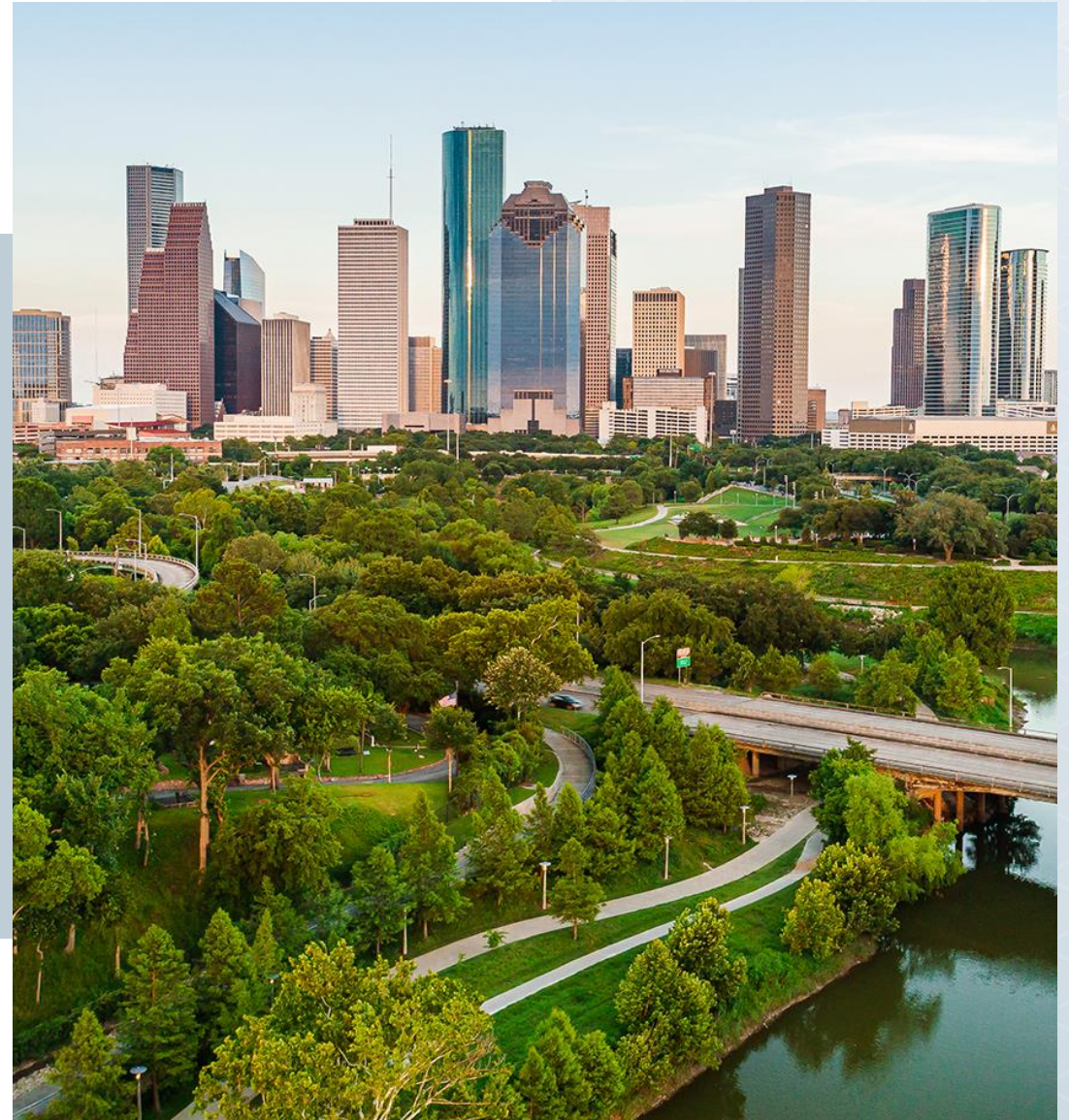


Metro Houston Economic Outlook

Patrick Jankowski

SVP, Research

April 19, 2022



50th ANNIVERSARY EDITION

CLINT EASTWOOD



**THE
GOOD THE
BAD and THE
UGLY**

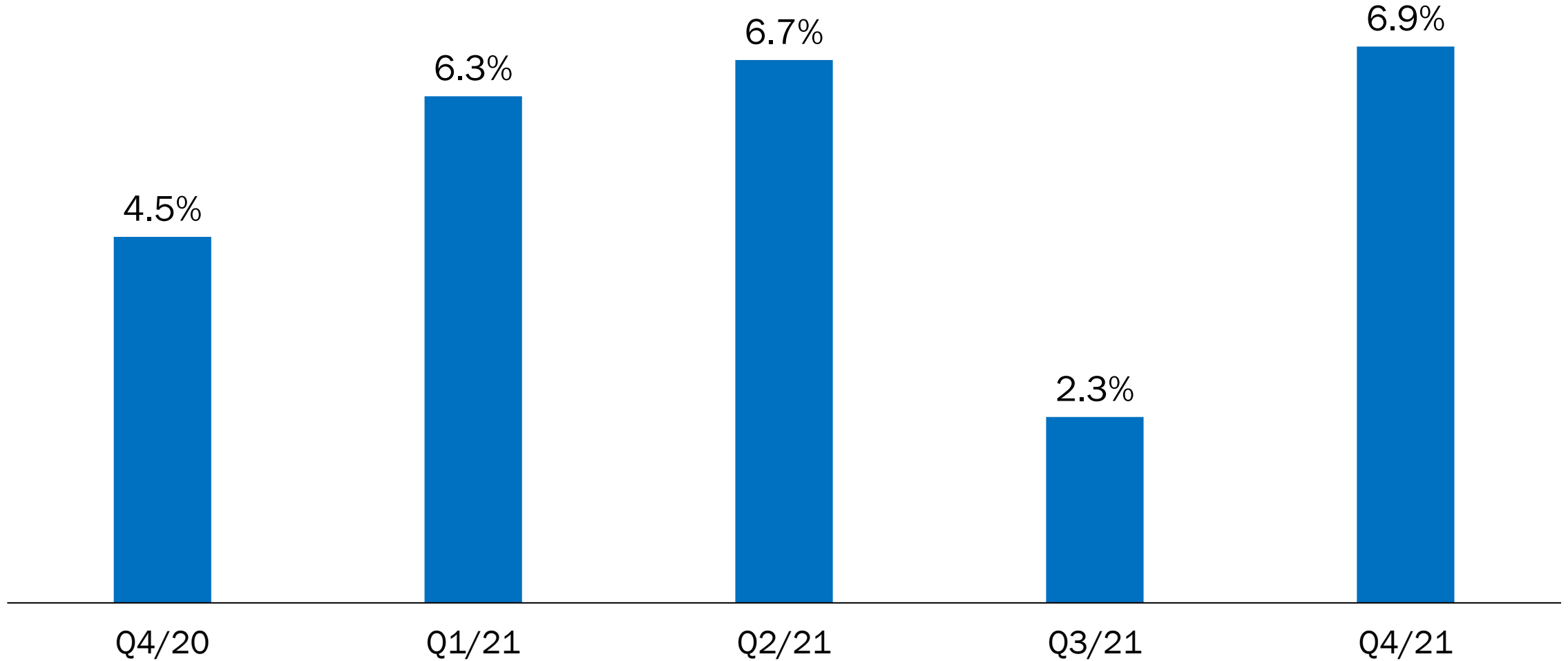
co-starring
LEE VAN CLEEF

also starring
ELI WALLACH
in the role of TUCO

directed by
SERGIO LEONE



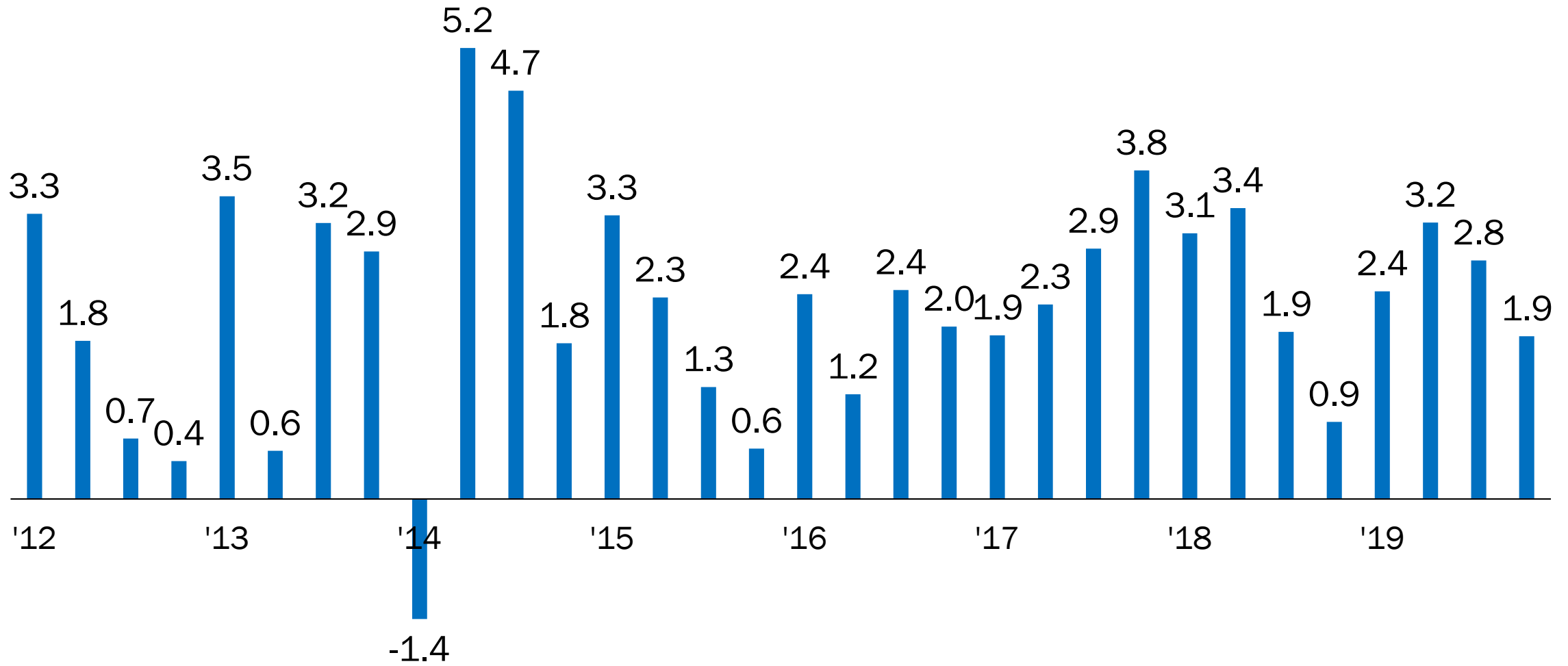
% Change in Real U.S. Gross Domestic Product*



Source: U.S. Bureau of Economic Analysis

* Compounded Annual Rate of Change, Seasonally Adjusted Annual Rate

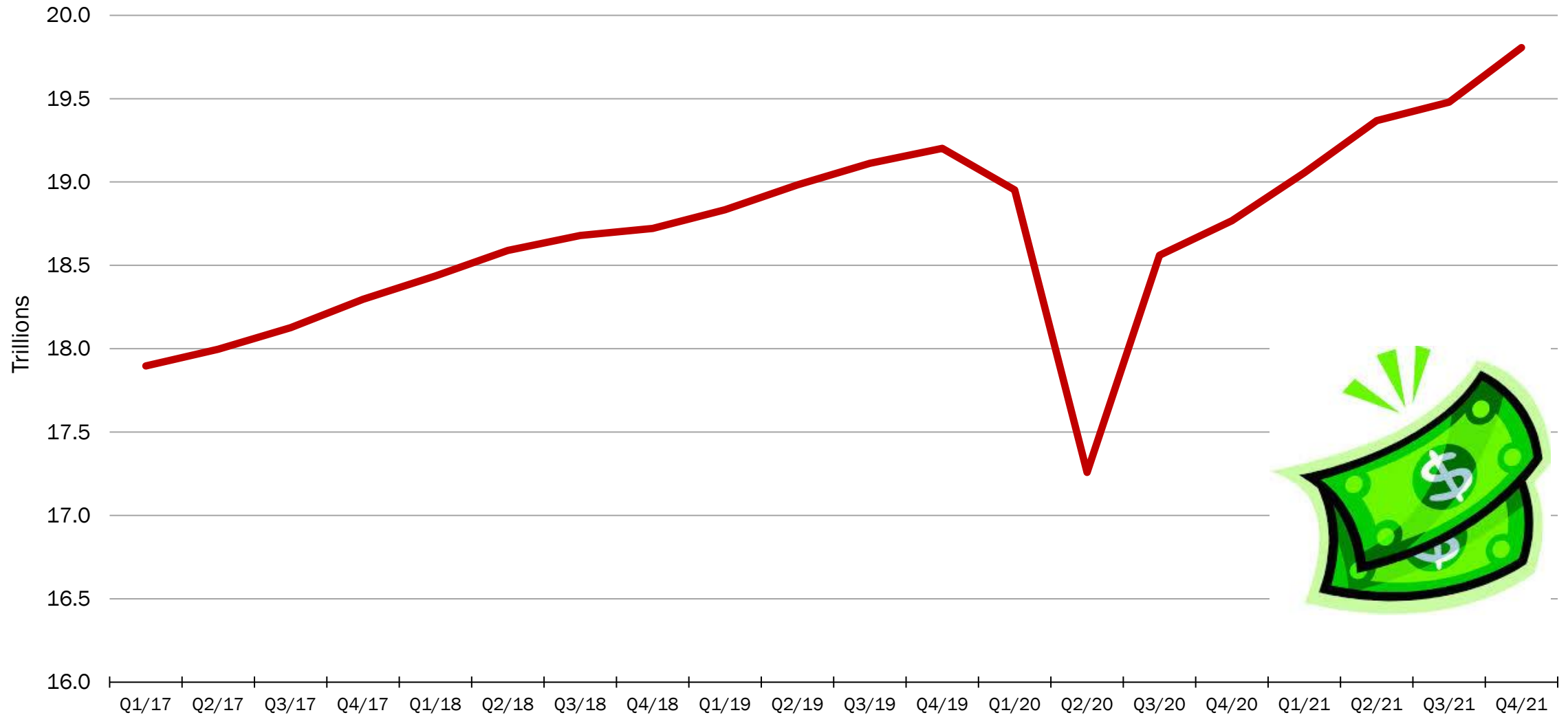
% Change in Real U.S. Gross Domestic Product*



Source: U.S. Bureau of Economic Analysis

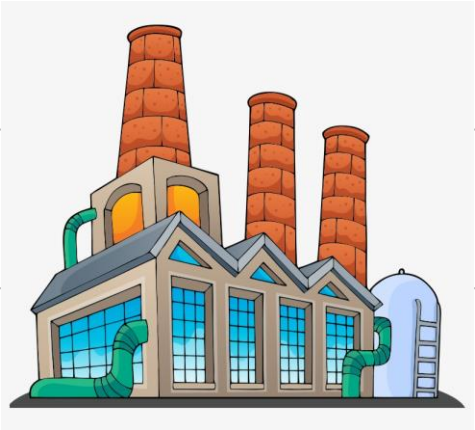
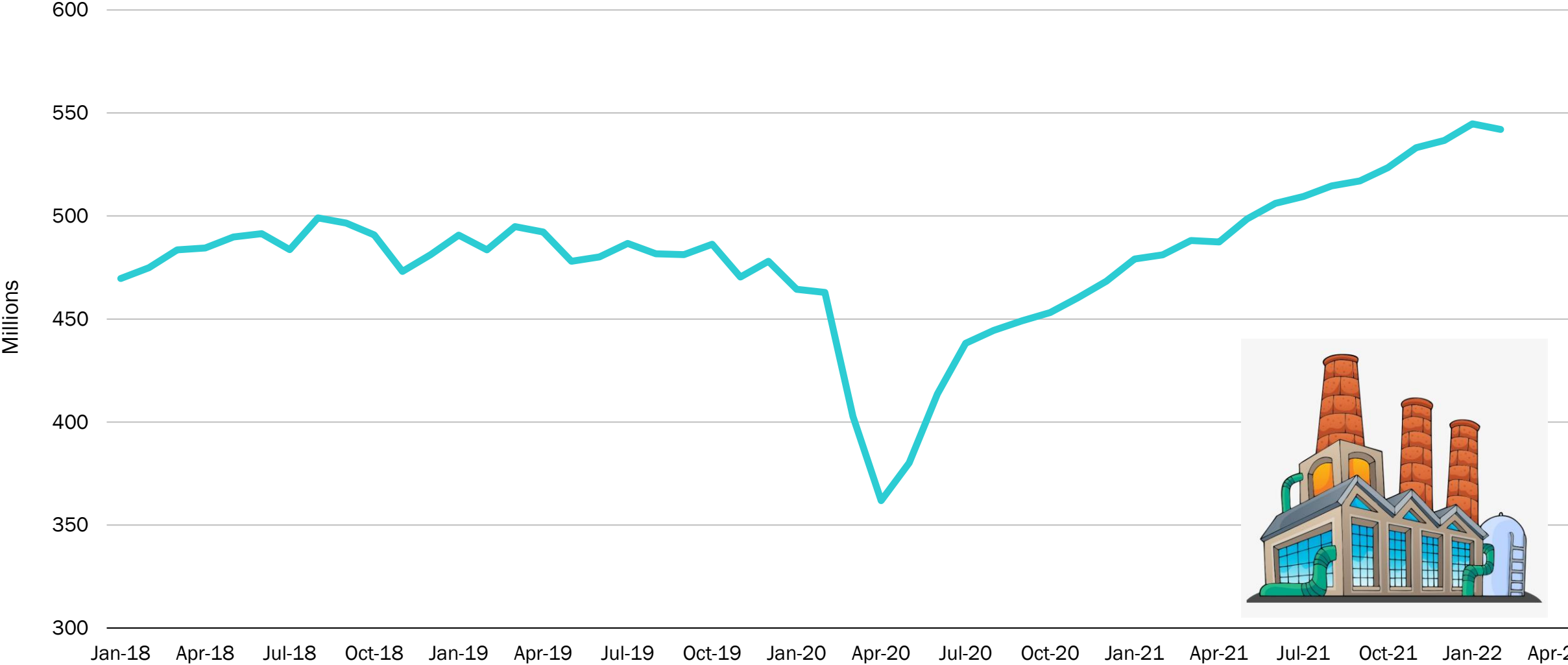
* Compounded Annual Rate of Change, Seasonally Adjusted Annual Rate

U.S. Real Gross Domestic Product



Source: U.S. Bureau of Economic Analysis

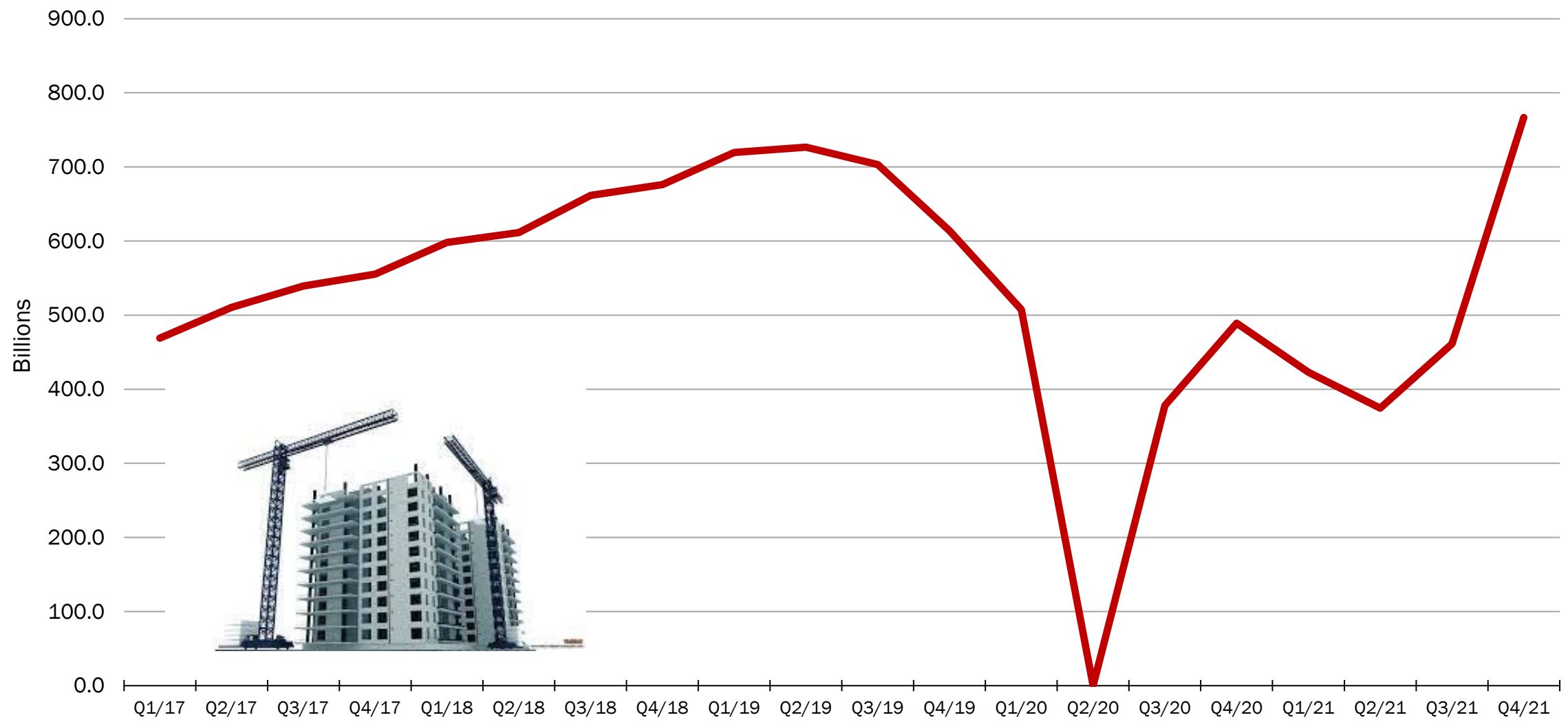
New Orders of Manufactured Goods*



Source: U.S. Census Bureau

*Monthly, Seasonally Adjusted

Net Private Domestic Investment



Source: U.S. Bureau of Economic Analysis

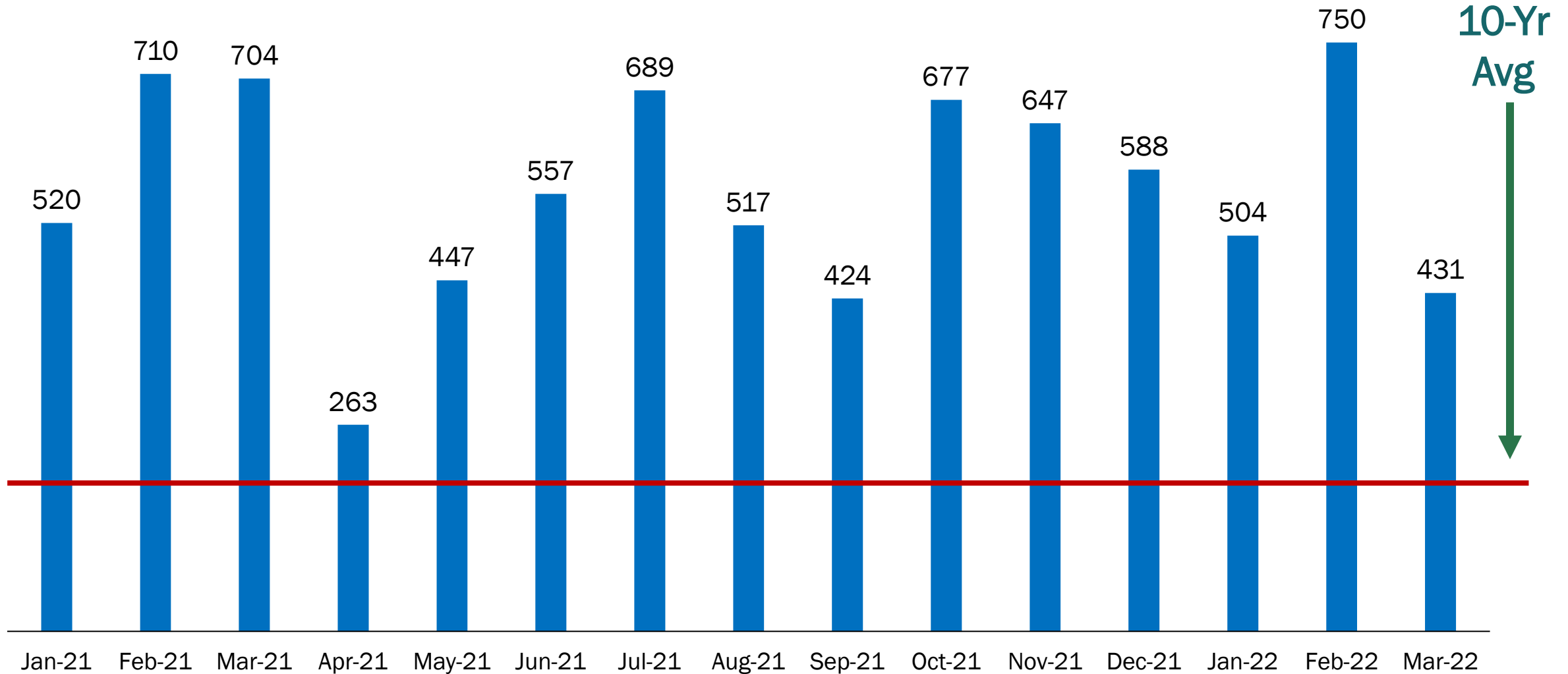
THE WALL STREET JOURNAL.

U.S. March Jobs Report Shows Strong Hiring Momentum

Economists see labor market growing briskly as more workers seek jobs

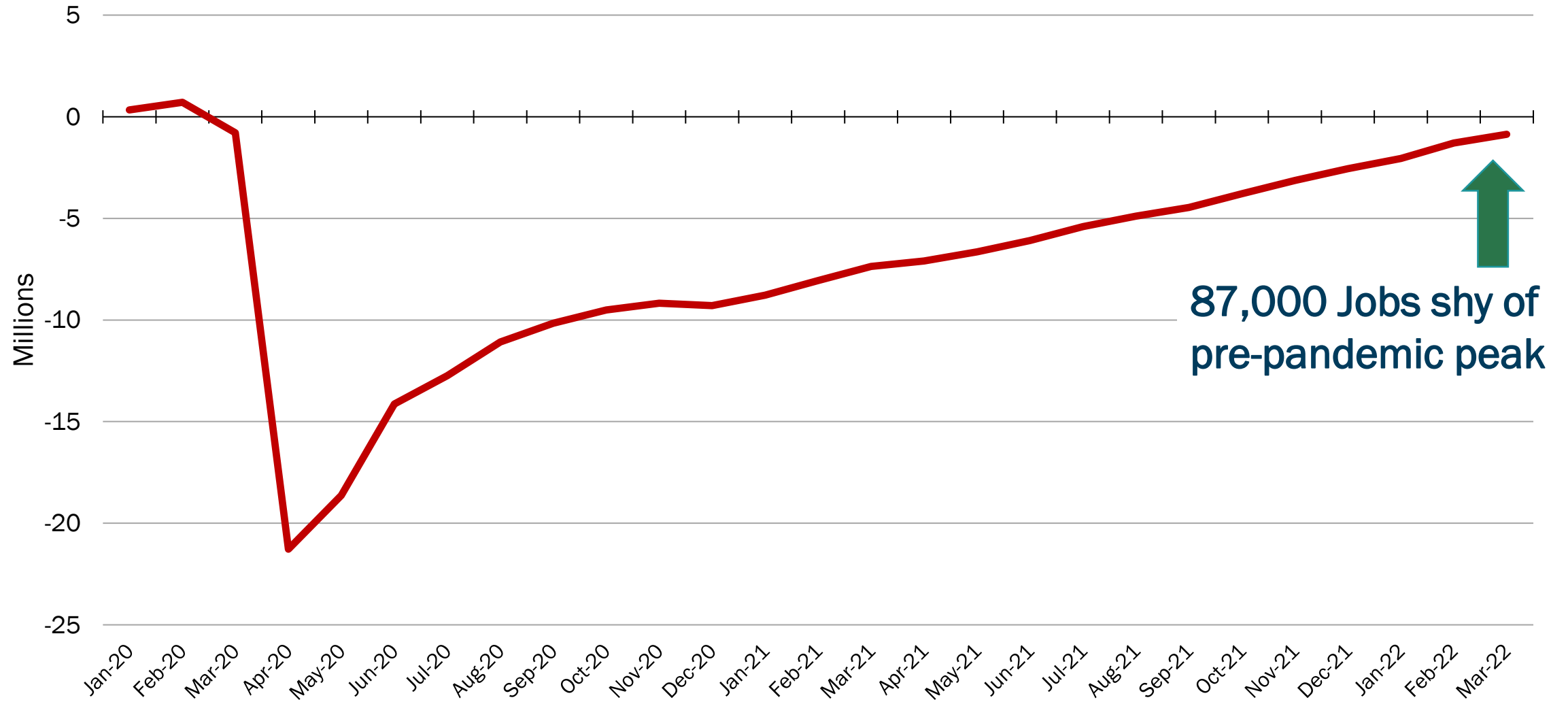


Monthly U.S. Payroll Employment Gains



Source: U.S. Bureau of Labor Statistics

Change in U.S. Payrolls Since Jan '20

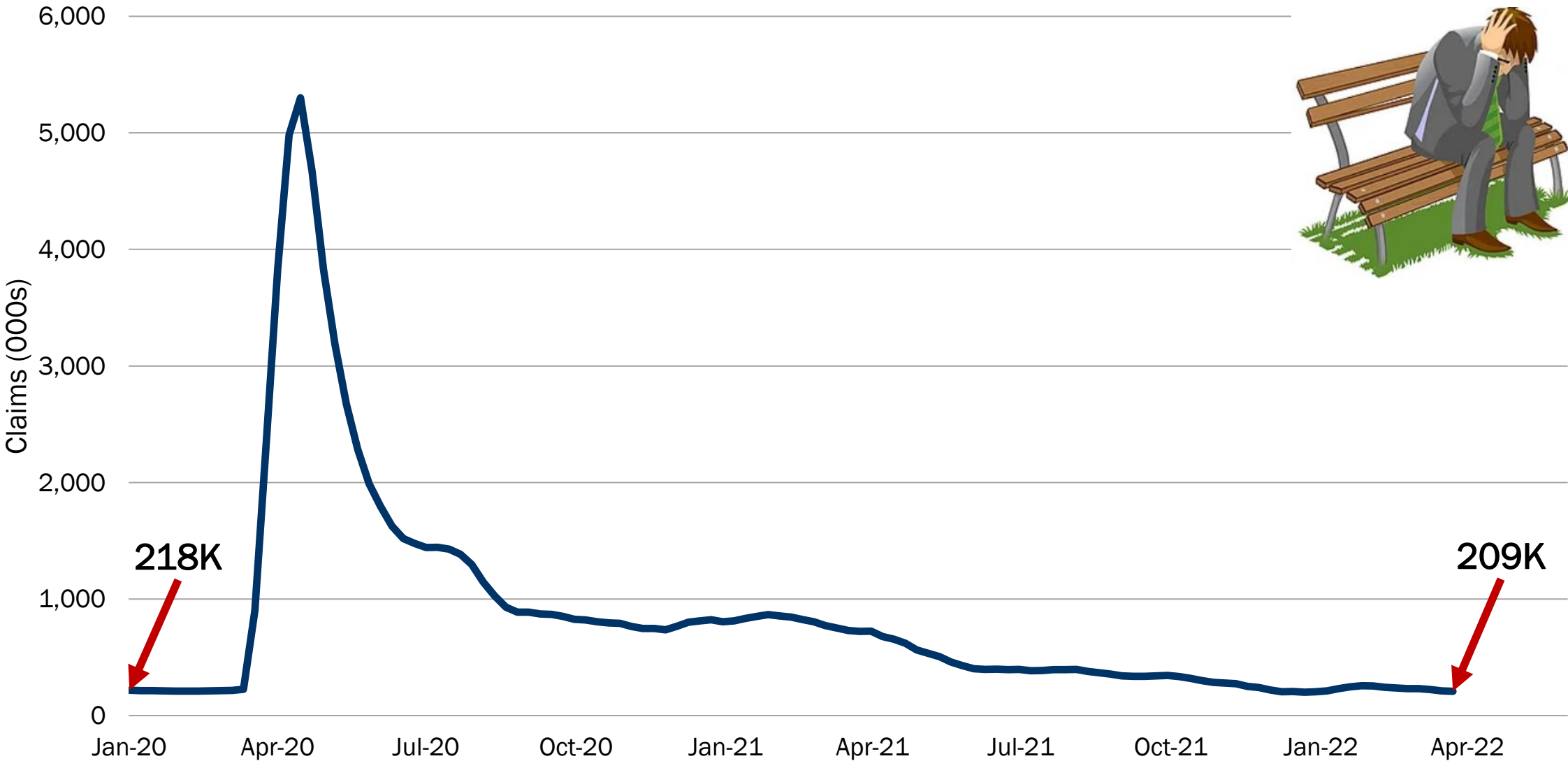


Source: U.S. Bureau of Labor Statistics

BARRON'S

Initial Jobless Claims Decline to Lowest Level Since 1969

Initial Claims for Unemployment Benefits, U.S.*



Source: U.S. Employment and Training Administration

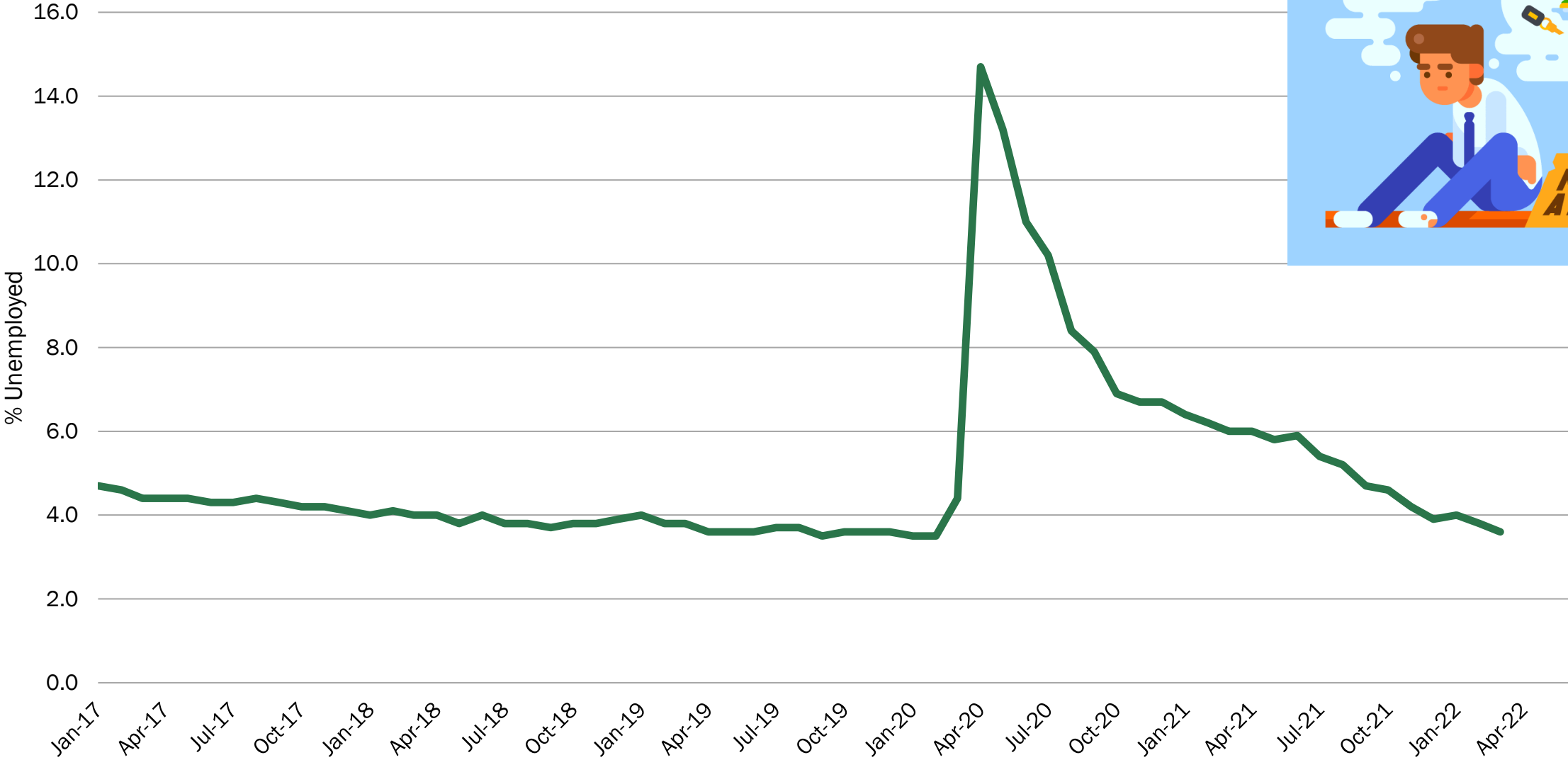
* Four-week moving average



REUTERS

**U.S. unemployment rate
drops to 3.6% as labor
market rapidly tightens**

U.S. Unemployment Rate*



Source: U.S. Bureau of Labor Statistics

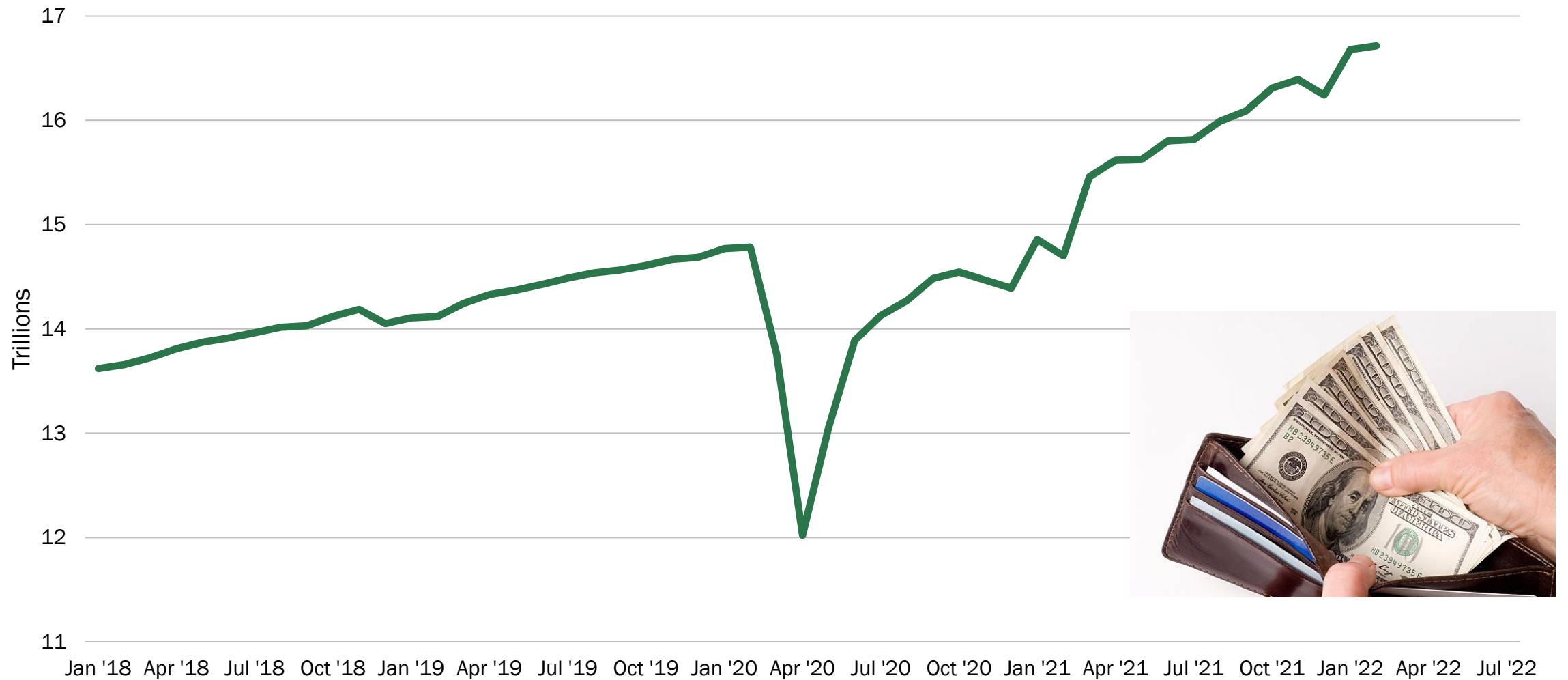
*Monthly, Seasonally Adjusted

THE WALL STREET JOURNAL.

Inflation Weighed on Consumer Spending Growth in February



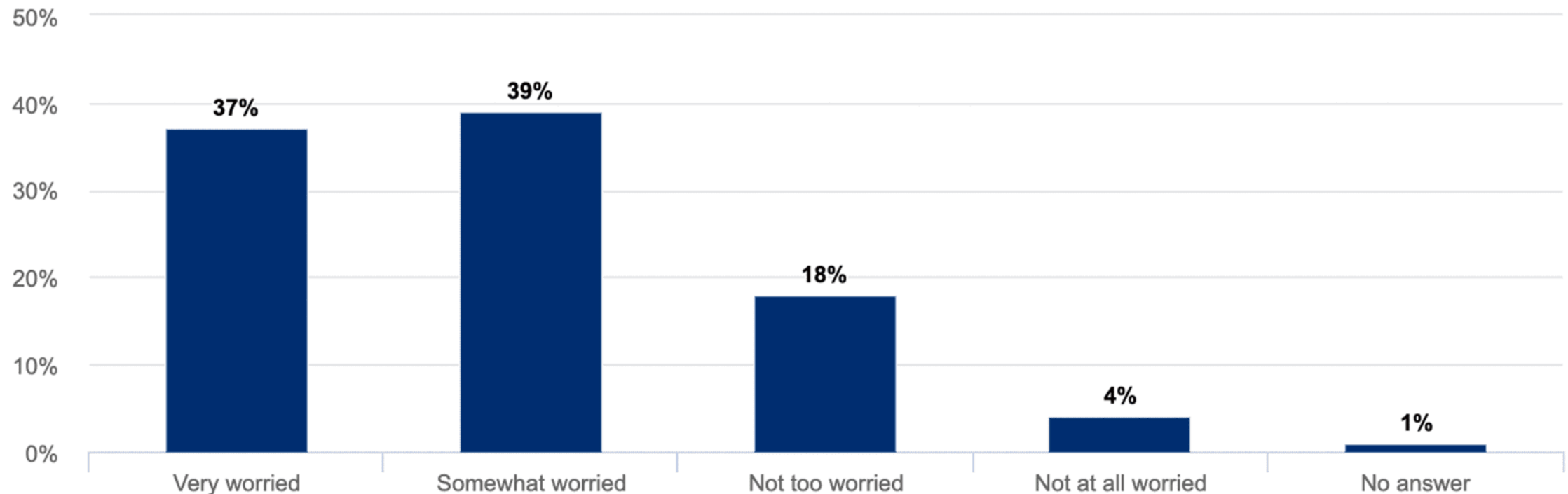
Consumer Spending, Annual Rate*



Source: U.S. Bureau of Economic Analysis

*Monthly, Seasonally Adjusted

How worried are you that higher prices will force you to rethink your financial choices in the coming months?



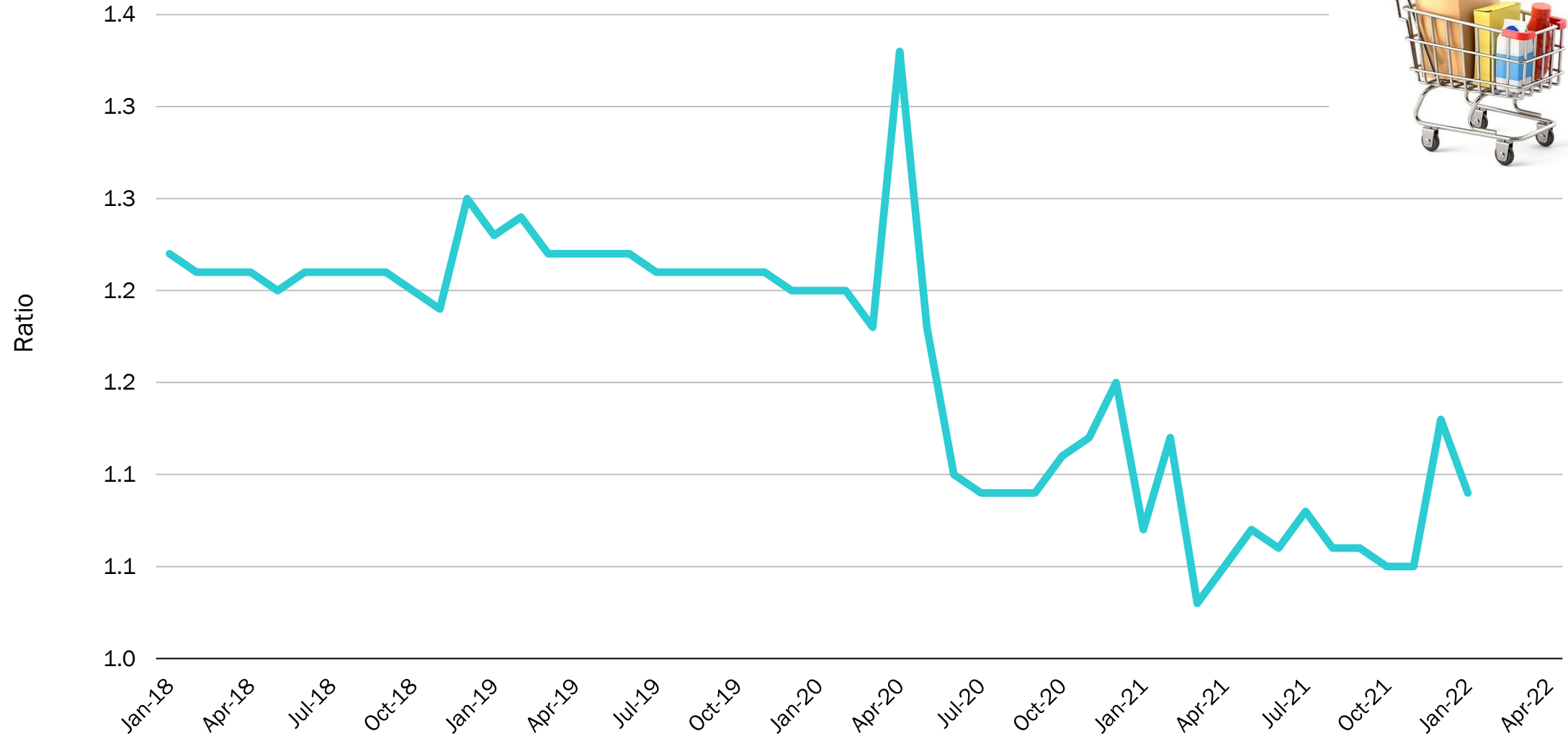
Source: Conducted by Momentive



- ✓ GDP Growth
- ✓ Manufacturing Orders
- ✓ Private Investment
- ✓ Job Growth
- ✓ Unemployment Rate
- ✓ Initial Claims for Benefits
- ✓ Consumer Spending



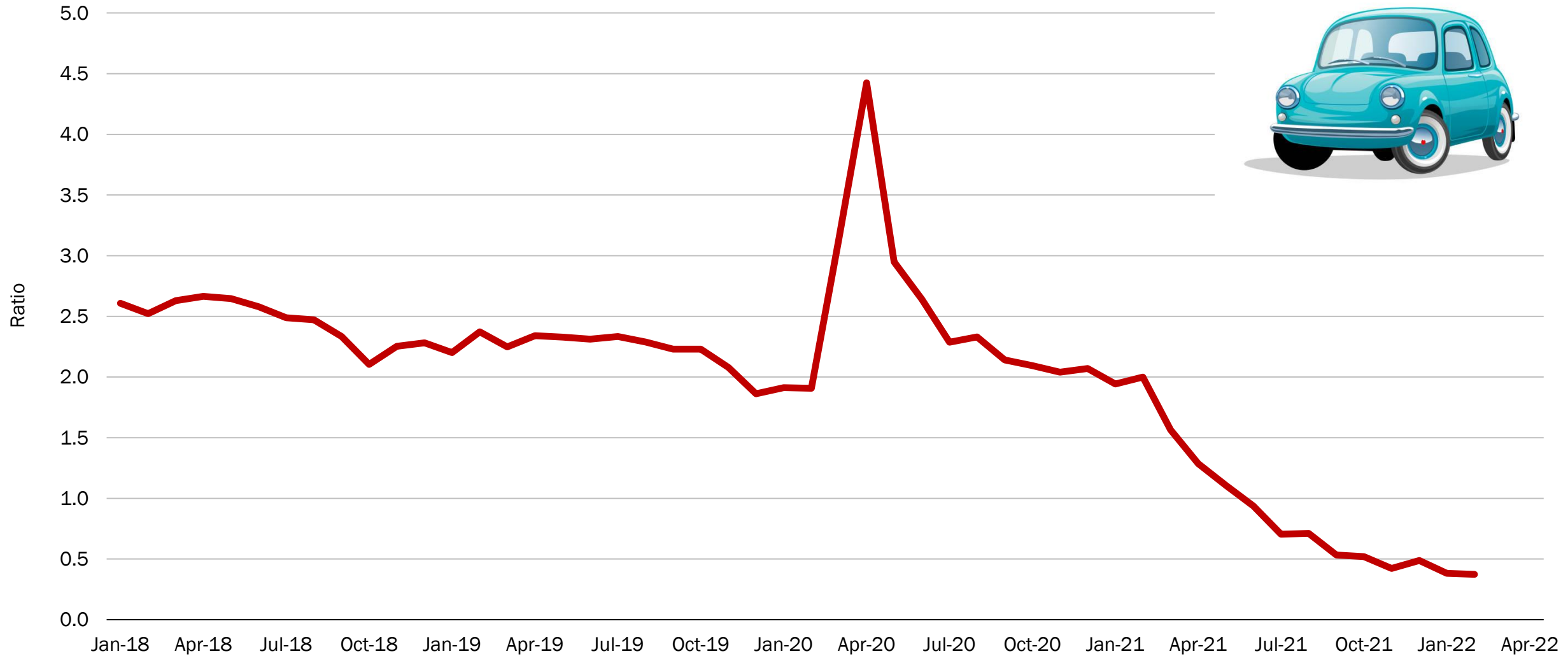
Retail Inventories/Sales Ratio*



Source: U.S. Census Bureau

*Excludes automobiles and parts

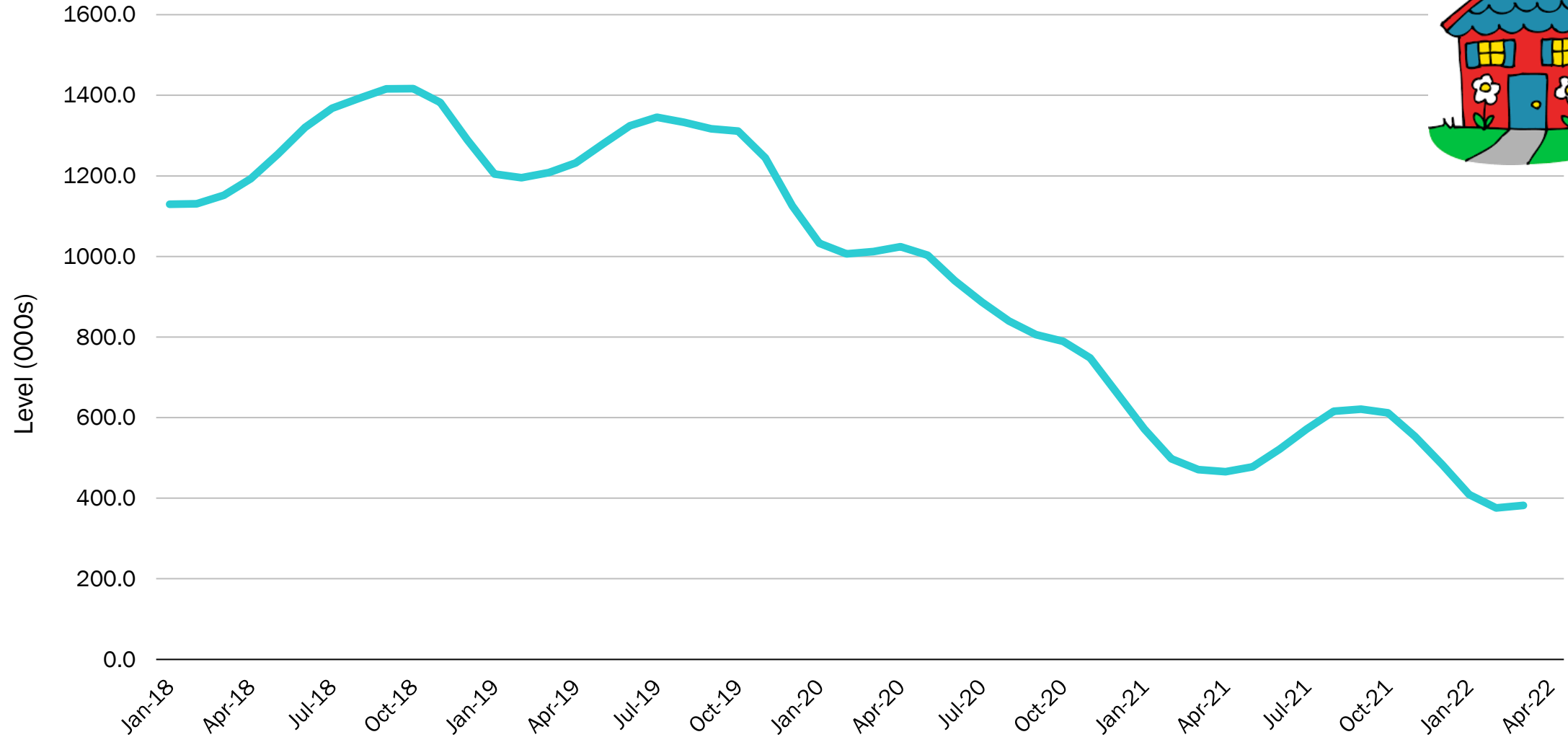
Auto Inventory/Sales Ratio*



Source: U.S. Bureau of Economic Analysis

*Seasonally Adjusted

Active Listings, U.S. Homes for Sale*



Source: Realtor.com

*Not Seasonally Adjusted



- Retail Inventories
- Auto Inventories
- Home Listings

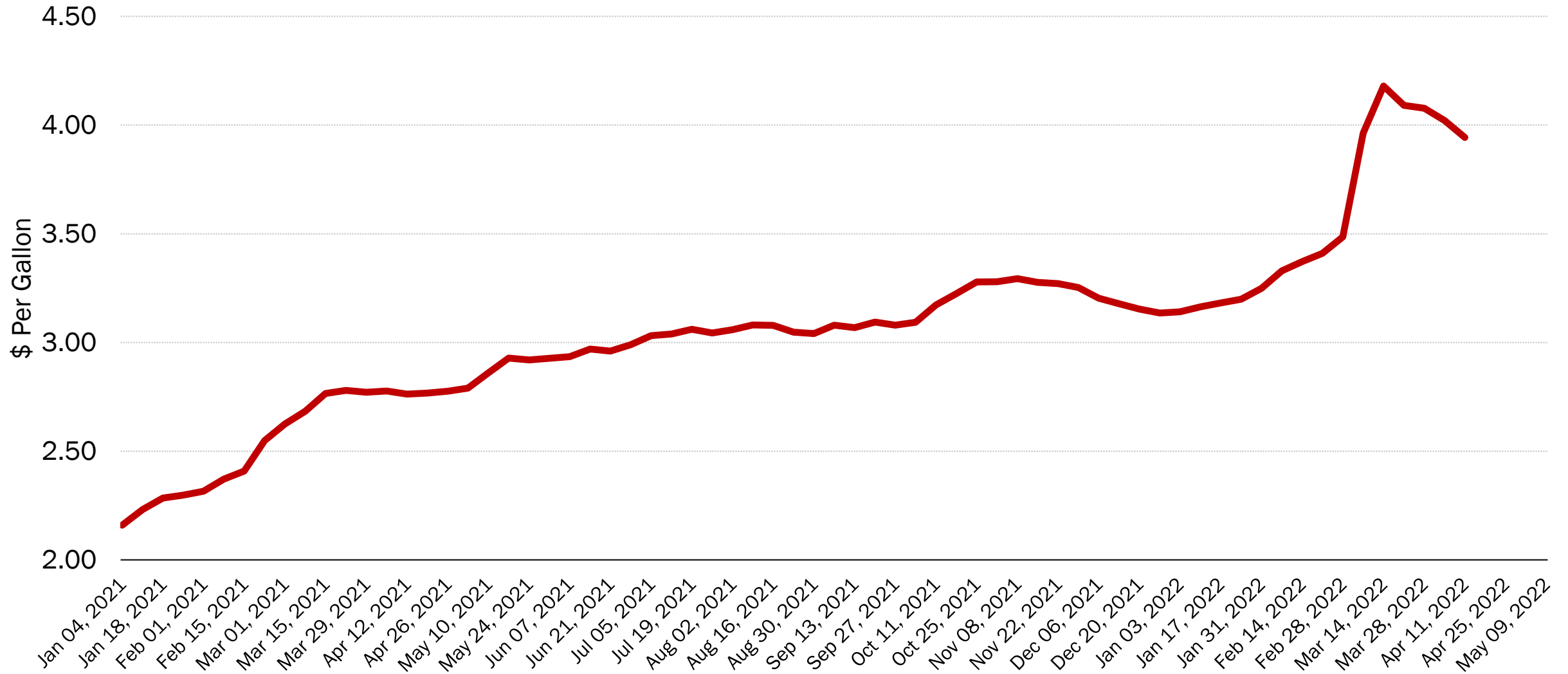


U.S. Inflation Rate



Source: U.S. Bureau of Labor Statistics

U.S. Regular Gasoline Prices*

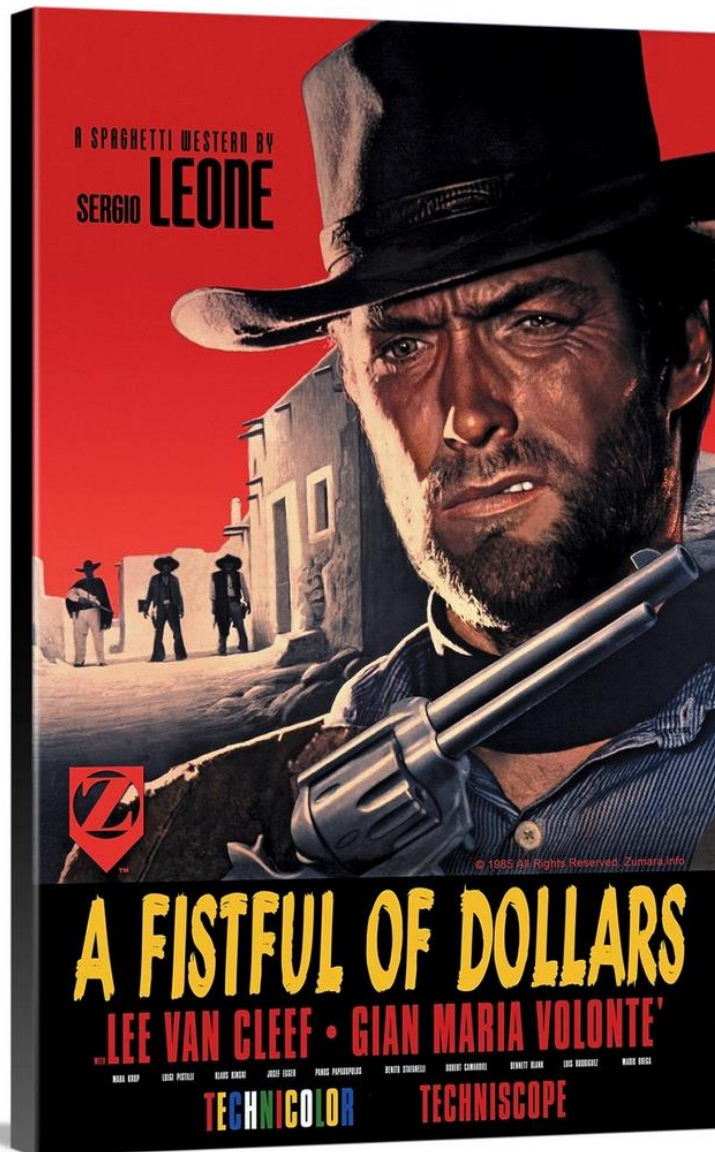


Source: U.S. Energy Information Administration

* includes taxes



- ❖ Inflation
- ❖ Gasoline Prices



The New York Times

The U.S. Economy Is Booming. So Why Are Economists Worrying About a Recession?



ECONOMY

Powell Says Fed Will Consider More-Aggressive Interest-Rate Increases to Reduce Inflation

Bringing down inflation and avoiding recession will be 'challenging task,' says central bank leader



THE WALL STREET JOURNAL.



The Fed is targeting a soft landing. Getting it wrong means recession



Interest rates go up



Interest rates go up



Borrowing becomes more expensive



Interest rates go up



Borrowing becomes more expensive



Demand for homes, cars, goods softens



Interest rates go up



Borrowing becomes more expensive



Demand for homes, cars, goods softens



Prices stabilize



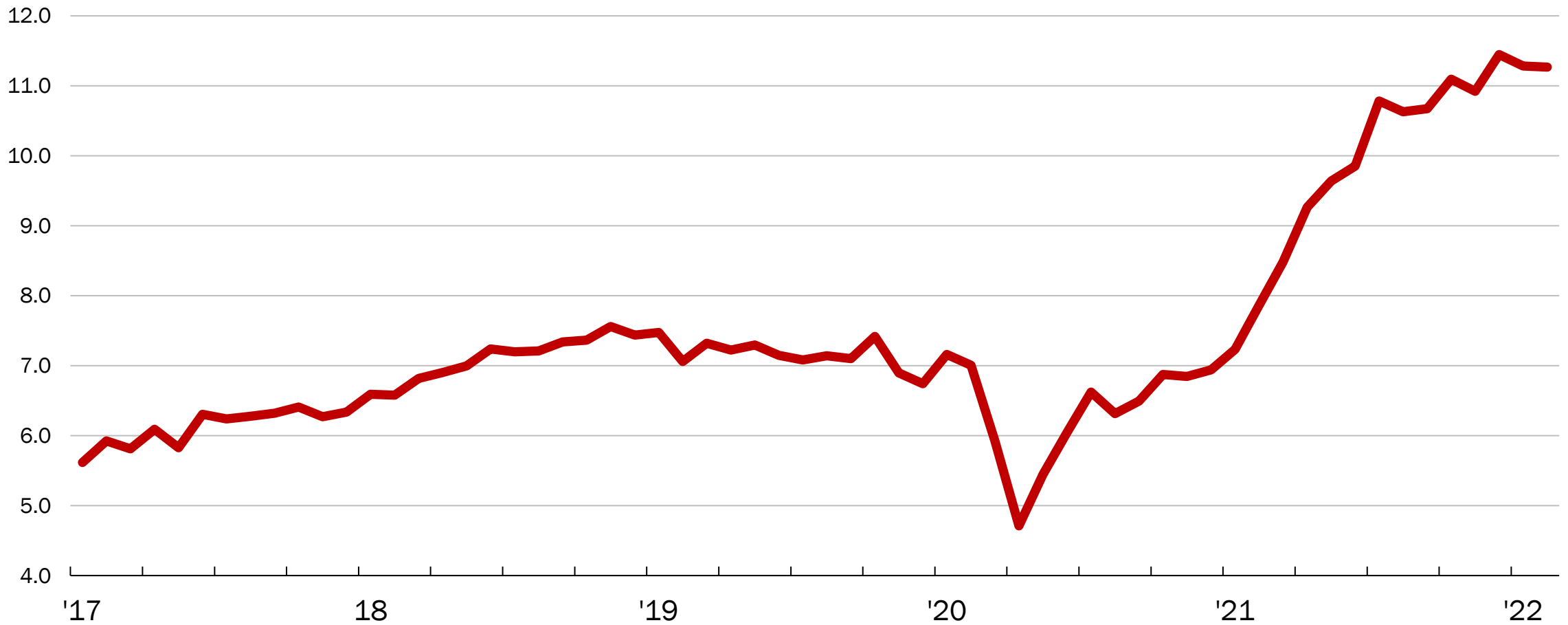
Recent U.S. Recessions

| Recession Date | Causes |
|----------------------------|---|
| 1973–75 | Oil price shock, stock market crash |
| 1980 | Interest rate hikes |
| 1981–1982 | Oil prices hike, rising interest rates |
| Early 1990s | Oil price hike, rising interest rates, elevated debt levels, consumer pessimism |
| Early 2000s | Dot-com bubble collapse, drop in business investments, 9/11 |
| Great Recession, 2008-2010 | Subprime mortgage crisis |
| COVID Recession, 2020 | Global pandemic |



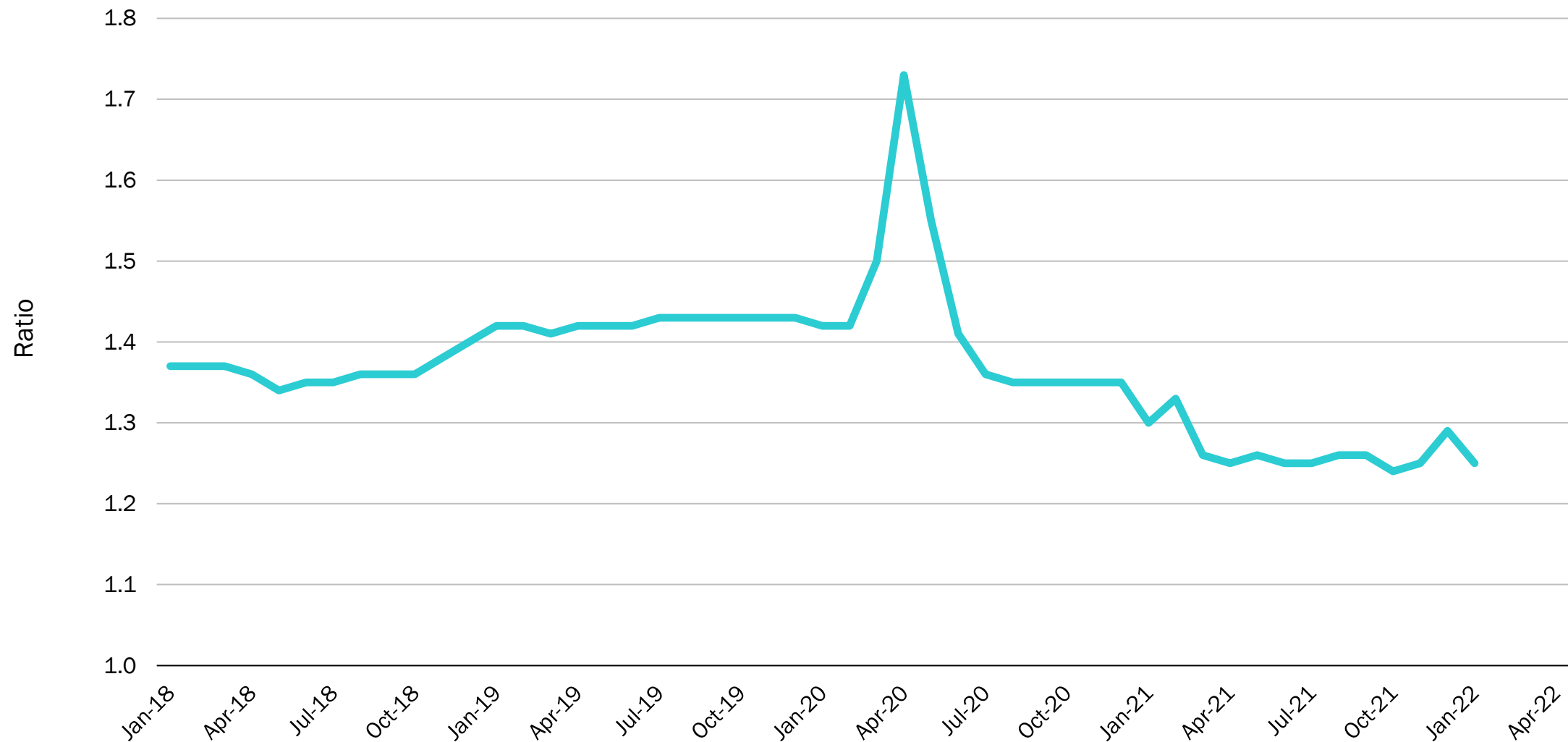
U.S. Job Openings

Millions



Source: U.S Bureau of Labor Statistics

Total Business Inventories/Sales Ratio*



Source: U.S. Census Bureau

*Excludes automobiles and parts

Consumer Confidence Index®

Index, 1985 = 100



*Shaded areas represent periods of recession.

Sources: The Conference Board; NBER

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Manufacturing at a Glance

| INDEX | Mar Index | Feb Index | % Point Change | Direction | Rate of Change | Trend* (months) |
|--------------------|-----------|-----------|----------------|-----------|----------------|-----------------|
| Manufacturing PMI® | 57.1 | 58.6 | -1.5 | Growing | Slower | 22 |
| New Orders | 53.8 | 61.7 | -7.9 | Growing | Slower | 22 |
| Production | 54.5 | 58.5 | -4.0 | Growing | Slower | 22 |
| Employment | 56.3 | 52.9 | +3.4 | Growing | Faster | 7 |





Services at a Glance

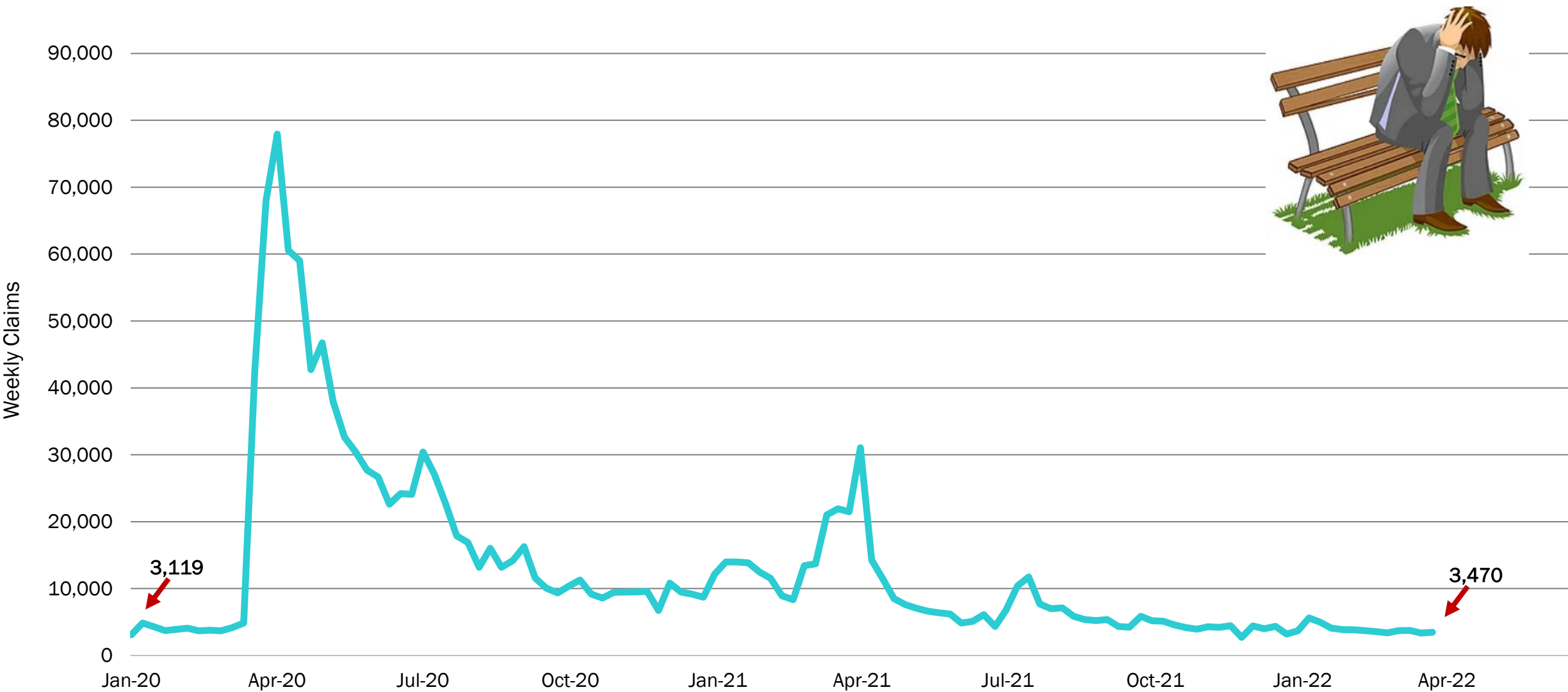
| INDEX | Mar Index | Feb Index | % Point Change | Direction | Rate of Change | Trend* (months) |
|-------------------|-----------|-----------|----------------|-----------|------------------|-----------------|
| Services PMI® | 58.3 | 56.5 | +1.8 | Growing | Faster | 22 |
| Business Activity | 55.5 | 55.1 | +0.4 | Growing | Faster | 22 |
| New Orders | 60.1 | 56.1 | +4.0 | Growing | Faster | 22 |
| Employment | 54.0 | 48.5 | +5.5 | Growing | From Contracting | 1 |



What about Houston?

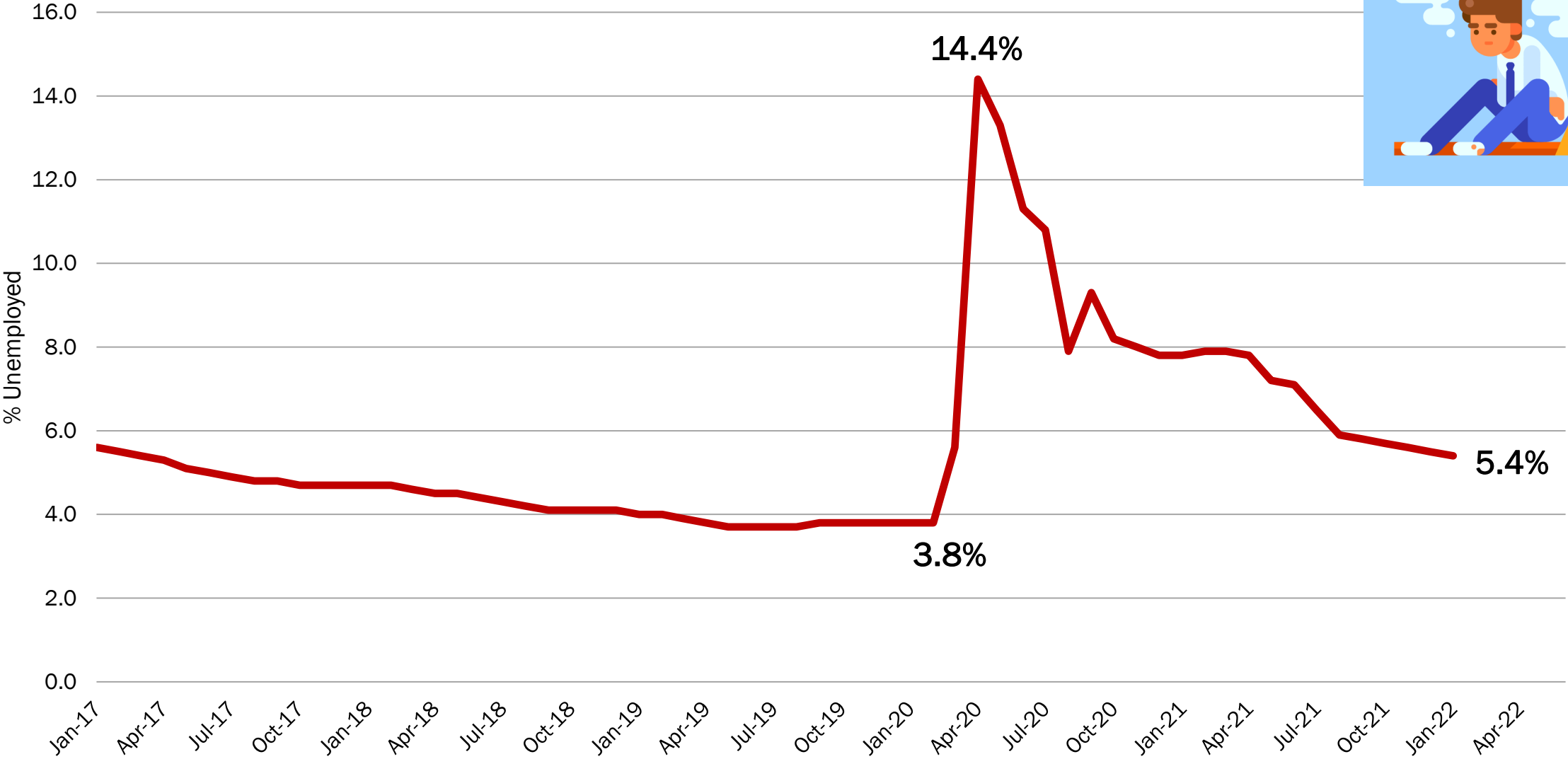


Initial Claims for Unemployment Benefits, Metro Houston



Source: Partnership calculations based on Texas Workforce Commission data

Houston Unemployment Rate*



Source: U.S. Bureau of Labor Statistics

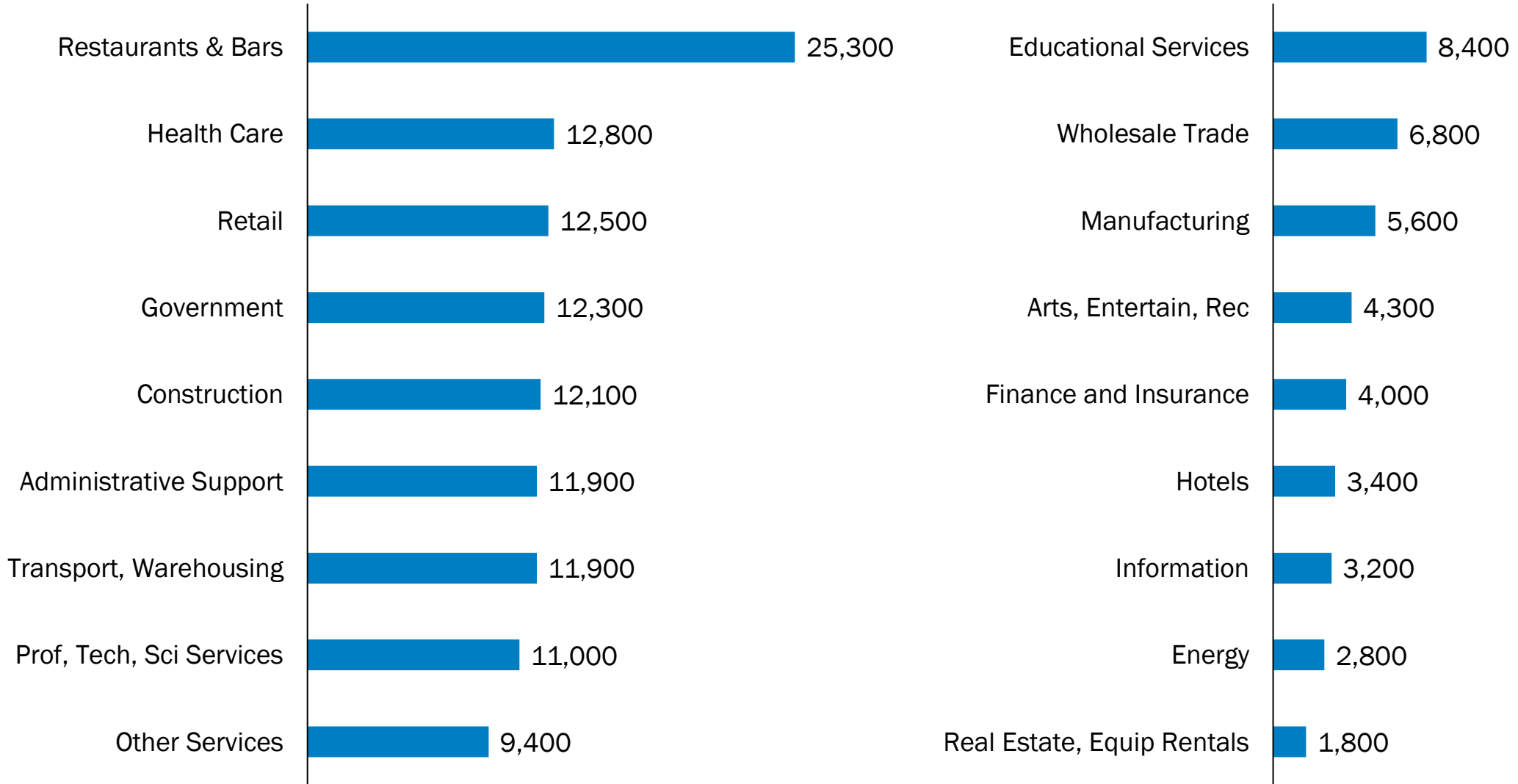
*Monthly, Seasonally Adjusted

Best Years For Job Growth, Metro Houston

| Year | Jobs |
|-------------|----------------|
| 2021 | 159,700 |
| 1981 | 126,900 |
| 2012 | 117,400 |
| 2014 | 116,800 |
| 2006 | 106,800 |
| 1997 | 106,600 |

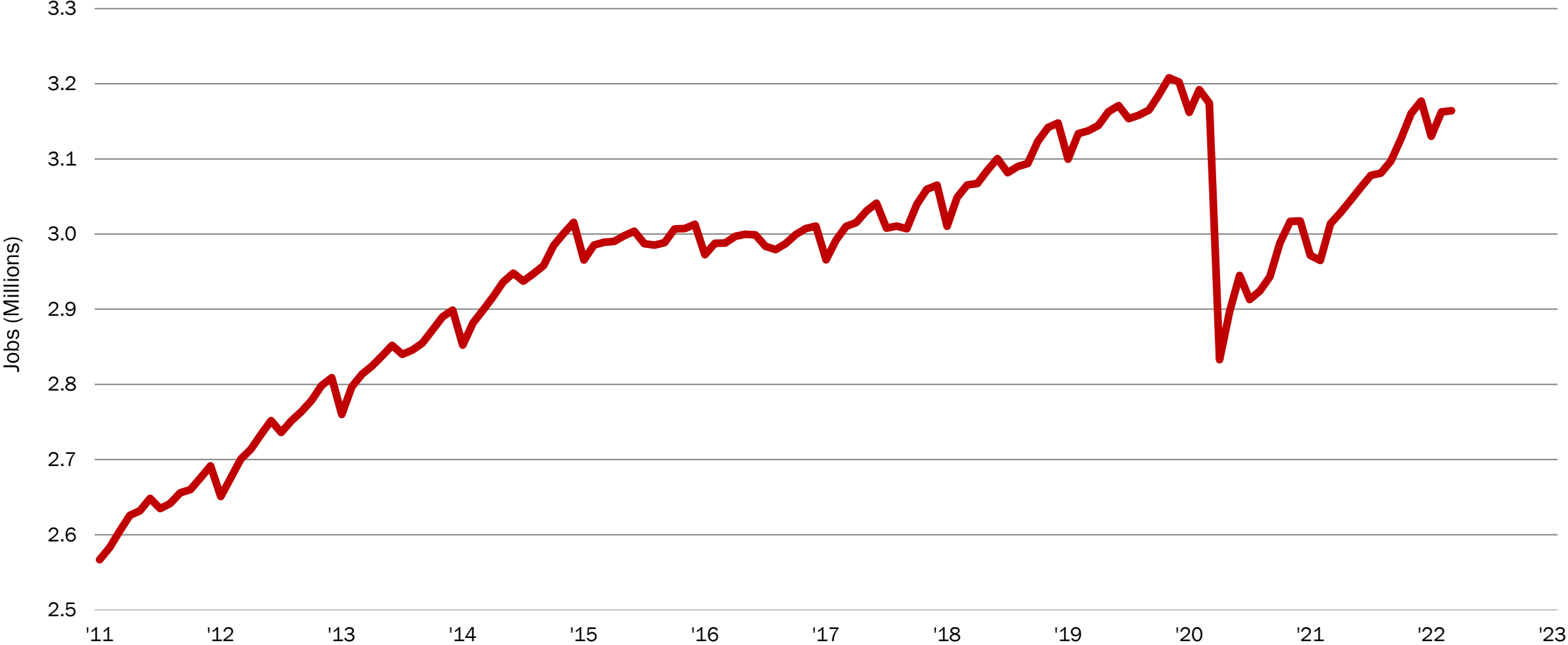
Source: Partnership calculations based on Texas Workforce Commission data

Houston Job Growth, 2021



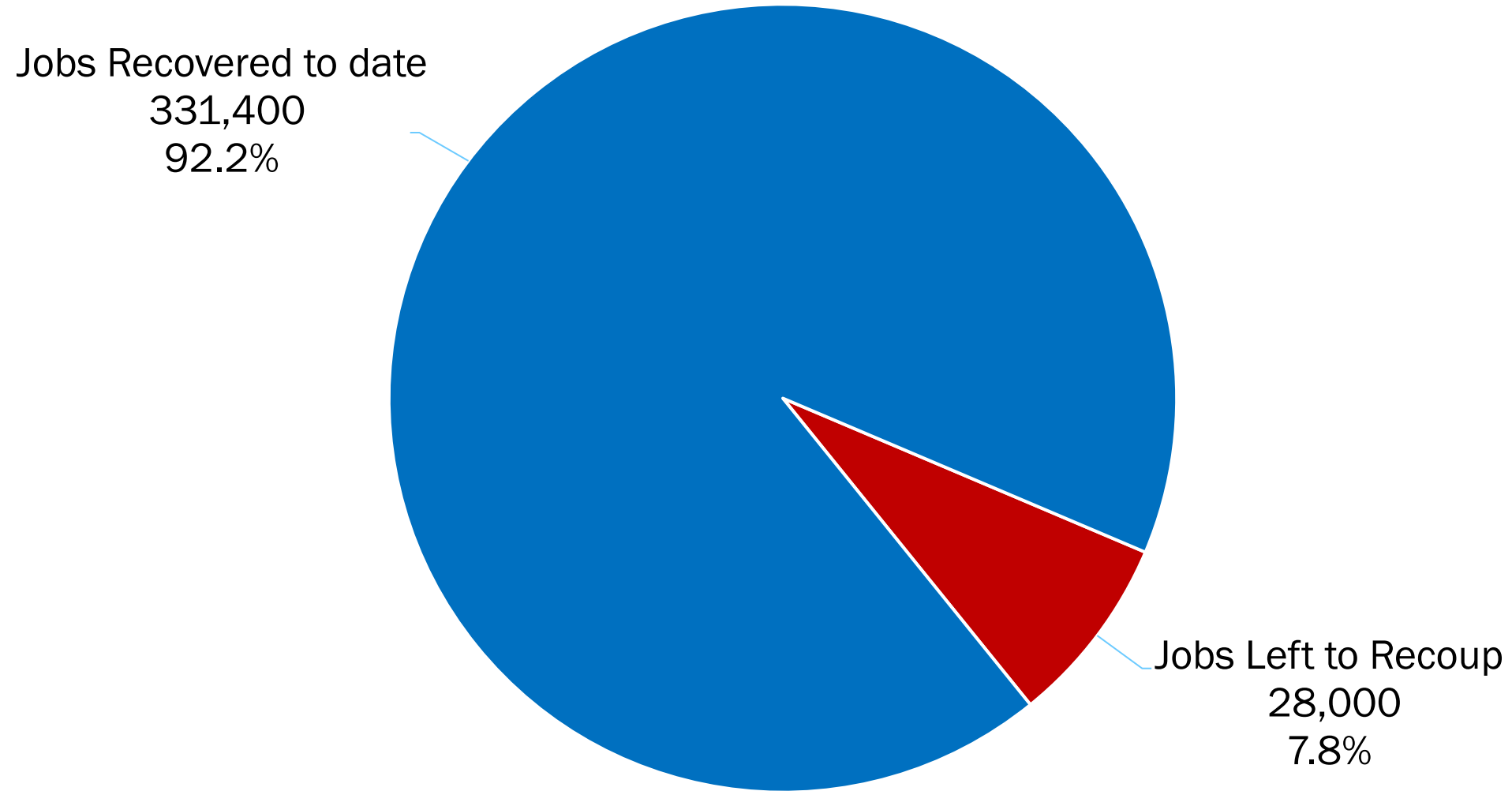
Source: Partnership calculations based on Texas Workforce Commission data

Metro Houston Employment



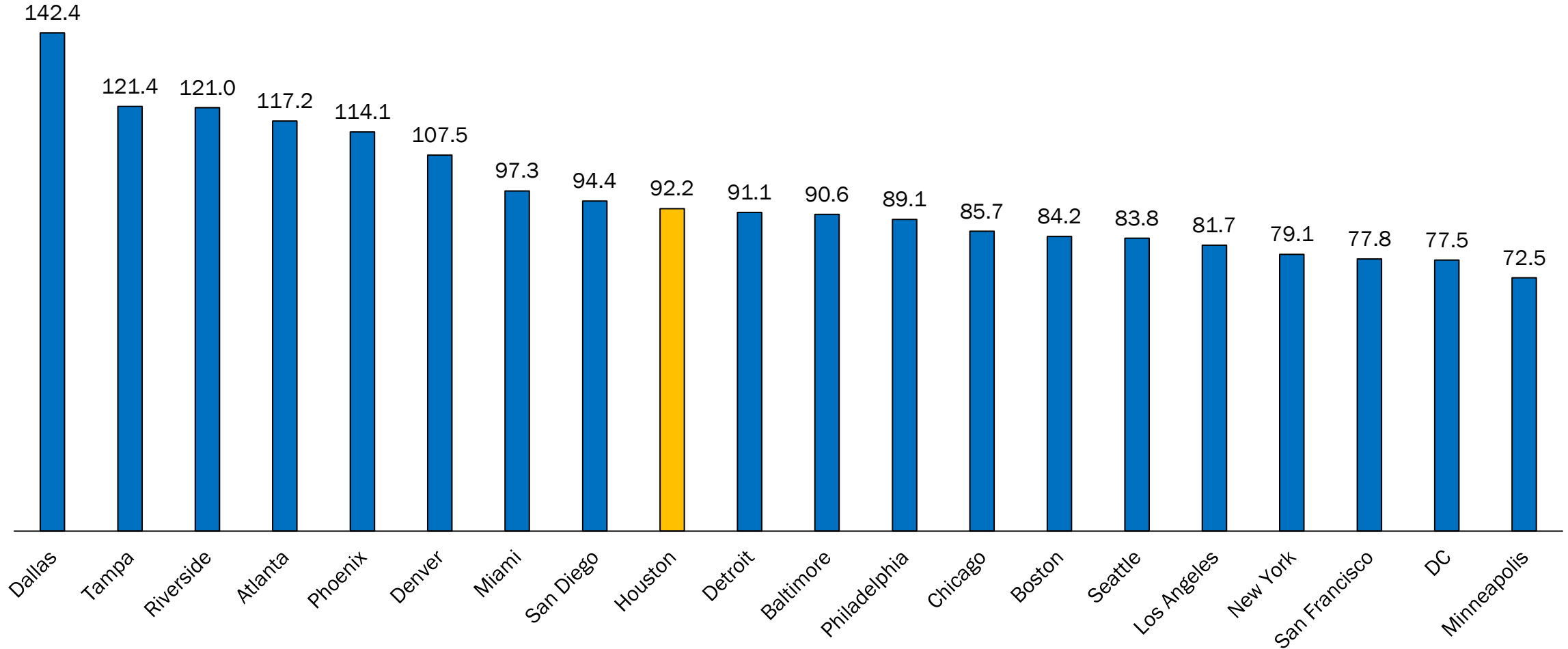
Source: Partnership calculations based on Texas Workforce Commission data

Recovery To Date, Metro Houston Employment*



* As of March '22

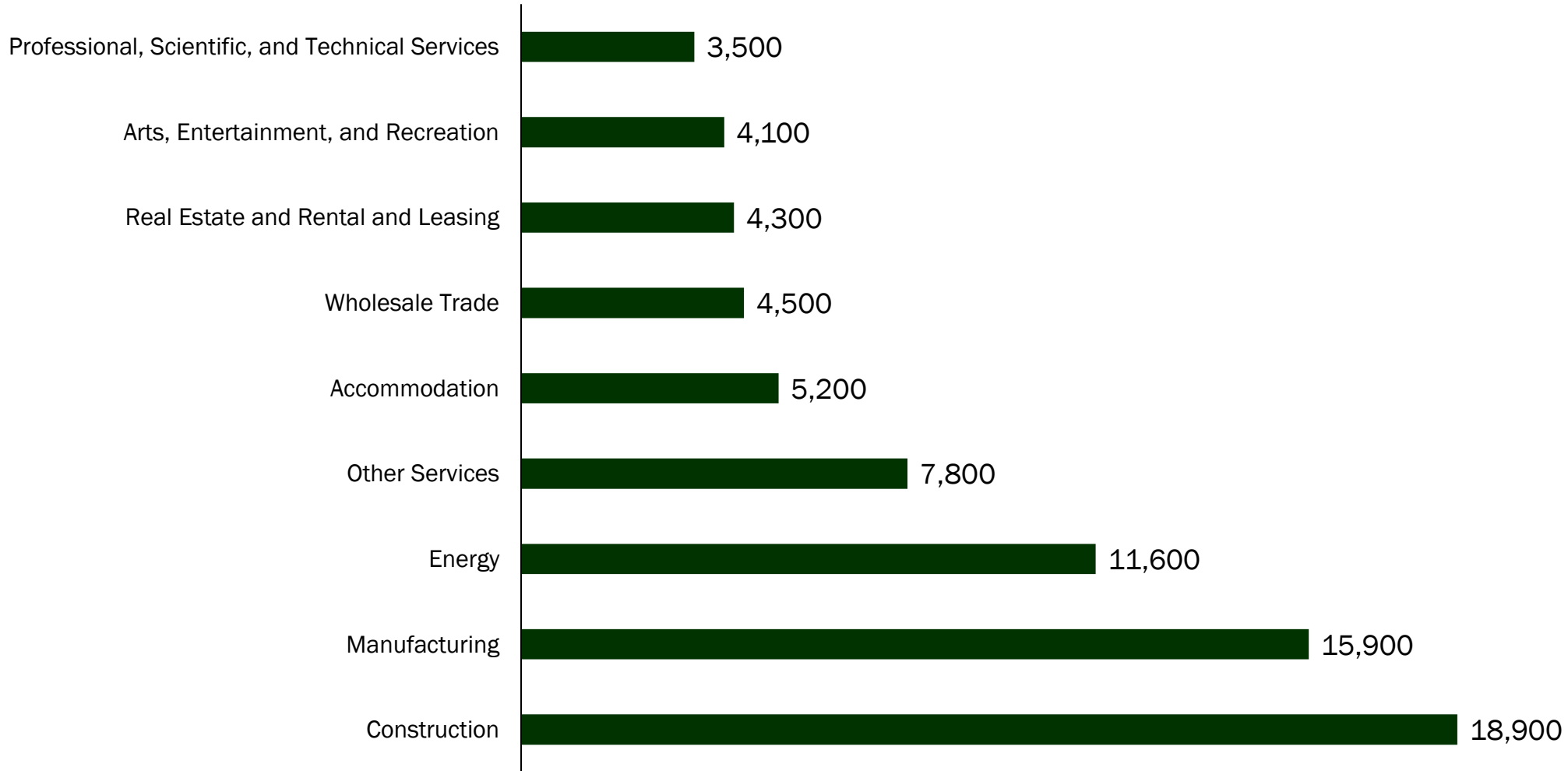
Percent Pandemic Jobs Losses Recovered*



Source: Greater Houston Partnership calculations based on Bureau of Labor Statistics data

* As of March '22

Job Losses Yet to Recoup, Metro Houston*

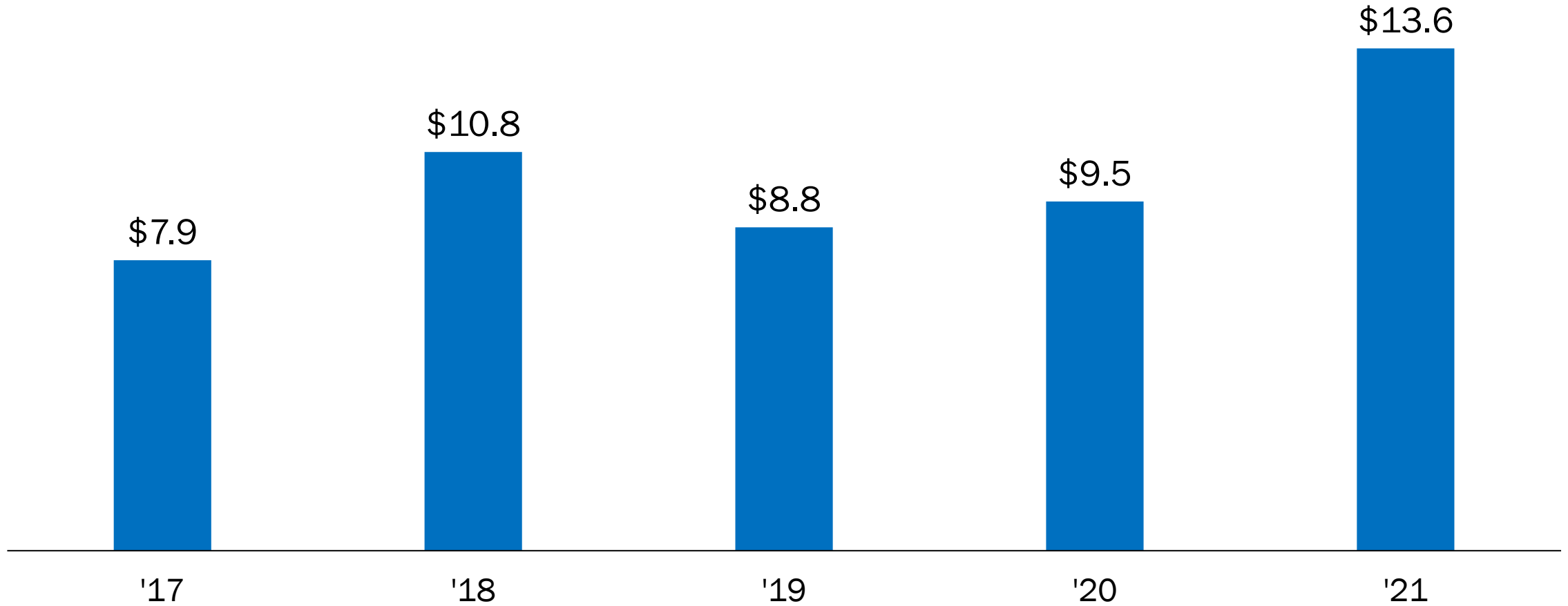


Source: Partnership calculations based on Texas Workforce Commission data

* As of March '22

Construction Contract Awards, Jul - Dec*

\$ Billions



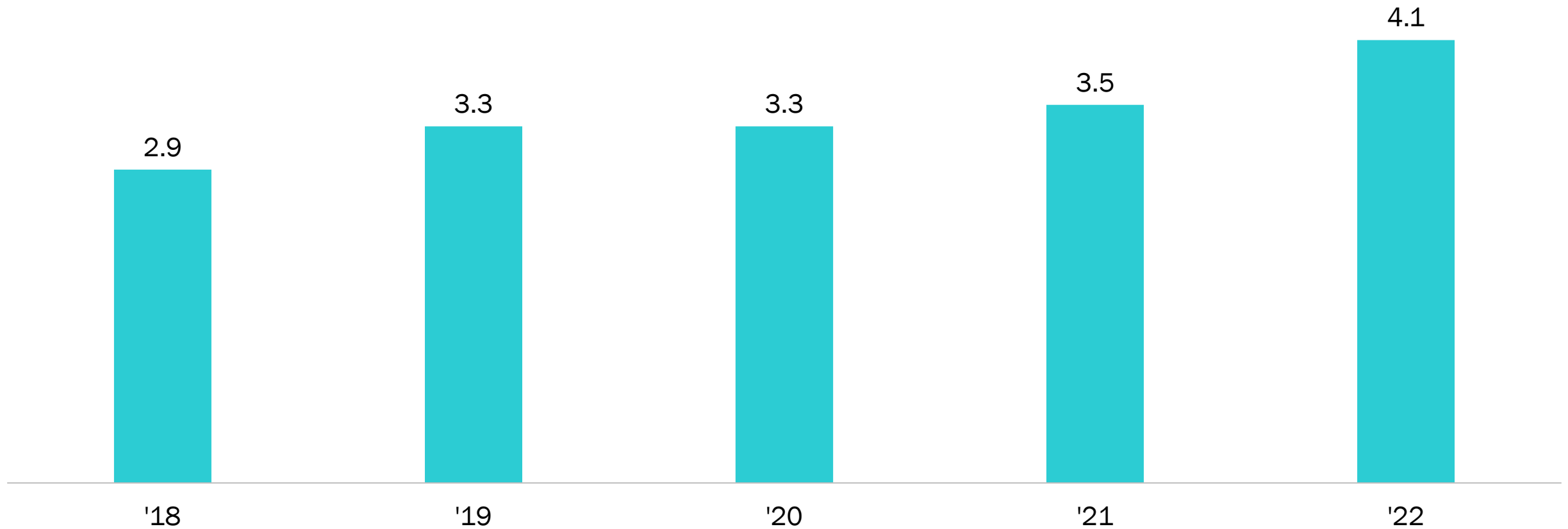
Source: Dodge Data & Analytics

* Excludes infrastructure projects

Construction Contract Awards, Feb YTD



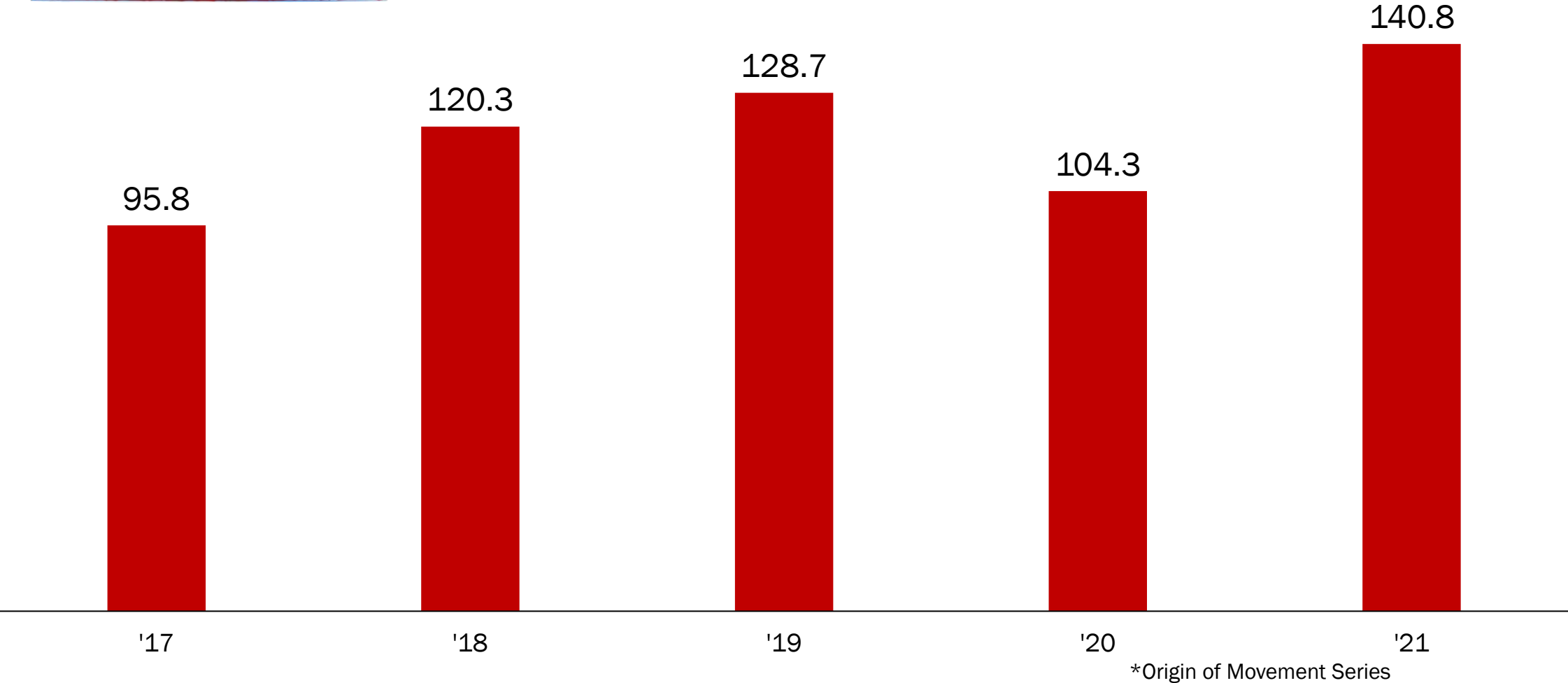
\$ Billions



Source: Dodge Data

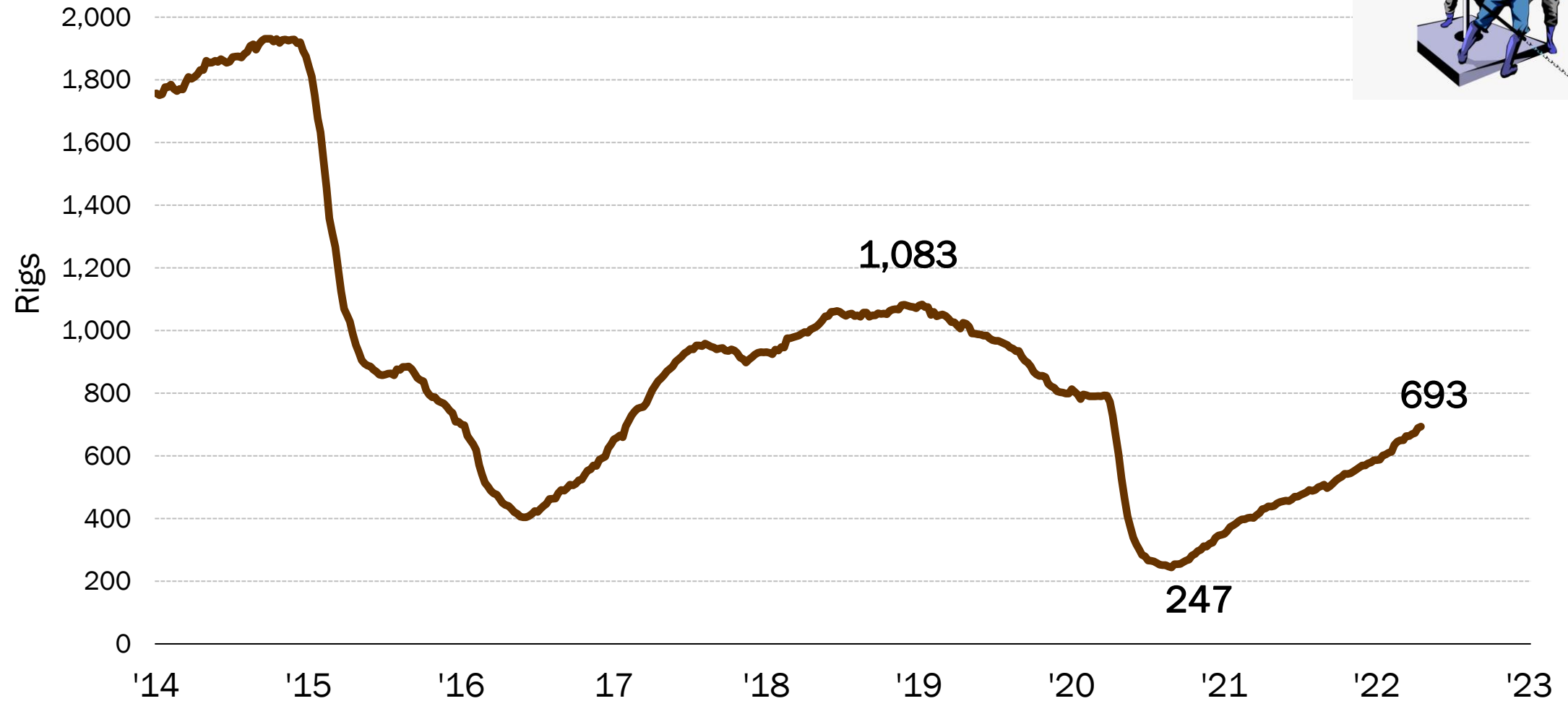
Metro Houston Exports, Annual*

\$ Billions



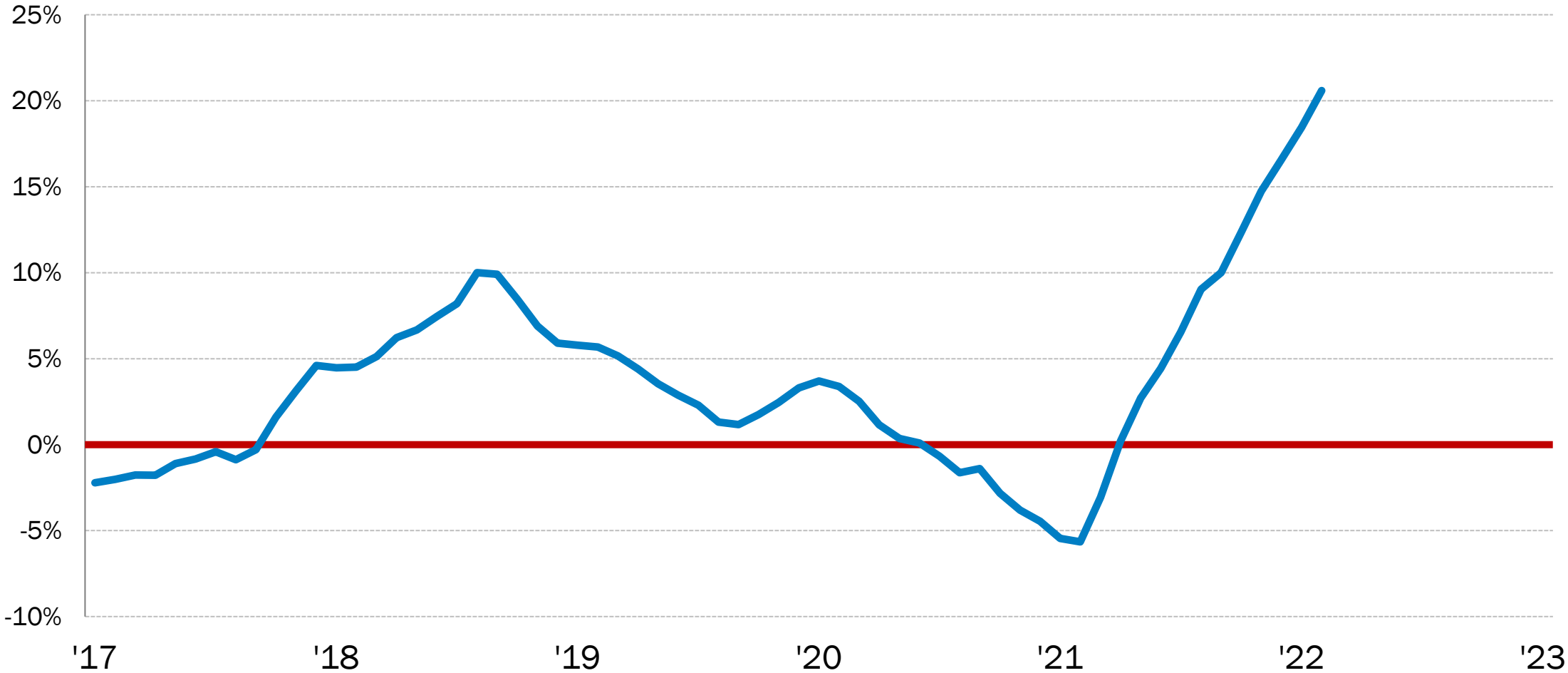
Source: U.S. Census Bureau

U.S. Active Rig Count



Source: Baker Hughes

Sales Tax Collections, 12-Month % Change



Source: Partnership calculations based on Texas State Comptroller's data

Houston Industrial Market

| | JANUARY 2022 vs JANUARY 2021 | | |
|-------------------------|------------------------------|---|------------|
| Vacancy | 6.9% | ↓ | 8.8% |
| Availability | 9.9% | ↓ | 12.0% |
| Under Construction SF | 18,876,175 | ↑ | 17,774,510 |
| NNN Avg Asking Rent/MO | \$0.65 | ↑ | \$0.62 |
| Net Absorption SF YTD | 438,900 | ↑ | 243,973 |
| Leasing Activity SF YTD | 3,627,451 | ↑ | 3,394,397 |
| Deliveries SF YTD | 312,085 | ↓ | 1,187,373 |



Source: NAI Partners

Houston Retail Market

| | FEBRUARY 2022 vs FEBRUARY 2021 | | |
|-------------------------|--------------------------------|---|-----------|
| Vacancy | 5.8% | ↓ | 6.5% |
| Availability | 6.5% | ↓ | 7.3% |
| Under Construction SF | 3,584,611 | ↑ | 3,321,069 |
| NNN Avg Asking Rent | \$19.25 | ↑ | \$18.56 |
| Net Absorption SF YTD | 951,870 | ↑ | 545,073 |
| Leasing Activity SF YTD | 1,712,953 | ↑ | 1,149,871 |
| Deliveries SF YTD | 647,362 | ↓ | 734,244 |



Source: NAI Partners

Houston Office Market

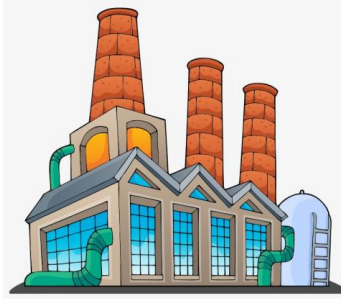
| | FEBRUARY 2022 vs FEBRUARY 2021 | | |
|---------------------------|--------------------------------|---|-----------|
| Vacancy | 24.9% | ↑ | 23.8% |
| Availability | 29.0% | ↑ | 28.5% |
| Under Construction SF | 1,701,662 | ↓ | 4,127,586 |
| Gross Average Asking Rent | \$29.25 | ↓ | \$29.29 |
| Net Absorption SF YTD | 633,921 | ↑ | (512,747) |
| Leasing Activity SF YTD | 1,668,323 | ↓ | 2,087,397 |
| Deliveries SF YTD | 531,395 | ↑ | 46,667 |



Source: NAI Partners

Houston Purchasing Managers Index

Readings Above 50 = Expansion



Source: Institute for Supply Management-Houston

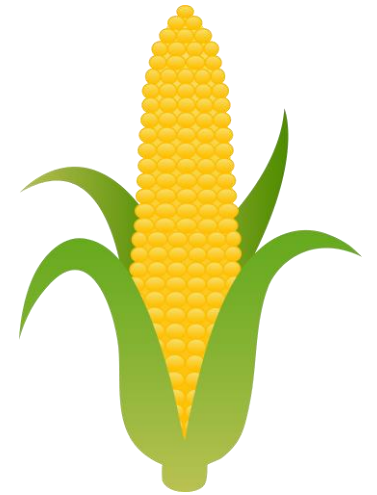
Russian Invasion of Ukraine



The New York Times

*Ukrainian Invasion Adds to Chaos for
Global Supply Chains*





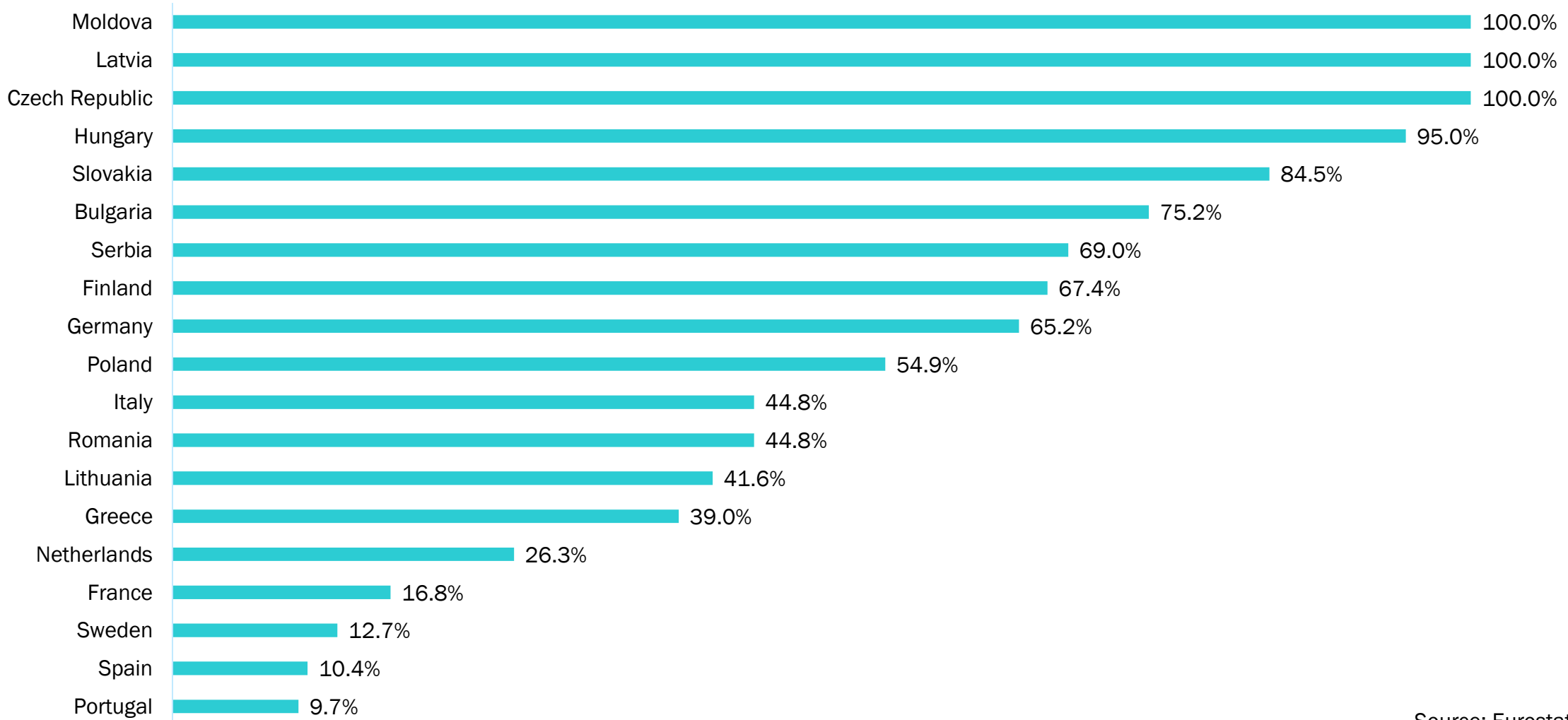


REUTERS

Palladium propelled to record highs by Russia supply concerns



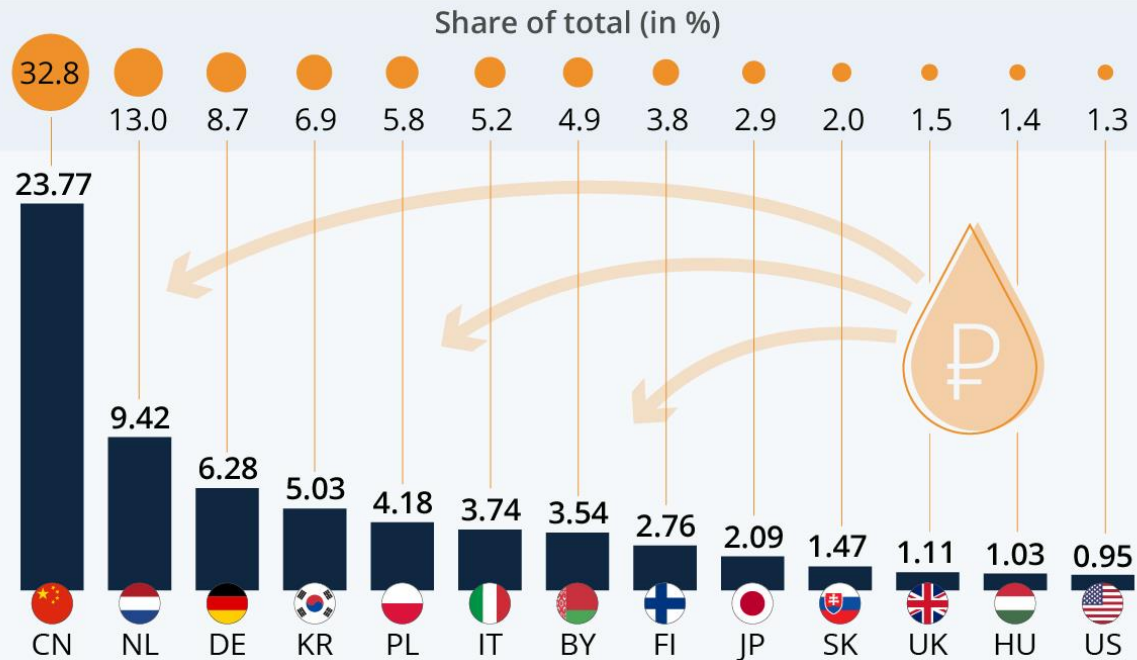
Share of Natural Gas Supplied by Russia in '20



Source: Eurostat

Russia's Most Important Oil Export Partners

Trade value of crude oil exports from Russia in 2020, by destination country (in billion USD)



Source: UN Comtrade



statista

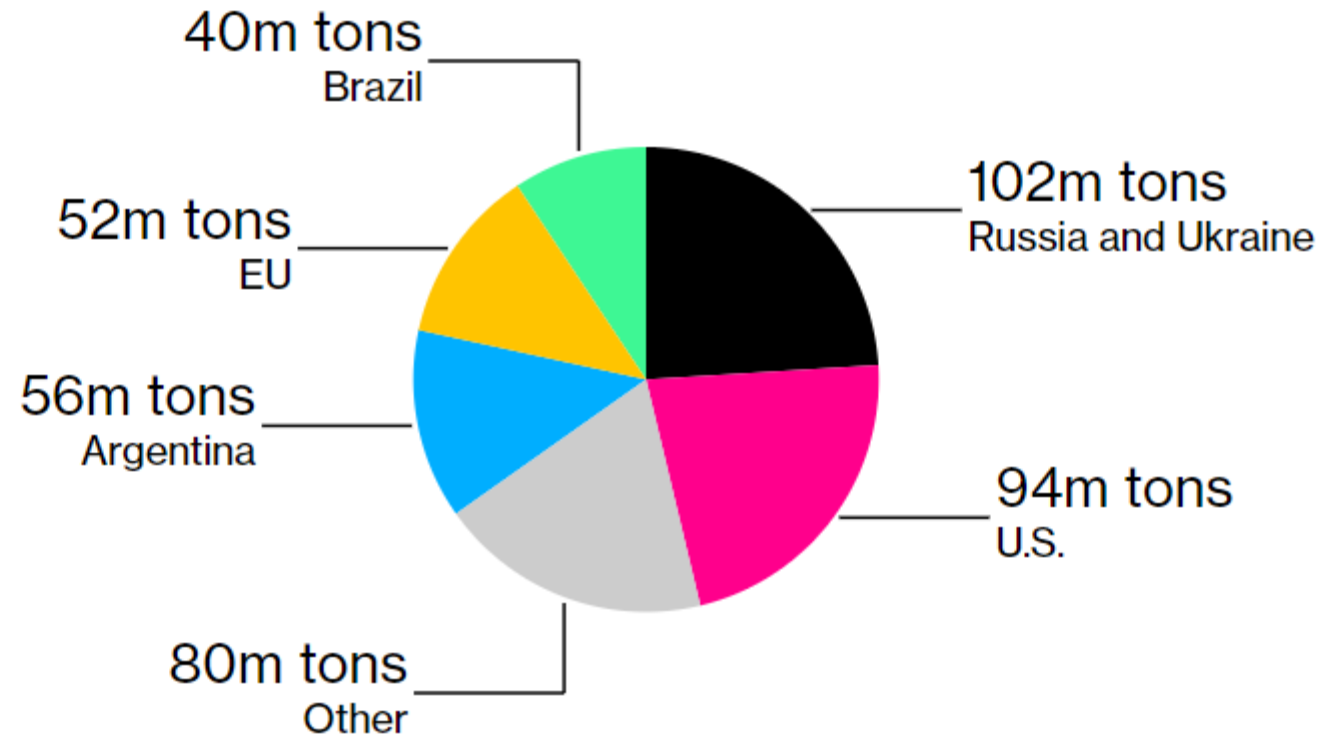
Top 10 Fertilizer Exporters - 2020

| Rank | Country | Value (\$ Billions) | % World Total |
|------|---------------|---------------------|---------------|
| 1 | Russia | 7.0 | 12.6 |
| 2 | China | 6.6 | 11.8 |
| 3 | Canada | 5.2 | 9.3 |
| 4 | United States | 3.6 | 6.4 |
| 5 | Morocco | 3.4 | 6.1 |
| 6 | Belarus | 2.9 | 5.2 |
| 7 | Netherlands | 2.0 | 3.6 |
| 8 | Belgium | 1.9 | 3.5 |
| 9 | Qatar | 1.3 | 2.4 |
| 10 | Saudi Arabia | 1.2 | 2.2 |

Source: www.worldstopexports.com

Breadbasket to the World

Russia and Ukraine account for a quarter of global grains trade



Source: International Grains Council

Note: Estimates for the 2021-22 season, for wheat and coarse grains



The Russia-Ukraine war is fueling the ‘biggest supply shock to global grain markets’ in living memory

Major purchasers of Russian and Ukrainian Wheat



Egypt



Turkey



Bangladesh



Nigeria



Yemen



Azerbaijan



Tunisia



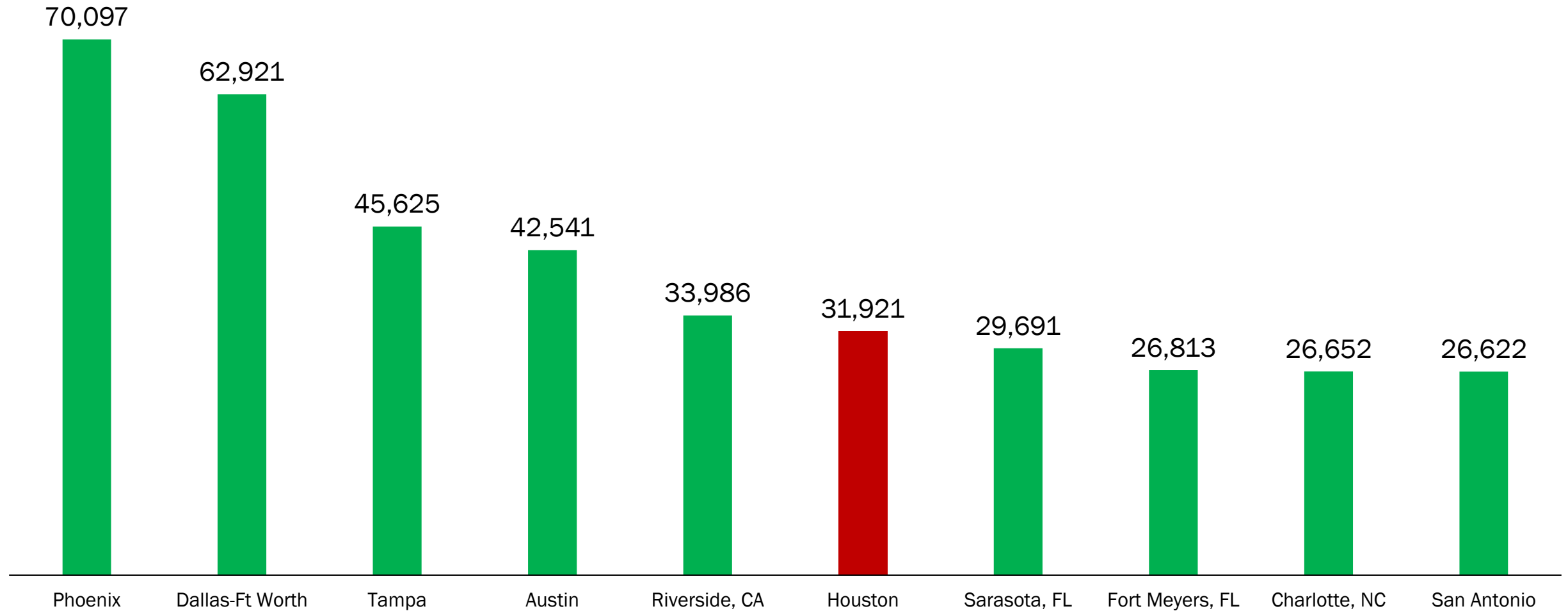
Senegal



Vietnam

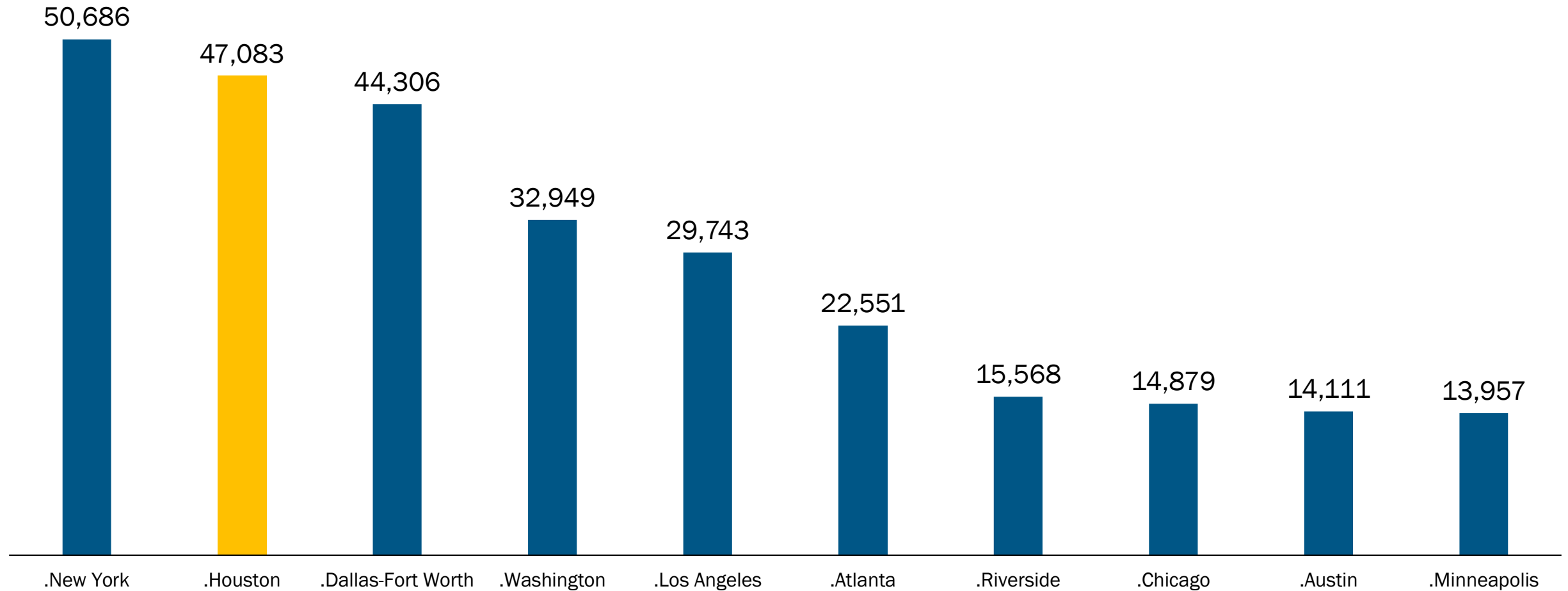


Top 10 Metros, Net Migration, Jul '20 – Jul '21



Source: U.S. Census Bureau

Top 10 Metros, Natural Increase, Jul '20 – Jul '21



Source: U.S. Census Bureau

Change in Population, 20 Most Populous Metros

July 1, 2020 to July 1, 2021

| Pop Rank | Metro | Change | Pop Rank | Metro | Change |
|----------|-----------------|----------|----------|---------------|----------|
| 1 | New York | -327,955 | 11 | Phoenix | 78,220 |
| 2 | Los Angeles | -175,913 | 12 | San Francisco | -116,385 |
| 3 | Chicago | -91,671 | 13 | Riverside | 47,601 |
| 4 | Dallas-Ft Worth | 97,290 | 14 | Detroit | -20,543 |
| 5 | Houston | 69,094 | 15 | Seattle | -13,177 |
| 6 | Washington | -29,280 | 16 | Minneapolis | -1,909 |
| 7 | Philadelphia | -13,382 | 17 | San Diego | -11,183 |
| 8 | Miami | -34,694 | 18 | Tampa | 36,129 |
| 9 | Atlanta | 42,904 | 19 | Denver | 3,277 |
| 10 | Boston | -36,579 | 20 | Baltimore | -3,364 |

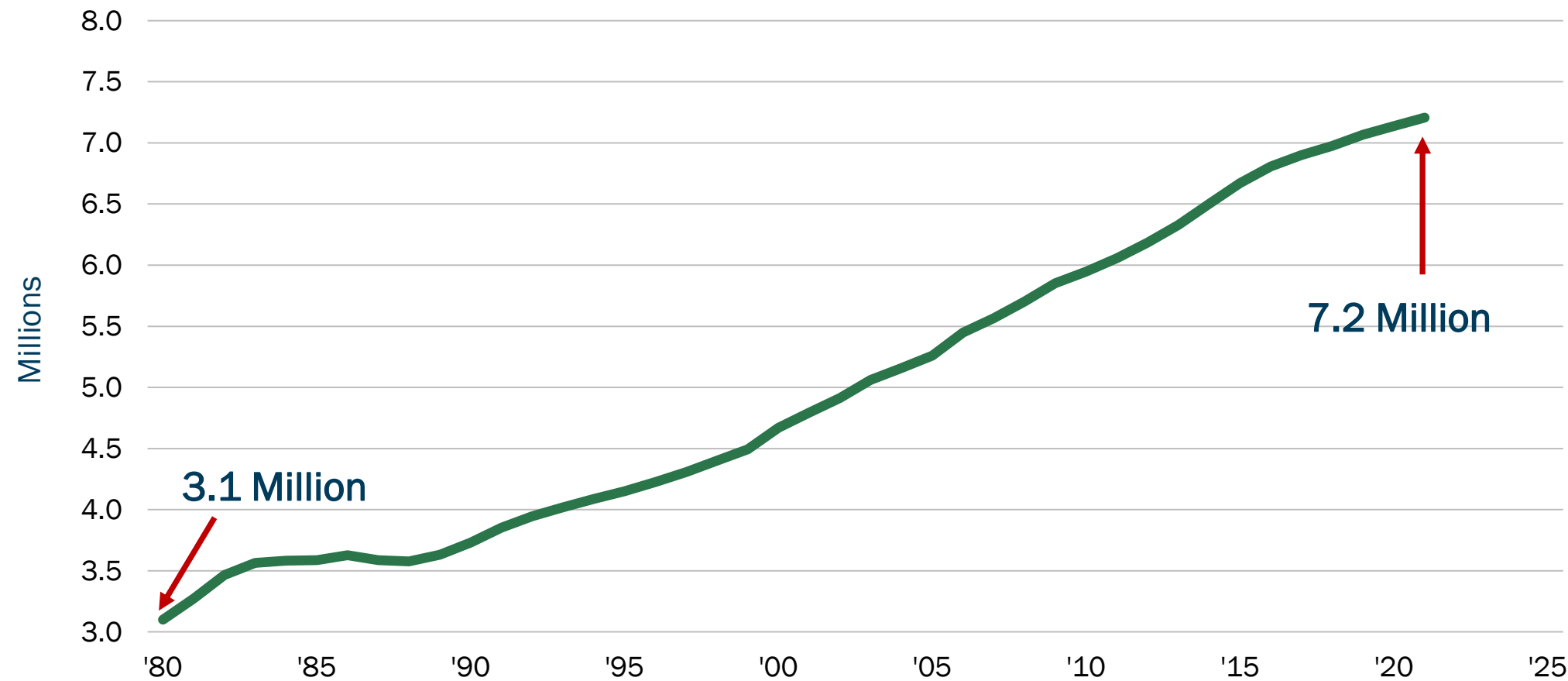
10 Most Populous Metros*

| Rank | Metro | Population |
|------|-----------------|------------|
| 1 | New York | 19,768,458 |
| 2 | Los Angeles | 12,997,353 |
| 3 | Chicago | 9,509,934 |
| 4 | Dallas-Ft Worth | 7,759,615 |
| 5 | Houston | 7,206,841 |
| 6 | Washington, DC | 6,356,434 |
| 7 | Philadelphia | 6,228,601 |
| 8 | Atlanta | 6,144,050 |
| 9 | Miami | 6,091,747 |
| 10 | Phoenix | 4,946,145 |

Source: U.S. Census Bureau

* As of July 1, 2021

Metro Houston Population Growth



Metro Houston Economic Outlook

Patrick Jankowski

SVP, Research

April 19, 2022

