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 August 3, 2018.
- Real consumer spending increased in June at a pace similar to that in May, as real spending rose robustly in Q2.
  - The rise in spending for June was led by services and durable goods expenditures.

- Business equipment spending rose moderately in the first half of 2018, a slower pace than in 2017.
  - New orders of capital goods (excluding aircraft) remained slightly above shipments, suggesting some momentum over the near term.

- Housing activity indicators moderated somewhat in June.
  - However, tight housing supply and a strong labor market have the potential to provide support to the housing sector, even with higher mortgage interest rates.

- Payroll growth moderated in July, but was revised significantly upward for both May and June. Labor force participation was unchanged, the unemployment rate ticked down, and the employment-to-population ratio rose slightly.
  - The latest readings of various measures of labor compensation continued to point to modest firming of wage growth.

- Core PCE inflation continued to run at a level roughly consistent with the FOMC’s longer-run objective.

- U.S. equity indices rose moderately over the past month, and volatility fell further. The nominal 10-year Treasury yield fluctuated within a narrow range. The broad trade-weighted dollar index increased slightly. Non-energy commodity prices remained below their levels of the first half of the year.

**Output growth above potential growth estimate**

- Over this expansion, real GDP has grown at an annual rate of 2.3%, above the 1.5% growth rate of real potential GDP estimated by the Congressional Budget Office (CBO).
  - The difference in growth rates was larger over the four quarters through 2018Q2, as real GDP increased 2.8% and real potential GDP rose 1.8%.
  - The 3.9% unemployment rate in July was below many estimates of its natural rate, including that of the CBO (4.62%).

- Unemployment well below the CBO estimate of the natural rate signals tight resource constraints.
  - However, capacity utilization rates remain below their historical averages, suggesting some remaining slack by that measure.
**OVERVIEW**

**Labor Market Indicators**

- **Employment situation in line with expectations**
  - The labor force participation rate was unchanged in July at 62.9%.
  - The unemployment rate ticked down to 3.9% from 4.0%.
    - The male unemployment rate fell to 3.8% from 4.1%. The female unemployment rate fell from 4.0% to 3.9%.
  - The employment-to-population ratio rose 0.1 percentage point in July to 60.5%, its highest level since January 2009.
    - The employment-to-population ratio increased uniformly for both men and women, and across all age groups.

![Labor Market Indicators Graph]

**PCE Deflator**

- **Inflation running near FOMC’s longer-run objective**
  - The total PCE price index rose 0.1% in June, compared to 0.2% in May. The core PCE price index (which excludes food and energy prices) increased 0.1% in June, also below the 0.2% rise in May.
    - Energy prices declined 0.15% in June, while food prices rose 0.2%.
  - The 12-month changes in the total PCE and core PCE price indices were +2.2% and +1.9%, respectively.
    - The June reading marked the fourth consecutive month that total PCE inflation has been at or above 2%, the first such occurrence since early 2012.
    - After rising earlier in the year, headline and core PCE inflation appear to have stabilized at levels near the FOMC’s 2 percent longer run goal.
**ECONOMIC ACTIVITY**

### GDP Growth

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Source: Bureau of Economic Analysis via Haver Analytics

### Growth picks up pace in 2018Q2

- According to the advance release, real GDP expanded at a 4.1% annual rate in 2018Q2, after growth of 2.2% in Q1.
  - The four-quarter change in output accelerated to 2.8%, the strongest pace in three years.

- Final sales to domestic producers and net trade were the major sources of growth in the second quarter of 2018, while inventory decumulation was a major drag.
  - Private consumption and business fixed investment expanded briskly in Q2, powering a growth contribution of 3.7 percentage points from domestic final sales.
  - Exports grew much faster than imports in Q2, for a 1.1 percentage points contribution from net trade.
  - An inventory drawdown subtracted 1.0 percentage points.

### 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 activity rebounds in June

- Manufacturing production increased 0.8% in June following a revised 1.0% decline in May.
  - Manufacturing production rose by 1.9% in June on a 12-month change basis.

- The ISM PMI fell 2.1 percentage points to 58.1 in July.
  - The average reading for the PMI in 2018 is above the previous year, indicating strong performance.
  - The Prices Paid Index fell 3.6 percentage points, but remains high at 73.2 in July, indicating continued price pressures.

- All regional Fed manufacturing surveys indicate continued expansion in July.
**Revised income data reveal higher saving rate**

- Real personal consumption expenditures grew 0.3% in June, the same increase as in May.
  - With the June increase, real PCE in the second quarter grew at a solid 4% annual rate.

- Real disposable income increased 0.3% in June, up from an increase of 0.2% in May.
  - Due to upward revisions to disposable income in the 2018 NIPA Comprehensive Revision, the personal saving rate was revised significantly upward as of 2013 and was 6.8% in June.

- Net worth as a percentage of disposable income continued to climb rapidly over the past year.

**Consumer spending increases in June**

- Real expenditures on goods remained flat in June after increasing 0.8% in May.
  - Durable goods expenditure increased 0.35% while nondurable expenditure fell 0.14% in June.

- Real expenditures on services increased 0.4% in June compared to 0.1% in May.
  - The largest contributor to the increase was spending for food services and accommodations.
**Equipment Investment and Capacity Utilization**

- **4-Quarter % Change** and **% of Capacity**
- **Manufacturing Capacity Utilization Rate (Right Axis)**
- **Real Business Investment in New Equipment (Left Axis)**
- **Source:** Bureau of Economic Analysis, Federal Reserve Board via Haver Analytics
- **Note:** Shading shows NBER recessions.

**Growth of equipment spending moderates in H1**
- After rising 9.6% in 2017, real business equipment investment grew at a more moderate 6.1% annual rate in the first half of this year.
  - The slowing in the first half was largely concentrated in industrial equipment and “other” equipment.
  - The equipment spending share of nominal GDP remained modestly below its average share in 2014 – 15.
- Equipment investment has risen only moderately over the past three years, as the manufacturing capacity utilization rate remains fairly low.
  - This rate was 75.5% in June, the same as in February 2012 and 2.8 percentage points below its longer-term average.
  - Historically, utilization rates near 75% have been associated with rather modest growth of equipment investment.

**Investment in Nonresidential Structures**

- **Yearover-Year % Change**
- **Structures: Petroleum and Natural Gas (Right Axis)**
- **Structures: Total (Left Axis)**
- **Source:** Bureau of Economic Analysis via Haver Analytics
- **Note:** Shading shows NBER recessions.

**Investment in nonres structures driven by energy sector**
- After declining in 2015 and 2016, real investment in nonresidential structures has been growing at a moderate rate over the past 18 months.
  - Over the four quarters ending in 2018Q2, real investment in nonresidential structures increased 5.4%.
- The bulk of the fluctuation in this series over the past several years has been driven by movements in investment in petroleum and natural gas related structures.
  - Investment in the oil and gas sector has reflected the decline of oil prices in early 2016 and subsequent rebound.
- Excluding the energy sector, real investment in nonresidential structures continues to decline.
**Housing Starts**

- Total housing starts fell a sharp 12.3% in June. For the entire second quarter, starts were down 4.2% following two quarters of solid increases.

- Single-family housing starts appear to be continuing on a gradual uptrend. In contrast, multi-family starts—though volatile for the past few years—have remained flat in the 375,000 to 400,000 unit range.

- While mortgage interest rates have risen by around 75 basis points over the past year, the fundamentals underlying the housing market appear strong. Inventories of homes for sale and rent are relatively low, home prices are rising briskly, and employment continues to increase at a solid pace.

**New and Existing Home Sales**

- Single-family existing home sales decreased 0.6% in June to 4.76 million units (seasonally adjusted annual rate).
  - Single-family existing home sales are 2.3% below a year ago and are comparable to mid-2002 levels.

- Single-family new home sales decreased 5.3% (SAAR) in June to 631,000 units.
  - Single-family new home sales were 2.3% below a year ago.
  - They were below the immediate pre-recession level (641,000 units in November 2007) after having surpassed it for the first time in November 2017.

- Favorable labor market conditions increased demand, but low inventory conditions along with rising house prices and mortgage rates adversely affected affordability, leading to a decline in home sales.
GOVERNMENT SECTOR

Growth of government spending is firming

- Following relatively sluggish growth in 2016 and 2017, growth of consumption and gross investment by the government sector has firmed over the past three quarters.

- As of 2018Q2, growth of consumption and gross investment by the federal government rose to 2.2% (four-quarter percent change), the strongest since 2010Q4.
  - Both defense and nondefense spending have risen by just over 2% over the past year as the increased budget authority approved earlier this year moves through the pipeline.

- At the state and local level, consumption and gross investment grew a more modest 0.7% over the four quarters ending in 2018Q2, the strongest since 2010Q4.
  - This was the first four-quarter increase in over a year.

Federal government receipts tumble in 2018Q1

- Federal government receipts fell 4.0% over the four quarters ending in 2018Q1, the first decline since the early aftermath of the last recession.
  - The decline reflects lower personal and corporate income tax rates under the newly enacted Tax Cut and Jobs Act.
  - Personal tax receipts were down 0.3% over the four quarters ending in 2018Q1, while corporate profit tax receipts were down a sharp 48.6%.

- Total receipts at the state and local level have continued to expand, rising 4.2% over the four quarters through 2018Q1.
  - This improvement reflects the faster pace of nominal GDP growth against a backdrop of essentially steady tax rates.
INTERNATIONAL DEVELOPMENTS

Net Exports: Contribution to GDP Growth

Source: Bureau of Economic Analysis via Haver Analytics

Net exports boost GDP growth in 2018Q2

- According to the advance release, net exports added 1.1 percentage points to GDP growth in 2018Q2.
  - Real exports grew 9.3% (SAAR) and real imports increased 0.5% (SAAR).
  - In Q2, growth of real exports accelerated significantly, whereas real import growth slowed.

- The trade deficit increased to $46.3 billion in June from $43.2 billion in May.
  - Real goods exports fell 1.4% over the month in June, as export volumes of consumer goods (excluding autos), autos, and capital goods (excluding autos) declined.
  - Real goods imports were up 0.8% between May and June, owing mainly to increased real imports of consumer goods (excluding autos). Oil import volumes grew in June after declining in May.

Global Export Orders and Export Volume Growth

Source: JPMorgan, CPB World Trade Monitor

Note: >50 in the Diffusion Index implies an increase.

Global export growth slows

- Global export growth has slowed in recent months, with volumes up 2.5% in the three months through May compared with the same period a year earlier.
  - The slowdown has been steepest among economies in emerging Asia and, to a lesser extent, Latin America.
  - Growth in export volumes among advanced economies has held up better, especially in the United States.

- Export orders have also decelerated, with July survey results pointing to the smallest pickup in two years.
  - These survey data suggest that growth in global export volumes could slow further in the months ahead.

- New trade restrictions are too recent to be a likely source of the export growth slowdown.
LABOR MARKET

**Payroll Employment and Aggregate Hours**

- Payroll growth strong despite being below forecast
  - Nonfarm payroll employment increased by 157,000 in July, below the Bloomberg median forecast of +193,000.
    - The relatively low headline gains were accompanied by an upward revision in payrolls for the months of May (from +244,000 to +268,000) and June (from +213,000 to +248,000), resulting in an overall positive revision of +59,000.
    - Private payrolls rose by 170,000 while government payrolls declined by 13,000.
  - Aggregate hours rose by 2.23% over the last 12 months.
    - Average weekly hours declined slightly to 34.5 hours, but remain in line with the level that has prevailed over the last three quarters.

**Alternative Unemployment Rates**

- Reduction in labor market slack
  - The headline (U3) unemployment rate fell from 4.0% in June to 3.9% in July.
  - The U6 unemployment rate, which broadens the definition of unemployed to include discouraged and marginally attached workers, as well as workers who work part-time because full-time work is not available to them due to economic reasons, fell from 7.8% to 7.5%.
  - The gap between U6 and U3 unemployment fell to its post-recession low of 3.6 percentage points.
    - The gap was at its series high of 7.4 percentage points in September 2011.
    - In between the 2001 and 2007 recessions, the gap averaged 3.9 percentage points.
**Labor Market**

**Employment-to-Population Ratio: Prime-age (25-54)**

- The prime-age (25-54) employment-to-population ratio ticked up from 79.3% in June to 79.5% in July.
  - The prime-age male employment-to-population ratio ticked up from 86.1% in June to 86.2% in July. Between the 2001 recession and the Great Recession, the male employment-to-population ratio reached its peak at 88.0% in May 2007.
  - The prime-age female employment-to-population ratio moved upward from 72.8% in June to 72.9% in July, in line with its highest point between the 2001 recession and the Great Recession.

**Growth of Average Hourly Earnings and ECI**

- Average hourly earnings rose by 0.26% in July and were up 2.70% over the past 12 months.
- Average weekly earnings fell slightly by 0.03% from $933.51 in June to $933.23 in July.
- The Employment Cost Index reported an annual growth in worker compensation of 2.78%, in line with the 12-month growth in average hourly earnings.
Core Goods and Core Services: 3 Month Change

- **Core CPI inflation starting to stabilize**
  - The 3-month change in core CPI was 1.7% (annual rate) in June, just below that in April and May.
    - The 3-month change was 3.1% in February, the highest it had been since January 2008.
  - The 3-month change in core services CPI was 2.7% (annual rate) in June, down from 3.4% in February.
    - Transportation services appeared to be a major factor in the slowing of near-term core services inflation.
  - The 3-month change in core goods CPI was -1.0% (annual rate) in June, down from +2.5% in February.
    - One factor that probably contributed to the recent fall of core goods prices was a decline in core import prices.

3-Year Ahead Inflation Expectations

- **Consumer inflation expectations stable**
  - According to the NY Fed's Survey of Consumer Expectations, median inflation expectations at the three-year horizon declined by 0.1% to 2.9% in July while they remained unchanged at the one-year horizon at 3.0%.
  - Median inflation uncertainty—or the uncertainty expressed regarding future inflation outcomes—similarly remained unchanged at the one-year horizon and declined slightly at the three-year horizon.
  - Expectations for changes in the cost of medical care decreased from 9.6% in June to 8.5% in July, its lowest value since May 2015.
**U.S. Equity Market Index and Volatility**

- U.S. equity markets increased slightly during the past month to remain near all-time highs.
  - The S&P 500 index rose 2% between July 9 and August 3 and is up 10% from its recent low on April 2. This brings the index within 1% of its all-time high on January 26.
  - As of August 3, the index was up 5% year-to-date.

- Option-implied stock market volatility, as measured by the CBOE Volatility Index (VIX Index), remains low.
  - The VIX Index closed at 11.64 on August 3, which is well below its 37.32 multi-year high on February 5, and near its 2017 year-end value of 11.04.

**Chinese Equities and USD-CNY Performance**

- Chinese equities extended their decline with the Shanghai Composite (SSE) index down 2.6% from July 9 to August 3.
  - The SSE index has decreased 17% since the start of 2018, with a 12% decline from June 7 to August 3. The MSCI EM index is down 7% year-to-date.

- The Chinese CNY declined 3% against the dollar from July 9 to August 3 and is down 5% since the start of 2018.
FINANCIAL MARKETS

USD Exchange Rates

- The exchange value of the dollar against a basket of global currencies increased 0.5% between July 9 and August 3.
  - Over the same period, the dollar appreciated by 1.6% against the euro and 0.4% against the Japanese yen while depreciating 3% against the Mexican peso.

- Since the start of 2018, the dollar has appreciated 1.7% against a basket of global currencies.

Expected Federal Funds Rate

- The expected path of the federal funds rate implied by Federal Funds futures moved up by about 9 basis points between July 9 and August 6.

- The market-implied path remains somewhat below the median path of the FOMC’s June 2018 Summary of Economic Projections and the June 2018 NY Fed Survey of Primary Dealers at longer horizons.
FINANCIAL MARKETS

10-Year Treasury and Term Premium

- Longer-term Treasury yields have increased slightly since early July.
  - The 10-year yield increased by 12 basis points between July 9 and August 3, remaining close to its highest level in the past several years.
  - Estimates from the Adrian-Crump-Moench term structure model attribute the increase primarily to a less negative term premium with only a modest increase in the path for short term interest rates.
  - The 10-year term premium increased by 9 basis points between July 9 and August 3.
  - The estimated path for the short term interest rate increased by 3 basis points during the same period.

5-10 Year Forward Decomposition

- Market-implied TIPS-based measures of long-term inflation expectations (“breakevens”) increased slightly in recent weeks.
  - The five-to-ten year breakeven inflation rate increased 16 basis points from July 9 to August 3 and is up by about 33 basis points year-to-date.
  - According to the Abrahams-Adrian-Crump-Moench model, most of the year-to-date movements in forward inflation compensation continue to reflect changes in the inflation risk premium.
  - The estimated five-to-ten year inflation risk premium has increased by about 24 basis points year-to-date.
SPECIAL TOPIC: NIPA ANNUAL REVISION

Modest revisions to real GDP growth

- The July GDP release included a comprehensive revision of the national income and products account (NIPA) data.
  - Such revisions incorporate new and revised source data as well as statistical and definitional changes that can affect the entire history of GDP.

- In this case, revisions to real GDP growth were modest.
  - Over this expansion (2009Q2 – 2018Q1), the average real GDP growth rate was little revised at 2.2% (annual rate).
  - The decline in output in the last recession now appears slightly less severe, with real GDP falling at an average annual rate of 2.7% compared to the previous estimate of 2.8%.
  - Business investment expenditures were revised moderately upward over recent years, in part reflecting changes in price indices for tech investment.

Personal saving rate revised upward

- Unlike real GDP growth, the personal income data for recent years were revised notably upward.
  - Real disposable personal income is now estimated to have risen at a 2.0% annual rate over 2012Q4 – 2017Q4, compared to the previous estimate of 1.5%.
  - There were upward revisions to proprietors’ income, dividend and interest income, and (for 2017) wages and salaries.

- With relatively little revision to personal outlays, the personal saving rate over the past few years was revised substantially upward.
  - The 2018Q1 personal saving rate is now reported to be 7.2%, compared to the previous estimate of 3.3%.
  - The personal saving rate now appears to be elevated given the high level of the household wealth-income ratio.