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 September 5, 2017.
- Real personal consumption expenditures posted a solid gain in July, indicating consumer spending growth could be maintained into Q3.
  - Auto sales slumped in August, which may reflect some impact from Hurricane Harvey.

- Monthly indicators suggest a solid start to equipment spending in Q3, but near-term momentum may be soft.

- Housing indicators still point to continued gradual improvement in this sector.
  - Multi-family starts appear to have peaked for this cycle, but a number of factors suggest that single-family starts could continue to rise.

- Payroll growth slowed in August. The unemployment rate rose slightly, the labor force participation rate did not change and the employment-to-population ratio fell slightly.
  - Growth in labor compensation measures remained subdued.

- Monthly readings on PCE inflation suggest that core inflation may be stabilizing for now at a level somewhat below the FOMC’s longer-run objective.

- In the past month, U.S. equity indexes were little changed and the nominal 10-year Treasury yield moved lower. The trade-weighted index for the U.S. dollar edged down. Oil prices fluctuated within narrow ranges even with some impact from Hurricane Harvey.

**Output close to its potential level**

- The gap between real GDP and the Congressional Budget Office’s (CBO) measure of real potential GDP was about 0.2% in 2017Q2.
  - CBO estimates of the output gap in recent quarters have narrowed, as real GDP was revised slightly upward and potential GDP was revised a bit downward.
  - The August unemployment rate of 4.4% is below many estimates of its natural rate, including that of the CBO (4.74%).

- The CBO output gap now indicates little resource slack remains in the U.S. economy, while the unemployment gap indicates no slack remains.
  - However, capacity utilization rates are still below their historical averages, suggesting more substantial resource slack than other activity gap measures.
**Labor Market Indicators**

- **Unemployment Rate**: The unemployment rate rose from 4.3% in July to 4.4% in August.
  - The unemployment rate has been steady over the last five months, ranging between 4.3% and 4.4%.
- **Labor Force Participation Rate**: The labor force participation rate remained unchanged at 62.9%, the same level as in the beginning of the year.
- **Employment to Population Ratio**: The employment-to-population ratio fell 0.1 percentage point to 60.1% and has shown little change in the last six months.

**Inflation remained subdued**

- The total PCE price index rose 0.1% in July, following no change in June. The core PCE price index (which excludes food and energy prices) increased 0.1% in July, the same as in June.
  - Energy prices fell 0.1% in July and are up a little over 3% from a year ago.
  - Food prices rose 0.2% in July and also increased 0.2% from a year ago, the first 12-month gain since April 2016.
- The 12-month changes in the total PCE and core PCE price indexes were each +1.4% in July.
  - After peaking at 2.2% in February, the 12-month change in the total PCE price index has trended downward and has been below the FOMC’s objective since that month.
**ECONOMIC ACTIVITY**

**GDP Growth**

![GDP Growth Chart]

Source: Bureau of Economic Analysis via Haver Analytics

**Revisions indicate stronger growth in Q2**

- According to the second estimate, real GDP rose at a 3.0% annual rate in Q2, an upward revision to the advance estimate of a 2.6% increase.
  - The pace of growth in Q2 was the strongest since 2015Q2.
- There were upward revisions to real consumer spending and to business fixed investment that were partially offset by lower reported state and local government spending.
- Real gross domestic income (GDI), which provides an alternative measure of economic activity, increased at a 2.9% annual rate in 2017Q2.
  - The four-quarter change in real GDI was +2.0%, slightly below the 2.2% increase in real GDP.

**Manufacturing and ISM Manufacturing Index**

![Manufacturing and ISM Manufacturing Index]

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

**Manufacturing activity contracts in July**

- Manufacturing production fell 0.1% in July, following a 0.2% increase in June.
  - On a 12-month change basis, manufacturing activity has now increased for nine consecutive months.
- The ISM Manufacturing Index increased by 2.5 points to 58.8 in August.
  - This is the highest reading of the index since April 2011.
**Households**

### Disposable Income and Consumption

![Graph showing disposable income and consumption over time.]

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

**Note:** Shading shows NBER recessions.

### Consumer spending shows solid increase in July

- Real personal consumption expenditures rose by 0.2% in July, with growth in June revised upward to +0.2%.
  - On a 12-month change basis, real consumption increased 2.7%, slightly faster than the 2.6% gain in June.

- Real disposable personal income increased by 0.2% in July after being flat in June.
  - The increase reflected gains in employee compensation, personal interest and dividend income.

- The personal saving rate fell to 3.4% in July from a revised 3.6% in June.
  - The personal saving rate has now declined steadily since its recent peak of 4.1% in February.

### Consumer sentiment improves in August

- The Michigan Index of Consumer Sentiment rebounded from 93.4 in July to 96.8 in August, returning to levels observed in the first half of 2017.
  - The increase in the overall index was led by the Expectations component.

- The Conference Board's Consumer Confidence Index (CCI) continued to rise in August to 122.9, approaching the 17-year high recorded in March.
  - The increase was largely driven by the Present Situation Index.

- Both indices remain elevated, with the CCI exhibiting an upward trend since mid-2016.
**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 investment improves moderately**
- With a solid rise in the quarter, real business equipment investment increased 3.1% over the four quarters ending in 2017Q2.
  - Four-quarter changes were positive for all of the major categories except for transportation equipment.
  - The level of real business equipment investment in 2017Q2 was still below the levels in the second half of 2015.
- A key factor behind sluggish equipment investment has been the low manufacturing capacity utilization rate.
  - This rate was 75.4% in July, 3 percentage points below its longer-term average, and it has fluctuated within a narrow range over the past few years.
  - Historically, robust growth of equipment investment has not occurred until the capacity utilization rate surpassed 80%.

**Nondefense Capital Goods Excluding Aircraft**

- **Bil. $, 3 MMA**

- **New Orders**
- **Shipments**

**Sources:** Census Bureau via Haver Analytics
**Note:** Shading shows NBER recessions.

**Solid start for equipment spending in Q3**
- Monthly data on new orders and shipments of nondefense capital goods excluding aircraft are high frequency indicators of business investment in new equipment.
  - After falling in 2015 and the first half of 2016, new orders and shipments of nondefense capital goods excluding aircraft have risen in 2017.
    - Shipments of these goods rose solidly in July, a good sign for equipment spending in Q3.
    - Still, new orders and shipments remained below the levels that prevailed in 2012-2015.
    - New orders and shipments of these goods have been nearly equal in recent months, which typically is a signal of soft near-term momentum in equipment spending.
**Housing Sector**

**Housing Starts**

A three-month moving average of total housing starts was essentially unchanged in July at 1,166 million units at a seasonally-adjusted annual rate (SAAR).

- The July three-month moving average was modestly below that of July 2016.

- The three-month moving average of single-family starts increased again in July and reached 837,000 units (SAAR), with the July level 10.4% above that from a year ago.
  - Single-family market conditions appear to be tight, with home prices rising steadily and low inventories of units for sale.

- The three-month moving average of multi-family starts continued to decline in July, with the July level 22% below that of July of 2016.

**Credit Score at Mortgage Origination**

Credit standards have loosened only modestly since 2012, after tightening sharply between 2007 and mid-2009.

- Lending standards also remain tight compared to levels in the early 2000s, which preceded the subprime boom.

- Nearly 67.5 million people in the population of adults with credit reports currently have scores below 650.
  - The share of originations to borrowers below this level has fallen from 25% to 10% since the Great Recession.
**GOVERNMENT SECTOR**

**Real Government Consumption and Gross Investment**

- Over the four quarters ending in 2017Q2, real consumption and gross investment spending by both the federal and state and local governments was essentially unchanged.

- Federal defense and nondefense spending were essentially unchanged over the year ending in 2017Q2.
  - Defense spending, comprising 60% of federal consumption and gross investment spending, had been contracting sharply as recently as 2013, while nondefense spending growth has been more volatile but was over 3% in 2015.

- State and local spending has been weighed down by substantial declines in infrastructure investment.
  - Real state and local investment is down 8.7% since 2016Q1.

**Infrastructure investment remains weak**

- Real state and local government gross investment fell 5.7% over the last year.
  - The four-quarter percent change in real state and local investment has been negative for five straight quarters.
  - Real state and local investment is now 5.3% below its 2009 peak level.

- Growth in real state and local consumption continues to moderate.
  - Consumption spending, which is about 80% of total state and local government spending, is dominated by wage and salary payments.
  - Consumption spending grew 0.9% in the four quarters ending in 2017Q2.
INTERNATIONAL DEVELOPMENTS

Real Exports and Nonoil Imports of Goods

- 12 Month % Change

Source: Census Bureau via Haver Analytics
Note: Shading shows NBER recessions.

Trade deficit edged up in July

- The trade deficit in July edged up to $43.7 billion from $43.5 billion in June, as both export and import growth rates slowed relative to the preceding month.
  - Export volumes of goods fell 0.6% over the month from lower export volumes of industrial supplies excluding petroleum, auto vehicles and parts, and consumer goods.
  - Real nonoil imports of goods grew 0.3%, after a 0.6% increase in June, mainly due to capital goods imports.

- The second estimate of GDP in 2017Q2 saw a broadly unchanged growth contribution from net exports.
  - The net export contribution to 2017Q2 GDP growth changed from +0.18% to +0.21%, as both goods export growth as well as goods and services import growth were revised down.

Cumulative Weekly Decomposition April-August 2017

- Percentage change

Sources: Authors' calculations; Haver Analytics; Thomson Reuters; Bloomberg.
Notes: Residual reflects price movements unexplained by supply and demand factors. Supply, demand, and residual sum to Brent crude price.

Oil prices rebound relative to Q2

- Using a statistical model and a large number of financial variables, weekly oil price movements can be separated into demand effects, supply effects, and a ‘residual’.

- Oil prices fell about 14% in Q2.
  - This oil price reduction was due to expanding supply and was a continuation of a largely supply-induced weakness in oil prices throughout Q1.

- Since Q2, however, oil prices have rebounded about 9%.
  - An improved global demand outlook was the main driver behind this oil price recovery.
**Payroll Employment and Aggregate Hours**

- Nonfarm payroll employment rose by 156,000 in August, which was below the median expectation of 180,000.
  - July employment growth was revised down from +209,000 to +189,000 and June employment growth was revised down from +231,000 to +210,000, resulting in a net downward revision of 41,000.
  - Monthly employment gains have averaged 176,000 in 2017 despite the weak payroll gains in March (+50,000).

- Average weekly hours dropped slightly from 34.5 hours in July to 34.4 hours in August.
  - With the slowing of payroll growth and the decline of average weekly hours, aggregate hours declined by 0.2% in August.
  - The 12-month percent change in aggregate hours was +2.0%.

**Prime-Age Labor Force Participation Rates**

- The labor force participation rate for prime-age (25-54) workers declined modestly for men and women.
  - The female labor force participation rate declined from 75.3% to 75.1%, while the male labor force participation rate fell from 88.5% to 88.4%.

- Over the last two years, the labor force participation rate has risen for women of all age groups.
  - The prime-age female labor force participation rate has shown the largest increase and has risen from 73.6% in August 2015 to 75.1% in August 2017.

- The prime-age male participation rate has retraced all of its increases over the last year, with the August 2017 reading of 88.4% the same as that in August 2016.
**Prime-Age Male Unemployment and Employment**

- The unemployment rate for prime-age men rose from 3.8% in July to 4.0% in August.
  - Since May, the unemployment rate of prime-age male workers has risen by 0.4 percentage point (from 3.6% to 4.0%), but has remained essentially unchanged for female workers.

- The employment-to-population ratio for prime-age men fell from 85.2% in July to 84.9% in August.
  - Since May, the employment-to-population ratio for prime-age men has fallen by 0.4 percentage point (85.3% to 84.9%), while that of prime-age women has risen by 0.3 percentage point (71.8% to 72.1%).

**Growth of Average Hourly Earnings and ECI**

- Average hourly earnings increased from $26.36 in July to $26.39 in August.

- Average weekly earnings decreased slightly by 0.18% from $909.42 to $907.82.
  - The 12-month change in average weekly earnings was 2.8%, higher than the 2.5% increase in average hourly earnings.

- The employment cost index rose 2.4% for the 4-quarter period ending in June 2017.
### CPI Inflation: Core Goods and Core Services

The chart shows the 12-month percentage change in the CPI, Total Core CPI, Core Services CPI, and Core Goods CPI from 2000 to 2016. The shading indicates NBER recessions.

**Source:** Bureau of Labor Statistics via Haver Analytics

**Note:** Shading shows NBER recessions.

### Softness in core CPI inflation persists

- The core CPI rose 0.1% in July, the same change as in the previous three months.
  - The 12-month change in the core CPI was +1.7% in July, down from a peak of +2.3% in January.

- Similar to recent months, core CPI services prices increased in July, but at a slower pace compared to 2016, and core CPI goods prices continued to fall.
  - On a 12-month change basis, core CPI services prices increased 2.4%, down from a 2.5% rise in June and almost 1 percentage point below the recent peak reached in 2016.
  - The 12-month change in core CPI goods prices was -0.6%.

### Mean Probabilities for Core PCE Inflation in 2017

The chart shows the mean probabilities for core PCE inflation in 2017, with two surveys: 2017Q2 and 2017Q3. The probability ranges are from -0.5 to 4.0.

**Source:** US Survey of Professional Forecasters

### Forecasters predict lower core inflation in 2017

- The US Survey of Professional Forecasters provides density (histogram) forecasts that show the probability that inflation will fall into 10 separate ranges.
  - The Q3 survey was fielded from late July through early August, with results released on August 11.

- Compared to last quarter, survey respondents have increased the probability that core PCE inflation measured from 2016Q4 to 2017Q4 will be below 2.0 percent.
  - Forecasters now see a 73% chance that core PCE inflation will be below 2.0%, up from 55% in the previous survey.
  - The Q3 survey also reports that the likelihood that core PCE inflation will be between 1.5 and 1.9 percent is a little under 50%.
**U.S. Equity Market Index and Volatility**

- U.S. equity markets valuations were little changed.
  - Between August 7 and September 5, the S&P 500 index decreased 0.9 percent.

- Option-implied stock market volatility, as measured by the CBOE Volatility Index (VIX), remains low.
  - The VIX closed at 12.23 percent on September 5, an increase of 2.3 percentage points from its August 7 level.
  - During this period, there were occasional spikes in the VIX, such as the increase on August 10 to 16.04 percentage points.

**U.S. Bank Equities Performance**

- As measured by the KBW Nasdaq bank index, bank equities decreased 5.7 percent between August 7 and September 5, compared to a decrease of 0.9 percent for the S&P 500 Index.
  - The XLF financial sector ETF decreased by 4.4 percent over the same period.

- For 2017 year-to-date, U.S. bank equities are lower and the broad financial sector ETF is slightly higher.
  - For 2017 year-to-date, the KBW index is down 1.4 percent, while the XLF ETF is up 3.1 percent and the S&P 500 has increased 8.9 percent.
Dollar declines slightly against global currencies

- During the period from August 7 through September 5, the exchange value of the dollar against a basket of global currencies decreased by 1.2 percent.
  - On net, the dollar depreciated by about 1.8 percent against the Japanese yen, depreciated by about 0.1 percent against the Mexican peso, and depreciated by about 1.0 percent against the Euro.

Lower implied path for federal funds rate

- Between August 7 and September 5, the expected path of the federal funds rate implied by rates on overnight indexed swaps (OIS) shifted down at all maturities and flattened.
  - The expected federal funds rate decreased by about 10 basis points at the one-year horizon and by 25 basis points at the five-year horizon.

- The current market-implied path out to five years remains below the reported longer-run value of the median respondent of both the FOMC’s June 2017 Summary of Economic Projections and the July 2017 NY Fed Survey of Primary Dealers.
10-Year Treasury and Term Premium

Source: New York Fed calculations, Bloomberg Finance L.P.

- The 10-year nominal yield decreased by 12 basis points between August 7 and September 5, and Treasury yields remain low by historical standards.
  - The 10-year yield is down by about 50 basis points from its year-to-date high observed in March.

- Estimates from the Adrian-Crump-Moench term structure model attribute the decline in the 10-year yield over the last few months to both a reduction in the term premium and a modest downward revision to the expected average short-term interest rate over the next decade.
  - The estimated 10-year term premium remains at very low levels.

5-10 Year Forward Decomposition

Source: New York Fed calculations, Bloomberg Finance L.P.

- Market-implied TIPS-based measures of long-term inflation expectations ("breakevens") decreased in July.
  - The five-to-ten year breakeven inflation rate moved down 2.4 basis points between August 7 and September 5.

- According to the Abrahams-Adrian-Crump-Moench term structure model, most of the movements in forward inflation compensation continues to reflect movements in the inflation risk premium.
SPECIAL TOPIC: SCE LABOR MARKET SURVEY

**Reservation Wage**

<table>
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<tr>
<th>Year</th>
<th>25th Percentile</th>
<th>Mean</th>
<th>75th Percentile</th>
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Note: Reservation wage is the lowest wage the respondent would be willing to accept for a new job.

**Marked drop in reservation wages**

- The SCE Labor Market Survey provides information on individuals’ labor market experiences and expectations.

- The average reservation wage—the lowest wage respondents would be willing to accept for a new job—declined from $59,660 in March to $57,960, its lowest level since March 2015.
  - The drop was most pronounced for older (over age 45) respondents.
  - The series had generally been trending upward during 2015 and 2016, but has been declining since November 2016.

**Job Seekers**

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<th>Age Group</th>
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Note: Percentage who searched for a job in the past four weeks

**Proportion of job seekers rise**

- The proportion of individuals who reported searching for a job in the past four weeks increased from 19.4% in March to 22.7% in July.
  - The increase was most notable for younger households (age 45 and less), for whom the proportion of job seekers rose sharply from 22.7% in March to 28.2% in July.

- The proportion of individuals in July who reported receiving at least one job offer in the past four months was 17.2%, similar to the proportion in March.

- The average full-time offer wage received in the past four months declined from $58,880 in March to $49,250 in July.
SPECIAL TOPIC: SCE LABOR MARKET SURVEY

**Job Offer Wage Expectations**

$1000s

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Note: Expected annual salary of job offers in the next four months, conditional on expecting an offer

**Near-term labor market expectations deteriorate**

- The average expected likelihood of receiving at least one job offer in the next four months declined from 24.9% in November 2016 to 22.0% in July 2017.
  - The drop was primarily driven by males, for whom the average likelihood declined from 24.1% in March to 21.4% in July.

- Conditional on expecting an offer, the average expected annual salary of job offers in the next four months declined from $54,590 to $50,790.
  - Although the series reached its lowest level in a year, it still remains above 2014 levels.
  - This decline was broad-based across demographic groups.