Economic Developments and Monetary Policy Environment

Federal Reserve Bank of Chicago
Academic Advisory Council Meeting
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Federal Reserve Bank of Chicago

The views expressed are my own and not necessarily those of the Federal Reserve Bank of Chicago or the Federal Reserve System
Employment Well Below Pre-pandemic Level

Nonfarm Payroll Employment

(Millions, SA)

Source: Bureau of Labor Statistics via Haver Analytics
Unemployment Still Somewhat Elevated

Unemployment Rate

(percent, SA)

Source: Bureau of Labor Statistics via Haver Analytics

<table>
<thead>
<tr>
<th></th>
<th>Feb’20</th>
<th>Apr’20</th>
<th>Oct’21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>3.5</td>
<td>14.7</td>
<td>4.6</td>
</tr>
<tr>
<td>Adjusted for misreports(^1)</td>
<td>19.7</td>
<td>4.7</td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>5.8</td>
<td>16.7</td>
<td>7.9</td>
</tr>
<tr>
<td>Hispanic</td>
<td>4.4</td>
<td>18.9</td>
<td>5.9</td>
</tr>
<tr>
<td>Out of labor force but want a job (%LF)</td>
<td>3.0</td>
<td>6.3</td>
<td>3.4</td>
</tr>
</tbody>
</table>

1. BLS estimate accounting for misclassification of workers absent due to pandemic; estimates are upper bounds
Labor Force Participation Rate
(SA, percent)

Job Openings and Quits are Extremely High

Job Openings Rate
(percent, SA)

Quit Rate
(percent, SA)

Source: Bureau of Labor Statistics via Haver Analytics
ECI Compensation: Private Industry Workers

(percent change year-to-year, SA)

Source: Bureau of Labor Statistics via Haver Analytics

ECI Compensation includes value of benefits and nonproduction bonuses and holds constant industry and occupation shares of employment. Real is deflated by total PCE Price Index.
Household Spending

Real Personal Consumption Expenditures
(index, Feb 2020 = 1.00)

Light Vehicle Sales
(SAAR, million units)

PCE Goods

PCE Total

PCE Services

Source: Bureau of Economic Analysis from Haver Analytics

Single Family Housing Starts and Permits
(SAAR, millions)

Source: Census Bureau and Bureau of Labor Statistics from Haver Analytics

Source: Autodata via Haver Analytics

Light Vehicle Sales
(SAAR, million units)

Starts

Adjusted Permits

Source: Census Bureau and Bureau of Labor Statistics from Haver Analytics

Household Spending

Real Personal Consumption Expenditures
(index, Feb 2020 = 1.00)
Fiscal Policy Boost to Personal Income

**Personal Income**
(bil. $, SAAR)

- 25000
- 23000
- 21000
- 19000
- 17000

**Personal Income less UI, Pandemic Benefits, and Child Tax Credit**

- 15000

**Sep-2021**

**Personal Saving Rate**
(percent of disposable personal income)

- 35
- 30
- 25
- 20
- 15
- 10
- 5
- 0

**Sep-2021**

*Personal income less unemployment insurance, Coronavirus Food Assistance Program, PPP loans to businesses, increase in Medicare reimburse rates, extended unemployment benefits, pandemic unemployment assistance and compensation payments, pandemic emergency unemployment compensation, economic impact payments, lost wages supplemental payments, PPP loans and Provider Relief Fund to NPISH, Child Tax Credit*

*Source: Bureau of Economic Analysis from Haver Analytics*
Capital Goods and Nonresidential Structures

Nondefense Capital Goods ex. Aircraft
(bil. $, SA)

Private Nonresidential Construction
(bil. $, SA)

Source: Census Bureau and Bureau of Labor Statistics from Haver Analytics
Global Economic Activity

JPMorgan Global PMIs
(50+ equals expansion)

Euro Area PMIs
(50+ equals expansion)

China PMIs
(50+ equals expansion)

Source: JPMorgan/IHS Markit from Haver Analytics
Business Activity and Supply Constraints

Overall PMI
(above 50 is expansion)

Supplier Deliveries
(above 50 is slower deliveries)

Inventories
(below 50 is too low)

Prices Paid
(above 50 is increasing prices)

Source: Institute for Supply Management via Haver Analytics.
Manufacturing inventories, customer index; services, sentiment index.
Inflation Expectations

Michigan Survey of Inflation Expectations

(percentage)

5 years ahead

1 year ahead

5-10 years ahead

Source: University of Michigan from Haver Analytics

TIPS Inflation Compensation

(percentage)

5-10 years ahead

5 years ahead

Source: Board of Governors of the Federal Reserve System
Financial Market Developments

S&P 500 Index
(index)

10 Year Treasury
(percent)

Source: S&P Dow Jones Indices via FRED

Source: Board of Governors of the Federal Reserve System via FRED
Financial Market Conditions

Chicago Fed National Financial Conditions Index
(+ indicates tighter than average)

Source: Federal Reserve Bank of Chicago from Haver Analytics
## September Summary of Economic Projections

<table>
<thead>
<tr>
<th>Variable</th>
<th>Median</th>
<th>Central Tendency</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2021</td>
<td>2022 2023 2024</td>
<td>Longer run</td>
</tr>
<tr>
<td><strong>Change in real GDP</strong></td>
<td>5.9</td>
<td>3.8 2.5 2.0</td>
<td>1.8</td>
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<tr>
<td>June projection</td>
<td>7.0</td>
<td>3.3 2.4 1.8</td>
<td>1.8</td>
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<tr>
<td><strong>Unemployment rate</strong></td>
<td>4.8</td>
<td>3.8 3.5 3.5</td>
<td>4.0</td>
</tr>
<tr>
<td>June projection</td>
<td>4.5</td>
<td>3.8 3.5 4.0</td>
<td>3.8</td>
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<tr>
<td><strong>PCE inflation</strong></td>
<td>4.2</td>
<td>2.2 2.2 2.1</td>
<td>2.0</td>
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<tr>
<td>June projection</td>
<td>3.4</td>
<td>2.1 2.2 2.0</td>
<td>2.0</td>
</tr>
<tr>
<td><strong>Core PCE inflation</strong></td>
<td>3.7</td>
<td>2.3 2.2 2.1</td>
<td>2.0</td>
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<tr>
<td>June projection</td>
<td>3.0</td>
<td>2.1 2.1 2.0</td>
<td>2.0</td>
</tr>
<tr>
<td><strong>Federal funds rate</strong></td>
<td>0.1</td>
<td>0.3 1.0 1.8</td>
<td>2.5</td>
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<tr>
<td>June projection</td>
<td>0.1</td>
<td>0.1 0.6 2.5</td>
<td>0.1</td>
</tr>
</tbody>
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**Source:** Board of Governors of the Federal Reserve System, available at https://www.federalreserve.gov/monetarypolicy/fomcprojtabl20210922.htm
Monetary Policy: Forward Guidance

- Funds rate liftoff: “...when labor market conditions have reached levels consistent with the Committee’s assessments of maximum employment and inflation has risen to 2 percent and is on track to moderately exceed 2 percent for some time.”

Target Rate Probabilities for 15 Jun 2022 Fed Meeting (in bps)

Federal Funds Rate at Year-End
(June, percent)

2021 2022 2023 2024 Long Run

Federal Funds Rate at Year-End
(September, percent)

2021 2022 2023 2024 Long Run

Source: June/September 2021 FOMC Summary of Economic Projections. Red points indicate the median projection.
Monetary Policy: Asset Purchases

• “In light of the substantial further progress the economy has made toward the Committee's goals since last December, the Committee decided to begin reducing the monthly pace of its net asset purchases by $10 billion for Treasury securities and $5 billion for agency mortgage-backed securities. The Committee judges that similar reductions in the pace of net asset purchases will likely be appropriate each month, but it is prepared to adjust the pace of purchases if warranted by changes in the economic outlook.”

Source: November 2021 FOMC statement, Board of Governors of the Federal Reserve