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 November 3, 2017.
After declining in August, real consumer spending showed a strong rebound in September.
- Motor vehicle sales picked up notably in September and October after declining through much of the year.

Business equipment spending has been strong this year, with capital spending indicators pointing to solid growth in the near-term.

Housing indicators still point to continued gradual improvement in this sector.
- Multi-family starts remained appreciably below their recent peaks, but tight market conditions continued to promote a gradual rise in single-family starts.

Payroll growth recovered in October from the effects of Hurricanes Harvey and Irma. The unemployment rate, the employment-to-population ratio, and the labor force participation rate all declined.
- Growth of labor compensation remained subdued.

Monthly readings on PCE inflation indicated that core inflation continues to run somewhat below the FOMC’s longer-run objective.

In the past month, U.S. equity indexes continued to rise and are at record highs. The nominal long-term Treasury yield was roughly unchanged and the U.S. dollar rose slightly.
- Oil prices moved up recently due to greater tensions in the Middle East and a solid outlook for global growth.

**Output slightly above its potential level**

- Real GDP in 2017Q3 was 0.2% above the Congressional Budget Office’s (CBO) measure of real potential GDP.
  - Based on current data, real GDP had not been above the CBO estimate of real potential GDP since 2007Q4.
  - The October unemployment rate of 4.1% is below many estimates of its natural rate, including that of the CBO (4.74%).

- The CBO output gap indicates no remaining resource slack in the U.S. economy, while the unemployment gap signals even tighter resource constraints.
  - However, capacity utilization rates are still below their historical averages, suggesting appreciable remaining resource slack by that measure.
**Labor Market Indicators**

- The unemployment rate fell from 4.2% in September to 4.1% in October.
  - The unemployment rate has not been at or below 4.1% since December 2000.

- The labor force participation rate dropped 0.4 percentage point from 63.1% to 62.7%.

- The employment-to-population ratio dropped from 60.4% in September to 60.2% in October.
  - The employment-to-population ratio has remained at or above 60% since February 2017.
  - Prior to February 2017, the last time the employment-to-population ratio was above 60% was February 2009.

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**PCE Deflator**

- The total PCE price index rose 0.4% in September, following a 0.2% increase in August. The core PCE price index (which excludes food and energy prices) increased 0.1% in September, the same as in August.
  - Energy prices rose 6.8% in September, partly impacted by Hurricane Harvey, and are up 11% from a year ago.
  - Food prices were flat in September for a second consecutive month and are 0.4% higher from a year ago.

- The 12-month changes in the total PCE and core PCE price indexes were +1.6% and +1.3%, respectively, in September.
  - After peaking at 2.2% in February, the 12-month change in the total PCE price index has been below the FOMC’s objective since that month.
Output growth maintains its pace in Q3

- According to the advance release, GDP expanded at a 3.0% annual rate in 2017Q3.
  - Following the 3.1% annual growth rate in Q2, this marks the first time since 2014Q2-Q3 that output growth has been 3% or higher in two consecutive quarters.

- Consumer spending contributed 1.6 percentage points to Q3 growth, with investment in business equipment, inventory investment, and net exports also providing notable positive growth contributions.
  - However, residential investment and investment in nonresidential structures actually declined during the third quarter.

Manufacturing in October exhibits mixed signals

- The ISM Manufacturing Index fell 2.1 points in October to 58.7, indicating continued expansion but at a slower rate.
  - The index is still above the average for the first half of the year.

- Manufacturing production edged up by 0.1%.
  - This rise is likely explained by the manufacturing sector regaining its footing after the hurricane season.

- Regional surveys by the New York, Philadelphia, Richmond and Dallas Federal Reserves indicate accelerating expansion in the manufacturing sector.
**Disposable Income, Consumption, and Wealth**

- **Household Net Worth (Right Axis)**
- **Real Disposable Income (Left Axis)**
- **Real Personal Consumption (Left Axis)**

- Quarter % Change
- % of Disposable Income

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

**Consumer spending rebounds in September**

- Real personal consumption expenditures (PCE) increased 0.6% in September after declining 0.1% in August.
  - Real expenditures on goods rose 1.4%, driven by an increase of 3.5% in spending on durable goods.
  - Service expenditures increased a solid 0.3%.
- Real disposable personal income was unchanged in September, after declining 0.1% in August.
- With consumption outpacing income growth, the personal saving rate declined to 3.1% in September.

**Total Light Vehicle Retail Sales**

- Millions

Source: Autodata via Haver Analytics
Note: Shading shows NBER recessions.

**Light vehicle sales rebound in last two months**

- Over the first eight months of this year, light motor vehicle sales were below the pace of the previous two years.
- Sales rose sharply in September to about 18.5 million units (annual rate), and remained at a strong pace of about 18 million in October.
- Two factors appeared to have contributed to the rise in sales in September and October.
  - One is the replacement of vehicles damaged from the major hurricanes that have hit the U.S. this year.
  - The second is widespread discounting to help reduce inventories. The inventories-sales ratio had become elevated earlier in the year, but returned to more normal levels in September.
**Equipment Investment and Capacity Utilization**

- **Manufacturing Capacity Utilization Rate (Right Axis)**
- **Real Business Investment in New Equipment (Left Axis)**

- **Quarterly Change**
  - 1980
  - 1985
  - 1990
  - 1995
  - 2000
  - 2005
  - 2010
  - 2015
- **% of Capacity**
  - 30
  - 20
  - 10
  - 0
  - 10
  - 20
  - 30
  - 40
  - 50
  - 60
  - 70
  - 80
  - 90
  - 100

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

**Note:** Shading shows NBER recessions.

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**Equipment investment rises solidly**

- With another solid rise during the third quarter, real business equipment investment increased 6.2% over the four quarters ending in 2017Q3.
  - Four-quarter changes were positive for all of the major categories of equipment.
  - With the recent increases, the level of real business equipment investment hit a new peak in 2017Q3.

- Still, equipment investment has risen sluggishly over the past three years, as the manufacturing capacity utilization rate remains low.
  - This rate was 75.1% in September, 3 percentage points below its longer-term average.
  - Historically, robust growth of equipment investment has not occurred until the capacity utilization rate surpassed 80%.

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**Nondefense Capital Goods Excluding Aircraft**

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

- **Bil. $, 3 MMA**
  - 2000
  - 2002
  - 2004
  - 2006
  - 2008
  - 2010
  - 2012
  - 2014
  - 2016
- **Bil. $, 3 MMA**
  - 45
  - 50
  - 55
  - 60
  - 65
  - 70
  - 75

**Source:** Census Bureau via Haver Analytics

**Note:** Shading shows NBER recessions.

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**New business equipment investment keeps momentum**

- As noted above, growth of business investment in new equipment has rebounded in 2017 following a slump over the preceding two years.

- High frequency indicators on new orders for and shipments of nondefense capital goods began moving upward in mid-2016 and have continued on an upward trend since then.

- This development suggests that the firmer tone of business investment in new equipment is likely to continue in the immediate future.
**HOUSING SECTOR**

**Housing Starts**

- **Total housing starts stable in 2017Q3 after Q2 decline**
  - A three-month moving average of total housing starts was essentially unchanged in 2017Q3 at 1.165 million units at a seasonally-adjusted annual rate (SAAR).
    - This follows a decline from 1.24 million units in Q1 to 1.167 million in Q2.
  - As seen in the chart, the decline of total starts since the first quarter has been concentrated in the multi-family sector, where rental vacancy rates, while still quite low, have begun moving upward over the past few quarters.
  - Single-family starts remain on a very gradual uptrend.

**New and Existing Home Sales**

- **Home sales continue on a gradual uptrend**
  - Single-family existing home sales increased 1.1% in September to 4.79 million units (SAAR).
    - Single-family existing home sales are 1.2% higher than a year ago and are comparable to mid-2002 levels.
  - Single-family new home sales increased 18.9% (SAAR) in September to 667,000 units.
    - Single-family new home sales have risen 17.0% over the past year, and have just surpassed the immediate pre-recession level (641,000 units in November 2007).
  - Inventories-sales ratios for existing and new homes are below their historical averages, which has contributed to upward pressure on home prices.
GOVERNMENT SECTOR

Real government spending unchanged over past year

- As of 2017Q3, real consumption and gross investment spending by both the federal and state and local governments was essentially unchanged from a year earlier.

- At the federal level, both defense and nondefense spending were roughly unchanged over the year ending in 2017Q3.
  - Defense spending, comprising 60% of federal consumption and gross investment spending, had been contracting sharply as recently as 2013. In contrast, nondefense spending grew 3.2% in 2015 but has slowed since then.

- At the state and local level, employment has been rising but infrastructure spending has been declining sharply in recent quarters.

State and local public sector remains weak

- State and local government consumption growth continues to weaken.
  - Growth in state and local consumption spending has been weakening for the past two years.
  - In Q3, real year-over-year spending growth fell to 0.6%.
  - State and local consumption is about 80% of state and local spending, and is dominated by wage and salary payments.

- Infrastructure spending by states and localities continues to decline.
  - Real state and local government gross investment has been weak throughout the current expansion.
  - Spending has been falling since mid-2014, and has been very weak throughout this recovery.
INTERNATIONAL DEVELOPMENTS

**Net Exports: Contribution to GDP Growth**

According to the advance release, net exports added 0.4 percentage point to GDP growth in Q3.
- Real exports rose 2.3% (SAAR), whereas real imports fell 0.8% (SAAR).
- Growth rates of both exports and imports decelerated relative to Q2.

The trade deficit grew to $43.5 billion in September from a revised $42.8 billion deficit in August.
- Real exports of goods were up 0.8% in September, owing mainly to higher export volumes of petroleum.
- Real imports were up 0.5% between September and August, as increases in capital goods (excluding autos) and nonoil industrial supplies outpaced a decline in oil imports.

**Net Financial Outflows from China**

Net financial outflows from China totaled $37 billion in Q3.
- Net outflows have been trending down, with the reading in Q3 at half of the year-ago outflow.

Very little of the net purchases of foreign assets appears to have been done by private investors.
- Net private outflows were close to zero in Q3.
- Last year, net private outflows hit $640 billion.

The modest outflows were mostly in the form of central bank purchases of foreign assets.
- These reserve asset purchases equaled $30 billion in Q3.
- Last year, the central bank sold off $444 billion of its reserves to offset the substantial private outflows.
Payroll Employment and Aggregate Hours

Payroll employment rebounds in October

- Nonfarm payrolls increased by 261,000, below the median forecast (+313,000).
  - The net revision to August and September payrolls raised employment gains by 90,000, bringing the average monthly increase in payroll employment to 162,000 over the past three months.

- Average weekly hours remained unchanged at 34.4 hours.
  - With the notable rise in payrolls, aggregate hours worked by all private employees increased by 0.2%.

- Employment in private service-providing industries increased by 219,000, following a decrease of 3,000 in September.

Unemployment Flows

Improvement in unemployment in 2017

- The job-finding rate, or percentage of unemployed workers finding jobs, increased from 26.9% in January to 28.1% in October.
  - The job-finding rate is above its pre-recession level of 27.0%.

- The job-loss rate, or percentage of employed workers entering unemployment, fell from 1.13% in January to 1.04% in October.
  - The job-loss rate remains below its pre-recession level of 1.18%.

- The median duration of unemployment was 9.9 weeks in October, down from 10.3 weeks in September.
**Stark decline in labor force participation rate**
- The labor force participation rate declined from 63.1% to 62.7% in October after increasing by 0.2 percentage point in September.
  - The decline can be attributed to a decrease in flows from non-participation to employment coupled with an increase in flows from employment to non-participation.
- The decline in the labor force participation rate was more notable for prime-age women (from 75.2% to 74.9%) than for prime-age men (from 88.6% to 88.5%).

**Slight decline in average earnings for October**
- Average hourly earnings declined by 0.04% from $26.54 in September to $26.53 in October.
  - The decline in average hourly earnings was concentrated in service-providing sectors.
- Average weekly earnings decreased by 0.04% in October.
  - The 12-month changes in average hourly earnings and in average weekly earnings were both +2.4%.
**INFLATION**

**CPI Inflation: Core Goods and Core Services**

- **Core inflation moves sideways in September**
  - The September core CPI report was not particularly encouraging regarding the prospects of a swift return of inflation to mandate-consistent levels.
    - Core CPI rose 0.1% in September down from 0.2% in August.
    - The 12-month change in the core index was 1.7%, the same as in the previous four months.
  - Core goods prices continue to fall while service prices did not rise as fast as they did in August.
    - Core services prices rose 0.2% in September, down from the 0.4% increase recorded in August, with the 12-month change at 2.6%.
    - Core goods prices fell by 0.2% in September, with the 12-month change at -1.0%.

**CPI Inflation: Medical Care**

**CPI medical inflation returns to trend**

- The CPI medical care year-on-year inflation declined by 0.2 percentage points to 1.6% in September.
  - This represents its lowest reading since 2000.
- CPI medical inflation has been on a downward trend for the last two decades, with the rise in 2015-2016 likely a transient phenomenon.
  - This rise is being reversed by the steep decline in 2017.
  - These rise and fall dynamics are accounted for by the CPI Physician services index, which is vulnerable to outliers.
- Other indices of medical inflation (PCE) show a smoother downward trend, further suggesting that the decline in CPI medical inflation is just a return to trend.
**U.S. Equity Market Index and Volatility**

![Graph showing S&P 500 and VIX indices from 2007 to 2018. The S&P 500 index has generally increased, while the VIX index has shown periods of volatility.]

**Source:** Bloomberg Finance L.P.

**U.S. equity markets register new record levels**

- U.S. equity markets reached new highs in October and early November.
  - Between October 6 and November 6, the S&P 500 index increased 1.6%.
  - On the morning of November 6, the S&P 500 index achieved its all-time high at 2591.13.

- Option-implied stock market volatility, as measured by the CBOE Volatility Index (VIX), remains low.
  - The VIX closed at 9.14 percent on November 3, its lowest level since 1993.

**U.S. Bank Equities Performance**

![Graph showing performance of SP500, XLF ETF, and KBW Index from 2007 to 2018.]

**Source:** Bloomberg Finance L.P.

**Note:** Start date 01/03/2007 = 1.

**U.S. bank stocks perform similar to market**

- As measured by the KBW Nasdaq bank index, bank equities rose 1.2% between October 6 and November 6, compared to an increase of 1.6% for the S&P 500 Index.
  - The XLF financial sector ETF rose 1.5% over the same period.

- For 2017 year-to-date, U.S. bank equities have increased more slowly than the broader stock market, which has increased 15.7%.
  - The KBW index is up 11.1%, while the XLF ETF is up 15.1% year-to-date.
**USD Exchange Rates**

- The exchange value of the dollar against a basket of global currencies increased about 0.8% over the last month.
  - Over this same period, the dollar appreciated by about 2.6% against the Mexican peso, by 1% against the Euro, and by 0.9% against the Japanese yen.

- Since the start of the year, the dollar has depreciated by about 6.9% 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) was little changed over the past month.

- The current market-implied path out to five years remains below 2.4%.
  - This is below the reported longer-run value of the median respondent of both the FOMC’s September 2017 Summary of Economic Projections and the September 2017 NY Fed Survey of Primary Dealers.
**10-Year Treasury and Term Premium**

- The 10-year Treasury yields remain low by historical standards.
  - The 10-year yield is approximately unchanged from its level in early October, and is down by about 30 basis points from the 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**

- Market-implied TIPS-based measures of long-term inflation expectations ("breakevens") were little changed over the past month.
  - The five-to-ten year breakeven inflation rate moved down 1.5 basis points between October 6 and November 6, and is up by 46.5 basis points from the record lows observed last year.

- According to the Abrahams-Adrian-Crump-Moench term structure model, most of the movements in forward inflation compensation continue to reflect movements of the inflation risk premium.
SPECIAL TOPIC: SURVEY OF CONSUMER EXPECTATIONS

Medium-term inflation expectations remain stable

- According to the October 2017 FBRNY Survey of Consumer Expectations (SCE), median inflation expectations at the three-year ahead horizon were unchanged at 2.8%.
- Medium-term expectations have been fairly stable at around 2.7% since the spring of this year.
- Median year-ahead inflation expectations increased from 2.5% in September to 2.6% in October.

Expected year-ahead change in food prices declines

- Median year-ahead expectations of food price changes fell to its lowest value since the start of our survey in June 2013.
- The median one-year ahead expected gasoline price change decreased from 4.7% in September to 3.8% in October.
- Expectations for changes in the cost of medical care and the cost of a college education increased from 9.3% to 9.7% and from 5.9% to 6.6%, respectively, in October.

Source: Survey of Consumer Expectations
Federal Reserve Bank of New York
Expected Change in Financial Situation

Percent Expecting to be Somewhat or Much Better Off Financially One Year From Now

Percent Expecting to be Somewhat or Much Worse Off Financially One Year From Now


Source: Survey of Consumer Expectations
Federal Reserve Bank of New York

Consumers optimistic about their financial situation

- Consumers’ expectations about their year-ahead financial situation show a persistent increase following the 2016 election.

- In October, 41% expected improvement in their situation, compared to 35% in the prior year.

- The proportion of respondents expecting a worsening approached a series low – only 11% expect their financial situation to worsen in October, compared to 17% a year ago.

Government Debt Expectations

Median one-year ahead expected government debt growth


Source: Survey of Consumer Expectations
Federal Reserve Bank of New York

Government debt growth expectations rise

- Median year-ahead expected growth in government debt posted its third consecutive monthly increase in October.

- Since attaining a series low of 4.8% in December of 2016 and 4.9% in July of 2017, it has steadily risen since then, reaching 5.9% in October.

- The current level is below the 8-10% range observed during June 2013 to November 2014.