

Dazed & Confused

Appraisal Institute Fall Forum November 8, 2023

Presented By:
Rick Merritt
President, Elliott D. Pollack & Company



Conflicting Economic Data



A Recession has been delayed by:

- Money sent to consumers & businesses from the government following the pandemic.
- Rapid growth in jobs and slower than normal growth in the labor force has kept unemployment low and wage demands high.



Where did the Money Come From?

The Federal government's fiscal policy has poured money into the system.

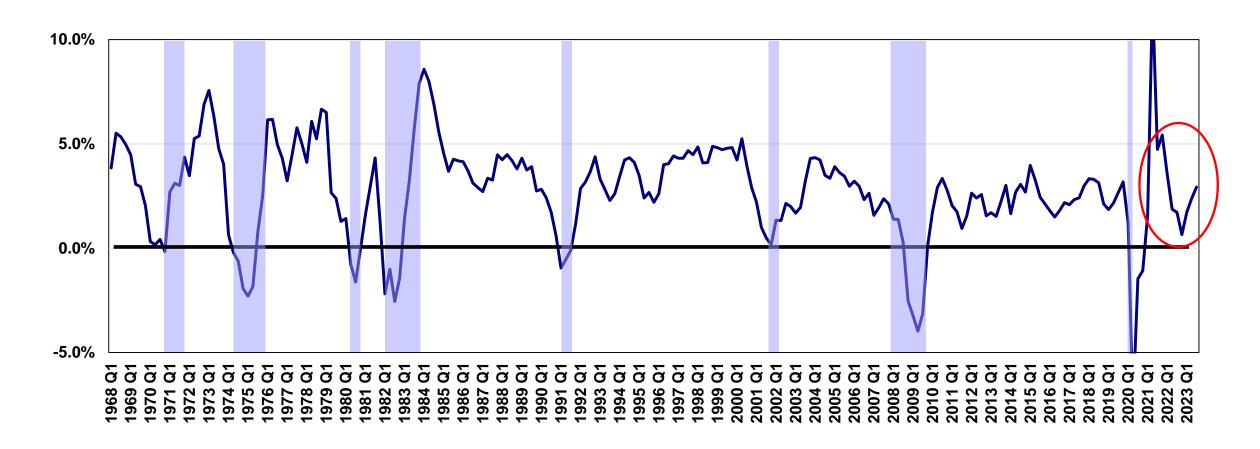
- Cares Act 2020 \$2.2 trillion
- American Rescue Plan Act 2021 \$1.9 trillion
- Infrastructure Investment and Jobs Act \$1.0 trillion
- Inflation Reduction Act authorized \$891 billion in total spending
- CHIPS Act \$280 billion



Real GDP

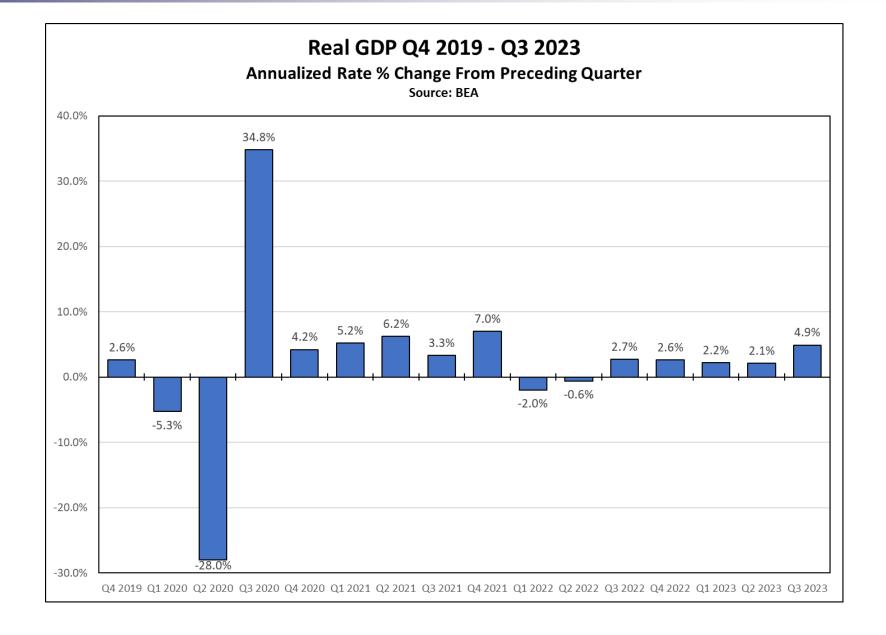
% Change Y/Y Q1 1968 – Q3 2023 Source: BEA

Recession Periods





Real GDP Rates Since The Start of the Pandemic





Real GDP Forecast Blue Chip Economic Indicators

(September 2023)

Year	2023	2024
Average	2.1%	1.0%
Top 10	2.3%	1.7%
Bottom 10	1.9%	0.3%

The average annual growth rate between 2010-2019 was 2.3%.

48% of Blue Chip contributors suggest a recession will occur in the next 12 months.

Court, Merritt, Pollack, & Stevenson

Uncharted Waters

The Fed has never tried to induce a recession:



When there are 8.8 million unfilled jobs and only 6.3 million unemployed



When the federal government created a situation where consumers still had so much excess cash.



When consumers have an estimated \$200 billion in excess cash down from the peak of \$2.1 trillion in the fall of 2021.





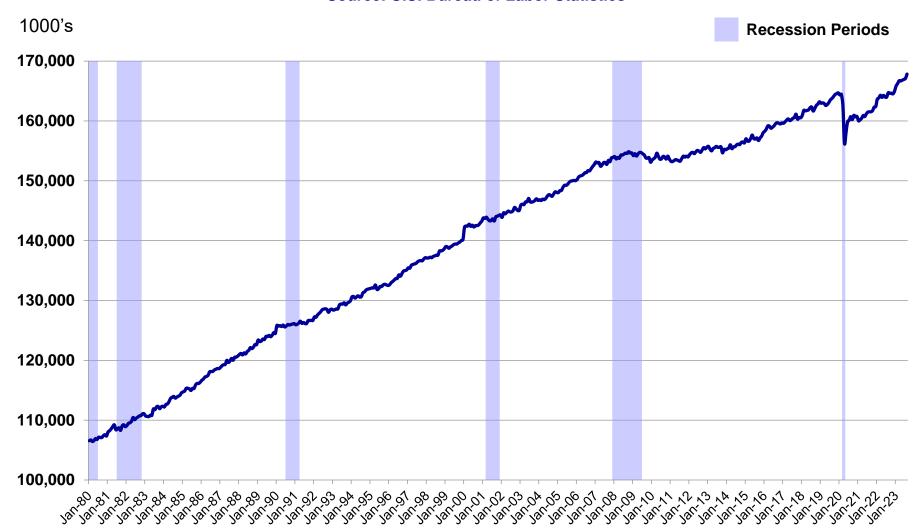
Uncharted Waters

- These things made the economy more difficult to slow than under normal circumstances.
- The excess cash in the hands of consumers that fueled inflation has also kept the economy stronger than normal (this will be ending by late 2023 or early 2024).
- Now add a credit crunch to the mix and things could get dicey at some point.

Labor Force (S/A)

1980 - 2023*

Source: U.S. Bureau of Labor Statistics

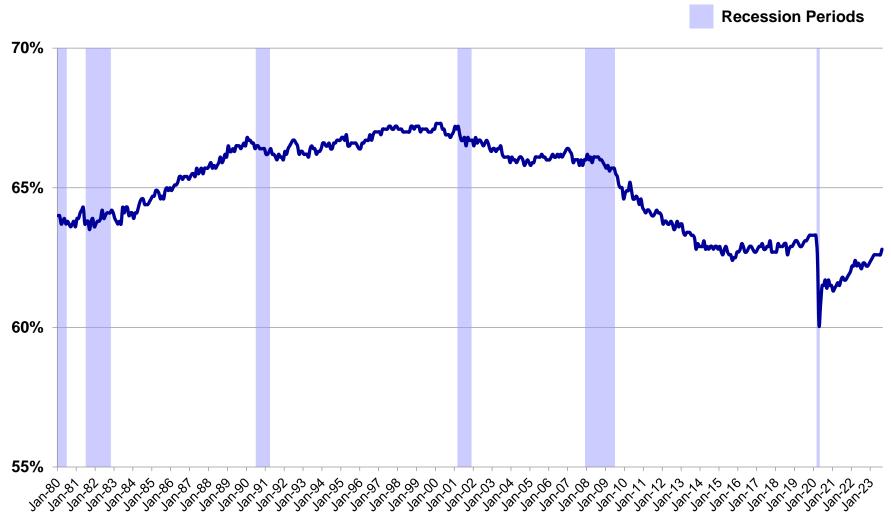




Labor Force Participation Rate (S/A)

1980 - 2023*

Source: U.S. Bureau of Labor Statistics







Low Labor Force Growth

We are in a period where labor force growth has been slow, unemployment levels are low, and demand for labor is higher than normal.

- Baby Boomers retired early or did not return to work after COVID.
- People stayed home because of childcare costs and availability.
- People were paid not to work.

JOBS

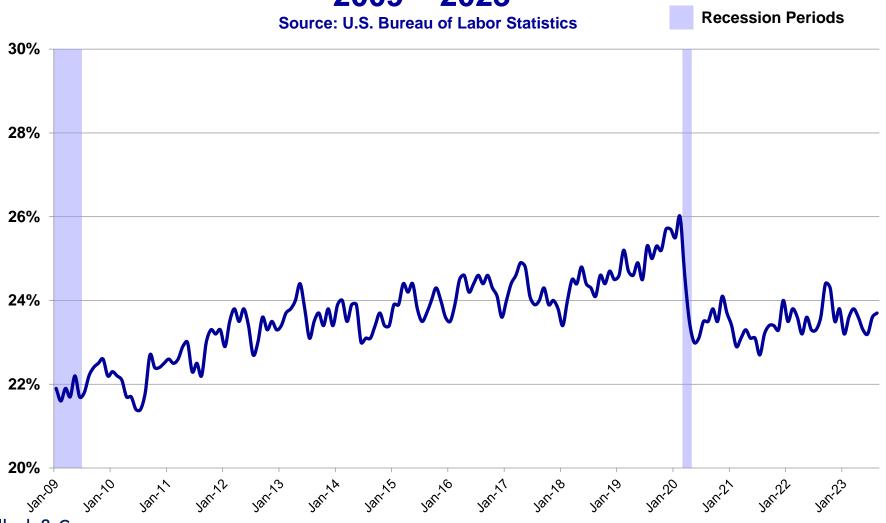


Labor Force Growth

- Job growth appears to be moderating and the labor force appears to be accelerating.
- Labor force participation is at its highest level since Feb.
 2020. The increase is among young adults and women 55 and older.

Labor Force Participation Rate (NSA) People 65+ with no disabilities

2009 - 2023*





Risks to the Economy

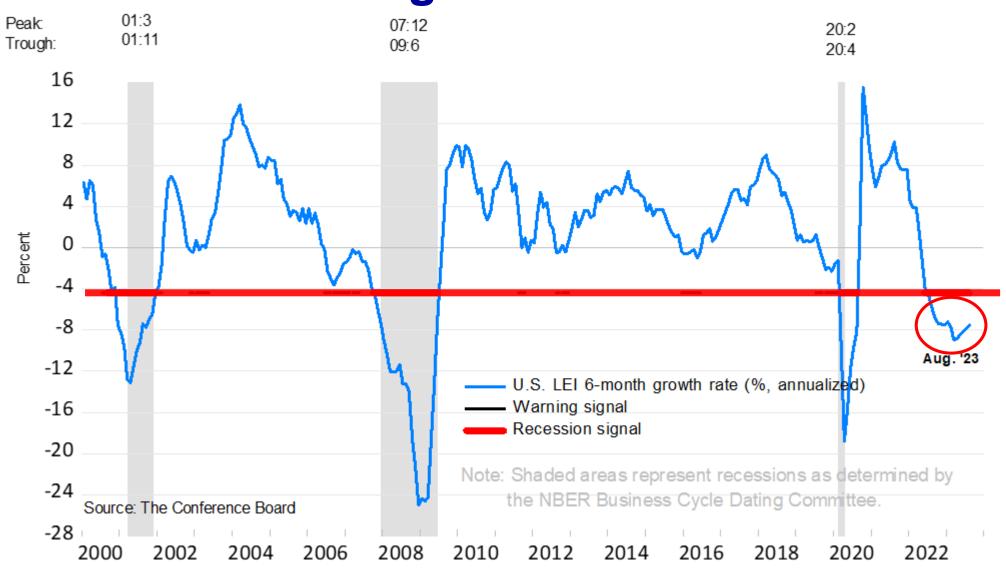
- Wars, particularly in Israel
- Oil prices
- Tight credit market for businesses & banking system
- Restarting student loan payments
- Credit card use and cost of credit have been increasing

Recession?

Economic growth will either slow or go into a recession sometime in 2024. It is hard to tell which at this point.

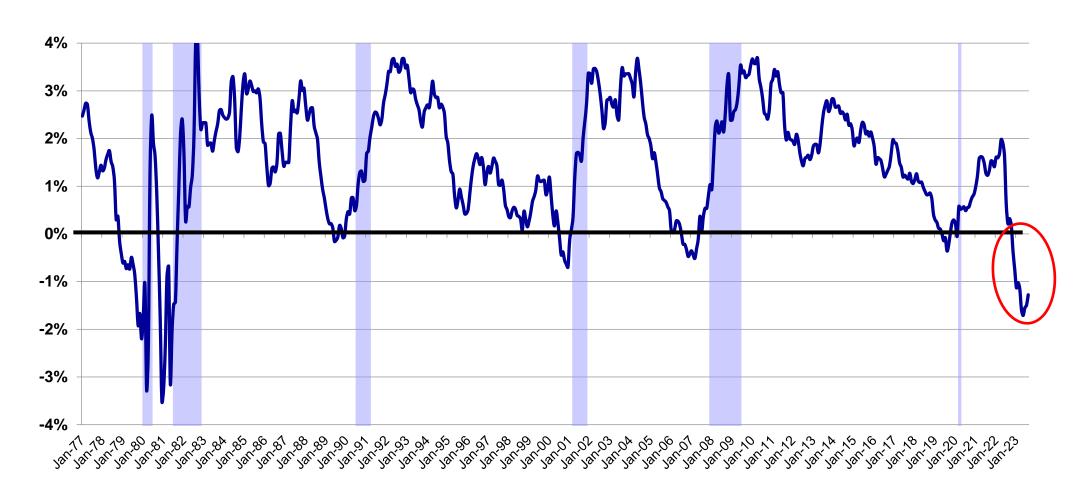


Leading Indicators



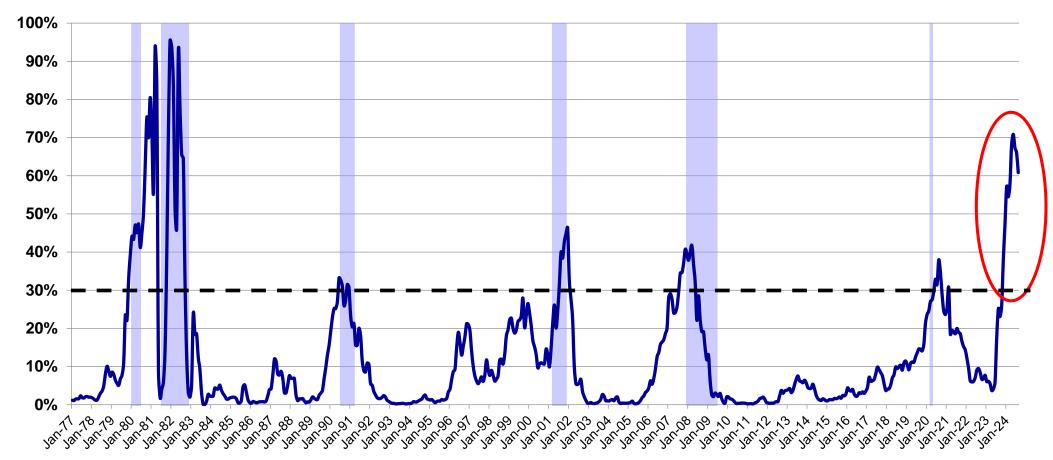
Treasury Spread 10-Year minus 3-month

Source: Federal Reserve



Treasury Spread Probability of Recession

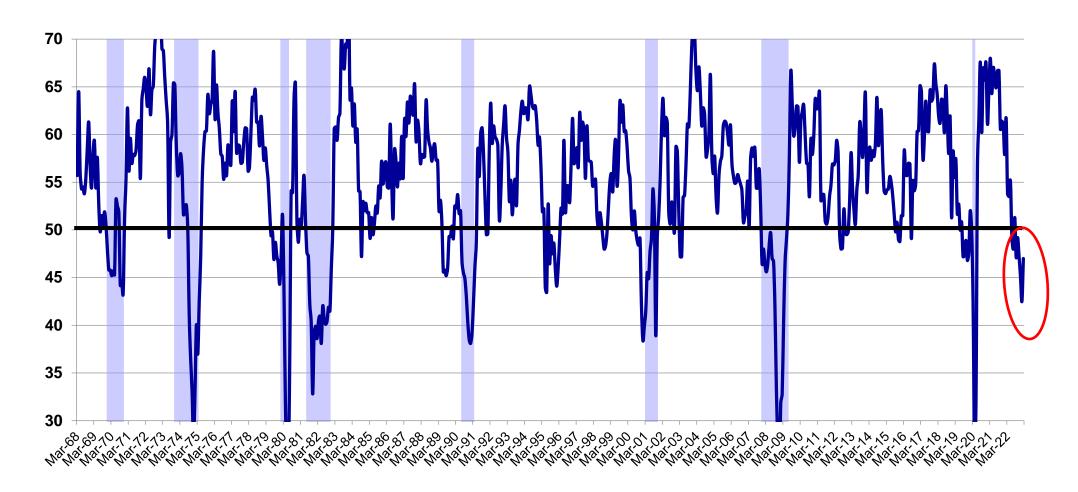
Source: Federal Reserve



ISM's Manufacturing PMI: New Orders

1968 - 2023*

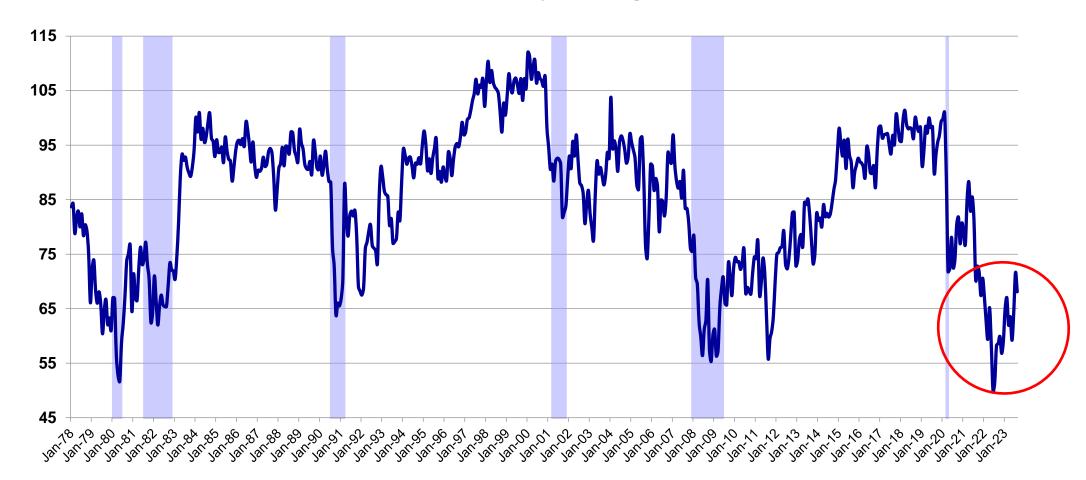
Source: ISM



University of Michigan: Consumer Sentiment

1978 - 2023*

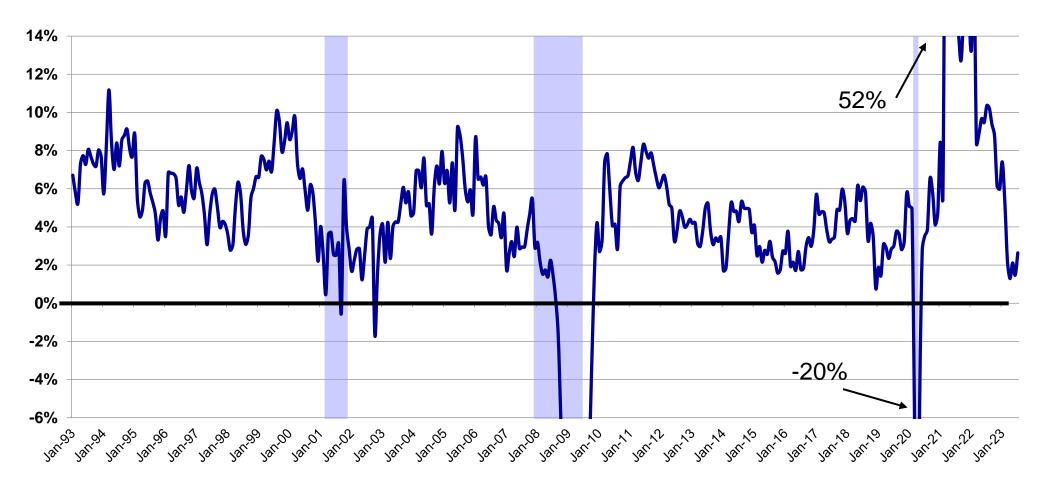
Source: University of Michigan



Retail Sales

% Change Y/Y

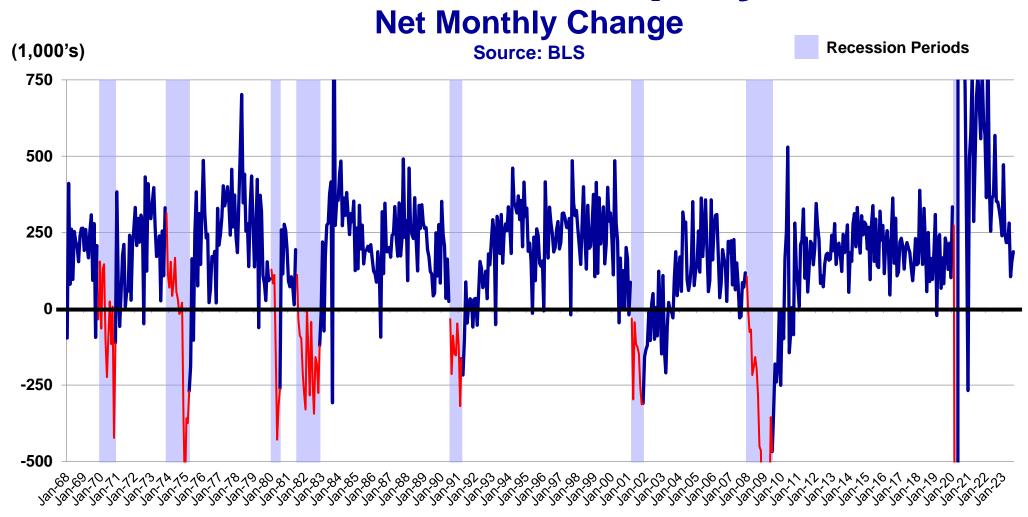
Source: U.S. Census







U.S. Non-farm Employment



Unemployment Rate (U-3) 1968-2023

Source: BLS



Weighted Overall Wage Growth Tracker, 3-Month Moving Average

1998 - 2023

Source: Current Population Survey, Bureau of Labor Statistics, and Federal Reserve Bank of Atlanta Calculations.



U.S. Job Openings and No. Unemployed

2001 - 2023*

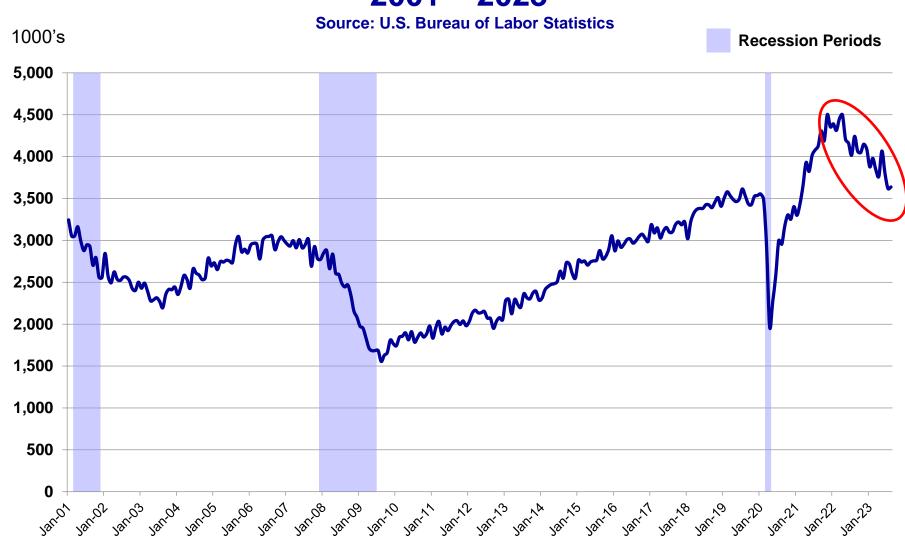
Source: U.S. Bureau of Labor Statistics



More jobs are available than people unemployed.

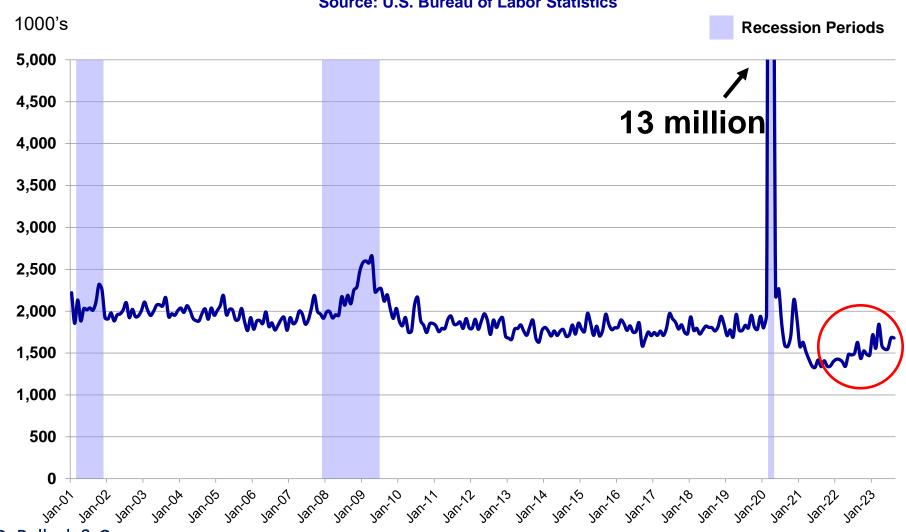


Quits 2001 – 2023*



Layoffs 2001 - 2023*

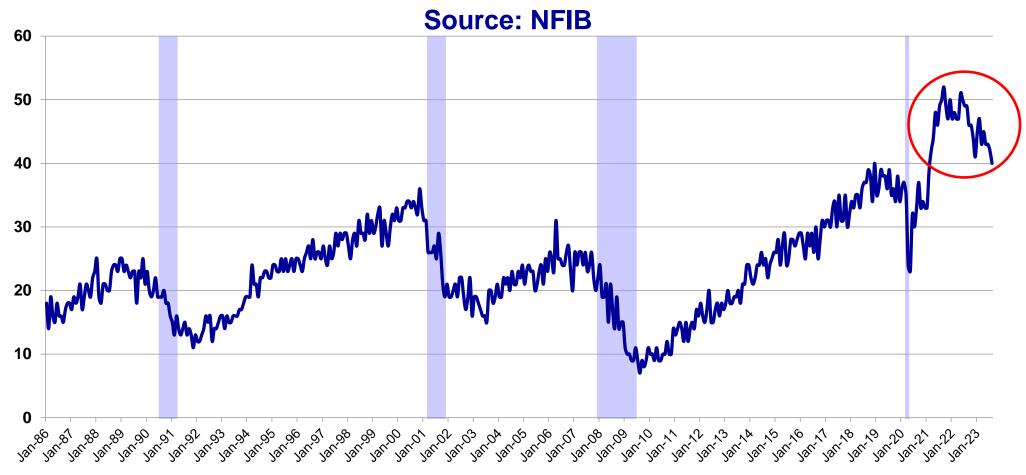
Source: U.S. Bureau of Labor Statistics



NFIB

Percentage of small businesses with unfilled job openings

1986-2023

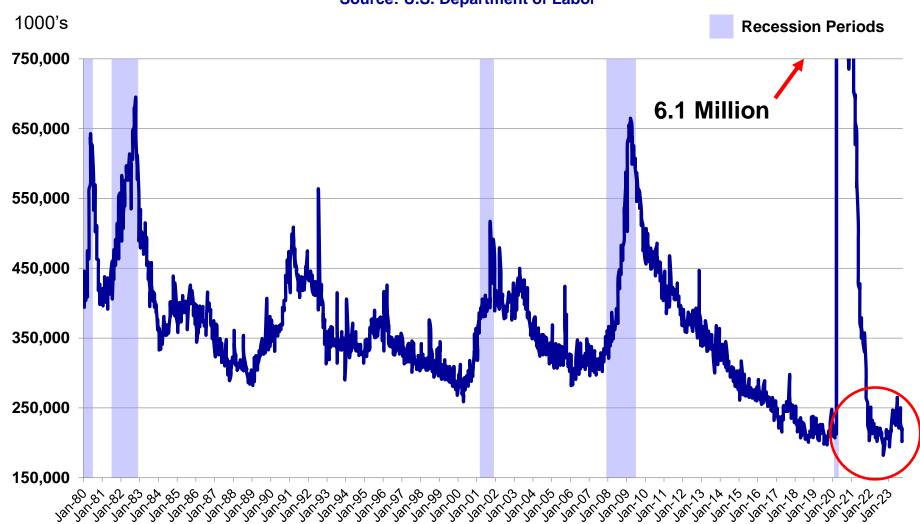




Initial claims

2000 - 2023*

Source: U.S. Department of Labor





Monetary Policy



Arthur Burns Did Not Finish The Job 1970-1978



Paul Volcker Finished the Job 1979-1987

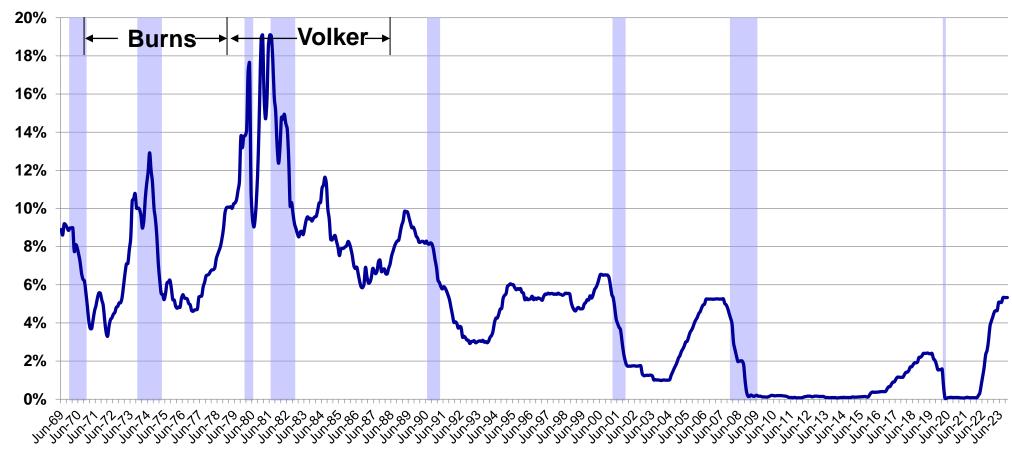


Jerome Powell To-be-determined 2018-?



Federal Funds Effective Rate 1968-2023

Source: BLS





High Interest Rates

- The most interest-sensitive sectors include:
 - Housing especially for-sale housing
 - Commercial construction
 - Consumer durables spending such as autos, appliances and furniture
 - Business spending on plant and equipment
- High interest rates slow job creation, wage growth, commodity prices, etc.

It's like déjà vu all over again.

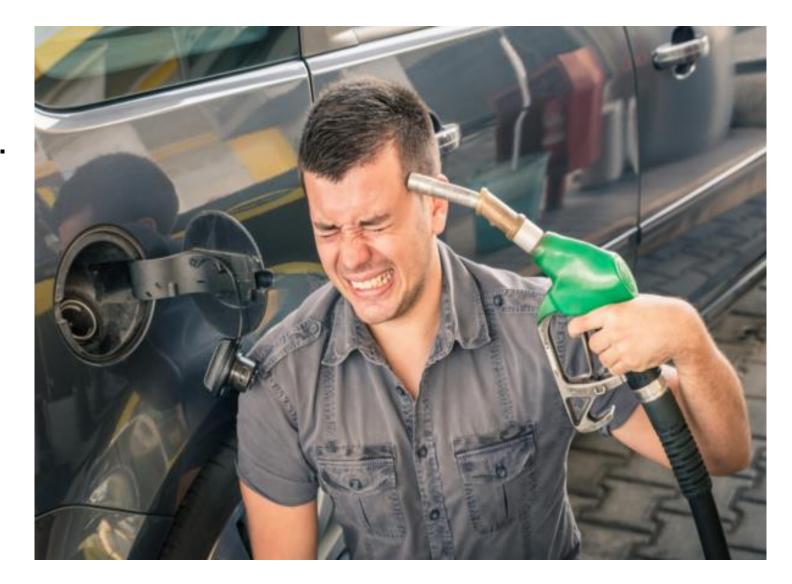
- We have been here before but have not had a period of high inflation for 40+ years since the 1970's and 1980's. Inflation stayed high throughout the 80's.
- Inflation this time around has been high for only the last eight quarters and is much less ingrained in the economy.
- High inflation is unfamiliar to most people because:
 - You have to be 60 years old or more to have experienced it in the past
 - You totally forgot about it
 - Or you weren't born



Historically, high inflation and recessions were caused by energy spikes.

More recent recessions have been caused by financial crises.

- 1990 Savings & Loan Crisis
- Dot.com bust
- Great Recession

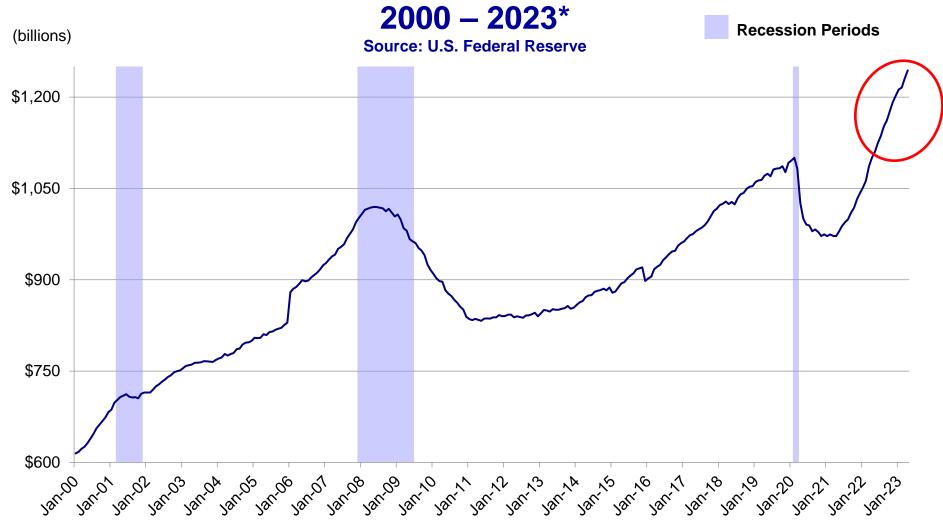


Core-PCE and Core-CPI

% Change Y/Y Source: BEA; BLS



U.S. Consumer Credit Total Revolving Credit Outstanding

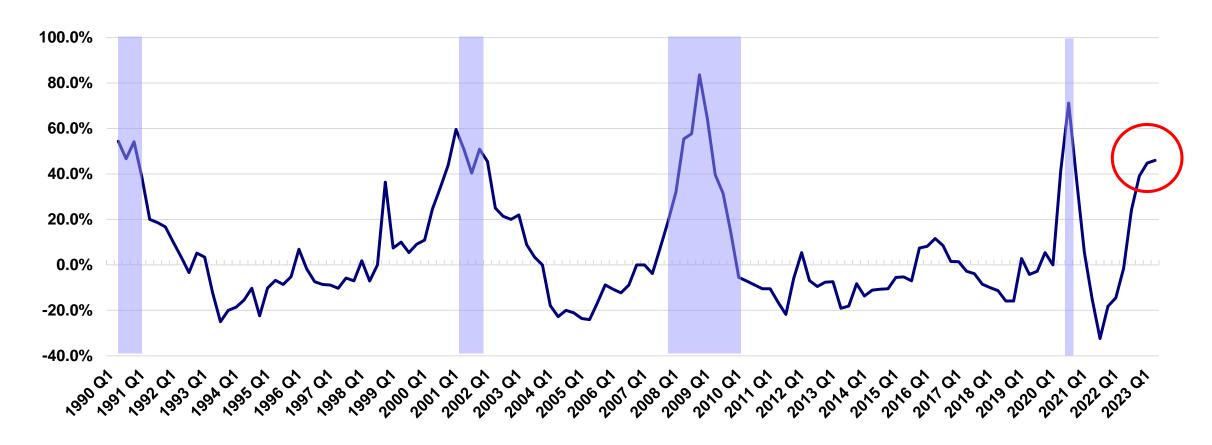




Net Percentage of Domestic Banks Tightening Standards

Source: Board of Governors of the Federal Reserve System

Recession Periods

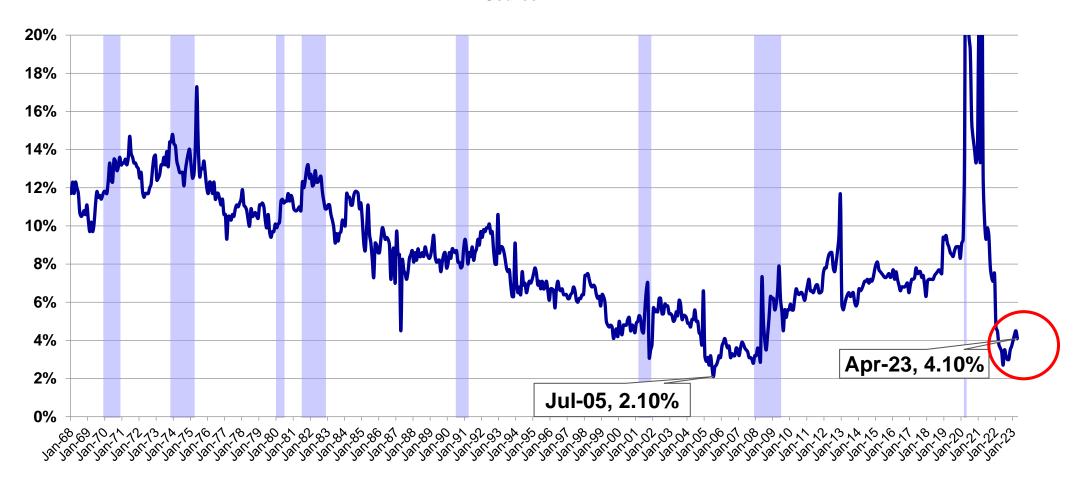




Savings Rate

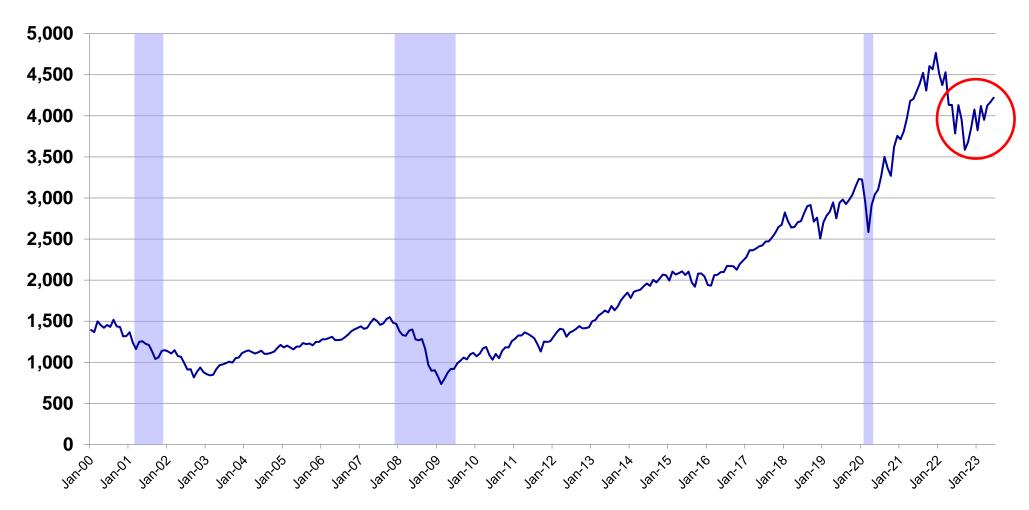
1968 - 2023

Source: BEA





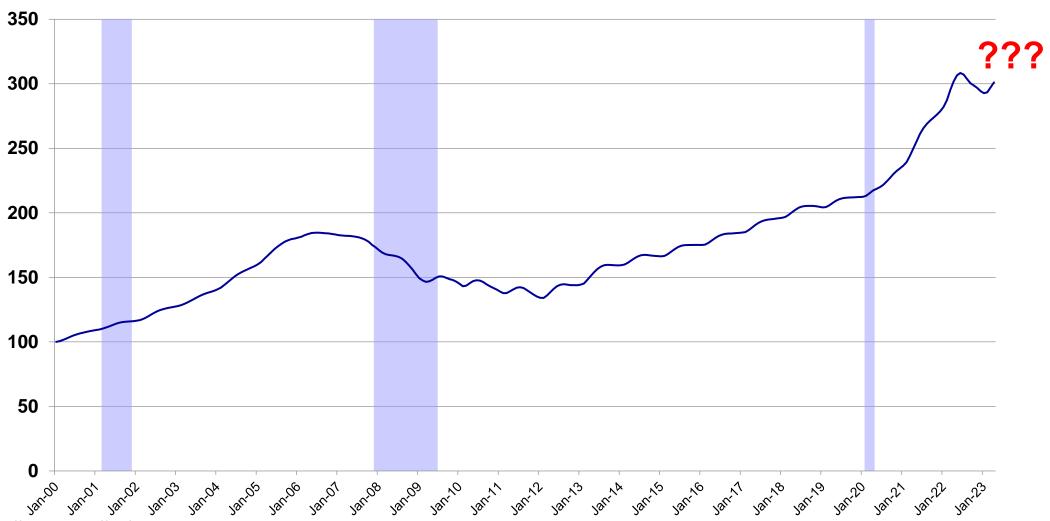




U.S. S&P/Case-Shiller Home Price Indices

2000 − 2023*

Recession Periods





Note: Lagged 3-month average

Current Status

We likely will not see a halt to Fed interest rate hikes until we see:

- A slowdown in hiring
- An increase in unemployment
- A balance between available jobs and the unemployed
- A slowing of retail sales growth

The effort to reduce inflation requires a long-term outlook extending at least into 2024.



The Fed's Task

A SOFT LANDING

 Unemployment increases, inflation declines to the Fed's goal, and we avoid a recession, or a recession is mild.

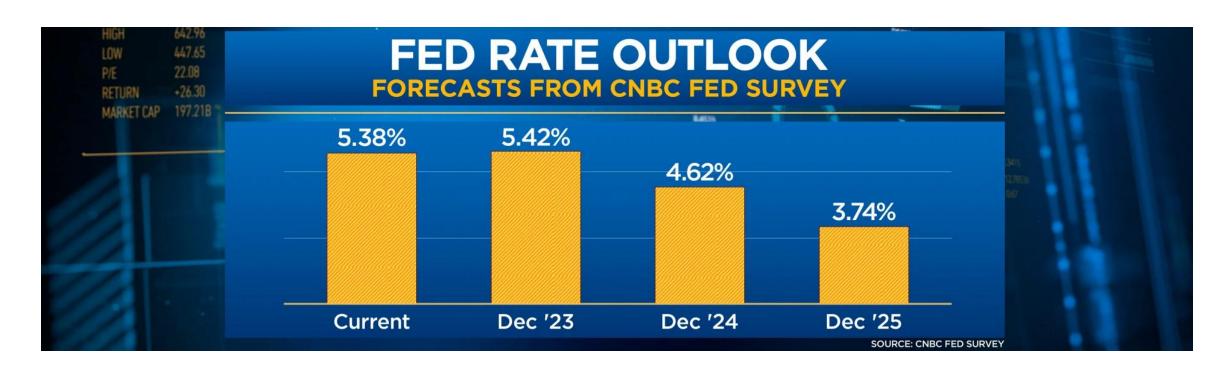
A HARD LANDING

 The Fed affects unemployment more measurably resulting in a more difficult recession.

In either case, the Fed must stay the course and rein in inflation or we could have a repeat of the 1970's early 1980's.



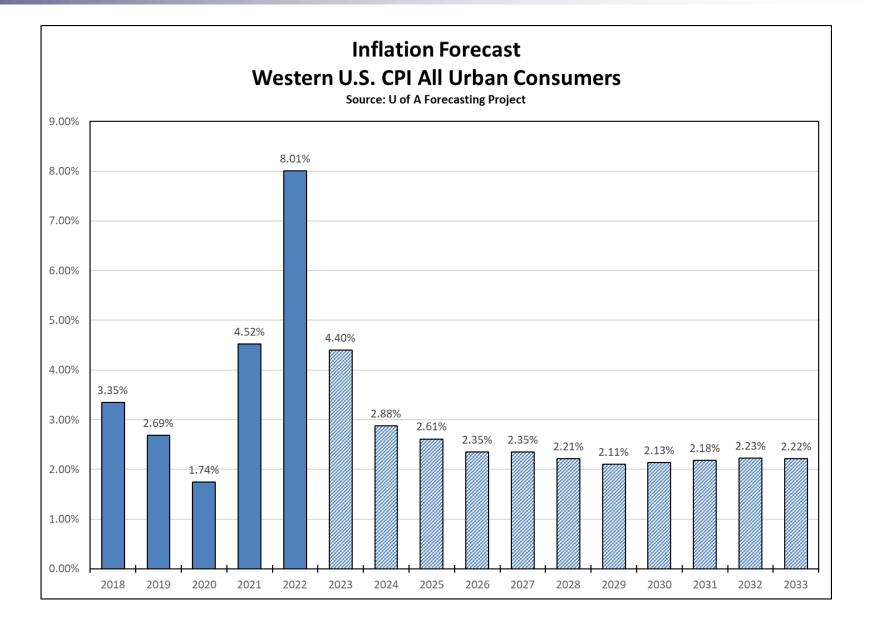
Fed's Mantra: Higher for Longer



Expectations: No rate cuts until September 2024



Inflation **Expectations**

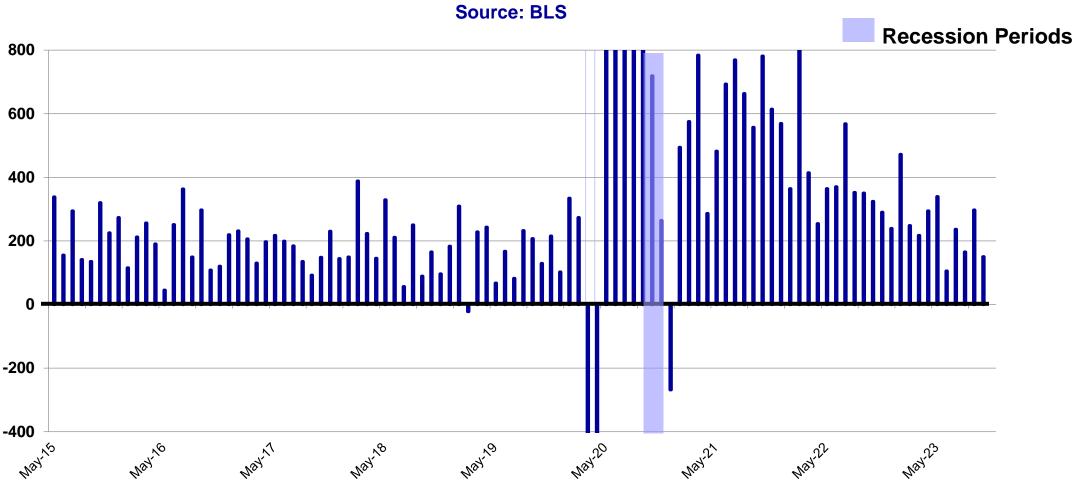




Are we at the beginning of job disruptions?

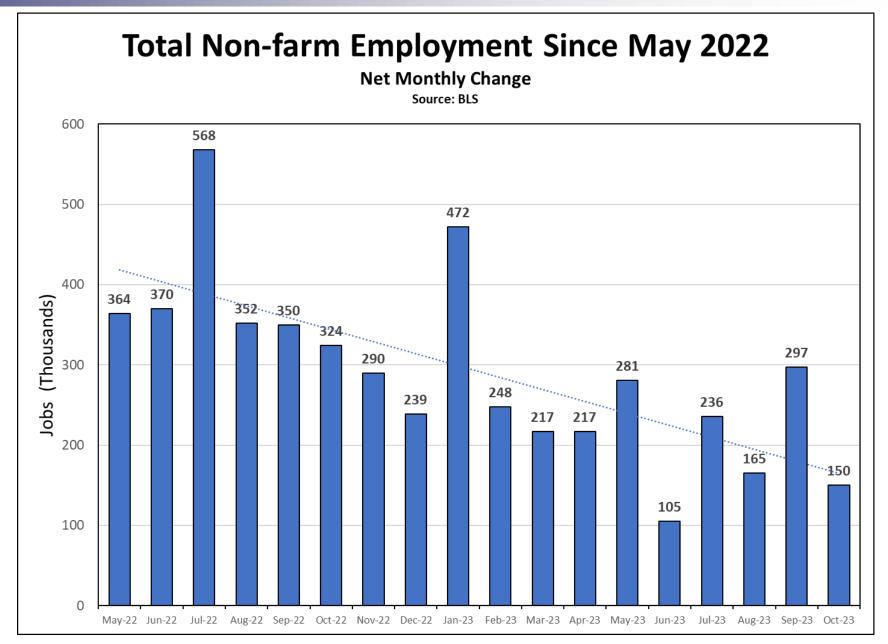
Total Non-farm Employment

Net Monthly Change





While still healthy growth in jobs, the trendline shows job creation slowing









This bright employment picture could deteriorate as consumers and business are forced to cut back. We have not seen that occur so far.



CAPITAL MARKETS



We are in the Early Stages of a Credit Crunch

- Signature Bank and Silicon Valley Bank brought to light the impact of rising interest rates on banking.
- Banks are freezing credit, tightening lending standards, and recapitalizing.
- The government has stepped in to protect smaller banks from a classic bank run and to avoid contagion.





"When you have free money, people do stupid things. When you have free money for 11 years, people do really stupid things."

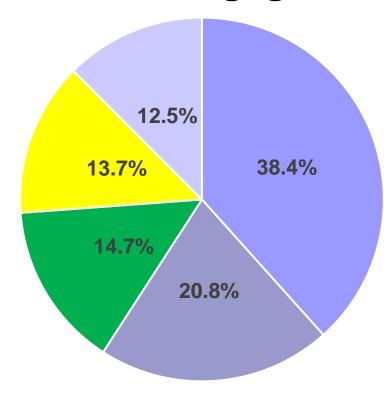
Stan Druckenmiller



Commercial Real Estate (CRE) Lenders

Lender Percentages of CRE Mortgage Market

- Banks
- GSE Portfolios
- Life Insurance Co.
- CMBS, CDOs, ABS
- Other



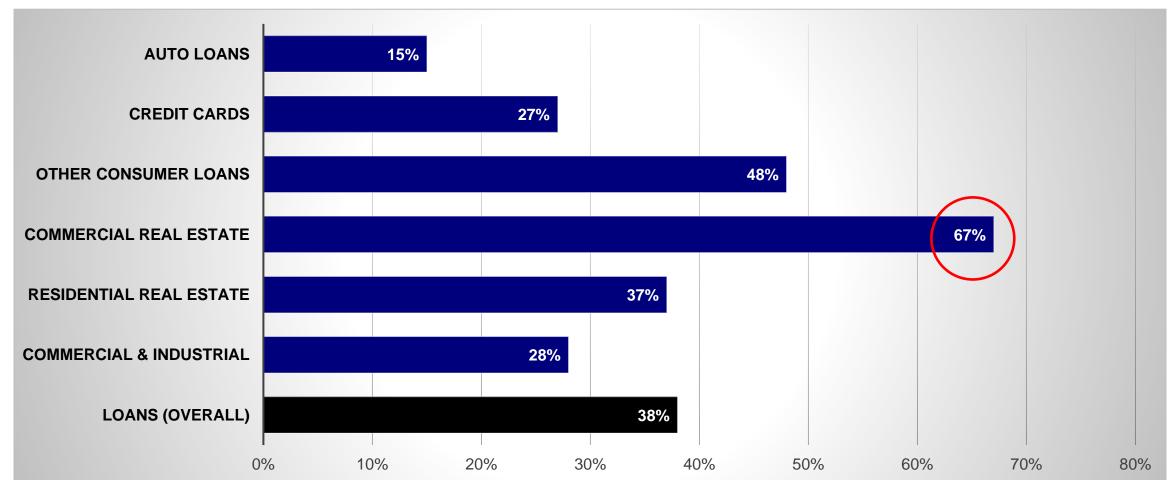


Banking Definitions By Size

- Large Bank The 25 largest financial institutions include U.S. firms with assets of \$100 billion or more and foreign banking organizations with combined U.S. assets of \$100 billion or more.
- Regional Bank Total assets between \$10 billion and \$100 billion.
- Community Bank Total assets between Less than \$10 billion
- Small Bank Total assets with assets of less than \$1.384 billion



Regional and Community Banks Share Of All Outstanding Bank Loans By Type





Commercial Mortgage Debt Maturities

- \$5.67 trillion of commercial debt.
- \$2.75 trillion of loans are set to mature between this year and 2027.
- \$1.2 trillion of debt on U.S. commercial real estate is "potentially troubled" because it is highly leverage and values are falling.
- Offices are the biggest near-term problem, accounting for more than half of the \$626 billion of at-risk debt that's set to mature by the end of 2025.
- Office values have tumbled 31%.
- After offices, apartment buildings are the next-biggest category of potentially troubled properties with \$192 billion in debt needing to be refinanced through 2025.

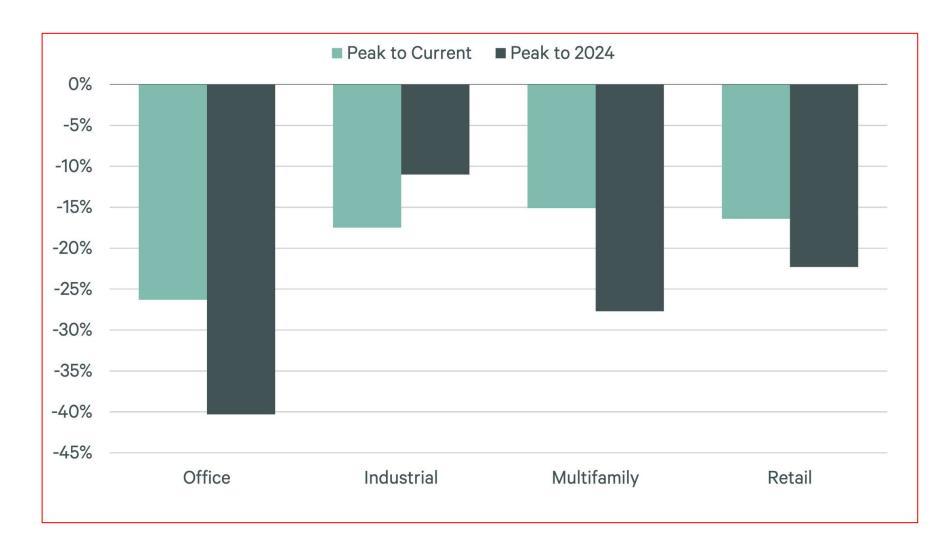
Source: Trepp; Newmark





Current & Forecasted Decline in Capital Values by Property Type

Source: CBRE



What Will the Banks Do?

- Recent "Guidance" from Fed and FDIC suggests lenders work with creditworthy borrowers.
- Extend or renegotiate the loans, partial payments, deferred payments.
- · Require additional equity in projects.
- Take back the properties and sell them at market.







Welcome to Arizona

Arizona Rankings Among States

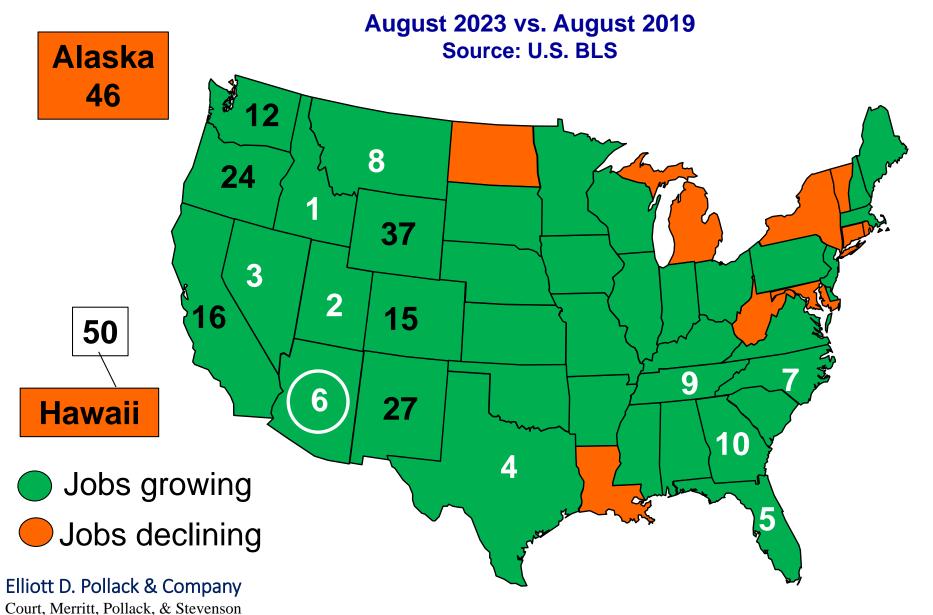
Source: U.S. Bureau of Census; Bureau of Labor Statistics; Bureau of Economic Analysis

DECADE	POPULATION	EMPLOYMENT	PERSONAL INCOME
1950 - 1960	4 TH	1 st	2 nd
1960 - 1970	3 RD	3 RD	4 TH
1970 - 1980	2 ND	3 RD	3 RD
1980 - 1990	3 RD	3 RD	5 TH
1980 - 1990	2 ND	2 ND	3 rd
2000 – 2010	2 nd	12 th	12 th
2010 – 2020	9 th	3 rd	6 th





Job Growth 2023 versus 2019



Greater Phoenix is now the 10th largest Metro in the Country

(population 1970-2022)

Source: U.S. Department of Commerce, Bureau of the Census)

City of Phoenix is the 5th largest city in the country

<u>Rank</u>	<u>1970</u>	<u>1980</u>	<u>1990</u>	2000	<u>2010</u>	2022
1	New York					
2	Los Angeles					
3	Chicago	Chicago	Chicago	Chicago	Chicago	Chicago
4	Philadelphia	Philadelphia	Washington, DC	Dallas	Dallas	Dallas
5	Detroit	Detroit	San Francisco	Philadelphia	Philadelphia	Houston
6	San Francisco	San Francisco	Philadelphia	Houston	Houston	Washington DC
7	Washington, DC	Washington, DC	Boston	Washington DC	Washington DC	Philadelphia
8	Boston	Dallas	Detroit	Miami	Miami	Atlanta
9	Pittsburgh	Houston	Dallas	Atlanta	Atlanta	Miami
10	St. Louis	Boston	Houston	Boston	Boston	Greater Phoenix
11	Baltimore	Nassau-Suffolk	Miami	San Francisco	San Francisco	Boston
12	Cleveland	St. Louis	Seattle	Detroit	Detroit	Riverside
13	Houston	Pittsburgh	Atlanta	Riverside	Riverside	San Francisco
14	Newark	Baltimore	Cleveland	Greater Phoenix	Greater Phoenix	Detroit
15	Minneapolis	Minneapolis	Minneapolis	Seattle	Seattle	Seattle
16	Dallas	Atlanta	San Diego	Minneapolis	Minneapolis	Minneapolis
17	Seattle	Newark	St. Louis	San Diego	San Diego	Tampa
18	Orange County, CA	Orange County, CA	Pittsburgh	St. Louis	St. Louis	San Diego
19	Milwaukee	Cleveland	Greater Phoenix	Tampa	Tampa	Denver
20	Atlanta	San Diego	Tampa	Baltimore	Baltimore	Baltimore
21	Cincinnati	Miami	Denver	Denver	Denver	St. Louis
22	Paterson	Denver	Cincinnati	Pittsburgh	Pittsburgh	Orlando
23	San Diego	Seattle	Portland	Portland	Portland	Charlotte
24	Buffalo	Tampa	Milwaukee	Sacramento	Sacramento	San Antonio
25	Miami	Riverside 🗸	Kansas City	San Antonio	San Antonio	Portland
26	Kansas City	Greater Phoenix	Sacramento	Orlando	Orlando	Austin
27	Denver	Cincinnati	Norfolk	Cincinnati	Cincinnati	Sacramento
28	Riverside	Milwaukee	Indianapolis	Cleveland	Cleveland	Pittsburgh
29	Indianapolis	Kansas	Columbus	Kansas City	Kansas City	Las Vegas
30	San Jose	San Jose	San Antonio	San Jose	San Jose	Cincinnati
31	New Orleans	Buffalo	New Orleans	Columbus	Columbus	Kansas City
32	Tampa	Portland	Orlando	Charlotte	Charlotte	Columbus
33	Portland <	New Orleans	Buffalo	Indianapolis	Indianapolis	Indianapolis
34	Greater Phoenix	Indianapolis	Charlotte	Virginia Beach	Virginia Beach	Cleveland
35	Columbus	Columbus	Hartford	Providence	Providence	Nashville



Greater Phoenix Employment Ranking

When comparing 2023 versus 2019 Greater Phoenix ranks fifth.

Metro	2023	2019	Growth	Rank
Austin-Round Rock	1,311.7	1,111.2	18.0%	1
Dallas-Fort Worth-Arlington	4,232.6	3,756.9	12.7%	2
Nashville-DavidsonMurfreesboroFranklin	1,156.4	1,038.3	11.4%	3
Tampa-St. Petersburg-Clearw ater	1,525.4	1,374.3	11.0%	4
Phoenix-Mesa-Chandler	2,352.7	2,156.2	9.1%	5
Las Vegas-Henderson-Paradise	1,120.8	1,028.4	9.0%	6
Charlotte-Concord-Gastonia	1,347.7	1,237.3	8.9%	7
Riverside-San Bernardino-Ontario	1,667.0	1,536.7	8.5%	8
Orlando-Kissimmee-Sanford	1,432.6	1,321.2	8.4%	9
San Antonio-New Braunfels	1,157.1	1,071.9	7.9%	10

Source: Bureau of Labor Statistics

Note: Metro areas with over 1,000,000 jobs

*August 2023 data

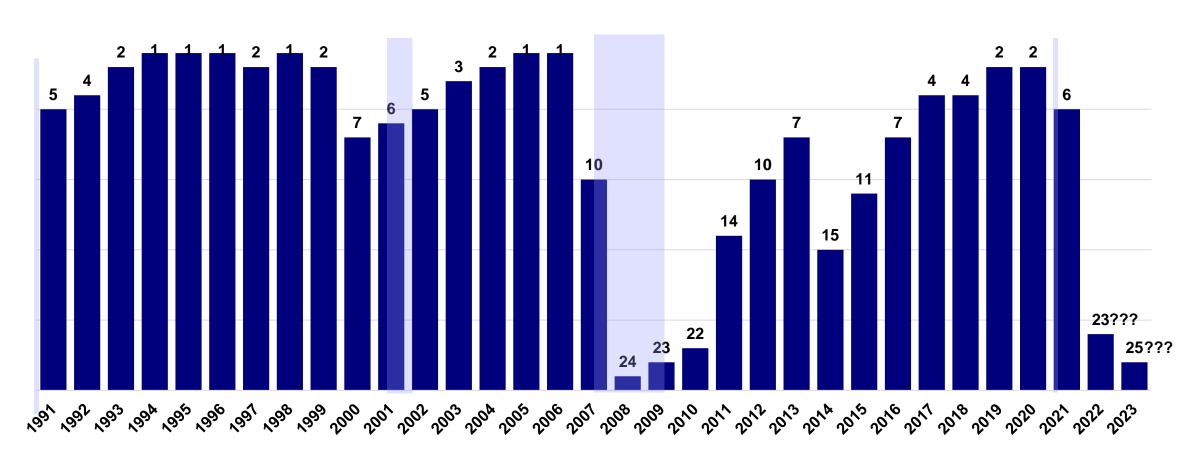


Phoenix-Mesa Employment Growth Rank

(Ranking among all metro areas greater than 1,000,000)

Source: U.S. Bureau of Labor Statistics





Arizona & Greater Phoenix

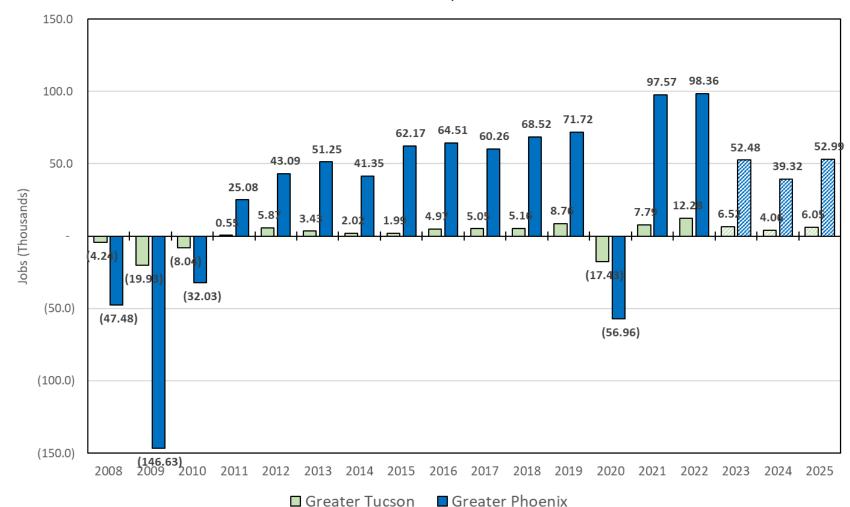
- Most of the growth is in Greater Phoenix.
- The recovery since the pandemic shutdown has been strong. Job growth slowed in 2023 and will continue to slow in 2024 mainly because the Phoenix area did not lose as many jobs during COVID and has recovered more jobs since COVID.
- Economic development successes (semiconductors, electrical car manufacturers, battery manufacturers, and suppliers).
- Greater Phoenix will likely do better than most places.
- The water issue is a straw man. It should be easily resolvable.



In the past 1.5 years, 80% of the State's job growth has occurred in Greater Phoenix



Source: AZ OEO, U of A





Arizona Job Openings and No. Unemployed

2001 - 2023*

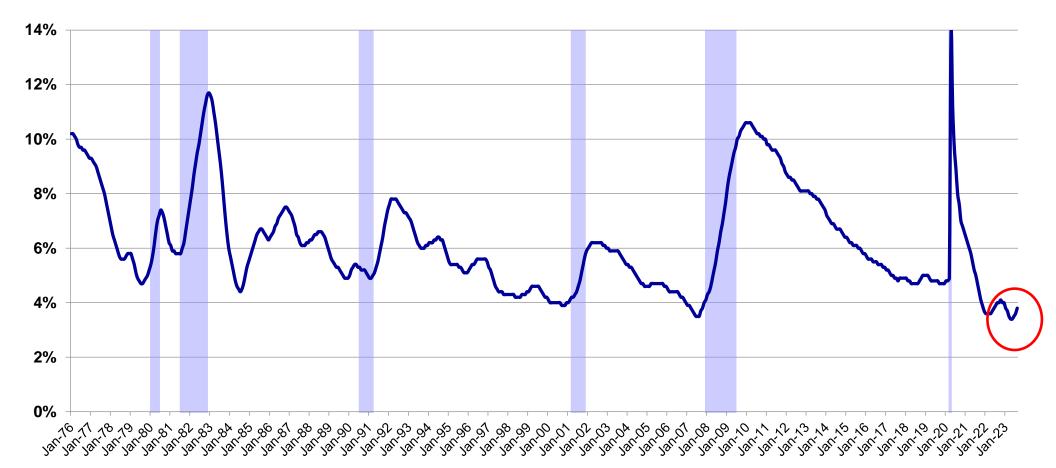
Source: U.S. Bureau of Labor Statistics



Arizona Unemployment Rate

1976-2023

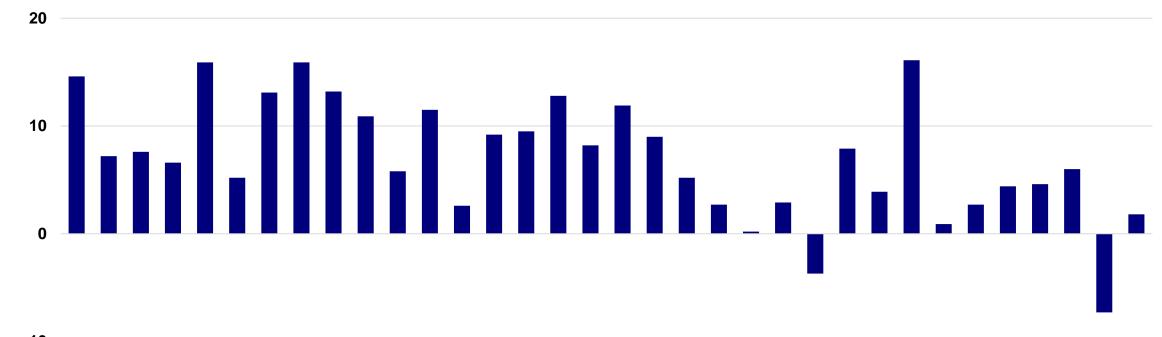
Source: BLS; AOEO



Greater Phoenix Employment Monthly Gains (S/A)

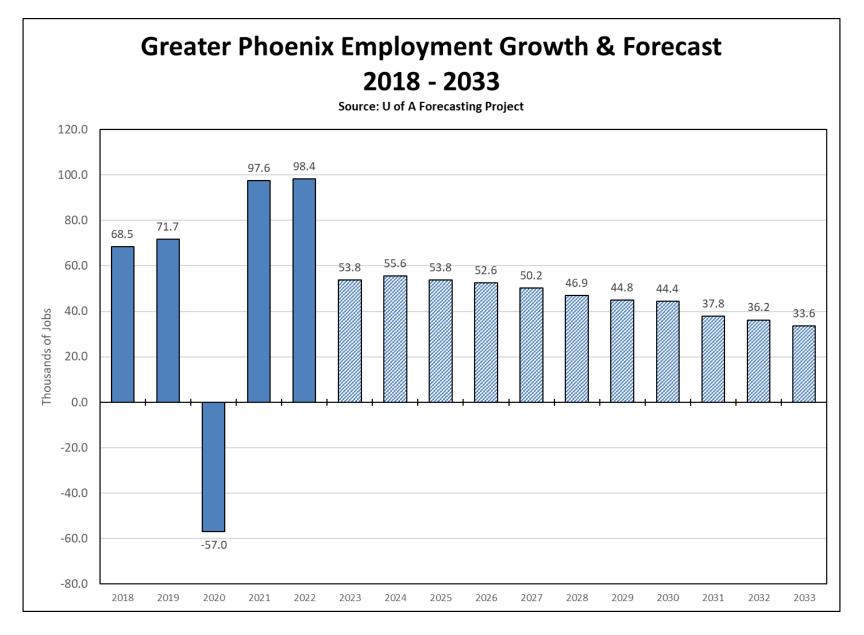
2020-2023







Employment Growth

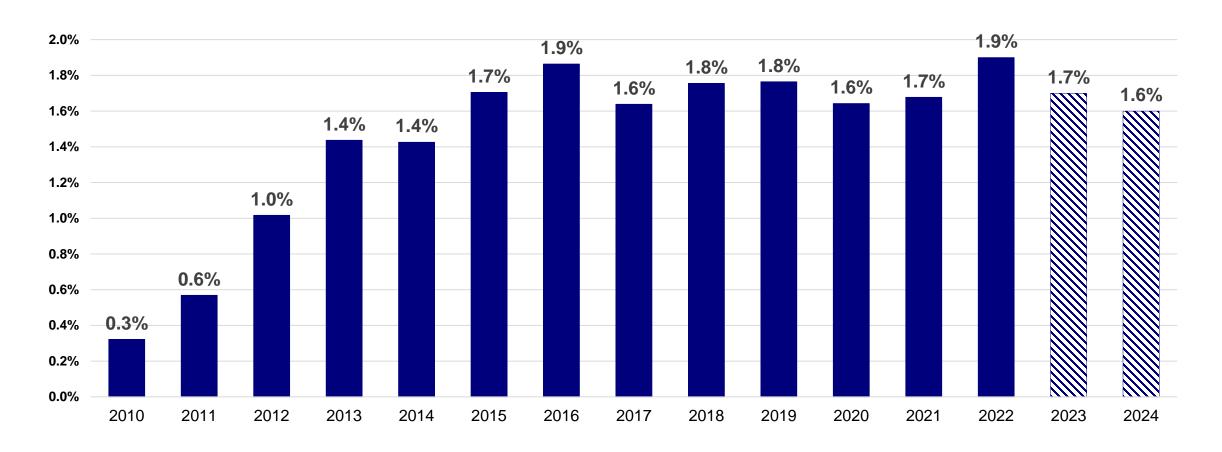




Greater Phoenix

Population Growth

Source: AOEO; EDPCo

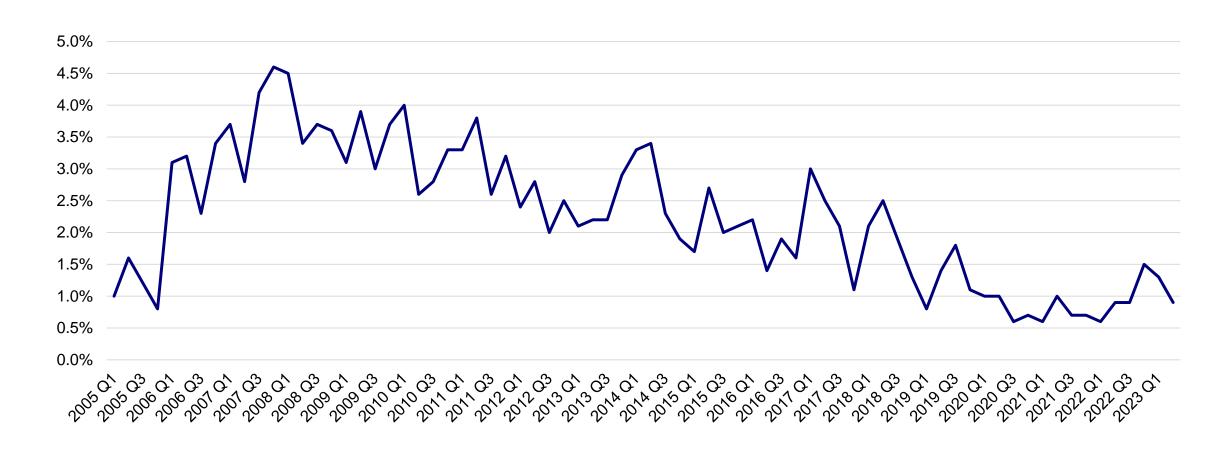


Housing Market



AZ Homeowner Vacancy Rate

Source: U.S. Census Bureau

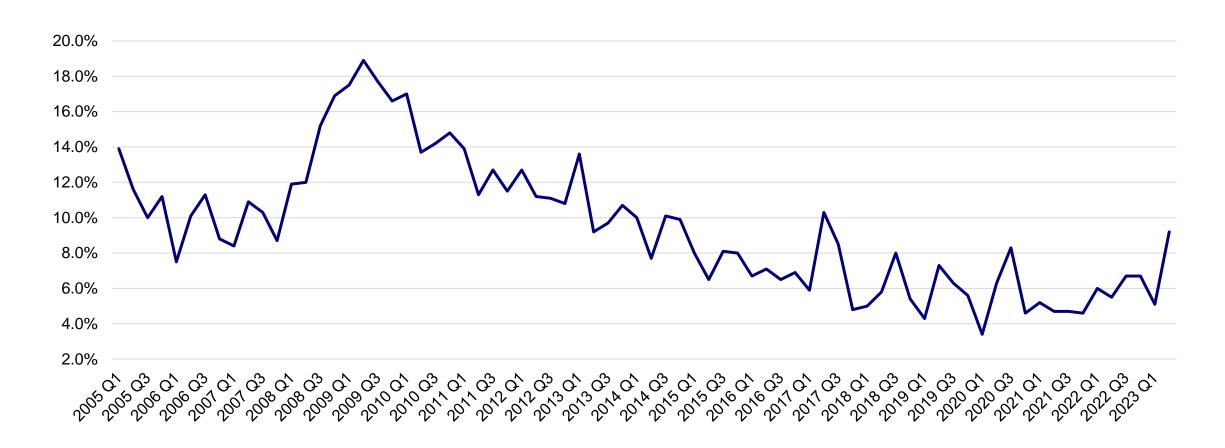




The homeowner vacancy rate is calculated as the ratio of vacant year-round units for sale to the sum of owner-occupied units, vacant year-round units sold but awaiting occupancy, and vacant year-round units for sale.

AZ Rental Vacancy Rate

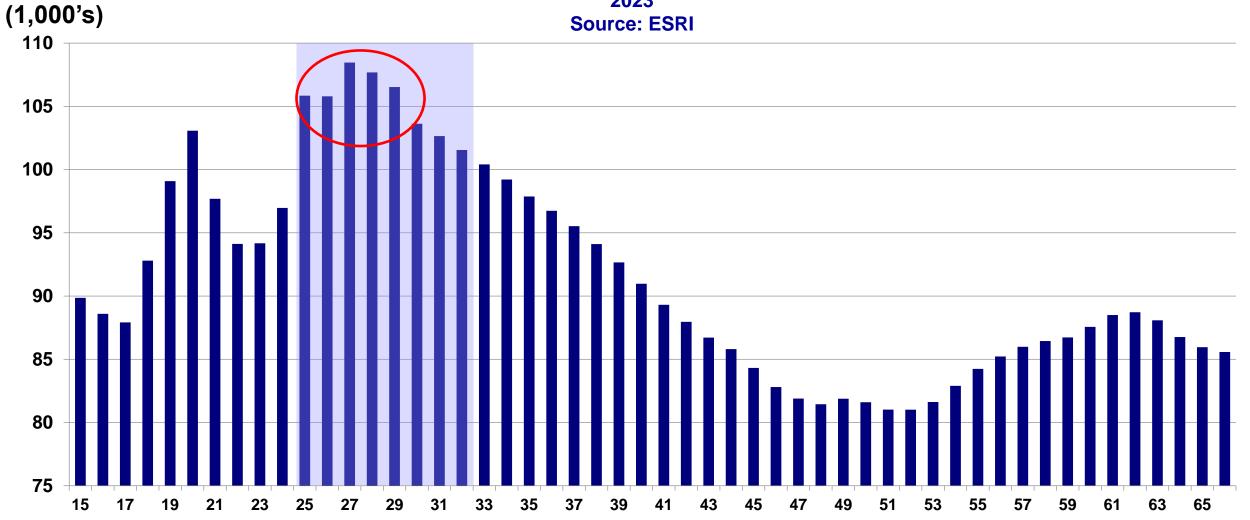
Source: U.S. Census Bureau





Arizona Population by Age (15-65)

2023





Greater Phoenix Homeownership Rates by Age Group

Source: 2021 American Community Survey 1-Year Estimates

Householder Age	% of Total Occupied
15 to 24 years	18.9%
25 to 34 years	43.9%
35 to 44 years	62.0%
45 to 54 years	72.5%
55 to 64 years	78.1%
65 to 74 years	84.0%
75 to 84 years	83.5%
85 years and over	69.4%
Total	67.1%

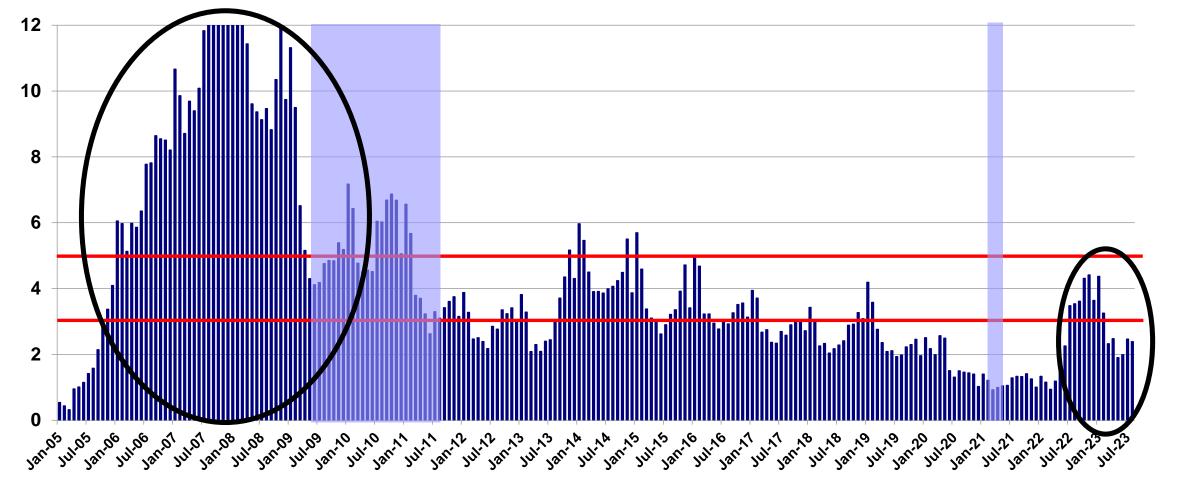


Greater Phoenix Resale Months Supply

2005-2023*

Source: ARMLS; Cromford Report

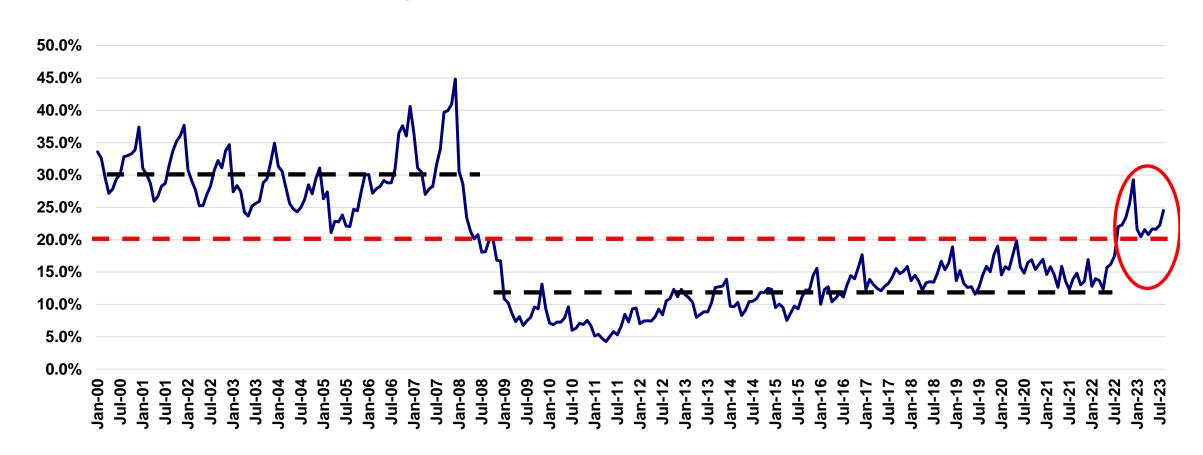






Maricopa County % of New Home Sales of Total Sales

Source: Information Market



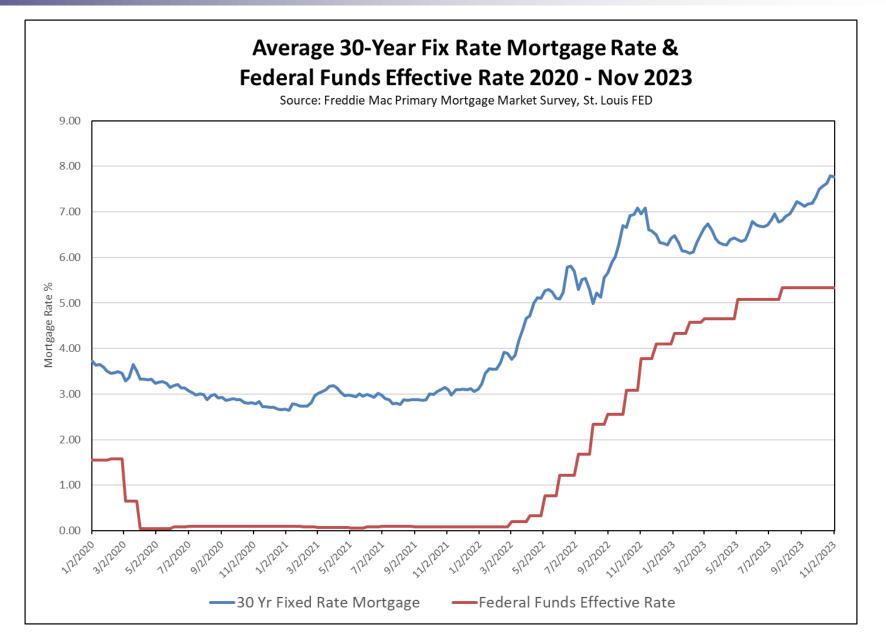
Greater Phoenix Undersupplied Market

- Ranked 4th most undersupplied market based on vacancy rates by John Burns Real Estate Consulting.
- Arizona Department of Housing analysis estimates that 270,000 housing units are needed statewide just to meet current demand.
- Home Arizona believes that the Greater Phoenix market is undersupplied by at least 45,000 units

If this is not addressed now, the problem will worsen. The only way to fix this properly is to build more and build now.



Mortgage Rate Trends





Mortgage Payment Change

	October 2021	October 2022	October 2023
Median Sales Price - New	\$447,400	\$529,150	\$538,400
Median Sales Price - Existing	\$420,000	\$447,500	\$445,000
Mortgage Rate Only	3.05%	6.66%	7.63%
Interest & Principal - New	\$1,709	\$3,060	\$3,431
Interest & Principal - Existing	\$1,604	\$2,588	\$2,836

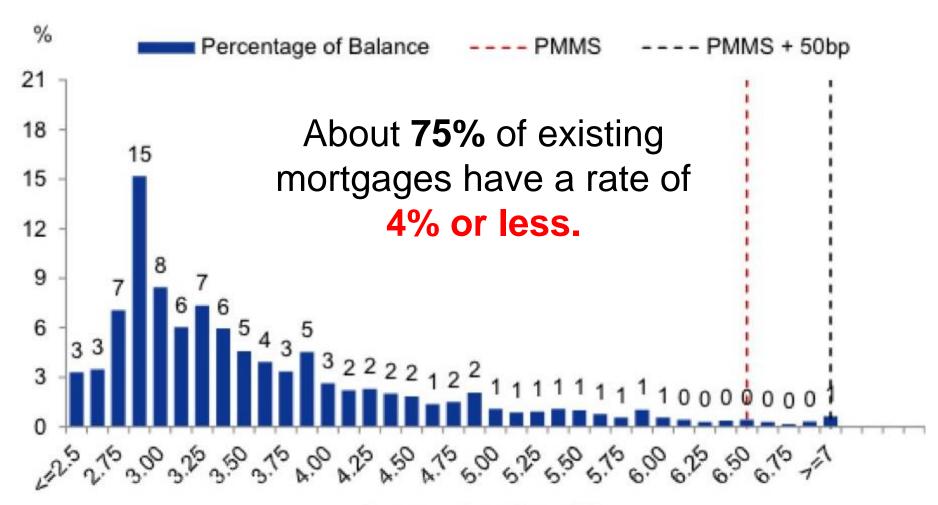
Mortgage payments for a new home have increased 101% and 77% for an existing home since 2021 based on 10% down payment

Source: Freddie; Information Market



Distribution of Outstanding **30-year Conventional Mortgage Borrower Rates**

Source: eMBS; Goldman Sachs

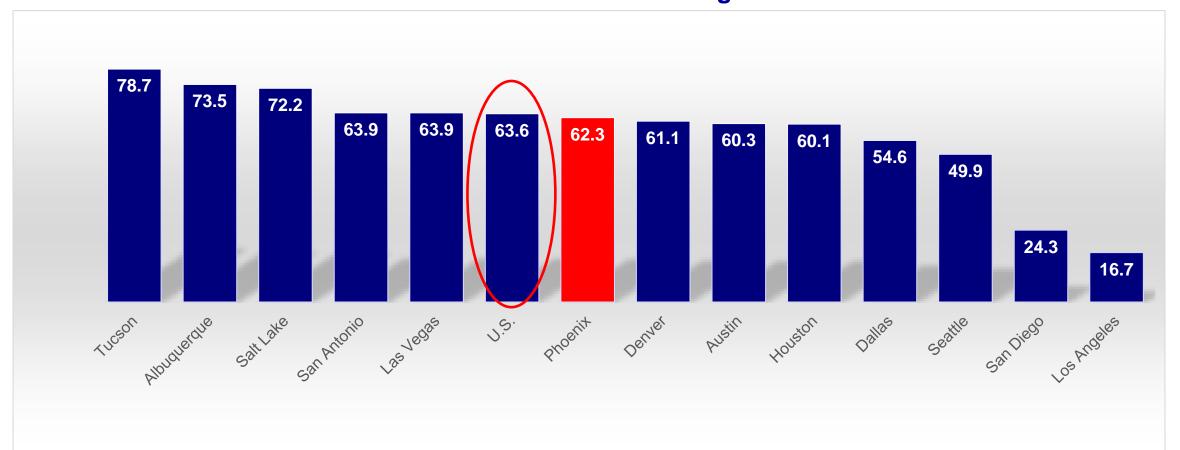






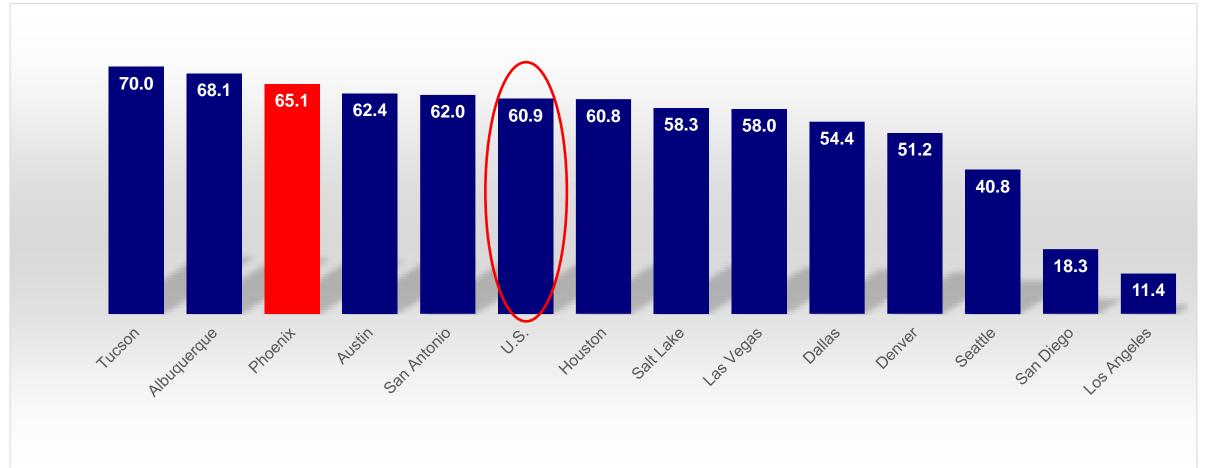
Housing Opportunity Index 2015 Q2

Source: NAHB/Wells Fargo



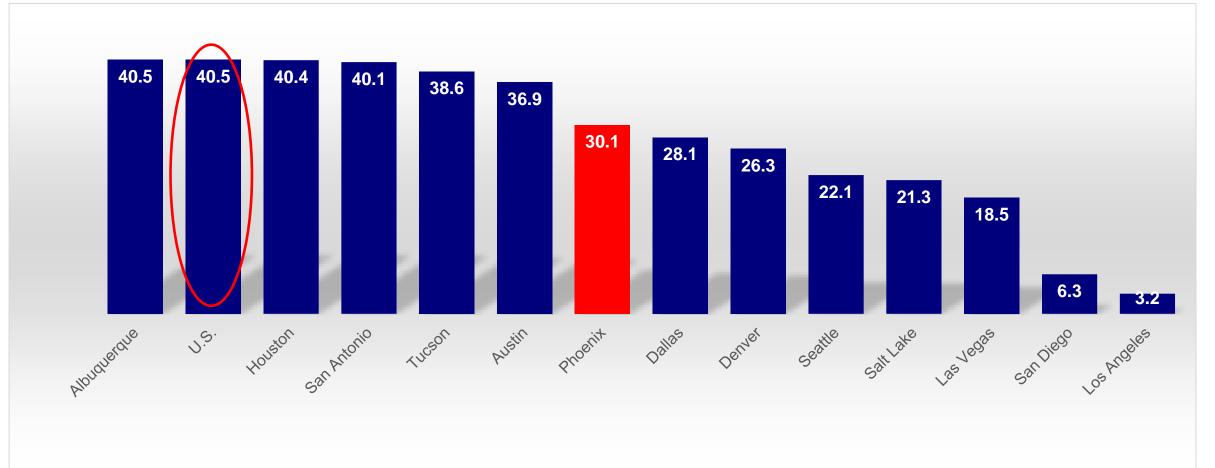
Housing Opportunity Index 2019 Q2

Source: NAHB/Wells Fargo



Housing Opportunity Index 2023 Q2

Source: NAHB/Wells Fargo



Existing Single-Family Home Price

Source: NAR

	2019 Q2	2020 Q2	2022 Q2	2023 Q2
Greater Phoenix	\$285,500	\$314,700	\$496,000	\$464,200
Seattle	\$542,700	\$574,100	\$818,900	\$793,300
Los Angeles	\$567,000	\$581,700	\$834,700	\$789,400
San Diego	\$655,000	\$670,000	\$965,900	\$942,400
Denver	\$471,400	\$478,400	\$695,800	\$674,500
Austin	\$343,700	\$355,000	\$613,200	\$496,300
Salt Lake	\$358,00	\$381,900	\$605,000	\$549,900
Dallas	\$275,400	\$280,900	\$408,200	\$389,800



Greater Phoenix Multi-Family Average Rent Percent Change a Year Ago 2004 – 2023*

Recession Periods



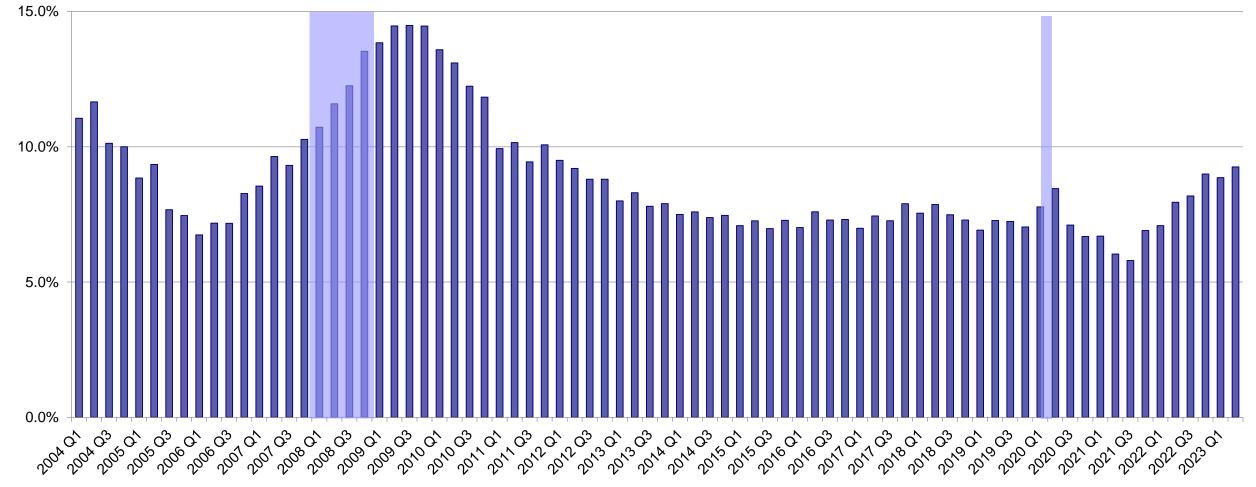




Greater Phoenix Multi-Family Vacancy Rate 2004 – 2023*

Source: RealData

Recession Periods

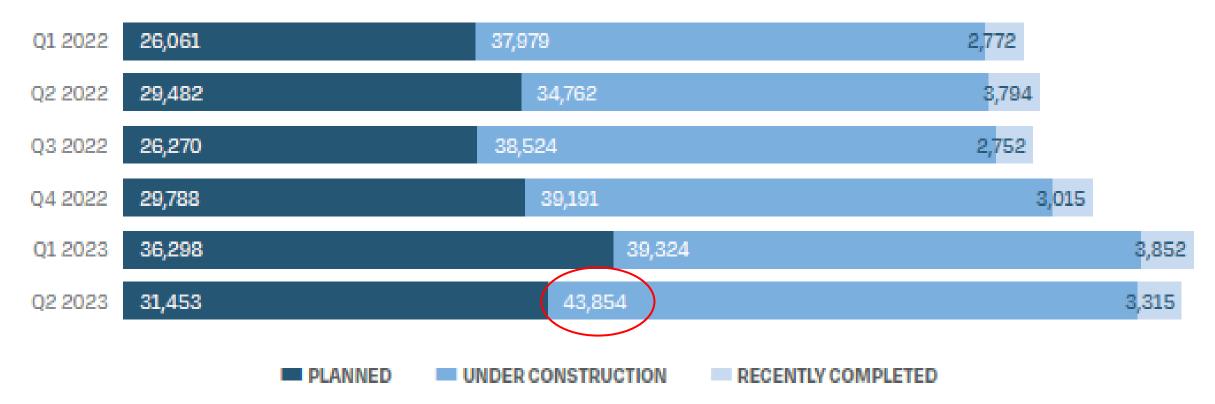




Multifamily Construction Trend

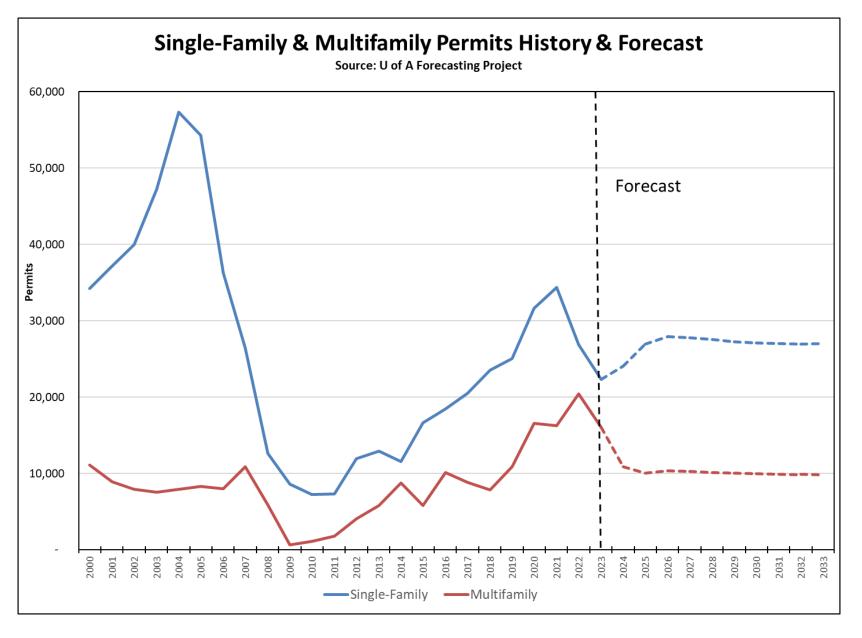
Source: ABI Multifamily

PHOENIX MSA | MULTIFAMILY CONSTRUCTION (50+)





Housing Permit Forecast



Summary of Housing Market

- Single family housing is under pressure due to affordability issues.
- New home building is doing better than expected. That is likely to continue.
- Existing home inventory remains low.
- Apartment vacancy rates are up as units permitted during the period of low interest rates come to market.



What to Expect in the Near Term?

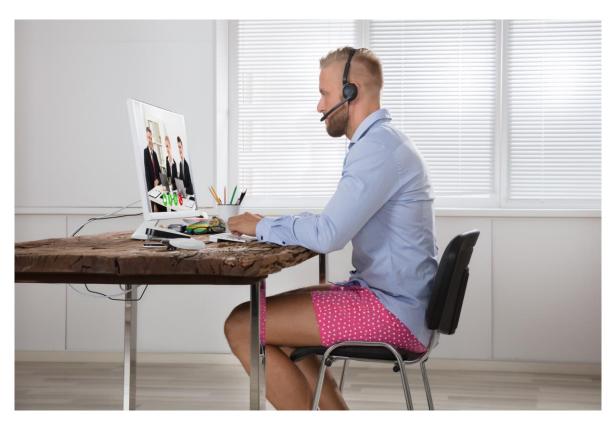
- Continued high interest rates, falling in late 2024.
- Modestly slower population growth.
- More attached housing on smaller lots with smaller setbacks.
- Continued rate buydowns.
- Rent growth slowing due to higher supply coming into the market.
- More doubling and tripling up by roommates. Living with parents.
- The need for more housing units has not diminished.



Commercial Real Estate



OFFICE

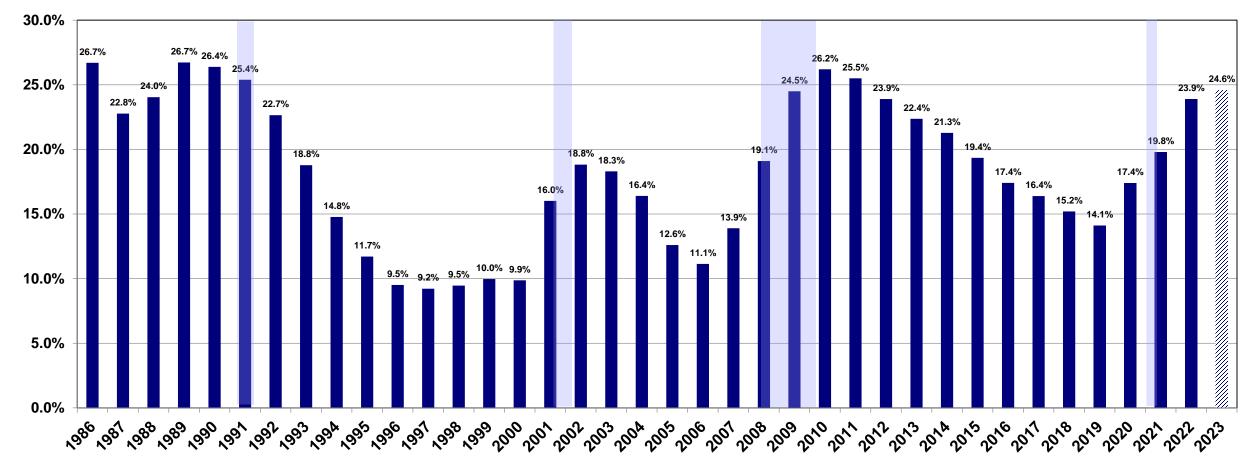




Office Space Year-End Vacancy Rates Greater Phoenix 1986–2023*

Source: CBRE



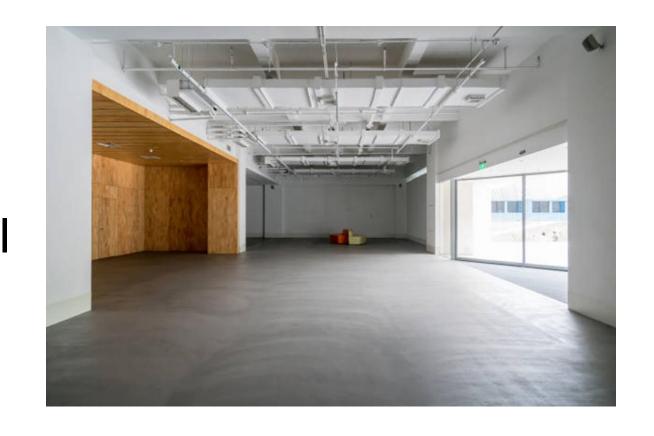


Sublease Availability

Source: Colliers

- 2021 Q2 5,503,751
- · 2022 Q2 6,244,319
- 2023 Q2 7,476,257

Sublease space brings total vacant space to over 26 million implying a 26% vacancy rate.





Office Conversion

- Much of the empty office space will either take years to absorb or may never be used as office space.
- Conversions to residential are very expensive:
 - > 34 buildings in Phoenix may be suitable for conversion.
 - Conversion buildings are typically older vintage 1980s.
 - > Buildings must be sold at current, depressed rates.
 - Must have a narrow floorplate.

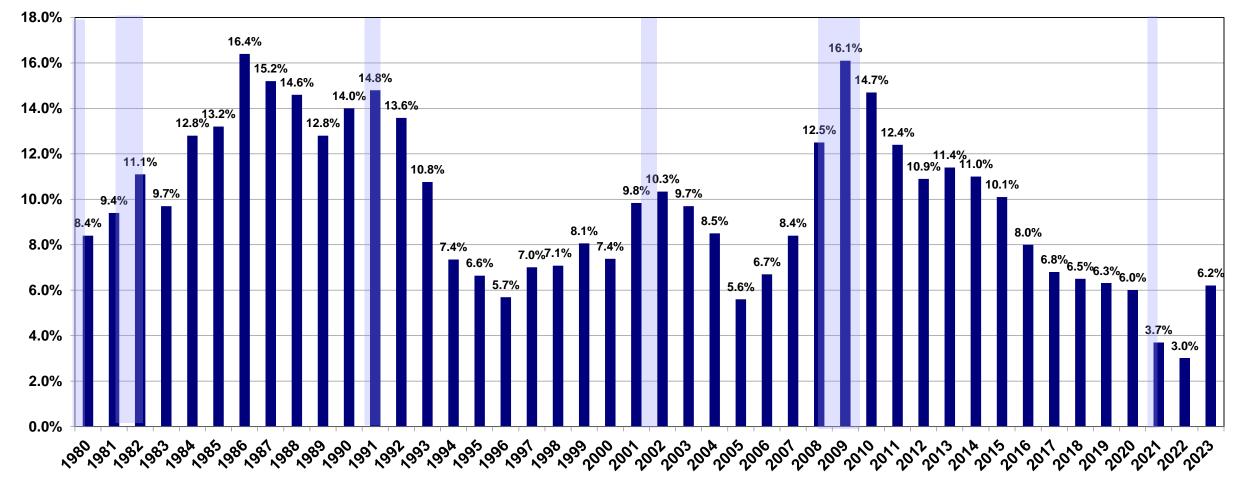


INDUSTRIAL



Industrial Space Vacancy Rates Greater Phoenix 1980 – 2023*







Greater Phoenix Industrial Market

Source: CBRE

2023 Third Quarter

- Net Rentable Area 401.9 million sq. ft.
- Vacancy Rate 6.2%
- 3Q 2023 Asking Rate: \$1.16 per sq. ft.
- Under Construction 40.3 million sq. ft.
- YTD Deliveries <u>23.2 million</u> sq. ft.
- YTD Net Absorption <u>10.5 million</u> sq. ft.
- Smaller spaces will be absorbed but large spaces may be in for a difficult time
- Vacancy rates will rise significantly in 2024 and 2025.



Phoenix Industrial Construction



Greater Phoenix Industrial Market

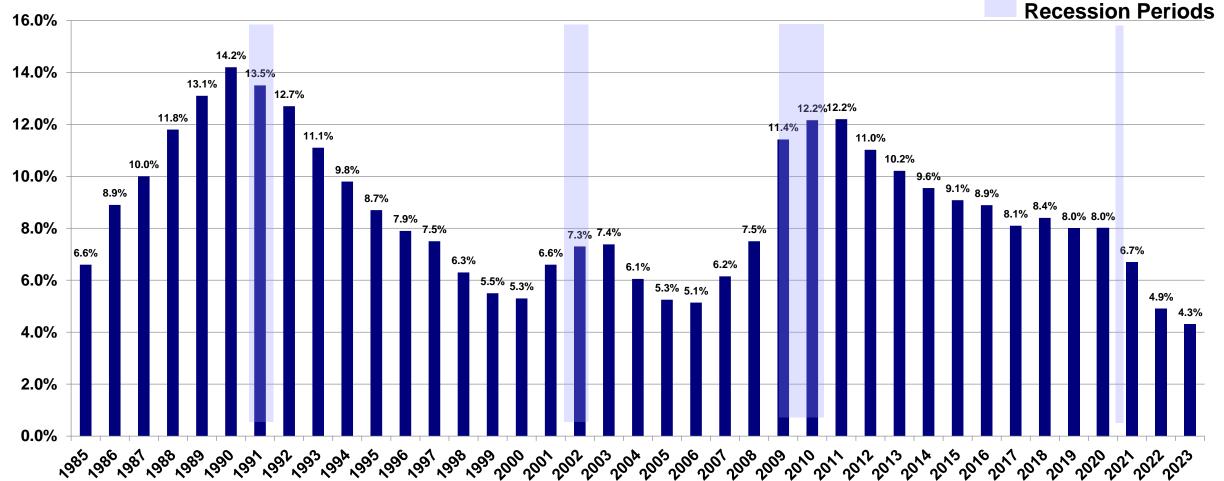
		Under	UC Plus
	Under	Construction	Planned
Market	Construction	% of Stock	% of Stock
National	535,594,839	2.90%	6.90%
Phoenix	46,621,995	12.70%	34.70%
Dallas	49,325,498	5.40%	10.70%
Charlotte	14,573,810	4.80%	10.90%
Inland Empire	29,587,901	4.70%	16.20%
Denver	10,666,778	4.20%	6.60%
Philadelphia	16,119,250	3.80%	8.70%
Memphis	10,845,290	3.80%	4.60%
Houston	18,211,577	3.10%	5.40%
Kansas City	7,892,972	2.90%	17.90%
Columbus	8,706,133	2.90%	8.10%
Indianapolis	8,414,173	2.40%	7.00%
Bay Area	5,772,267	2.00%	4.00%
Central Valley	6,930,626	2.00%	2.80%
Tampa	5,075,966	1.90%	6.30%
Chicago	19,806,983	1.90%	4.30%
Source: Yardi Matri	X		

RETAIL



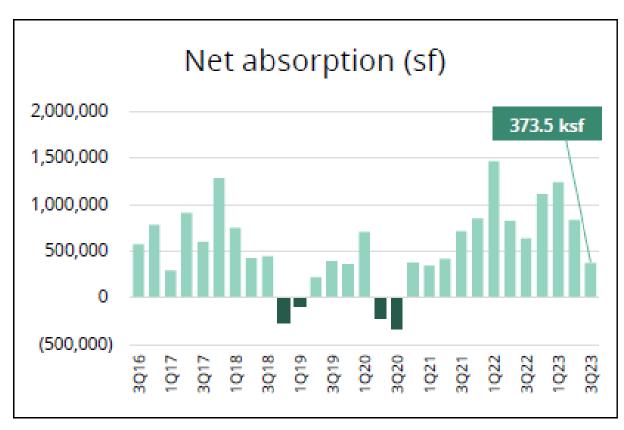
Retail Space Vacancy Rates Greater Phoenix 1985–2023*

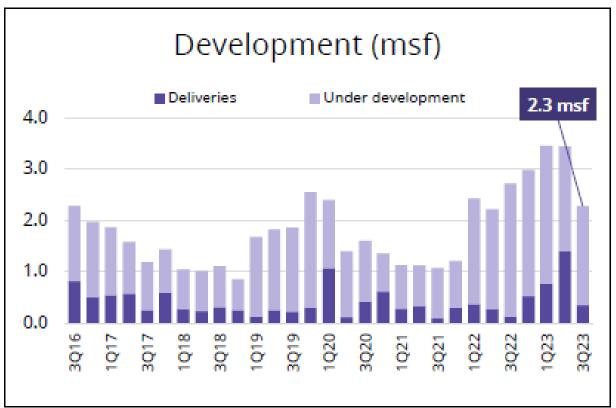
Source: CBRE**





Retail Market Q3 2023





What to Expect This Year & Next?



Economic Uncertainty

- Mixed economic signals
- Inflation will take time to tame
- Fiscal policy is still stimulative
- Geopolitical events could impact the economy

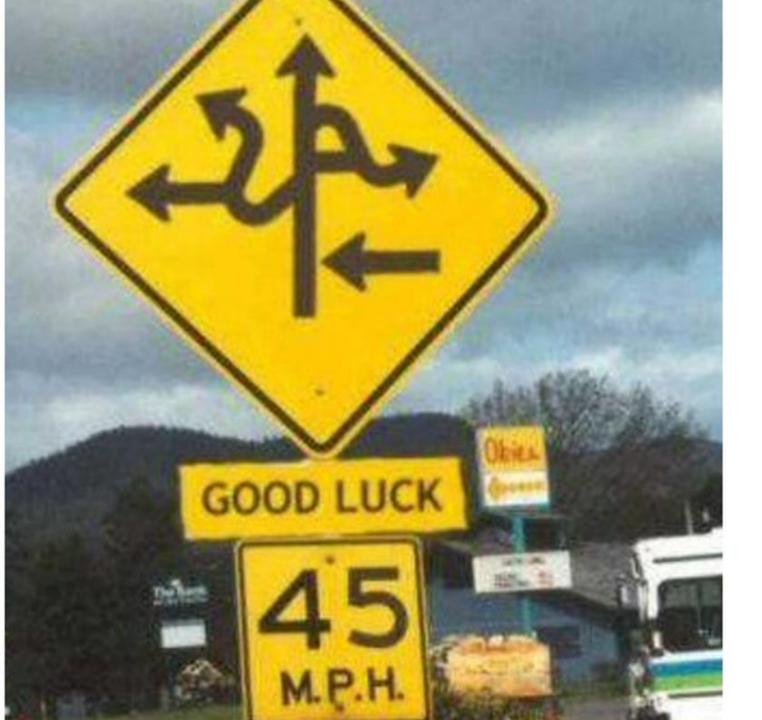


Global Influences

Enormous RISKS to the economy, some of which are out of our control

- Geopolitical events:
 International Pariahs add
 Russia to the list
- War in Israel could expand into wider conflict
- Energy Purchasing oil from less than friendly countries





Data to Watch

Forecasts are speculative, monitor monthly data

- Employment growth
- Unemployment levels
- Progress on subduing inflation

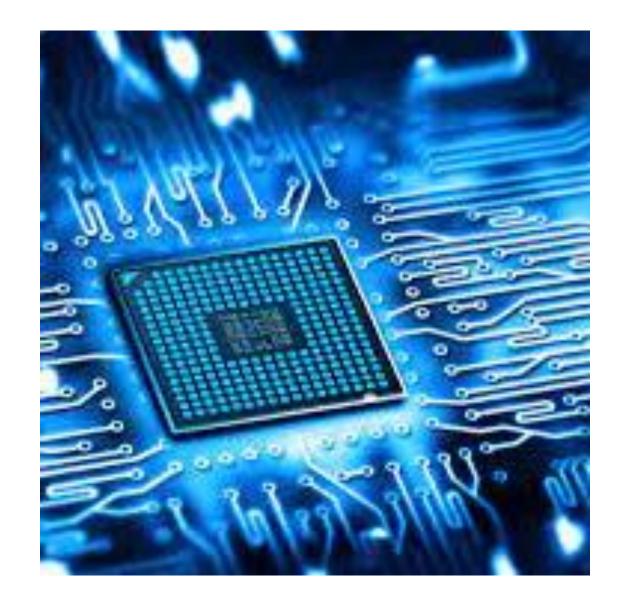
Economic Summary



- The near term will be difficult, but absolutely necessary. The Fed needs to stay the course.
- Look for interest rates to remain elevated through 2024.
- Tightening labor markets.
- Slower retail sales (temporarily).
- Inflation higher in Phoenix than U.S.
- Housing Affordability remains an issue.

Arizona & Greater Phoenix

- Strong job growth likely to slow in 2023.
- Build upon economic development successes (semiconductors, electrical car & battery manufacturers and suppliers).
- Single family housing is under lots of pressure.
- Rental housing still positive, but transaction volume will slow.



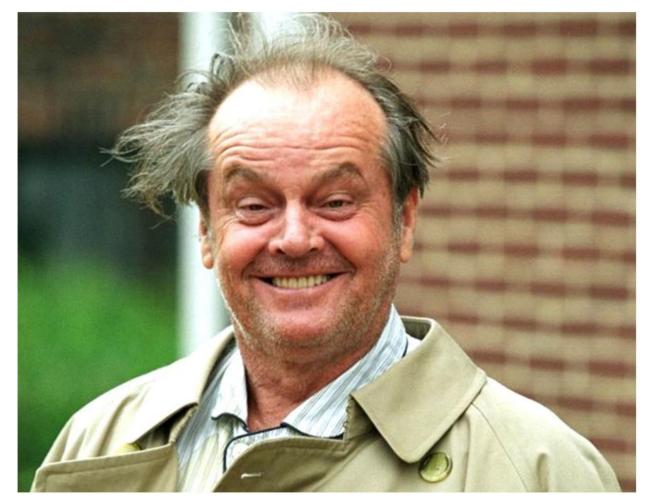
Arizona & Greater Phoenix Conclusion Longer Term

- Arizona & Greater Phoenix will continue to grow more rapidly than the U.S.
- Housing will cycle up dramatically but the nature of housing might be changing to higher density to improve affordability.
- The "water issue" will be resolved as water usage becomes more efficient. The price of water will increase.





Have a nice day!





For a quick analysis of important economic data released each week, subscribe to the <u>Monday Morning Quarterback</u>

www.arizonaeconomy.com

(Click on Subscribe to MMQ)

