Current State of the U.S. Economy
Real GDP Growth Composition

- Real GDP growth
- Consumption Expenditures
- Fixed Investment
- Inventory Investment
- Net Exports
- Government Expenditures

RSQE: May 2022
Monthly Light Vehicle Sales

Millions of units, SAAR

- Total Light Vehicle Sales
- Light Truck Sales
- Car Sales

RSQE: May 2022
Inputs
Inflation Expectations

Percent


-1.5 -1.0 -0.5 0.0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0 6.5 7.0 7.5 8.0 8.5 9.0 9.5 10.0 10.5

- UoFM, 1-year inflation expectations, 3-mo average
- 5-year breakeven inflation rate
- UoFM, 5-to-10-year inflation expectations

RSQE: May 2022
Monetary Policy

- Inflation very high, supply chain stress lingers, tight labor market
- Near-term inflation expectations high, but long-term expectations still reasonable
- Monetary policy is tightening quickly
  - Fed funds rate expectations have been moving up rapidly since last fall
  - 75bps increase in the fed funds rate since March
  - 200bps more expected through December 2022, 50bps more through mid-2023
- Engineering a ‘soft landing’ will be very hard
- After inflation cools, we expect the fed funds rate to come down toward long-run neutral rate of around 2.5 percent
Remaining Biden agenda stalled

Ukraine-related spending at $50bln in just 3 months
  • More spending likely, but the pace will likely slow

Fiscal 2022 budget passed in March
  • Discretionary spending increases just enough to keep up with inflation

The return of divided government seems likely

Debt ceiling suspended through mid-December 2022
  • Replay of the 2011 debt ceiling/spending path stand-off possible but unlikely
Single-Family Home Price Appreciation

Percent change
- Year-over-year growth
- Quarterly growth, annual rate

Forecast

RSQE: May 2022

RESEARCH SEMINAR IN QUANTITATIVE ECONOMICS
UNIVERSITY OF MICHIGAN
U.S. Forecast
Consumer Price Inflation (CPI-U)

Percent change, annualized rate

<table>
<thead>
<tr>
<th>Year</th>
<th>Core CPI</th>
<th>CPI</th>
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<tbody>
<tr>
<td>2020</td>
<td>1.62</td>
<td>1.20</td>
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<tr>
<td>2021</td>
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<td>2024</td>
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<td>2.47</td>
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</table>

Forecast

RSQE: May 2022
Interest Rates
Risks

- War in Ukraine
  - Duration, possible escalation
- Inflation Dynamics
- Monetary Policy
- Fiscal path
  - Elections
- Housing Sector
- Pandemic
The Economic Outlook for Michigan for 2022–2024

Consensus Revenue Estimating Conference
May 20, 2022

Research Seminar in Quantitative Economics
High-Frequency Indicators: Michigan
Getting Back to Normal?

Monthly Average Percent Change, Compared to January 2020, State of Michigan

- Total time spent at retail and restaurant locations
- Total time spent at workplace locations
- Total time spent away from home

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

RSQE: May 2022
Almost Out of a Deep Jobs Hole

Thousands of Payroll Jobs, SA, MI
Unemployment Keeps Falling
Job Openings Cooling Off…

Percent change, relative to February 1, 2020

- Red: Total Job Posting in the Detroit Metro-Area
- Green: Total Job Posting in the Grand-Rapids Metro-Area
- Blue: Total Job Posting in Michigan
- Yellow: Total Job Posting in the U.S.

Source: Indeed

RSQE: May 2022
...but the Labor Market Remains Tight
Filling Jobs Remains Difficult
Local Inflation: No Relief Yet

*Data for odd-numbered months are interpolated by RSQE
Michigan Economic Outlook
Quarterly Michigan Payroll Employment:
Full Recovery in Mid-2023

RSQE: May 2022
Employment Outlook by Industry Group: Blue-Collar Industries Lead the Way

Index, 2020Q1=100

Forecast

Blue-Collar
Higher-Ed Services
Lower-Ed Services

RSQE: May 2022
Quarterly Michigan Personal Income: Back to Steady Growth

Millions of dollars, SAAR

RSQE: May 2022
National and Local Inflation: Better News Next Year?