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 December 14, 2018.
• Real consumer spending growth slowed somewhat in November, but remained robust.
  – Goods expenditures grew at a strong pace, while spending on services slowed.

• Business equipment spending rose modestly in 2018Q3, a further slowdown from the second quarter and below the pace in 2017.
  – New orders of capital goods (excluding aircraft) declined in November but remained modestly above shipments, suggesting some momentum over the near term.

• Housing activity indicators remained soft in November.
  – While a strong labor market continues to have the potential to provide support to the housing sector, higher mortgage rates and tax code changes appear to be having some restraining effect on the market.

• Payroll growth was strong in December. The labor force participation rate rose and the unemployment rate increased slightly, while the employment-to-population ratio was unchanged.
  – The latest readings of various measures of labor compensation continue to indicate a gradual firming of wage growth.

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

• Even though they rebounded recently, U.S. equity indices declined over the past month amid considerable volatility. The nominal 10-year Treasury yield decreased. The broad trade-weighted dollar index declined. After a recent rally, oil prices were little changed over the month.

**Output moderately above potential GDP estimate**

• The level of real GDP in 2018Q3 was about 0.8% above the estimate of real potential GDP from the Congressional Budget Office (CBO).
  – Over this expansion, real GDP has grown at a 2.3% annual rate, compared to the 1.5% growth rate of real potential GDP.
  – Over this year, the CBO projects that real potential GDP will grow 2.1%.
  – The 3.9% unemployment rate in December was below most estimates of its natural rate, including that of the CBO (4.61%).

• 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.
**Indicators consistent with strong labor market**

- The labor force participation rate increased 0.2 percentage point to 63.1% in December, matching September 2017 as the highest participation rate since 2015.
  - The prime-age (25-54) male participation rate was unchanged in December at 89.0%, which is modestly below levels seen earlier in 2018.
  - The prime-age female participation rate rose to 75.9%, a level that is slightly above the levels that prevailed just prior to the 2007-09 recession.
- The employment-to-population ratio remained at 60.6%.
- The unemployment rate increased 0.2 percentage point in December to 3.9%.
  - An alternative measure of unemployment, U6, which includes marginally attached workers and workers who hold part-time jobs but prefer full-time jobs, was unchanged in December at 7.6%.

**Inflation remains near FOMC’s longer-run objective**

- The total PCE price index rose 0.1% in November, lower than in October. The core PCE price index (which excludes food and energy prices) increased 0.15% in November, slightly higher than in October.
  - Energy prices declined 2.1% in November, and are up 3.4% relative to one year ago. Food prices rose 0.2%.
- The 12-month changes in the total PCE and core PCE price indices were +1.8% and +1.9%, respectively.
  - Total PCE inflation has fallen below 2% after several months at or above 2%.
  - While headline PCE inflation appears to have softened slightly, core PCE inflation remains near the FOMC’s 2 percent longer-run goal.
**ECONOMIC ACTIVITY**

**GDP Growth**

Source: Bureau of Economic Analysis via Haver Analytics

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**Economic growth revised down slightly in 2018Q3**

- According to the third estimate, GDP grew at a 3.4% annual rate in 2018Q3.
  - The previous estimate had 3.5% growth.

- Changes in contributions from the various categories of growth were largely offsetting.
  - Upward revisions to inventory investment and spending on intellectual property were matched by downward revisions to exports and spending on nonresidential structures.

- Growth in Q3 was largely from consumption, inventories, and government spending.
  - Declining exports was a substantial drag on growth.

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**Manufacturing and ISM Manufacturing Index**

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

** Manufacturing activity expands in December**

- Manufacturing production was unchanged in November following a revised 0.1% decrease in October.
  - Manufacturing production rose by 1.9% in November on a 12-month change basis.

- The ISM PMI decreased 5.2 percentage points to 54.1 in December.
  - December’s decrease indicates that manufacturing expanded at a much slower pace than in November.
  - The Prices paid index fell 5.8 percentage points, from 60.7 to 54.9, indicating raw materials price pressures at a slower pace.

- Regional Fed manufacturing surveys were mixed in December.
**Households**

### Disposable Income and Consumption

- 12 Month % Change
- 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 slows in November

- Real personal consumption expenditures rose 0.3% in November down from a revised growth of 0.6% in October.
  - Spending on goods increased 0.7% as in October, but spending on services slowed to a 0.2% growth from 0.5% in the previous month.
- Real personal disposable income increased 0.2% in November following growth of 0.3% in October.
  - Nominal income increased 0.2% after a robust 0.5% increase in October.
  - Growth of wages and salaries slowed to 0.2% from 0.4% in the previous month.
- The personal saving rate declined to 6% from 6.1% in October.

### Consumer confidence declines sharply in December

- The Conference Board’s Consumer Confidence Index fell just over 8 points in December, from a revised level of 136.4 in November.
  - The decline in the headline index was driven by declines in both the Expectations Index and the Present Situation Index.
  - This is the lowest reading for the Expectations Index since November 2016.
- Consumers’ short-term outlook on both business conditions and employment deteriorated.
- Near-term (one-year) household inflation expectations declined to 4.3% from 4.7% in November.
  - This is the lowest level for the series since February 2004.
**Equipment Investment and Capacity Utilization**

- **4-Quarter % Change**
- **% 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.

**Equipment spending growth modest in 2018Q3**

- Real business equipment investment grew at a 3.4% annual rate in 2018Q3. So far this year, equipment spending has risen at a 5.5% annual rate after rising 9.6% in 2017.
  - Compared to 2017, growth has slowed this year in all major categories of equipment except transportation equipment.
  - The equipment spending share of nominal GDP remained slightly below its average share in 2013–15.

- Recent softer equipment investment has occurred against a backdrop of continued relatively low levels of the manufacturing capacity utilization rate.
  - This rate was 75.7% in November, the same as in June 2015 and about 2½ percentage points below its longer-term average.
  - Historically, utilization rates near 75% are associated with modest growth of equipment investment.

**Nondefense Capital Goods Excluding Aircraft**

- **Bil. $, 3 MMA**

Source: Census Bureau via Haver Analytics

Note: Shading shows NBER recessions.

**Retrenchment in capital goods in November 2018**

- Shipments of nondefense capital goods excluding aircraft fell by 0.1% in November 2018.
  - This measure is a proxy for equipment spending that is available at a monthly frequency.

- New orders of nondefense capital goods excluding aircraft declined by 0.6% in November 2018.

- However, new orders of nondefense capital goods excluding aircraft remain moderately above shipments, suggesting near-term momentum in equipment spending.
**HOUSING SECTOR**

**Housing Starts**

- Total housing starts rose 3.2% in November. Even so, the October-November average of total housing starts was only slightly above the soft pace of Q3.
  - Single-family housing starts declined 4.6% in November following a 1.7% decline in October.
    - The three-month moving average of single-family starts have been on a gradual downward trend since peaking in May.
    - Higher mortgage interest rates and the scaling back of state and local tax deductions appear to be factors behind this slowing.
  - Multi-family housing starts, which are volatile, rose 22.4% in November following declines in the previous two months.
    - The three-month moving average of multi-family starts were up about 10% since August 2018.

**Single Family Housing Market**

**Total housing starts stabilize so far in Q4**

**Housing price gains slow in November**

- The CoreLogic single family national home price index rose 5.27% in November on a year over year basis.
  - While home price growth continued, it slowed relative to earlier in 2018, when increases were around 6%.
  - All states except North Dakota experienced year over year increases in the home price index in November.
- The inventory of single family homes was 1.53 million units in November, equivalent to a 3.9 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.
  - While home price growth continues, it has slowed amid tight inventories and stagnant construction.
**Real Government Consumption and Gross Investment**

- After being essentially unchanged from 2016Q1 to 2017Q3, growth of consumption and gross investment by the government sector has firmed over the past year, rising 2.3%.
- As of 2018Q3, growth of consumption and gross investment by the federal government rose to 3.5% (four-quarter percent change), the strongest since 2010Q3.
  - Spending on national defense is up 4.2% over the past four quarters while nondefense discretionary spending has risen by 2.4%.
- At the state and local level, consumption and gross investment grew 1.5% over the four quarters ending in 2018Q3 after having declined in 2017.

**State and local sector strengthens further**

- Real state and local government gross investment grew 6.5% over the four quarters ending in 2018Q3.
  - Gross investment has now grown for four consecutive quarters for the first time since 2014.
  - Real state and local infrastructure spending remains below its level of a decade ago, but has now surpassed its 2011 level.
- State and local consumption spending grew slightly in Q3.
  - After a strong recovery between 2014 and 2016, real state and local consumption spending has been stable for about two years.
  - Consumption, comprised mainly of wages and salaries, is about 80% of state and local government spending.
**INTERNATIONAL DEVELOPMENTS**

**Global Export Orders and Export Volume Growth**

Global export growth has staged a modest rebound in recent months, rising 3.7% in the three months through October compared with the same period a year earlier.
- This compares with a figure of just 2.4% in May.
- The rebound has been strongest among economies in Emerging Asia. Export growth among major advanced economies has actually slowed.

- Export orders, in contrast, have continued to weaken, with December’s survey the weakest in two and a half years.
- These survey data suggest that growth in global export volumes will turn back down in coming months.

- New trade restrictions would further dampen the outlook for global exports.

**China: Manufacturing PMI and Industrial Production**

China’s manufacturing activity continues to slow

China’s manufacturing purchasing managers’ index (PMI) declined for a fourth consecutive month in December to 49.4, the lowest reading since February 2016.
- New export orders tumbled to 46.6, resuming a sharp decline after stabilizing temporarily the prior month. The decline in export orders suggests that exports will be a drag on growth going forward.
- The quarterly growth rate of industrial production held at 5.7% in November, similar to the growth rate in Q3 but 0.7 percentage point below the quarterly growth rates in Q2 and Q1.

- Non-manufacturing activity has held up better, however, with the PMI for construction and services increasing by 0.4 percentage point to 53.8. The increase was driven by a rebound in construction activity.
**Payroll Employment and Aggregate Hours**

- **Payroll growth strong in December**
  - Nonfarm payrolls increased 312,000 as private payroll employment rose 301,000 and government payrolls increased 11,000.
    - Realized employment gains were well above the Bloomberg median forecast of 184,000, as well as the high forecast in the survey of 225,000.
    - Payroll employment also was revised upward for both November (from +155,000 to +176,000) and for October (from +237,000 to +274,000), for a total revision of +58,000.
  - Average weekly hours increased to 34.5 hours in December from 34.4 hours in November, reversing the November decline.
    - As a result, aggregate weekly hours worked by all private employees increased 0.54% in December after falling 0.18% in November.

**Goods vs. Service-Providing Employment Growth**

- **Employment growth is broad-based across sectors**
  - In December 2018, the goods-producing employment year-over-year growth rate of 3.1% surpassed that of services-providing employment at 1.9%.
  - While goods-producing employment growth rates trended upwards and service-providing employment growth rates trended downwards in 2017, both sets of growth rates have been more stable in 2018.
    - The average year-over-year growth rates across all months for goods-producing and service-providing employment in 2018 were 3.2% and 1.7%, respectively.
**Beveridge Curve**

Vacancy Rate (JOLTS)

- The vacancy rate, expressed as 100 times the ratio of job openings to the sum of job openings and employment, fell slightly by 0.1 percentage point to 4.4% in November, in line with the second- and third-quarter averages for 2018.
  - The average vacancy rate in 2018 through November was 4.3%, notably higher than average vacancy rate in 2017 of 3.7%.
- The ratio of vacancies to unemployment, a measure of labor market tightness, was 1.15 in November, down slightly from 1.17 in October.
  - The average vacancy-to-unemployment ratio in 2018 through November was 1.08, meaning that on average there was more than one job opening in 2018 for every unemployed person. The average ratio in 2017 was 0.81.

**Growth of Average Hourly Earnings and ECI**

Annual Percent Change

- Average hourly earnings increased 0.40% in December, and were up 3.15% over the past 12 months.
  - The 12-month changes in average hourly earnings in the last three months (ranging from 3.13% to 3.17%) are notably above the 2.4 – 2.8% range in which the average hourly earnings changes had been fluctuating from 2016 until September.
- Average weekly earnings increased 0.69% in December, suggesting a robust increase in the wage and salary component of personal income.
**Inflation**

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

- **Core inflation holds steady in December**
  - Headline inflation fell driven by a decline in energy prices, but core inflation rose in line with expectations.
    - The 12-month change in the core index was 2.2% in December, the same as in November.
  - Core goods prices rose for the third consecutive month.
    - The rise in core goods prices was mainly due to increases in the prices of recreational commodities. The 12-month change in core goods prices in December was 0.1%.
  - Core services inflation was a bit stronger in December than in the previous two months.
    - Core services prices rose 0.3% in December. The 12-month change in this index was 2.9% over the past three months.

**1-Year Ahead Home Price Change Expectations**

- **Home price change expectations decline**
  - Median home price change expectations decreased 0.1 percentage point in December, to 3.0%.
  - After solid gains in the first half of 2018, home price change expectations have declined steadily from a high of 3.9% in June to the lowest level in the past 12 months in December.
  - The decline is consistent across all regions except the Midwest.
FINANCIAL MARKETS

U.S. Equity Market Index and Volatility

- U.S. equity markets declined during the past month.
  - The S&P 500 index lost 4.5% between December 6, 2018, and January 8, 2019.
- Option-implied stock market volatility, as measured by the CBOE Volatility Index (VIX Index), remained level.
  - The VIX Index closed at 20.5 on January 8, 2019, below its 37.3 multi-year high on February 5, 2018.
  - On December 24, 2018, it closed at 36.1, its largest value in more than six months.

USD Exchange Rates

- The exchange value of the dollar against a basket of global currencies depreciated by 1.4% between December 6, 2018, and January 8, 2019.
  - Over this same period the dollar depreciated by 0.6% against the euro, 3.4% against the Japanese yen, and 4.8% against the Mexican peso.
- Over the last year, the dollar has appreciated 5.4% against a basket of global currencies.
Bank stocks lose value

- As measured by the KBW Nasdaq bank index, bank equities declined 5.8% between December 6, 2018, and January 8, 2019.
  - The index declined by 1.3 percentage points more than the S&P 500.
- The XLF financial sector ETF declined 5.0% between December 6, 2018 and January 8, 2019.
  - Over the last year, the XLF ETF has lost 12.9% of its value.

Implied path for federal funds shifts down

- The expected path of the federal funds rate implied by rates on overnight indexed swaps (OIS) moved down for all maturities longer than three months between December 6, 2018 and January 8, 2019.
  - The shift for all maturities greater than a year was around -20 basis points.
  - For shorter maturities, the expected path of the federal funds rate declined slightly.
- The market-implied path remains somewhat below the median path of the FOMC’s December 2018 Summary of Economic Projections and the November 2018 NY Fed Survey of Primary Dealers at longer horizons.
FINANCIAL MARKETS

10-Year Treasury and Term Premium

![Chart showing 10-Year Treasury and term premium trends from 2007 to 2019.](source: NY Fed calculations, Federal Reserve Board. Note: 5-day moving average, zero-coupon yield.)

Longer-term Treasury yields decline

- Longer-term Treasury yields decreased since early December.
  - The 10-year yield declined by 28 basis points between December 6, 2018, and January 8, 2019.
  - On November 8, 2018, the 10-year yield reached 3.2%, its highest value over the last year; it currently stands at 2.7%.
- Estimates from the Adrian-Crump-Moench term structure model attribute the decrease almost exclusively to a more negative term premium, while the path for the short term interest rate remained broadly unchanged.
  - On December 24, 2018, the term premium was -66 basis points, its lowest value of 2018.

5-10 Year Forward Decomposition

![Chart showing 5-10 year forward decomposition trends from 2007 to 2019.](source: NY Fed calculations, Federal Reserve Board. Note: 5-day moving average, zero-coupon yield.)

Breakeven inflation declines slightly

- Market-implied TIPS-based measures of long-term inflation expectations (“breakevens”) declined in recent weeks.
  - The five-to-ten year breakeven inflation rate declined by 10 basis points between December 6, 2018, and January 3, 2019.
- According to the Abrahams-Adrian-Crump-Moench model, most of the year-to-date movements in forward inflation compensation continue to reflect movements in the inflation risk premium.
  - The estimated five-to-ten year inflation risk premium declined by 5 basis points between December 6, 2018 and January 3, 2019.
  - Since December 6, 2018, the estimated inflation risk premium has remained negative.
2nd District businesses report slowing growth

- Our monthly regional business surveys signal slowing growth in both the manufacturing and service sectors.
  - The headline index for the Business Leaders Survey, which covers service-sector firms in the tri-state area, drifted down in the final months of 2018, pointing to slowing growth.
  - The Empire State Manufacturing Survey’s headline index fell to a 1½-year low in December, suggesting a more pronounced deceleration in activity.

Employment trends mixed across the region

- New York City continues to lead the region in job growth.
  - Despite ongoing weakness in the city’s key finance sector, the local economy has seen historically strong growth.
- Job growth has been more subdued across the rest of the NYC metro region.
  - Long Island and the Hudson Valley have roughly tracked the US; Northern New Jersey has lagged somewhat; and Fairfield County, CT has been sluggish.
- Upstate New York has been mixed but generally sluggish.
  - Aside from Albany and Ithaca, upstate metro areas continue to lag the nation in job growth.
  - Job growth remains particularly weak in the Southern Tier, as well as the Utica, Glens Falls and Watertown metro areas.
SPECIAL TOPIC: REGIONAL EMPLOYMENT

Puerto Rico & US Virgin Islands diverge

- Puerto Rico’s economy has rebounded gradually from the devastation of Hurricanes Irma & Maria.
  - After falling more than 5% in the wake of Maria, employment has rebounded almost fully. A surge in construction jobs has helped offset an ongoing shortfall in tourism-related jobs.
- The US Virgin Islands have seen much steeper job losses.
  - Employment fell more than 15% after the hurricanes and has rebounded only modestly; tourism, which is almost always the industry hardest hit by disasters, is their key industry.
- Irma & Maria’s economic effects were unusually severe.
  - A locality hit by a hurricane typically sees a moderate drop in employment, followed by a swift rebound (e.g. Sandy). The economic loss in PR & especially USVI was unusually severe, though less so than in New Orleans after Katrina.

Source: Authors’ calculations, based on U.S. Bureau of Labor Statistics data accessed through Moody’s Economy.com

Note: Index is month before hurricane = 100.