



# The Economic Outlook

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## U.S. Outlook

- We have become more cautious about the economic outlook, given persistently high inflation. While the Fed is seeking a 'softish' landing, we have reduced our expectation for economic growth over the next two years and now see a better than even chance the economy slips into recession by the end of 2023. Housing and commercial real estate markets also appear set to slow, despite current low vacancy rates.
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## Inflation Has Accelerated

- Inflation has proven to be stronger and more persistent than the Fed had expected. The primary culprit is the incredibly expansive fiscal policy over the past couple of years, which has been accommodated by an equally incredible expansive monetary policy. Supply chain disruptions are playing a supporting role and price increases will ease a bit as bottlenecks diminish. Inflation expectations have also risen.
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## Affordability Migration

- The pandemic accelerated the migration from high-cost, densely-populated cities to secondary metro areas in the South and Mountain West. The move from transit-oriented cities to suburban areas and automobile-centric metropolitan areas helped fuel sales of single-family homes and motor vehicles. The shift has also bolstered suburban retailing and increased demand for suburban offices and apartments.
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## Monetary and Fiscal Policy Tighten

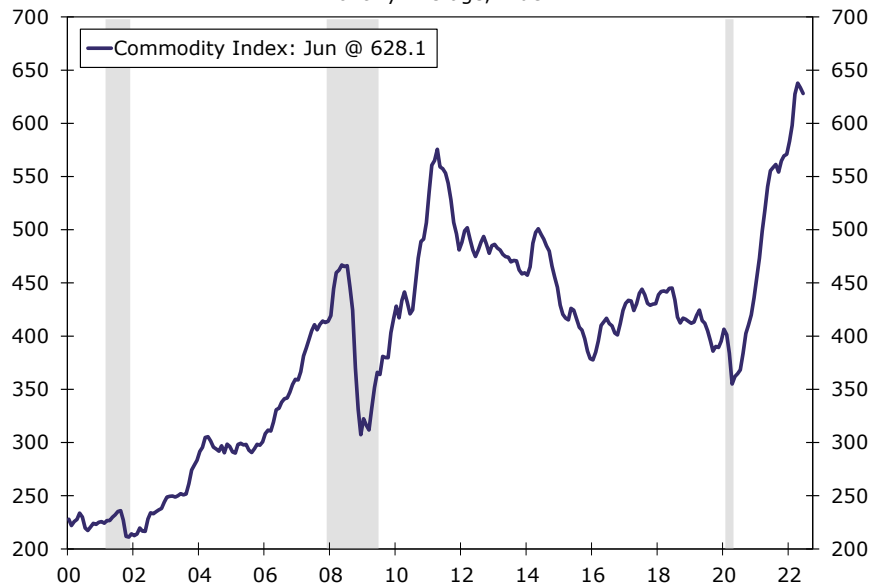
- After initially misreading the inflation threat, the Fed accelerated the wind down of quantitative easing and accelerated the timetable for hiking interest rates. Fiscal policy has also run into a brick wall, as the prospect of higher inflation now outweighs the benefits of another massive fiscal stimulus. With less stimulus in the pipeline, real after-tax income will slow and restrain consumer spending.
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# Commodity Prices

The Russia-Ukraine conflict has sparked a sharp rise in commodity prices. Notably, the region produces and exports large amounts of wheat, corn and soybeans as well as oil and natural gas. Many Ag prices were high before the conflict, reflecting droughts in key growing regions.

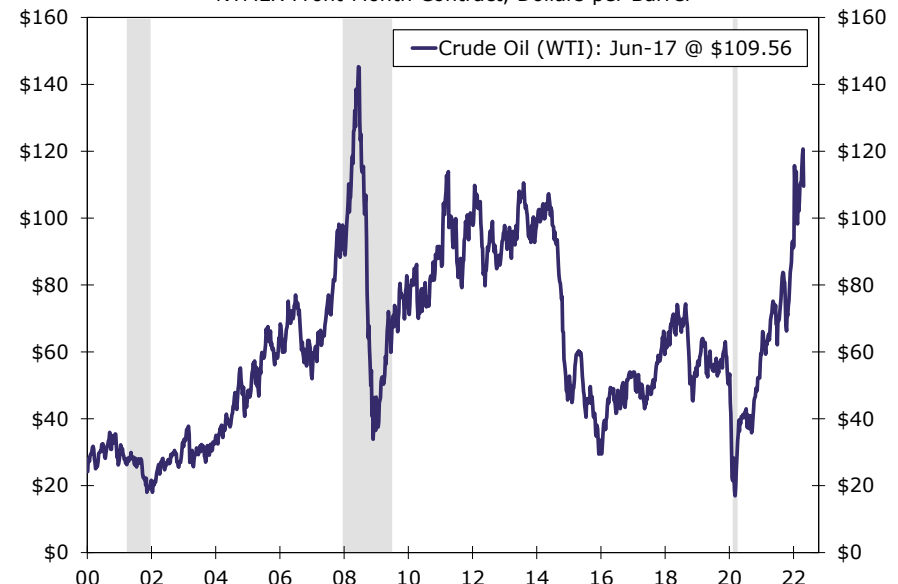
### Commodity Prices

Monthly Average, Index

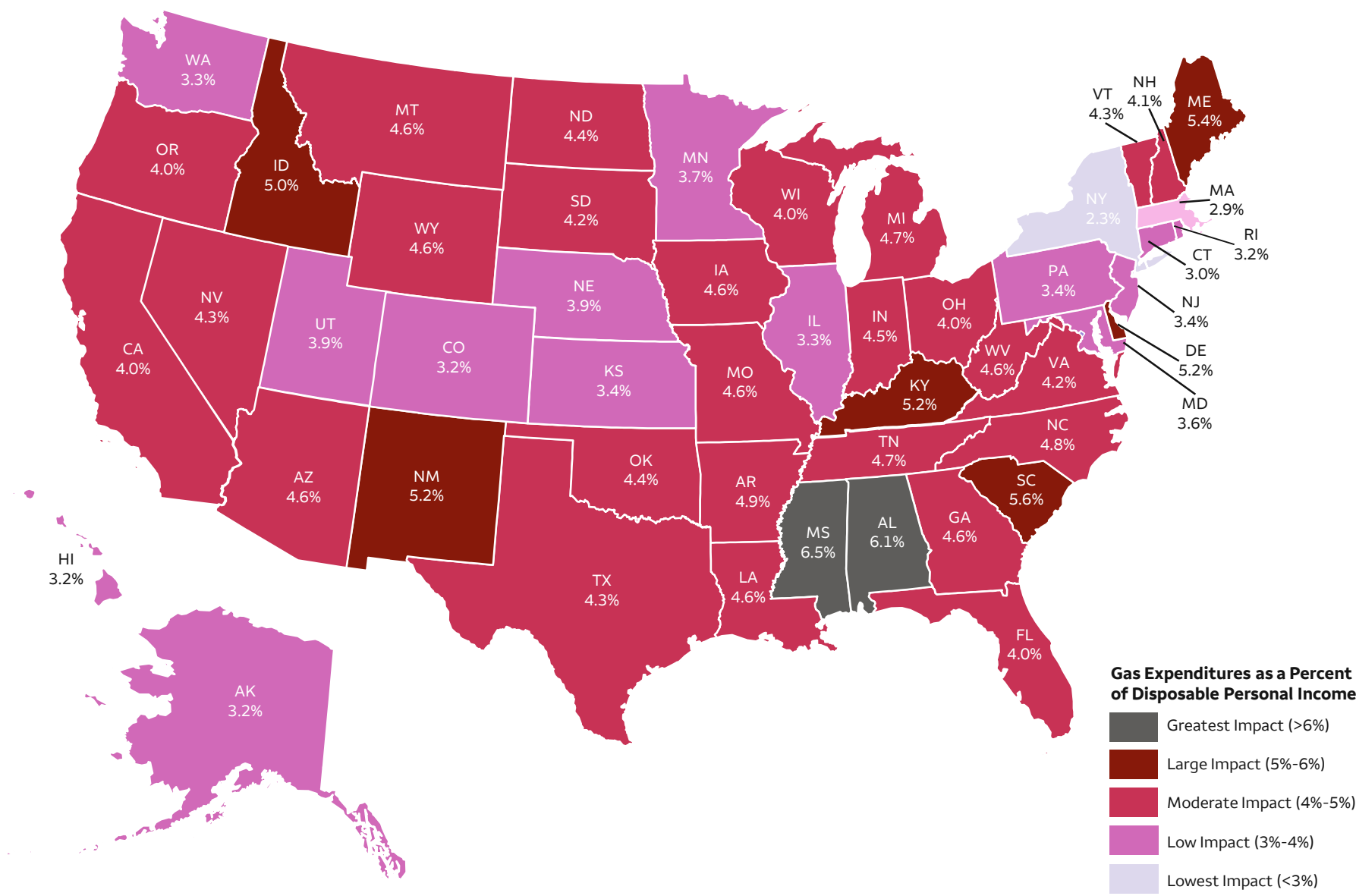


### Crude Oil

NYMEX Front-Month Contract, Dollars per Barrel



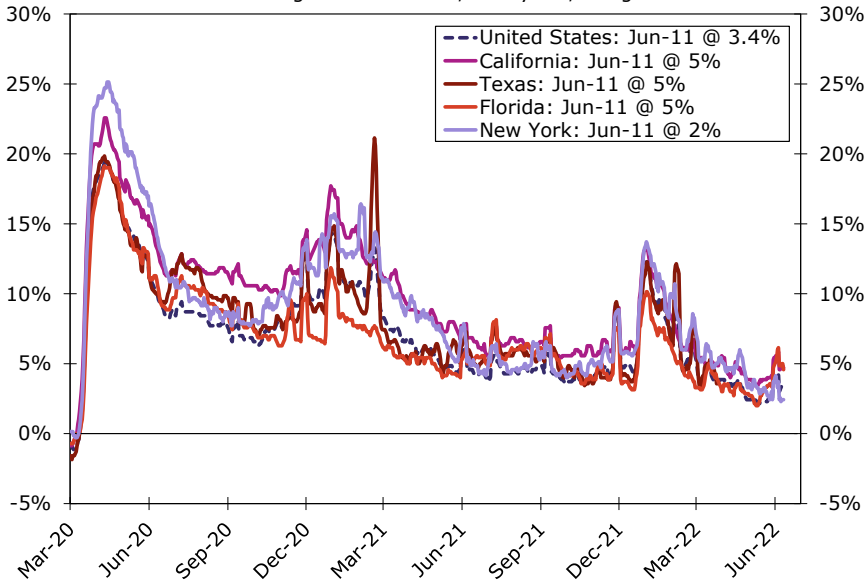
# Regional Impact of Higher Gasoline Prices



Return-to-office plans are moving forward, however, Americans continue to spend a larger share of their time at home and away from workplaces.

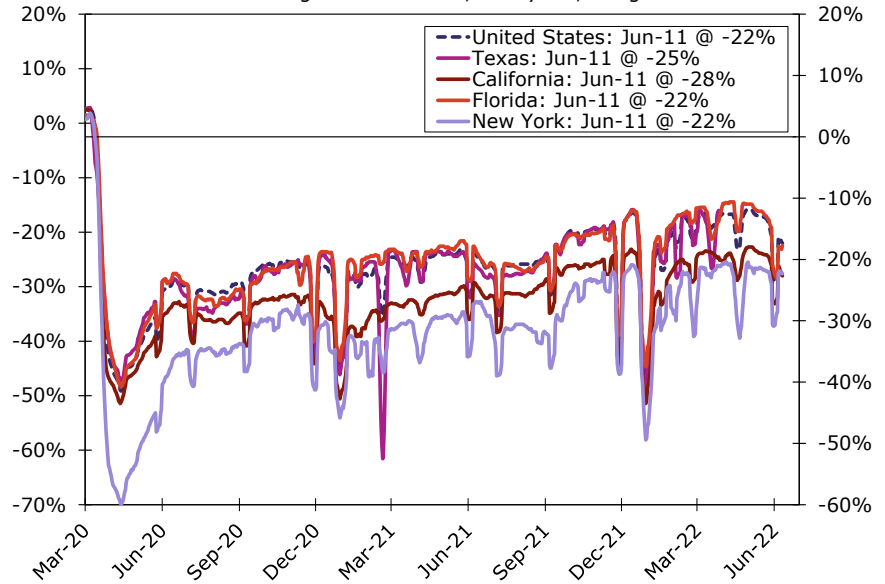
## Time Spent at Residential Locations

Percent Change from Baseline, 7-Day MA, Google Data



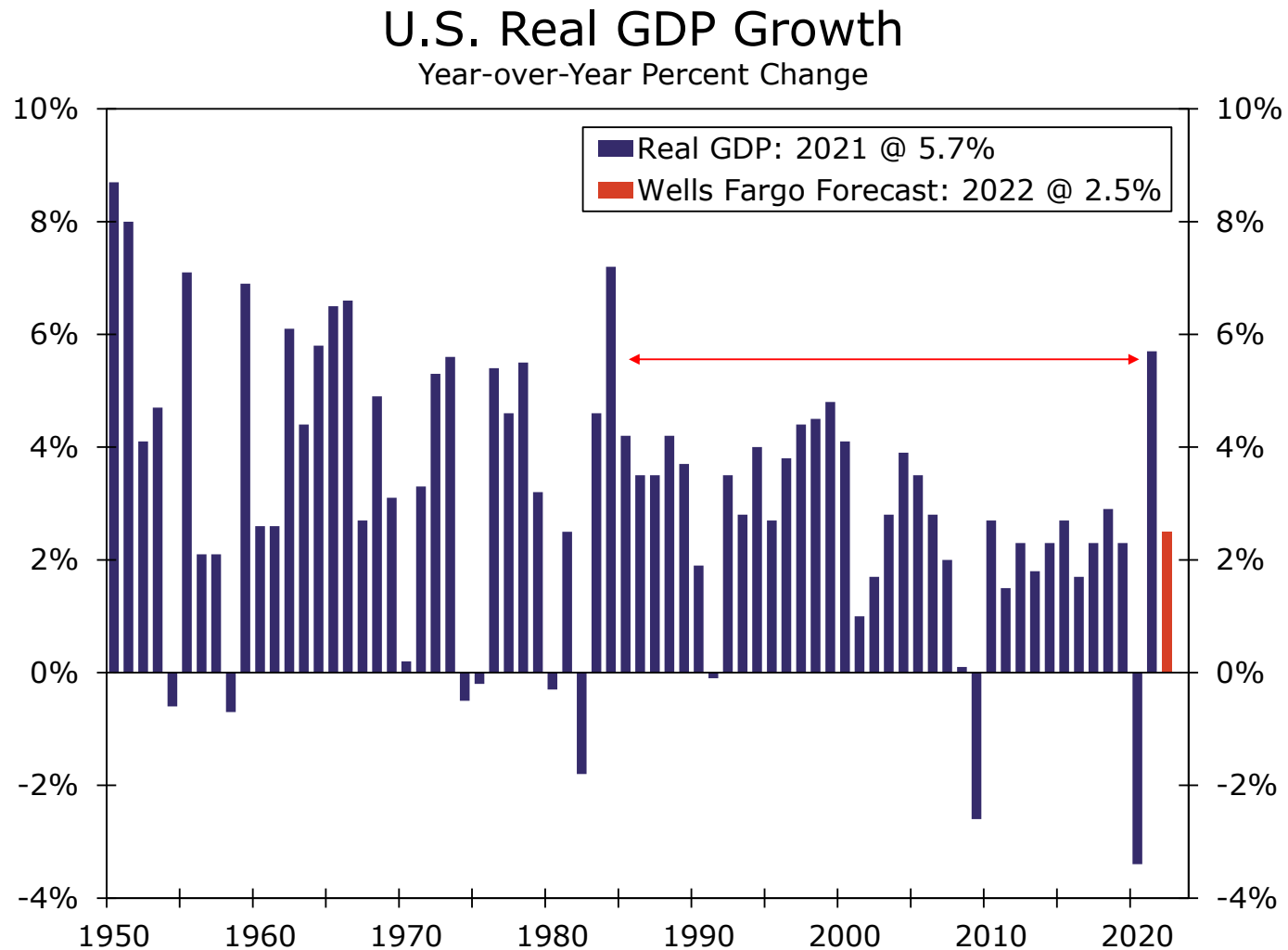
## Visits to Workplaces

Percent Change from Baseline, 7-Day MA, Google Data

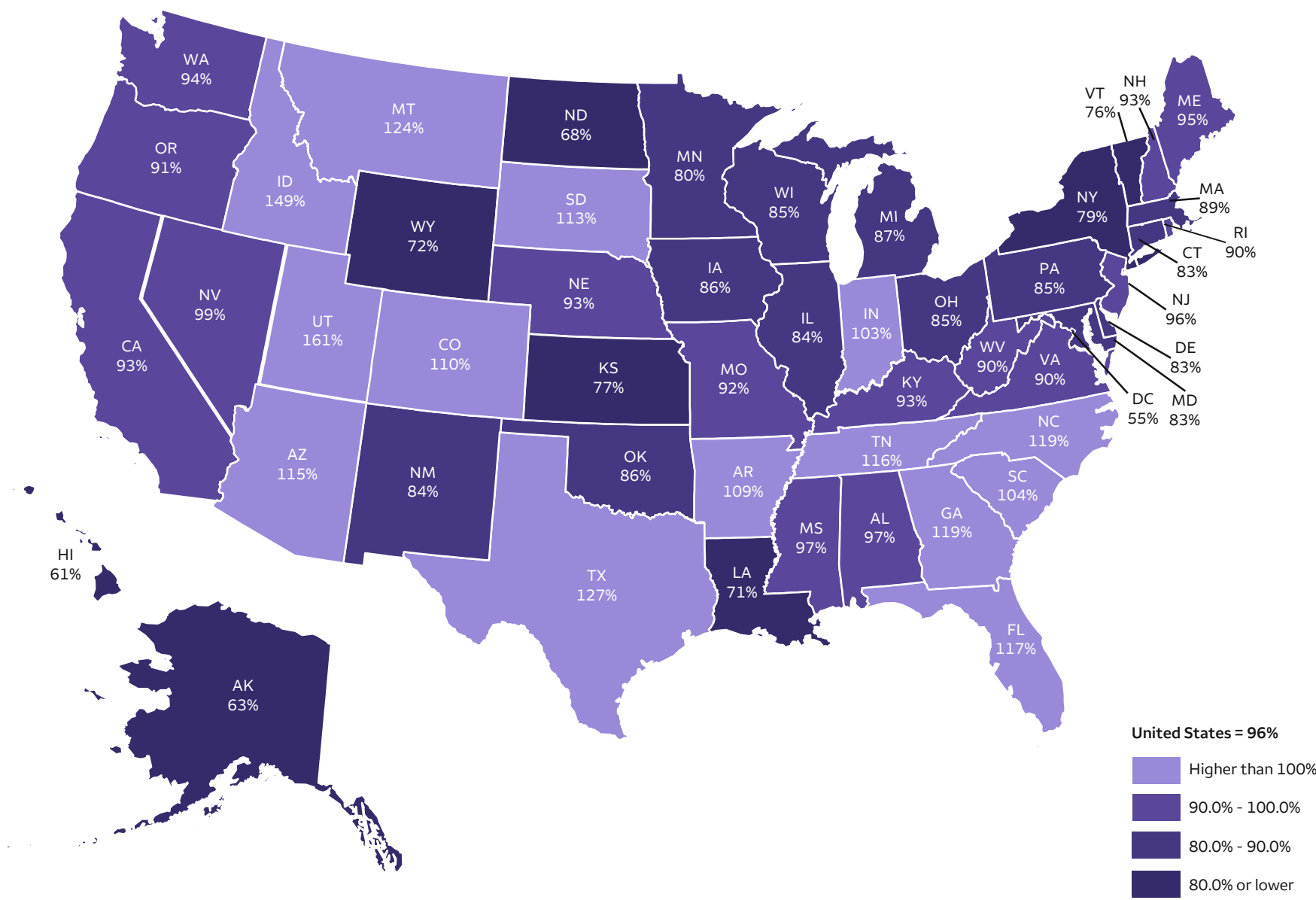


Full year GDP growth for 2021 came in at 5.7%, which marks the fastest GDP growth since 1984.

Even with the rising cost of necessities, economic growth consumer spending remains strong. We project 2.5% real GDP growth this year and 0.0% in 2023.



# Percent of March and April Job Losses Recovered – May 2022

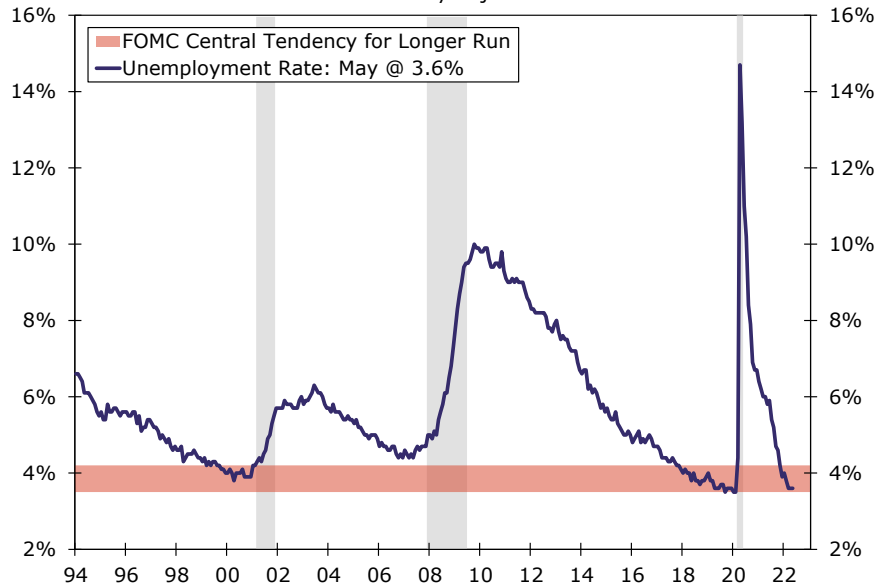


Source: U.S. Department of Labor and Wells Fargo Economics

The unemployment rate has nearly reached its pre-pandemic level of 3.5%. The labor force participation rate for prime-working age individuals, however, is a full percentage point below its pre-pandemic peak. There are nearly two job openings for every unemployed person.

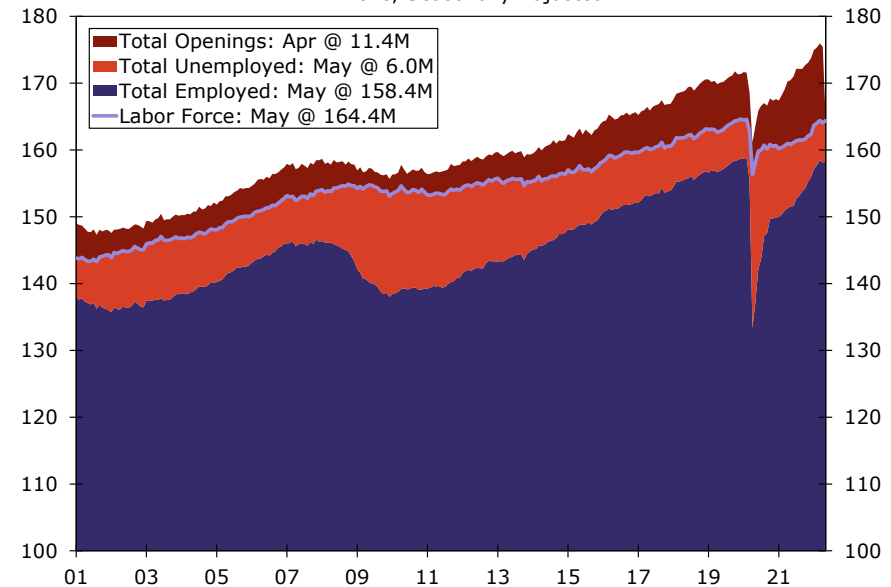
## U.S. Unemployment Rate

Seasonally Adjusted



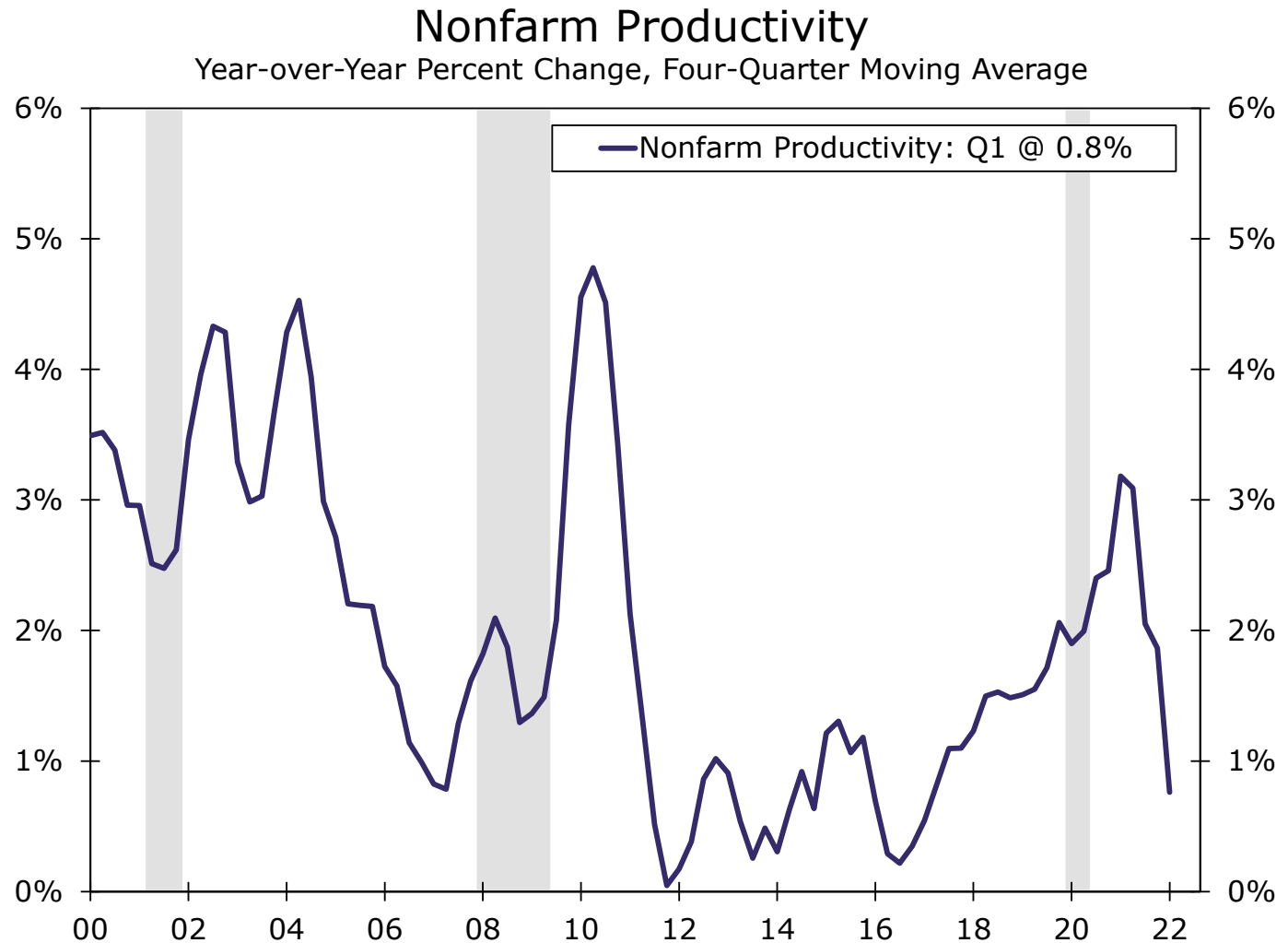
## U.S. Labor Force Dynamics

In Millions, Seasonally Adjusted





Trends in productivity have turned down, with growth looking no better than before the pandemic.

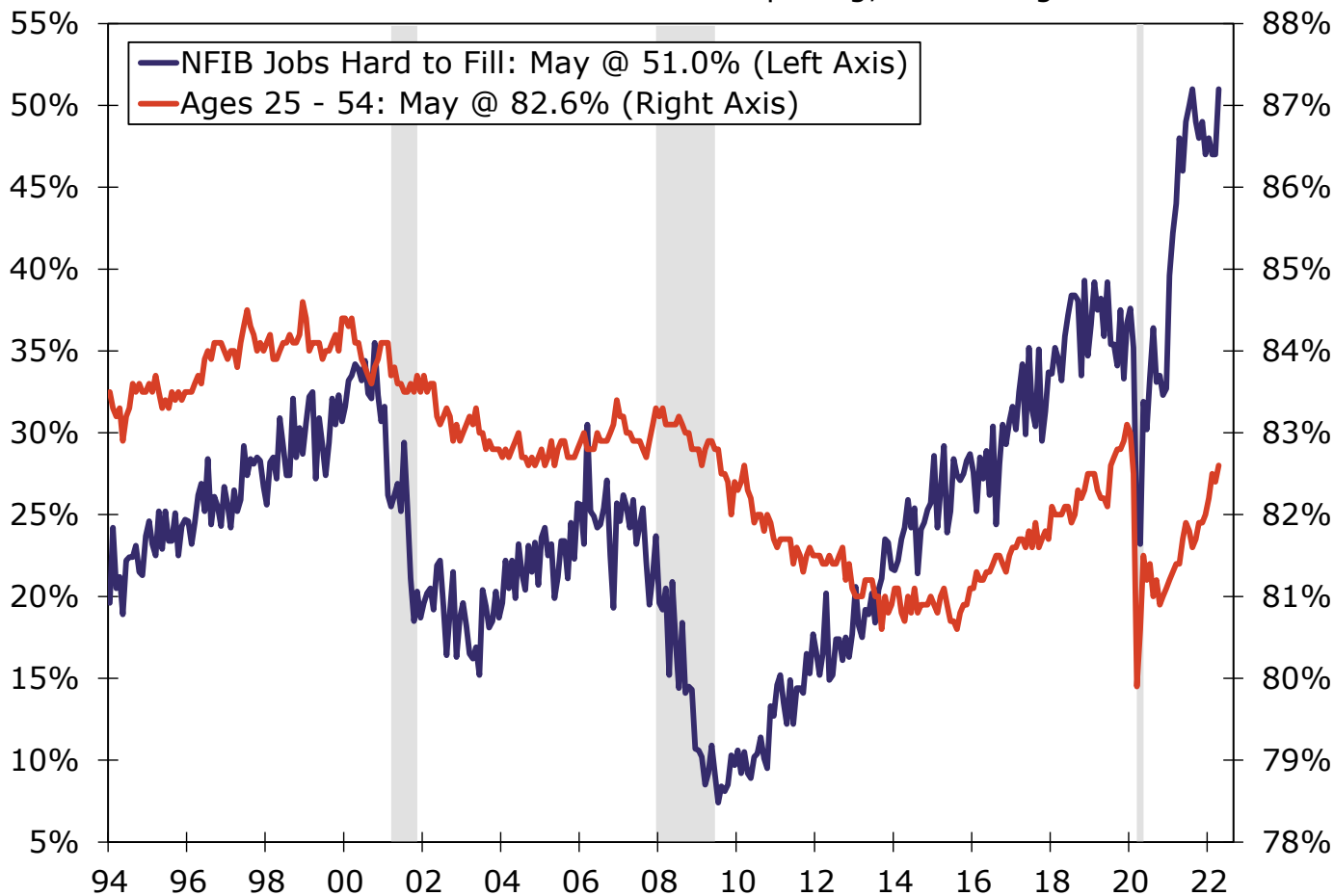


The availability of workers continues to restrain the recovery.

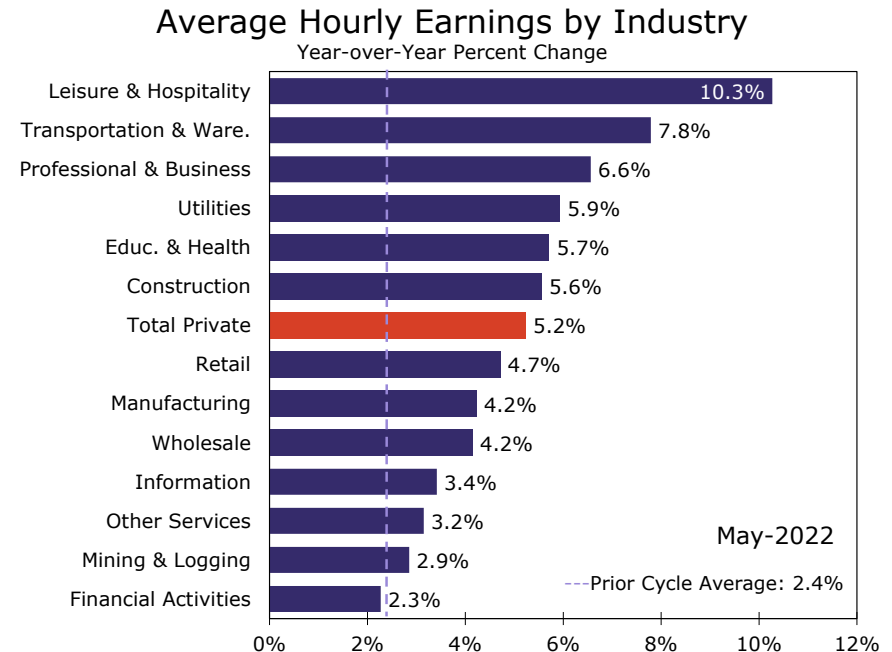
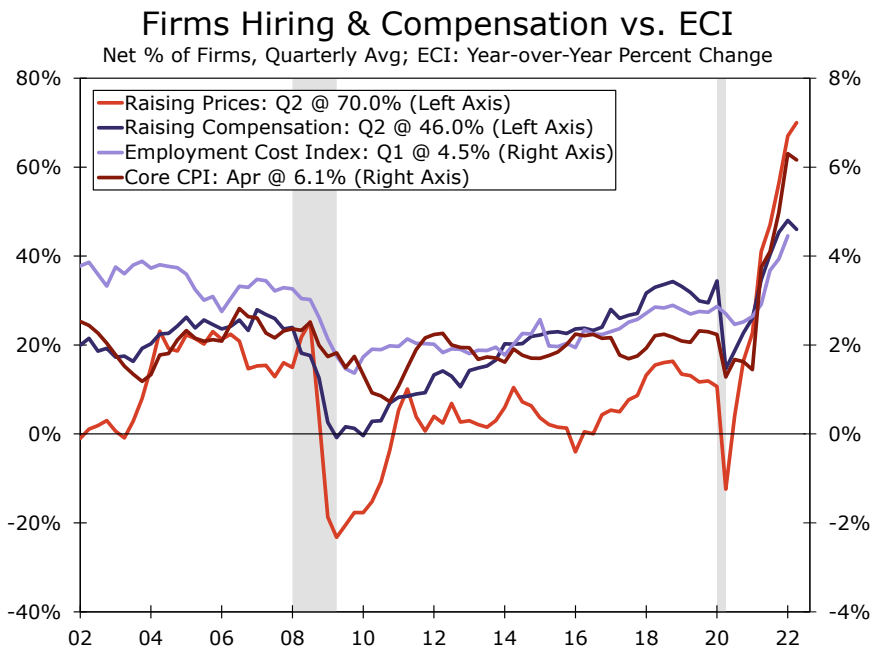
There are signs of relief as the prime age participation rate has climbed 0.5 percentage points since the start of this year.

## Job Hard to Fill vs. Labor Force Participation

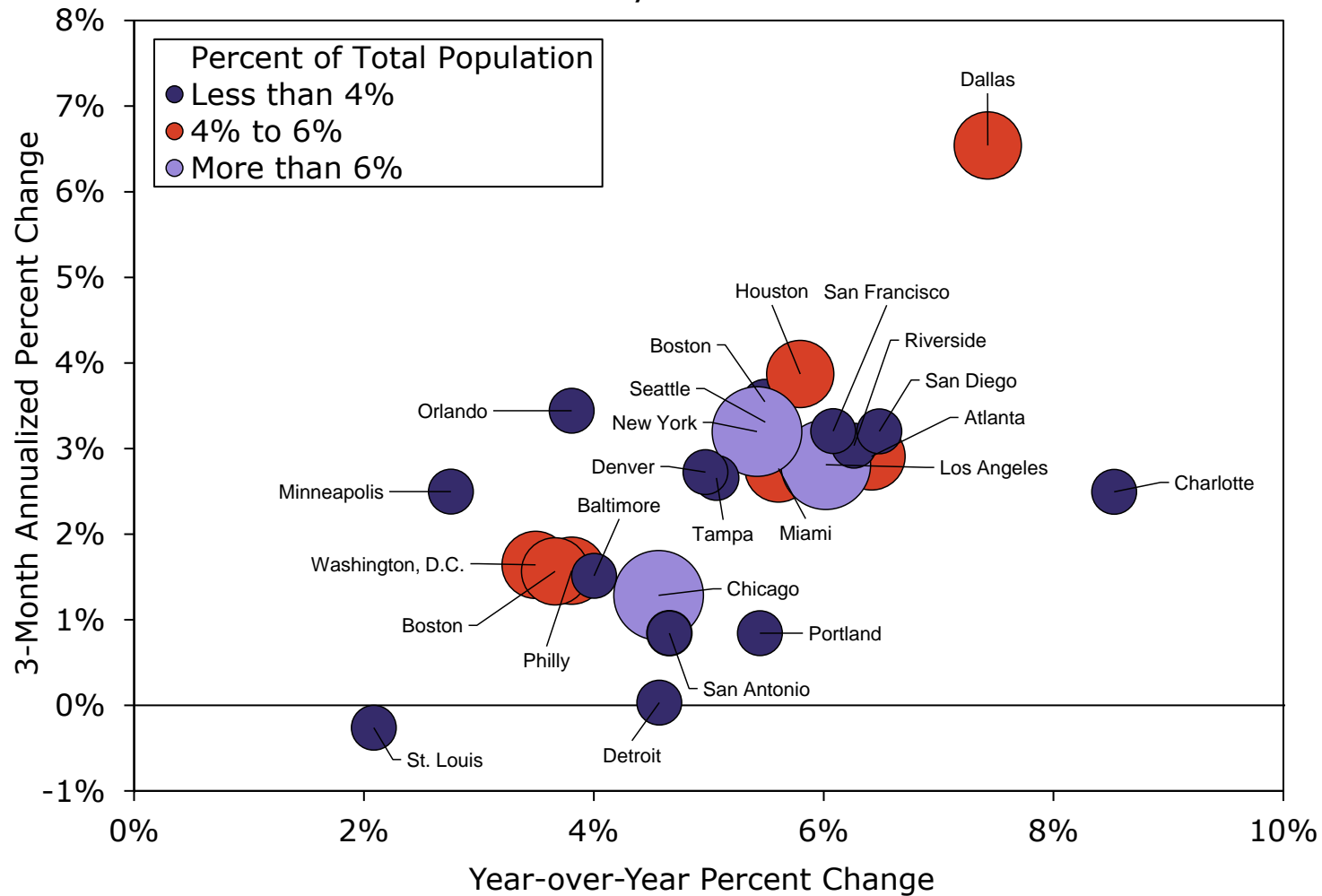
Firms with at least One Hard to Fill Job Opening; Percent Ages 25-54



Wage growth has picked up, particularly in lower-paying industries that are struggling the most to get workers back to the job site. At the same time, firms are raising prices in tandem with rising wages, which raises the prospect of a self-reinforcing wage-price spiral.

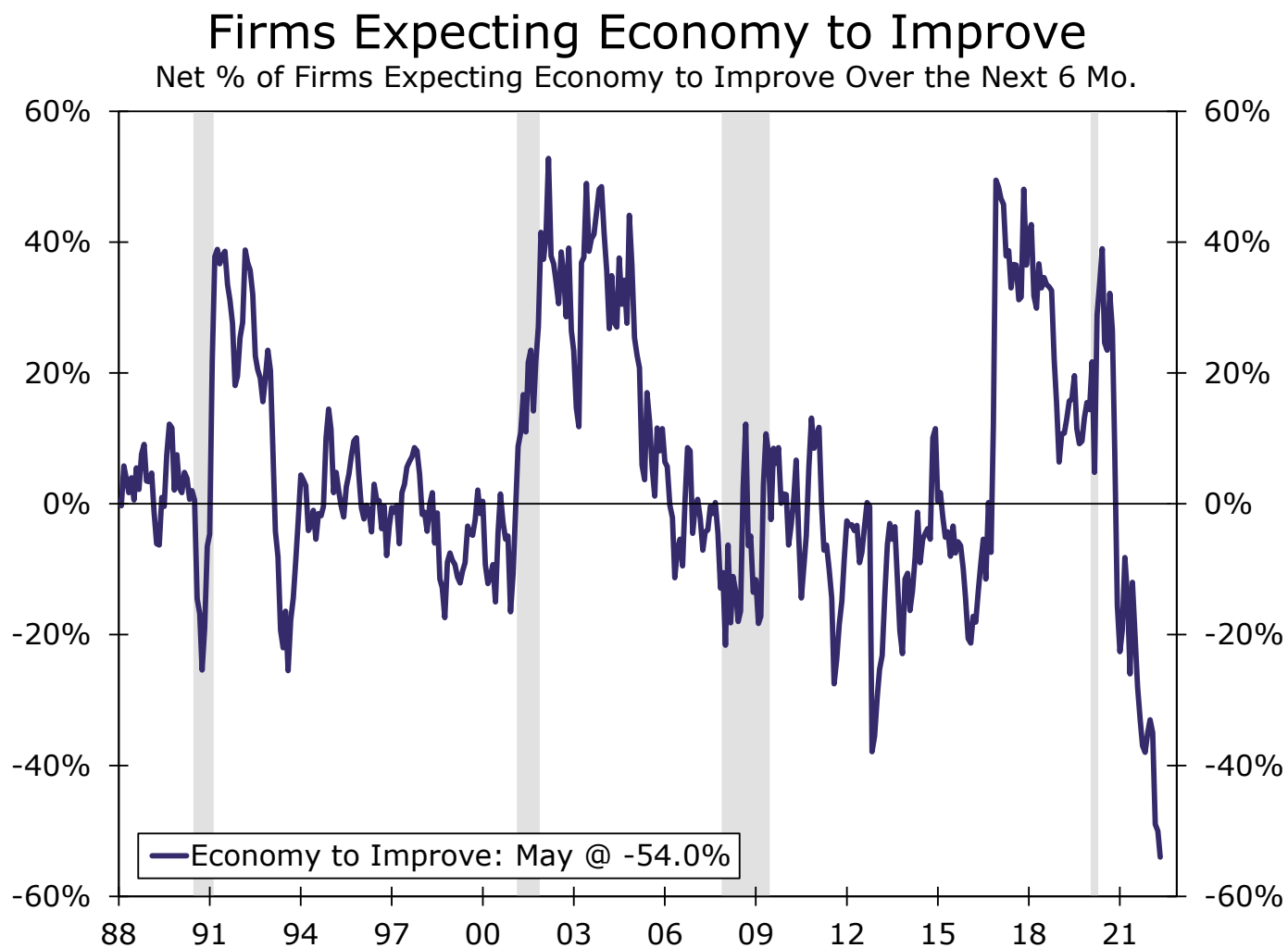


## U.S. Employment Growth by MSA May 2021

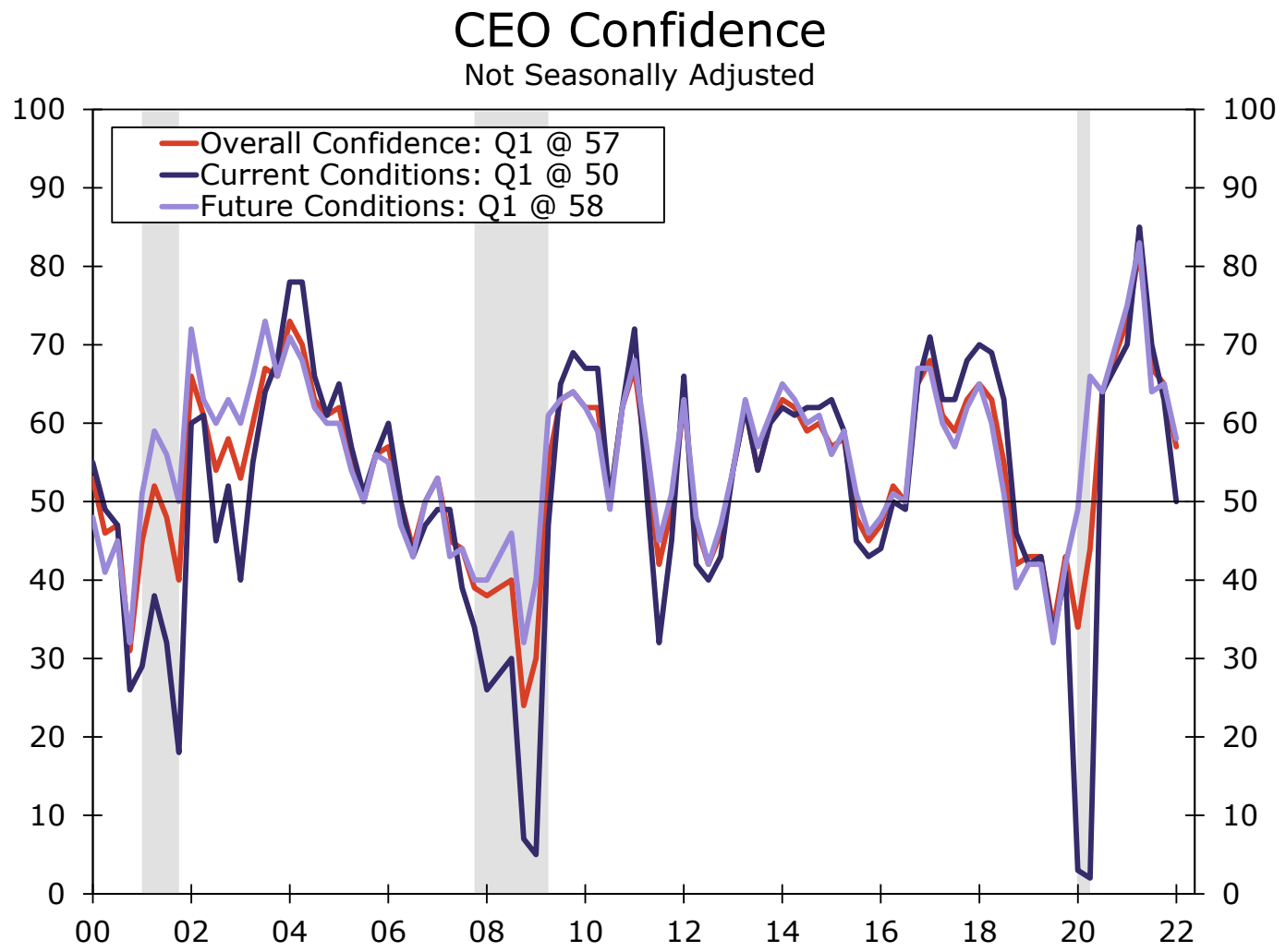


The rising costs of doing business is squeezing operating margins, causing outlook to drop sharply in recent months.

The latest net reading of -54 is the lowest level in the 48-year history of the NFIB survey.



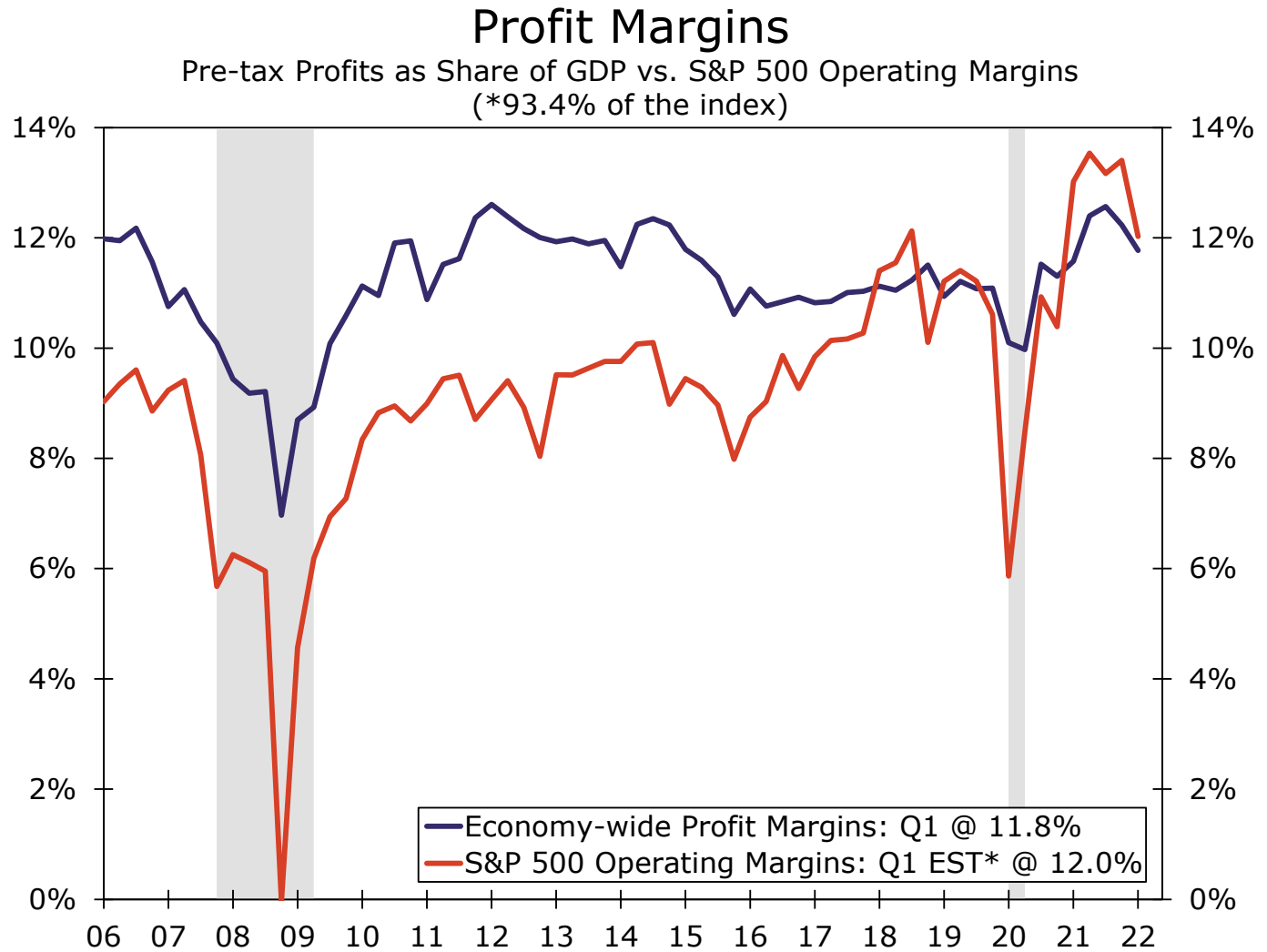
Confidence among CEOs has declined considerably in the last two quarters as surging inflation and labor shortages continue to wrack businesses.



# Profit Margins

Measures of both large business and economy-wide profit margins have compressed in recent quarters.

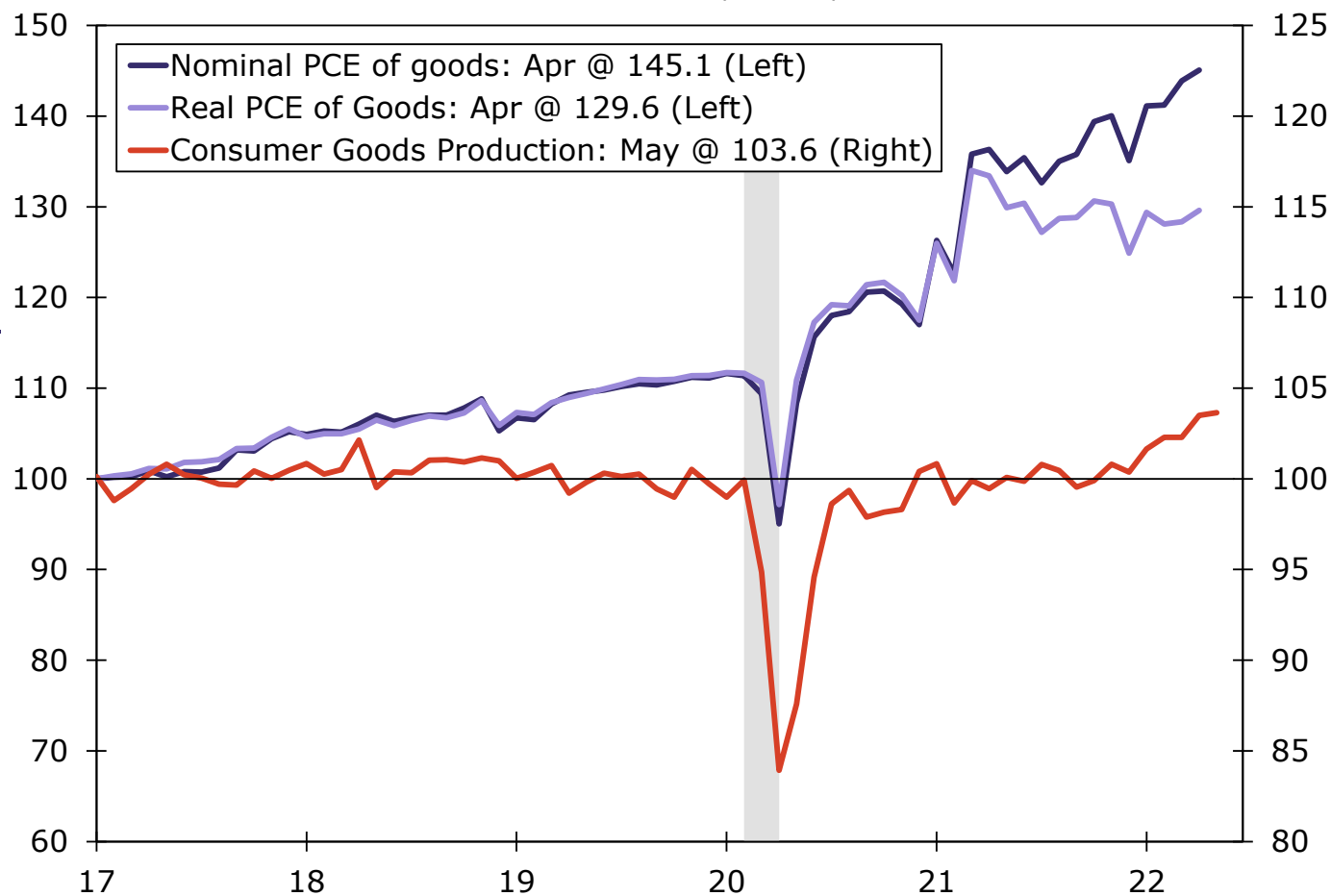
Equity analysts have cited rather pessimistic earnings reports for the first quarter with growing concern over inflation and its impact on margins.



Demand for consumer goods surged well ahead of the output, which slashed inventories and pulled in a torrent of imports.

## Consumer Goods Production vs. Consumption

Trillions of Chained Dollars; Index, 2017=100



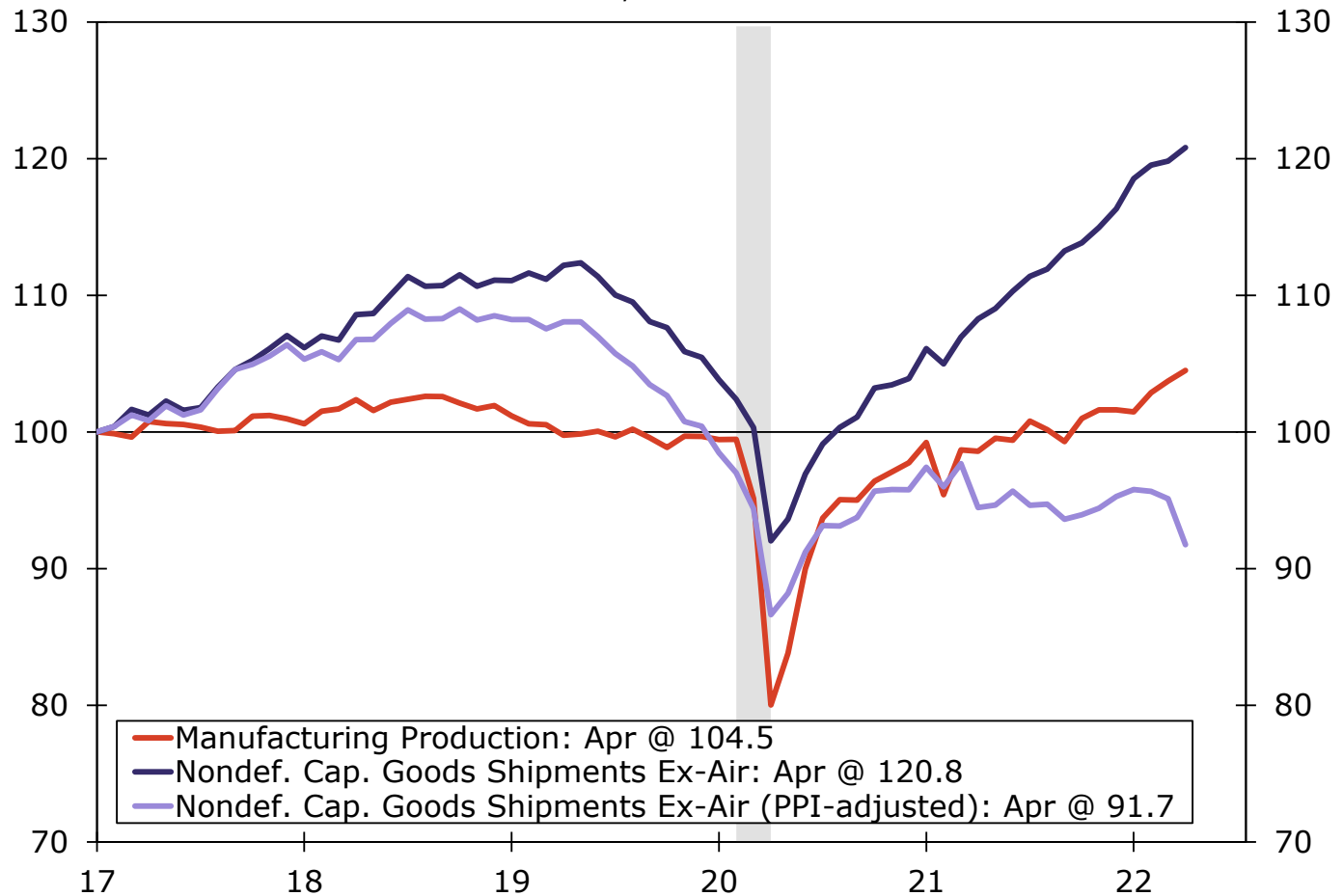


# Core Capital Goods Orders

Producers of capital equipment have had a hard time keeping up with the surge in demand.

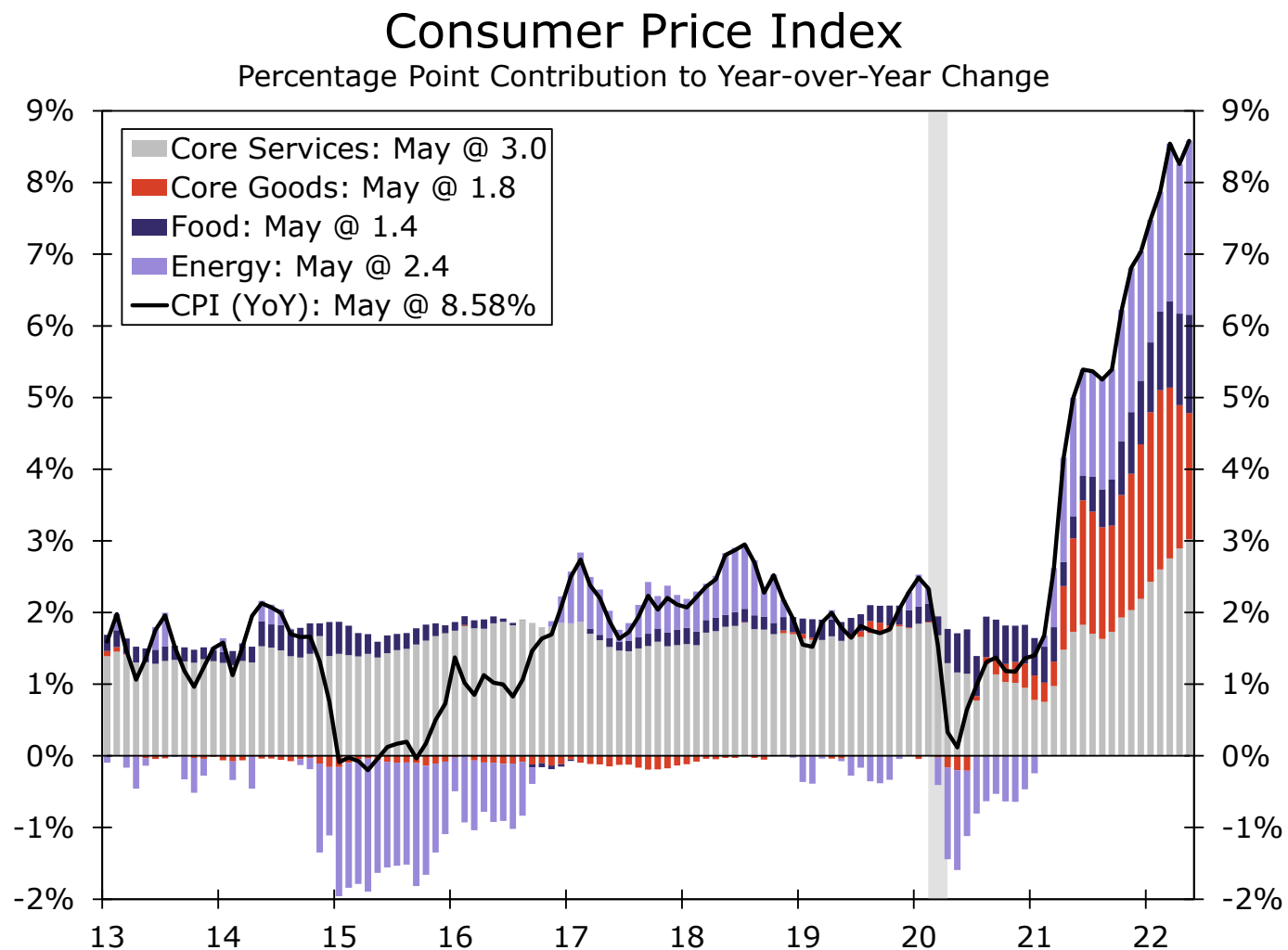
## Manuf. Prod. vs. Core Capital Spending

Index, 2017=100



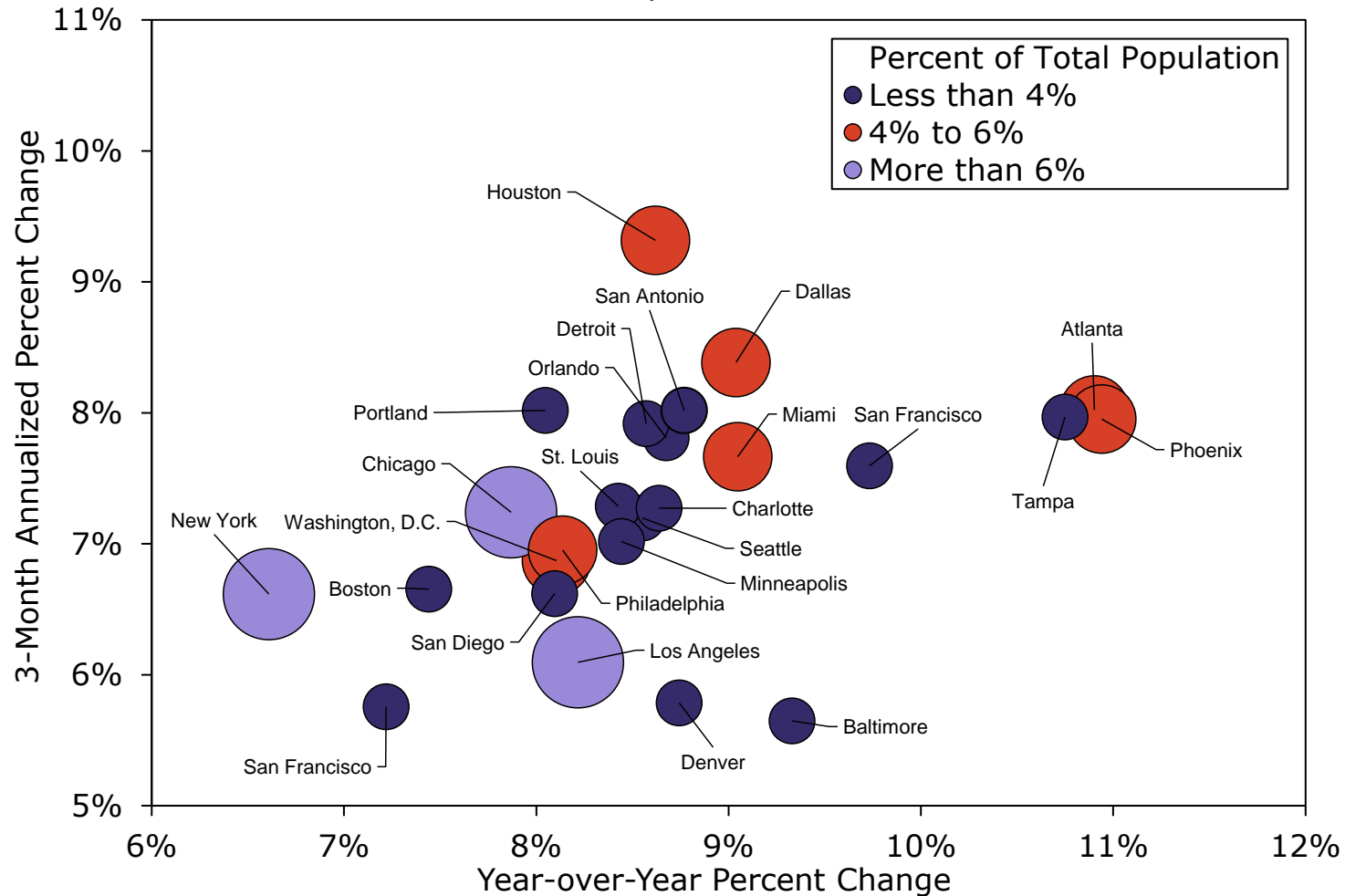
# Consumer Price Inflation

The pandemic likely marks a significant shift in inflation that will prove long lasting.



## U.S. CPI Inflation Growth by MSA

May 2021



# Supply Chain Pressure Gauge

Indicator	Feb-20	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb-21	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb-22	Mar	Apr	May	Jun
<b>Volume</b>																													
Unfilled Orders (a)	9.0%	6.2%	2.6%	6%	1.1%	4.6%	5.6%	7.4%	9.4%	10.7%	10.3%	11.2%	12.6%	15.3%	16.2%	15.6%	14.1%	12.4%	11.6%	9.1%	7.8%	6.0%	4.5%	4.4%	3.9%	4.3%	3.8%		
Cass Freight Index (a)	-13.2%	14.0%	-33.5%	-44.1%	-36.3%	48.0%	88.4%	115.9%	80.5%	21.6%	-17.4%	-21.7%	-8.1%	29.1%	26.8%	59.0%	12.2%	-3%	-10.6%	-14.4%	4.1%	-8.8%	8.4%	-32.4%	-11.1%	-1.6%	39.7%	23.7%	
Taiwan Elect. Product Exports (a)	-38.1%	14.7%	56.6%	41.7%	14.7%	39.7%	120.9%	87.0%	96.2%	3.3%	-9.4%	10.2%	-47.1%	23.5%	6.6%	133.2%	35.6%	39.3%	73.1%	70.5%	-2.4%	20.0%	-7.5%	41.6%	-4.8%	58.1%	37.1%	27.1%	
Real Goods Consumption (b)	0.0%	-0.9%	-13.0%	-0.7%	5.0%	6.8%	6.7%	8.7%	9.0%	7.7%	5.2%	12.8%	9.1%	20.0%	19.5%	16.3%	16.8%	13.9%	15.3%	15.4%	17.0%	16.7%	11.9%	15.9%	14.7%	15.0%	16.1%		
<b>Time</b>																													
ISM Manuf. Supplier Deliveries	57.3	65.0	76.0	68.0	56.9	55.8	58.2	59.0	60.5	61.7	67.7	68.2	72.0	76.6	75.0	78.8	75.1	72.5	69.5	73.4	75.6	72.2	64.9	64.6	66.1	65.4	67.2	65.7	
ISM Serv. Supplier Deliveries	52.4	62.1	78.3	67.0	57.5	55.2	60.5	54.9	56.2	57.0	62.8	57.8	60.8	61.0	66.1	70.4	68.5	72.0	69.6	68.8	75.7	75.7	63.9	65.7	66.2	63.4	65.1	61.3	
Ships Awaiting Space LA & LB (c)	0.0	0.0	0.0	0.0	0.0	0.5	2.0	1.5	4.3	10.0	22.2	32.1	32.6	26.5	21.5	18.9	13.8	21.4	34.8	56.3	66.6	70.0	85.6	103.2	79.9	48.4	41.5	29.8	25.0
<b>Price</b>																													
World Container Index (WCI)	\$1,633	\$1,520	\$1,500	\$1,549	\$1,788	\$2,009	\$2,144	\$2,541	\$2,592	\$2,806	\$3,955	\$5,263	\$5,227	\$4,991	\$4,919	\$5,898	\$7,052	\$8,879	\$9,556	\$10,237	\$9,891	\$9,180	\$9,227	\$9,518	\$9,398	\$8,783	\$7,907	\$7,667	\$7,602
PPI Transp. & Ware. of Goods (a)	0.3%	-1.9%	-7.6%	-12.2%	-8.8%	1.0%	9.0%	8.0%	6.5%	7.8%	10.2%	10.7%	13.0%	16.3%	16.5%	16.9%	14.4%	12.5%	9.6%	11.9%	16.4%	22.5%	19.6%	21.0%	19.3%	35.5%	34.1%	40.6%	
Dry Van Rate Per Mile (a)	7.6%	-16.0%	-28.6%	-49.7%	-16.5%	52.6%	352.8%	315.4%	191.1%	112.6%	48.8%	12.2%	-25.4%	10.5%	12.6%	52.0%	-8.4%	-8.6%	-0.2%	41.8%	64.5%	57.1%	54.4%	91.6%	70.1%	-7.2%	-56.2%	-69.7%	-64.4%
<b>Inventory</b>																													
Retail Inventory-to-Sales Ratio	1.42	1.53	1.69	1.35	1.23	1.22	1.23	1.23	1.25	1.27	1.27	1.22	1.24	1.10	1.09	1.10	1.10	1.12	1.12	1.10	1.09	1.10	1.17	1.15	1.15	1.18	1.18		
ISM Manuf. Cons. Inventories	41.8	43.4	48.8	46.2	44.6	41.6	38.1	37.9	36.7	36.3	37.9	33.1	32.5	29.9	28.4	28.0	30.8	25.0	30.2	31.7	31.7	25.1	31.7	33.0	31.8	34.1	37.1	32.7	
Inventory Too Low (d)	-3.5%	-1.5%	-6.6%	-4.5%	1.2%	1.3%	2.7%	4.8%	4.4%	4.9%	6.5%	5.3%	4.5%	2.5%	7.0%	8.0%	11.0%	12.0%	11.0%	10.0%	9.0%	15.0%	9.0%	7.0%	7.0%	9.0%	6.0%	8.0%	
<b>Labor</b>																													
Production & Manuf. Posts (b)	0.2%	1.3%	-30.0%	-31.6%	-23.7%	-13.8%	-6.1%	4.2%	12.9%	20.6%	27.4%	26.3%	38.2%	46.8%	63.5%	74.8%	76.7%	84.0%	78.0%	87.3%	92.4%	103.0%	115.3%	102.9%	108.9%	108.3%	96.3%	97.1%	
Loading & Stocking Posts (b)	1.4%	-0.4%	-32.5%	-32.7%	-17.6%	-0.8%	4.6%	12.3%	28.2%	38.8%	39.0%	26.3%	38.9%	46.4%	61.7%	72.7%	76.6%	90.2%	72.0%	82.4%	92.4%	106.5%	114.9%	92.9%	97.5%	93.9%	80.7%	84.9%	
Jobs Hard to Fill (d)	37.6%	35.2%	23.5%	23.2%	31.9%	30.2%	33.4%	36.4%	33.1%	33.5%	32.3%	32.7%	39.6%	42.2%	44.0%	48.0%	46.0%	49.0%	50.0%	51.0%	49.0%	48.0%	49.0%	47.0%	48.0%	47.0%	47.0%	51.0%	

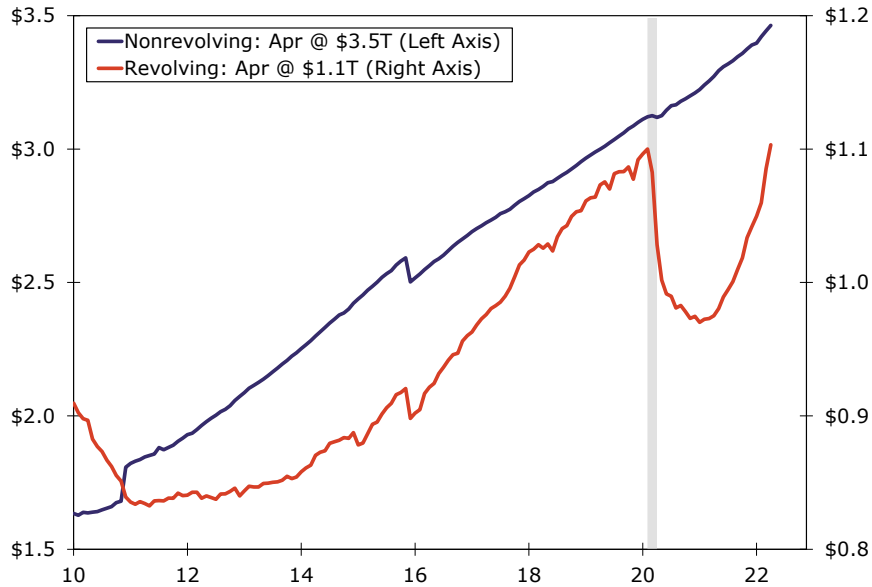
Notes: (a) 3-Month Annualized Rate, (b) versus February 2020, (c) Monthly Average, (d) Net % of Firms, Current Month Reflects Monthly Average of Available Data for All Series

Source: U.S. Department of Commerce, Bloomberg Finance L.P., Taiwan Ministry of Finance, Institute for Supply Management (ISM), Drewry, U.S. Department of Labor, National Federation of Independent Business (NFIB), Indeed.com and Wells Fargo Economics

Consumer credit grew by a record \$52.4B in March. The uptick in revolving credit marked a more than 50-year high and essentially puts the total level of revolving consumer credit on par with where it stood pre-pandemic. Still, delinquency rates have remained largely flat in Q1-2022.

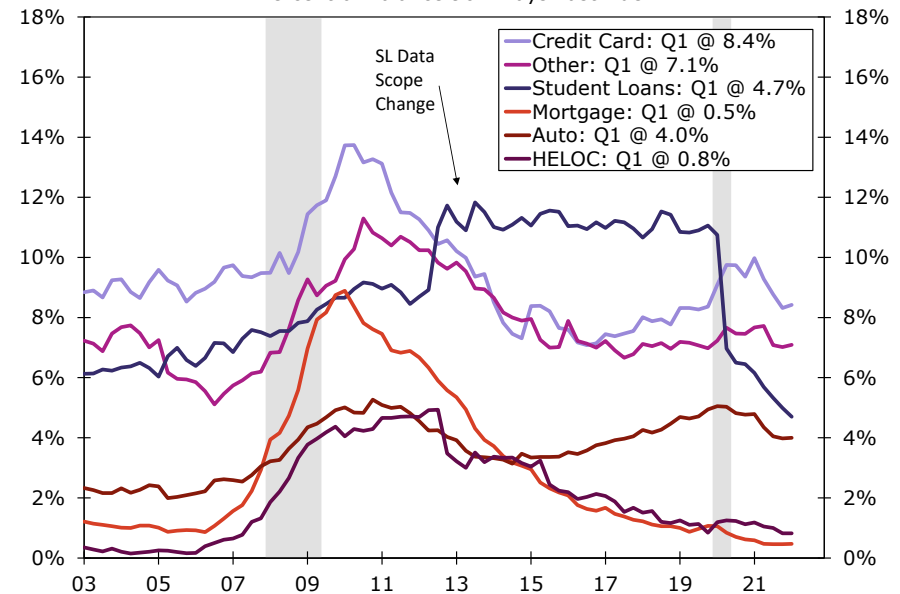
### Total Level of Credit Outstanding

Trillions of USD

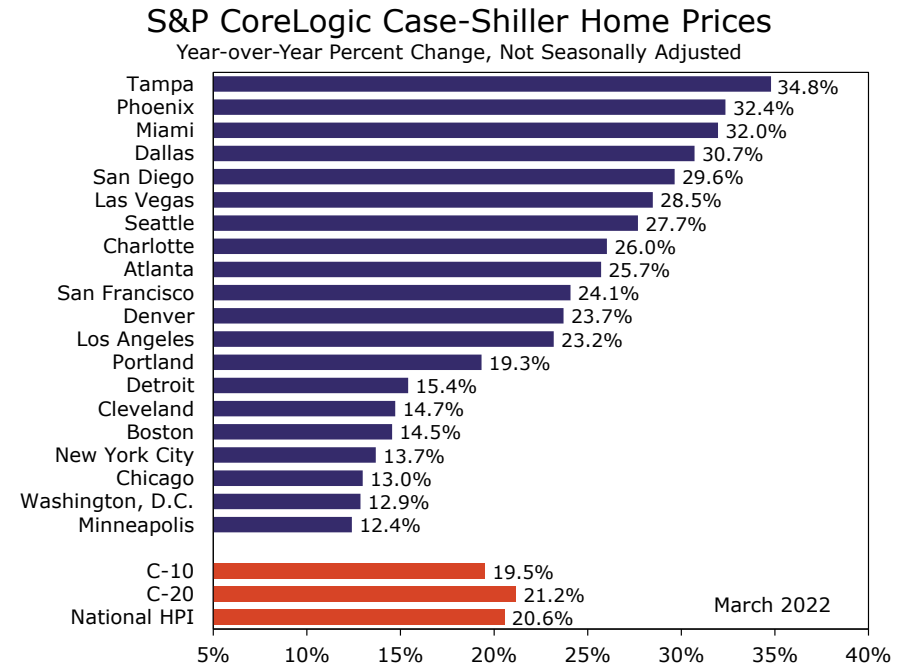
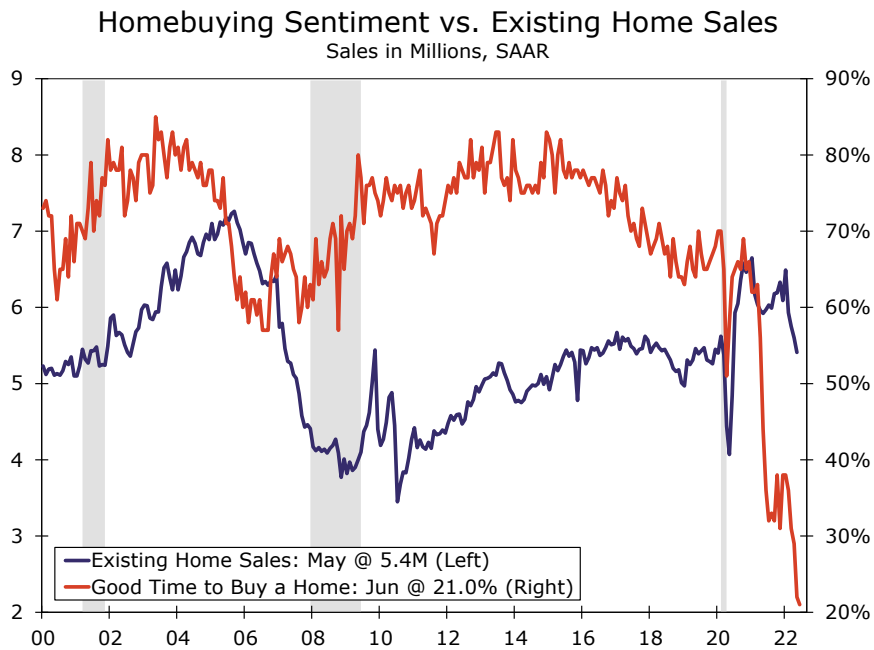


### Household Debt Delinquencies

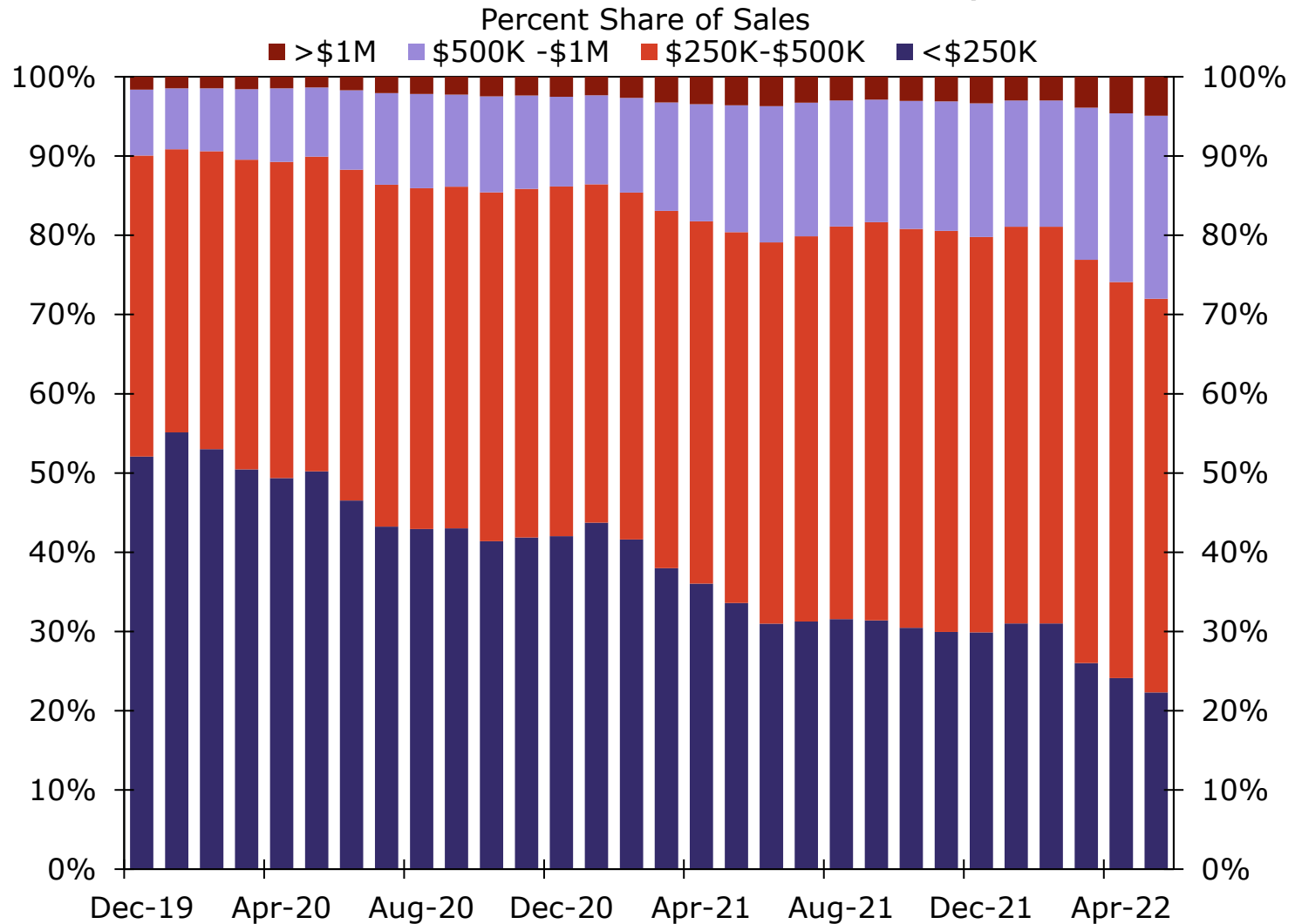
Percent of Balance 90+ Days Past Due



Intense competition from investor buyers, tight inventories and fast-rising home prices have put homes out of reach for many prospective home buyers. The share of consumers that feel now is a good time to buy a home is probing all-time lows.



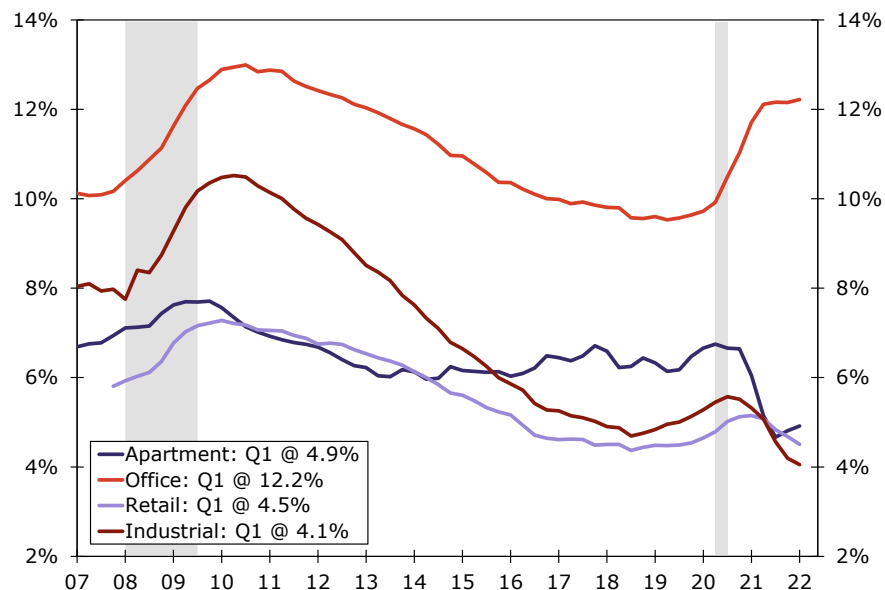
## Southern Home Sales Distribution by Price



# Commercial Real Estate Fundamentals

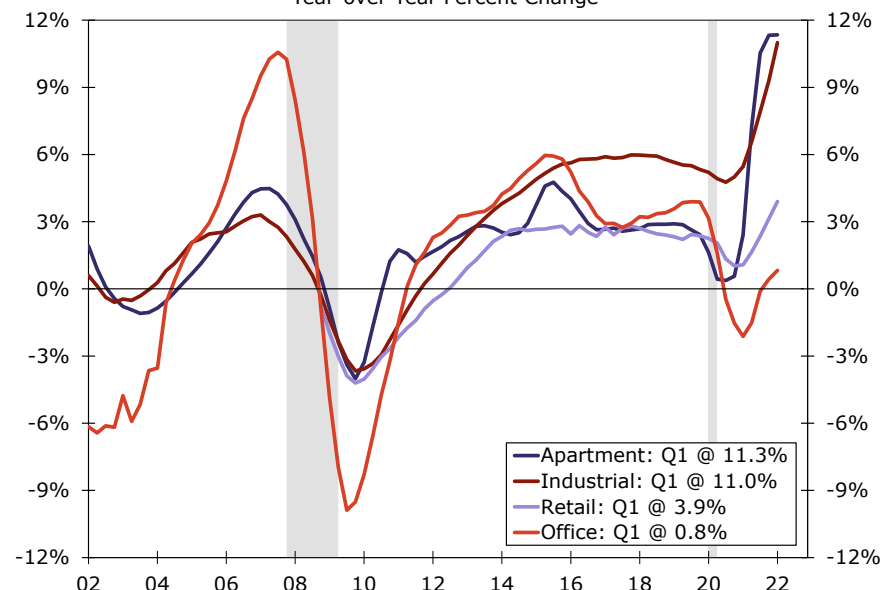
The office market continues to lag as Return to Office plans remain in flux. Stronger economic demand has translated to rising occupancy and rents for most property classes.

### CRE Vacancy Rates



### CRE Asking Rents

Year-over-Year Percent Change



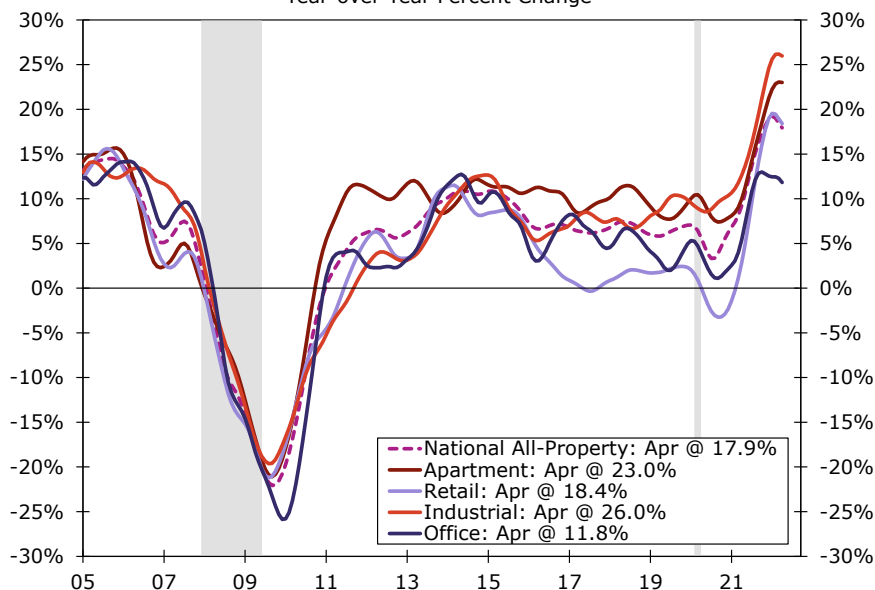


# Commercial Real Estate Fundamentals

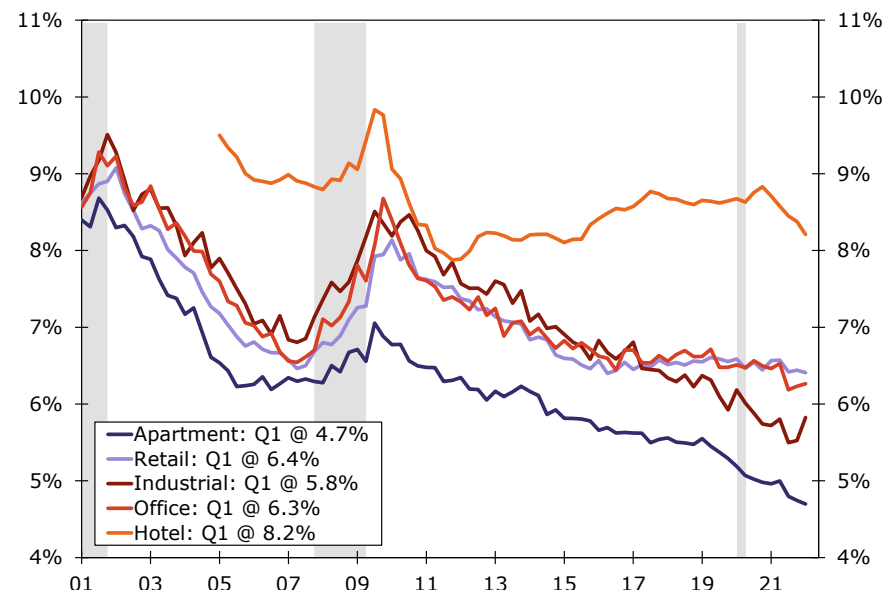
Property prices climbed rapidly in 2021, led by sturdy gains in retail, apartment and industrial properties. While the hard-hit office and hotel markets face a longer road to recovery, their path of recovery is coming into better focus.

## Commercial Property Price Index

Year-over-Year Percent Change



## CRE Cap Rates by Property Type

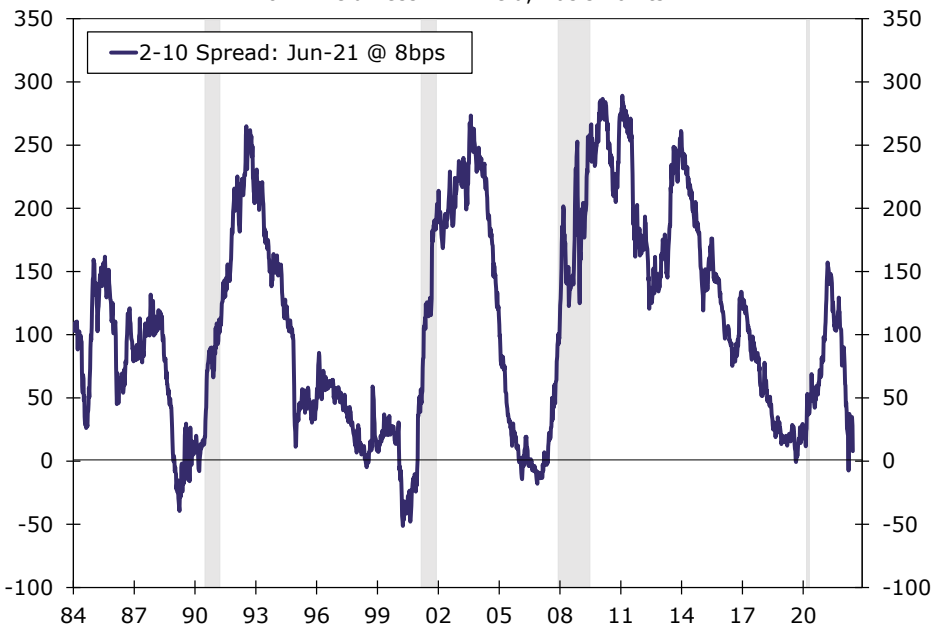


# Possibility of “Soft Landing”

The yield curve is signaling recession and the Fed has never achieved a soft landing when it has had to push up unemployment significantly.

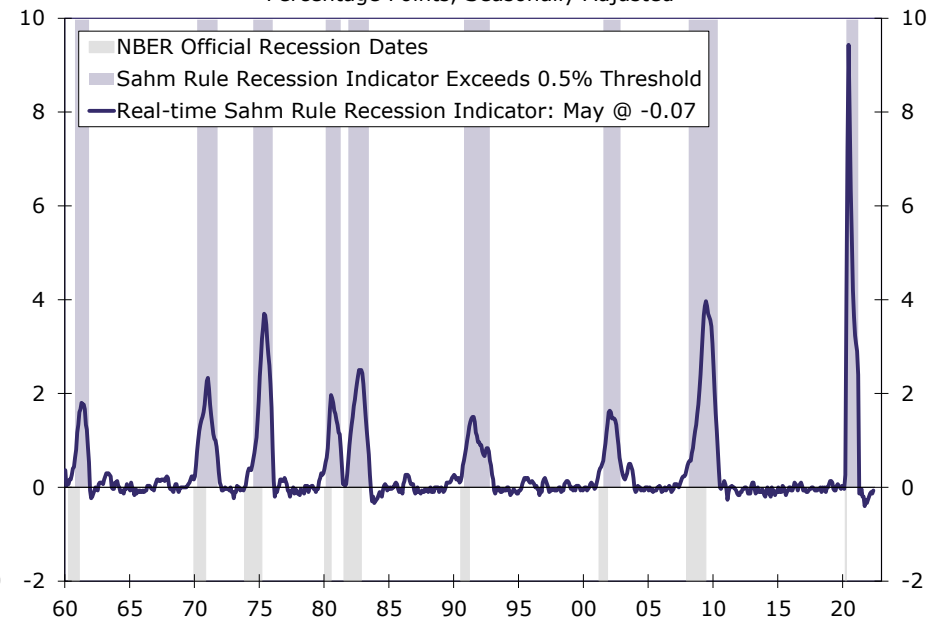
## Yield Curve Spread

10-Yr Yield Less 2-Yr Yield, Basis Points



## Real-time Sahn Rule Recession Indicator

Percentage Points, Seasonally Adjusted



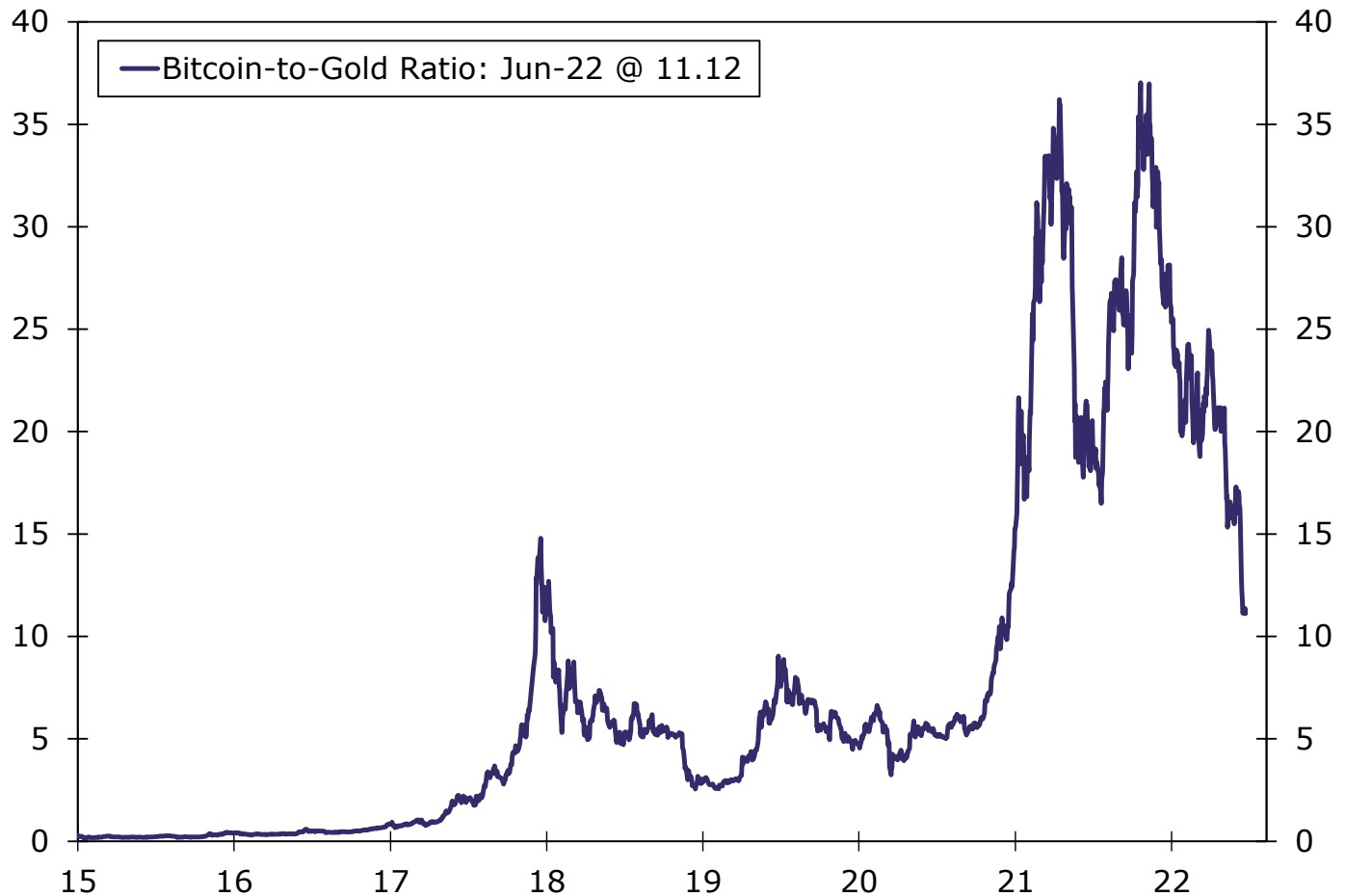
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Cryptocurrencies appear to be more of a speculative vehicle than an inflation hedge.

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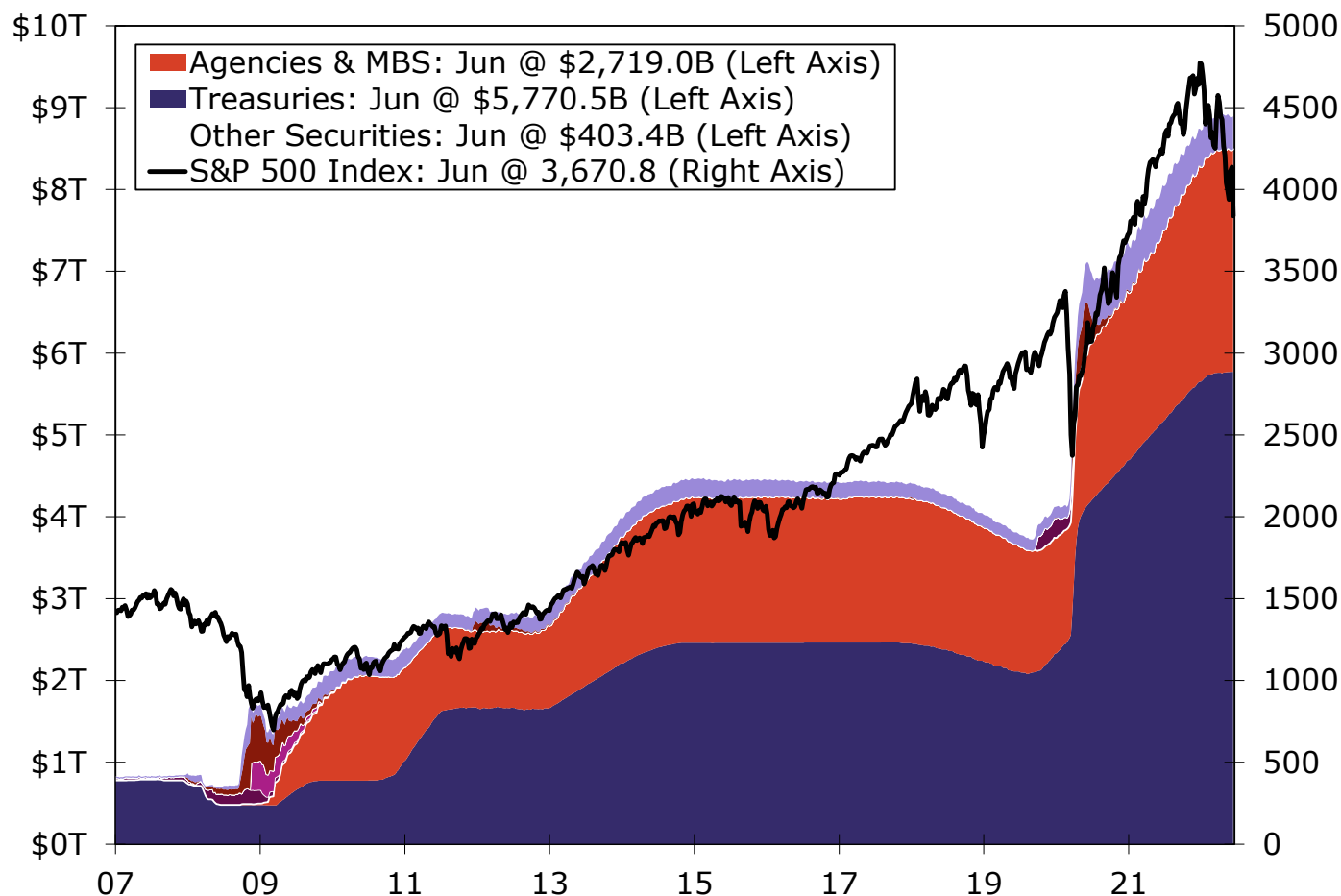
## Bitcoin-to-Gold Ratio

Value of Bitcoin to Gold Ounce



The massive expansion of the Fed's balance sheet propelled asset prices during the pandemic.

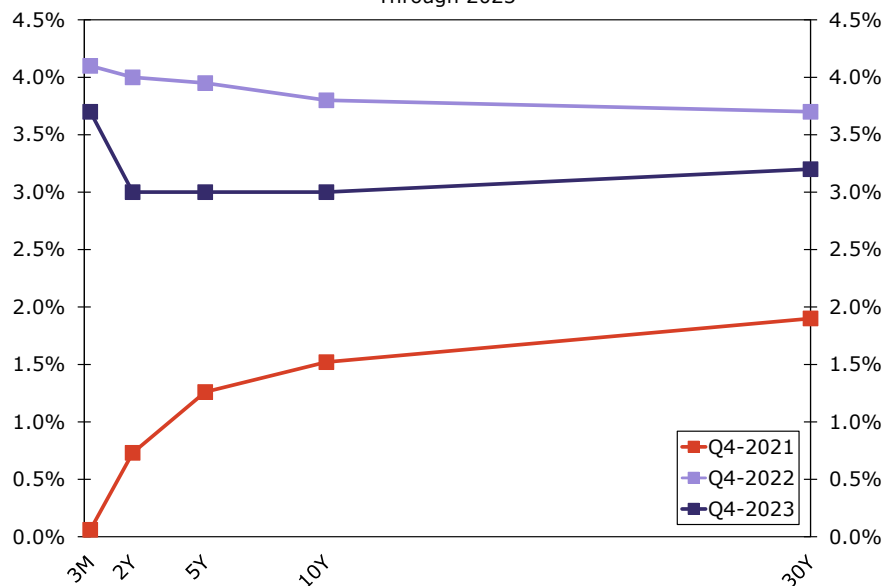
## Federal Reserve Balance Sheet vs. S&P 500 Index



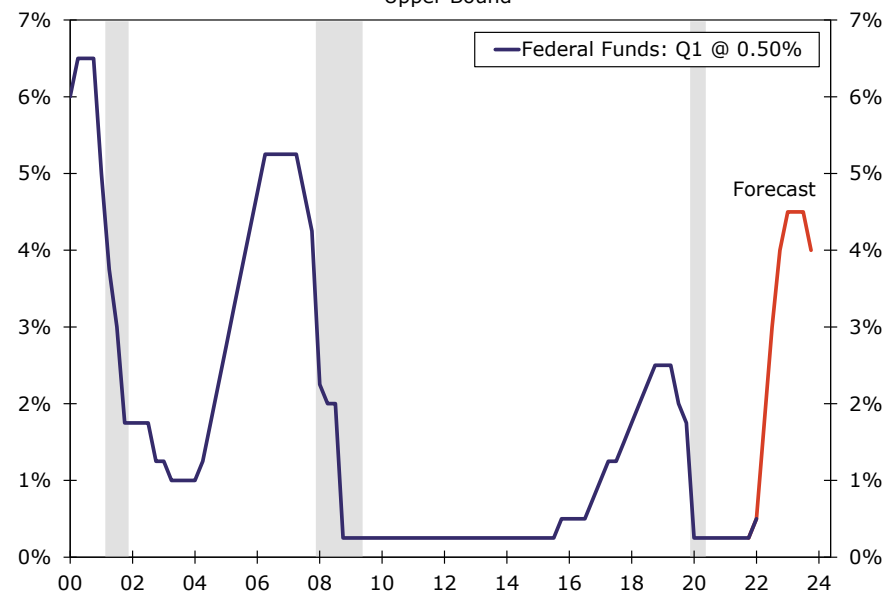
# Interest Rate Outlook

We expect the Fed to raise the federal funds rate by 50 bps at each of the June, July and September FOMC meetings. We then expect five more 25 bps rate hikes over the course of the next two years, with the fed funds rate rising to 3.50%-3.75% in Q2-2023. While the Fed has succeeded in soft landings in the past, markets are pricing in a 30%-40% chance of recession.

### Wells Fargo Rates Forecast Through 2023



### Federal Funds Target Rate Upper Bound



There is a growing body of evidence of an affordability migration to traditionally smaller, secondary markets across the Sun Belt and South.

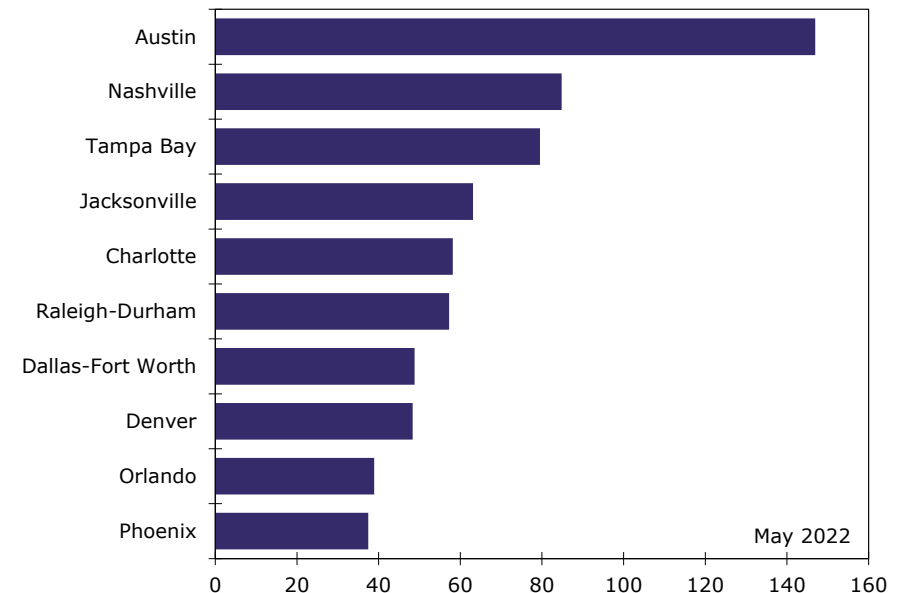
## Top 10 Metro Areas by Numeric Growth

July 2020 - July 2021

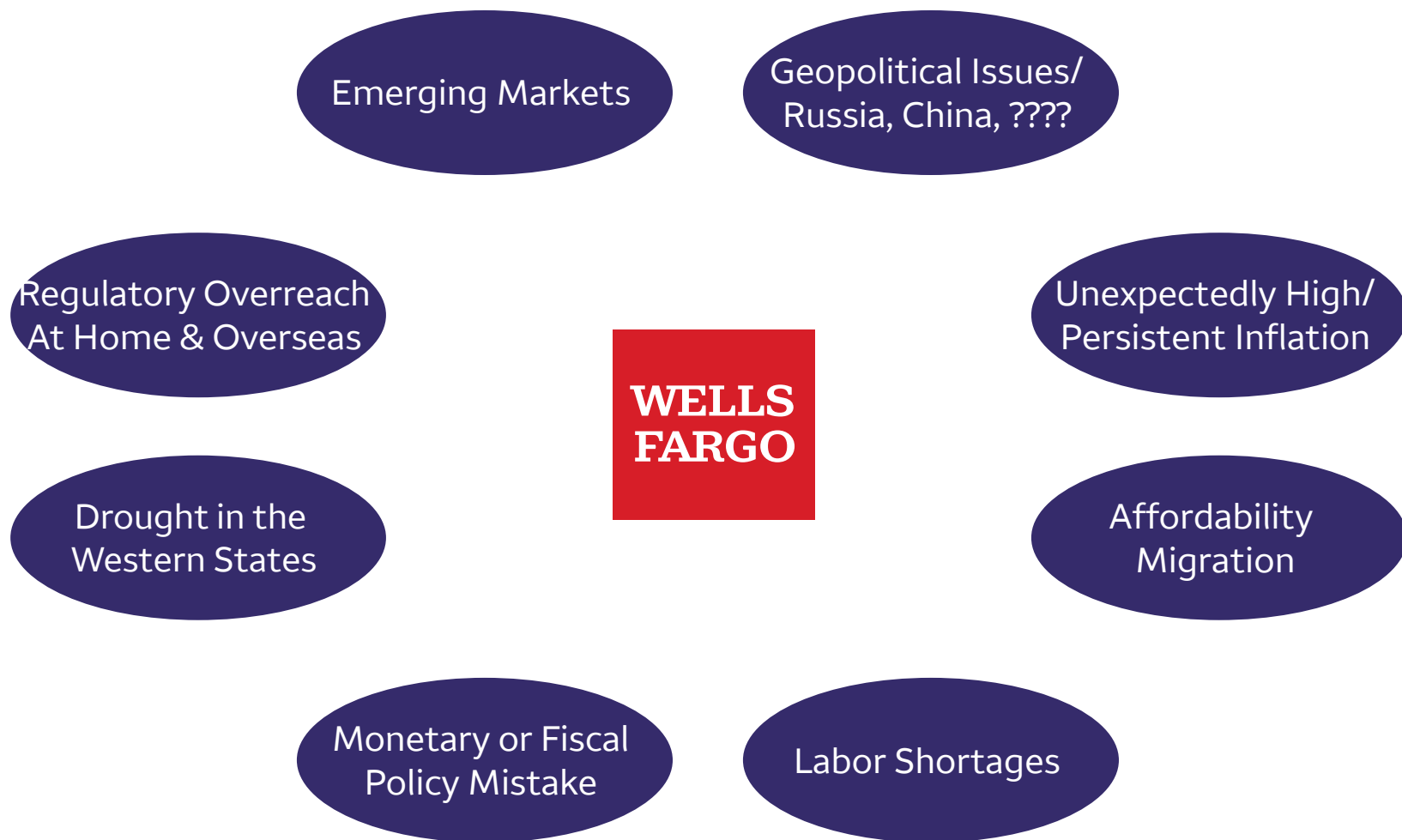
Rank	Metro Area	Growth
1.	Dallas-Fort Worth-Arlington, TX	97,290
2.	Phoenix-Mesa-Chandler, AZ	78,220
3.	Houston-The Woodlands-Sugar Land, TX	69,094
4.	Austin-Round Rock-Georgetown, TX	53,301
5.	Riverside-San Bernardino-Ontario, CA	47,601
6.	Atlanta-Sandy Springs-Alpharetta, GA	42,904
7.	Tampa-St. Petersburg-Clearwater, FL	36,129
8.	San Antonio-New Braunfels, TX	35,105
9.	Charlotte-Concord-Gastonia, NC-SC	31,381
10.	Raleigh-Cary, NC	28,186

## Cities that Gained the Most Workers

LinkedIn Population Gain per 10,000 Members, Over Past 12 Months



# Issues to Watch



## Wells Fargo U.S. Economic Forecast

	Actual				Forecast								Actual		Forecast	
	2021				2022				2023				2020	2021	2022	2023
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q				
Real Gross Domestic Product <sup>1</sup>	6.3	6.7	2.3	6.9	-1.5	3.5	1.7	0.8	0.3	-2.0	-2.4	1.1	-3.4	5.7	2.5	0.0
Personal Consumption	11.4	12.0	2.0	2.5	3.1	3.8	1.4	0.6	-0.5	-1.3	-0.7	1.2	-3.8	7.9	3.1	0.1
Business Fixed Investment	12.9	9.2	1.7	2.9	9.2	4.6	4.3	4.3	2.0	-1.7	-2.6	1.3	-5.3	7.4	5.3	1.5
Equipment	14.1	12.1	-2.3	2.8	13.2	2.0	4.2	4.0	0.5	-3.0	-4.0	1.0	-8.3	13.1	5.3	0.5
Intellectual Property Products	15.6	12.5	9.1	8.9	11.6	10.0	5.0	4.8	3.3	-1.8	-2.2	2.6	2.8	10.0	9.2	2.5
Structures	5.4	-3.0	-4.1	-8.3	-3.6	-1.5	2.5	3.8	3.0	2.5	0.7	-1.5	-12.5	-8.0	-3.0	2.1
Residential Investment	13.3	-11.7	-7.7	2.2	0.4	-9.5	-6.0	-2.5	-2.0	-6.0	-7.5	-9.0	6.8	9.2	-4.0	-5.0
Government Purchases	4.2	-2.0	0.9	-2.6	-2.7	1.4	2.1	1.7	1.3	1.0	0.7	0.5	2.5	0.5	-0.6	1.3
Net Exports <sup>2</sup>	-1.6	-0.2	-1.3	-0.2	-3.2	1.0	-0.4	-0.4	0.4	0.5	0.4	0.2	-0.2	-1.9	-1.2	0.2
Inventories <sup>2</sup>	-2.6	-1.3	2.2	5.3	-1.1	-0.7	0.3	-0.1	-0.2	-1.3	-1.7	0.0	-0.6	0.1	0.8	-0.5
Nonfarm Payroll Change <sup>3</sup>	645	422	543	637	539	367	250	163	100	-83	-170	-175	-774	562	330	-82
Unemployment Rate	6.2	5.9	5.1	4.2	3.8	3.6	3.5	3.5	3.5	3.9	4.4	4.9	8.1	5.4	3.6	4.2
PCE Deflator <sup>4</sup>	1.8	3.9	4.3	5.5	6.3	6.5	6.7	6.1	5.1	3.6	2.6	2.2	1.2	3.9	6.4	3.4
Quarter-End Interest Rates <sup>5</sup>																
Federal Funds Target Rate	0.25	0.25	0.25	0.25	0.50	1.75	3.00	4.00	4.50	4.50	4.50	4.00	0.50	0.25	2.31	4.38
Secured Overnight Financing Rate	0.01	0.05	0.05	0.05	0.29	1.55	2.80	3.80	4.35	4.35	4.40	3.90	0.36	0.04	2.11	4.25
3 Month LIBOR	0.19	0.15	0.13	0.21	0.96	2.05	3.30	4.35	4.70	4.75	4.65	4.05	0.65	0.16	2.67	4.54
Prime Rate	3.25	3.25	3.25	3.25	3.50	4.75	6.00	7.00	7.50	7.50	7.50	7.00	3.50	3.25	5.31	7.38
Conventional Mortgage Rate	3.17	3.02	2.88	3.11	4.42	5.70	5.85	5.90	5.85	5.65	5.40	4.95	3.12	2.95	5.47	5.46
3 Month Bill	0.03	0.05	0.04	0.06	0.52	1.85	3.10	4.10	4.40	4.40	4.25	3.70	0.36	0.04	2.39	4.19
6 Month Bill	0.05	0.06	0.05	0.19	1.06	2.45	3.50	4.30	4.40	4.35	4.15	3.55	0.37	0.06	2.83	4.11
1 Year Bill	0.07	0.07	0.09	0.39	1.63	3.10	3.75	4.15	4.25	4.15	3.90	3.25	0.37	0.10	3.16	3.89
2 Year Note	0.16	0.25	0.28	0.73	2.28	3.55	3.85	4.00	4.10	3.90	3.60	3.00	0.39	0.27	3.42	3.65
5 Year Note	0.92	0.87	0.98	1.26	2.42	3.60	3.85	3.95	4.00	3.85	3.50	3.00	0.53	0.86	3.46	3.59
10 Year Note	1.74	1.45	1.52	1.52	2.32	3.55	3.70	3.80	3.75	3.60	3.40	3.00	0.89	1.45	3.34	3.44
30 Year Bond	2.41	2.06	2.08	1.90	2.44	3.50	3.60	3.70	3.65	3.55	3.45	3.20	1.56	2.06	3.31	3.46

Forecast as of: June 15, 2022

<sup>1</sup> Compound Annual Growth Rate Quarter-over-Quarter

<sup>2</sup> Percentage Point Contribution to GDP

<sup>3</sup> Average Monthly Change

<sup>4</sup> Year-over-Year Percentage Change

<sup>5</sup> Annual Numbers Represent Averages



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