



# Exploring California's Economic Outlook & Trends for 2022

CSFMO 2022 Annual Conference  
February 17, 2022

*A Partnership that matters*



# Your Presenters

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Vice President –  
Government Relations  
*Avenu Insights & Analytics*



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Economist  
*UCLA Anderson Forecast*

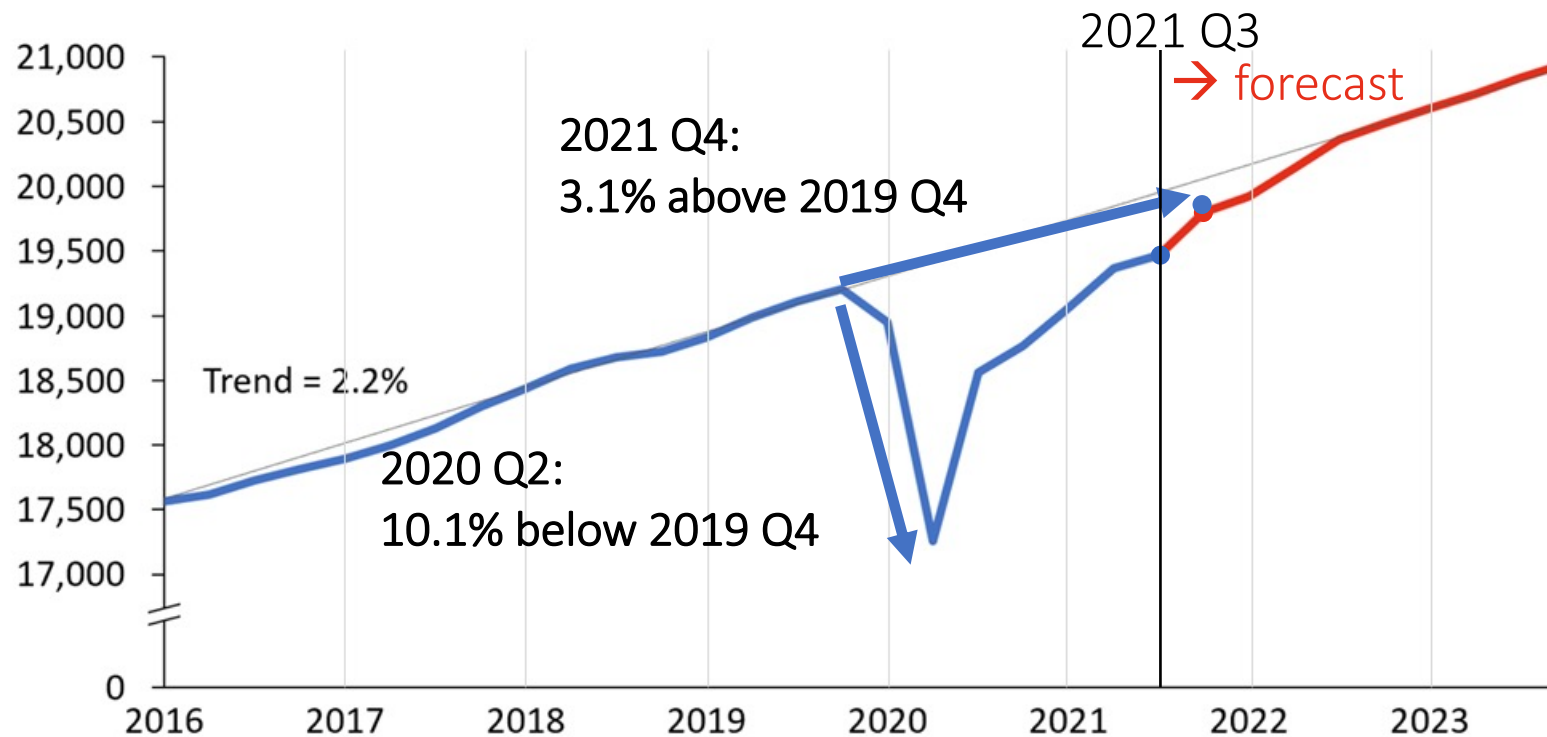


# Overview

- UCLA Anderson/ Avenu Partnership
- The U.S. economy and forecast (brief)
- The California economy
  - Labor markets
  - Real estate
  - Income and spending
- Economic forecast for California

# U.S. real GDP is back above pre-pandemic levels

**Real GDP Levels, Annual Rates, Billions of Chained 2012\$**



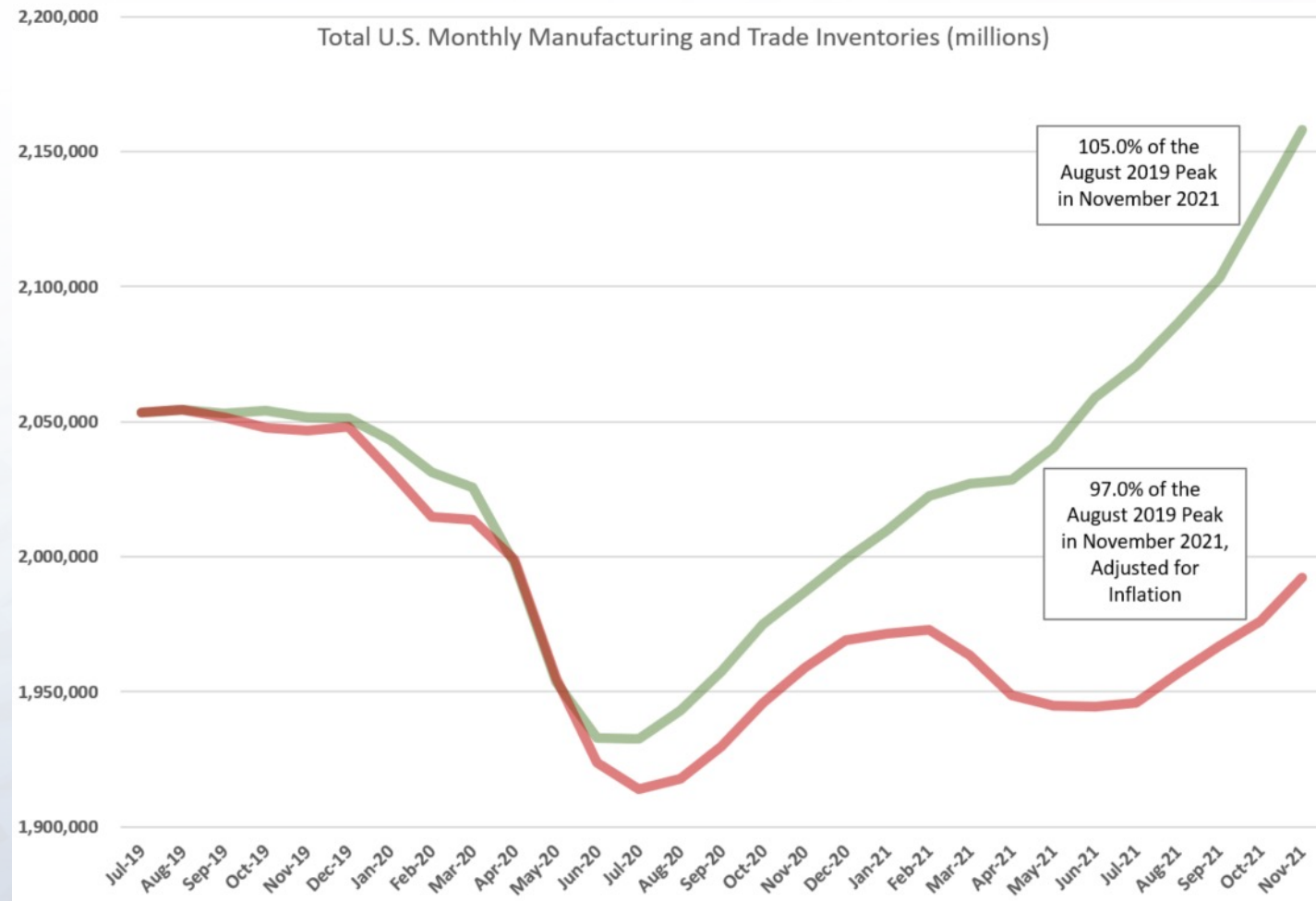
Source: U.S. Bureau of Economic Analysis and UCLA Anderson Forecast

Possible changes to the forecast:

- Dec. 2021 vintage, before omicron - (2021 Q4 came in just above our forecast)
- Delay recovery in services consumption, return to work, tourism
- Depends on how consumers and government react to variants, duration of disruptions



# Do U.S. Manufacturing and Trade Inventories reflect the pattern of Real G.D.P?



Source: U.S. Bureau of Labor Statistics

# What exactly is inflation?

- It is the drop in the purchasing power
- It manifests itself as a rise in all prices and wages—not just some subset of prices.
- The U.S. Federal Reserve uses monetary tools to control inflation.
- Monetary tools include the fed funds rate, open market operations, the discount rate and the management of people's inflation expectations.
- Monetary Inflation does not significantly impact growth rates in Sales Tax Revenue because it affects both prices and wages, as well as income and expenditures equally.

## Sources:

Rising Relative Prices or Inflation: Why Knowing the Difference Matters

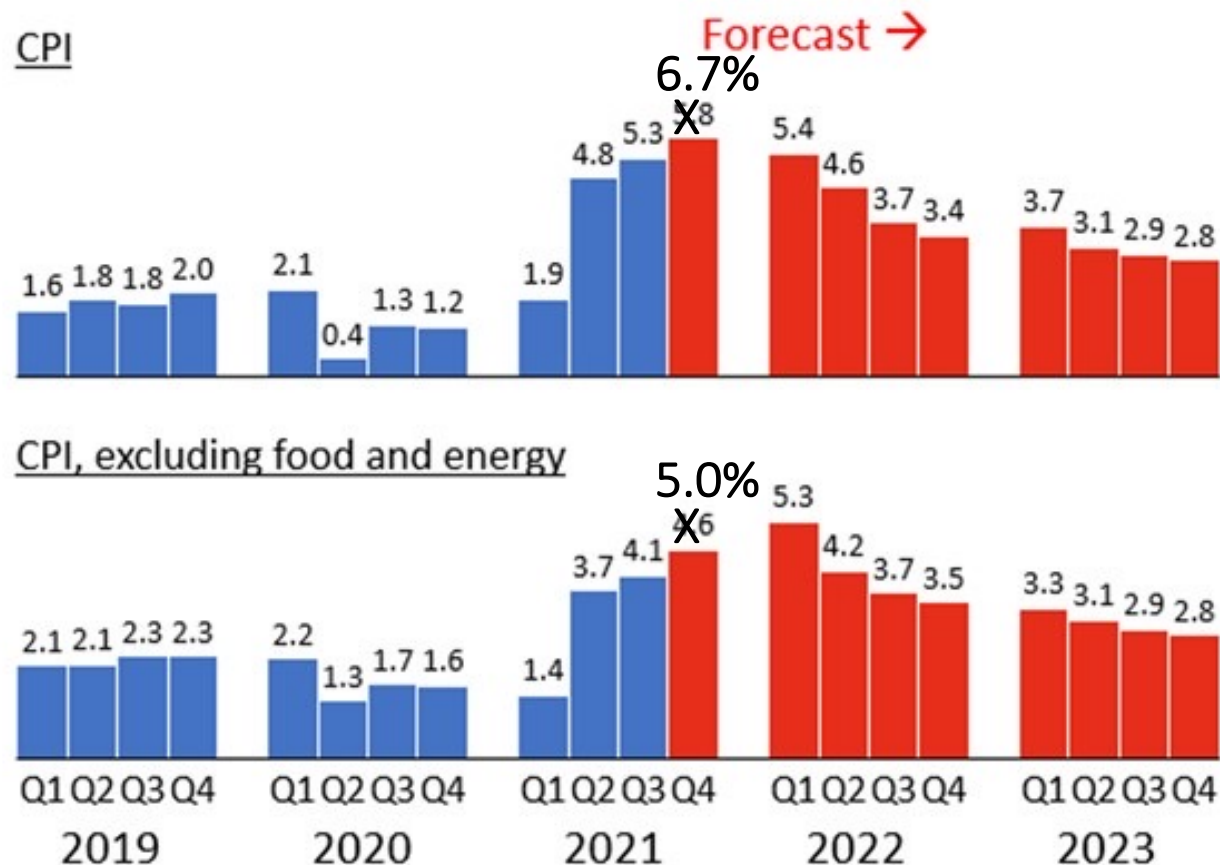
<https://www.clevelandfed.org>

How the Federal Reserve Controls Inflation

<https://www.thebalance.com/what-is-being-done-to-control-inflation-3306095>

# Inflation remains elevated

## CPI Year-Over-Year Inflation



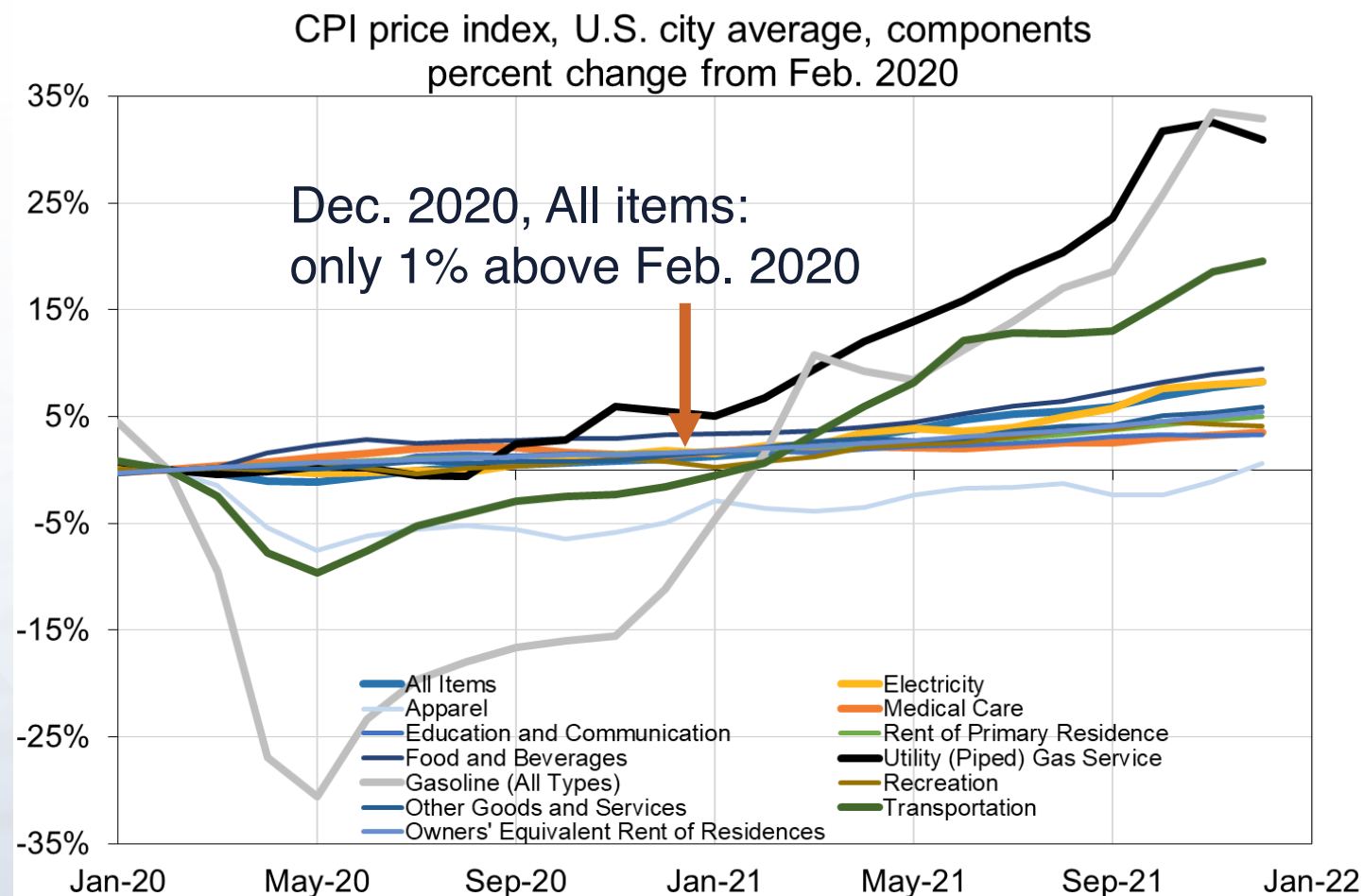
Source: U.S. Bureau of Labor Statistics

Possible changes to the forecast:

- Dec. 2021 vintage, before omicron
- Undershoot in 2021 Q4
- Potential inflationary pressures: labor costs, housing, high demand and constrained supply, variants and zero-tolerance trading partners, continued demand for goods vs services
- Potential deflationary pressures: oil prices already high, home price increases slowing, production ramping up in auto manufacturing



# CPI inflation components



Source: U.S. Bureau of Labor Statistics.

Source: U.S. Bureau of Labor Statistics

# How do Relative Price Changes impact Taxable Sales?

## Example: Gasoline Prices in Palm Desert

### Average Price Per Gallon of Gasoline in CA

3/30/2017	\$3.00	
12/18/2018	\$3.75	25% increase in price

### Benchmark Year Gross Sales Tax Revenue

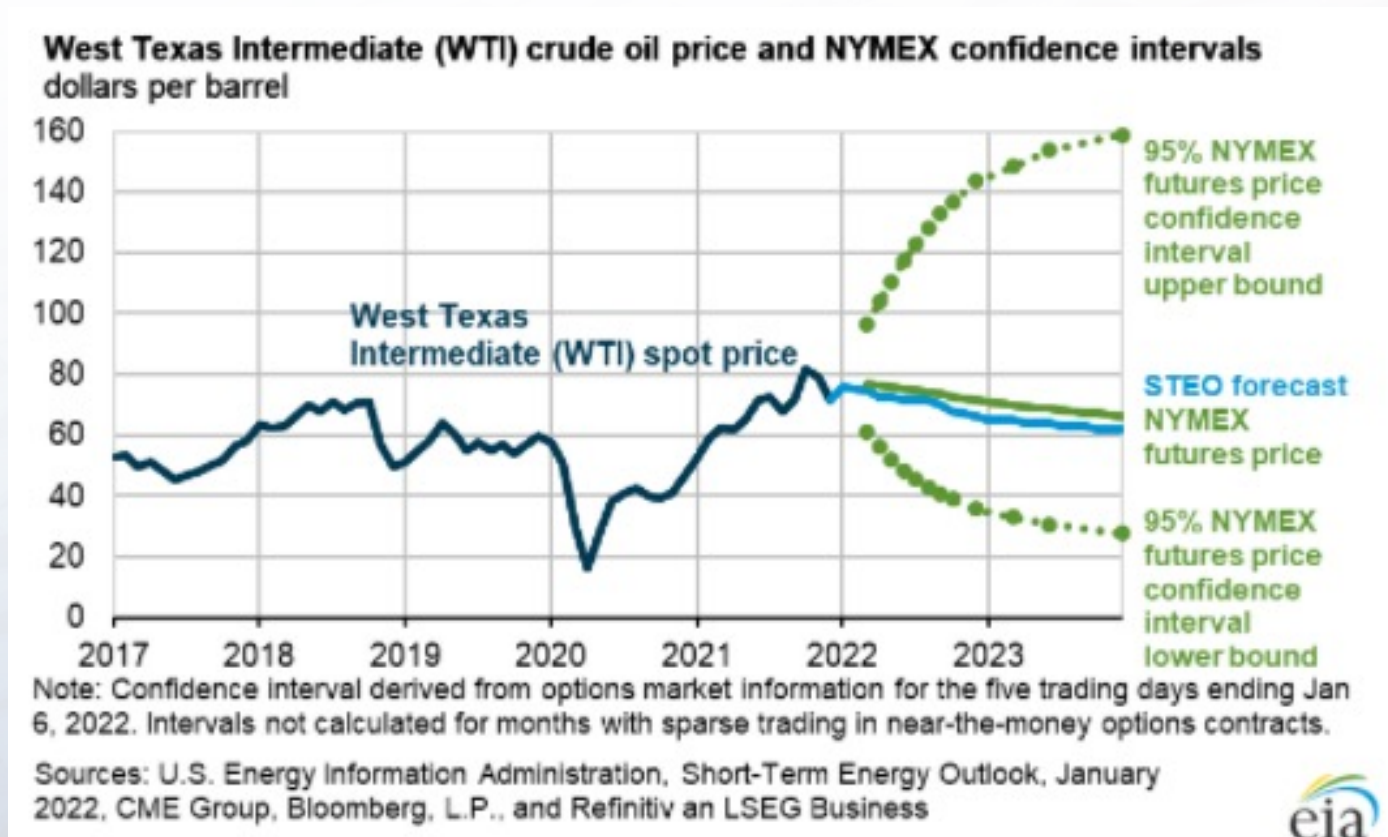
SERVICE STATIONS	2017Q1	\$501,539	
SERVICE STATIONS	2018Q4	\$738,029	+47% or roughly 23% per year
TOTAL GROSS TAX	2017Q1	\$16,569,185	
TOTAL GROSS TAX	2018Q4	\$17,778,792	+7% or roughly 3.5% per year

- Analysis of the prices of taxable goods must be made under “the umbrella of income”.
- Gasoline prices increased along with demand, (Vehicle Miles Travelled), but income did not increase as rapidly. Consumers, businesses, organizations and governments spent less on other taxable purchases.
- Many Relative Price Increases in recent years in CA have been in Housing and Healthcare. This has created a counterintuitive downward pressure on the disposable income remaining for taxable purchases.

Source:

# How do Oil prices indirectly impact Taxable Sales?

- Most sales tax is levied against tangible personal property that must be shipped by some combination of ships, planes, trains and vehicles. Shipping costs are often embedded in the prices that consumers pay.
- Oil Prices are expected to decline in 2022 and 2023.





# Statewide taxable sales are already back to pre-pandemic trend

If stable average growth had been maintained							
Fiscal Year	14 - 15	15 - 16	16 - 17	17 - 18	18 - 19	19 - 20	20 - 21
<b>Projected</b>	\$633.4	\$658.7	\$685.1	\$712.5	\$741.0	\$770.6	\$801.5
Change	4.3%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%

Actual Taxable Sales - Cash Basis							
Fiscal Year	14 - 15	15 - 16	16 - 17	17 - 18	18 - 19	19 - 20	20 - 21
<b>Actual</b>	\$633.4	\$650.0	\$668.3	\$661.5	\$767.9	\$715.2	\$805.6
Change	4.3%	2.6%	2.8%	-1.0%	16.1%	-6.9%	12.6%
Transition from SBoE to CDTF: delays early 2018				Average = 7.5%			
Payments accelerated by 1 month 2018				Average = 6.9%			

# Not all Economic Segments have recovered equally.

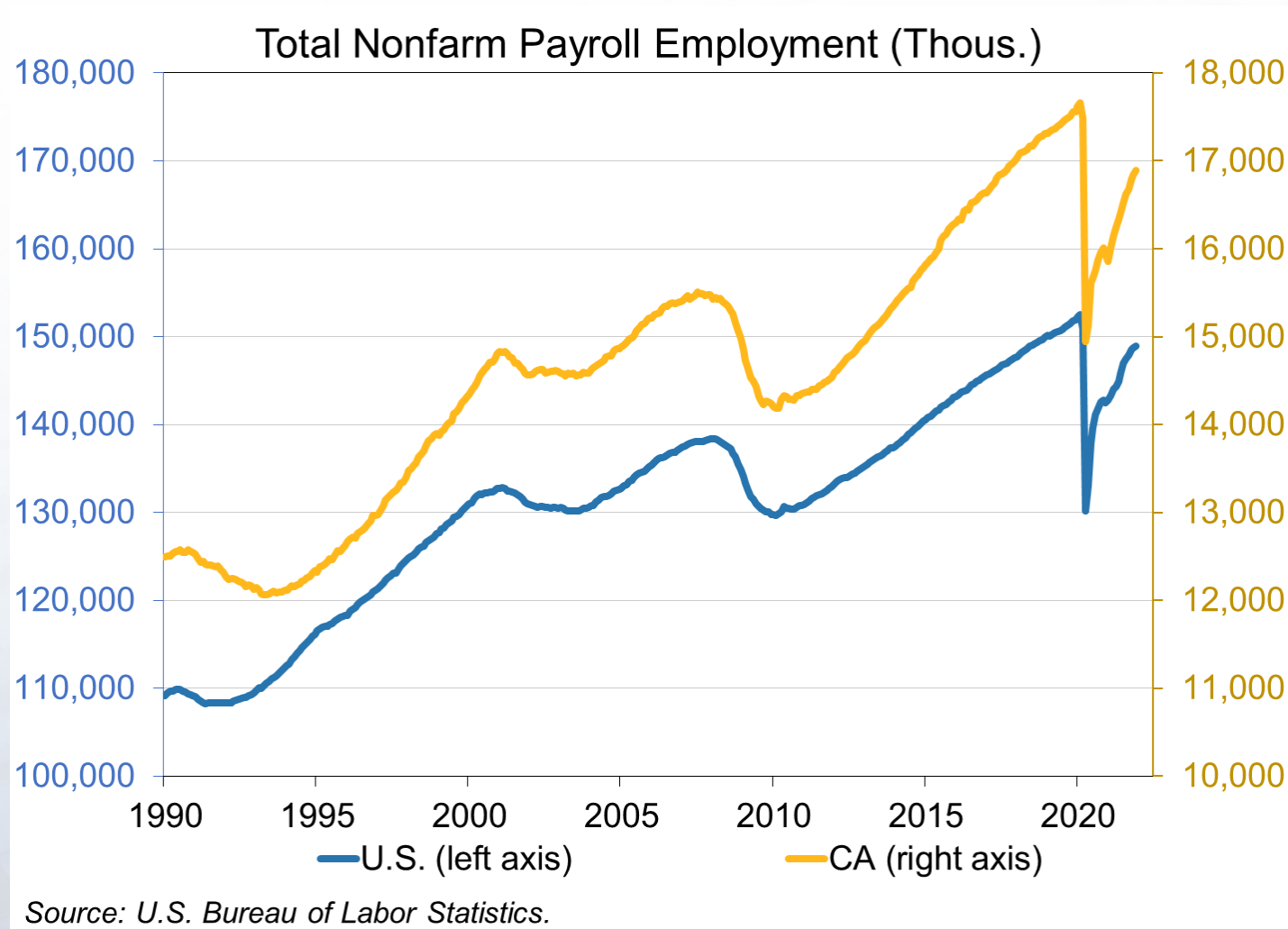
Dominated by  
E-Commerce

ECONOMIC SEGMENT	FY 18-19 (PRE-COVID)	FY 18-19 % of Total	5 Yr Avg Annual Growth	BMY 2021Q3 Projected Avg Growth	Actual BMY 2021Q3	% Recovered to Trend
COUNTY POOLS	933,114,462	16.4%	9.6%	1,147,772,950	1,363,749,919	118.8%
RESTAURANTS	745,391,568	13.1%	5.9%	848,272,632	599,424,017	70.7%
AUTO SALES - NEW	518,195,882	9.1%	4.6%	573,486,520	577,263,365	100.7%
DEPARTMENT STORES	402,861,472	7.1%	0.3%	405,586,228	399,451,721	98.5%
SERVICE STATIONS	352,504,931	6.2%	-2.0%	336,853,007	289,806,196	86.0%
MISCELLANEOUS RETAIL	333,375,524	5.9%	3.4%	359,460,101	410,087,772	114.1%
BLDG.MATLS-WHSLE	262,005,315	4.6%	7.4%	307,807,854	285,965,098	92.9%
APPAREL STORES	242,602,775	4.3%	1.8%	252,546,446	214,841,589	85.1%
FOOD MARKETS	210,349,891	3.7%	2.3%	221,403,051	219,000,254	98.9%
BLDG.MATLS-RETAIL	183,324,862	3.2%	2.9%	195,519,191	213,492,882	109.2%
FURNITURE/APPLIANCE	167,404,666	2.9%	2.7%	177,758,380	173,672,937	97.7%
OFFICE EQUIPMENT	159,665,765	2.8%	0.0%	159,665,765	163,613,151	102.5%
LIGHT INDUSTRY	154,144,379	2.7%	2.9%	164,397,692	155,632,385	94.7%
HEAVY INDUSTRY	145,571,710	2.6%	4.4%	160,409,150	148,284,187	92.4%
LEASING	143,603,067	2.5%	9.3%	175,543,920	128,672,357	73.3%
AUTO PARTS/REPAIR	126,658,918	2.2%	2.6%	134,197,454	130,145,374	97.0%
AUTO SALES - USED	74,206,661	1.3%	6.3%	85,171,884	84,080,590	98.7%
ALL OTHER	522,862,142	9.4%	4.1%	572,423,581	548,882,367	95.9%
<b>TOTAL</b>	<b>5,677,843,988</b>	<b>100.0%</b>	<b>4.0%</b>	<b>6,278,275,803</b>	<b>6,106,066,160</b>	<b>97.3%</b>

Data covers  
86% of  
California by  
population.

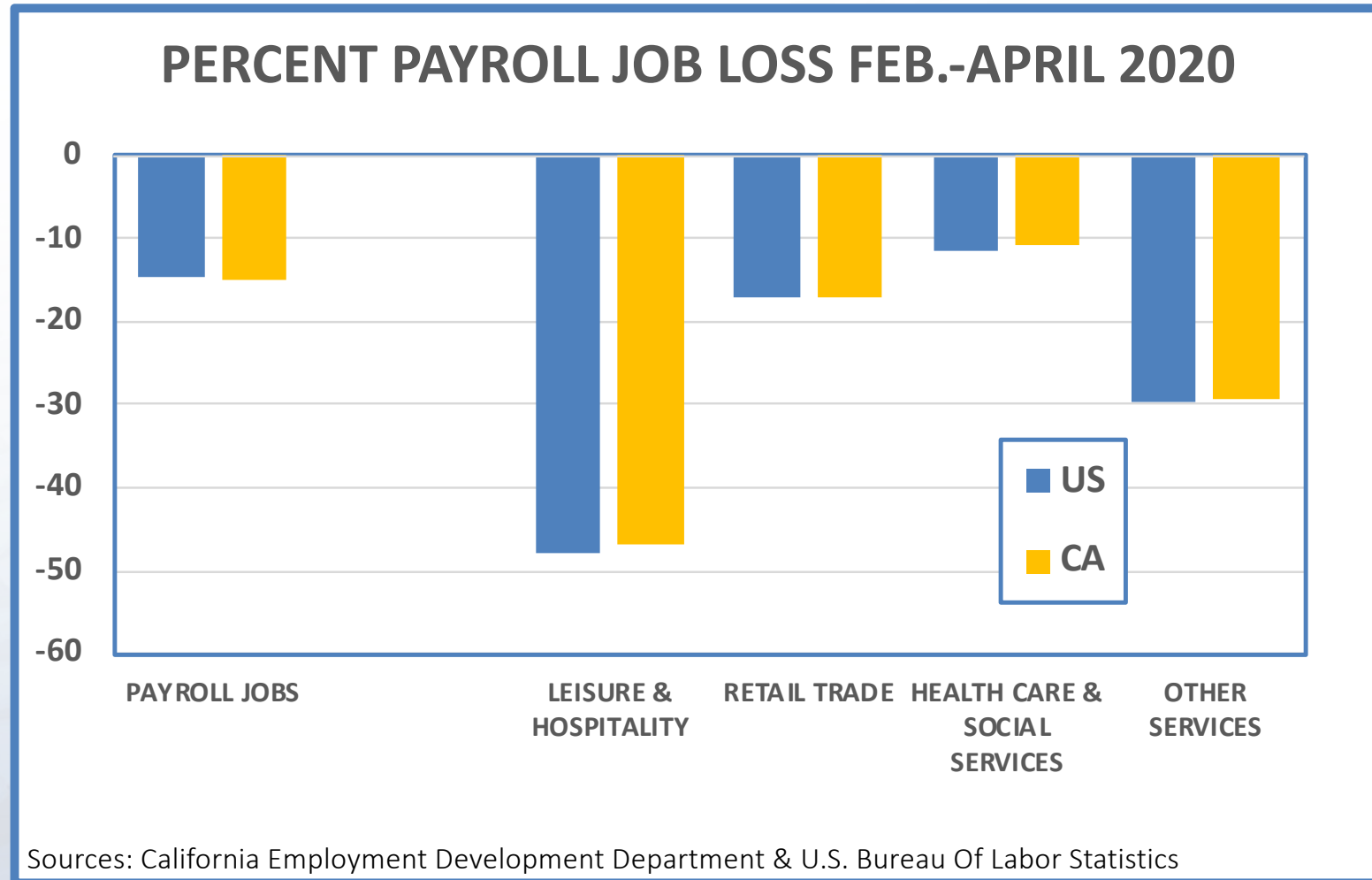
Economic-Basis, except County Pools

# California labor markets move with U.S. labor markets

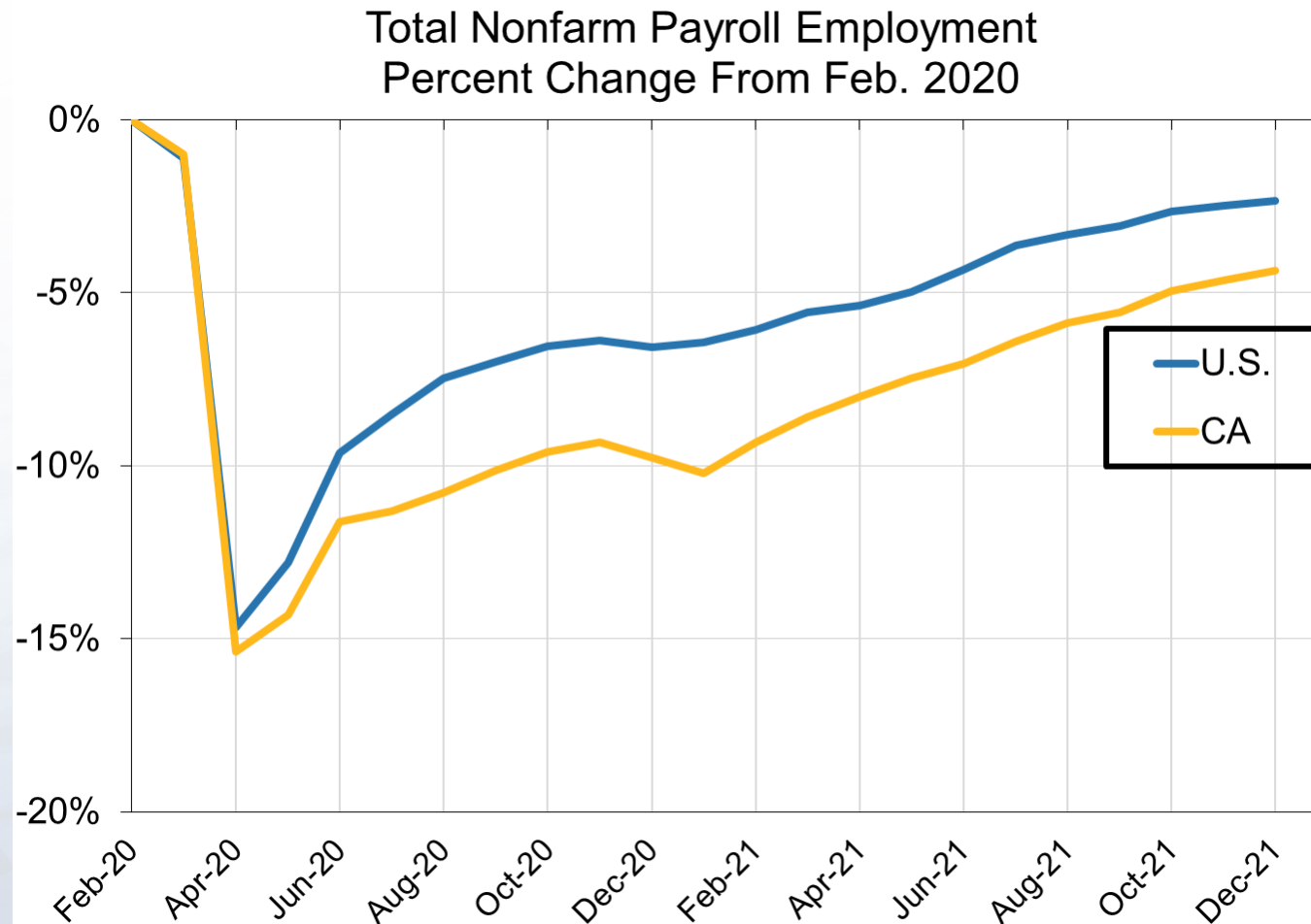




# Similar losses in the 2020 recession ...



# ... but a slower initial recovery



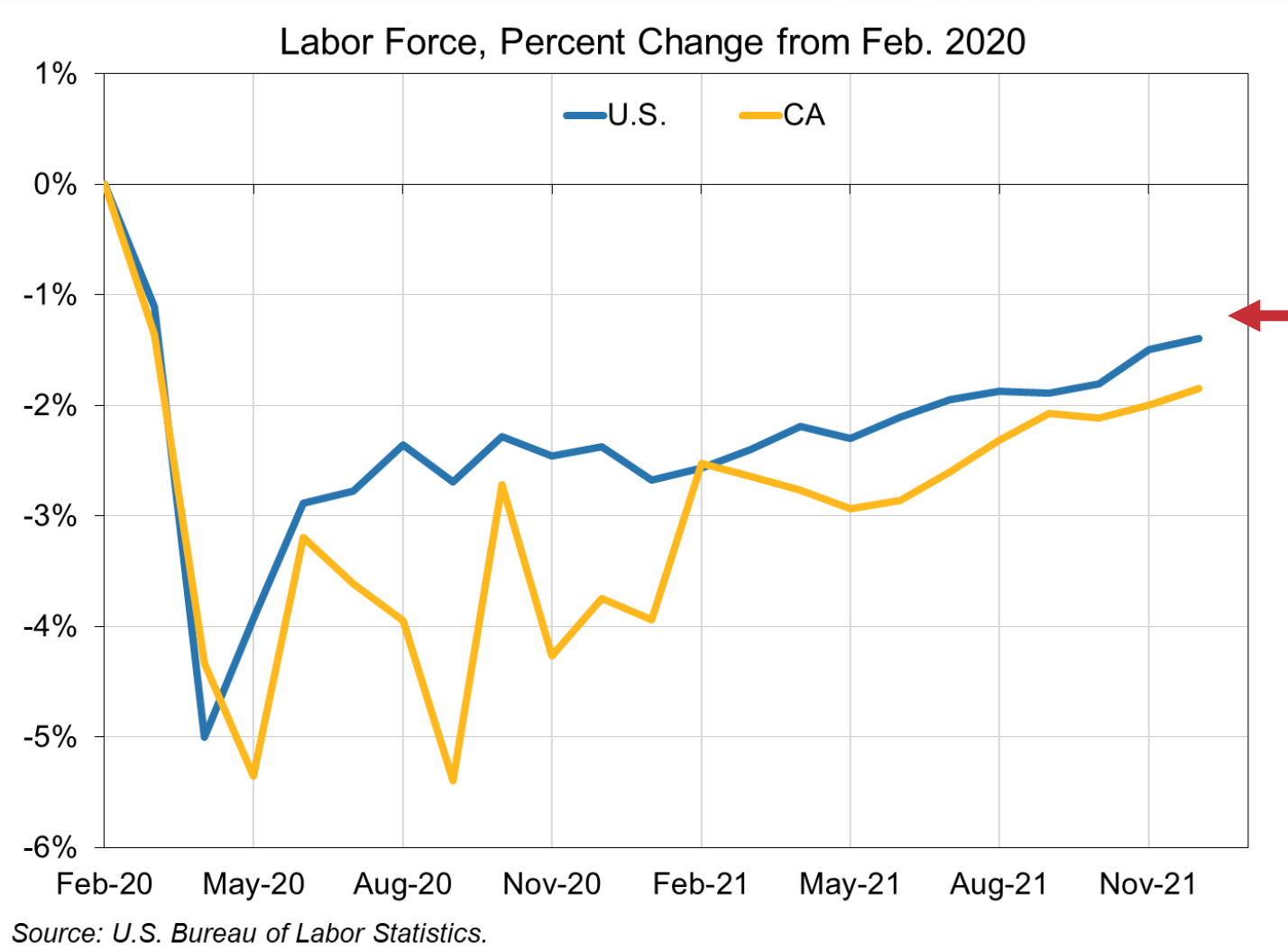
Source: U.S. Bureau of Labor Statistics.

Forecast:

Payroll jobs return  
to Feb. 2020 levels

early 2023 (U.S.)  
Mid/late 2023 (CA)

# Some explanations: 1) smaller labor force



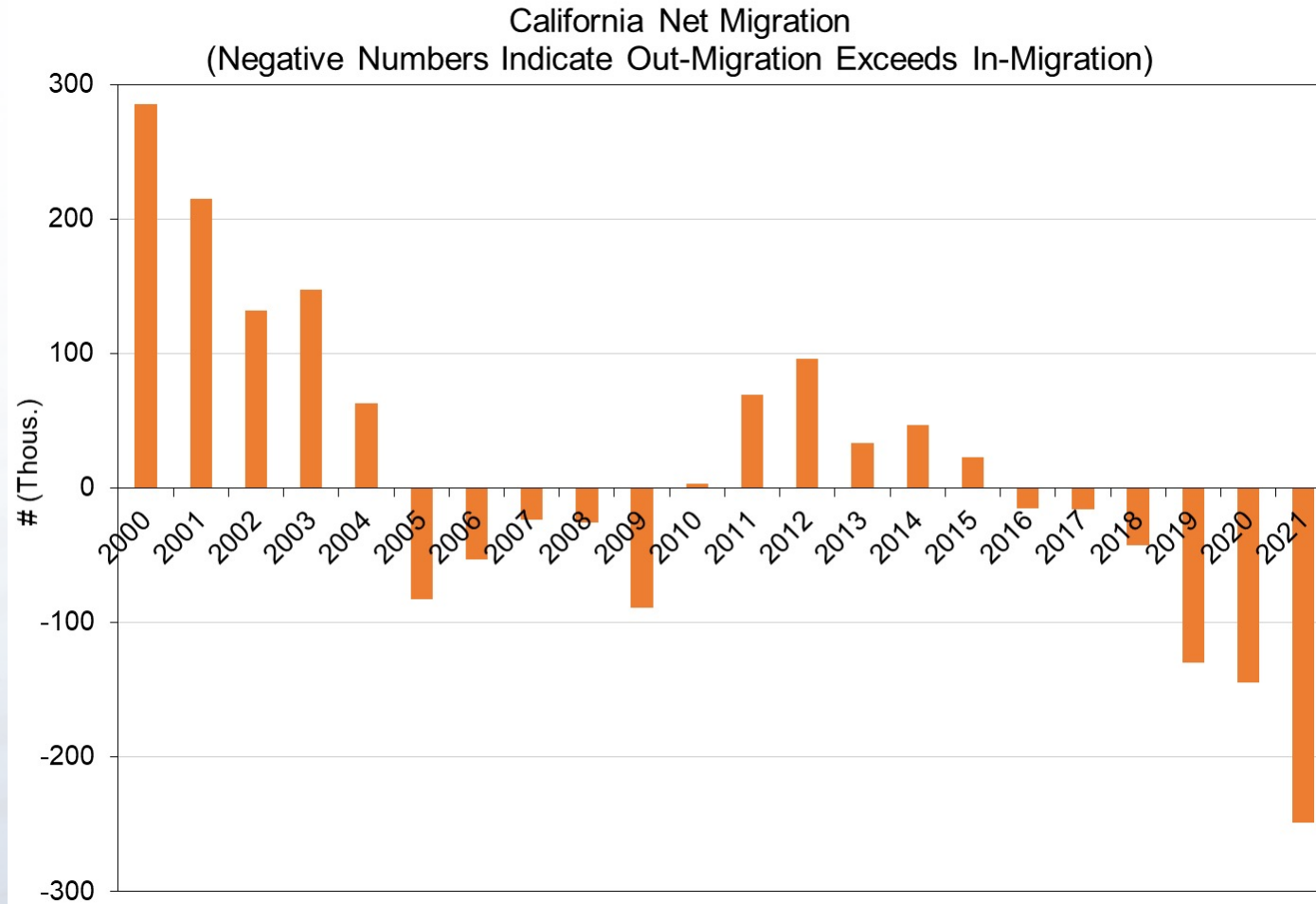
(Feb. 2020 vs Dec. 2021):

U.S.: 2.3 million fewer people in the labor force

CA: 358K fewer people in the labor force

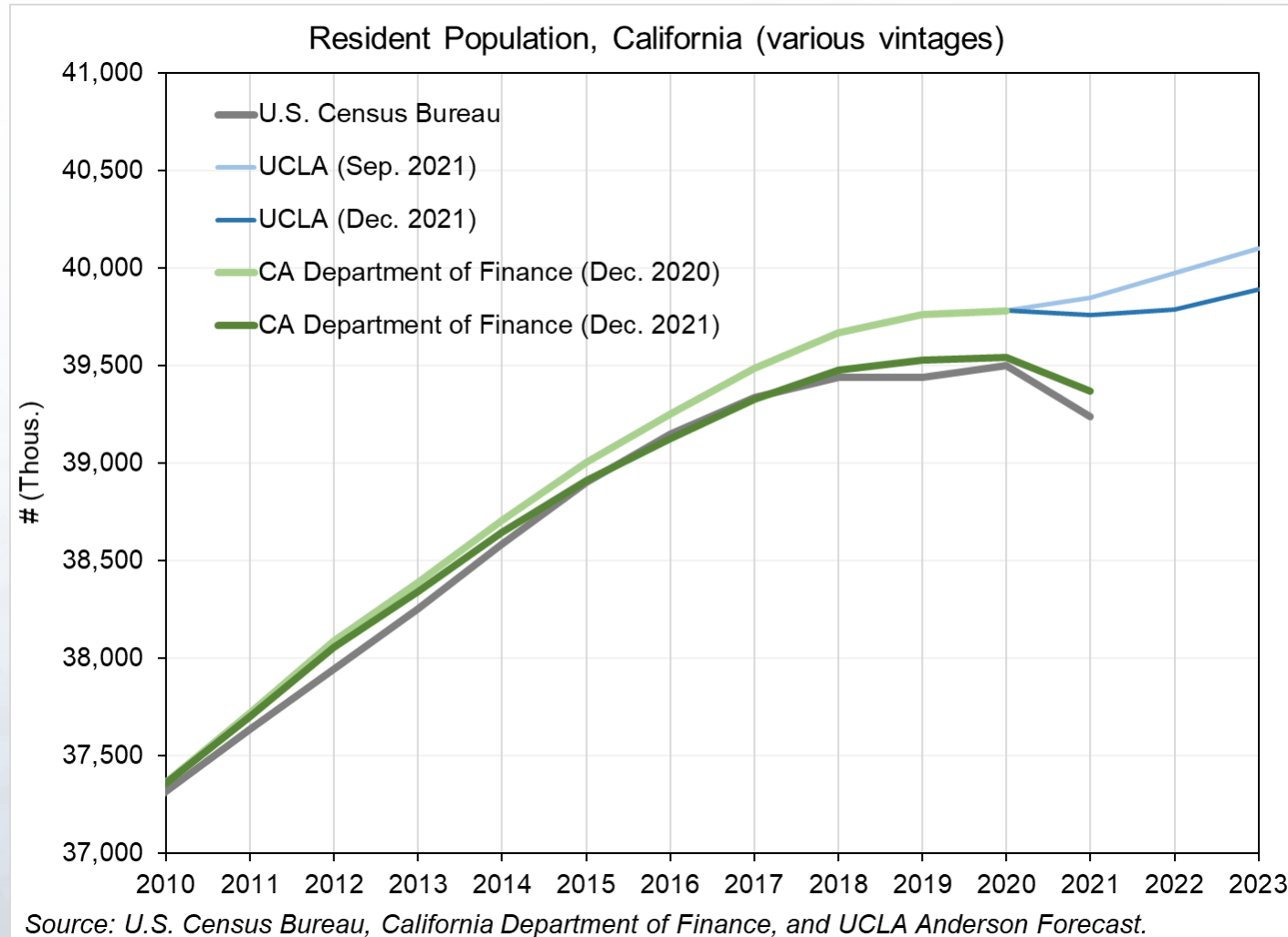


## 2) fewer people

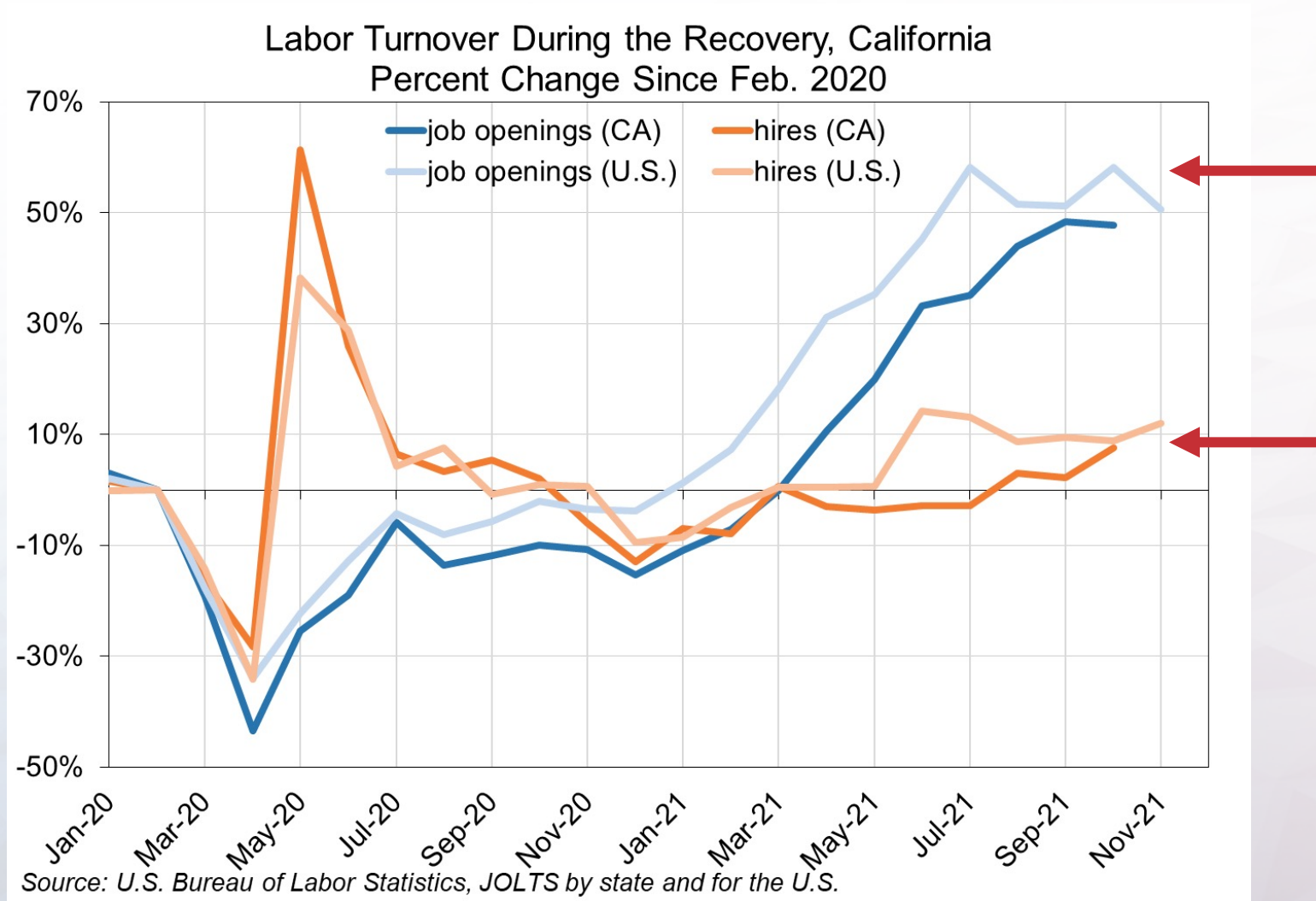


Source: California Department of Finance.

# Changes in population estimates



### 3) supply and demand mismatch





# How does Employment relate to Taxable Sales?

In many large urban jurisdictions, there is a strong correlation between employment and per capita sales tax.  
Correlation Coefficients (-1 to 1):

San Diego	0.938	Very Strong Correlation
Fresno	0.935	Very Strong Correlation
Los Angeles	0.894	Very Strong Correlation
San Francisco	0.757	Strong Correlation
San Jose	0.720	Strong Correlation

In many smaller rural jurisdictions, the correlation between employment and per capita sales tax is very weak.  
Correlation Coefficients (-1 to 1):

Sausalito	-0.027	Very Weak Correlation
Bishop	-0.026	Very Weak Correlation
Rio Vista	-0.018	Very Weak Correlation
Vernon	0.224	Very Weak Correlation
Willits	0.652	Moderate Correlation

Source:

# Key to Sales Tax Growth

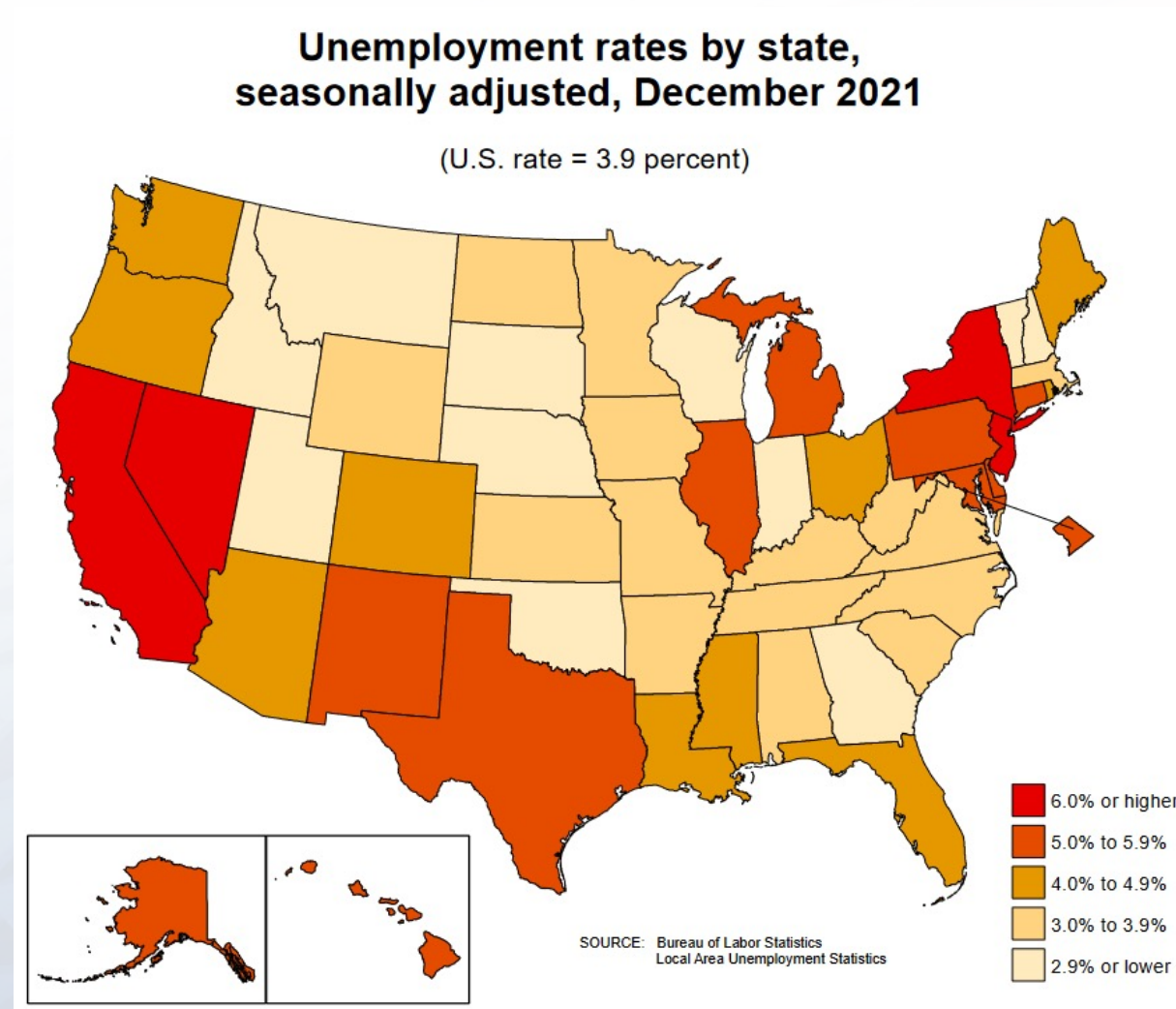
## Example: Roseville

Change in Population	2.3%	2.1%	1.9%	2.4%	2.7%	6.3%	4.5%
Change in Annual Taxable Sales - Cash Basis (Includes Pools)	1.8%	3.4%	1.5%	5.9%	-3.9%	-2.4%	-0.1%
Gap	-0.5%	1.3%	-0.4%	3.5%	-6.6%	-0.5%	1.0%
Correlation Coefficient	-0.475	moderate to weak negative correlation					

	2016	2017	2018	2019	2020	5-Year Average	Pre-Pandemic Avg
Change in Annual Per Capita Disposable Income (EBI)	6.9%	-0.4%	10.7%	-0.1%	11.8%	6.3%	4.5%
Change in Annual Per Capita Local Taxable Sales - Economic Basis	-2.2%	2.5%	-0.3%	-0.1%	-11.8%	-2.4%	-0.1%
Gap	-9.1%	2.9%	-11.0%	0.0%	-23.6%	-8.2%	-4.3%
Correlation Coefficient	-0.701	strong negative correlation					

<b>Capture:</b> Income from commuters, visitors and tourists used to make taxable purchases.	2016	2017	2018	2019	2020	5-Year Average	Pre-Pandemic Avg
Change in Per Capita Income + Capture	1.5%	4.2%	3.7%	9.2%	-1.5%	3.4%	4.7%
Change in Annual Taxable Sales - Cash Basis (Includes Pools)	1.8%	3.4%	1.5%	5.9%	-3.9%	1.7%	3.2%
Gap	0.3%	-0.8%	-2.2%	-3.3%	-2.4%	-1.7%	-1.5%
Correlation Coefficient	0.932	almost perfect positive correlation					

# California unemployment rate higher than others



Source: U.S. Bureau of Labor Statistics (<https://www.bls.gov/web/laus/mstrtr2.pdf>)



# Unemployment rates by county

Dec. 2020



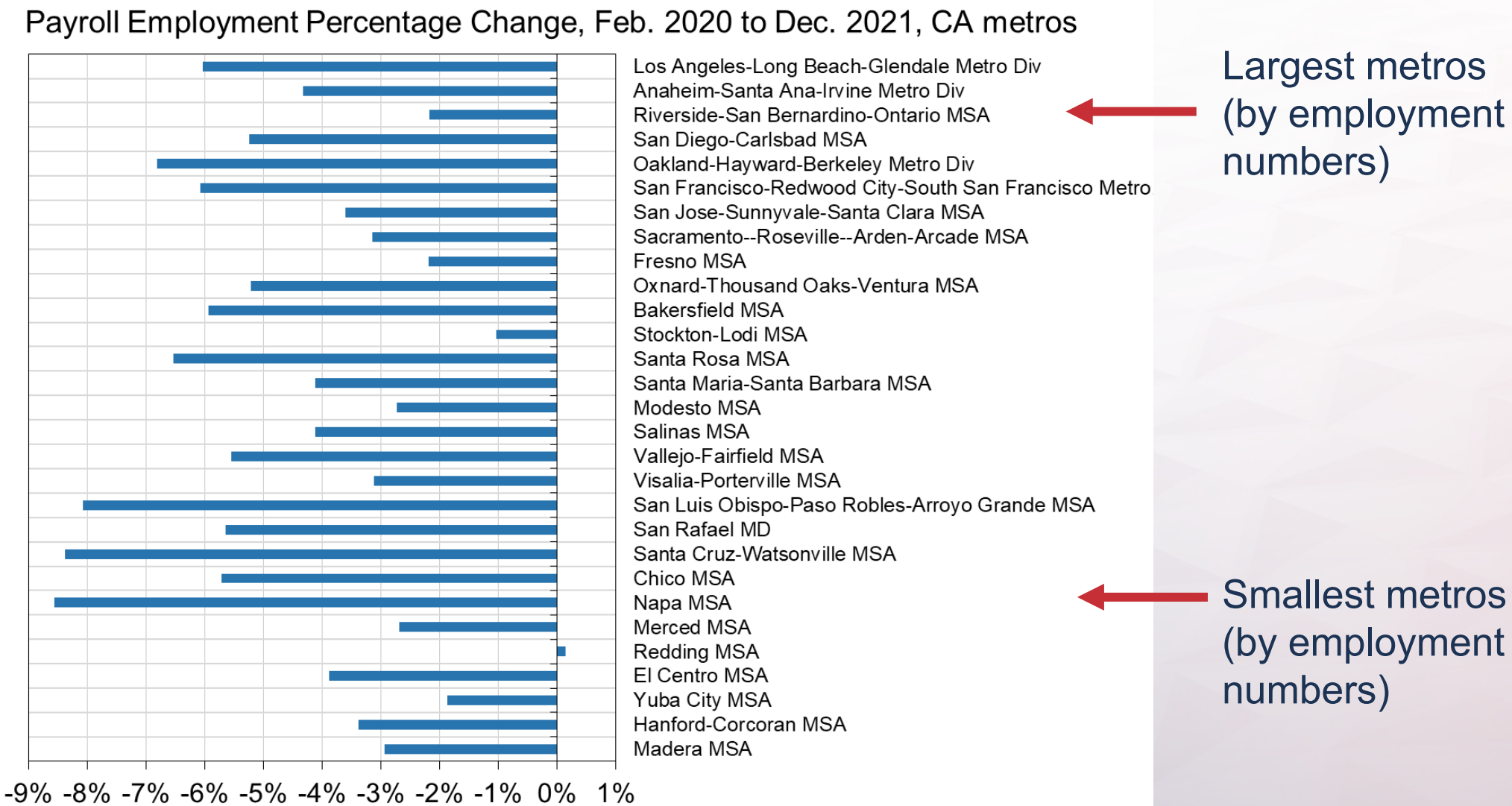
Dec. 2021



Source: California Employment Development Department. Data not seasonally adjusted

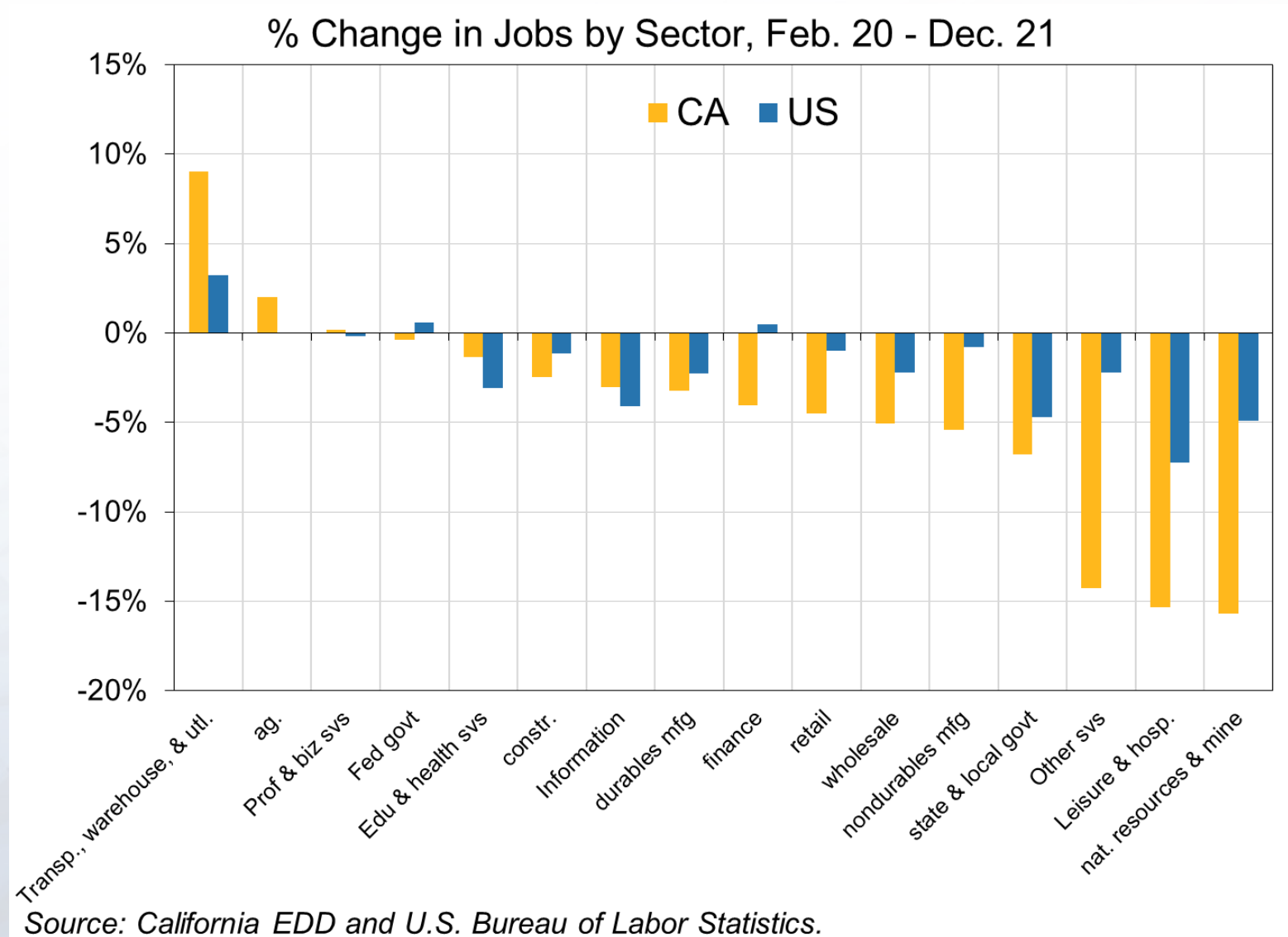


# Nonfarm payroll employment (jobs) recovery by metro



Source: California Employment Development Department. Sorted by size (payroll employment, average over 2019 ).

# Job losses concentrated in a few sectors



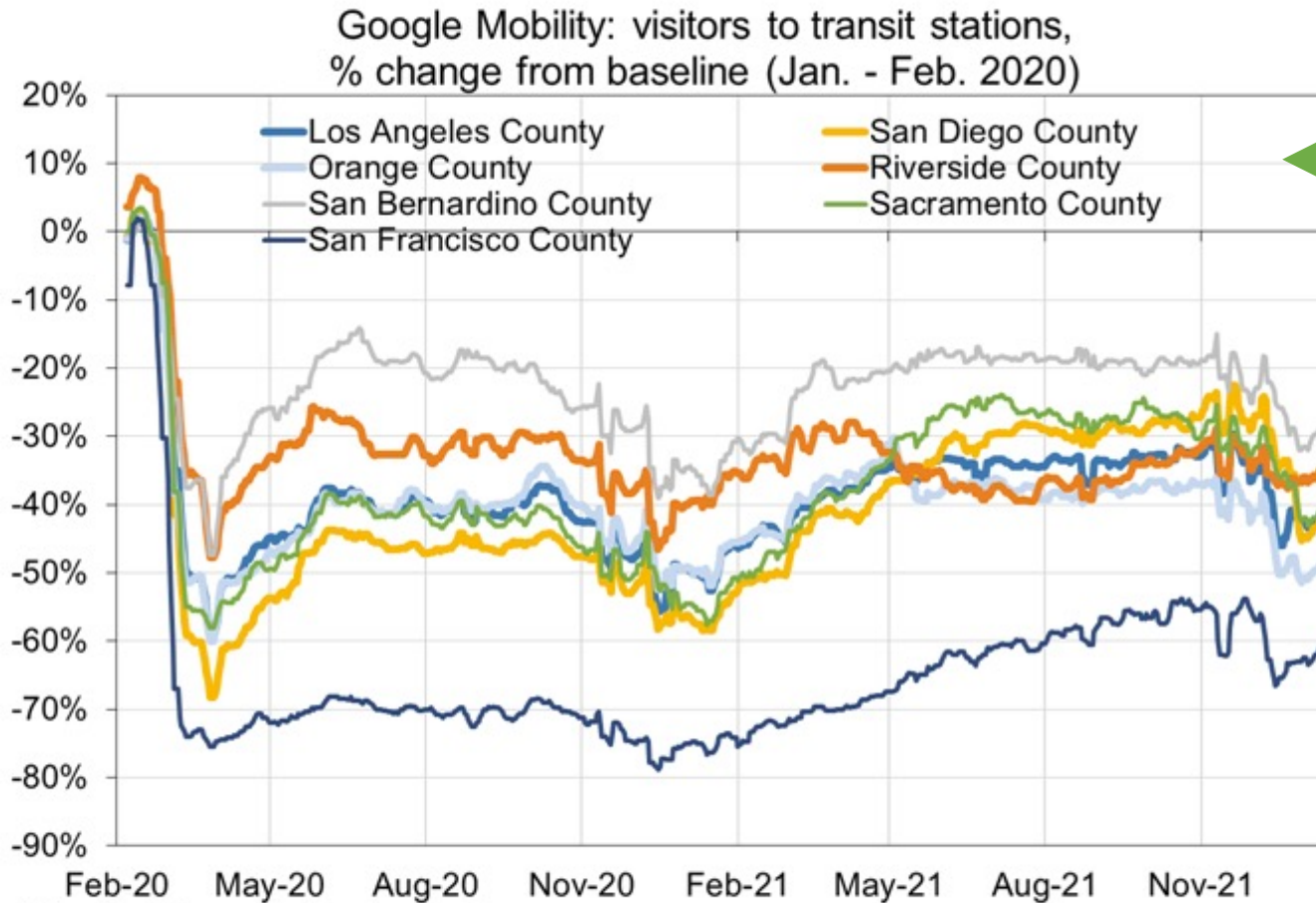
# Air passenger arrivals indicate tourism still lags



*Note: Data are not seasonally adjusted.*

*Source: Air Traffic Passenger Statistics for SFO from the San Francisco Open Data Portal (DataSF) and Los Angeles International Airport - Passenger Traffic By Terminal from LAWA OpenData.*

# Normal commute patterns have not returned



Selected large  
counties in CA

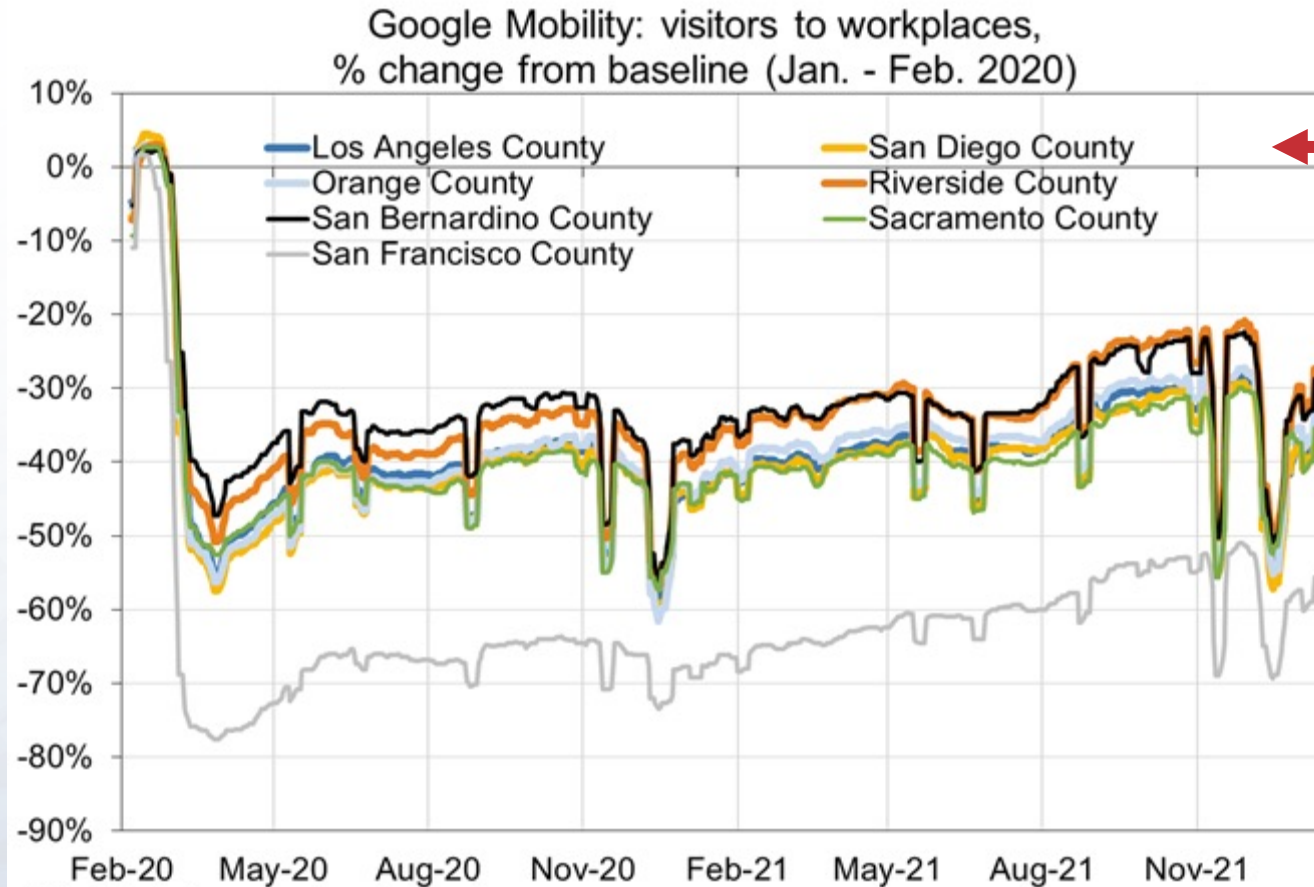
Note: Weekdays only, five-day moving average.

Source: Google LLC "Google COVID-19 Community Mobility Reports".

<https://www.google.com/covid19/mobility/> Accessed: 1/10/2022.



# Fewer workers are going to their offices



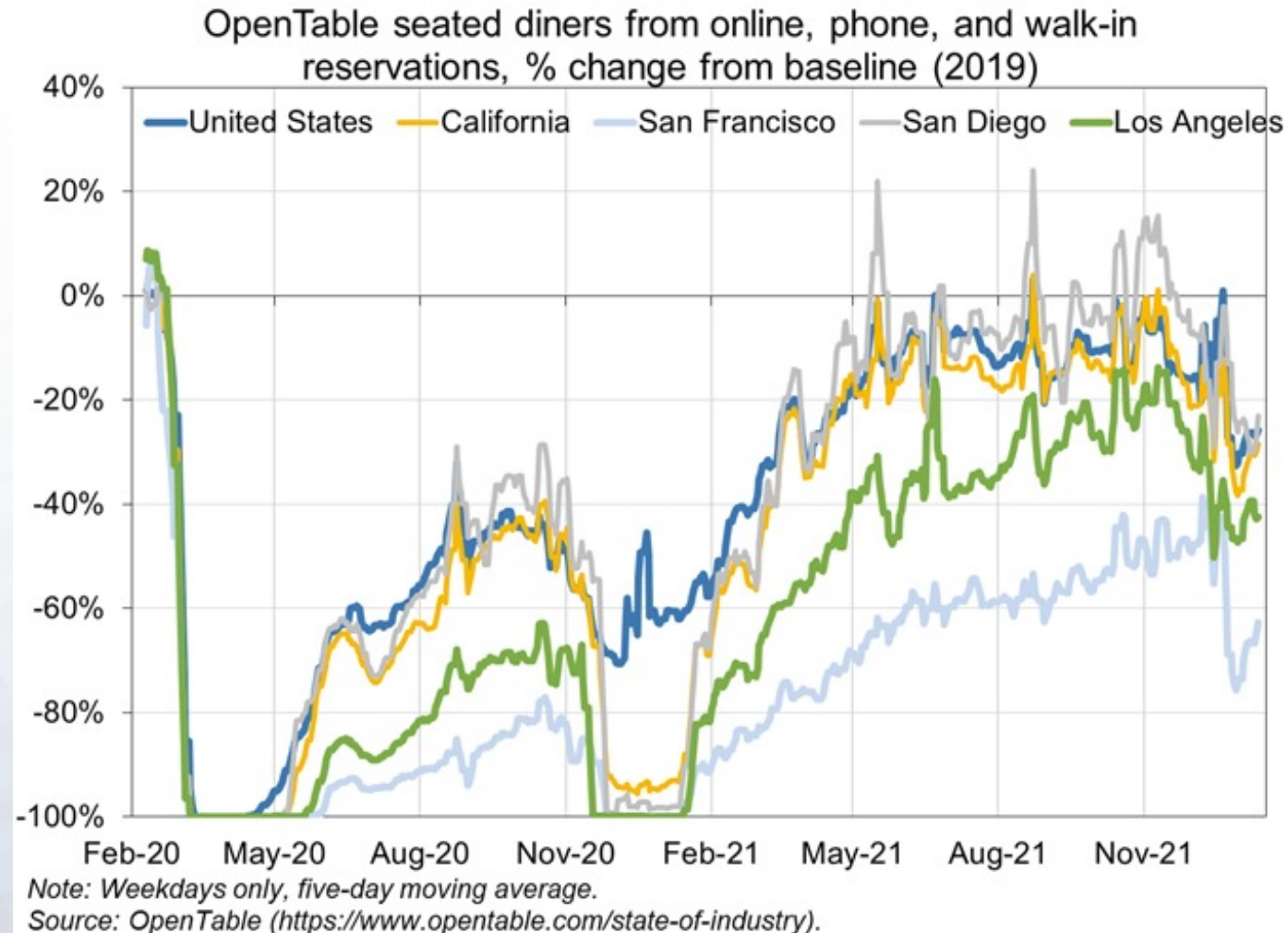
Selected large  
counties in CA

Note: Weekdays only, five-day moving average.

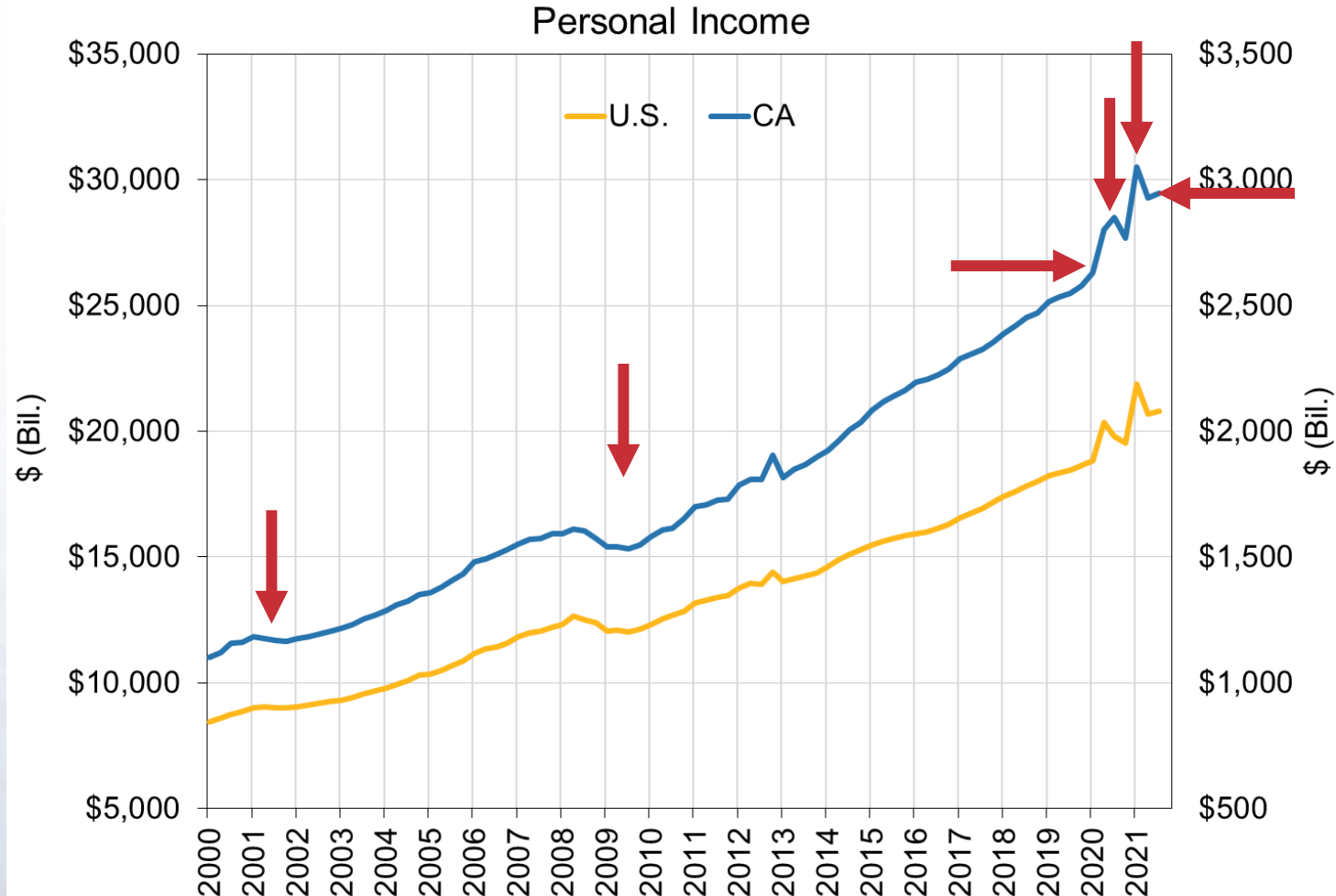
Source: Google LLC "Google COVID-19 Community Mobility Reports".

<https://www.google.com/covid19/mobility/> Accessed: 1/10/2022.

# Fewer people are dining out

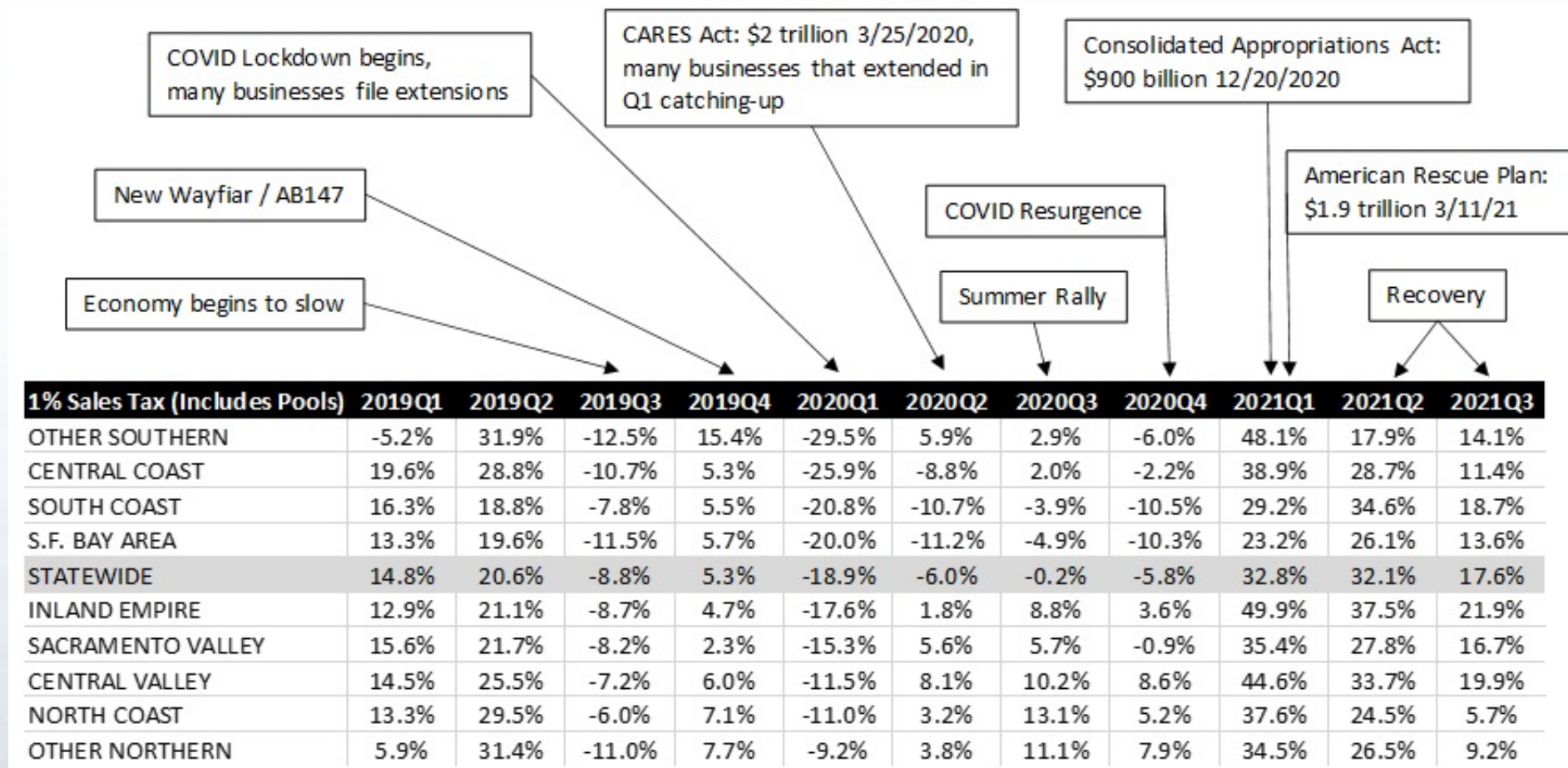


# Gains in personal income



Source: U.S. Bureau of Economic Analysis.

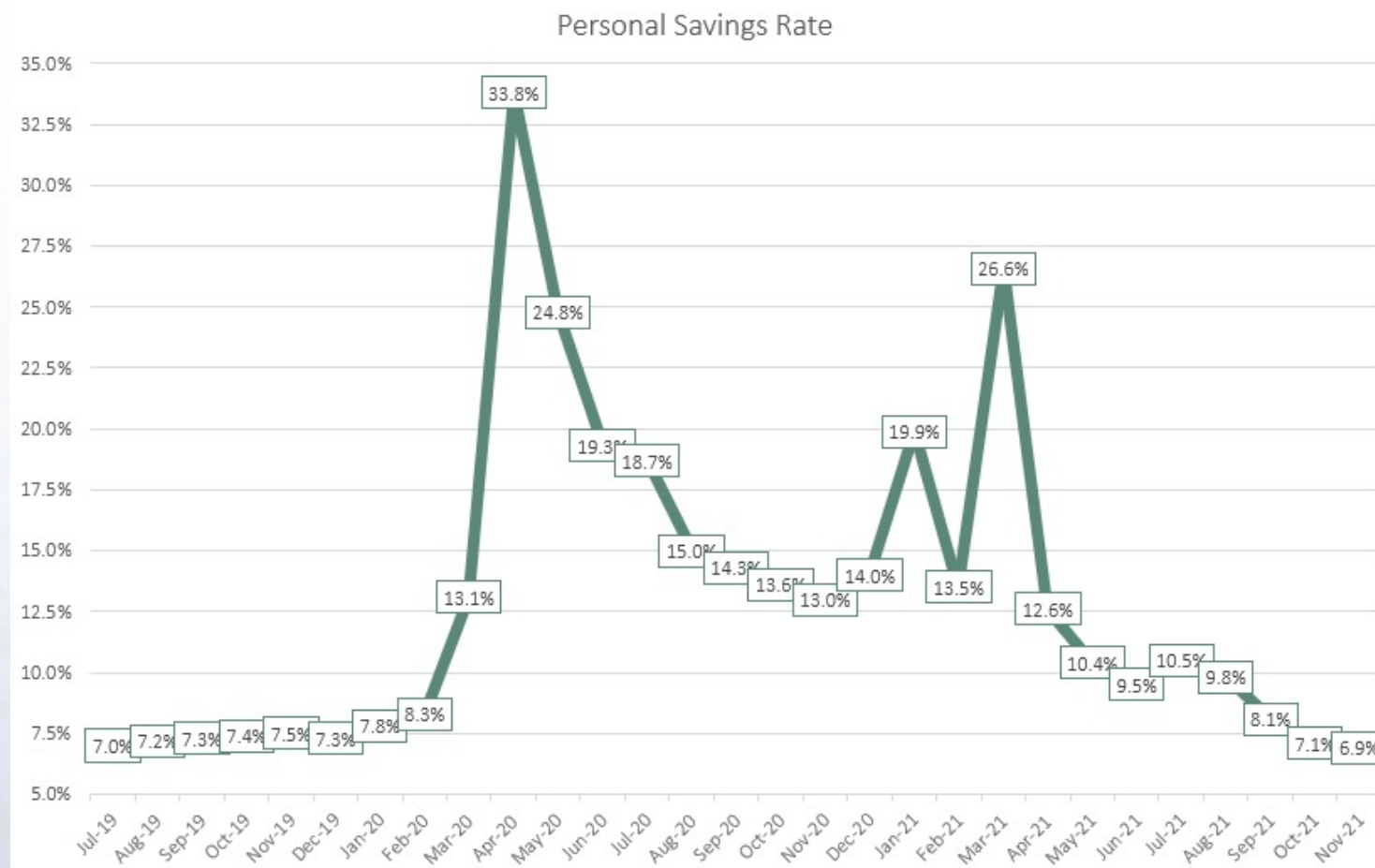
# What should we keep in mind about where we are?



Source:

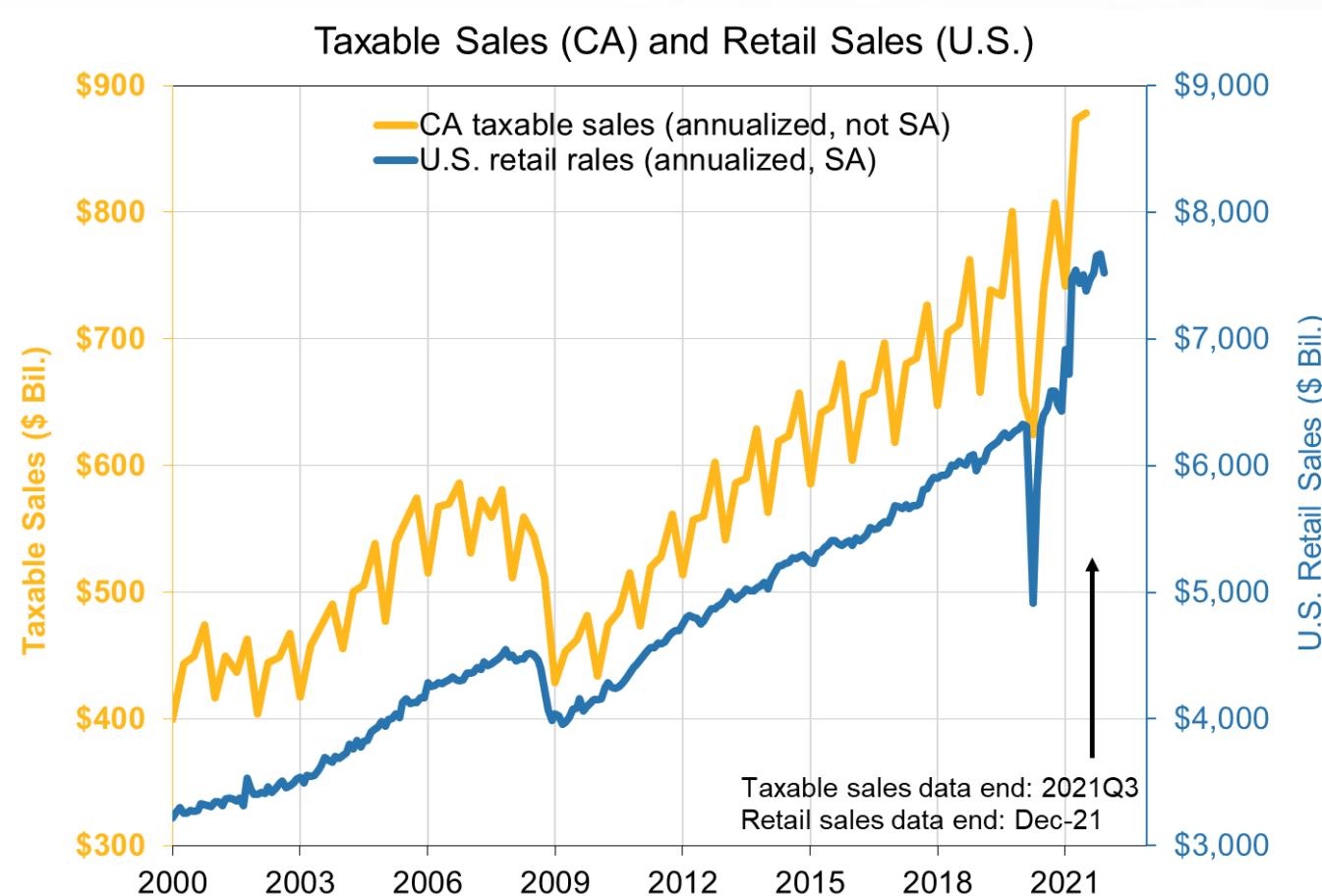


# Have U.S. consumers spent all that cash?



Source: U.S. Bureau of Economic Analysis, Courtesy [fred.stlouisfed.org](https://fred.stlouisfed.org)

# Strong growth in taxable sales after mid-2020

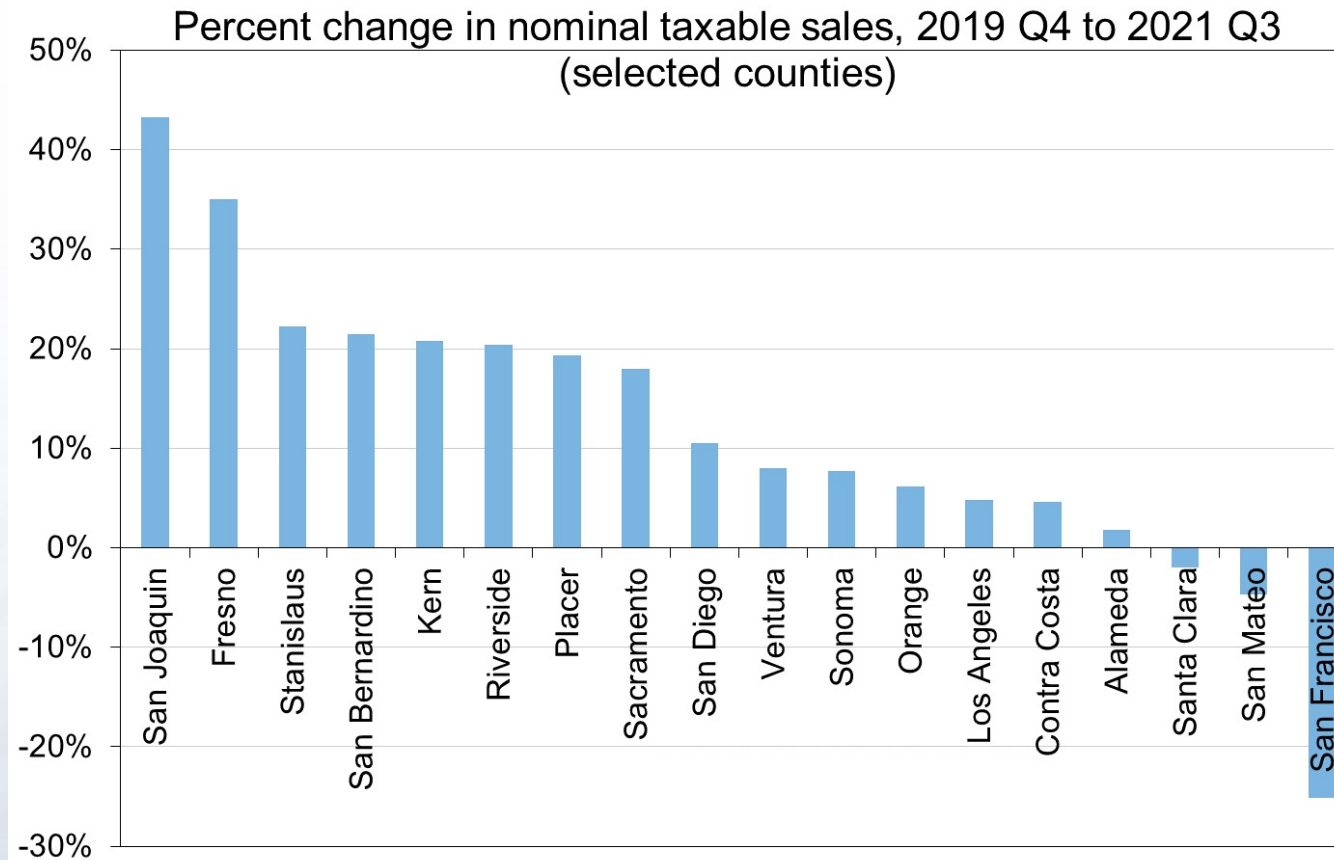


Source: California Department of Tax and Fee Administration (quarterly data, not seasonally adjusted) and the U.S. Census Bureau (monthly data).

Forecast:

CA taxable sales  
annual growth:  
2021: 9.8%

# Taxable sales in most counties above 2019 Q4 levels



Note: Chart shows 18 largest CA counties (measured by 2019 average total taxable sales). Data not seasonally adjusted.

Source: California Department of Tax and Fee Administration.

# What are Relative Price Changes?

- They are not monetary like inflation.
- They are driven by supply and demand.
- Unlike in inflation, they convey important information useful for making decisions about consumption, production and labor.
- Inflation provides no such useful information. It can distort important relative price signals, leading people to make less than optimal economic choices.
- Relative Price Changes have a great impact on Sales Tax Revenues.

## Sources:

Rising Relative Prices or Inflation: Why Knowing the Difference Matters  
<https://www.clevelandfed.org>

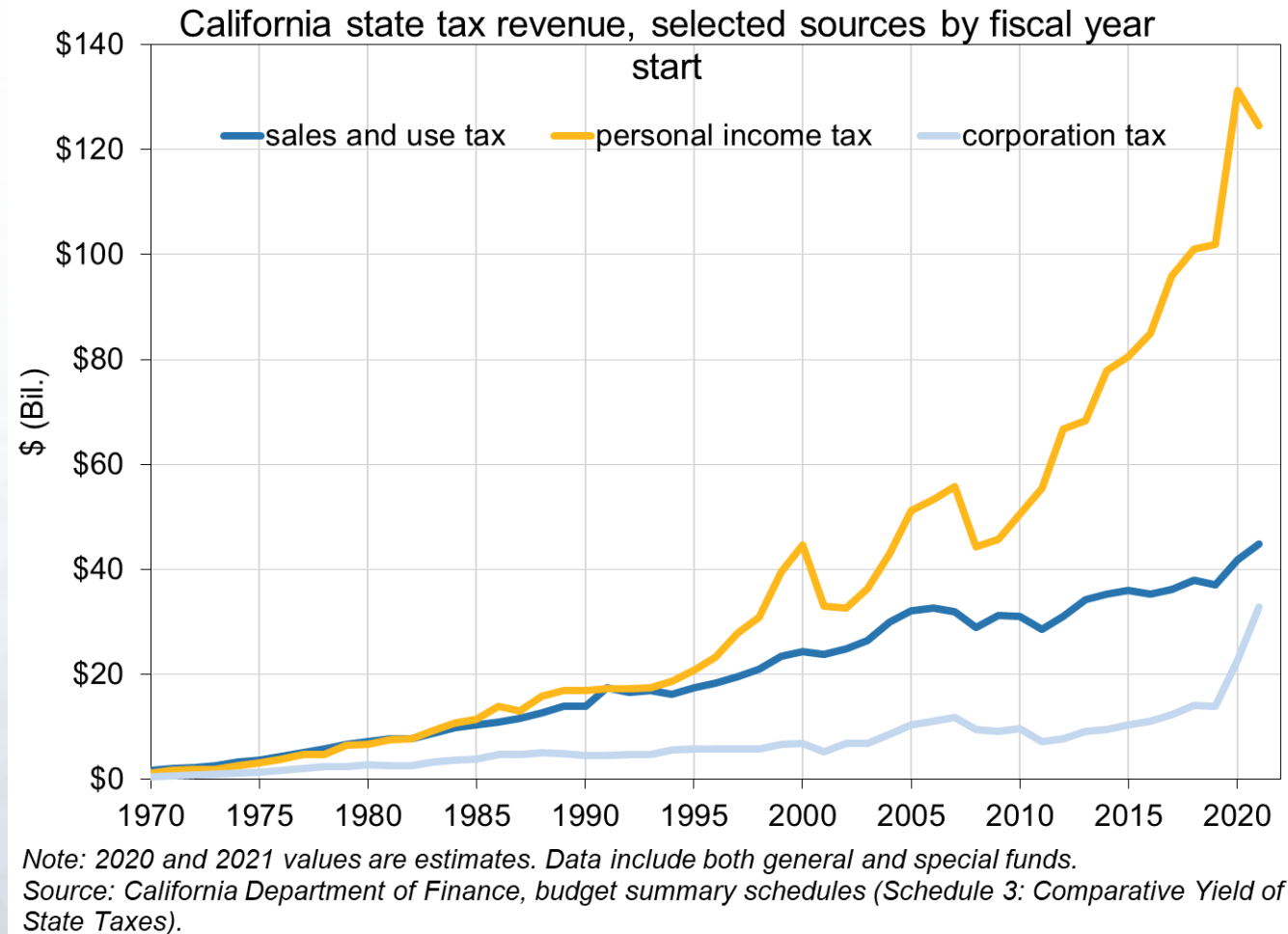


# Common Drivers of Growth in Taxable Sales

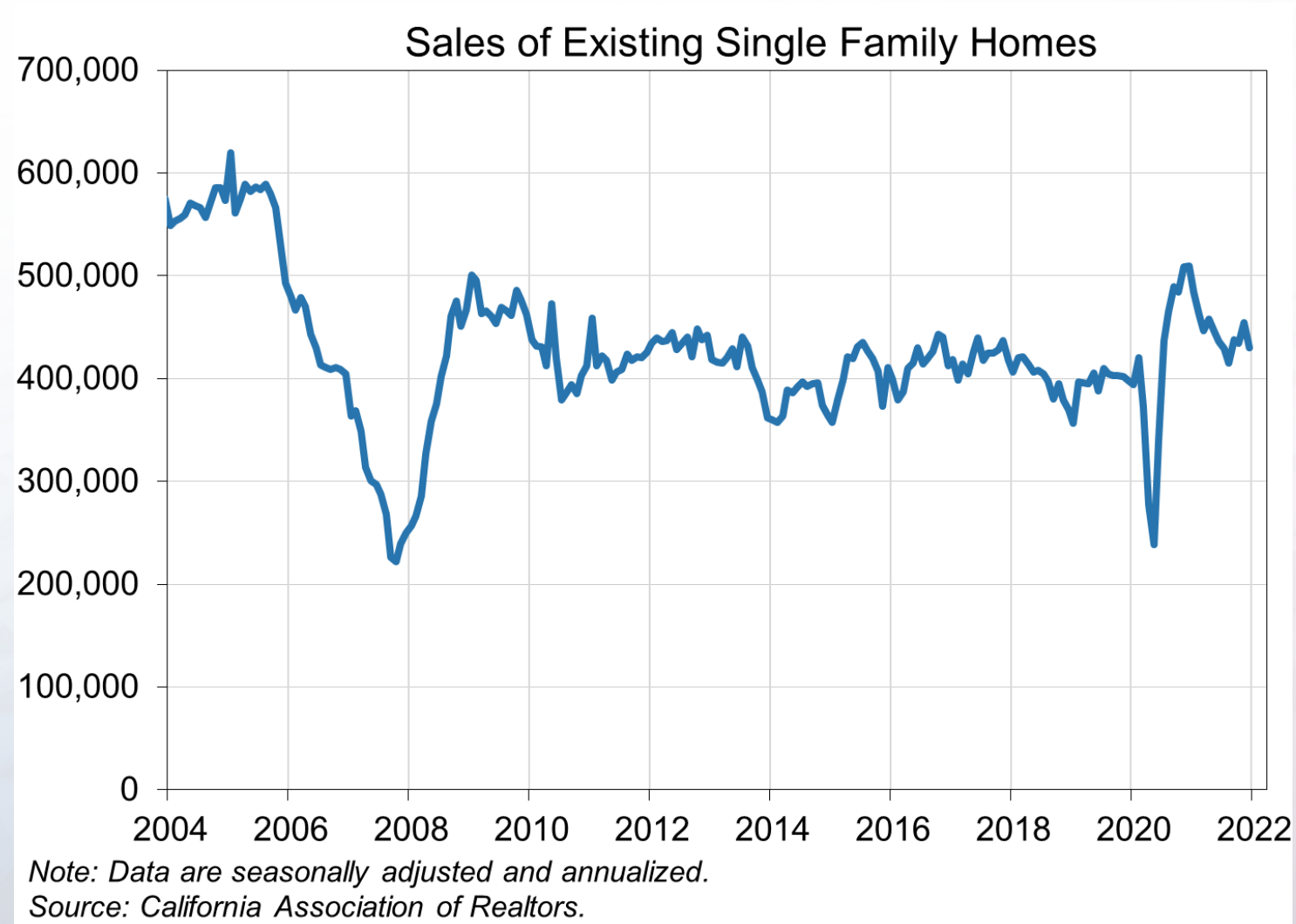
- For all Taxable Sales Growth:
  - Employment
  - Number and types of new businesses
  - Tourism and Visitors
  - Relative Price Changes
  - Changes in Population
- For Consumer-Driven Taxable Sales Growth (74% of statewide):
  - Disposable Income
  - Personal Consumption Expenditures (PCE)
- For Business-Driven Taxable Sales Growth (22% of statewide):
  - G.D.P.
- For Government-Driven Taxable Sales Growth:
  - State and local budgets
- For Non-Profit-Driven Taxable Sales Growth:
  - Healthcare and other industry analysis

Source:

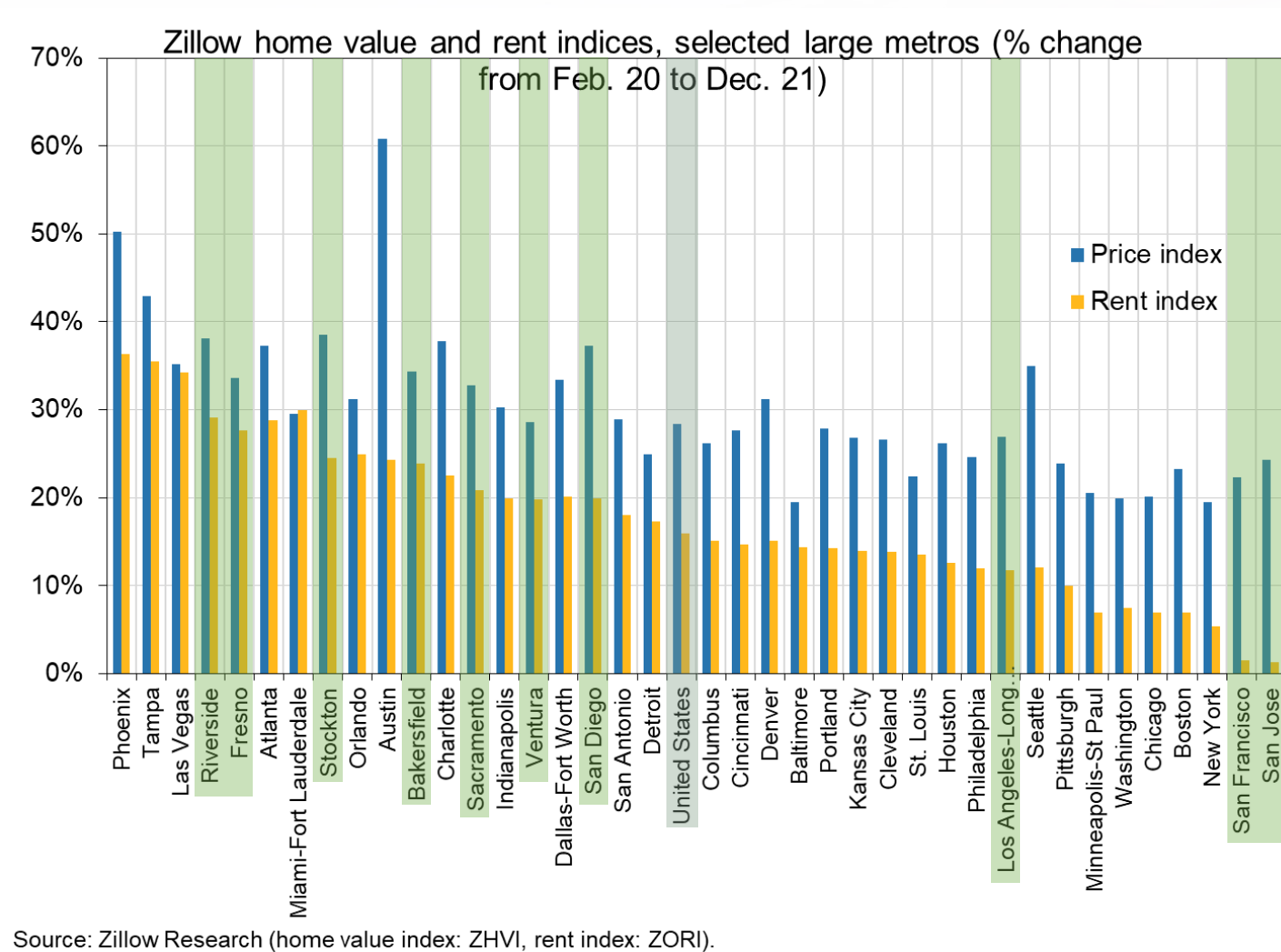
# How long will strong revenue collections last?



# More sales across the state



# Rents generally up, less so in some larger metros

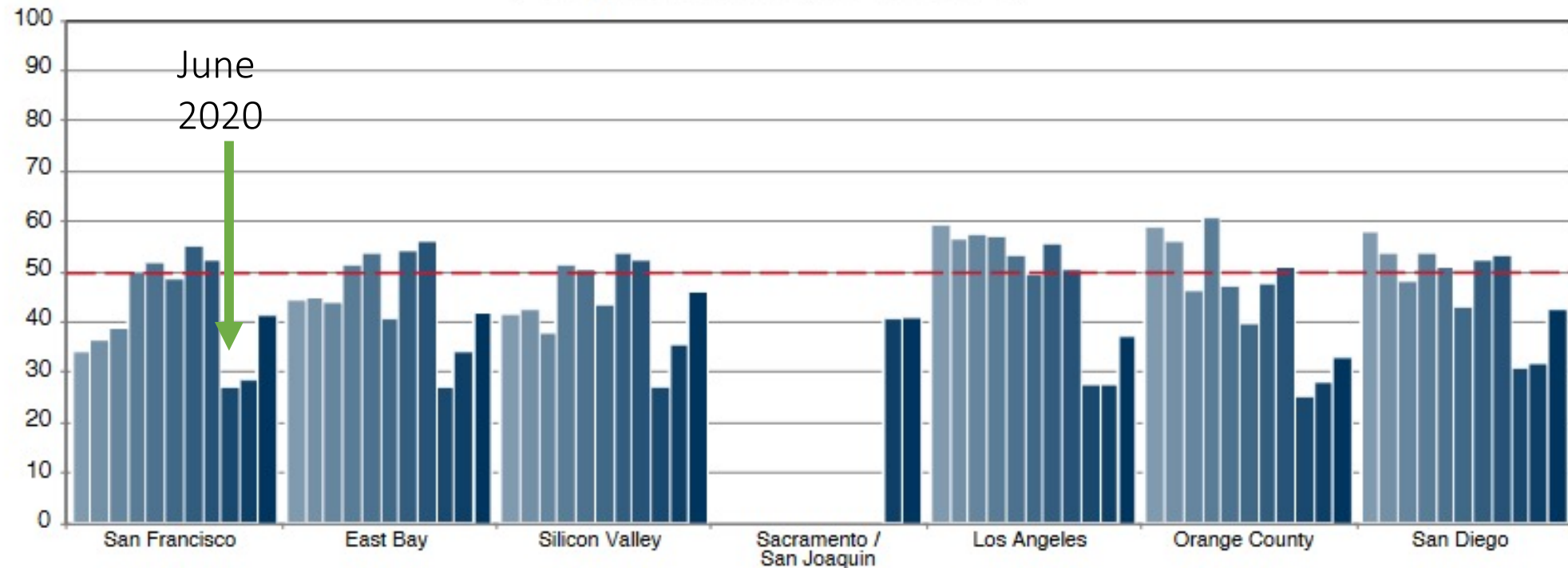




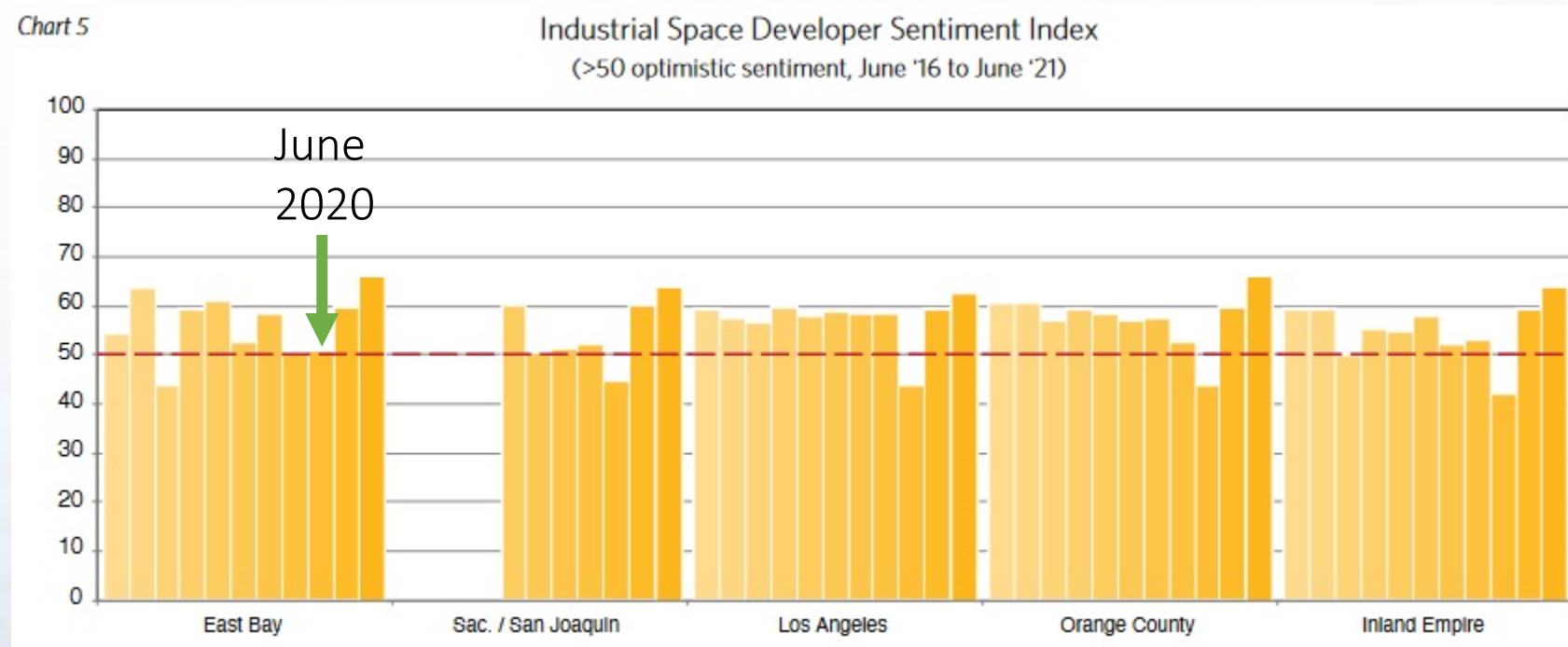
# Commercial real estate: sentiments differ by sector

Chart 1

Office Space Developer Sentiment Index  
(>50 optimistic sentiment, June '16 to June '21)



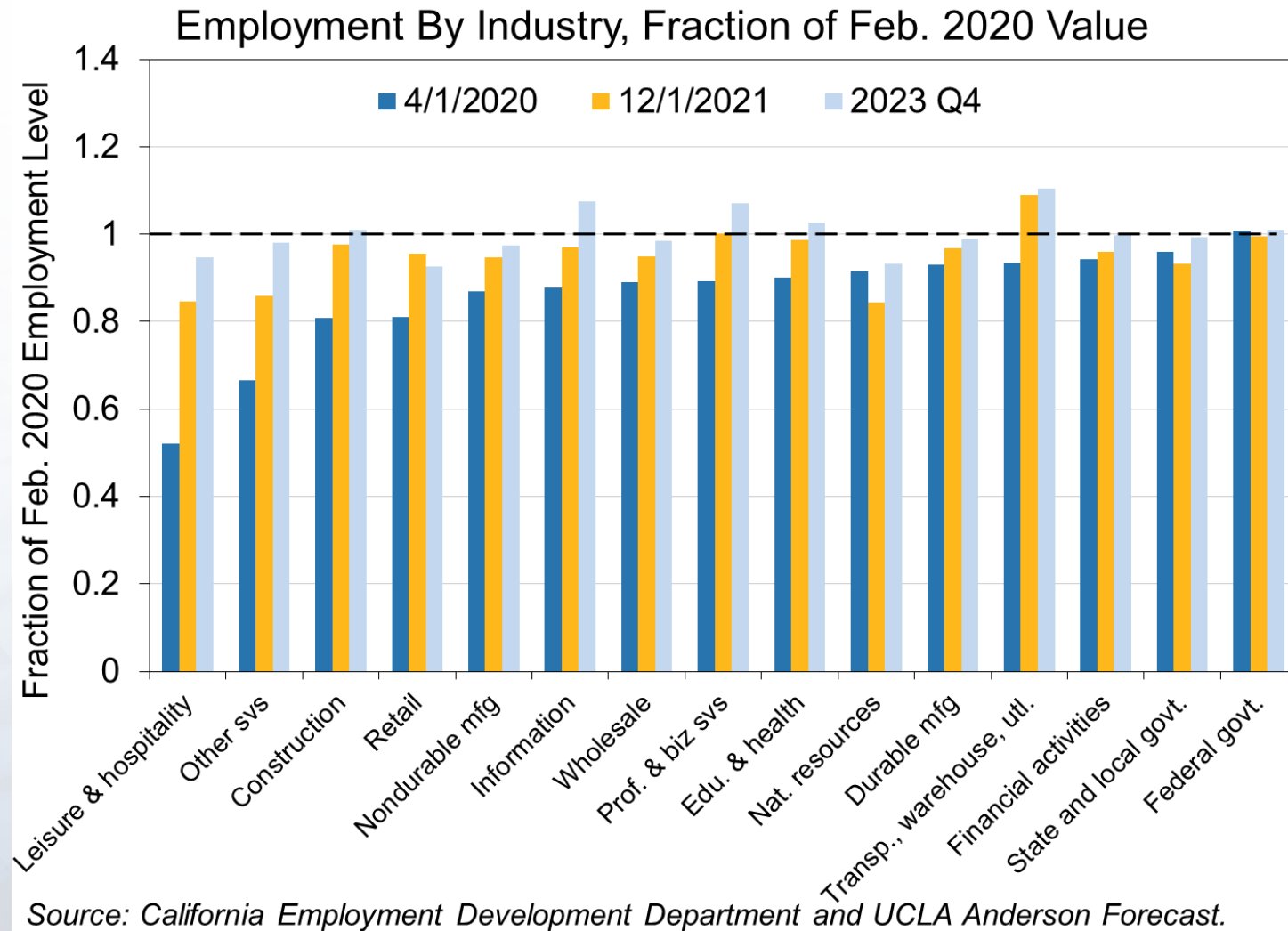
Source: June 2021 Allen Matkins / UCLA Anderson Forecast Commercial Real Estate Survey.



# California forecast key indicators (Dec. 2021)

	2021	2022	2023
Payroll jobs (ann. % chg.)	1.9%	4.7%	2.5%
Unemployment rate (ann. avg.)	7.7%	5.6%	4.4%
Personal income (ann. % chg.)	6.7%	1.9%	5.8%
CPI inflation (ann. % chg.)	4.0%	4.1%	2.9%
Taxable sales (ann. % chg.)	9.8%	3.9%	3.3%
Auto registrations (mil.)	1.6	1.5	1.6
	-0.44% (July to July)		
Population (ann. % chg.)	<del>-0.03%</del>	0.05%	0.23%

# California forecast key indicators: sector employment





# Summary

- The California economic recovery continues
- Areas of economic strength support government revenue:
  - Personal income
  - Taxable sales
  - Residential real estate
- Issues to watch:
  - Labor supply (labor force exits, migration)
  - Inflation

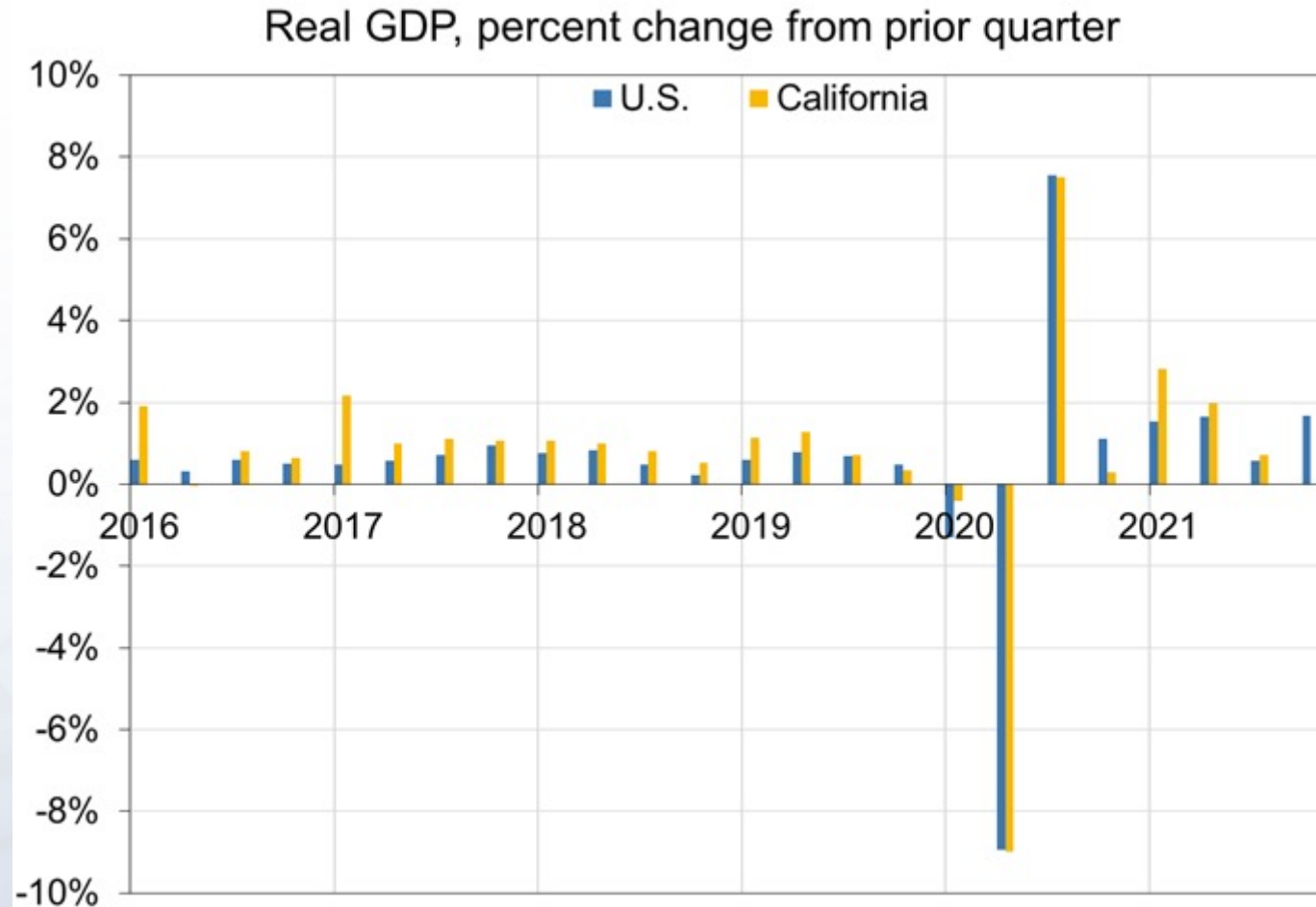


***Thank You***



# ***Appendix***

# U.S. vs California GDP



Source: U.S. Bureau of Economic Analysis.

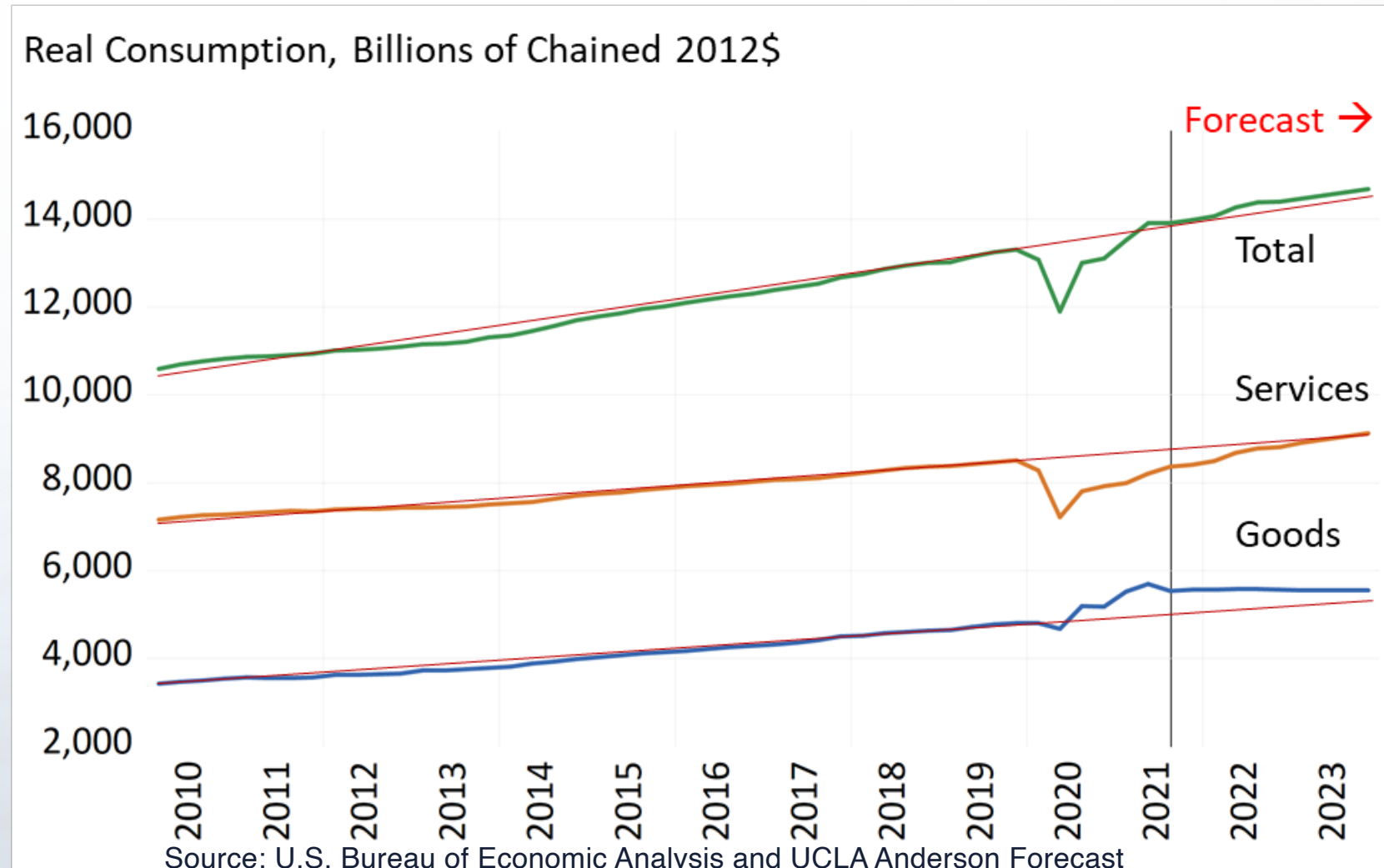
As of 2021 Q3:

U.S. real GDP 1.4%  
above 2019 Q4 level

CA real GDP 3.2%  
above 2019 Q4 level

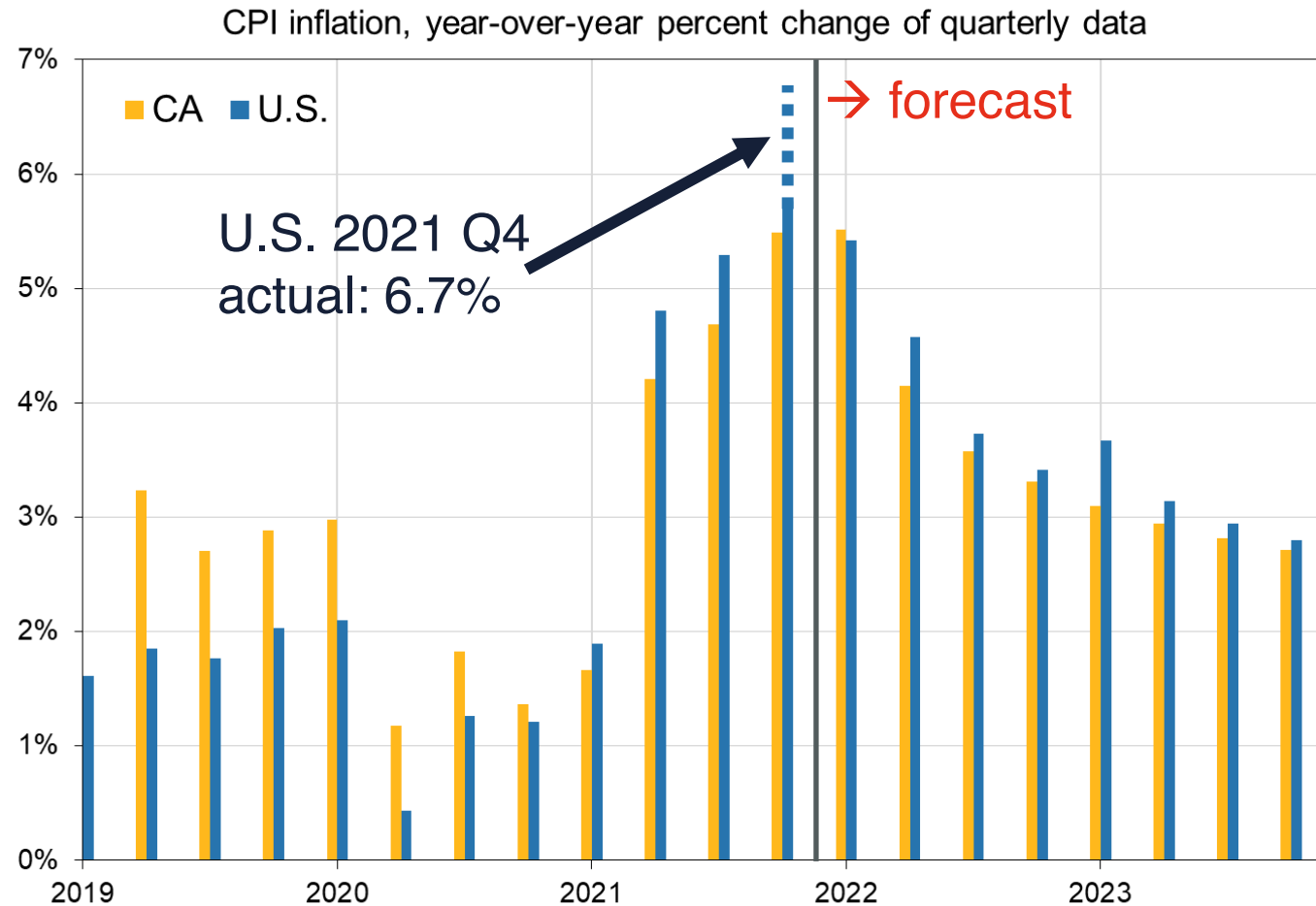


# Goods vs services: changes in consumption patterns



- 2021 Q4 actuals:
- Total: below forecast
  - Services: above forecast
  - Goods: below forecast

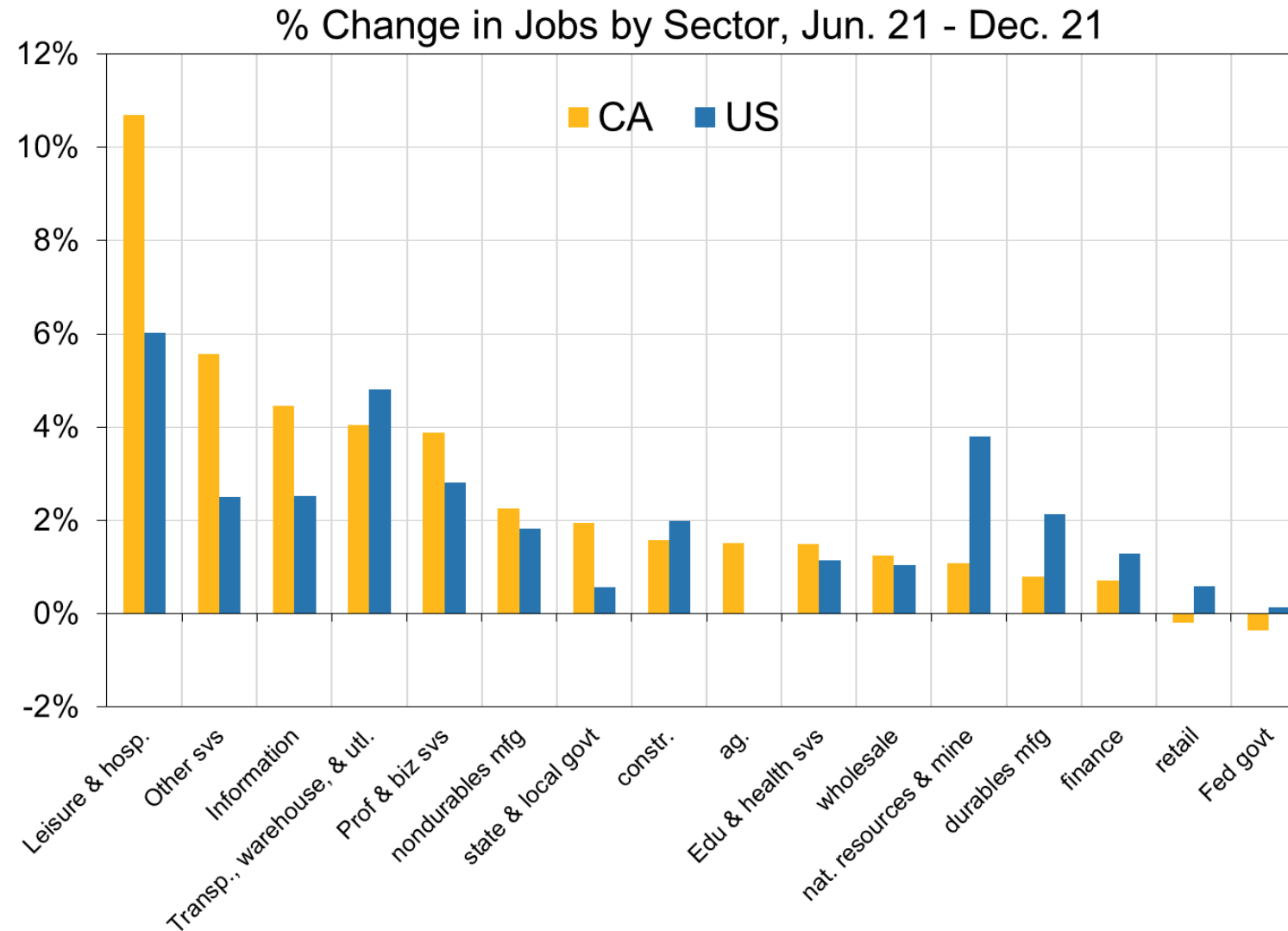
# U.S. and California inflation forecasts



Note: Data are as of most recent forecast.

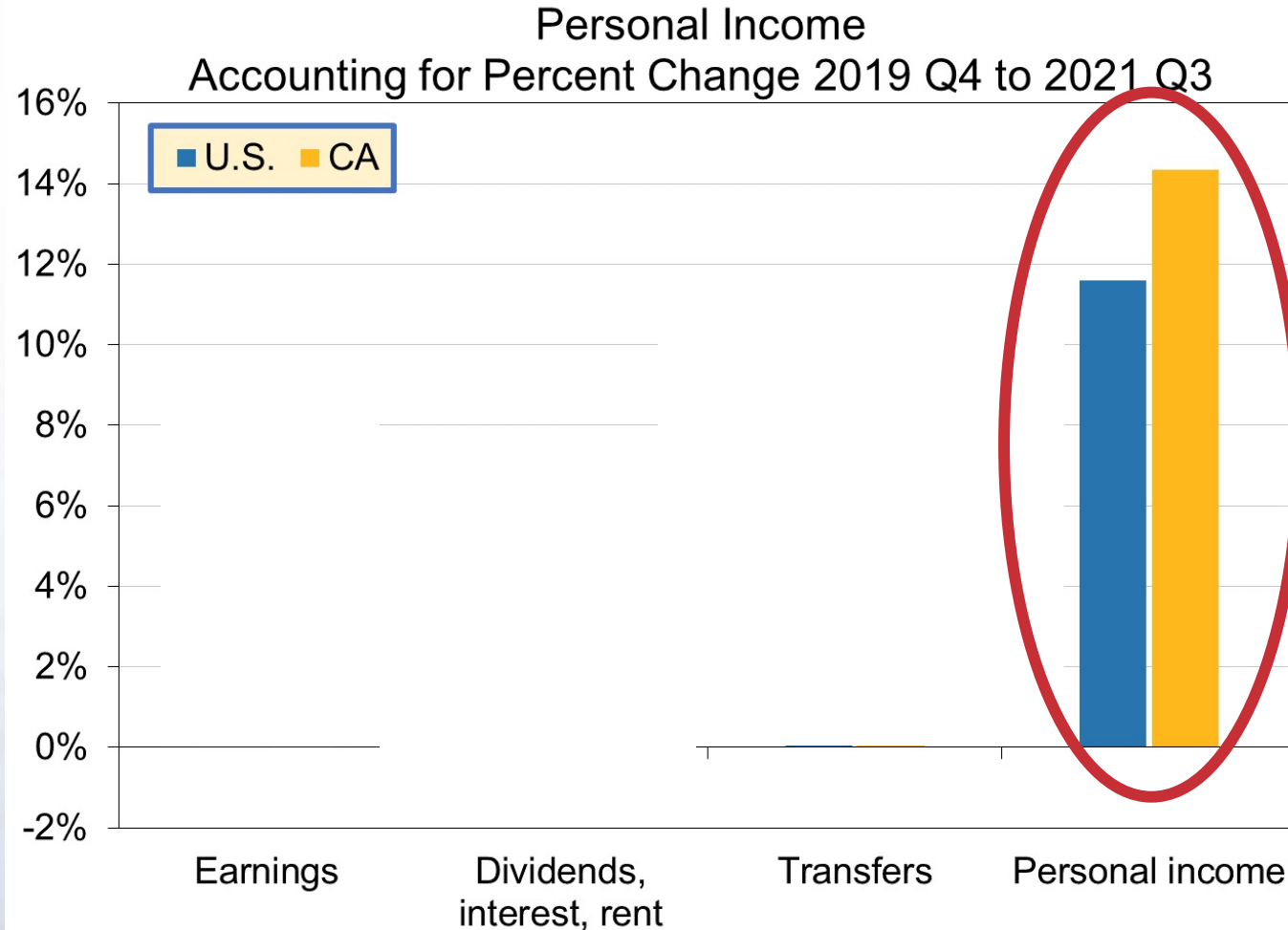
Source: U.S. Bureau of Labor Statistics and the UCLA Anderson Forecast.

# Recent job gains concentrated in hardest hit sectors



Source: California EDD and U.S. Bureau of Labor Statistics.

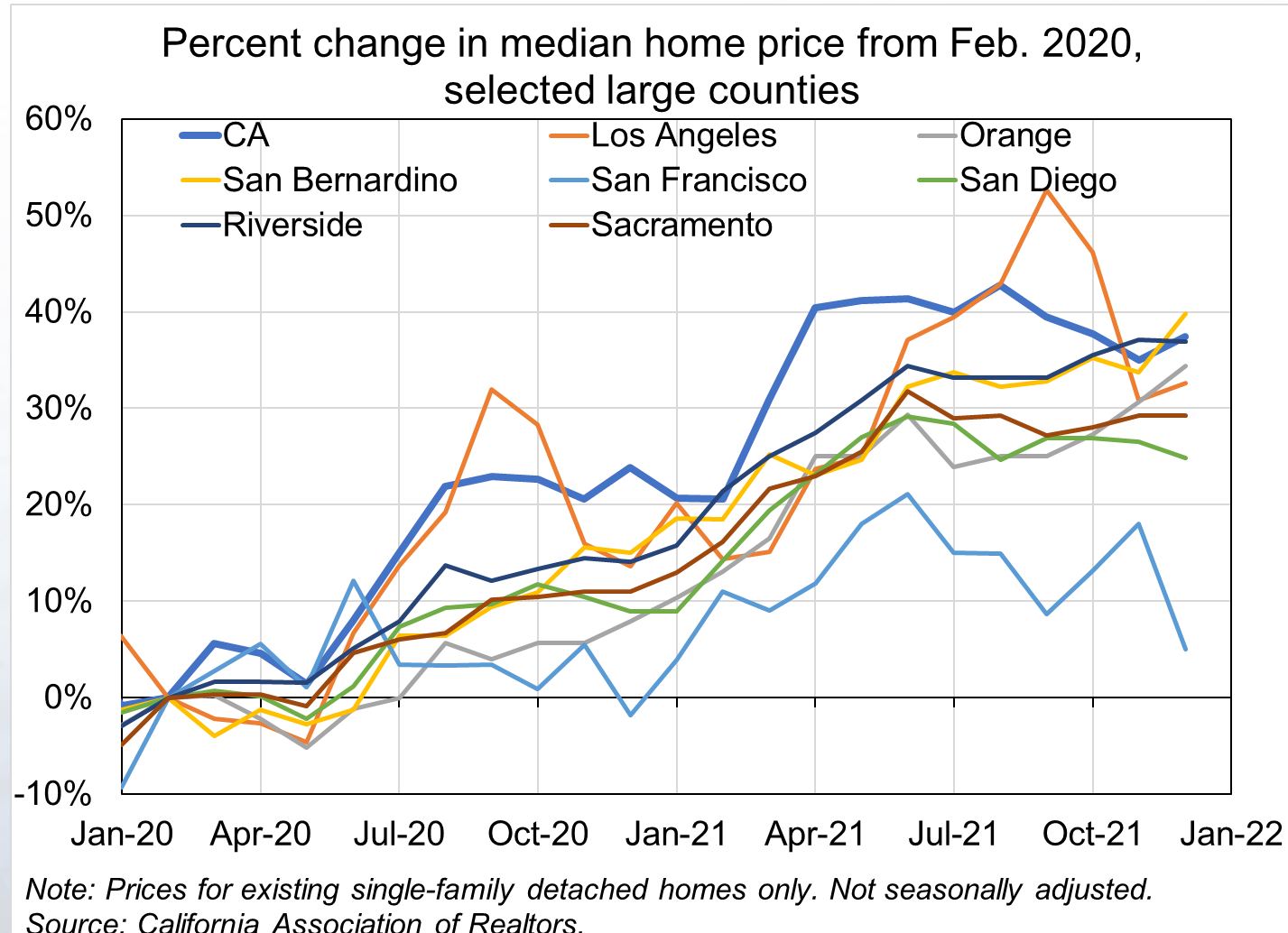
# Gains in personal income – several sources



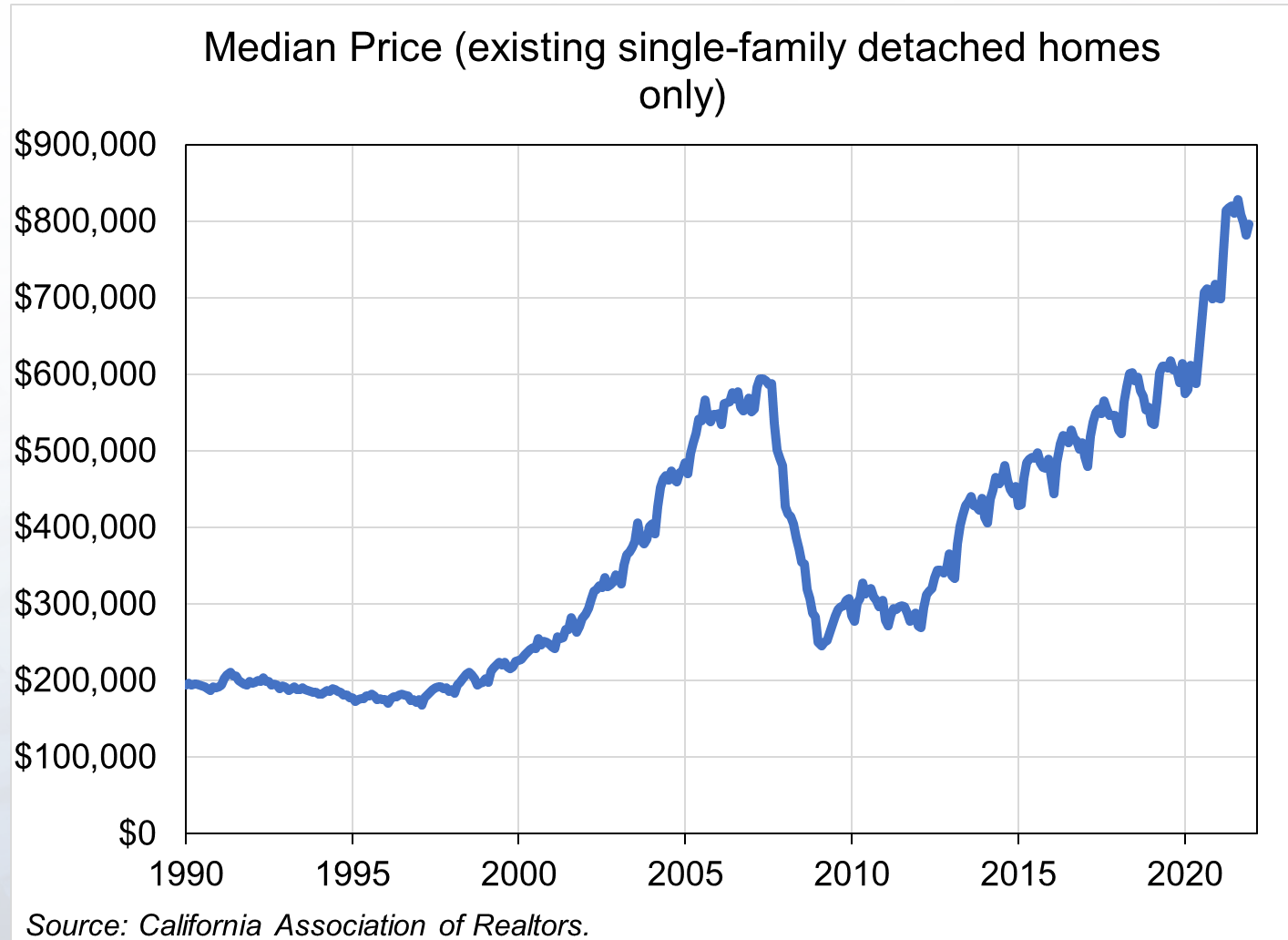
Source: U.S. Bureau of Economic Analysis.



# Higher prices across the state



# Residential real estate: prices up sharply since 2020



# California forecast key indicators

