About RSQE
What does RSQE do?

**Economic Forecasting**
RSQE forecasts the national, state, and local economies.

**Economic Policy Analysis**
RSQE performs economic impact assessments and researches policy-relevant trends.

**Presentations and Media**
RSQE staff members present on the economic outlook throughout Michigan and speak frequently with local and national media.

**Scholarship and Grants**
RSQE staff publish in scholarly journals and receive prestigious grants such as NSF awards for their research.

**Education**
RSQE staff occasionally teach courses in Economic Forecasting. RSQE supports Ph.D. students in Economics and mentors undergraduate students.
Current State of the U.S. Economy
Residential Housing Market Metrics

(LH) NAHB Housing Market Index
(RH) MBA Mortgage Loan Applications for Purchase

RSQE: December 2022
10-year to 2-year Treasury Bond Yield Spread

Basis points


-250 -225 -175 -150 -125 -100 -75 -50 -25 0 25 50 75 100 125 150 175 200 225 250 275 300

RSQE: December 2022
Inputs
Monetary Policy:

• Terminal fed funds rate range at \(5.25 - 5.5\) percent, peaking in 2023Q2

• The Fed starts easing in early 2024, once PCE inflation forecasts show imminent return to 2.0 percent inflation

• Gradual fed funds rate range cuts through rest of 2024

Fiscal Policy:

• Divided Government is back

• Defense spending set for brisk growth

• Slow growth of discretionary nondefense spending likely
U.S. Forecast
Real GDP Growth
Payroll Employment Growth

Thousands of jobs per month, quarterly average

- Total Employment
- Private Employment
Unemployment Rate and Participation Rate

- Unemployment Rate (RH)
- Labor Force Participation Rate (LH)

RSQE: December 2022
Consumer Price Inflation (CPI-U)

Percent change, annualized rate

CPI
Core CPI
Forecast

Year 2020 2021 2022 2023 2024
Core CPI 1.62 5.01 6.10 3.27 2.34
CPI 1.20 6.72 7.59 2.31 2.32

RSQE: December 2022

LSA RESEARCH SEMINAR IN QUANTITATIVE ECONOMICS UNIVERSITY OF MICHIGAN
Current State of the Michigan Economy
Michigan is Still Climbing Out of a Deep Jobs Hole

Index, 100 = February 2020

- Michigan Payroll Employment
- National Payroll Employment
Labor Demand Continues to Soften but Remains High

Source: Indeed

Percent change, relative to February 1, 2020

- Total Job Posting in the Detroit Metro-Area
- Total Job Posting in the Grand-Rapids Metro-Area
- Total Job Posting in Michigan
- Total Job Posting in the U.S.
Michigan Economic Outlook
Quarterly Light Vehicle Sales: Slow Recovery Ahead

Millions of units, annualized rate

- **Total Light Vehicle Sales**
- **Detroit Three Sales**

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

RSQE: December 2022
Michigan’s Unemployment Rate Ticks Up

RSQE: December 2022
Labor Force Participation Recovers Modestly

Percent

Forecast

05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

RSQE: December 2022
Michigan Personal Income…Inflation Takes a Bite

- **Personal Income per Capita**
- **Real Disposable Income per Capita, 2021 dollars**

RSQE: December 2022
State Tax Revenues:
A Partial Decline Toward Trend
Michigan’s Long-Run Outlook
County-Level Total Population Change, 2020–2050

Population Change, 2020–2050
- Red: Declining more than 4%
- Orange: Declining 0–4%
- Green: Growing up to 4%
- Yellow: Growing more than 4%

RSQE: December 2022
We are forecasting a complete recovery in payroll employment by the end of 2024

The unemployment rate rises to 4.7% by early 2024 before declining

Personal income per capita in 2024 is 25% higher than in 2019
  • But inflation eats away almost all of those gains

State tax revenue declines $2 billion in fiscal 2023 following the boom of the past two years

Major risks are tilted to the downside, including:
  • Inflation remaining elevated
  • Demand for autos falling
  • Job losses in construction