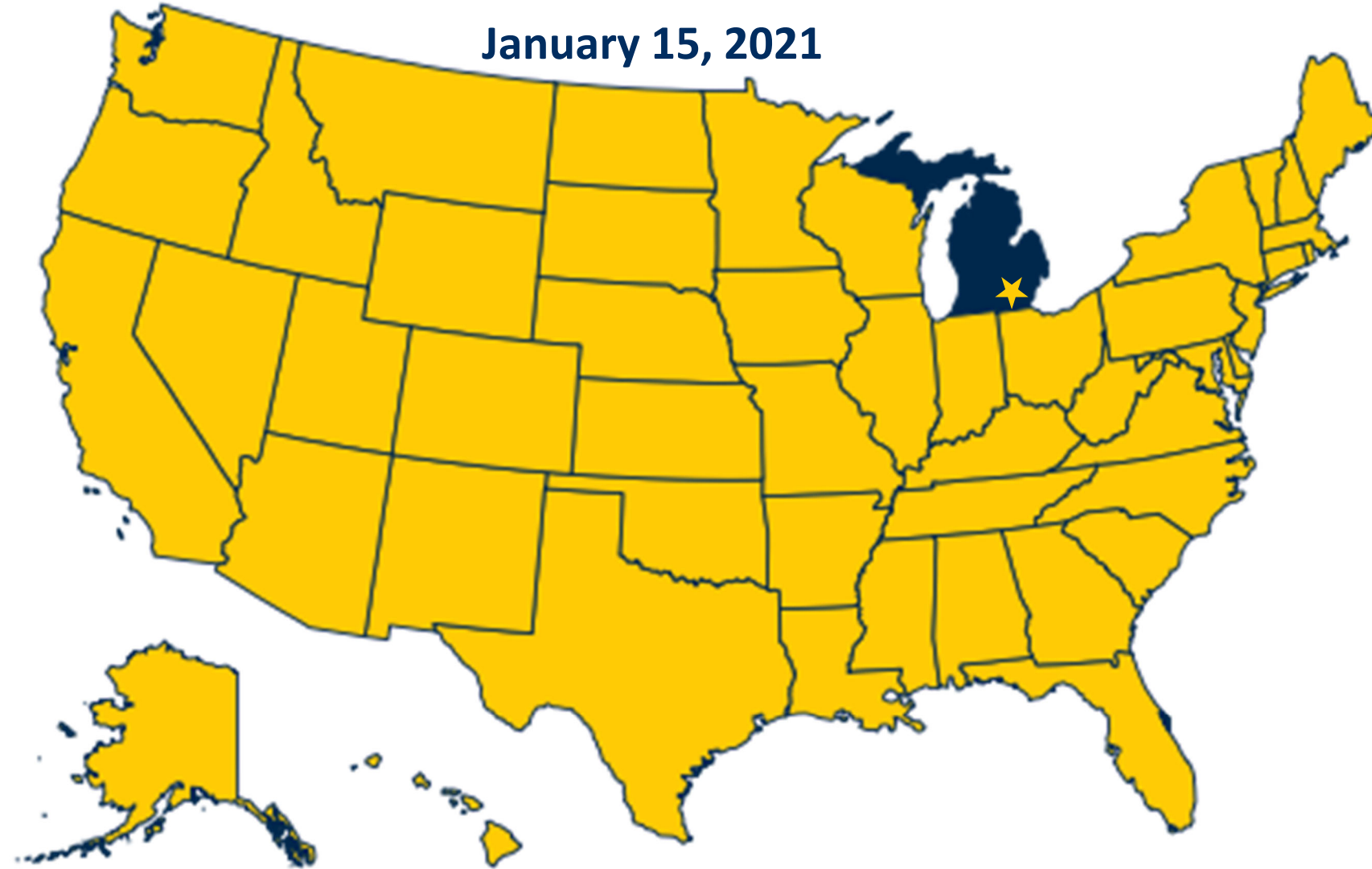


# The U.S. and Michigan Outlook for 2021–2023

## Consensus Revenue Estimating Conference

### Lansing, Michigan

January 15, 2021



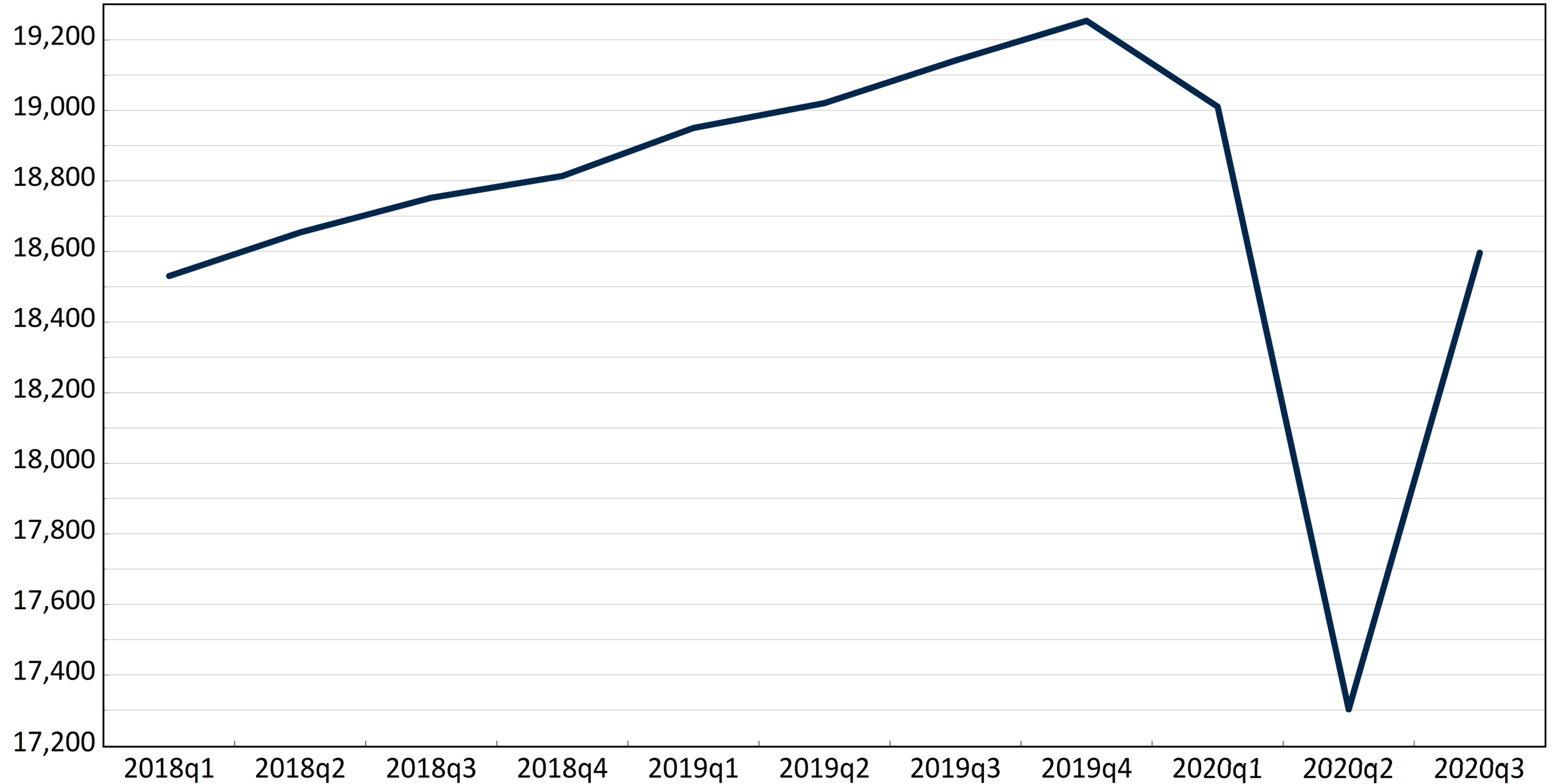
**Research Seminar in Quantitative Economics**



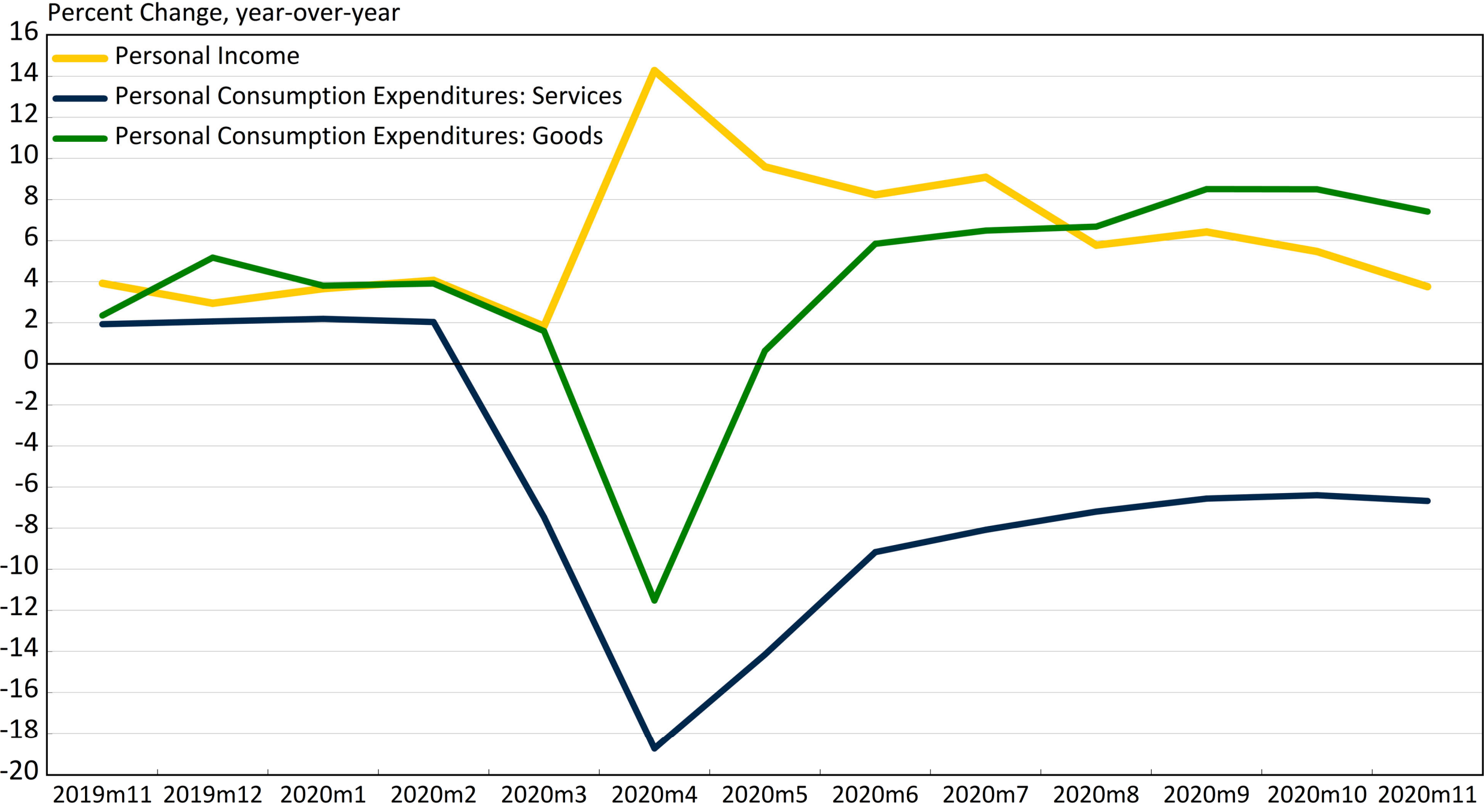
# **Current State of the U.S. Economy**

# Quarterly U.S. Real GDP

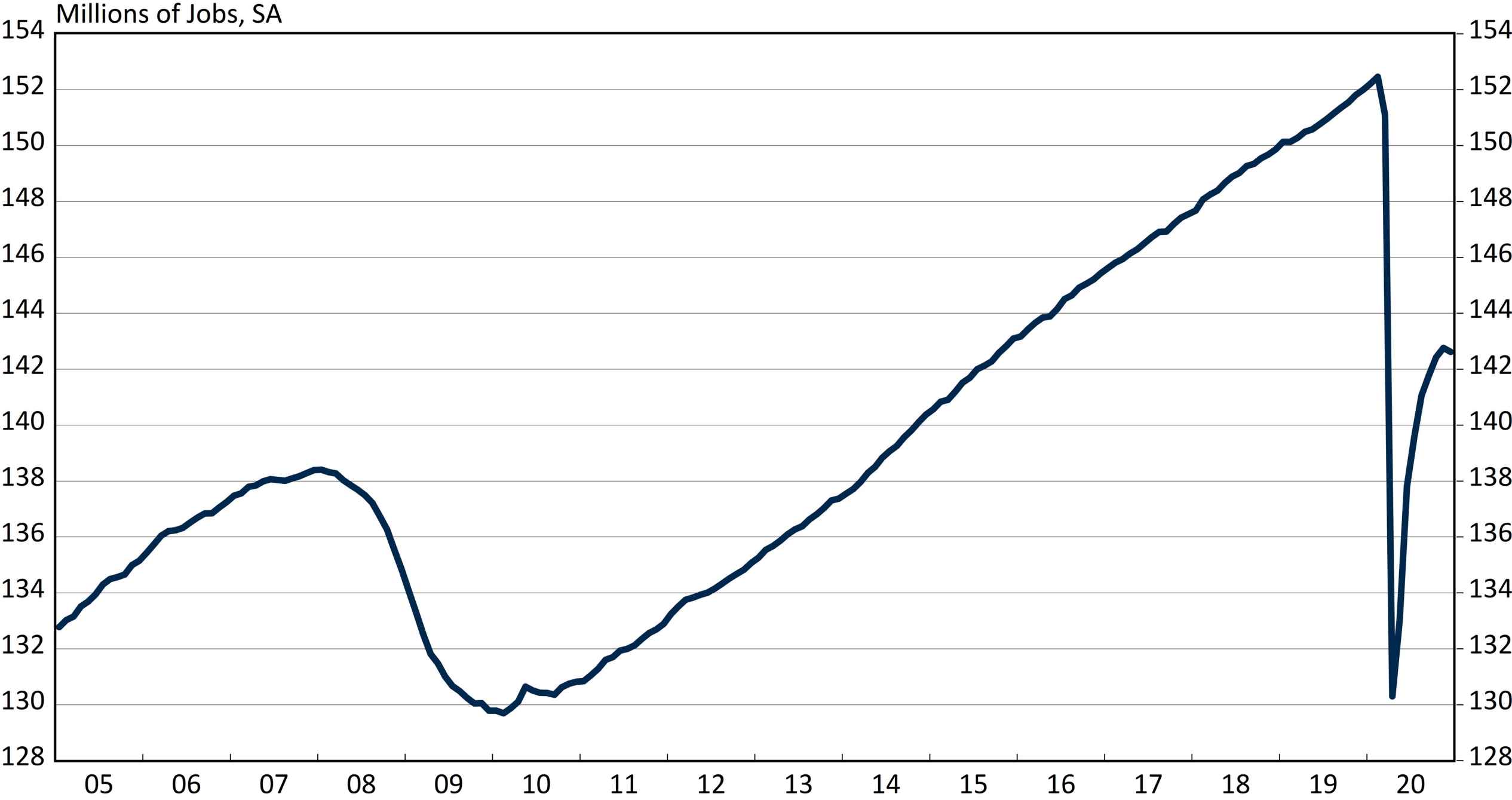
Billions of 2012 dollars, SAAR



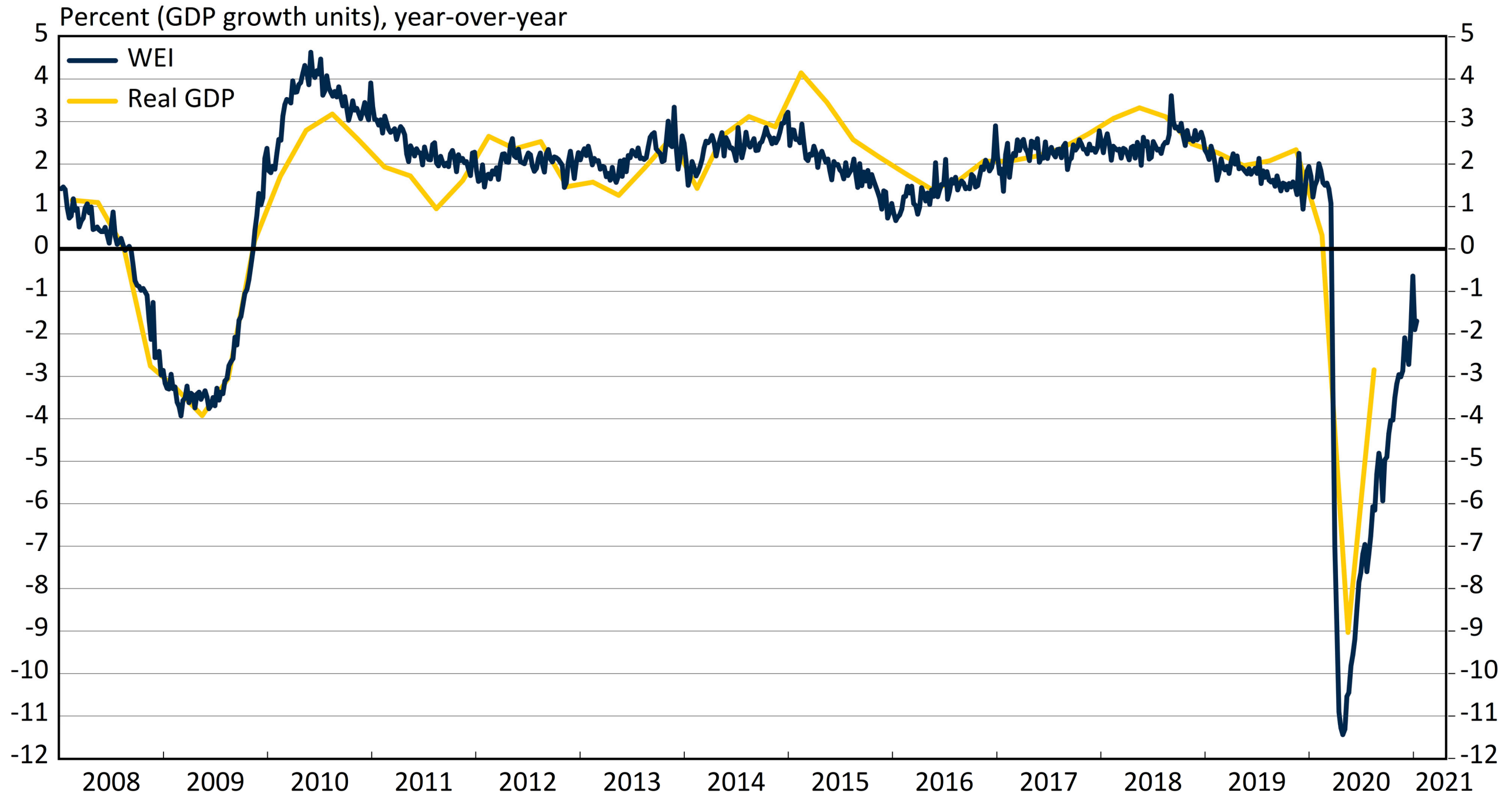
# Monthly Personal Consumption Expenditures



# Monthly Payroll Jobs

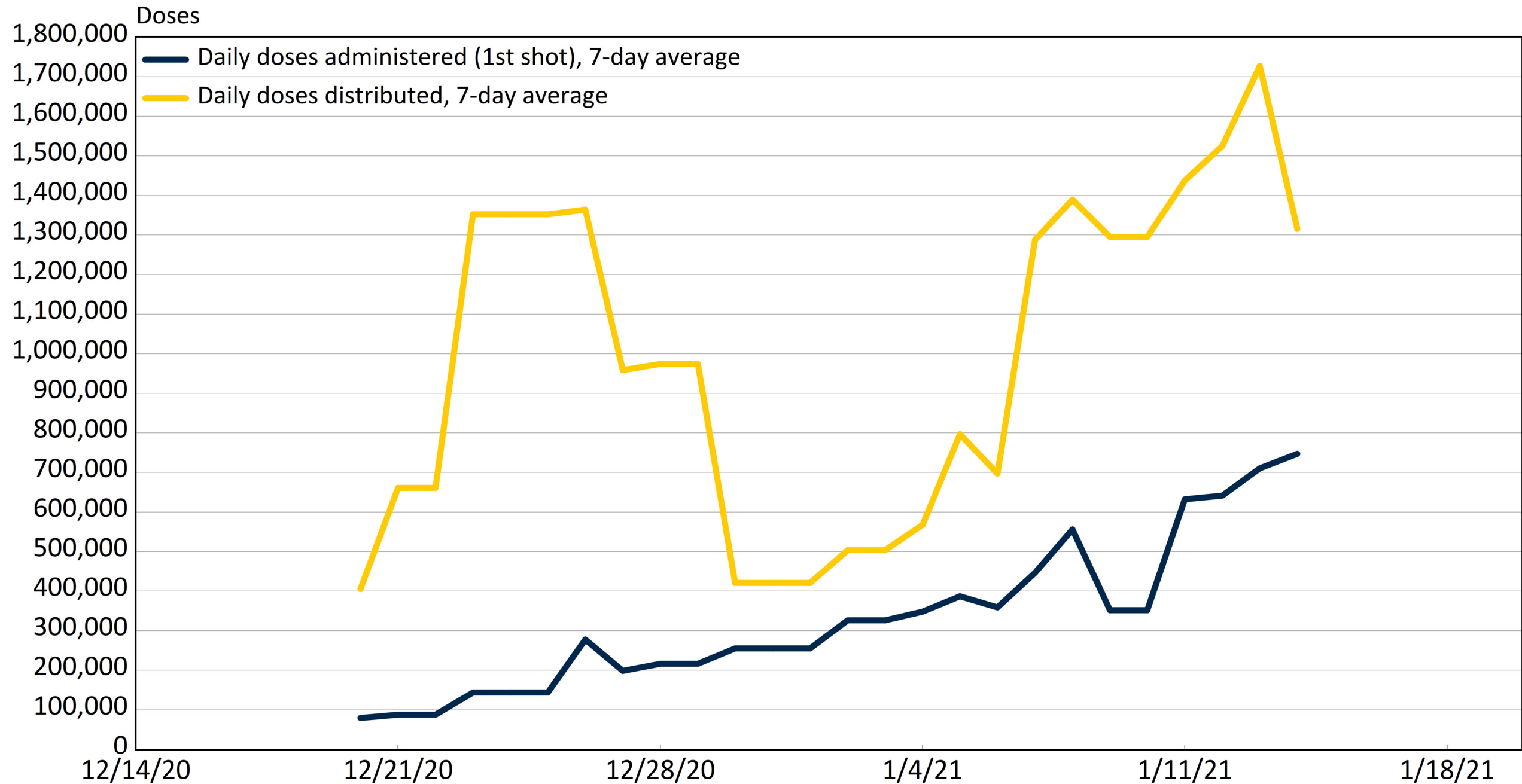


# Weekly Economic Index (Lewis-Mertens-Stock)



# Policy Assumptions

# National COVID-19 Vaccine Shots and Shipments



Source: CDC



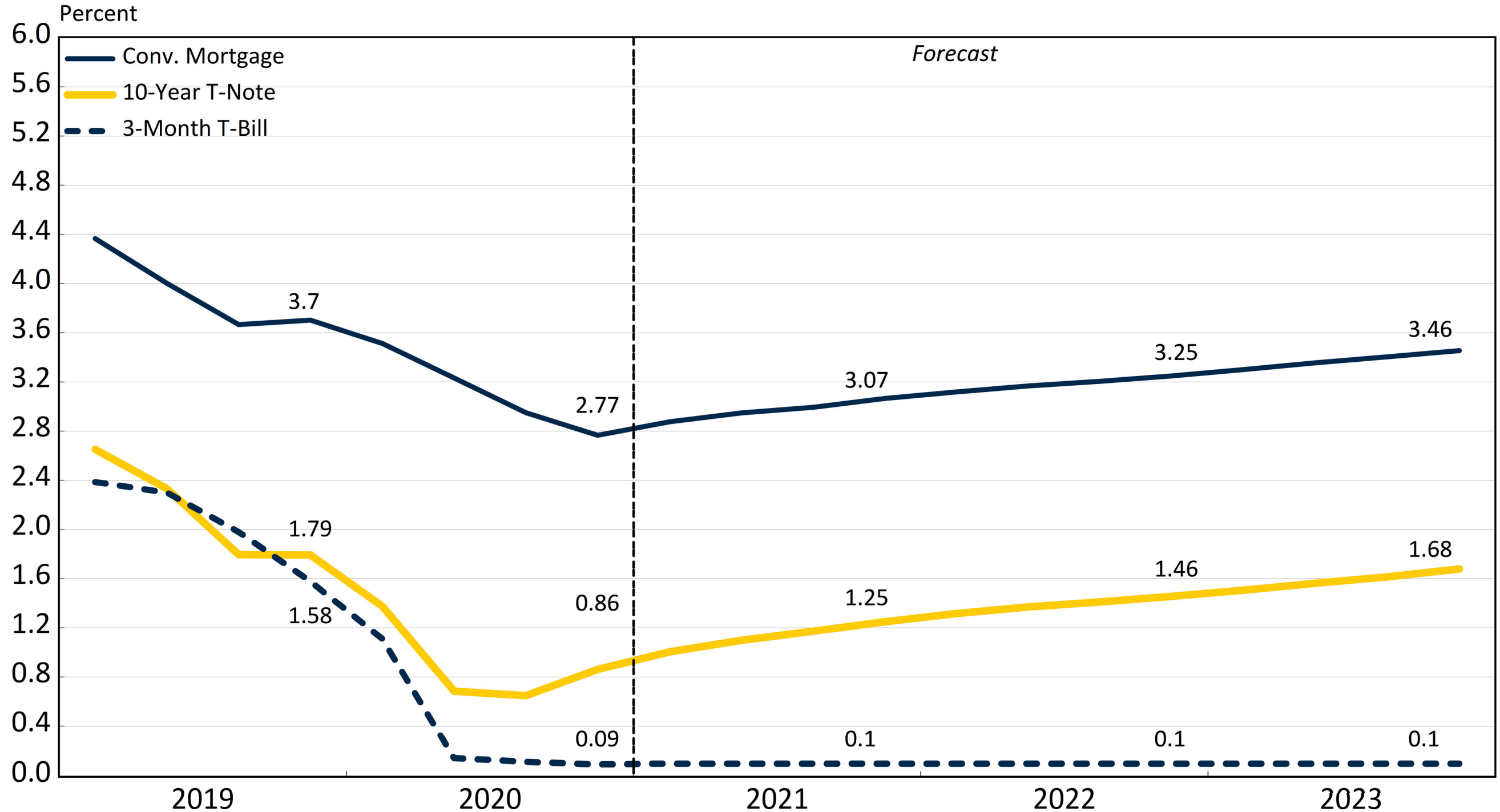
# The Pandemic

- People over 65 account for ~80% of total deaths and ~50% of hospitalizations
- Aggressive vaccination targeting 55 million seniors and those at-risk should dramatically lower the disease burden
- As of Jan 14, 11.1 million received the first dose, most under 65 so far
- Current vaccination rate ~700k/day, many going to seniors
- By early March, most vulnerable population could be vaccinated, assuming high uptake
- Many restrictions might be dialed down soon after

# Monetary Policy

- New policy framework announced in August 2020
  - “to achieve inflation that averages 2 percent over time”
  - In practice the Fed will likely wait to raise rates until inflation forecasts consistently exceed 2 percent
- Our forecast does not feature significant inflation
  - Higher inflation is a significant risk, however
  - Market-based 5-year breakeven inflation topped 2 percent recently
- No policy rate hikes through 2023
- Asset purchases likely to slow by mid-2021

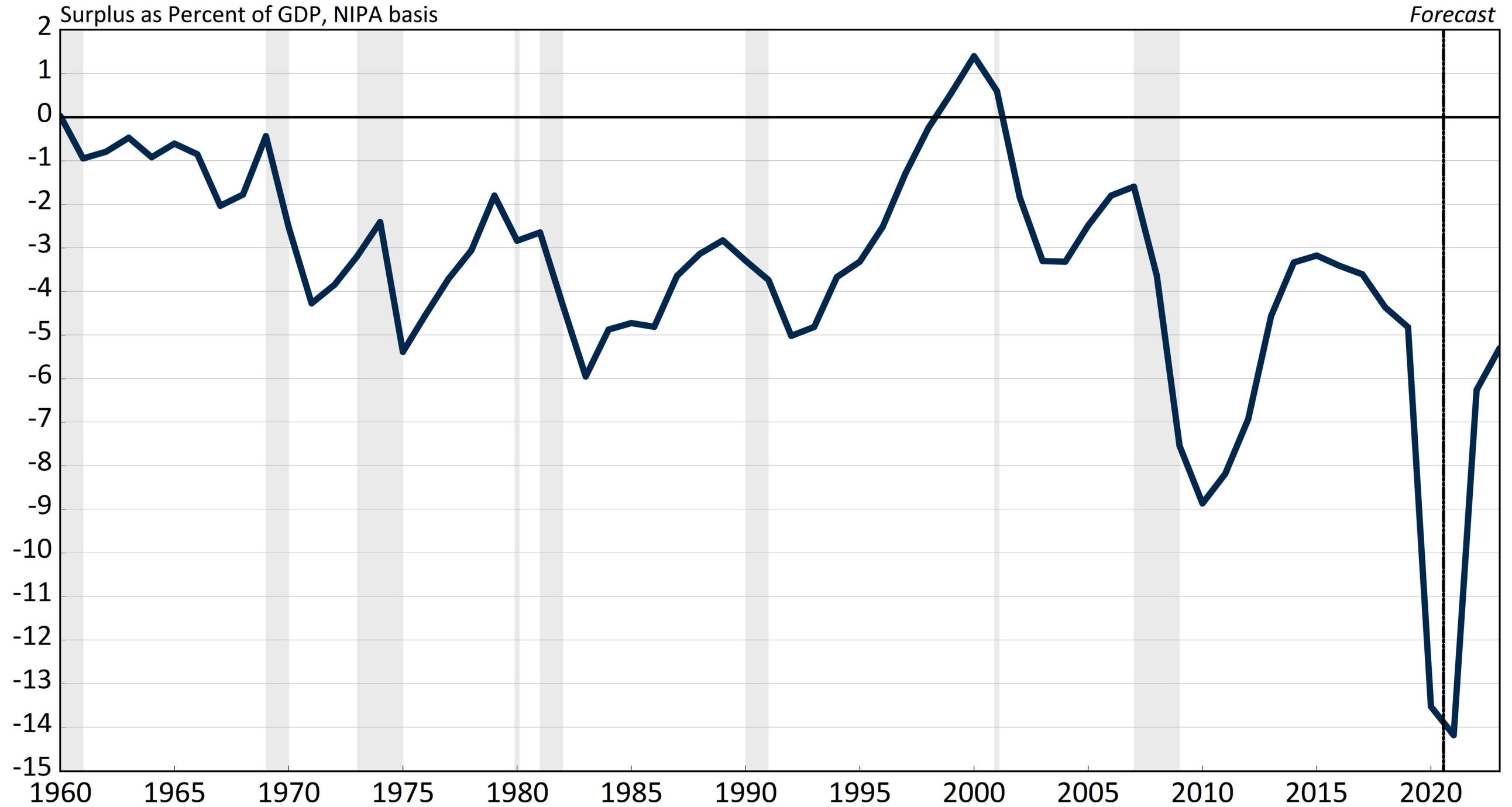
# Market Interest Rates



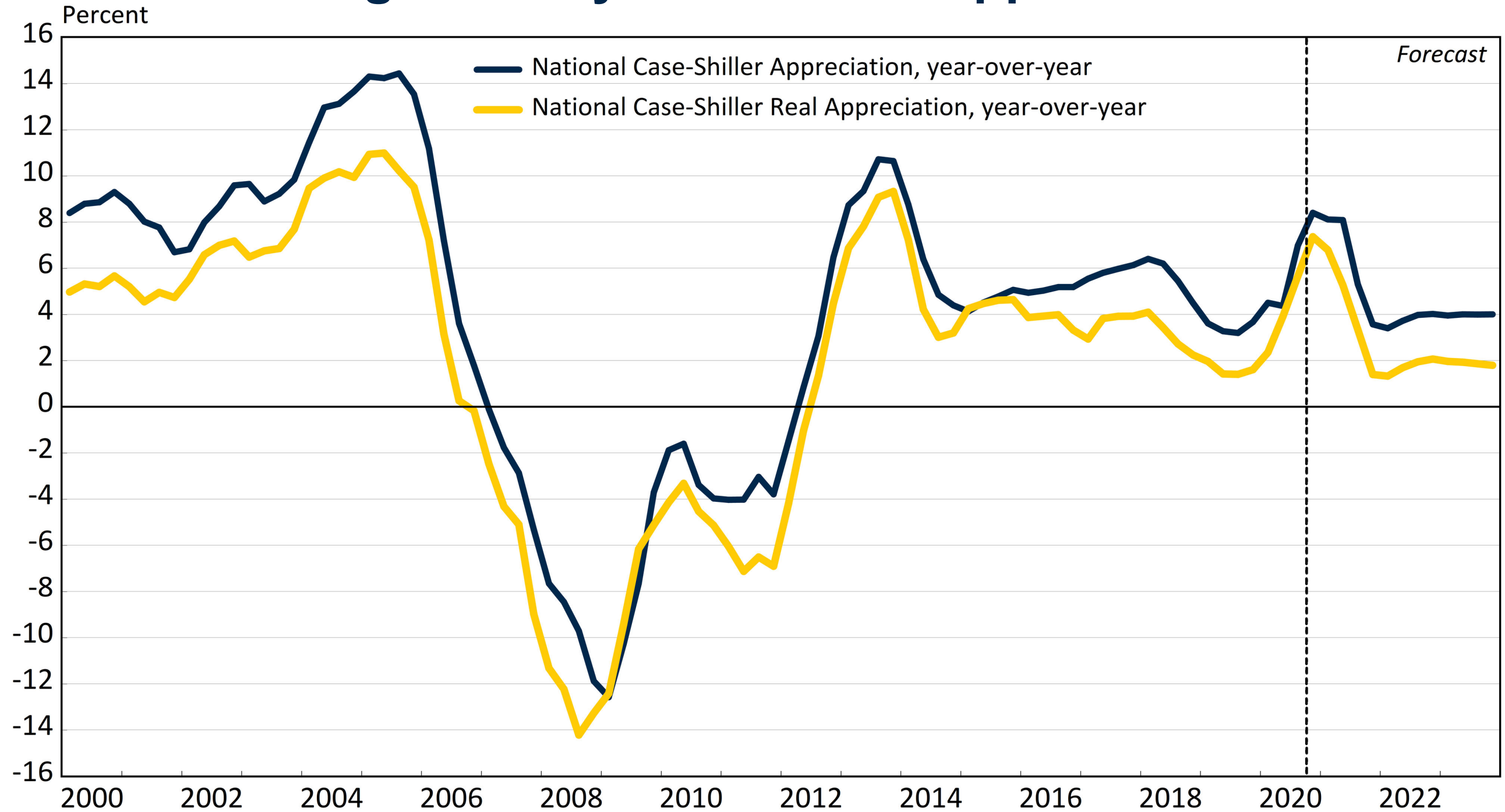
# Fiscal Policy

- New \$900 billion round of relief in December 2020
  - About \$280 billion in personal income support via rebate checks and UI
  - Another \$284 billion for small businesses via renewed PPP
  - \$82 billion for schools and colleges
- Democrats took over Senate control last week. Quick adjustments:
  - Another round of rebate checks, and longer-lasting boost to UI compensation and eligibility
  - Considerable help for state and local governments
  - Higher federal spending and some increase in taxes, starting fiscal 2022

# Federal Budget Balance, Fiscal Year

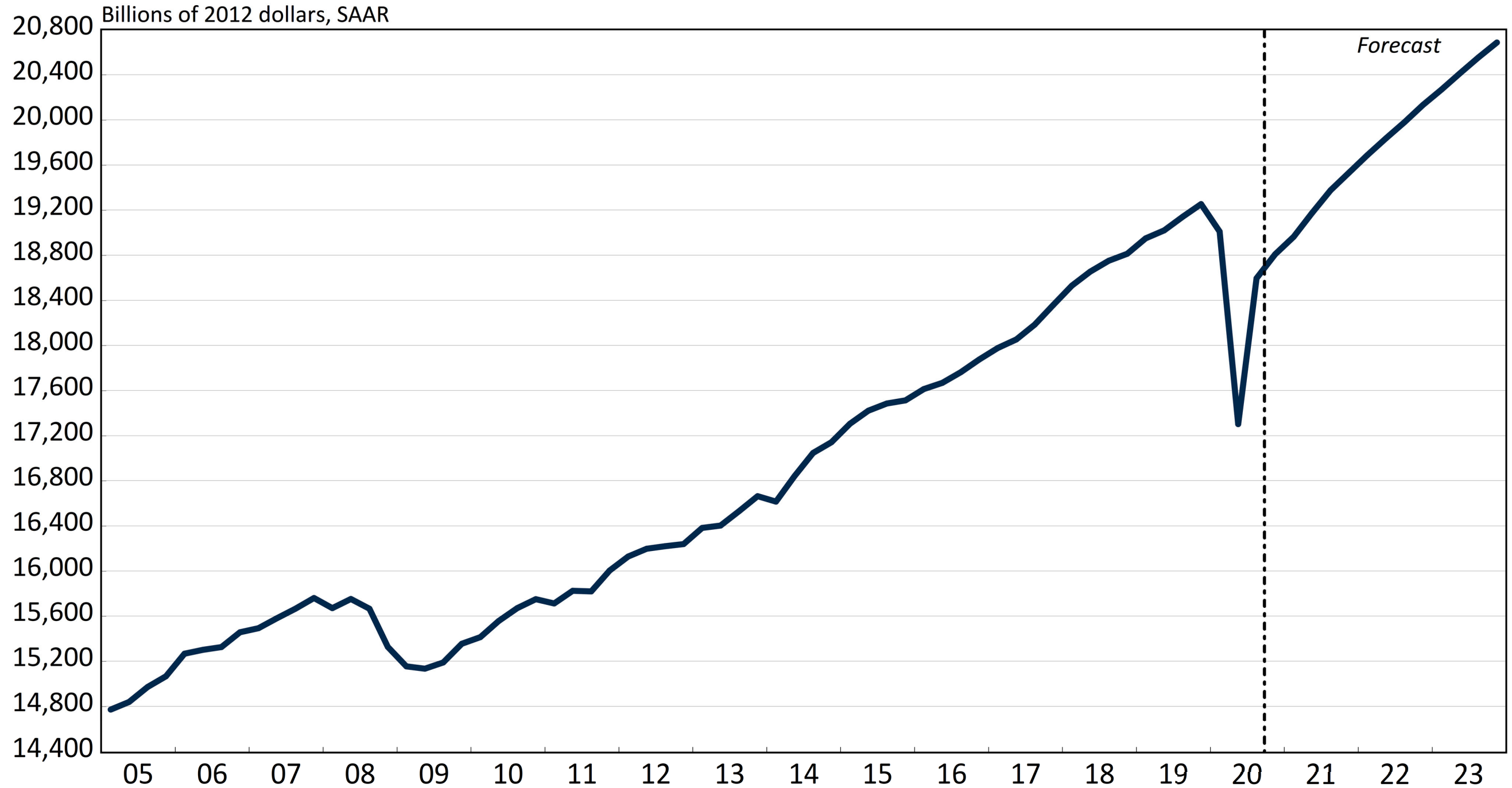


# Single-Family Home Price Appreciation



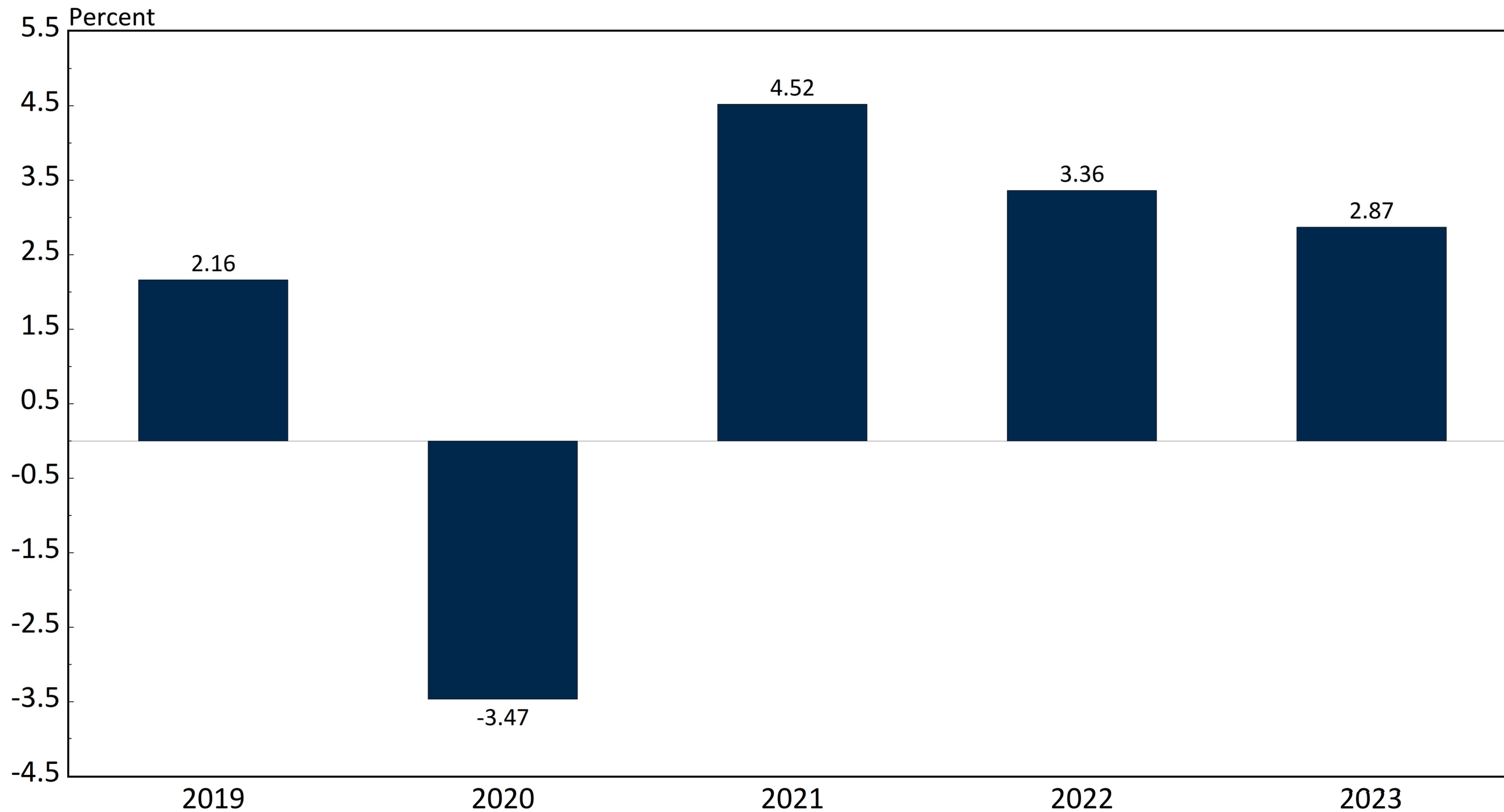
# U.S. Forecast

# Quarterly U.S. Real GDP

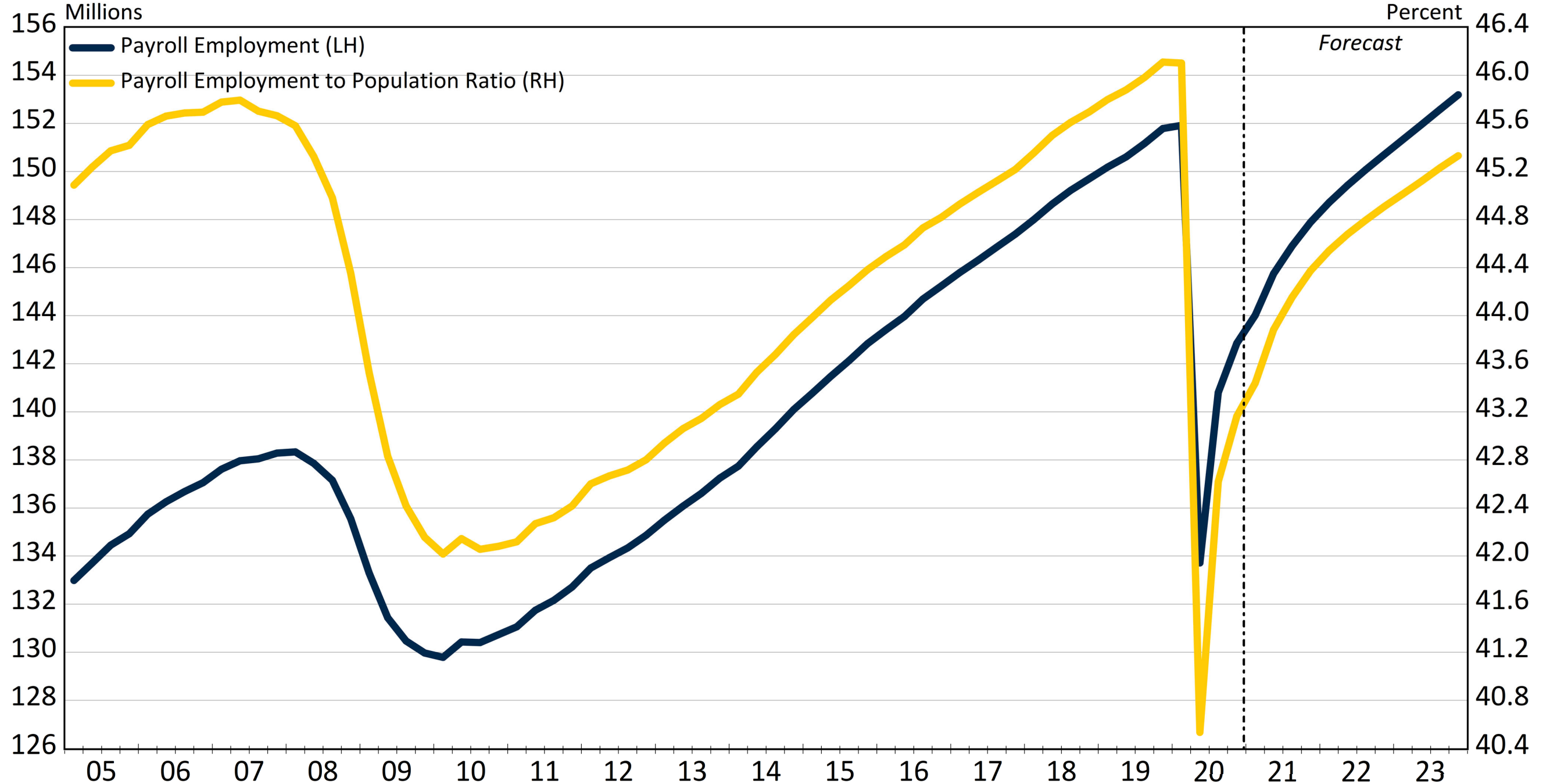




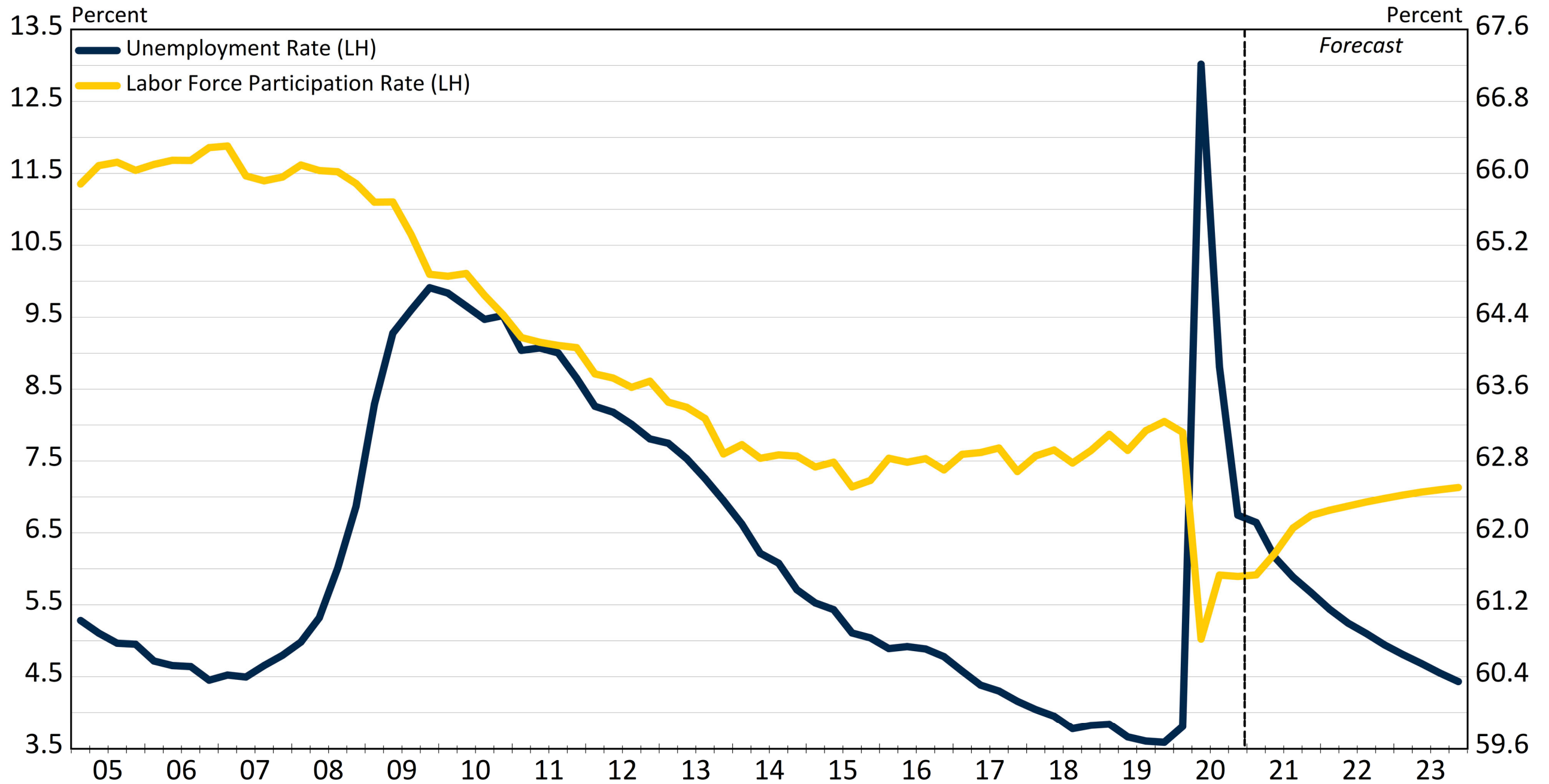
# Real GDP Growth



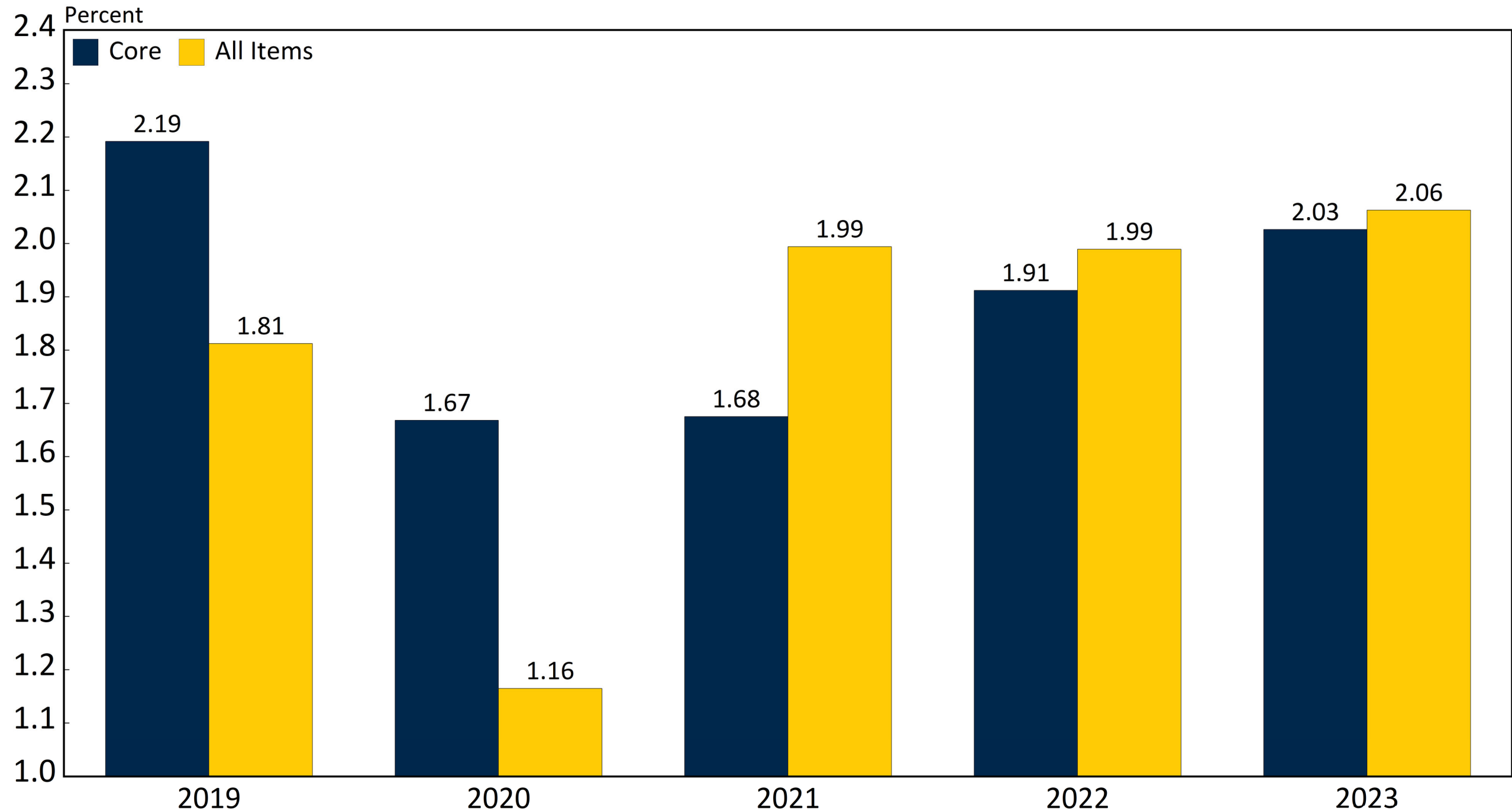
# National Payroll Employment



# Quarterly U.S. Unemployment Rate

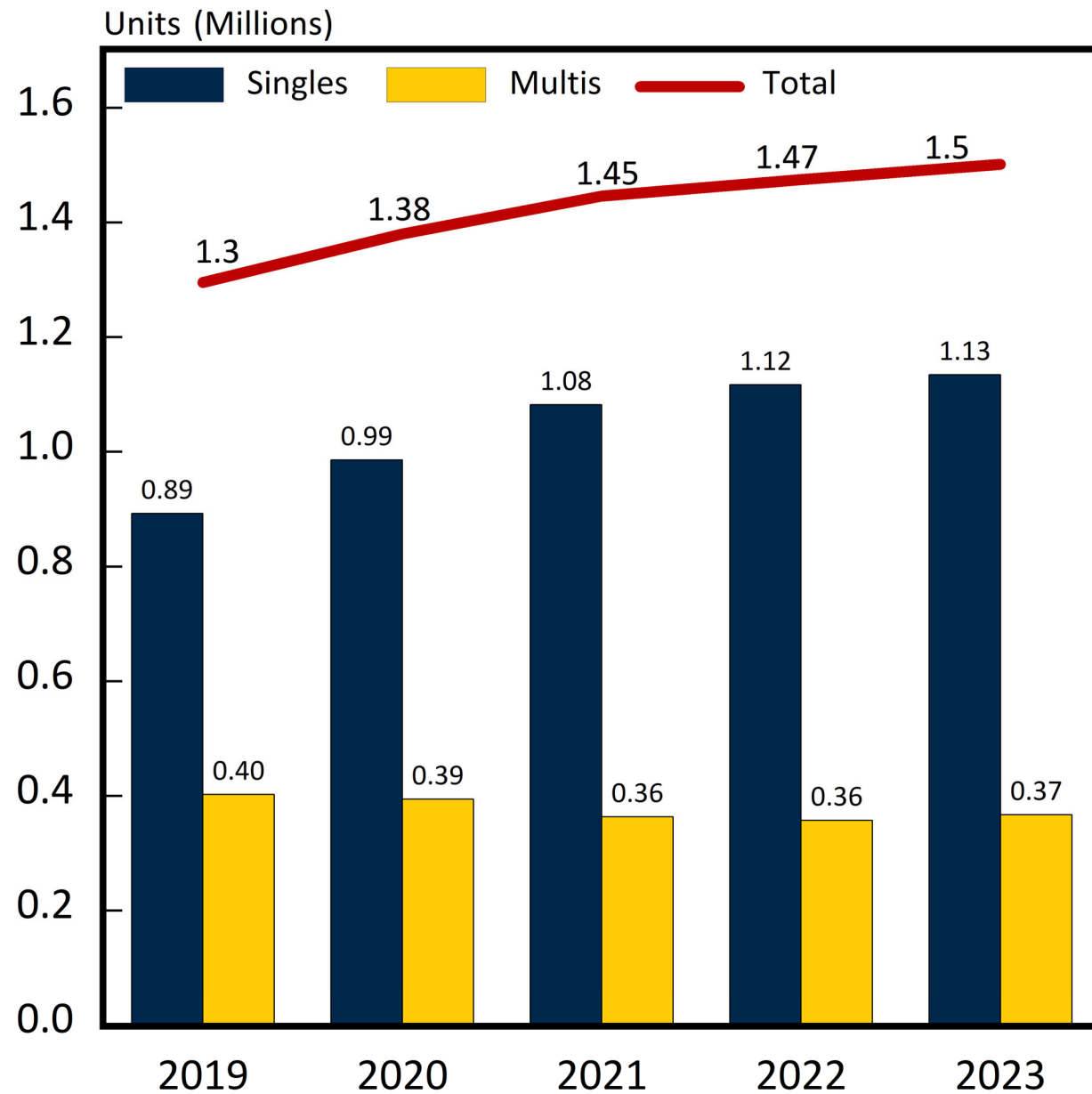


# Consumer Price Inflation (CPI-U)

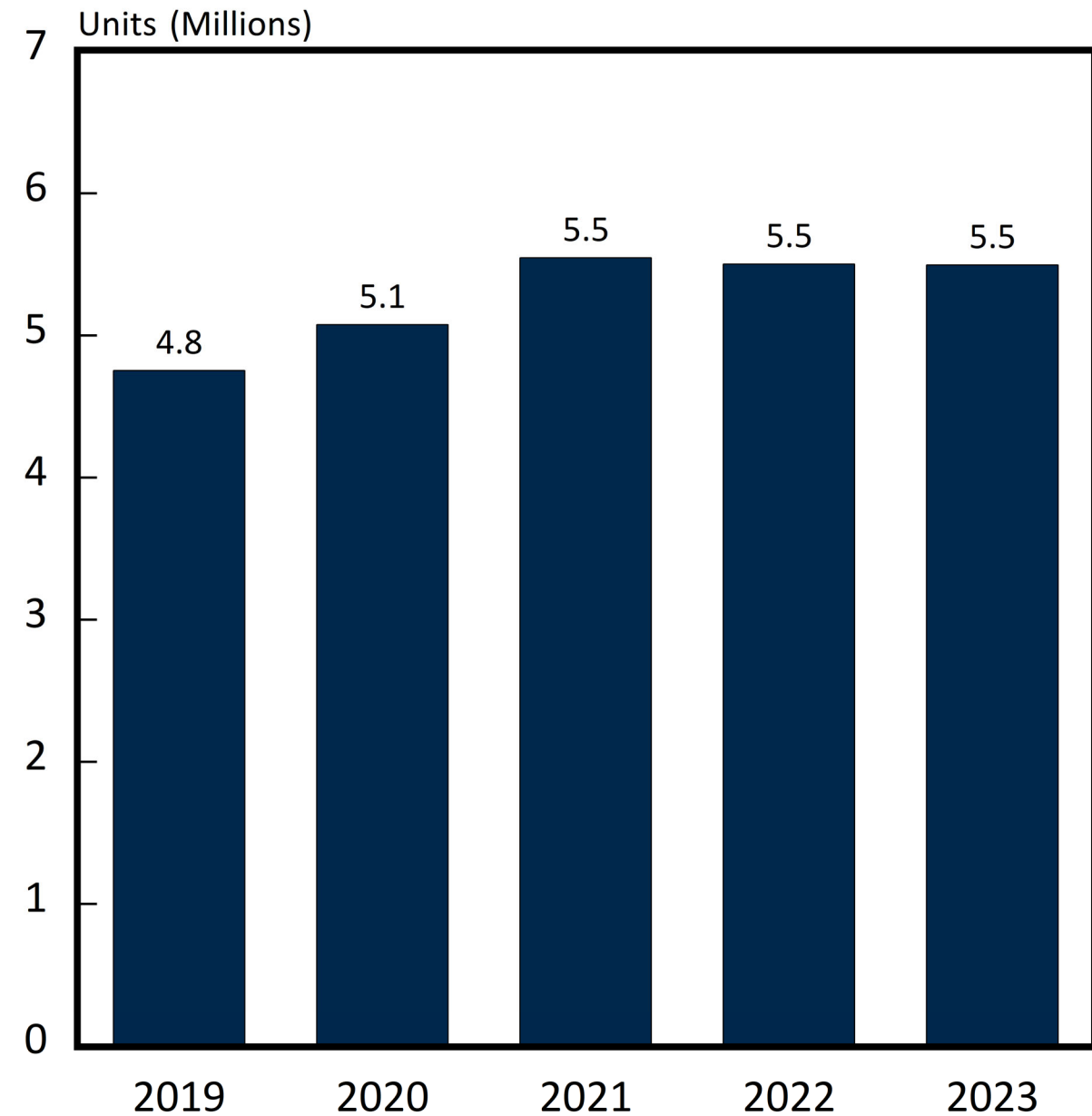


# Housing Market

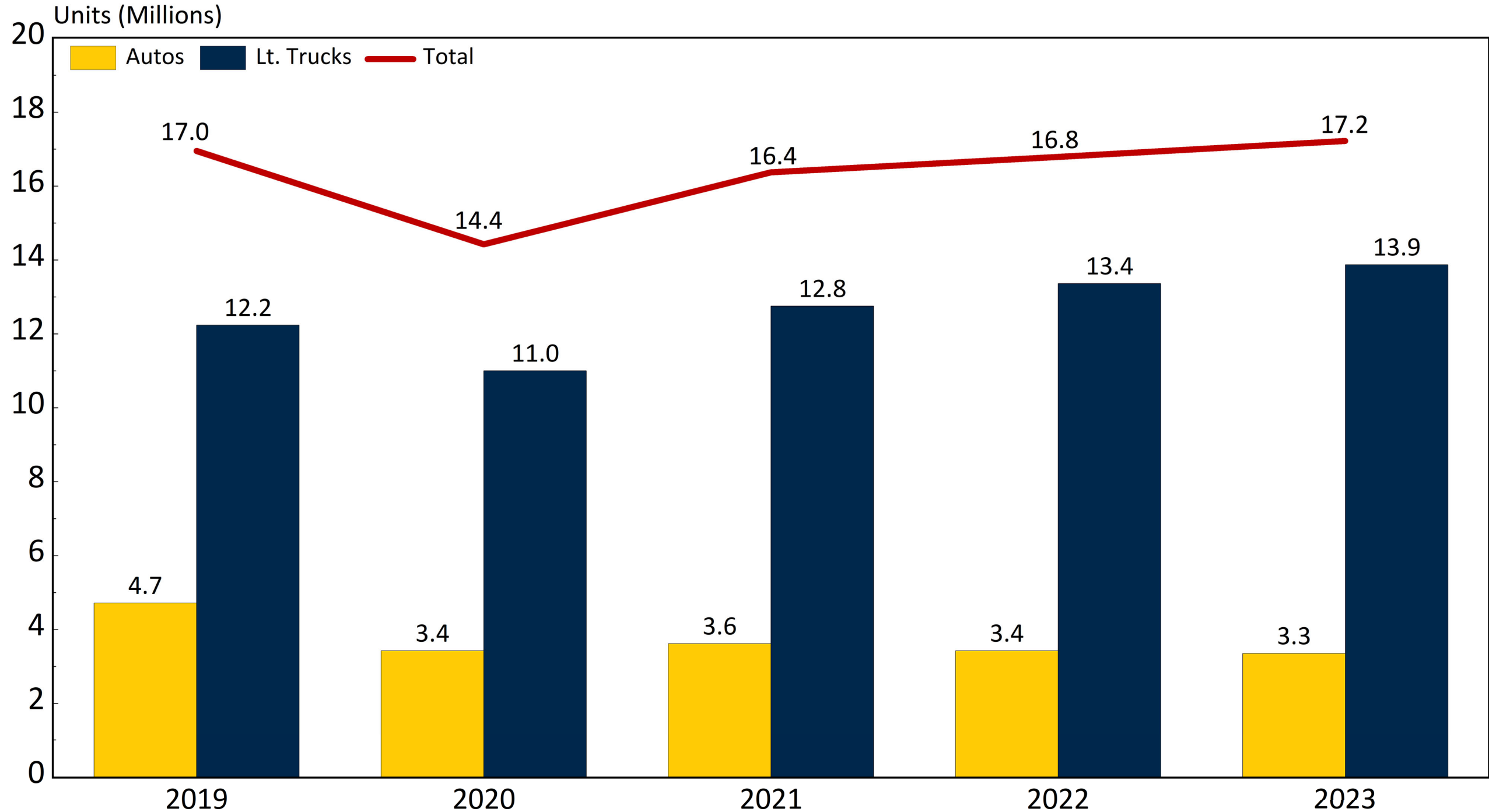
## Housing Starts



## Existing Home Sales



# Light Vehicle Sales



# Risks

## ➤ The Pandemic

- Vaccine uptake

## ➤ Fiscal

- Larger/smaller than expected stimulus

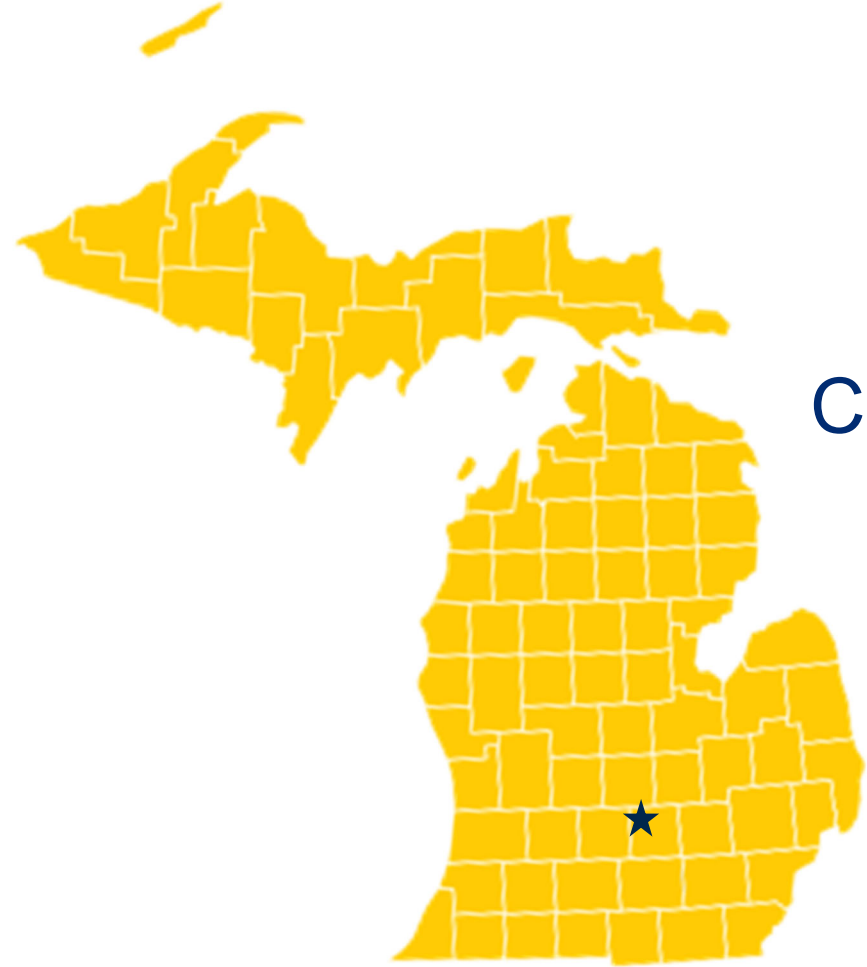
## ➤ Monetary

- Inflation acceleration, policy tightening sooner

## ➤ Housing Sector

## ➤ Financial Valuations

# The Michigan Economic Outlook For 2021–2023



Consensus Revenue Estimating Conference

January 15, 2021

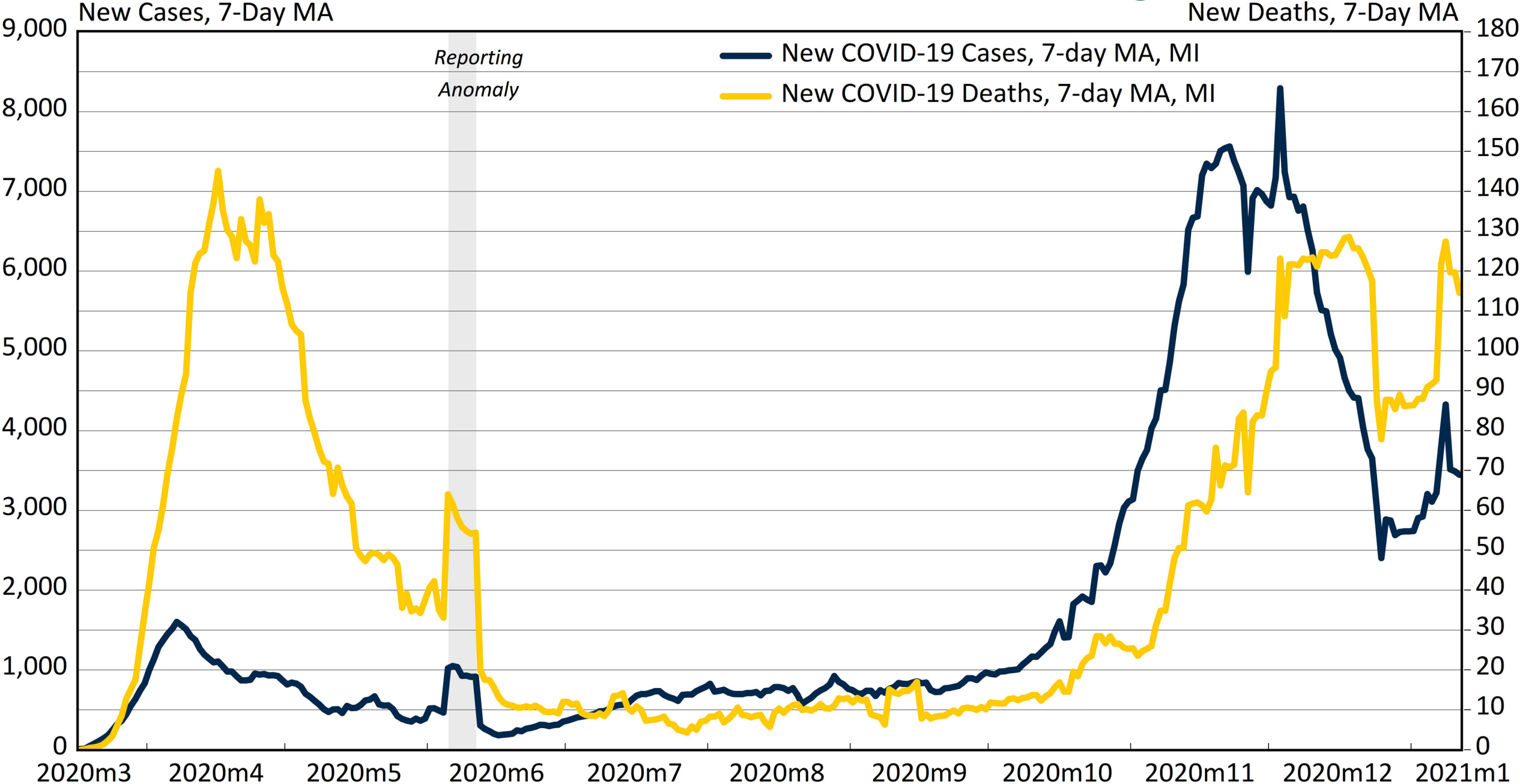
**Research Seminar in Quantitative Economics**





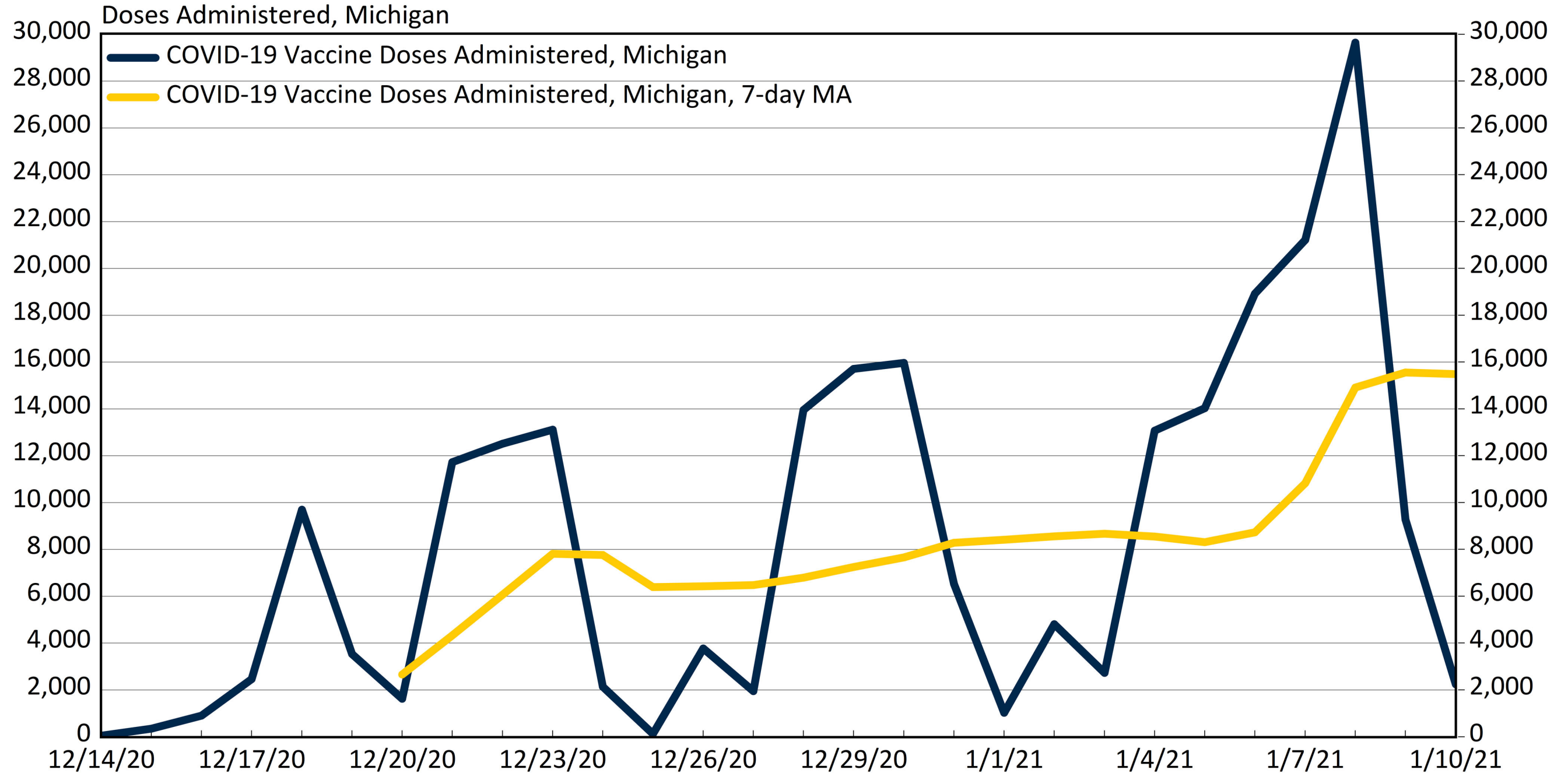
# High-Frequency Indicators: Michigan

# The Second Wave is Subsiding



Source: New York Times

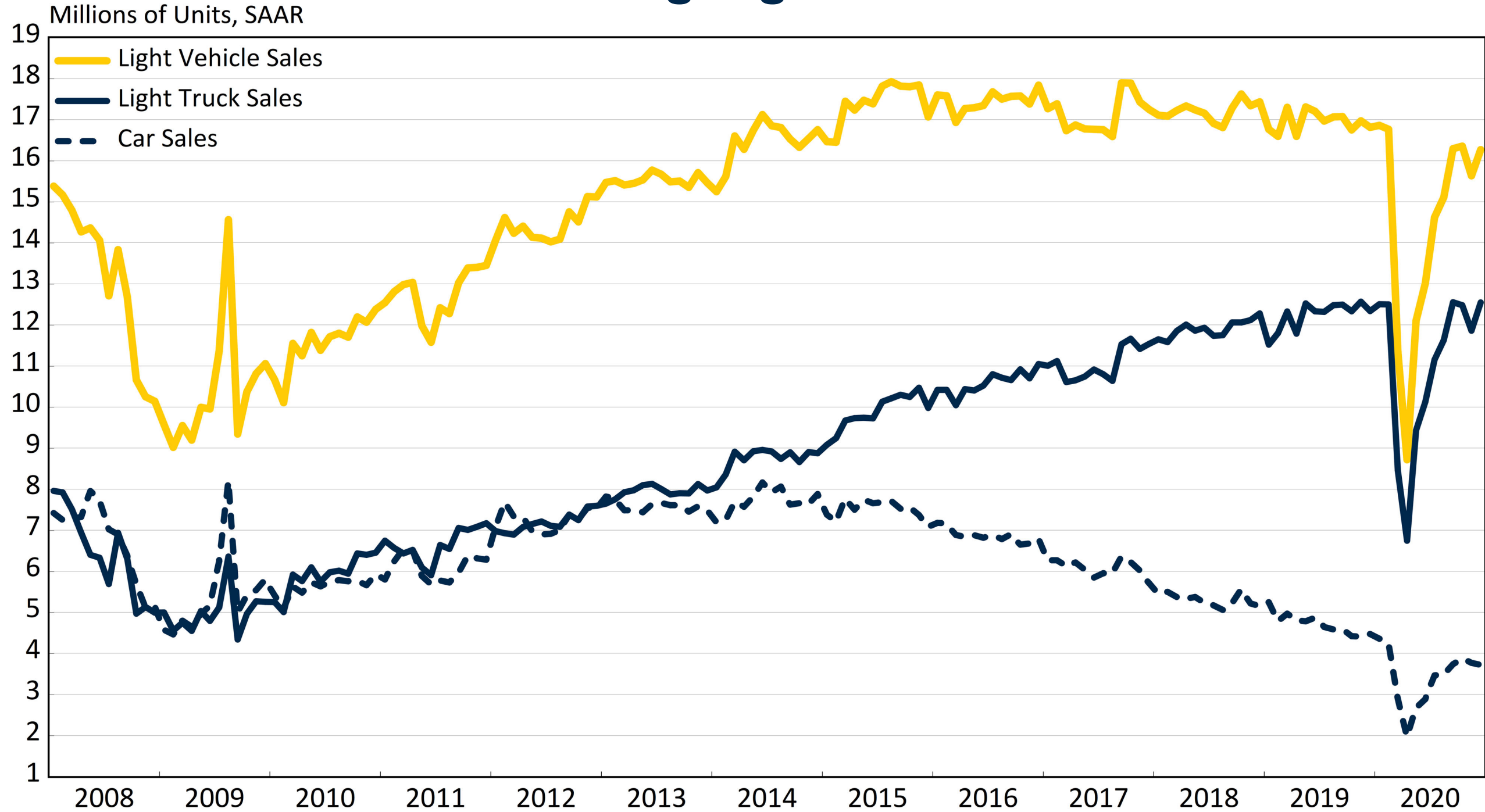
# The Vaccine Rollout is Beginning



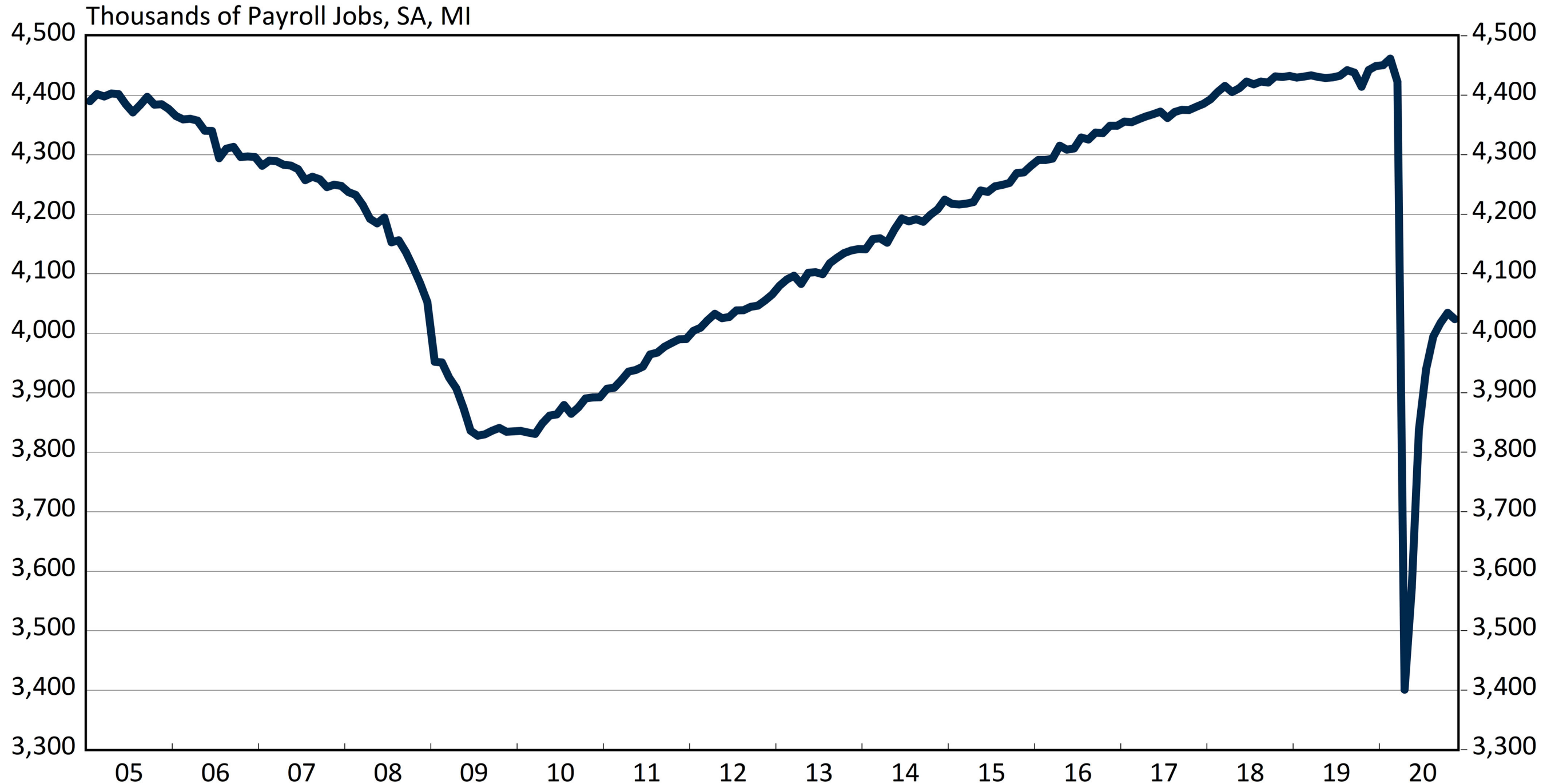
Source: MDHHS as of 01/12/2020

RSQE: January 2021

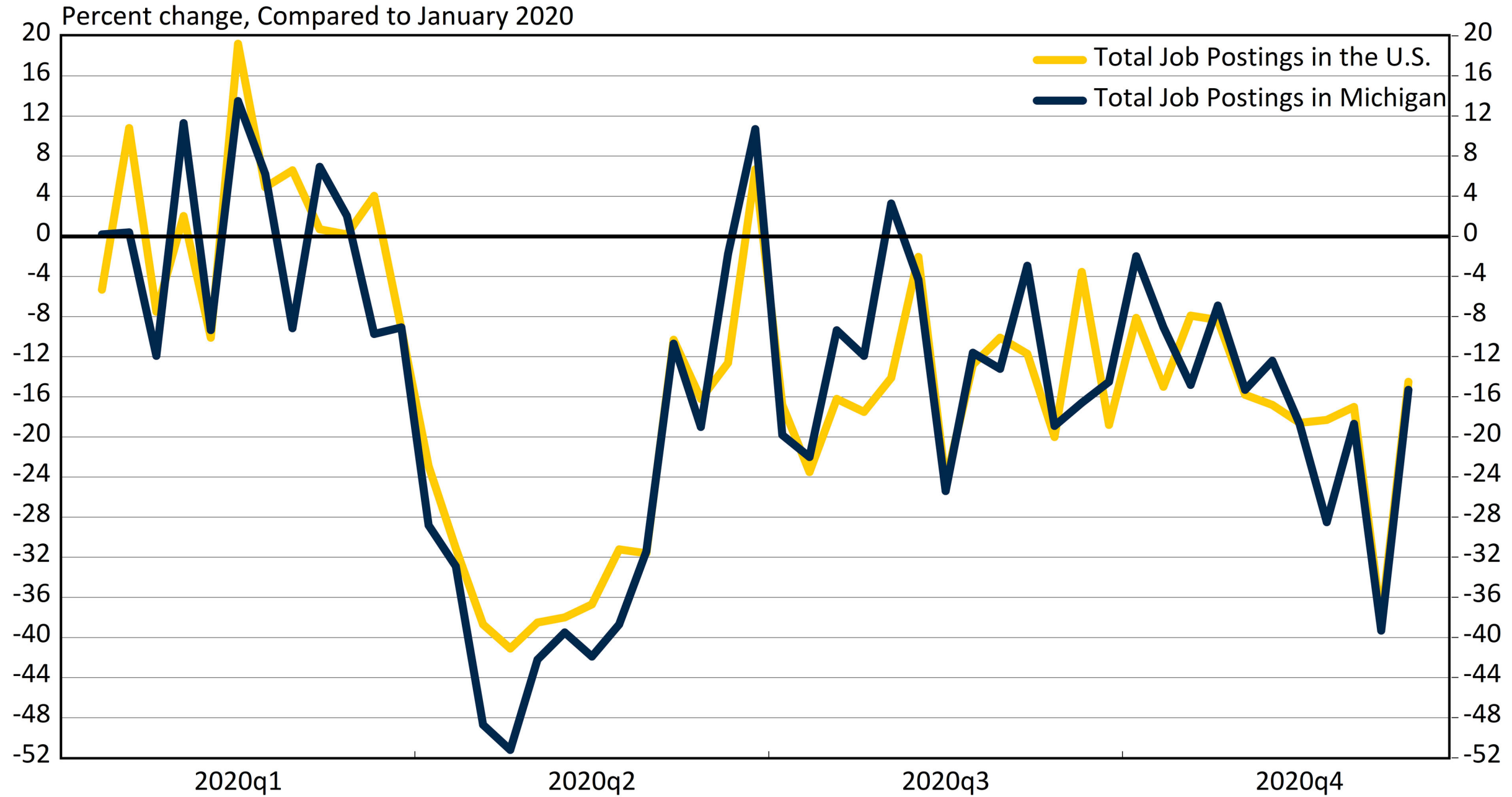
# Rebounding Light Vehicle Sales



# Climbing Out of a Deep Jobs Hole

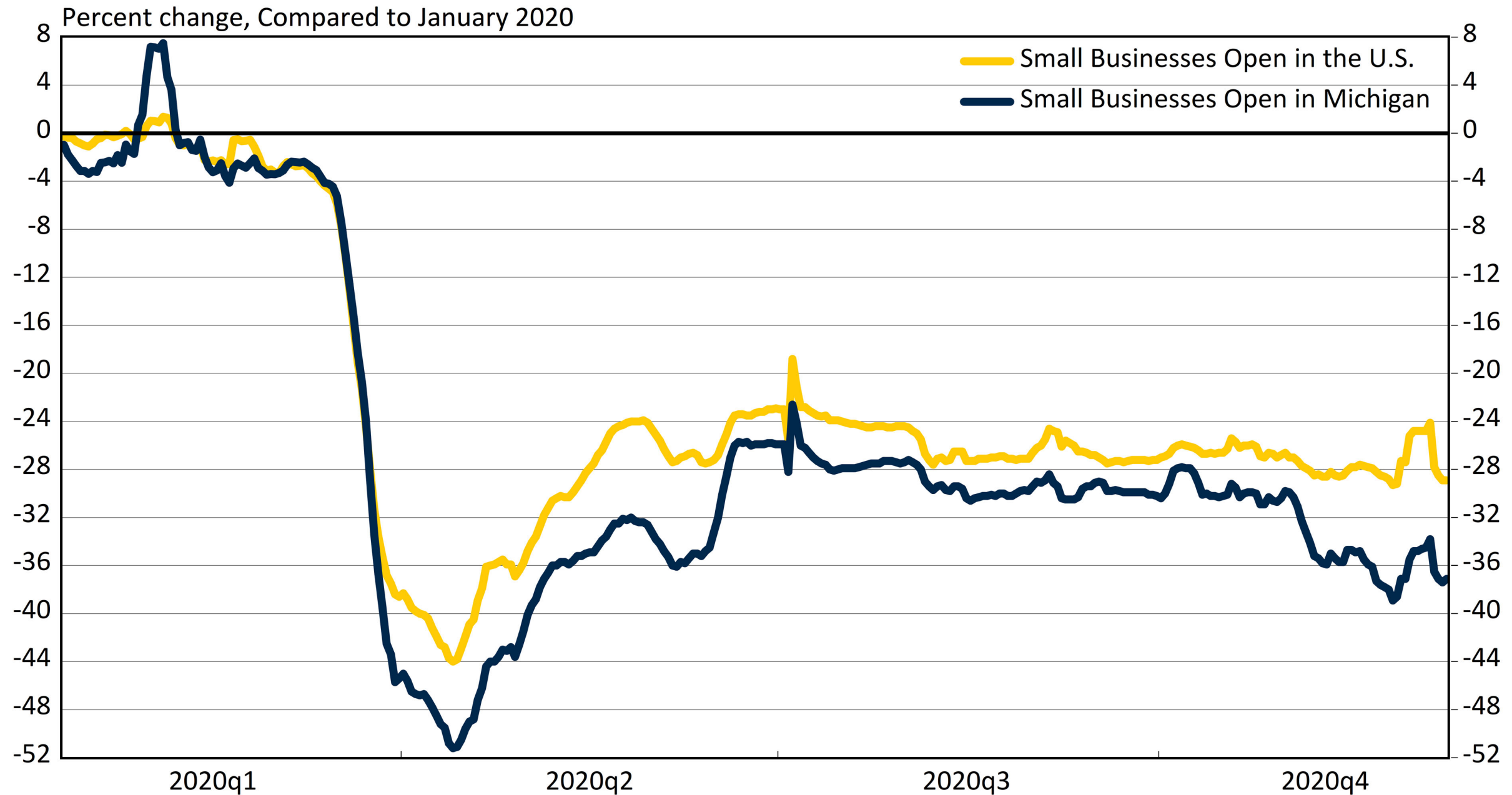


# Job Postings: Losing Steam Again



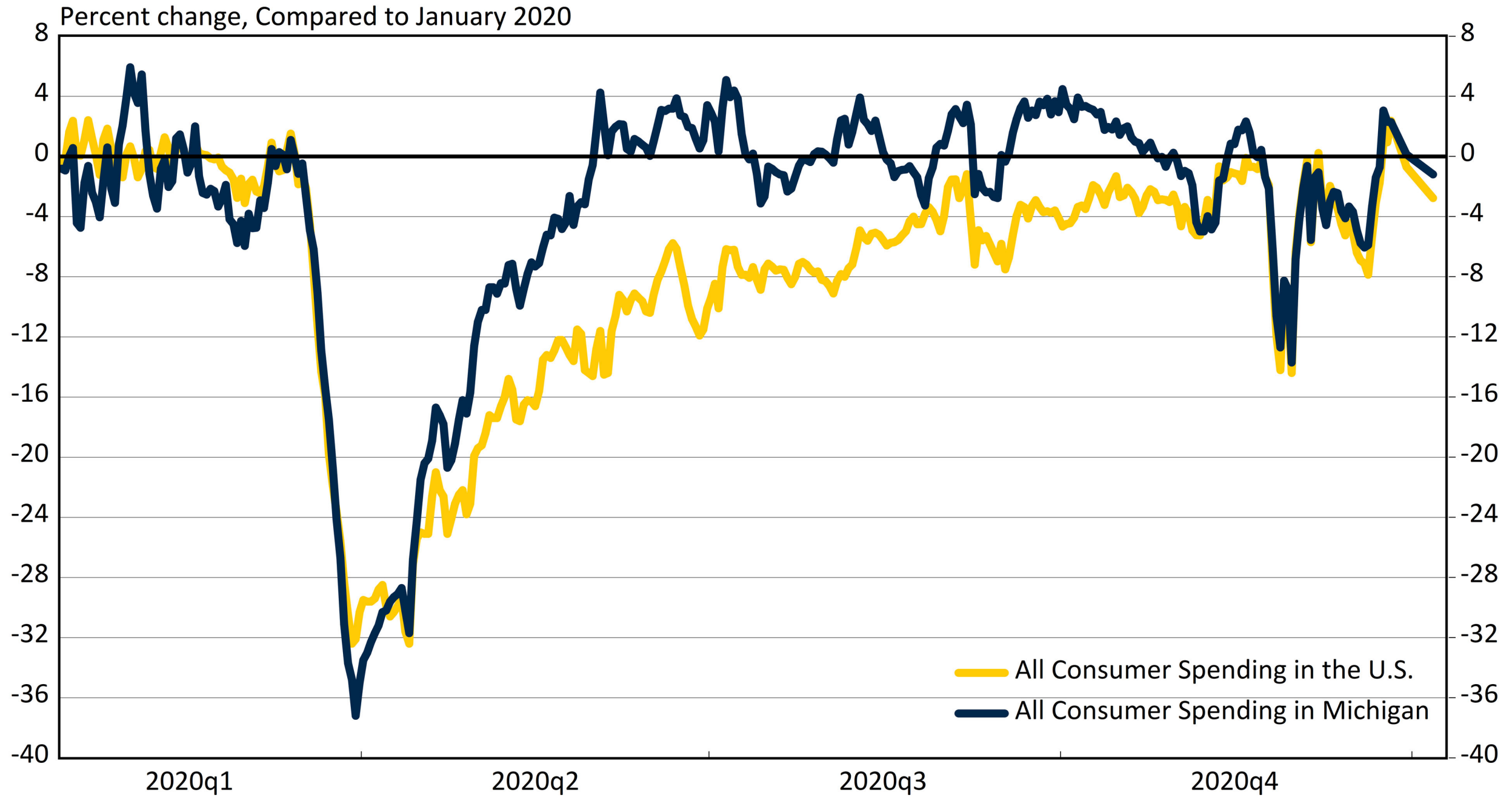
Source: Burning Glass Technologies via Opportunity Insights

# Small Businesses Closures Remain High



Source: Womply via Opportunity Insights

# Consumer Spending Wavering



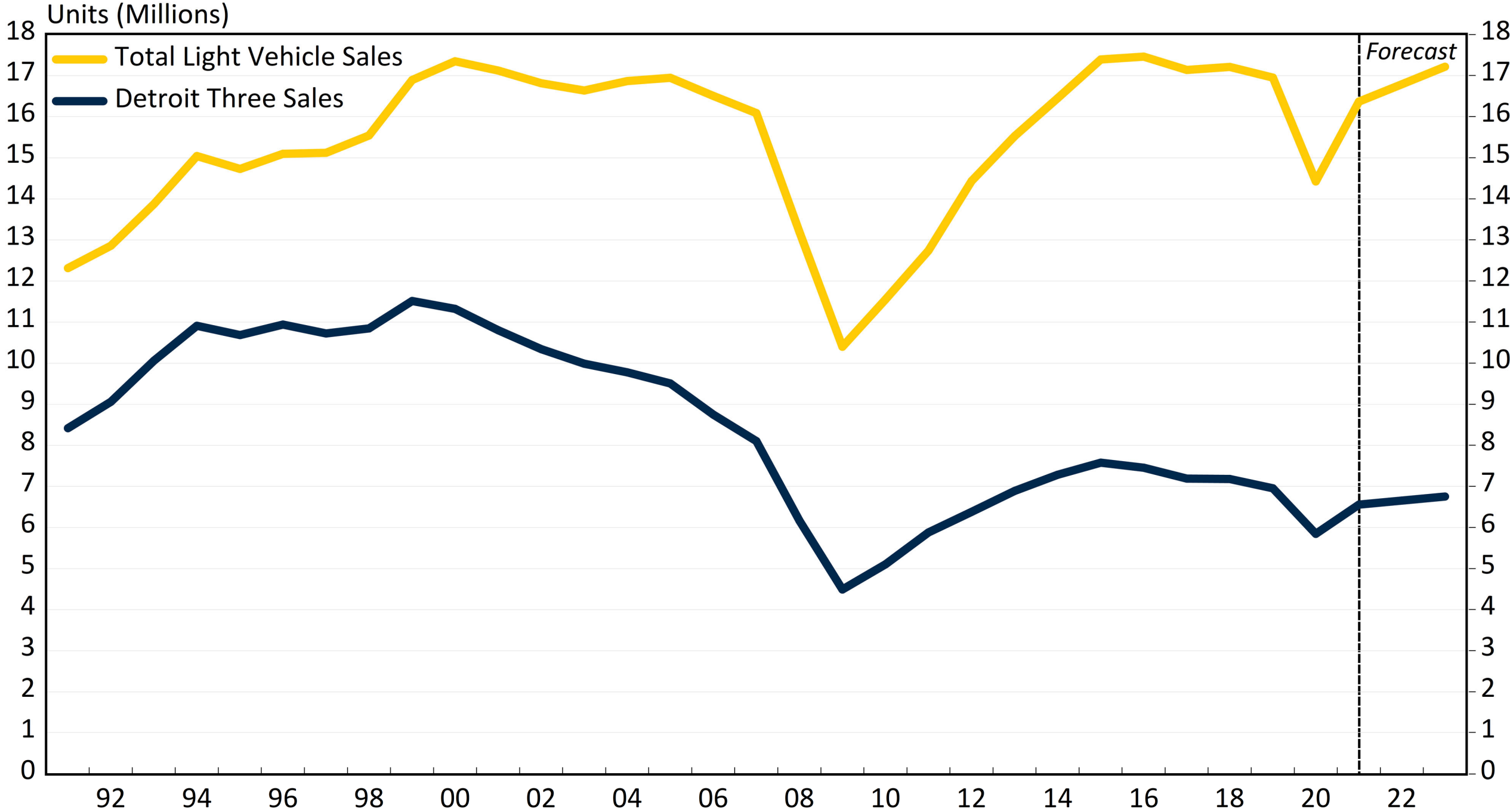
Source: Affinity Solutions via Opportunity Insights

RSQE: January 2021

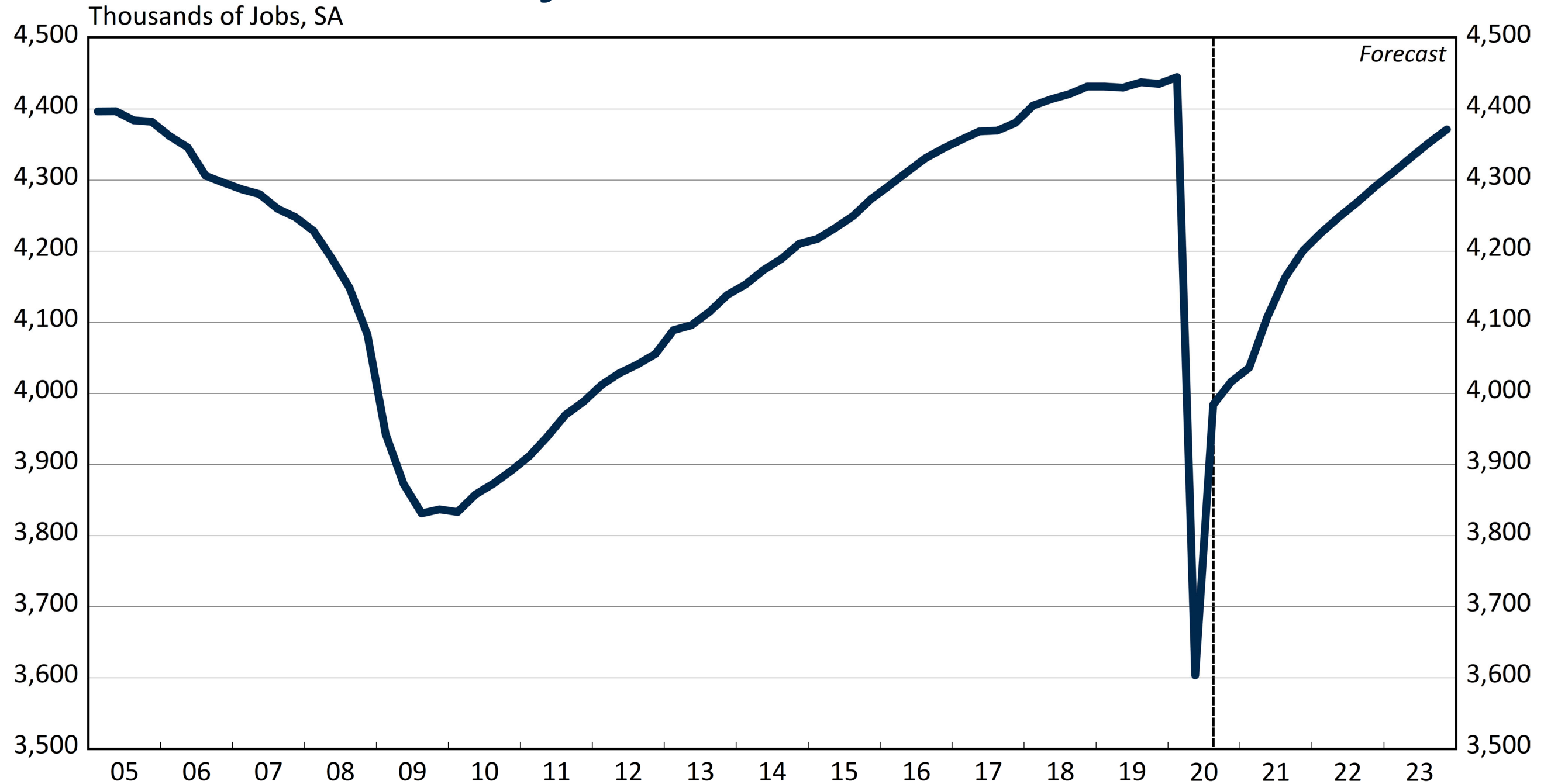


# Michigan Economic Outlook

# Annual Light Vehicle Sales: Not the Great Recession

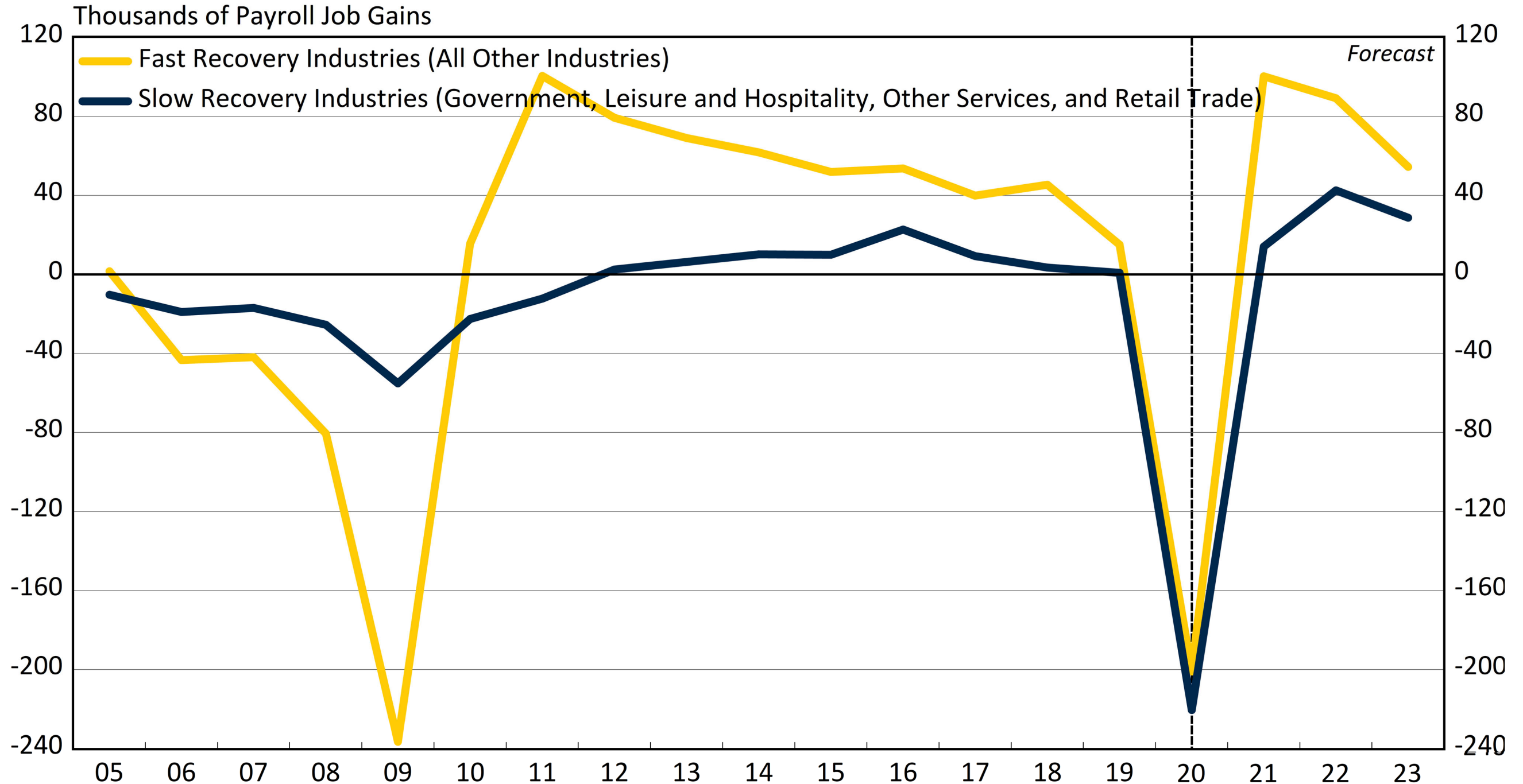


# Quarterly Michigan Payroll Employment: Recovery Continues at a Slower Pace



RSQE: January 2021

# Annual Job Growth in Michigan: Two-track Recovery

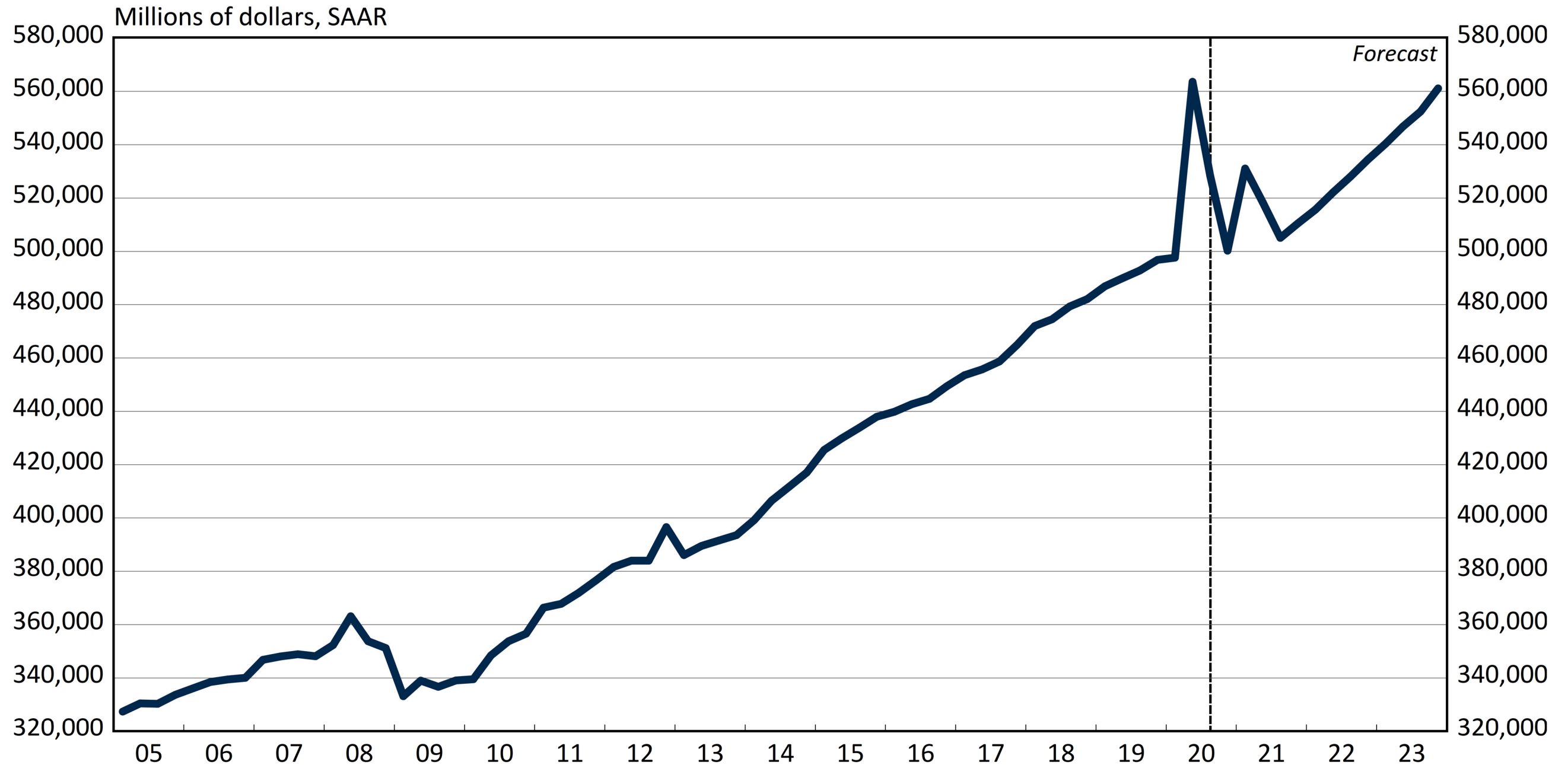


# Quarterly Michigan Unemployment Rate



RSQE: January 2021

# Quarterly Michigan Personal Income: Stimulus Cushions Income Losses



## RSQE Forecast – State Revenues by Fiscal Year (Millions of Dollars)

	<u>Actual</u> 2020 <sup>P</sup>	<u>Forecast</u>		
		2021	2022	2023
GFGP revenue	10,840	9,940	10,473	11,017
(% change)	(-2.5)	(-8.3)	(5.4)	(5.2)
Earmarked state SAF revenue	13,851	13,821	14,179	14,605
(% change)	(2.1)	(-0.2)	(2.6)	(3.0)

<sup>P</sup>Preliminary



[lsa.umich.edu/econ/rsqe](https://lsa.umich.edu/econ/rsqe)