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 July 8, 2016.
- After very strong growth in April, real consumer spending returned to a more steady, but still solid, pace in May.

- Following declines in 2015Q4 and 2016Q1, the outlook for business equipment remains weak.

- Indicators provided mixed signals about the state of manufacturing, while the tone of the May housing data suggests the sector continued on a very gradual uptrend.
  - The renewed appreciation of the dollar could further restrain manufacturing activity and lead to weaker conditions in the sector.

- Payroll growth rebounded in June. The unemployment rate rose and the employment-population ratio declined, while the labor force participation rate increased.
  - Aggregate compensation measures generally indicate that wage growth remained fairly restrained.

- Both headline inflation and core inflation appear to have stabilized, although at levels that continue to run below the FOMC’s longer-term objective.

- Financial market volatility increased following the Brexit vote. Longer-term sovereign yields fell. The U.S. yield curve and market-implied fed funds rate path flattened. Equity prices recovered and reached new nominal highs.

**Output is below its potential level**

- The gap between real GDP and the Congressional Budget Office’s (CBO) measure of real potential GDP was about 2.1% in 2016Q1.
  - The June unemployment rate of 4.9% is near many estimates of its natural rate, including the CBO’s estimate of 4.84%.
  - Compared to these alternative unemployment gap estimates, the CBO output gap indicates more resource slack.

- Historically, inflation has tended to be restrained if the economy is operating below potential.
OVERVIEW

**Labor Market Indicators**

- The unemployment rate increased from 4.7% in May to 4.9% in June.
  - An alternative measure of unemployment, U6, which includes marginally attached workers and workers who hold part-time jobs but prefer full-time jobs, fell from 9.7% in May to 9.6% in June.

- The labor force participation rate increased slightly from 62.6% in May to 62.7% in June.

- The employment-population ratio edged down slightly to 59.6%.

**PCE Deflator**

- The total PCE deflator increased 0.2% in May after a 0.3% rise in April. The core PCE deflator (which excludes food and energy prices) rose 0.2%, the same as in April and matching the average monthly gain in 2016Q1.
  - Energy prices increased 1.4% in May, although they are down nearly 11% from a year ago.

- On a 12-month change basis, the increases in the total PCE deflator and core PCE deflator were 0.9% and 1.6%, respectively.
  - After an upward trend in 2015, both measures have stabilized since the beginning of the year.
ECONOMIC ACTIVITY

Output growth in Q1 revised up

- According to the third estimate, real GDP rose at a 1.1% annual rate, an upward revision from the second estimate of a 0.8% increase.

- The upward revision primarily reflected higher export growth and stronger nonresidential fixed investment that were partly offset by weaker consumer spending.

- Real gross domestic income (GDI), which provides an alternative measure of economic activity, increased at a 2.9% annual rate.
  - The four-quarter change in real GDP was 2.1%, while that of real GDI was 2.3%. Both are close to the average pace of growth during this expansion.

ISM survey suggests rebound in manufacturing

- Manufacturing output has been drifting down since January and fell to its lowest level of this year in May.
  - Manufacturing output fell 0.4% in May and is down 0.2% from a year ago.
  - The weakest categories during this past year have been paper, printing, apparel, metals, and machinery.

- The ISM’s manufacturing survey, along with other survey measures, points to a recent pickup in manufacturing.
  - The ISM’s headline index jumped 2 points in June to 53.2—its highest level in roughly a year—with all components rising.
  - Other regional manufacturing surveys also signaled a pickup in activity in June, following weak readings for most of this year.
Disposable Income and Consumption

![Disposable Income and Consumption graph]

**Consumption growth maintains momentum in May**

- Real personal consumption expenditures rose 0.3% in May, following strong growth of 0.8% in April.
  - On a 12-month change basis, PCE growth was 2.7%, slightly above the first quarter average.
- Goods consumption grew at a solid 0.6% rate in May, while services consumption was subdued.
  - Durables and nondurables consumption grew at about the same monthly pace (0.6% and 0.5%, respectively).
  - Following an increase of 0.5% in April, services consumption only grew by 0.1% in May.
- The personal saving rate declined slightly from 5.4% in April to 5.3% in May.

Total Light Vehicle Retail Sales

![Total Light Vehicle Retail Sales graph]

**Sales of light motor vehicles decline in June**

- Sales of light motor vehicles (automobiles and light trucks) were 16.7 million units at a seasonally-adjusted annual rate (SAAR) in June, 4.5% below the May level.
  - Sales had improved steadily from the end of 2009 through October 2015, but since then have generally been declining.
  - The June level was 8.7% below the October 2015 peak.
- Automobile sales were 6.8 million units in June.
  - Automobile sales fluctuated between 7.0 and 8.3 million units from 2012 through early 2016; they are now below this range.
- Light truck sales were 9.9 million units in June.
  - After improving fairly steadily from mid-2009 through the end of 2015, light truck sales have stabilized in 2016.
**Investment in new equipment remains sluggish**

- Over the four quarters ending in 2016Q1, real business investment in new equipment was down 0.3%, continuing a slowing trend in place since 2010.
  - Growth of investment in information processing equipment and industrial equipment remains relatively strong; however, investment in new agricultural and mining and oilfield equipment is down sharply.

- A key reason for the overall slow pace of growth of investment in new equipment is the relatively low level of the manufacturing capacity utilization rate.
  - This rate, which had been slightly above 75% for over a year, dipped below 75% in May.
  - Historically, robust growth of investment in new equipment is associated with a capacity utilization rate of 80% or higher.

**Orders and shipments remain soft**

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

- The 3-month moving average of orders of such goods fell again in May, while that of shipments was flat.
  - Both series remain well below their peaks in late 2014.

- New orders have been generally below shipments since late 2014, and were moderately below shipments in May.
  - Based on historical patterns, this difference between new orders and shipments is consistent with continued sluggishness in equipment spending over the near term.
Recent housing starts show loss of momentum

- The 3-month moving average of total housing starts was 1.15 million units (SAAR) in May, little changed since mid-2015.
  - The 3-month moving average of single family starts was 759,000 in May, down from a recent peak of 795,000 in February of this year.
  - The 3-month moving average of multifamily starts has increased somewhat in recent months, but remains below levels reached in mid 2015.

- Even with historically low mortgage interest rates, housing starts per capita remain more than 45% below the longer-term average from 1968 to 2003.

Single family housing inventory remains low

- The CoreLogic single family national home price index rose 5.9% in May from the previous year.
  - There is widespread recovery in home prices, with 22 states reaching new highs in May.
  - Connecticut, New Jersey, and Pennsylvania, however, registered price declines in May.

- The inventory of single family homes was 1.9 million units at the end of May, equivalent to a 4.7 months’ supply which was the same as in April.
  - The level of single family homes for sale remains below the low end of the historical range of 5-7 months, contributing to an environment of price appreciation given ongoing labor market improvement.
Government sector is expanding modestly

- On a year-over-year basis, real government consumption and gross investment was up 1.5% as of 2016Q1, its best performance since 2009Q4.

- At the federal level, real consumption and gross investment was up a modest 0.2% over the four quarters ending in 2016Q1.

- At the state and local government level, which represents about 60% of total government spending (excluding entitlement spending), the four-quarter change of real consumption and gross investment was 2.2% in 2016Q1.
  - This is the strongest growth in this sector since 2002.

State and local investment slows during 2016Q2

- Real state and local gross investment has shown a volatile upward path over 2015 and early 2016.
  - Investment grew by 14.7% (annual rate) in 2016Q1.

- However, monthly data released during 2016Q2 suggest a slowdown in state and local government investment:
  - State and local government construction put in place declined 2.2% in April and 3.1% in May.

- In contrast, real state and local consumption expenditures have sustained a gradual but steady recovery since mid-2013.
  - Monthly state and local government employment data for April through June indicate this pattern will continue during 2016Q2.
INTERNATIONAL DEVELOPMENTS

Real Exports and Imports of Goods and Services

- Import and export growth remain weak
  - Real exports rose only 0.3% in 2016Q1 (SAAR).
    - Real goods exports fell 1.5% from April to May, with the 12-month change at -1.6%.
  - Real imports declined for the second straight quarter in 2016Q1, falling 0.5% (SAAR).
    - Although real nonoil imports grew 1.1% from April to May, over the year they were up only 0.1%.
  - Overall, net exports contributed 0.1 percentage point to real GDP growth in 2016Q1.

Net Financial Outflows: Public vs. Private

- China’s foreign exchange reserves fell in Q1
  - China has a large saving surplus that it must invest abroad.
    - This surplus totaled $39 billion in Q1.
  - Private investors, on net, bought $177 billion in foreign assets.
    - That is, net private capital outflows exceeded the country’s saving surplus.
  - The central bank sold $129 billion in foreign currency assets to offset this large private capital outflow.
    - Previously, private investors tended to move money into China.
    - Possible explanations for the altered behavior include a drop in the domestic rate of return and a reduction in the expected appreciation of China’s currency.

Source: State Administration of Foreign Exchange via Haver Analytics
Note: Public outflow measured by central bank FX reserves. Private outflow = current account – reserves
**LABOR MARKET**

**Growth of Payroll Employment and Aggregate Hours**

- **Strong payroll employment growth in June**
  - While nonfarm payroll employment increased by 287,000 in June and reversed May's weak payroll growth, the pace of payroll gains appears to be moderating when viewed over the last three months.
    - Monthly payroll employment gains have averaged around 150,000 in the last three months, compared to nearly 200,000 in the prior twelve months.
  - Aggregate hours worked rose by 0.2% in June.
    - The 12-month change in aggregate hours was 1.6%.
  - The one month diffusion index (reflecting the balance between industries increasing and decreasing employment) was 62.4 in June, well above its three-month average of 54.8.

**Two Measures of Vacancies**

- **Signs of slowdown in vacancy creation**
  - The Job Openings and Labor Turnover Survey (JOLTS) reported that there were 5.5 million job openings as of the last business day in May, a drop of 345,000 from one month earlier.
  - The Help Wanted Online (HWOL), an alternative measure of vacancies, reported a drop of 226,700 in June. According to HWOL, there were 4,658,000 online advertised vacancies in June.
    - The HWOL drop in vacancies was widespread across a majority of states.
LABOR MARKET

Three Measures of Job Destruction

- JOLTS also reported that there were 1.7 million layoffs and discharges in May, little changed from April.
- There were 1.802 million workers who transitioned from employment to unemployment in June according to the household survey.
- For the week ending July 2nd, the four-week moving average of initial claims for unemployment insurance was 264,750, slightly below the reading from one month ago (269,500).

Growth of Average Hourly Earnings and ECI

- Average hourly earnings rose 0.1% in June and have increased by 2.6% over the past 12 months.
- Average weekly earnings rose 0.1% in June, from $880.30 to $880.98.
- The employment cost index rose 0.6% in 2016Q1 and has increased by 1.94% over the past 4 quarters.
Core CPI inflation measures have risen recently

- Core inflation measures are designed to remove transitory fluctuations and capture underlying movements in inflation.
  - The ex-food and energy measure associates transitory fluctuations with price changes of those items.
  - The weighted median and trimmed mean associate transitory fluctuations with items having “small” and “large” price changes.

- While the weighted median measure has been higher and less variable than the trimmed mean and ex-food and energy measures since early 2012, all have increased during the past year.
  - Core PCE inflation measures also have risen moderately over the past year.

Goods and services prices continue to diverge

- The 12-month change in the core CPI was 2.2% in May, up from 2.1% in April.

- Core CPI goods prices continue to decline due to the strong dollar and falling import prices.
  - On a 12-month change basis, core CPI goods prices fell 0.5% in May, the same decrease as in April.

- Core CPI services prices are less exposed to trade and continue to rise at a steady pace.
  - The 12-month change in core CPI services prices was 3.2% in May, up from 3.0% in April.
  - The shelter component of the CPI rose 3.8% from a year ago.
**US Equity Market Returns and Volatility**

- Broad US equity markets edged up to register new highs despite volatility surrounding the result of the UK's referendum to leave the European Union.
  - The S&P 500 has increased about 2% since June 6.
  - The index is up almost 7% for the year as of July 12.

- The VIX index finished below its long-term average.
  - Mirroring the price action of US equity markets, readings of the VIX option-implied volatility index spiked above 25 around Brexit, but since then has more than retraced its rise.
  - The VIX average from the beginning of the year through July 12 has been around its historical median value of 18.

**International Equity Indices**

- Following significant declines after the UK’s vote to leave the European Union, major global equity indices have mostly retraced these losses.
  - The DAX index declined more than 1.5% over the past month, and is down over 3% from January 4 through July 12.
  - The Japanese Nikkei stock index declined 2.9% over the past month, and is down about 13% year-to-date.
  - In contrast, the Shanghai A shares index increased almost 4% over the past month, but is still down about 7.5% year-to-date.
**UK indices very volatile following Brexit vote**

- UK equity indices recorded significant volatility following the unexpected “leave” outcome.
  - The blue-chip FTSE 100 index increased, on net, 6.5% from June 6 through July 12 and is up 9.6% year-to-date.
  - The FTSE 250 index, representing a wide range of UK-centric firms, is instead 3% lower since pre-Brexit levels, after initially declining over 13% in the days following the referendum.
  - Similar to the UK’s FTSE 250, the FTSE Europe ex UK Index partially recovered its post-referendum losses, ending around 1.8% lower compared to pre-Brexit levels.

**Shallower implied Federal Funds Rate path**

- The expected path for the Federal Funds rate (FFR) implied by rates on overnight indexed swaps (OIS) flattened after the June FOMC meeting and the UK referendum.
  - The current market-implied path remains well below the median longer run path from the FOMC’s Summary of Economic Projections (SEP) and the NY Fed Primary Dealer Survey.
**FINANCIAL MARKETS**

**10-Year Treasury and Term Premium**

- The U.S. 10-year treasury yield reached historic lows.
  - 10-year yields have fallen by as much as 24 basis points since the UK referendum, while shorter-dated Treasury yields have declined less, leading to a significant flattening of the curve.

- Estimates of the Adrian-Crump-Moench term-structure model attribute the yield decline since the start of the year to a lower term premium rather than to a lower expected short-term rates.
  - The term premium on the 10-year Treasury continues to trend further into negative territory.

**5-10 Year Forward Decomposition**

- Market-implied TIPS-based measures of long-term inflation expectations ("breakevens") have continued to retrace their increases since the start of the year.
  - The five-to-ten year breakeven inflation rate registered a new multi-year low of about 1.3%, and has since remained near that level.

- Variation in the breakeven inflation rate appears to be largely driven by changes in the inflation risk premium, with implied expected inflation (as measured by the Abrahams-Adrian-Crump-Moench model) remaining stable.
  - The estimated five-to-ten year inflation risk premium is at multi-year lows of around -0.8%.
UNCERTAINTY AND THE BREXIT VOTE

**Spike in U.S. policy uncertainty after Brexit vote**

- Uncertainty relates to the confidence an individual attaches to a forecast or the outlook of an event.
  - Delayed spending by consumers and firms is one way increased uncertainty can affect the economy.
- The U.S. daily policy uncertainty index is constructed from:
  - A quantitative measure of newspaper articles that include policy-related economic uncertainty terms
  - Number of tax code provisions set for future expiration
  - Extent of disagreement among economic forecasters
- Economic policy uncertainty spiked after the Brexit vote, rising to a level similar to that associated with the Lehman bankruptcy and the 9/11 terrorist attack, although it has since retracted much of the increase.

**Sharp rise in U.K. policy uncertainty in June**

- The U.K. policy uncertainty index is constructed in a similar manner to the U.S. index, but is only available on a monthly basis.
- The U.K. index increased dramatically in June and reached a new record level of 664.
  - The marked rise in the index began in January of this year.
- The index declined in both April and May from the previous record in March, suggesting that passage of the referendum was being viewed as a less likely event prior to the actual vote.
UNCERTAINTY AND THE BREXIT VOTE

Gallup’s Economic Confidence Index

Not every index showing a Brexit effect

- Gallup’s Economic Confidence Index is constructed on a daily basis from:
  - Americans rating economic conditions in the U.S. today
  - An assessment of whether economic conditions in the U.S. as a whole are getting better or getting worse

- Gallup’s U.S. economic confidence index showed little change in its readings before and after the Brexit vote.
  - The index was at -17 for the week ending June 26, which is not markedly different from the reading of -15 for the previous week.
  - This pattern could be a sign that Americans do not see meaningful effects from the vote, or alternatively have decided to wait before assessing the vote’s impact on the U.S. economy.

Source: Gallup US Daily Tracking