

Are the Inflationary Headwinds too Strong?

Transit Finance Learning Exchange



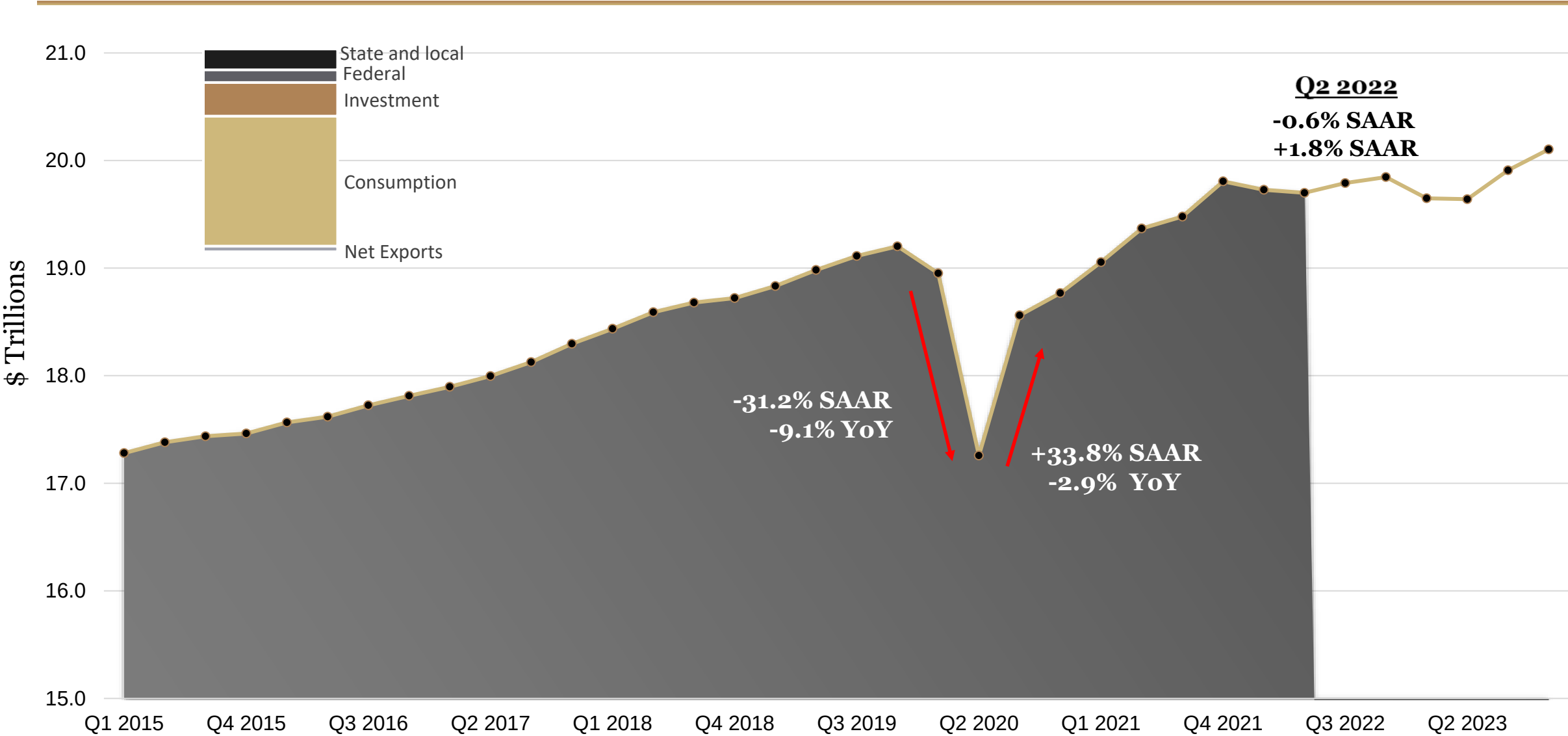
Richard Wobbekind
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for Business and Government Relations
Business Research Division
University of Colorado Boulder



Leeds School of Business
UNIVERSITY OF COLORADO **BOULDER**

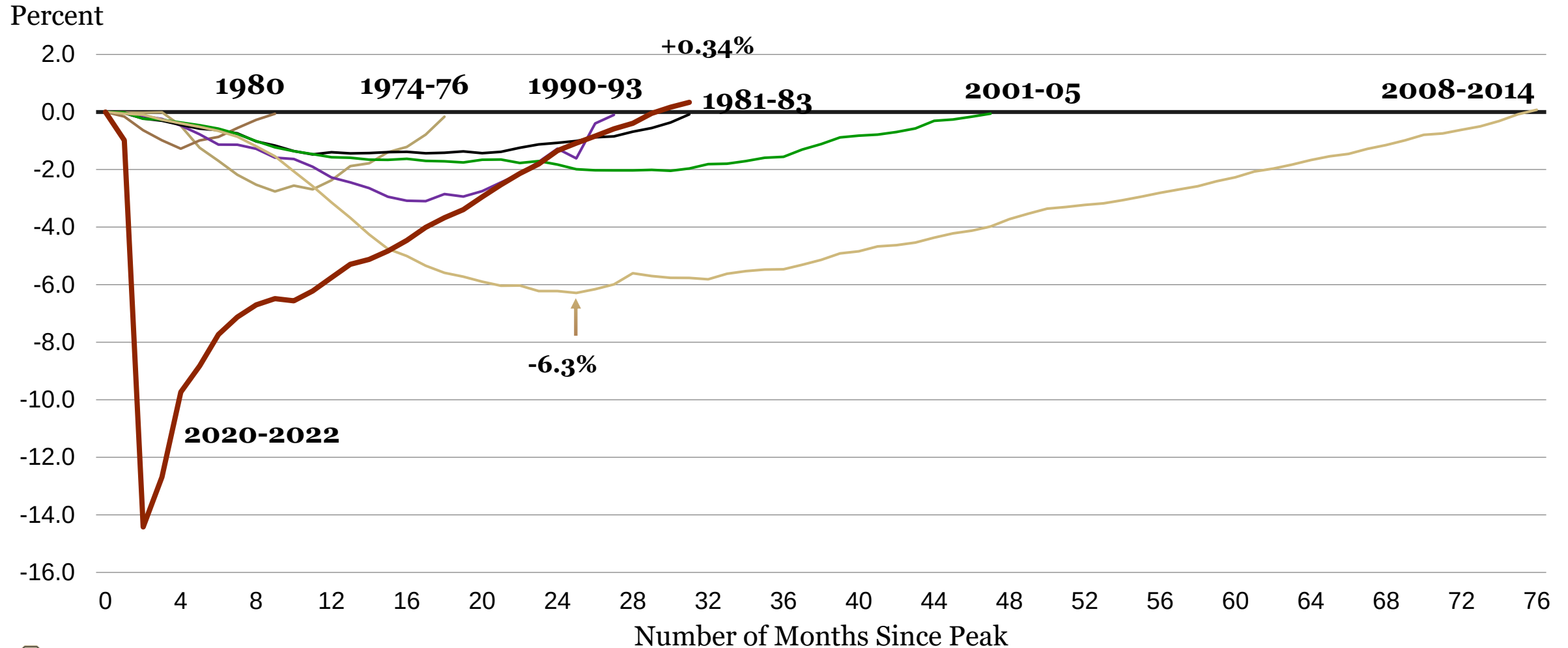
November 1, 2022

U.S. Real GDP

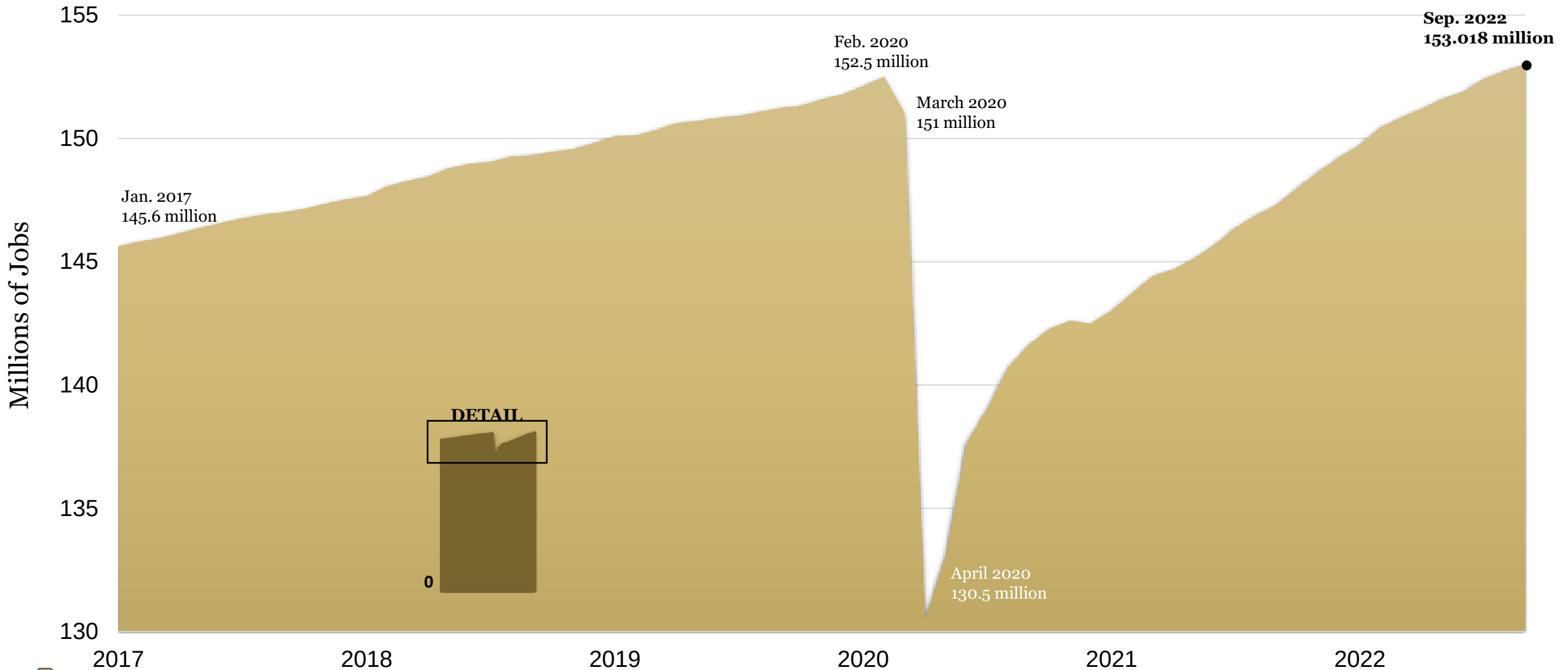


National Employment

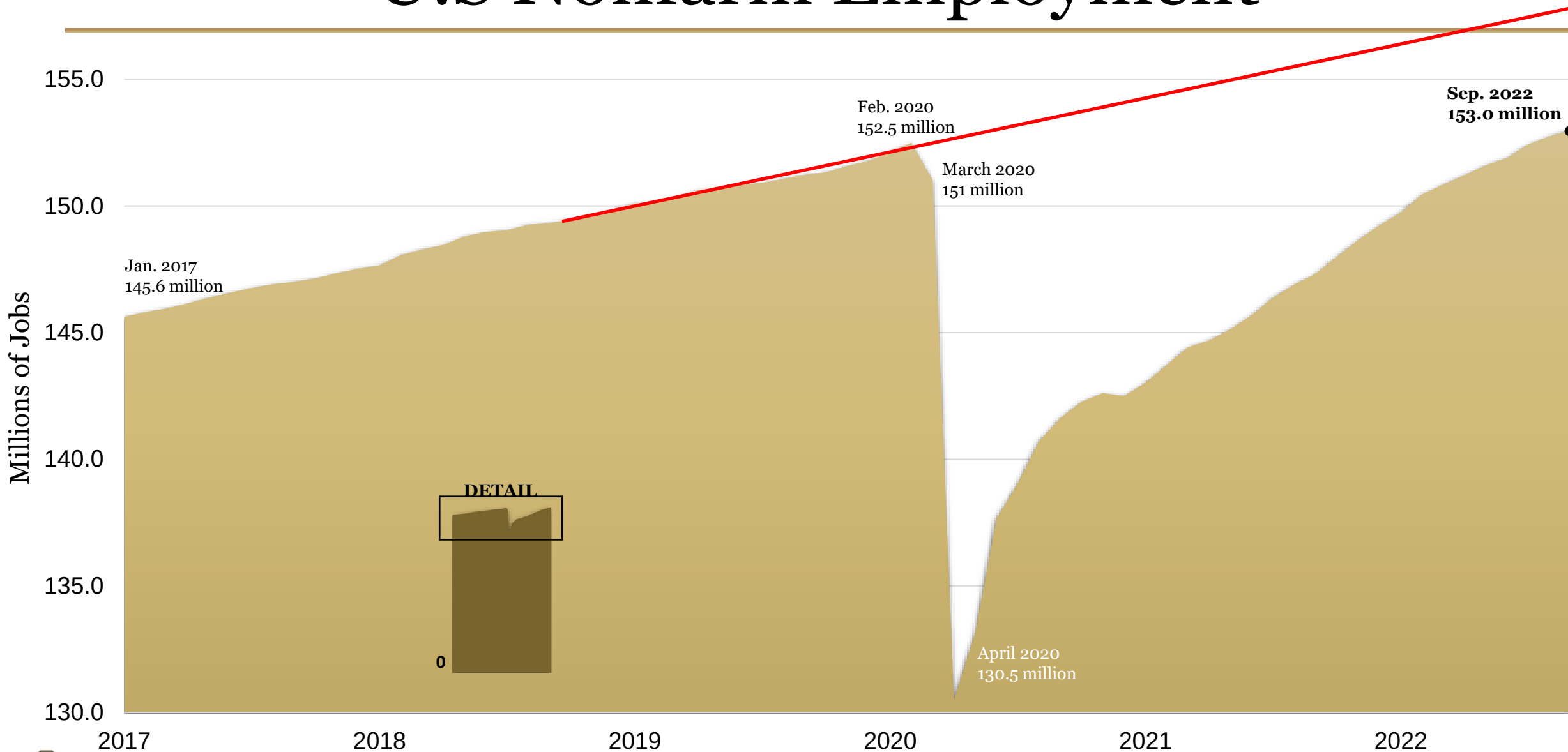
Months to Recovery



U.S Nonfarm Employment

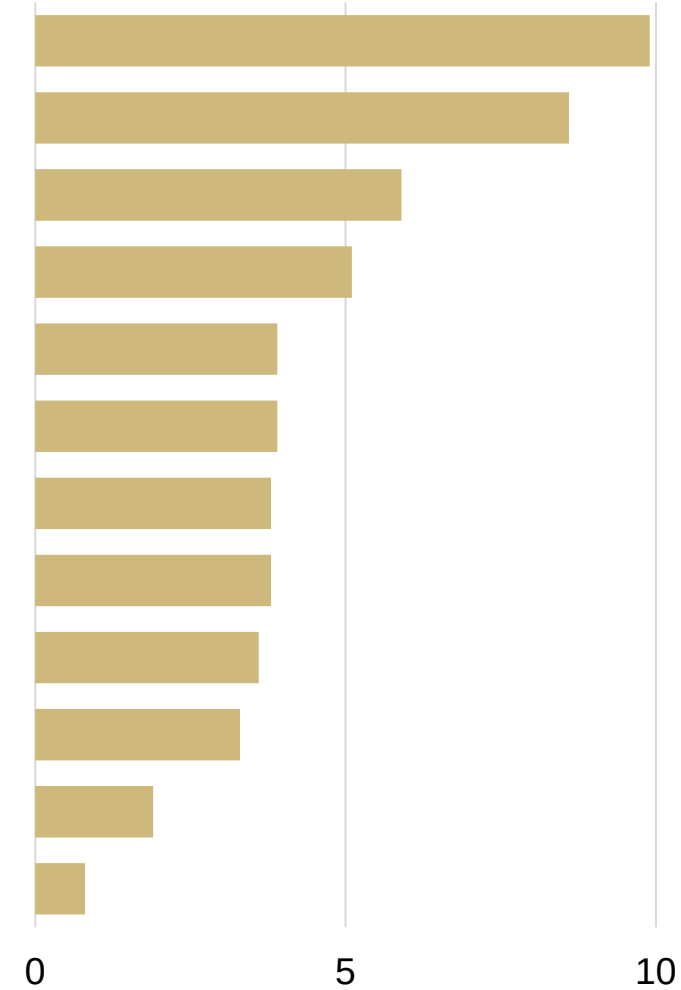


U.S Nonfarm Employment

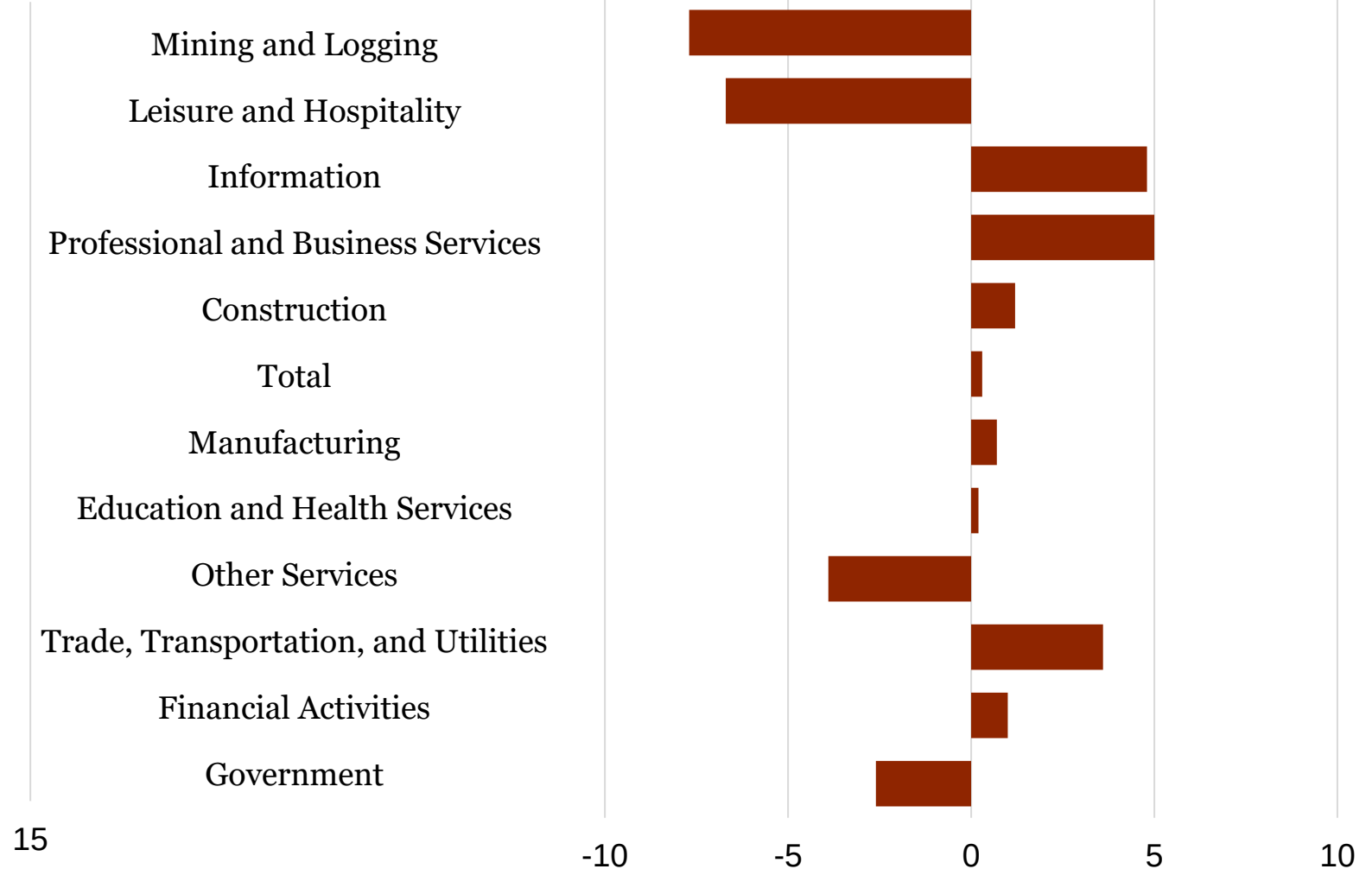


Employment Change

Pct. Change, Year-over-year

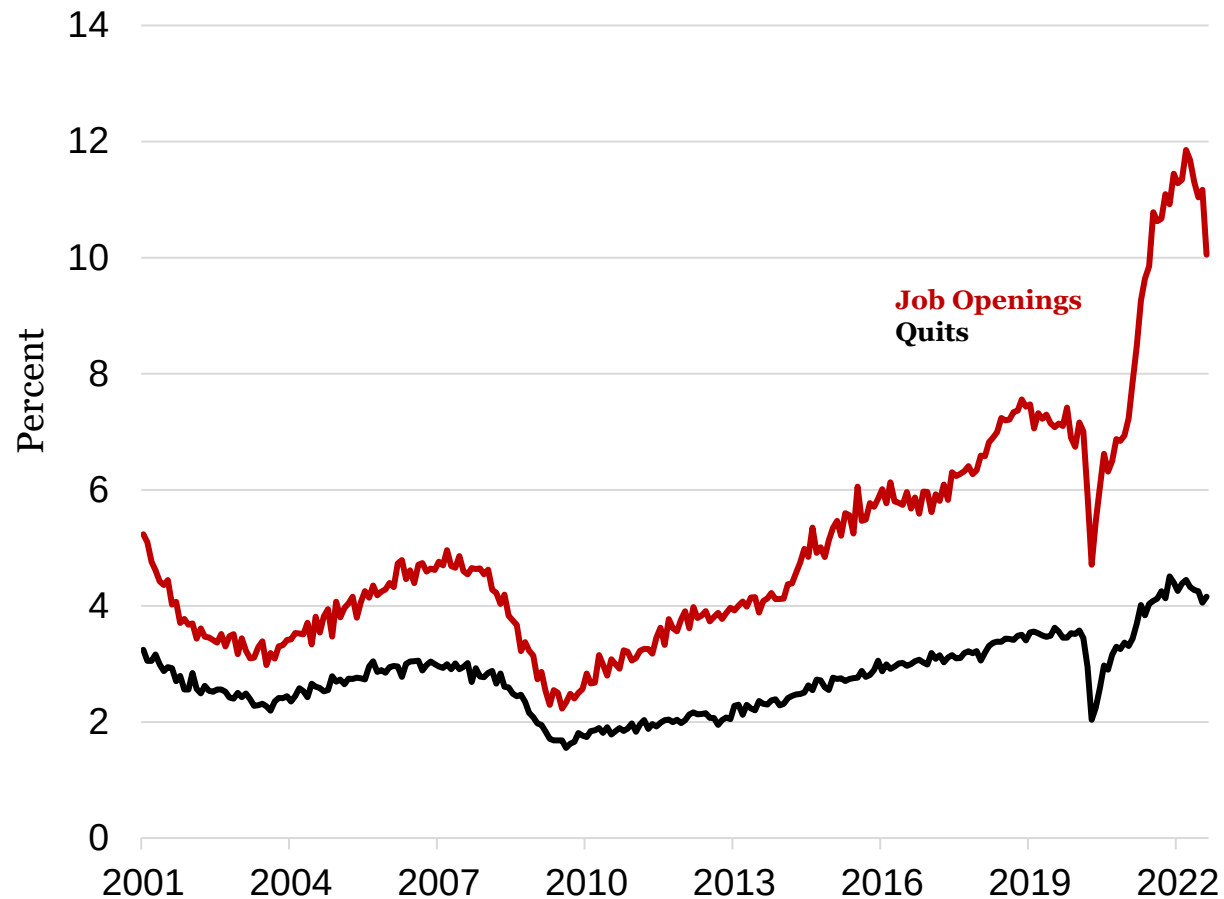


Pct. Change, Jan. 2020-Sept. 2022

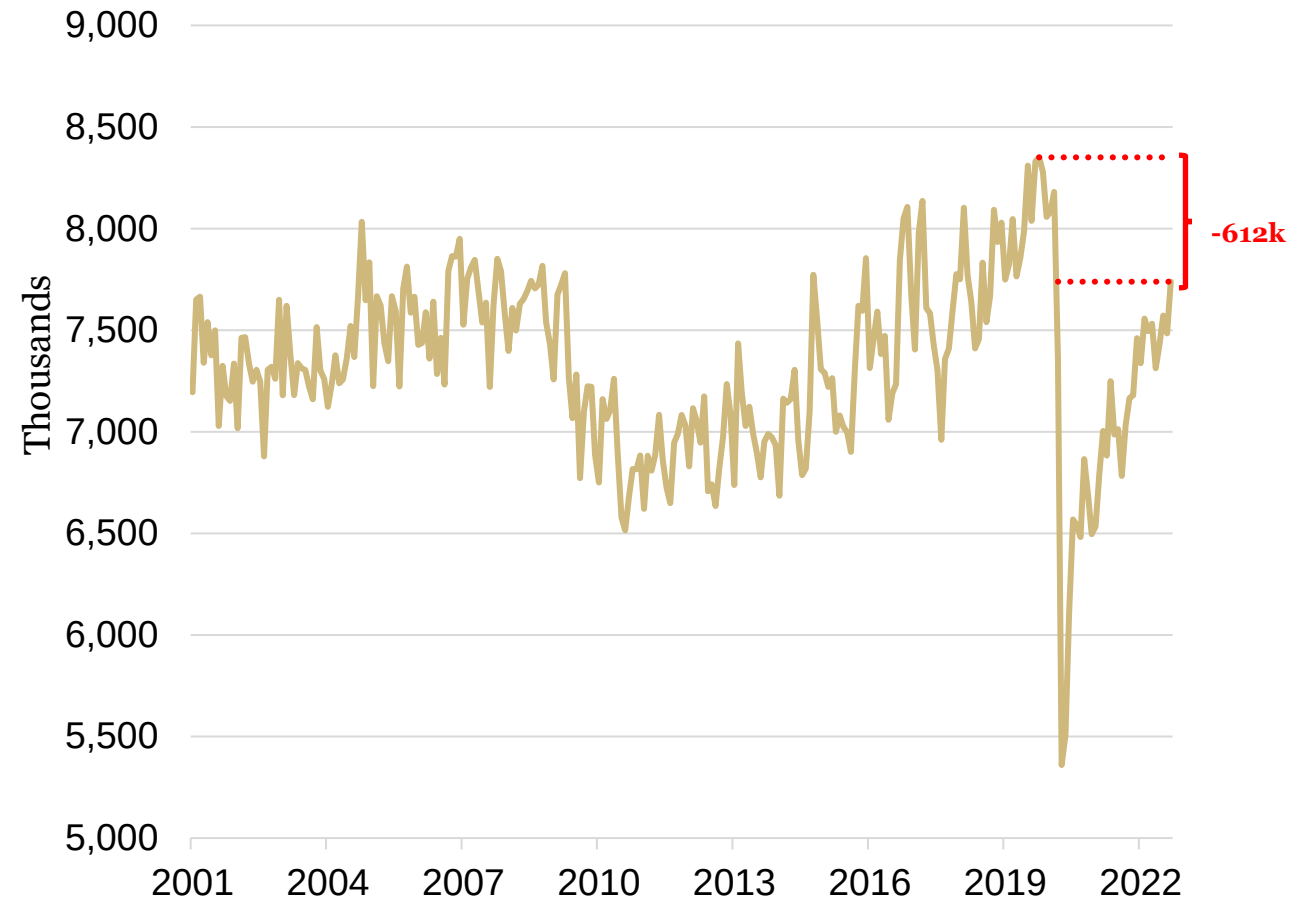


Labor Shortage

Job Openings and Quits

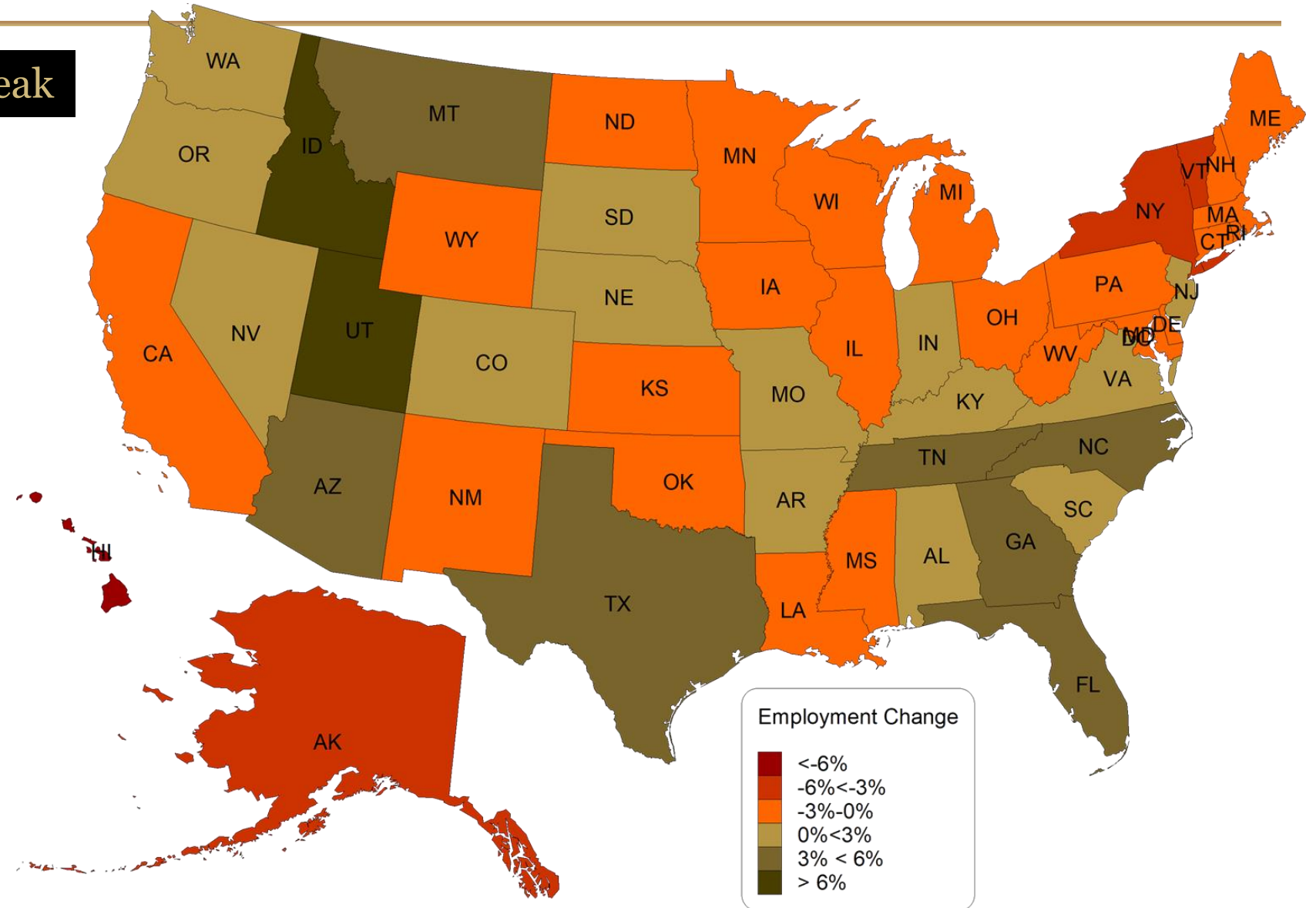


National Multiple Jobholders



Employment Recovery

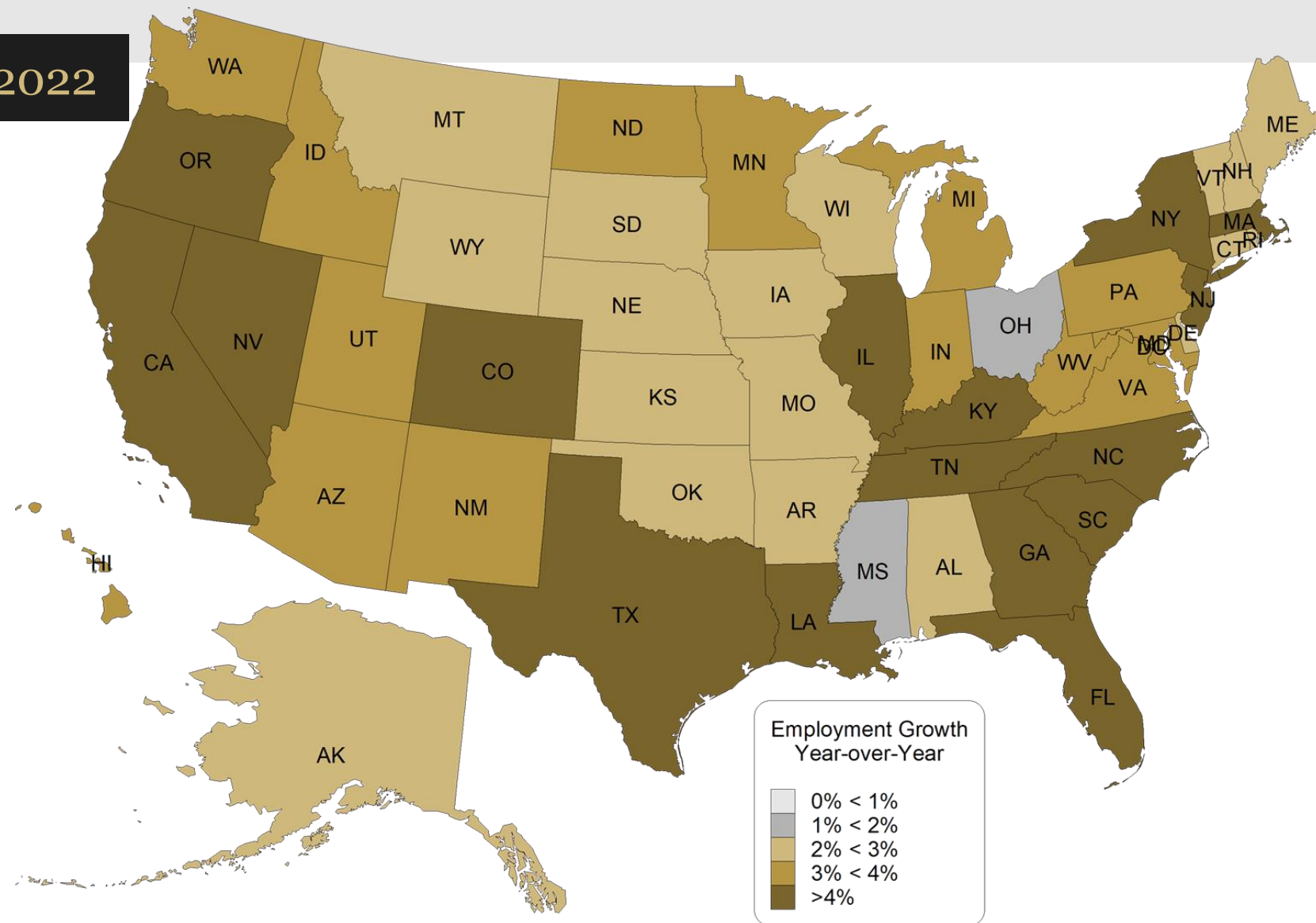
Change from Prerecession Peak



Source: Bureau of Labor Statistics, Current Employment Statistics (Seasonally Adjusted), as of September 2022.

Employment Growth

1-Year Growth, September 2022



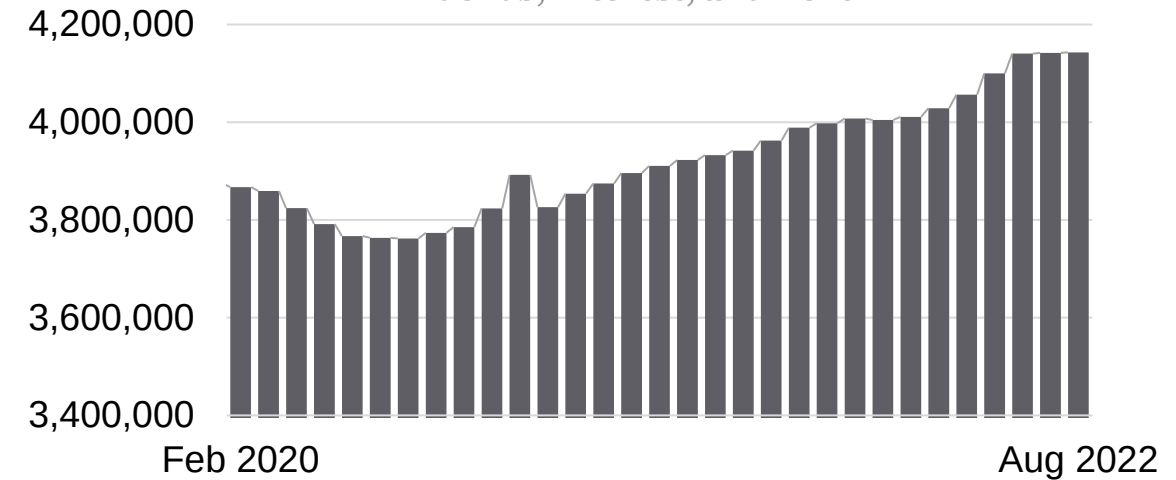
National Personal Income

\$ Billions, Seasonally Adj. Annual Rate

Employee Compensation



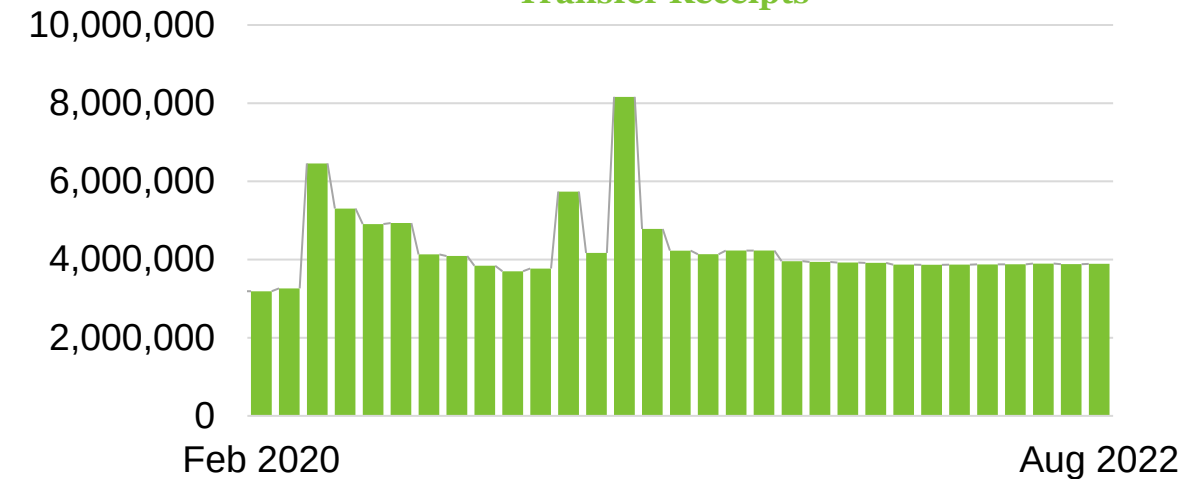
Dividends, Interest, and Rent



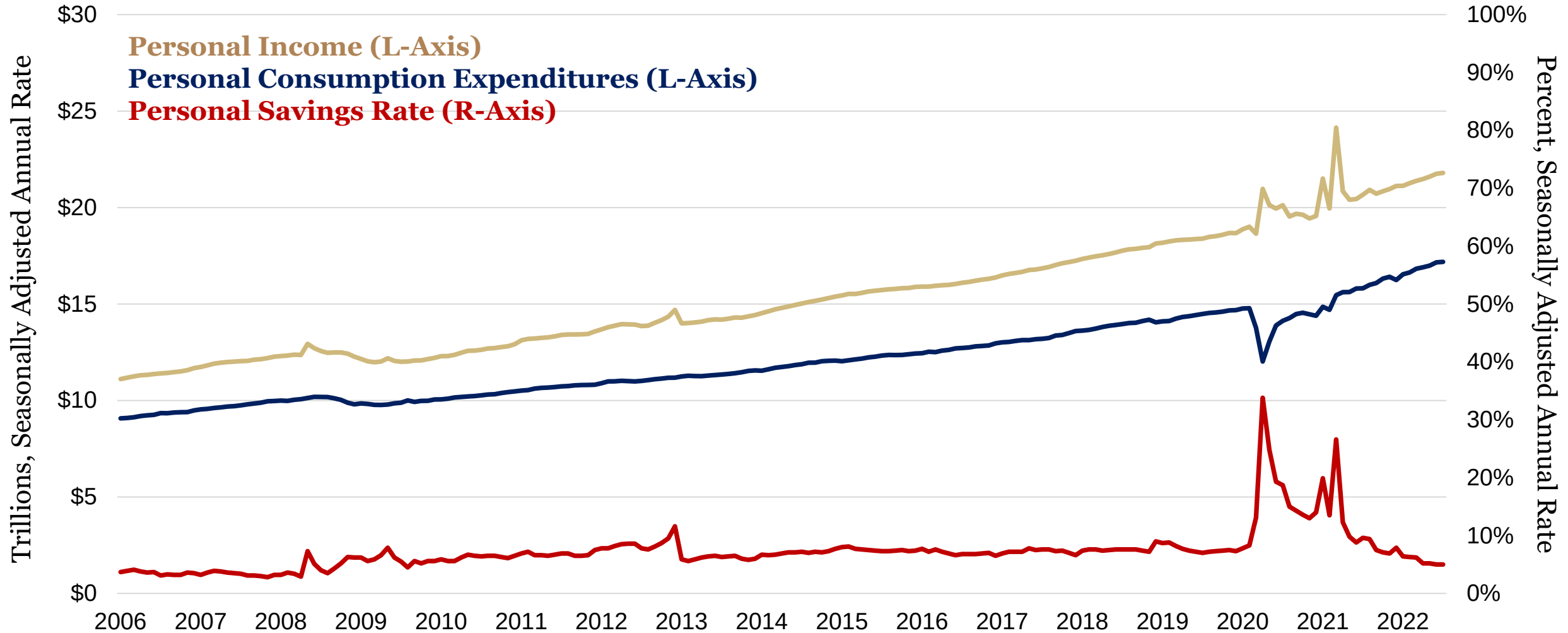
Proprietor Income



Transfer Receipts

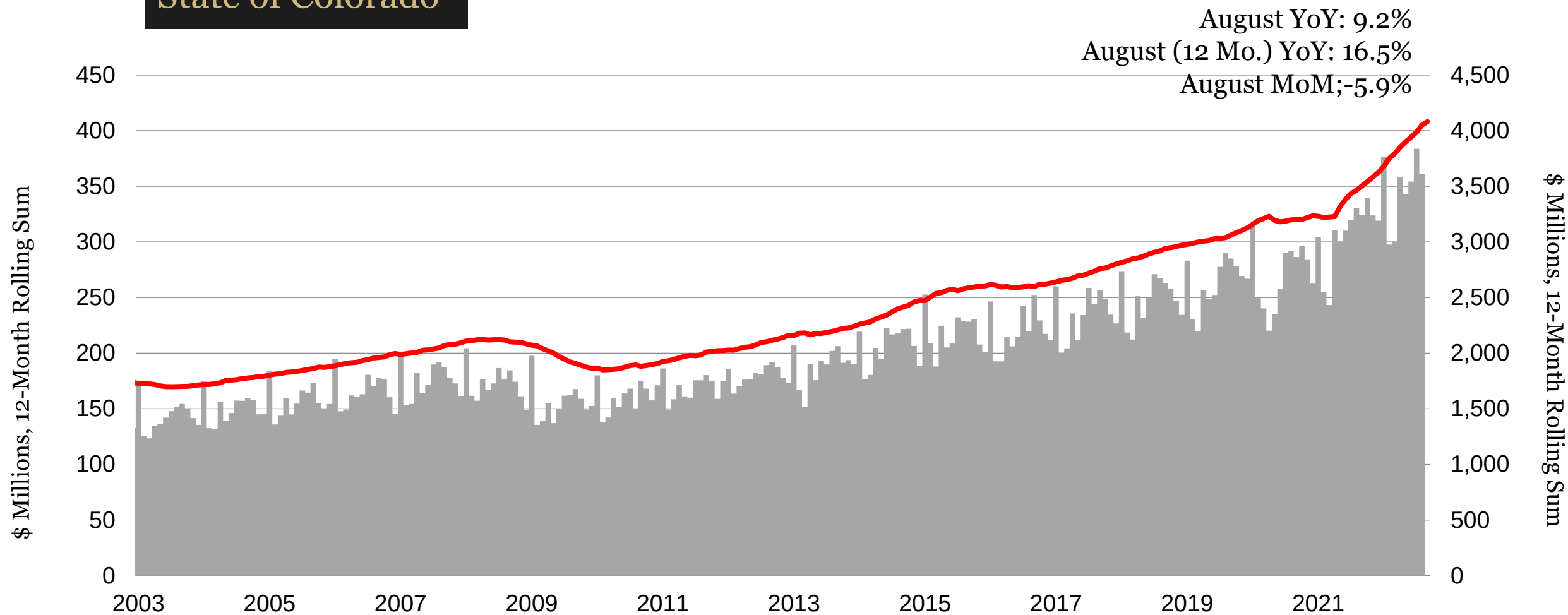


Personal Income and Savings

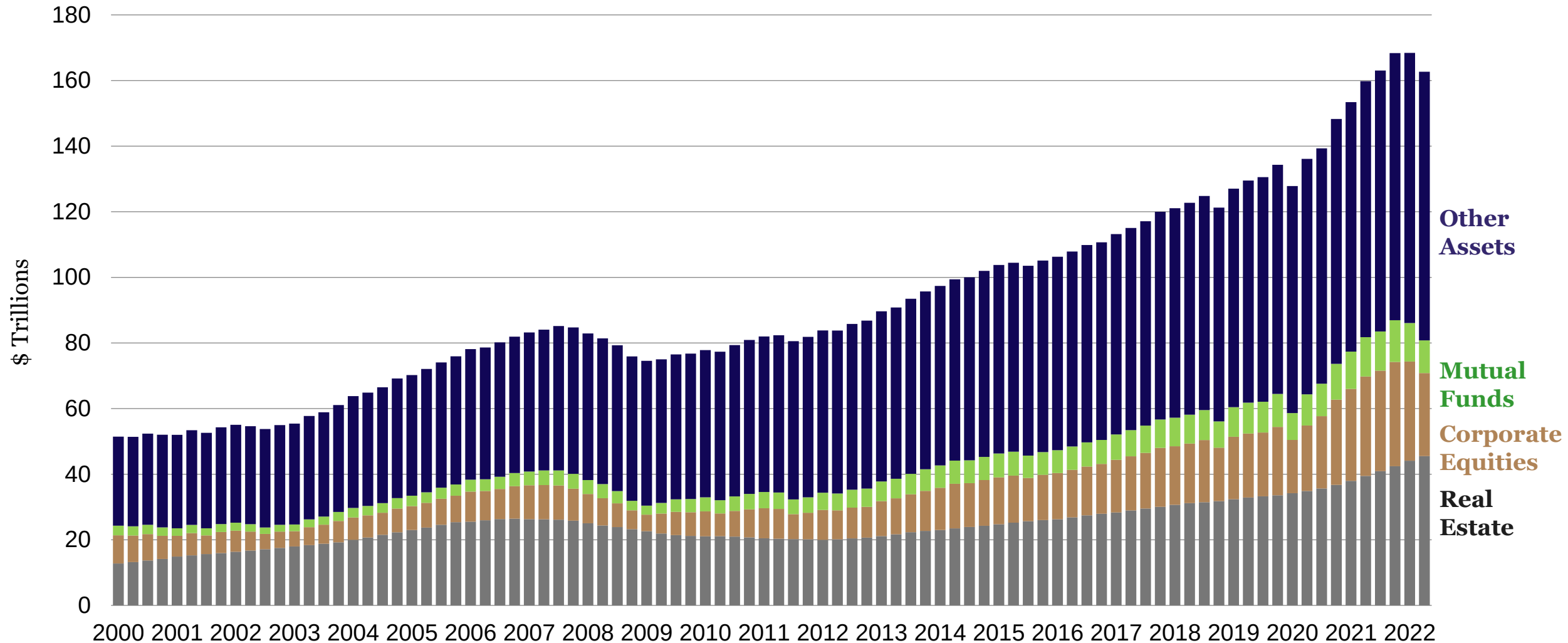


Sales Tax Collections

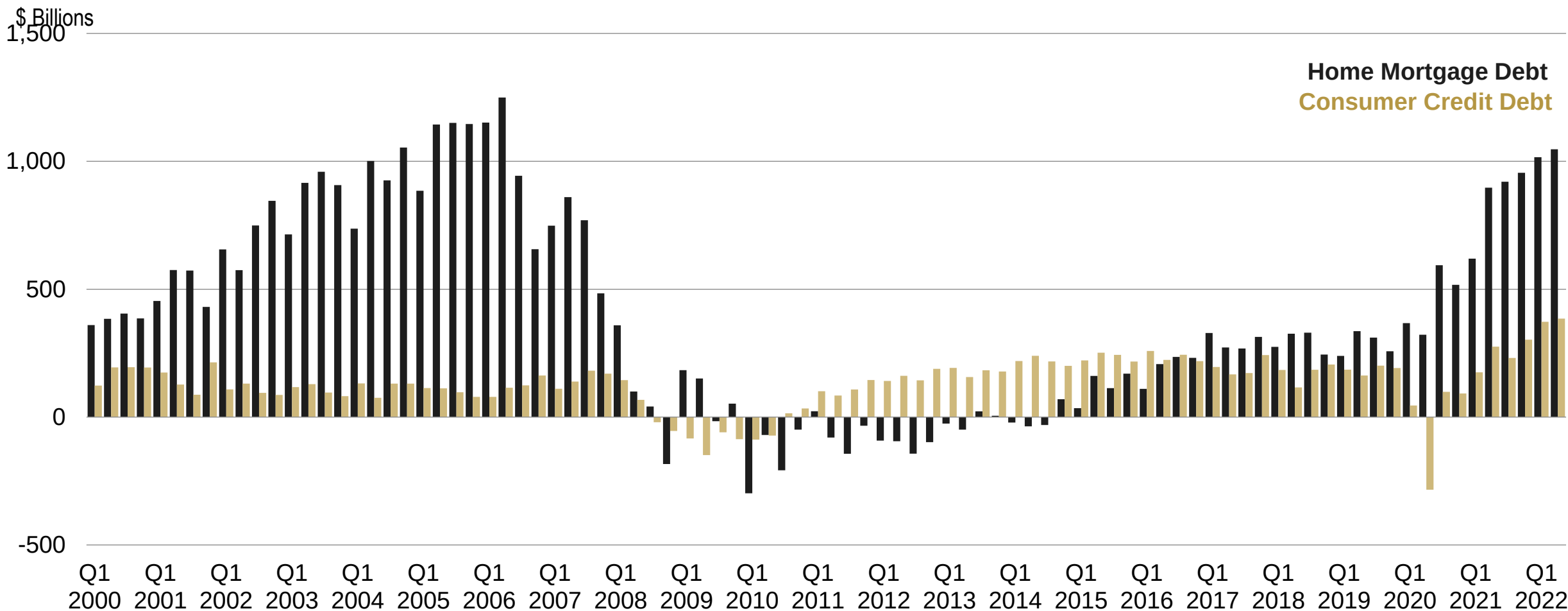
State of Colorado



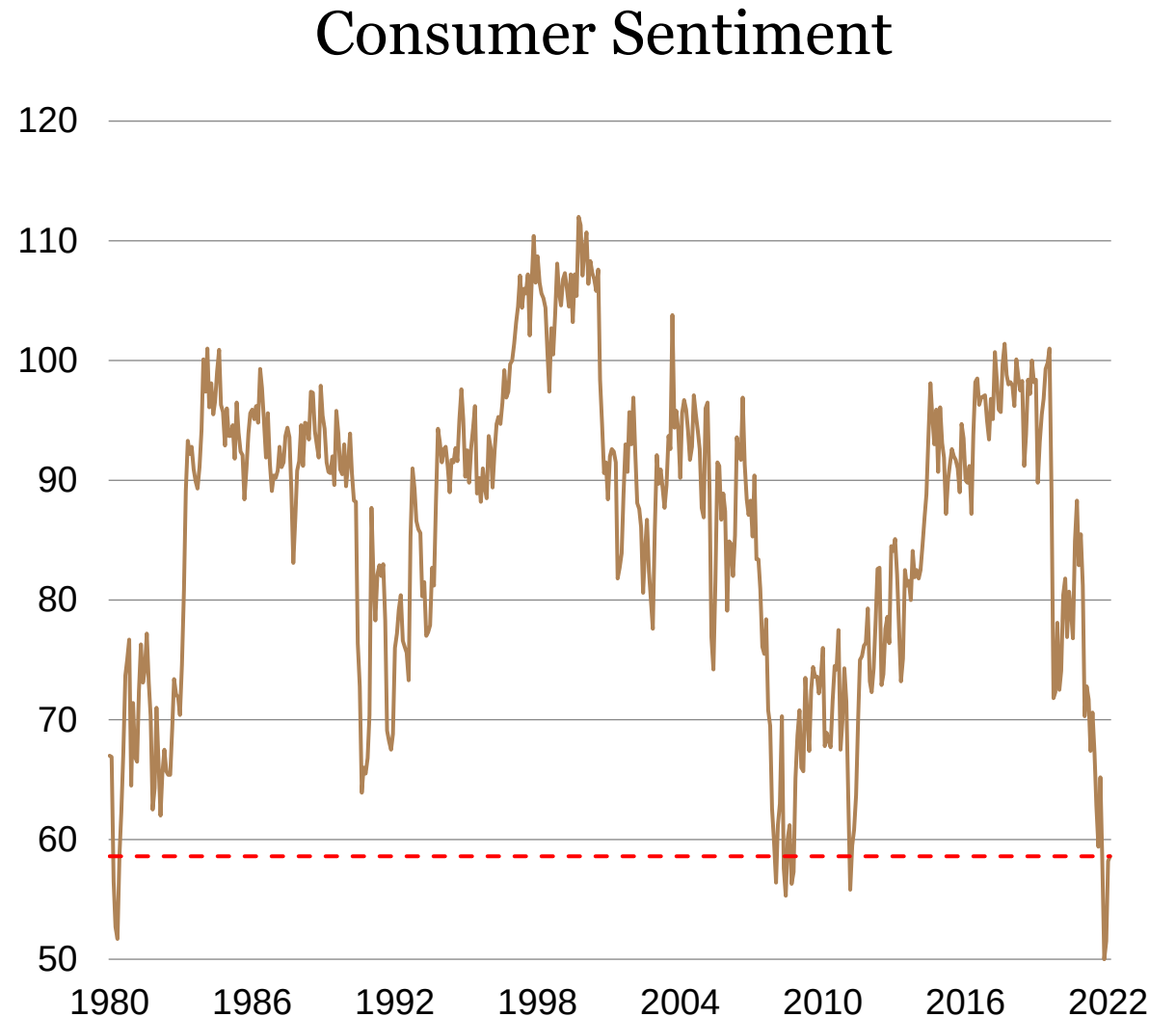
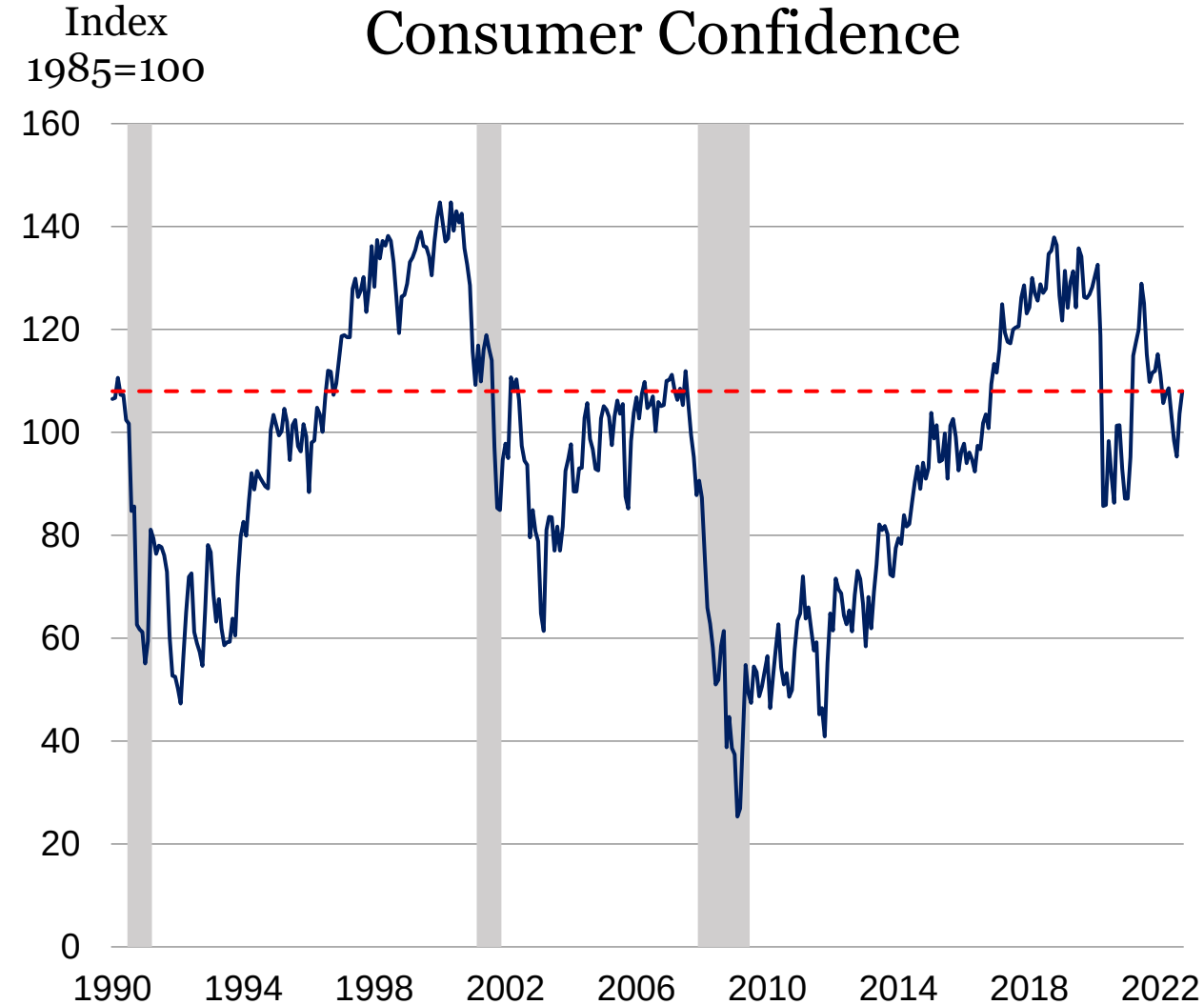
Household Wealth



Household Debt Growth

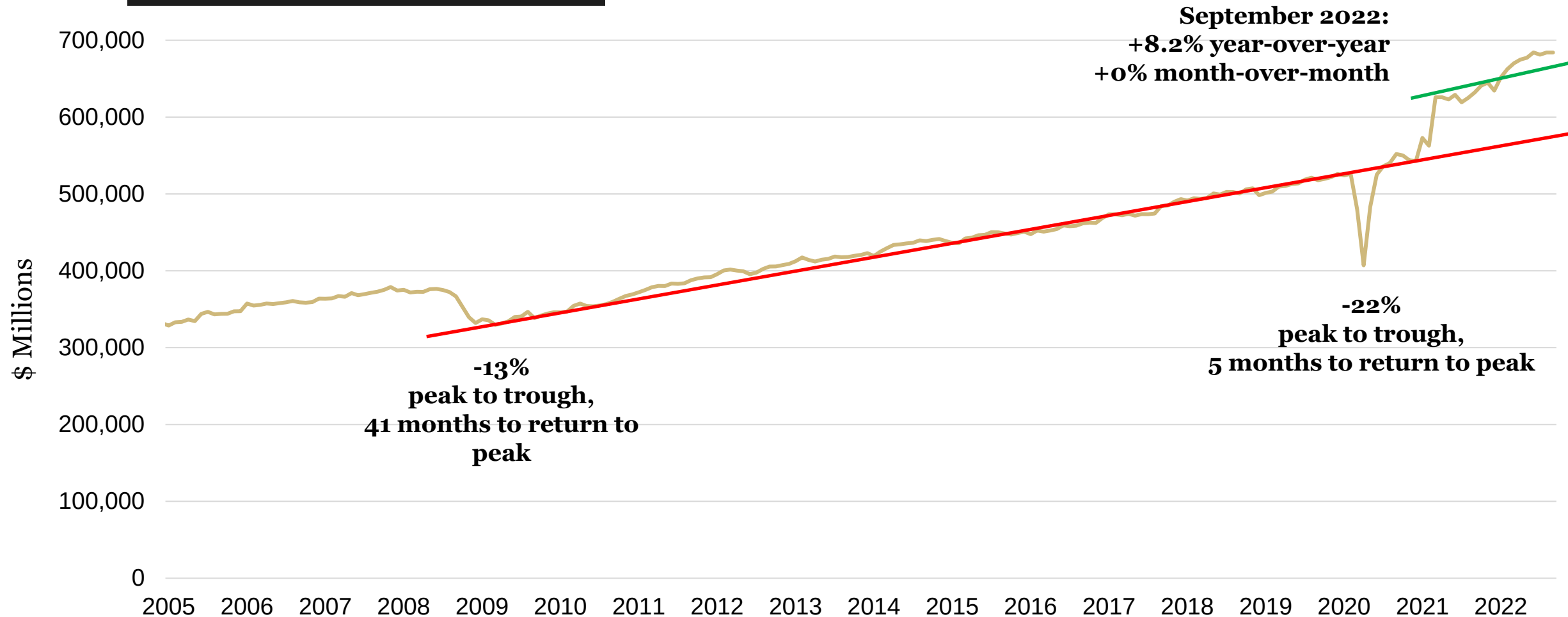


Index of Consumer Confidence



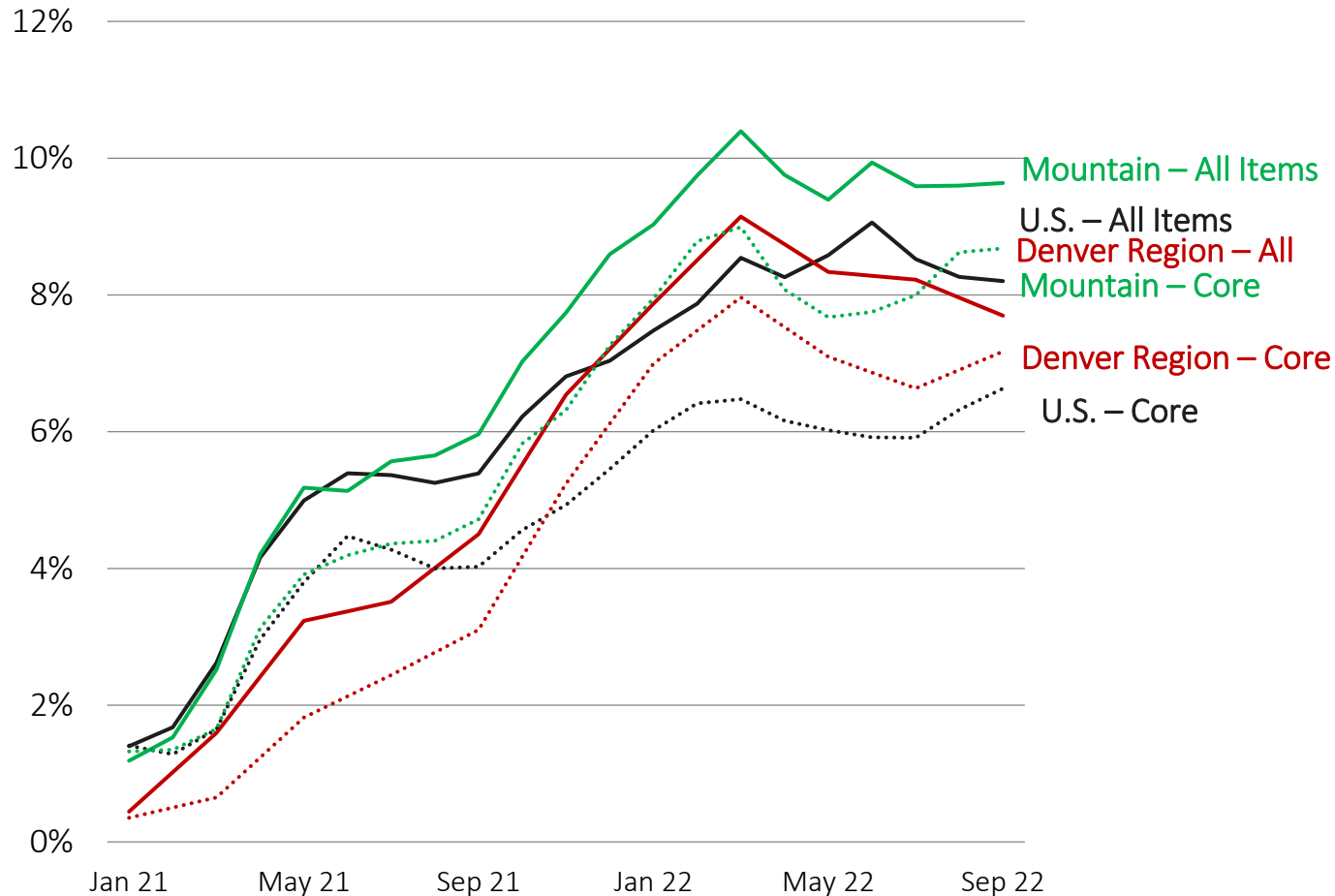
National Retail Sales

Trend vs. Recent Volatility



Inflation

Consumer Price Index, Percent Change Year-Over-Year



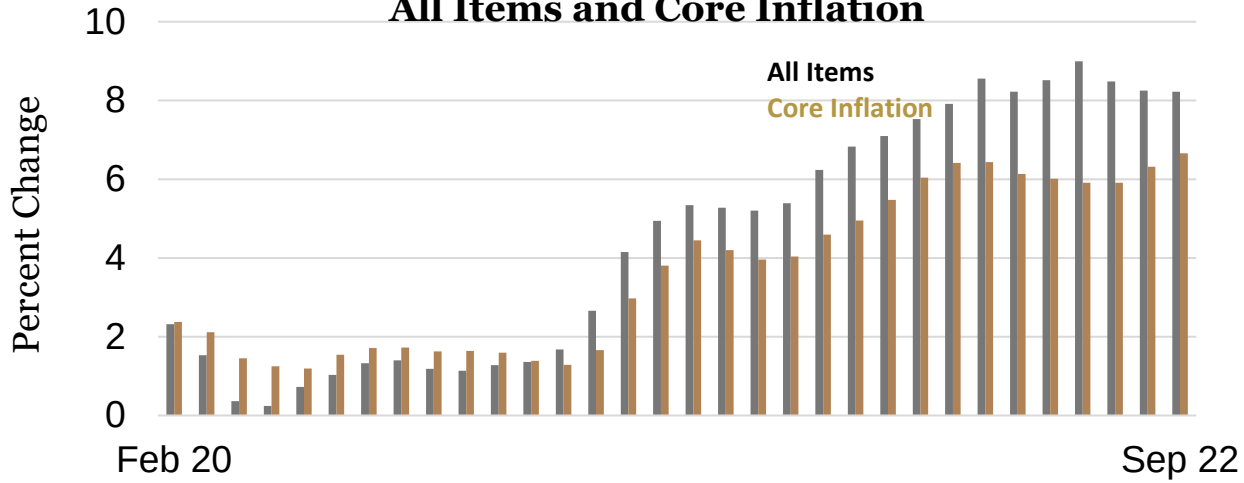
Items	U.S. City Average	Mountain	Denver-Aurora-Lakewood	Item Weights
All items	8.2%	9.6%	7.7%	100.0%
Food and beverages	10.8%	11.7%	11.3%	14.3%
Housing	8.0%	10.5%	8.2%	42.4%
Apparel	5.5%	5.4%	-0.4%	2.5%
Transportation	12.6%	12.8%	7.0%	18.2%
Medical care	6.0%	6.2%	NA	8.5%
Recreation	4.1%	4.2%	3.5%	5.1%
Education and Comm.	0.2%	1.7%	-0.5%	6.4%
Other goods and services	6.9%	7.5%	8.0%	2.7%
Core Inflation	6.6%	8.7%	7.2%	

Source: Bureau of Labor Statistics, CPI for All Urban Consumers (CPI-U).

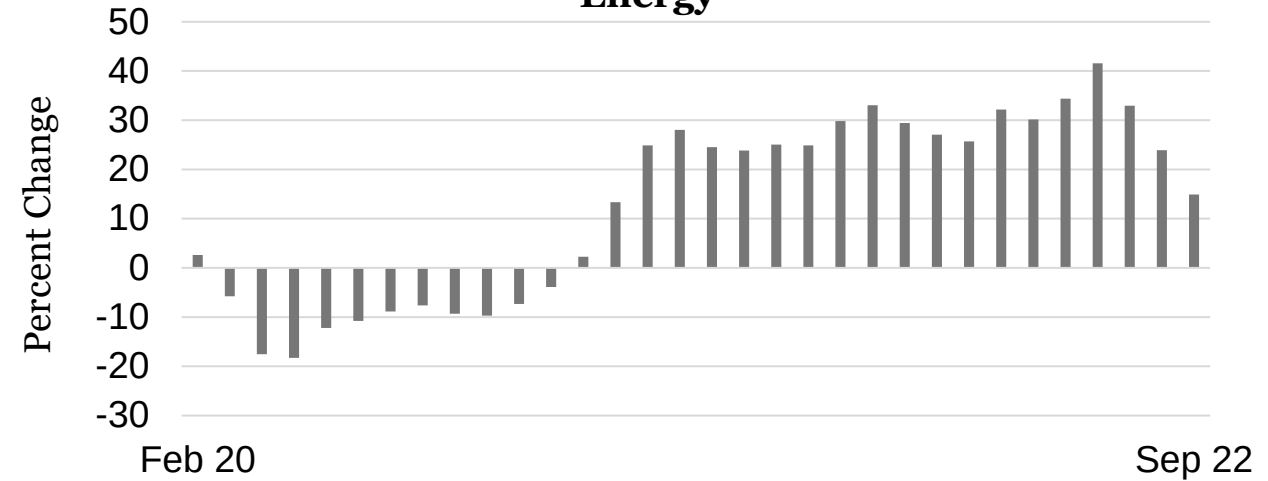
Note: Denver-Aurora-Lakewood values as of Sept 2022, Mountain and U.S. as of Sept.

Inflation

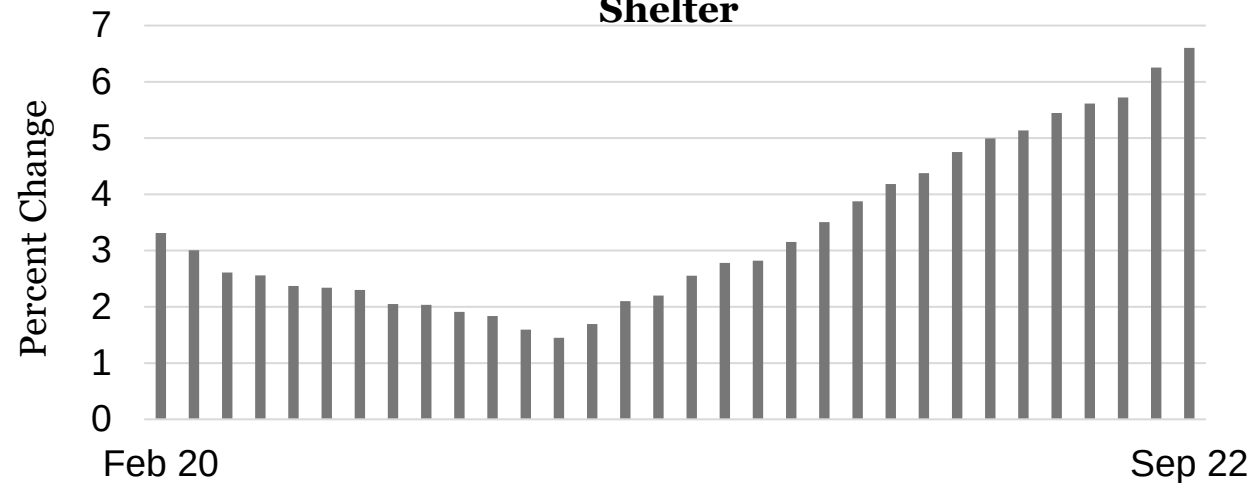
All Items and Core Inflation



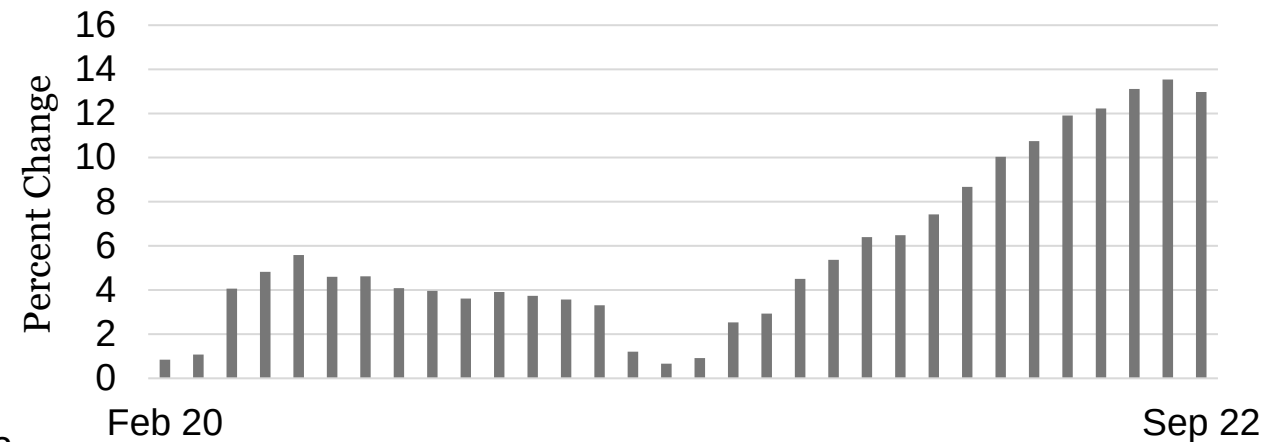
Energy



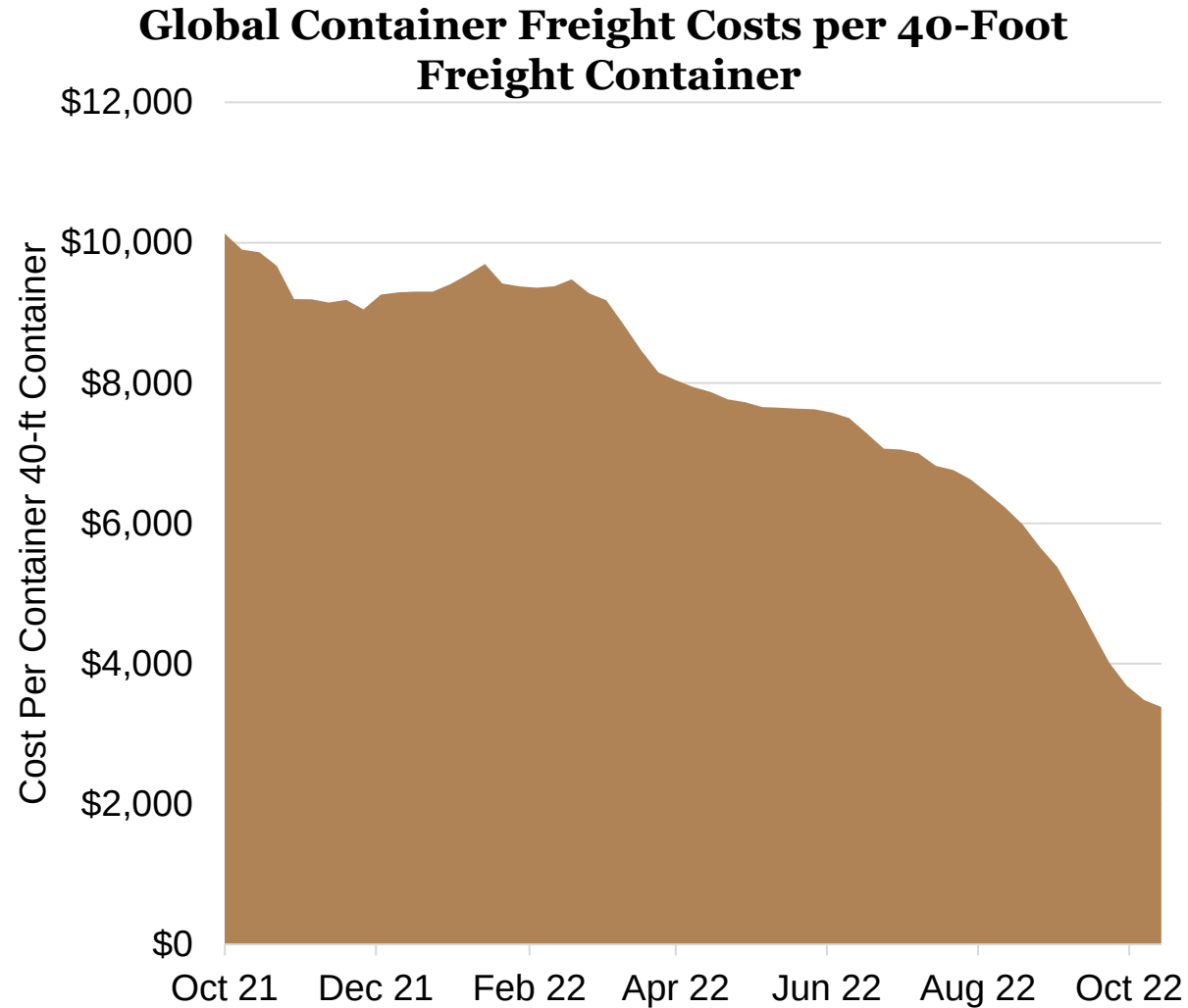
Shelter



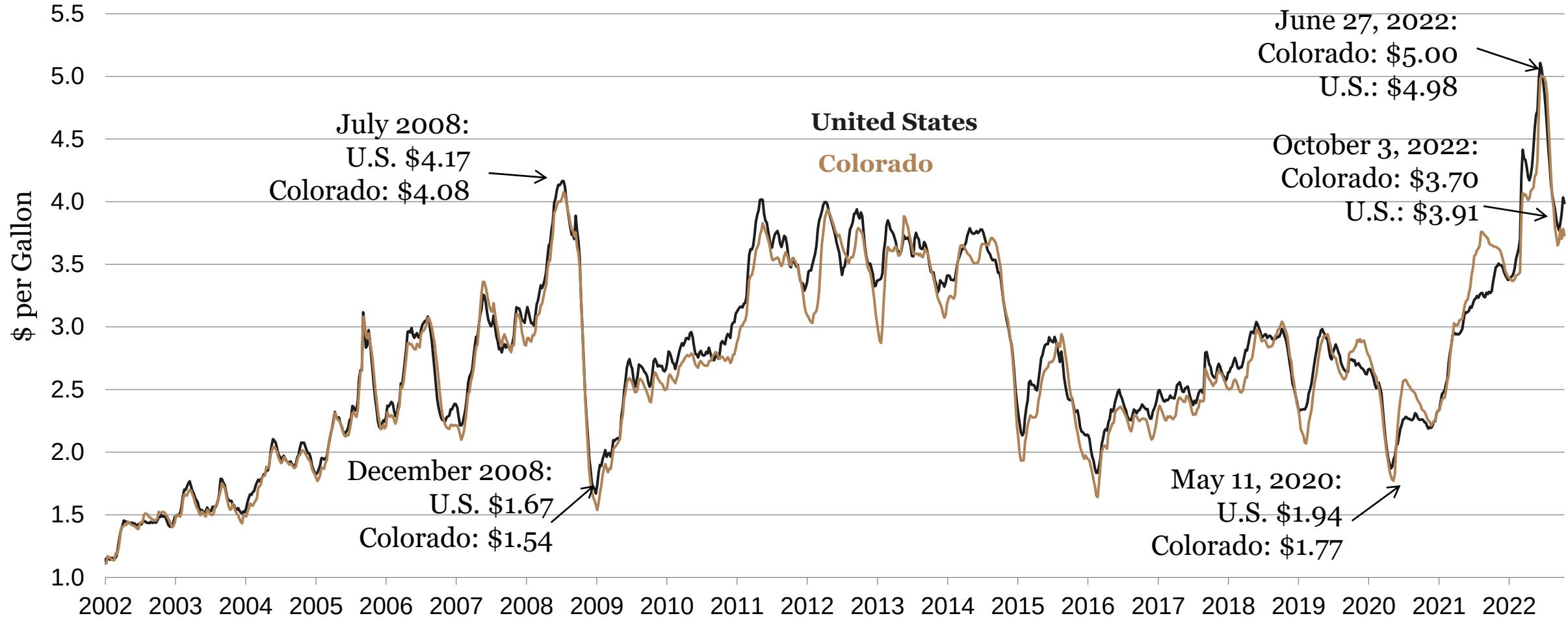
Food at Home



Supply Chain



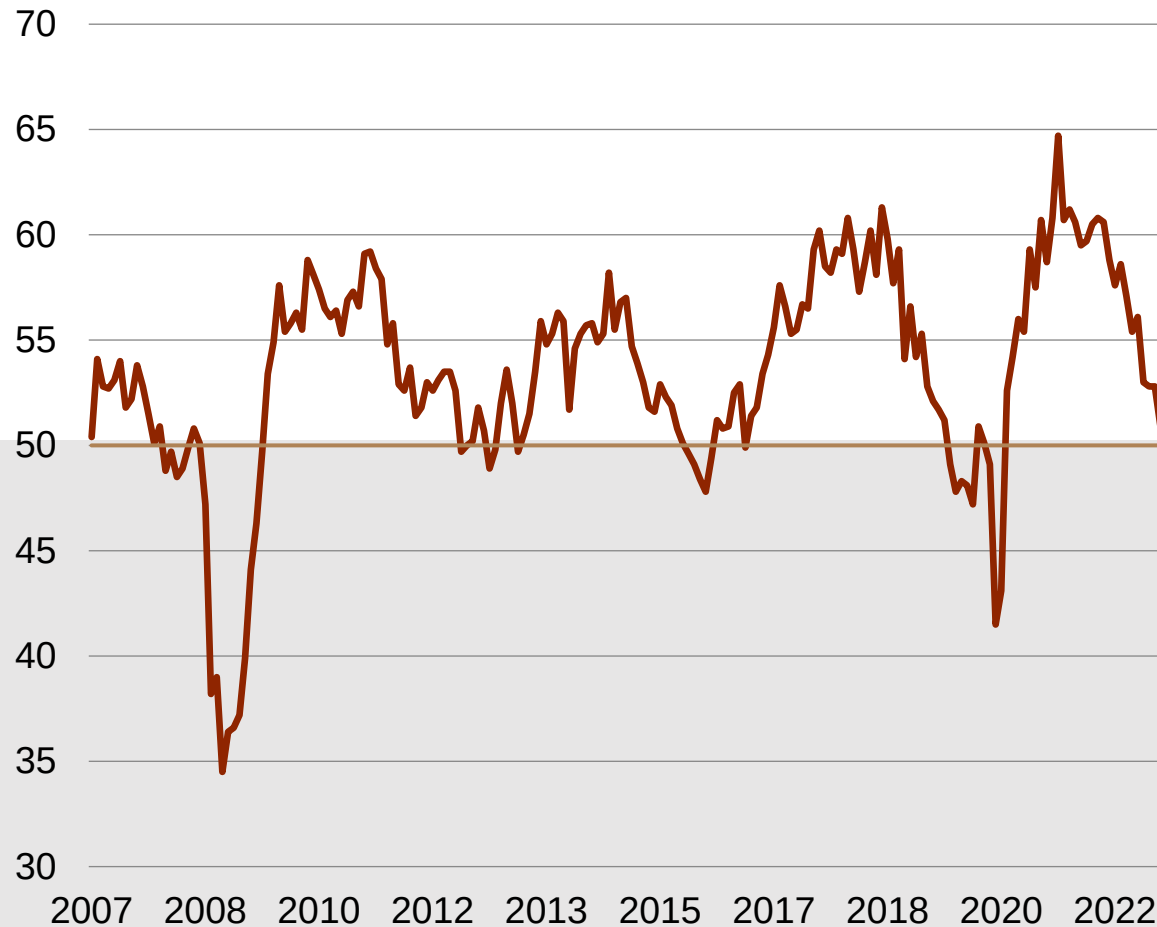
Retail Gasoline



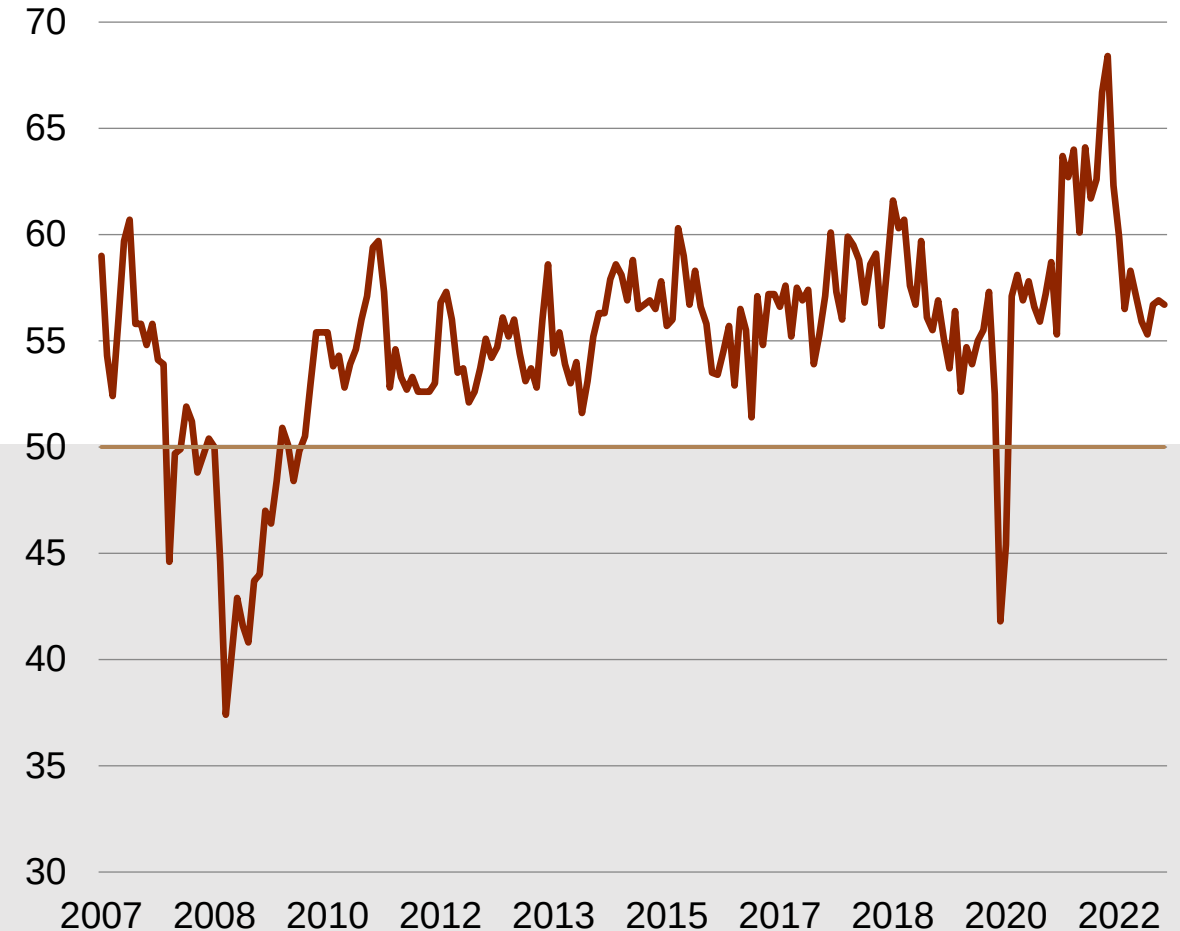
Source: Energy Information Administration (All Grades). Data through August 01, 2022.

ISM Indices

ISM Manufacturing PMI® Index

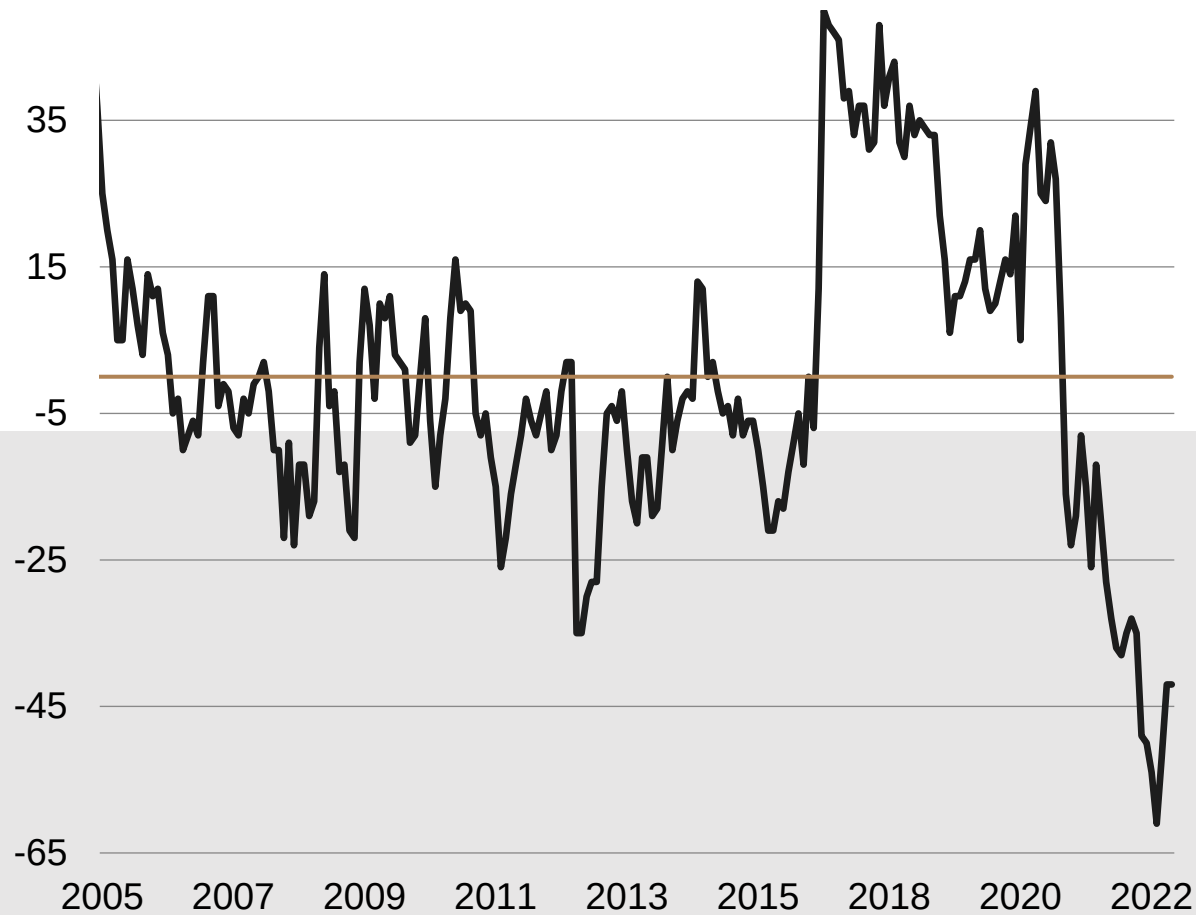


ISM Services PMI® Index



Small Business Outlook

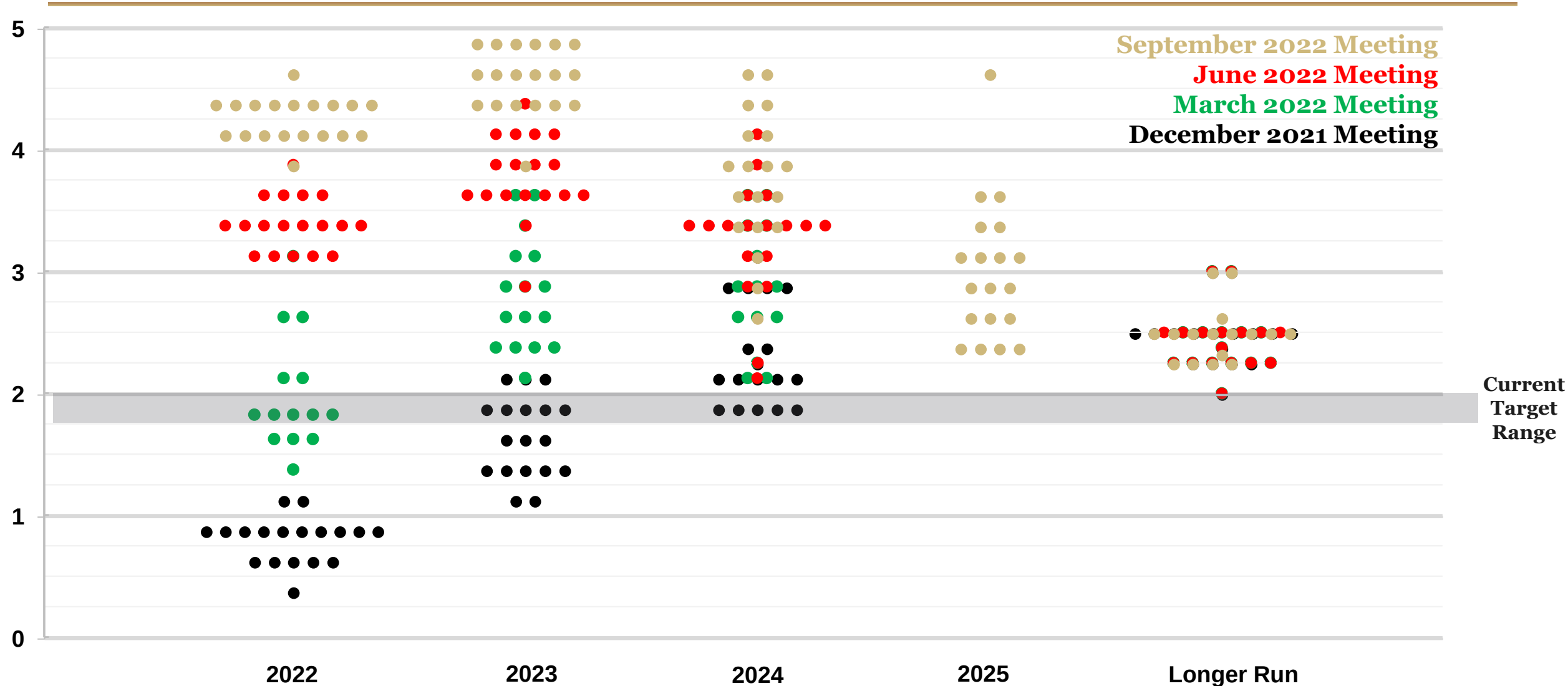
Business Conditions



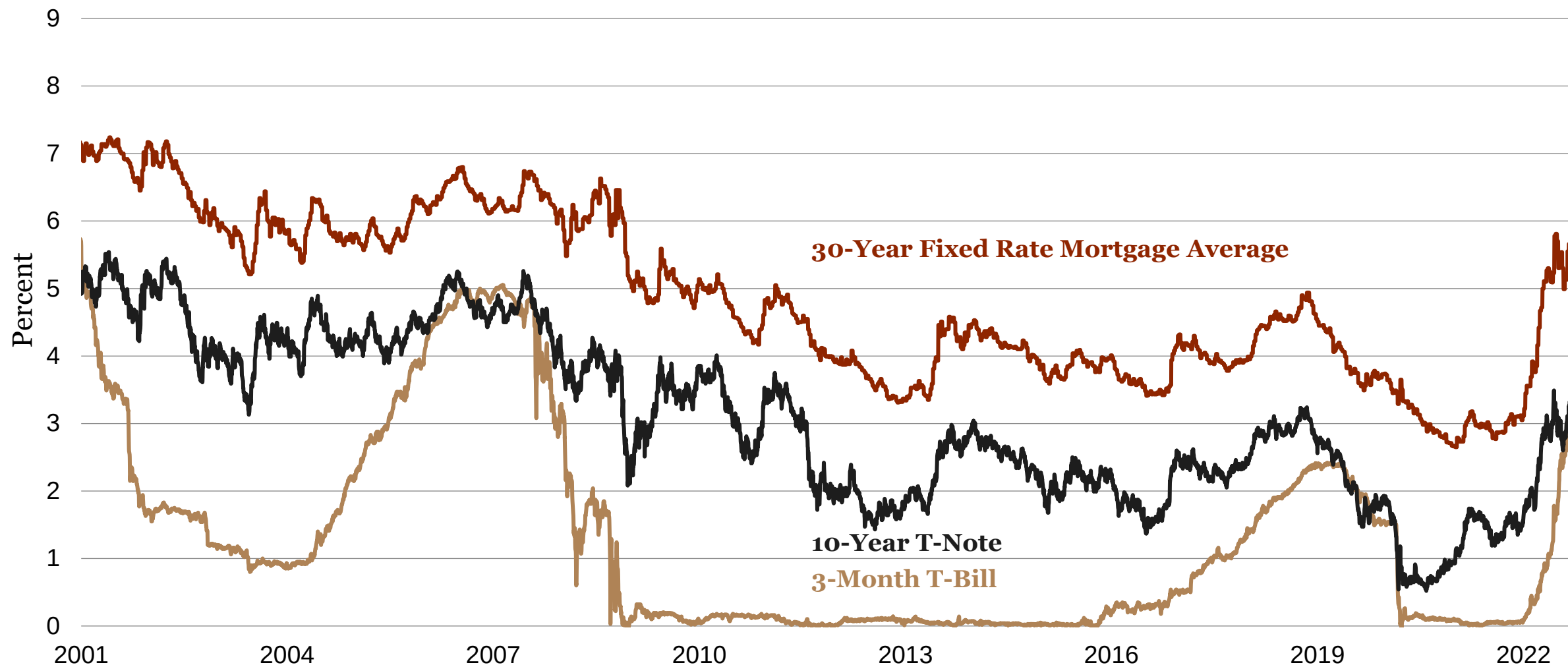
Optimism Index



Federal Funds Rate Outlook



Interest Rates

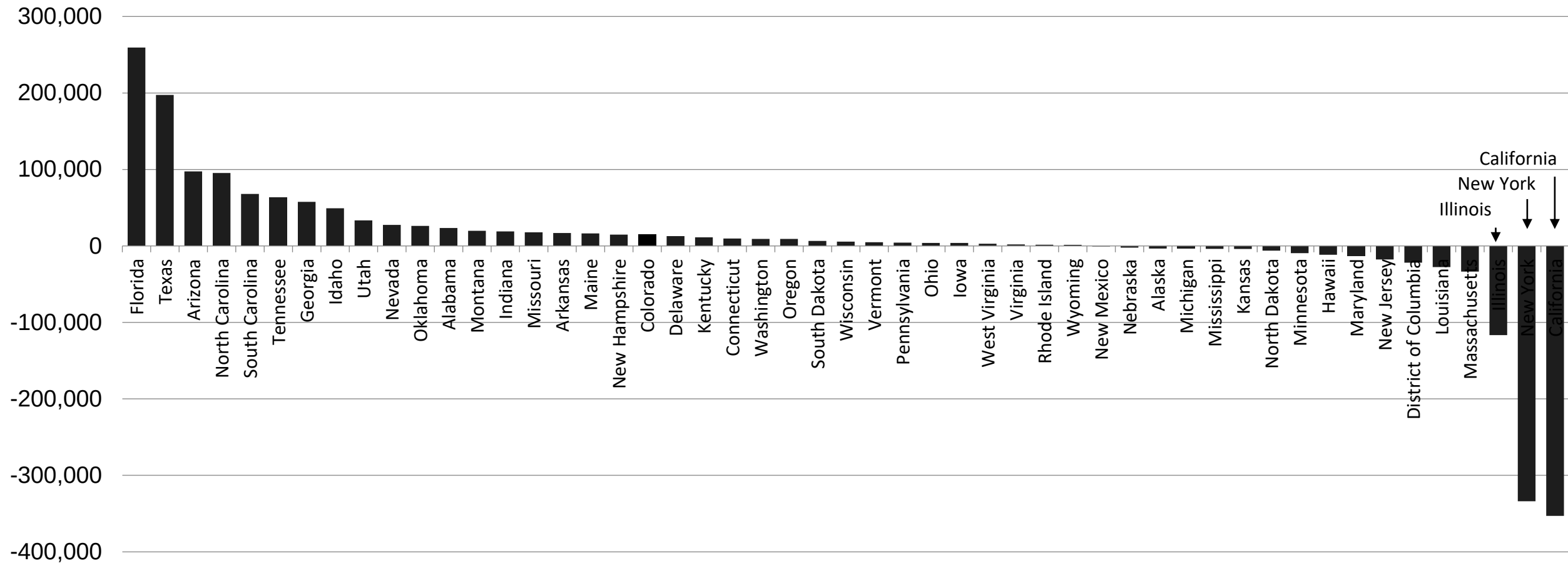


Population, Employment, and the Economy



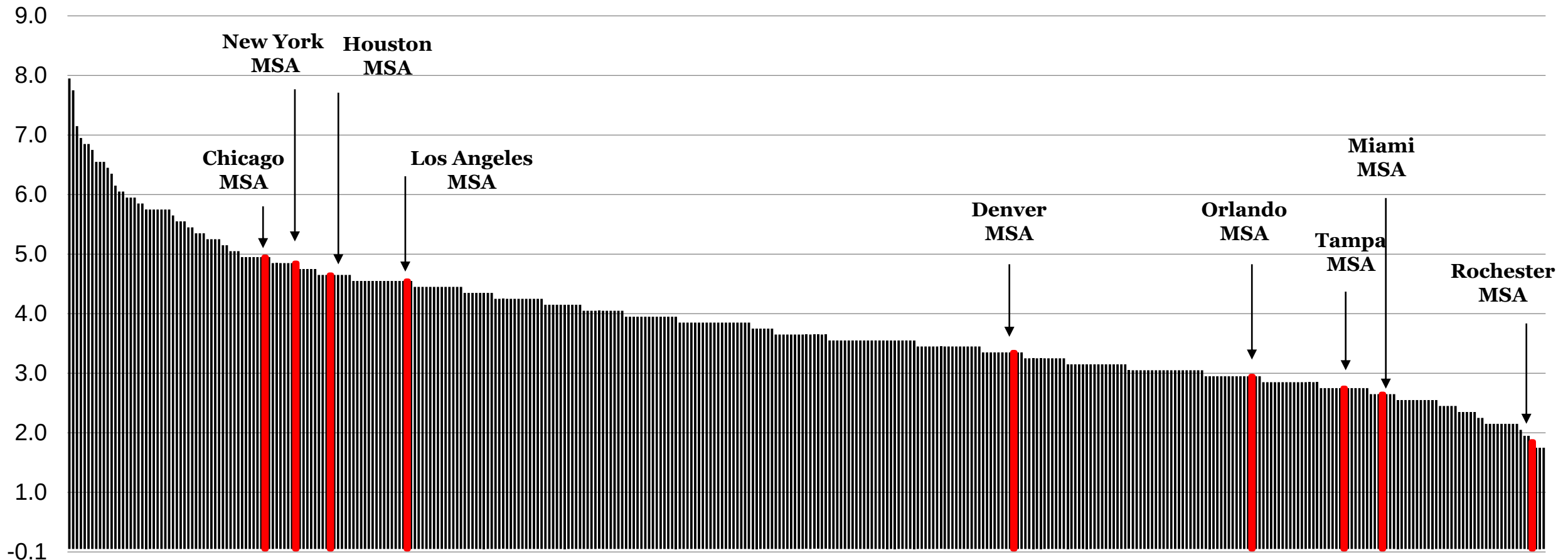
Net Migration

2021



Unemployment Rate by State

September 2022

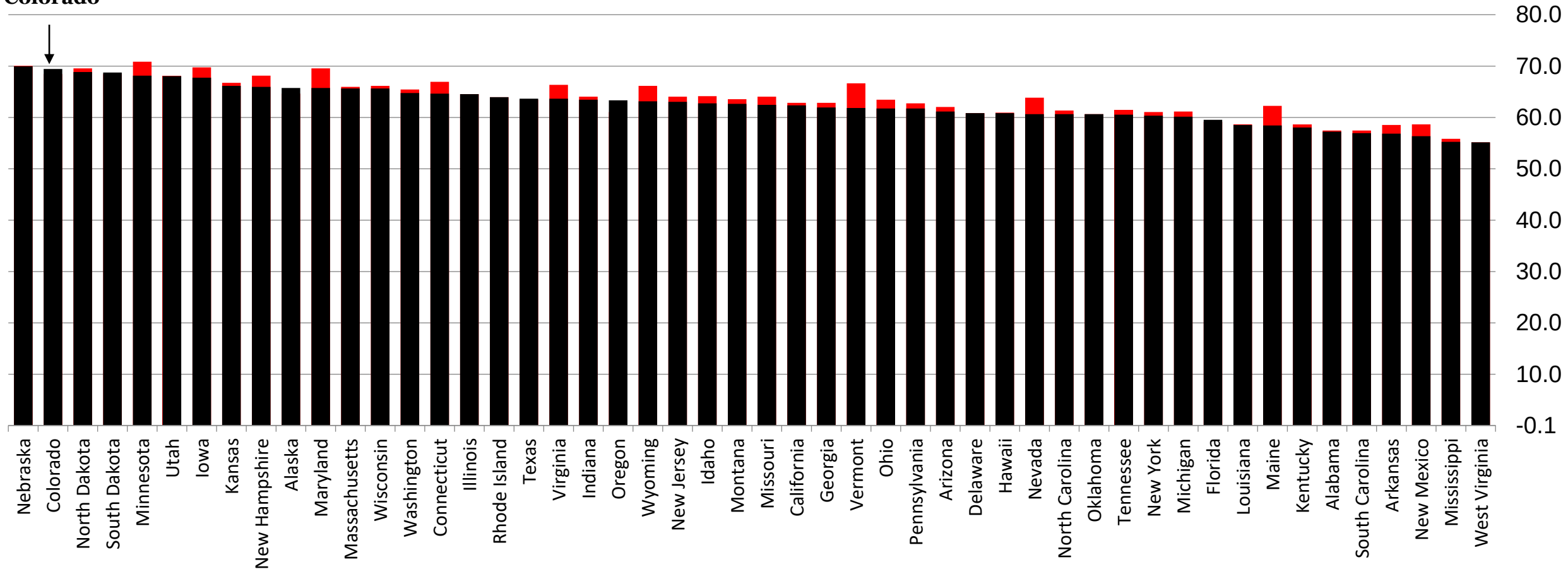


Labor Force Participation Rate

February 2020
September 2022

September 2022 vs. February 2020

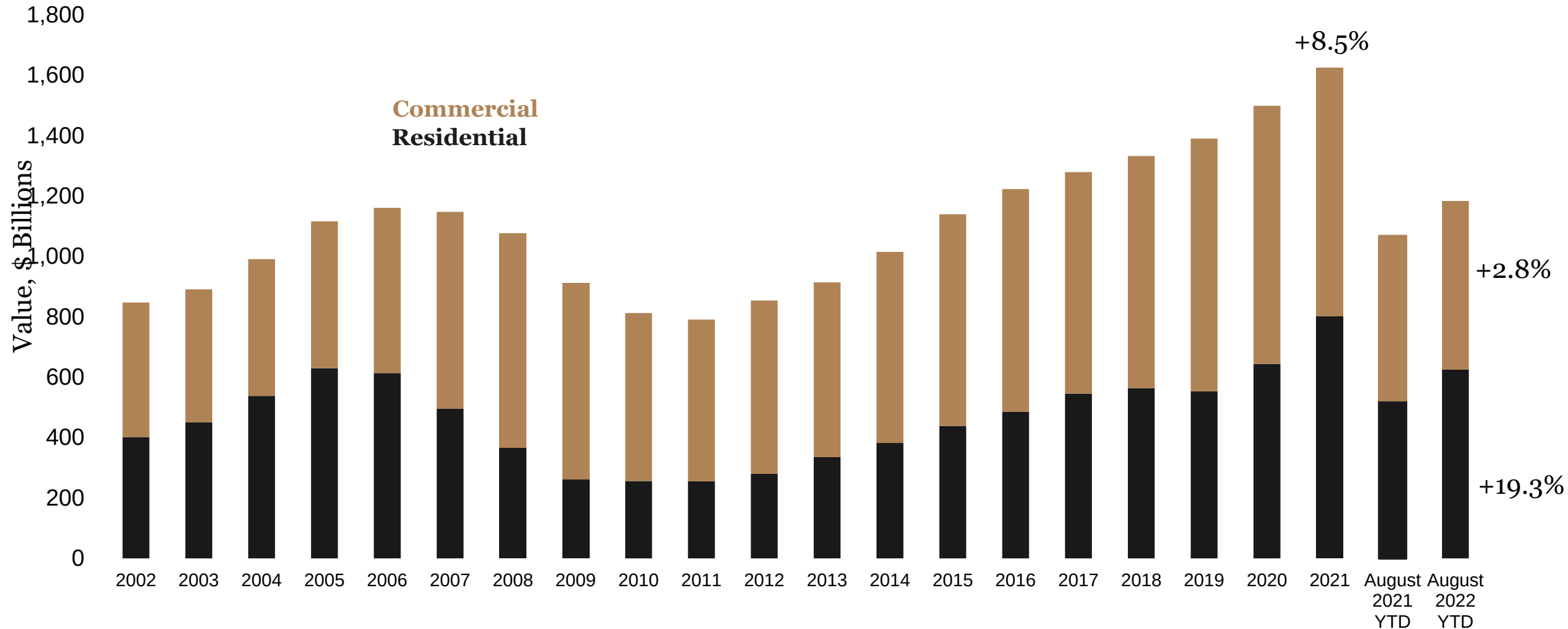
Colorado



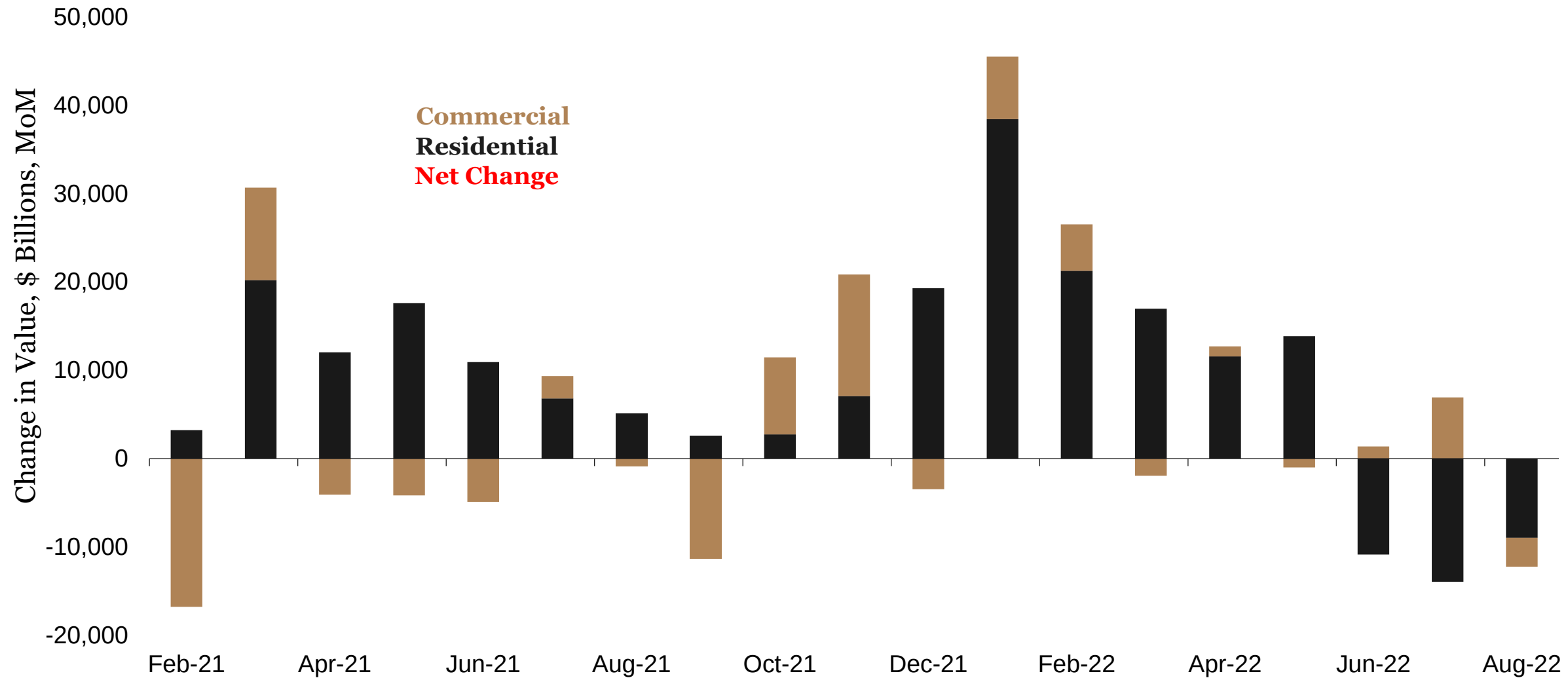


Construction and Real Estate

National Value of Construction

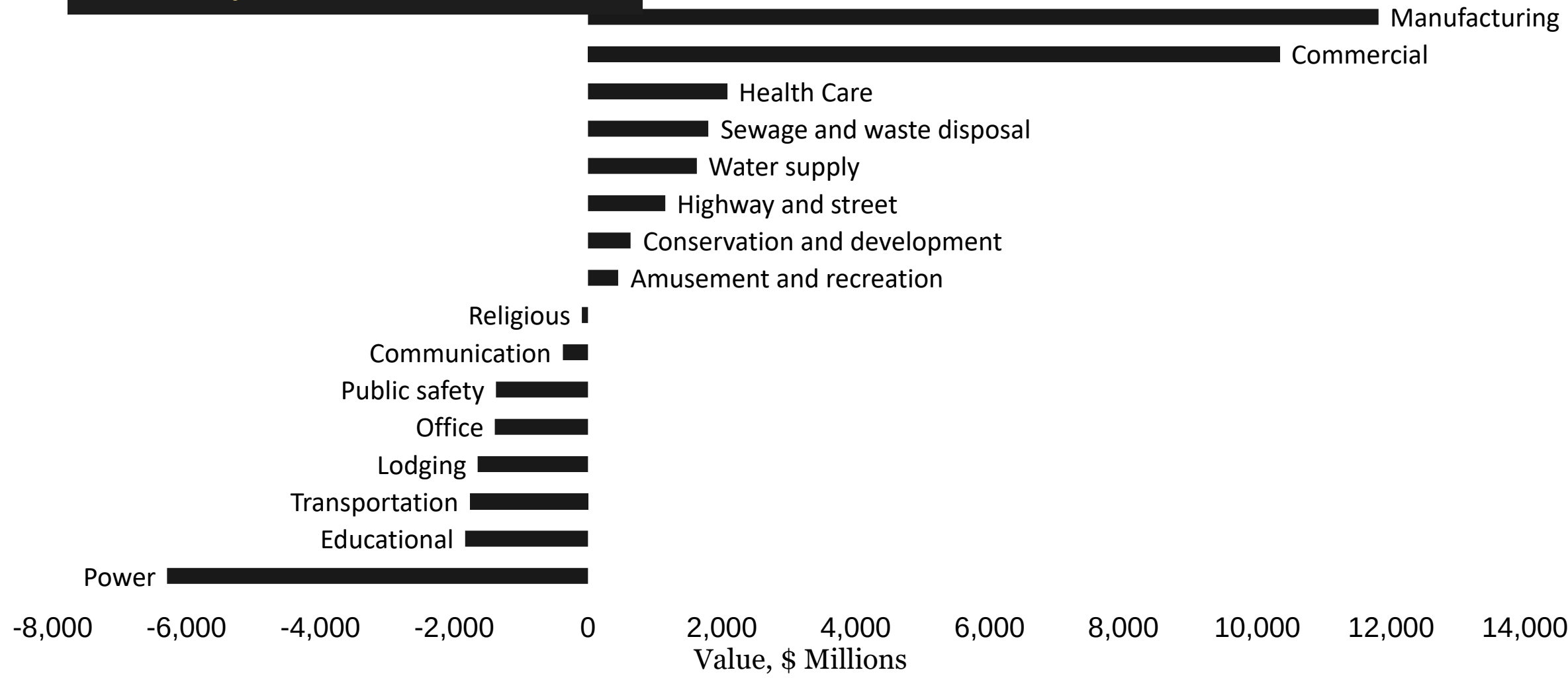


National Value of Construction



Change in National Nonresidential Value of Construction

2022 July YTD Year-over-Year

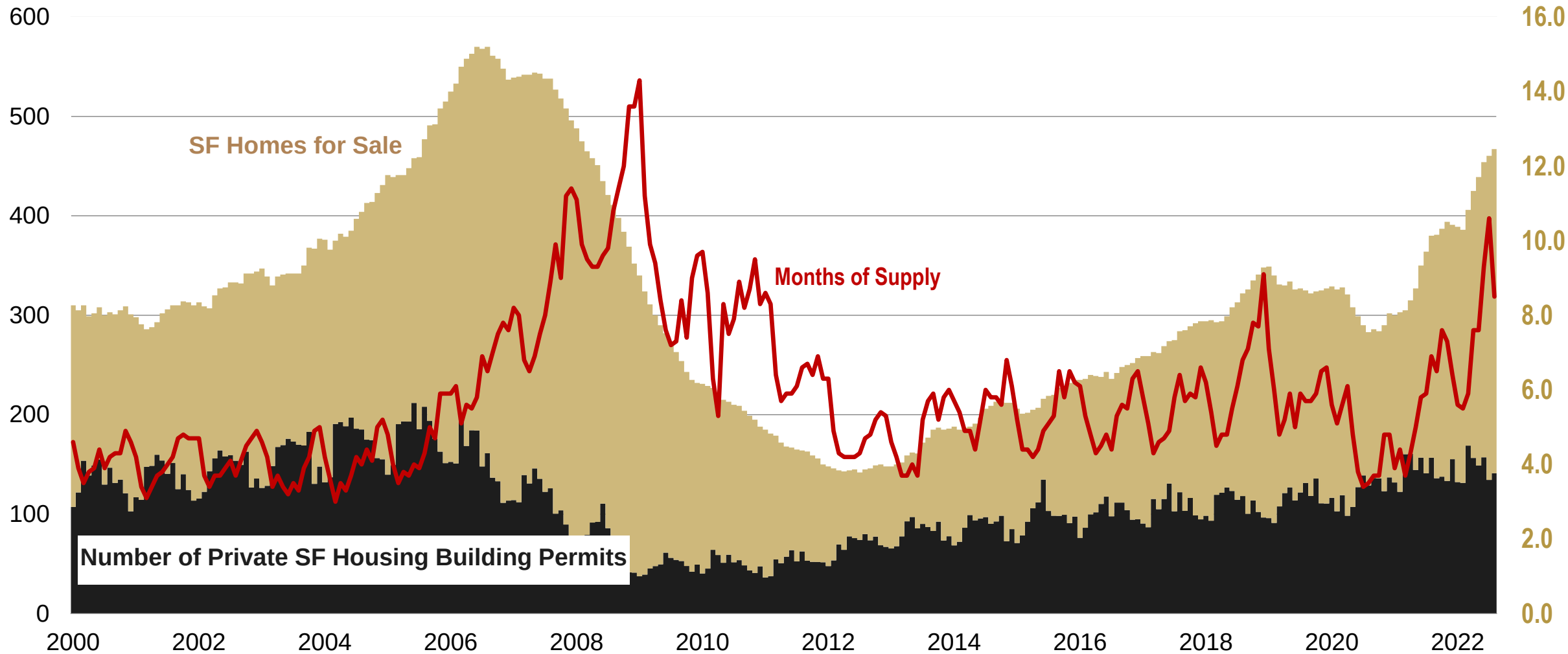


U.S. Housing

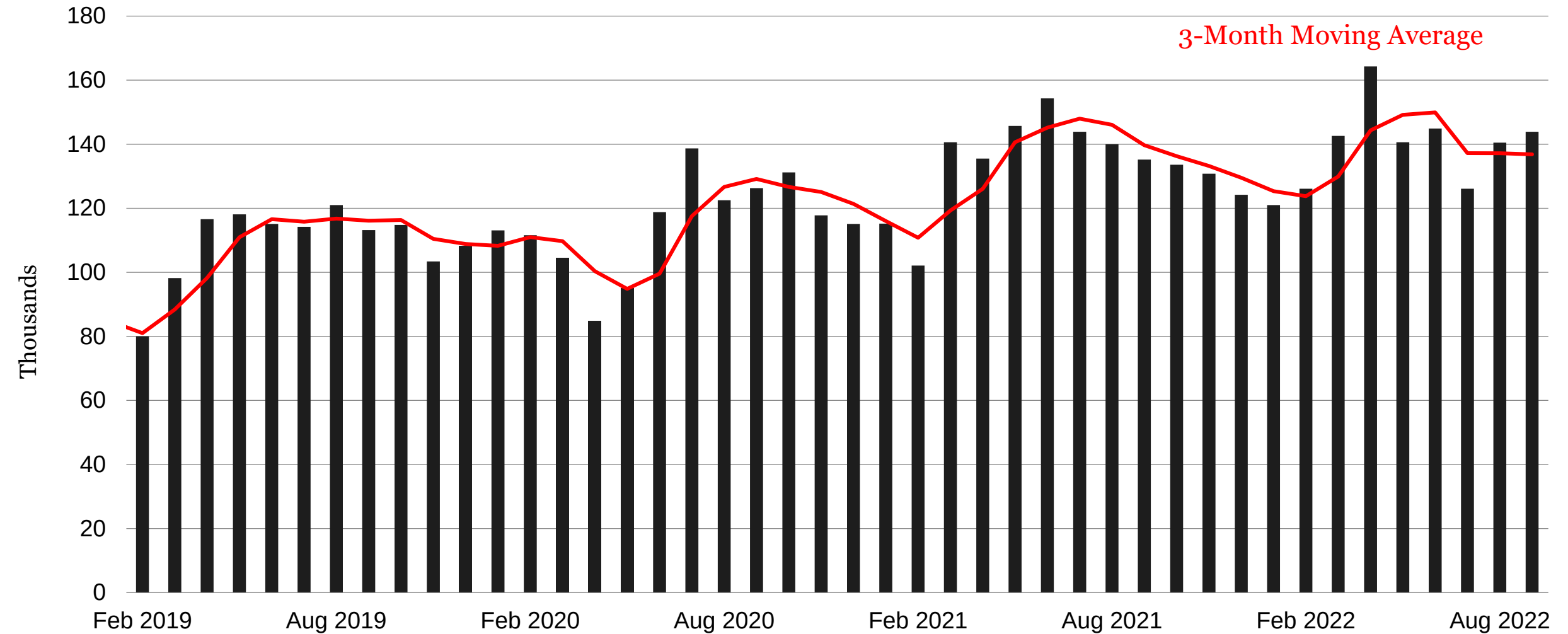
Supply, Inventory, and Permits

New SF Home Inventory
(thousands)

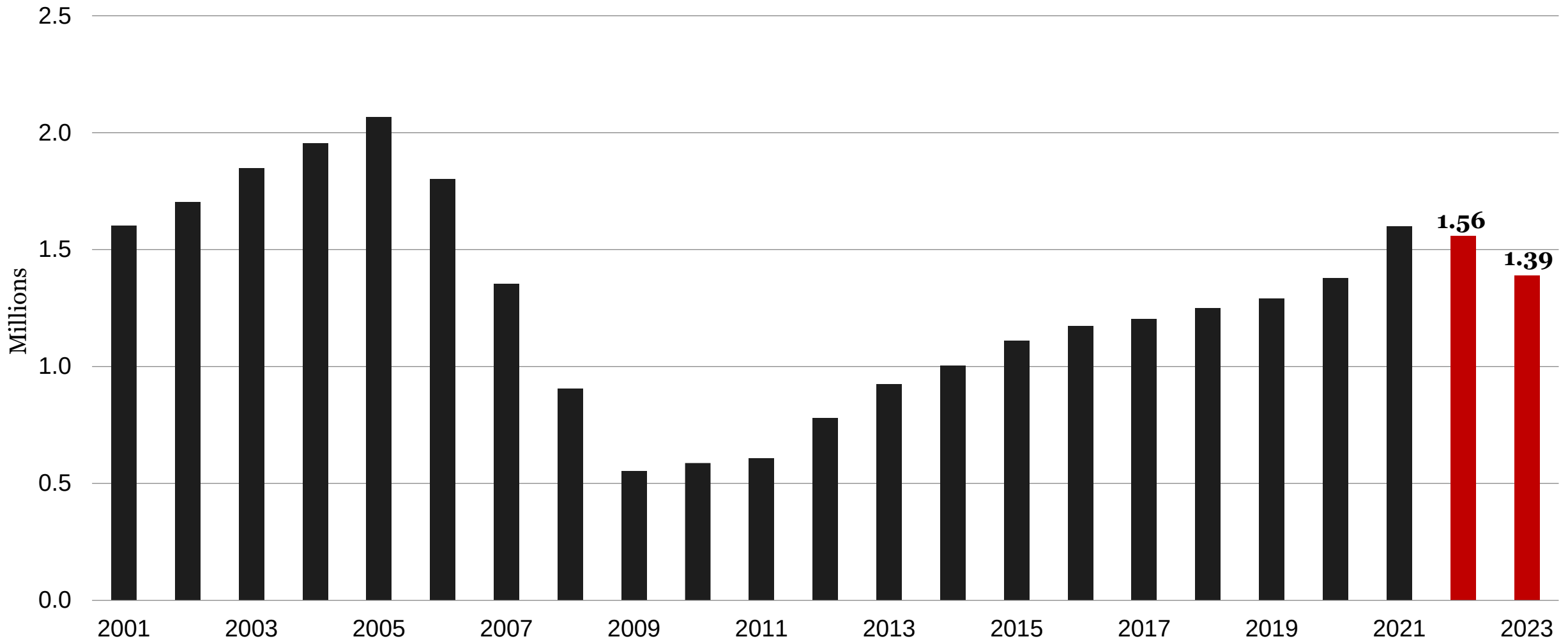
(Months)



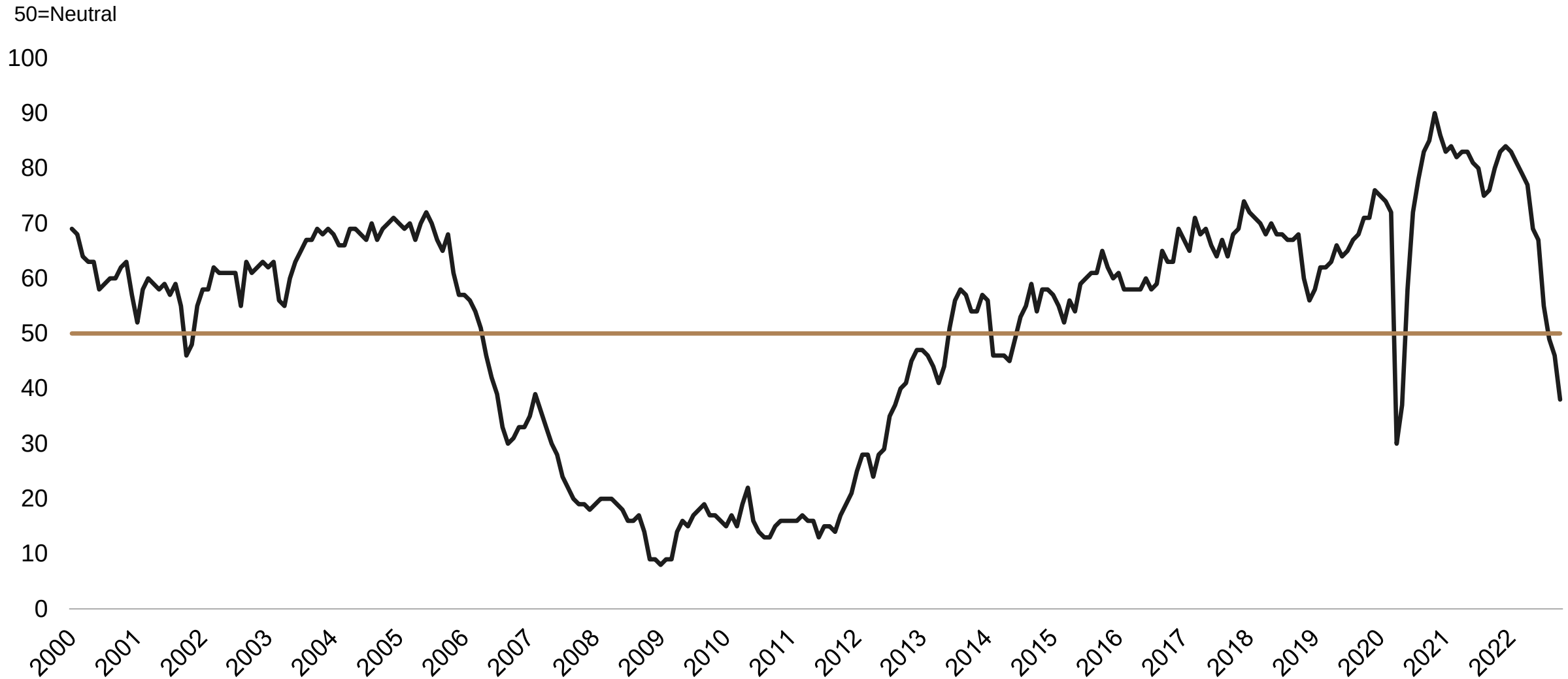
National Housing Starts



National Housing Starts



NAHB Housing Market Index



Mortgage Applications & Rates

Composite Index,
March 1990=100

500

450

400

350

300

250

200

150

100

April-22 May-22 Jun-22 Jul-22 Aug-22 Sep-22 Oc-22

Percent

10.0

9.0

8.0

7.0

6.0

5.0

4.0

3.0

2.0

1.0

0.0

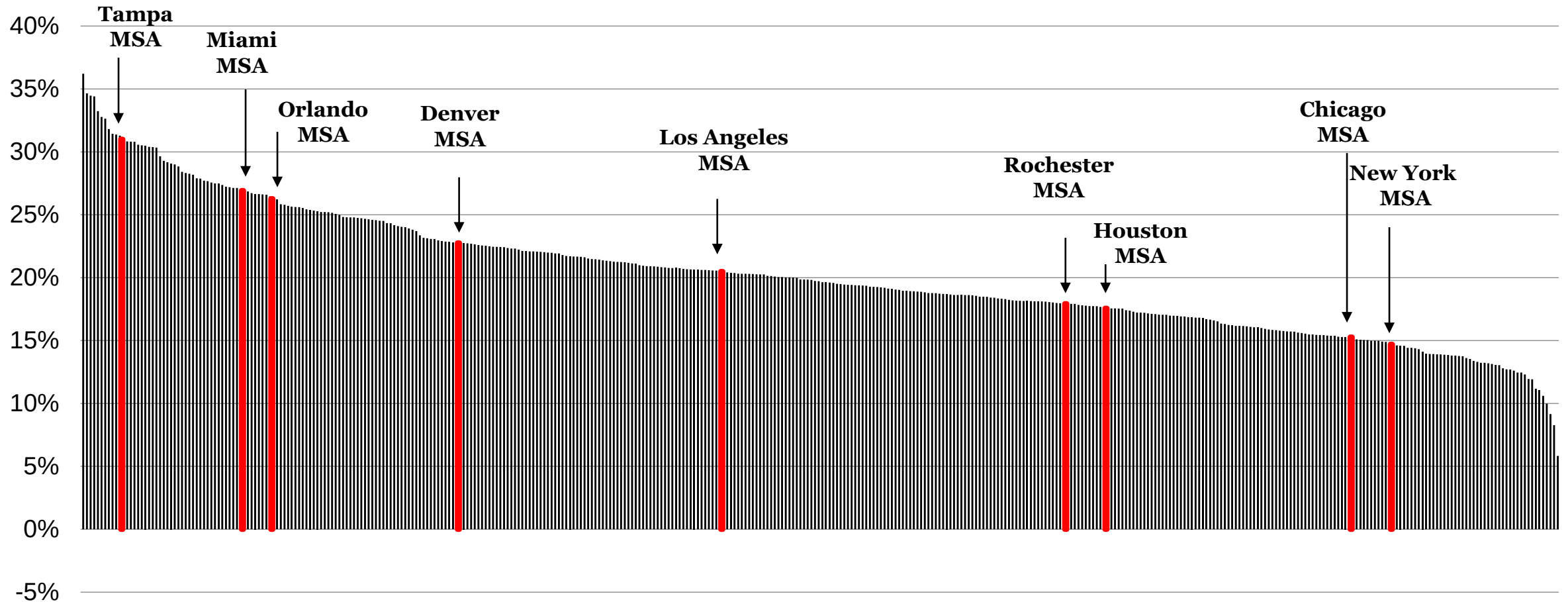
2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 2020 2022

**15-Year Fixed
Average Prime**

**30-Year Fixed
Average Prime
Offer Rate**

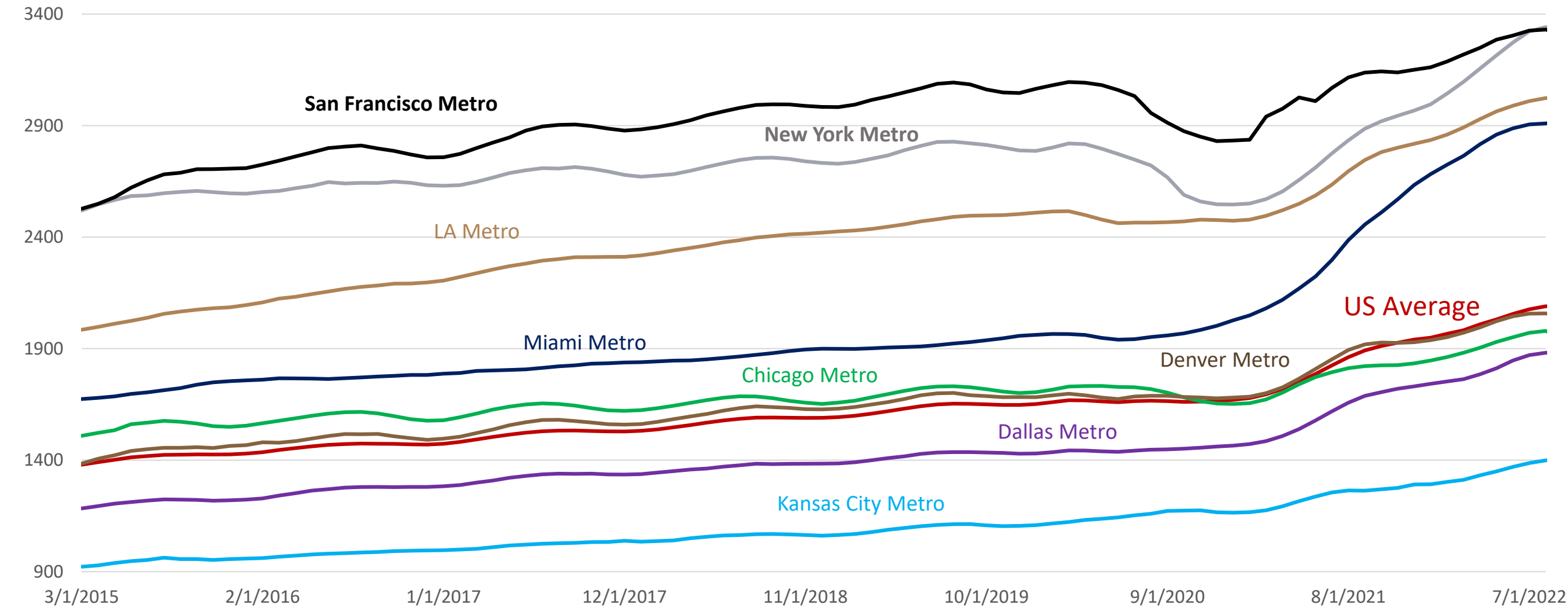
FHFA Home Price Index by MSA

1-Year Home Price Change, Q2 2022



Rents (Zillow Rents)

Dollars



Tailwinds

Employment Growth
Wage Growth
Consumption
Retail Sales
Income Growth
Infrastructure Spending
Trade Deficit

Headwinds

Gross Domestic Product
Ukraine Conflict
Inflation
Interest Rates
Supply Chain Disruptions
Worker Shortages
Fed Policy
Labor Participation
Energy Prices
Manufacturing

Unknowns

COVID Variants
Human Behavior
Migration
Birth Rates
Work from Home