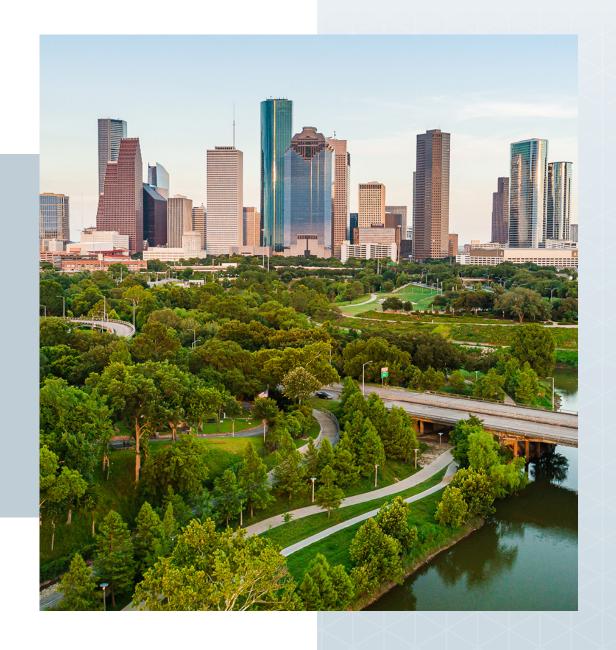
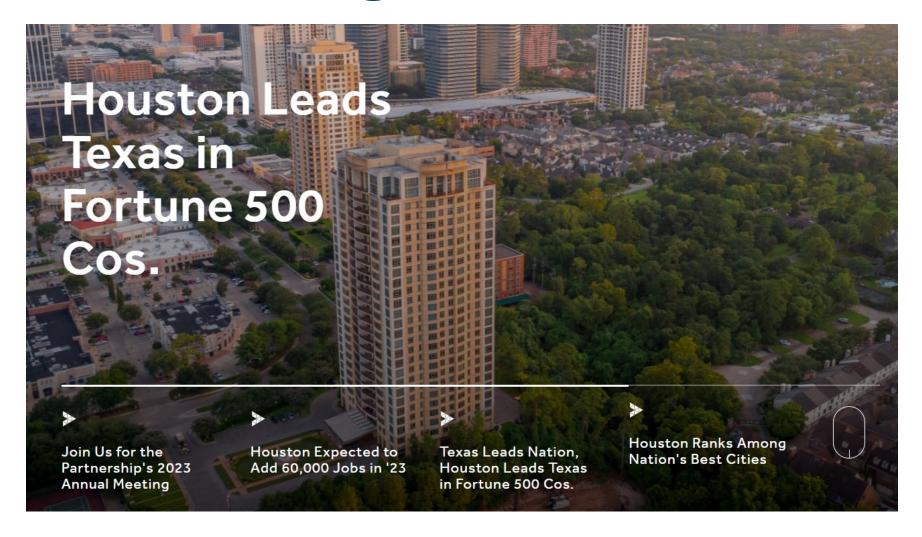
Metro Houston Forecast

Patrick Jankowski
Chief Economist and SVP, Research
January 11, 2023



www.houston.org



Jobs Lost, March – April '20 359,400

Jobs Lost, March - April '20

359,400

Jobs Created, May '20 - Nov '22

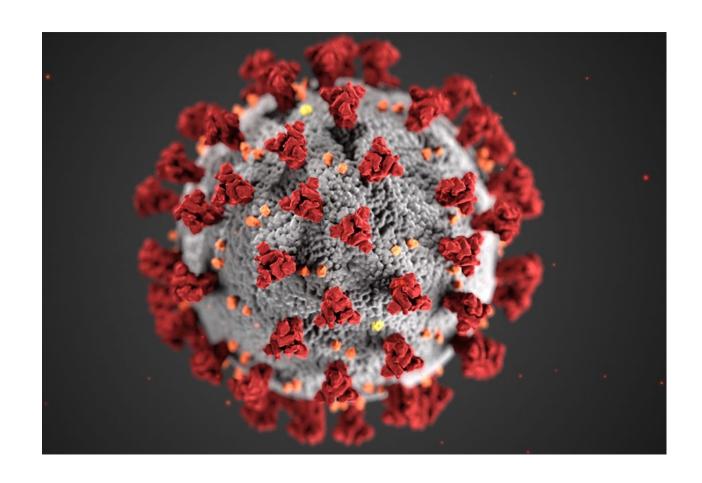
504,200

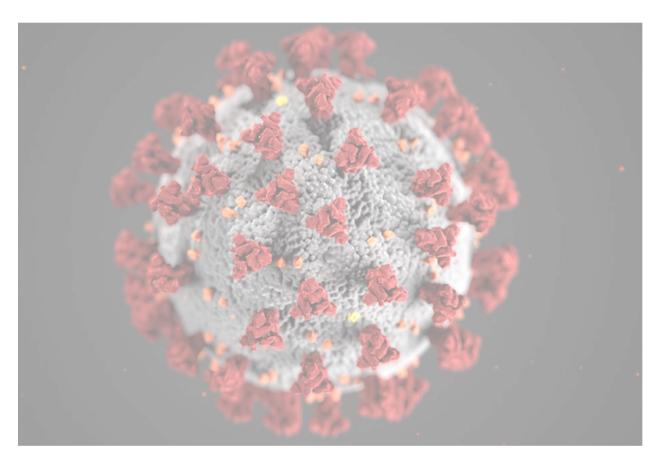
+144,800

Metro Houston Employment



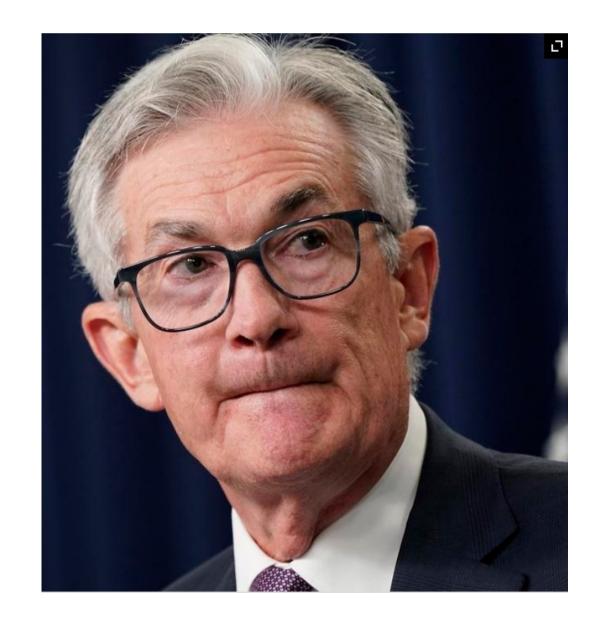
Source: Texas Workforce Commission



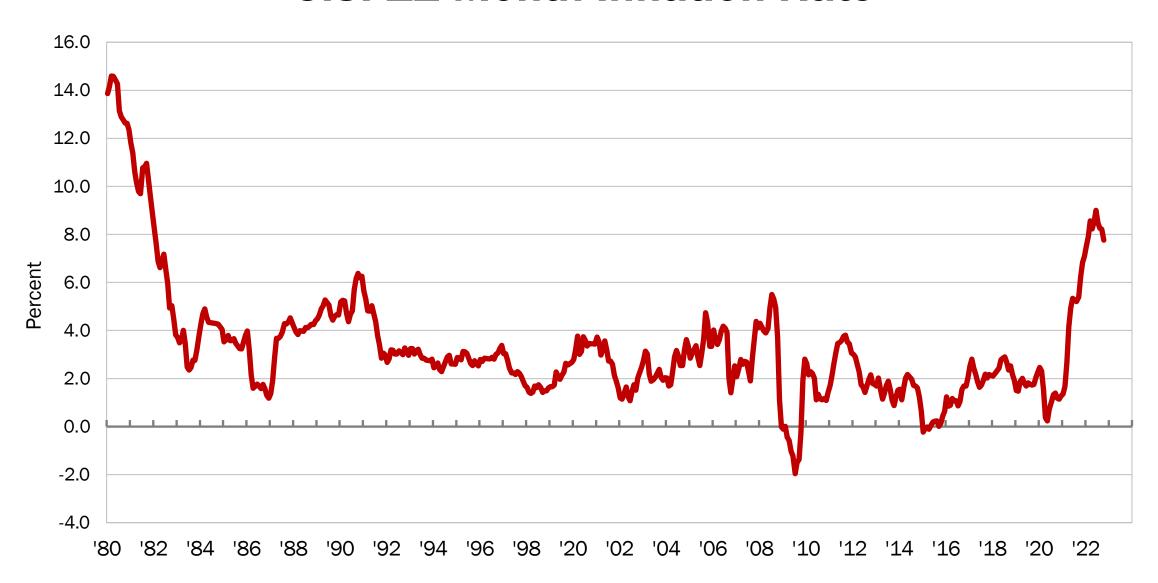




Jerome Powell Chairman U.S. Federal Reserve



U.S. 12-Month Inflation Rate



THE WALL STREET JOURNAL.

U.S. Inflation Eased in November, CPI Report Shows



1-Pound Loaf of White Bread



	October	\$ Price
	'19	1.33
	'22	1.81
1	49¢	1 36.9%

One Gallon Whole Milk



October		\$ Price
'19		3.12
'22		4.18
\$1.07	1	34.1%

1-Pound Lean Ground Beef



October	\$ Price
'19	5.46
'22	6.68
\$1.22	1 22.7%

1-Pound Bag of Potato Chips



	October	\$ Price
	'19	4.39
	'22	6.40
1	\$2.01	1 45.9%

Covid Stimulus Packages



Coronavirus Aid, Relief, and Economic Security Act (CARES)



Coronavirus Response and Consolidated Appropriations Act



American Rescue Plan

\$6.4
Trillion



Coronavirus Aid, Relief, and Economic Security Act (CARES)



Coronavirus Response and Consolidated Appropriations Act



American Rescue Plan

U.S. Expenditures on World War II





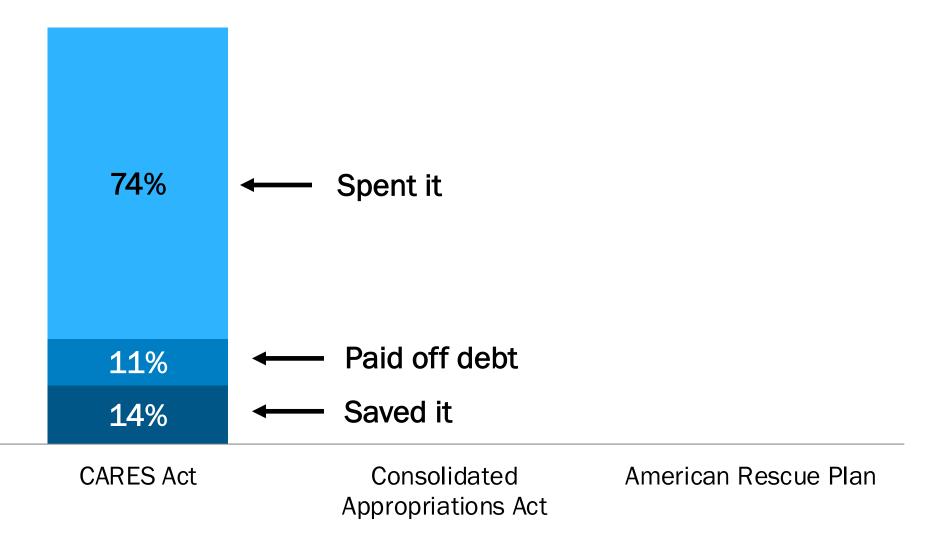


\$5.4 Trillion*

* Inflation adjusted '22 dollars

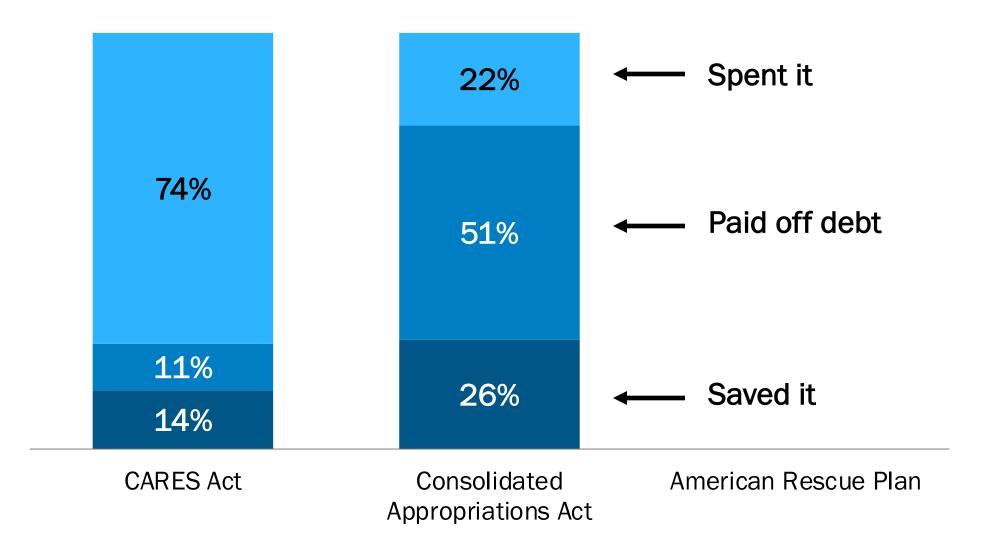
Source: Partnership calculations based on Congressional Research Services data

How Americans Used Their Stimulus Checks



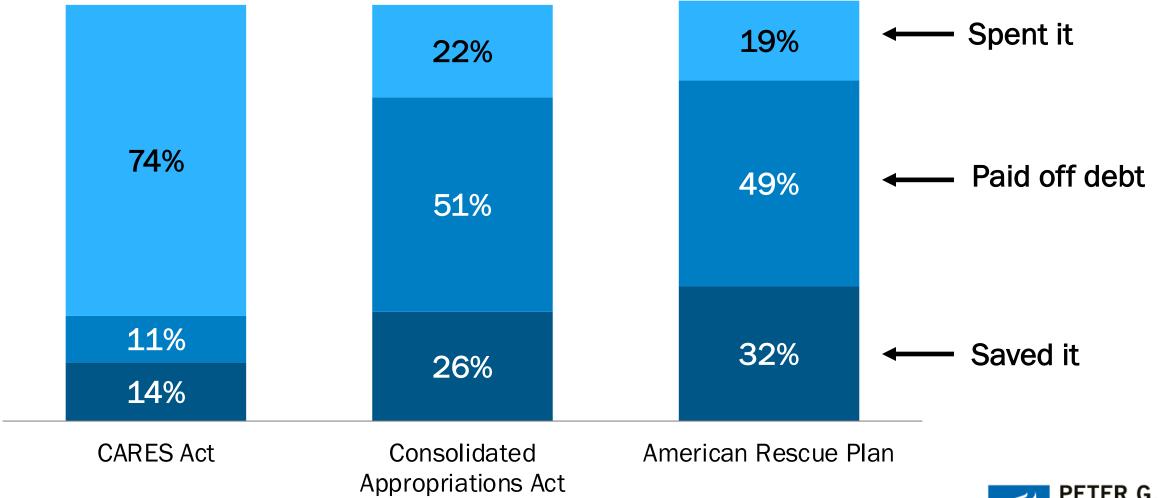


How Americans Used Their Stimulus Checks



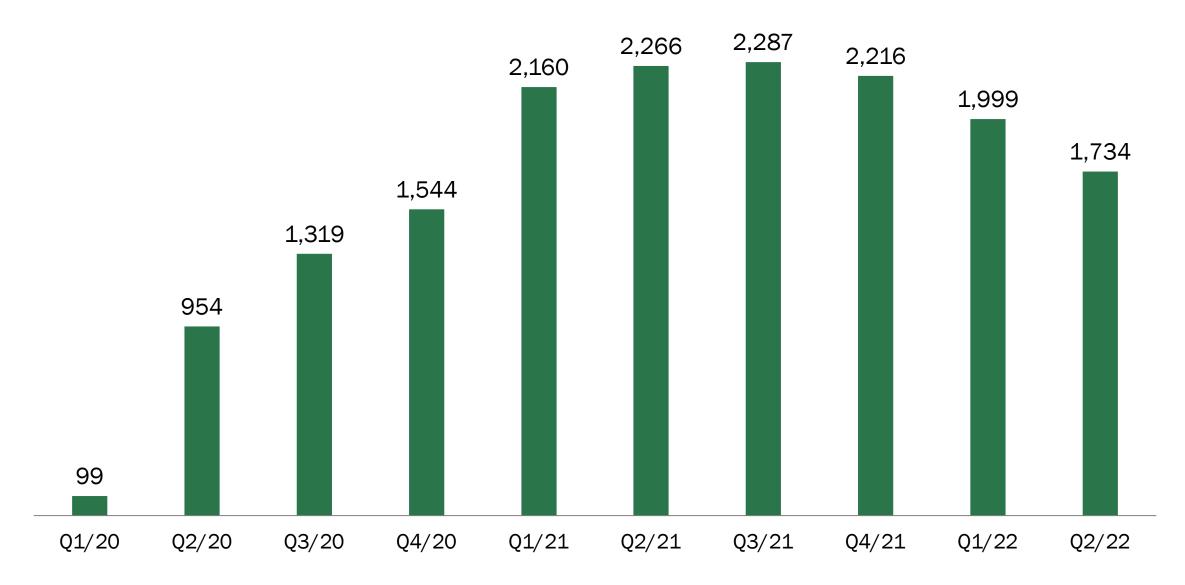


How Americans Used Their Stimulus Checks





Stock of Excess Savings in U.S. - \$ Billions



















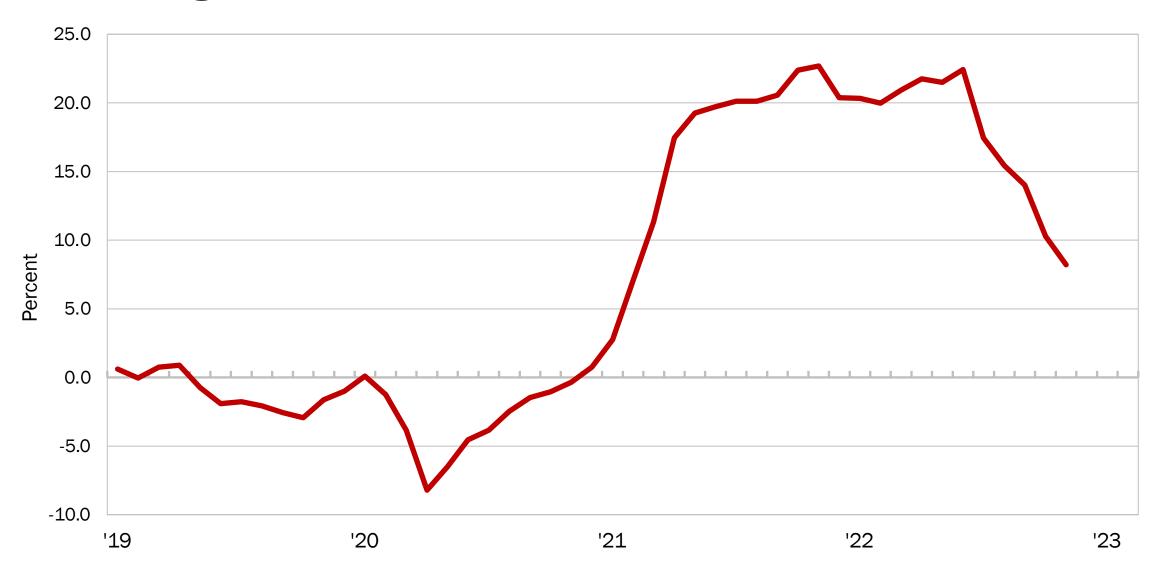








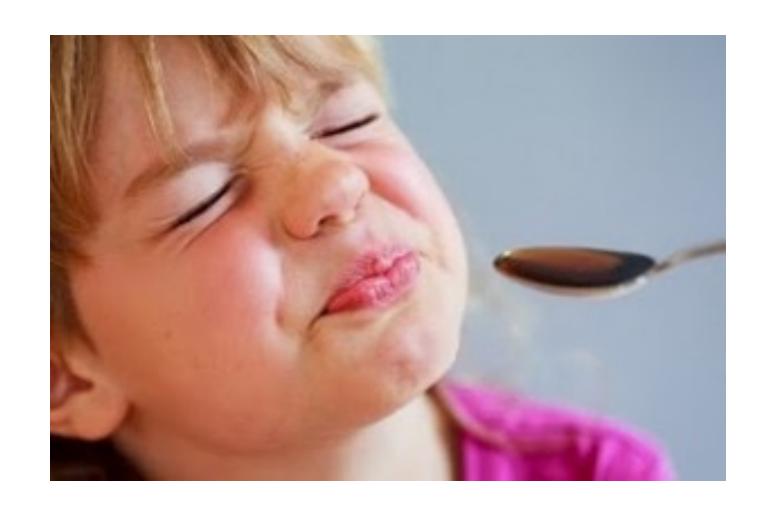
Change in Producer Price Index-All Commodities



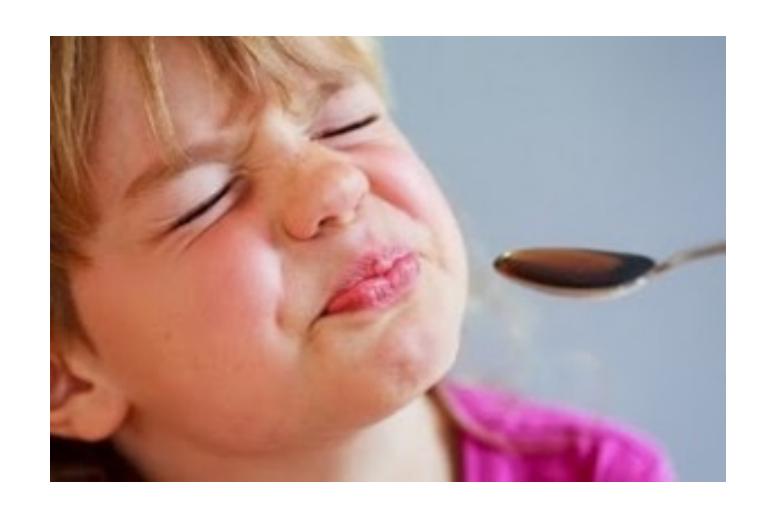


U.S. Labor Force Participation Rate





The Cure for Higher Prices?

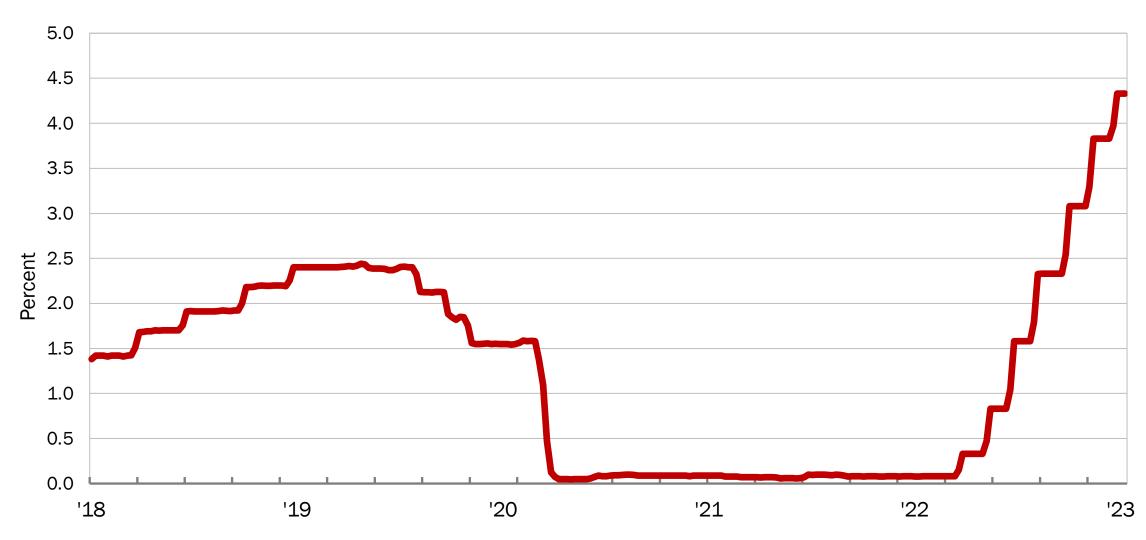


The Cure for Higher Prices?

Higher Prices

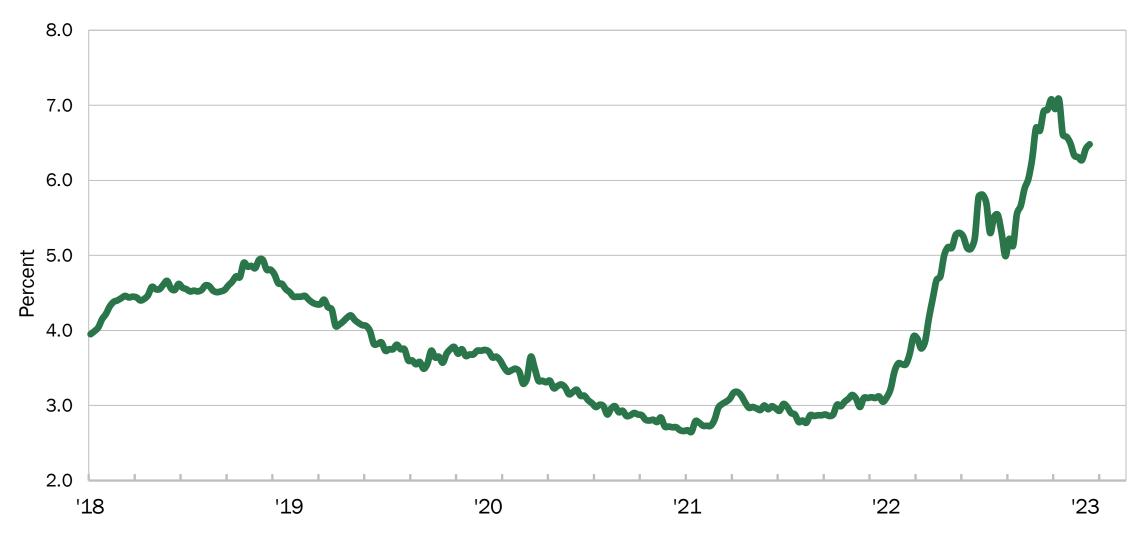


Federal Funds Effective Rate*



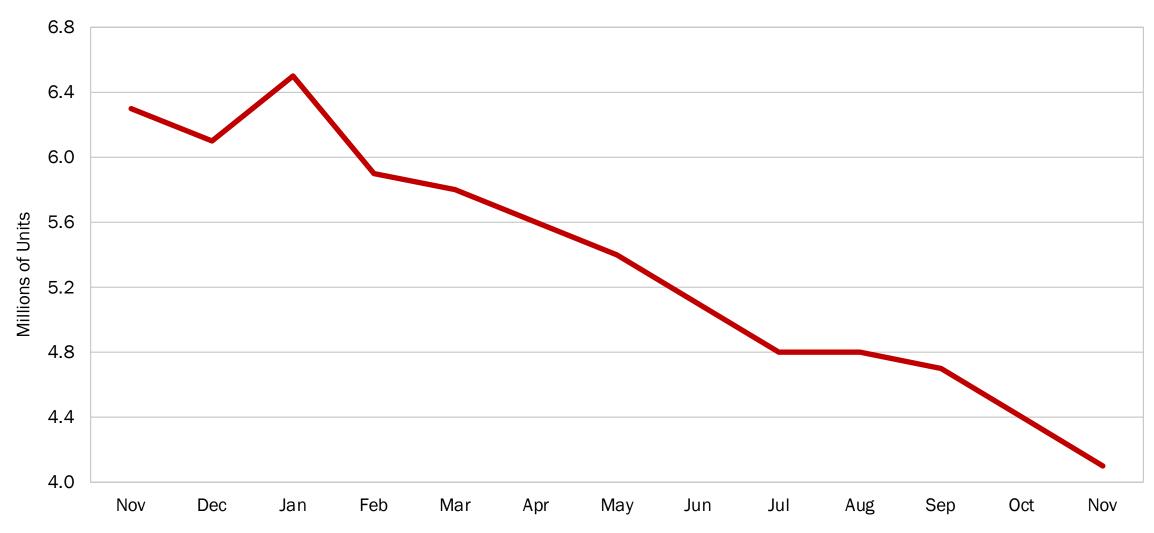
Source: Federal Reserve Bank of New York

Average 30-Year Fixed Rate Mortgage*



Source: Freddie Mac

Existing Home Sales*



Source: National Association of Realtors

THE WALL STREET JOURNAL.

Jan. 2, 2023 5:30 am ET

Big Banks Predict Recession, Fed Pivot in 2023



U.S. Personal Savings Rate*



U.S. Bureau of Economic Analysis

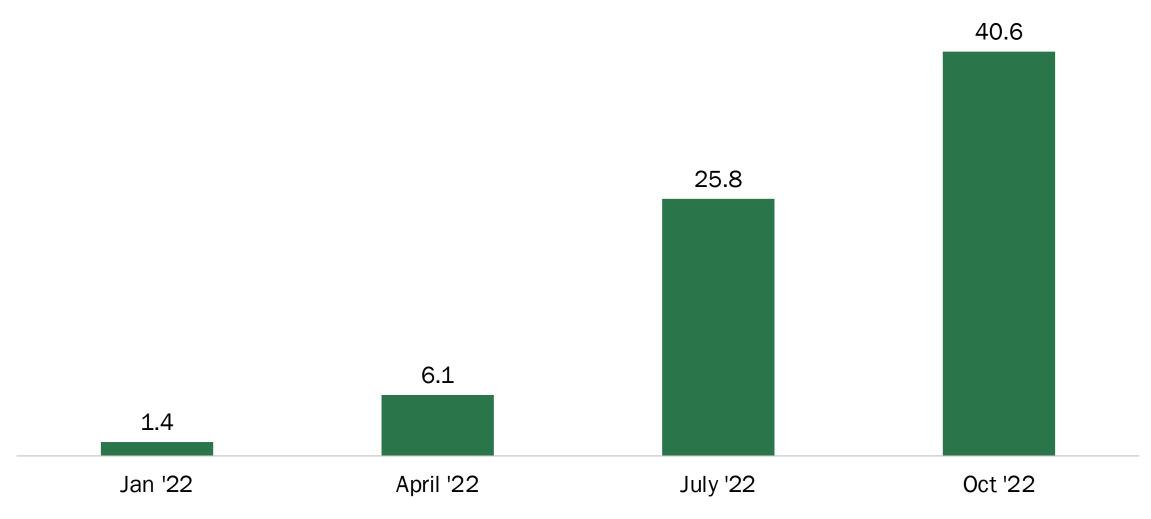
^{*} monthly, seasonally adjusted, annual rate

Single-Family Housing Starts*



Source: U.S. Census Bureau, HUD

Percent U.S. Banks Tightening Lending Standards*



Source: U.S. Federal Reserve, Senior Loan Officer Opinion Survey on Bank Lending Practices

FINANCIAL TIMES

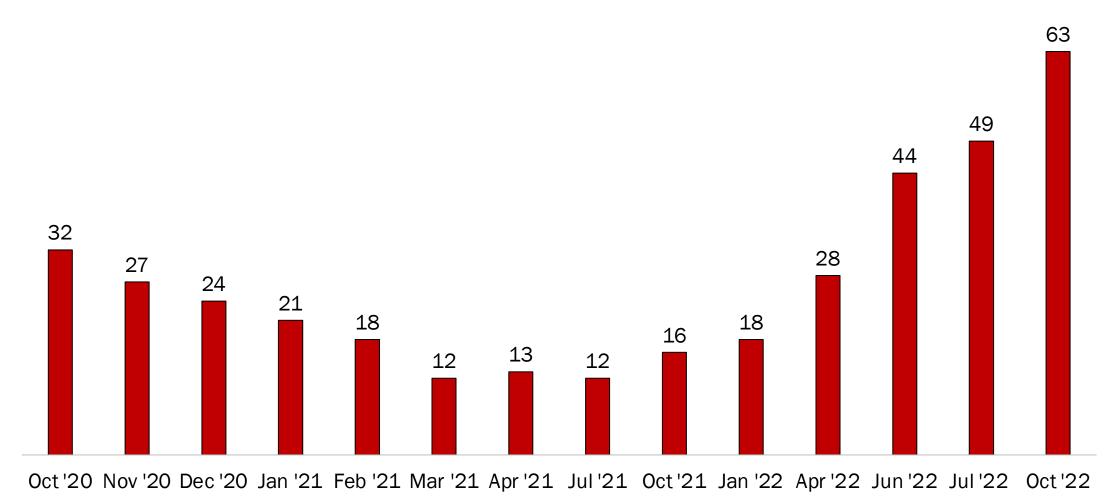
US inflation has not 'turned the corner yet', top

IMF official warns

JANUARY 4 2023



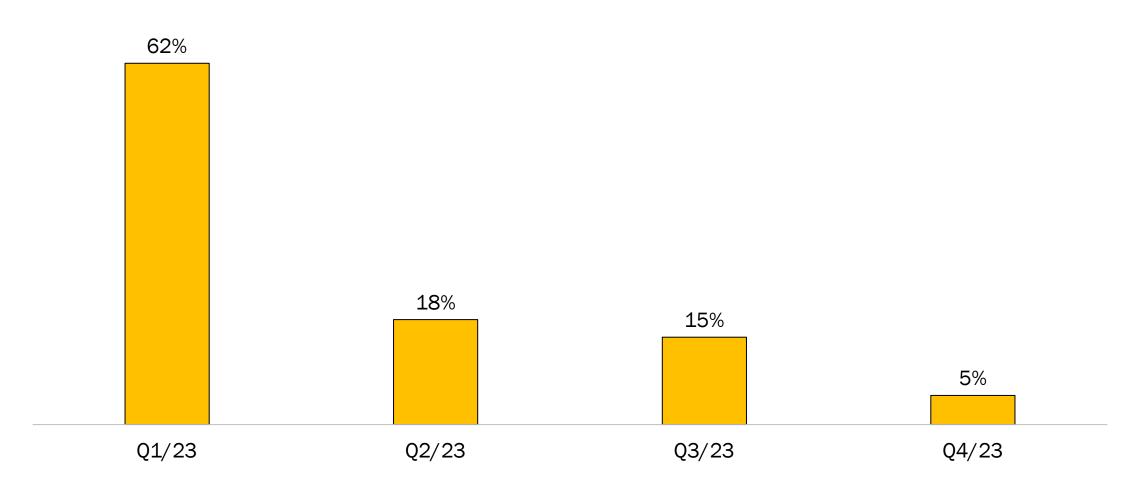
% Probability of a Recession in the Next 12 Months



Source: The Wall Street Journal

If a recession in '23, when will it start?

% of Respondents



Source: Member survey, National Association for Business Economics

Is a recession inevitable?





Bloomberg

Russian Wins in Eastern Ukraine Spark Debate Over Course of War May 28, 2022 at 2:00 AM CDT





How the impending red wave could become a tsunami 10/31/22 9:30 AM ET





Forbes Crypto Price Prediction: Bitcoin 'To Overtake' The Dollar By 2050 And Soar To \$66,000 By The End Of 2021

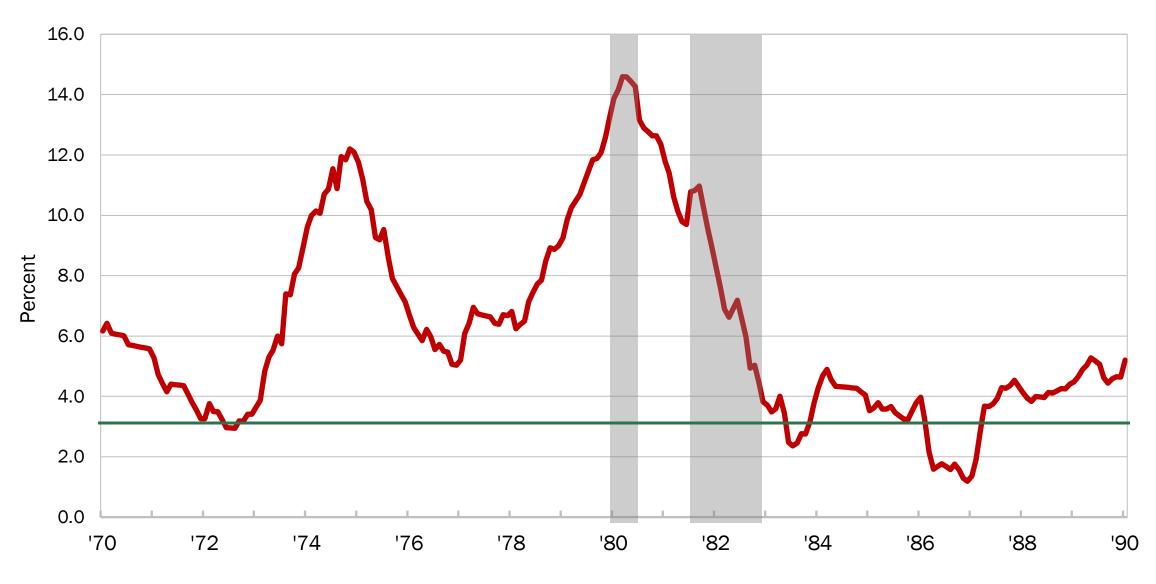


Three possible outcomes

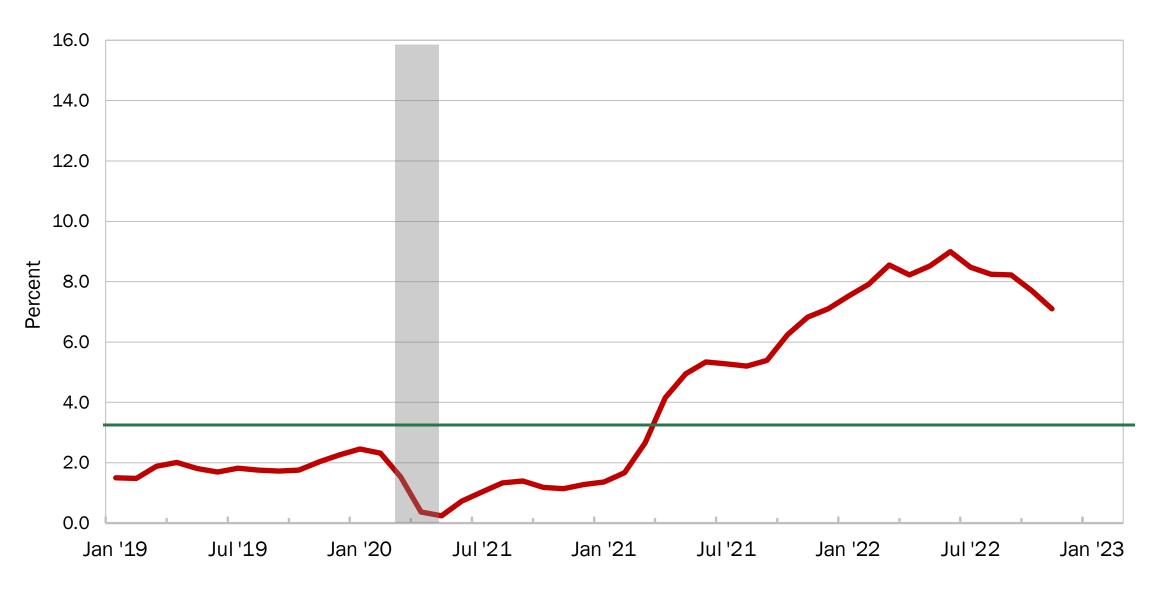
- Mild Recession
- Near Miss
- Deep and Protracted

Mild Recession

U.S. 12-Month Inflation Rate*

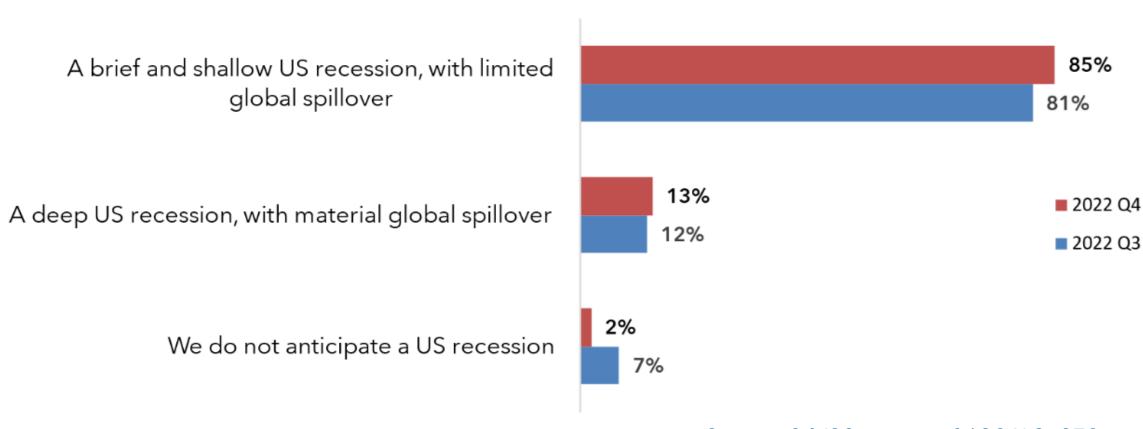


U.S. 12-Month Inflation Rate*





Over the next 12-18 months, are you preparing for...



Source: Q4/22 survey of 136 U.S. CEOs



Employment: 44% of CEOs expect to expand their workforce over the next 12 months, down from 50% in Q3

Source: Q4/22 survey of 136 U.S. CEOs

U.S. Job Openings





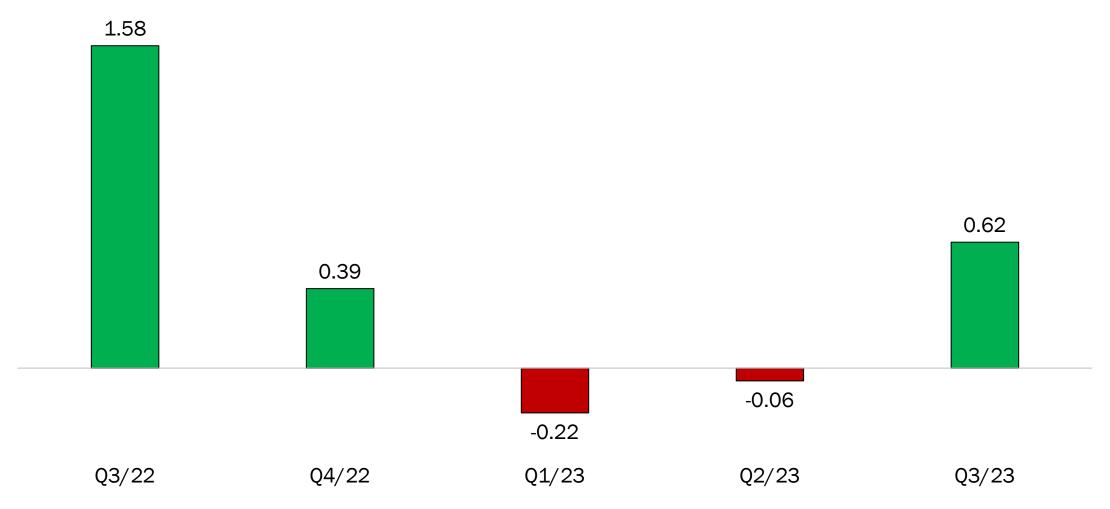
Source: U.S. Bureau of Labor Statistics



Capital Spending: 86% of CEOs expect their capital budgets to increase or remain the same over the next year, versus 82% in Q3.

Source: Q4/22 survey of 136 U.S. CEOs

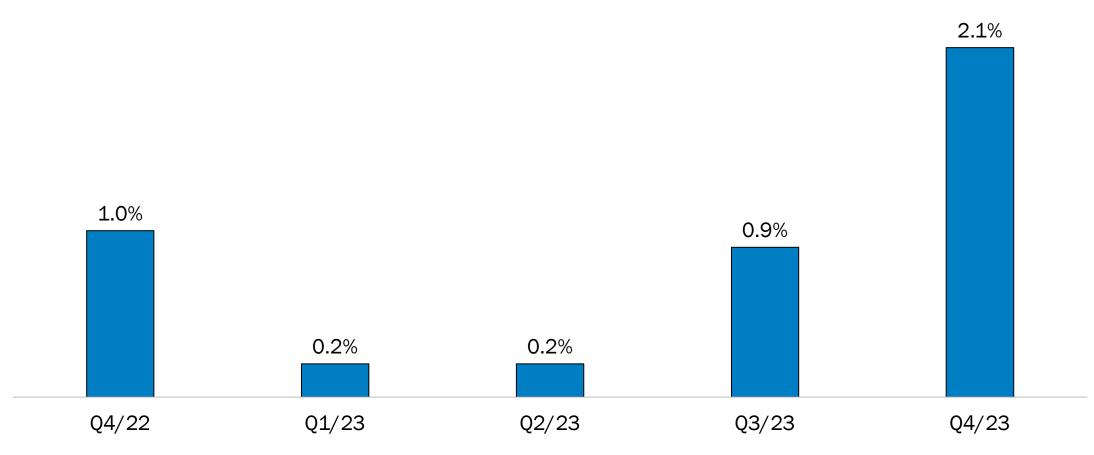
GDP (Quarterly, Annualized Growth Rate)



Source: The Wall Street Journal

GREATER HOUSTON PARTNERSHIP.

GDP (Quarterly, Annualized Growth Rate)*



Source: Federal Reserve Bank of Philadelphia Survey of Professional Forecasters



THE WALL STREET JOURNAL.

Third-Quarter U.S. Growth Was Stronger Than Previously Thought

+ 3.2%

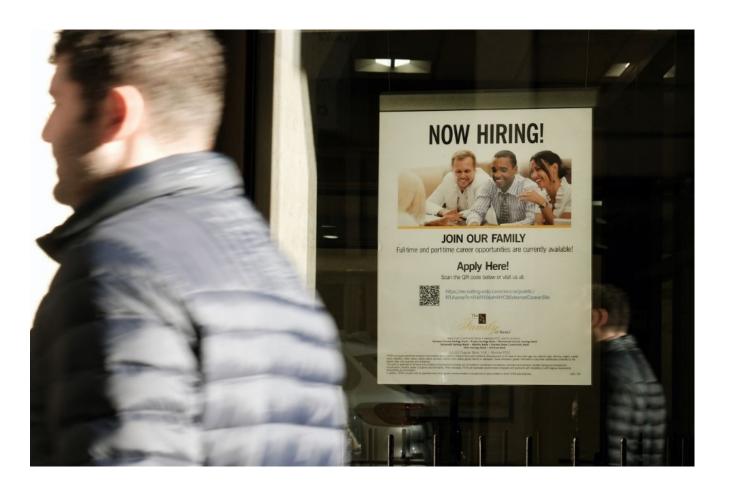


THE WALL STREET JOURNAL.

Unemployment Claims Fell During Holiday Week

Updated Jan. 5, 2023 9:55 am ET

218K





Consumer confidence improves in December, a hopeful sign for the economy

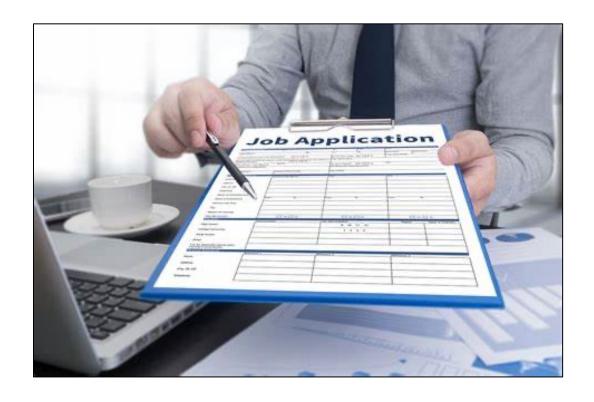
Updated 11:07 AM EST, Wed December 21, 2022



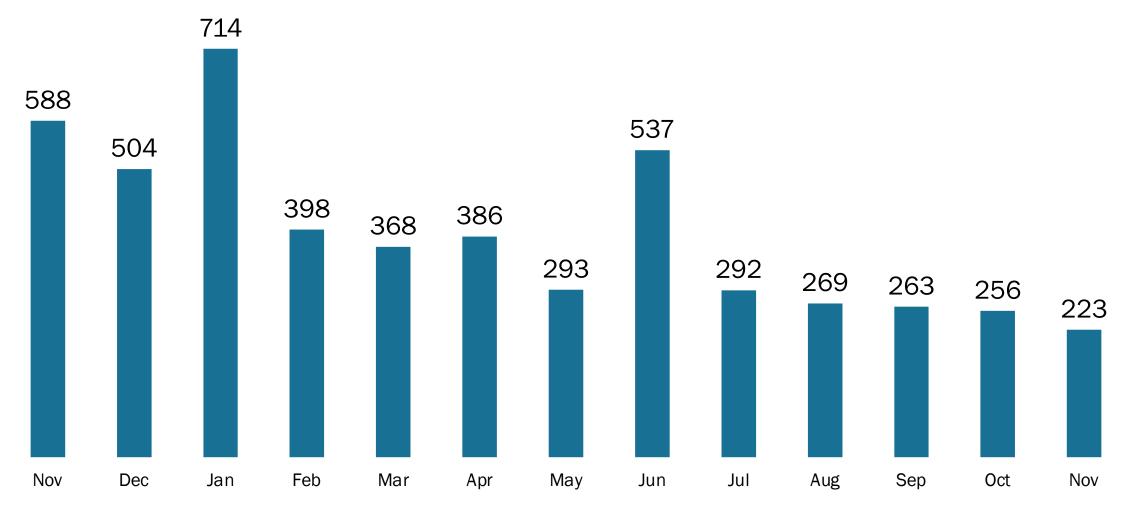
Bloomberg

Fed Gets 'Goldilocks' in Jobs Report: Slower Wage Growth, Solid Hiring

January 6, 2023 at 11:03 AM CST



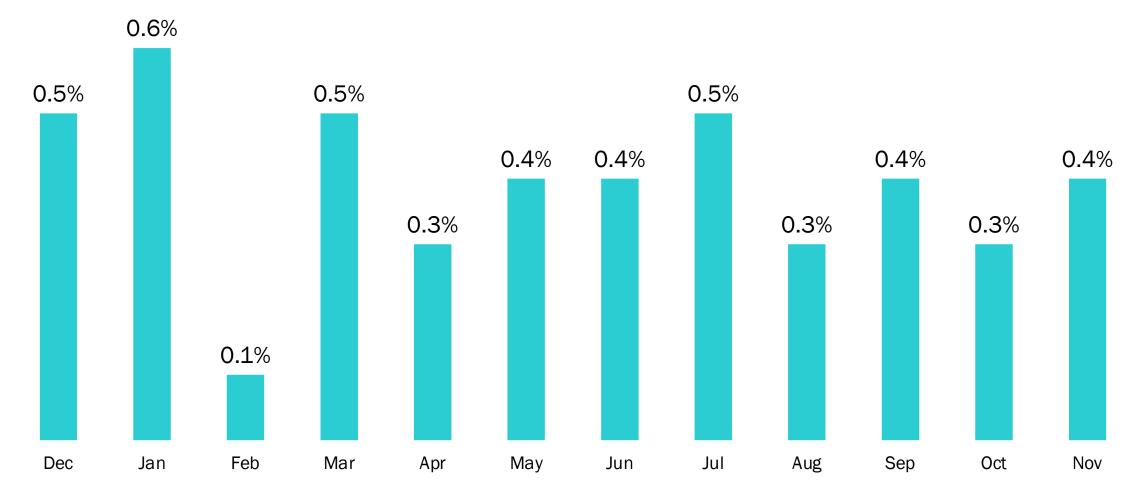
U.S. Job Growth, '000s*



Source: U.S. Bureau of Labor Statistics

^{*} seasonally adjusted

Percent Change, Avg Hourly Wage*



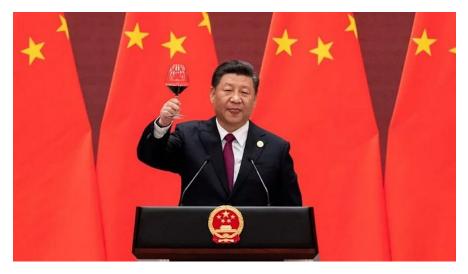
Source: U.S. Bureau of Labor Statistics

^{*} seasonally adjusted

Deep andProtracted









The probabilities:

50% Mild Recession

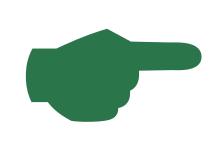
30% Near Miss

20% Deep and Protracted

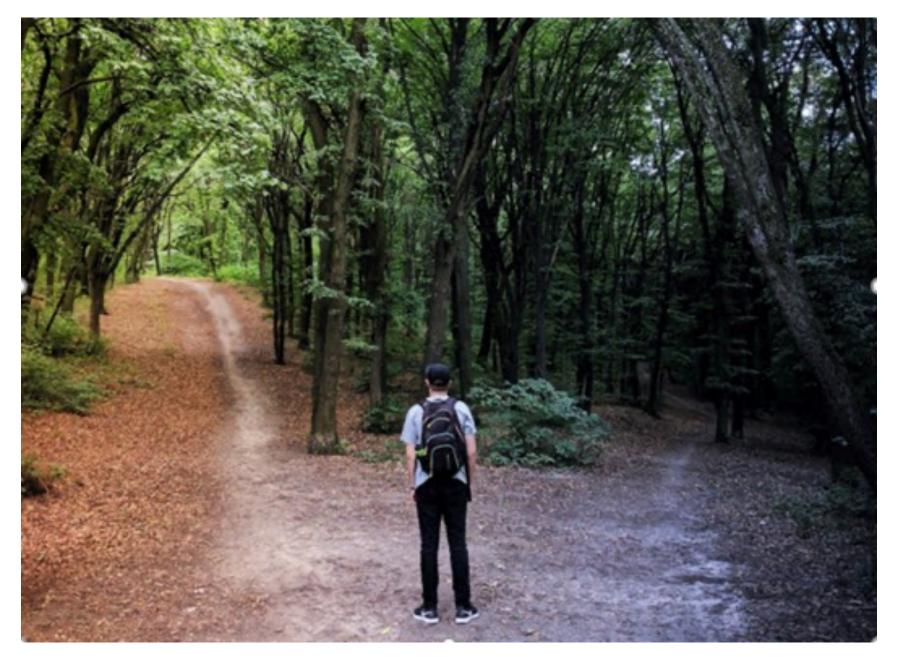
lf...



U.S. Recession



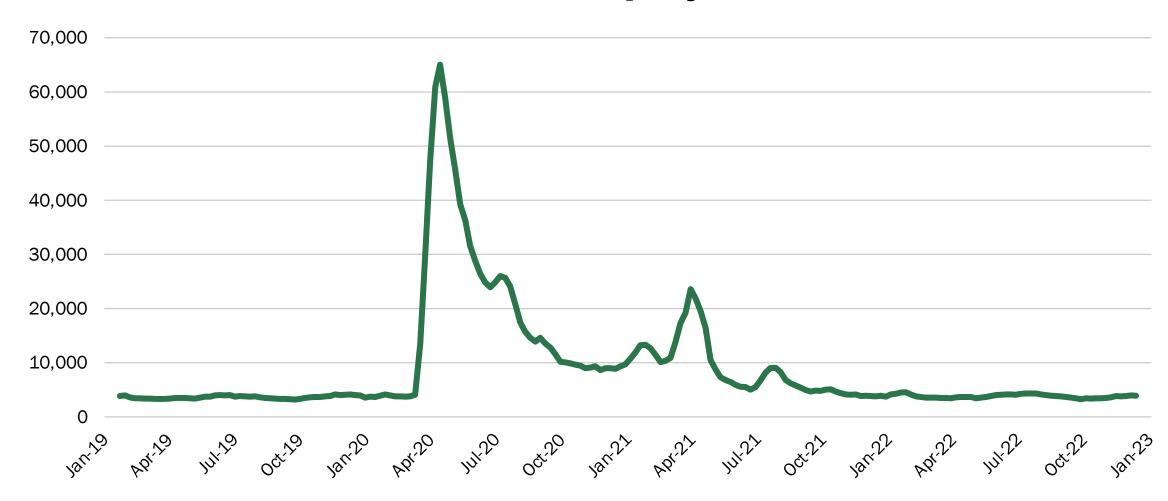
Short Shallow



Overall, Houston's economy is in pretty good shape.



Initial Claims for Unemployment Benefits



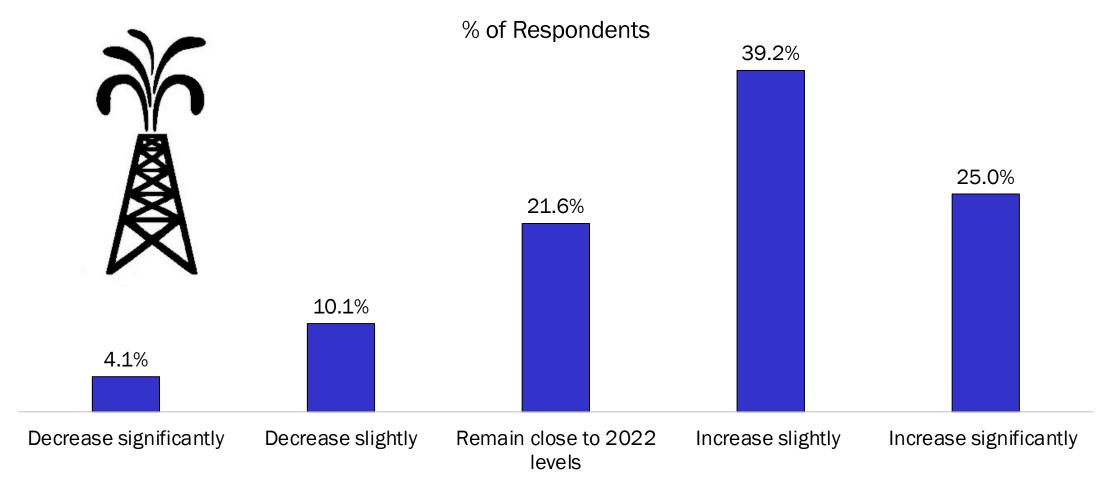
Source: Texas Workforce Commission

Houston Purchasing Managers Index +50 = Expansion



Source: Institute for Supply Management - Houston

Expectations for your firm's capital spending in '23 v '22?



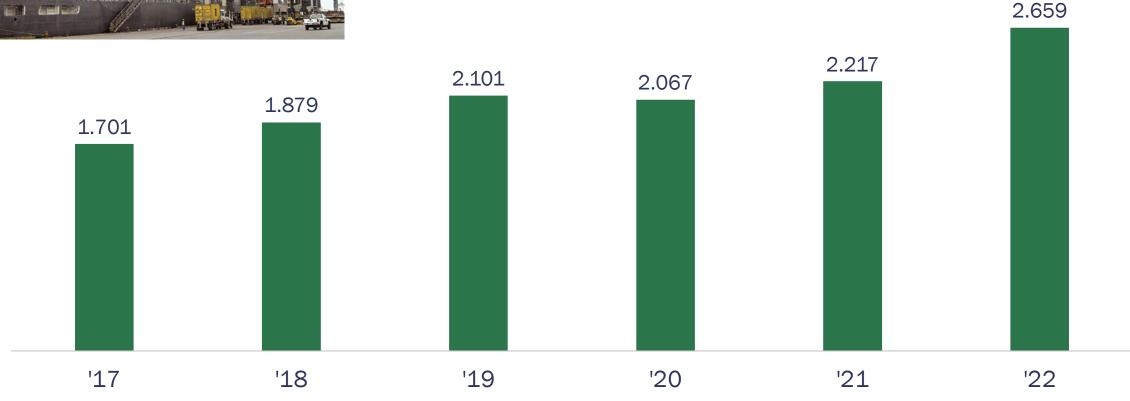
Source: Federal Reserve Bank of Dallas

^{*} Based on a survey of executives from 95 exploration and production firms and 53 oil and gas support services firms conducted December '22.



Port Houston Container Traffic

Loaded TEUs, Millions, October YTD



Source: Port of Houston



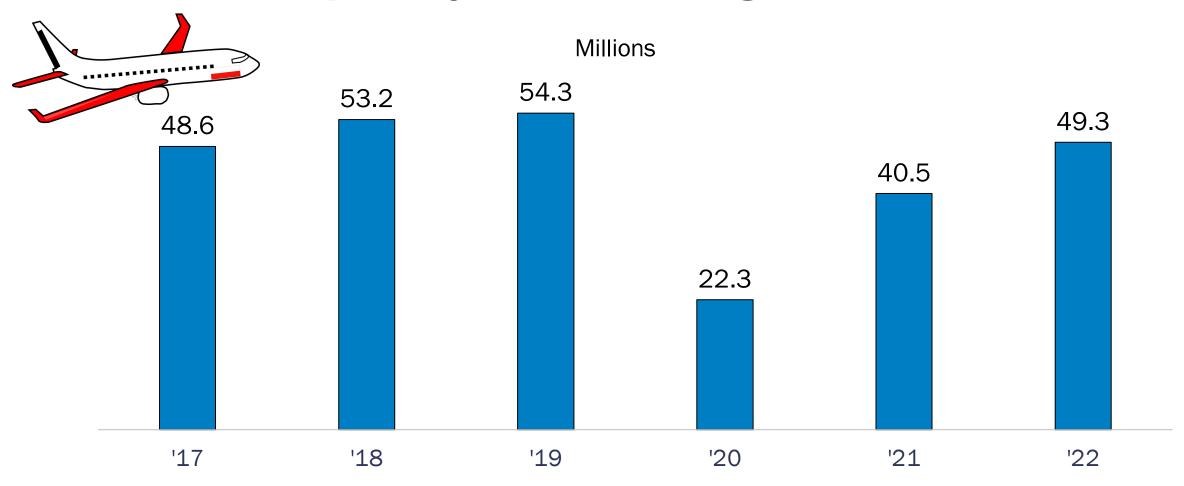
Metro Houston Construction Awards

\$ Billions, November YTD



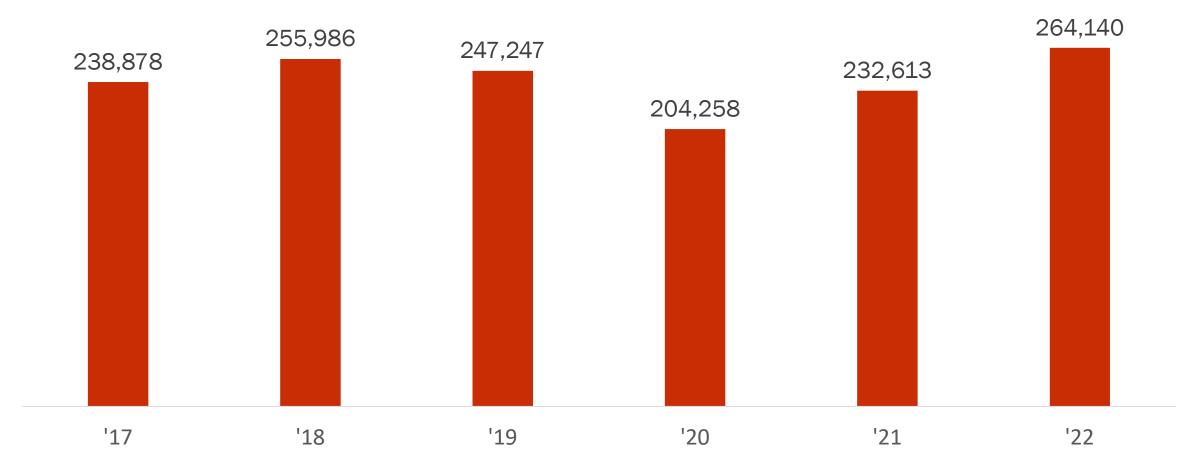
Source: Dodge Data & Analytics

Houston Airport System Passenger Traffic, Nov YTD





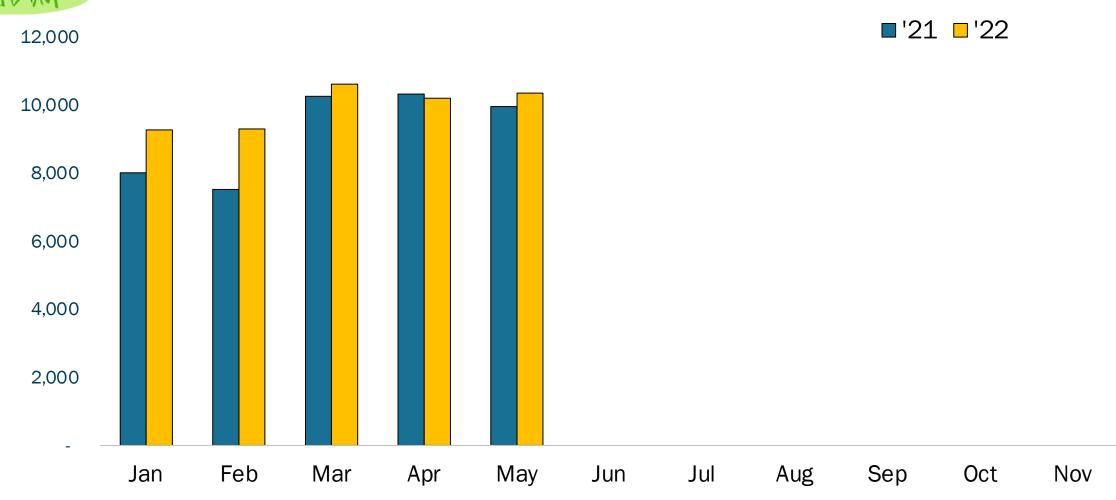
Houston Vehicle Sales, Oct YTD



Source: TexAuto Facts



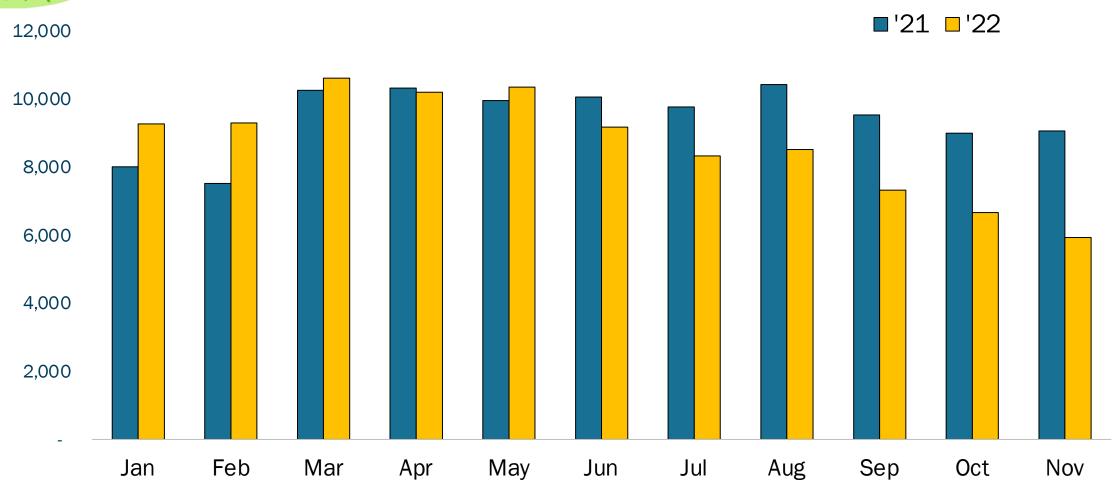
Existing Single-Family Home Sales



Source: Houston Association of Realtors

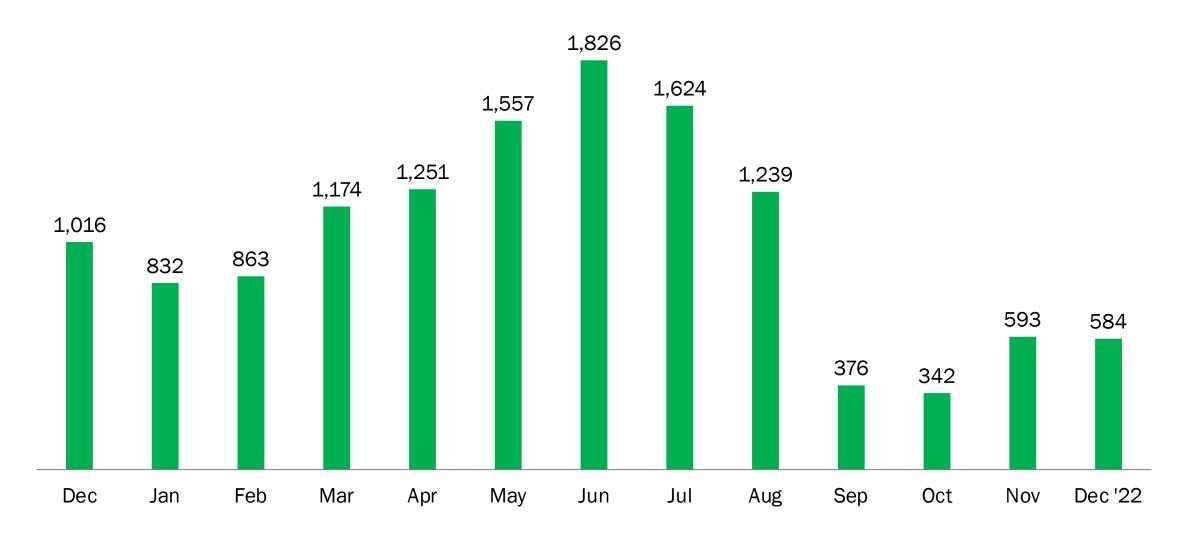


Existing Single-Family Home Sales





Absorption, Class A Apartments



Momentum '23

Houston Employment Forecast for '23

Scenario	Probability	
Mild Recession (Baseline)	50%	
Near Miss	30%	
Something Deeper	20%	

Source: Greater Houston Partnership Research

Houston Employment Forecast for '23

Scenario	Probability	Job Gains
Mild Recession (Baseline)	50%	60,000
Near Miss	30%	80,000
Something Deeper	20%	30,000

Source: Greater Houston Partnership Research

Best performing sectors in '23*

- ✓ Health Care
- √ Government
- ✓ Construction
- ✓ Prof, Sci, Tech Srvcs

- ✓ Restaurants, Bars
- ✓ Admin Support
- ✓ Manufacturing
- ✓ Energy

* Forecast to create 5,000 or more jobs

Recession Math



Recessions Since WW II

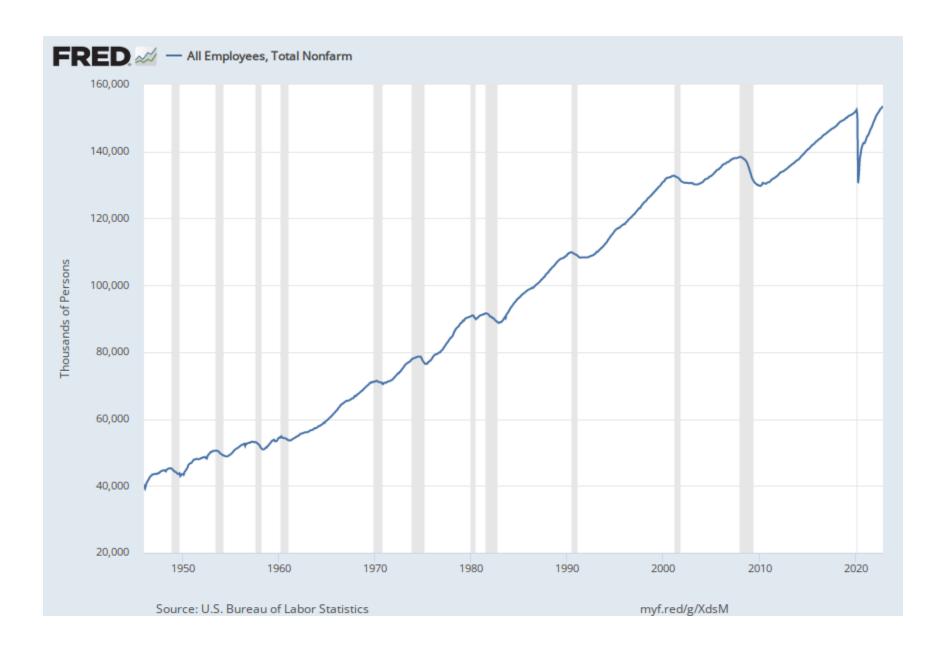


Recessions Since WW II

Recoveries Since WW II

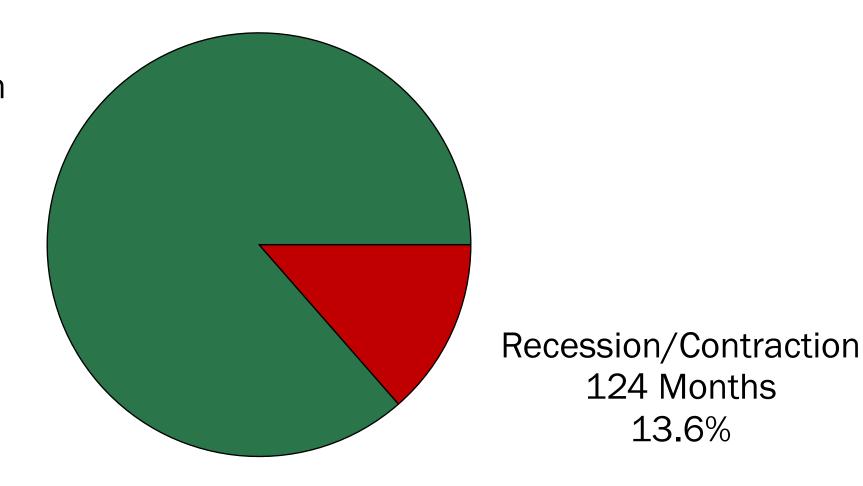


Recoveries Since WW II



U.S. Economy Since WW II

Recovery/Expansion 790 Months 86.4%



Source: National Bureau for Economic Research

Short-Term Outlook





Long-Term Outlook



Metro Houston Forecast

Patrick Jankowski
Chief Economist and SVP, Research
January 11, 2023

