BAUER
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INSTITUTE FOR
REGIONAL FORECASTING

Consumer Strength Meets Fed Policy: Is There Really a Recession Ahead?

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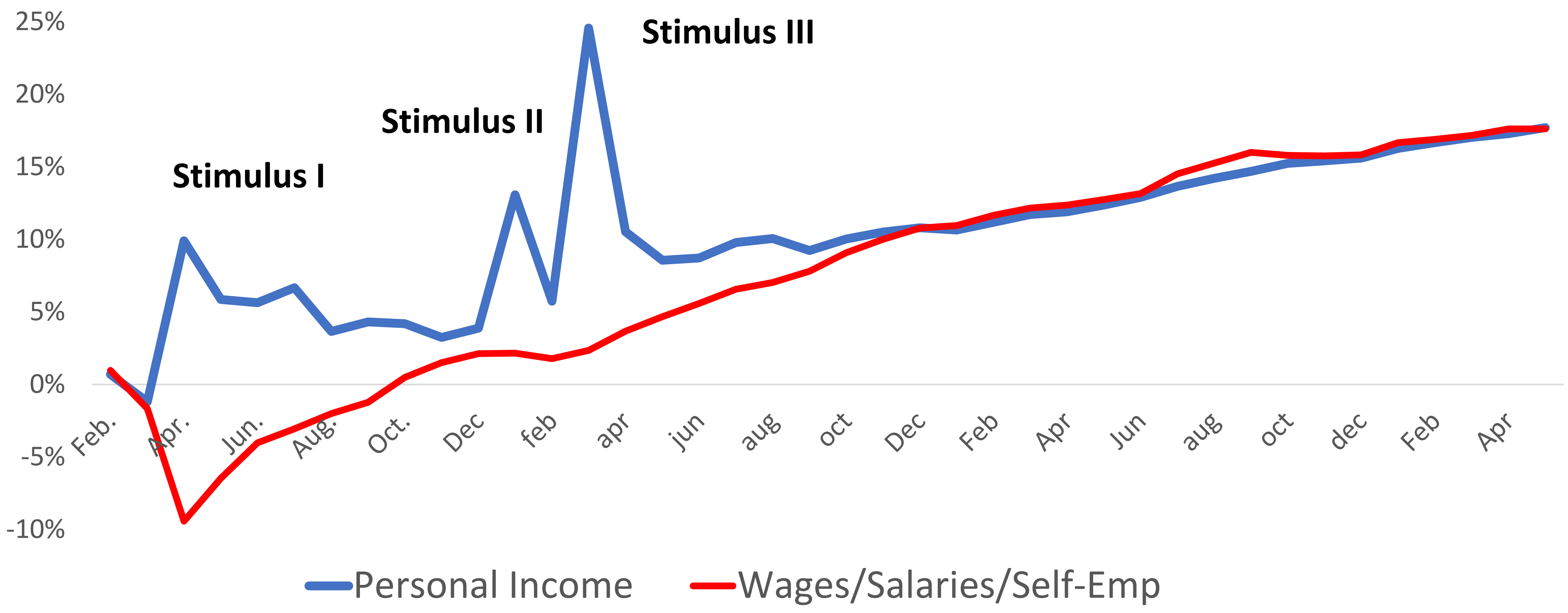
Consumer Strength Built on Fiscal Stimulus, Zero Interest Rates, and the Resulting Financial Boom

Key Measures Say Economic Strength Still Lies With the Consumer: Income, Jobs, and Spending

- **Industrial Production**:
  - **Industrial Production Index for Manufacturing:** After peaking in August 2022, it slowed sharply and has turned flat in recent months
  - **US ISM for Manufacturing:** Slowed steadily and throughout 2022, now in contraction for the last eight months
- **Sales**
  - **Real Merchant Wholesalers**: Peaked in March 2022, quickly fell as much as 7.5 percent, and is still in decline but more slowly
  - **Real Retail Sales**: Spiked in March 2021 with fiscal stimulus. A slow weakening trend began in May 2022, but spending remains at very high levels compared to pre-pandemic months
- **Income and Spending**
  - **Real Personal Income ex. Transfers:** *After some weakening in early 2022, slow and steady growth over the last 12 months at one percent annual rate*
  - **Real Personal Consumption**: Trended steadily upward at a very slow rate since the end of the pandemic
- **Employment**
  - **Household Survey:** *A blow-out first quarter averaged 549,300 jobs per month. In the second quarter the monthly readings turned negative or slowed to average only 39,000 jobs per month. So far though June, 160,600 jobs per month have been added*
  - **Payroll Survey:** *Big numbers were posted in the first quarter with 312,300 new jobs per month, and the second quarter is slower but quite strong with 244,000 jobs per month. We see a monthly average of 278,200 for the last six months*

Changes in Income-Related Activity: Compares Each Month to February 2020

Monthly % Change from February 2020



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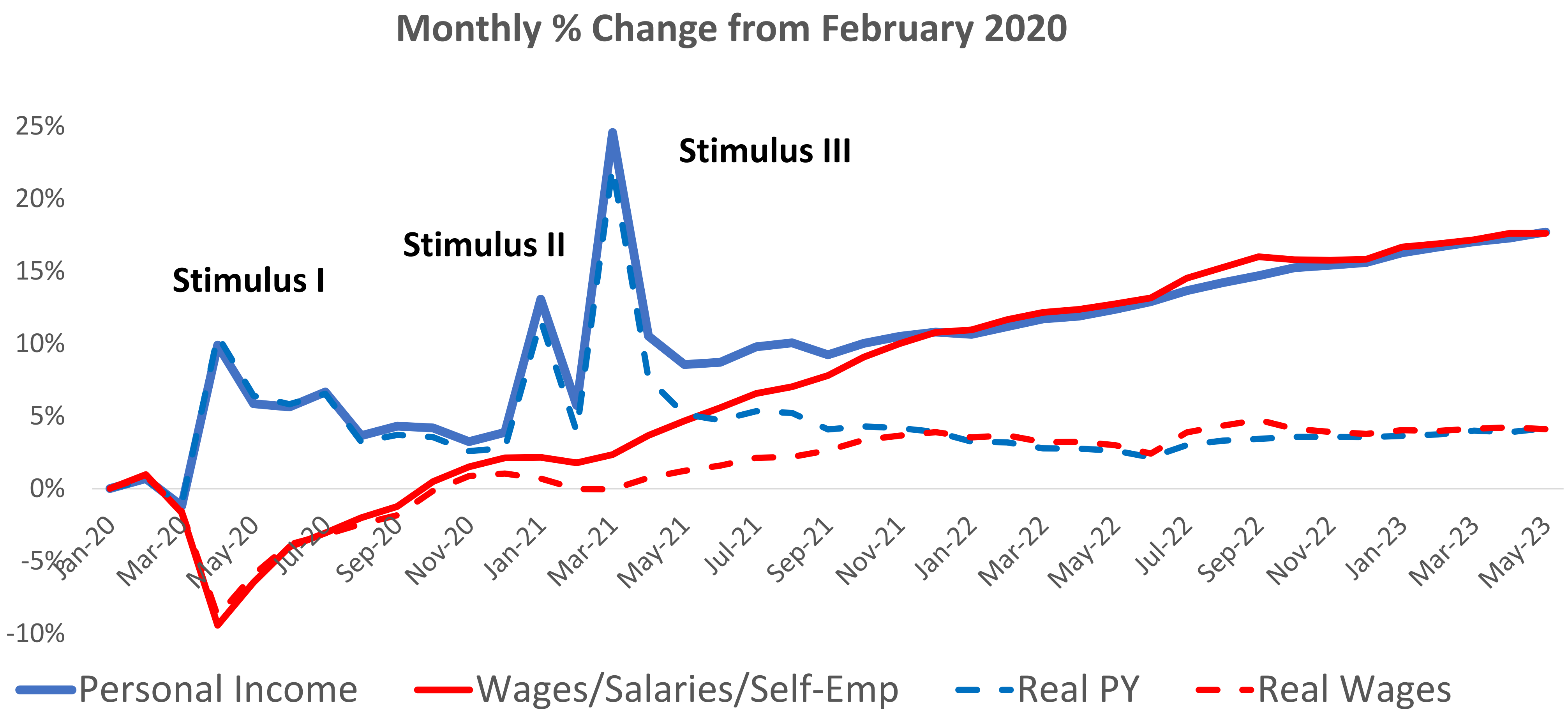
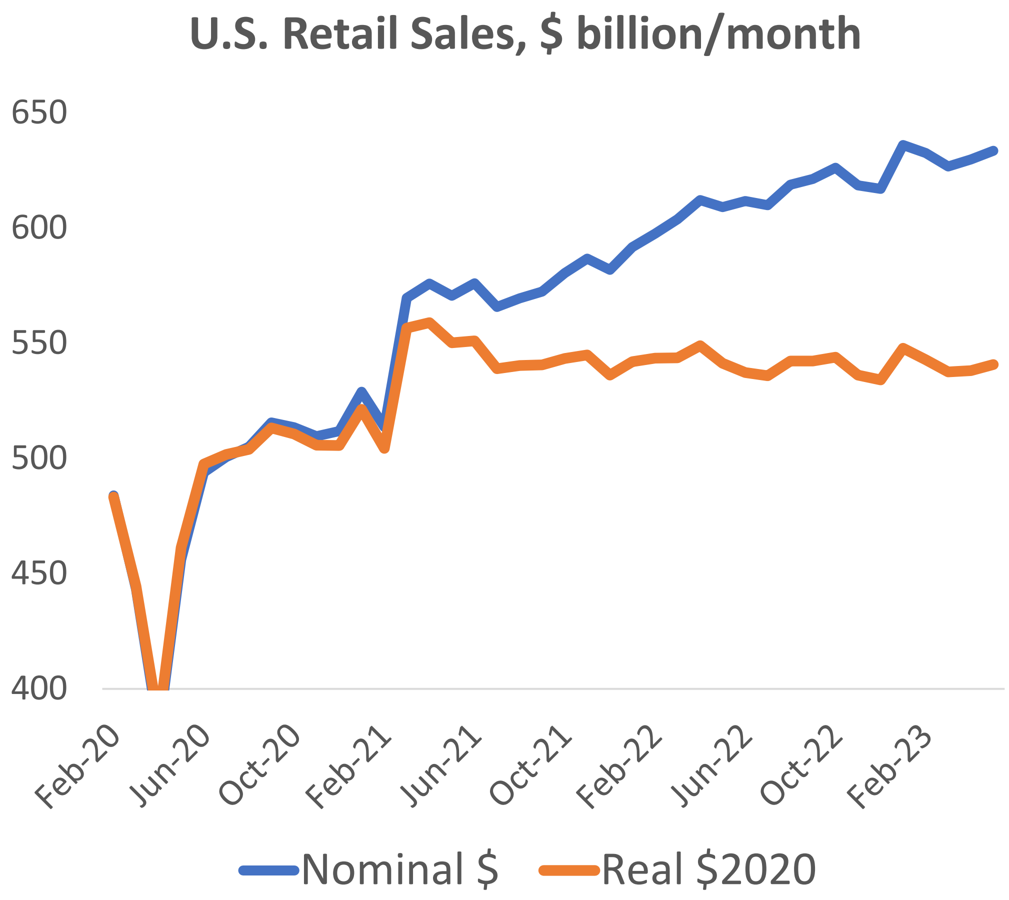
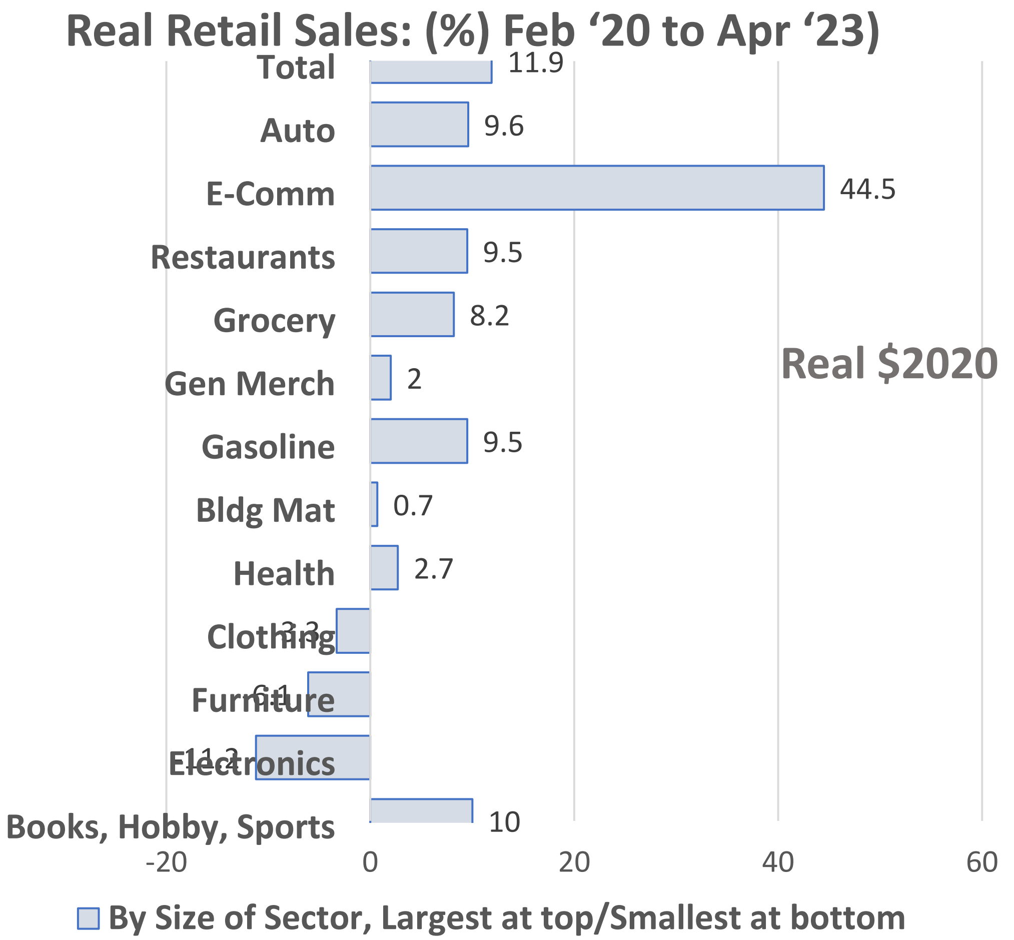


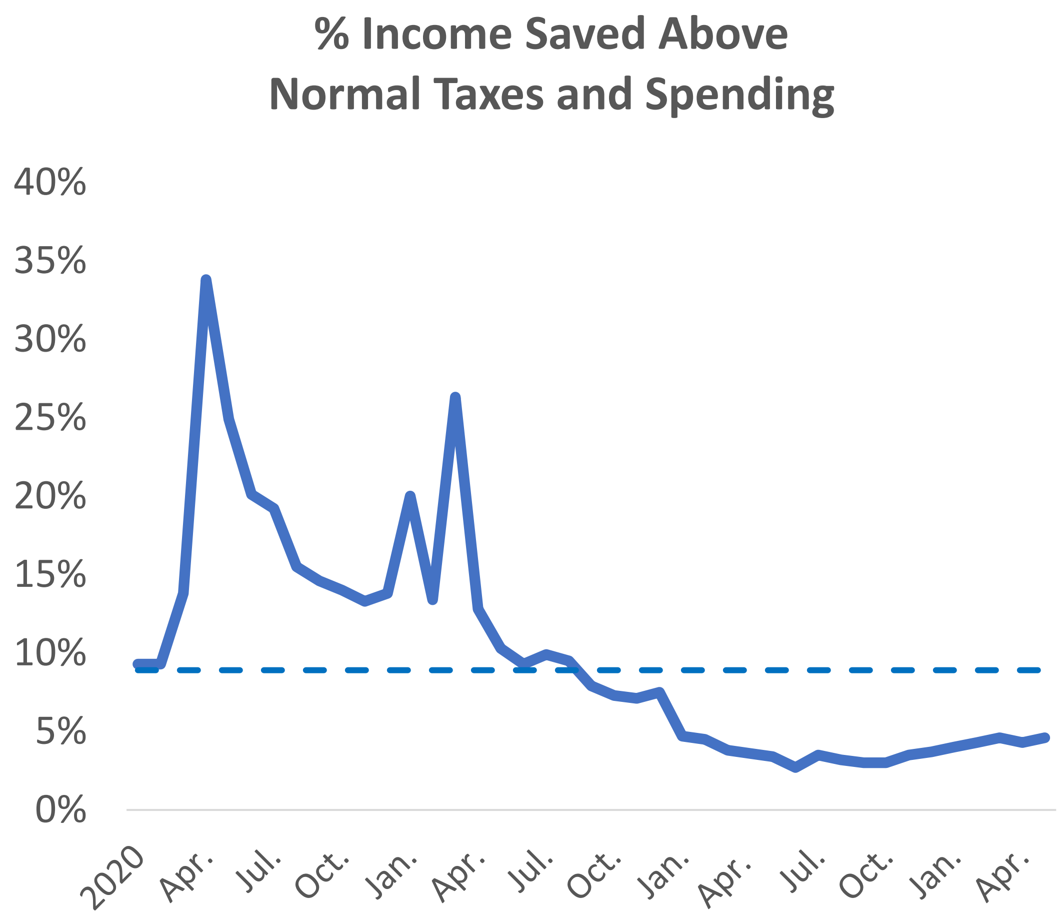
Fiscal Support and Cheap Money Drove U.S. Retail: Sales Failed to Retreat Even as Stimulus Waned

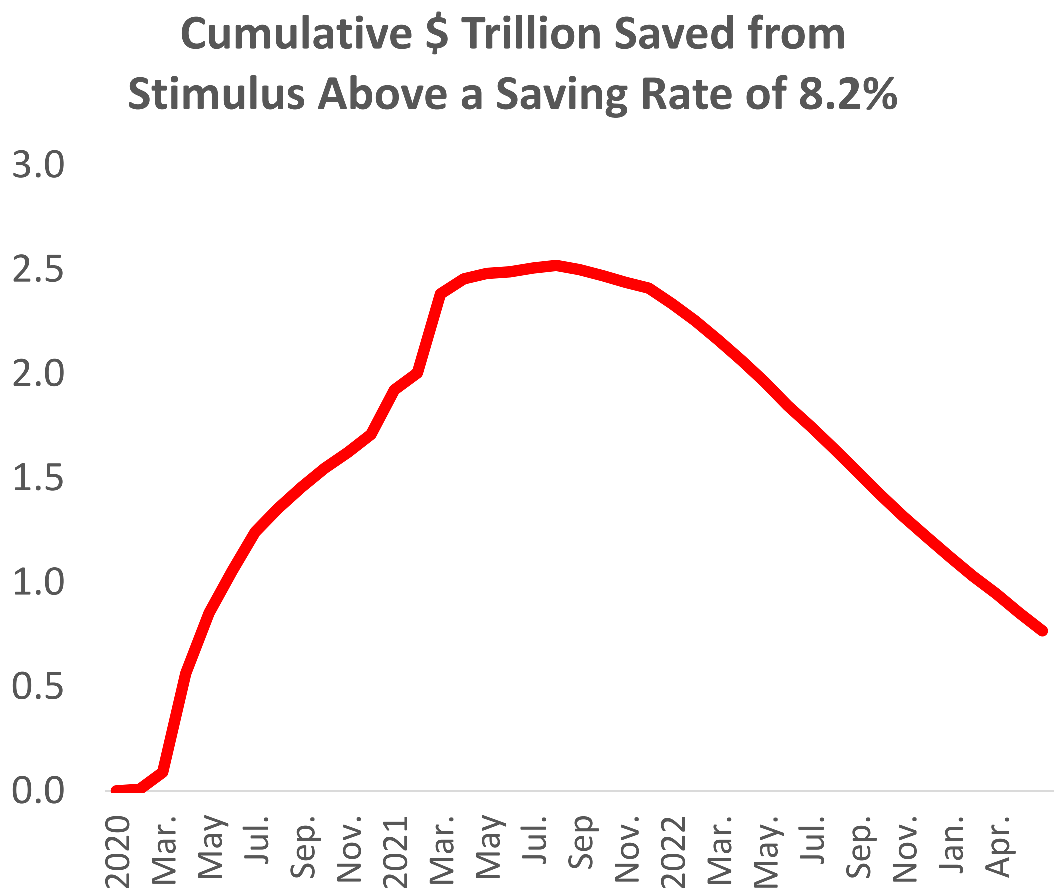




U.S. Census Bureau, May 2023, Sectors adjusted for general inflation

Personal Income Increases from Fiscal Stimulus and Excess Savings Are Generated By Stimulus Size





National Income Accounts, calculations of IRF

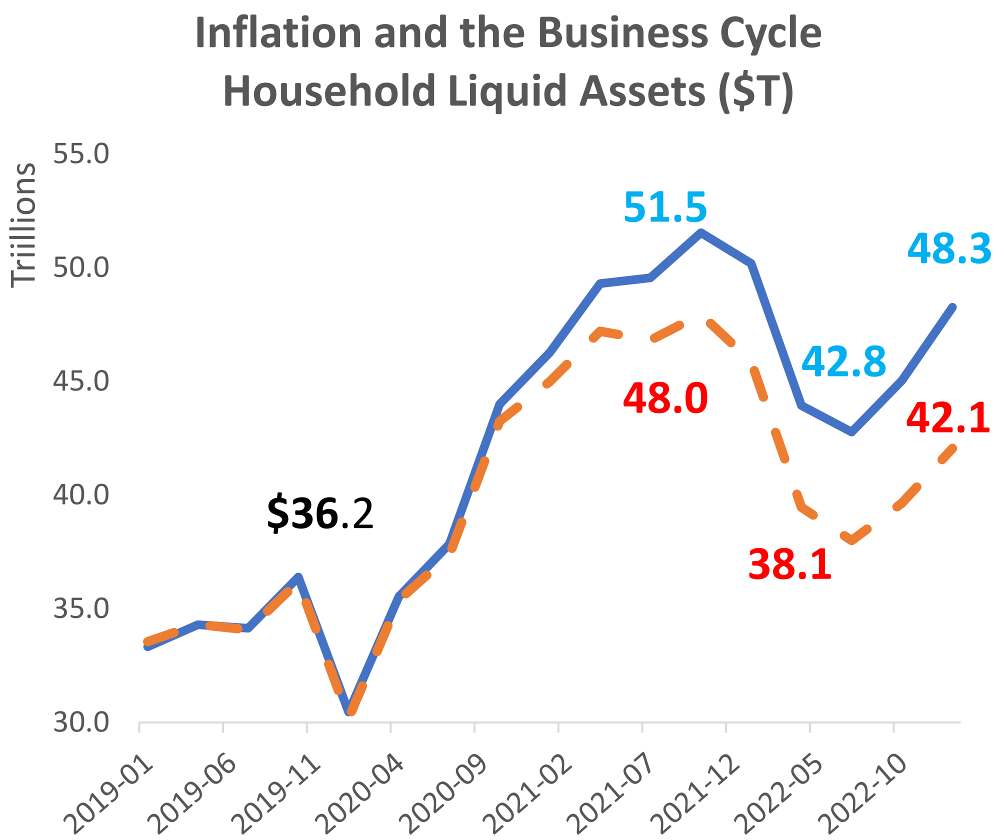
Is It Just Excess Savings?
There Is Much More to This Story!

- "Excess savings" were just the seed money for bigger things
- Federal Reserve carefully nurtured this garden with zero rates
- Savings = Investment and low interest rates plus stimulus *bred a huge financial boom in 2020-21*
  - Even today, household balance sheets are $33.3 trillion above pre-pandemic levels
    - $15.6t Nonfinancial
      - $13.6 trillion increase in new homes and rising home values
      - $2.0 trillion in consumer durables (autos, home furnishings)
  - Illiquid *financial* assets up by $7.5 trillion (pension entitlements, insurance reserves, proprietor equity)
  - Liquid financial assets are up $12.2 trillion
    - Stocks and bonds $7.7 trillion
    - Bank accounts $4.5 trillion

Savings = Investment

Post-COVID Households Hold $33.3 Trillion More In Liquid Financial Assets

	2019Q4	2023Q1 $ Trillion	Change	Change %
Total Assets	125.6	158.9	33.3	26.5%
Non-Financial	35.4	48.9	15.6	43.1%
Own Homes	29.9	41.2	11.3	37.8%
Cons Durables	5.7	7.7	2.0	35.1%
Financial	90.0	110.0	20.0	22.2%
Equities	29.1	35.8	6.7	23.0%
Debt	4.1	5.1	1.0	24.3%
Checking Acct	1.0	4.2	3.2	320.0%
Time Acc't	9.8	9.9	0.1	1.0%
Money Mkt Acct	2.2	3.2	1.2	54.1%
Other Financial*	53.6	61.7	8.1	15.1%



*Other Financial is illiquid assets in insurance reserves, proprietor's equity in businesses, and pension entitlements
Federal Reserve, *Financial Accounts of the United States*

It Is Easier to Lose $5.9 Trillion in Liquid Assets Than You Might Think

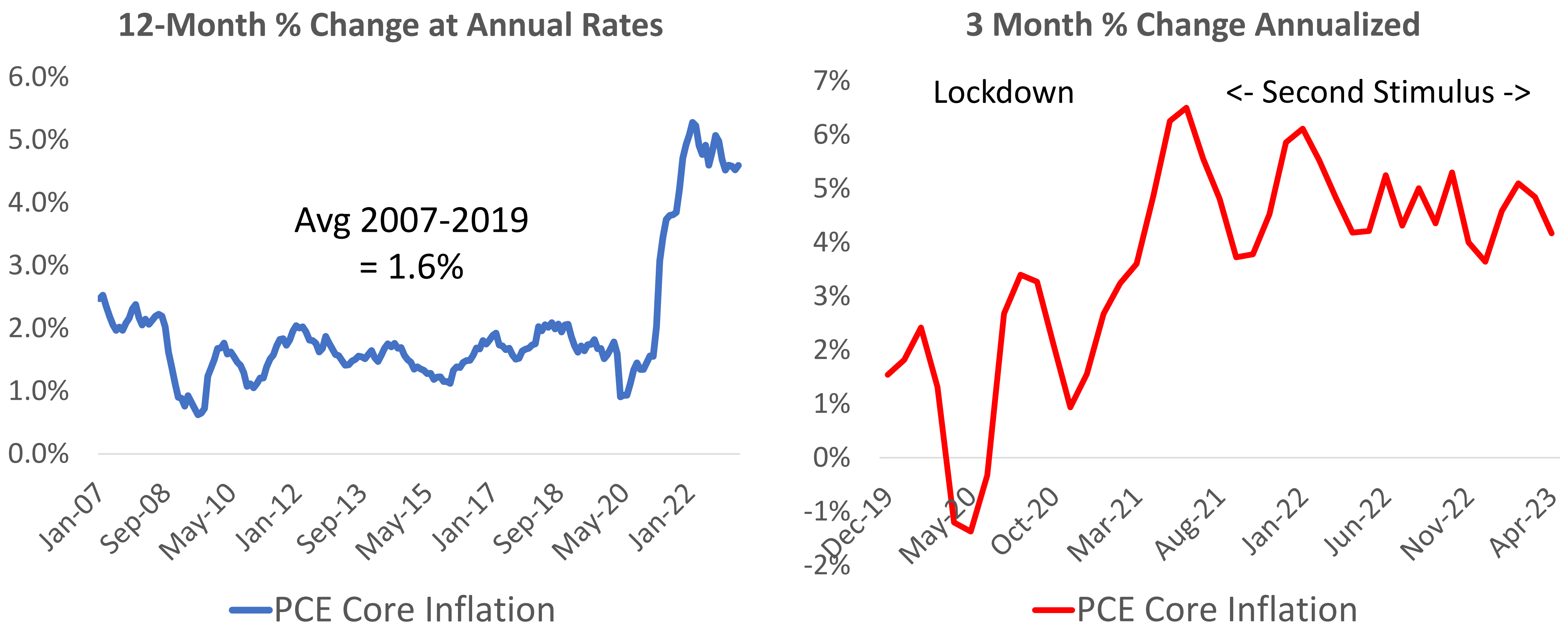
- Yes, we are waiting for the consumer to spend that money, but the Federal Reserve’s 2022 financial downturn and on-going inflation are also rapidly stealing those assets
- Focus on liquid financial assets, and put aside highly illiquid assets in housing, consumer durables, pension entitlements, proprietor equity in business, life insurance reserves, etc.
- From the big financial perspective, it easier than you think to wipe out $5.9 trillion. *Start counting in June 2023* and it is gone if …
    - Households continue spending at recent rates for 18-24 months,
    - Or we have 10 months of current inflation,
    - Or see a 15 percent decline in equities,
    - Or *some combination of the above*

Can the Fed Slow Inflation?
The Household Sector Is Now the Target

Can the Fed Slow Inflation Further?
Yes … But at the Cost of Economic Growth

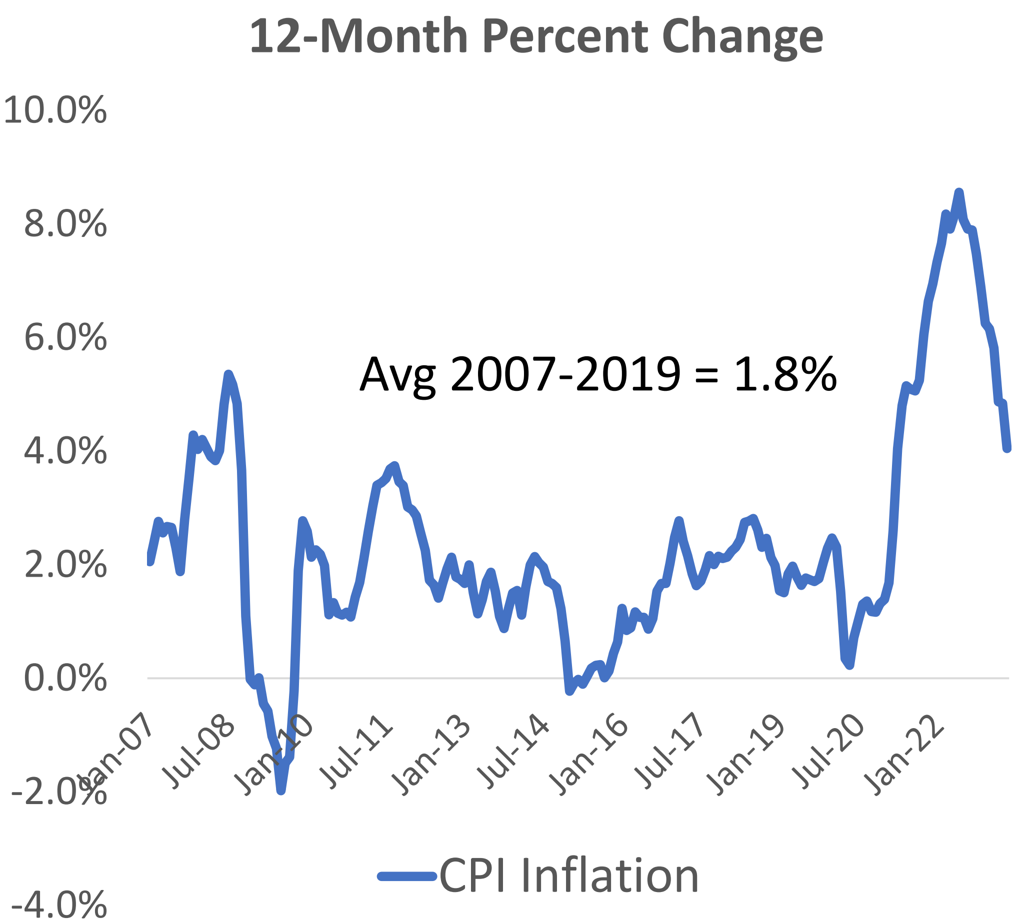
- They absolutely have the tools -- if they have the political will
- They were embarrassed by letting the inflation genie out of the bottle in 2021 and professional reputations and personal legacies are now at stake
- They are fully geared to move forward unless there is an immaculate disinflation – somehow core price measures simply falls back without the need for continued tightening
- It takes 12-18 months for monetary policy to work, and we at the 18-month mark. So far, policy is still nibbling around the edges: housing, autos, banking, and manufacturing and the goods sector. ***The target now is the household sector. Have they done enough or not?***

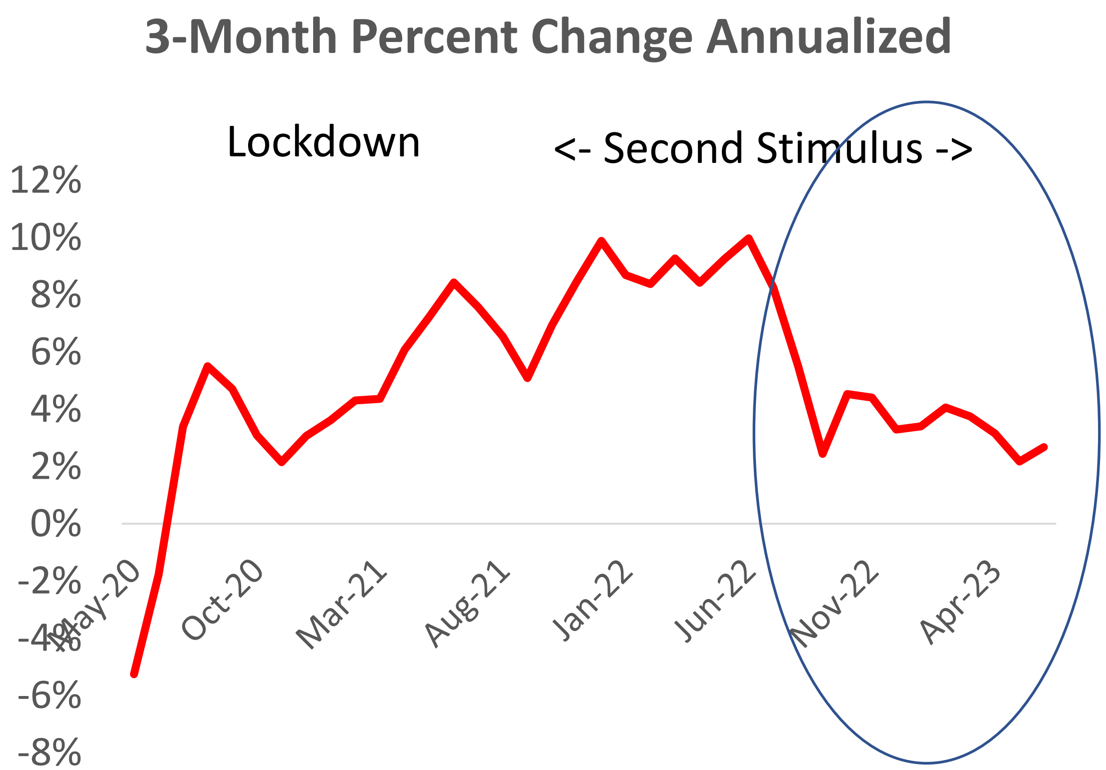
The Fed's Preferred Measure of Inflation Excludes Oil and Food and Ran at a 4.4 Percent 12-Month Rate to March



FRED, St Louis Federal Reserve Bank

Including Food and Oil in the Consumer Price Index Tells of a Much Bigger Problems Than Just the Core

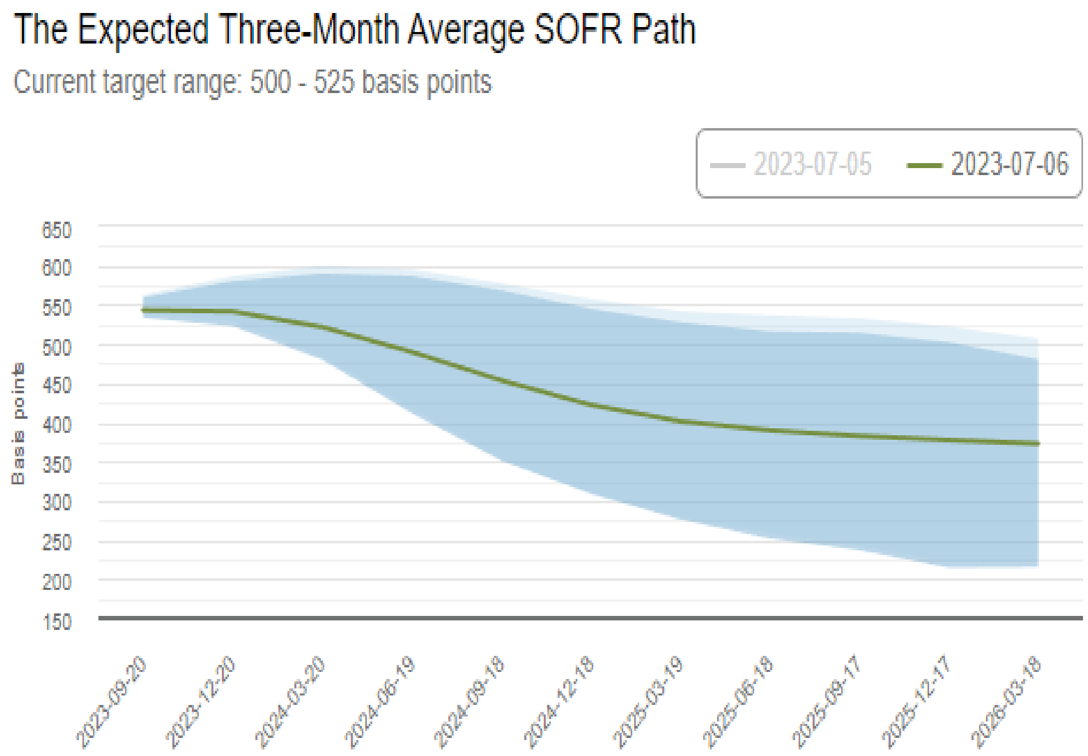




FRED, St Louis Fed

Tighter Monetary Policy Moves Forward Under Uncertain Conditions

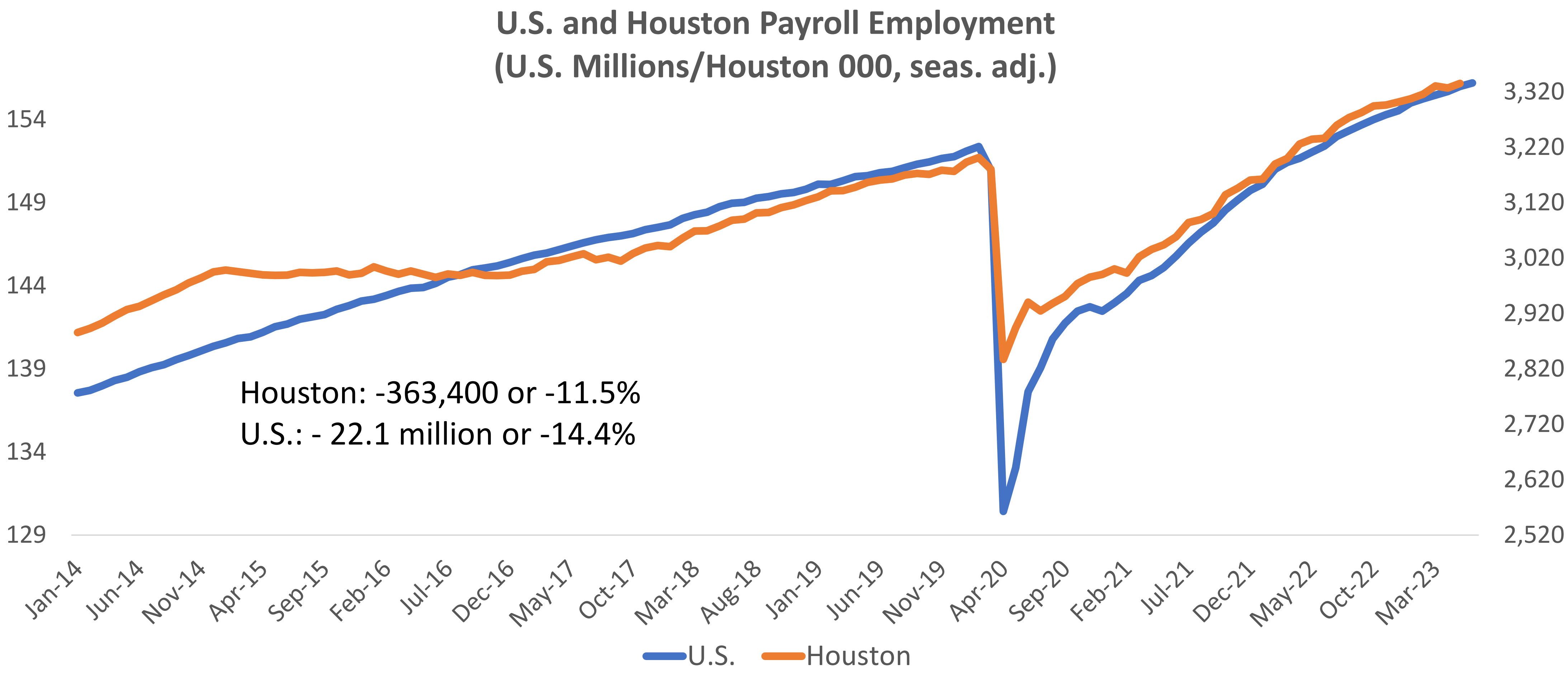
- The Federal Reserve has reiterated strongly that its objective remains two percent inflation over the longer term.
- The committee has raised its key policy rate to 5.00-5.25 percent in ten consecutive increases and paused in June. Further increases of 25 to 50 bps are likely. This would imply a peak federal funds rate near or above 5.50% through 2023
- This would see rates near 4.4% for the two-year note or 3.9% for the 10-year; expect a prime rate near 7.5% and conventional 15-year mortgages near 6.5%.
- The May 2022 meeting also brought a commitment to shrink the Fed's balance sheet starting June 1 by $48 billion per month and rising to $95 billion per month in September. They remain on this track with over $1.2 trillion now sold



Note: Fed funds are Atlanta Fed 6/14/23 estimates to 2025 based on COMEX futures and other financial variables

Houston Looks Like the US:
Consumer Strength with Weakness on Periphery

COVID-19 Shock Played Out With Deep Job Losses: But April 2022 Saw Houston Return to the 2020 Peak



Seasonal adjustment of Houston employment from Dallas Fed and U.S. by BLS

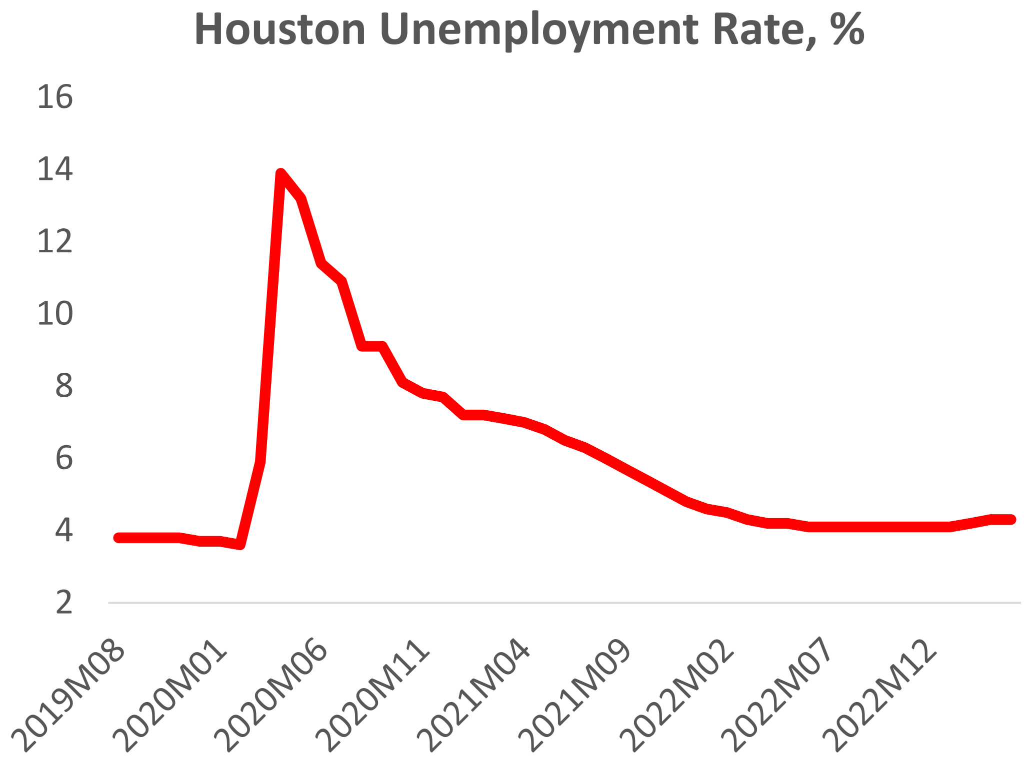
Houston Completes Its COVID Recovery But Lags the Other Major Texas Metros

	Recovery Date	Net New Jobs Since 2020 Peak (000)	Net New Jobs Since 2020 Peak (%)	Annual Growth Rates Since 2020 Peak (%)
Austin	May ’21	154.8	13.5%	3.9%
Dallas	Jul ’21	250.9	9.2%	2.7%
Fort Worth	Oct ’21	73.5	6.6%	1.9%
Houston	Apr ’22	108.2	3.4%	1.0%
San Antonio	Nov ’21	66.9	6.1%	1.8%
Midland/Odessa	Nov ’22	3.6	1.8%	0.5%
Texas	Oct ’21	854.8	6.6%	2.0%
U.S.	Jun ’22	3693.0	2.4%	1.1%

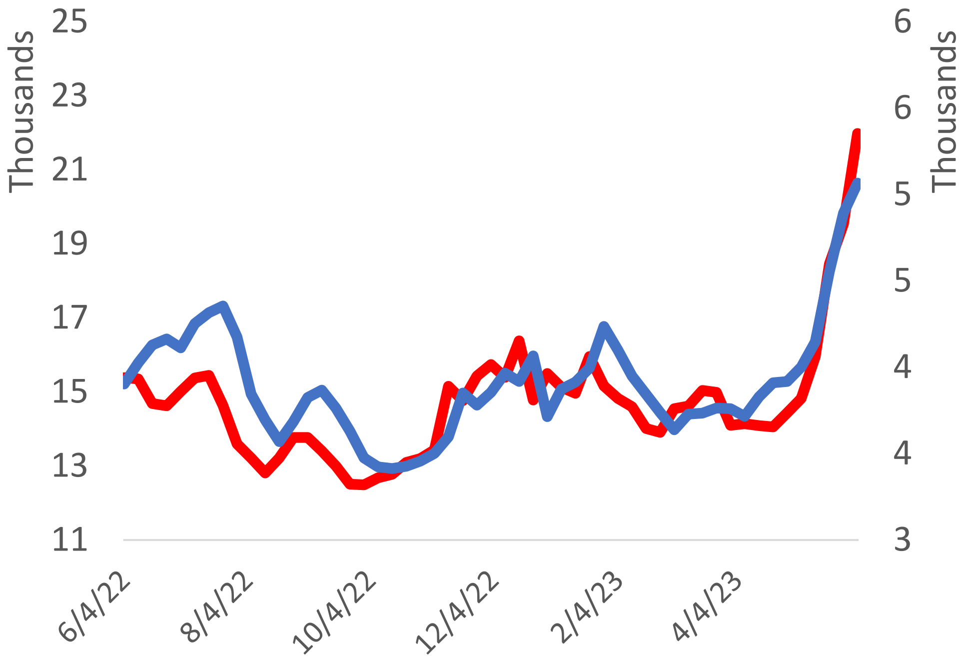
Dallas Fed adjusted payrolls for Texas and its metros to May ’23. Different seasonal adjustment factors mean T.W.C or other sources can have slightly different outcomes.

Houston's Unemployment Rate Softer and Initial Claims Rising: A Very Tight Market Is Softening

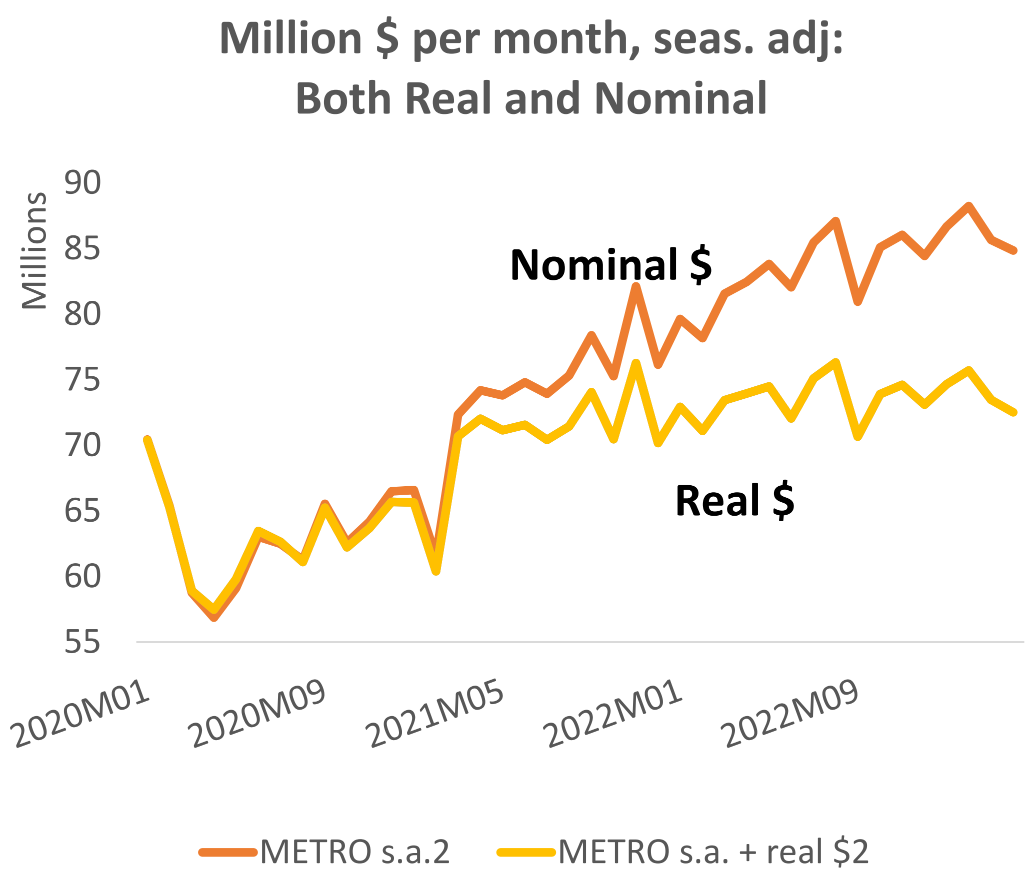
Houston's Unemployment Rate Peaked at 13.9%, Now 4.3% vs U.S. at 3.6%



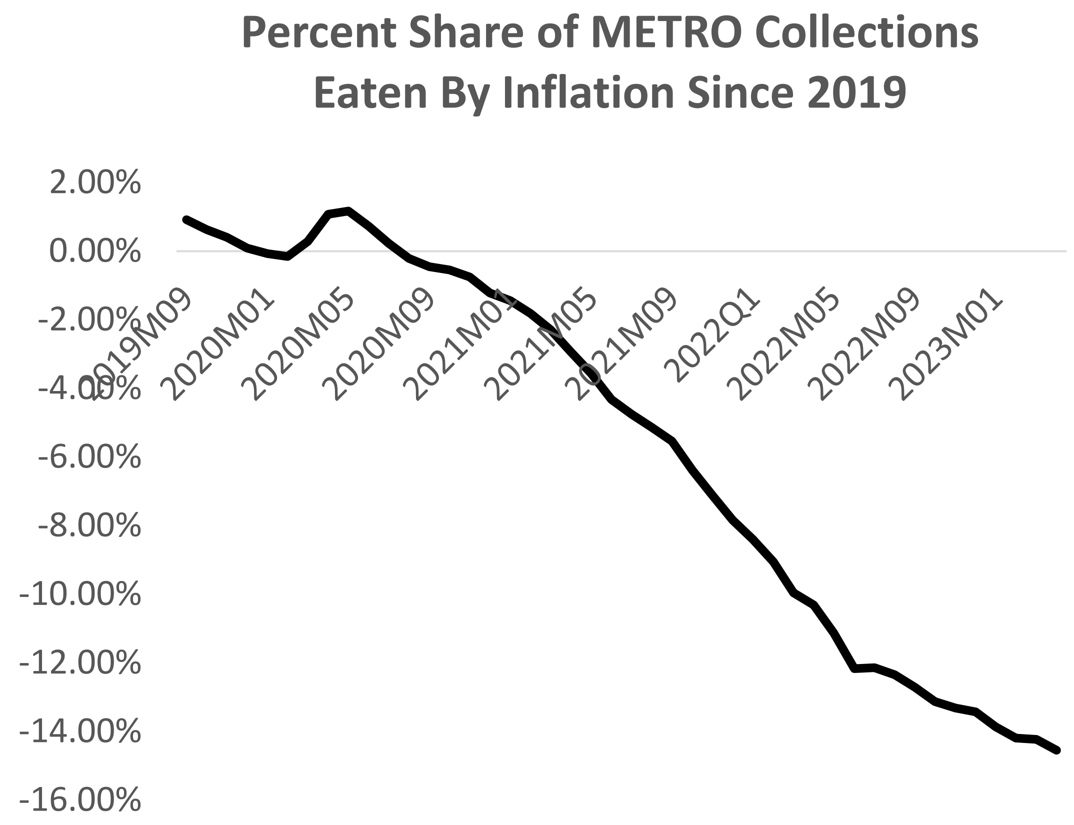
Initial Claims for Unemployment in Houston Rising in a Still-Tight Market



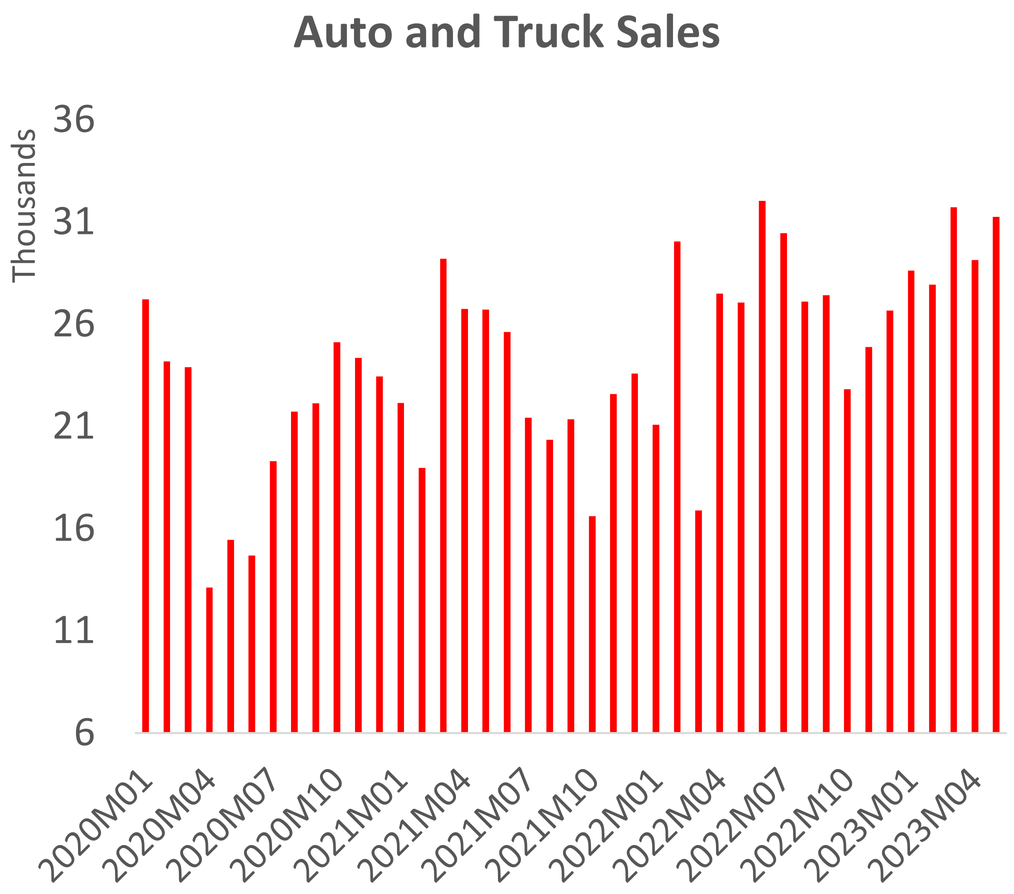
METRO Sales Tax Collections Remain Strong With or Without Inflation in 2021-22

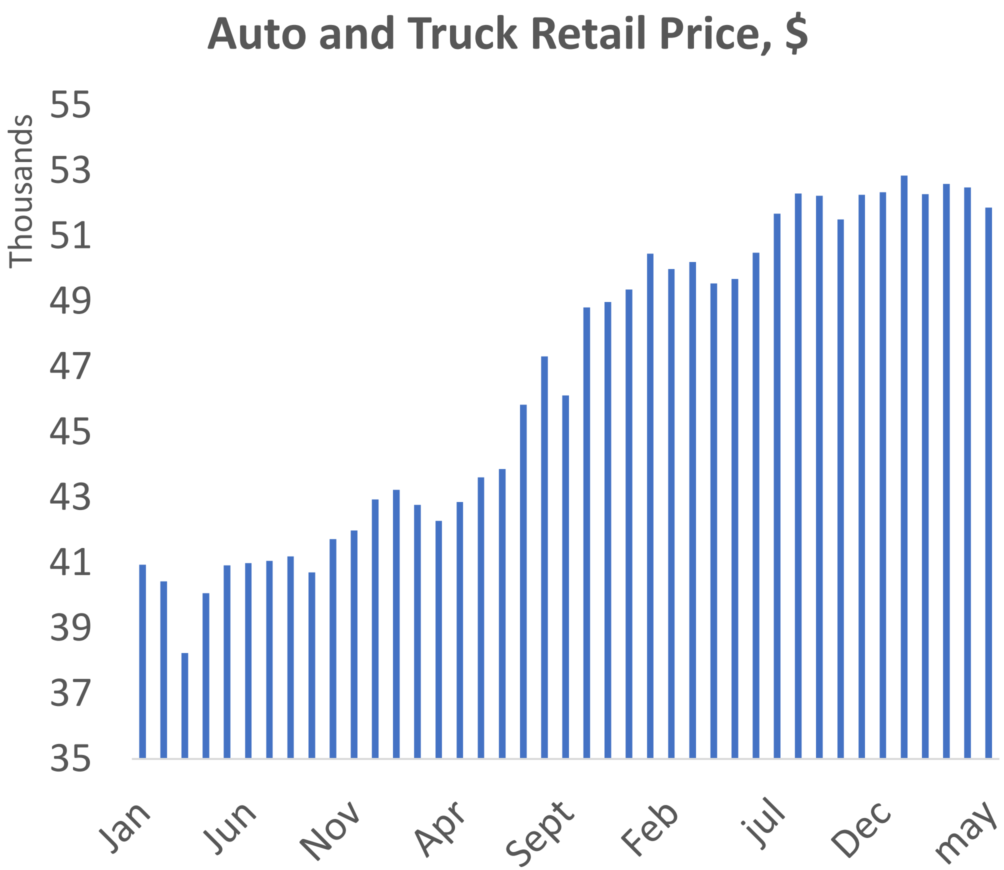


Real $2020 using consumer price deflator



Houston Auto Sales and Pricing Show the COVID Dip and Multiple Stimulus Impacts

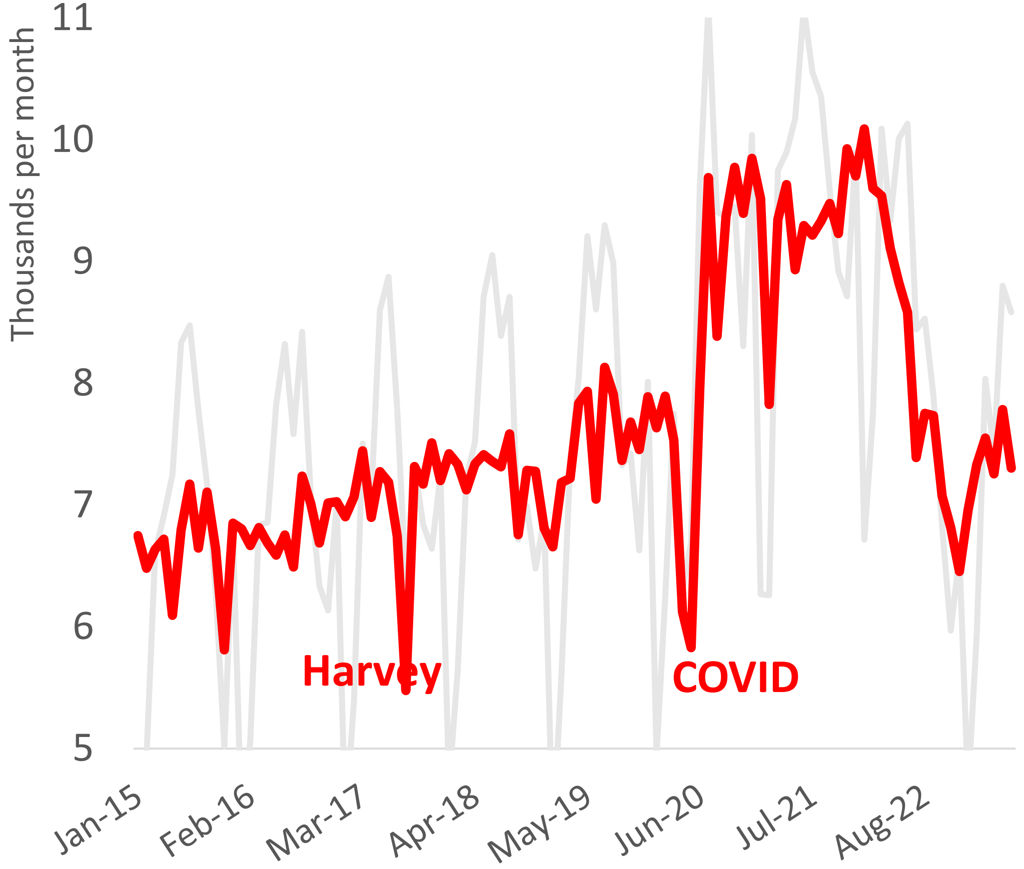




InfoNation

Houston Existing Home Sales Soared in Pandemic, But Have Fallen Just as Hard Afterwarg

(Houston MLS sales, s.a.)



- The initial response to the pandemic was a sharp pull-back in sales due to the stay-home orders and nonessential business closings
- Then a quick drop in interest rates and a check from the federal government ignited an increase in sales to as much as 27.4% above pre-pandemic levels
- Local sales through May are now 7.5% BELOW pre-pandemic levels, but stabilizing in recent months
- Home rose 33.1% in the pandemic and are now down only 1.8%. Few prospects for appreciation ahead.

Source: Texas A&M Real Estate Center, HAR, seasonally adjusted by IRF

A New Financial Model for Oil Leaves Behind a Smaller, Slower-Growing Industry In Houston

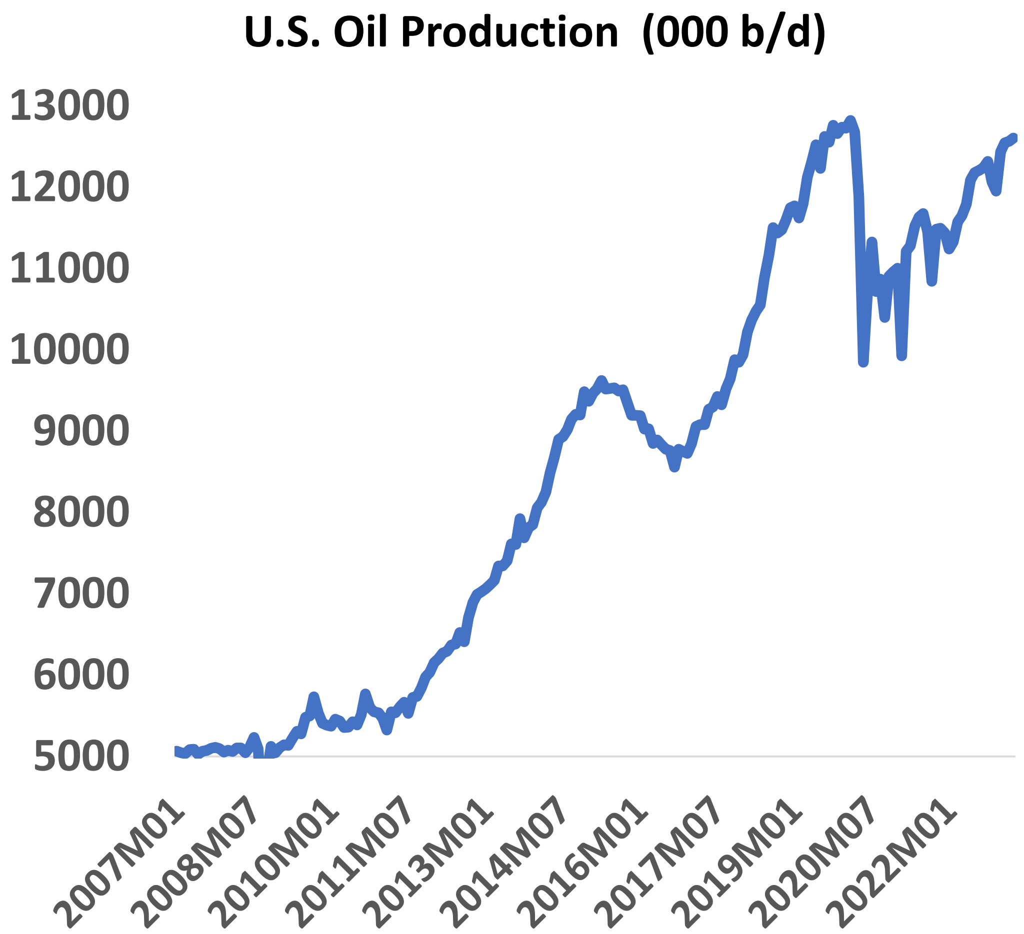
U.S. Oil Was Forced to Turn to a New Management Style and a New Financial Model

- From 2003-2014, the US fracking industry seemed to have the Midas touch. As long as the price of oil was above $100 per barrel, they were a collection of high-flying tech companies living off ever-rising equity values
- Fracking has since lived through three drilling downturns since 2014 -- and three rounds of industry bankruptcy totaling $290 billion – that showed them that $100 oil is an anomaly. Oil price is usually lower, and that fracking is a high-cost source of oil
    - OPEC deliberately slashed the price of oil in late 2014 to $40-$50 per barrel in 2014 and the rig count quickly fell from 2,000 to 400 and Houston lost 77,000 oil jobs
    - In 2017, OPEC raised prices and producers quickly went back to high levels of oil production. OPEC again cut prices to $50 per barrel, and producers could earn no profits nor see any gains in equity. A deep credit crunch followed as Wall Street turned its back on the industry
    - Then came COVID and a near-death experience for many U.S. producers. A new approach to industry finance and management was needed

U.S. Producers Respond to Financial Needs By Diverting Cash Flows and Cutting Production

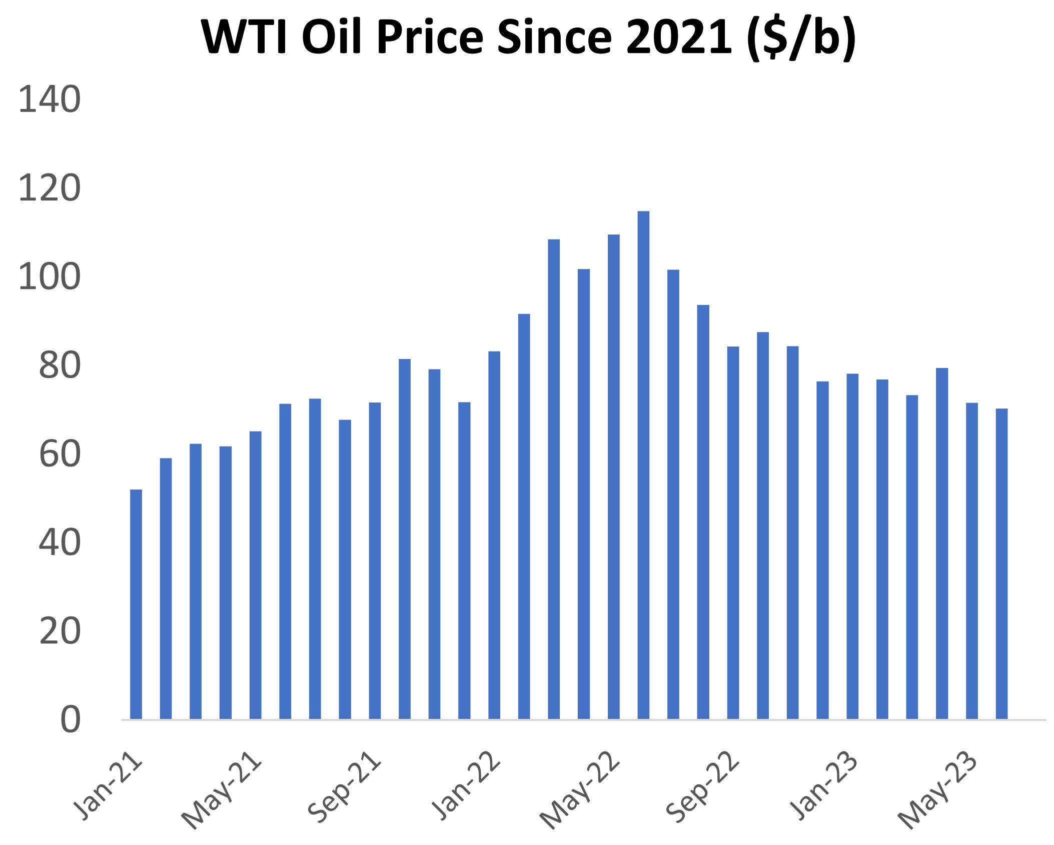
- No longer a tech stock, producers are now value stocks committed to a new financial model
- U.S. producers have committed to rewarding investors by diverting 30% to 40% of free cash flows to dividends or an improved balance sheet
- Recent earnings reports show companies are meeting these commitments by providing record levels of free cash flows to investors
- If OPEC holds spare capacity, this means holding down U.S. production to about 11-12 million barrels per day. The peak was 12.7 million b/d in February 2020

DOE/EIA, Seasonally adjusted by IRF

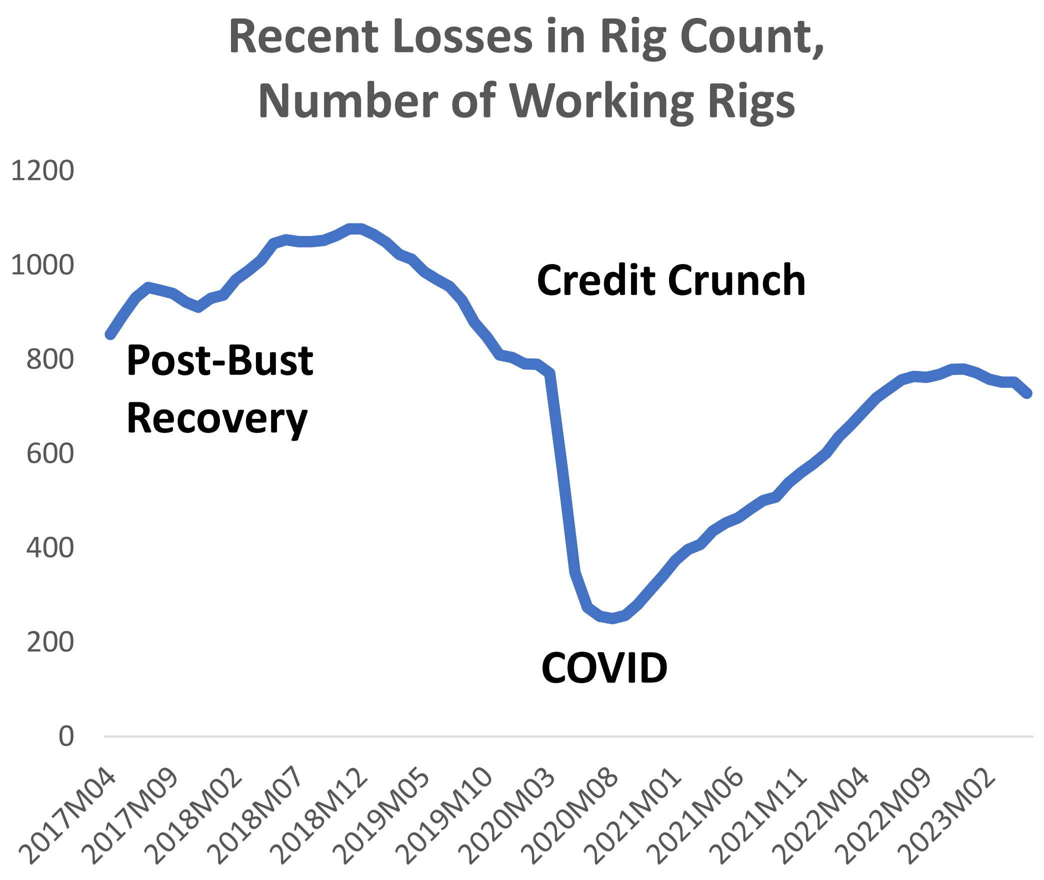


Higher Oil Prices Are Back
But There Was Limited Producer Response in 2021-23

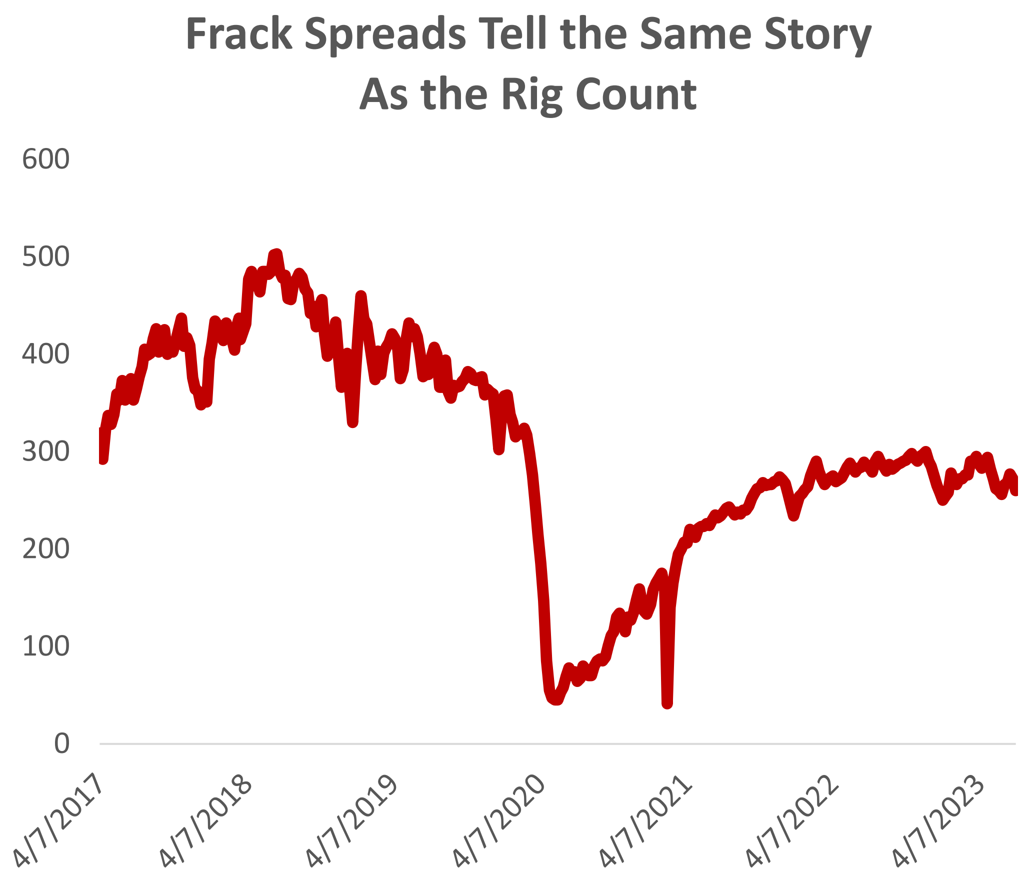
- Higher oil prices are back … but they don’t mean what they once did for U.S. oil
- Oil markets pushed above $70/b in October 2021 with Omicron in retreat, demand rising, and little OPEC spare capacity
- Even with oil prices still above $70 per barrel, we have seen only limited gains in the rig count, oil jobs, or increases in U.S. oil production
- *US producers explicitly tell investors thay will not raise production if global oil demand is weak, and implicitly support higher prices from OPEC*



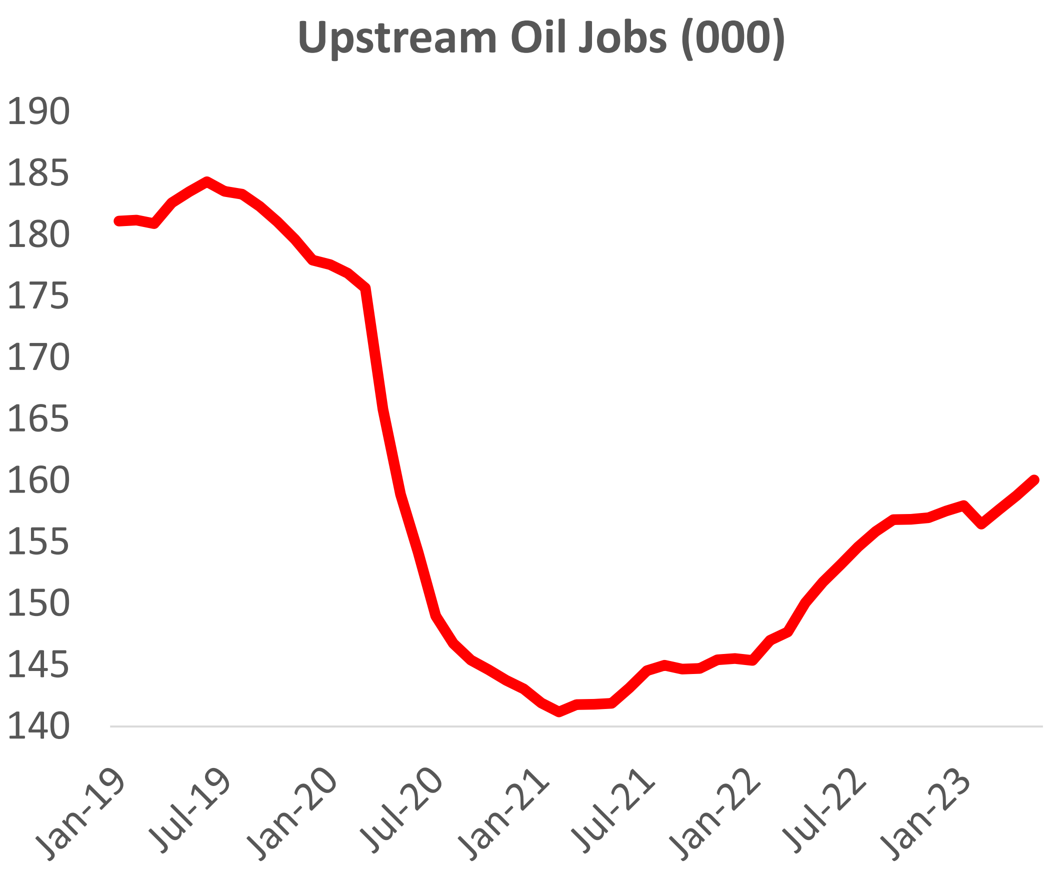
Rig Count and Frac Spreads Peeak Near Pre-COVID Levels: Show Weakness and Small Declines in Recent Weeks



Baker Hughes Rig Count



Houston Lost 43,400 Upstream Jobs After a Peak in 2019Q2, And Only 17,600 or 40.6% Are Back

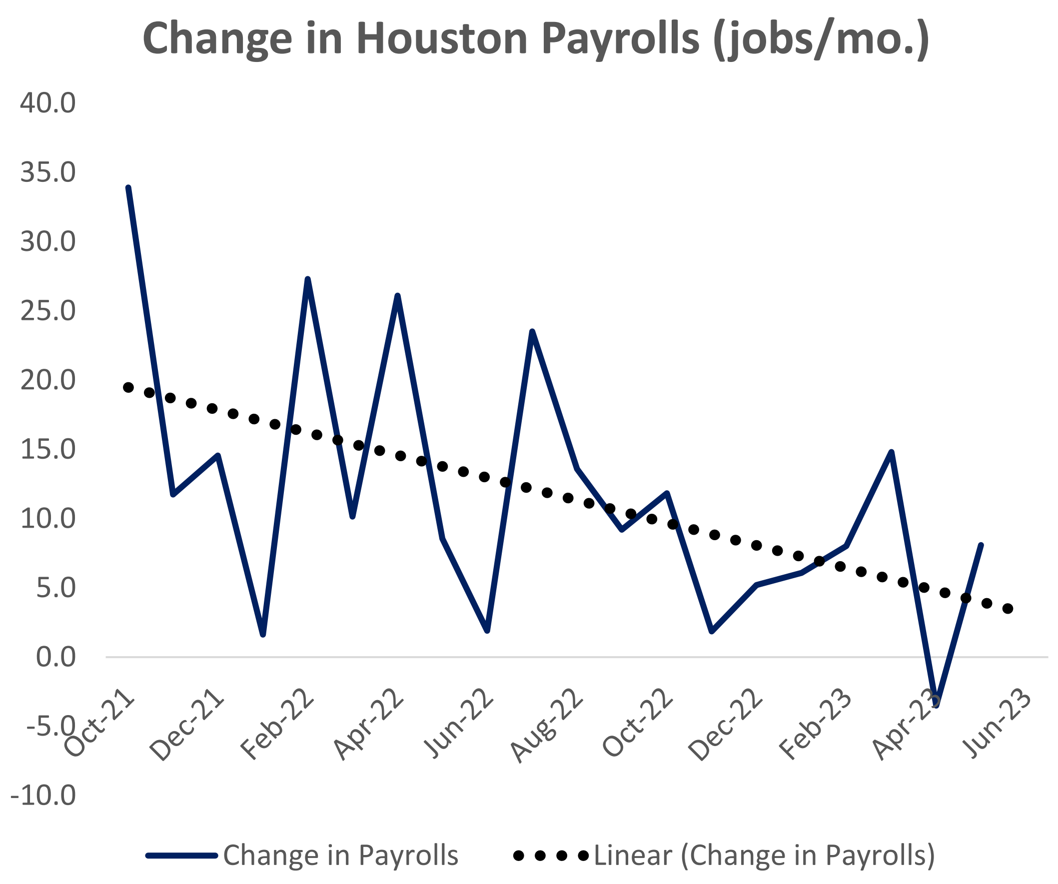


Texas Workforce Commission, calculations of IRF

- The COVID downturn in Houston's employment had begun in May 2019 a credit crunch and with the loss of 7,700 jobs
- Then COVID arrived and added a total of 43,400 by February 2021
- Steady job recovery came only in nine months of early 2022, with few further gains for the last eight months. So far, only 40.6% of losses are recovered
- Counting back to the onset of the Fracking Bust in 2014, Houston has lost about 80,000 oil-related jobs

Outlook for Houston: 2023-27

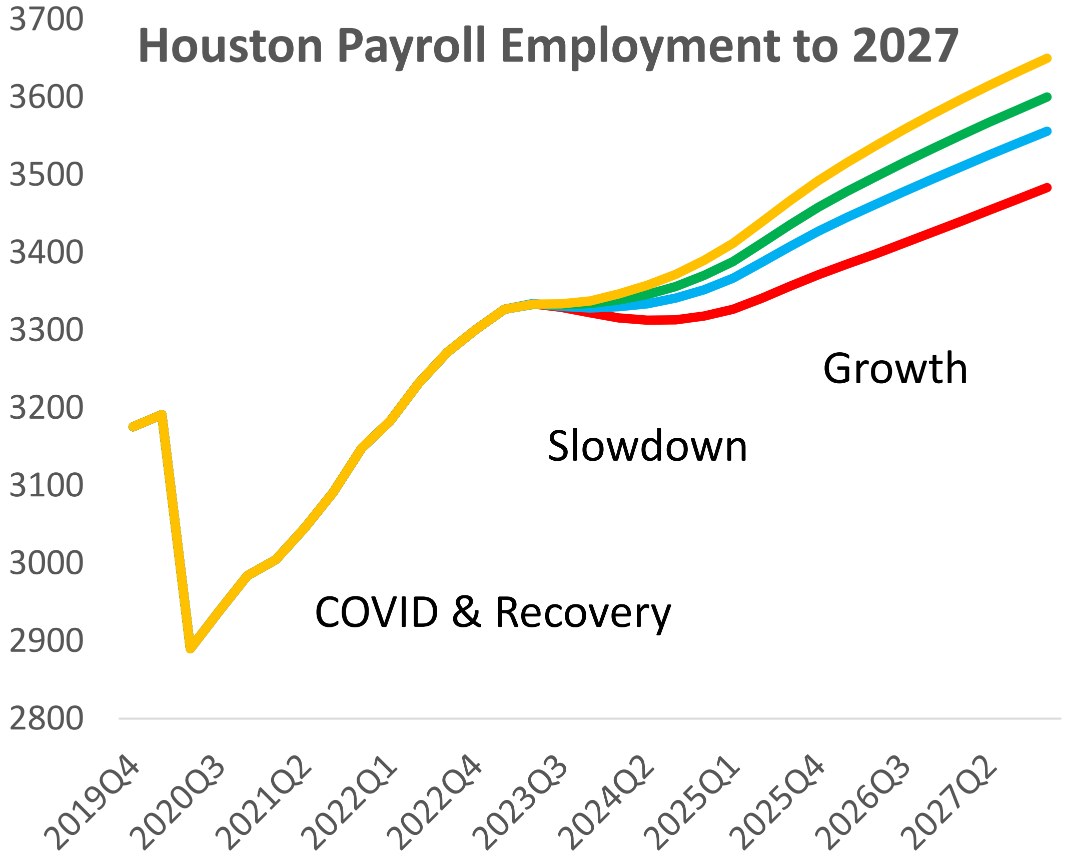
Payroll Employment Growth in Houston Has Slowed Steadily Since COVID Losses Were Restored



- It took until April of 2022 for Houston to restore all of the job losses from the lockdown period
- Bringing those jobs back resulted in monster job gains in 2021-22 of 164,100 and 153,000
- Since the COVID losses have returned local employment growth has slowed steadily
- April was the first negative reading on locval jobs since Feb 2021. Houston is still on pace to add 80,000 jobs this year – *but only assuming that the slowing trend in jobs does not continue from here*

A Major Slowdown Coming Soon

- Assume the outlook from *The Survey of Professional Forecasters*: A steep US slowdown in 23Q2 followed by very slow growth through much of 2024
- Low, Medium and High forecasts based on $40, $65, and $80 oil prices.
- $100 oil-price marker is added to show even $100 won't bring back earlier booms
- The new financial model for oil assumes 30% diversion of cash flows by oil producers – a smaller, slower-growing industry



Contributions to Houston Job Growth 2019 to 2027: Comparing Different Oil Prices $40 to $100

(‘000 Q4/Q4)

	Change in Payrolls				Payroll Growth Rate (%)			
	$40	$65	$80	$100	$40	$65	$80	$100
2019	58.5	58.5	58.5	58.5	1.9	1.9	1.9	1.9
2020	-191.9	-191.9	-191.9	-191.9	-6.2	-6.2	-6.2	-6.2
2021	164.1	164.1	164.1	164.1	5.4	5.4	5.4	5.4
2022	152.9	152.9	152.9	152.9	4.7	4.7	4.7	4.7
2023	21.4	27.5	33.2	36.8	0.6	0.8	1.0	1.1
2024	-4.3	23.6	36.3	52.3	-0.1	0.7	1.1	1.6
2025	53.28	75.45	87.98	102.53	1.6	2.2	2.6	3.0
2026	54.60	67.03	75.56	85.69	1.6	1.9	2.2	2.4
2027	57.3	61.3	66.0	71.6	1.7	1.7	1.8	2.0

Contributions to Houston Job Growth 2019 to 2027: Comparing Different Oil Prices $40 to $100
(‘000 Q4/Q4)

	Change in Payrolls				Payroll Growth Rate (%)			
	$40	$65	$80	$100	$40	$65	$80	$100
2019	58.5	58.5	58.5	58.5	1.9	1.9	1.9	1.9
2020	-191.9	-191.9	-191.9	-191.9	-6.2	-6.2	-6.2	-6.2
2021	164.1	164.1	164.1	164.1	5.4	5.4	5.4	5.4
2022	152.9	152.9	152.9	152.9	4.7	4.7	4.7	4.7
2023	21.4	27.5	33.2	36.8	0.6	0.8	1.0	1.1
2024	-4.3	23.6	36.3	52.3	-0.1	0.7	1.1	1.6
2025	53.28	75.45	87.98	102.53	1.6	2.2	2.6	3.0
2026	54.60	67.03	75.56	85.69	1.6	1.9	2.2	2.4
2027	57.3	61.3	66.0	71.6	1.7	1.7	1.8	2.0

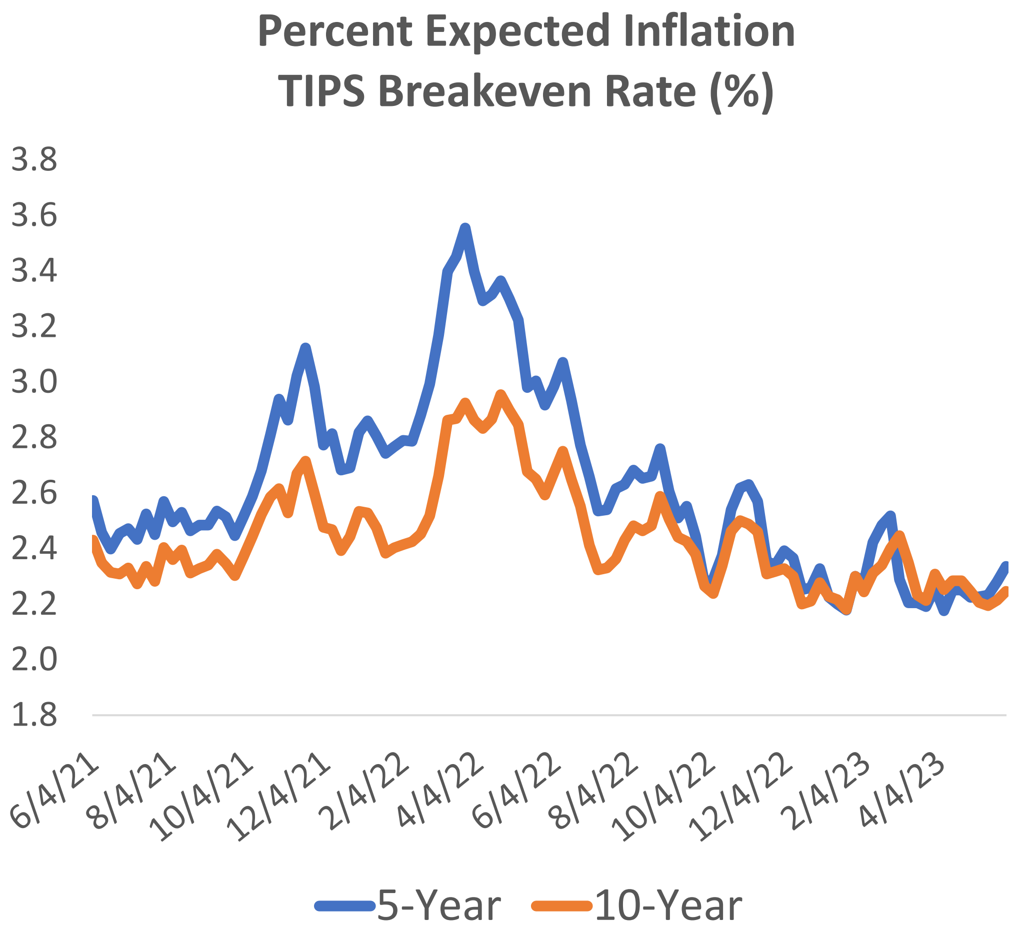
The Bottom Line for Today

- COVID and the pandemic economy are behind us – and we hope no new mutations change this picture. But it did leave behind a significant COVID policy mess to clean up: a mis-timed stimulus and far too much cash, the Fed's tardy response to inflation, and now an all-out effort to slow the economy
- The Fed has responded quickly to slow the U.S. economy with monetary policy likely driving one percent GDP growth through 2023 and no meaningful job growth. The *Survey of Professional Forecasters* sees no recession forecast in 2023, but it does bring a year of no growth
- Oil and fracking have become a smaller and slower-growing industry, having less economic impact on Houston. Houston's future growth slows in response
- The US outlook is taken from the *Survey of Professional Forecasters*. With little support from oil or the US economy, Houston also falls into slowing job growth in 2023, remains slow and below trend through 2024, and only returns to trend growth in 2025 and beyond

Consumer Strength Meets Fed Policy: Is There Really a Recession Ahead?

Robert W. Gilmer, Ph.D.
C.T. Bauer College of Business
June 2023

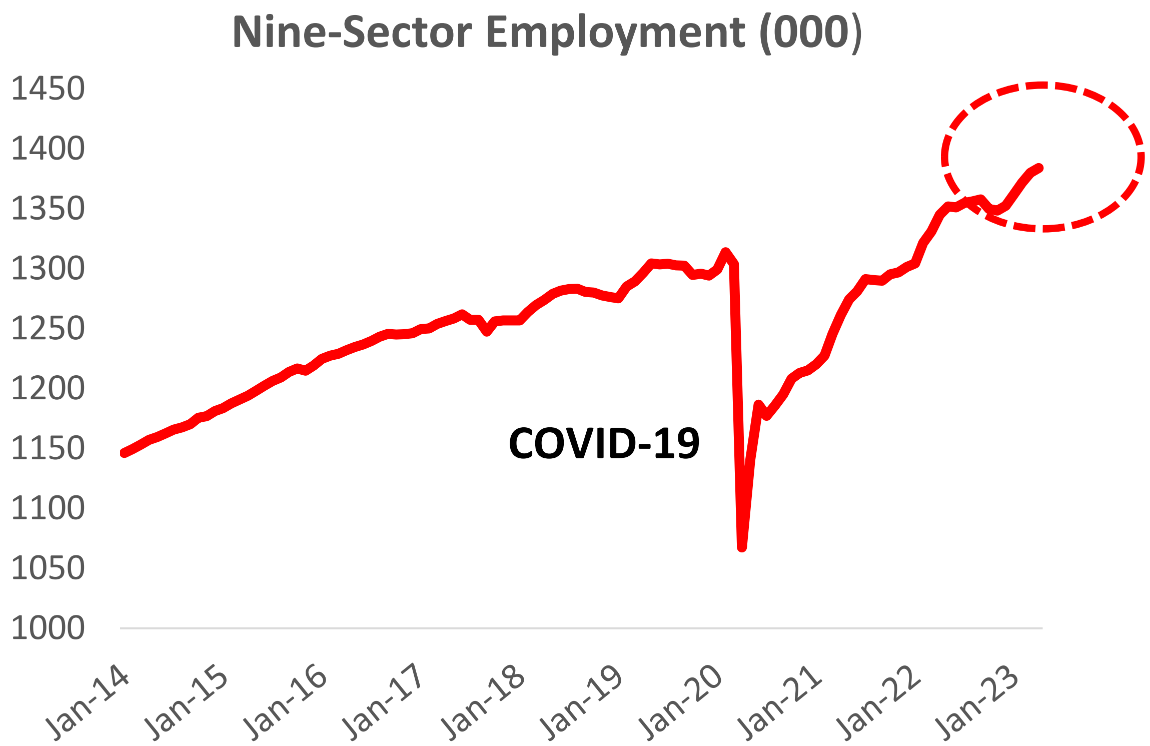
Where Does Inflation Go From Here?



- Inflation expected by consumers according to the U of Michigan December Consumer Survey is 4.5% over the next 12 months and 3.8% average over 5-10 years
- *The Survey of Professional Forecasters* says we finish 2023 at a 3.4% y-o-y CPI inflation, followed by 2.5% in 2024 and 2.3% in 2025
- Breakeven TIPS rates from financial markets peaked with Fed rate hikes and are down a full percentage point from early 2022
- The TIPS market expectations rose with last January's bad economic news, but is now falling back

Nine Local Service Sectors Account for 41.9% of Houston's Jobs in 2019, But Contributed 68% of Lockdown Job Losses

Nine Service Sectors Lost 246,500 Jobs Or 68.5% of Houston's April 2020 Losses



Contact-Sensitive Services: % from Pre-COVID By Sector: Feb '20 to Mar '23