Forecasting Strategy and Economic Insights

Idaho Economic Outlook and Revenue Assessment Committee
January 5, 2023

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Setting the Stage

1. A Cloudy Crystal Ball – Forecasting Strategy Amid Uncertainty

- State revenues strong in recent years, but sustainability uncertain
- How solid is your forecast insurance?
- Under-forecasts and over-forecasts both carry risks

2. Dissonant Economic Indicators Signal Major Uncertainty

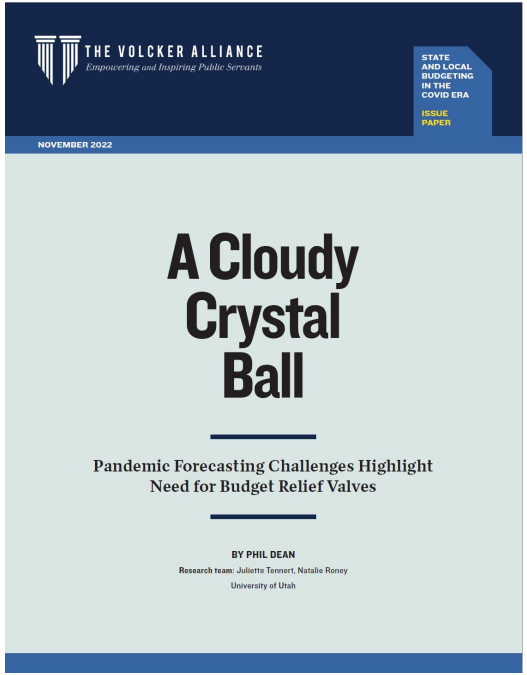
- Supply-side constraints (mainly labor) still limit growth
- Inflation spurring rapid & ongoing interest rate increases
- With strong household finances in general, solid demand continues - but (a) moderating from overheated demand and (b) shifting from goods to services

3. Intentionally Select Risk Tolerance Level Considering Fiscal Health

Budget Forecast Strategy

A Cloudy Crystal Ball

Pandemic Forecasting Challenges Highlight Need for Budget Relief Valves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STATE AND LOCAL BUDGETING IN THE COVID ERA

ISSUE PAPER

NOVEMBER 2022

A Cloudy Crystal Ball

Pandemic Forecasting Challenges Highlight Need for Budget Relief Valves

BY PHIL DEAN

Research team: Juliette Tennert, Natalie Roney

University of Utah

- Highlights forecasting and budget management lessons learned from the pandemic
- Tool kit on various best practices and how states forecast budgets

https://www.volckeralliance.org/sites/default/files/2022-11/ACloudyCrystalBall_113022.pdf

States Can Learn Forecast Practices From Each Other

California

- Legislative Analyst's Office uses long-term forecasts and portrays forecast uncertainty for legislature

Idaho

- By EO, recently adopted five-year forecasts for both revenue and expenditures

Utah

- Uses restricted-account reserves and capital budget as budget buffers
- Preforms stress testing of budgets on regular basis

Alaska

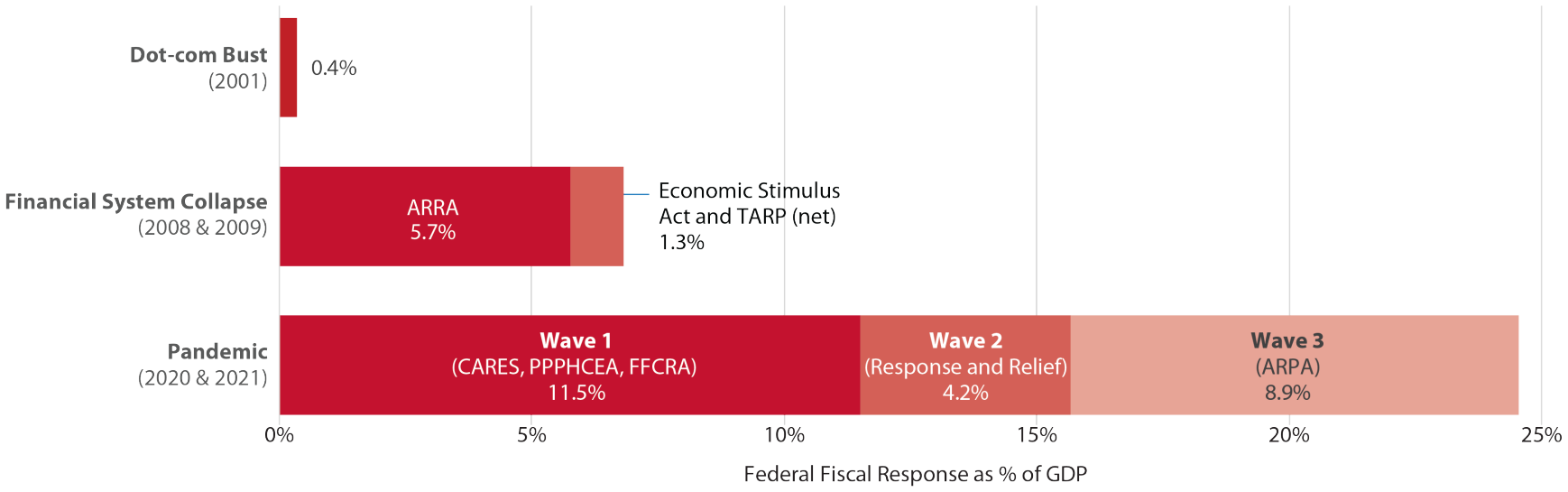
- Addresses volatile revenue with multi-year forecasts and reserves

How Do You Forecast This?

FIGURE 5 Weekly US Unemployment Claim Filings Spiked to Unprecedented Levels Early in Pandemic, in Millions (Seasonally Adjusted)

SOURCE FRED, Federal Reserve Bank of St. Louis.

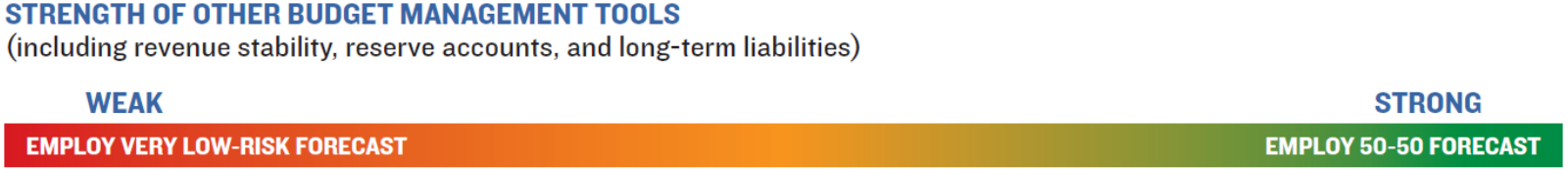
Or This?



Source: Kem C. Gardner Policy Institute from CBO and BEA data

Select Forecast Risk Considering Overall Fiscal Health (Strength or Weakness of Other Budget Tools)

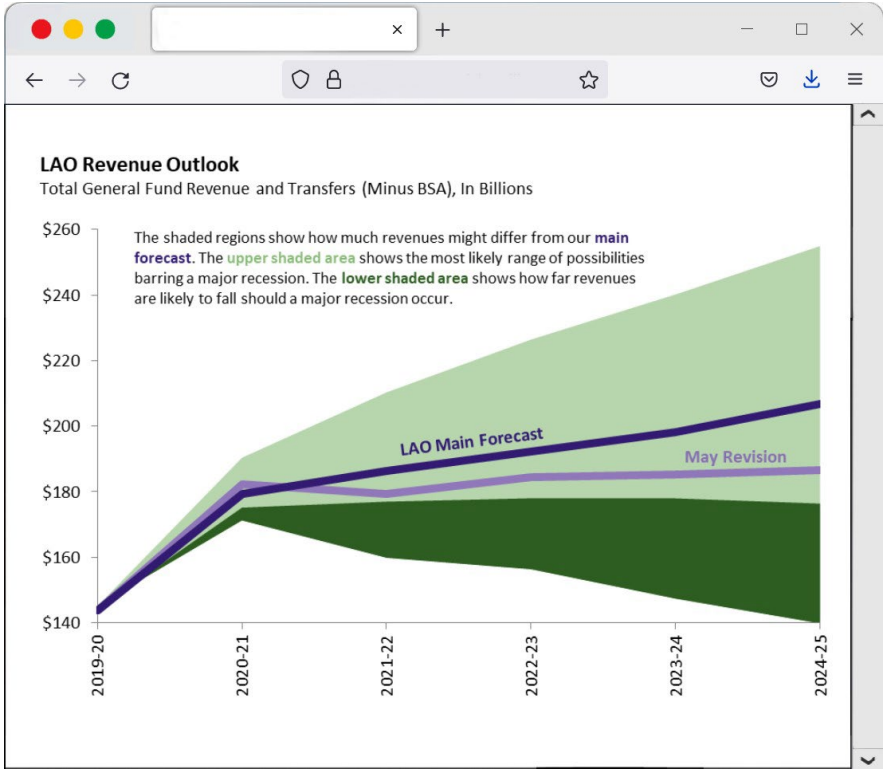
FIGURE 2 Forecast Risk Tolerance Should Reflect Strength of Other Budget Tools

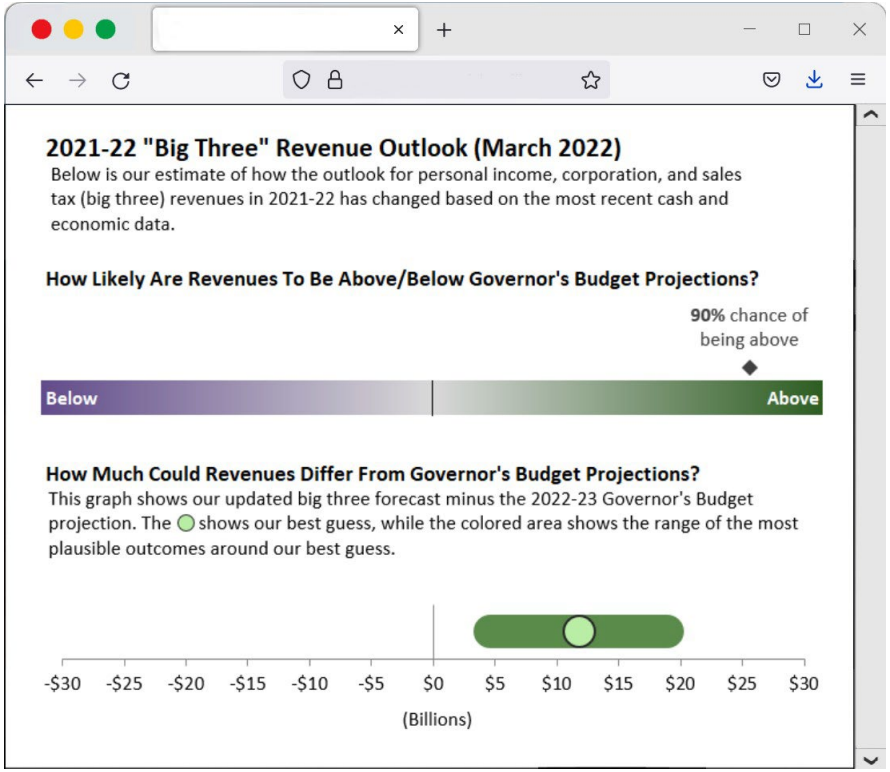


States control broad range of budget management tools

- Revenue system design
- Budget reserves
  - Formal rainy day funds
  - Other balances in special/restricted accounts
- Cash flow management
- State spending levels

Forecast Represents One Point in a Range of Possibilities – What's Your Risk Tolerance Level?

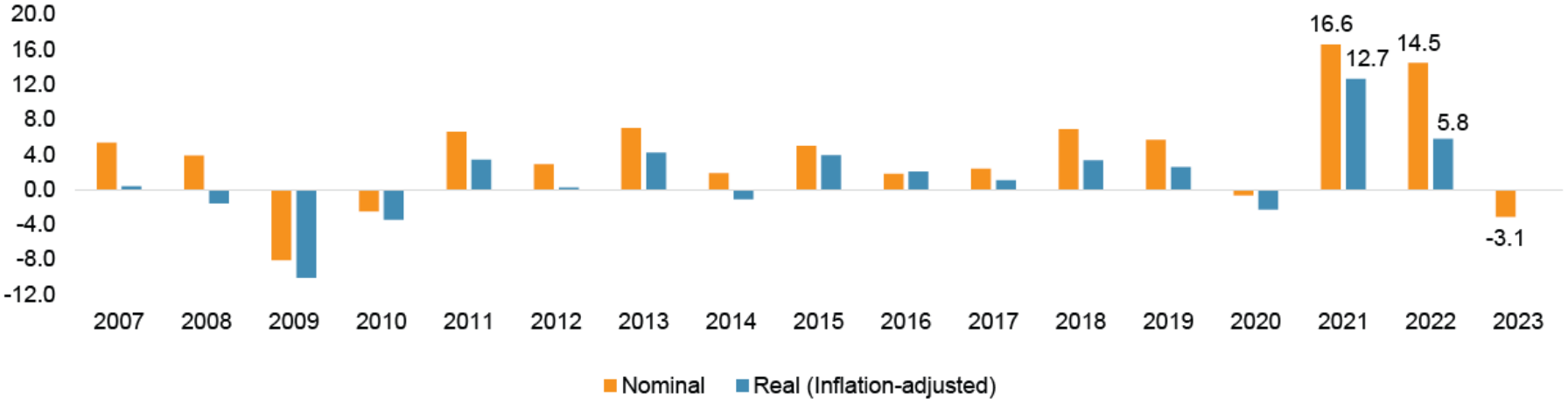




SOURCE California Legislative Analyst's Office

Extremely Strong Recent State Nominal Revenue Growth Likely to Moderate

Annual General Fund Revenue Changes, Fiscal 2007 To Fiscal 2023 (Percentage Change)

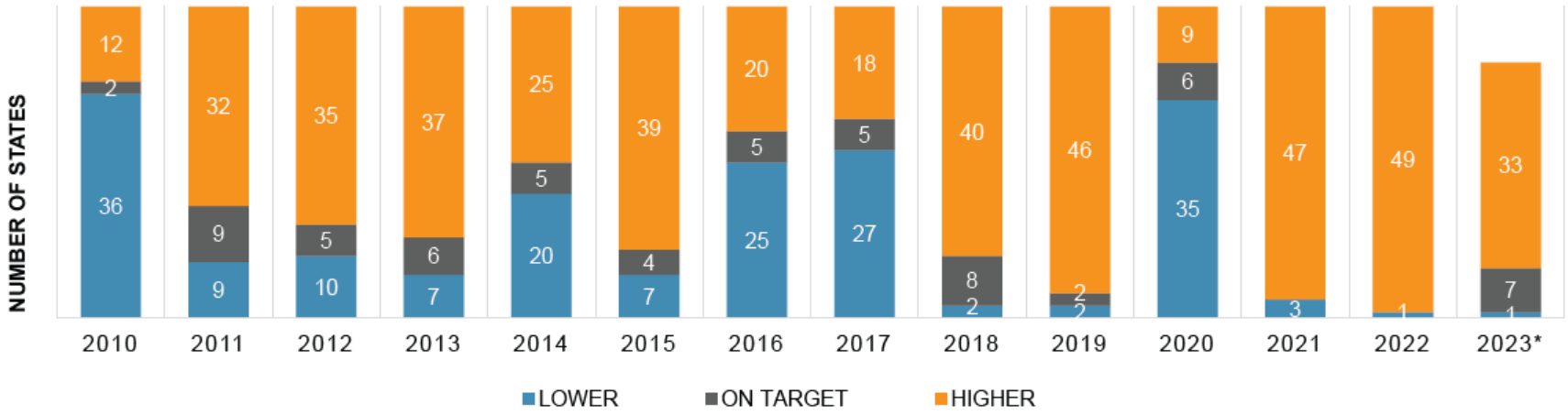


Note: Fiscal 2023 figure is based on states' enacted budget forecasts. More recent collections data suggest that revenue will continue to grow year-over-year in fiscal 2023.

Source: National Association of State Budget Officers

State Revenue Forecast Accuracy

General Fund Revenue Collections Compared To Original Budget Projections (By Fiscal Year)



Fiscal 2023 is ongoing; figures are subject to change, and not all states were able to report this early in the fiscal year.

Source: National Association of State Budget Officers

Missed Forecasts (High and Low) Carry Different Risks

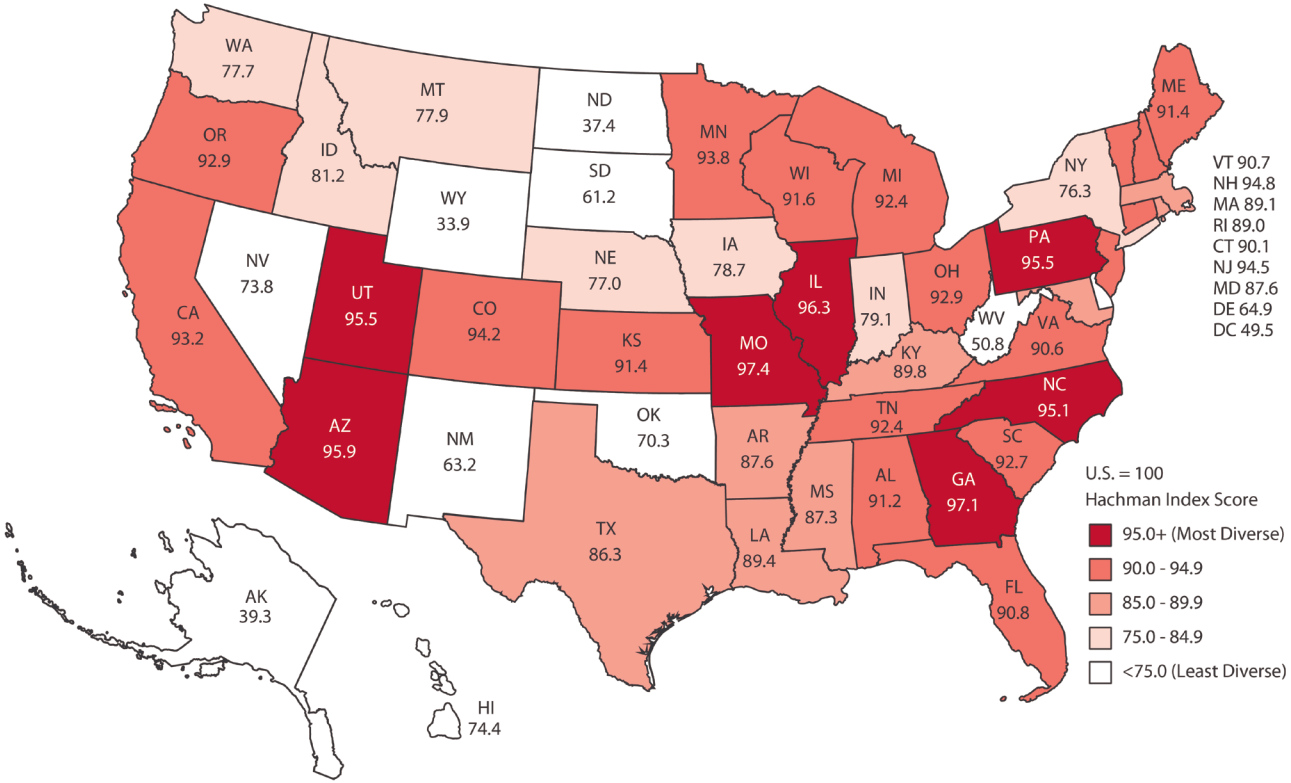
Revenue forecast too high (year-end shortfall)

- Risks future budget cuts or tax increases
- Forecast miss leads to drawing down rainy day funds or other reserves
- Most states hedge slightly to avoid shortfalls
- Managing from budget crisis to crisis undermines long-term strategic management, shifting focus to short-term pressures

Revenue forecast too low (year-end surplus)

- Risks missing opportunities to productively use funds in high-inflation economy
- May shift funding from ongoing people-oriented programs to one-time object-oriented programs
- Consistent large under-forecast undermines credibility
- Collected funds spendable later
- Avoids forecast-driven future budget cuts or tax increases

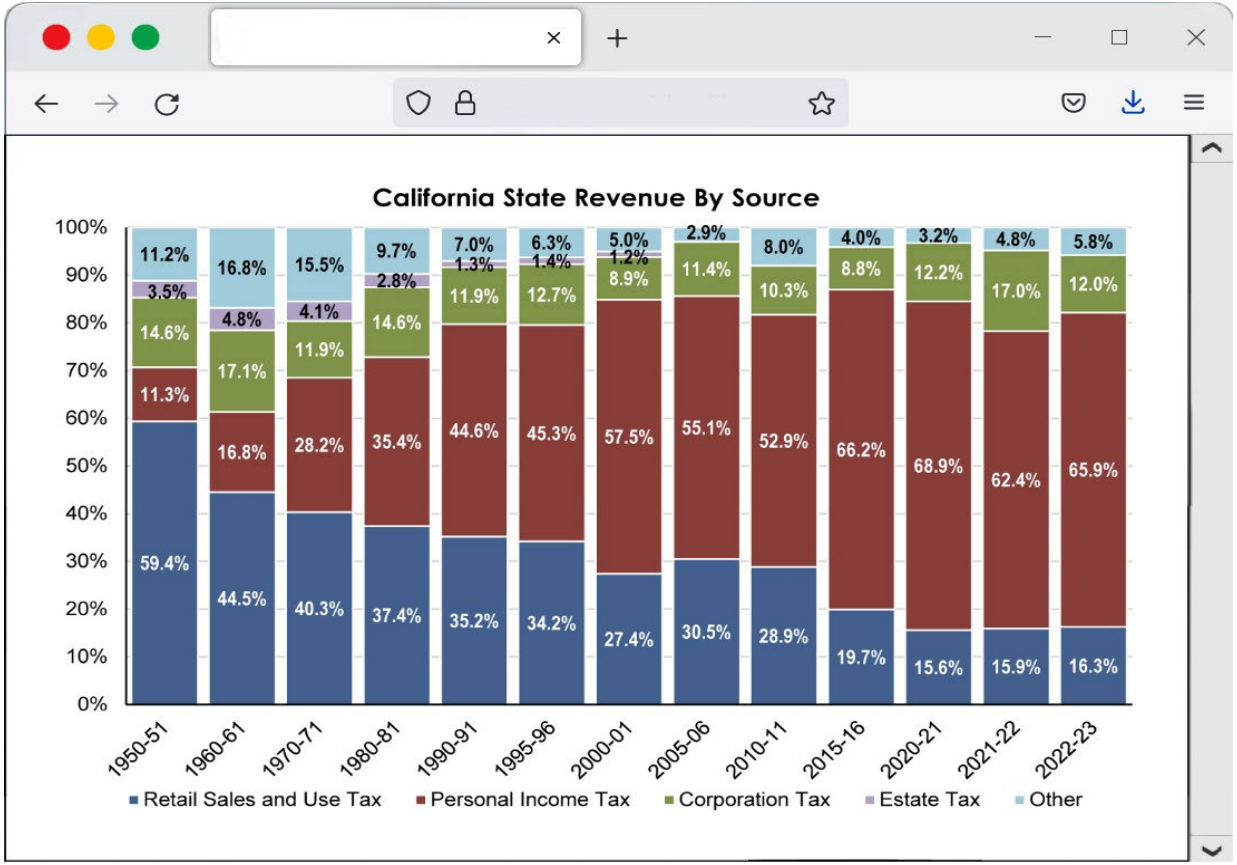
State Economic Structure Impacts Revenues



Hachman Index measures economic diversity relative to US economy

SOURCE Gardner Policy Institute

System Design Impacts State Revenues

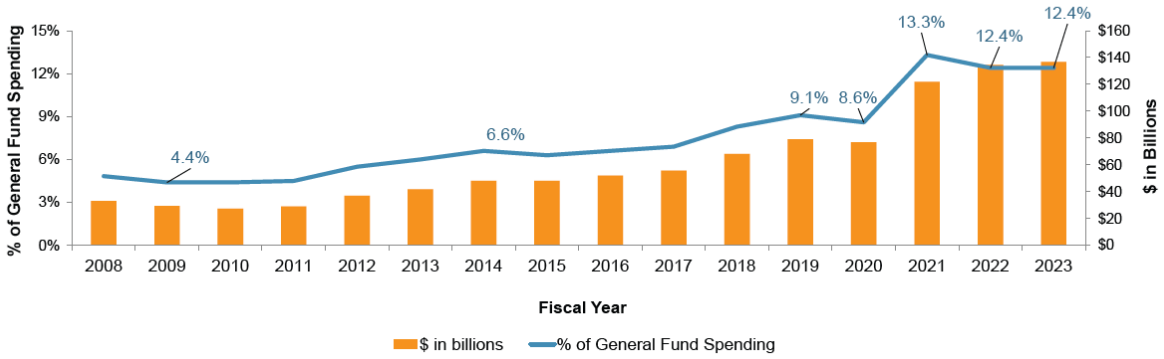


Like many states, California's tax system design has selected more volatile income taxes over time, **increasing forecast challenges**

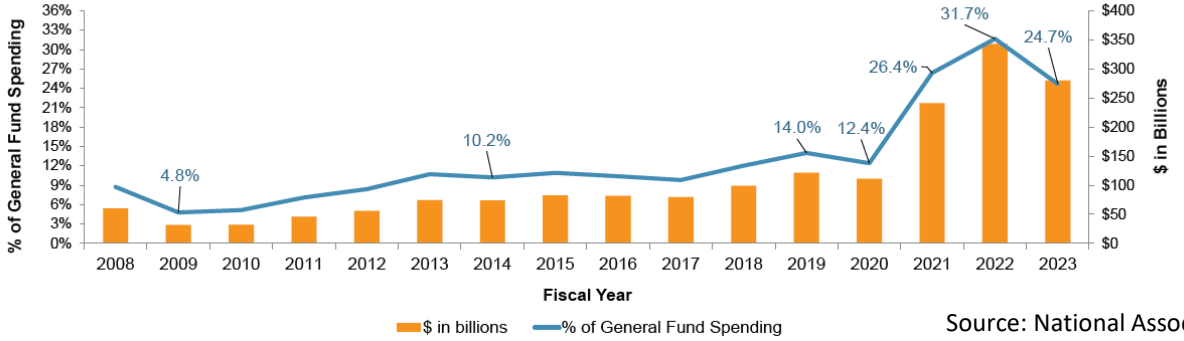
SOURCE California Department of Finance

State Budget Reserves Strong Post-Pandemic

Rainy Day Fund Balances in Dollars and as a Percentage of General Fund Expenditures

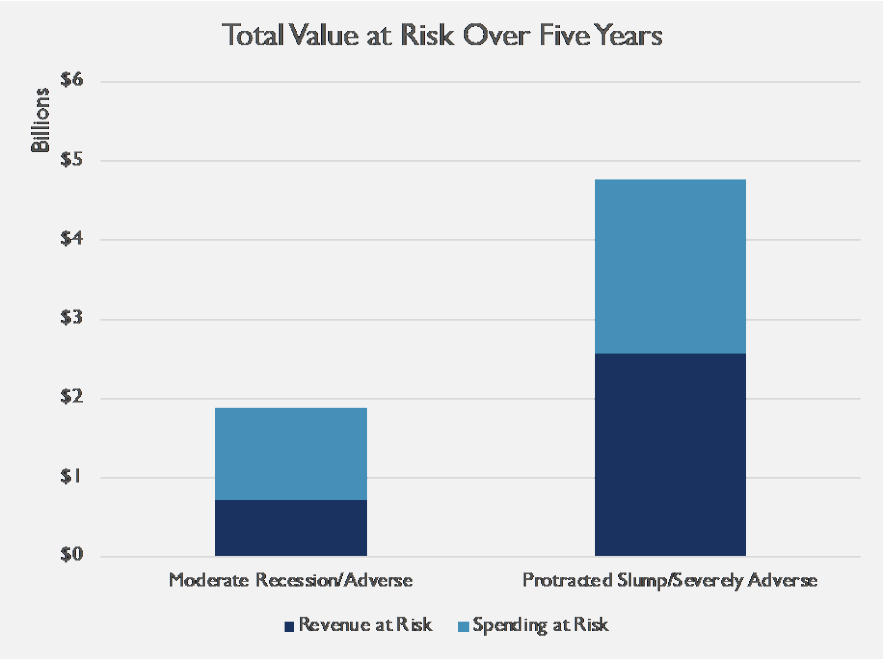


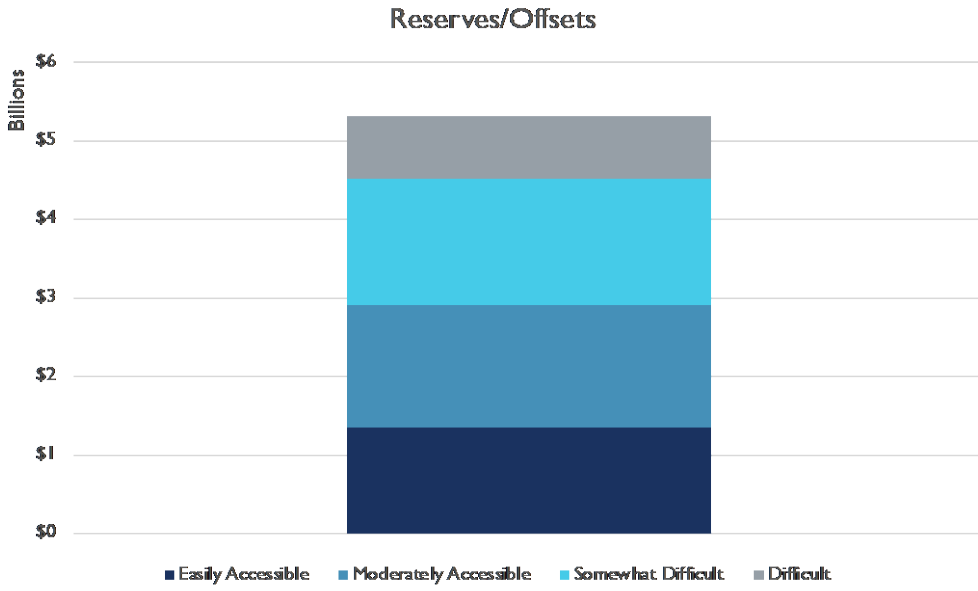
Total Balances in Dollars and as a Percentage of General Fund Expenditures



Source: National Association of State Budget Officers

Budget Stress Testing Can Help States Evaluate Budget Preparation Levels



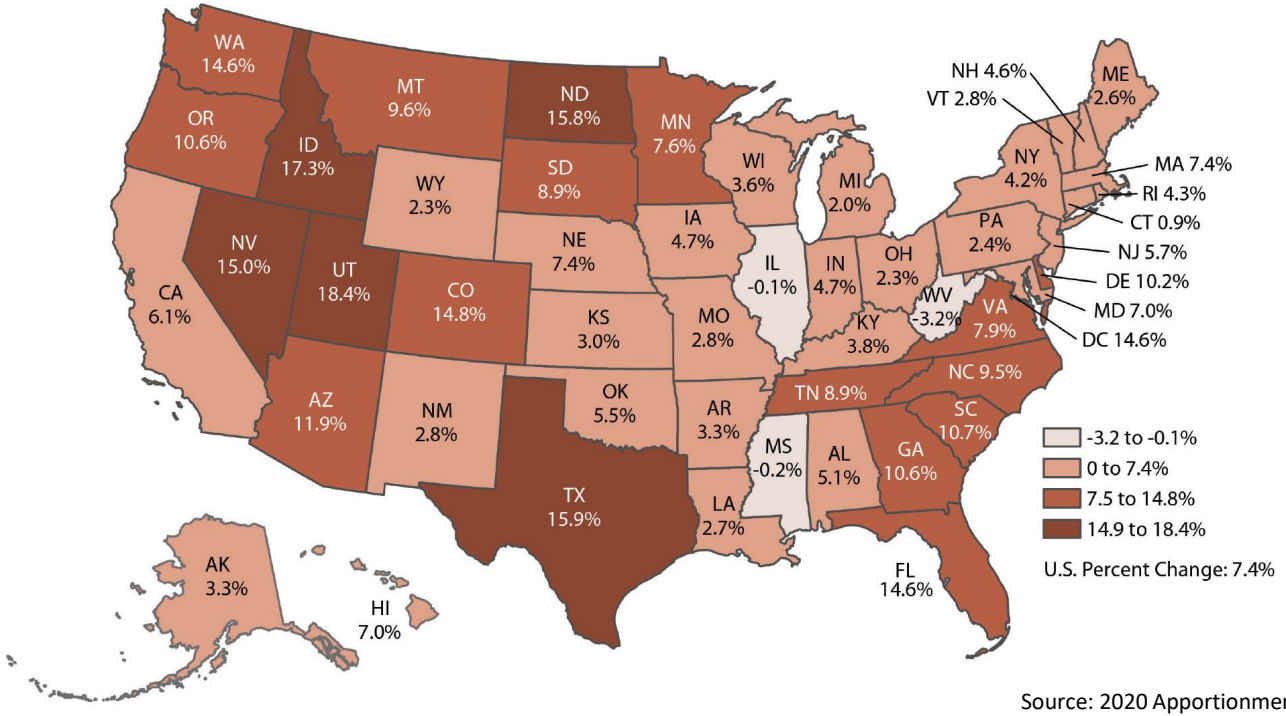


SOURCE Utah Governor's Office of Planning and Budget and Legislative Fiscal Analyst

Current Economic Conditions

Mountain West and South Population Growth Led the Nation

Percent Change, 2010 to 2020 Census



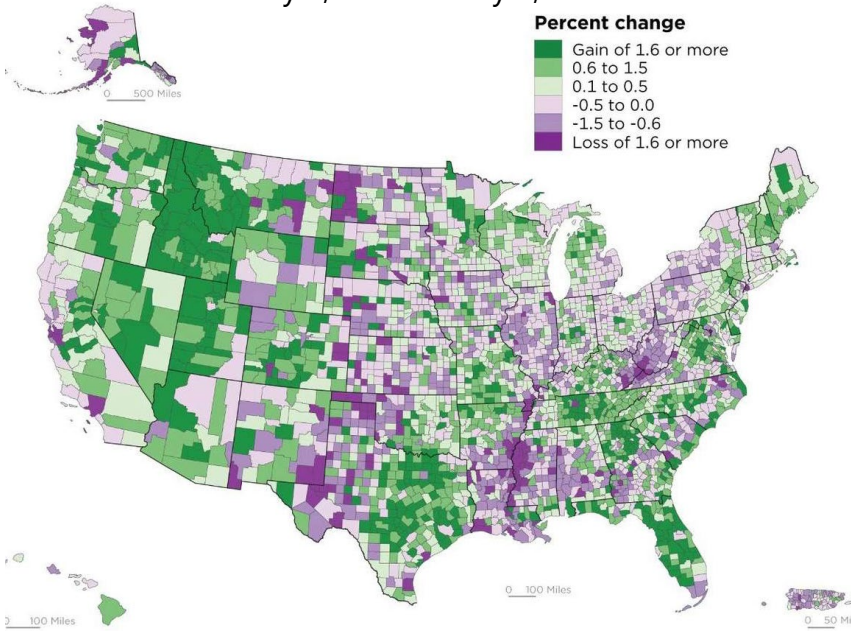
Source: 2020 Apportionment Data, U.S. Census Bureau

Mountain West and South Population Growth Continue to Lead the Nation

Percent Change, 2021 and 2022

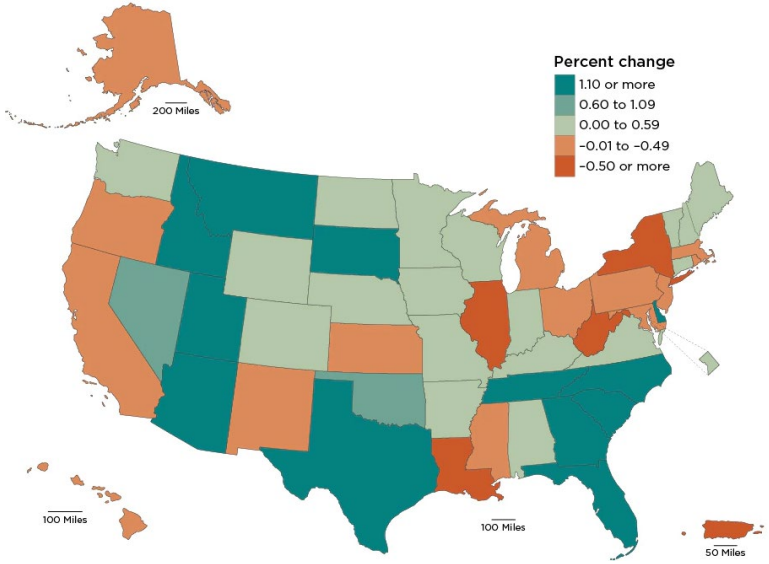
Percent Change in County Population:

July 1, 2021 to July 1, 2022



Percent Change in State Population:

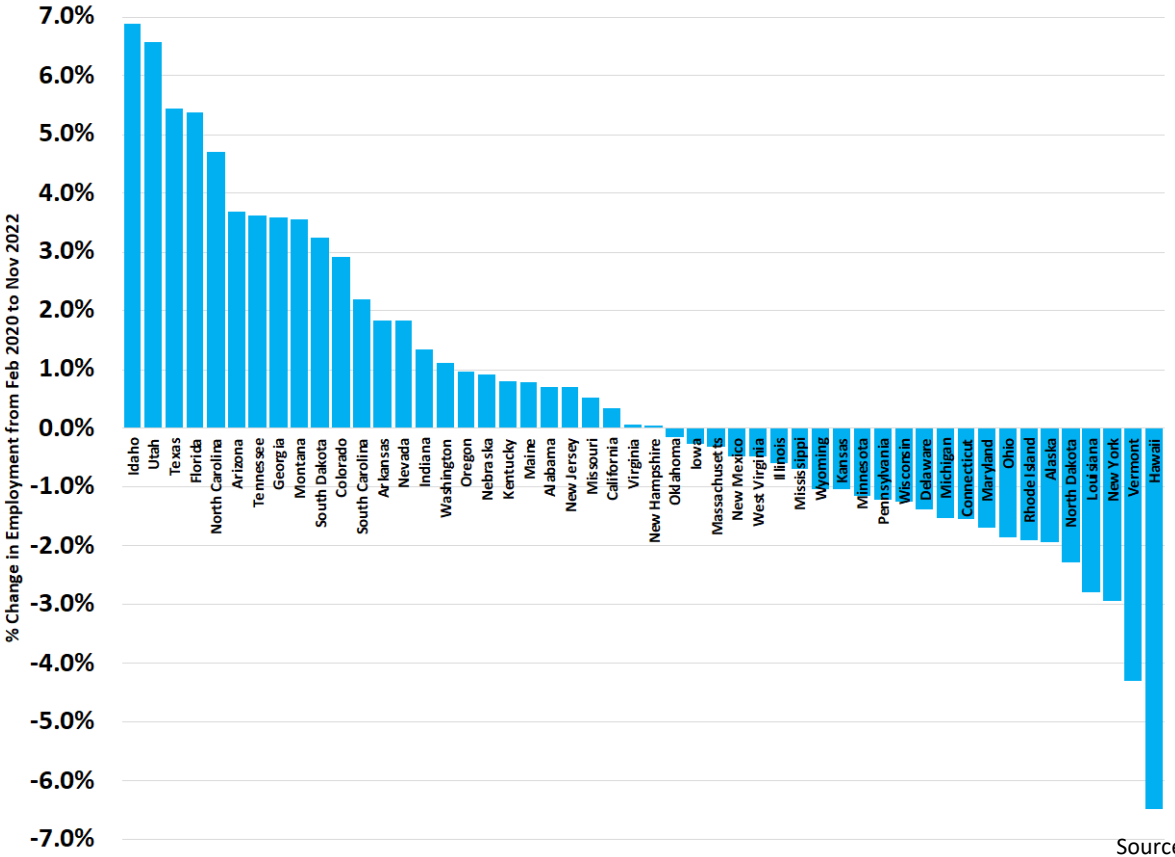
July 1, 2021 to July 1, 2022



Source: U.S. Census Bureau

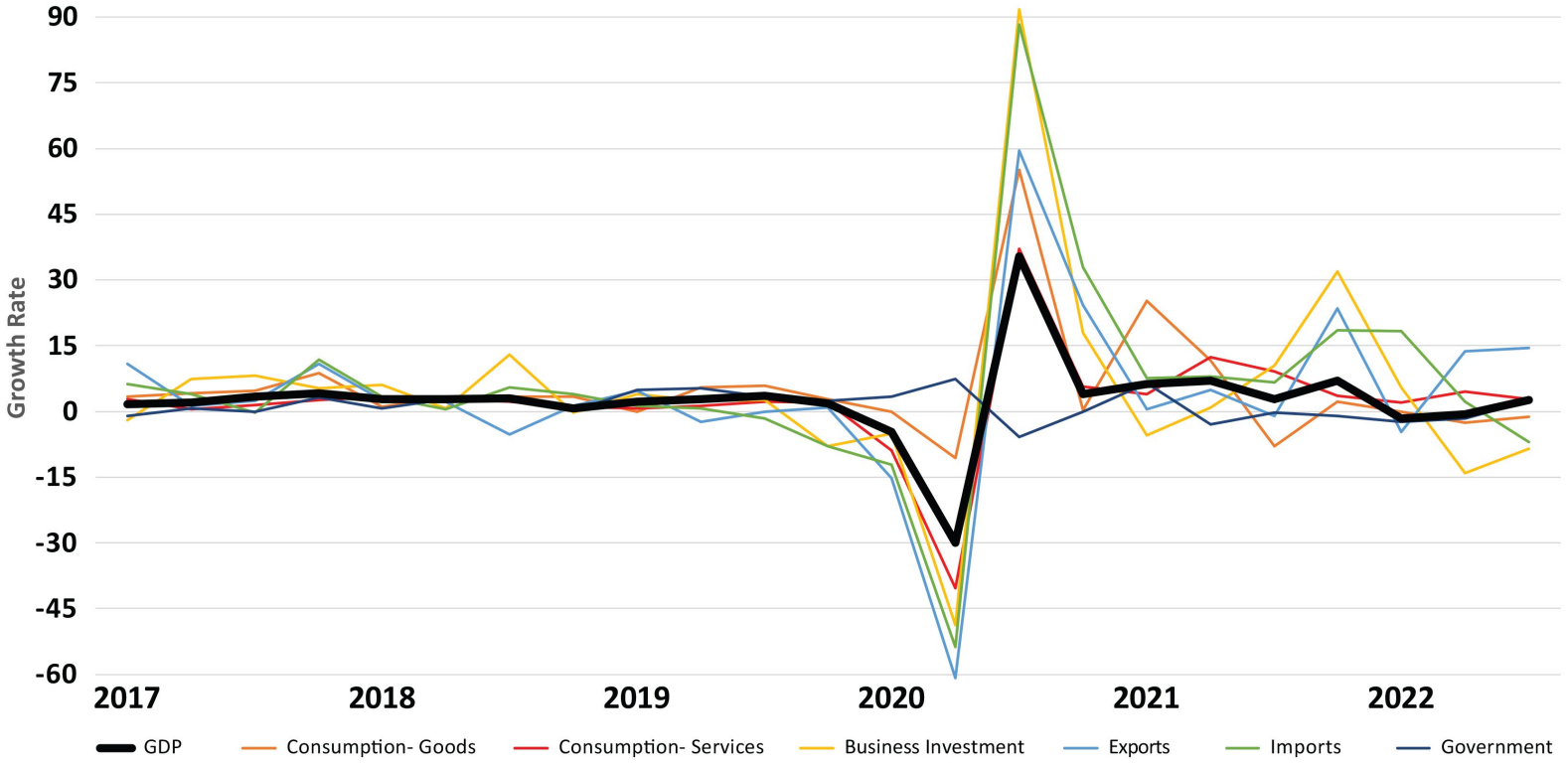
State Pandemic Jobs Recovery – Mountain West & South

Employment Percent Change, Feb 2020 to Nov 2022



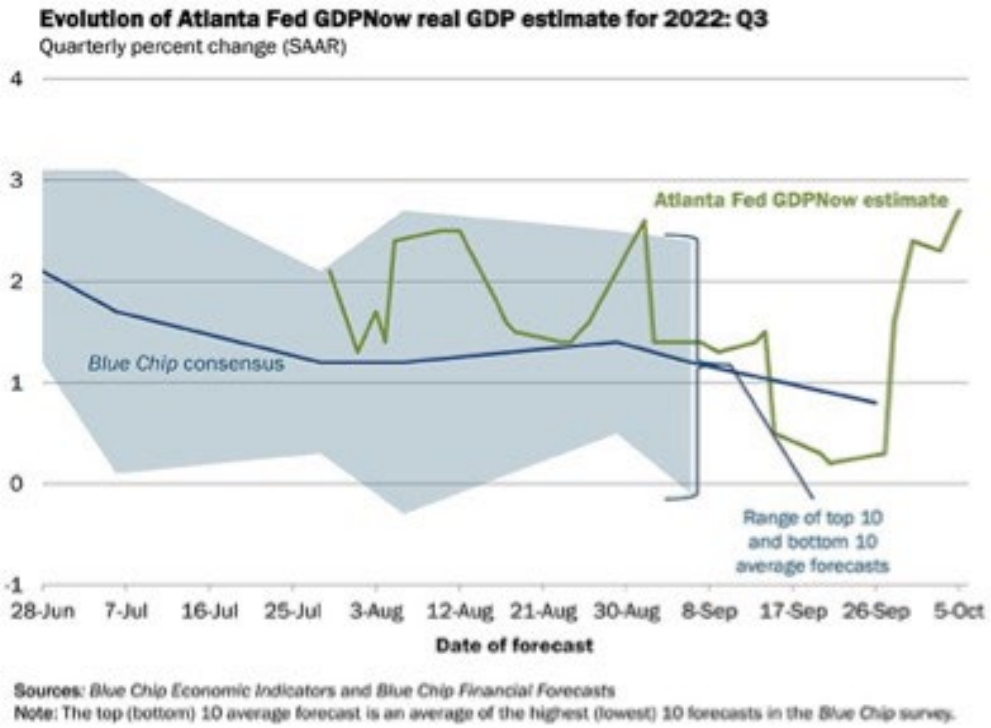
Source: U.S. Bureau of Labor Statistics

Even, then Uneven, Components of U.S. GDP
2017-2022



Source: U.S. Bureau of Economic Analysis

Major National Forecasts Missed Solid 2022 Q3 Economic Growth



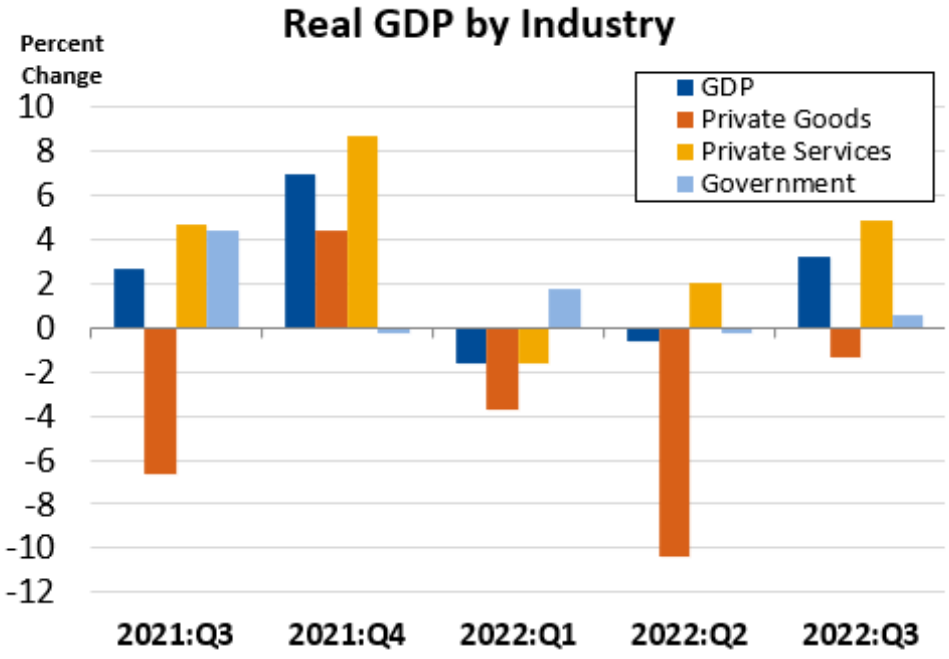
Actual GDP growth 2022 Q3

3.2%

(Dec 2022 estimate)

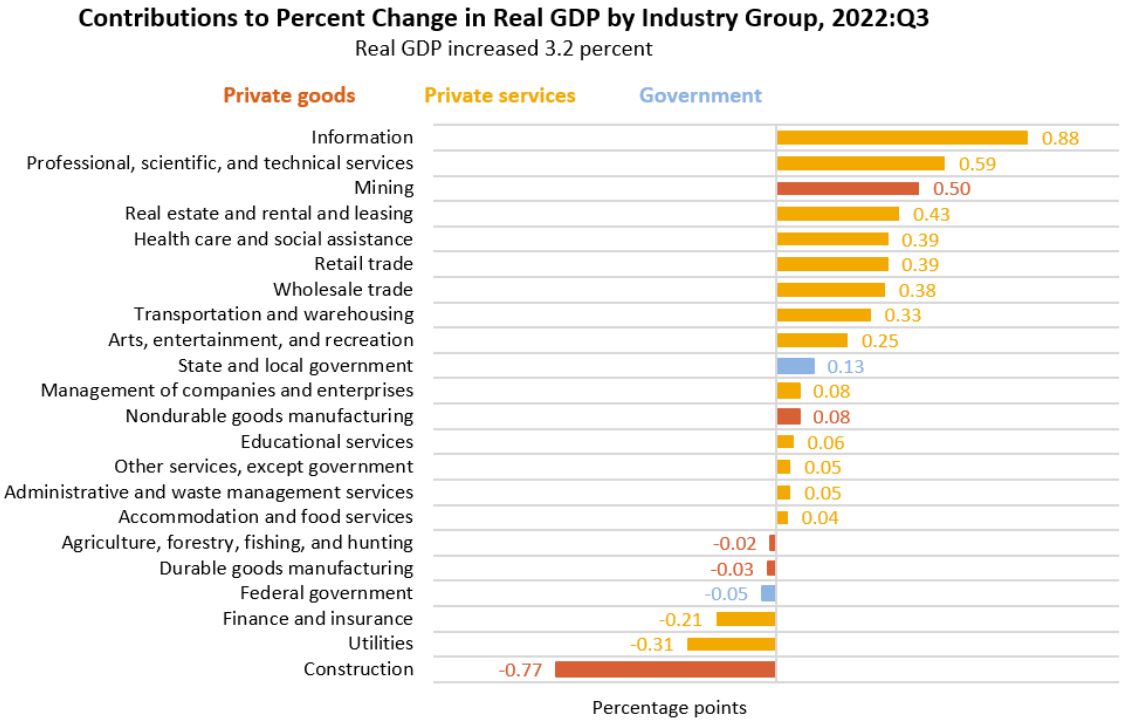
Source: Federal Reserve Bank of Atlanta

U.S. Household Consumption Shifting Back to Services
2021-2022

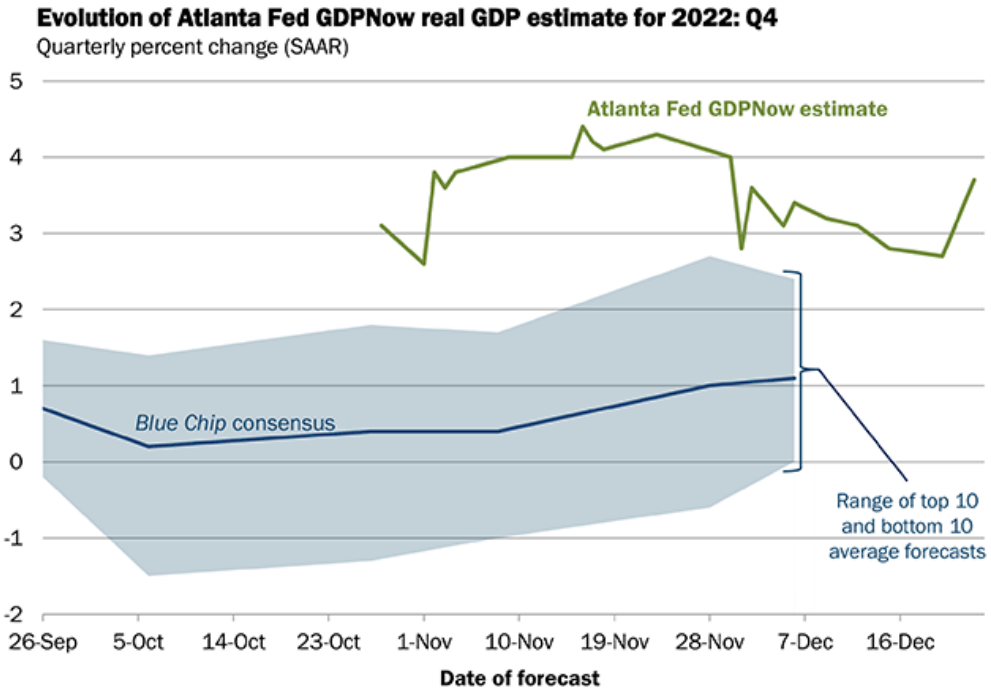


U.S. Bureau of Economic Analysis Seasonally adjusted annual rates

2022 Q3 Most U.S. Industries Grew, but Construction Dropped Dramatically with Interest Rate Increases



2022 Q4 Real GDP "Nowcast"
On Pace for Strong Growth (Well Above Major Forecasts)



Sources: *Blue Chip Economic Indicators* and *Blue Chip Financial Forecasts*
Note: The top (bottom) 10 average forecast is an average of the highest (lowest) 10 forecasts in the *Blue Chip* survey.

Source: Federal Reserve Bank of Atlanta

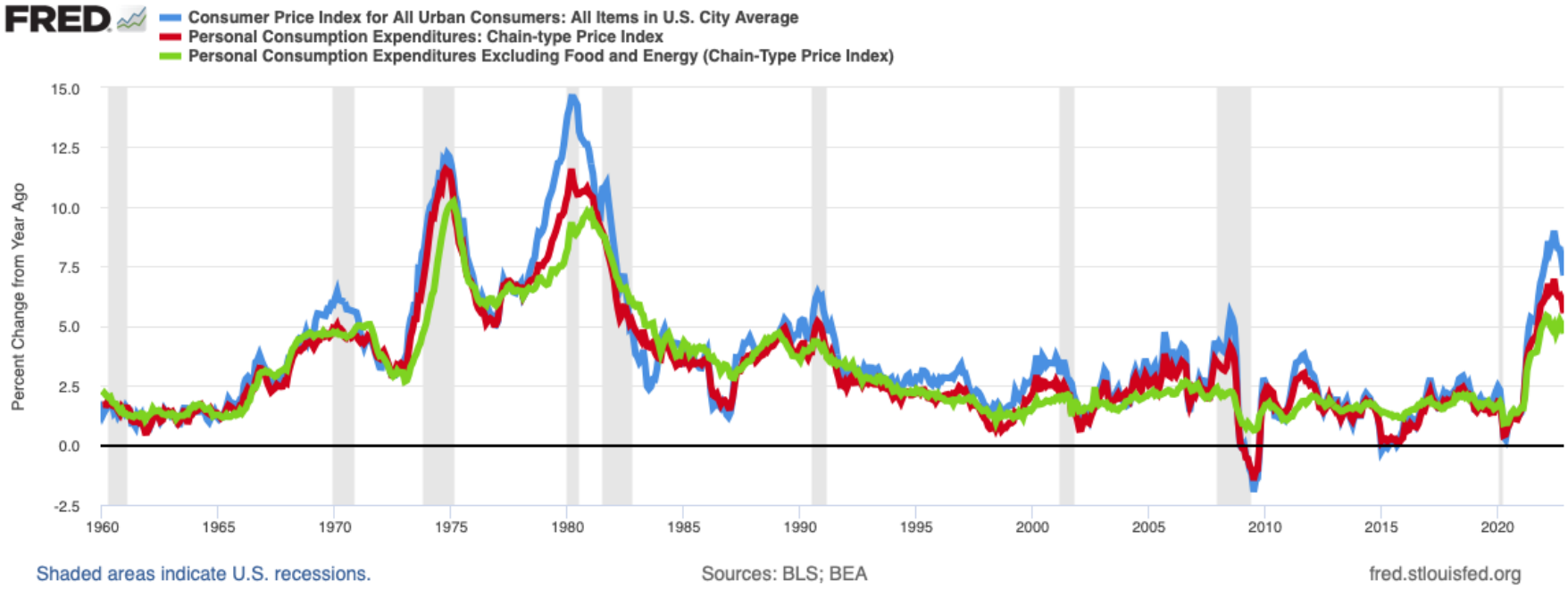
Monetary Policy Behind the Curve

"I think we now understand better how little we understand about inflation."
Jerome Powell, Chair of the Federal Reserve, June 2022

"We see today that there is a bit of a savings buffer still sitting for households, that may allow them to continue to spend in a way that keeps demand strong. This suggests we may have to keep at this for a while."

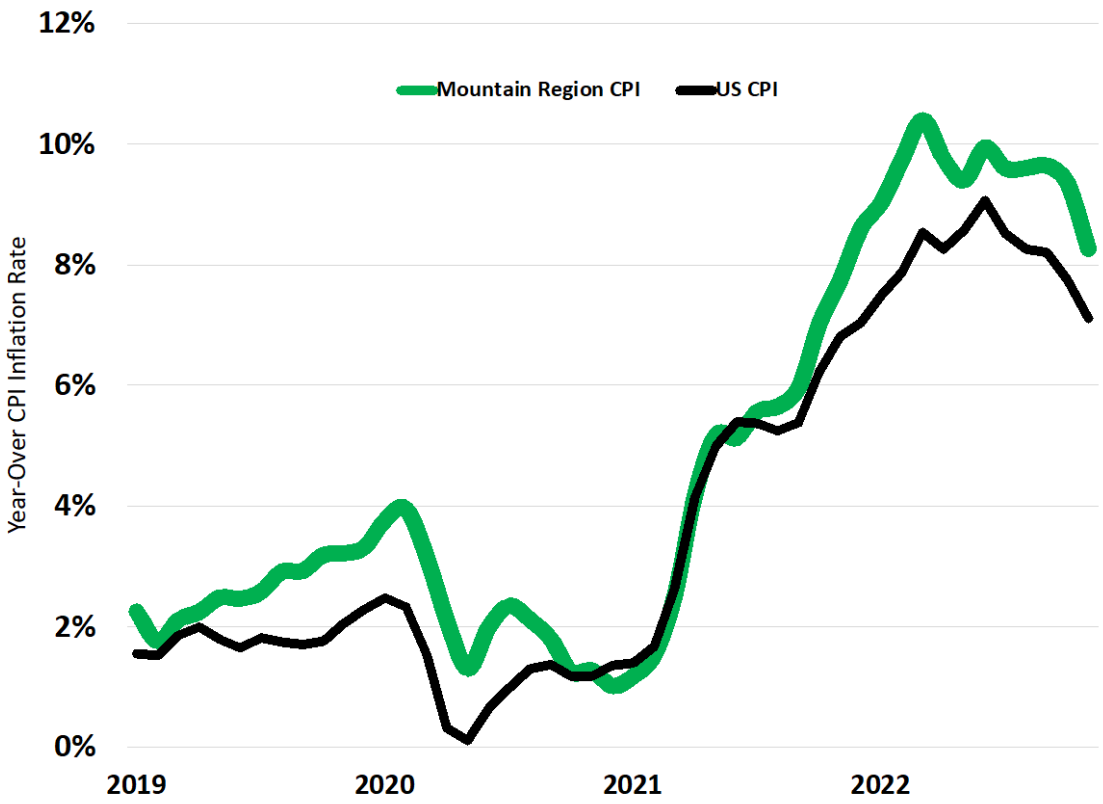
Esther George, President, Federal Reserve Bank of Kansas City, November 2022

Major Warning Signal: The Sting of High Inflation



Source: Bureau of Labor Statistics and Bureau of Economic Analysis via FRED

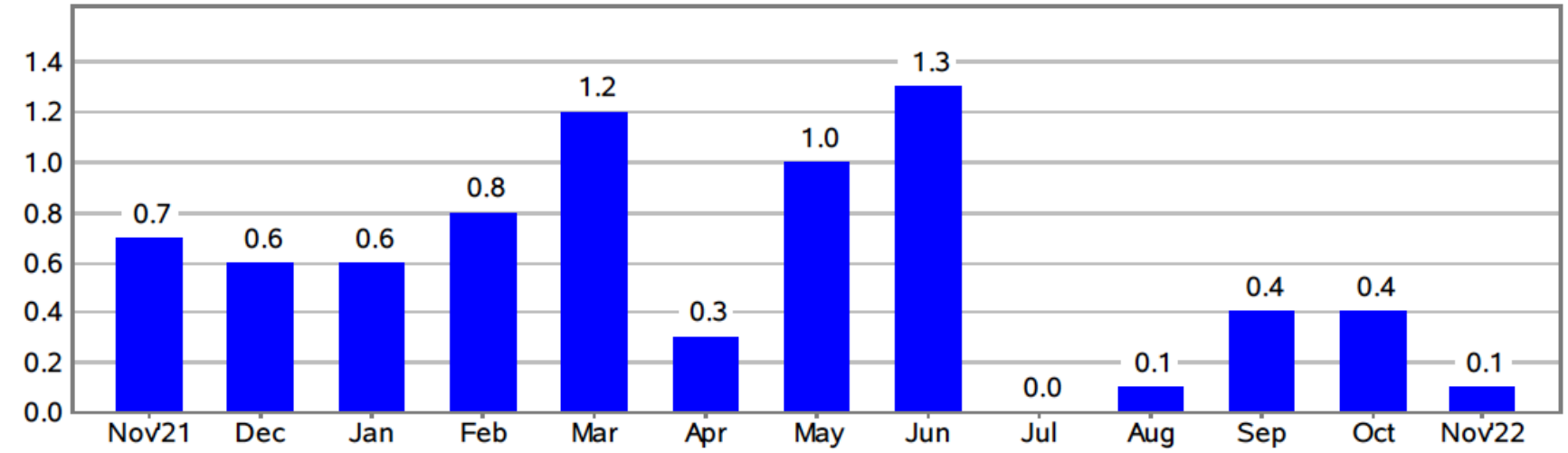
Mountain Region Inflation Even Higher



Source: U.S. Bureau of Labor Statistics

Moderating Monthly CPI

Chart 1. One-month percent change in CPI for All Urban Consumers (CPI-U), seasonally adjusted, Nov. 2021 - Nov. 2022
Percent change



Source: Bureau of Labor Statistics

Are Financial Conditions Really That Tight?

Strength Signals:
Household Finances Surprisingly Strong <u>in Aggregate</u>

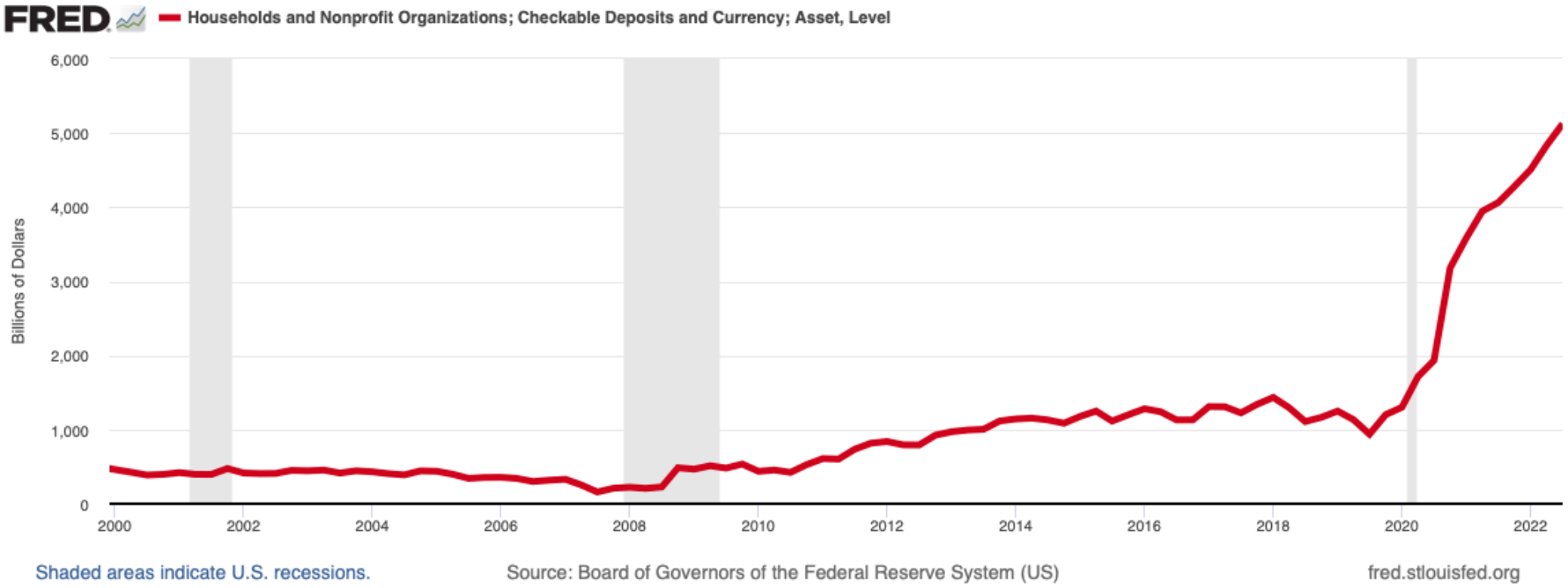
1. **Household financial buffers strong OVERALL**
   - High stock of savings
   - Low debt service payments
   - Consumption spending continues
   - Ample jobs

2. **BUT….<u>not everyone is doing so well</u> & some emerging weakness**

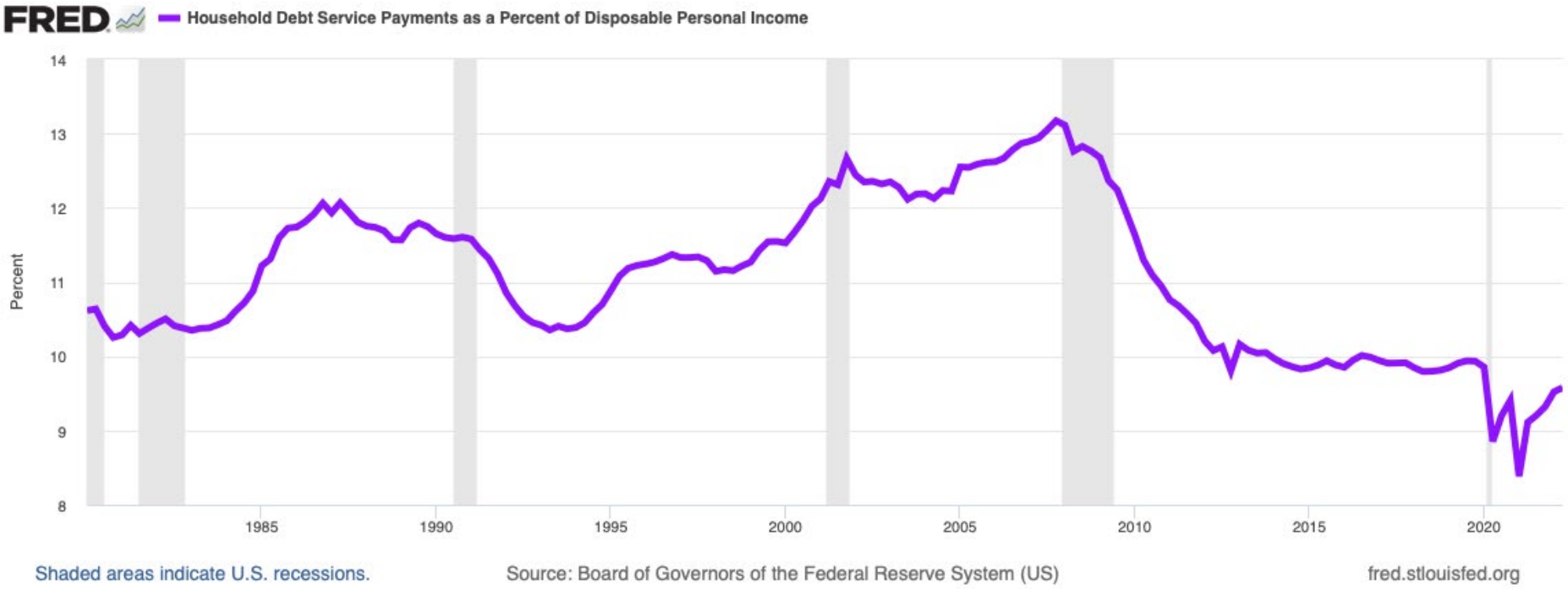
3. **Strength in household financial buffers creates uncertainty**

Strength Signal: Massive Household Liquidity

Household Reserves High <u>& Growing</u> through 2022Q3



Strength Signal:
Low Monthly Debt Service Payments

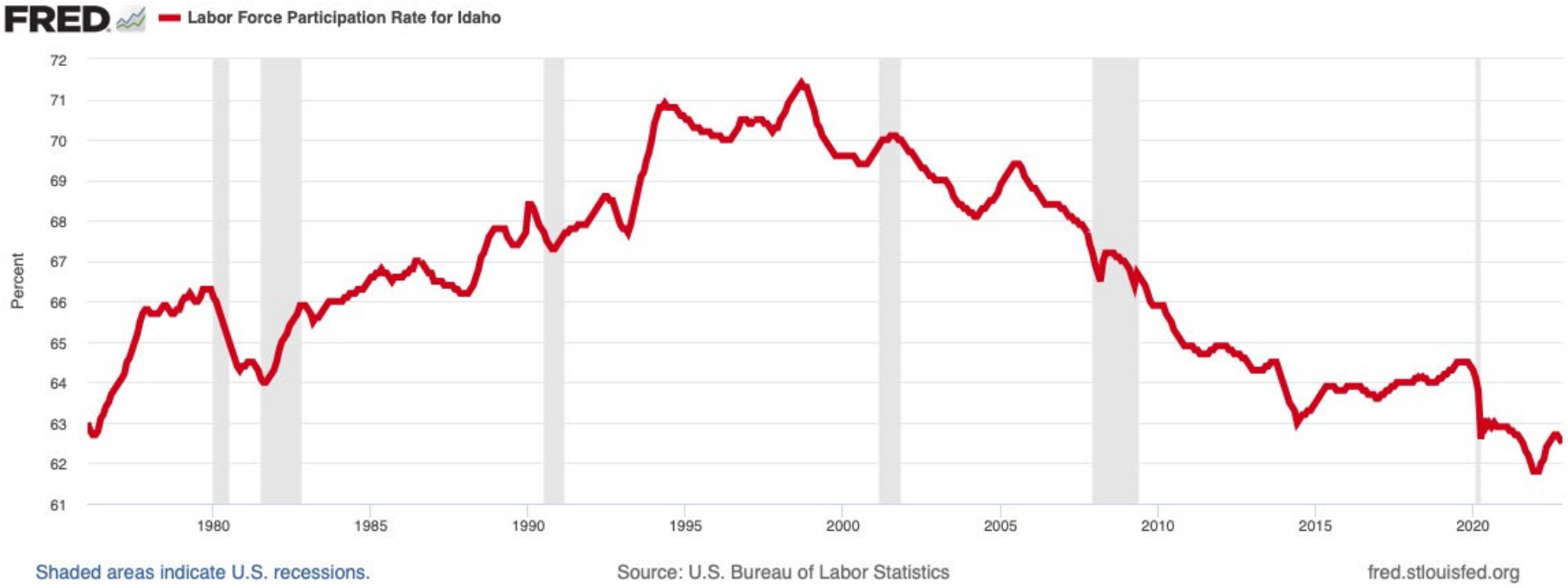


Baby Boomer Retirements Heavily Influence Labor Markets

Negative Real (Inflation-Adjusted) Wages

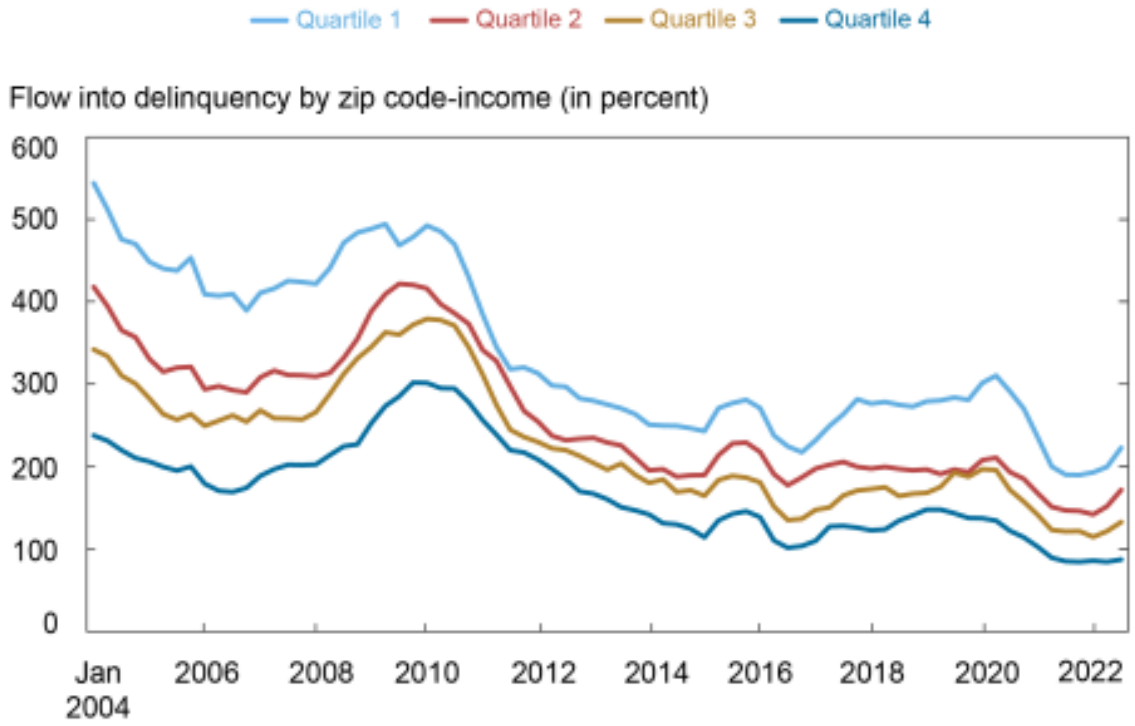
Source: Federal Reserve Bank of Atlanta

Historically Low Labor Force Participation Puts Upward Pressure on Worker Wages



Source: U.S. Bureau of Labor Statistics via FRED

Mixed Signal:
Increasing Debt & Delinquencies Among Low-Income Households, but Still Low



Although still well below pre-pandemic levels:

- **Delinquencies increasing**, especially among low-income households
- Inflation led to **increasing household debt** in 2022 Q3

Source: Federal Reserve Bank of New York

Recurring Takeaways

- Prepare for continued **economic re-sorting**
- Structural (long-term) and cyclical (short-term) changes create **pockets of strength and weakness**
- Make your budget systems highly **adaptable to rapidly changing conditions**

Amidst Uncertainty, Build Resiliency

- **Interpreting past and present conditions challenging due to complex and highly uncertain economic environment. Forecasting future events even harder.**

- **Scenario plan and develop early warning systems**

- **Single-supplier "just in time" systems failed. Consider how you need to <u>redesign your budget systems</u> to enhance resiliency:**
  - (a) build appropriate protective buffers - financial, personnel, supply chain, stock of supplies, etc.
  - (b) reliably deliver value during economy's ups and downs
  - (c) seize opportunities that arise during uncertain times

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