



The Post-Covid New World Order Worrying about the wrong recession.....

June 2022

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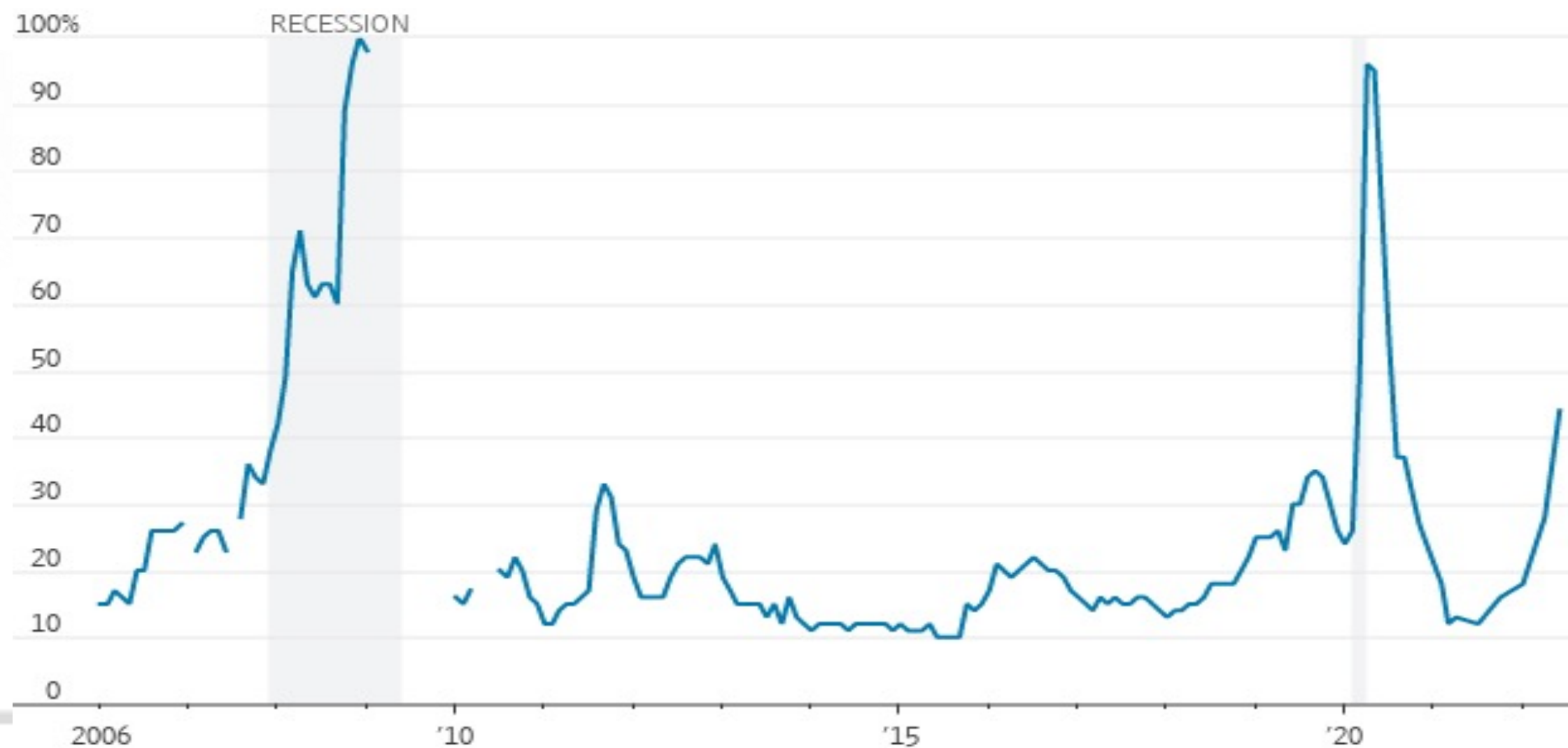
Founding Partner, Beacon Economics

*Director, UCR SoBA Center for Economic Forecasting and
Development*



A division of Western Alliance Bank. Member FDIC.

Probability the U.S. is in a recession in next 12 months including today



Note: Gaps indicate question not asked or data unavailable.

Source: Wall Street Journal surveys of economists

The Myth of the Fragile Economy



How did we get here?

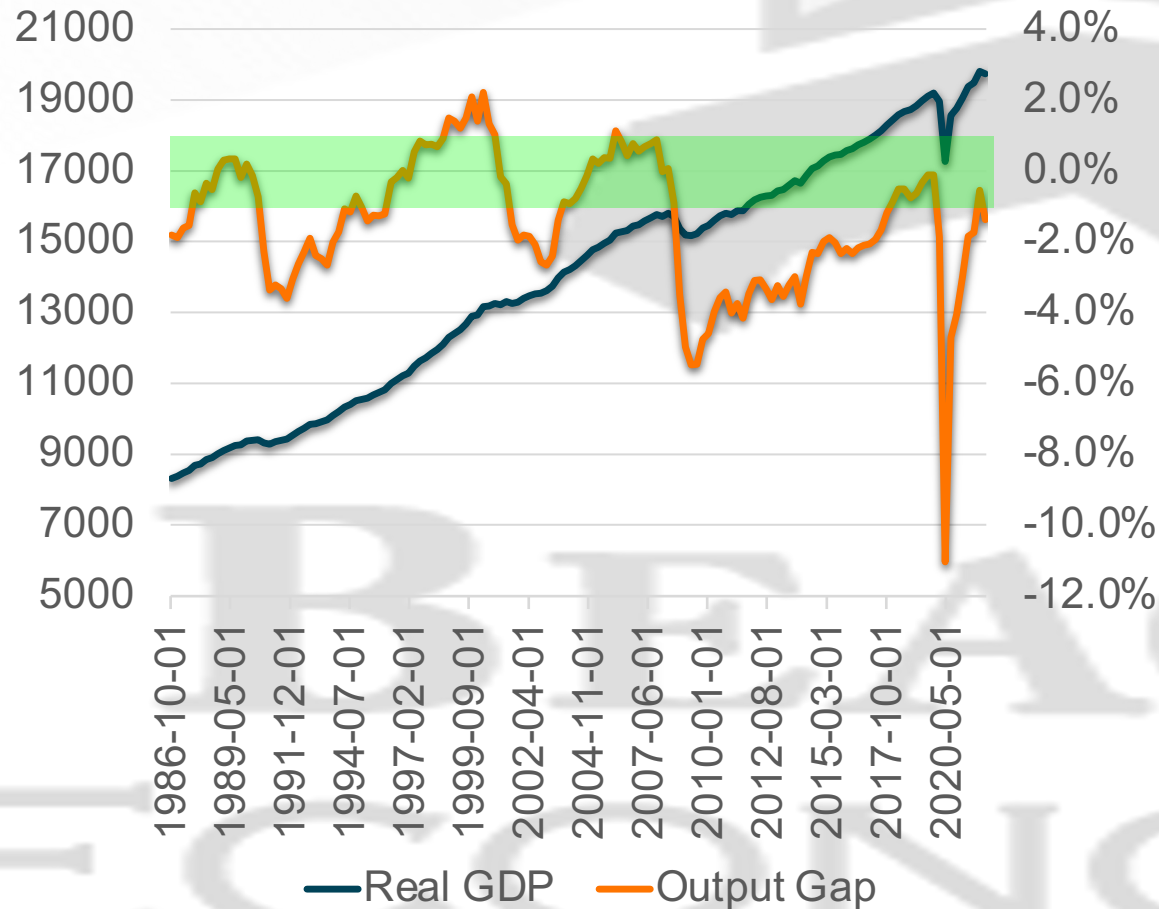
- The pandemic was a natural disaster, which have little long-run economic impact outside of accelerating existing long run trend trends.
- The fragile-economy narrative drove excessive fiscal and monetary policy reactions.
- The economy is clearly overheated, but the tilt to populism has made this political poison to acknowledge.

The Coming Recession? Not yet...

- Inflation, rising interest rates are a symptom of an overheated economy, not drivers of a contraction.
- True growing imbalances are the growing US trade deficit, the Federal deficit and an excess supply of money driving inflation.
- Geopolitical uncertainty have only extended the US asset cycle due to our reserve currency status.
- When? Hard to predict now but the longer policy makers fail to act, the harder the landing will be.

It Was a “V”...

Real GDP Trends

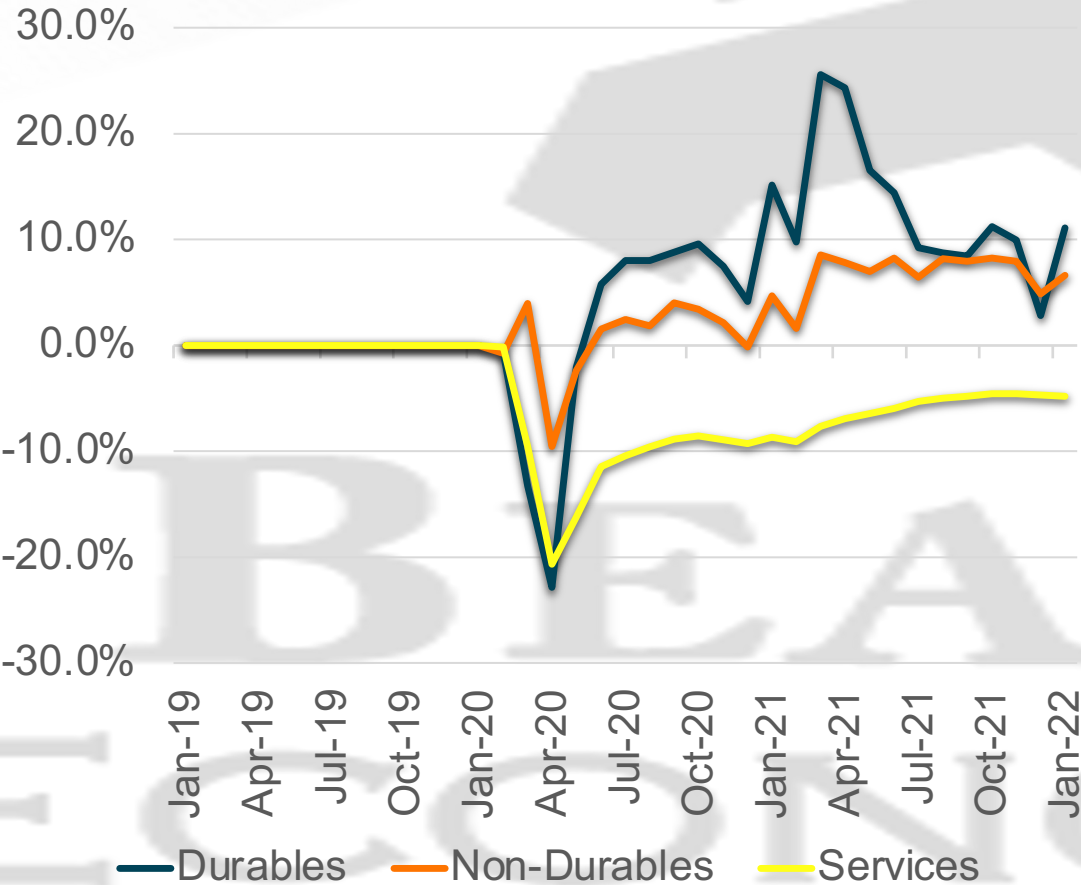


Why a “V”?

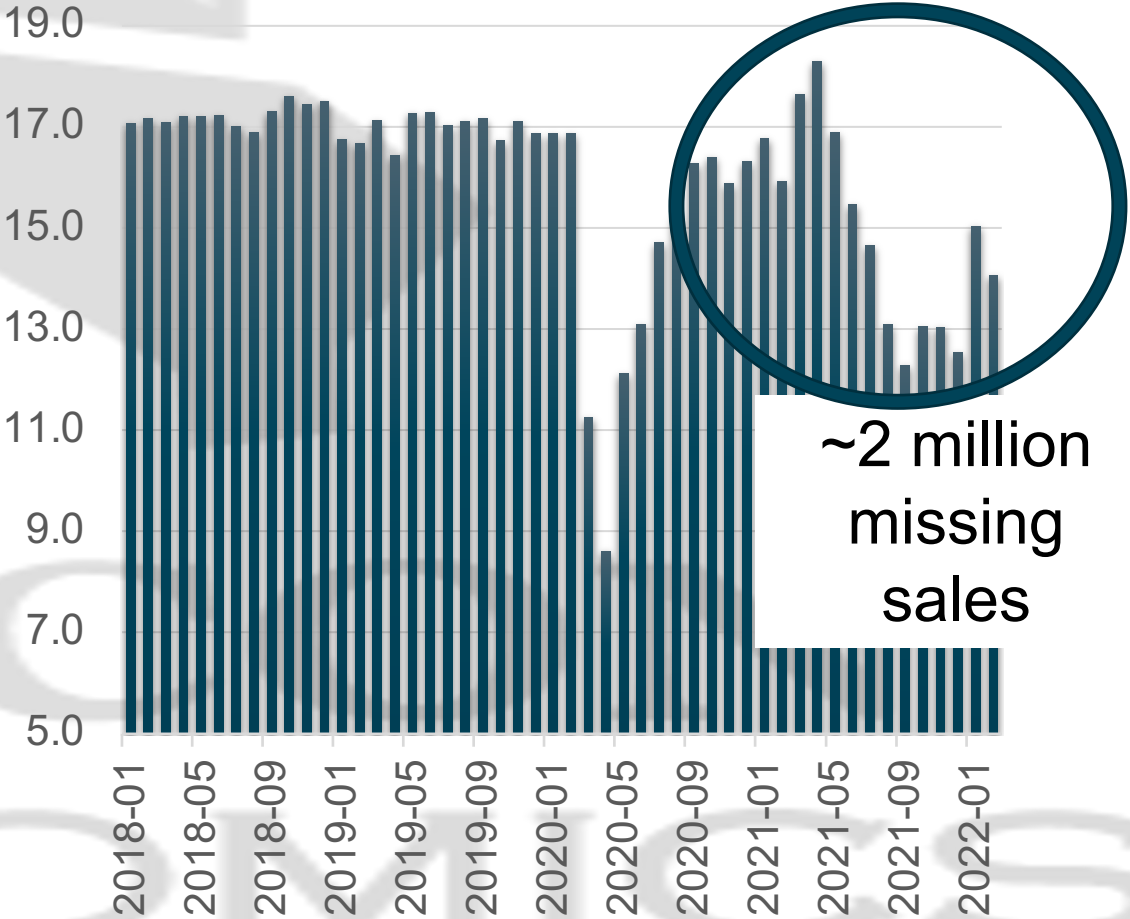
- Pre-pandemic economy was healthy and well-balanced
 - Tight labor markets
 - Conservative growth in capacity
 - Good financial fundamentals
- Supply shock recession, rather than a demand shock
 - Pandemic shifted spending over time and across sectors, not cancel it
- Government support
 - Scale of effort was massively overdone

An Uneven Recovery

Real Consumer Spending Relative to Pre-Covid Trends

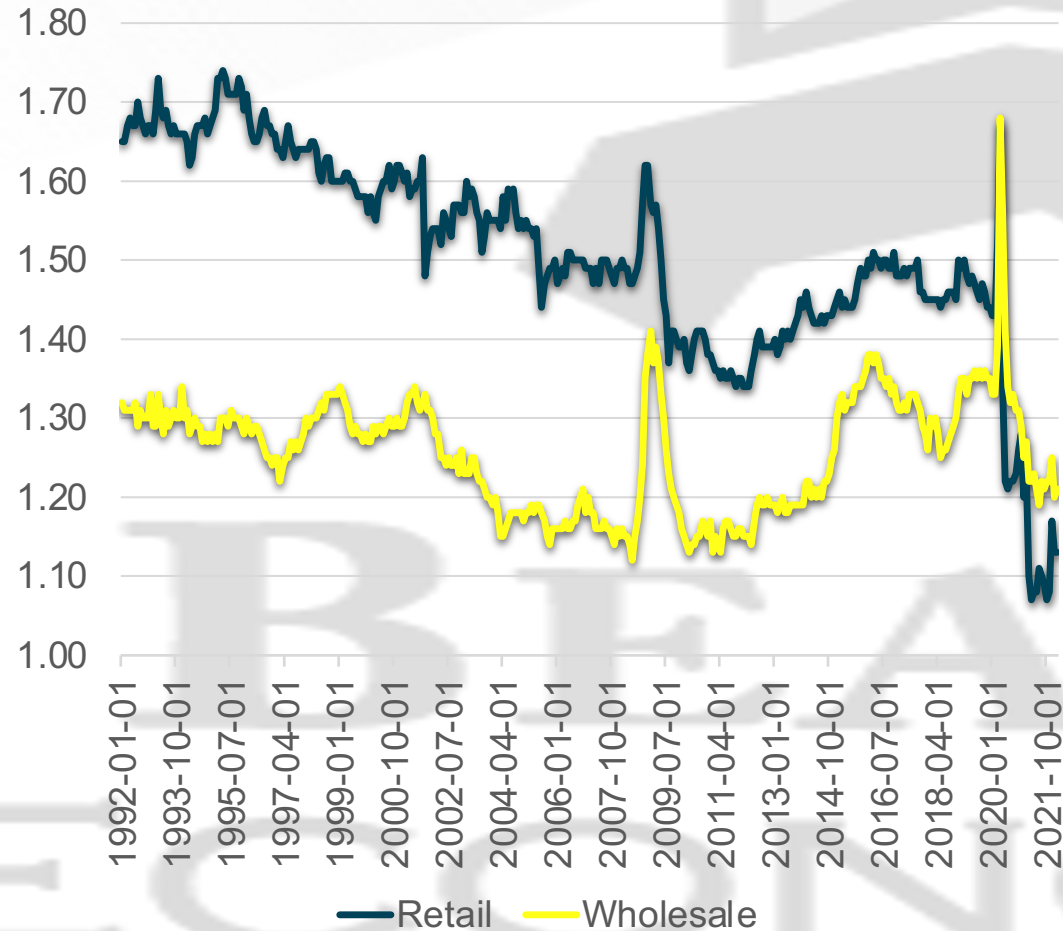


US Auto Light Truck Sales SAAR

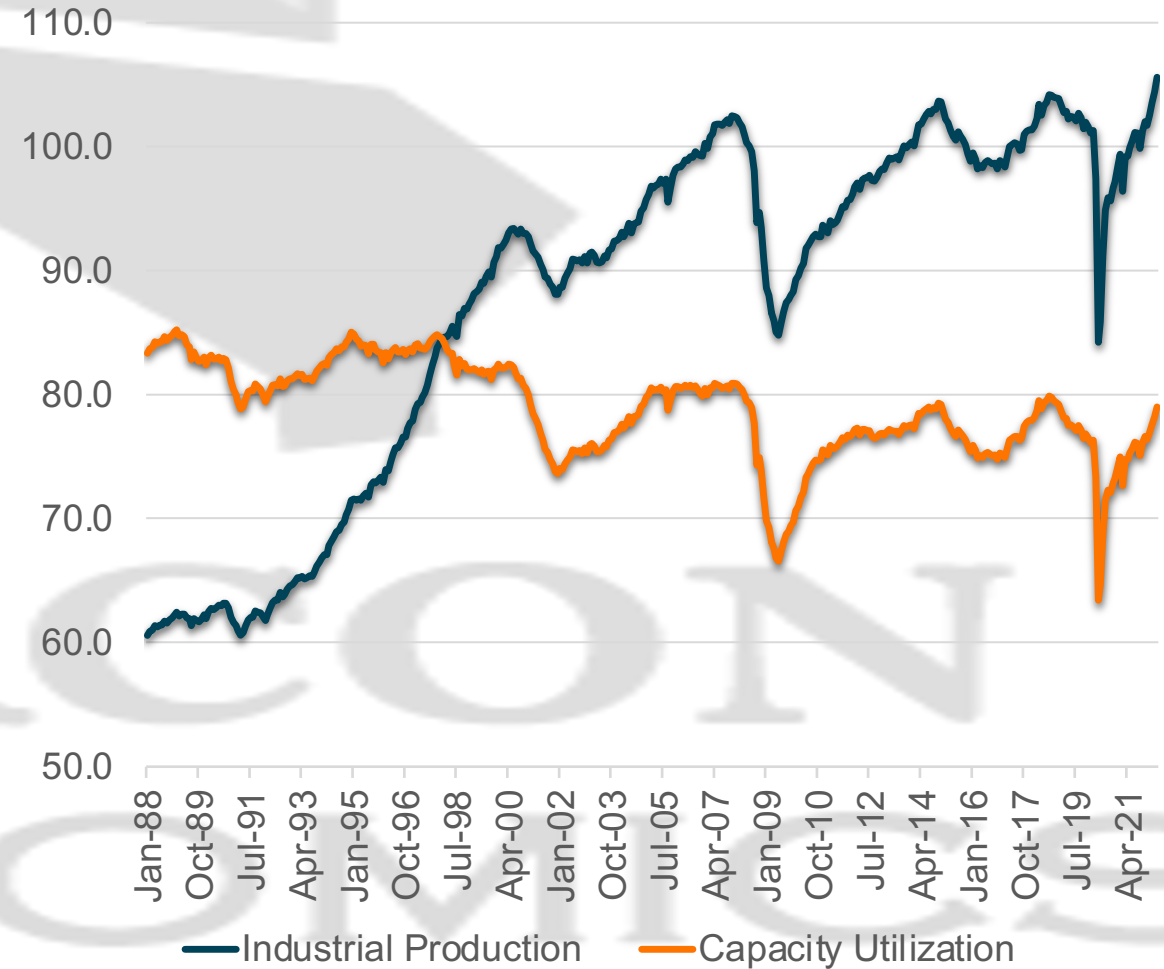


Supply Chain Problems

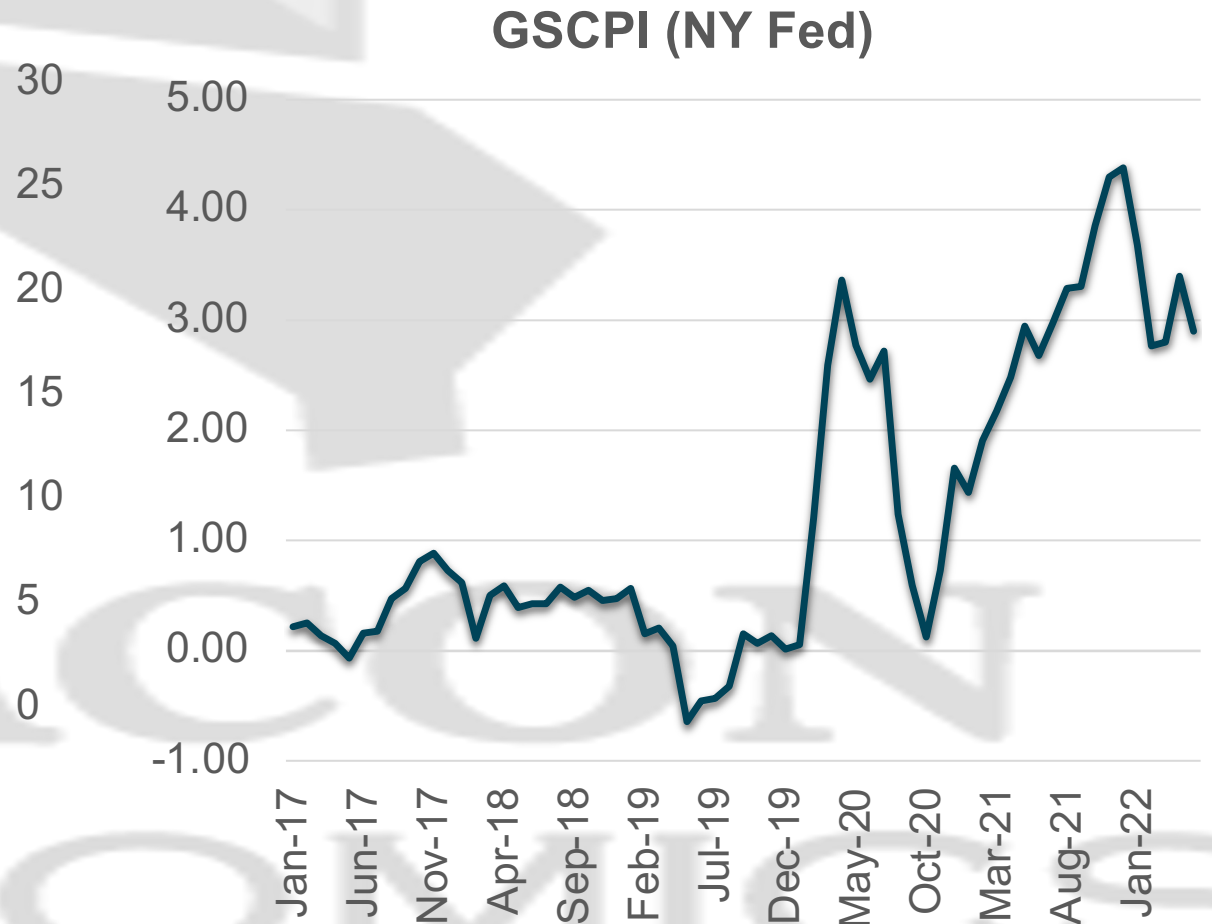
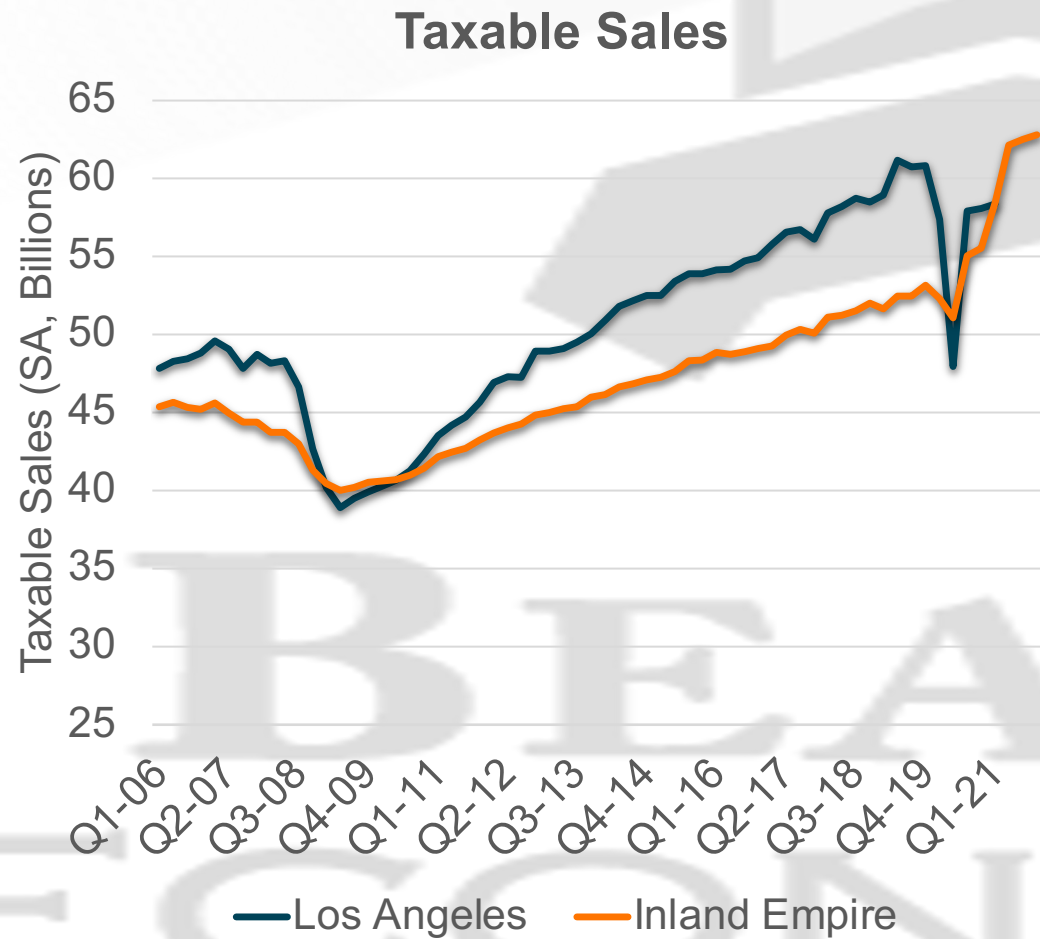
Inventory to Sales Ratios



Production and Capacity

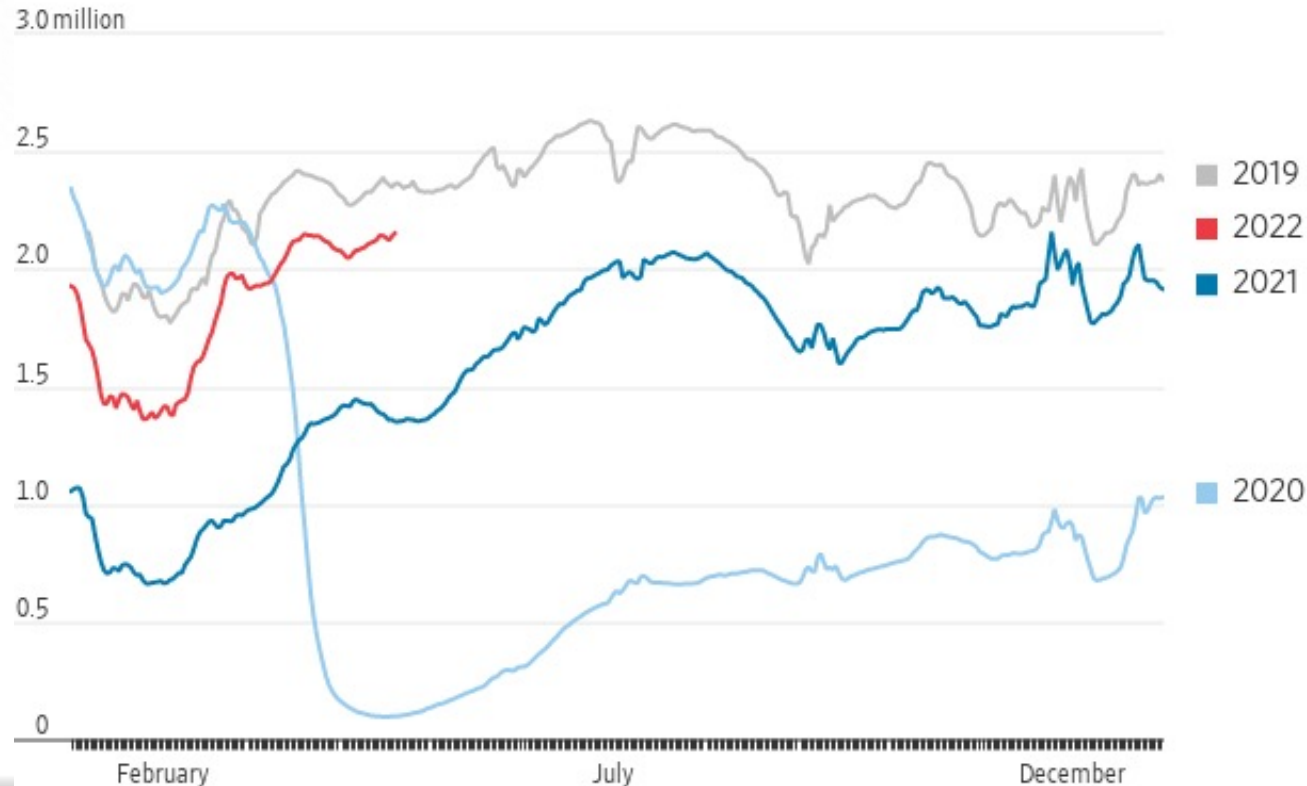


CA Business Activity



Travel? Tourism?

TSA checkpoint travel numbers



Note: Seven-day moving average
Source: Transportation Security Administration

2021 Hotel Statistics

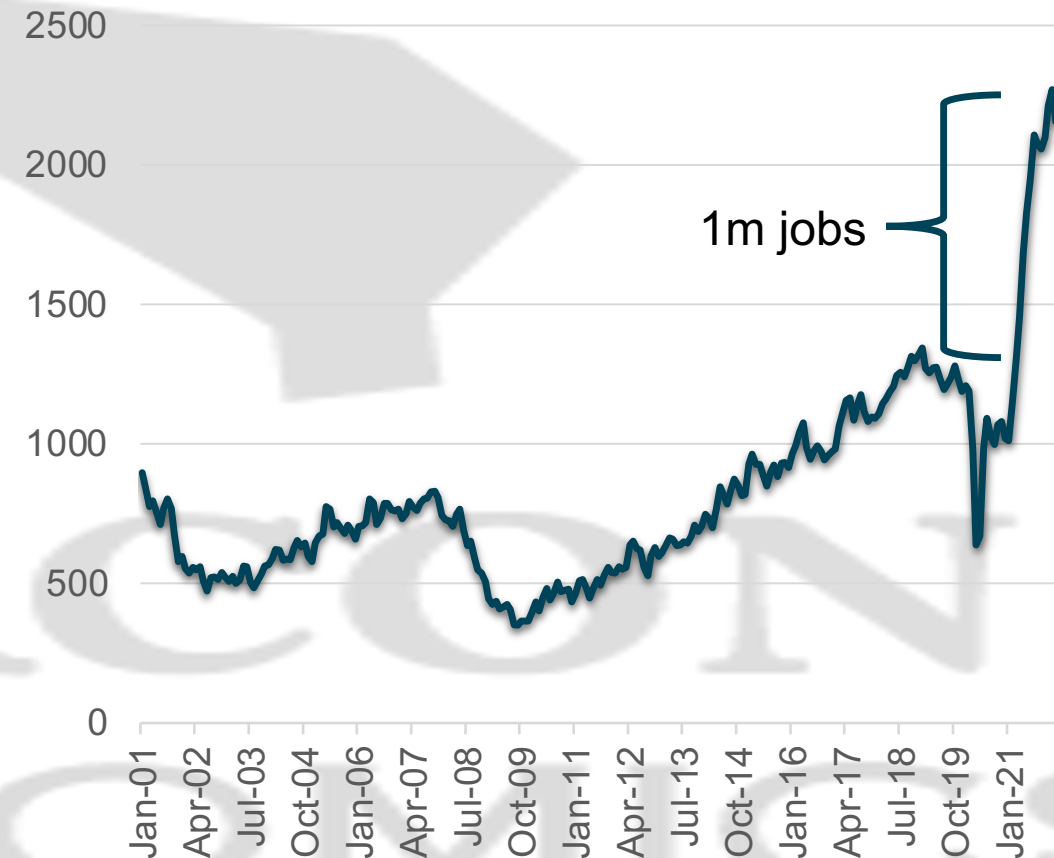
	2021 Rev	% Chg
California	16,796	49.2
Central Coast	2,017	72.7
Central Valley	1,012	38.5
Deserts	726	60.8
Los Angeles	3,670	53.6
Orange County	1,791	70.6
San Diego	2,162	68.8
SF Bay Area	2,724	19.0

As for the Service Sector...

Real Consumer Spending Services
Growth Q4 19 to Q1 22

Services	0.3%
Financial services	6.4%
Housing and utilities	2.7%
Food accommodations	1.5%
Health care	-0.1%
Other services	-1.5%
Transportation services	-9.7%
Recreation services	-11.7%

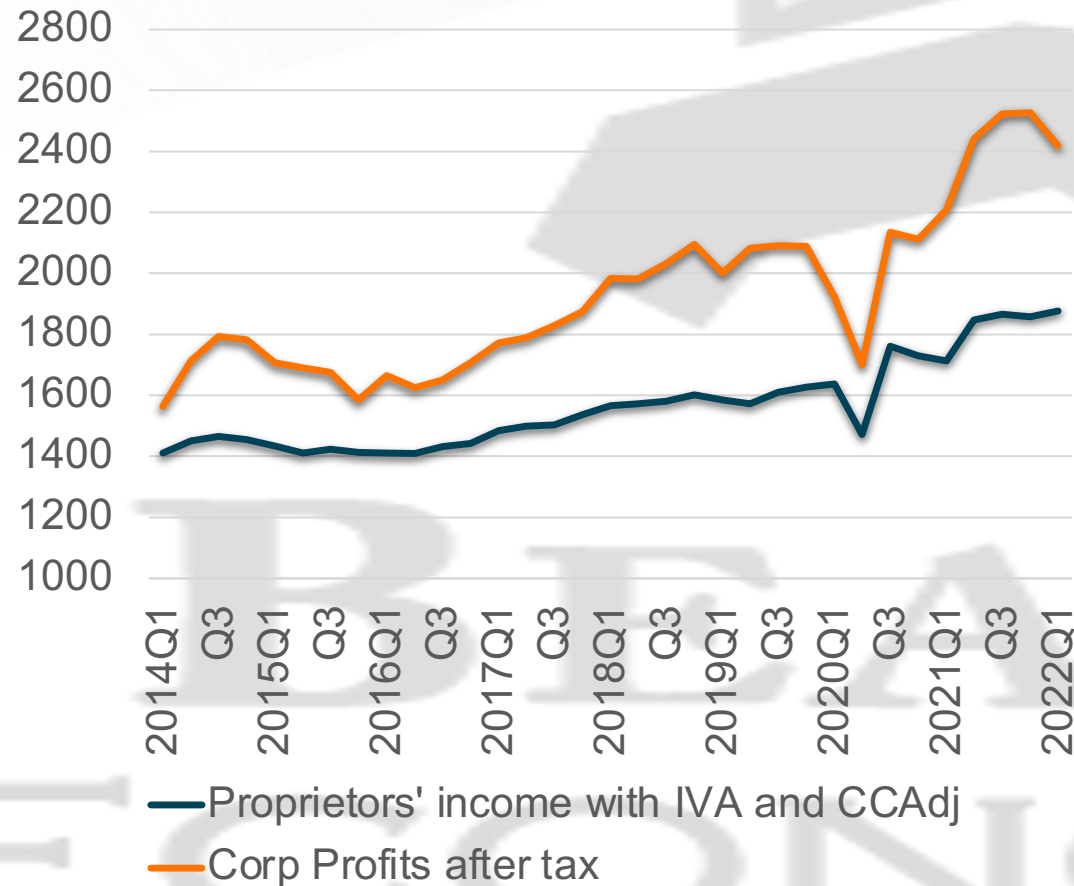
Job Openings Leisure, Hospitality and
Other Services



Earnings and Investments



Earnings and Profits, \$Bil SAAR

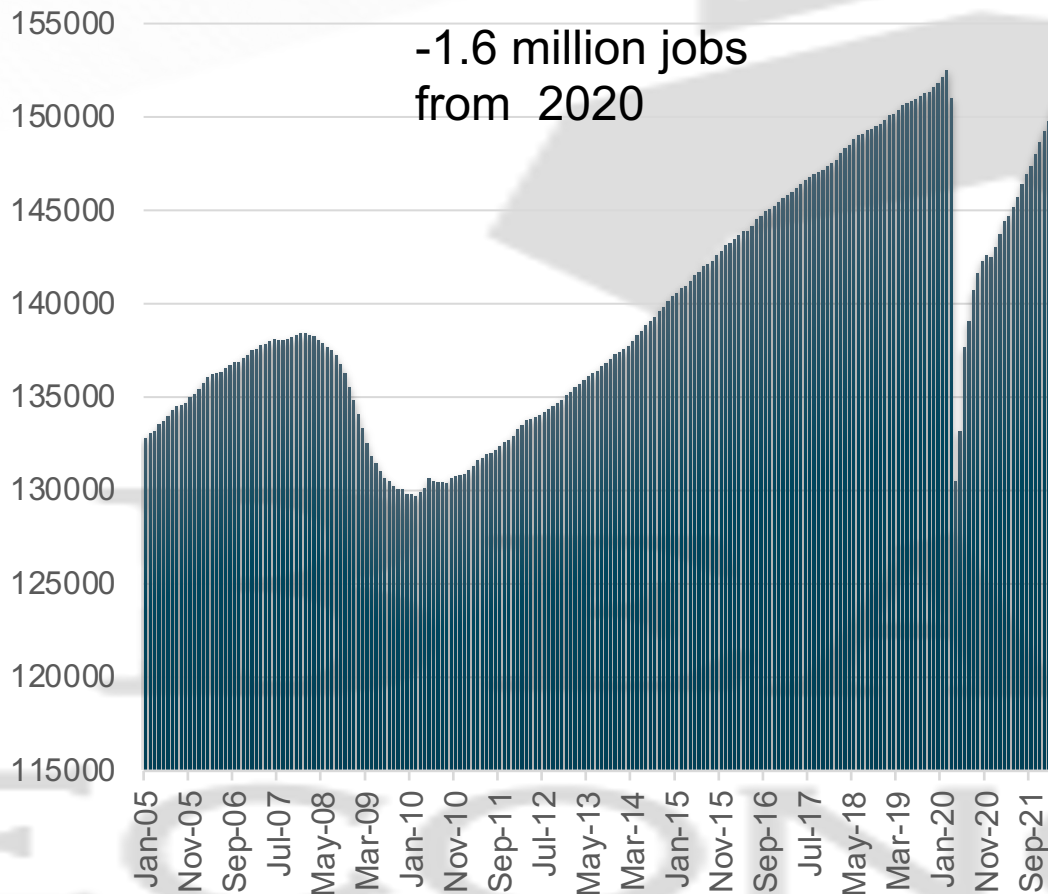


Real Investment

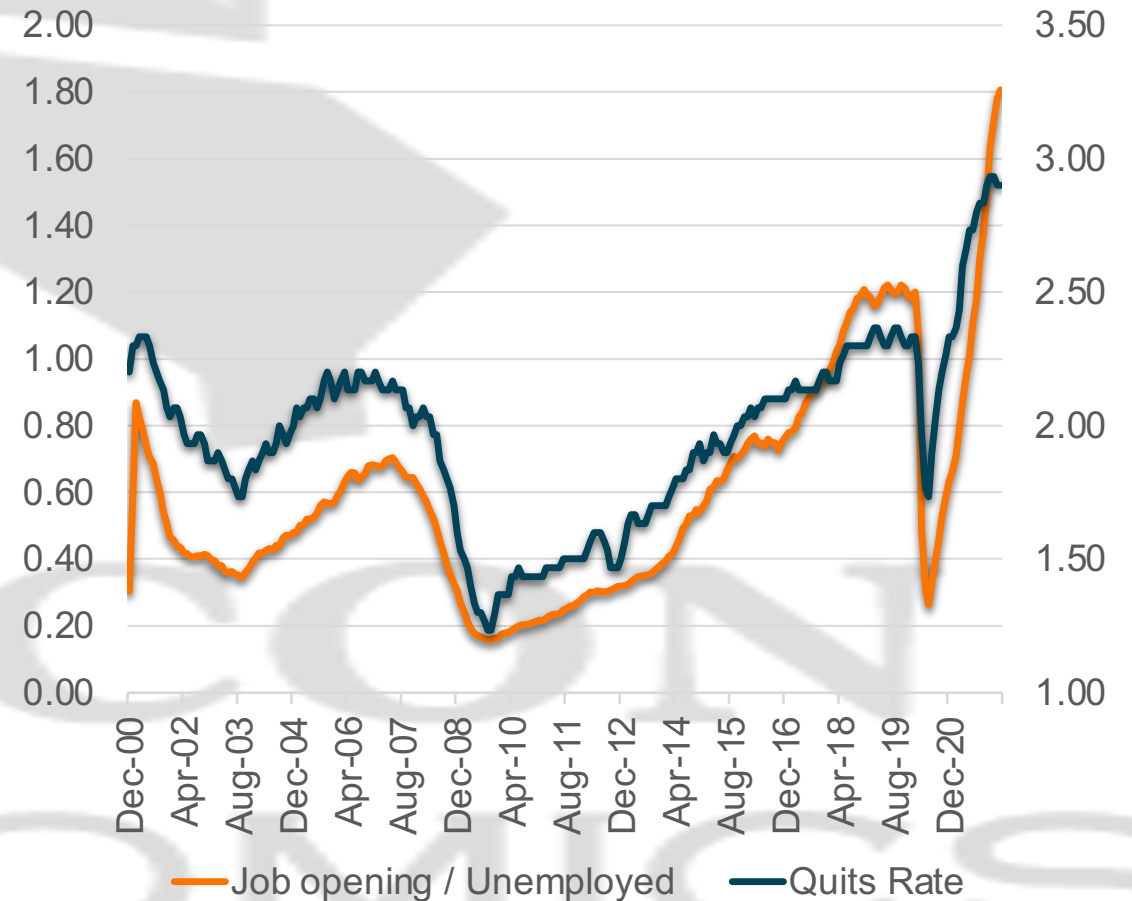
	2019Q4	2021Q4	
Private fixed investment	3781.4	4254	12.5%
Structures	685.3	594.8	-13.2%
Power and communication	148.1	118.6	-19.9%
Mining exploration, shafts	115.3	94.9	-17.7%
Manufacturing	77.1	73.7	-4.4%
Commercial and health	212.2	205.9	-3.0%
Equipment	1210.3	1300.6	7.5%
Information processing eq	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%

A Labor Market Paradox?

US Payroll Jobs



Labor Demand / Supply Metrics

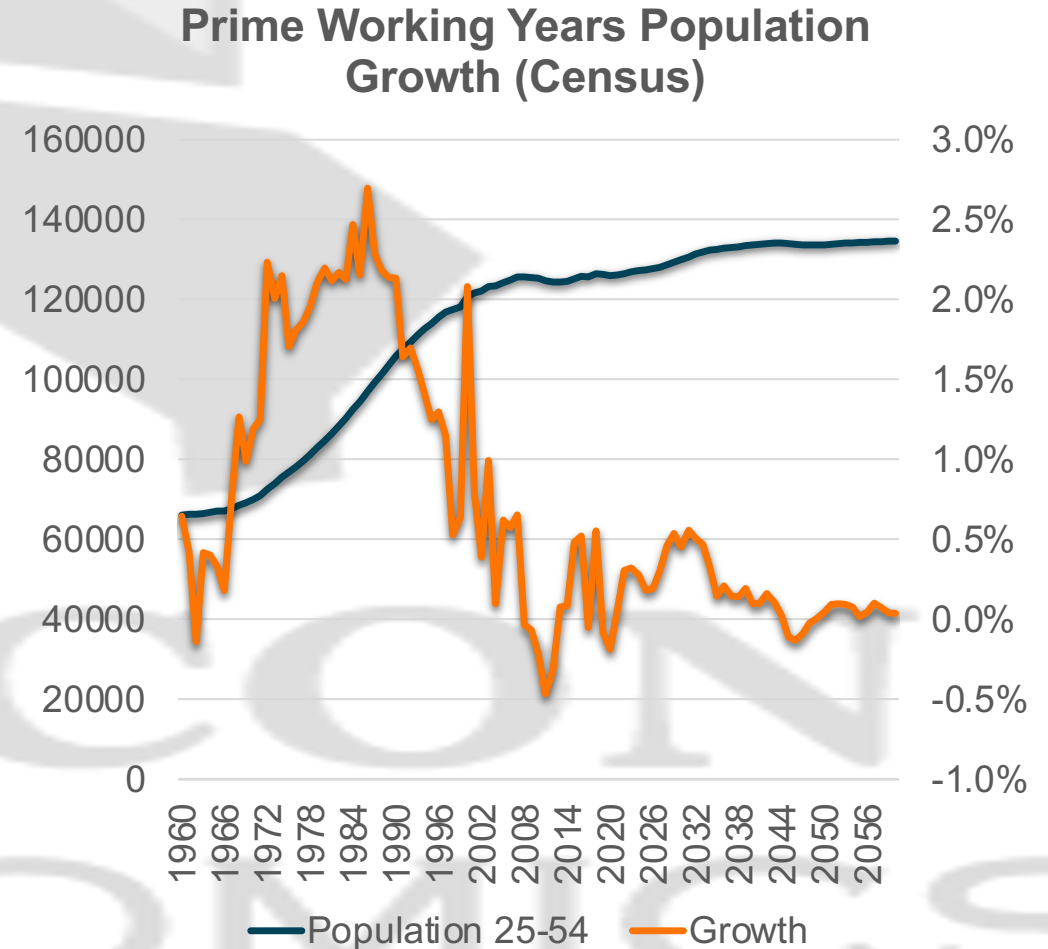
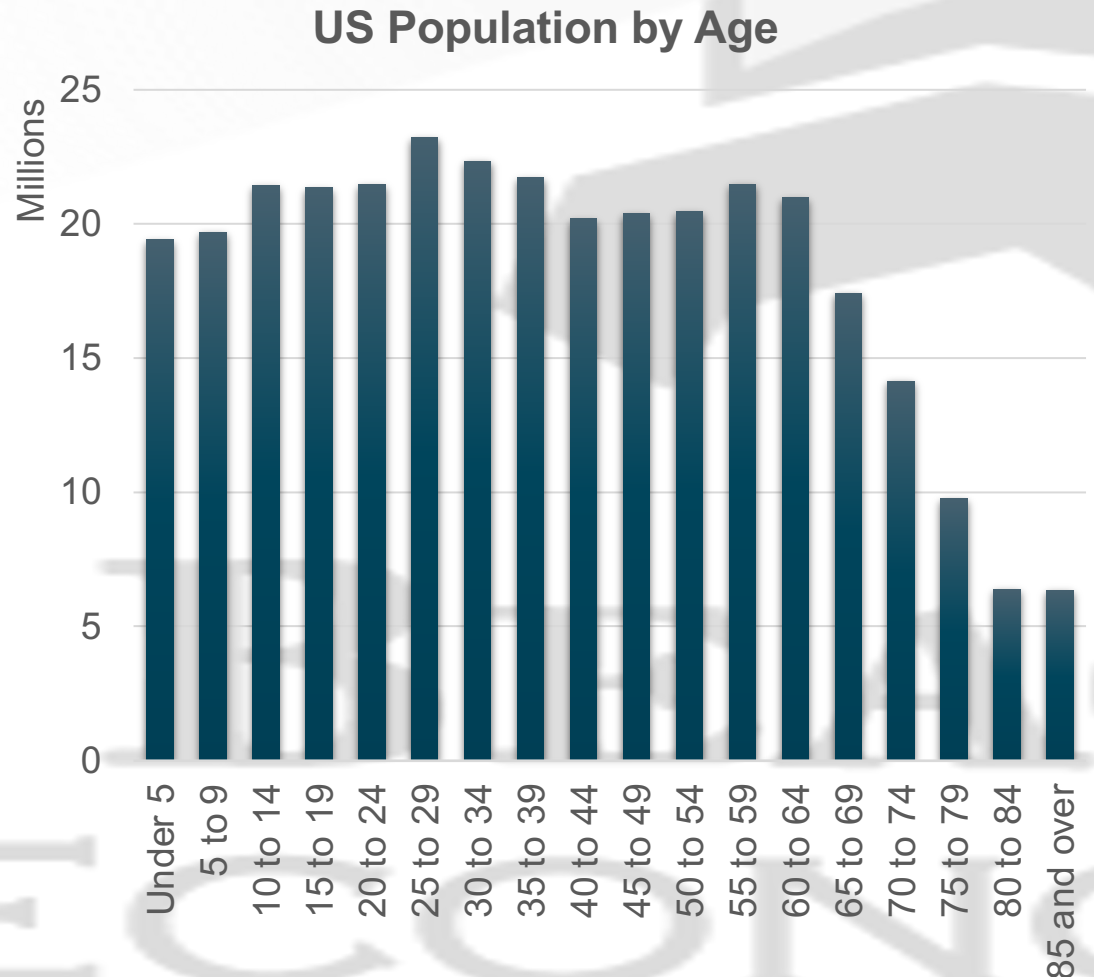


Tracking Shortages



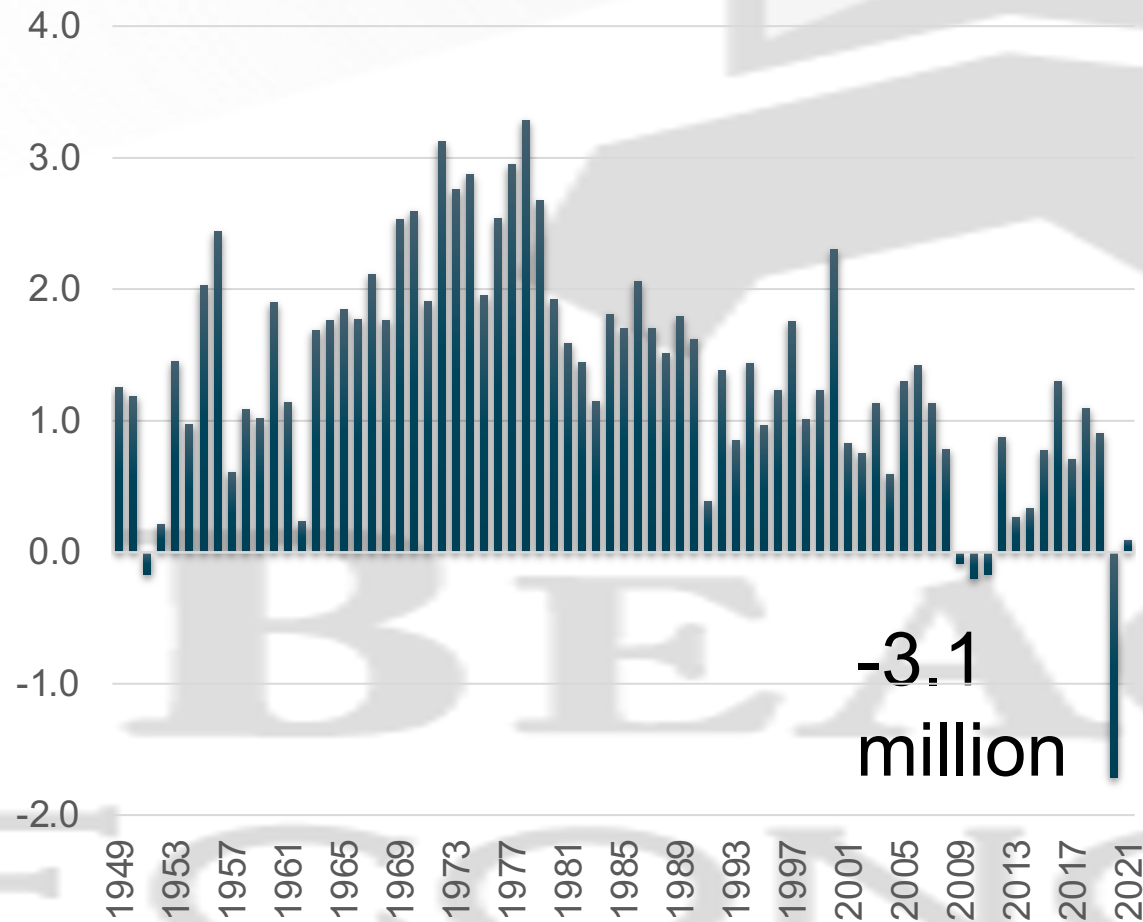
Job Openings by Industry	Jan-21	Jan-22	
Total	7,232	11,263	55.7%
Accommodation food	689	1,497	117.3%
Arts and recreation	90	179	98.9%
Financial activities	276	538	94.9%
Wholesale trade	188	309	64.4%
Manufacturing	522	855	63.8%
Health care	1,204	1,944	61.5%
Information	161	234	45.3%
Professional business	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%

The Long Run Labor Force Issue

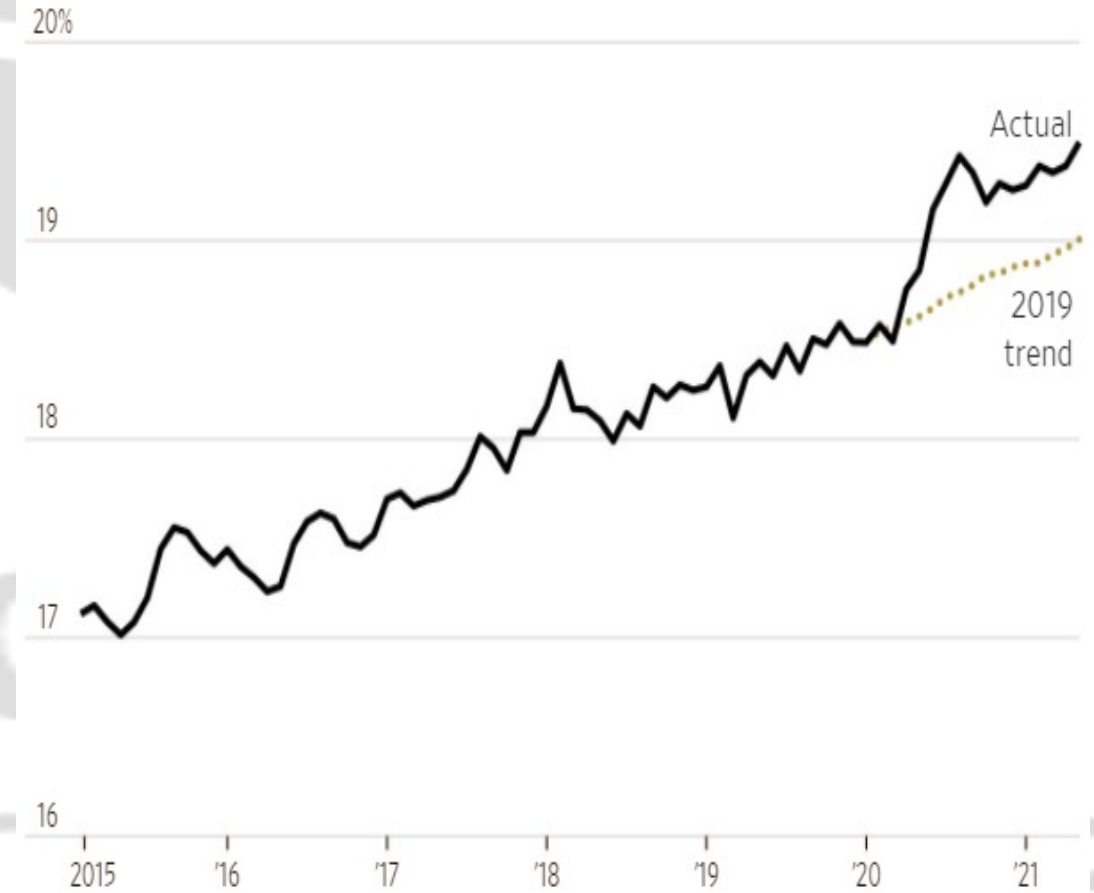


The Big Retirement

YoY Growth US Labor Force



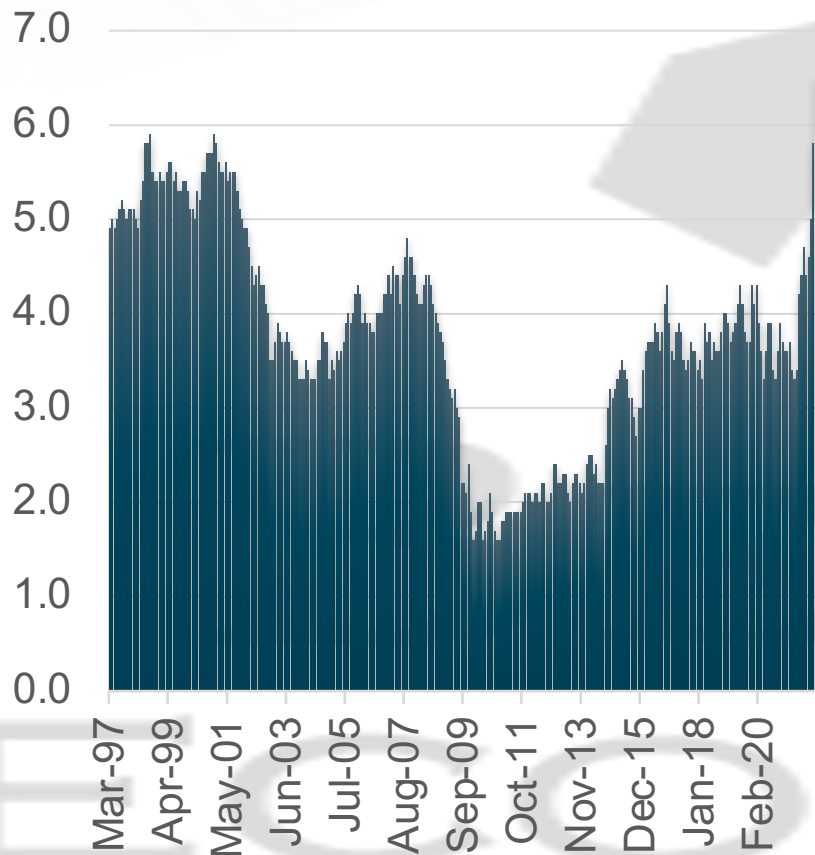
Share of U.S. population retired



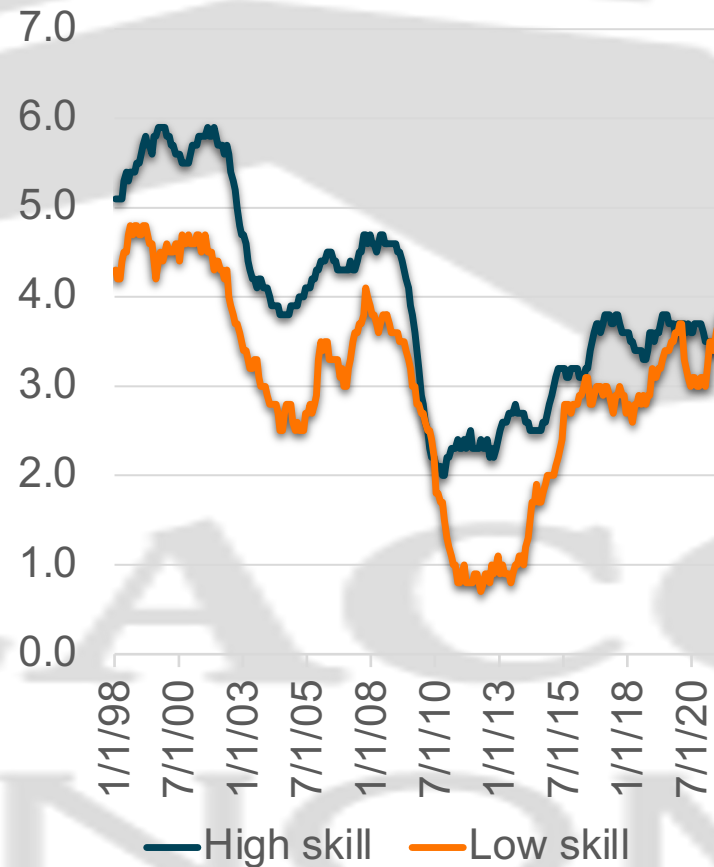
Source: IPUMS-CPS, University of Minnesota via Federal Reserve Bank of Dallas

A Sellers' Market in Labor

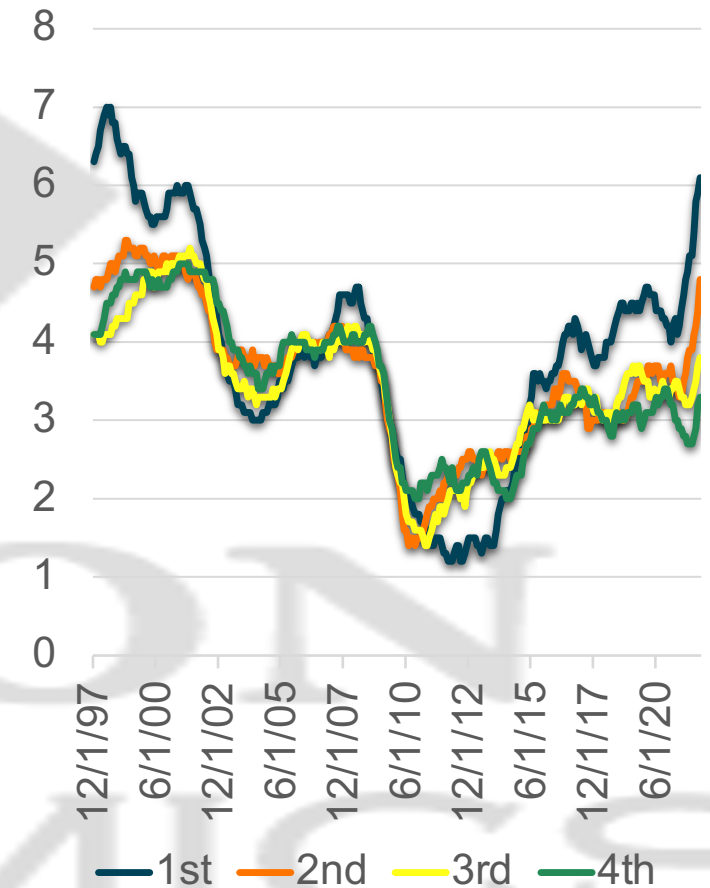
Atlanta Fed: Average
Earnings Growth YoY



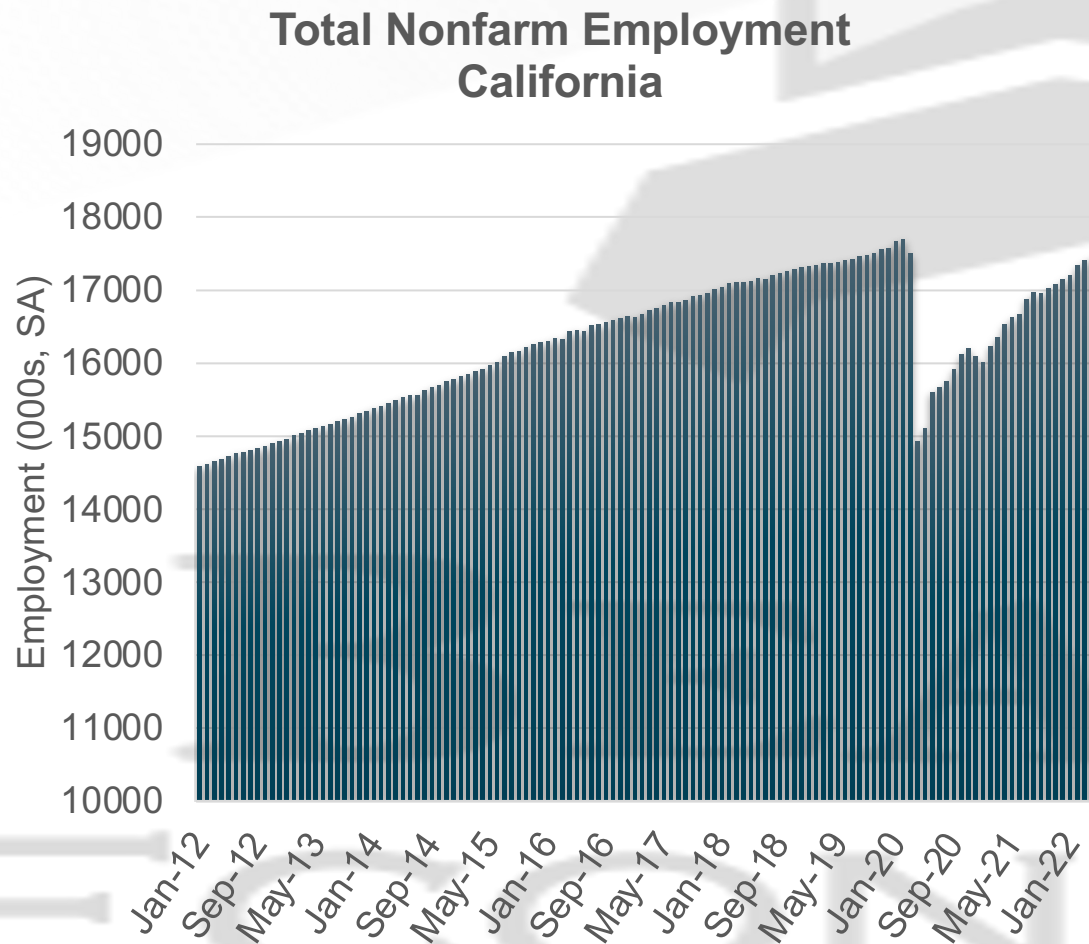
By Occupational Skill



By Earnings Quartile

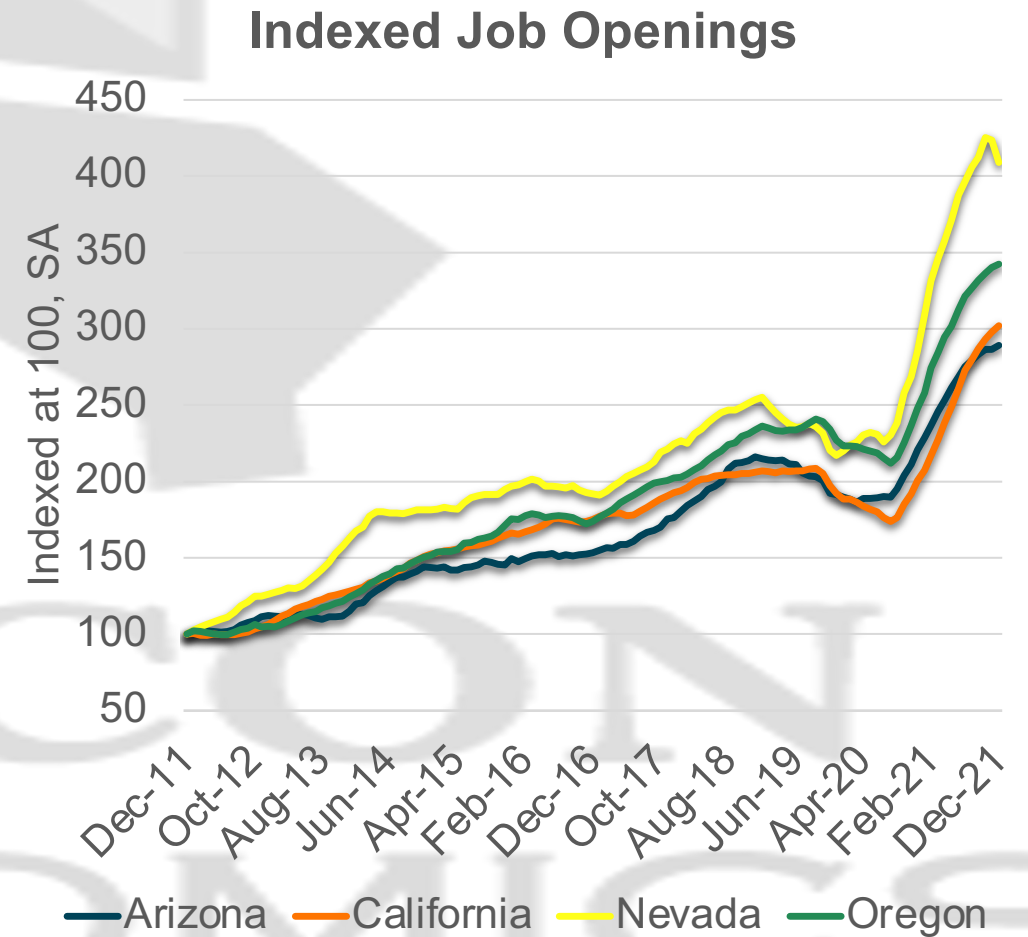
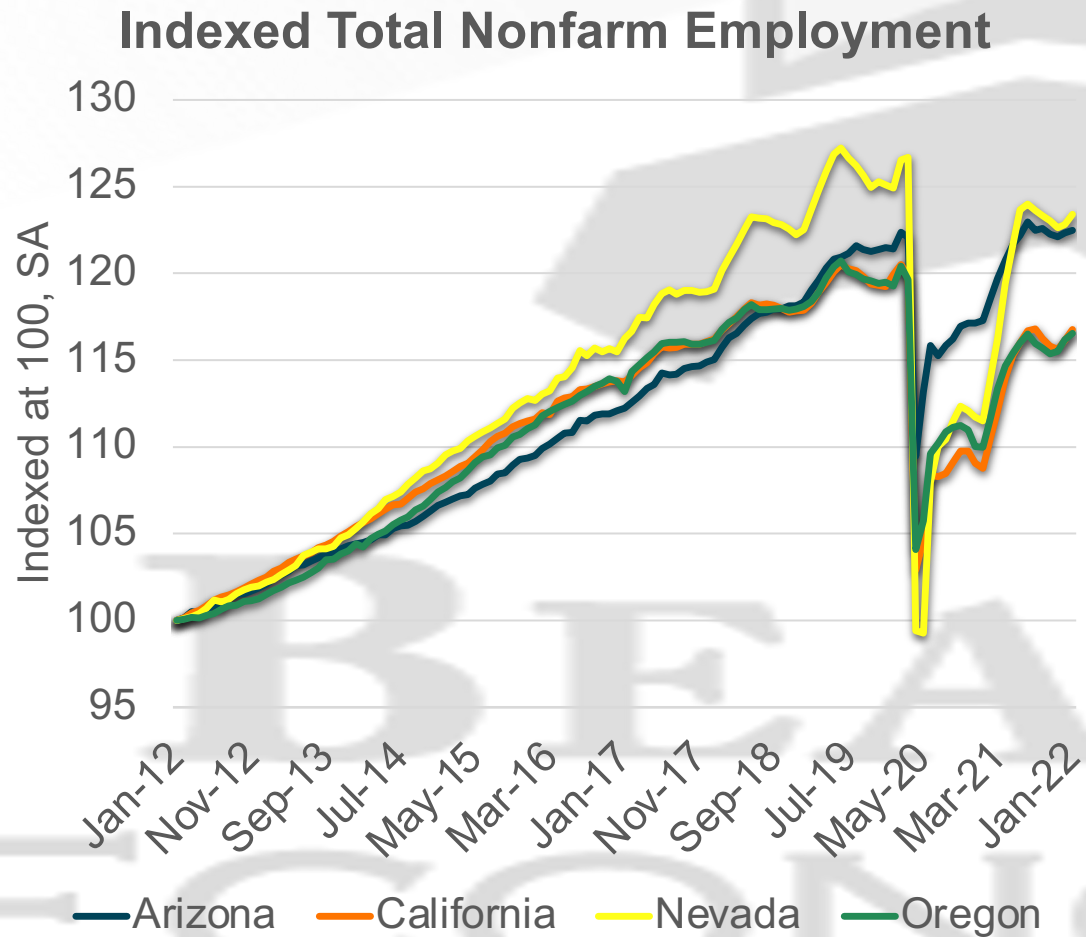


California Employment



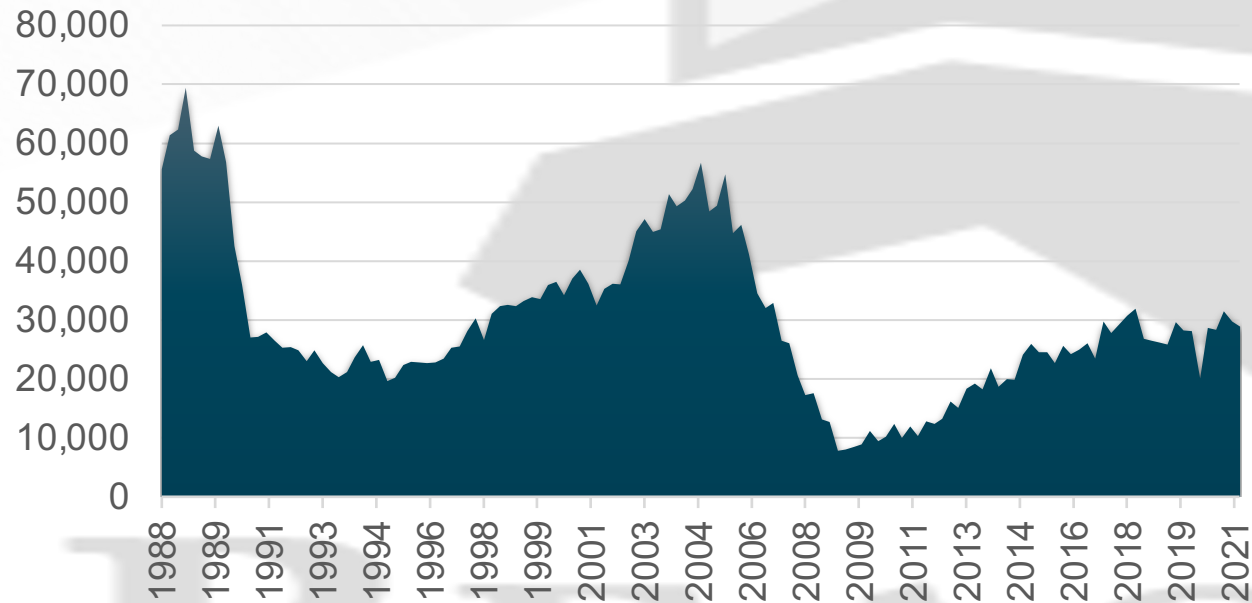
Industry	CA Mar-22 Emp (000s)	Change from Mar-21	
		Abs. Chg CA	% Chg CA
Total Nonfarm	17,411	1,056.1	6.5
Hospitality	1,862	414.7	28.7
Education/Health	2,893	117.0	4.2
Logistics	3,135	112.5	3.7
Government	2,511	86.8	3.6
Prof Sci and Tech	1,402	80.0	6.1
Admin Support	1,161	56.8	5.1
Retail Trade	1,644	52.2	3.3
Information	591	47.5	8.7
Construction	916	30.6	3.5
Manufacturing	1,299	30.6	2.4
Finance	834	12.3	1.5
Wholesale Trade	654	12.0	1.9
Management	241	-2.1	-0.9

Regional Labor Markets



The Real California Story

California Residential Unit Permits



CA Labor Force Growth

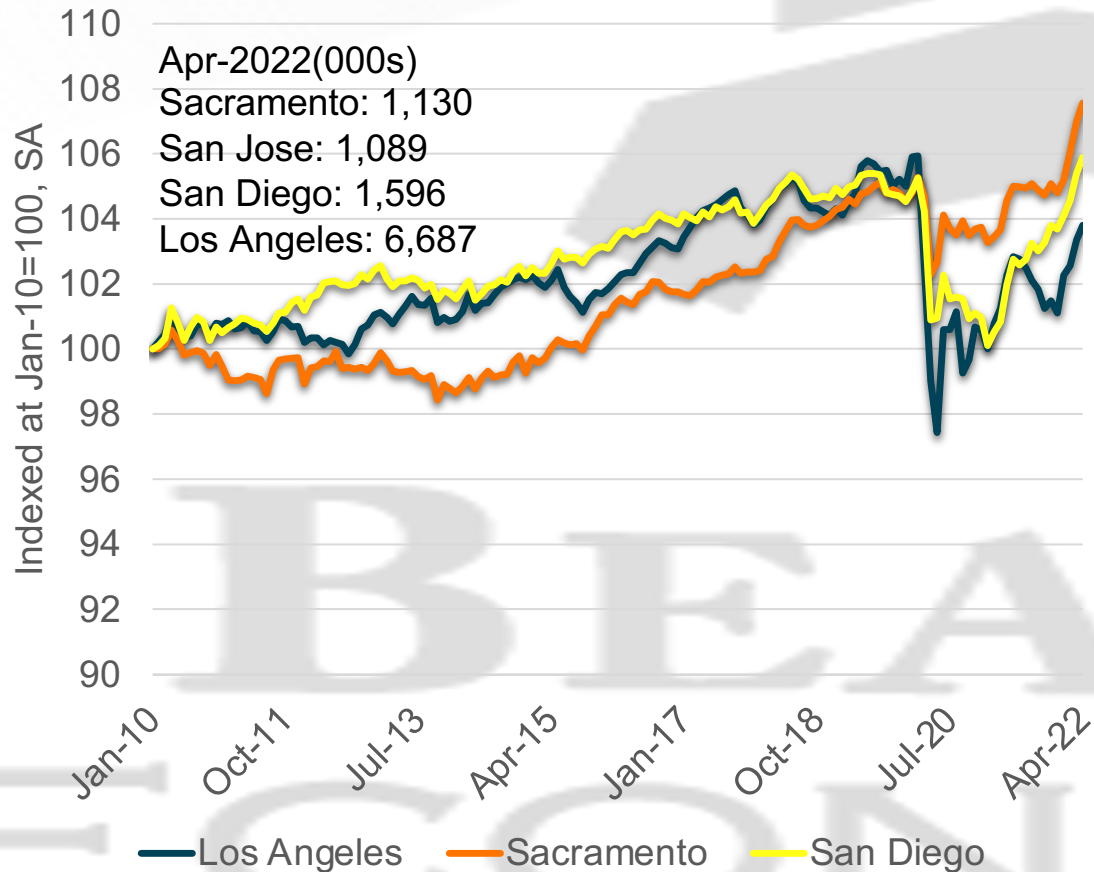


Housing Stock Age

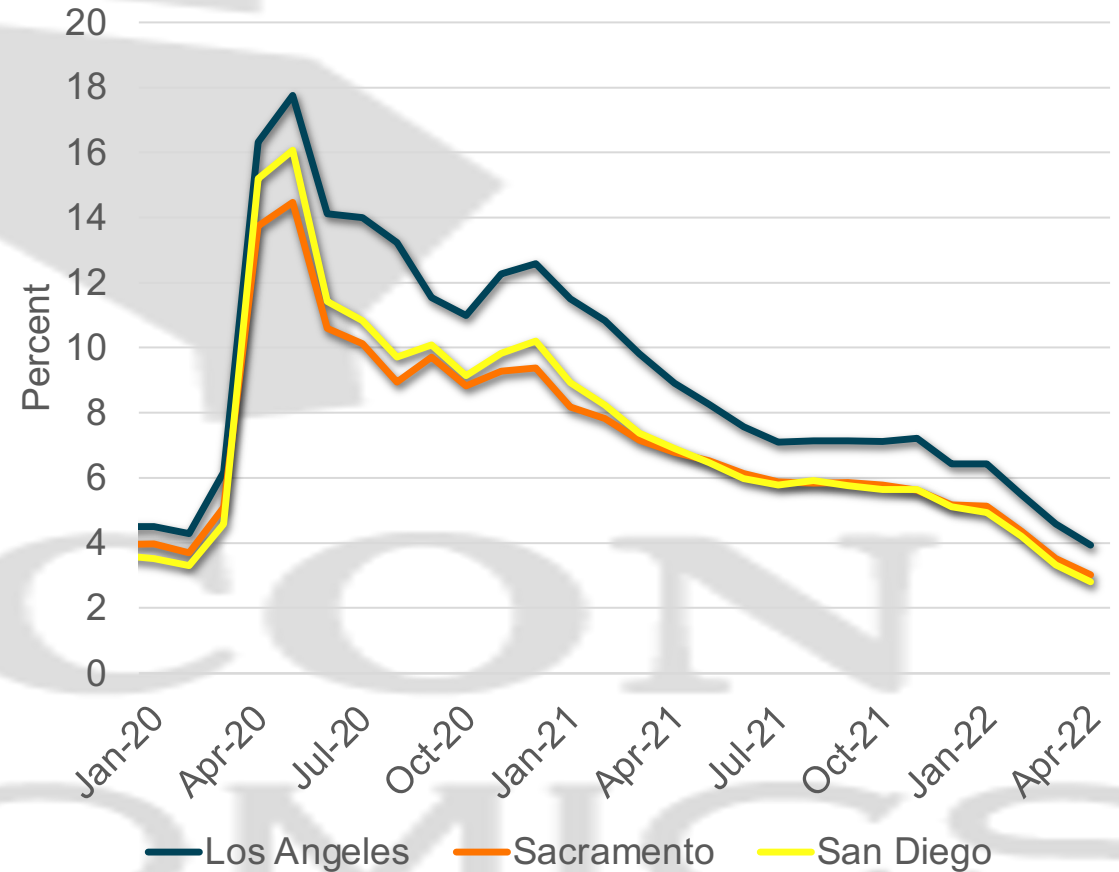
	Share Built After 2010	Share Built After 2000	Share SF
Texas	14.1%	32.4%	66.1%
California	4.6%	15.4%	57.7%

Regional Labor Markets

Labor Force



Unemployment Rate



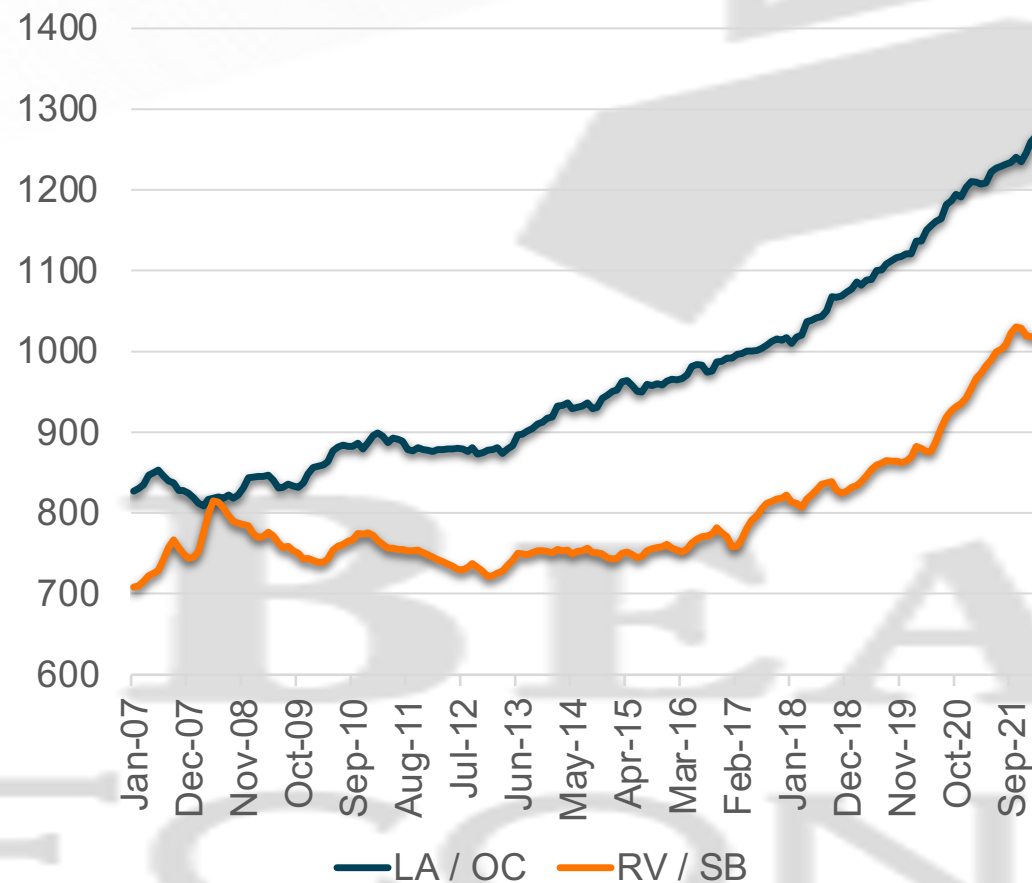
The State Employment Situation



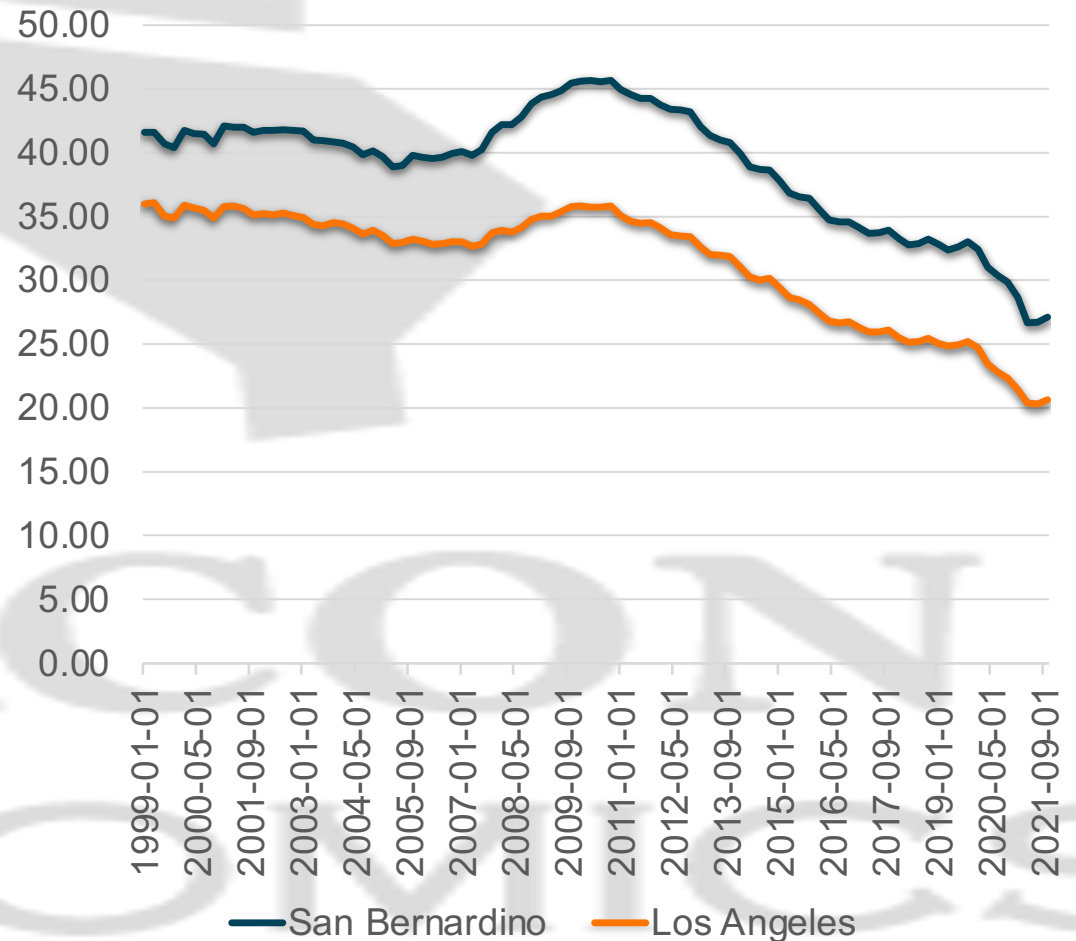
	Payrolls		Labor Force		Unemployment Rate	
Ch Feb 20 – Mar 22	Mar-22		Mar-22		Mar-22	
Stockton	261.6	3.1%	338.2	1.6%	5.3	-0.8
Inland Empire	1636.4	2.7%	2177.9	3.4%	4.3	0.2
Sacramento	1045.8	0.9%	1124.4	1.6%	3.5	-0.2
Fresno	373.2	0.4%	454.9	-0.2%	6	-1.4
San Diego	1504.1	-1.2%	1589.4	0.2%	3.3	0.0
Bakersfield	276.6	-1.3%	389.7	-0.6%	6.6	-1.7
California	17396.4	-1.7%	19131.3	-2.1%	4.9	0.8
San Jose	1144.1	-2.4%	1076.9	-1.0%	2.4	-0.3
Los Angeles (MD)	4487.3	-3.0%	5022.7	-3.8%	5.8	1.4
Oakland (MD)	1164.4	-3.1%	1382.8	-1.7%	3.3	0.2
Orange County (MD)	1634	-3.1%	1589.4	-1.7%	3.1	0.2
Ventura	304.9	-3.8%	412.3	-2.6%	3.4	-0.3
San Francisco (MD)	1155.8	-4.1%	1018.1	-2.9%	2.4	0.1
Santa Rosa	201.9	-4.4%	249.3	-3.3%	2.7	-0.1

Local Earnings

Weekly Earnings Private Sector



Equifax Subprime Credit % Population



Labor Shortage Solutions

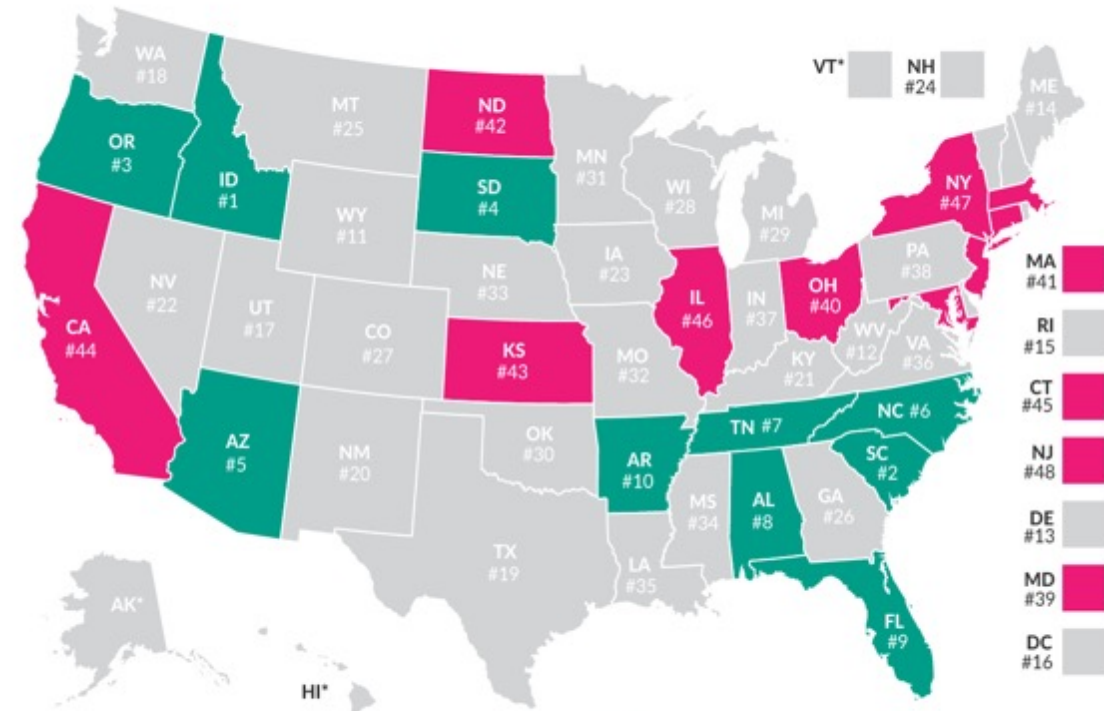


■ Solutions

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

Where Did Americans Move in 2020?

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



Note: Rankings are determined based on the number of inbound moves as a percentage of total moves in a state. DC is included in state rankings while Vermont is excluded because of its small sample size. Alaska and Hawaii are not included in the study.

Source: United Van Lines, 2020 National Movers Study.

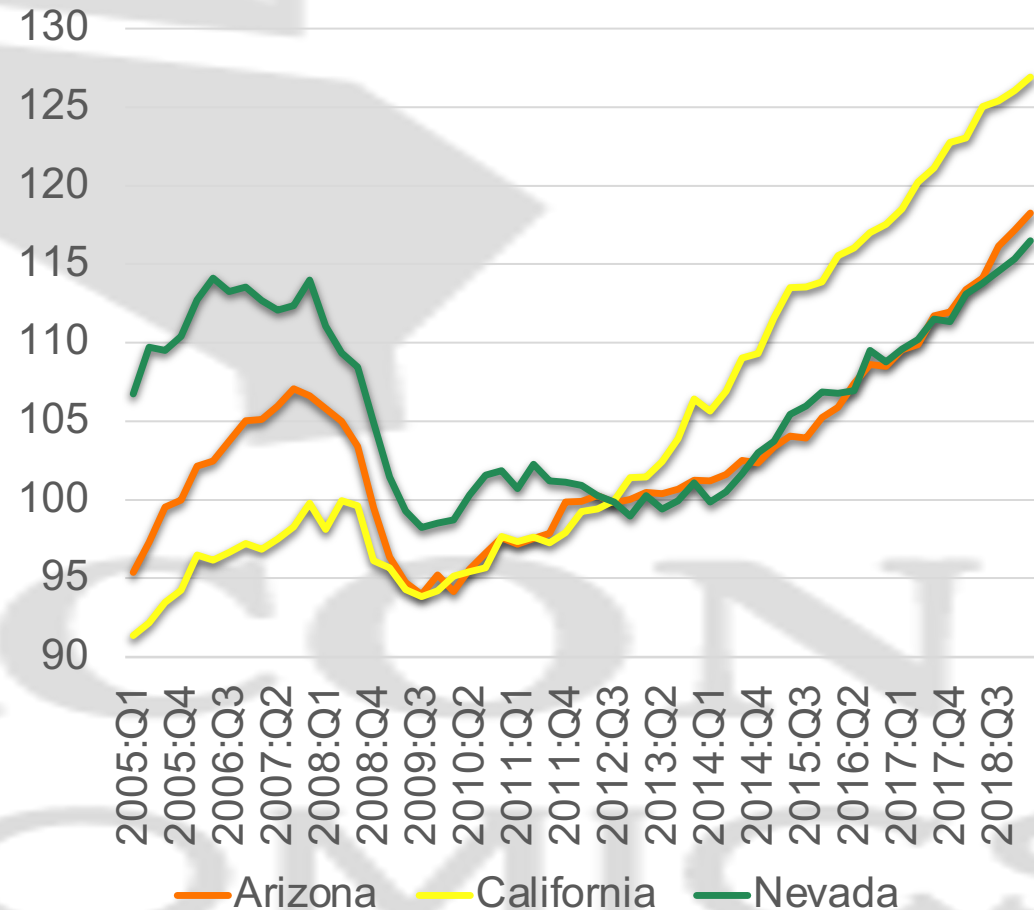
- Top 10 States for Inbound Migration
- Top 10 States for Outbound Migration

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
BA	19,318	21,011	70,607
Grad	69,468	7,422	27,190

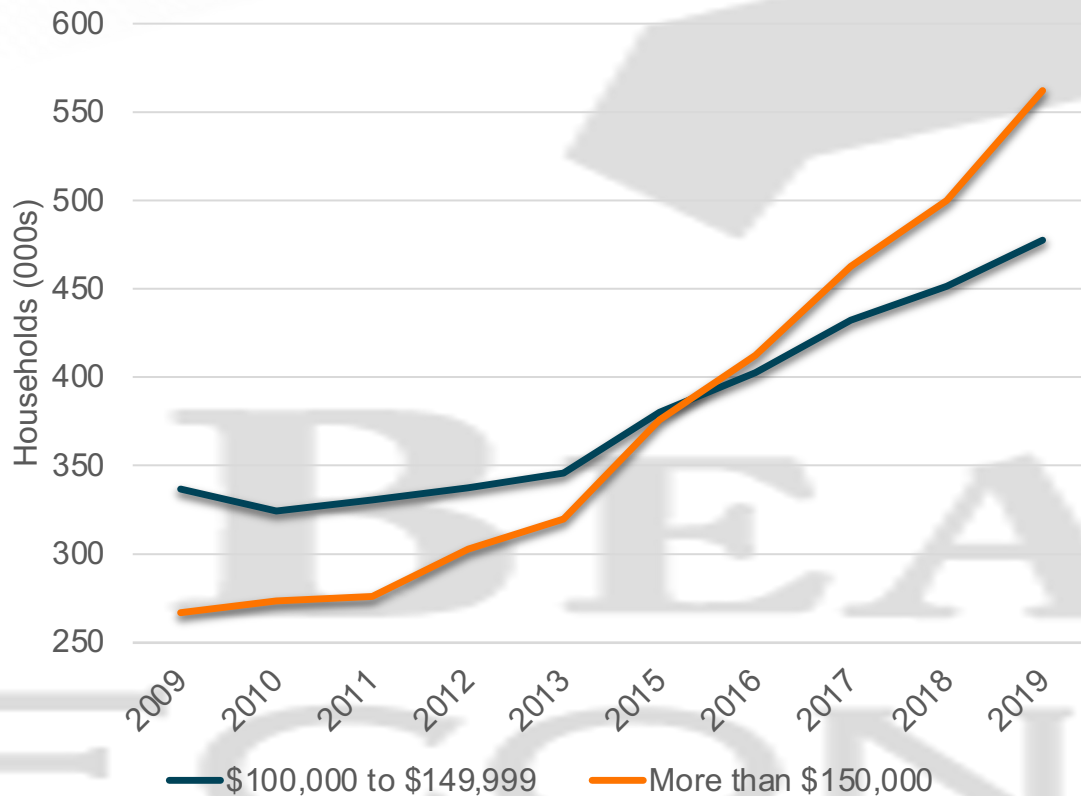
Real Output by State



Upper Income Households – SoCal Cities



Upper Income Households SoCal Cities

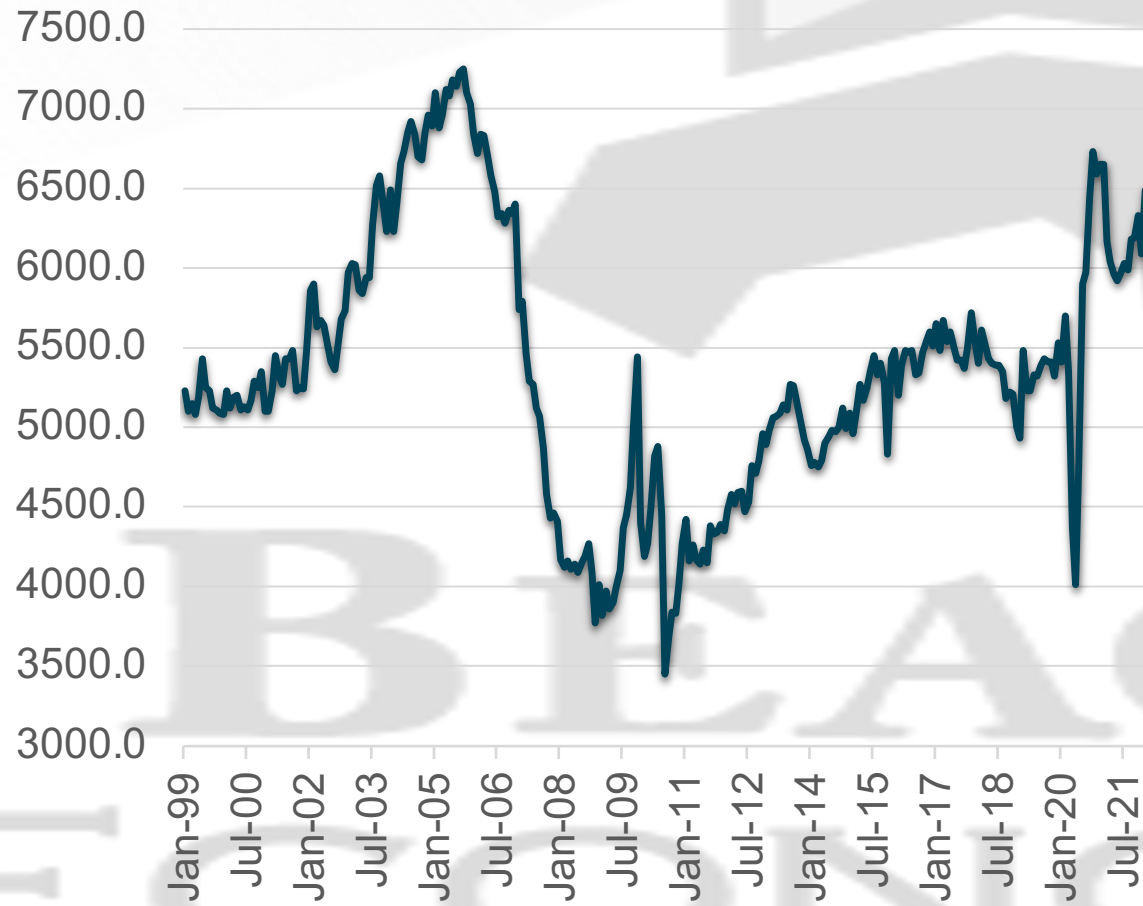


Location	Income Bracket – More than \$150,000	
	2019 Value (Households)	5-Yr Growth (%)
Los Angeles County		
Los Angeles	266,293	56.4
Long Beach	27,367	38.7
Santa Clarita	21,377	92.1
Orange County		
Anaheim	20,293	42.6
Santa Ana	11,819	154.1
Irvine	35,961	54.5
Inland Empire		
San Bernardino	4,731	173.5
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

Residential Markets



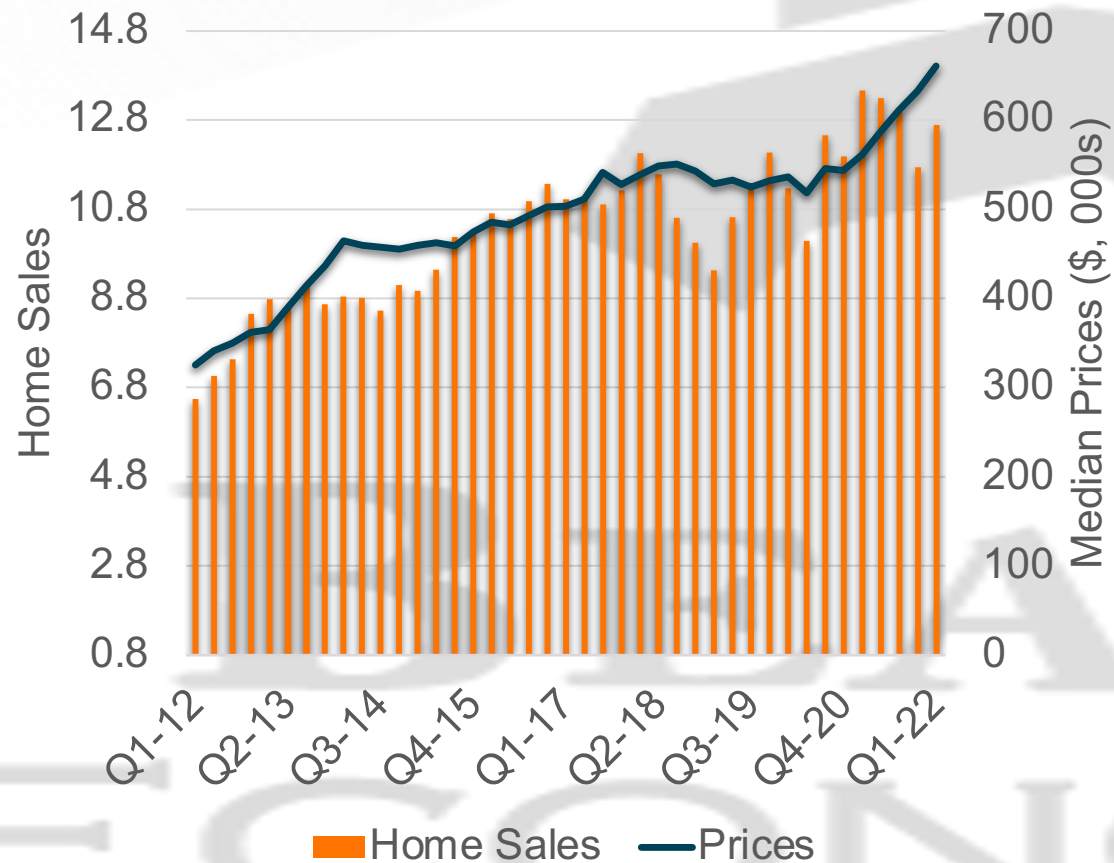
US Existing Home Sales



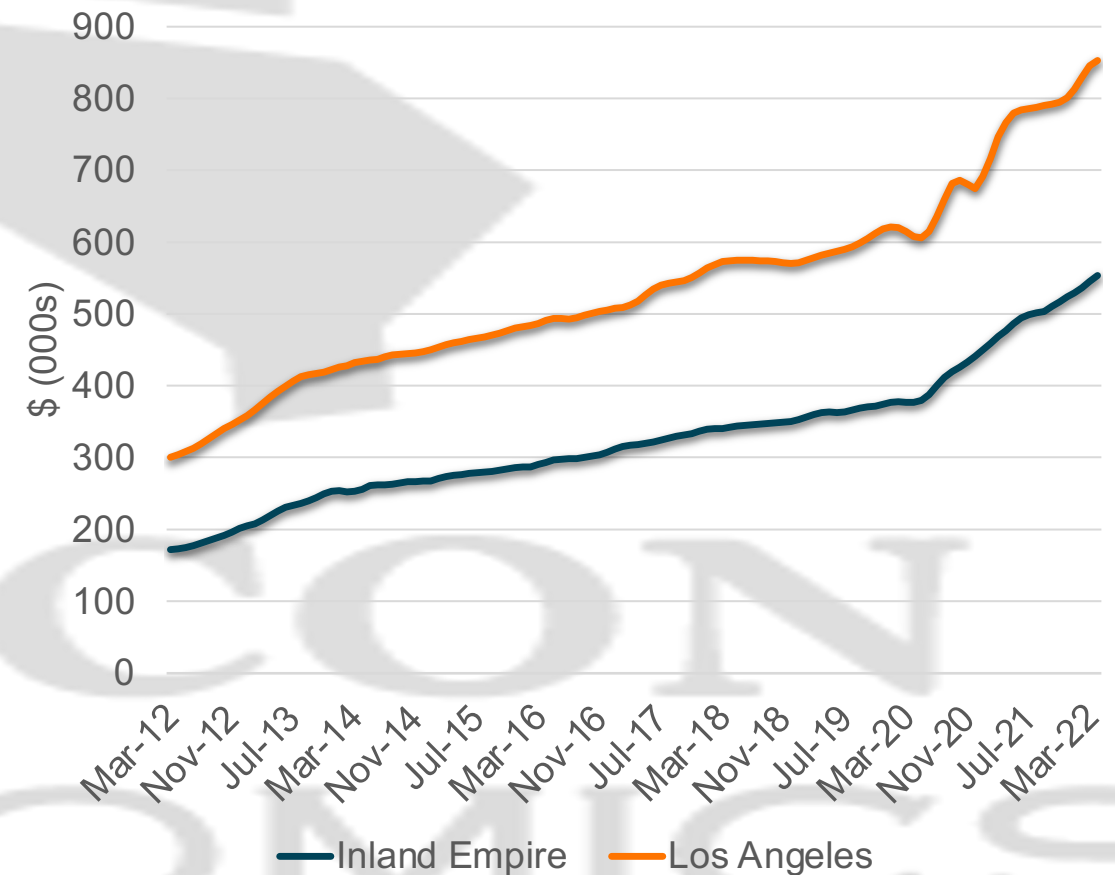
	19-20	20-21	21-22
U.S. National	0.5%	12.2%	19.8%
Phoenix	0.8%	17.4%	32.9%
Tampa	0.7%	12.8%	32.6%
Miami	0.7%	11.1%	29.7%
San Diego	-0.2%	17.1%	29.1%
Dallas	0.2%	10.9%	28.8%
Las Vegas	0.7%	9.3%	27.5%
Seattle	0.7%	15.8%	26.6%
Charlotte	0.4%	12.0%	25.5%
Atlanta	0.5%	10.0%	24.0%
San Francisco	0.7%	11.0%	22.8%
Denver	0.5%	11.4%	22.3%
Los Angeles	0.3%	12.0%	22.1%
Portland	0.6%	11.6%	19.0%
Detroit	0.4%	11.7%	14.6%
Boston	0.4%	13.7%	14.6%
Cleveland	0.7%	12.5%	13.6%
Chicago	0.4%	8.6%	13.1%
New York	0.5%	12.2%	12.9%
Minneapolis	1.3%	10.3%	12.0%
DC	0.4%	10.8%	11.9%

Median Housing Prices – California

Sales vs Prices in California

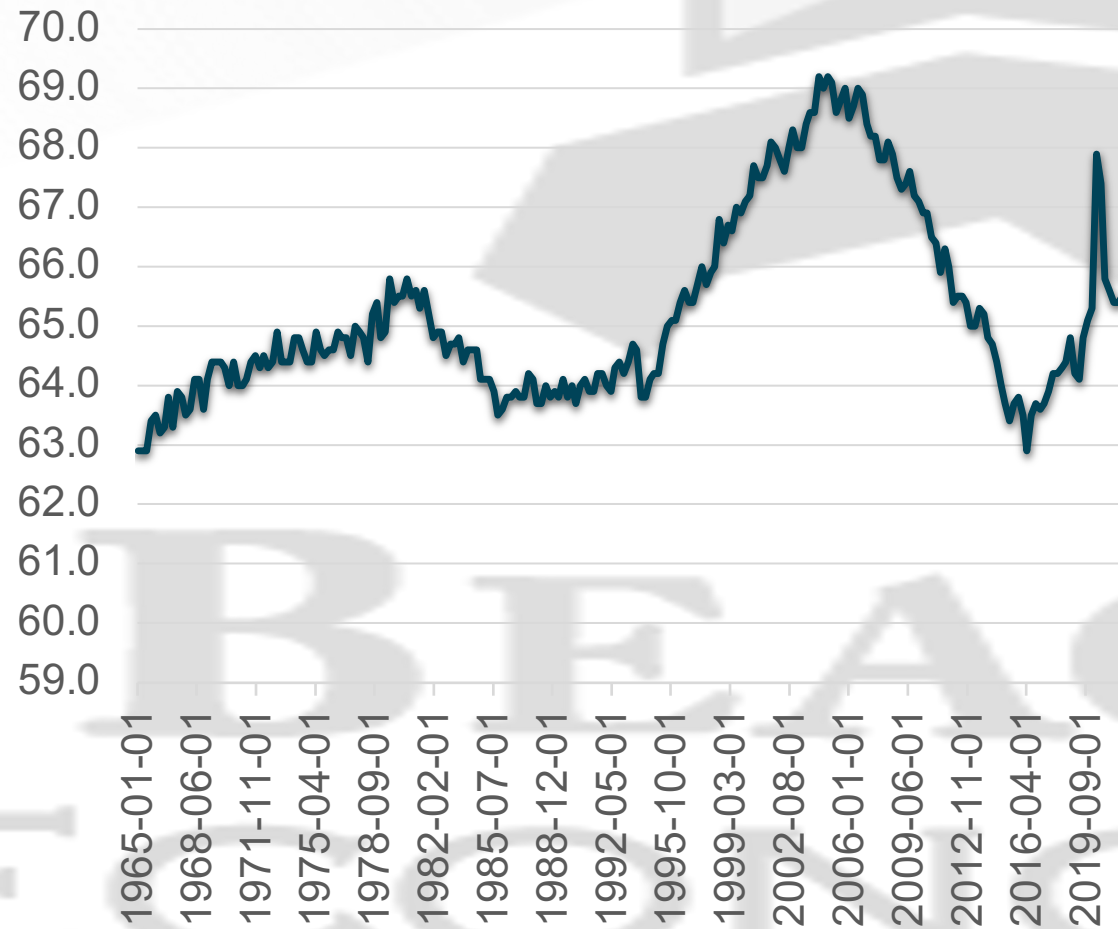


Median Housing Prices in California MSAs

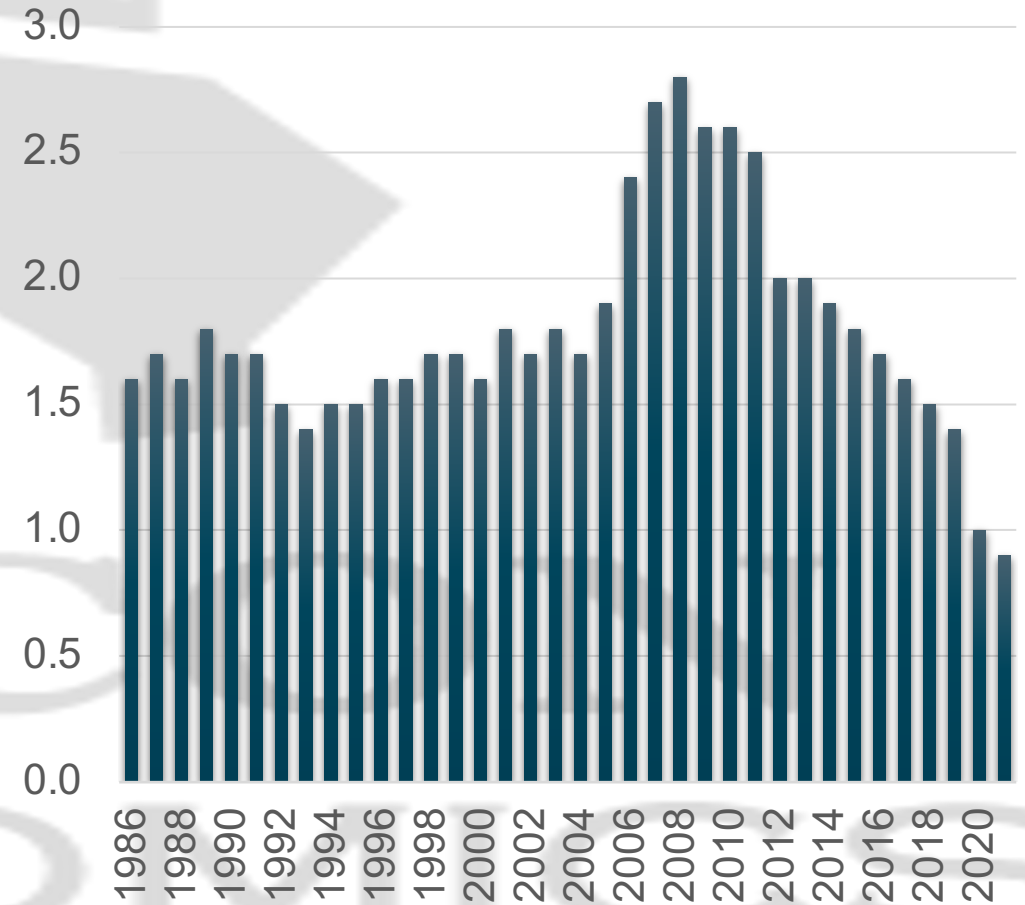


Long Run Market Dynamics

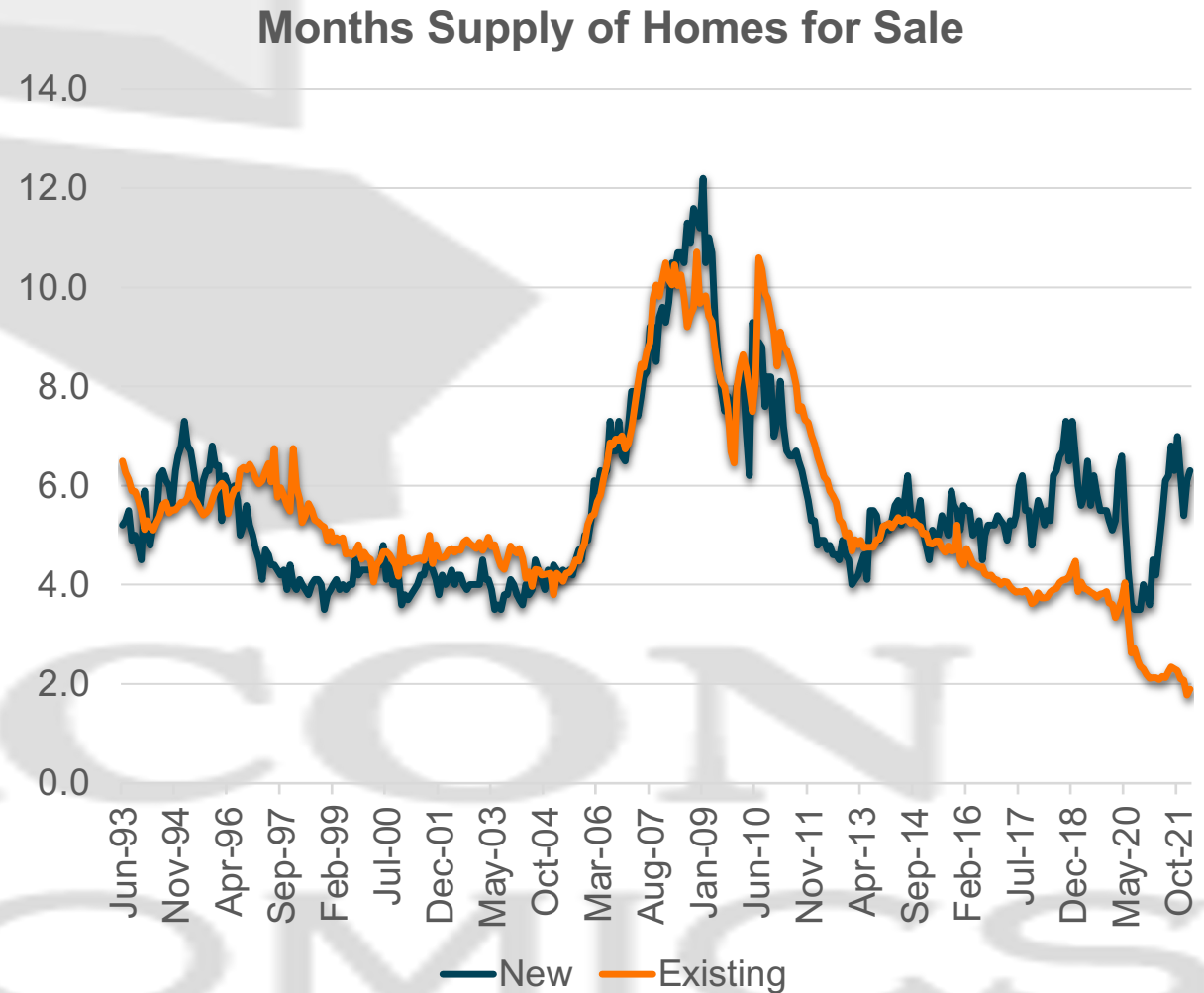
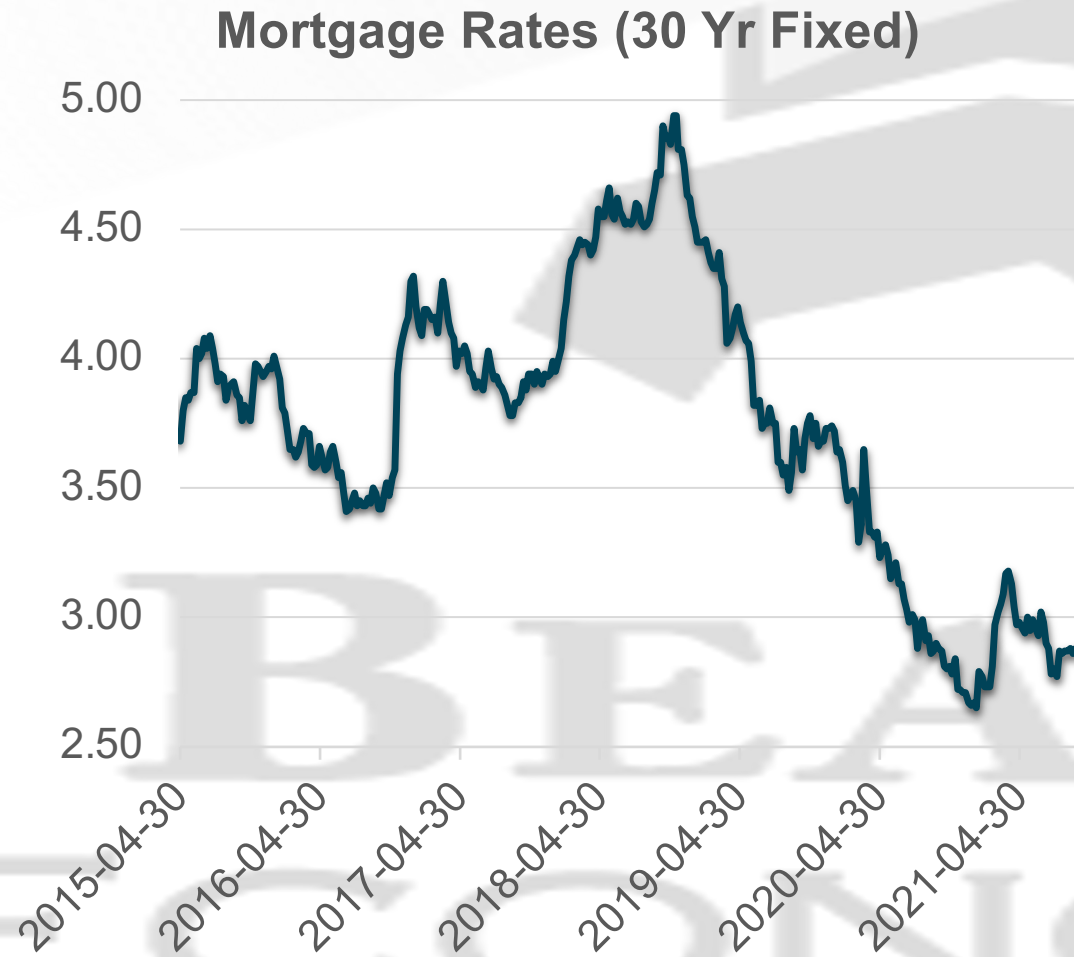
US Homeownership Rate



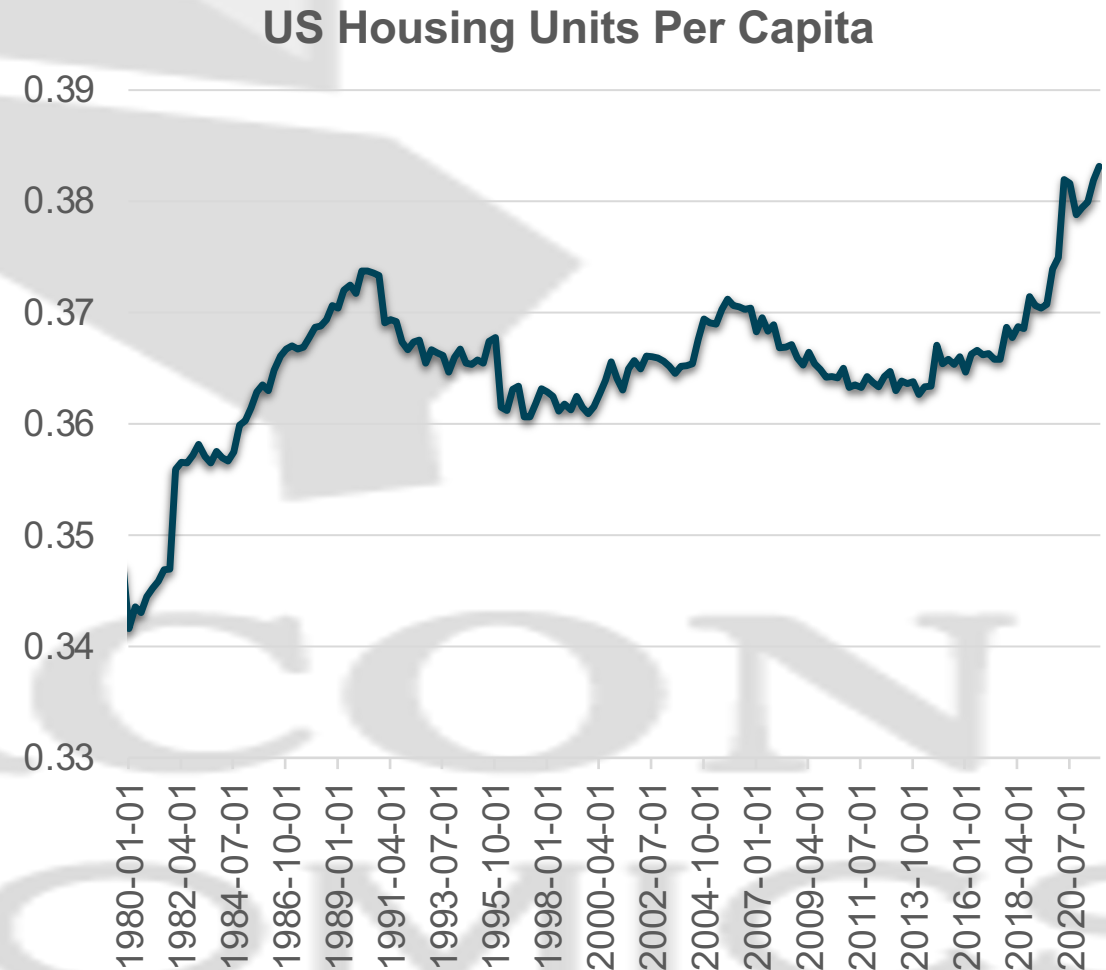
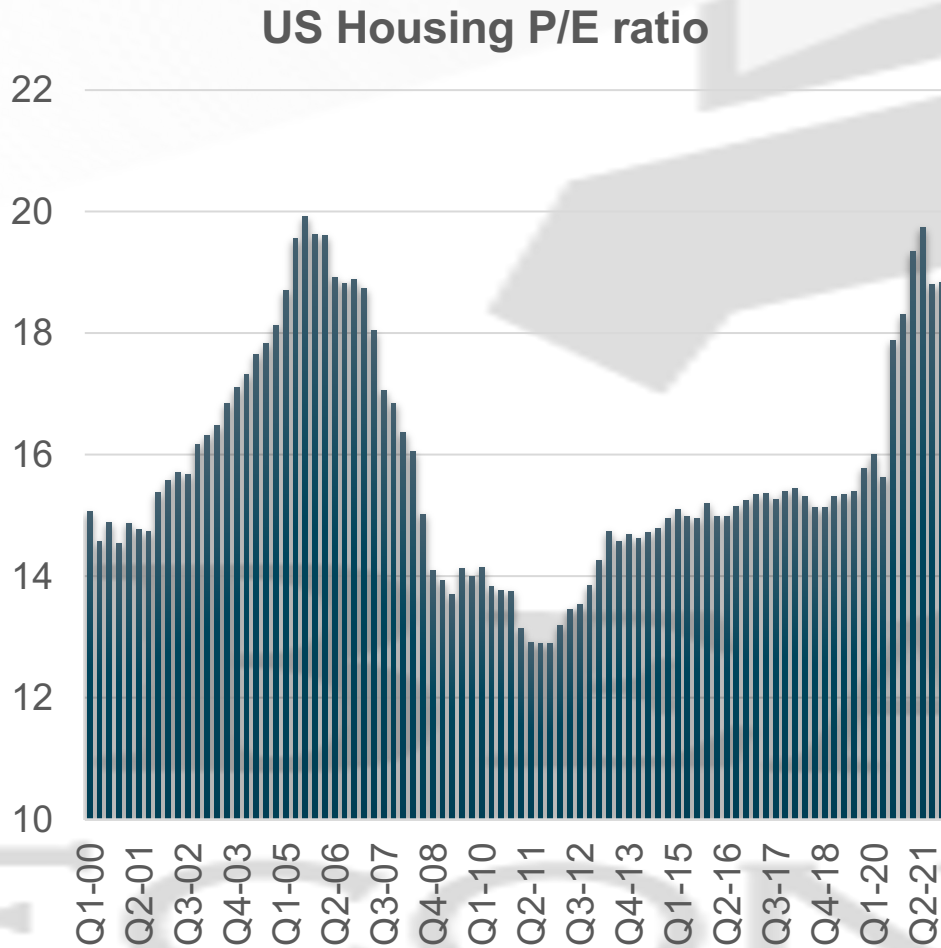
US Housing Vacancy Rate



Drivers of the Boom

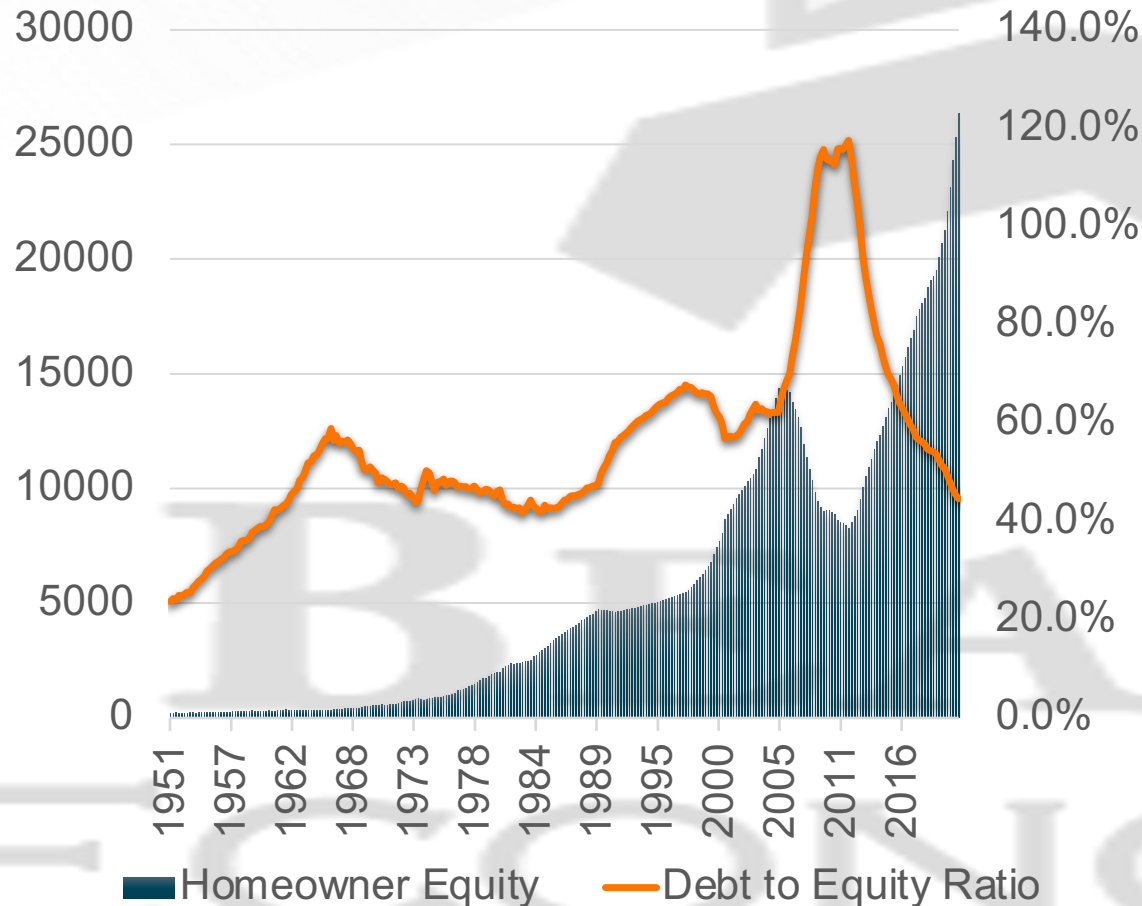


Any Signs of Froth?



Market Collapse? No, Not Yet...

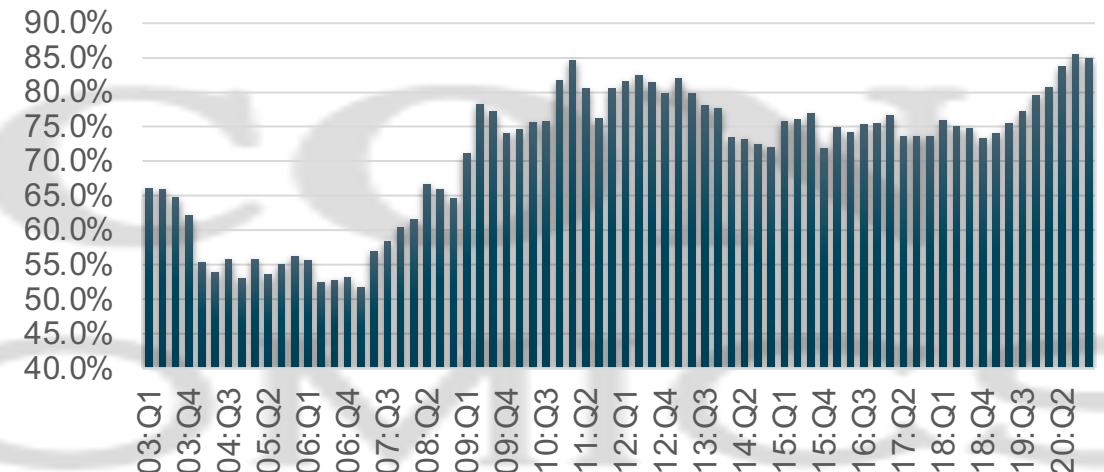
Housing Fundamentals



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

Share Owned			Share 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%

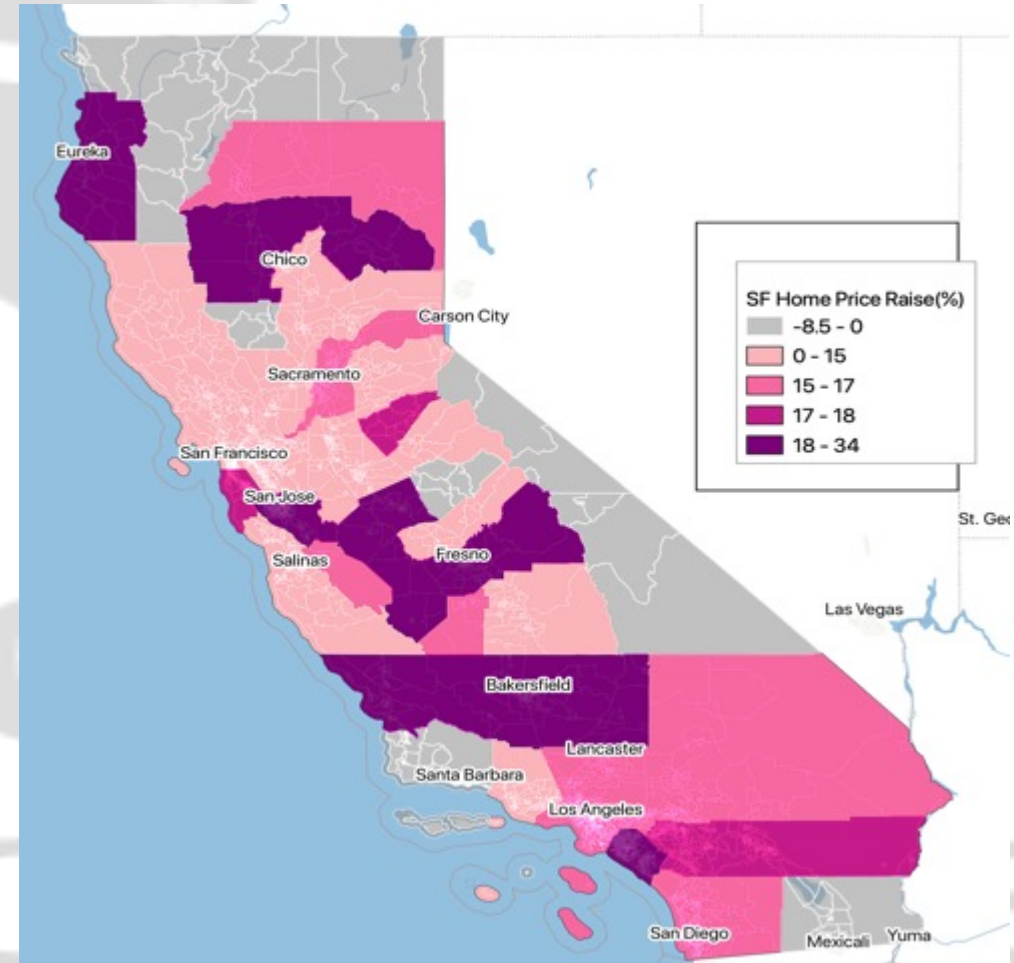
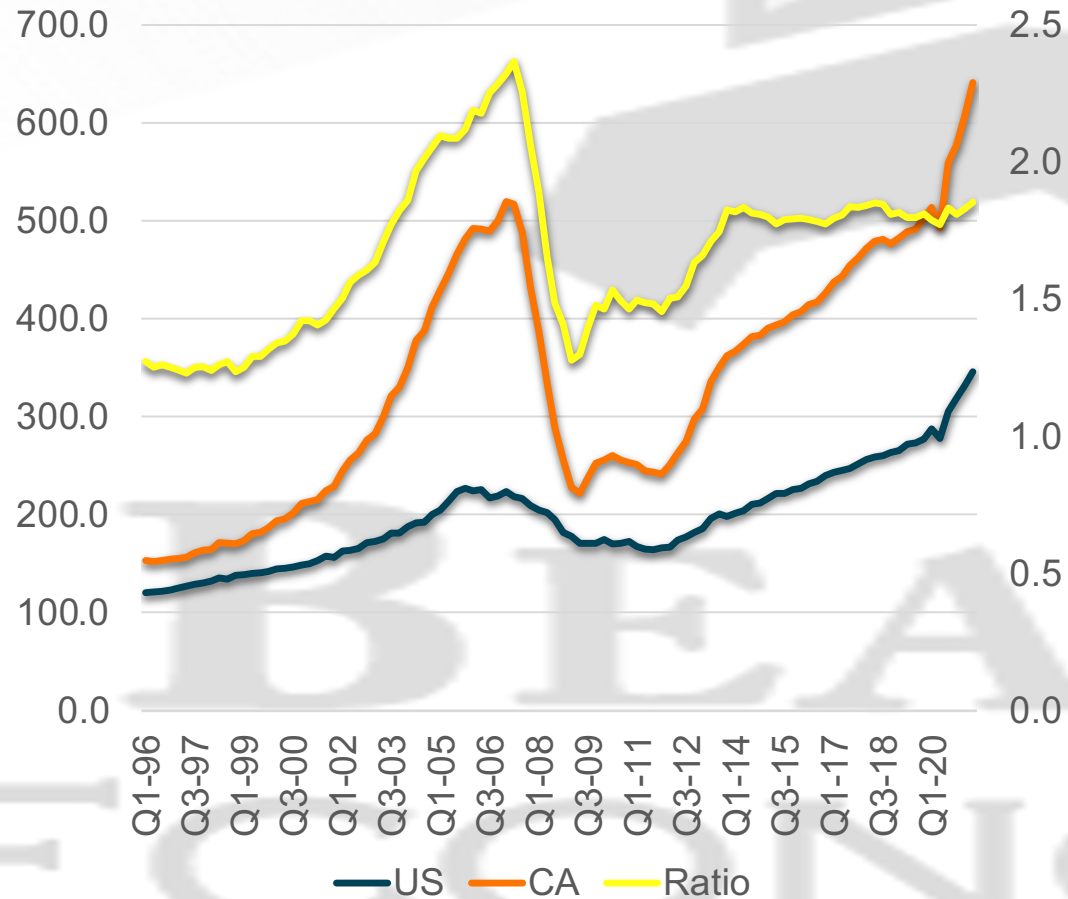
Share Mortgage Originations > 720 Fico



CA Housing Market



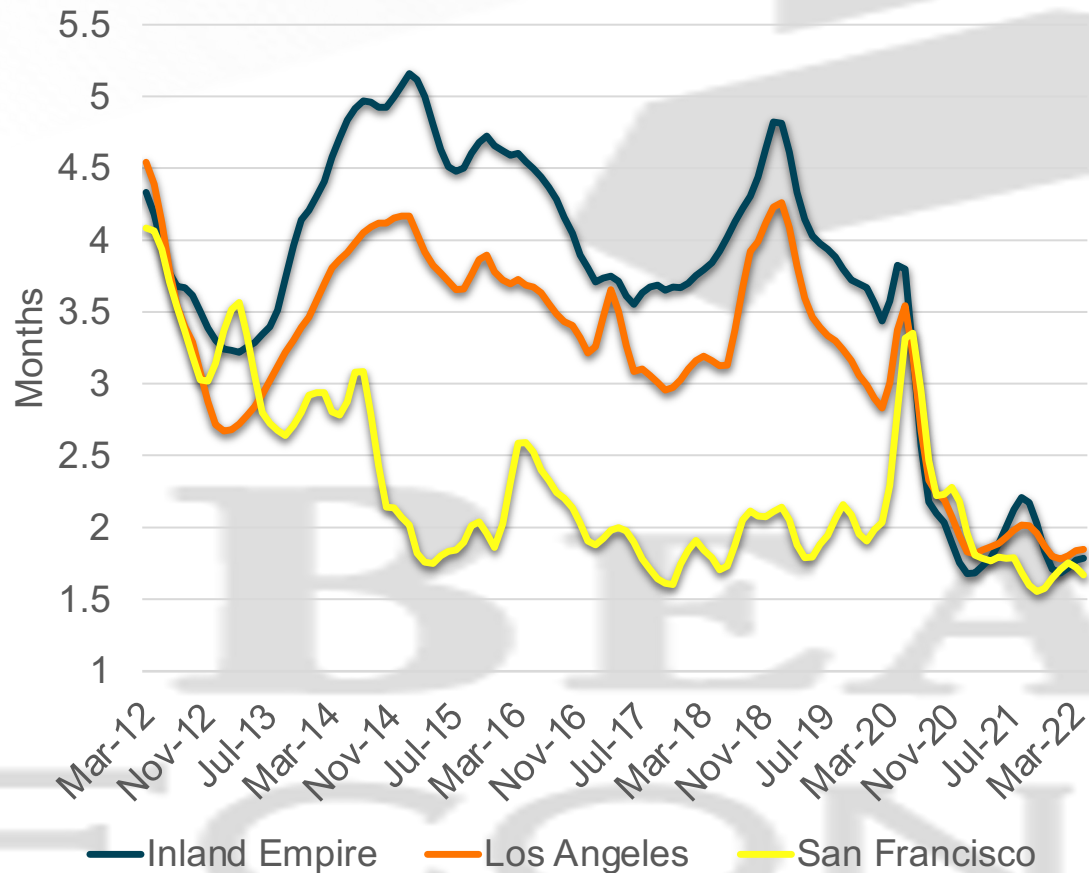
State vs National Prices



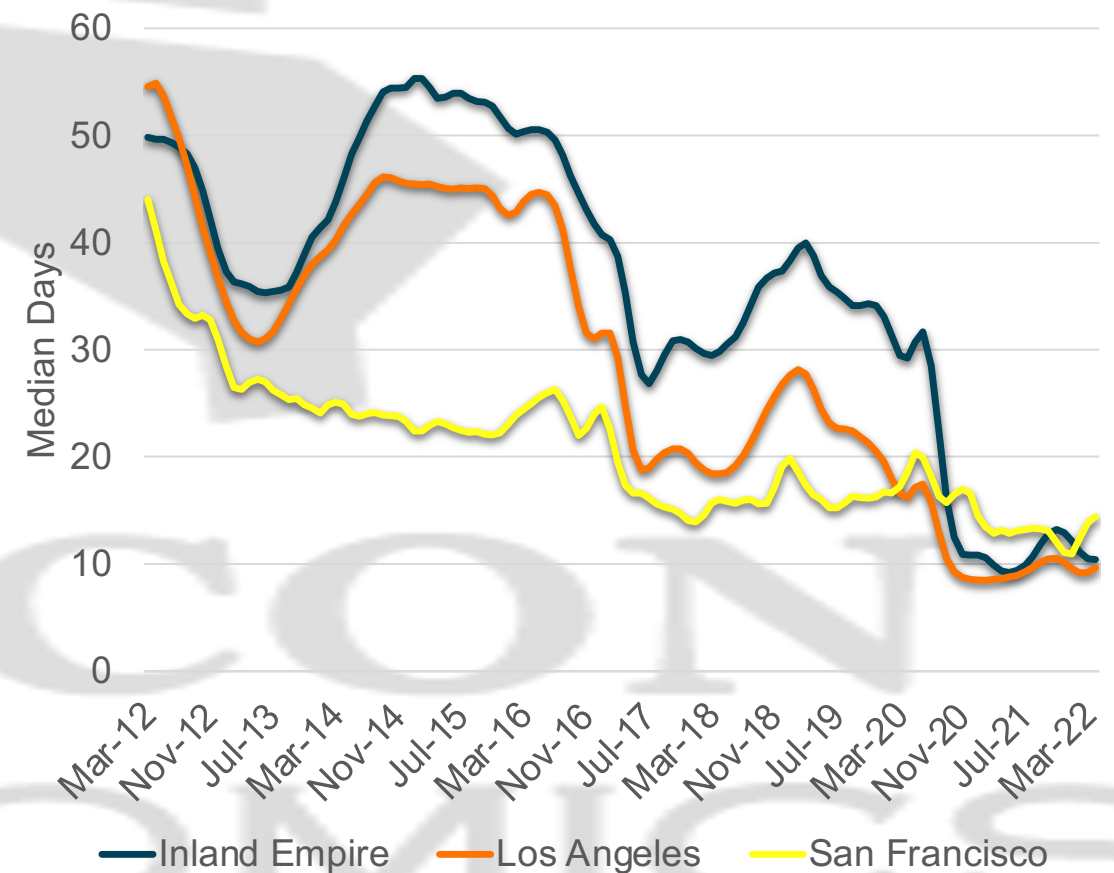
Housing Inventory & Median Days on Market – California MSAs



Inventory in California MSAs

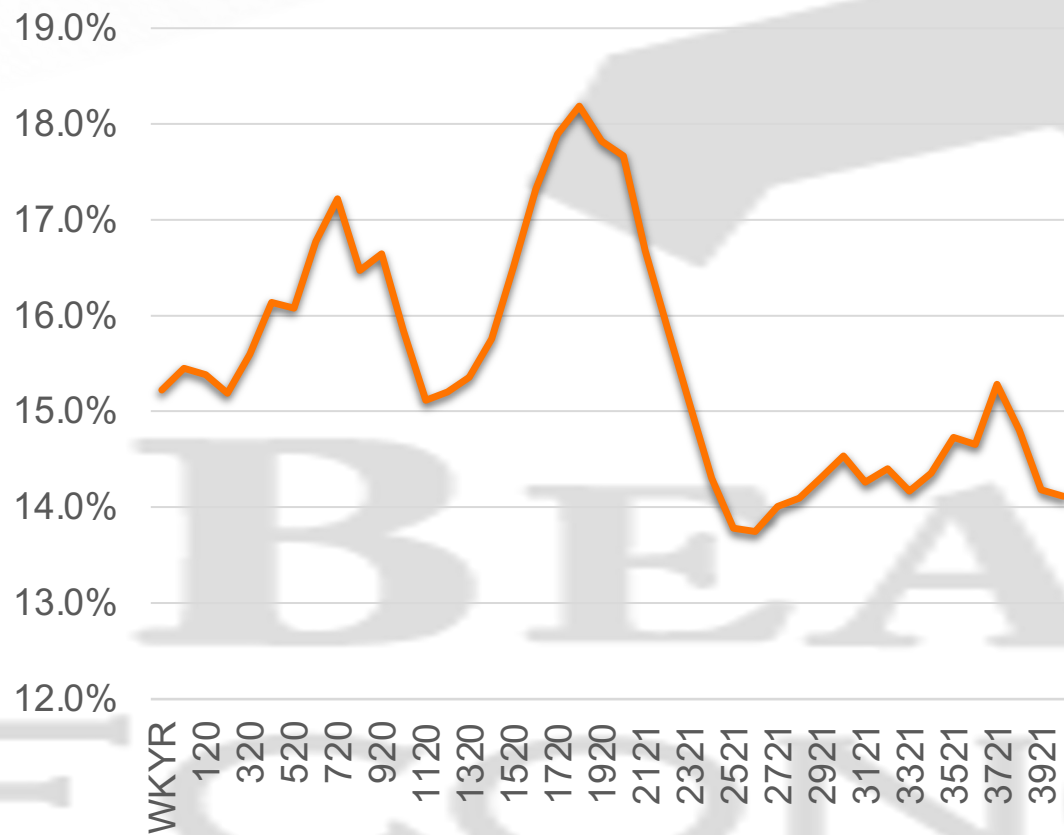


Median Days on Market

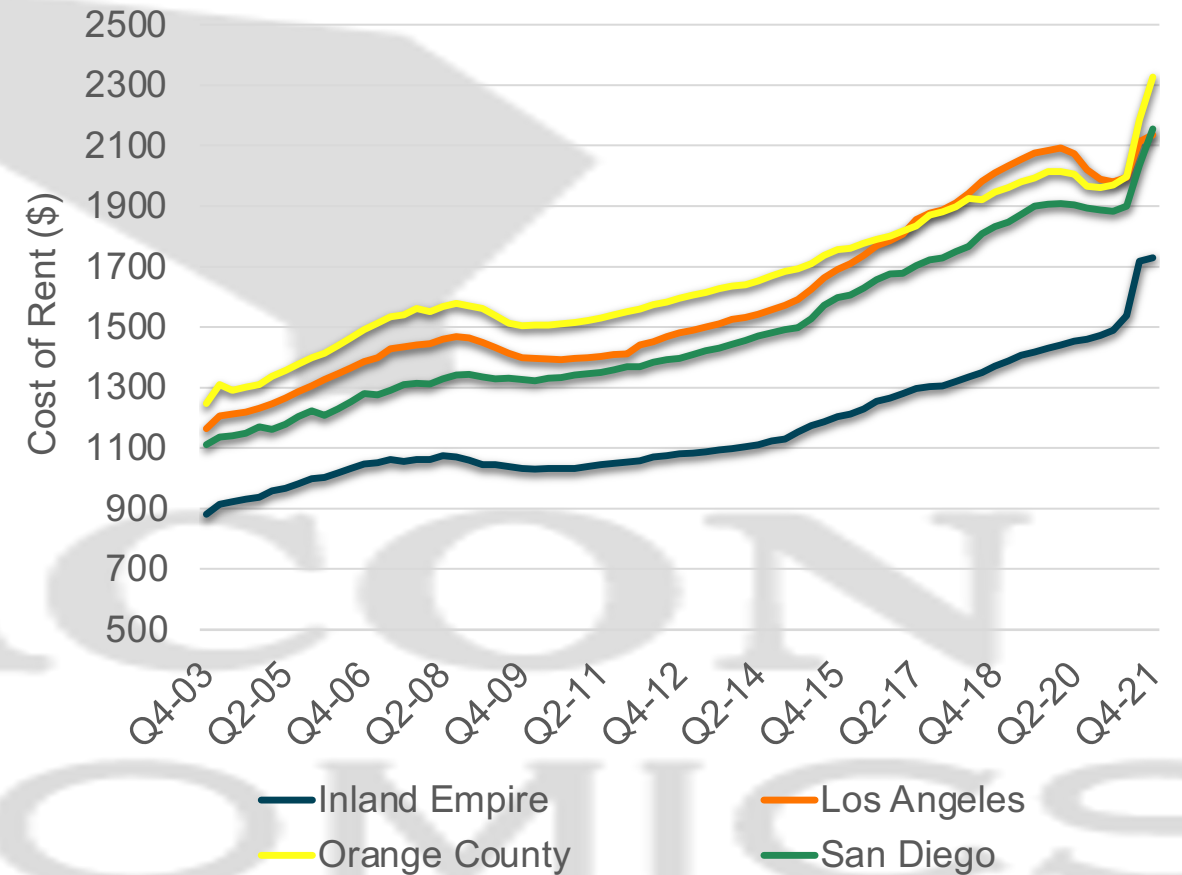


Rental Housing

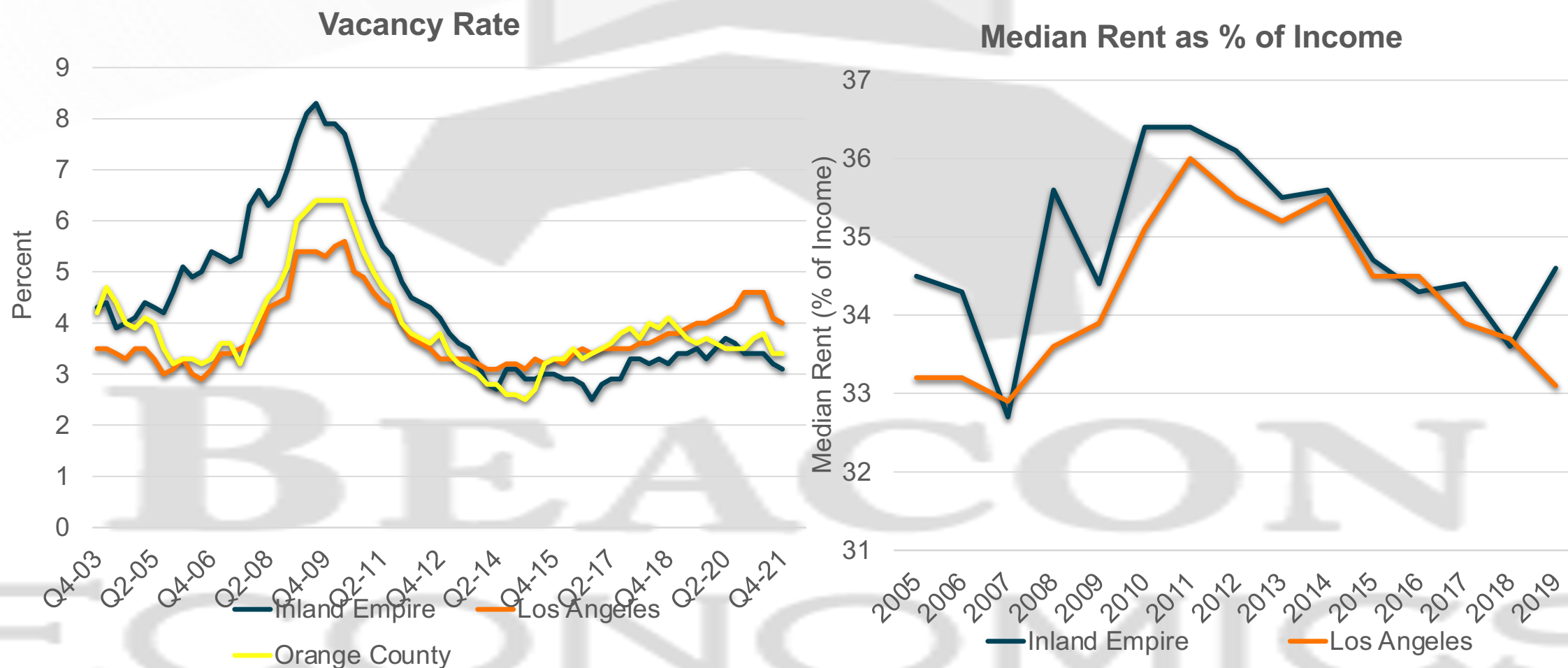
Households currently not caught up on payments, % (MA, Pulse)



Apartment Cost of Rent



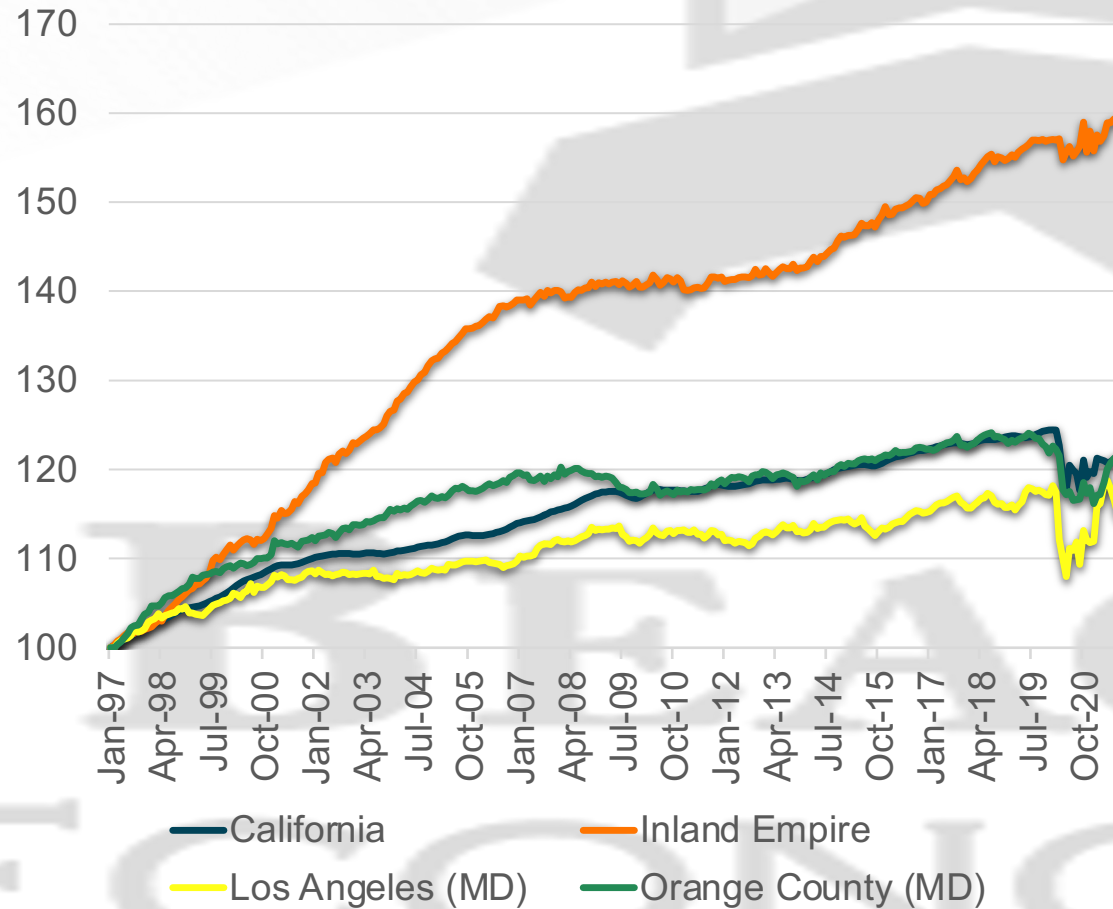
SoCal Apartment Market



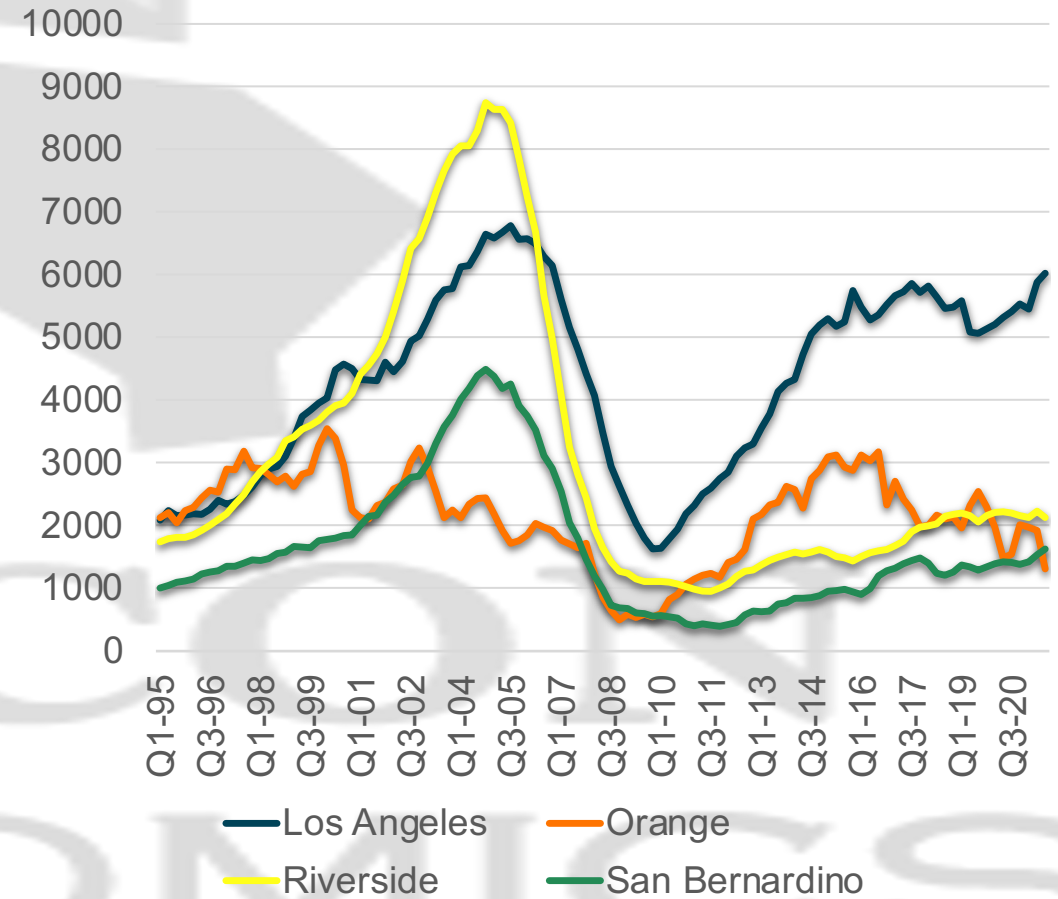
The Real So-Cal Story



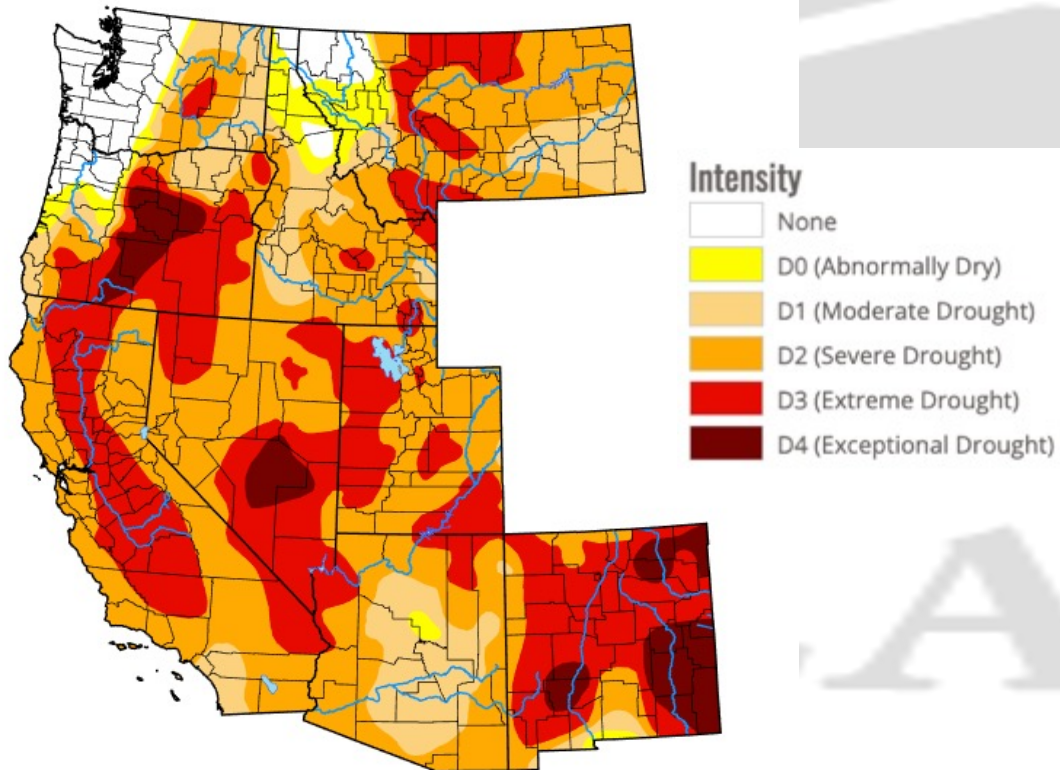
Labor Force Indexes



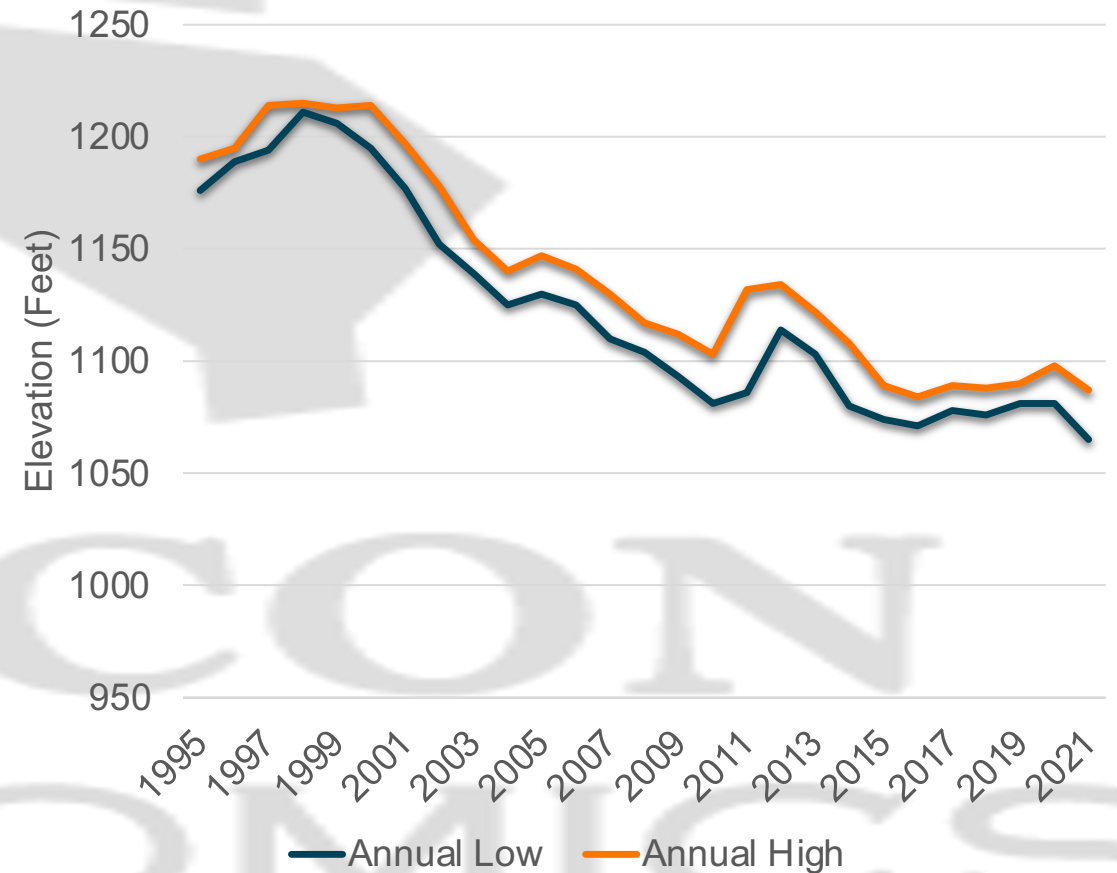
Residential Permits



The (lack of) Water Situation



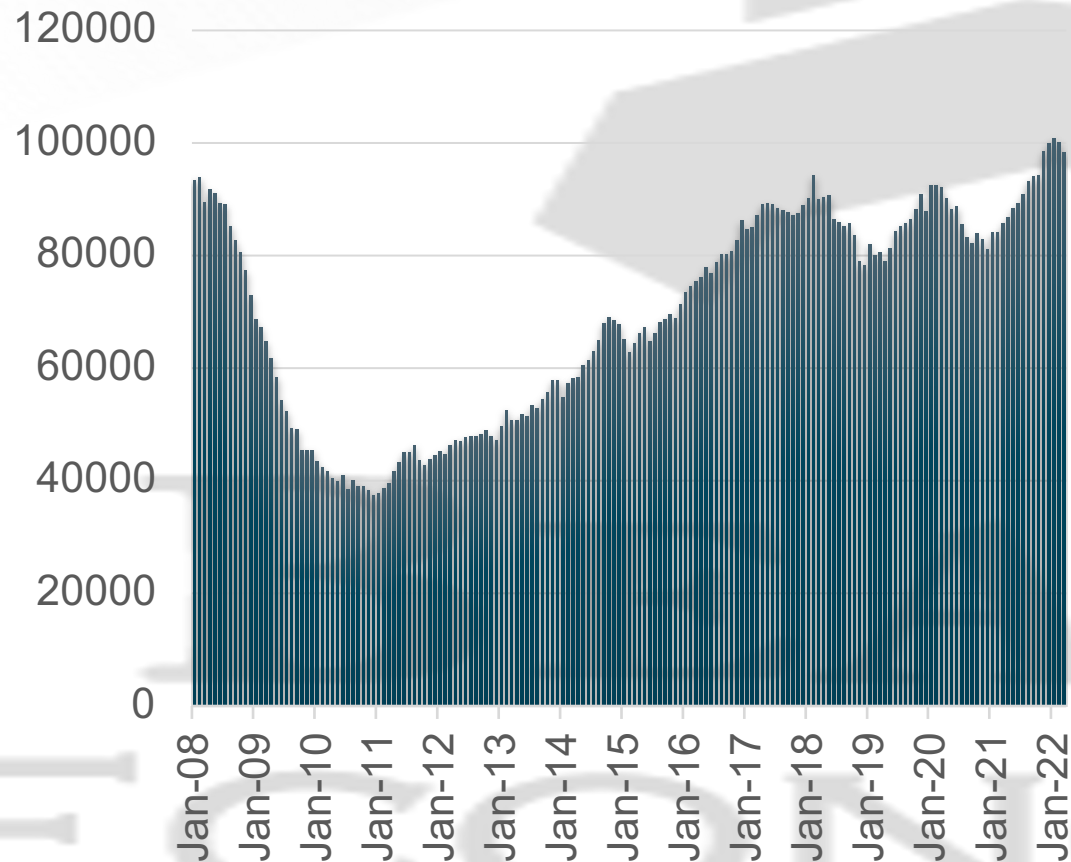
Lake Mead Water Elevation



Non-Res Markets

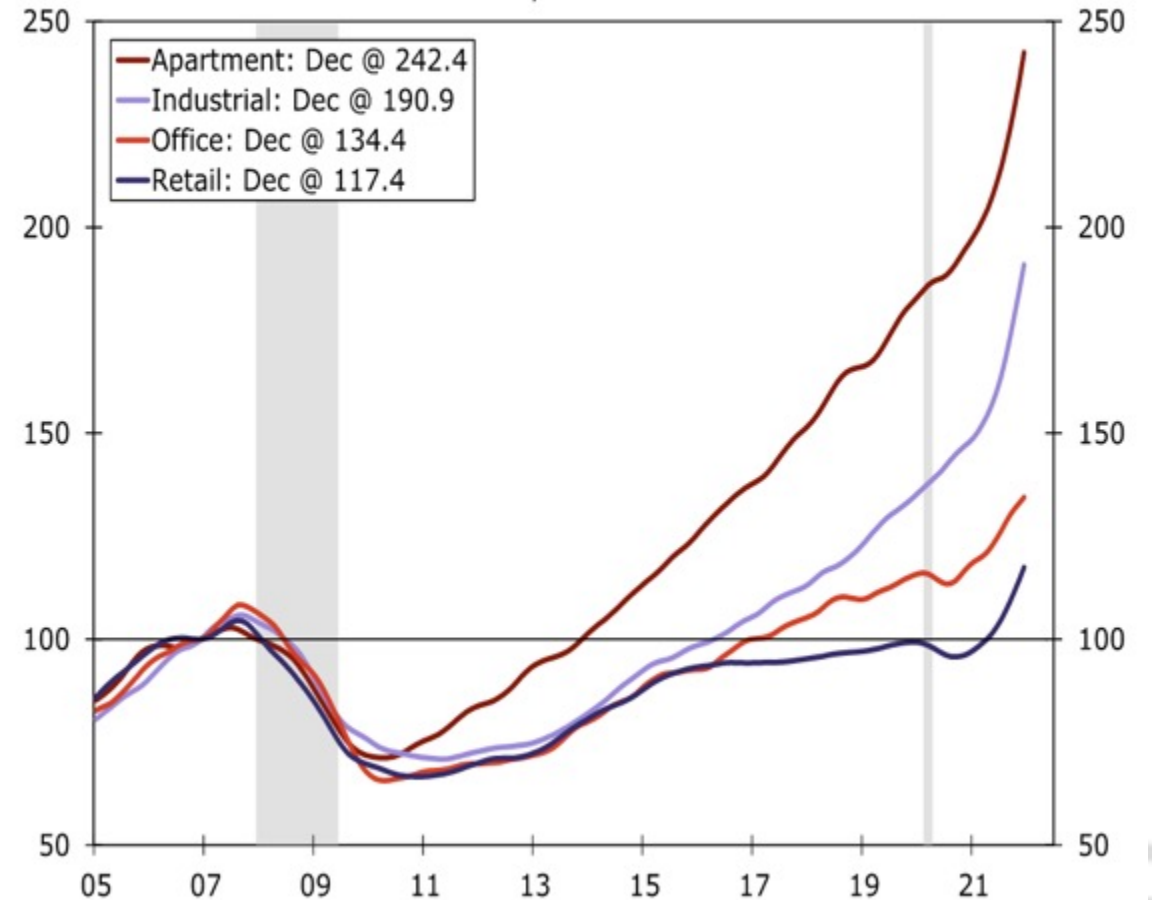


Commercial Construction Spending



Commercial Property Price Index

Index, 100=2006

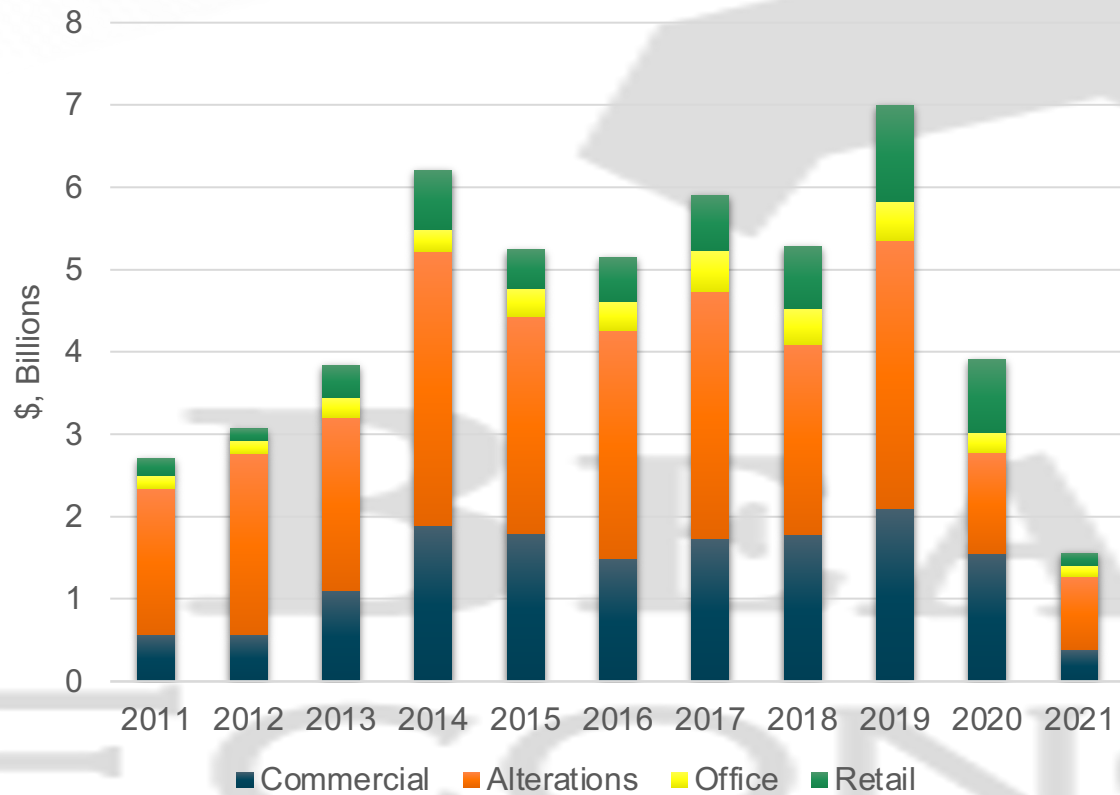


Source: Real Capital Analytics and Wells Fargo Economics

Non-Residential Real Estate



Value of Permits, Los Angeles County



Commercial Permit Value – Los Angeles			
Category	2021 (\$ Mil)	2-Year Change	
		Abs Chg	% Chg
Industrial	27.8	-35.5	-56.0
Office	137.4	-332.3	-70.7
Alterations	888.5	-2,369.5	-72.7
Hotel	52.7	-150.5	-74.1
Commercial	385.5	-1,712.5	-81.6
Retail	157.0	-1,016.8	-86.6

Nonresidential Rents and Vacancies



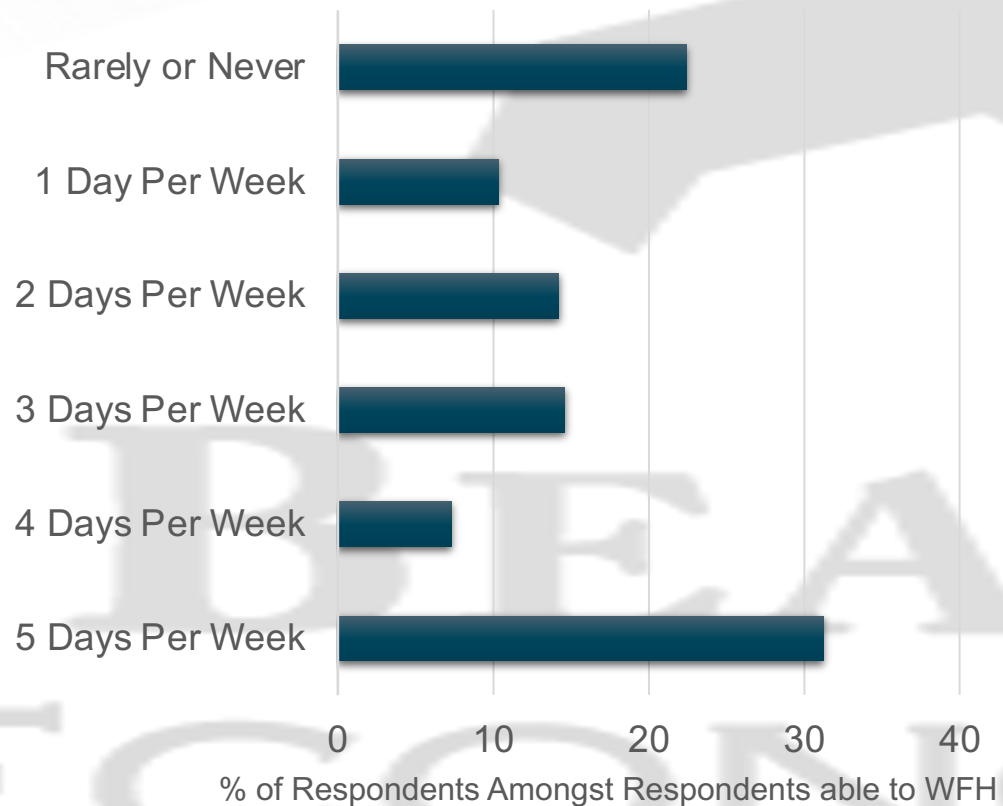
Office	Cost of Rent		Vacancy Rate	
	Q1-22 (\$)	1-Yr % Growth	Q1-22 (%)	1-Yr Change
San Jose	48.0	0.8	19.7	-0.6
Sacramento	27.7	1.2	19.2	0.2
San Diego	34.9	1.4	17.8	0.3
Los Angeles (MD)	41.1	0.6	15.8	0.5

Retail				
Sacramento	24.6	0.4	10.2	0.0
Los Angeles (MD)	33.5	0.2	7.8	0.1
San Diego	32.3	0.2	6.3	-0.3
San Jose	37.7	-0.1	5.5	-0.3

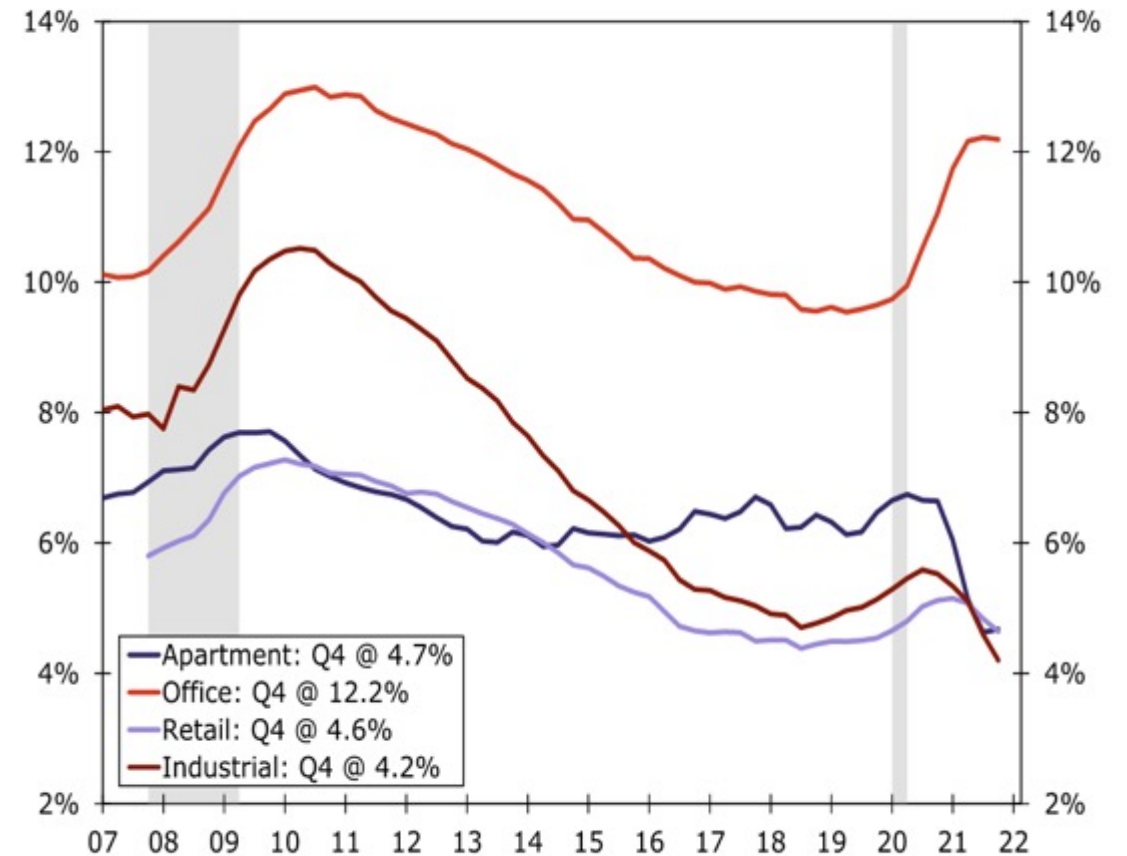
Warehouse/Distribution				
Sacramento	5.5	6.4	6.4	-3.1
San Jose	9.1	5.5	4.9	-4.5
San Diego	9.9	6.7	4.1	-4.9
Los Angeles (MD)	8.5	5.9	2.9	-3.0

Death of Office? Maybe Not...

Workers' desired amount of post-COVID WFH days



CRE Vacancy Rates

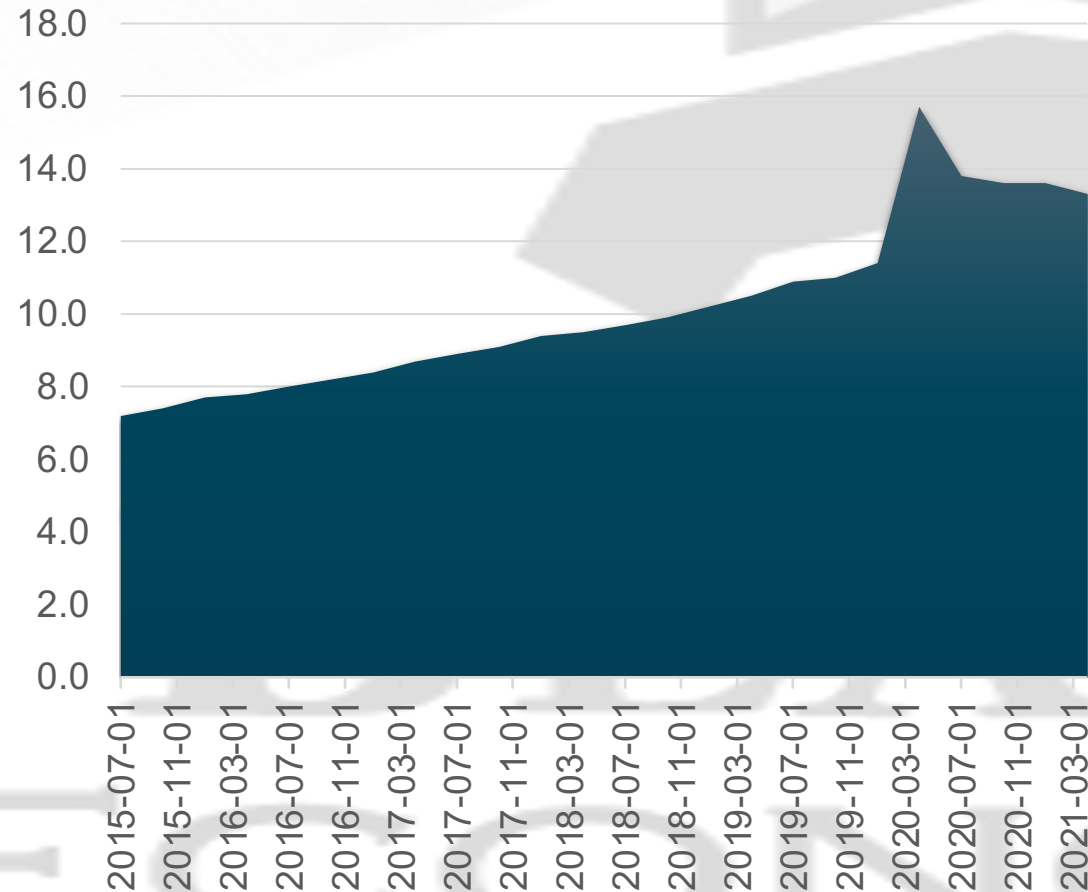


Source: CoStar Inc. and Wells Fargo Economics

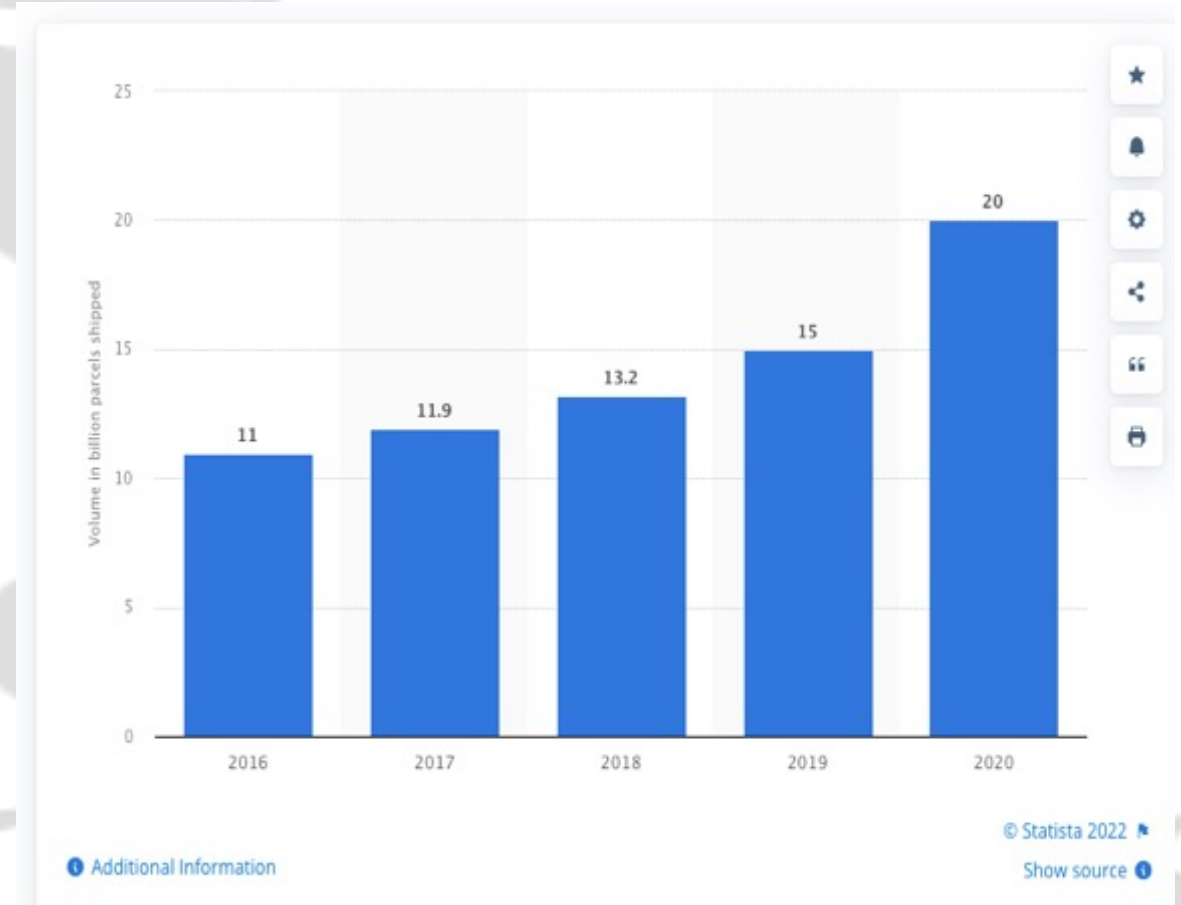
Retail / Industrial Supply Chains



E-Commerce Share of Retail

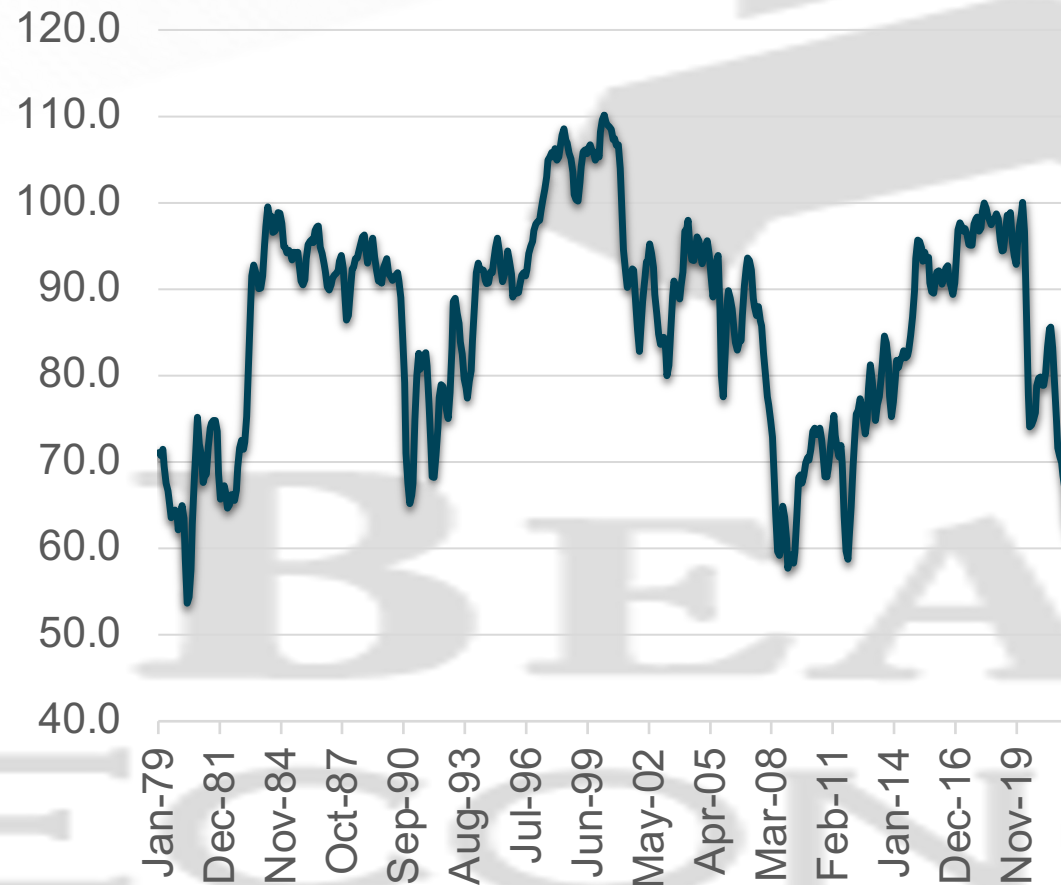


Pitney Bowes US Package Delivery

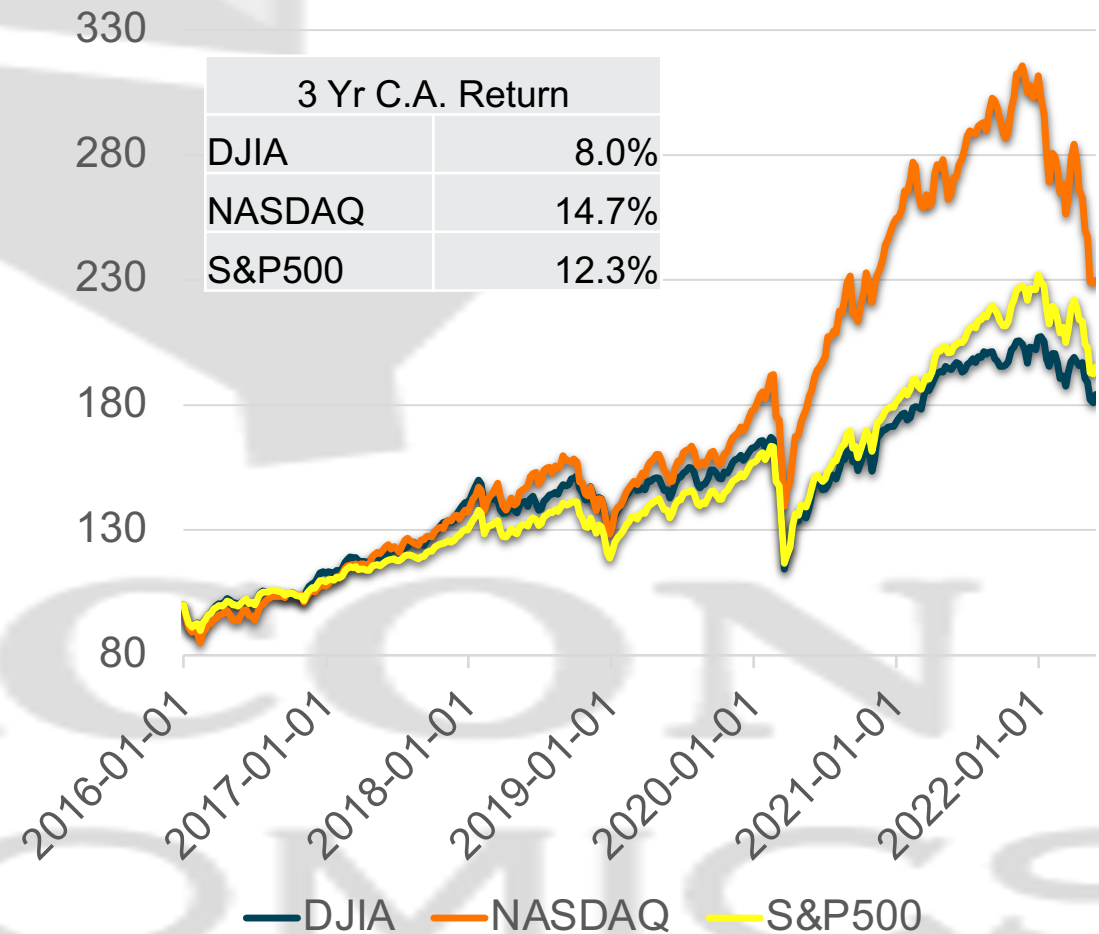


Pessimism on the Rise

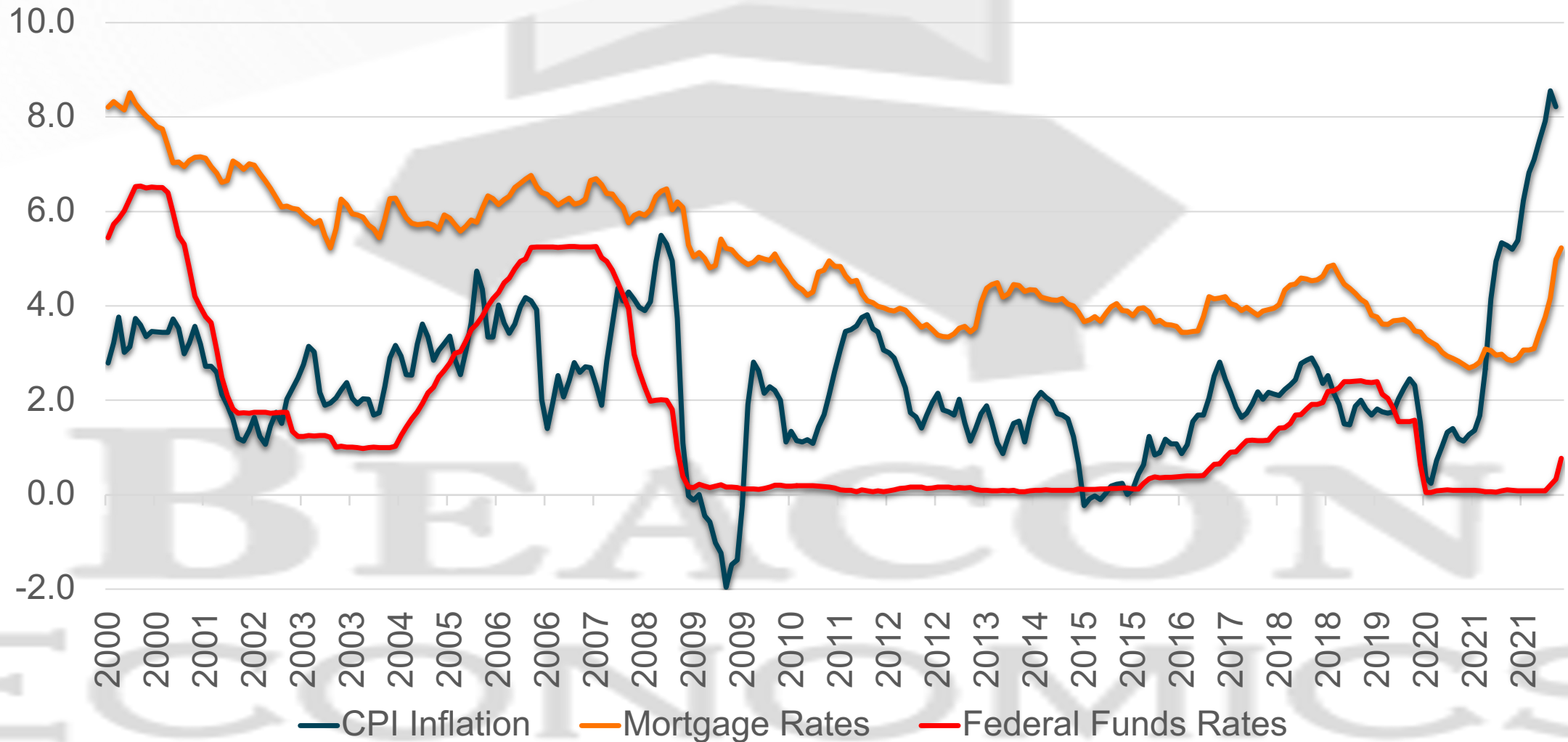
University of Michigan Consumer
Sentiment (smoothed)



Indexes of Market performance

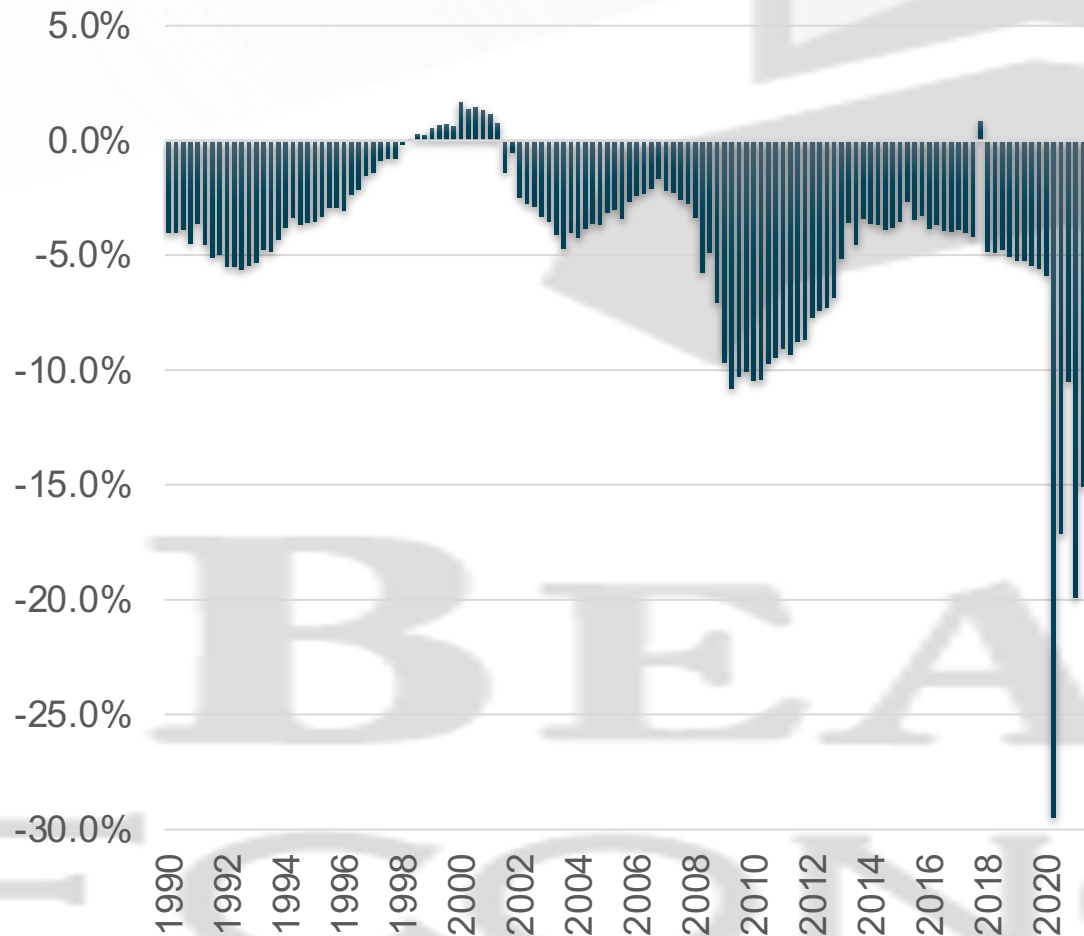


Current Economic Issues

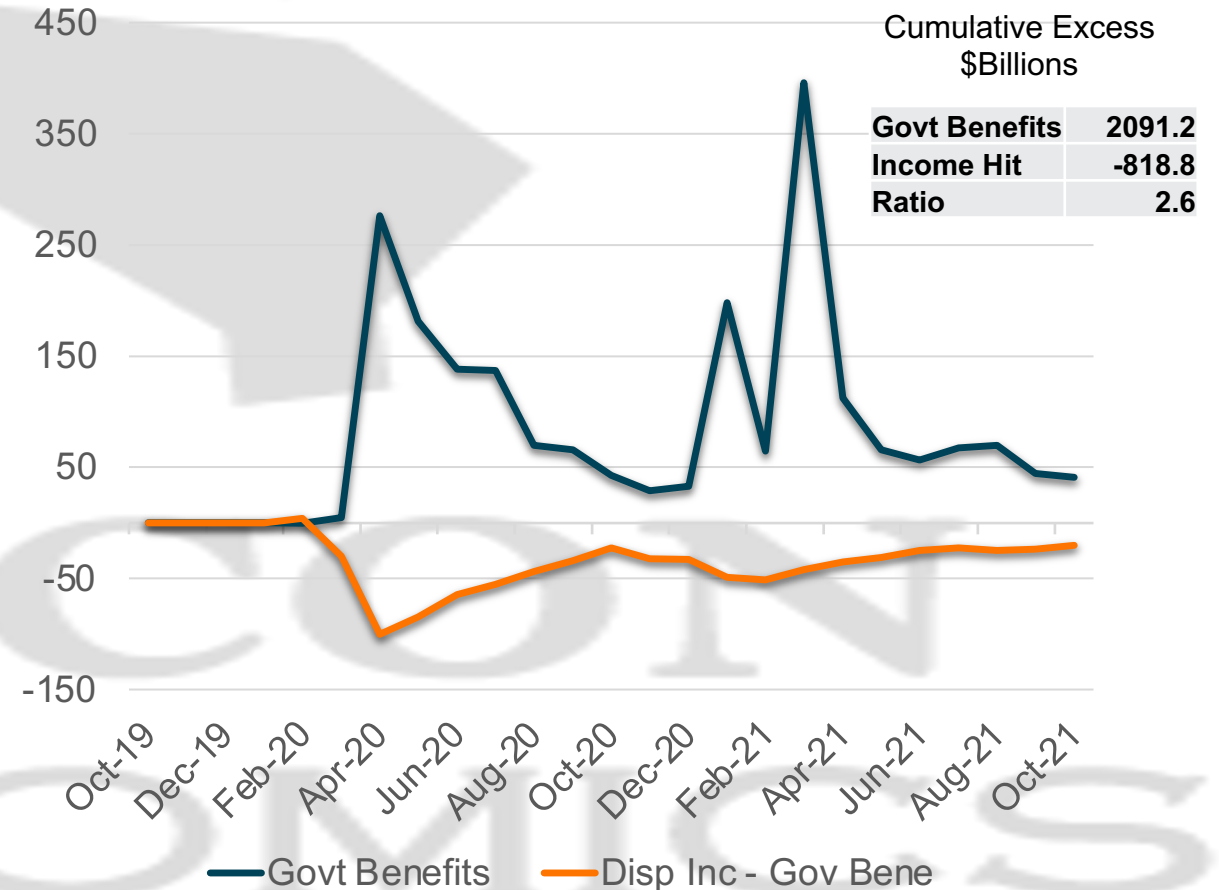


Federal Fiscal (Over)reaction

Net Federal Borrowing as % GDP

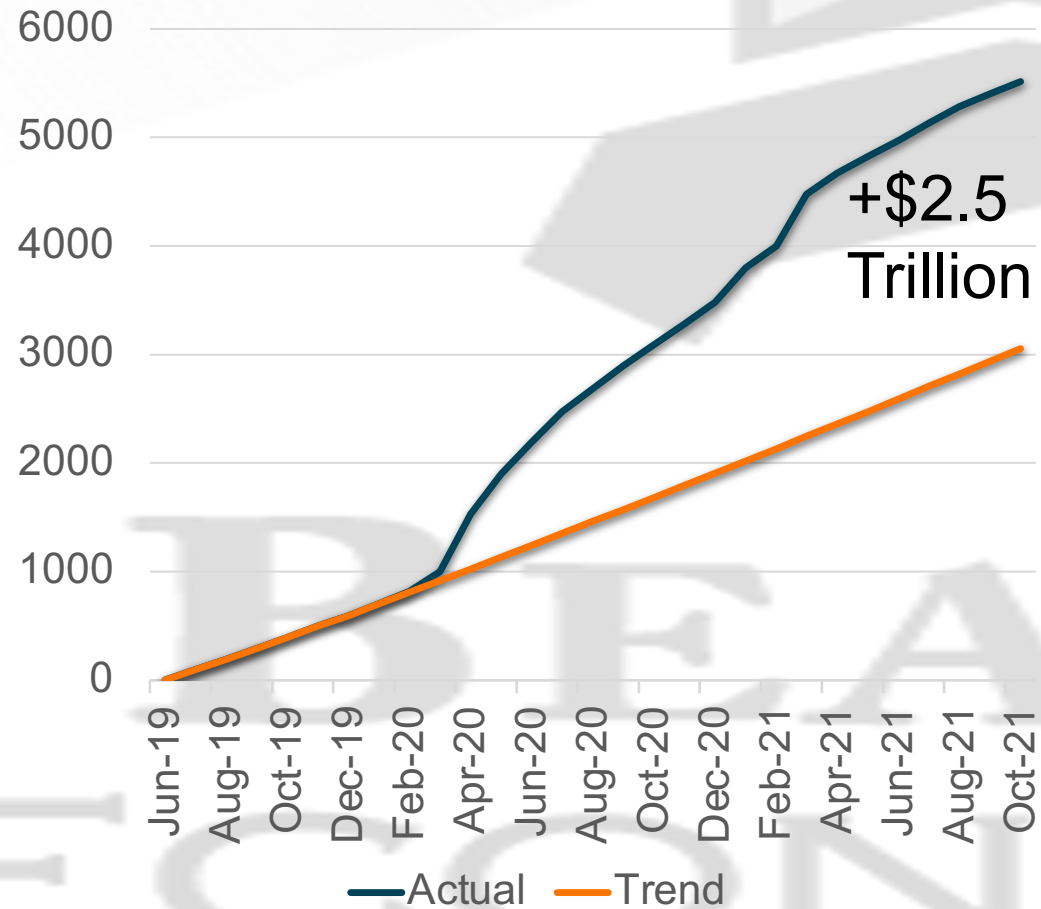


Levels of Personal Income Relative to Pre-Pandemic Trends

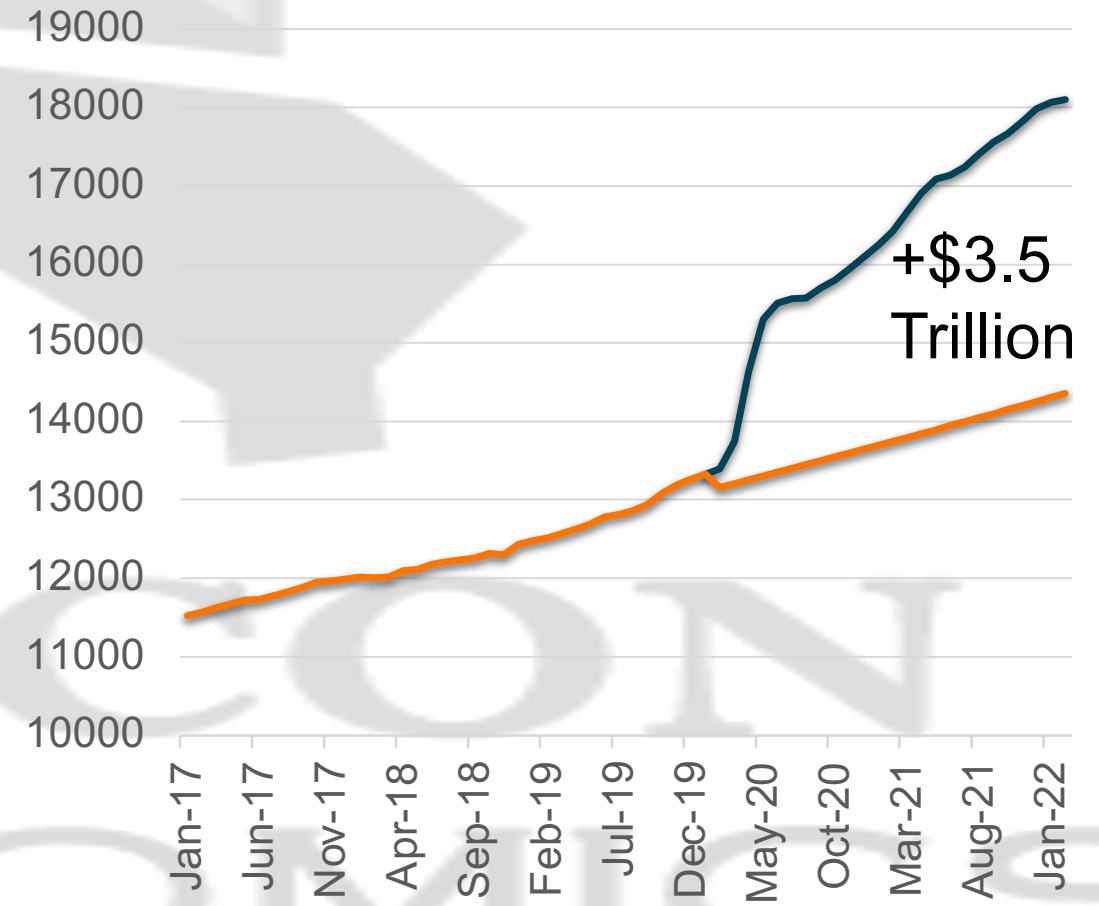


The Covid Boondoggle

Cumulative Personal Savings \$Bil

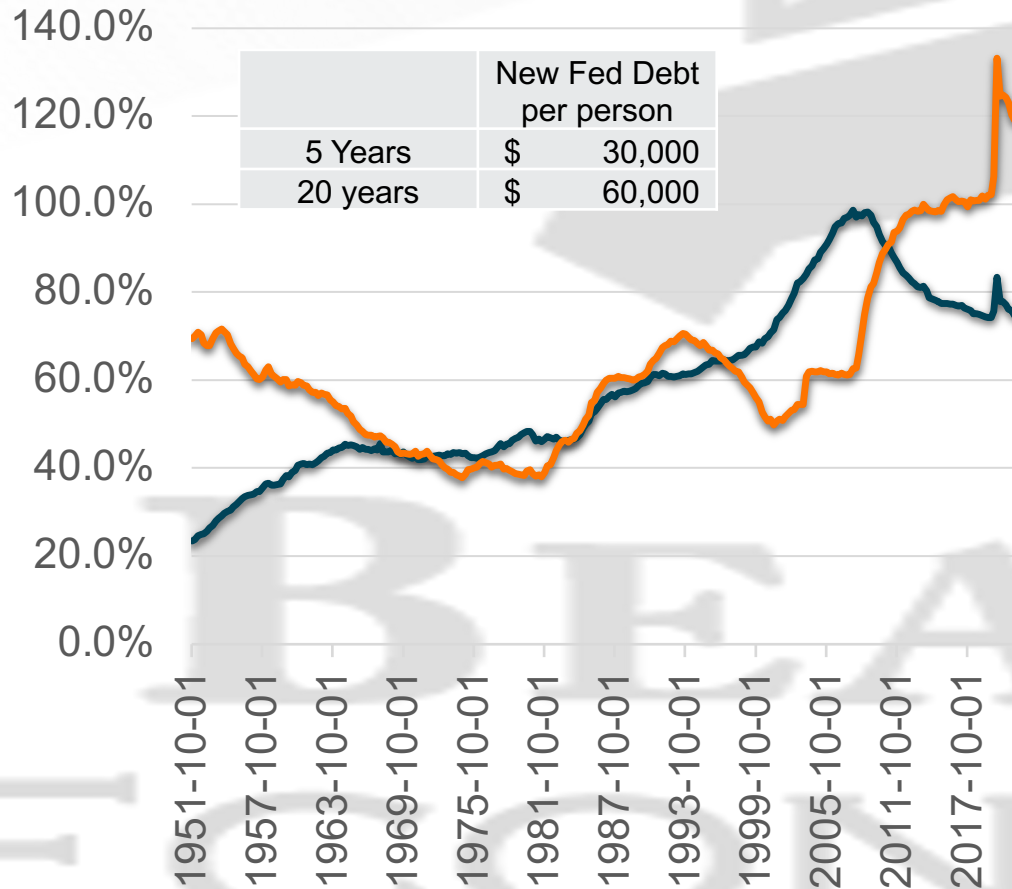


Commercial Bank Deposits \$Bil

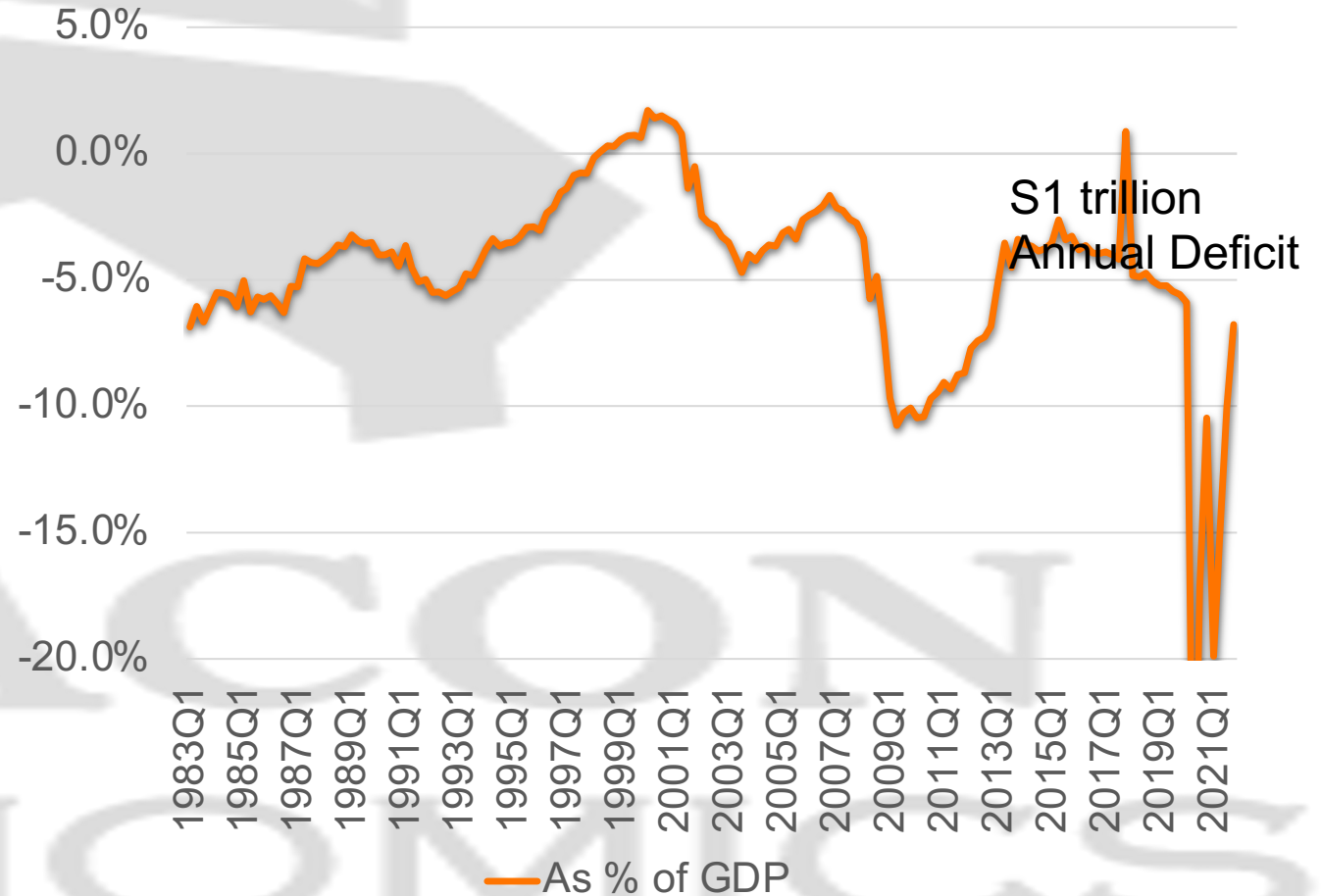


No Such Thing As a Free Lunch...

Debt to GDP Ratios

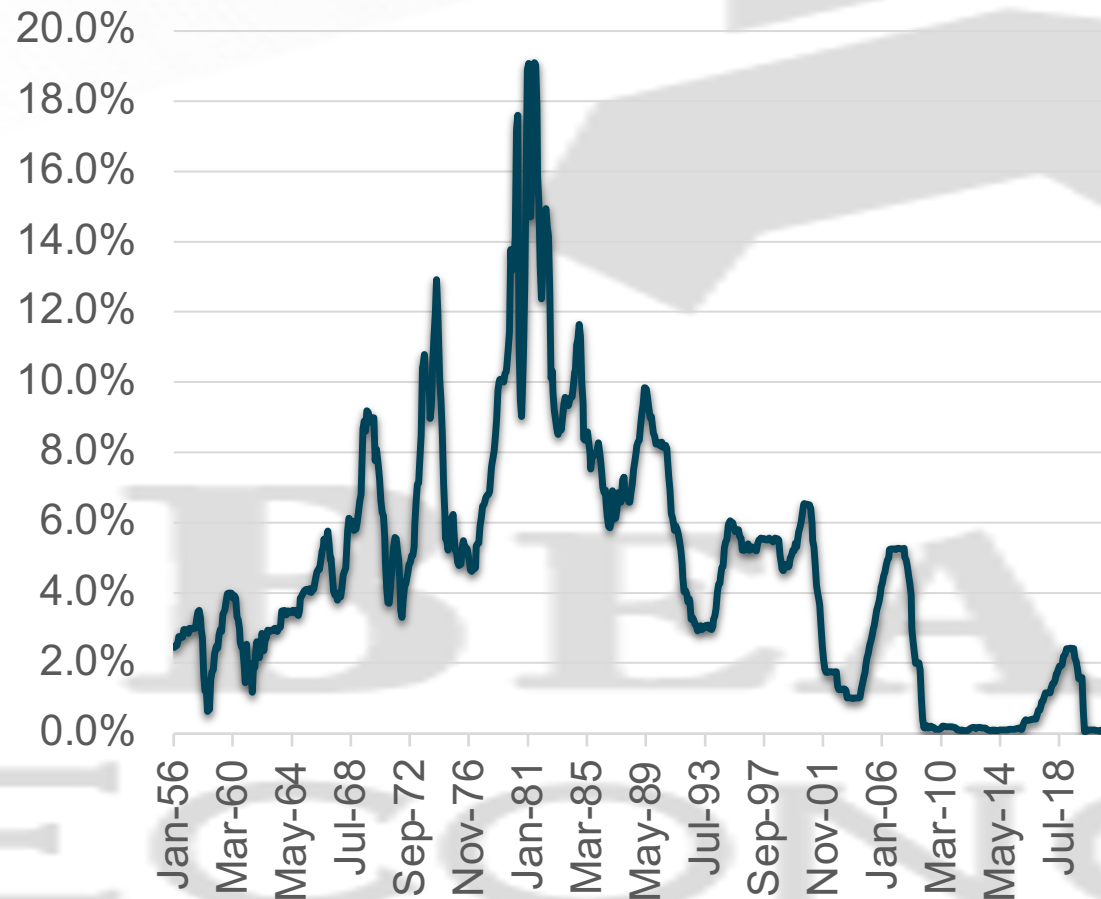


Federal Deficit

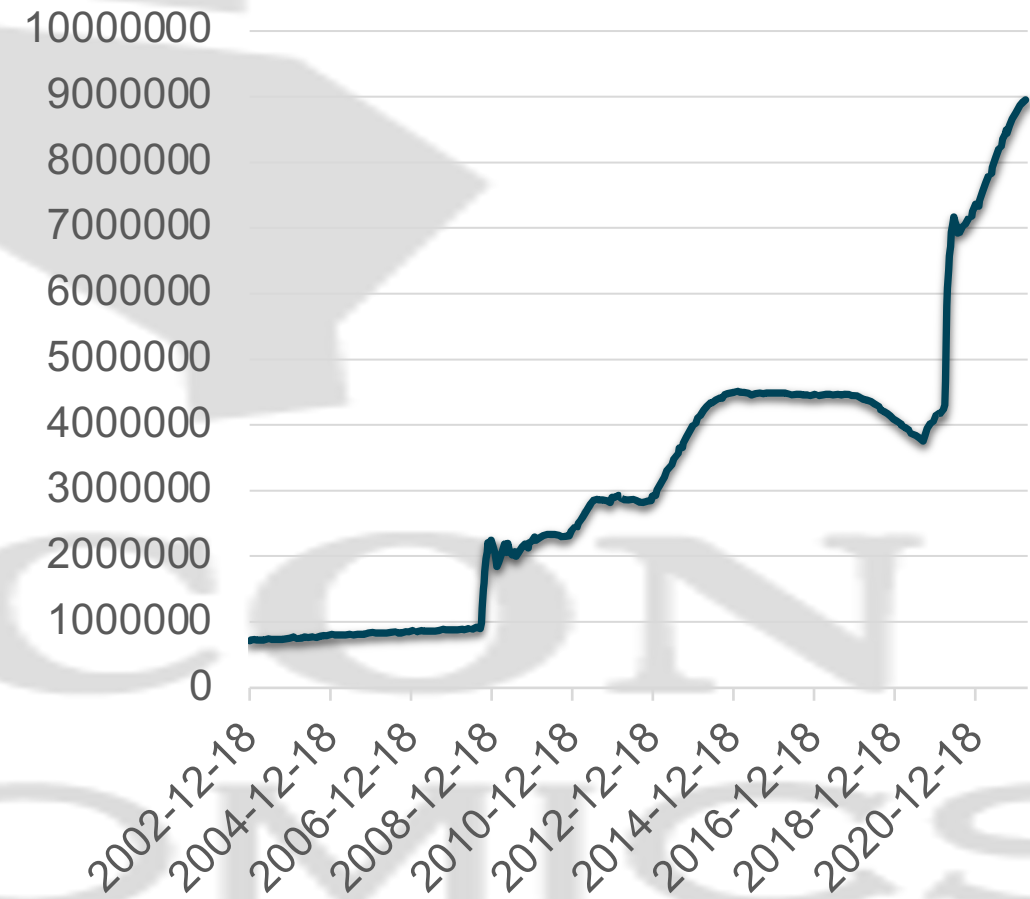


Mr. Powell's War

Federal Funds Rate



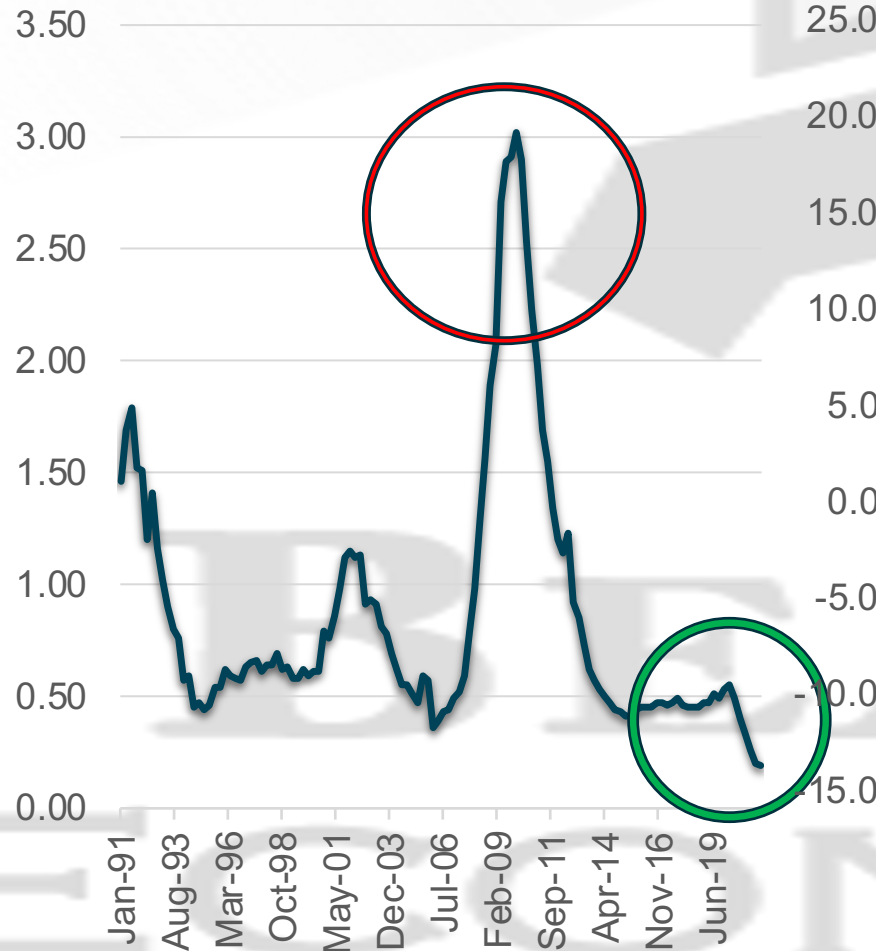
Federal Reserve Balance Sheet



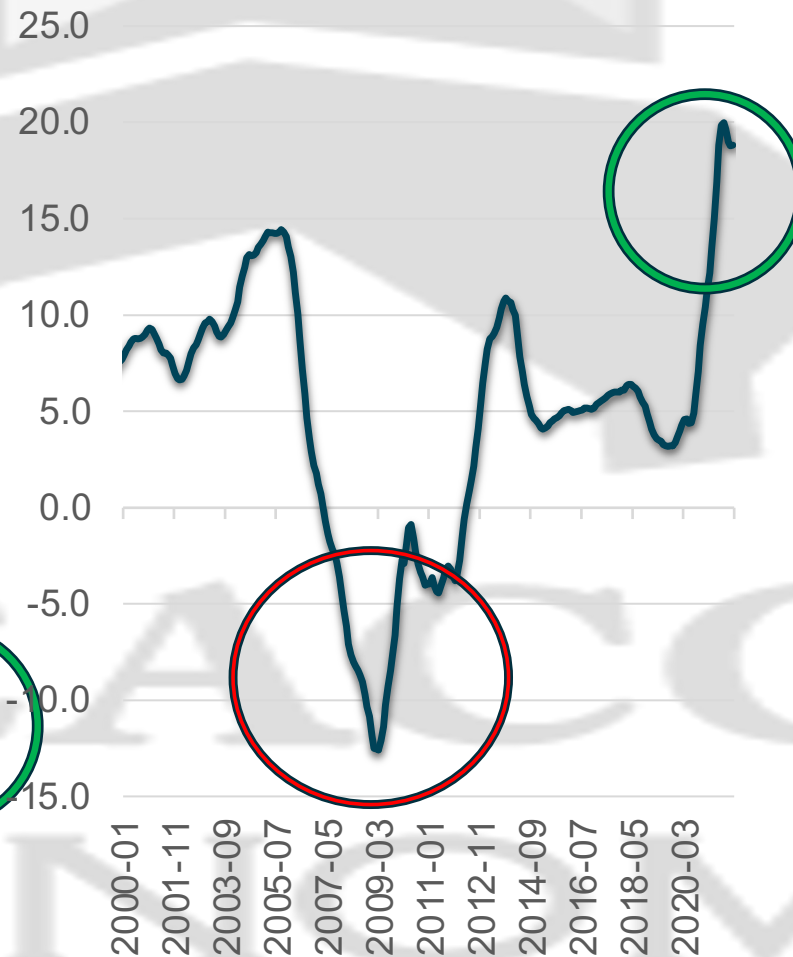
Mr. Powell's War



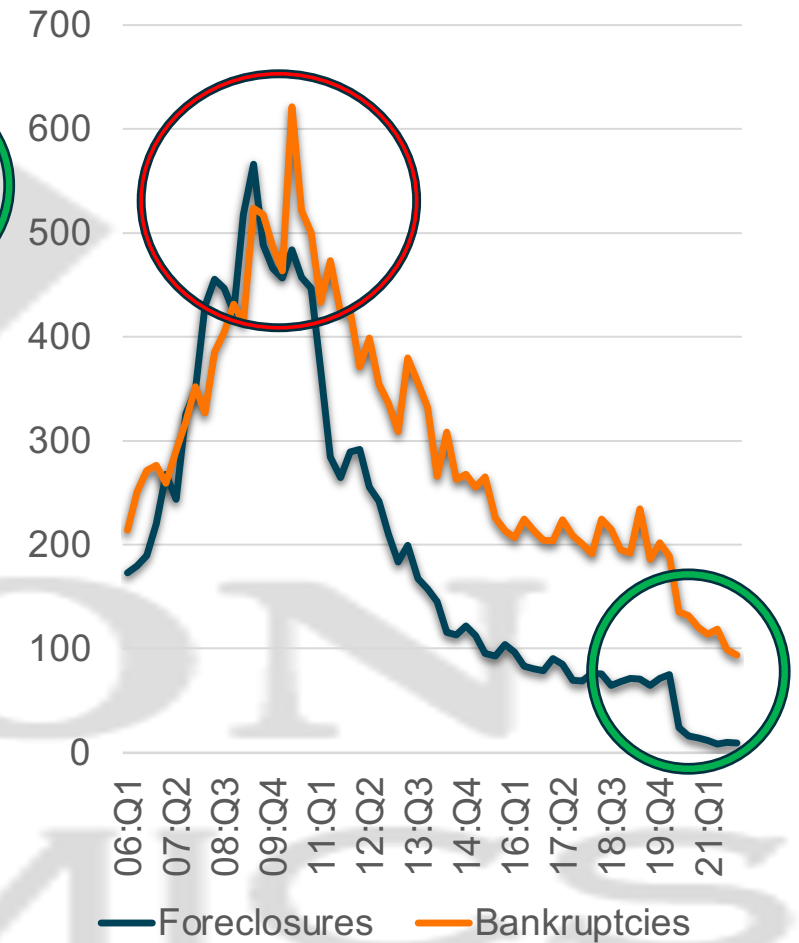
Bank Loan Charge-Off Rate



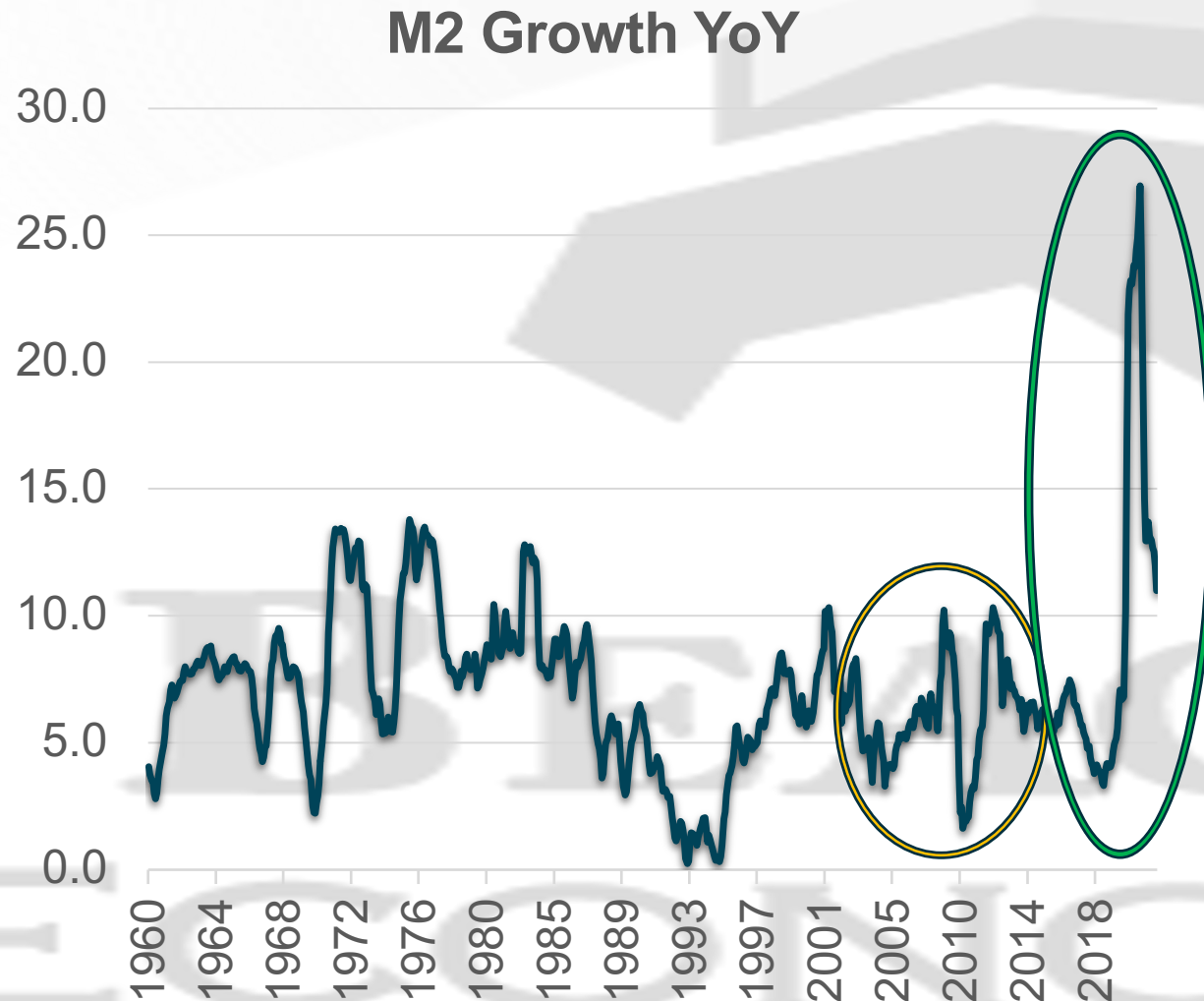
Case Shiller HPA YoY



Consumer Finances



QE: Then and Now



Problem of inflation

- Short run: Money illusion causes lower interest rates, asset bubbles forming, consumer spending binge
- Long run: slow stagnation, rising real interest rates, investments become difficult to cost out, uncertainty hurts markets

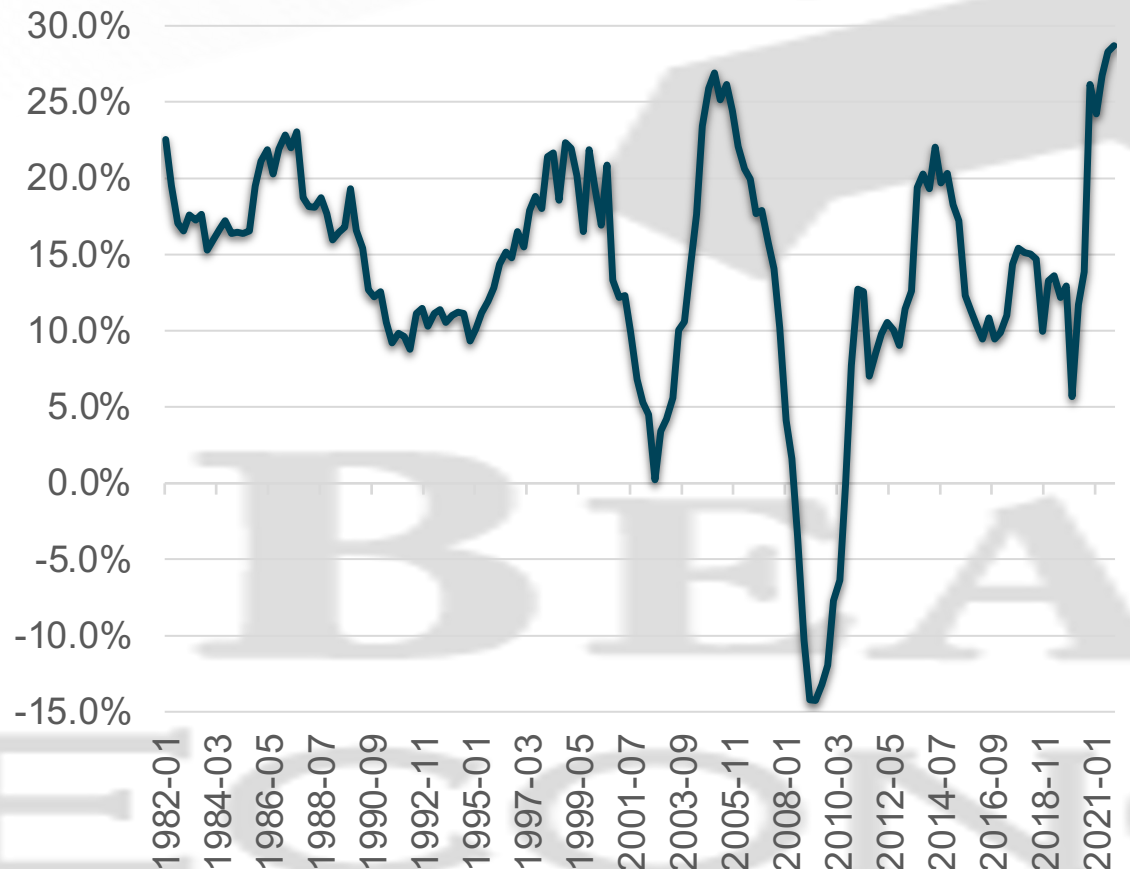
The Cure for inflation

- Quantitative tightening, sure to drive up LR rates very quickly in the short run
- The choice: pain now or worse pain later

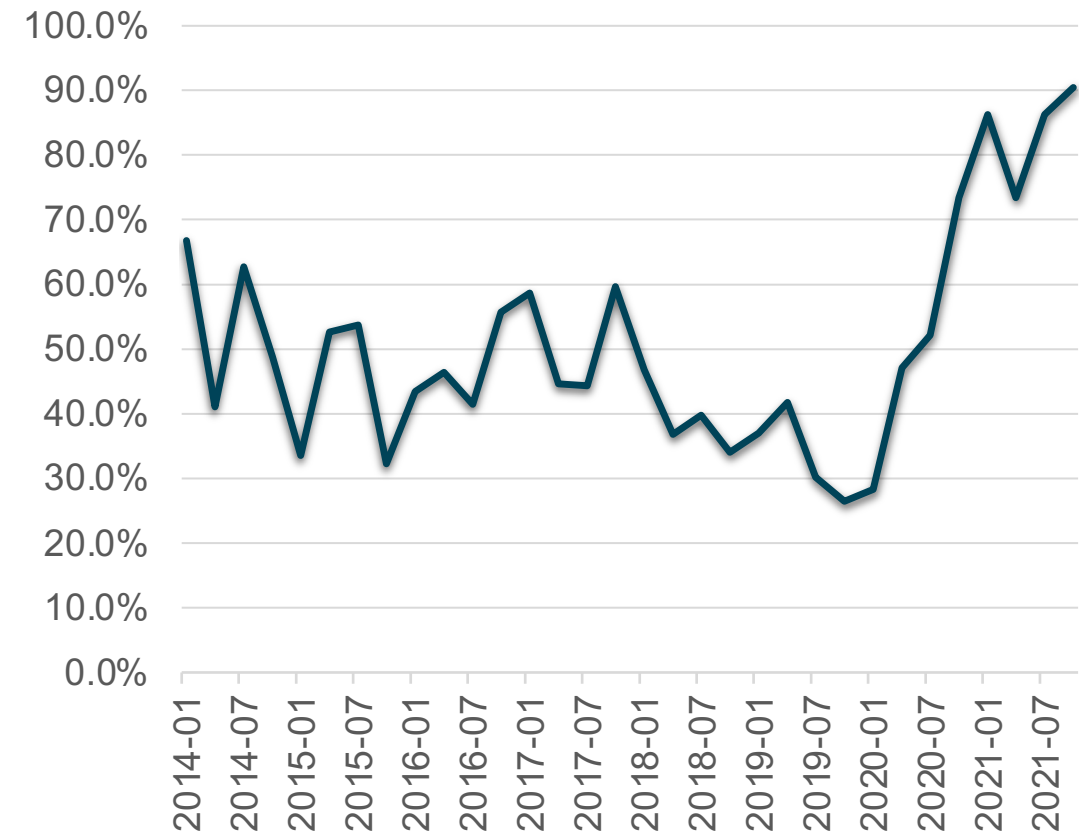
The Big Picture: Wealthiest Generation Ever?



2 Year Growth Aggregate Household Net Worth

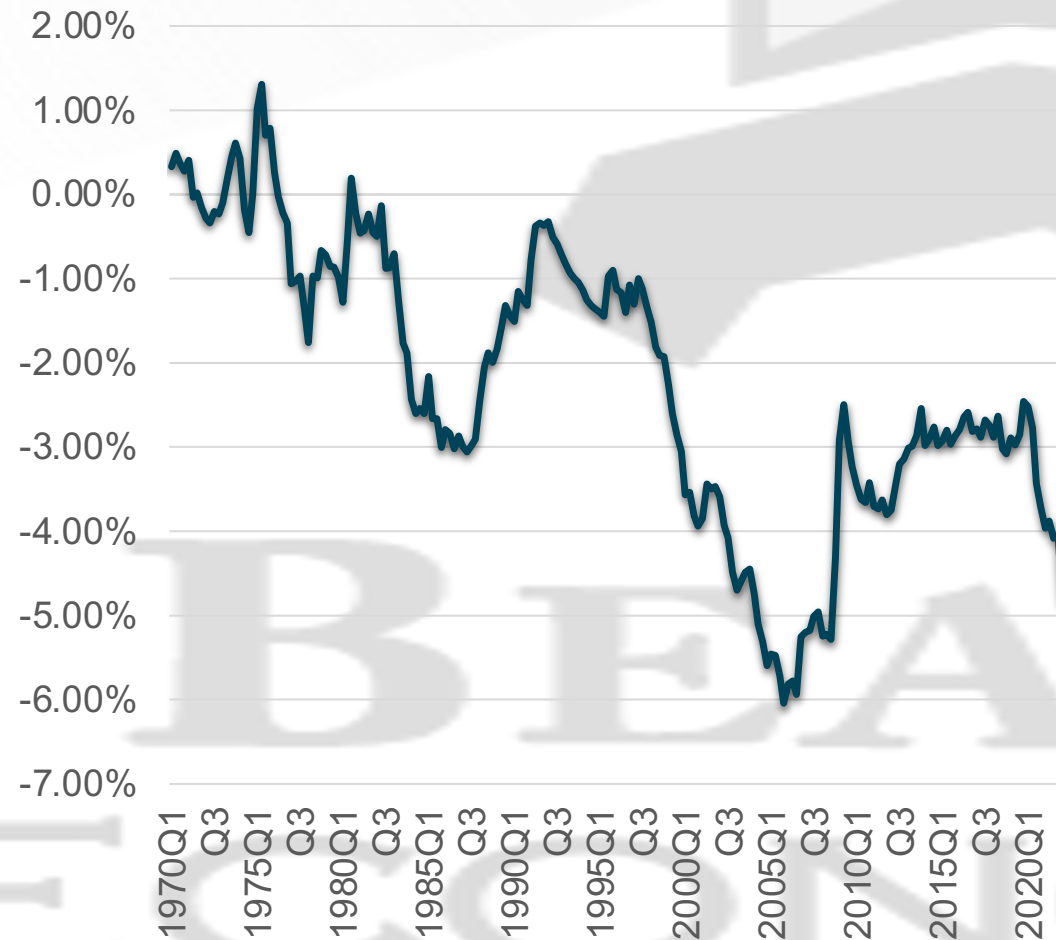


2 Year Growth Net Worth bottom 50% of Households

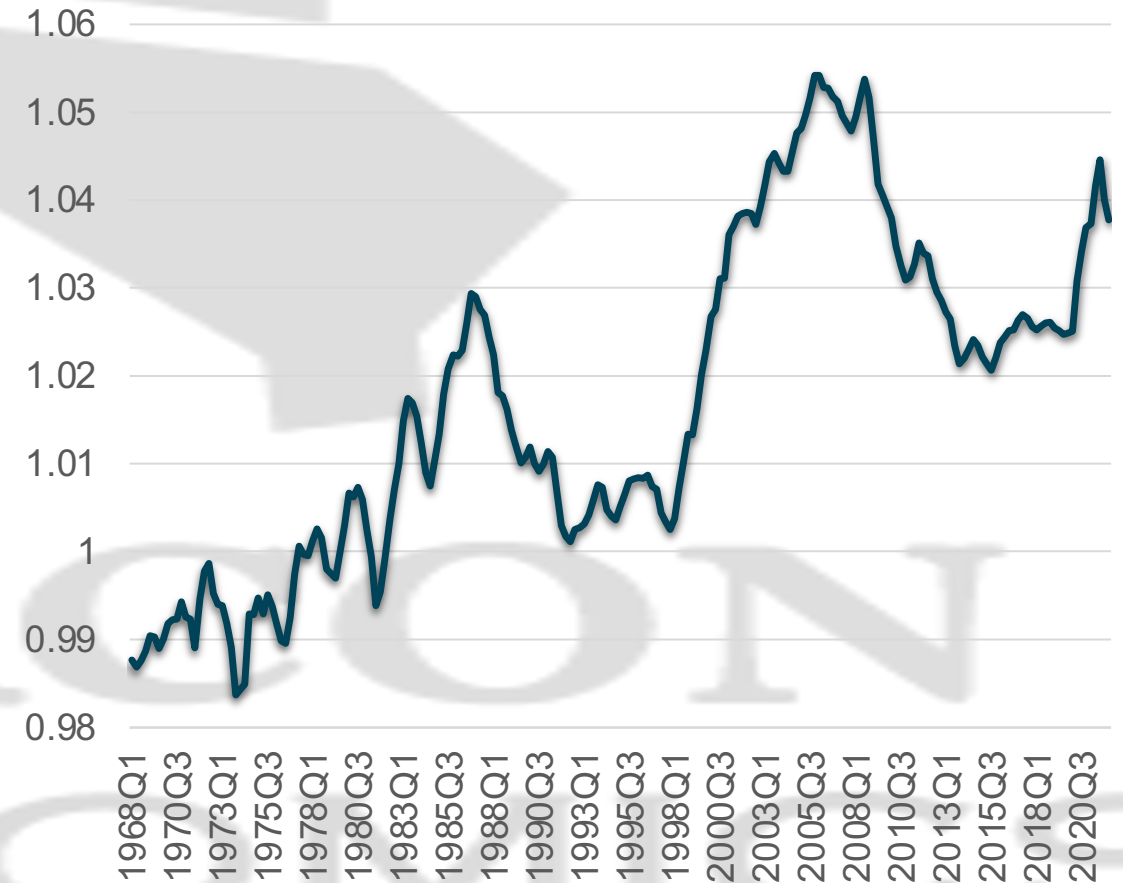


A Binging Economy...

Trade Balance as a % of GDP

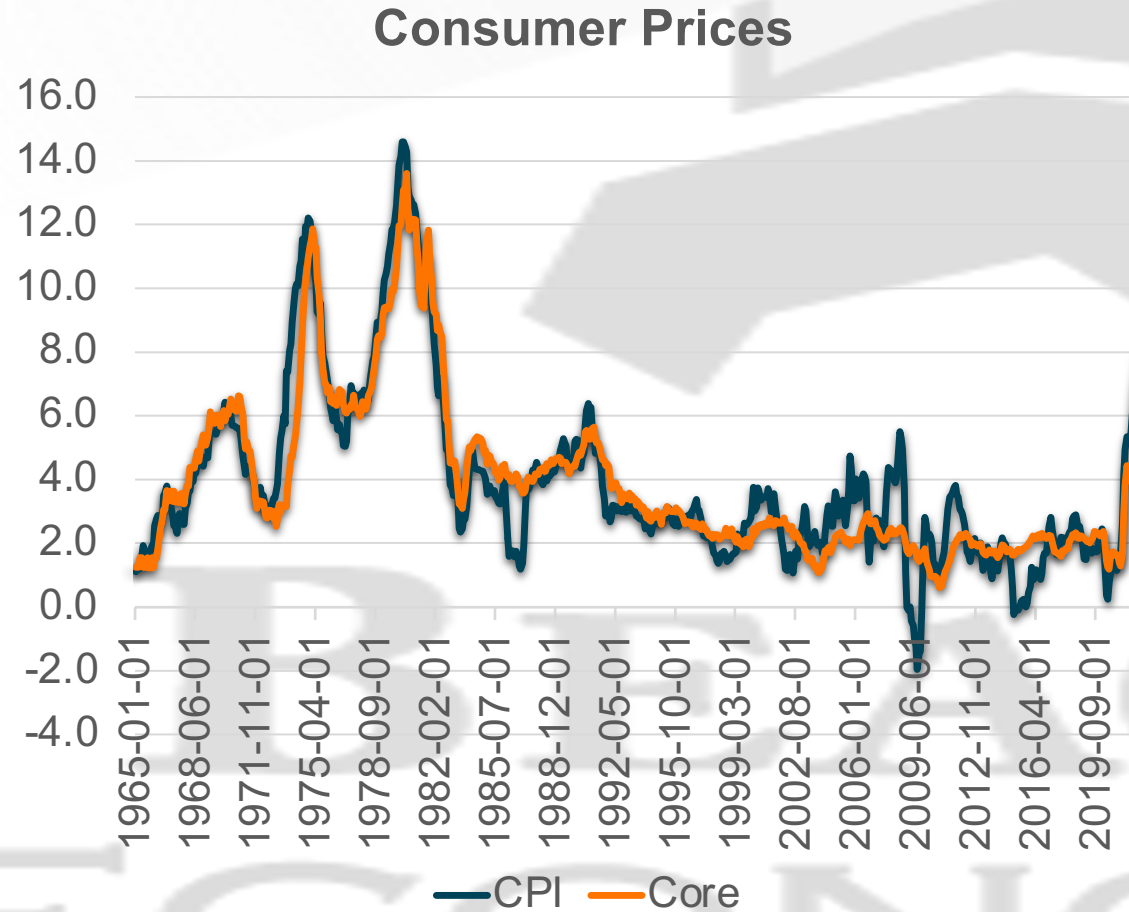


US Final Demand To Output



Inflation Nation...

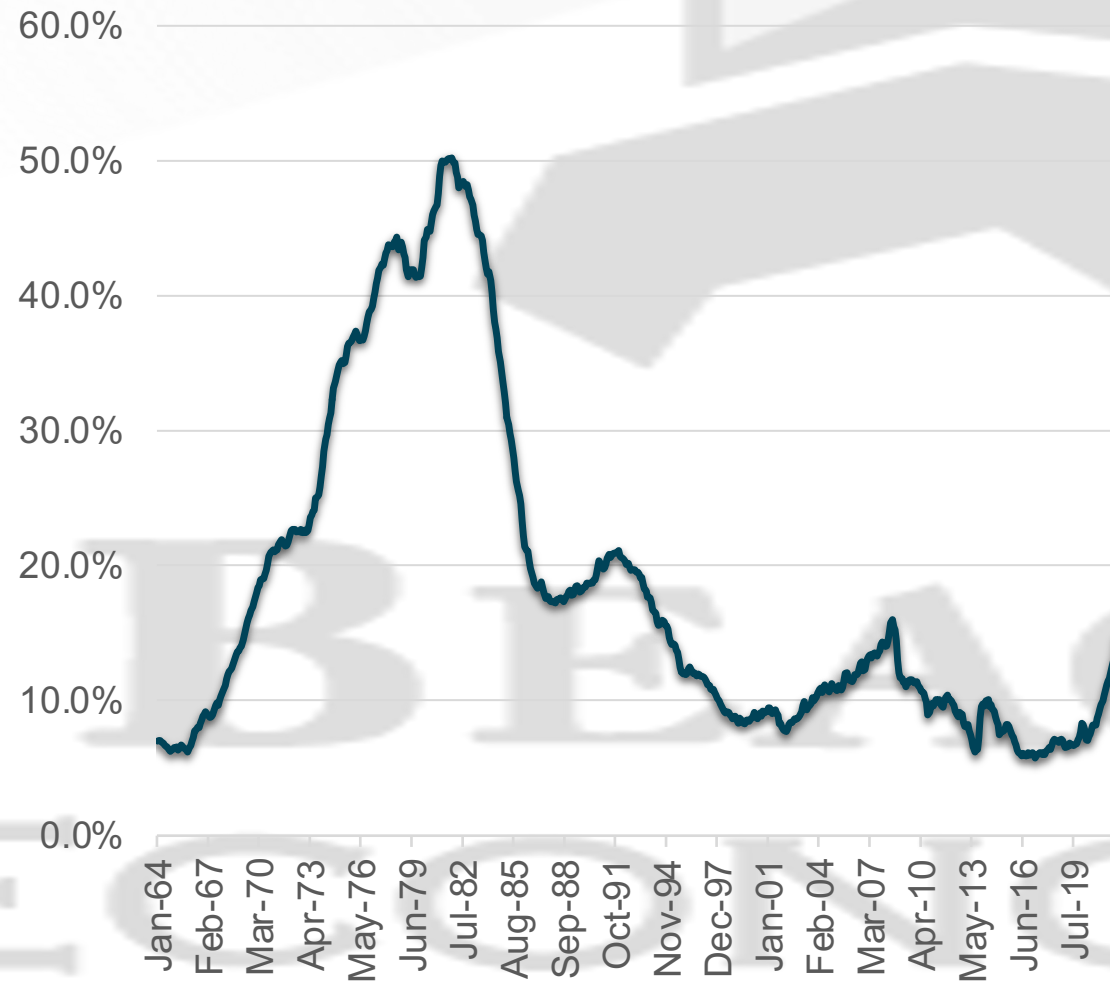
GDP Deflator



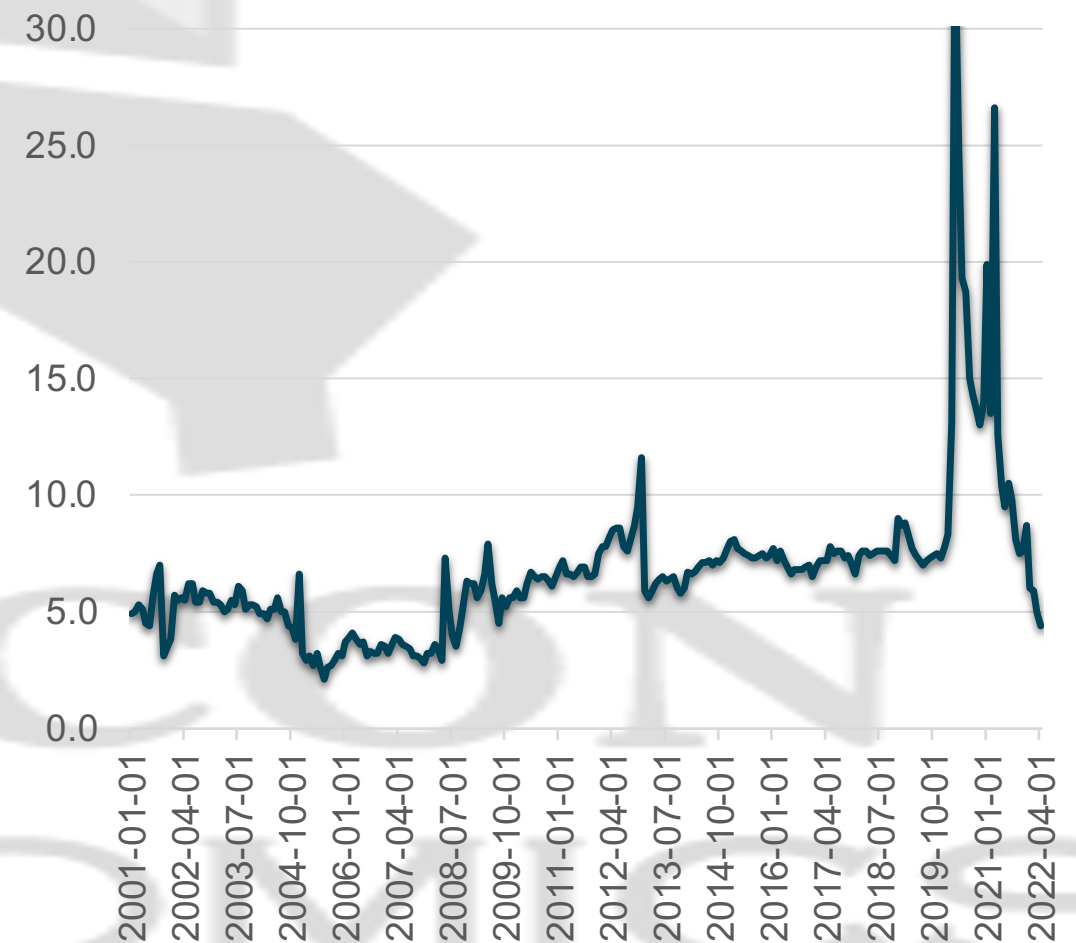
	16-20	20-21	21-22
GDP	2.0%	2.1%	6.8%
Consumption	1.8%	1.8%	6.3%
Goods	0.1%	1.3%	9.6%
Services	2.6%	2.1%	4.6%
Fixed investment	1.6%	2.3%	7.5%
Structures	2.6%	1.2%	15.6%
Equipment	-0.1%	-0.4%	3.7%
Intellectual property	0.8%	1.7%	1.4%
Residential	4.2%	7.2%	14.9%
Exports	1.4%	4.7%	13.2%
Imports	0.8%	2.5%	9.7%
Government	2.4%	2.4%	7.2%
Federal	2.0%	2.4%	5.5%
State and local	2.7%	2.5%	8.3%

Context Please

5 Year Increase in Consumer Prices



US Household Savings Rate



Interest Rate Issues?

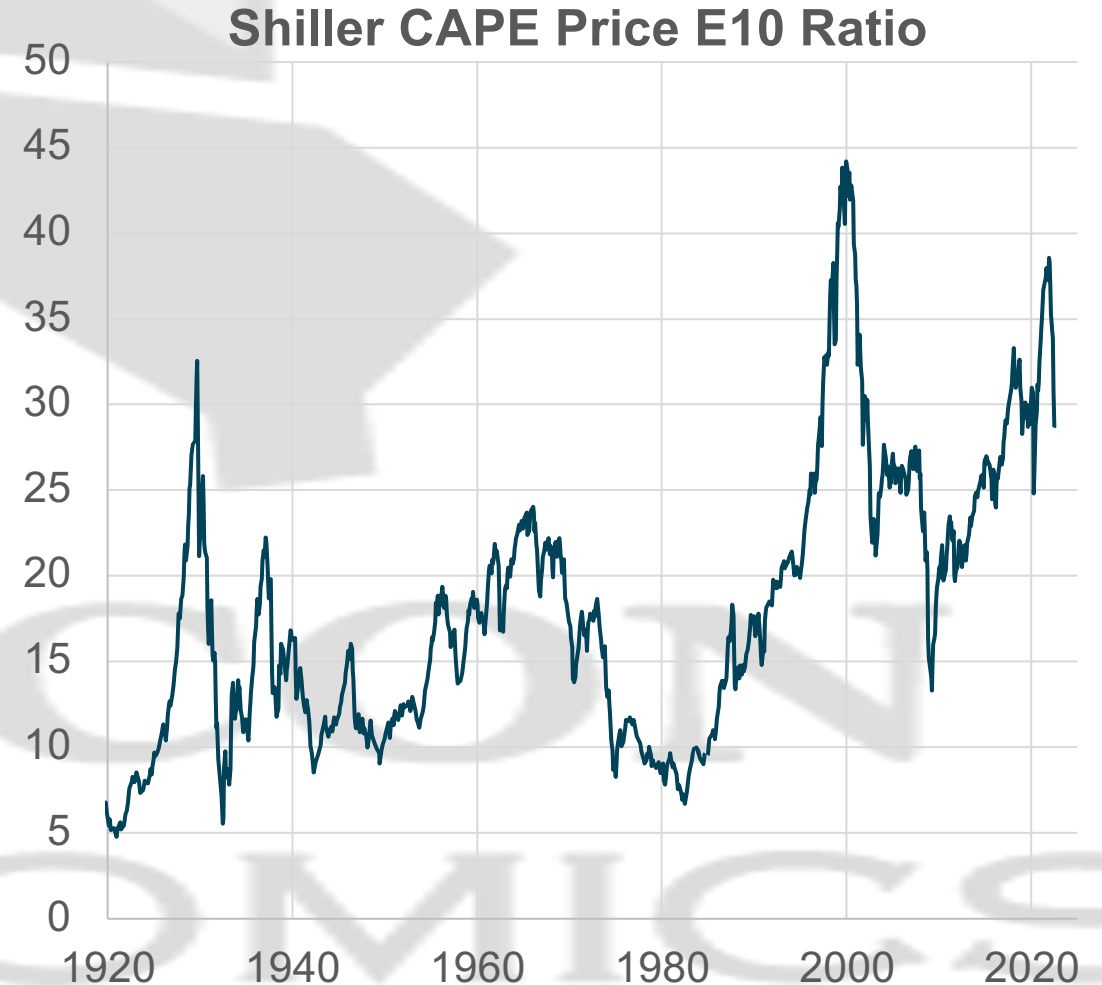
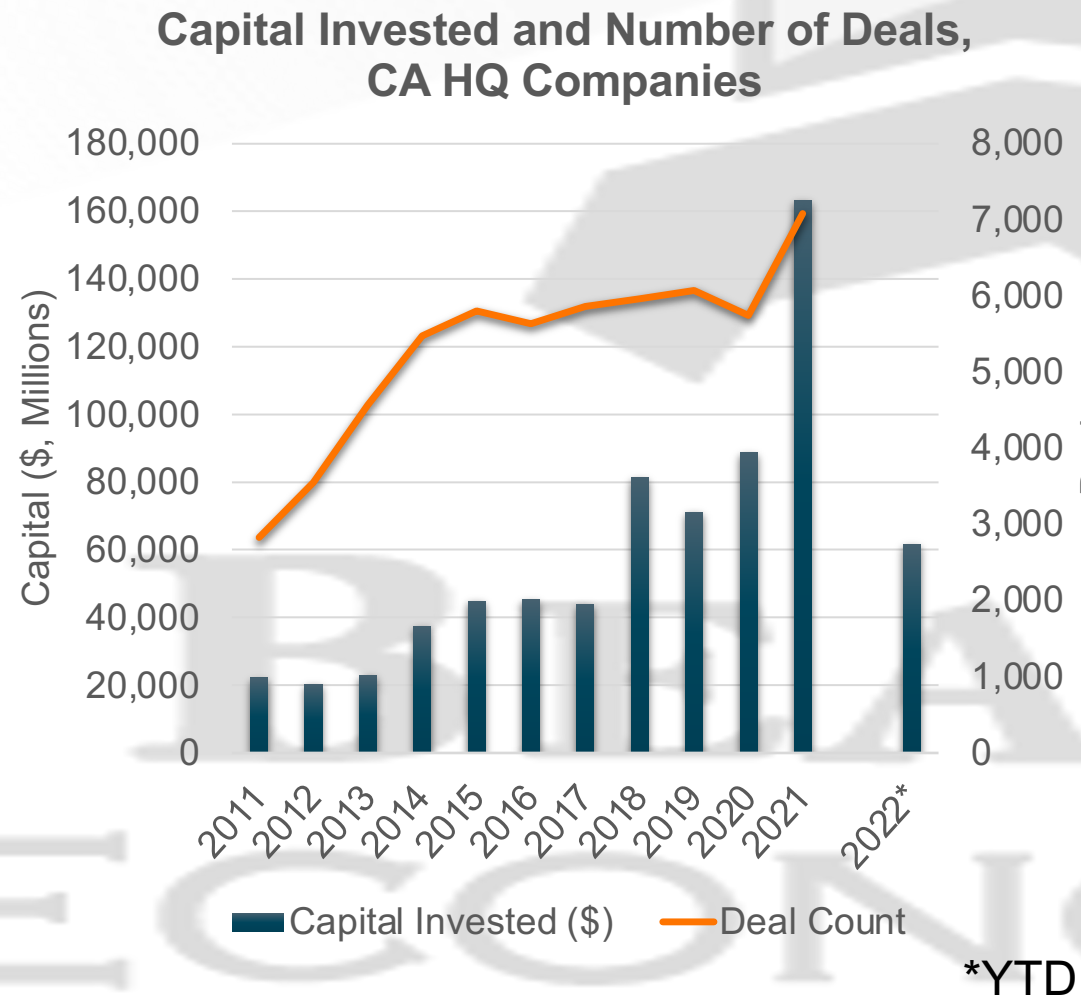
Financial Obligations Ratio



Real Interest Rates (2 yr tr – PCE inf)



The Big Slowdown? It's Called Gravity



The Inflation Conversation



Excuses for inflation

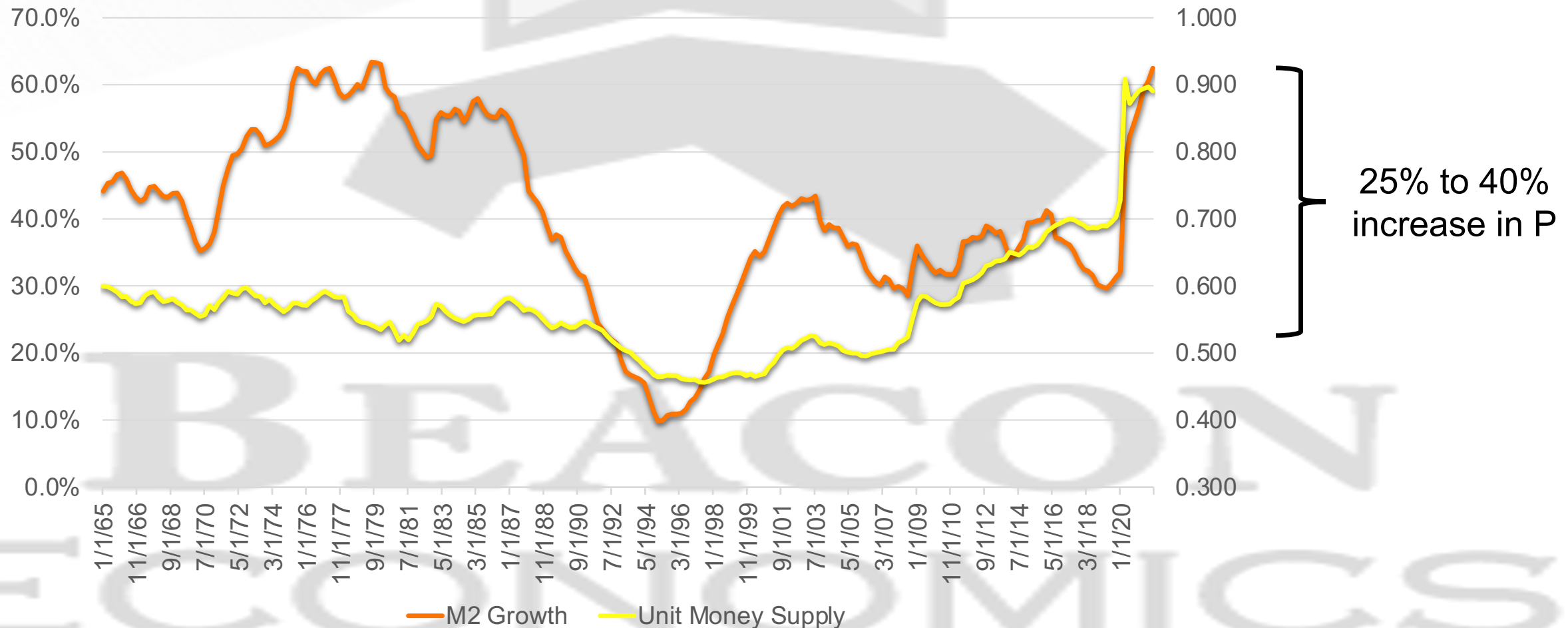
- Supply chain issues
- The federal deficit
- Greedy corporations and profiteering
- Not enough manufacturing jobs in the US
- Biden's bad green energy policies
- It's Mr. Putin's fault!
- Saturn isn't aligned with Jupiter
- Disco is making a comeback
- Its that new host on *Jeopardy!*

“Inflation is always and everywhere a monetary phenomenon in the sense that it is and can be produced only by a more rapid increase in the quantity of money than in output.”

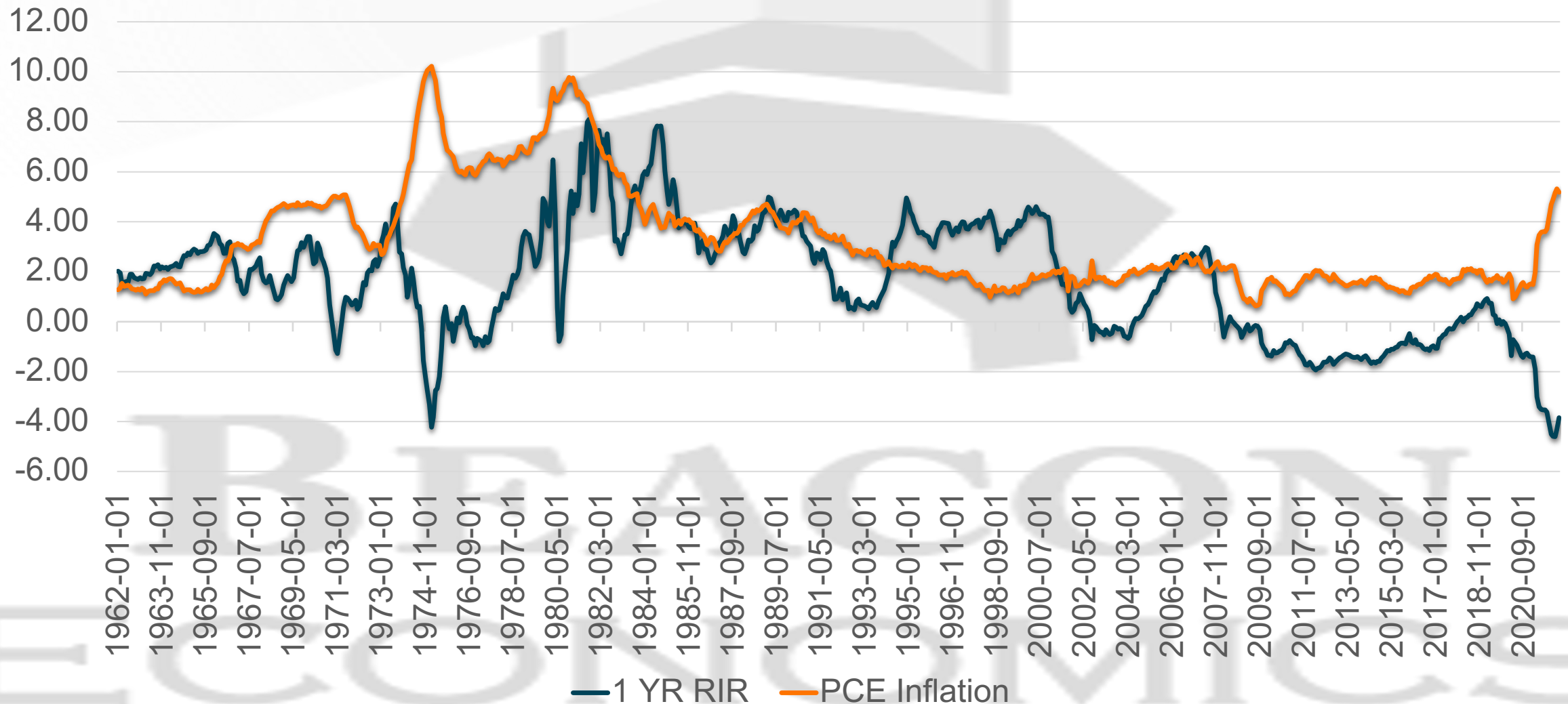
Milton Friedman

How Much Farther Can Inflation Go??

5 Year Cumulative Growth Rates

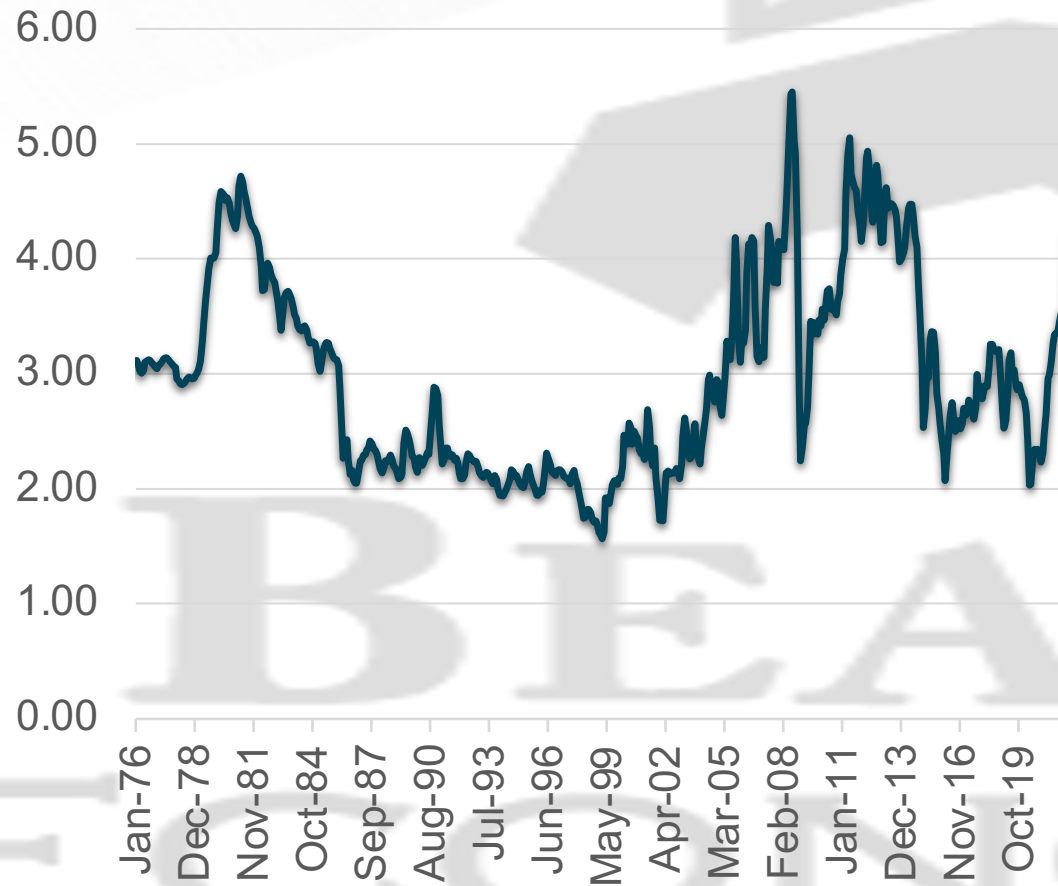


The Unwelcome Antidote



The Global View?

Real Price Gallon US Unleaded



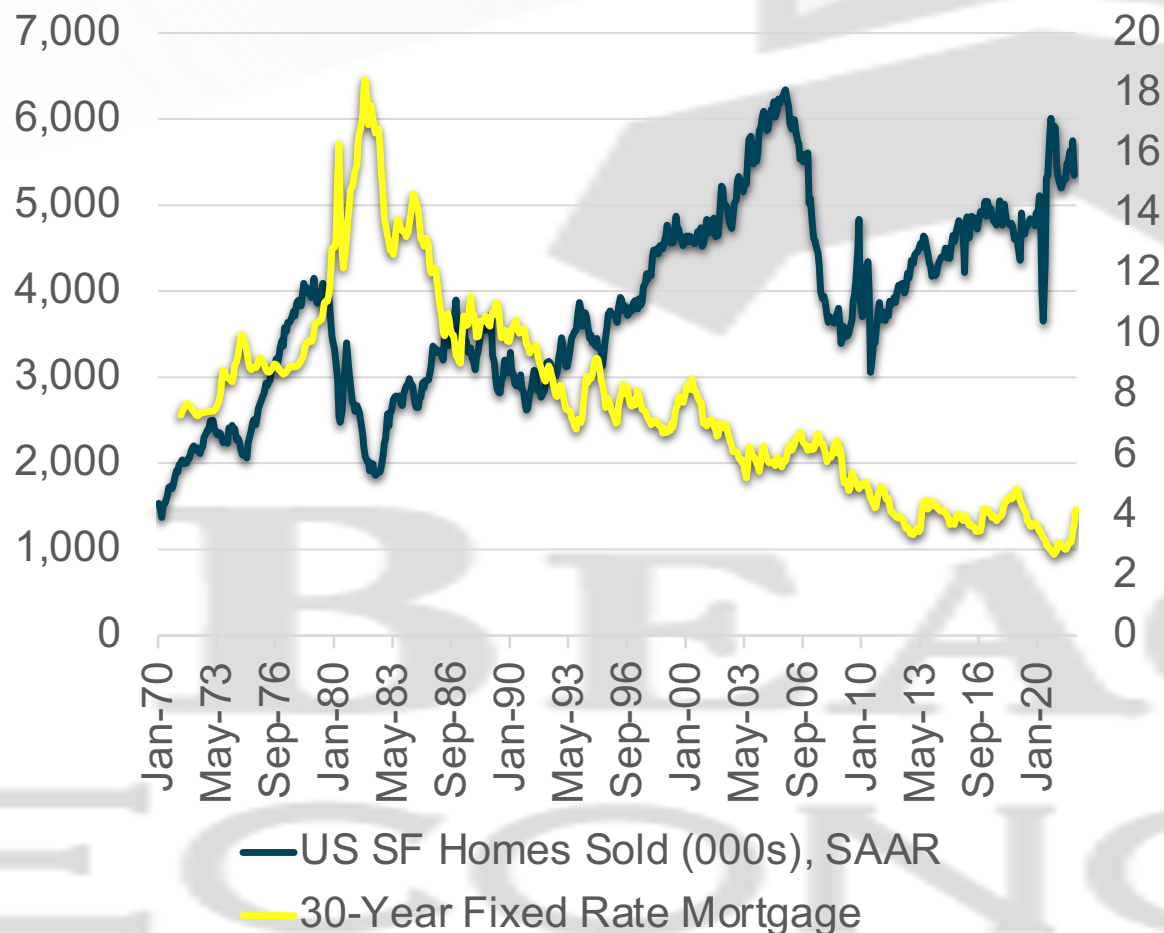
%US Real Broad Index



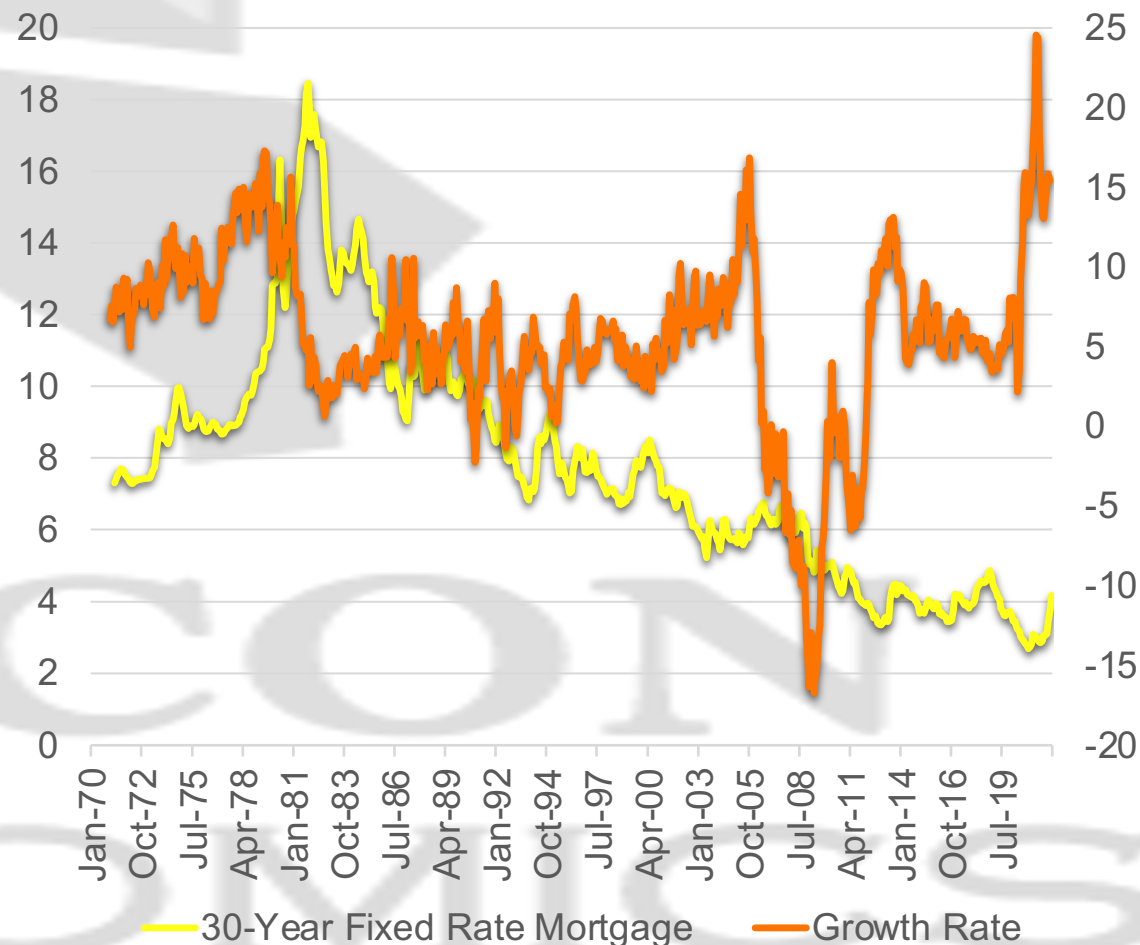
Residential Real Estate



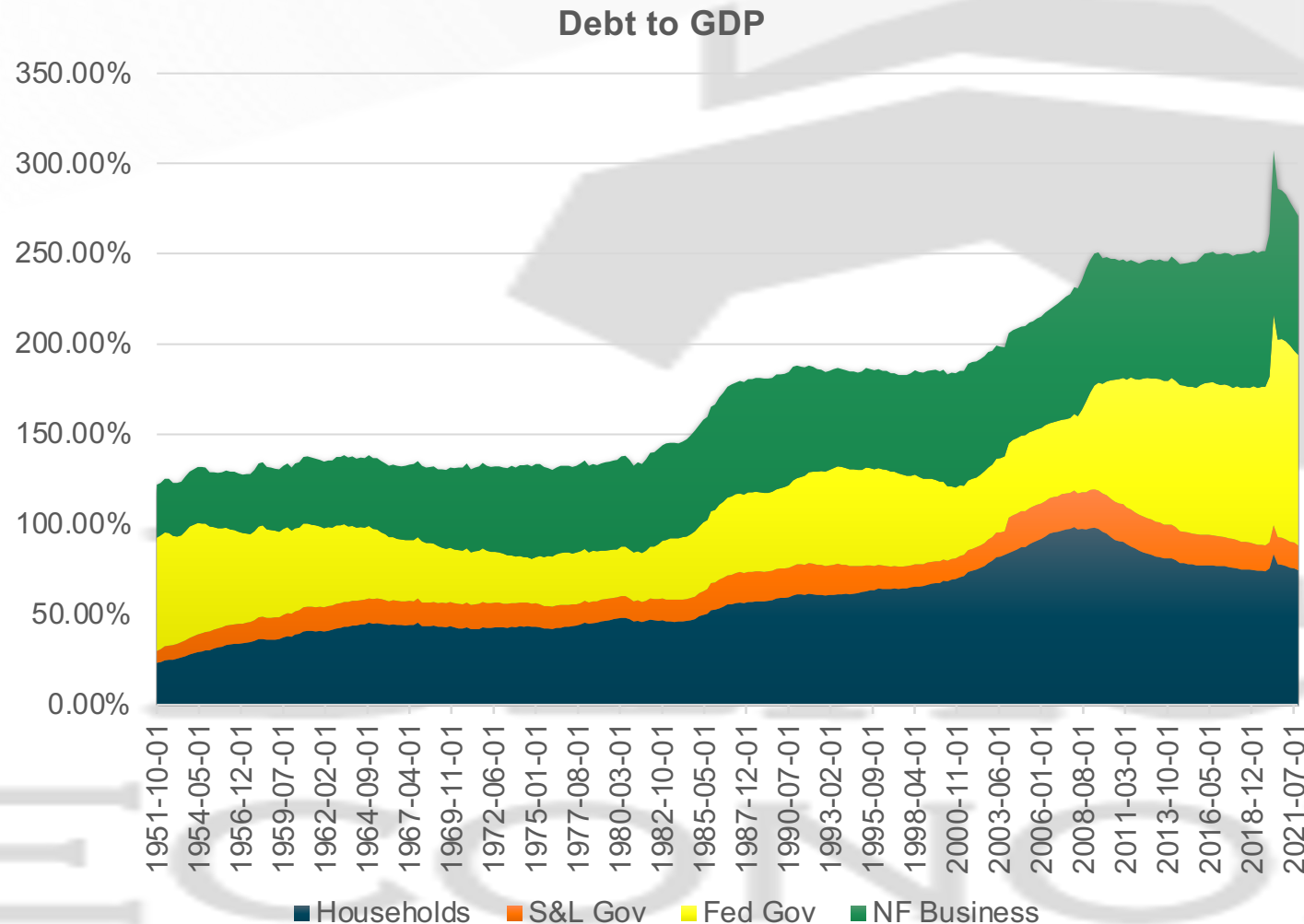
Home Sales (000s, SAAR) and Rates



Median Sales HPA (yoy%) and Rates

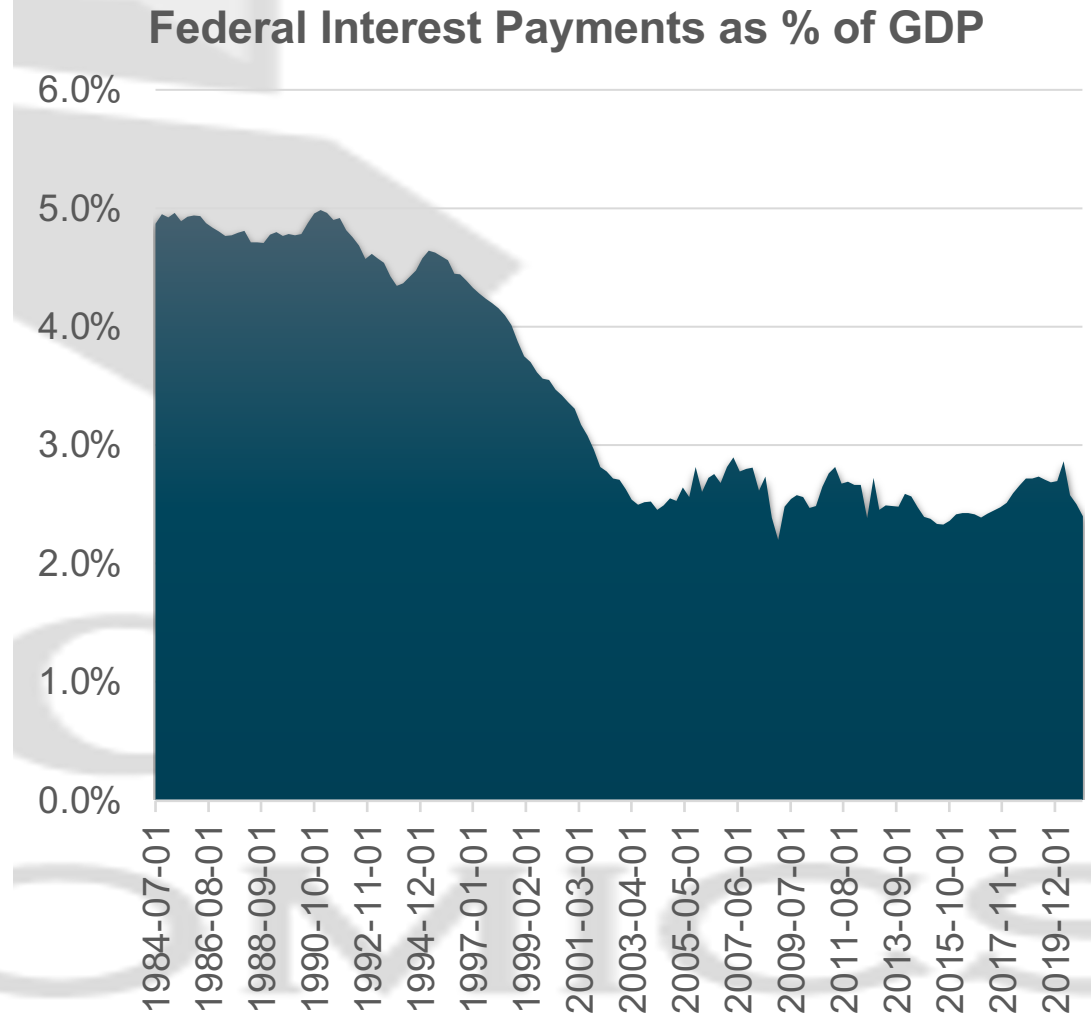
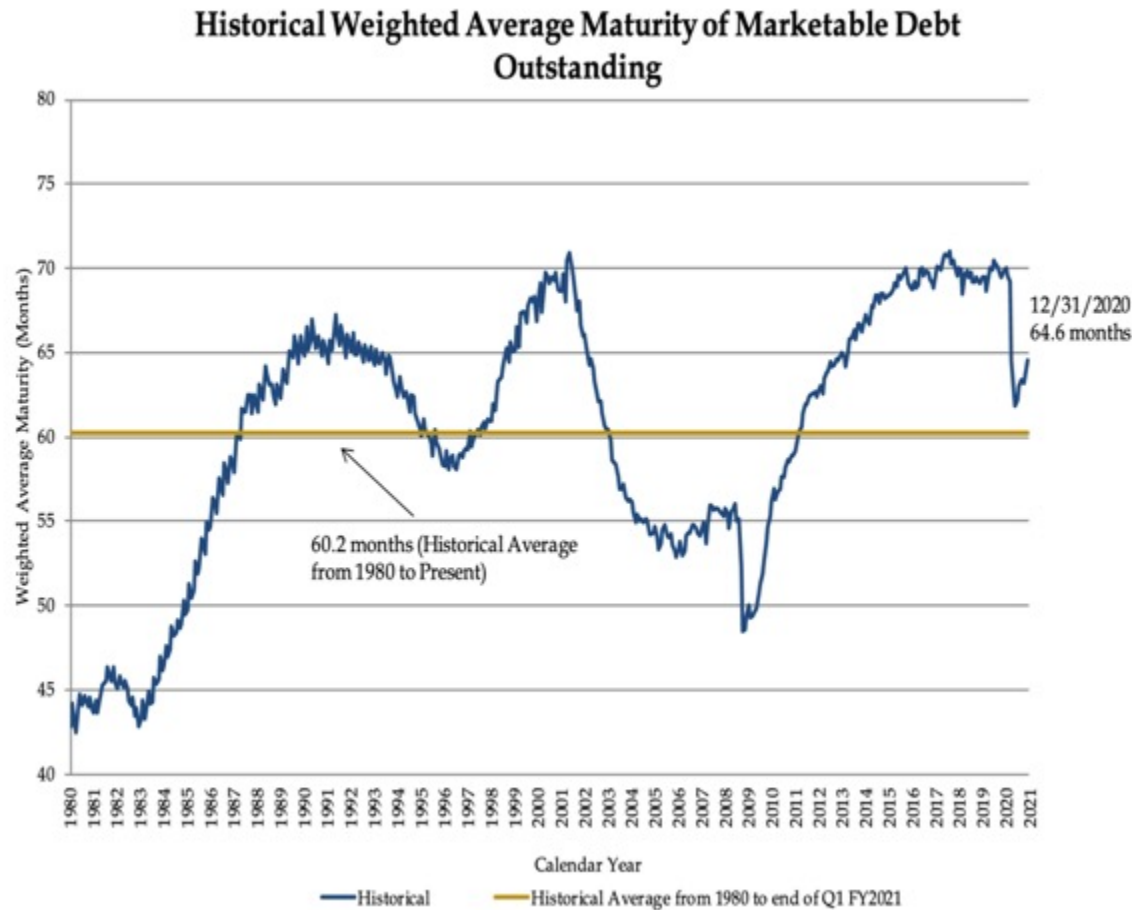


The Debt Nation



5 Year		
	Growth	Change
Household	25.7%	2666.8
S&L Gov	4.2%	133.8
Fed Gov	63.6%	8111.1
NF Business	40.4%	3826.8
Nominal GDP	30.3%	3859.1
20 Year		
Household	142.3%	10532.3
S&L Gov	166.1%	2041.8
Fed Gov	514.0%	21191.4
NF Business	179.2%	11901.2
Nominal GDP	129.2%	13532.6

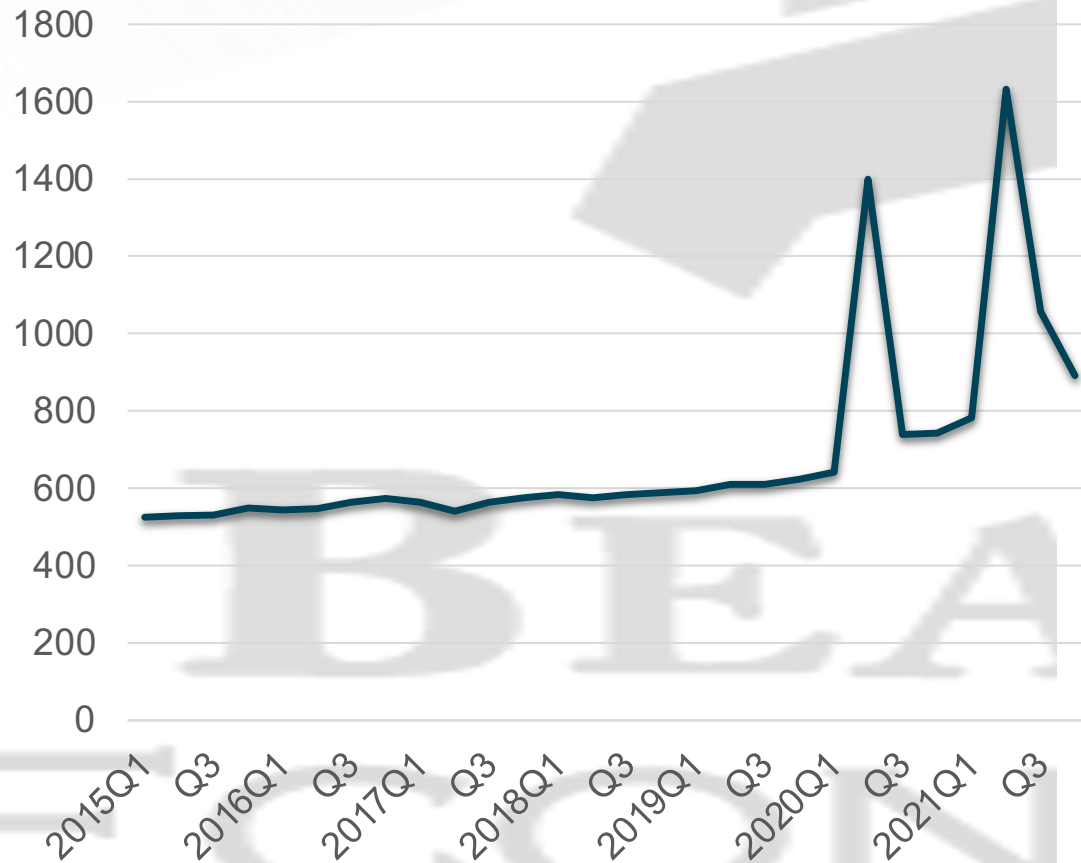
Interaction of Monetary and Fiscal Problems



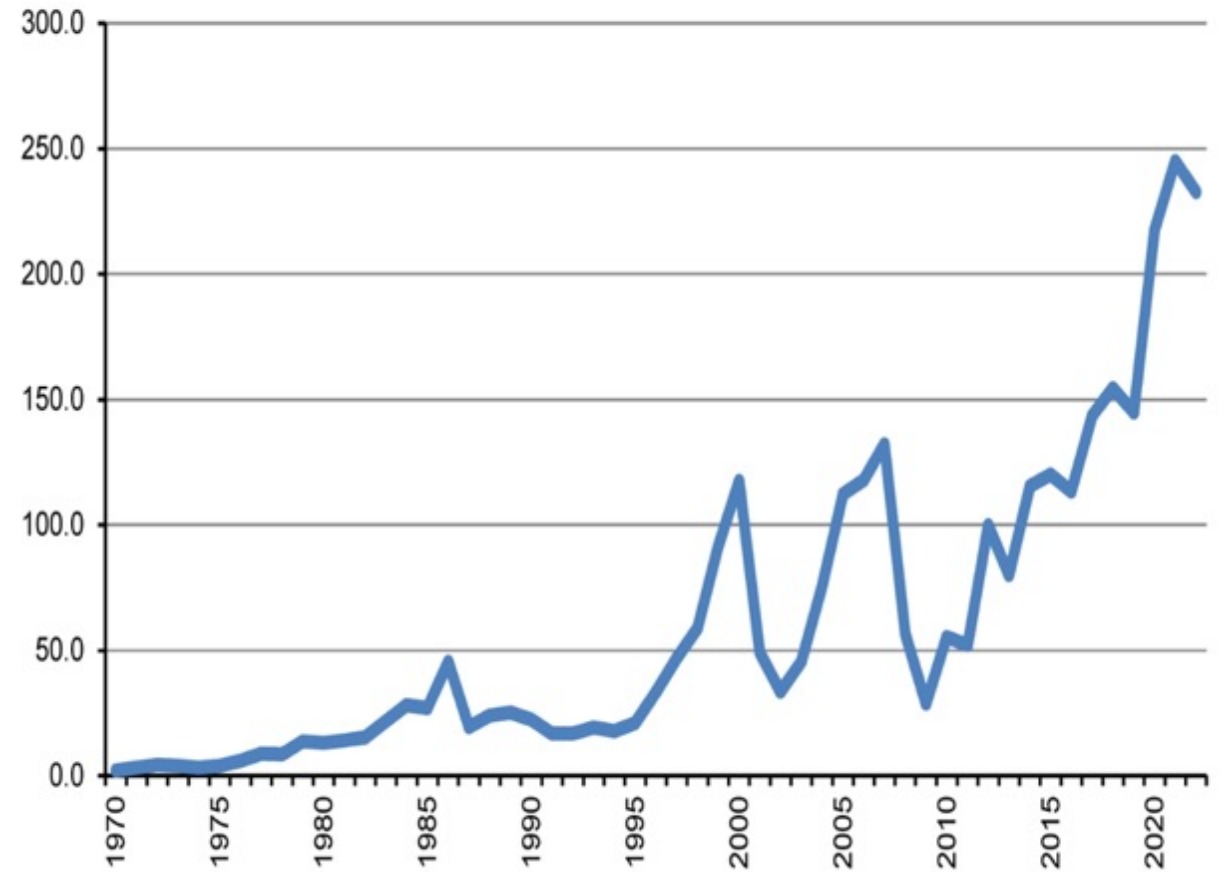
The Local Risks



Federal grants-in-aid to State and Local Government



Capital Gains Realizations
(Dollars in Billions)



The Long Run Still Matters



- **The Economy is all right**

- The “V” was the only logical outcome
- Recovery hampered not by lack of demand but by lack of supply
- Problem is overuse of stimulus
- Consumers are pushing inflation, not being hurt by it, demand is still strong
- Global geopolitics are mainly a dangerous distraction

- **The Outlook: Hot until Not**

- Wealth and income will drive economic momentum in the short run
- US economy will remain heated for the next year, unemployment to 3% 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.

- **Potential Scenarios**

- 1: Dramatic Fed action turns the tide before things get out of control
- 2: Consumer Spending drives the economy until a moderately painful crash
- 3: Investment / debt fueled boom drives the economy even farther with a more painful crash

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Thank You

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