U.S. Economy in a Snapshot
Research & Statistics Group
January 2021

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 January 15, 2021.
- Consumer spending fell in November, the first decline since April.
  - Real expenditures on goods fell more than spending on services.
  - Overall spending was down 2% over the year, with purchase of goods up 7% and those for services down 7%.

- Spending on business equipment moved higher in November.
  - Shipments of nondefense capital goods ex-aircraft were up 6% over the February level.

- Housing activity increased in November.
  - House starts were up sharply over the year, with the strength all in single-family housing. Multi-family starts were down.
  - Existing home sales fell, but were still up substantially over the previous year.

- Payroll employment fell in December, the first decline since April. The unemployment rate was unchanged.

- Core PCE inflation over the year was steady at 1.4% in November.

- U.S. equity indices rose to record levels in early January, while implied volatility was unchanged. The 10-year Treasury yield increased modestly and the market-implied expected policy rate path was unchanged for short maturities. The dollar depreciated slightly.

**Real GDP Relative to Potential**

```
<table>
<thead>
<tr>
<th>Year</th>
<th>Actual GDP</th>
<th>Potential GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>14.0</td>
<td>16.0</td>
</tr>
<tr>
<td>2008</td>
<td>14.5</td>
<td>16.5</td>
</tr>
<tr>
<td>2009</td>
<td>15.0</td>
<td>17.0</td>
</tr>
<tr>
<td>2010</td>
<td>15.5</td>
<td>17.5</td>
</tr>
<tr>
<td>2011</td>
<td>16.0</td>
<td>18.0</td>
</tr>
<tr>
<td>2012</td>
<td>16.5</td>
<td>18.5</td>
</tr>
<tr>
<td>2013</td>
<td>17.0</td>
<td>19.0</td>
</tr>
<tr>
<td>2014</td>
<td>17.5</td>
<td>19.5</td>
</tr>
<tr>
<td>2015</td>
<td>18.0</td>
<td>20.0</td>
</tr>
<tr>
<td>2016</td>
<td>18.5</td>
<td>20.5</td>
</tr>
<tr>
<td>2017</td>
<td>19.0</td>
<td>21.0</td>
</tr>
<tr>
<td>2018</td>
<td>19.5</td>
<td>21.5</td>
</tr>
<tr>
<td>2019</td>
<td>20.0</td>
<td>22.0</td>
</tr>
<tr>
<td>2020</td>
<td>20.5</td>
<td>22.5</td>
</tr>
<tr>
<td>2021</td>
<td>21.0</td>
<td>23.0</td>
</tr>
</tbody>
</table>
```

Source: Bureau of Economic Analysis, Congressional Budget Office via Haver Analytics

Note: Shading shows NBER recessions.

**Despite Q3 rebound, output still below potential**

- The level of real GDP in Q3 was 3.5% below the CBO’s estimate of potential GDP.
  - The Q3 output gap narrowed considerably from -9.9% in Q2.
  - The 6.7% unemployment rate in December was above the CBO’s estimate of its longer-run natural rate (4.4%).
  - The CBO projects that potential GDP will grow this year at a relatively slow rate of 1.5% (Q4/Q4).

- Other measures also indicated that there is considerable slack in the economy.
  - Capacity utilization rates continued to be at low levels.
**Labor Market Indicators**

- **Labor market recovery stalled in December**
  - Nonfarm payroll employment fell by 140,000 in December, the first decline since April.
  - Payroll employment in private service-providing industries fell by 188,000, with losses concentrated in the leisure and hospitality sector (-498,000).
  - Private payroll employment in goods-producing industries increased by 93,000.
  - The unemployment rate remained unchanged at 6.7%.
  - Labor force participation and the employment-to-population ratio were also unchanged at 61.5% and 57.4%, respectively.

**Inflation slowed slightly in November**

- The PCE price index was up 1.1% over the year in November, an easing from the 1.2% pace set in October.
  - Prices for services rose 1.9% and those for durable goods rose 0.8%.
  - Energy prices were down 9.9% while food prices were up 3.7%.

- Core PCE inflation over the year was unchanged at 1.4%.
  - Core inflation was down to 1.0% in Q2 2020.
  - The rate was 1.6% in November 2019.
  - Inflation remains below the FOMC’s 2 percent longer-run goal.
Q3 growth was revised upward in 3rd estimate

- GDP surged at a 33.4% annual rate in Q3 (up from the previous estimate of 33.1%), after falling 31.4% in Q2. The 4-quarter change was -2.8%.
  - Personal consumption expenditures rose at a 41.0% rate.

- Upward revisions to personal consumption expenditures and nonresidential fixed investment more than offset a downward revision to exports.

- Real gross domestic income rose at a 25.8% annual rate (a small upward revision). Its 4-quarter change was -3.9%.
  - The personal saving rate was 16.0%.

Manufacturing and the ISM index moved higher

- Manufacturing production increased 0.8% in November after rising 1.1% in October.
  - The level of manufacturing was still down 4% over the year.

- The ISM manufacturing index rose in December.
  - The headline composite index increased 3.2 points to 60.7.
  - The Supplier Delivers index rose 5.9 points to 67.6, possibly reflecting transportation challenges stemming from COVID-19.
  - The Prices index increased from 65.4 to 77.6, suggesting potential input cost pressures.


**HOUSEHOLDS**

### Disposable Income and Consumption

- **12-month % change**

![Graph showing disposable income and consumption (real disposable income and real personal consumption) over years from 2007 to 2019.](image)

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

### Consumer spending faltered in November

- Real personal consumption expenditures (PCE) was down 0.4% in November, after six consecutive months of growth.

  - Real disposable personal income fell 1.2% in November, following a decline of 0.7% in October.
    - There were substantial drops in PPP loans to businesses, government support for farmers, and personal income transfer receipts.
    - The growth in wages and salaries slowed.

- The personal saving rate moved lower.
  - It was 12.9% in November, down from 13.6% in October.

### Goods spending declined more than services

- Real expenditures on goods fell in November, while spending on services was essentially unchanged.
  - Spending fell 17% for durable goods and 0.7% for nondurables.

- Expenditures on goods were up 7.3% over February levels.
  - Spending on durables was 12.0% higher.

- Expenditures on services were down 7.1% relative to February.
BUSINESS SECTOR

**Equipment Investment and Capacity Utilization**

- Real business equipment investment spending shot up at a 68.2% annual rate in Q3, after dropping at 35.9% in Q2.
  - Spending rose in Q3 for all four major categories of equipment, particularly for transportation equipment.
  - Spending was still down 2.6% from a year ago.

- Data through November on shipments of capital goods suggest that equipment spending rose further in Q4.

- The rebound in equipment demand has helped push up production and the capacity utilization rate for manufacturing.
  - Still, this rate was only 72.6% in November, which is 5.6 percentage points below its long-run (1972 – 2019) average.

**Investment in Nonresidential Structures**

- Real nonresidential structures investment declined 17.4% (annual rate) in Q3. The 4-quarter change was -15.9%.
  - The drop in spending was broad based, with the most severe fall in the mining exploration, shafts, and wells category.

- Over the past several quarters, structures spending has been weak for petroleum and natural gas.
  - Spending outside of energy has been sluggish or falling in recent quarters.

- Monthly data on nonresidential construction spending point to continued softness in Q4.
**Single-family housing starts continued to rise**
- Total housing starts increased 1.2% in November, putting starts up 12.8% over the year.
  - Building permits were up robustly.
- Single-family starts rose 0.4% in November to 1.2 million units (annual rate), 27% above the November 2019 level.
  - The three-month average was at its highest level since May 2007.
- Multi-family starts, which are notoriously volatile, rose 4% in November, but were down 18% over the year.

**Housing sales declined in November**
- Existing home sales fell 2.5% in November, the first decline after moving up for five months.
  - Sales were up 25.8% over the year.
- New single-family home sales fell 11.0%.
  - Sales were up 20.8% over the year.
- Despite these declines, housing market conditions remain solid as signaled in the NAHB housing market index and mortgage applications.
GOVERNMENT SECTOR

**Federal deficit widened during the pandemic**

- The federal budget deficit soared amidst the pandemic, reaching 16% of GDP in 2020.
- The sharp increase owes entirely to higher outlays, which rose from 21% of GDP in 2019 to 32% in 2020.
  - Revenues held steady at 16%.
- Income support payments to households and Paycheck Protection Program payments to businesses accounted for much of the increase in outlays.
  - These payments are transfers and do not count as government expenditure in the GDP accounts.

**S&L construction spending slowed**

- Construction spending by state and local governments eased in the second half of 2020.
  - The growth in spending slowed in October and November.
  - The slowdown follows large increases in 2018 and 2019.
- Q4 sending on education and power were down over the year.
  - Spending on higher education fell sharply in both Q3 and Q4.
- Spending on housing and hospitals has been resilient so far.
INTERNATIONAL DEVELOPMENTS

Real Exports and Nonoil Imports of Goods

- Trade deficit increased in November
  - Real imports grew much faster than real exports.
  - Exports grew by 0.5% and imports by 3.2%.
  - The growth rates for exports and imports have slowed since the summer.
  - The rise in exports was primarily driven by sales of industrial supplies and consumer goods.
  - The biggest increase in imports was in consumer goods, followed by higher purchases of industrial supplies, capital goods, and food.

Euro Area Core Inflation

- Inflation in Europe fell with the pandemic
  - Core inflation in the euro area was down to near 0.5% in December.
    - Lower energy prices pulled overall inflation down to -0.3%.
    - Core inflation had been averaging 1.2% in recent years.
  - The downward pressure on prices is coming from both good and services.
    - Categories with notably less inflation include clothing, furniture, air travel, and hotels.
  - U.K. core inflation was down to 1.0% in November.
    - Core inflation had been running around 2.0% before the pandemic.
Payroll employment contracted in December
- Nonfarm payroll employment fell by 140,000 in December, the first decrease since April.
  - Employment was 9.8 million (6.5%) below its February level.

- Private payroll employment fell by 95,000, driven by a decline of 188,000 in service-providing industries.
  - Government payroll employment fell by 45,000, primarily due to declines in state and local government employment.

- Aggregate weekly hours worked by all private employees declined by 0.4%, with the drag concentrated in the leisure and hospitality sector.

Changes in unemployment rates varied by age
- The unemployment rate for prime-age workers fell.
  - The rate for workers between ages 25 to 54 continued a steady decline—the only age group to do so—falling from 6.1% in November to 5.8% in December.

- Young workers (ages 16 to 19) saw the greatest increase in unemployment, up from 13.9% to 16.0%.
  - Younger workers are overrepresented in the leisure and hospitality industry, which had large job losses.

- Workers ages 20 to 24 saw their unemployment rates rise from 10.7% to 11.2%, while workers ages 55 and older saw a slight uptick from 5.8% to 6.0%.
 LABOR MARKET

The number of temporarily unemployed rose

- The number of workers on temporary layoff rose for the first time since the beginning of the pandemic, rising from 2.76 million in November to 3.04 million in December.
  - This increase in temporary layoffs can be attributed to the consequences of spiking COVID-19 cases nationwide.

- The number of workers who are permanently unemployed fell from 3.7 million to 3.4 million in December.

Average hourly earnings rose in December

- Average hourly earnings ticked up 0.8%.
  - On a 12-month basis, hourly earnings were up 5.1%.

- Average weekly earnings increased by 0.5% over the month.
  - Average weekly earnings increased by 6.3% over the year.

- These increases are biased higher because a disproportionate number of the job loses are lower-paid workers.
INFLATION

CPI Inflation: Core Goods and Core Services

Core CPI inflation was subdued in December

- Core inflation over the year was unchanged at 1.6% in December.
- Core goods inflation was above core services inflation for the first time since 2011.
  - The 12-month change in core services prices was 1.6%, well below the 3.1% rate in February.
  - Core goods prices were up 1.7%, compared with 0.0% in February.
- Overall inflation increased from 1.2% to 1.4%.
  - Energy was less of a factor in pulling down inflation.

CPI Inflation: Medical Care

Medical care inflation dropped sharply in 2020

- The medical care sub-index of the CPI was up 2.4% over the year in Q4.
  - This was down from the 4.4% pace set in Q4 2019.
  - Medical care accounts for 9% of the index.
- The drop in inflation was mostly in the drugs and insurance categories.
  - Prices for professions and hospital services have been relatively stable.
- Medical care inflation was unusually high in 2019.
  - The key factor was a surge in the cost of health insurance.
  - Medical inflation averaged 2.5% from 2016 to 2018.
FINANCIAL MARKETS

U.S. equity markets continued to move higher

- U.S. equity markets reached record highs.
  - The S&P 500 index increased 4% between December 9 and January 8. It was up 71% from its low on March 23, 2020 and up 18% from its 2019 year-end value.
  - The S&P 500 index closed at an all-time high on January 8.

- Option-implied stock market volatility, as measured by the CBOE Volatility Index (VIX Index), was unchanged over the month.
  - The VIX Index closed at 21.56 on January 8, well below its 82.69 record high on March 16, 2020, but still well above its 2019 year-end value of 13.78.

U.S. dollar declined modestly

- The exchange value of the dollar against a basket of currencies decreased 1% between December 9 and January 8.
  - Over this same period the dollar depreciated by 1% against the euro and was unchanged against the Japanese yen and the Mexican peso.

- Since the start of 2020, the dollar has depreciated 5% against a basket of currencies.
**Bank stocks outperformed market**

- As measured by the KBW Nasdaq bank index, bank equities increased 12% between December 9 and January 8.
  - As of January 8, the index decreased 6% since the start of 2020.

- The XLF financial sector ETF increased 8% between December 9 and January 8.
  - As of January 8, the index was unchanged since the start of 2020.

- As measured by the S&P 500 Index, the broader market increased by 4% over the month.

**Implied path for federal funds increased slightly**

- The expected path of the federal funds rate implied by rates on overnight indexed swaps (OIS) was unchanged for short maturities but increased for longer maturities between December 9 and January 8.

- The market-implied federal funds rate at the end of 2023 is modestly above the median value from the FOMC’s Summary of Economic Projections from December 2020 and the NY Fed’s Survey of Primary Dealers from December 2020.
**FINANCIAL MARKETS**

**10-Year Treasury and Term Premium**

- Long-term Treasury yields increased.
  - On a five-day moving average basis, the 10-year yield increased about 10 basis points between December 9 and January 8 from 0.95% to 1.04%.
  - The 10-year yield is about 90 basis points lower than its level at the end of 2019.

- Estimates from the Adrian-Crump-Moench term structure indicate that the term premium increased.
  - On a five-day moving average basis, the 10-year term premium increased by about 15 basis points between December 9 and January 8.

**5-10 Year Forward Decomposition**

- Breakeven inflation rates increased.
  - Market-implied TIPS-based measures of long-term inflation expectations ("breakevens") moved higher.
  - On a five-day moving average basis, the five-to-ten year breakeven inflation rate was 1.99% on January 8, up about 10 basis points over the month.

- According to the Abrahams-Adrian-Crump-Moench model, the inflation risk premium increased.
  - On a five-day moving average basis, the estimated five-to-ten year inflation risk premium increased by about 10 basis points over the past month.
  - The model estimates that expected inflation is unchanged.

©2021 Federal Reserve Bank of New York
**DEVELOPMENT IN CHINA**

### Investment, Retail Sales, and Industrial Production

**Index level, seasonally adj, 2010=100**

<table>
<thead>
<tr>
<th>Year</th>
<th>Investment</th>
<th>Retail Sales</th>
<th>IP</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>2011</td>
<td>110</td>
<td>110</td>
<td>110</td>
</tr>
<tr>
<td>2012</td>
<td>120</td>
<td>120</td>
<td>120</td>
</tr>
<tr>
<td>2013</td>
<td>130</td>
<td>130</td>
<td>130</td>
</tr>
<tr>
<td>2014</td>
<td>140</td>
<td>140</td>
<td>140</td>
</tr>
<tr>
<td>2015</td>
<td>150</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>2016</td>
<td>160</td>
<td>160</td>
<td>160</td>
</tr>
<tr>
<td>2017</td>
<td>170</td>
<td>170</td>
<td>170</td>
</tr>
<tr>
<td>2018</td>
<td>180</td>
<td>180</td>
<td>180</td>
</tr>
<tr>
<td>2019</td>
<td>190</td>
<td>190</td>
<td>190</td>
</tr>
<tr>
<td>2020</td>
<td>200</td>
<td>200</td>
<td>200</td>
</tr>
</tbody>
</table>

*Source: National Bureau of Statistics via CEIC and author’s calculations*

**China’s V-shaped recovery continued in Q4**

- Industrial production was 7% higher over the year, with manufacturing surveys suggesting growth continued into December.
  - Exports have been boosted by strong demand for medical supplies and work- and school-from-home goods.
- Real investment continued to exceed pre-pandemic levels.
- Real retail sales initially recovered more slowly but are now above pre-pandemic levels.

### Credit Growth and Credit Impulse

**Percent, y/y**

<table>
<thead>
<tr>
<th>Year</th>
<th>Aggregate credit growth (LHS)</th>
<th>Credit Impulse as % of GDP (RHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>40</td>
<td>20</td>
</tr>
<tr>
<td>2008</td>
<td>35</td>
<td>15</td>
</tr>
<tr>
<td>2009</td>
<td>30</td>
<td>10</td>
</tr>
<tr>
<td>2010</td>
<td>25</td>
<td>5</td>
</tr>
<tr>
<td>2011</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>2012</td>
<td>15</td>
<td>-5</td>
</tr>
<tr>
<td>2013</td>
<td>10</td>
<td>-10</td>
</tr>
<tr>
<td>2014</td>
<td>5</td>
<td>-15</td>
</tr>
<tr>
<td>2015</td>
<td>0</td>
<td>-20</td>
</tr>
<tr>
<td>2016</td>
<td>-5</td>
<td>-25</td>
</tr>
<tr>
<td>2017</td>
<td>-10</td>
<td>-30</td>
</tr>
<tr>
<td>2018</td>
<td>-15</td>
<td>-35</td>
</tr>
<tr>
<td>2019</td>
<td>-20</td>
<td>-40</td>
</tr>
<tr>
<td>2020</td>
<td>-25</td>
<td>-45</td>
</tr>
</tbody>
</table>

*Source: PBOC, CEIC, FRBNY staff estimates.*

**Credit support to growth has moderated**

- The credit impulse (i.e., the change in the flow of new credit as a percentage of GDP) appears to have peaked.
  - The credit impulse correlates well with growth indicators.
- Credit stimulus was driven by bank lending.
  - Corporate loans accounted for nearly half of new credit while new household credit accounted for roughly a quarter.
- Credit growth is expected to continue to slow in 2021, but authorities have reiterated that the withdrawal of policy stimulus will be gradual.