



# U.S. Economy & Housing Survey

October 2022

VONTIVE.COM



# Table of Contents

Introduction and Commentary	3-4
Survey Observations	5-14
Federal Reserve Influence	15-17
Covariance Statistics	18-24
Sentiment Transition	25-30
Experience Breakout	31-36
Respondent Characteristics	37-39

The information contained in this report involved the assembly of many data elements and is subject to human error. Readers of this report take full responsibility for their own actions, including investment decisions, without any liability to Vontive, Inc. There will usually be differences between projected and actual results, and the differences may be material. We have no liability with respect to the achievement of any projections or forecasts.

# Introduction

Vontive is pleased to release our inaugural U.S. Housing and Economy Survey. The survey is part of our investment in data science and research to monitor the health of the U.S. housing market and outlook for the economy.

We surveyed 1,052 real estate investors and 1,151 consumers. Each panel received the same questions, to enable their views to be compared. We believe ours is the first public survey of its kind comparing real-estate investor and household views of housing and the economy.

The timing of the survey, September 18-24, 2022, overlapped with the Federal Reserve announcement of a 75 basis point interest rate hike. Due to timing and sample size, we were able to measure how a crucial monetary policy change influenced each panel's responses.

The real-estate investor panel provides very significant coverage of non-institutional real estate investors. The consumer panel is nationally representative of households with a  $\pm 4\%$  margin of error.

# Commentary

Our survey tells a complicated story. To differing degrees, real estate investors and consumers believe the economy is recessionary, inflation is accelerating, and home prices have already transitioned from appreciating to declining.

While pessimistic, expectations are not severe. For example, at the median, real estate investors of all experience levels expect home price will decline ~7% in over the next 12 months. And they believe rents will appreciate ~3%. The beliefs captured by our survey portray a more modest “housing reset” than the 2008 U.S. Housing Crisis.

While the survey does not provide clearcut answers about the housing market or roadmap for real estate investors, it does reinforce our belief in financing investments that add value to properties and create affordable rental housing. If prices fall and rents appreciate, real estate investors who acquire and improve those assets will profit.

We encourage lenders and financial institutions to use the survey in thinking through being long home values and their macro risk exposure. Some of the data points may help define stress scenarios for loss exposure.

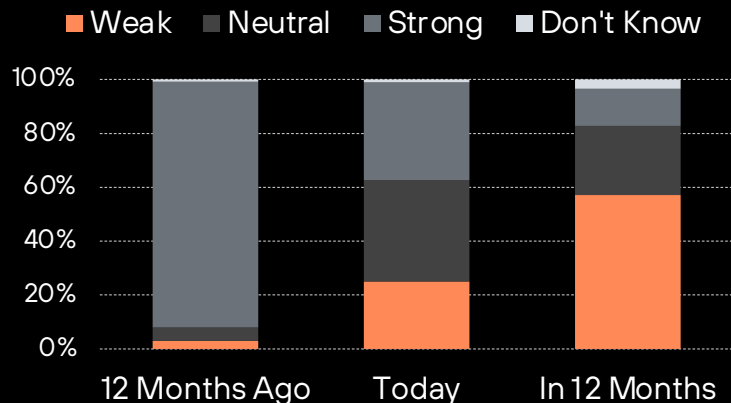


# General Observations

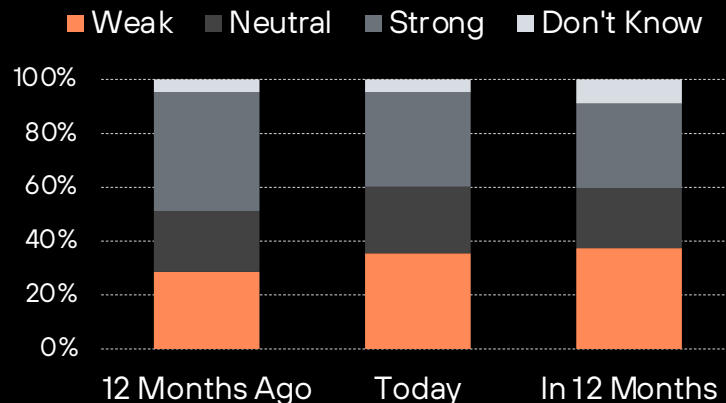
# Housing Market

Real estate investors believe the housing market will weaken over the next twelve months. In contrast, a majority of households believe the housing market is neutral or strong today and will remain there in twelve months.

## Real Estate Investor Panel



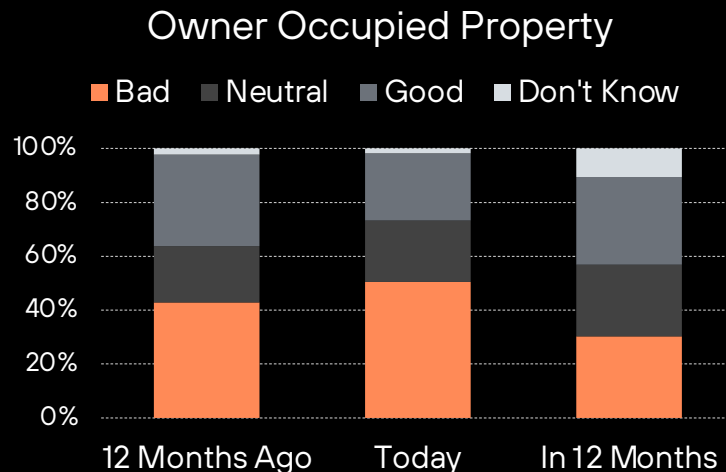
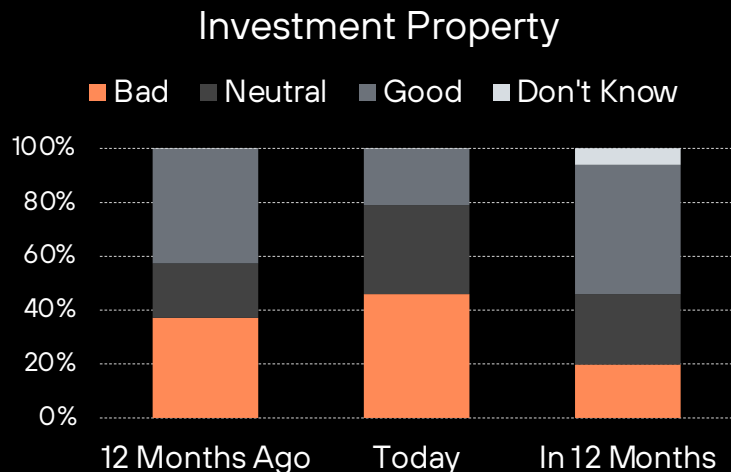
## Consumer Panel



Question: How would you describe the U.S. housing market? Weak equals "Very Weak" + "Weak." "Strong" equals "Strong" + "Very Strong."

# Good or Bad Time to Buy

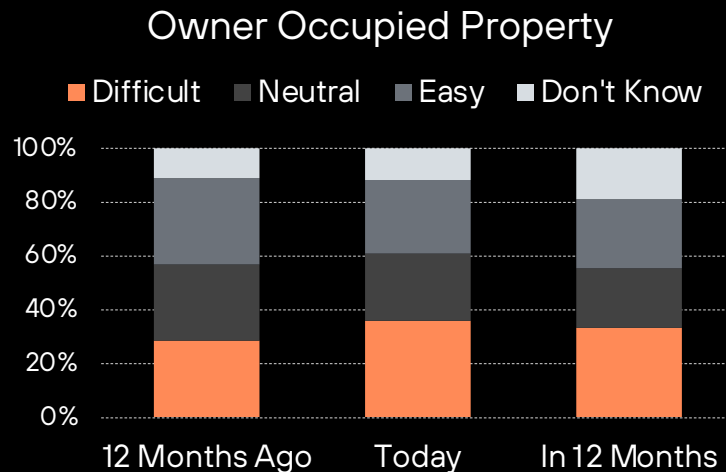
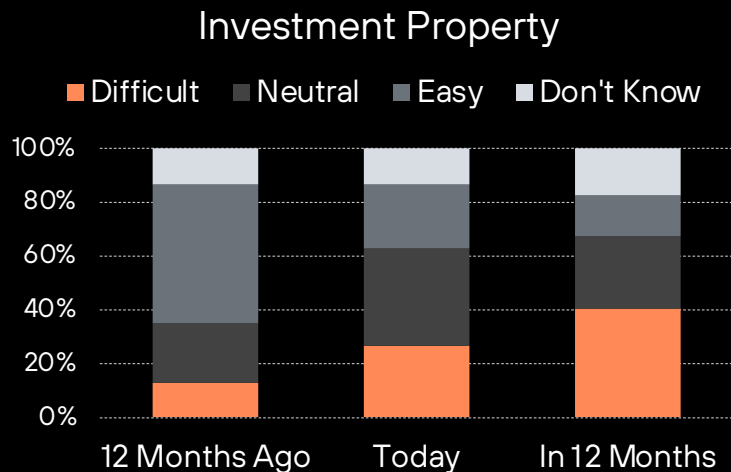
Real estate investors believe the current market is the least favorable time for buying an investment property, and conditions will improve in twelve months. A slight majority of consumers believe now is a bad time to buy a home, and conditions will improve in a year.



Questions: Real estate investors were asked, "Would you consider it a good or bad time to buy an investment property?" Consumers were asked, "Would you consider it a good or bad time to buy a home?" "Bad" equals "Very Bad" + "Bad." "Good" equals "Good" + "Very Good." "Don't Know" responses excluded.

# Mortgage Credit Availability

Real estate investors believe getting a mortgage has become more difficult, and credit will tighten over the next year. Meaningful percentages of real estate investors and consumers indicated they do not know if getting a mortgage is easy or difficult.



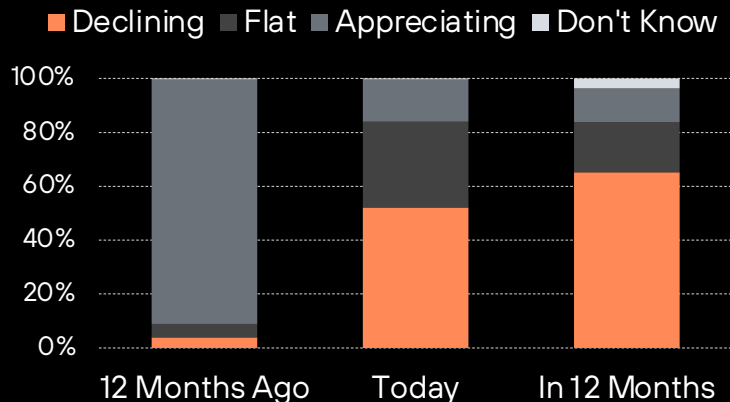
Question for real estate investors: How difficult or easy is getting a mortgage for an investment property? Question for consumers: How difficult or easy is getting a mortgage for a home? Difficult equals "Very Difficult" + "Difficult." "Easy" equals "Easy" + "Very Easy."



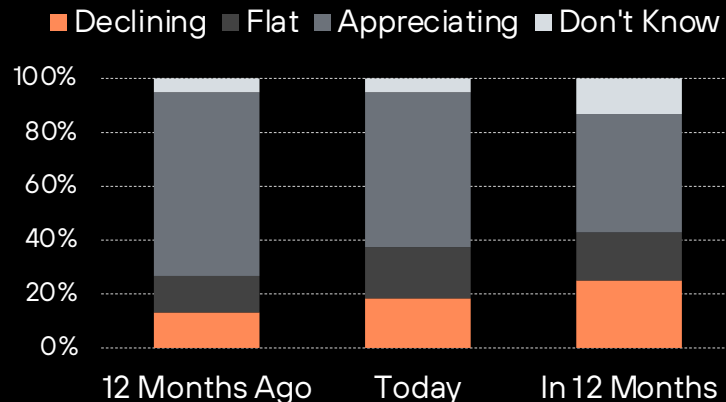
# Trajectory of Home Prices

Real estate investors believe home values already transitioned from appreciation to decline, and prices will be depreciating in a year. Consumers believe home values are flat or appreciating, but price appreciation will compress in twelve months.

## Real Estate Investor Panel



## Consumer Panel

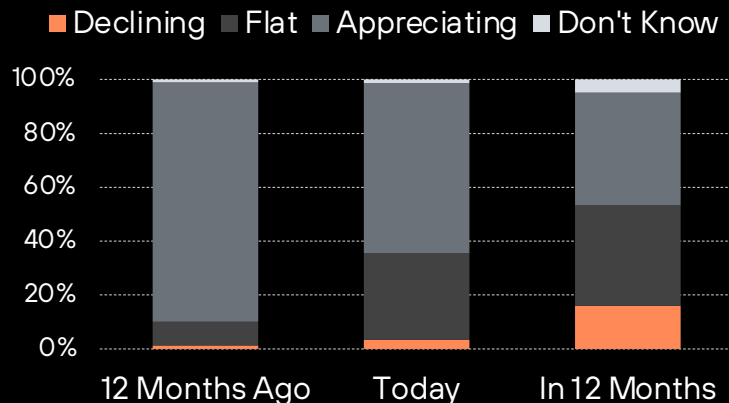


Question: What is the trajectory of home prices? Declining equals "Significantly Declining" + "Declining." "Appreciating" equals "Appreciating" + "Significantly Appreciating."

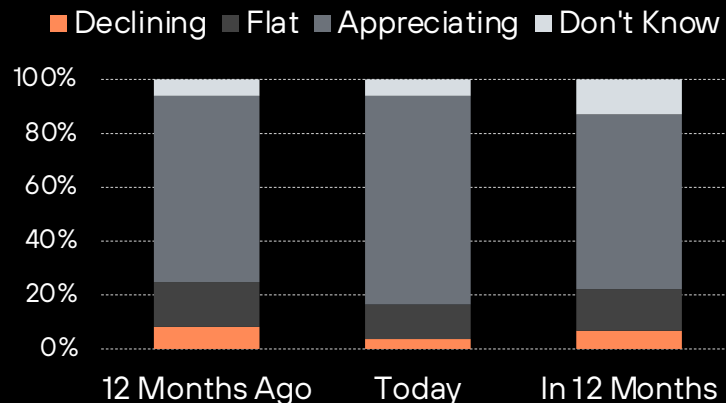
# Trajectory of Rents

Real estate investors and households believe rents are currently appreciating. Whereas consumers believe rents will continue a trend of appreciating, real estate investors expect rents will stabilize over the next year.

## Real Estate Investor Panel



## Consumer Panel



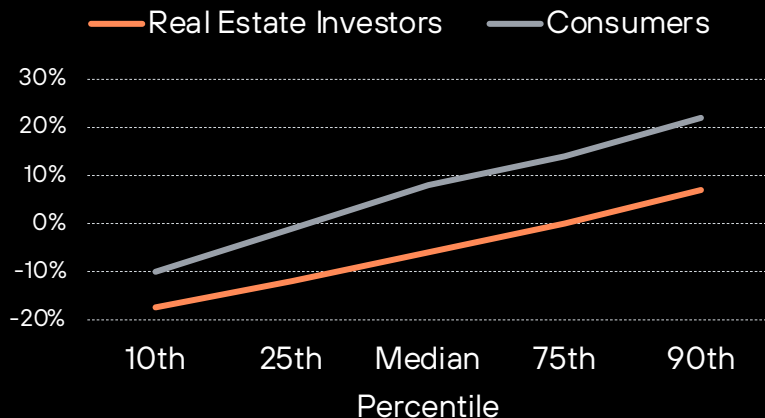
Question: What is the trajectory of rents? Declining equals "Significantly Declining" + "Declining." "Appreciating" equals "Appreciating" + "Significantly Appreciating."

# Expected Change in House Prices & Rents

Real estate investors and consumers were asked how much house prices and rents will change over the next 12 months for investment and owner-occupied properties, respectively.

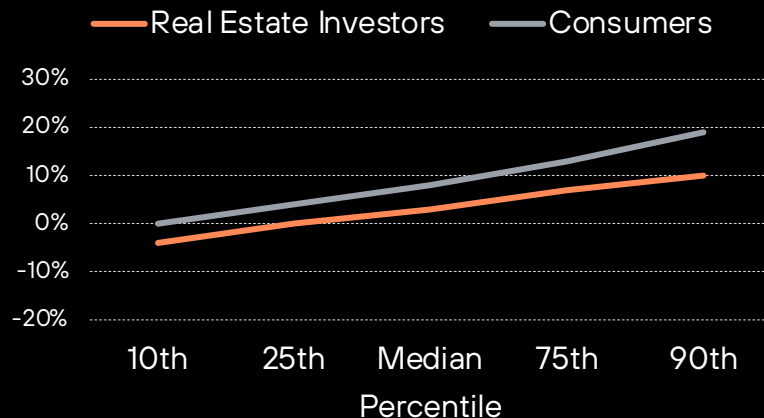
Whereas consumers believe prices and rents will increase, real estate investors expect home prices to decline and rents to appreciate less over the next year.

## Forward 12-Month Price Change



Question: How much will the average home price change over the next twelve months?

## Forward 12-Month Rent Change

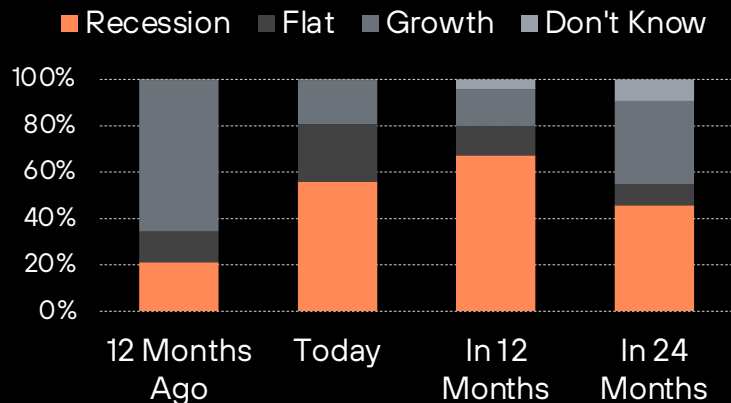


Question: How much will the average rent change over the next twelve months?

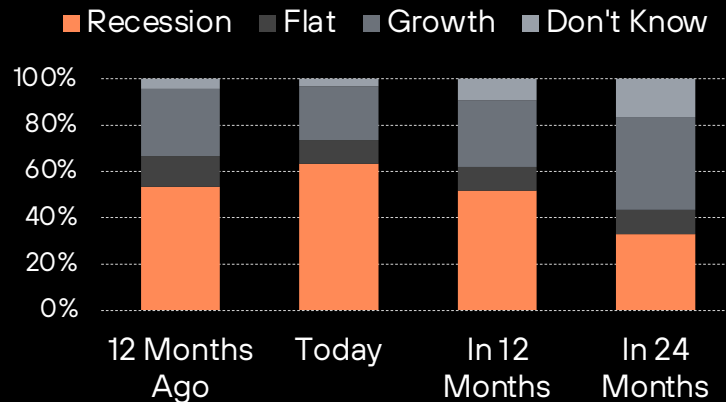
# Economy

Real estate investors and consumers are pessimistic about the economy. Both believe the economy is in a recession today, and a transition back is not expected until two years from today. Interestingly, 53% of consumers believe the economy was in a recession 12 months ago.

## Real Estate Investor Panel



## Consumer Panel

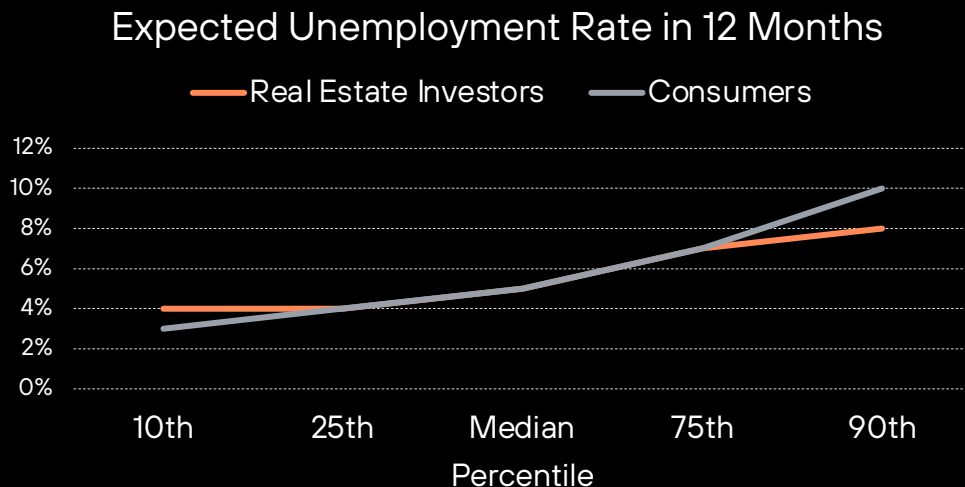


Question: How would you describe the U.S. economy? Recession equals "Depression" + "Severe Recession" + Recession + Mild Recession." Growth equals "Mild Growth" + "Growth" + "Strong Growth."

# Unemployment

Real estate investors believe the unemployment rate will be 5.61% a year from now. Consumers believe the unemployment rate will be 5.74%, modestly more pessimistic on average.

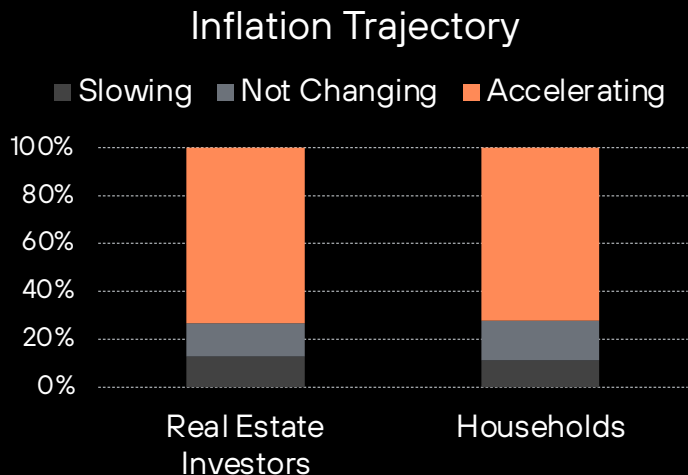
At the 90th percentile, reflecting the most pessimistic view of our survey panels, real-estate investors believe unemployment will rise to 8% and consumers to 10%.



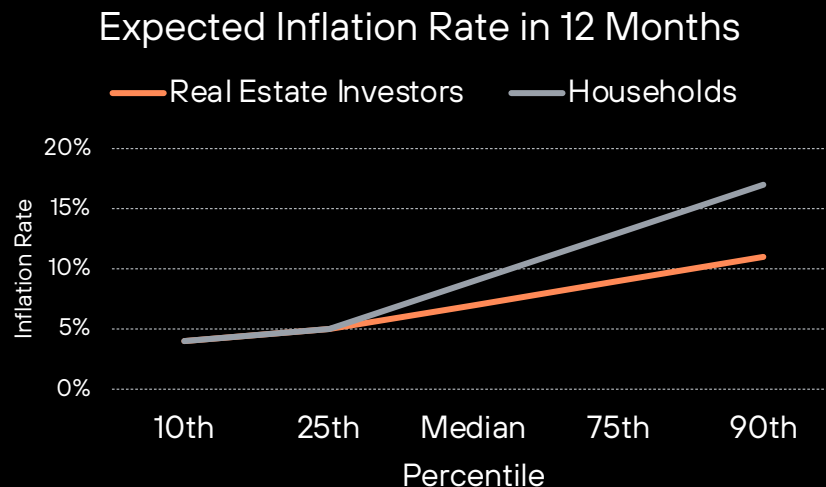
Question: The August 2022 unemployment rate was 3.7%. Twelve months from now, what do you expect the unemployment rate will be?

# Inflation

Real estate investors and households believe inflation is accelerating. On average, real estate investors and consumers believe the inflation rate will be 7.39% and 9.35% in one year, respectively. To the right of the median, consumers expect inflation will be much higher in a year.



Question: "What is the trajectory of inflation?" "Slowing" equals "Significantly Slowing" + "Slowing." "Accelerating" equals "Accelerating" + "Significantly Accelerating."



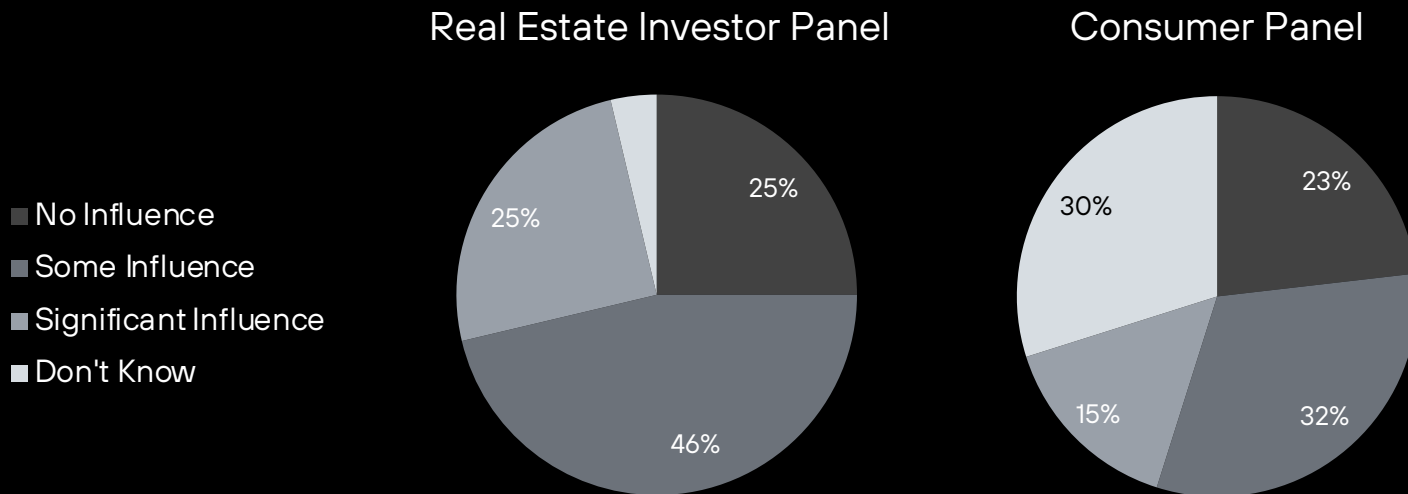
Question: "Twelve months from now, what do you expect the annual rate of inflation will be?" "Don't know" was less than 0.2% of responses and excluded from chart.



# September 21<sup>st</sup> Federal Reserve Rate Hike

# Fed influence, reported by respondents

The survey overlapped with the Federal Reserve announcing a 75 bps rate hike on September 21, 2022. 71% of real estate investors and 47% of consumers reported the Fed's action influenced their responses.



Question: "On September 21, the Federal Reserve announced a 75 basis-point hike to the Federal Funds rate. To what extent did the Federal Reserve raising the Federal Funds rate on September 21 influence your responses to this survey?" For Real Estate Investor Panel, n=144. For Consumer Panel, n=164. "Don't Know" is "Don't Know" + "Not Aware of Fed Announcement."



# Fed influence, measured in survey responses

We compared the responses of participants who reported the Fed influenced them to the rest of the sample. The only meaningful difference is in the consumer panel with respondents influenced by the Fed more pessimistic about mortgage credit availability.

Real Estate Investor Panel	
Housing market	-
Mortgage credit availability	-
Trajectory of home prices	-
Expected change in home prices	-
Trajectory of rents	-
Expected change in rents	-
Good or bad time to buy	-
Economy	-
Unemployment	-
Inflation	-

Consumer Panel	
Housing market	-
Mortgage credit availability	✓
Trajectory of home prices	-
Expected change in home prices	-
Trajectory of rents	-
Expected change in rents	-
Good or bad time to buy	-
Economy	-
Unemployment	-
Inflation	-



# Real Estate Investors: Covariance Statistics

# Market Health, Prices, and Rents in 12 Months

There is a positive covariance between real estate investors believing the housing market will be weak and house prices will be declining in a year. There's a somewhat inverse relationship for the trajectory of rents in twelve months.

		Housing Market Health		
		Weak	Neutral	Strong
House Price Trajectory	Significantly Declining	25%	0%	0%
	Declining	27%	13%	3%
	Flat	6%	8%	5%
	Appreciating	1%	4%	6%
	Significantly Appreciating	1%	1%	0%

		Housing Market Health		
		Weak	Neutral	Strong
Rent Trajectory	Significantly Declining	2%	0%	0%
	Declining	10%	4%	1%
	Flat	24%	12%	4%
	Appreciating	17%	9%	8%
	Significantly Appreciating	6%	1%	1%

# Good Time to Buy, Prices, and Rents in 12 Months

There is a modest relationship between real estate investors believing it will be a good time to buy in 12 months and also expecting house prices will be declining and rents will be appreciating in a year.

		Good Time to Buy		
		Bad	Neutral	Good
House Price Trajectory	Significantly Declining	8%	4%	13%
	Declining	10%	13%	22%
	Flat	2%	8%	10%
	Appreciating	1%	3%	6%
	Significantly Appreciating	1%	1%	1%

		Good Time to Buy		
		Weak	Neutral	Strong
Rent Trajectory	Significantly Declining	1%	0%	1%
	Declining	5%	5%	6%
	Flat	5%	13%	21%
	Appreciating	6%	9%	19%
	Significantly Appreciating	3%	2%	4%

# Economy, Prices, and Rents in 12 Months

There is a consistency between real estate investors believing house prices will be declining and the economy will be in a recession in a year. There is also covariance between believing that house prices will be declining in 12 months and inflation is currently accelerating.

		Economy		
		Recession	Flat	Growing
House Price Trajectory	Significantly Declining	23%	1%	1%
	Declining	35%	3%	5%
	Flat	8%	3%	7%
	Appreciating	4%	3%	4%
	Significantly Appreciating	1%	1%	1%

		Economy		
		Slowing	Flat	Accelerating
Rent Trajectory	Significantly Declining	2%	0%	0%
	Declining	12%	1%	2%
	Flat	28%	5%	7%
	Appreciating	23%	4%	7%
	Significantly Appreciating	6%	1%	2%

# Inflation, Prices, and Rents in 12 Months

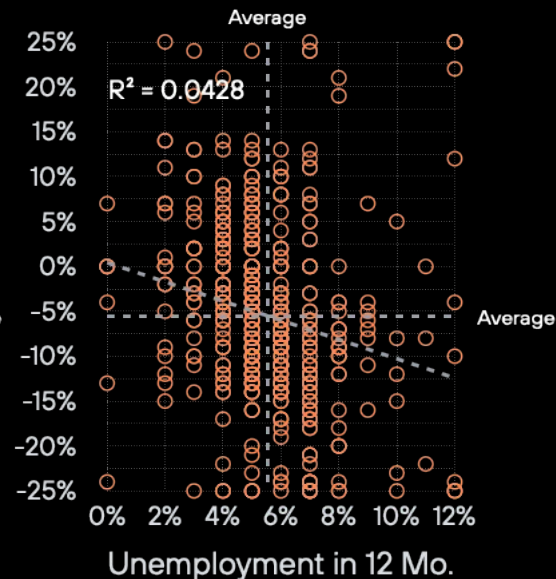
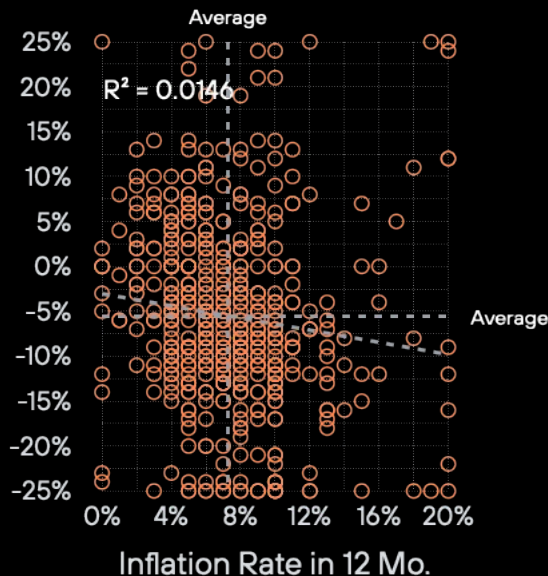
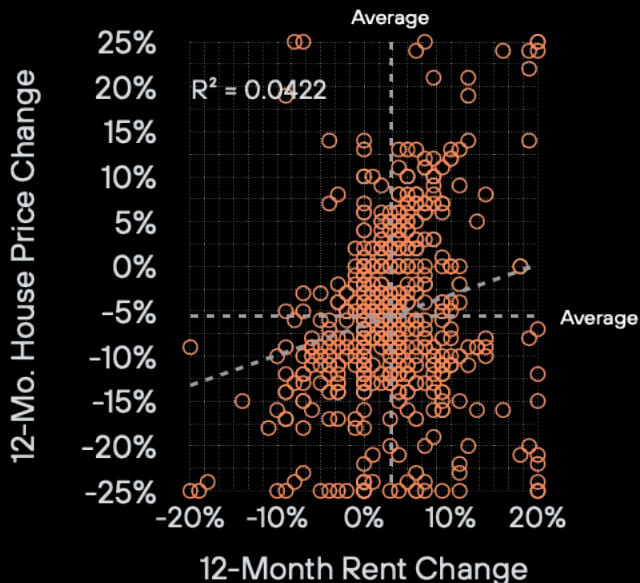
There is a strong inverse relationship between real estate investors believing house prices will be declining in a year, and the inflation rate is currently accelerating. There is weak positive relationship between believing that inflation is accelerating, and rents will be appreciating.

		Inflation		
		Slowing	Flat	Accelerating
House Price Trajectory	Significantly Declining	2%	3%	21%
	Declining	5%	5%	33%
	Flat	4%	3%	12%
	Appreciating	2%	2%	6%
	Significantly Appreciating	0%	0%	3%

		Inflation		
		Slowing	Flat	Accelerating
Rent Trajectory	Significantly Declining	0%	0%	2%
	Declining	2%	3%	10%
	Flat	6%	6%	27%
	Appreciating	5%	5%	26%
	Significantly Appreciating	1%	0%	7%

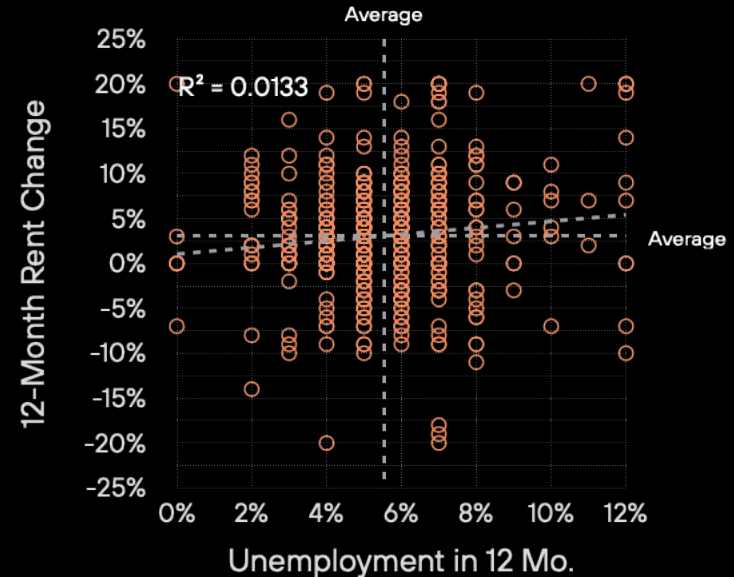
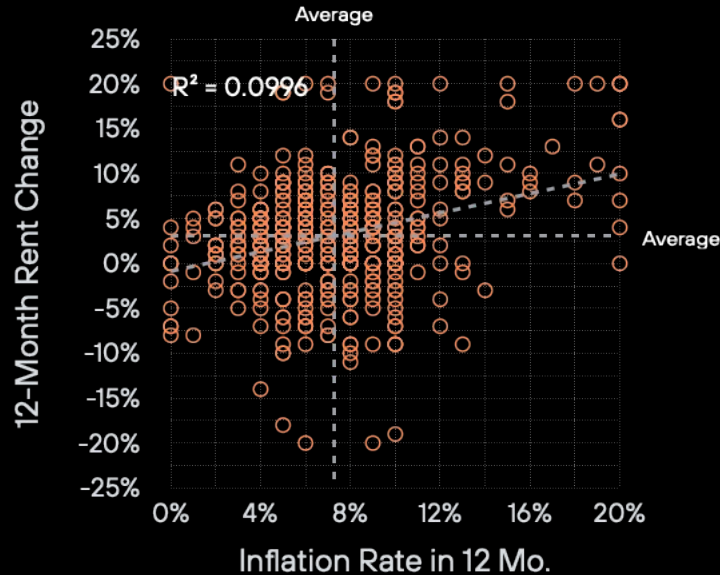
# HPA/HPD Uncorrelated with Other Estimates

While real estate investors believe over the next year house prices will decline, inflation will be elevated, and the unemployment rate will rise, their point estimate of house price change over 12 months does not correlate with other point estimates.



# Rent Change Estimate Uncorrelated

While real estate investors believe over the rents will modestly increase, inflation will be elevated, and the unemployment rate will rise, their point estimates of rent change over 12 months does not correlate with other point estimates.

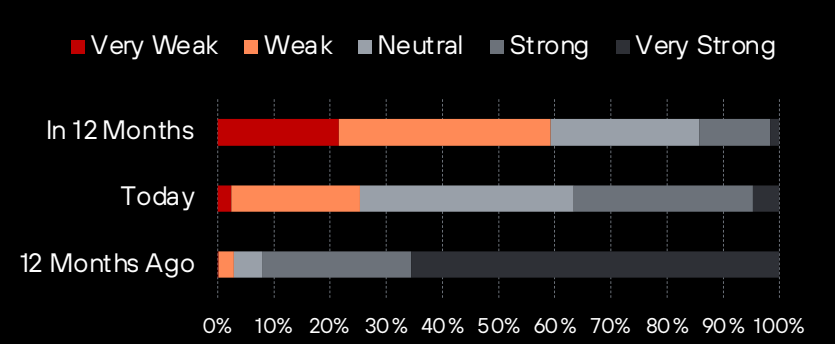






# Real Estate Investors: Sentiment Transition

# Housing Market

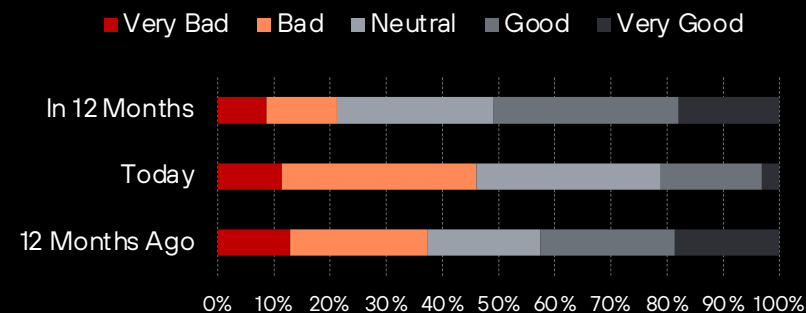


		Today					
		Very Weak	Weak	Neutral	Strong	Very Strong	Total
12 Months Ago	Very Weak	0%	0%	0%	0%	0%	0%
	Weak	1%	1%	0%	0%	0%	3%
	Neutral	0%	2%	1%	1%	0%	5%
	Strong	1%	6%	11%	6%	2%	26%
	Very Strong	1%	12%	26%	25%	3%	66%
	Total	2%	22%	38%	32%	5%	100%

		In 12 Months					
		Very Weak	Weak	Neutral	Strong	Very Strong	Total
Today	Very Weak	2%	0%	0%	0%	0%	2%
	Weak	13%	6%	4%	1%	0%	23%
	Neutral	6%	24%	6%	2%	1%	39%
	Strong	1%	7%	14%	9%	1%	32%
	Very Strong	0%	0%	1%	2%	0%	4%
	Total	22%	37%	26%	13%	2%	100%

		In 12 Months					
		Very Weak	Weak	Neutral	Strong	Very Strong	Total
12 Months Ago	Very Weak	0%	0%	0%	0%	0%	0%
	Weak	0%	1%	1%	0%	0%	3%
	Neutral	2%	1%	1%	1%	0%	5%
	Strong	6%	10%	6%	4%	0%	27%
	Very Strong	13%	25%	18%	8%	1%	65%
	Total	22%	38%	26%	13%	2%	100%

# Good or Bad Time to Buy



12 Months Ago

Very Bad

Bad

Neutral

Good

Very Good

Total

Today					
Very Bad	Bad	Neutral	Good	Very Good	Total
4%	6%	2%	1%	0%	13%
3%	11%	8%	2%	0%	24%
2%	7%	8%	3%	0%	20%
2%	7%	8%	6%	1%	24%
1%	4%	6%	6%	2%	19%
11%	35%	33%	18%	3%	100%

In 12 Months						
Today	Very Bad	Bad	Neutral	Good	Very Good	Total
	4%	5%	2%	1%	0%	11%
	9%	15%	8%	2%	0%	35%
	6%	13%	9%	4%	0%	33%
	1%	4%	6%	5%	1%	17%
	1%	0%	1%	1%	0%	3%
	22%	37%	26%	13%	2%	100%

12 Months Ago

Very Bad

Bad

Neutral

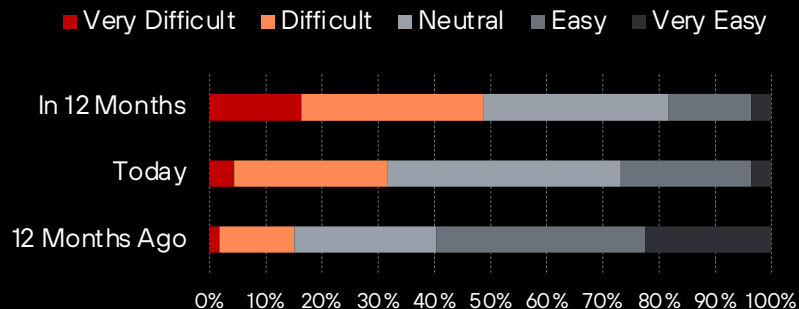
Good

Very Good

Total

In 12 Months					
Very Bad	Bad	Neutral	Good	Very Good	Total
0%	2%	4%	5%	2%	13%
2%	2%	7%	11%	4%	25%
2%	3%	6%	6%	4%	21%
3%	3%	6%	6%	5%	23%
2%	4%	5%	6%	2%	18%
9%	13%	28%	33%	18%	100%

# Mortgage Credit Availability

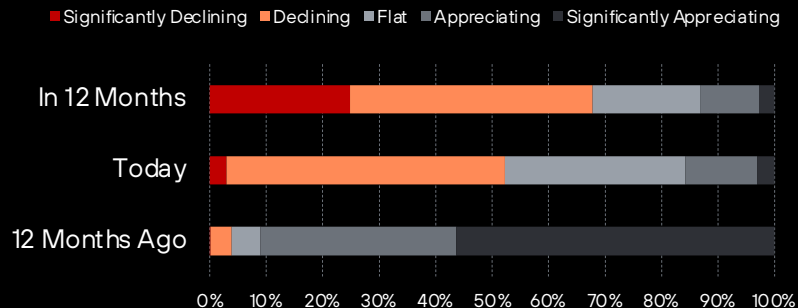


12 Months Ago	Today					
	Very Difficult	Difficult	Neutral	Easy	Very Easy	Total
	2%	0%	0%	0%	0%	2%
	1%	10%	2%	0%	0%	14%
	0%	7%	16%	1%	0%	25%
	0%	7%	15%	13%	0%	37%
	0%	2%	8%	8%	4%	23%
	4%	27%	42%	23%	4%	100%

In 12 Months						
Today	Very Difficult	Difficult	Neutral	Easy	Very Easy	Total
	3%	0%	0%	0%	0%	4%
	9%	15%	3%	0%	0%	27%
	3%	15%	20%	3%	0%	42%
	1%	3%	9%	10%	1%	23%
	0%	0%	0%	1%	2%	4%
	16%	33%	33%	15%	4%	100%

		In 12 Months					
		Very Weak	Weak	Neutral	Strong	Very Strong	Total
12 Months Ago	Very Difficult	2%	0%	0%	0%	0%	2%
	Difficult	3%	6%	3%	1%	0%	14%
	Neutral	4%	8%	12%	1%	0%	26%
	Easy	3%	12%	11%	8%	0%	35%
	Very Easy	3%	6%	7%	4%	3%	23%
	Total	16%	33%	33%	15%	3%	100%

# Trajectory of Home Prices

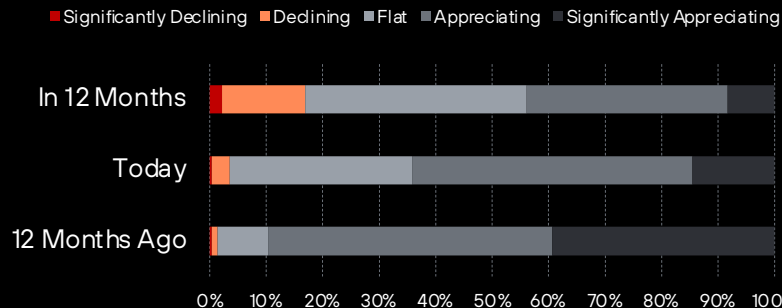


12 Months Ago	Today					
	Sig. Depr.	Depr.	Flat	Apprn.	Sig. Apprn.	Total
	Sig. Dep.	0%	0%	0%	0%	0%
	Depreciating	0%	2%	0%	1%	4%
	Flat	1%	3%	1%	0%	5%
	Appreciating	1%	18%	11%	3%	35%
	Sig. App.	1%	27%	19%	9%	56%
	Total	3%	49%	32%	13%	100%

		In 12 Months					
		Sig. Depr.	Depr.	Flat	Apprn.	Sig. Apprn.	Total
Today	Sig. Dep.	1%	1%	1%	0%	0%	3%
	Depreciating	19%	19%	9%	2%	0%	49%
	Flat	4%	19%	6%	3%	0%	32%
	Appreciating	0%	3%	3%	4%	1%	13%
	Sig. App.	0%	1%	1%	1%	1%	3%
	Total	25%	43%	19%	10%	2%	100%

		In 12 Months					
		Sig. Depr.	Depr.	Flat	Apprn.	Sig. Apprn.	Total
12 Months Ago	Sig. Dep.	0%	0%	0%	0%	0%	0%
	Depreciating	1%	1%	1%	0%	1%	4%
	Flat	1%	2%	1%	0%	0%	5%
	Appreciating	6%	17%	7%	4%	2%	35%
	Sig. App.	16%	23%	10%	6%	1%	56%
	Total	25%	43%	19%	10%	3%	100%

# Trajectory of Rents



		Today					
		Sig. Depr.	Depr.	Flat	Apprn.	Sig. Apprn.	Total
12 Months Ago	Sig. Dep.	0.0%	0.0%	0.2%	0.2%	0.0%	0.4%
	Depreciating	0.0%	0.2%	0.4%	0.4%	0.0%	1.0%
	Flat	0.0%	0.2%	2.4%	4.3%	2.2%	9.0%
	Appreciating	0.2%	1.4%	17.5%	24.5%	6.7%	50.2%
	Sig. App.	0.2%	1.4%	12.0%	20.2%	5.7%	39.4%
	Total	0.4%	3.1%	32.4%	49.6%	14.5%	100%

		In 12 Months					
		Sig. Depr.	Depr.	Flat	Apprn.	Sig. Apprn.	Total
Today	Sig. Dep.	0.4%	0.0%	0.0%	0.0%	0.0%	0.4%
	Depreciating	0.6%	0.8%	1.4%	0.2%	0.2%	3.3%
	Flat	1.2%	10.7%	15.8%	4.1%	0.2%	32.1%
	Appreciating	0.0%	2.3%	19.8%	25.9%	2.3%	50.2%
	Sig. App.	0.0%	0.8%	2.7%	4.7%	5.8%	14.0%
	Total	2.3%	14.6%	39.7%	35.0%	8.4%	100%

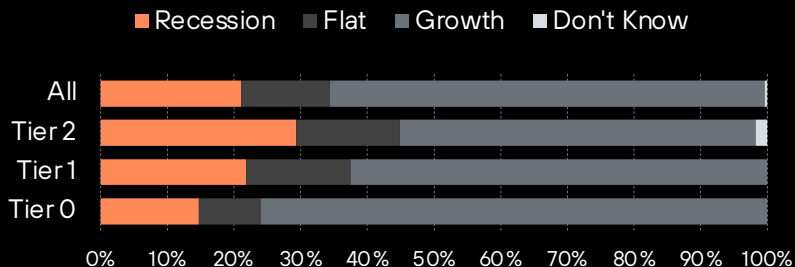
		In 12 Months					
		Sig. Depr.	Depr.	Flat	Apprn.	Sig. Apprn.	Total
12 Months Ago	Sig. Dep.	0.0%	0.2%	0.0%	0.0%	0.2%	0.4%
	Depreciating	0.0%	0.2%	0.4%	0.2%	0.0%	0.8%
	Flat	0.0%	1.2%	3.5%	3.3%	1.0%	8.9%
	Appreciating	0.8%	6.7%	20.1%	18.5%	4.1%	50.2%
	Sig. App.	1.4%	6.3%	15.2%	13.6%	3.0%	39.6%
	Total	2.2%	14.6%	39.2%	35.6%	8.3%	100%



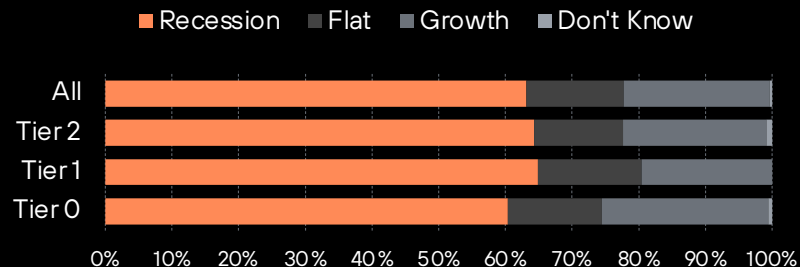
# Real Estate Investors: Experience Breakout

# Economy

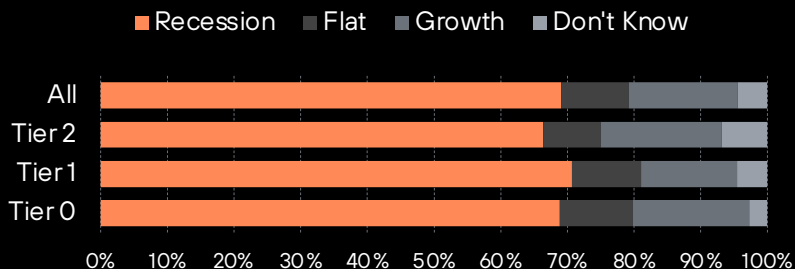
12 Months Ago



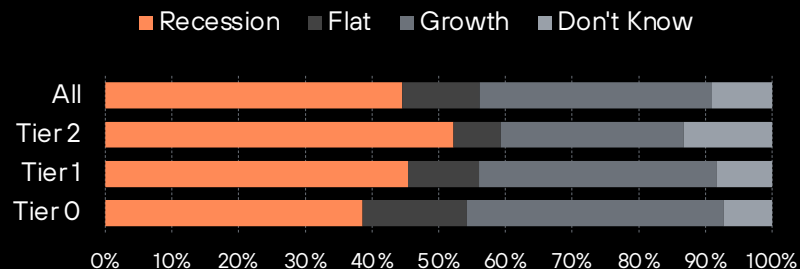
Today



In 12 Months

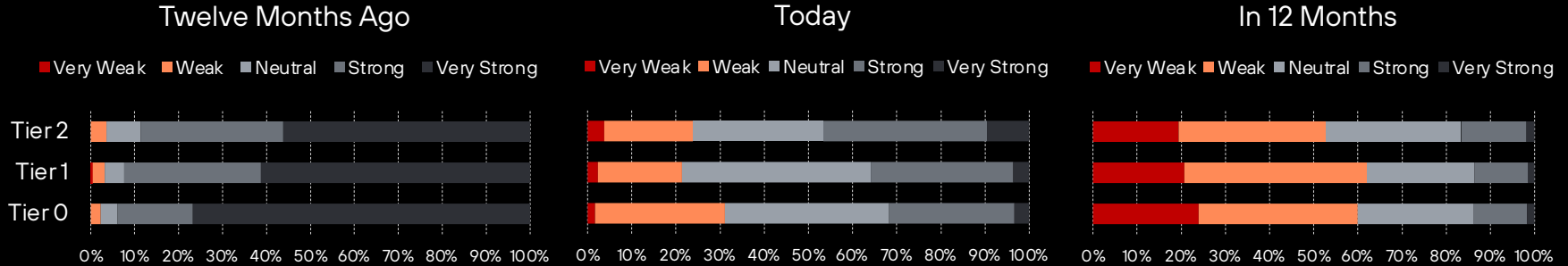


In 24 Months

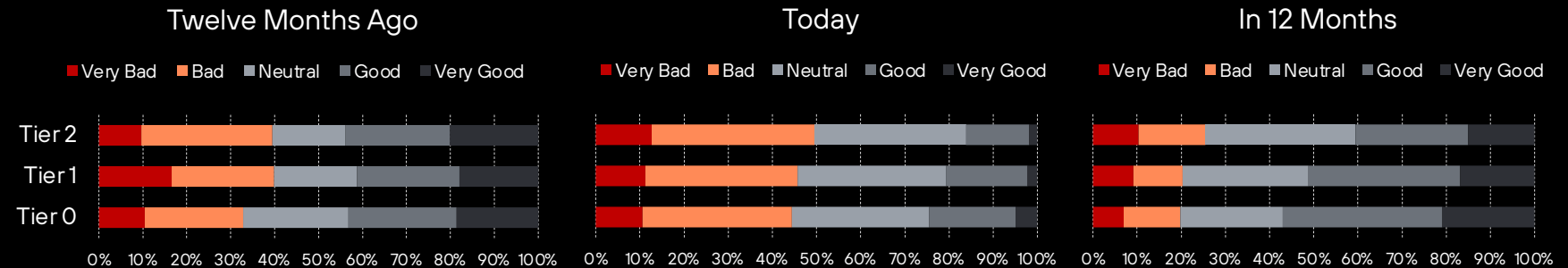




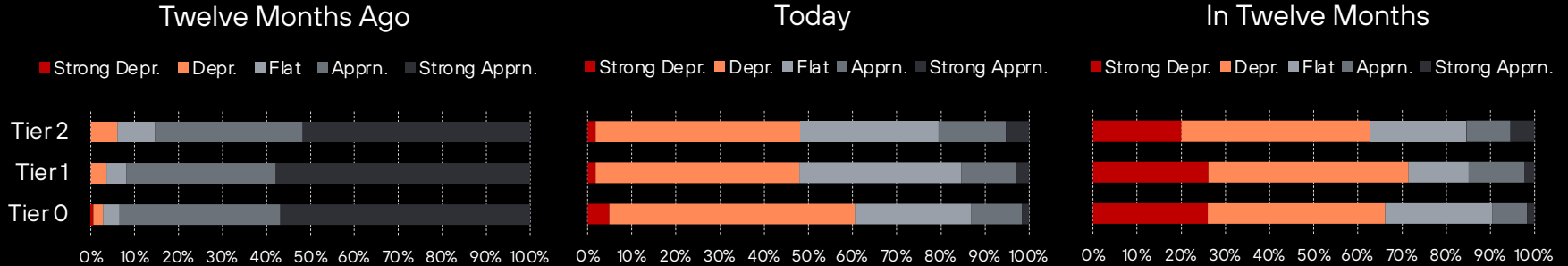
# Housing Market



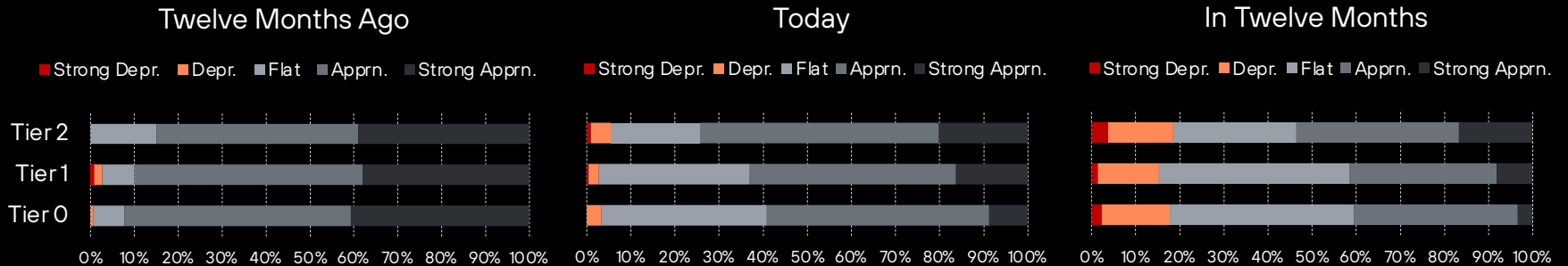
# Good or Bad Time to Buy



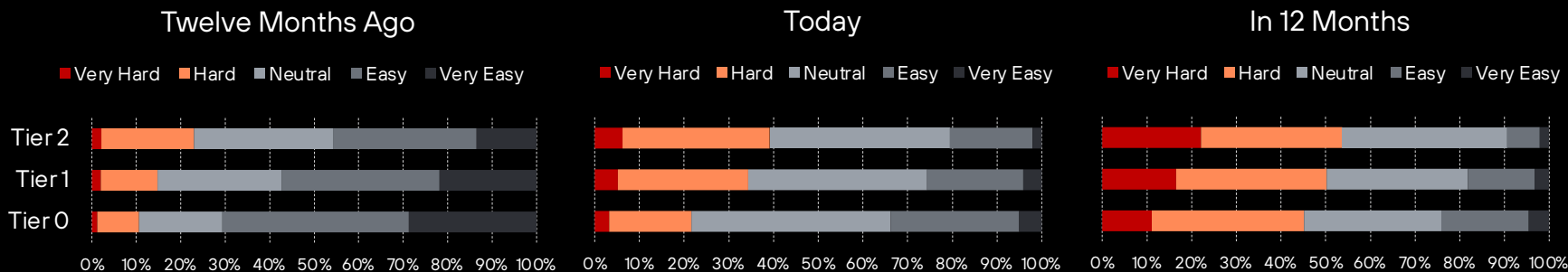
# Trajectory of Home Prices



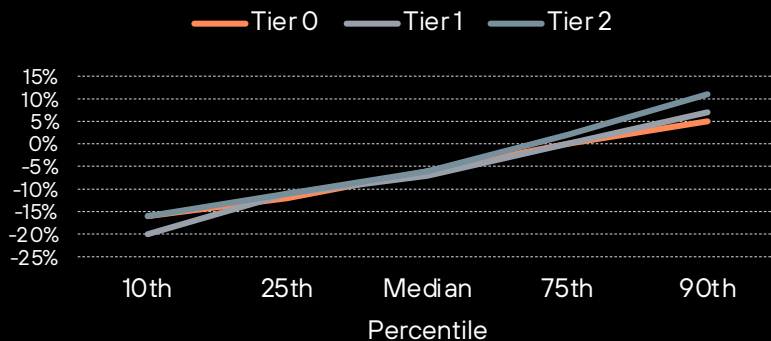
# Trajectory of Rents



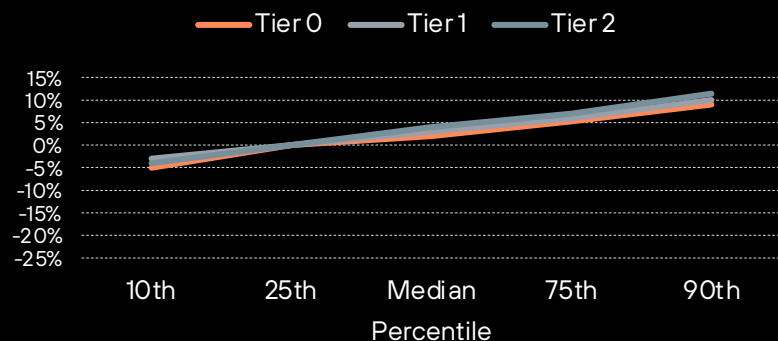
# Mortgage Credit Availability



## Forward 12-Month Price Change

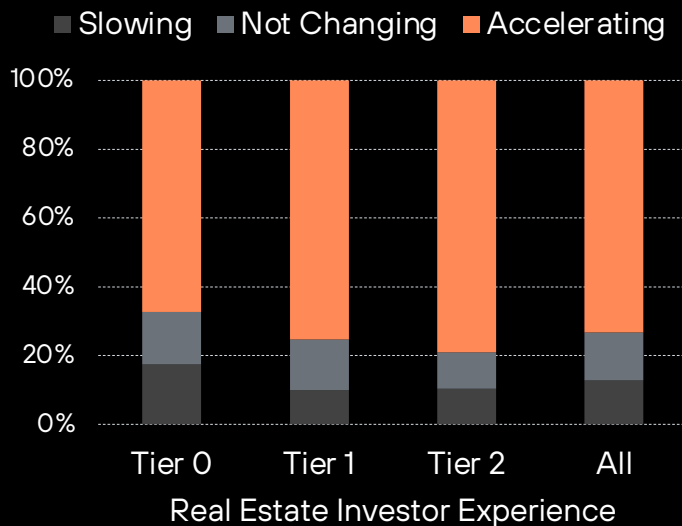


## Forward 12-Month Rent Change



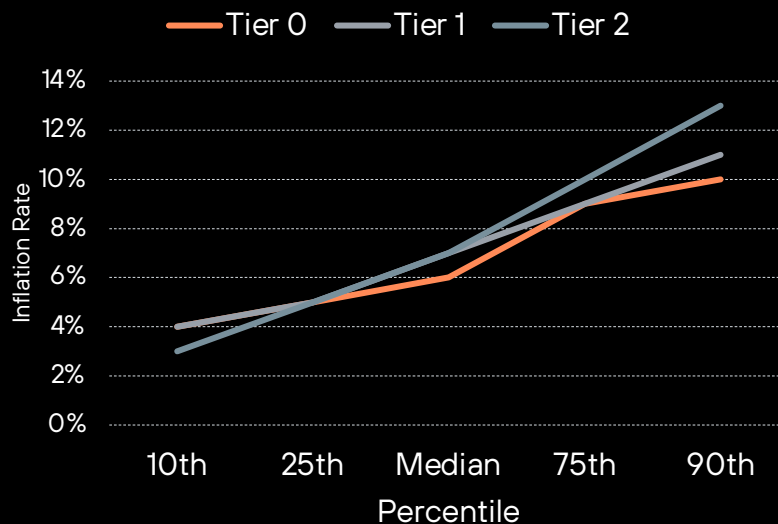
# Inflation

## Inflation Trajectory



Question: "What is the trajectory of inflation?" "Slowing" equals "Significantly Slowing" + "Slowing." "Accelerating" equals "Accelerating" + "Significantly Accelerating."

## Expected Inflation Rate in 12 Months



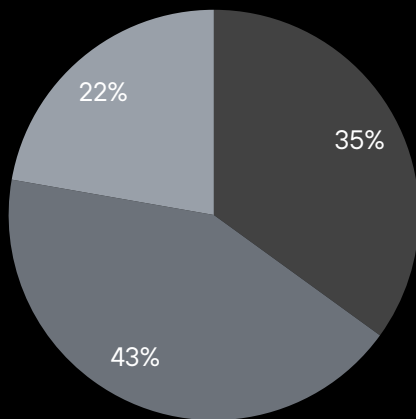
Question: "Twelve months from now, what do you expect the annual rate of inflation will be?" "Don't know" was less than 0.2% of responses and excluded from chart.



# Survey Respondent Characteristics

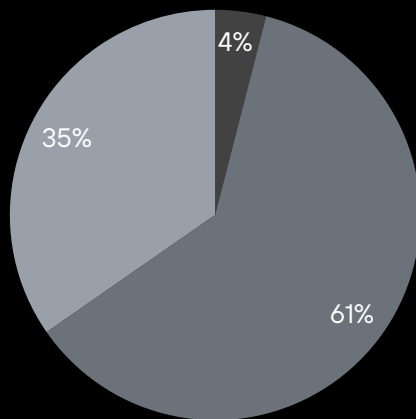
# Real estate investor panel (n=1,052)

## Investing Experience



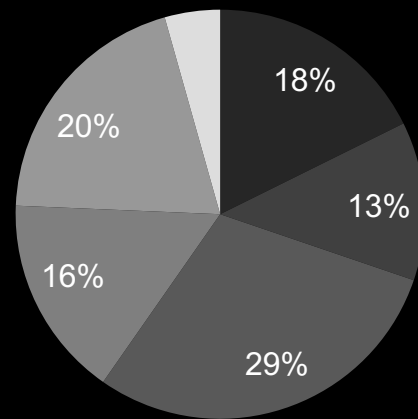
■ Tier 0 ■ Tier 1 ■ Tier 2

## Age Group



■ 18-39 ■ 40-64 ■ 65+

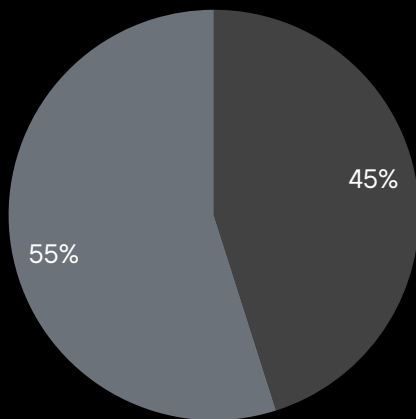
## Region



■ Midwest ■ Northeast ■ Southeast  
■ Southwest ■ West ■ Other

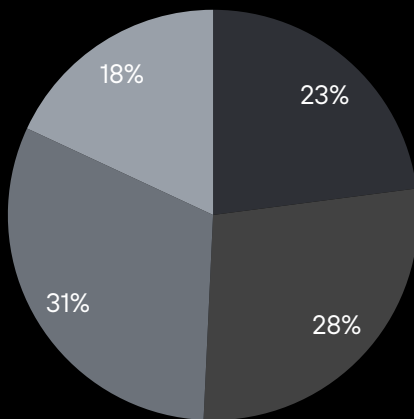
# Consumer panel (n=1,151)

Gender



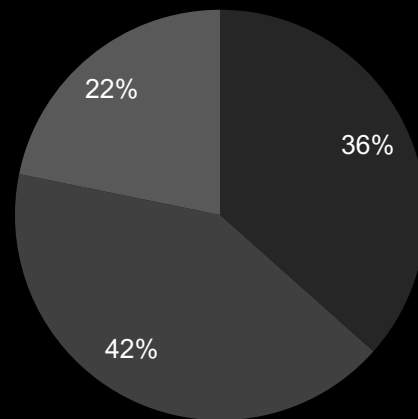
■ Male ■ Female

Age Group



■ 18-29 ■ 30-44 ■ 45-60 ■ 61+

Household Income



■ \$0-\$50k ■ \$50k-\$125k ■ Over \$125k