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 11, 2018.
OVERVIEW

- The pace of growth in real consumer spending was firm in August, but it was still somewhat below that of recent months.
  - As was the case in July, the increase in spending for August was led by services and nondurable goods expenditures.

- The recent monthly readings suggest that business equipment spending growth may be somewhat stronger in 2018Q3 than it was in the first half of 2018.
  - New orders of capital goods (excluding aircraft) remained above shipments, continuing to suggest some momentum over the near term.

- Housing activity indicators remained soft in August.
  - Home price appreciation, which had remained solid in earlier in the year, slowed some in the most recent readings. These patterns suggest that higher mortgage rates have had moderate restraining effects on the housing market.

- Payroll growth was below expectations in September, but was revised significantly upward for both July and August. The unemployment rate fell to its lowest level since 1969.
  - The latest readings of various measures of labor compensation point to some firming of wage growth.

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

- After reaching new highs, U.S. equity indices fell sharply in the past week amid higher volatility. The nominal 10-year Treasury yield increased significantly, reaching a multi-year high, mostly due to higher real yields. The broad trade-weighted dollar index rose modestly. Oil prices moved higher to around their highest levels since late 2014.

**Output modestly above potential GDP estimate**

- The level of real GDP in 2018Q2 was about 0.5% above the estimate of real potential GDP from the Congressional Budget Office (CBO).
  - In the August update to its 10-year economic outlook, the CBO revised downward its estimates of potential GDP for recent years.
  - Over this expansion, real GDP has grown at a 2.3% annual rate, compared to the 1.5% growth rate of real potential GDP.
  - The 3.7% unemployment rate in September was below many estimates of its natural rate, including that of the CBO (4.6%).

- The current output and unemployment gaps signal tight resource constraints in the U.S. economy.
  - However, capacity utilization rates remain below their historical averages, suggesting looser constraints by that measure.
OVERVIEW

Unemployment reaches lowest level since 1969

- The unemployment rate dropped 0.2 percentage points to 3.7 percent.
  - The unemployment rate is at its lowest level since December 1969.
  - The decline in the unemployment rate was due primarily to declines in unemployment among prime-age (25-54 year-old) workers, whose unemployment rate fell from 3.2% in August to 3.0% in September.
- The labor force participation rate remained at 62.7%.
  - The labor force participation rate declined slightly for men from 68.8% to 68.7% and was unchanged for women.
- The employment-to-population ratio increased from 60.3% to 60.4%.

Inflation remains near FOMC’s longer-run objective

- The total PCE price index rose 0.1% in August, same as in the previous two months. The core PCE price index (which excludes food and energy prices) was essentially flat in August, the smallest change since March 2017.
  - Energy prices rose 1.9% in August, and are up 11% over the past 12 months. Food prices were unchanged.
- The 12-month changes in the total PCE and core PCE price indices were +2.2% and +2.0%, respectively.
  - The August reading marked the sixth consecutive month that total PCE inflation has been at or above 2%, the first such occurrence since early 2012.
  - Despite some softness in the monthly data, headline and core PCE inflation continue to be consistent with the FOMC’s 2 percent longer-run goal.
ECONOMIC ACTIVITY

**GDP Growth**

Source: Bureau of Economic Analysis via Haver Analytics

**Economic growth unrevised in 2018Q2**

- According to the third estimate, real GDP rose at a 4.2% annual rate in 2018Q2.
  - This figure is unchanged from the second estimate, but up from 4.1% in the advance release.
  - Compared with the advance and second estimates, the third GDP estimate relies more heavily on direct activity indicators, and less heavily on indirect indicators and trend-based data.

- Revisions to expenditure components were fairly small.
  - Inventory investment subtracted 1.2 percentage points from GDP growth, vs. 1.0 percentage point in the earlier releases.
  - Growth in business fixed investment spending was revised up to a 8.7% annual rate, from 8.5% in the second estimate and 7.3% in the advance estimate.

**Manufacturing and ISM Manufacturing Index**

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

**Manufacturing activity expands in August**

- Manufacturing production increased 0.3% in August following a 0.3% increase in July.
  - Manufacturing production rose by 3.2% in August on a 12-month change basis.

- The ISM PMI fell 1.5 percentage points to 59.8 in September.
  - Despite the decline, the Index remains at high levels, indicating strong performance.
  - The Prices Paid Index fell 5.2 percentage points, but remains above its 2017 average, indicating continued price pressures in raw material prices.

- All regional Fed manufacturing surveys indicated continued expansion in September.
Disposable Income and Consumption

12 Month % Change

Real Disposable Income

Real Personal Consumption

Source: Bureau of Economic Analysis, Federal Reserve Board via Haver Analytics
Note: Shading shows NBER recessions.

Consumer spending on track for solid Q3 growth

- Consumption spending increased 0.2% in August and growth in July was revised up to 0.3%.
  - Spending on goods increased 0.3% and spending on services increased 0.2%.

- Real disposable personal income increased 0.2% in August, in line with recent trends.

- As income and consumption grew at similar rates, the saving rate in August remained at 6.6%, as in July.

Consumer confidence highest since 2000

- The Conference Board’s Consumer Confidence Index was 138.4 in September (1985=100).
  - This index has been rising throughout 2018 and now stands at its highest level since September 2000.
  - The differential in the percentage of people expecting more vs. fewer jobs in the short term in the Conference Board survey is the highest since January 2001.

- The Michigan Consumer Sentiment Index was 100.1 in September (1966Q1=100).
  - This was 3.9 points above the August reading, and is the third highest level since January 2004.

- Both indices convey considerable optimism among households about economic and labor market conditions.
**Business Sector**

**Equipment Investment and Capacity Utilization**

- Growth of equipment spending moderates in 2018H1
  - After rising 9.6% in 2017, real business equipment investment grew at a more moderate 6.5% 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 2013–15.
  - Equipment investment has risen only moderately over the past three years, as the manufacturing capacity utilization rate remains fairly low.
    - This rate was 75.8% in August, the same as in May 2014 and 2.5 percentage points below its longer-term average.
    - Historically, utilization rates near 75% have been associated with rather modest growth of equipment investment.

**Nondefense Capital Goods Excluding Aircraft**

- New orders and shipments fall in August
  - Monthly data on new orders and shipments of nondefense capital goods excluding aircraft are high-frequency indicators of business investment in equipment.
    - Shipments of these goods decreased 0.2% in August after rising 1.2% in July.
      - On a 12-month basis, shipments increased 6.2%, somewhat below the corresponding changes in recent months.
      - Nevertheless, average shipments in July and August were 1.8% above the Q2 average, a solid performance.
    - New orders for these goods decreased 0.9% in July, but remained above shipments, suggesting continued near-term momentum for equipment spending.
**Housing Starts**

- Total housing starts rebounded by 9.2% in August after declining a cumulative 11.7% over the preceding two months. The 12-month change returned to positive territory, rising 9.4%.

- Single-family housing starts increased at modest rates in July and August, but are essentially unchanged on a year-over-year basis. Multi-family starts—which are much more volatile—increased 29.3% in August following a cumulative 29.4% decline over the preceding four months.

- In the first week of October, contract mortgage interest rates on 30-year fixed rate mortgages exceeded 5% for the first time since February of 2011. Mortgage rates are up around 100 basis points over the past year, which appears to be adversely impacting single-family sales and starts.

**Single Family Housing Market**

- The CoreLogic single family national home price index rose 5.5% in August from a year ago.
  - Growth in the CoreLogic home price index for August slowed compared to recent months.
  - Since the last quarter of 2017, this index has been above its pre-recession high set in April 2006.

- The inventory of single family homes was 1.7 million units in August, equivalent to a 4.3 months' supply at the current sales pace.
  - Since late 2015, the inventory of single family homes for sales has remained below the normal range of 5-7 months.
  - The lean supply of homes for sale along with a healthy job market have created upward pressures on home prices.
GOVERNMENT SECTOR

Real Government Consumption and Gross Investment

- Growth of government spending is firming
  - After being essentially unchanged from 2016Q1 to 2017Q3, 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 2.3% (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 0.8% over the four quarters ending in 2018Q2, the strongest since 2016Q4.

Federal Deficit

- Federal budget deficits expected to rise in next decade
  - The dashed blue line is the CBO projection as of June 2017, before the enactment of the tax bill in late 2017 and the increase in discretionary spending caps for FY2018 and FY2019 enacted early this year.
    - Under those projections, deficit were expected to increase from 3.5% of GDP in FY2017 to 5.2% of GDP in FY2027, due primarily to rapid increases in outlays for Social Security and Medicare.
  - Under the more recent set of projections, the deficit is projected to be a full percentage point of GDP larger on average over the period from FY2018 through FY2025. Then, in FY2026 and FY2027 the deficit is on average 0.4 percentage points less due to the fact that, under current law, the tax cuts are scheduled to expire after 2025.
INTERNATIONAL DEVELOPMENTS

Real Exports and Nonoil Imports of Goods

- The trade deficit kept on rising
  - The trade deficit continued its upward trend, as it rose to $53.2 billion in August from $50 billion in July. In real terms, exports fell and imports were up over the month.
    - Real goods exports dropped 1.2% from July to August, owing to declines in export volumes of oil goods, foods, feeds and beverages, industrial supplies (excluding oil) and autos.
    - Real nonoil goods imports grew 0.9% in August, mainly due to higher volumes of auto imports and imports of consumer goods (excluding autos). Similar to the previous month, oil goods import volumes increased in August.
  - Net exports boosted GDP growth by about 1.2 percentage points in the third estimate of 2018Q2 GDP, broadly similar to the net export growth contribution in the second estimate.

Crude Oil Prices

- Oil prices move higher
  - The Brent oil price benchmark was near $85/barrel in early October.
    - This is up from $79/barrel in September.
    - Oil prices have been trending higher since early 2016.
  - Prices are rising in spite of rapid increases in U.S. oil supply.
    - The increase in global oil production is being restrained by declines in Venezuela and Iran.
  - Demand growth remains near recent rates.
    - Most of the increase in demand is coming from China, India, and the United States.
    - Demand is not increasing in Europe and Japan.
**LABOR MARKET**

**Payroll Employment and Aggregate Hours**

12-Month Percent Change

- **Payroll Employment**
- **Aggregate Hours**

Source: Bureau of Labor Statistics via Haver Analytics

Note: Shading shows NBER recessions.

**Sustained employment growth in September**

- Nonfarm payrolls rose by 134,000.
  - While the increase in payrolls was below the Bloomberg median forecast of +184,000, net revisions to employment in July and August resulted in gains of 84,000, more than offsetting the gap between forecast and realization.
  - The 12-month percent change in payroll employment in September was 1.73%, its highest value since January 2017.

- Average weekly hours remained at 34.5.
  - The 12-month percent change in aggregate hours in September was 2.61%, its highest value since February 2015.

**One-Month Diffusion Index: All Industries**

Percent Rising

- **2018 YTD: 63.7**

Source: Bureau of Labor Statistics

Note: Shading shows NBER recessions.

**Payroll growth is robust across industries**

- The one-month total private diffusion index in September was 60.9%.
  - The one-month diffusion index reflects the balance of industries increasing and decreasing employment over the month, where 50% indicates an equal balance between industries with increasing and decreasing employment.
  - Quarterly averages of the one-month diffusion index have been above 60% since 2017:Q1, indicating broad-based payroll growth.

- The one-month manufacturing diffusion index in September was 62.5%, in line with readings over the past year.
LABOR MARKET

**Not at work due to bad weather**

- Hurricane Florence made landfall in North Carolina on September 14.
  - The date of the storm coincides with reference periods for both the establishment and household surveys.
  - There was a significant increase in the number of people not at work due to bad weather.
    - This number rose from 26,000 in August to 313,000 in September.
    - Some of this month's shortfall in payrolls may be due to the hurricane.

**Growth of Average Hourly Earnings and ECI**

- Average hourly earnings rose by 0.29% from $27.16 in August to $27.24 in September.
  - The 12-month change in average hourly earnings was 2.72%, slightly down from its August value of 2.90%.
  - Despite this decline, the 6-month change in average hourly earnings rose to 3.31% (annual rate) in September, the highest in this expansion.

- Average weekly earnings rose by 0.29% from $937.02 to $939.78.
  - The 12-month change in average weekly earnings was 3.35%.
  - The third quarter average of the 12-month change in average weekly earnings was 3.21%, a post-recession series high.
INFLATION

Core CPI Inflation is Cooling

- Core CPI increased 0.1% in September, the same as in August, leaving its 12-month change stable at 2.2%.
  - Over the past three months, core inflation is up at only a 1.8% annual rate, indicating some cooling with respect to the summer’s readings.

- Core goods prices fell 0.3% in September, the second consecutive decline of that magnitude, pushing their 12-month change deeper into negative territory.

- Core services prices increased 0.2% in September, also the same as in August.

Medical care inflation revisits historical lows

- Medical care inflation has declined steadily since the Great Recession, from around 5% in 2007 to about 2% in 2018.

- Medical care inflation has experienced a boom-bust cycle over the past year, although of a smaller amplitude than the one between 2015 and 2017. After peaking at 2.5% in June 2017, 12-month inflation in the total medical care price index was 1.5% in August, the lowest in 60+ years. It has recovered somewhat, to 1.7% in September.

- This weakness in medical care prices reflects low readings in both medical care commodities and services, likely reflecting the ongoing structural transformation in the provision of medical care services of the last several years.
**FINANCIAL MARKETS**

### U.S. Equity Market Index and Volatility

- U.S. equity markets continued their 2018 rebound after the decline earlier in the year, registering new all-time highs for the S&P 500 index in September.
  - The S&P 500 index rose 1% between September 7 and October 4 and is up 12% from its recent low on April 2.
  - As of October 4, the index is up 7.6% year-to-date.

- Option-implied stock market volatility, as measured by the CBOE Volatility Index (VIX Index), remains low.
  - The VIX Index closed at 14.2 on October 4, which is well below its 37.3 multi-year high on February 5, and below its historical median of 17.5 since 2000.

### US Bank Equities Performance

- As measured by the KBW Nasdaq Bank Index, bank equities decreased by 2.4% between September 7 and October 4 and are 2.7% higher relative to April 2.
  - As of October 4, the KBW Index was roughly flat year-to-date.

- The XLF financial sector ETF decreased by 0.7% between September 7 and October 4 and is 4.4% higher since April 2.
  - As of October 4, the XLF ETF was up 0.8% year-to-date.
FINANCIAL MARKETS

USD Exchange Rates

- The exchange value of the dollar against a basket of global currencies increased 0.35% between September 7 and October 4.
  - Over the same period, the dollar appreciated 0.3% against the euro, appreciated 2.6% against the Japanese yen, and depreciated 1% against the Mexican peso.

- Since the start of 2018, the dollar has appreciated around 3% against a basket of global currencies.

Expected Federal Funds Rate

- The expected path of the federal funds rate implied by rates on overnight indexed swaps (OIS) moved up for shorter maturities by around 10 to 20 basis points between September 7 and October 5.
  - The reaction for longer maturities was similar, increasing by around 15 to 25 basis points since September 7.

- The market-implied path remains somewhat below the median path of the FOMC’s September 2018 Summary of Economic Projections and the July/August 2018 NY Fed Survey of Primary Dealers over a medium horizon.
**FINANCIAL MARKETS**

### 10-Year Treasury and Term Premium

- **Longer-term Treasury yields increase**
  - Longer-term Treasury yields have increased since early September.
  - The 10-year yield increased by 21 basis points between September 7 and October 4, reaching its highest level in the past several years.
  - Estimates from the Adrian-Crump-Moench term structure model attribute the increase to a less negative term premium and to a higher expected path for short-term interest rates.
  - The 10-year term premium increased by 13.5 basis points and the 10-year expected path of short-term interest rates increased by 7.5 basis points between September 7 and October 4.

### 5-10 Year Forward Decomposition

- **Breakeven inflation increases slightly**
  - 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 by around 4 basis points from September 7 to October 4.
  - 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.
**SPECIAL TOPIC: SCE LABOR SURVEY**

### Employer-to-employer transition rate rises

- The results of the July 2018 FRBNY SCE Labor Market Survey show that among respondents who were employed four months ago, 96.8% were still employed, compared to 93.6% last July.
  - The increase was most notable for older respondents (over age 45) and for females.

- The job-to-job transition rate rose to 4.7% from 3.8% in July 2017.
  - This increase was driven by respondents under age 45, workers without a college degree, and females.

- After declining over the first half of the year, the proportion of individuals who reported searching for a job in the past four weeks returned to 22%, unchanged from a year ago.

### Mixed results on job satisfaction

- Among employed respondents, satisfaction with current wage compensation fell to 58.5%, from 60.0% in July 2017.
  - This decline was most notable for younger respondents and workers without a college degree.
  - Higher-educated workers experienced a six percentage point increase in current wage compensation satisfaction.

- Satisfaction with current nonwage benefits edged up to 67.6%, from 67.1% in July 2017.

- The share of respondents satisfied with promotion prospects at their current job improved to 49.1%, from 44.3% in July 2017.
  - There was a significant 11.5 percentage point rise in the proportion of lower-educated workers who are satisfied with the career progression opportunities at their current jobs.
**SPECIAL TOPIC: SCE LABOR SURVEY**

### Reservation Wage

- ** Thousands of Dollars**
  - **75th Percentile**
  - **Median**
  - **25th Percentile**

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**Source:** New York Fed Survey of Consumer Expectations

### Average reservation wage increases

- The average reservation wage—the lowest wage respondents would be willing to accept for a new job—jumped to $60,196, from $57,964 in July 2017 (and $59,042 in July 2016).
  - The increase was most pronounced for older workers (above age 45), higher-educated respondents, and males.

- Conditional on expecting an offer, the average expected annual salary of job offers in the next four months increased to $52,905, from $50,790 in July 2017.
  - This series has been on an upward trend in 2018; the increase was most notable for workers with a college degree.

- The average expected likelihood of moving into unemployment ticked up slightly, to 2.7%, from 2.2% last July.
  - This increase was most notable among female workers.