

The Post-Covid New World Order San Bernardino Prospects

April 2022

Christopher Thornberg, Ph.D.

Director, UCR School of Business Center for Economic Forecasting and Development Founding Partner, Beacon Economics LLC



## The Big Picture



#### The Short of it

- The Covid pandemic is a tragic natural disaster, yet history shows that natural disasters have little long-run economic impact. A quicker-than-normal recovery was certain.
- The narrative drove fiscal and monetary policy reactions that have been excessive and are overheating the economy from consumer spending to asset markets.
- Geopolitical uncertainty is heating up—but the impact is largely to extend the US asset cycle
  due to the reserve currency status of the US economy
- Cyclical risks now lie primarily in the public sector; the twin issues of inflation and an unsustainable Federal budget deficit—but this may expand in the months to come.

#### The Long of it

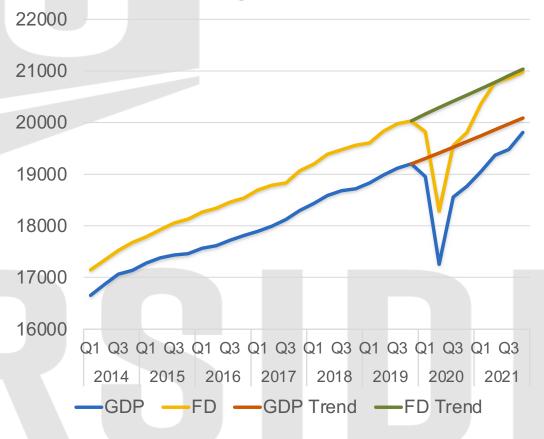
- There are no economic "new-normals" from the pandemic, but it has accelerated underlying trends that were already in place, with huge implications for labor markets, land use, retail channels, housing, and debt.
- Labor markets have flipped, and shortages are here to stay. Local economic development will shift from "jobs jobs" to "workers workers workers".
- These changes will ultimately favor growth in the IE

### The U or V Debate...



Real Growth Rates	Q417- Q419	Q419- Q421
Gross domestic product	4.9%	3.2%
Final Demand	5.1%	4.0%
Personal consumption expenditures	4.9%	4.4%
Durable goods	9.9%	21.1%
Nondurable goods	4.8%	13.0%
Services	4.2%	-0.5%
Fixed investment	6.8%	4.9%
Structures	7.7%	-22.3%
Equipment	5.1%	6.0%
Intellectual property products	16.1%	14.7%
Residential	-1.8%	13.7%
Net exports of goods and services	3.8%	58.3%
Exports	0.5%	-6.1%
Imports	1.3%	9.9%
Government	4.2%	1.3%
National defense	9.4%	-1.4%
Nondefense	4.8%	7.2%
State and local	2.2%	0.9%

## Real GDP and Final Demand relative to long run trend



## The Great Recession vs Today



#### **Recession Driver**

The Pre-Recession Economy

Government Response

#### **Then**

Demand shock caused by collapse in wealth, flow-stock issues

Over-heated by sub-prime lending bubble

Inadequate

#### **Now**

Short run supply shock driven by fear and health mandates

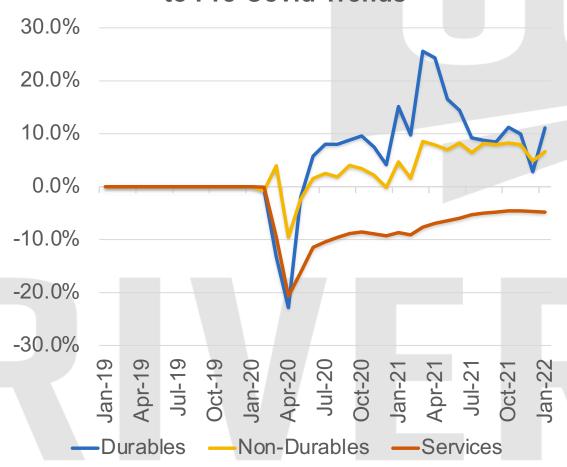
Slow but steady growth due to labor shortages / trade disruptions

**Excessive** 

## An Uneven Recovery







#### **Taxable Sales Receipts**

30000000

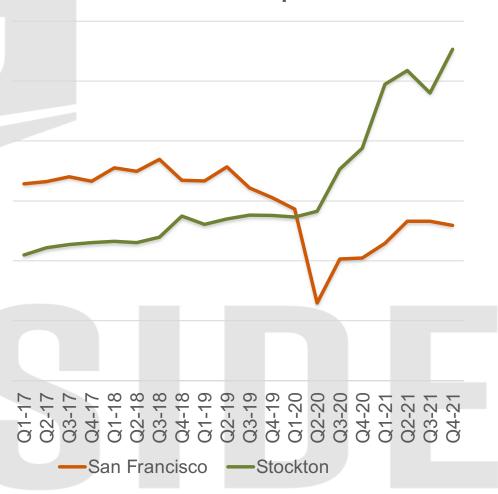
25000000

20000000

15000000

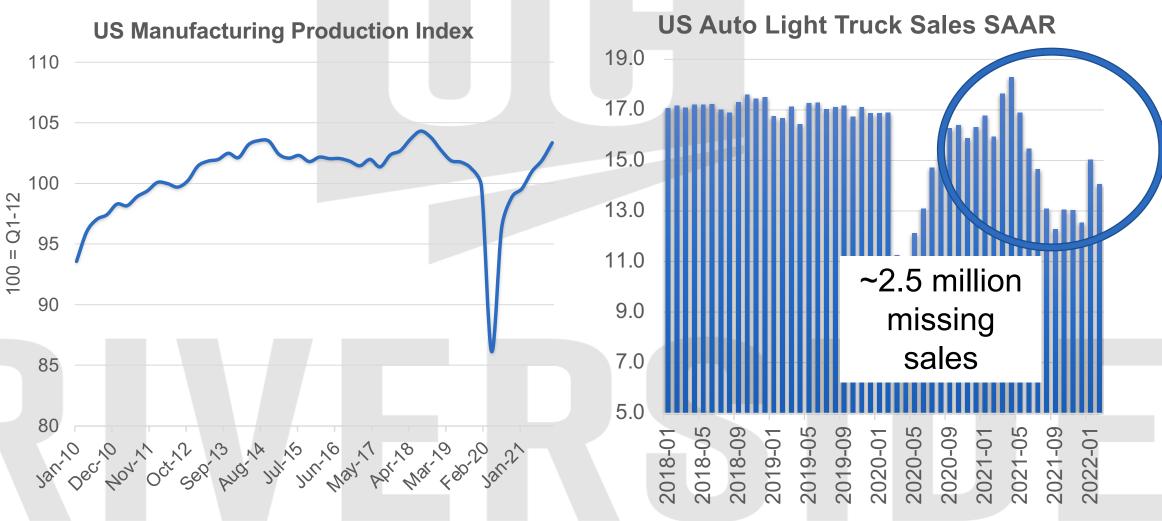
10000000

5000000



## Supply Not Keeping Up With Demand...





## Global Supply Problems



#### Domestic Supply Problems

- —JIT Inventories & bad forecasts
- —Excess demand
- —Labor Shortages

#### Global capacity

- Overseas production also hit by Covid
- —Slow shipping capacity growth
- —Small delays cascade quickly

#### Does it matter?

- Supply ultimately follows demand
- —Brakes on spending may be a good thing

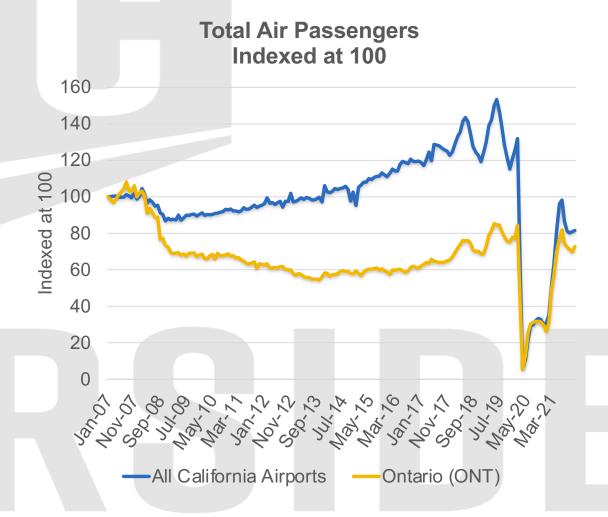


### As For the Service Sector...



#### Real Consumer Spending Services Q4 19 to Q4 21

	2019	2021	
	Q4	Q4	
Services	8505.9	8459.4	-0.5%
Financial, insurance	850.9	890.5	4.7%
Housing	2111.8	2155.1	2.1%
Food, accommodations	854.6	856.2	0.2%
Health care	2263.3	2249.7	-0.6%
Other services	1132.6	1104.2	-2.5%
Transportation	461.9	421.2	-8.8%
Recreation	510.2	442.9	-13.2%

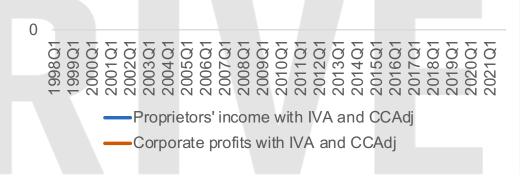


## **Earnings and Investments**







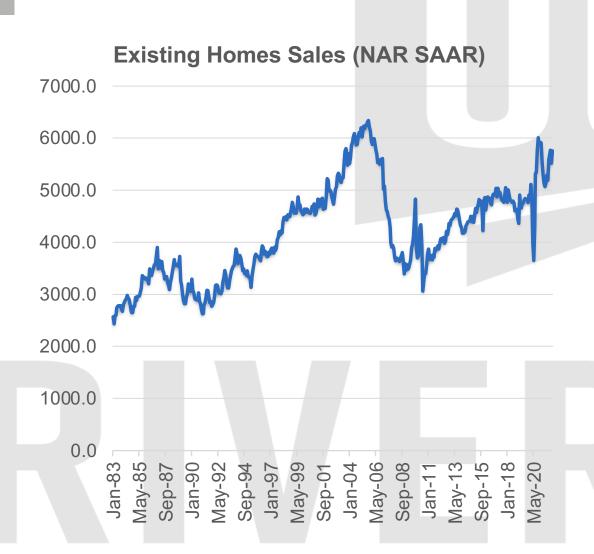


#### **Real Investment**

	2019Q4	2021Q4	
Private fixed investment	3781.4	4254	12.5%
Structures	685.3	594.8	-13.2%
Power and communication	148.1	118.6	-19.9%
Mining exploration, shafts	115.3	94.9	-17.7%
Manufacturing	77.1	73.7	-4.4%
Commercial and health	212.2	205.9	-3.0%
Equipment	1210.3	1300.6	7.5%
Information processing eq	390.2	488.5	25.2%
Industrial equipment	247.8	310.8	25.4%
Transportation equipment	307.4	203.6	-33.8%
Intellectual property products	1057	1250.2	18.3%
Software	439.1	526.9	20.0%
Research and development	524.3	621.1	18.5%
Entertainment	93.6	102.2	9.2%
Residential	828.8	1108.5	33.7%

## Housing – U.S.



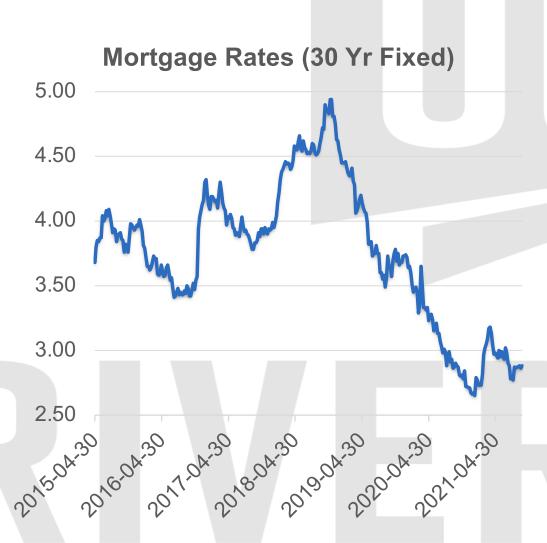


# Case Shiller HPA YoY



### **Drivers of the Boom**

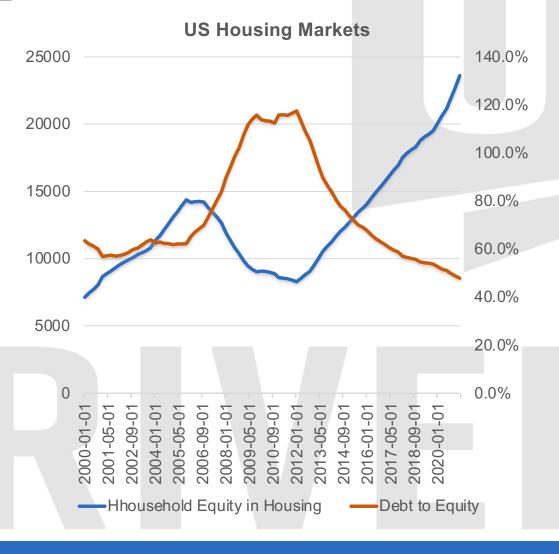








### Bubble Alert? Not Yet...

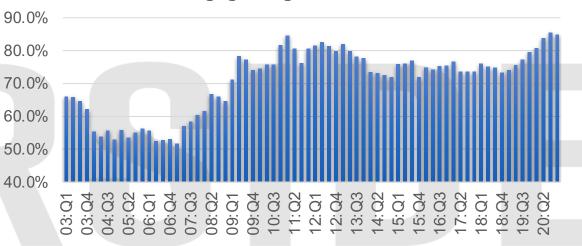




#### **Share Owners Housing Cost Constrained**

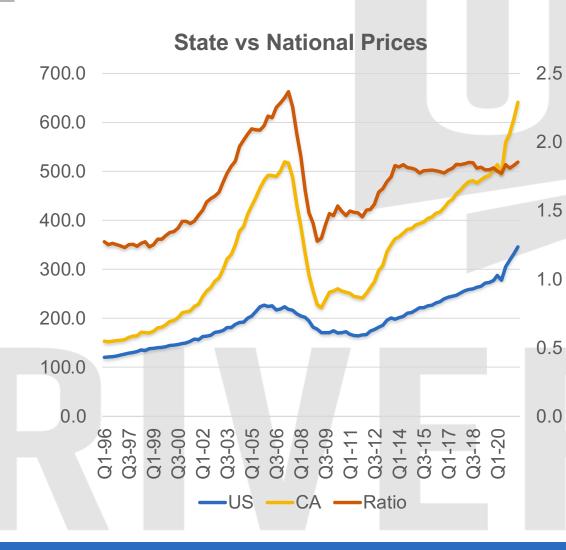
		2011	2019
		35.0 perce	nt or more
US	49,049,732	28.1%	19.9%
Arizona	1,023,943	30.5%	19.3%
California	5,064,795	38.6%	28.5%
Colorado	948,904	26.1%	20.7%
Nevada	403,792	33.4%	21.0%
Utah	446,690	24.9%	16.9%

#### **Share Mortgage Originations > 720 Fico**



## **CA Housing Market**



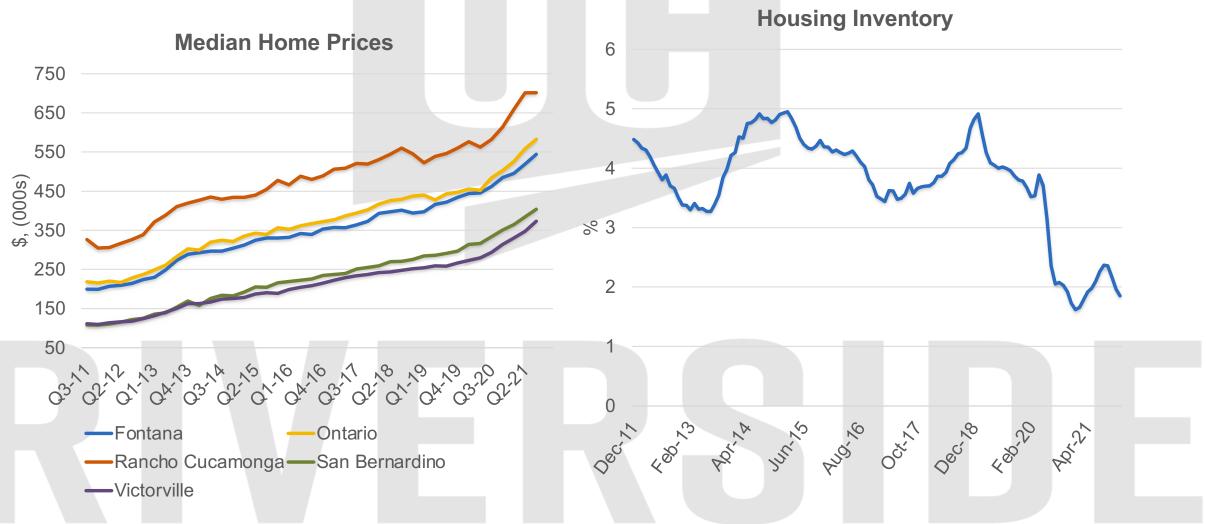


	Growth			
Region	Current Value (\$, Jan-22)	1-Yr % Ch.		
Maricopa County	442,537	30.1		
Clark County	405,542	28.5		
Riverside County	571,261	28.1		
San Diego County	857,991	24.9		
San Bernardino County	502,637	24.2		
Orange County	998,468	23.2		
Denver County	600,519	19.0		
Los Angeles County	824,244	16.1		

Source: CIRB

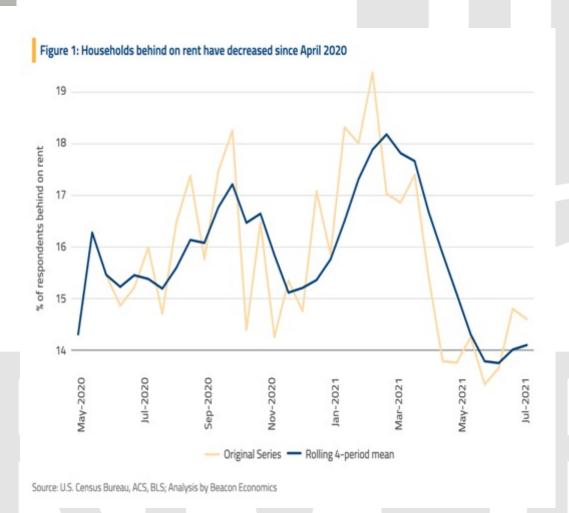
### Residential Real Estate

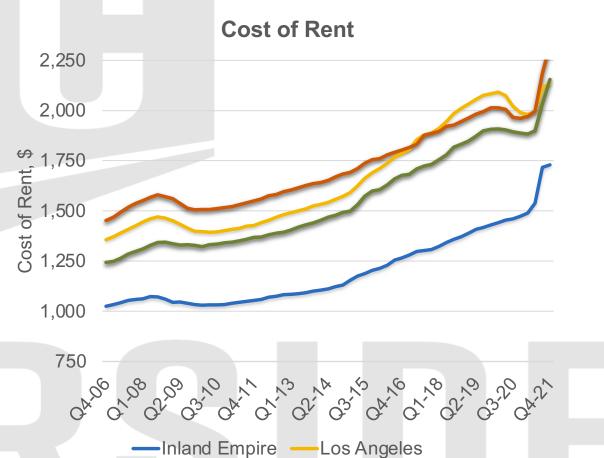




### Rental Housing



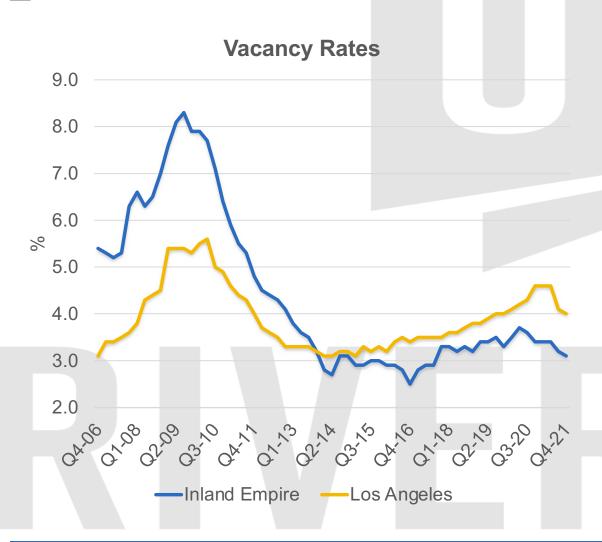


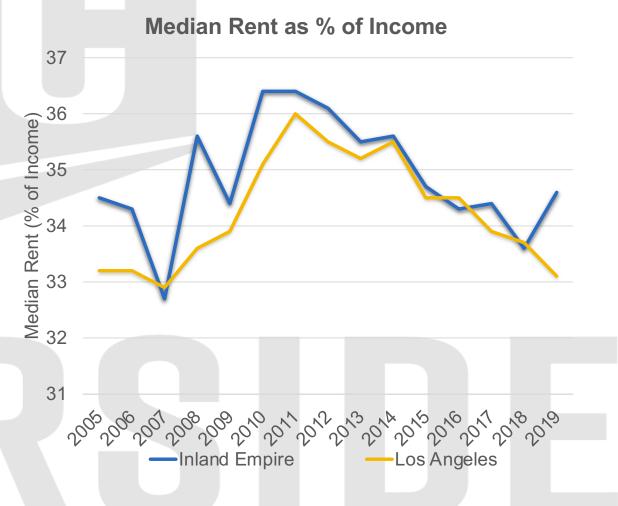


—Orange County—San Diego

### Apartments



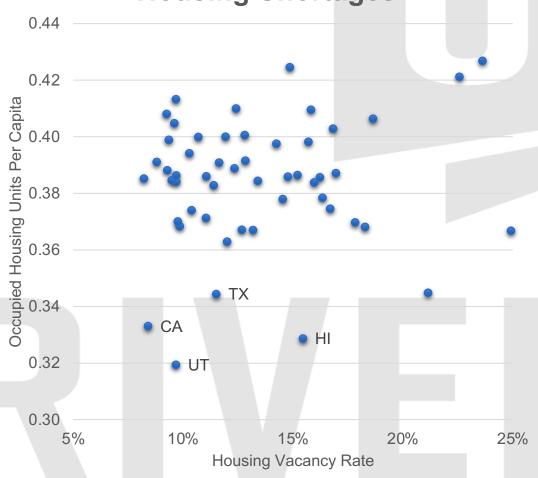




## CA Housing Shortages vs Affordability



#### **Housing Shortages**



## Worst States for Housing Affordability (>35% Cost to Income)

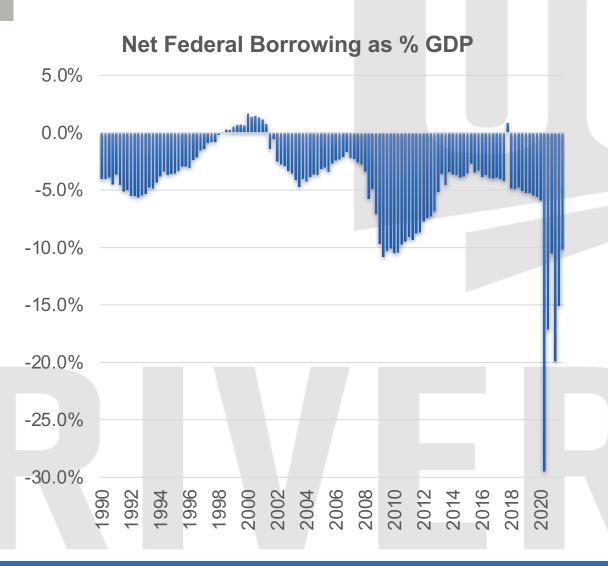
	Share 0	Dwned		Share R	Rented
Hawaii	31.1%	-9.3%	Florida	46.4%	-4.3%
California	28.5%	-12.4%	Hawaii	45.0%	-2.3%
Florida	25.0%	-14.3%	Louisiana	43.7%	0.0%
New Jersey	24.6%	-11.9%	California	43.6%	-4.2%
New York	24.4%	-8.2%	Vermont	43.3%	1.1%
Connecticut	22.9%	-8.5%	New York	41.2%	-2.7%
New Mexico	21.7%	-5.8%	Nevada	41.1%	-2.4%
Massachusetts	21.5%	-8.4%	Connecticut	40.6%	-4.2%
Montana	21.5%	-6.7%	Maryland	40.6%	-0.6%

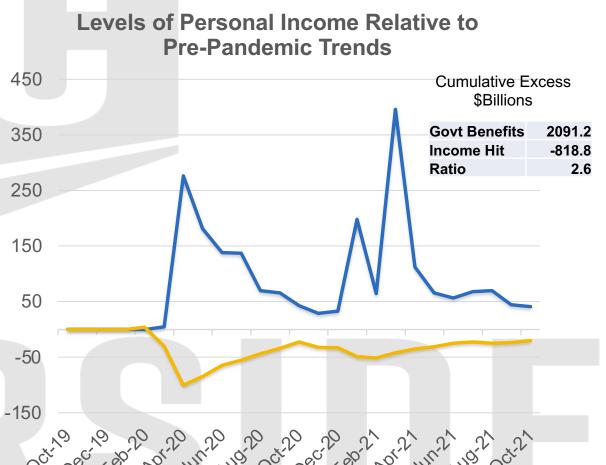
#### **Housing Stock Age**

	Share Built	Share Built	
	After 2010	After 2000	Share SF
Texas	14.1%	32.4%	66.1%
California	4.6%	15.4%	57.7%

## Federal Fiscal (Over)reaction







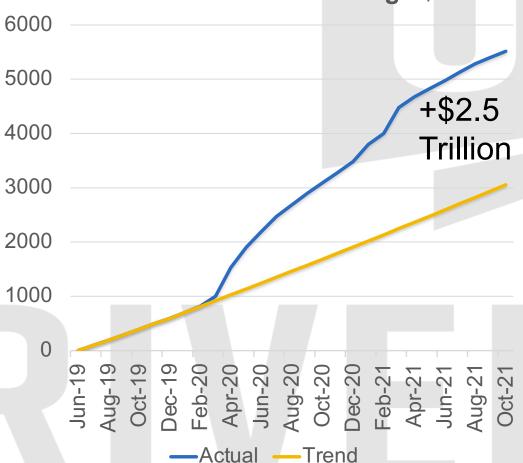
-Disp Inc - Gov Bene

—Govt Benefits

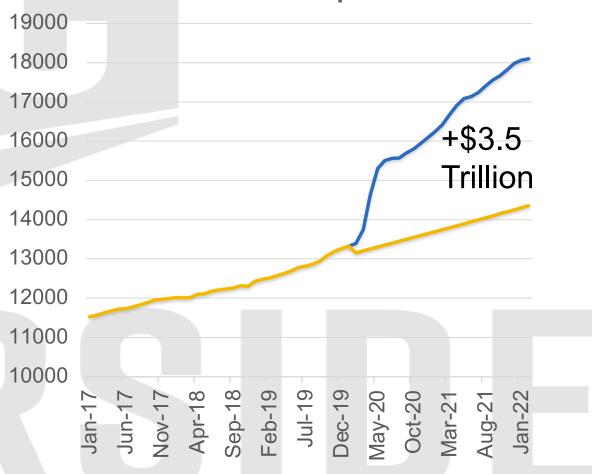
## The Covid Boondoggle





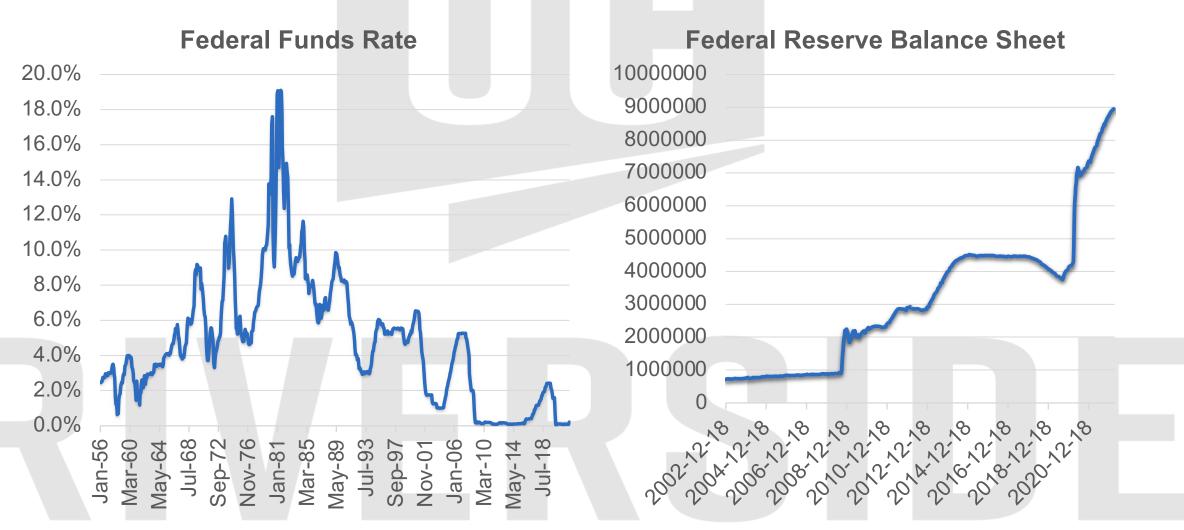


#### **Commercial Bank Deposits \$Bil**

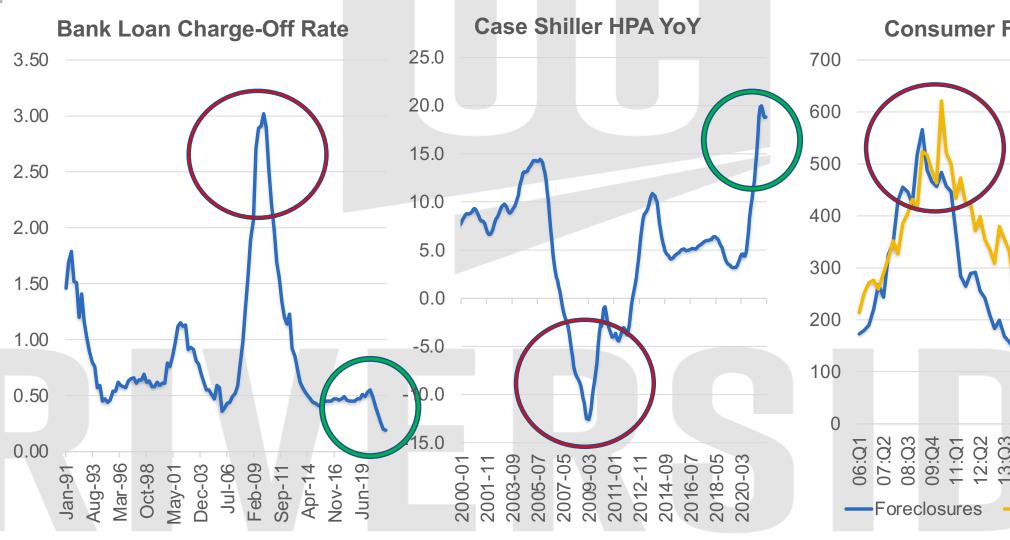


### Mr. Powell's War



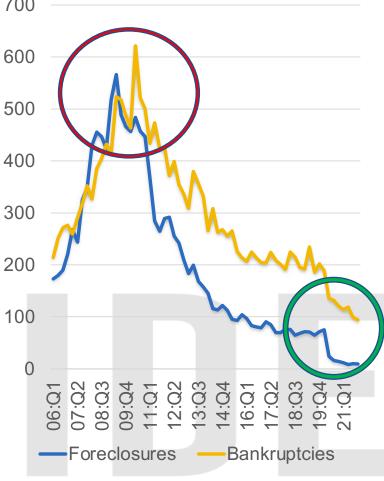


### Mr. Powell's War





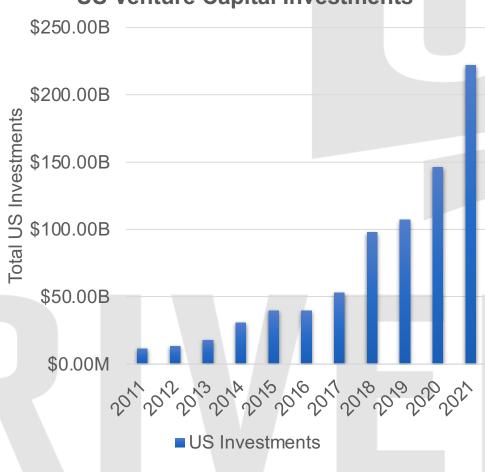


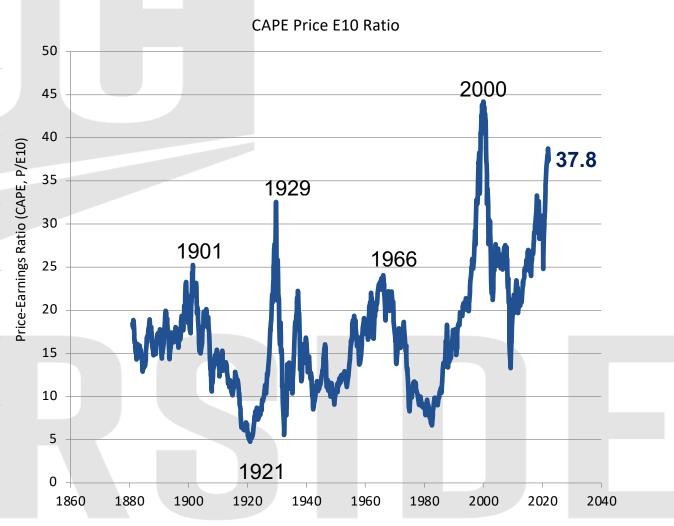


## **Speculation Planet**





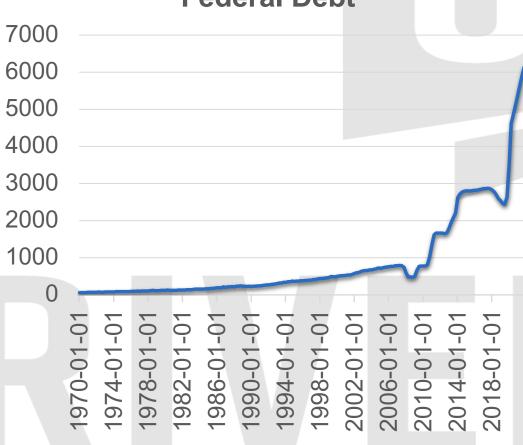




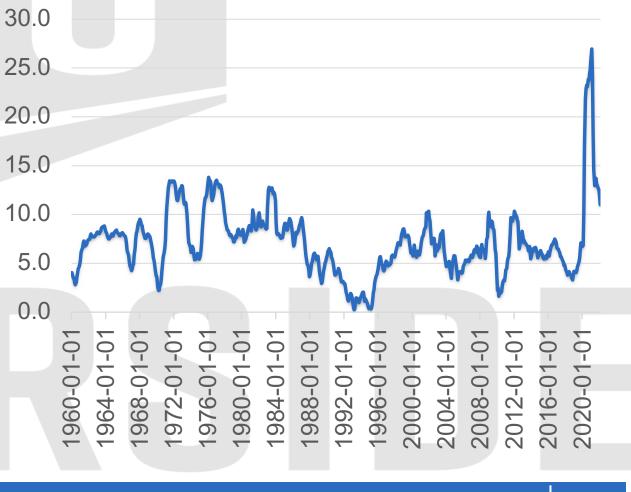
### QE: Then and Now







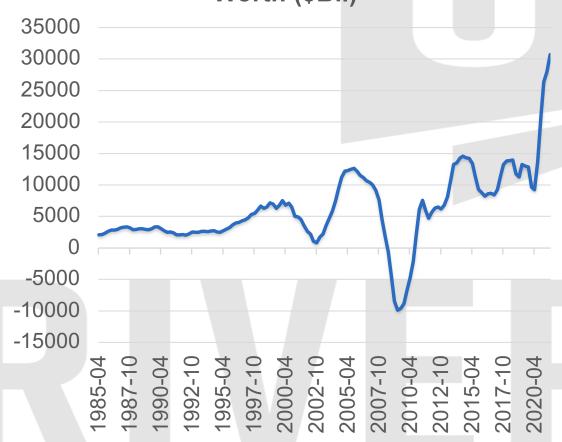
#### **M2** Growth YoY



### The "Wealthiest" Generation





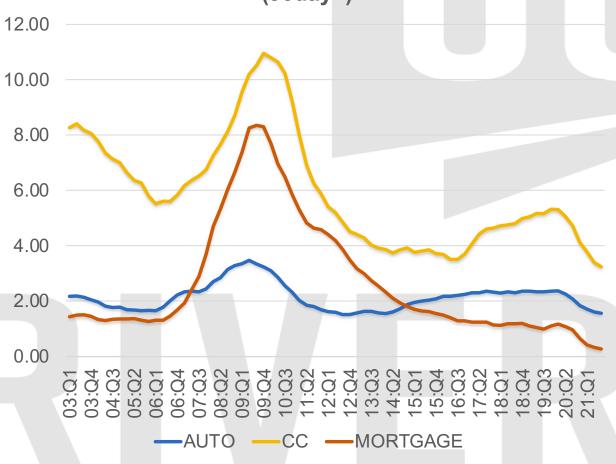


#### **US Financial Obligation Ratio**

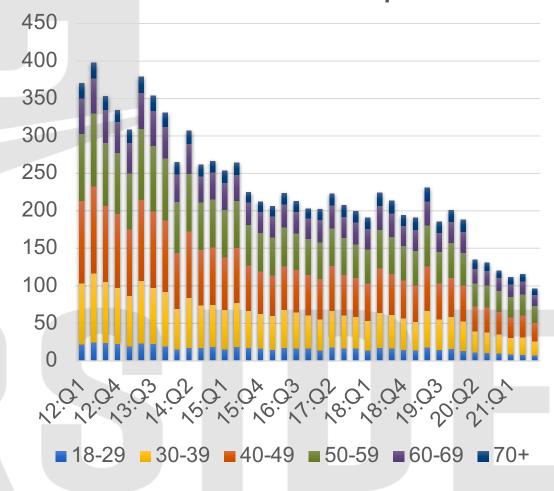


## Hardly a Surprise...



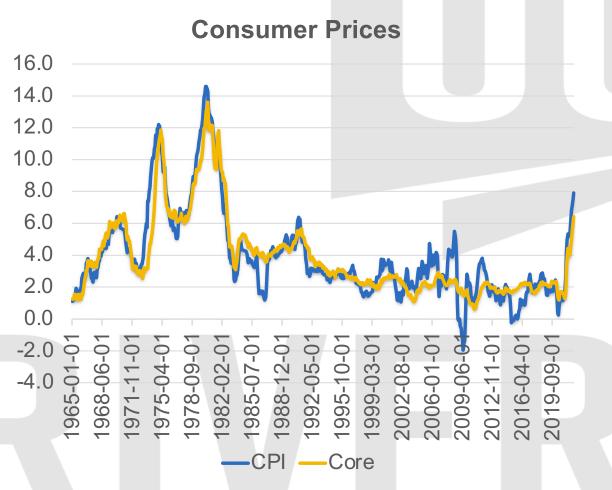


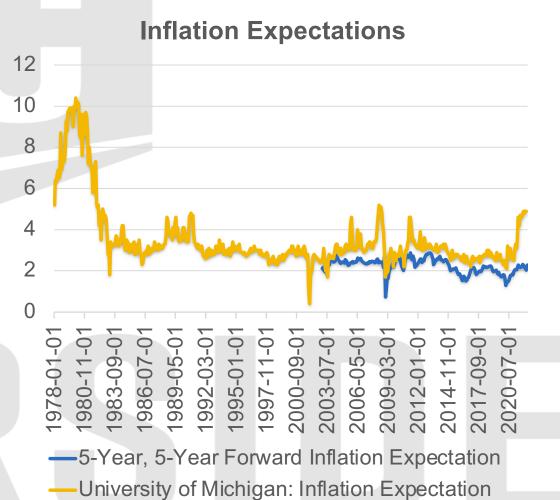
#### **New Personal Bankruptcies**



### Inflation Nation...



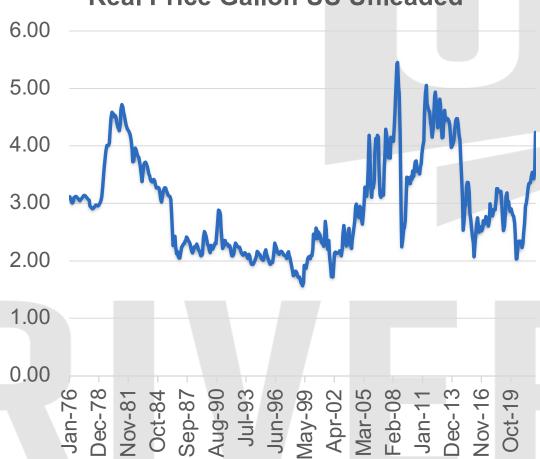




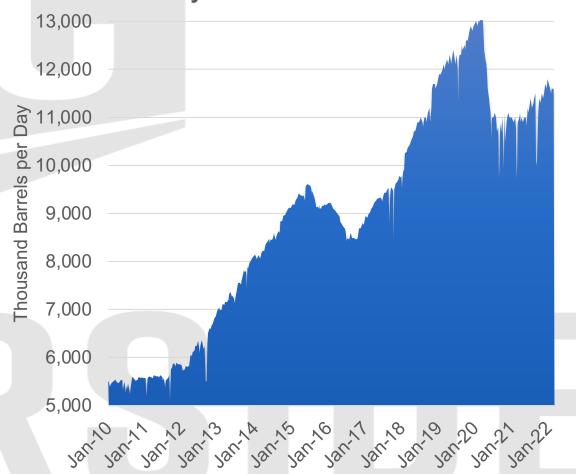
## The Energy Situation





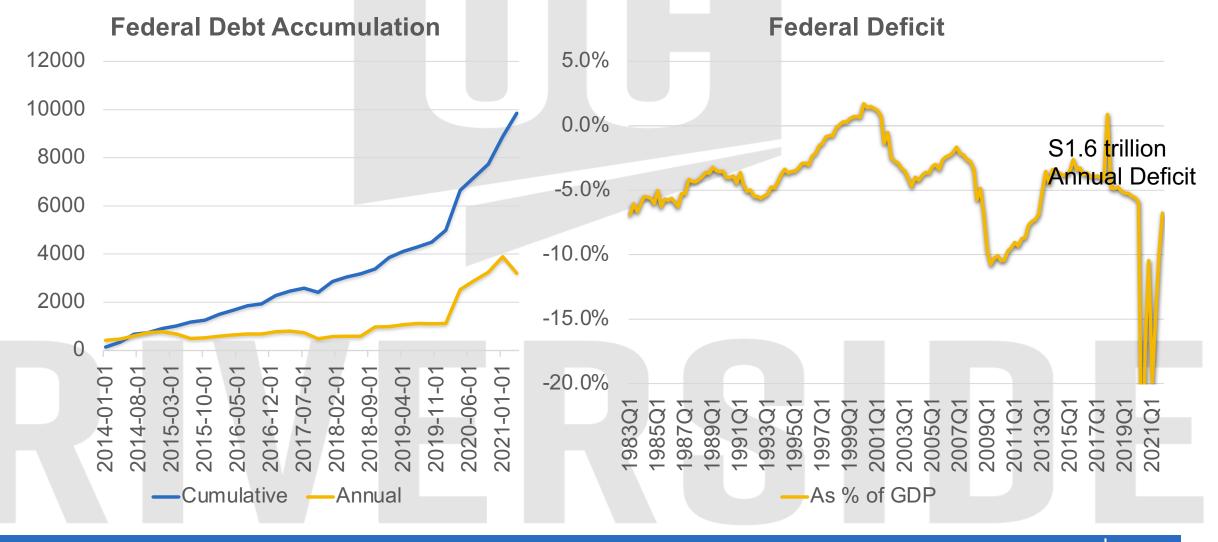


#### Weekly U.S. Prod. of Crude Oil



## No Such Thing As a Free Lunch...





### How Much Farther Can Inflation Go??





## Explain



#### Excuses for inflation

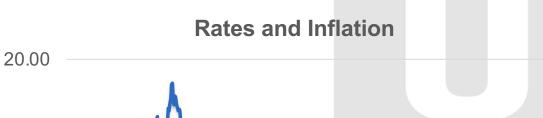
- Supply chain issues
- The federal deficit
- Greedy corporations and profiteering
- Not enough manufacturing jobs in the US
- Biden's bad green energy policies
- It's Mr. Putin's fault!
- Saturn isn't aligned with Jupiter
- Disco is making a comeback
- Its that new host on Jeopardy!

#### Problem of inflation

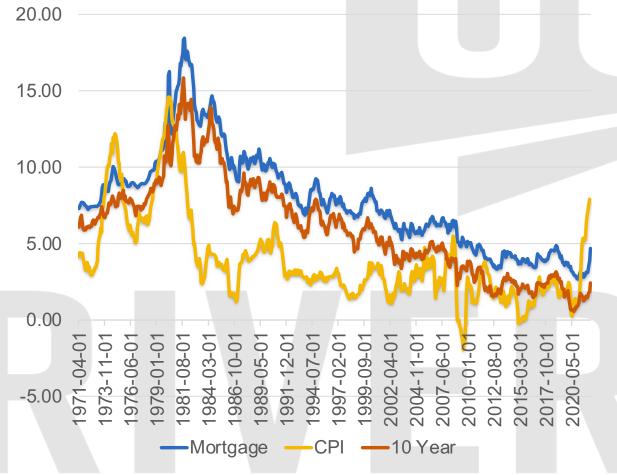
- Short run: Money illusion causes lower interest rates, asset bubbles forming, spending binge
- Long run: slow stagnation, rising interest rates, investments become difficult to cost out, uncertainty hurts markets
- The Cure: Quantitative tightening, sure to drive up rates very quickly in the short run

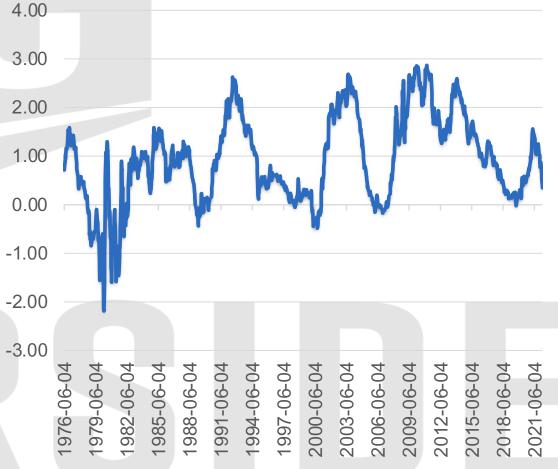
## First Rumblings





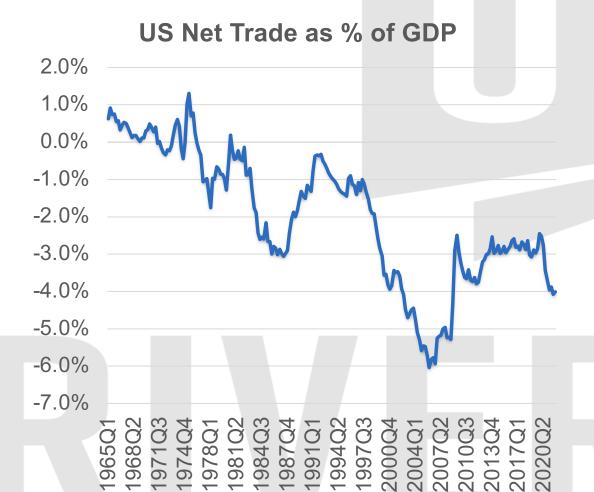




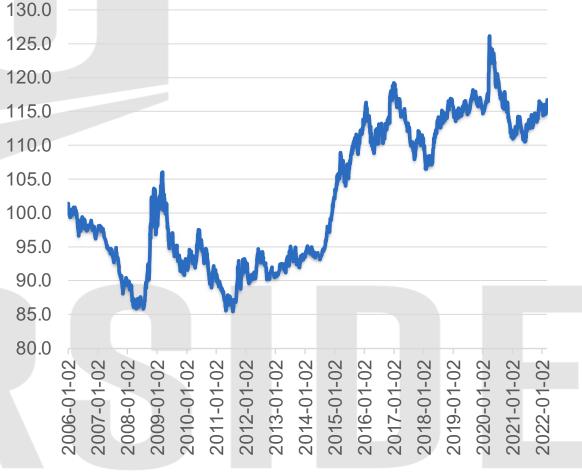


## Reliance on Foreign Capital



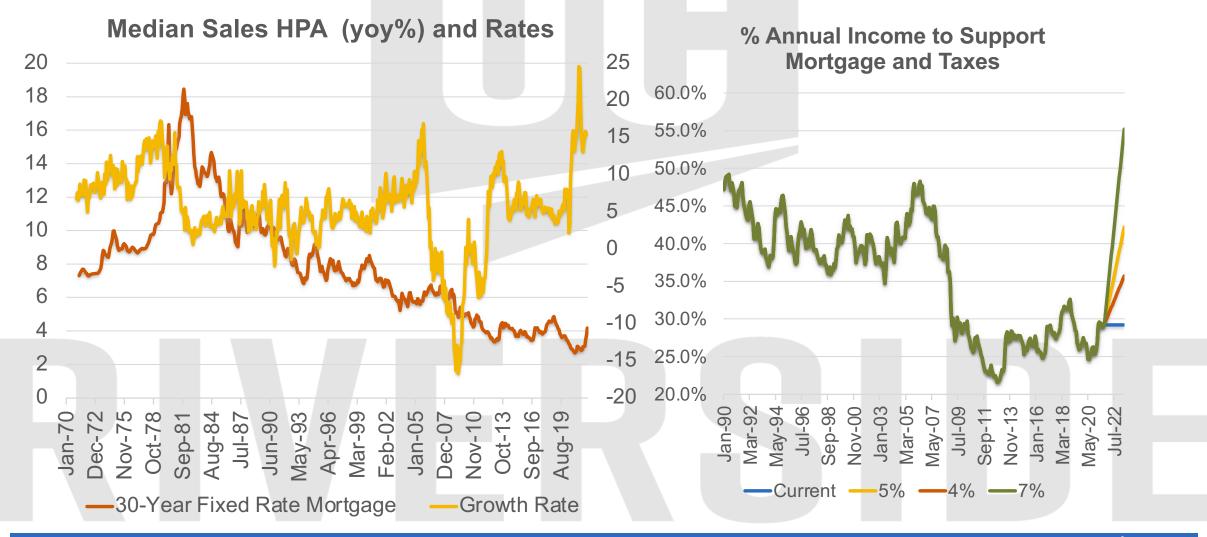






### Impact of an Interest Rate Shock

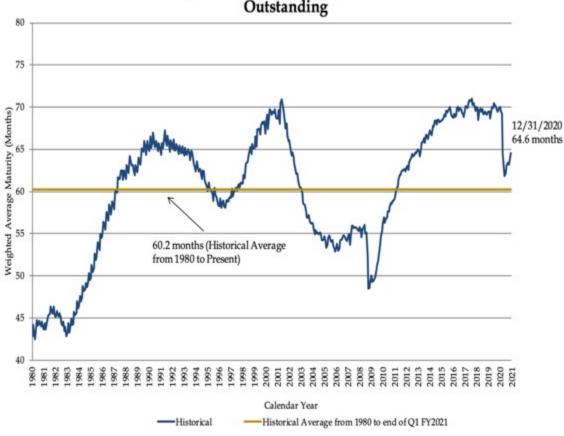




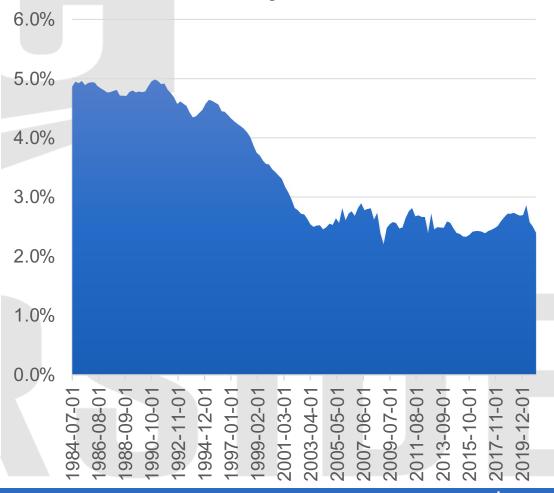
## Interaction of Monetary and Fiscal Problems







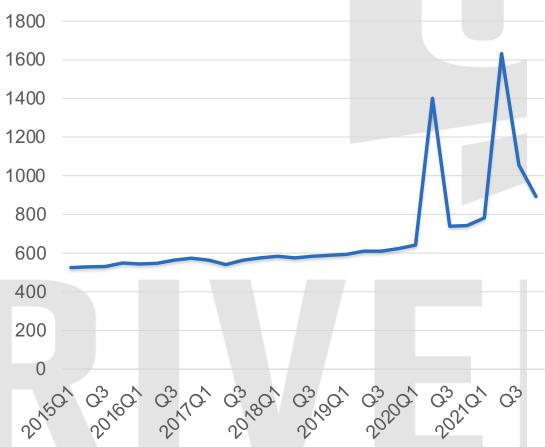
#### Federal Interest Payments as % of GDP



### The Local Risks

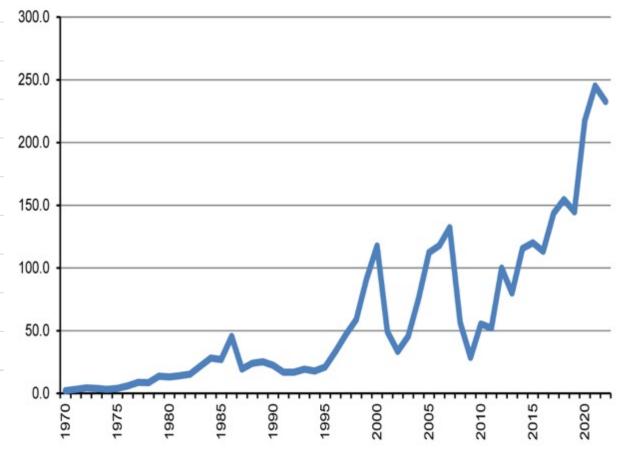






#### **Capital Gains Realizations**

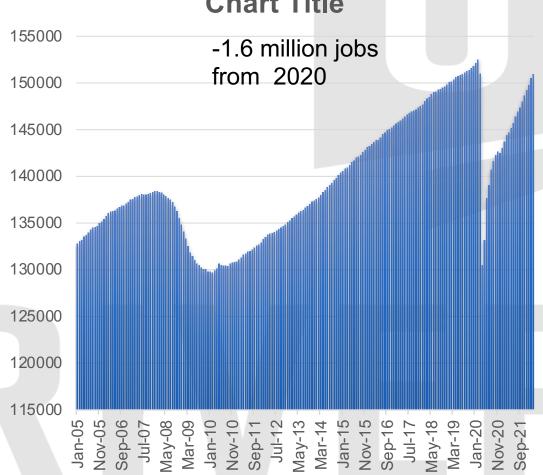
(Dollars in Billions)



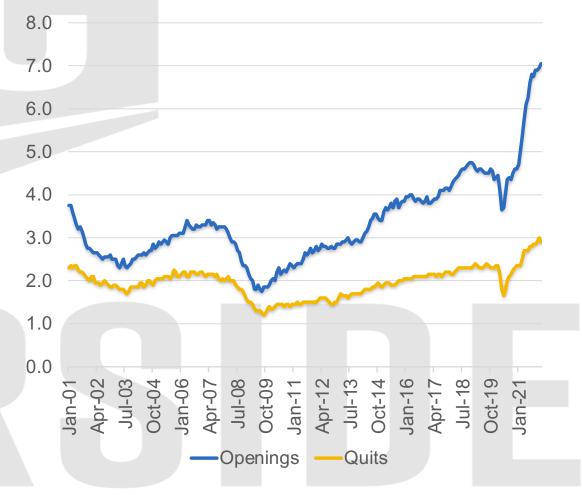
### A Labor Market Paradox?





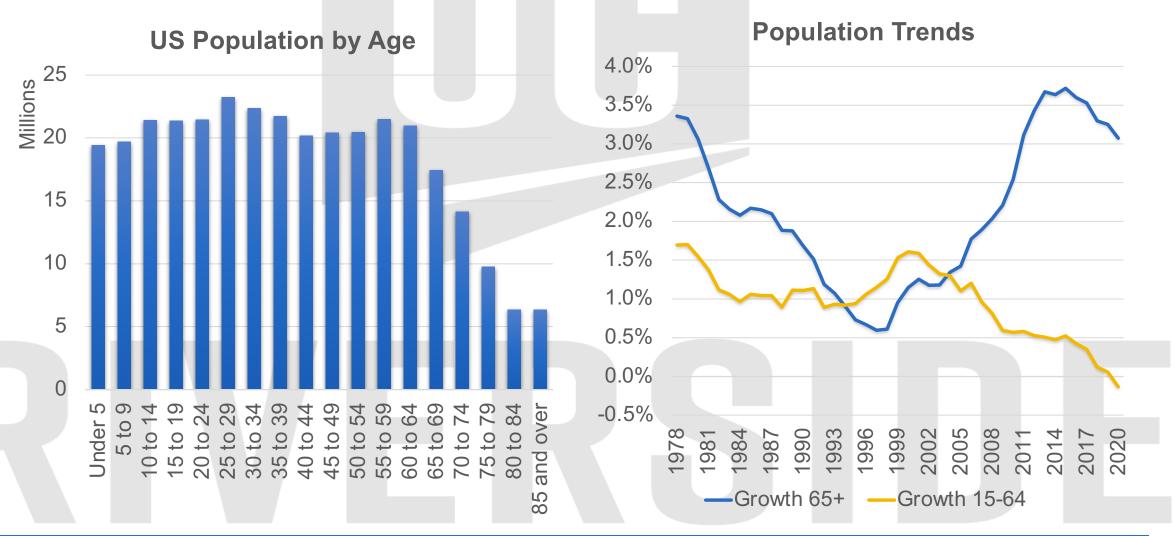


#### **US JOLT Trends**



## The Long Run Labor Force Issue



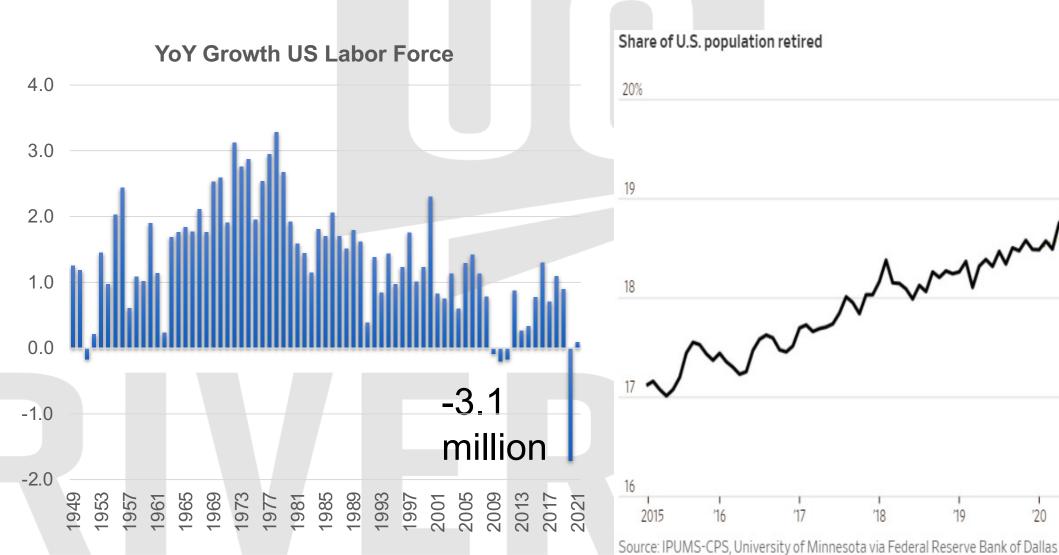


## The Big Retirement



trend

'21



## Tracking Shortages

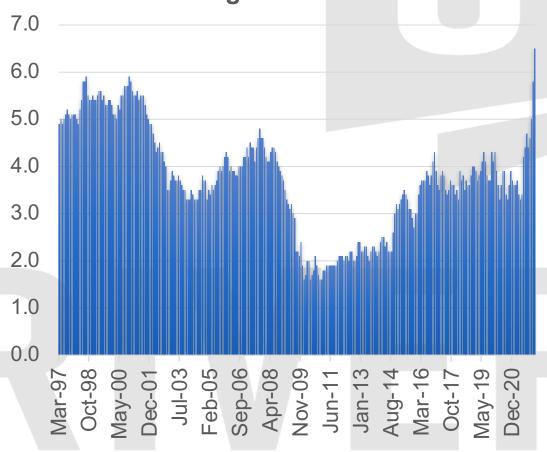


Job Openings by Industry	Jan-21	Jan-22	
Total	7,232	11,263	55.7%
Accommodation food	689	1,497	117.3%
Arts and recreation	90	179	98.9%
Financial activities	276	538	94.9%
Wholesale trade	188	309	64.4%
Manufacturing	522	855	63.8%
Health care	1,204	1,944	61.5%
Information	161	234	45.3%
Professional business	1,452	2,065	42.2%
Government	746	1,029	37.9%
Retail trade	811	1,046	29.0%
Construction	299	380	27.1%
Logistics	382	479	25.4%
Educational services	152	185	21.7%

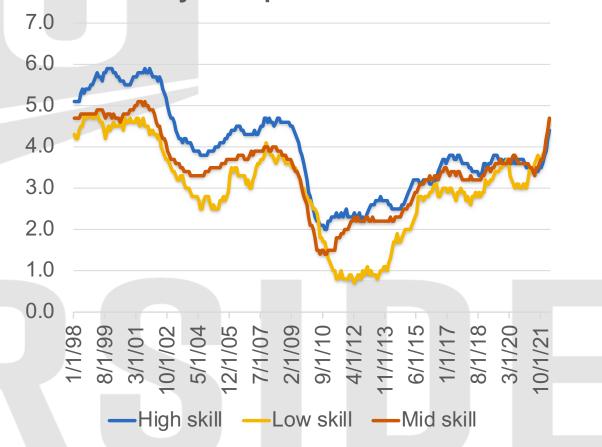
### A Sellers' Market in Labor



## Atlanta Fed Wage Tracker: Average Earnings Growth YoY

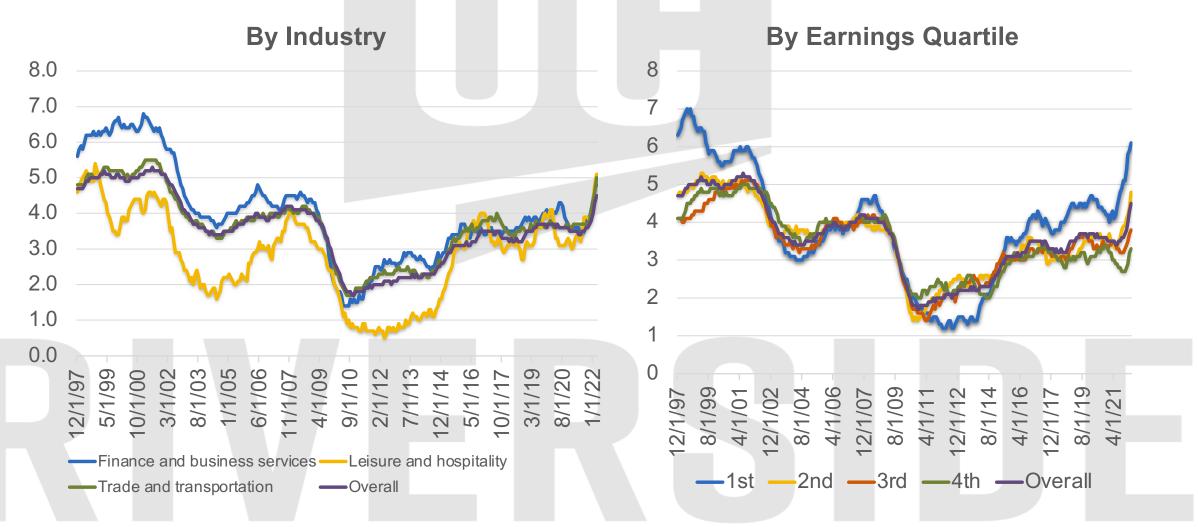


#### By Occupational Skill



## **Earnings Growth**



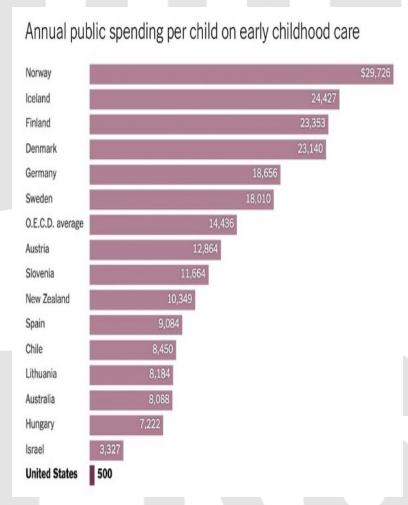


## **Labor Shortage Solutions**



#### Solutions

- Extensive: Increasing labor force through immigration (SR) or birthrates (LR)
- Intensive: Raising participation rates among the existing population
- Productivityenhancements: capital investments / skill training



### Labor force participation rate Females 25-54

remaies 25-54	
Sweden	88.7
Austria	85.7
Finland	84.9
Canada	83.5
Netherlands	83.3
Germany	83.3
France	83.1
Denmark	82.8
Spain	82.3
United Kingdom	81.5
Belgium	80.3
Japan	80.0
Israel	79.9
Australia	79.3
Poland	79.0
Greece	77.6
United States	76.0
Korea	67.8

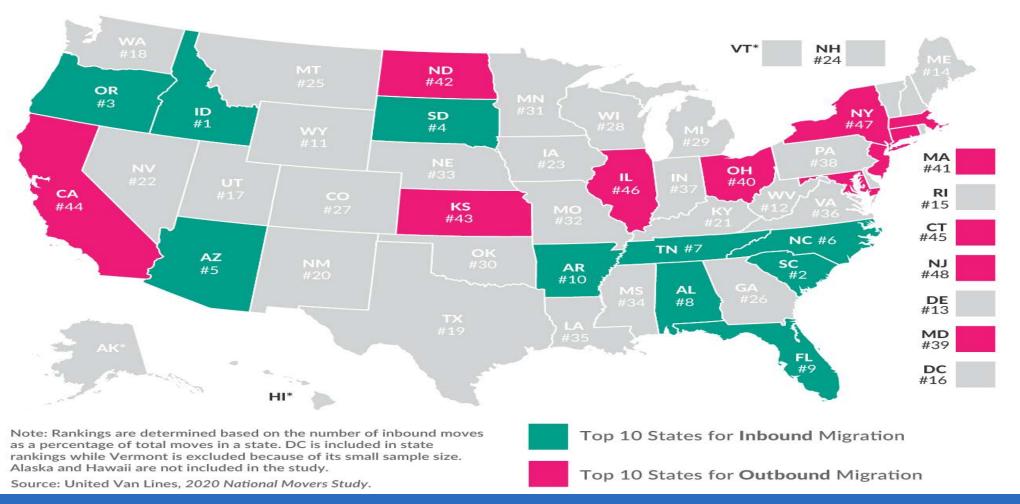
1 pp = 600,000 female workers in US

### The Future of Economic Development



#### Where Did Americans Move in 2020?

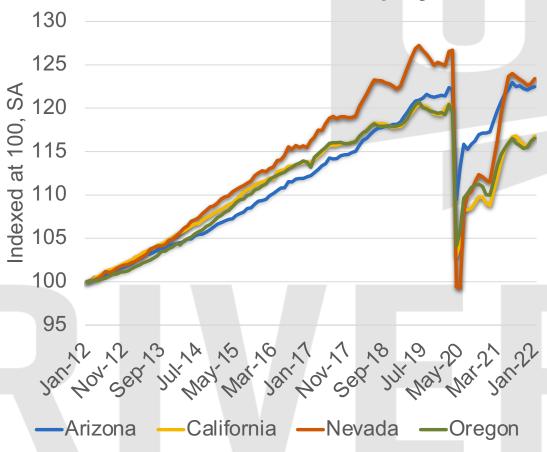
State Migration Patterns, from Most Inbound to Most Outbound, 2020



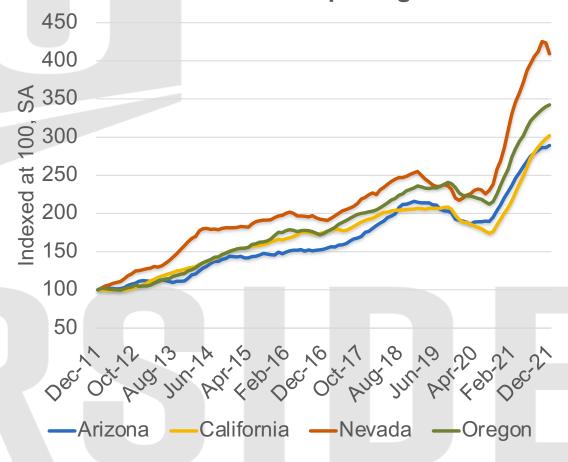
## Regional Labor Markets







#### **Indexed Job Openings**



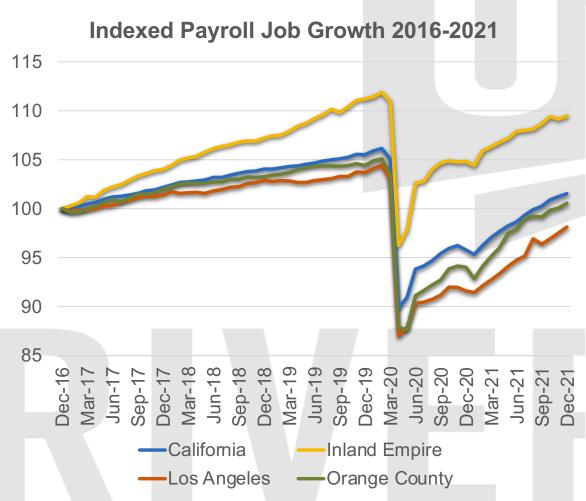
## The State Employment Situation



	Employment		La	bor Force		
	Jan-20	Jan-22		Jan-20	Jan-22	
California	17660.7	17194.1	-466.6	19545.4	19064.5	-480.9
Los Angeles (MD)	4612.3	4450.1	-162.2	5209.0	5016.9	-192.1
Inland Empire	1588.4	1616.3	27.9	2074.6	2138.4	63.8
San Diego	1517.7	1488.4	-29.3	1567.8	1567.8	0.0
Orange County (MD)	1684.5	1616.1	-68.4	1596.0	1561.2	-34.8
Oakland (MD)	1201.1	1154.7	-46.4	1389.6	1363.3	-26.3
Sacramento	1035.3	1027.5	-7.8	1092.1	1101.6	9.5
San Jose	1168.7	1137.6	-31.1	1077.4	1060.4	-17.0
San Francisco (MD)	1203.9	1147.6	-56.3	1032.8	1003.9	-28.9
Fresno	371.4	368.3	-3.1	450.5	448.1	-2.4
Ventura	316.0	301.8	-14.2	419.4	407.3	-12.1
Bakersfield	278.5	272.0	-6.5	391.2	383.7	-7.5

## **Local Employment Base**



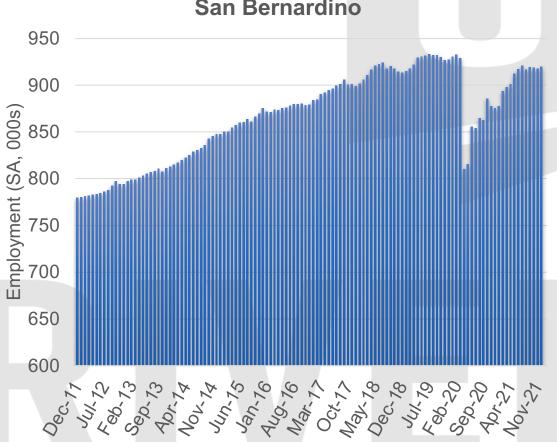


	IE Emp	2-Year Growth			
Industry	Dec-21 (000s)	% Growth (IE)	Abs Growth (IE)	Abs Growth (CA)	
Total Nonfarm	1,555	-1.6	-24.9	-662.0	
Logistics	438	7.8	31.6	-39.9	
Education/Health	262	2.4	6.0	-27.6	
Construction	108	-1.1	-1.1	-3.2	
Wholesale Trade	66	-2.1	-1.4	-35.2	
Retail Trade	176	-2.3	-4.2	-75.2	
Professional/Business	159	-3.0	-5.0	26.9	
Admin Support	107	-3.1	-3.4	-20.9	
Finance	44	-4.6	-2.1	-33.6	
Manufacturing	96	-5.1	-5.1	-53.5	
Other Services	44	-5.8	-2.7	-71.4	
Hospitality	152	-13.2	-23.2	-311.0	
Information	9	-18.4	-2.1	-6.0	

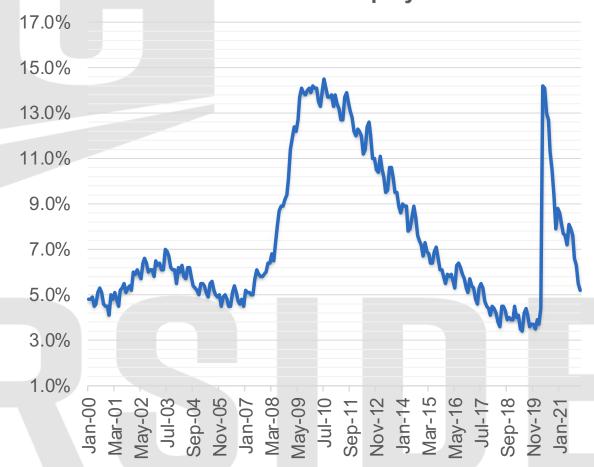
### **Local Labor Market**







#### San Bernardino Unemployment

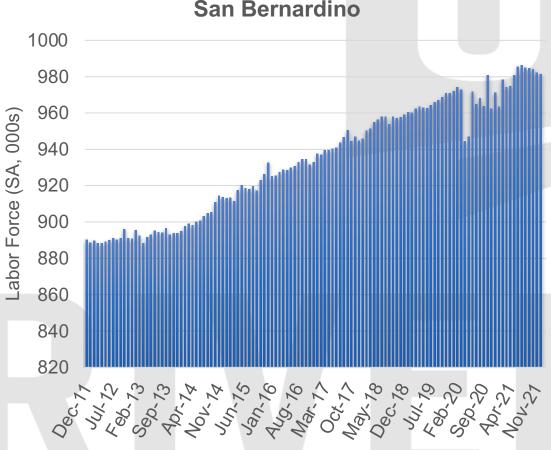


Source: California EDD

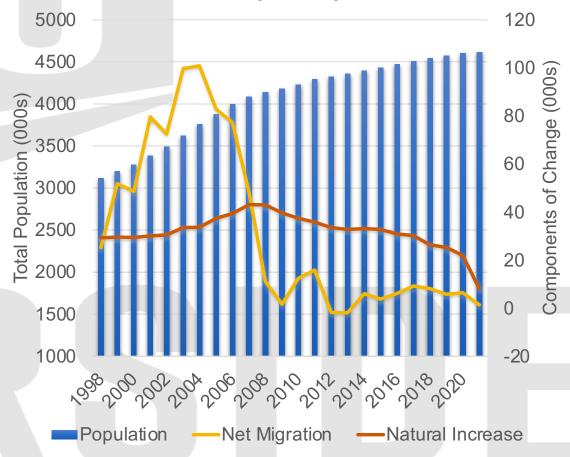
### **Local Labor Market**







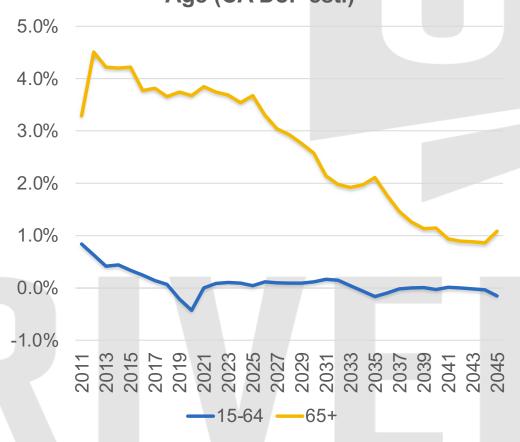
#### **Inland Empire Population**



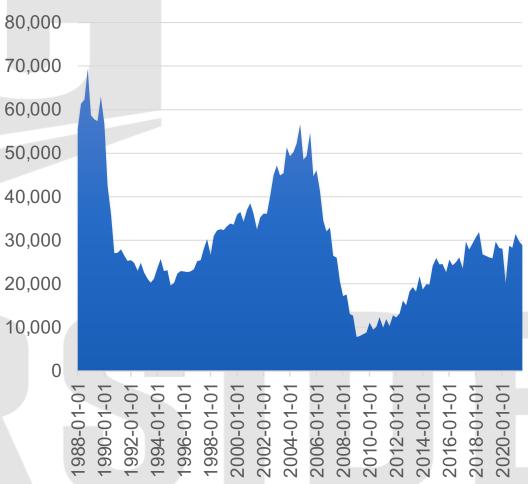
## State Labor Shortage Issues





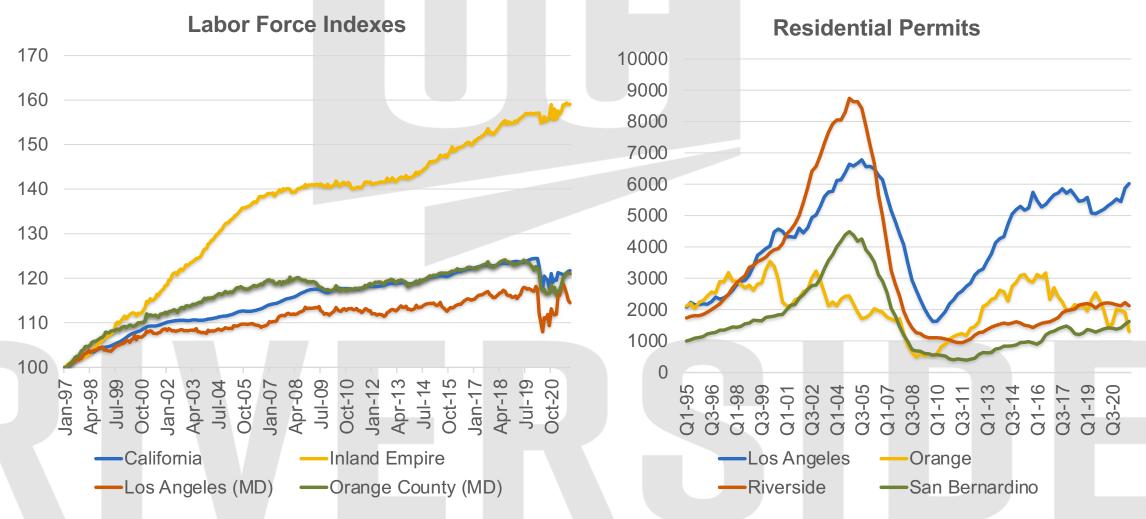


#### **California Residential Unit Permits**



## The Real So-Cal Story





### Who is Ahead?



**OPINION** 

## Regions Rise Together: building a plan for inclusive, sustainable growth across California

- Nearly 70% of job growth from 2010 to 2018 came from the coastal areas around Los Angeles, San Diego, and the Bay Area.
- Residents in counties as varied as Merced, Kern, and San Bernardino have seen their per capita incomes drop from close to 90% of the state median to below 65%.
- Today, California's inland communities face higher structural unemployment.
- They also create fewer jobs in the state's fastest-growing industries, particularly highwage sectors like information and professional services.
- The limited quality job opportunities nearby combined with high housing costs in coastal areas results in many inland residents enduring grueling daily commutes to reach employment

## Earnings by Education



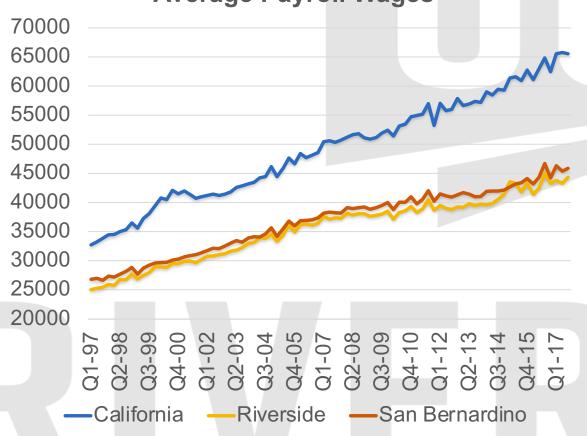
	2018 Earnings (\$)			
Education Level	Inland Empire	Los Angeles	Orange County	
Less than HS	25,369	25,699	23,416	
HS Grad	32,134	32,288	30,563	
Some College	39,354	41,162	36,830	
Bachelor's degree	53,289	67,131	56,577	
Grad/Professional Degree	80,807	89,585	80,940	

Housing Costs by Educational Attainment Share of Income Spent						
	LA	OC	Rv	SB		
Less Than High School	39.0	41.4	34.9	33.6		
High School Graduate	36.2	36.9	31.6	31.5		
Some College	32.0	31.8	28.4	29.2		
Bachelors Degree	27.6	26.8	25.8	26.3		
Grad./Prof. Degree	24.7	25.7	23.4	24.3		

### Who is Ahead? Behind?







#### **Define Success**

Tech Jobs?
Venture Capital?
Relative Average Wages?

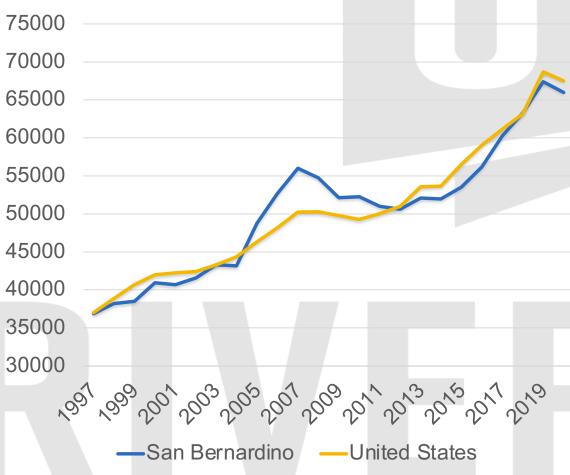
Growing Wages
Falling Poverty
Low Unemployment
Solid Pace Growth
Quality of Life

53

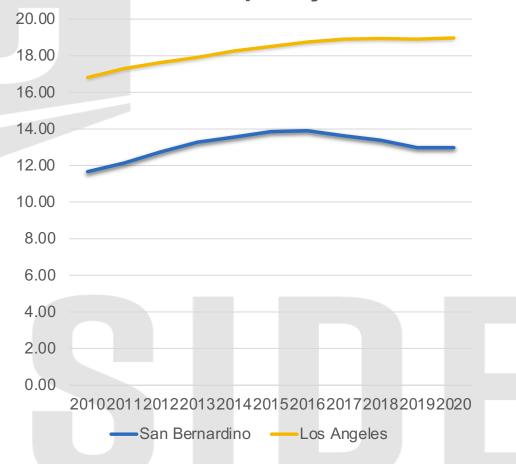
## A Bit of Comparison







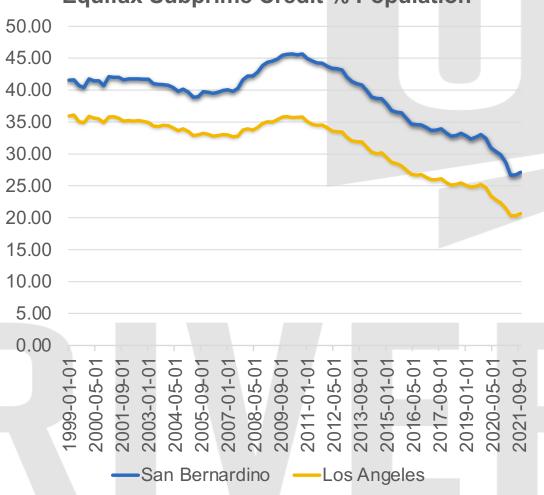
#### **Income Inequality Index**



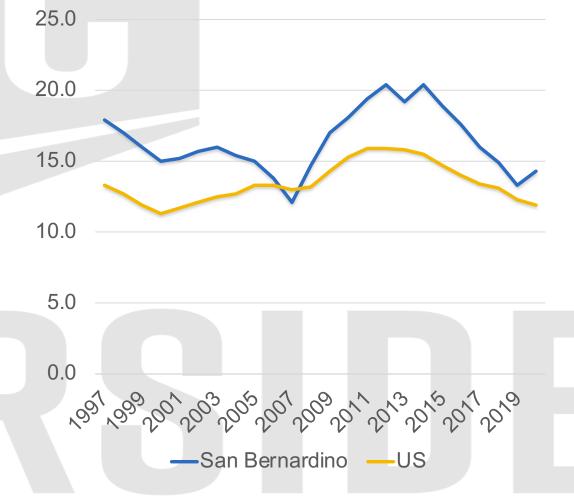
## **Prosperity Trends**







#### **Poverty Rates**



## Comparatives: 20 Largest US Counties

				Income <	Income > siness
	HHs H	OUSING COST	ΓS > 30% Income	50K	100K
Maricopa Arizona	1,611,722	29.0%	Wayne Michigan	49.39	% 21.7%
Wayne Michigan	689,270	30.8%	Miami-Dade Florida	45.69	% 24.9%
Tarrant Texas	727,094	31.5%	Bexar Texas	42.29	% 25.3%
King Washington	907,761	32.3%	Clark Nevada	39.59	% 27.8%
Bexar Texas	646,352	32.6%	Dallas Texas	40.09	% 28.2%
Harris Texas	1,647,384	33.3%	Broward Florida	40.99	% 28.9%
Santa Clara California	643,637	33.6%	Harris Texas	40.39	% 29.8%
Cook Illinois	1,985,613	34.2%	San Bernardino California	36.79	% 31.1%
Dallas Texas	940,587	34.2%	Maricopa Arizona	35.39	% 32.4%
Clark Nevada	813,607	35.3%	Tarrant Texas	34.89	% 32.6%
Alameda California	585,632	36.5%	Kings New York	39.79	% 34.4%
Riverside California	734,948	38.3%	Cook Illinois	37.69	% 34.6%
Orange California	1,044,280	39.1%	Riverside California	33.79	% 35.4%
San Bernardino California	644,758	39.2%	Queens New York	34.39	% 36.5%
San Diego California	1,132,434	41.6%	Los Angeles California	35.09	% 36.5%
Queens New York	784,552	41.8%	San Diego California	29.49	% 41.8%
Broward Florida	705,472	42.1%	Orange California	25.29	% 48.2%
Kings New York	978,091	44.6%	King Washington	23.79	% 51.9%
Los Angeles California	3,328,398	45.0%	Alameda California	23.79	% 54.0%
Miami-Dade Florida	912,805	46.9%	Santa Clara California	18.59	% 61.3%

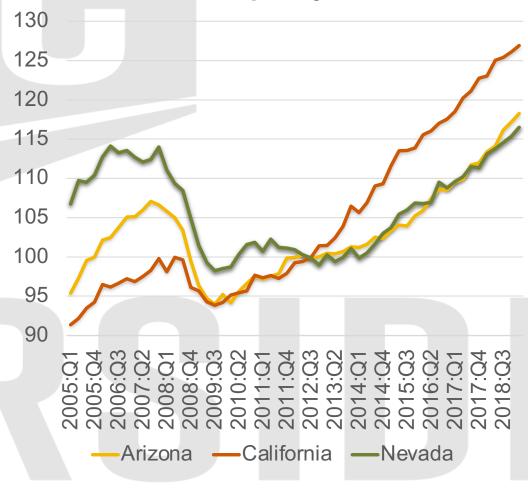
### California Skill Shifts



Net Migration by Educational Attainment, Population over 25 (Total from 2012-2017)

Education	CA	NV	AZ
Net Migration	-285,240	117,472	262,788
Less Than HS	-58,169	15,202	6,605
HS Grad	-134,048	33,371	64,261
Some College	-181,809	40,466	94,125
ВА	19,318	21,011	70,607
Grad	69,468	7,422	27,190

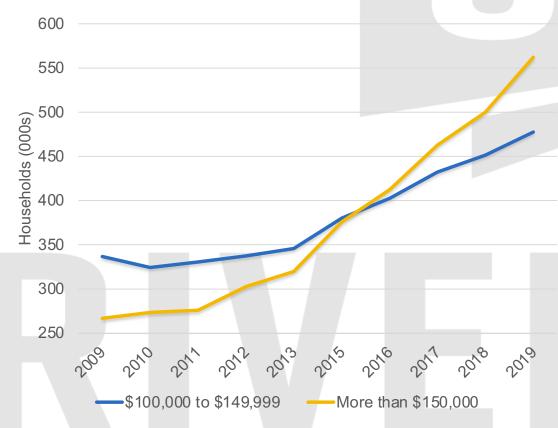
#### **Real Output by State**



## Upper Income Households – SoCal Cities



## Upper Income Households SoCal Cities

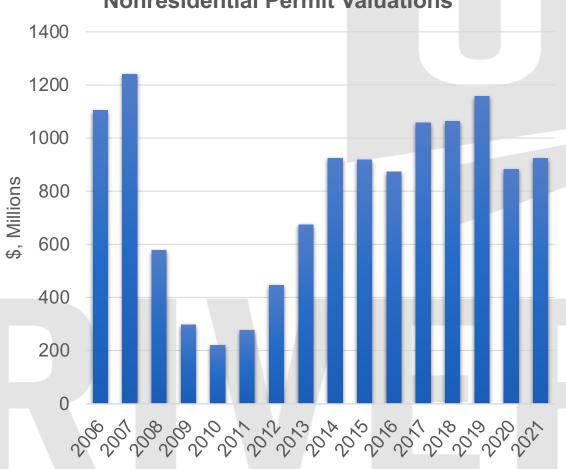


		RIICINECO			
Logotion	Income Bracket – More than \$150,000				
Location	2019 Value (Households	5) 5-Yr Growth (%)			
Los Angeles County					
Los Angeles	266,293	56.4			
Long Beach	27,367	38.7			
Santa Clarita	21,377	92.1			
Orange County					
Anaheim	20,293	42.6			
Santa Ana	11,819	154.1			
Irvine	35,961	54.5			
Inland Empire					
San Bernardino	4,731	173.5			
Riverside	12,669	63.9			
Rancho Cucamonga	13,927	40.1			
San Diego County					
San Diego	120,803	49.7			
Chula Vista	17,025	95.1			

### San Bernardino Nonresidential Permits







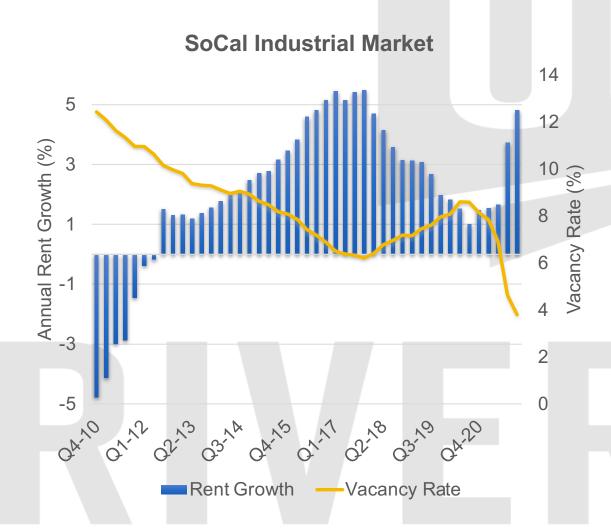
#### **Nonresidential Permits in Select Cities**

City	2021 Value (Permits)	2-Year Change (Permits)
Victorville	156,324,876	141,941,584
Ontario	278,265,052	10,246,437
Rancho Cucamonga	52,779,630	-14,356,684
Fontana	117,344,044	-27,577,866
San Bernardino	47,068,951	-29,428,746
Rialto	5,000	-197,228,896

Source: CIRB

### SoCal - Industrial CRE Market





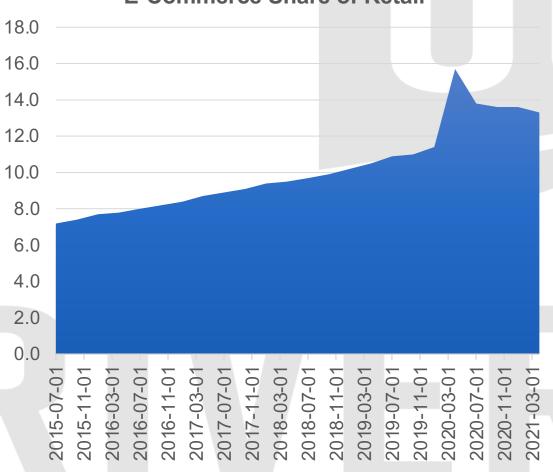
	Cost o	f Rent	Vacancy Rate	
MSA	Q4-21 (\$)	2-Year Growth (%)	Q4-21 (%)	2-Year Change (p.p.)
San Diego	24.9	6.5	11.7	-9.0
Orange County (MD)	20.8	5.8	6.3	-5.9
Inland Empire	15.4	5.3	6.7	-8.2
Los Angeles (MD)	22.2	5.2	9.1	0.1

Source: REIS

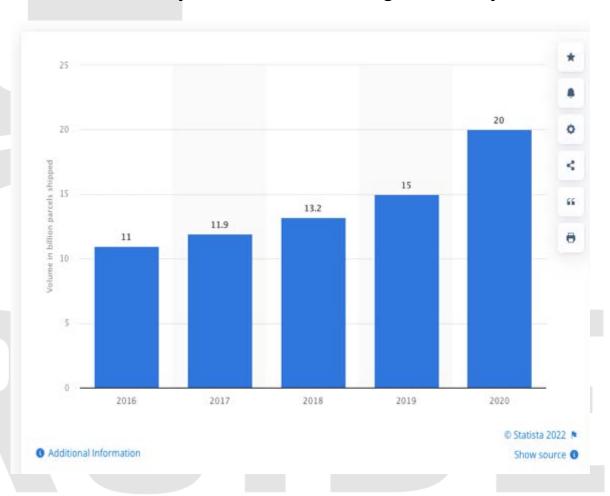
## Retail / Industrial Supply Chains





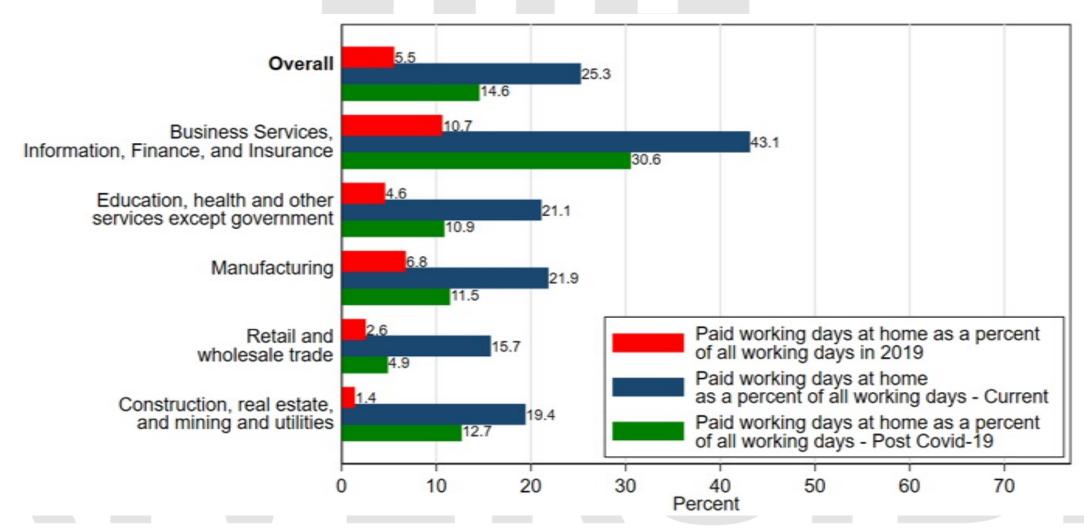


#### Pitney Bowes US Package Delivery



### WFH Before, During, and After COVID

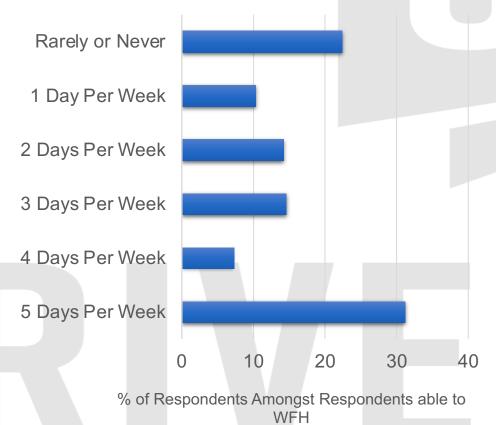




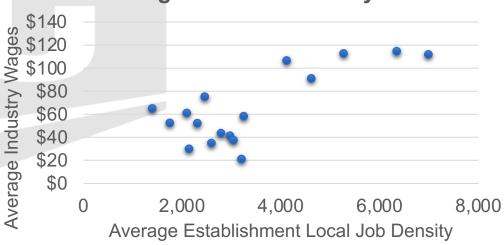
# The Future of Downtowns More Jobs Fewer People







#### **Wages and Job Density**

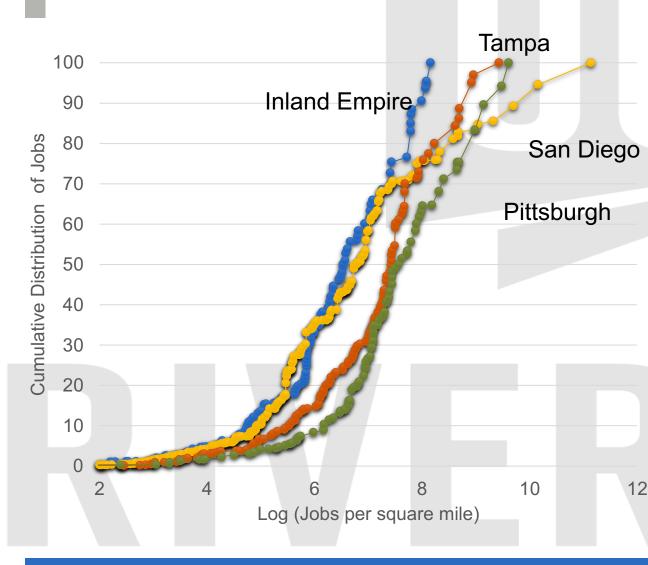


#### Where do you want to live?

- Accessibility to Income
- Quality of Life
- Affordability

## **Density Density Density**

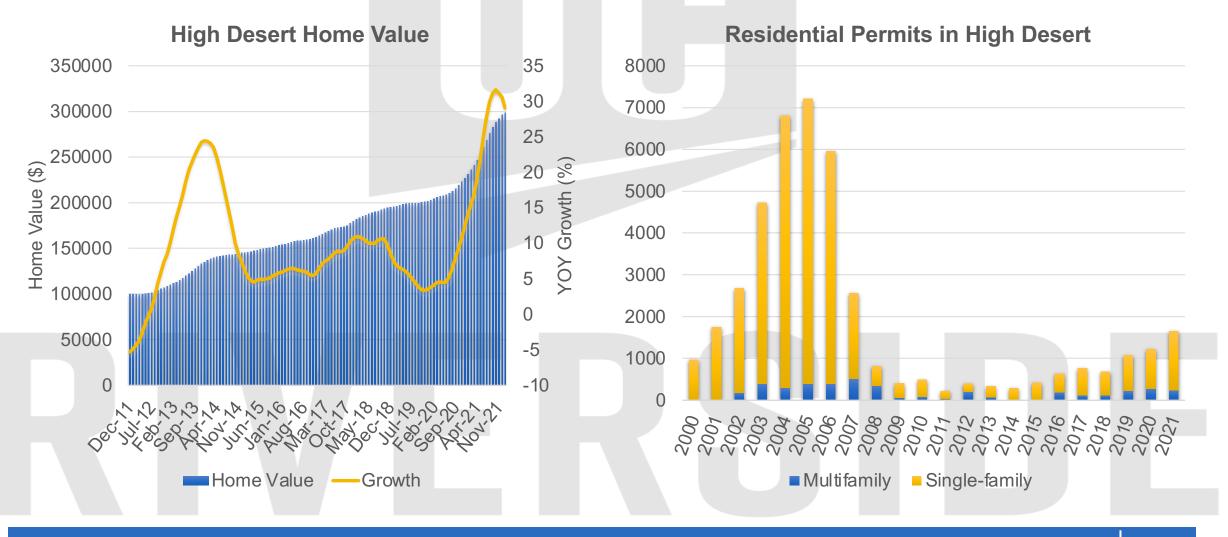




	HHs	Owned	% in MF
Kings New York	972,314	30.3%	85.8%
Queens New York	783,362	45.1%	71.0%
Cook Illinois	1,991,474	57.2%	52.6%
Miami-Dade Florida	902,200	51.6%	46.7%
Broward Florida	704,942	62.8%	45.7%
Los Angeles California	3,332,504	46.0%	44.4%
King Washington	900,061	56.5%	41.7%
Dallas Texas	945,996	50.4%	41.0%
San Diego California	1,130,703	53.9%	38.2%
Alameda California	573,174	53.6%	38.1%
Harris Texas	1,635,749	54.9%	36.8%
Santa Clara California	635,314	56.4%	36.3%
Orange California	1,040,001	57.2%	36.2%
Clark Nevada	809,026	54.8%	32.6%
Bexar Texas	644,561	58.5%	30.7%
Maricopa Arizona	1,596,784	63.2%	28.6%
Tarrant Texas	722,446	60.3%	27.8%
San Bernardino California	640,090	60.1%	25.8%
Riverside California	736,413	67.5%	24.1%
Wayne Michigan	694,858	62.5%	23.1%

### Residential Home Values and Permits





## The Long Run Still Matters



#### The Economy is back...

- The "V" was the only logical outcome
- Recovery hampered not by lack of demand but by lack of supply
- Consumers are pushing inflation, not being hurt by it
- Global geopolitics are mainly a dangerous distraction

#### Labor Supply Shortages

- Good for low skilled workers, reduces inequality
- ED: No longer Jobs Jobs, but Workers Workers Workers
- Immigration, programs to encourage senior and female employment, capital investments

#### The Outlook: Hot until Not

- US economy will remain heated for the next year, unemployment to 3.4% by year end
- Inflation will continue to be hot, unclear when rates will reflect reality
- Expect a sugar crash to come, combination of tight federal budget and inflation.

#### ED in SB

- Start with the idea that SB is a successful economy
- Density density density
- Changes in economy broadly supportive of the local economy—good times ahead, except for the national issues

## What can UCR do for you?



Connect with us.

To view again or download this presentation and for further information, go to: www.BeaconEcon.com

Continue the conversation.

Contact **Dr. Chris Thornberg** directly at **chris@beaconecon.com** or **310.571.3399** 

Let's discuss your goals and needs.

Beacon has **6 Practice Areas** covering a range of services and products.

Our 6 Practice Areas



Housing, Land Use, & Real Estate Advisory



Sustainable Growth and Development



Economic & Revenue Forecasting



Economic, Fiscal and Social Impact Analysis



Regional and Sub-Regional Analysis



Litigation and Testimony

### Partner with local leaders on research

School of Business

We partner with local cities, counties, & businesses to do local analysis.

Types of analysis the Center specializes in:



Economic, Demographic & Revenue Forecasting



**Economic Impact Analysis** 



Regional Intelligence Reports



**Employment and Industry Cluster Analysis** 

#### A Selection of local Center partners:

- County of Riverside EDA
- County of San Bernardino EDA
- South Coast Air Quality Management District
- BNSF Railway
- Riverside Public Utilities
- Autoclub Speedway
- City of Ontario
- Coachella Valley



### Thank You

Chris@BeaconEcon.com | ucreconomicforecast.org