Economic Outlook

Heart of America Tax Institute
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Jason Brown
Vice President and Economist
Outlook themes

• Inflation remains stubbornly high and broad based.

• Labor markets are very tight, which has boosted wage growth and supported consumer spending.

• However, labor productivity has declined substantially.

• Interest rate sensitive sectors are responding to Fed action against inflation.

• Long-term trends in supply may limit housing and rental price declines.
Federal Reserve Districts and Office Locations
GDP declined in Q2 led by contractions in manufacturing and construction.

Note: Industry’s share of overall District GDP is in parentheses
Sources: BEA, Staff
Inflation remains elevated and broad-based.

Sources: BLS, FRB Cleveland, Haver Analytics
More households report difficulty paying for usual household expenses.

Sources: Census Household Pulse Survey
Delinquency rates on consumer debt are near pre-pandemic levels.

Tenth District

Subprime

<table>
<thead>
<tr>
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<th>Q1-20</th>
<th>Q2-22</th>
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</thead>
<tbody>
<tr>
<td>Auto</td>
<td>10.2%</td>
<td>9.8%</td>
</tr>
<tr>
<td>Credit Card</td>
<td>8.5%</td>
<td>6.9%</td>
</tr>
<tr>
<td>Mortgage</td>
<td>20.9%</td>
<td>13.7%</td>
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Sources: FRBNY CCP/Equifax, Staff
There are nearly twice as many job openings as unemployed workers.

Job openings/# unemployed

- 10J
- U.S.
- District States

Sources: BLS, Haver Analytics
Labor force participation has not fully recovered.

Index, Feb-20 = 100, sa

- Total
- Prime-age women
- Age 65+

Sources: BLS, Haver Analytics
The imbalance in the labor market has caused faster wage growth.

Sources: FRB Atlanta, Haver Analytics
Wage growth has accelerated, particularly among industry switchers.

Monthly Mean Wage Growth by Job Mobility

Year/Year % Change (12-month moving average)

Sources: FRB Atlanta, BLS, Census Bureau, Staff
Many contacts report adjusting compensation due to inflation.

Did you adjust employees' compensation due to inflation during this year? If yes, what has your firm implemented?

On average, how much do you intend to change employees' wages for the rest of 2022?

Sources: FRBKC Surveys
Higher wages with less output has led to lower labor productivity.

Sources: BEA, BLS
Skill miss-match and quiet quitting may help explain less productive workers.

How competent/skilled is your company's workforce compared to pre-pandemic (January 2020) levels?

How likely are your employees to go above and beyond their job expectations relative to pre-pandemic?

Sources: FRBKC Surveys
Higher wages have helped sustain consumer spending.

Index, Feb-20 = 100, sa

United States

% chg

Tenth District

Durables

Services

Nondurables

Total

Accomodation and Food Services

General Merchandise

Note: Change is relative to January 4-31, 2020.

Sources: BEA, Affinity Solutions, Opportunity Insights, Haver Analytics
Interest rates have risen following FOMC action to slow inflation.

Sources: Federal Reserve Board, WSJ, Haver Analytics
Rate hikes are tightening financial conditions and weighing on consumer expectations.

Sources: FRB, S&P 500, University of Michigan, Haver Analytics
Consumer sentiment for buying a house has fallen sharply.

Index, Good time to buy minus bad time to buy

Monthly payment per $100k in Jan-18

Sources: University of Michigan, Federal Home Loan Mortgage Corporation, Zillow, Staff, Haver Analytics
Nearly three weeks of wages are currently needed to pay mortgage.

<table>
<thead>
<tr>
<th>U.S.</th>
<th>10J</th>
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<tr>
<td>Median Hourly Wage ($ per hour)</td>
<td>22</td>
</tr>
<tr>
<td>Median Home Value</td>
<td>355,852</td>
</tr>
<tr>
<td>Monthly Mortgage Payment</td>
<td>2,431</td>
</tr>
<tr>
<td>Hours Worked to Afford Mortgage</td>
<td>110</td>
</tr>
</tbody>
</table>

Sources: House Method, Zillow, US Bank, BLS
New housing listings are declining while days on market is rising.

Source: Redfin
House price growth and rental rates have slowed but remain high.

Sources: University of Michigan, Federal Home Loan Mortgage Corporation, Zillow, Staff, Haver Analytics
Home builder sentiment has also dropped, which may limit supply of new homes.

Index, All Good = 100, sa

Sources: National Association of Home Builders, Haver Analytics
Construction activity has shifted toward multi-family housing.

Source: Census