The U.S. and Michigan Outlook for 2021–2023
Consensus Revenue Estimating Conference
Lansing, Michigan
May 21, 2021
Current State of the U.S. Economy
Inflation: Not Alarming … Yet
Inflation Expectations: Up, Still Anchored

![Graph showing inflation expectations and 5-year breakeven inflation rate from 2004 to 2022. The graph indicates that inflation expectations have increased, but remain anchored below the 2008 peak.](image-url)
Consumer Confidence: Mixed

Graph showing the Consumer Confidence Index from 2008 to 2022, with two different indices:
- University of Michigan Consumer Sentiment (yellow line)
- Conference Board Consumer Confidence (dark blue line)

The graph indicates a trend of increasing consumer confidence over time, with a notable dip around 2008.
Key Inputs into the Forecast
August 2020 policy framework to be tested soon
  - The Fed to let prices catch up after periods of weak inflation

Near term inflation will be high due to strong demand and short supply
  - Watch for: inflation persisting or expectations moving higher
  - Asset prices may also factor into the Fed policy

Fed to taper its safe asset purchases before the end of 2021
  - Enough to manage expectations through temporary inflation spike

First rate hike in mid-2023, with unemployment rate under 4.5 percent
Fiscal Policy

The ARP $1.9T stimulus in March
- Total COVID-19 relief up to $5T
- Rebate checks, continued UI benefit boost, refundable tax credits
- Aid to state and local governments, schools and universities, hospitals, etc

Further proposed legislation with ~$4.6T in spending and ~$2.4T in revenues over 2022-32

We expect a reconciliation package half as large to pass this fall
- Most tax increases to be delayed until 2023
- Most near-term impact: extension of ARP middle-class tax credits beyond ‘21
- Inflation staying high through the summer could derail passage
U.S. Forecast for 2021–2023
Payroll Employment Growth

Thousands of jobs per month, quarterly average

- Total Employment
- Private Employment

RSQE: May 2021
Labor Force Participation and Unemployment Rate
Light Vehicle Sales

Units (Millions)

<table>
<thead>
<tr>
<th>Year</th>
<th>Autos</th>
<th>Lt. Trucks</th>
<th>Total</th>
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<td>4.7</td>
<td>12.2</td>
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<tr>
<td>2020</td>
<td>3.4</td>
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<tr>
<td>2021</td>
<td>3.8</td>
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<td>3.6</td>
<td>13.9</td>
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<tr>
<td>2023</td>
<td>3.5</td>
<td>14.2</td>
<td>17.6</td>
</tr>
</tbody>
</table>

RSQE: May 2021
Risks

- Inflation acceleration
  - Would lead to: higher rates sooner, less fiscal stimulus, weaker housing, etc

- Further supply chain disruptions

- Major vaccine-escape COVID-19 mutation

- Housing

- Financial valuations

- Global political developments
The Michigan Economic Outlook for 2021–2023

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May 21, 2021

Research Seminar in Quantitative Economics
High-Frequency Indicators: Michigan
Vaccine Rollout Slowing Down

Source: MDHHS as of 05/14/2021

RSQE: May 2021
Cumulative Vaccinations Leveling Off?

Percent of Michigan residents 16+ who have received at least one dose*

*Does not include those vaccinated under the Department of Veterans Affairs, Department of Defense, Bureau of Prisons, and most out-of-state providers

Source: MDHHS as of 05/14/2021

RSQE: May 2021
Still Climbing Out of a Deep Jobs Hole

Thousands of Payroll Jobs, SA, MI

RSQE: May 2021
Monthly Unemployment Rate

- Michigan
- National

Percent: 24

RSQE: May 2021
Total Time Spent at Various Michigan Locations

Google's COVID-19 Community Mobility Reports via Opportunity Insights

RSQE: May 2021
Small Businesses Closures Remain High

Source: Womply via Opportunity Insights
Michigan Economic Outlook
Annual Light Vehicle Sales: Not the Great Recession

Units (Millions)

- Total Light Vehicle Sales
- Detroit Three Sales

Forecast

RSQE: May 2021

Research Seminar in Quantitative Economics
University of Michigan
Quarterly Michigan Payroll Employment: Recovery Continues at a Slower Pace

RSQE: May 2021
Inflation Rate, National and Detroit CPI

Percent change

Local Inflation
National Inflation

Forecast

RSQE: May 2021
Quarterly Michigan Personal Income: Stimulus Cushions Income Losses

RSQE: May 2021