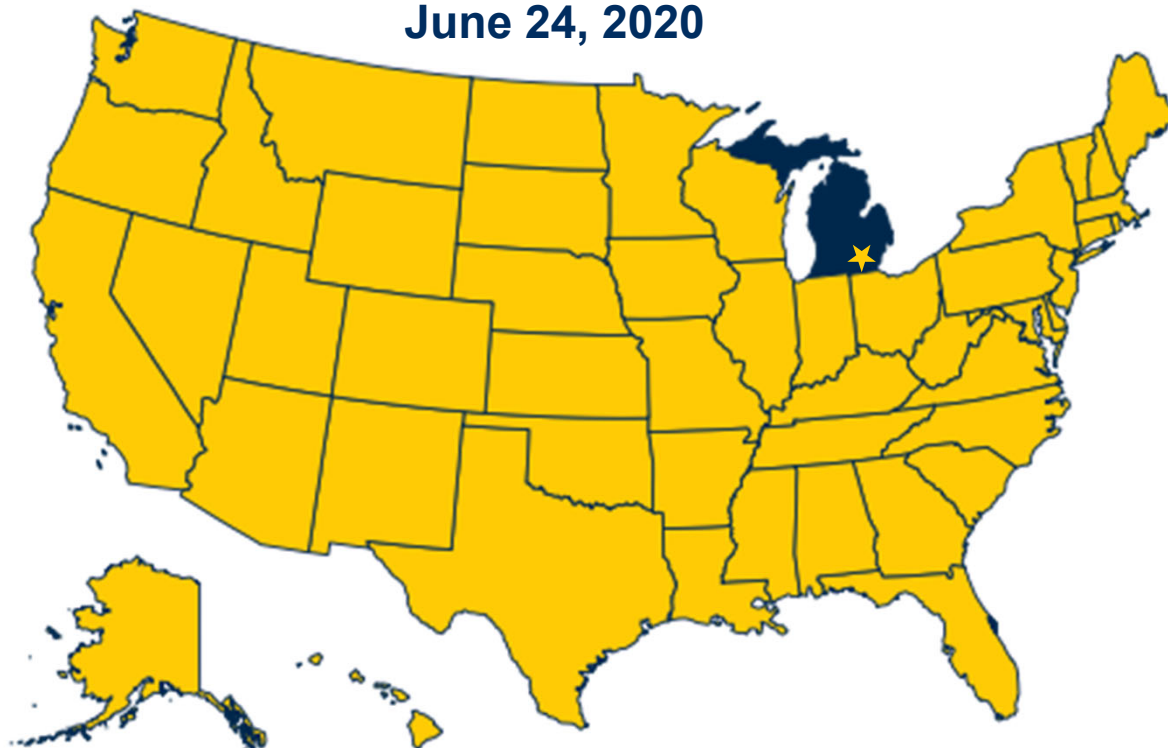


Modeling the Economic Outlook in the Time of COVID-19

REMI Webinar Series

June 24, 2020

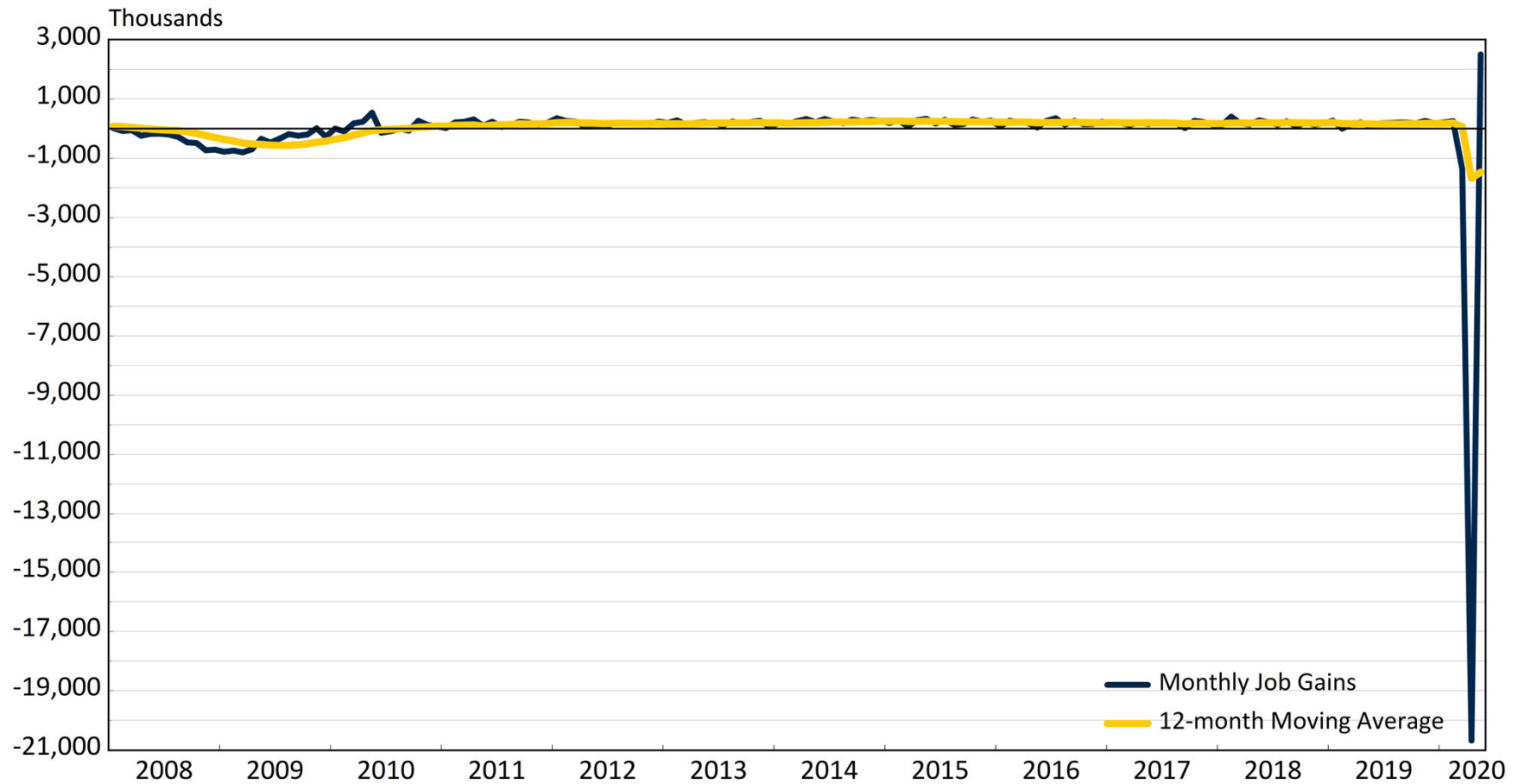


Research Seminar in Quantitative Economics



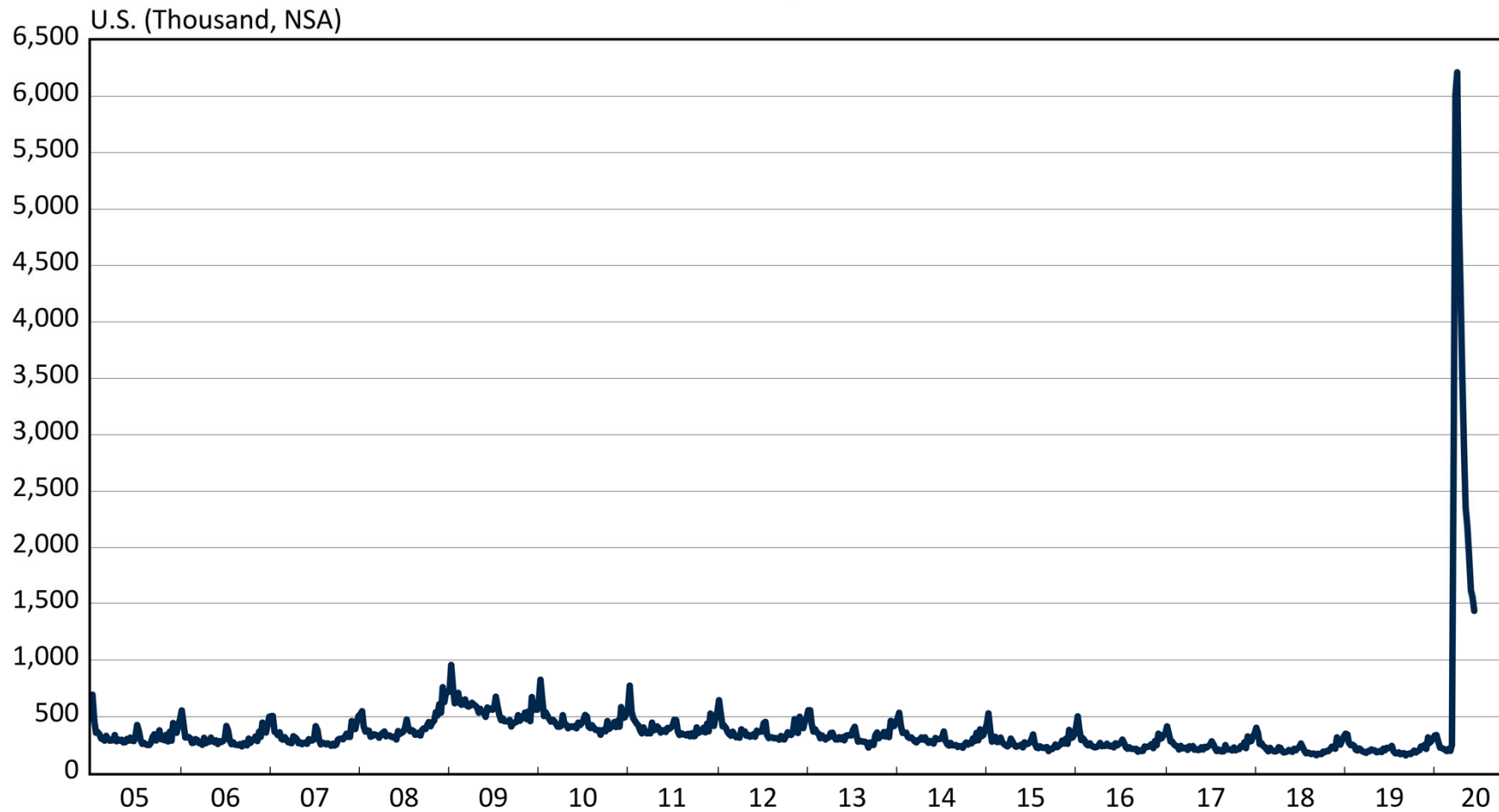
High-Frequency Economic Indicators

Monthly Payroll Job Gains Through May 2020



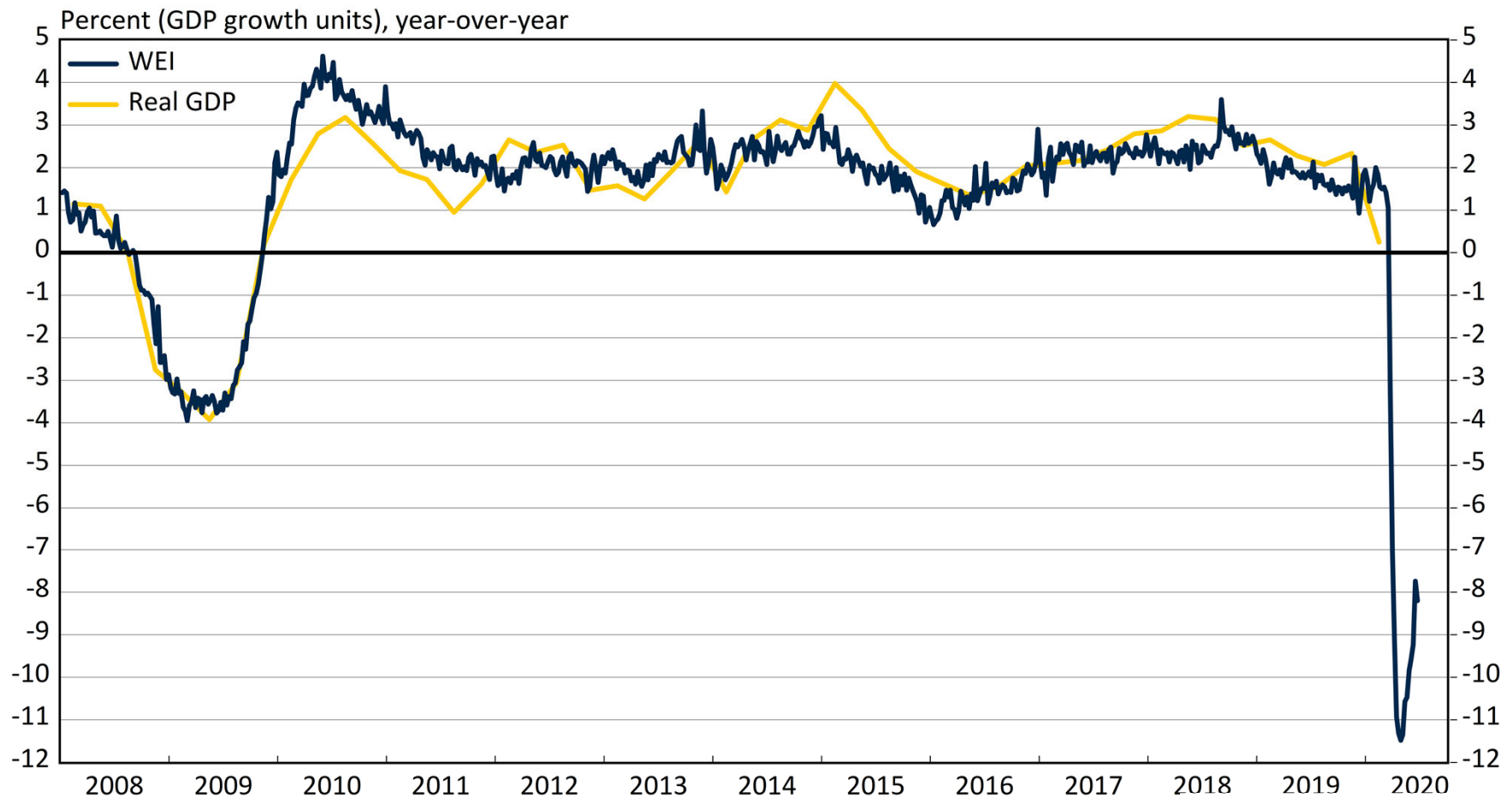
RSQE: June 2020

Weekly Initial Unemployment Insurance Claims



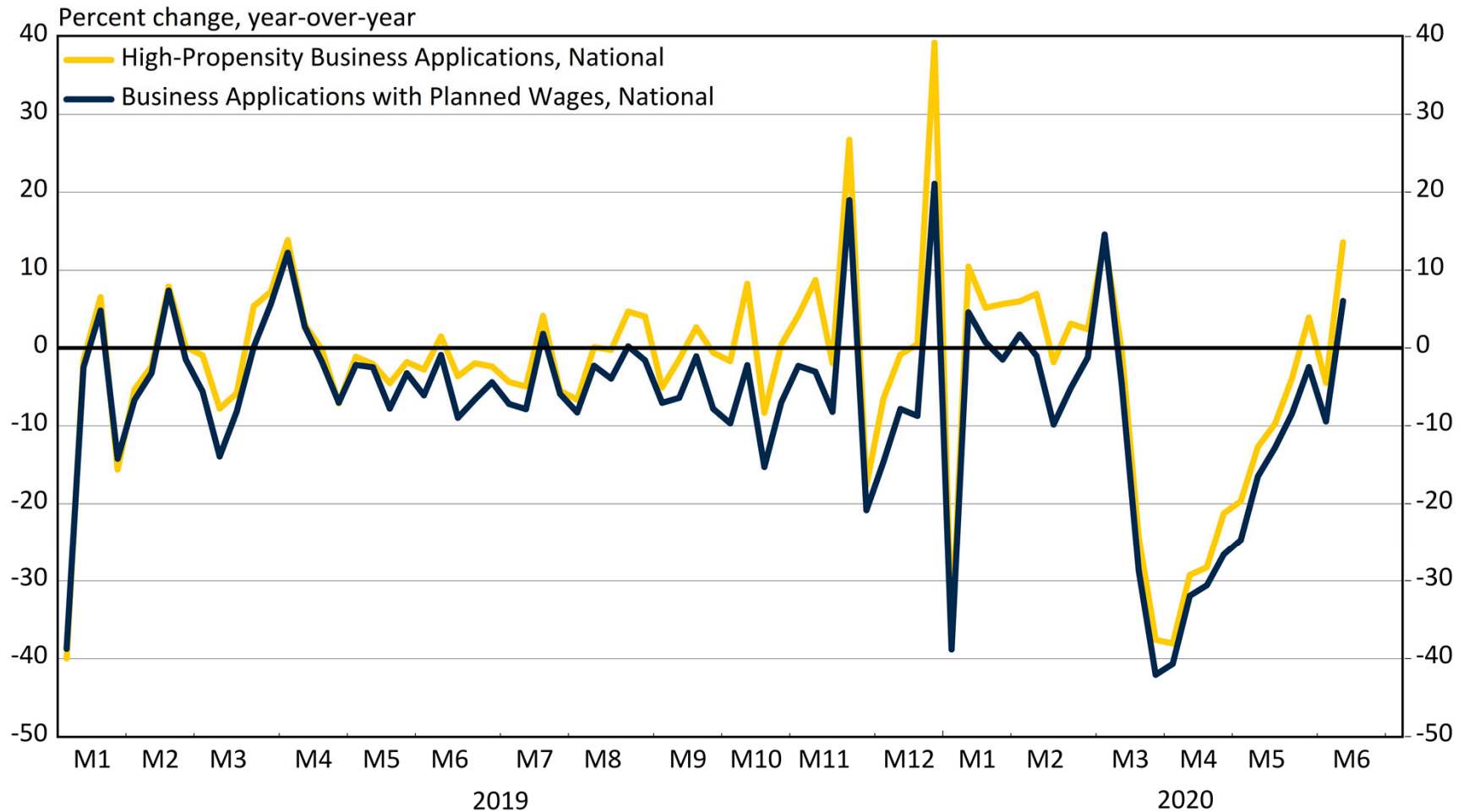
RSQE: June 2020

Weekly Economic Index (Lewis-Mertens-Stock)



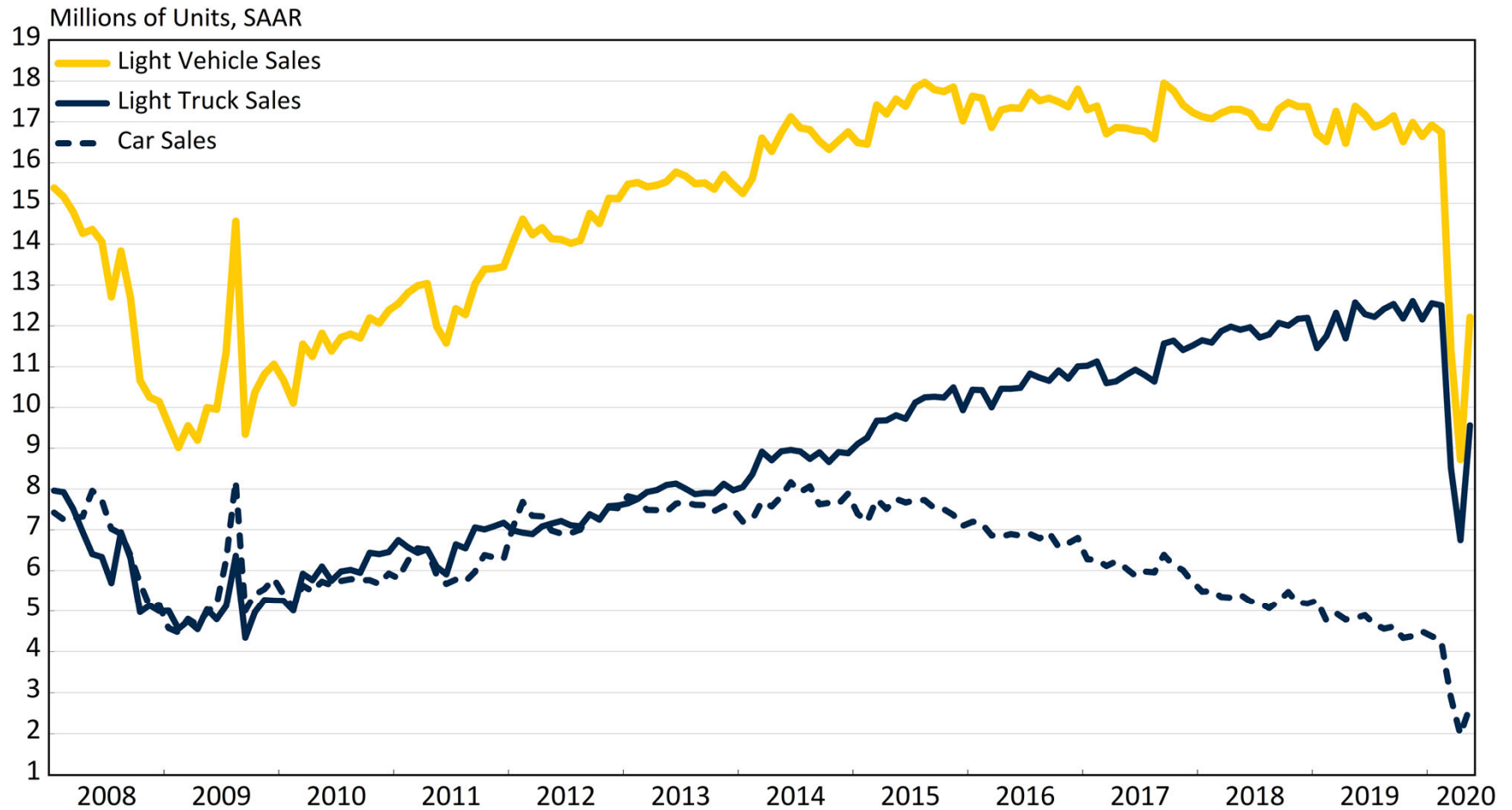
RSQE: June 2020

Business Formation Statistics



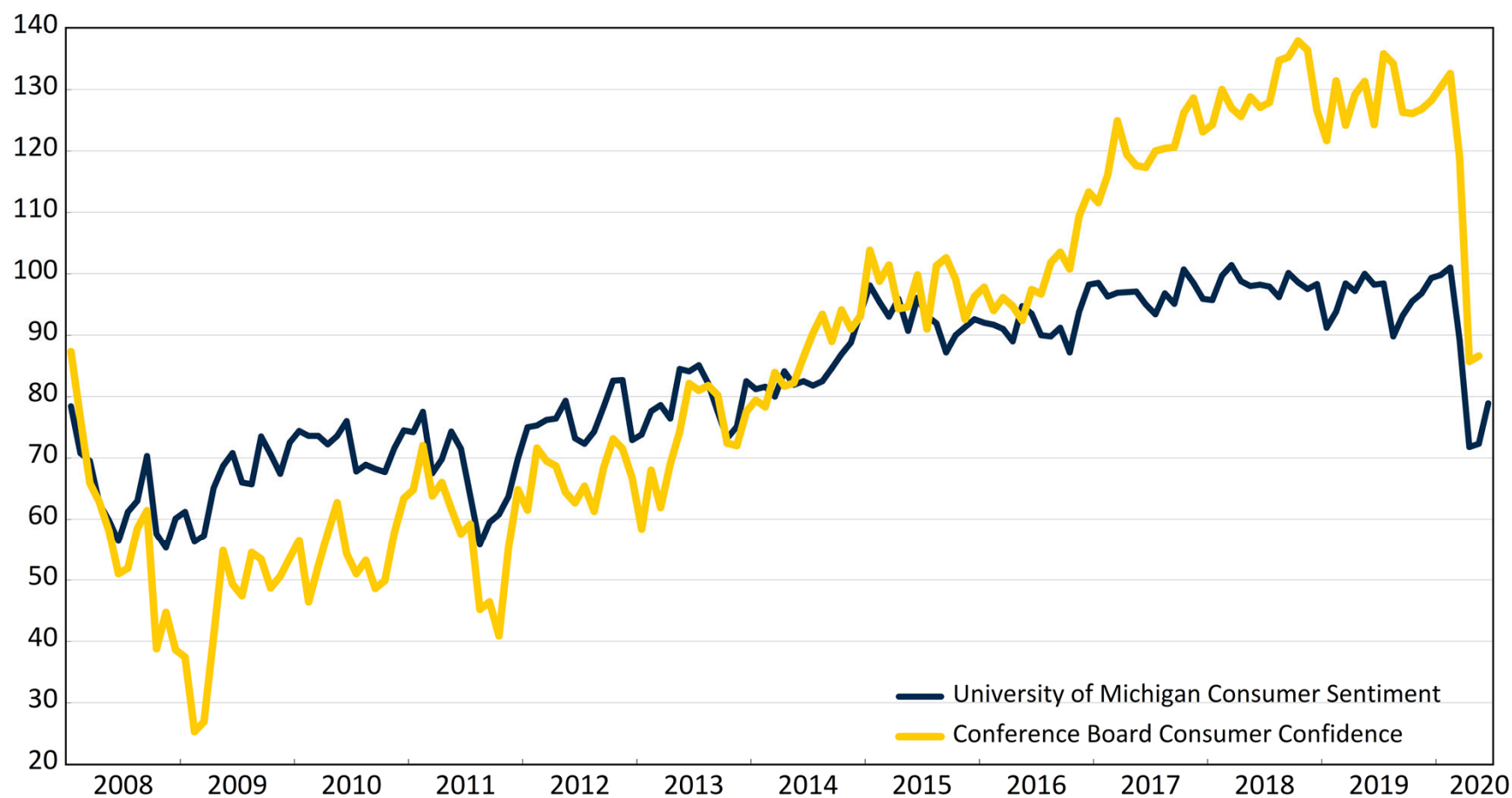
RSQE: June 2020

Monthly U.S. Light Vehicle Sales

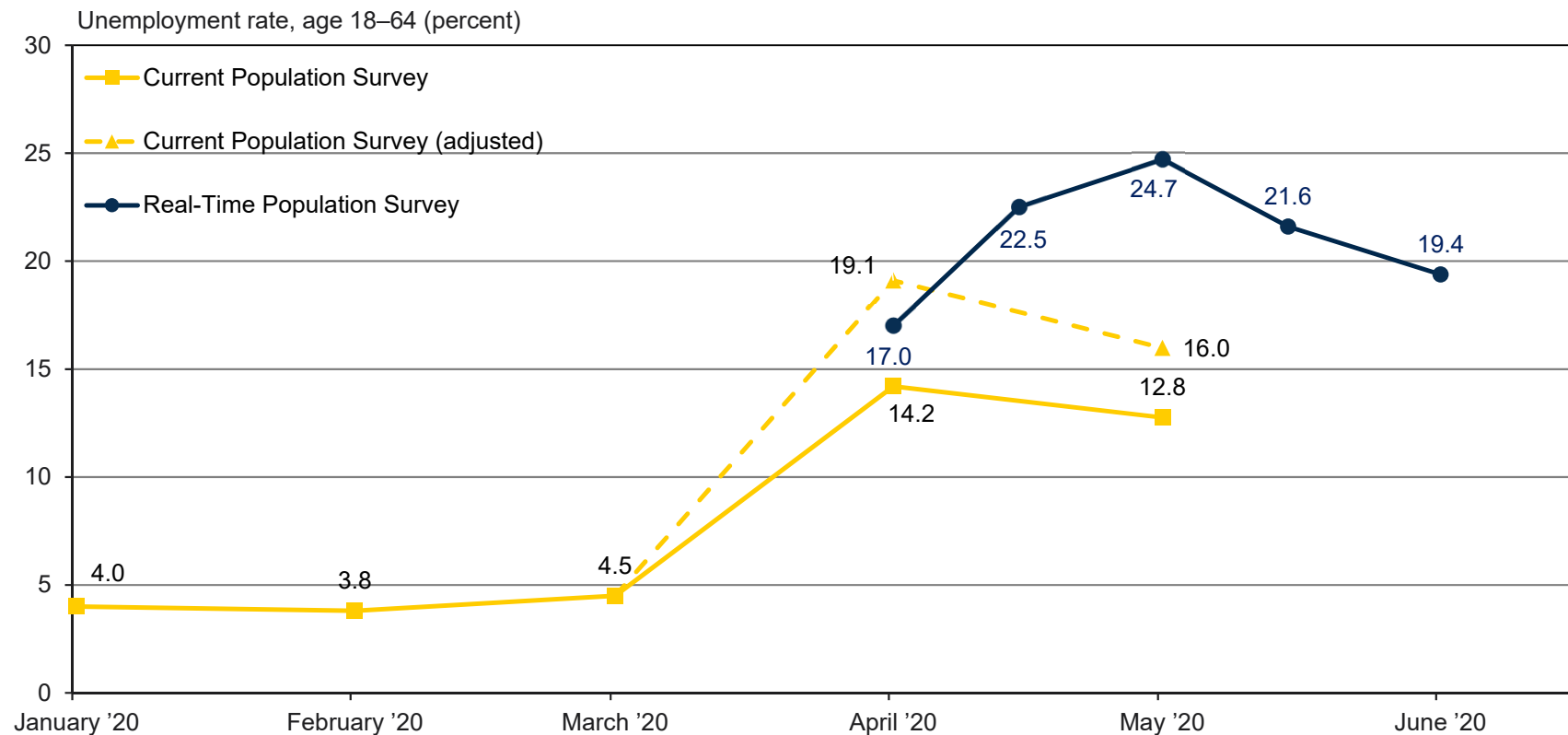


RSQE: June 2020

Consumer Sentiment and Confidence



Unemployment Rate in the Current Population Survey, Real-Time Population Survey



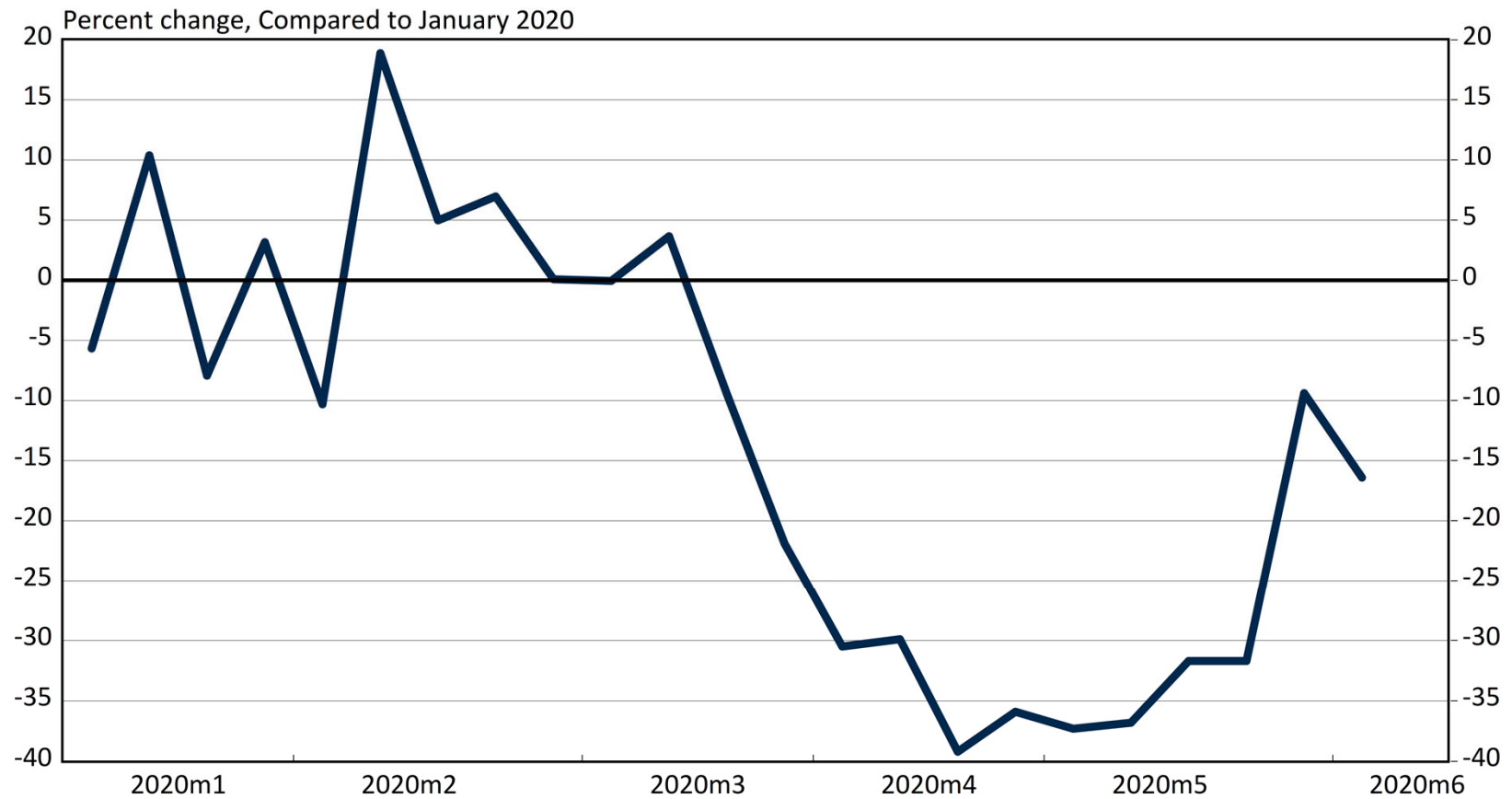
SOURCES: Bureau of Labor Statistics; "Real-Time Labor Market Estimates During the 2020 Coronavirus Outbreak," by Alexander Bick and Adam Blandin, preliminary working paper, 2020.

RSQE: June 2020

Federal Reserve Bank of Dallas



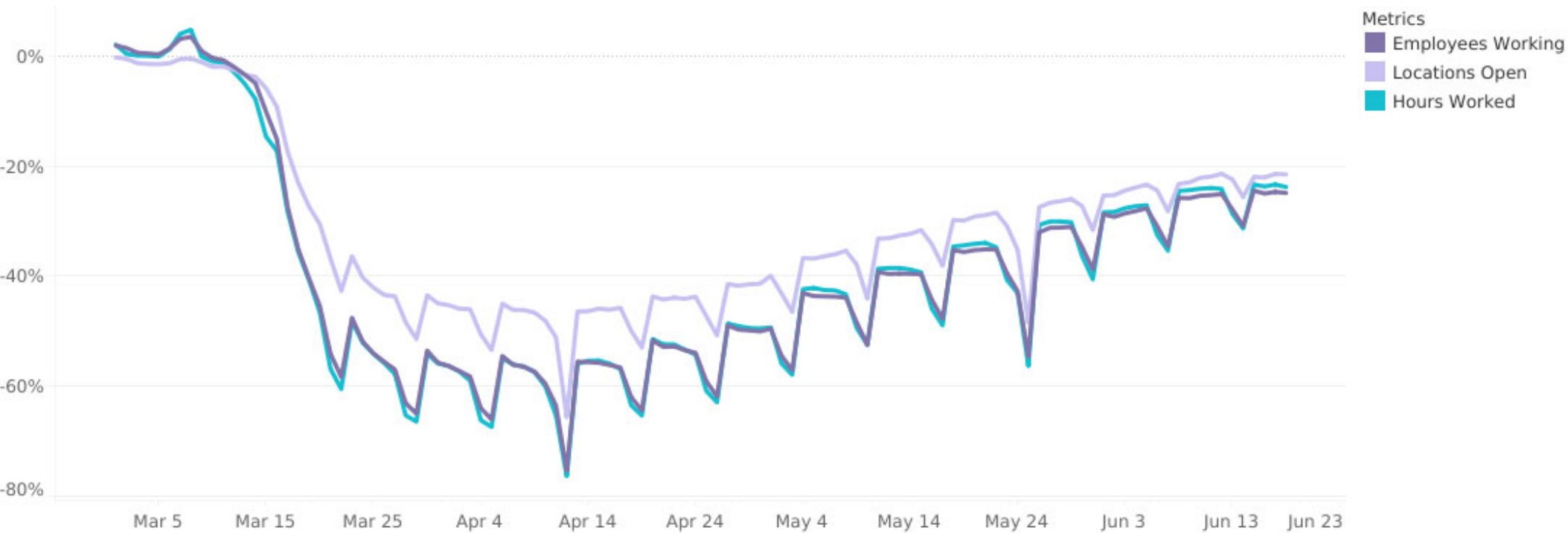
Weekly National Unique Job Postings



Source: Burning Glass Technologies

RSQE: June 2020

Homebase Small Business Trends



RSQE: June 2020

Affinity Solutions Consumer Spending Trends

OPPORTUNITY
INSIGHTS

ECONOMIC TRACKER

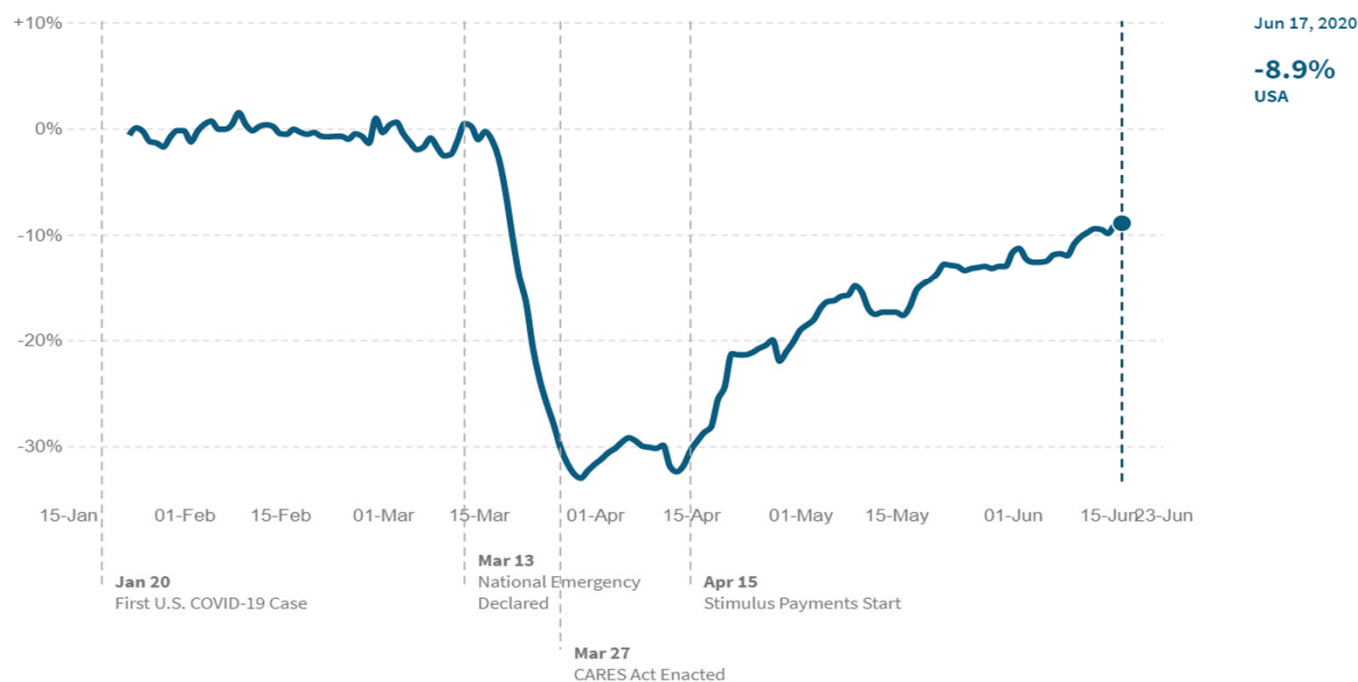
HARVARD
UNIVERSITY

BROWN

BILL & MELINDA
GATES foundation

Percent Change in All Consumer Spending*

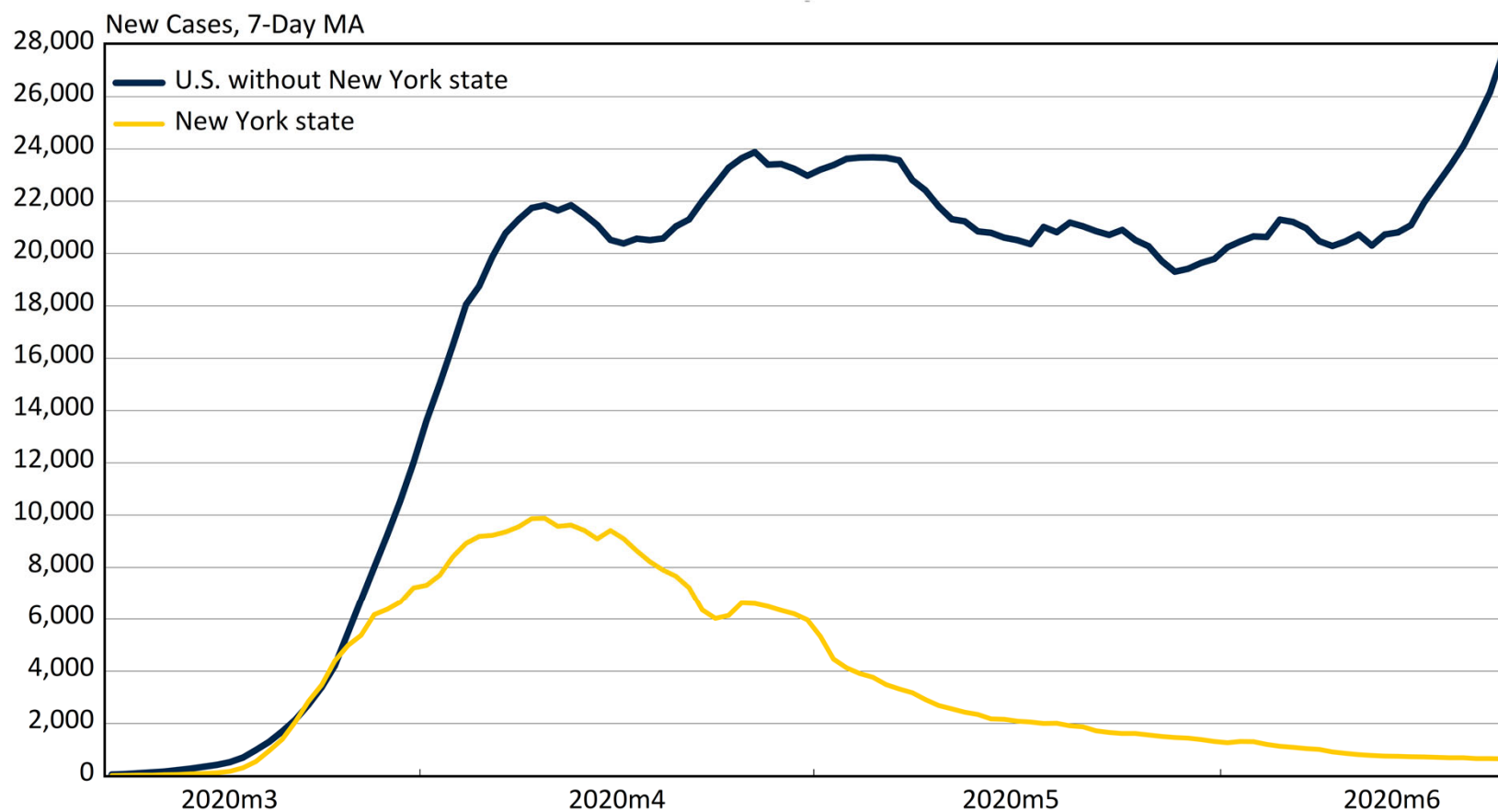
In **the United States**, as of June 17 2020, total spending by all consumers decreased by **8.9%** compared to January 2020.



*Change in average consumer credit and debit card spending, indexed to January 4-31 2020 and seasonally adjusted.
This series is based on data from Affinity Solutions.

RSQE: June 2020

7-Day Moving Average of Daily New Cases of COVID-19 (U.S.)



Source: New York Times

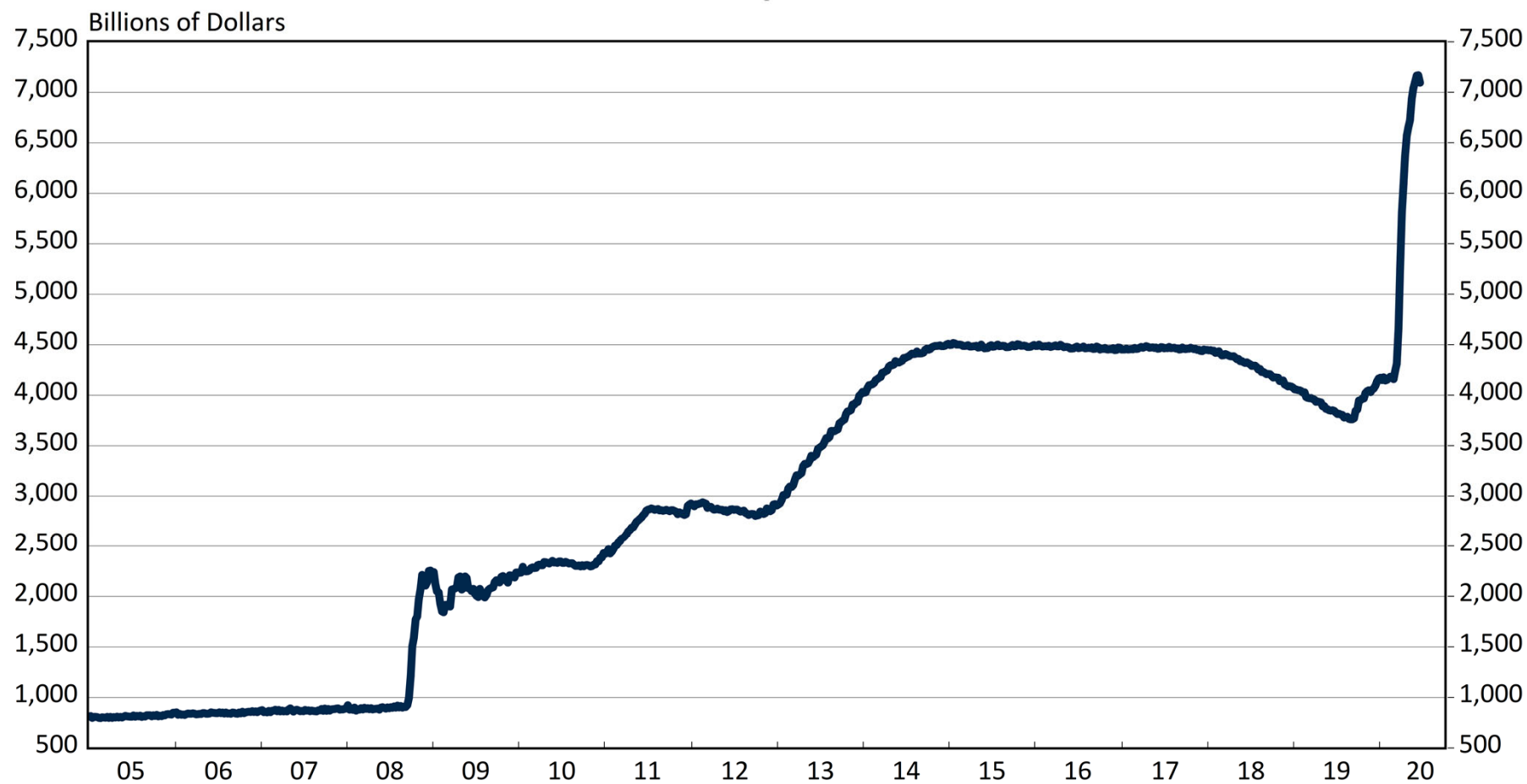
RSQE: June 2020

U.S. Economic Outlook

Epidemiological and Public Health Policy Assumptions

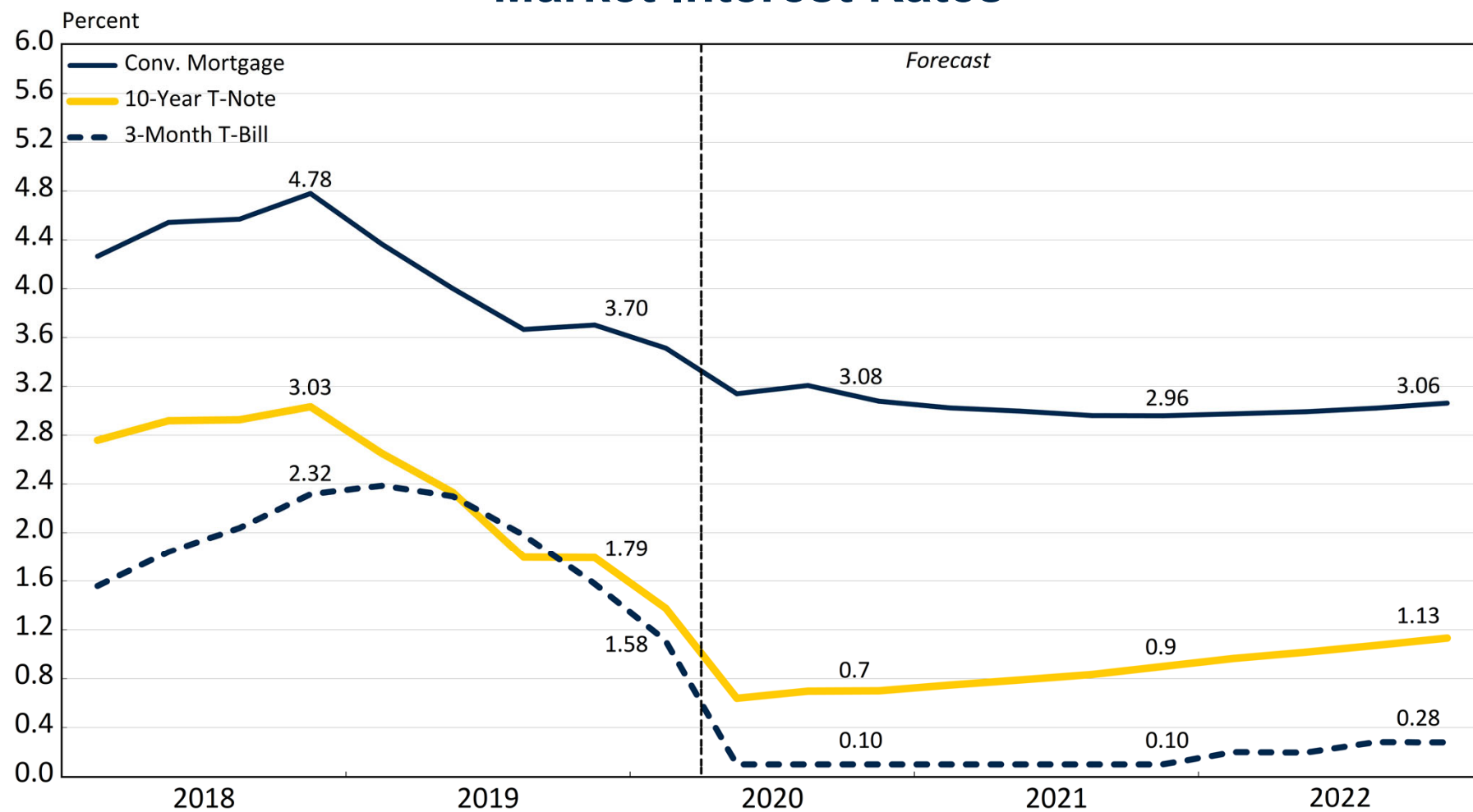
- Assumptions, not recommendations!
- Around 80% of deaths are among those over 65
 - A shift in strategy likely in favor of helping the vulnerable isolate
 - Ease restrictions on businesses gradually, with new safety protocols and capacity constraints in place
- We expect/hope no largescale rebound in cases or “second wave”
- Service industries with the highest perceived risk of infection won’t rebound until customers feel safe
 - Sit-in restaurants, air travel, public transportation, concerts, sporting events, etc.
 - We project these industries to return to ‘business as usual’ by mid-2021
- We are cautiously optimistic about K-12 schools reopening in-person this fall/winter (with precautions)
 - Otherwise, there is likely to be large-scale absenteeism from work
 - Children’s susceptibility to severe illness from COVID-19 appears much lower than adults’
 - Children appear unlikely to be super-spreaders of COVID-19

Federal Reserve Balance Sheet



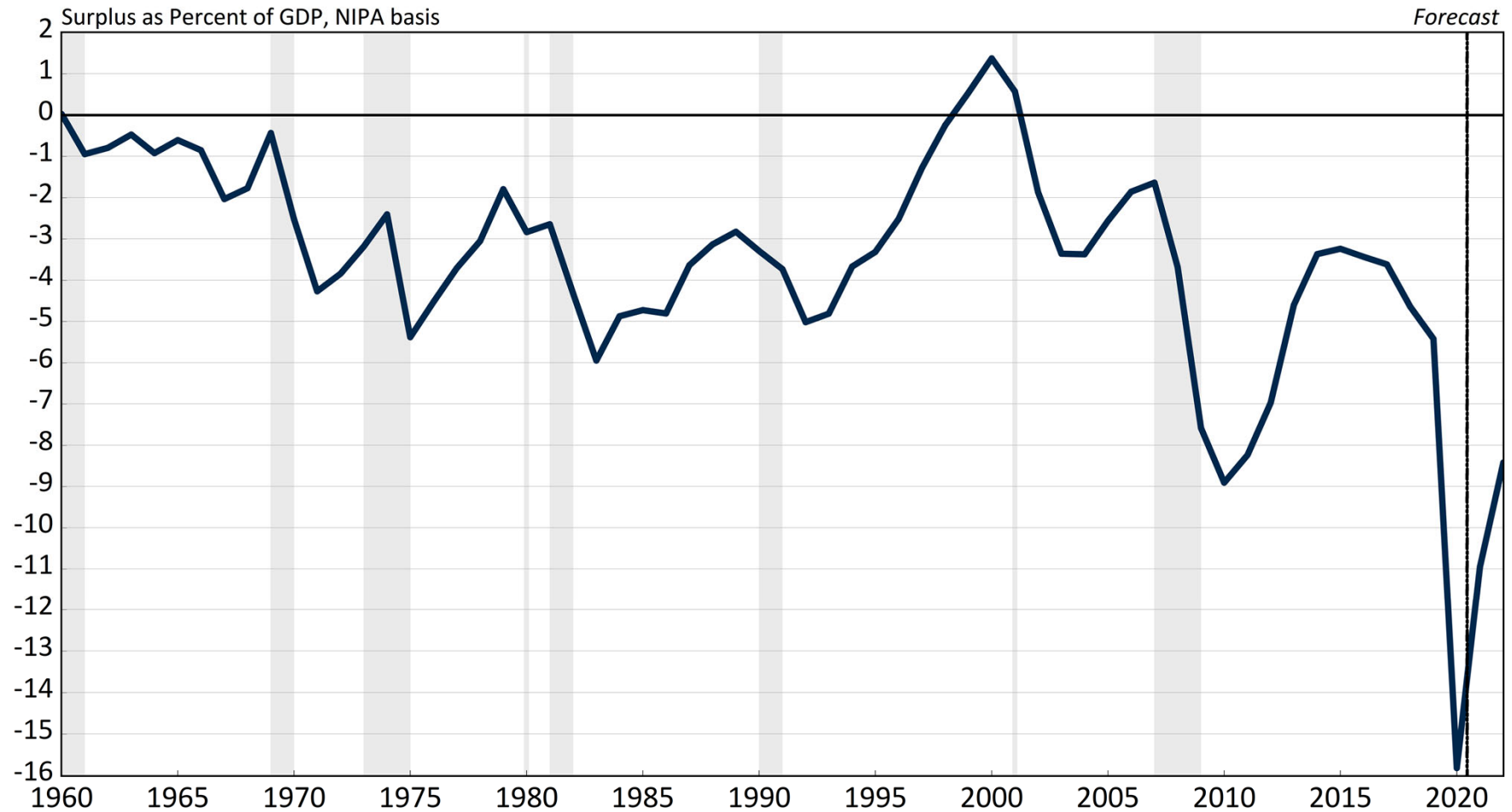
RSQE: June 2020

Market Interest Rates



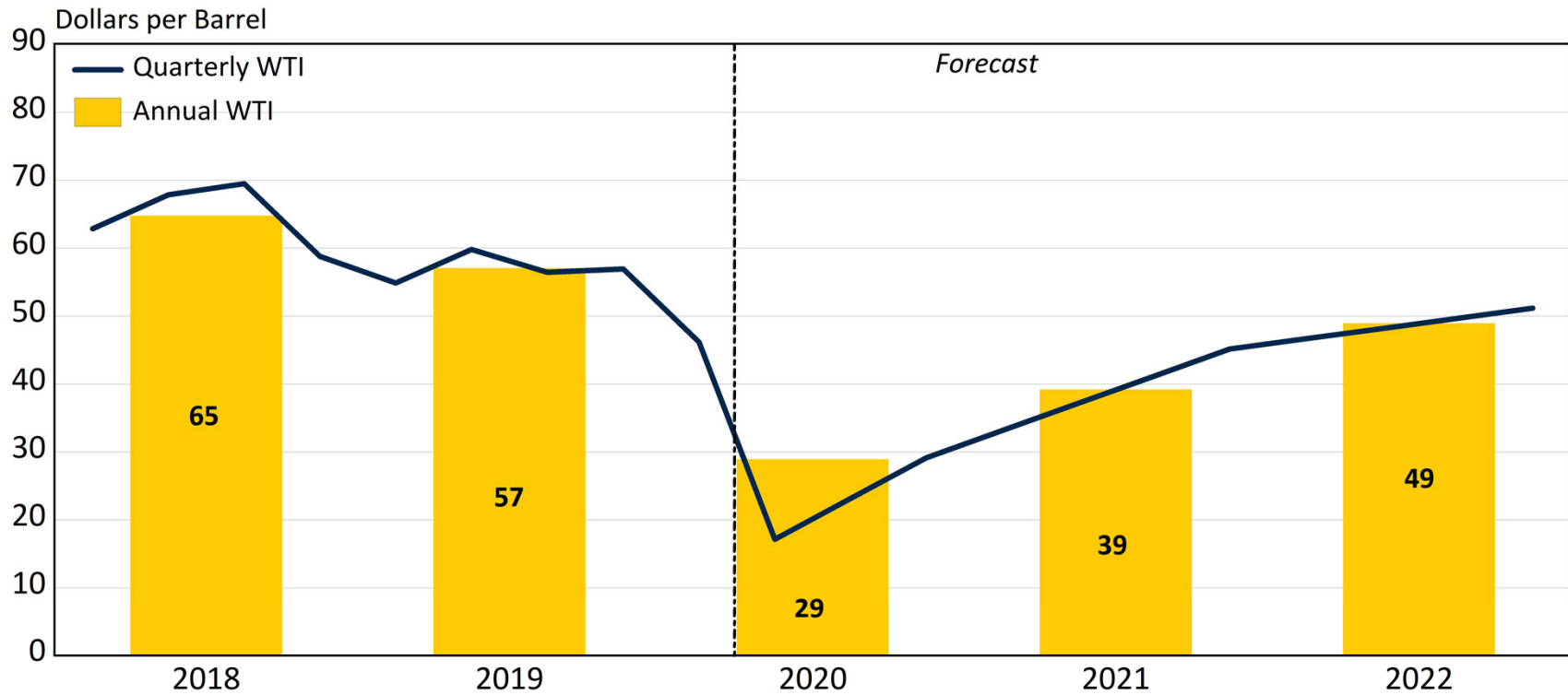
RSQE: June 2020

Federal Budget Balance



RSQE: June 2020

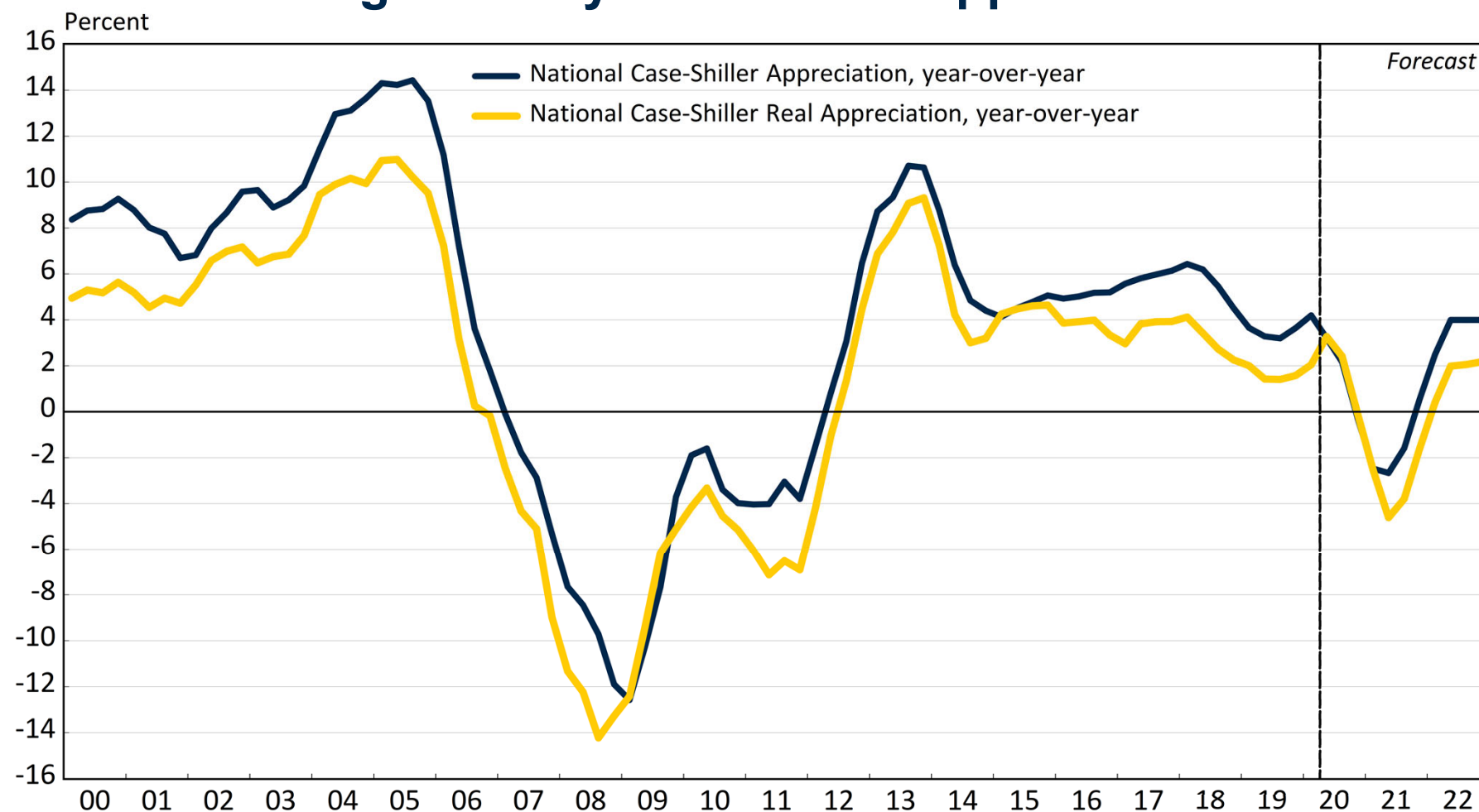
Oil Prices (West Texas Intermediate Crude)



		4th Quarter to 4th Quarter % Change			
WTI	6.2	-3.1	-48.8	54.8	13.3
Imports*	14.6	-7.4	-48.0	52.3	13.1

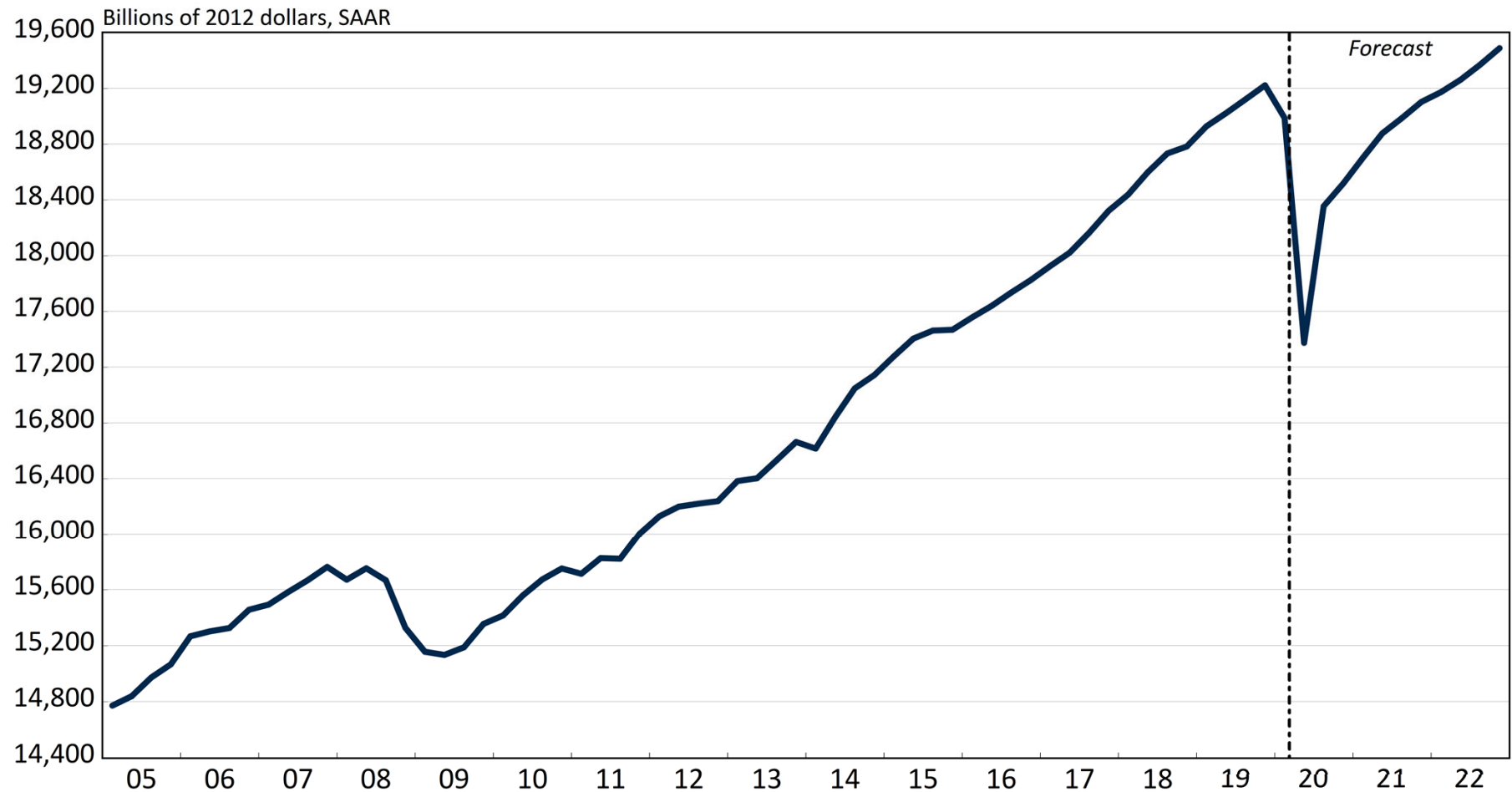
*Implicit deflator for petroleum & products

Single-Family Home Price Appreciation



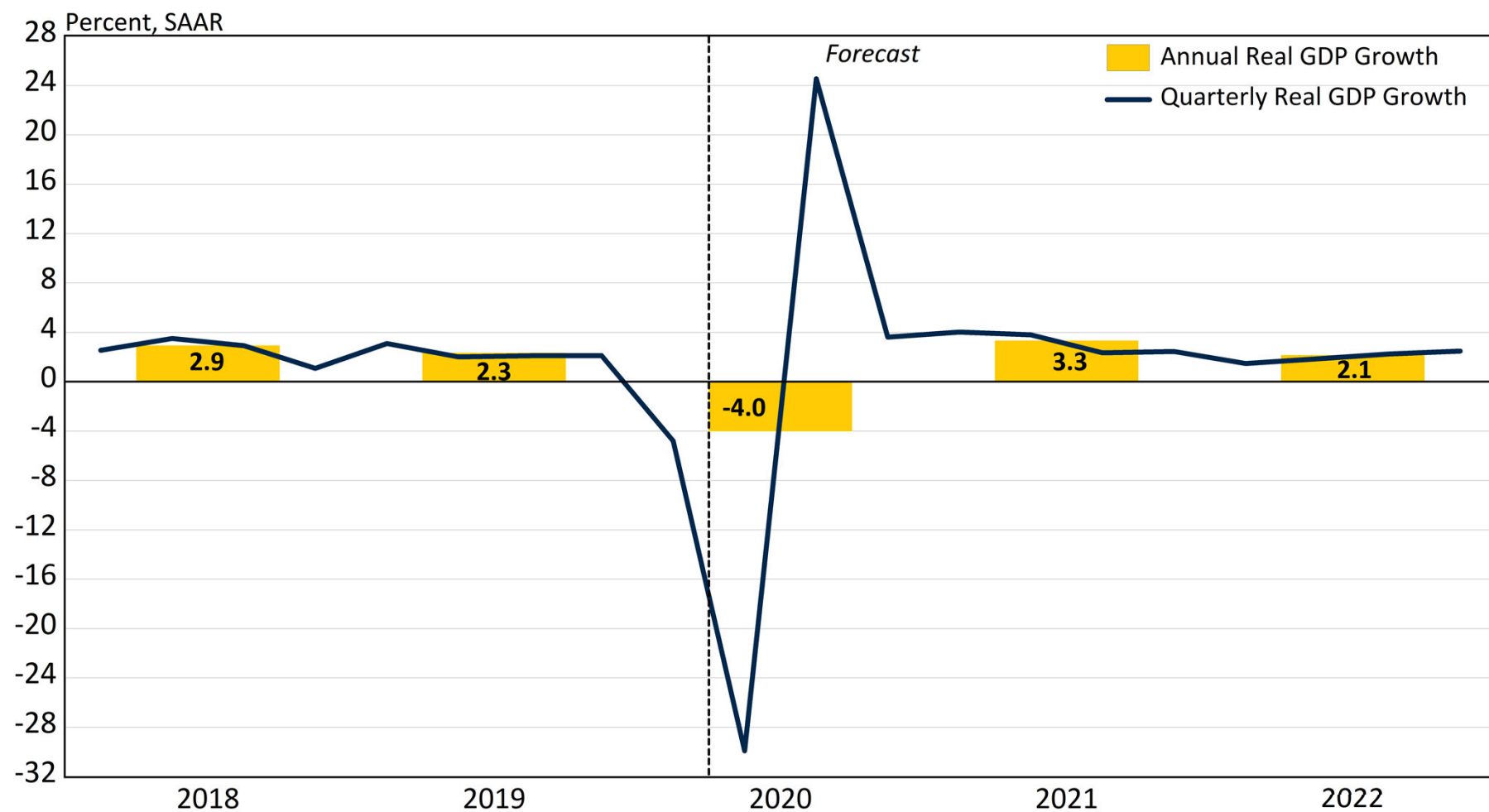
RSQE: June 2020

Quarterly U.S. Real GDP



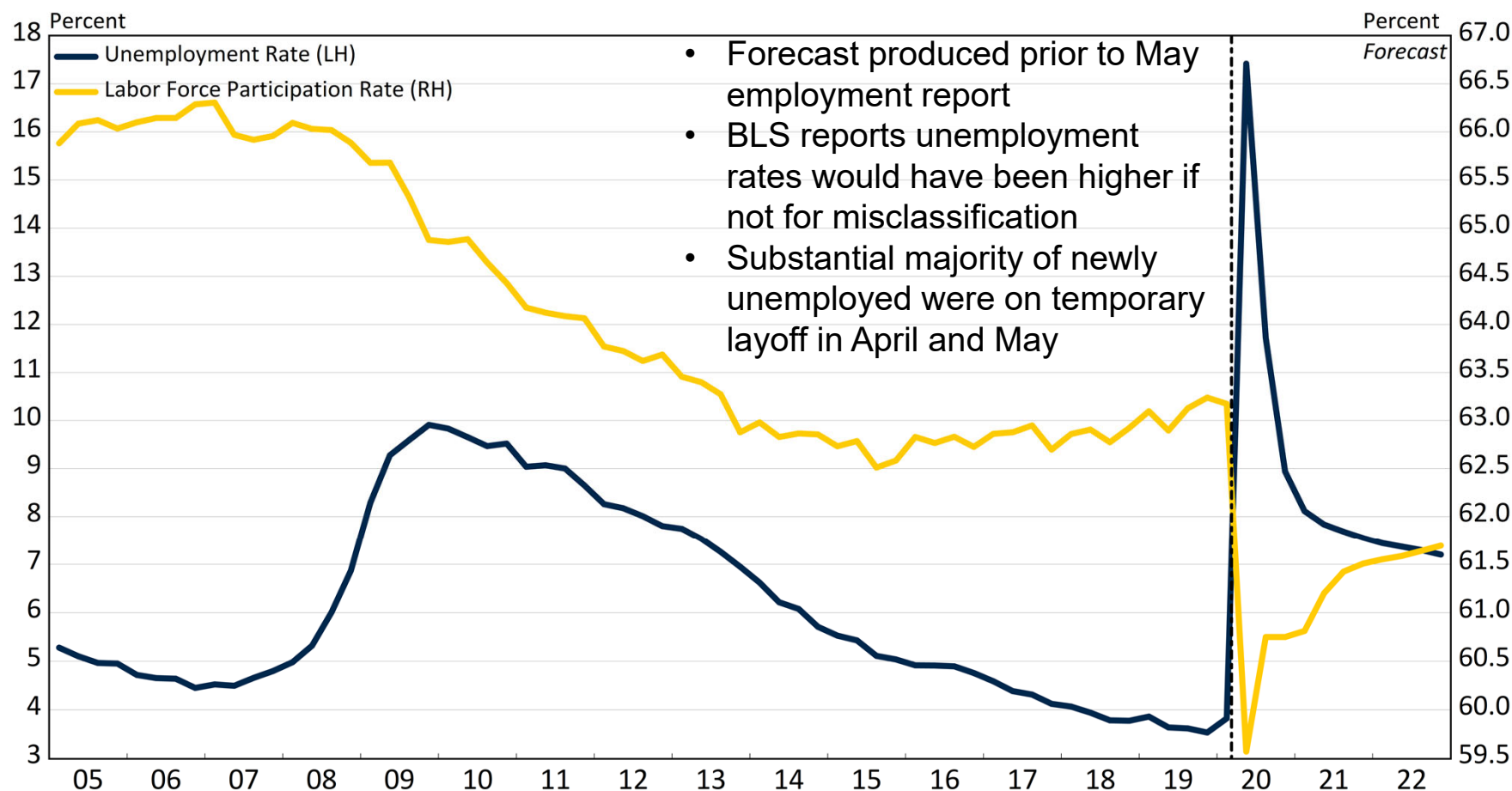
RSQE: June 2020

Real GDP Growth

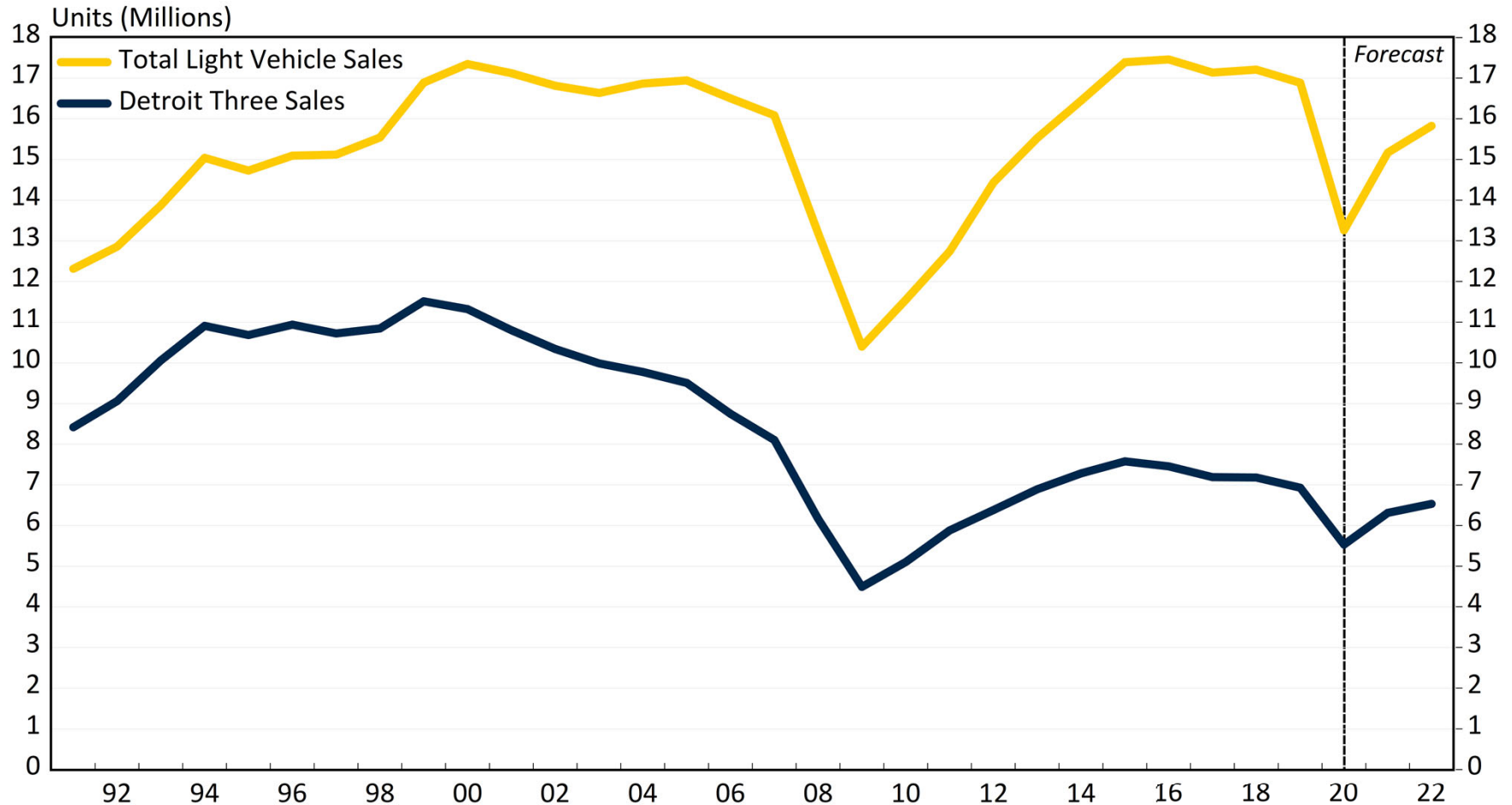


RSQE: June 2020

Quarterly U.S. Unemployment Rate and Labor Force Participation Rate

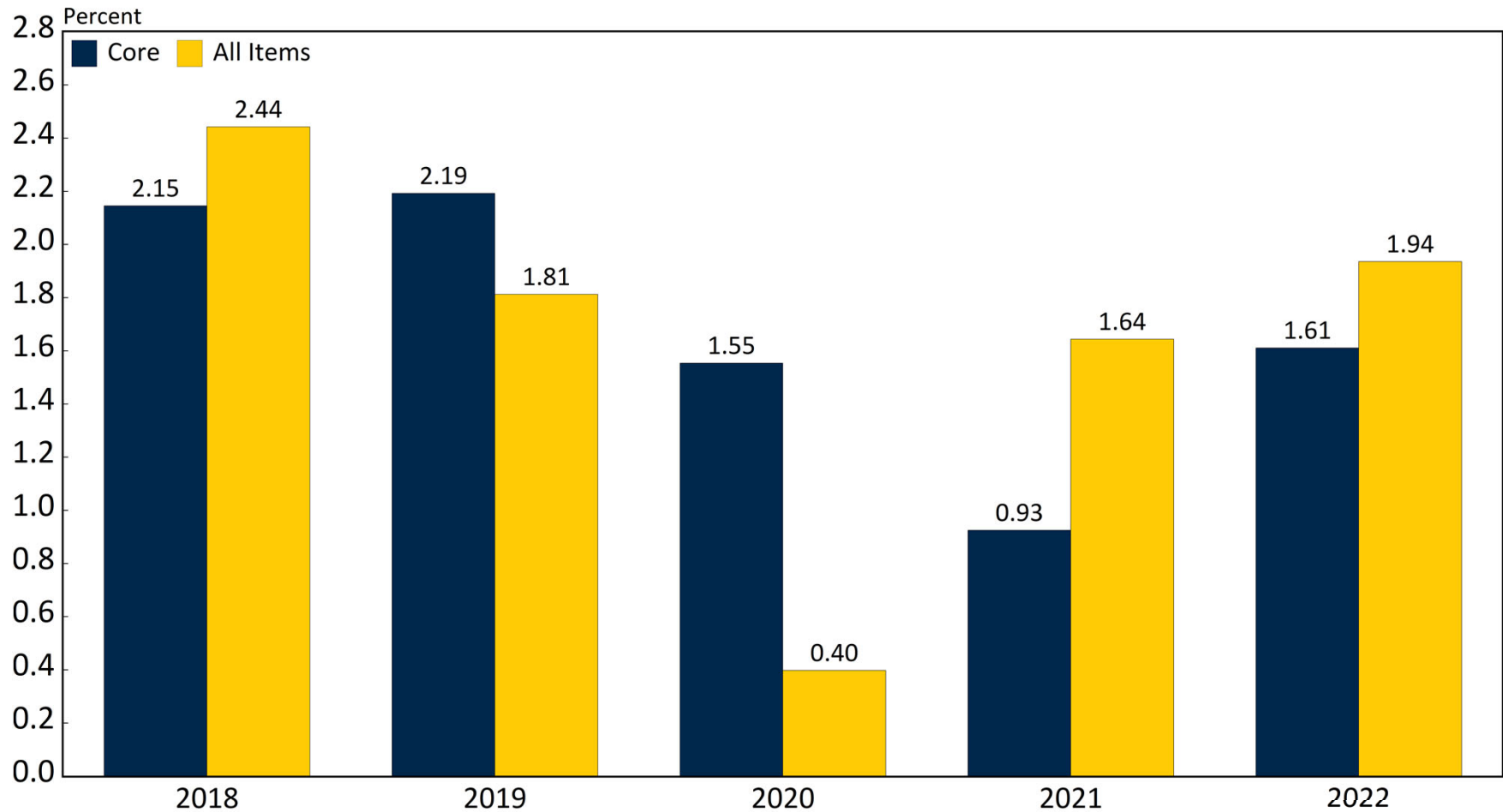


Annual Light Vehicle Sales, 1991–2022



RSQE: June 2020

Consumer Price Inflation (CPI-U)





lsa.umich.edu/econ/rsqe