

***The Future Economy:
Opportunities for Growth!***



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Roaring 20s!?!

Case-Shiller shows home price growth matches record high — what this means for homeowners

Home prices surge at nearly 20% annually

By Kelsey Ramirez | Sponsored by Credible - which is majority owned by our parent, Fox Corporation, and is solely responsible for its services.



Total Crypto Market Cap Surges to \$2.6 Trillion Amid Increased Investors

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Today's Structure

1. **Confidence**
2. **Economic Recovery**
3. **Govt. Policies**
4. **Trend Opportunities**
5. **Case Study**

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Key Takeaway: Get Ready Now!

What's the Big Idea?

**Future provides big opportunities
for those ready to jump forward!**

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What is your top 2022 challenge?

A. Supply Chain

B. Labor Force

C. COVID & Climate Change

CONFIDENCE

Built Capacity

Hospital Beds & PPE

Therapies & Pills

10 Vaccines

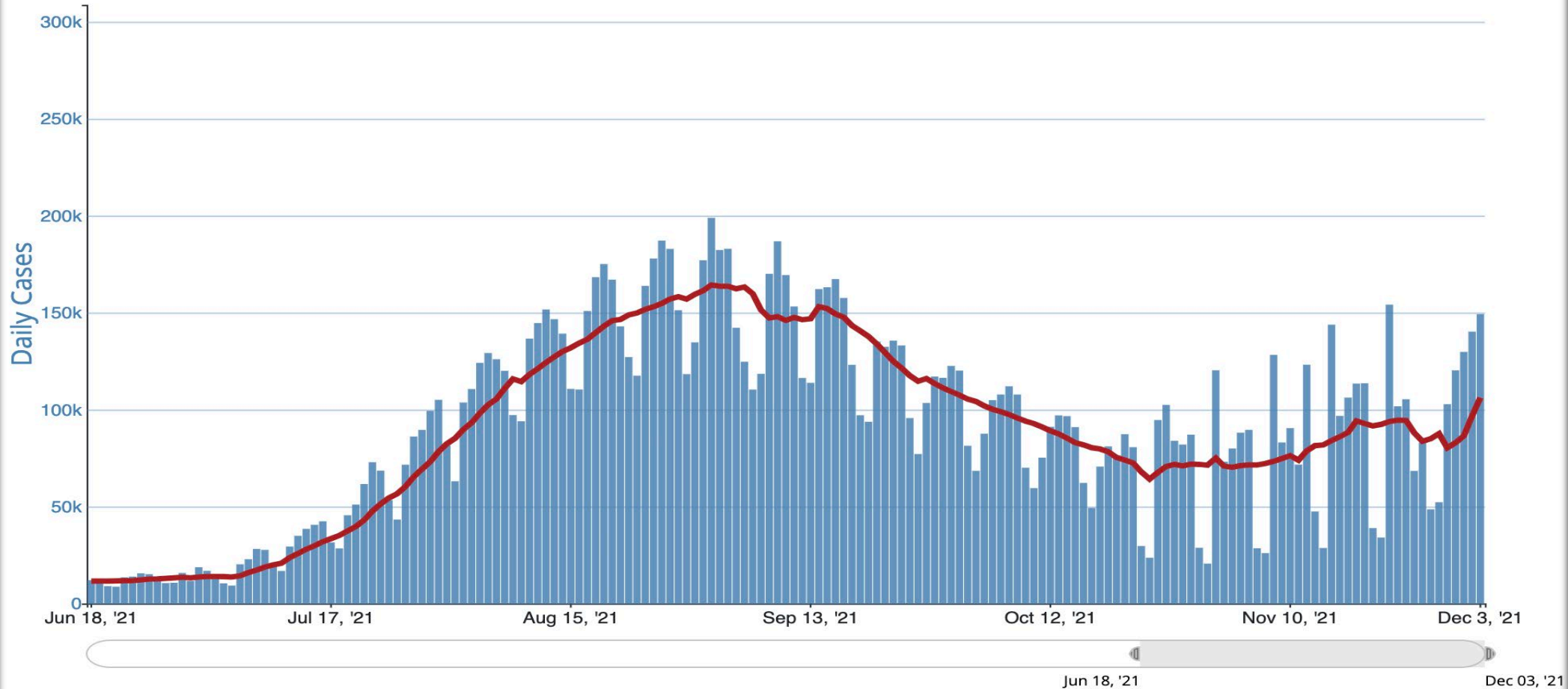
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But Expect Further **Omicron** Increases

Daily Trends in Number of COVID-19 Cases in The United States Reported to CDC



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The **Positive** Evolution of a Virus?

How serious is omicron? It will take weeks to understand new coronavirus variant, experts say.

Elizabeth Weise USA TODAY

Published 5:02 a.m. ET Nov. 30, 2021 | Updated 9:27 a.m. ET Nov. 30, 2021



Biden says COVID-19 omicron variant 'a cause for concern, not a cause for panic'

President Joe Biden urged Americans to get vaccinated as he discussed the new variant omicron. *Associated Press, USA TODAY*

- On November 26, 2021, the World Health Organization (WHO) classified a new variant, B.1.1.529, as a Variant of Concern and has named it Omicron.
- Cases are now in 17 states

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Pandemic ➞ Endemic ➞ Flu ?

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ECONOMIC RECOVERY

Biggest Risk for US Economy?

A. Inflation

B. Political/Regulatory Uncertainty

C. Military Conflict

4,582.75 ▲ **+44.32 (+0.98%)**

52 week range

3,633.40 - 4,743.83

1D 5D 1M 3M 6M YTD 1Y 5Y ALL

+ Comparison

1D Display Studies Settings Annotations



**How
Did
This
Happen?**

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Big Govt to the Rescue

\$2.3T CARES Act 1.0

\$0.5T CARES Act 2.0

\$0.9T CARES Act 3.0

\$1.9T CARES Act 4.0

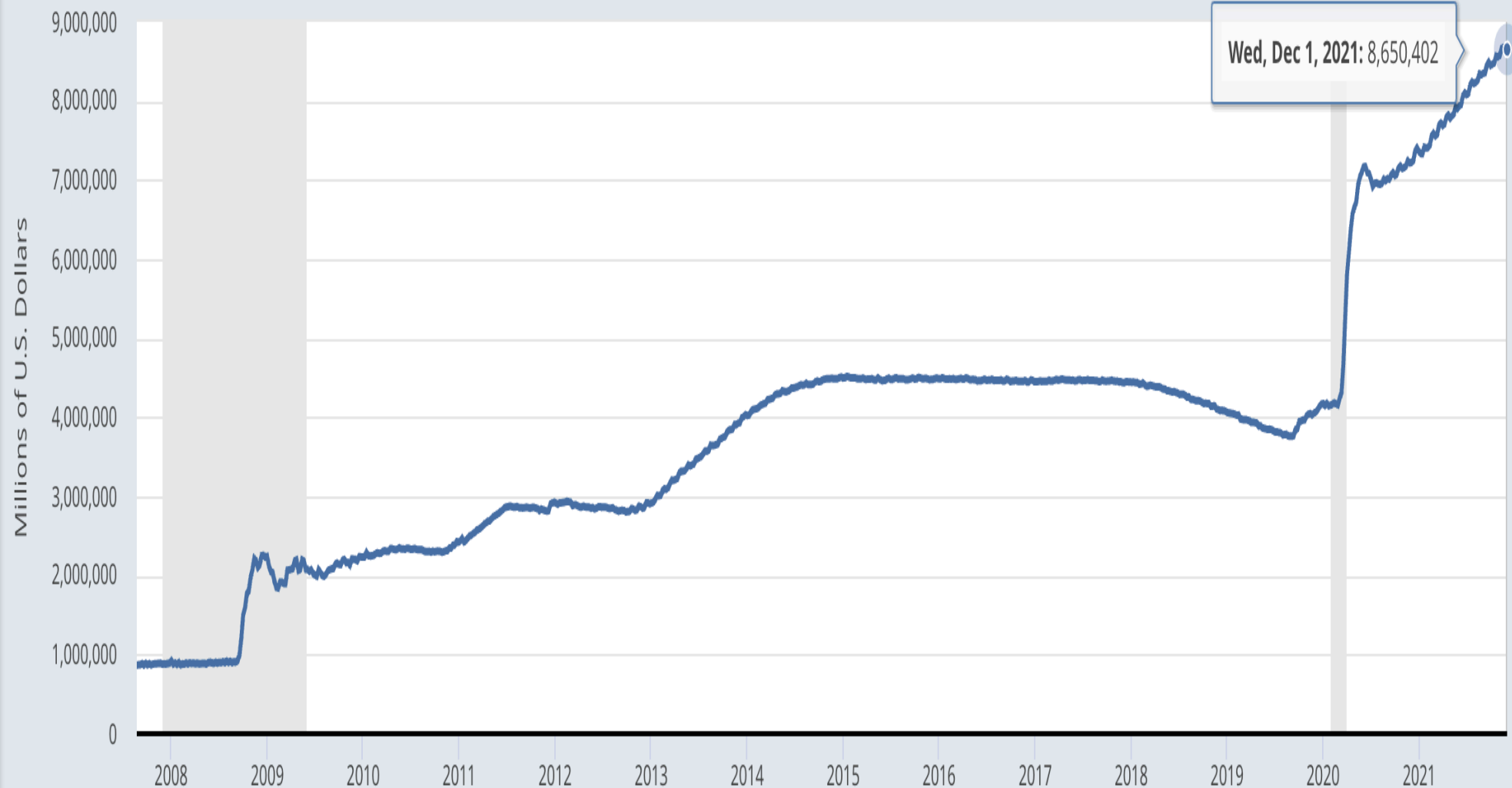
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— Assets: Total Assets: Total Assets (Less Eliminations from Consolidation): Wednesday Level



**Federal
Reserve
Buying
Doubles
Assets**

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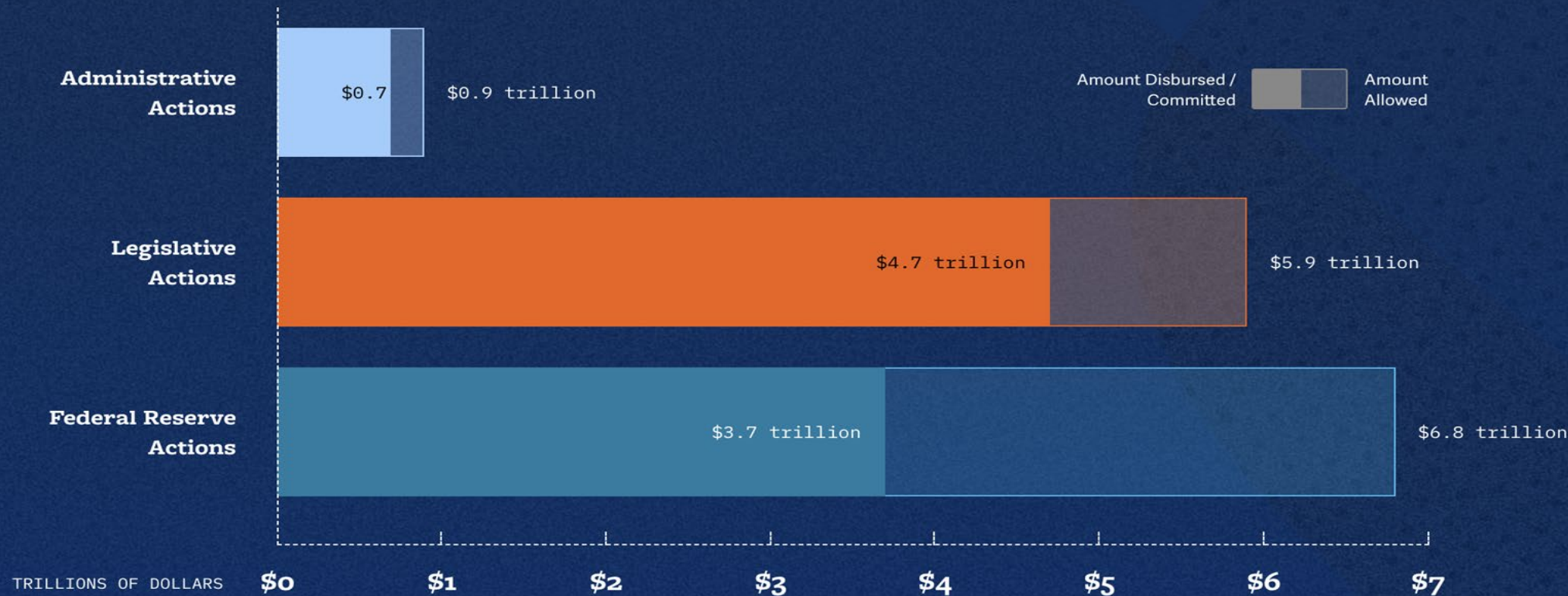


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COVID Money Tracker

Explore the data and track the trillions of dollars of federal spending, tax cuts, loans, grants, and subsidies authorized and disbursed in the wake of the coronavirus pandemic and economic crisis.

Tracking the COVID Response



**\$13.6T
Total!**

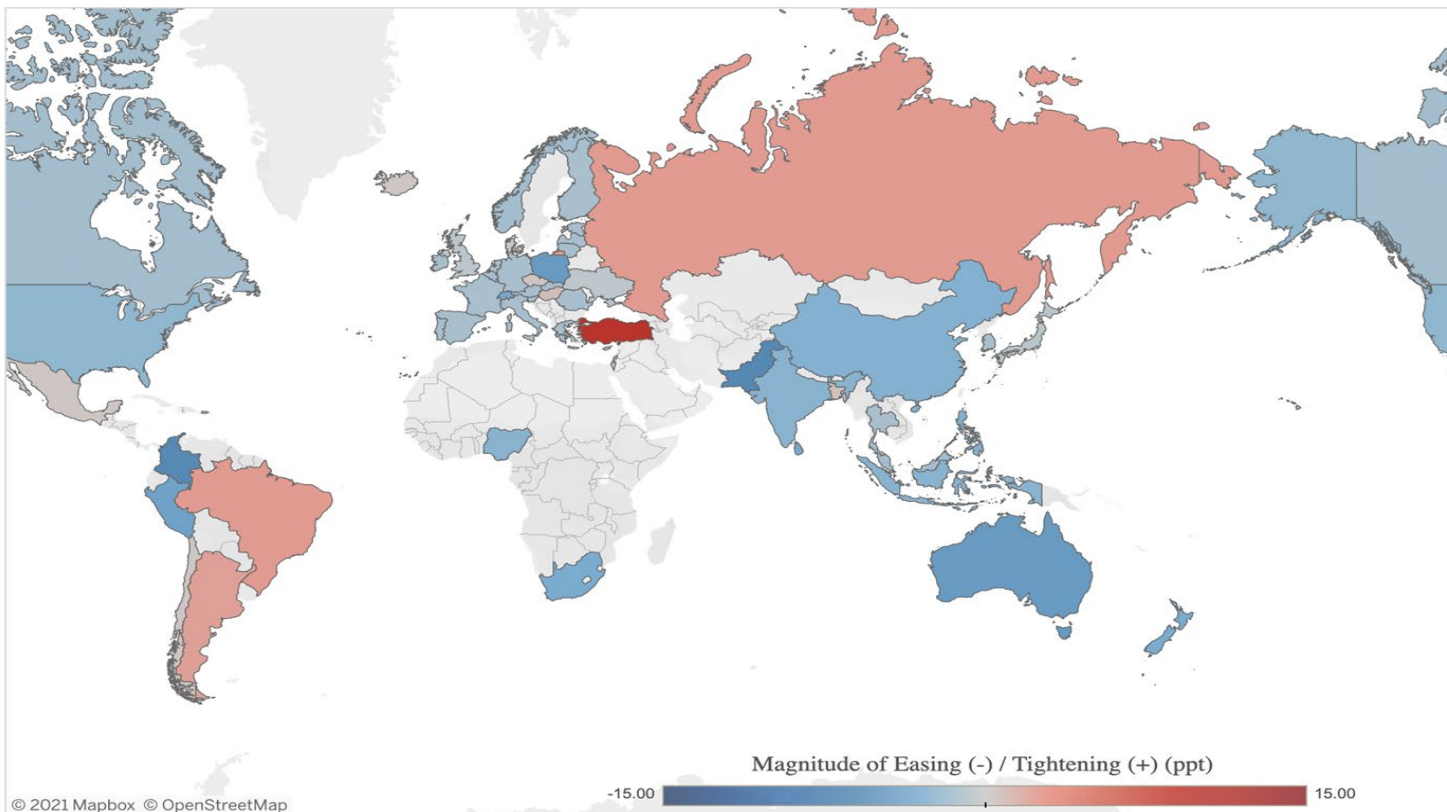
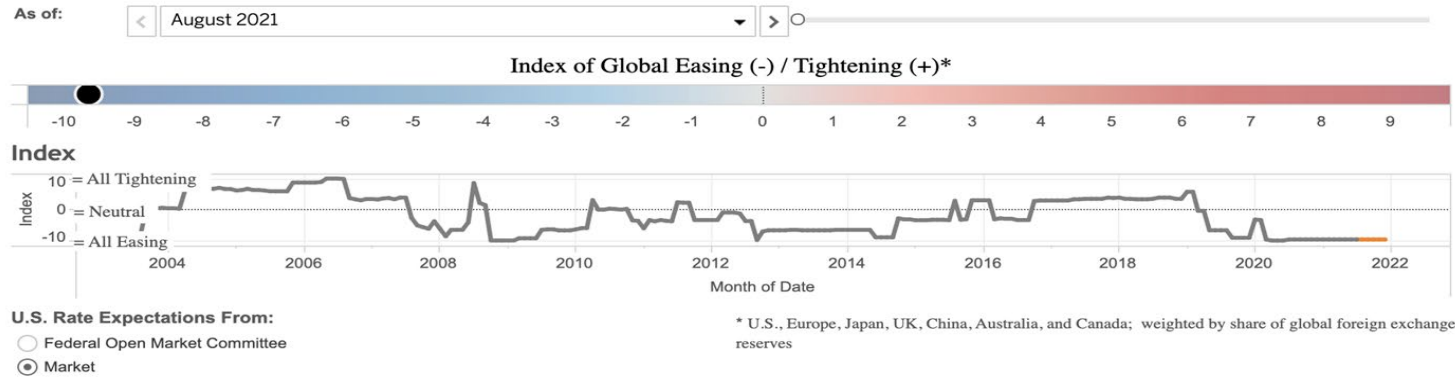
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Source: CRFB



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CFR Global Monetary Policy Tracker



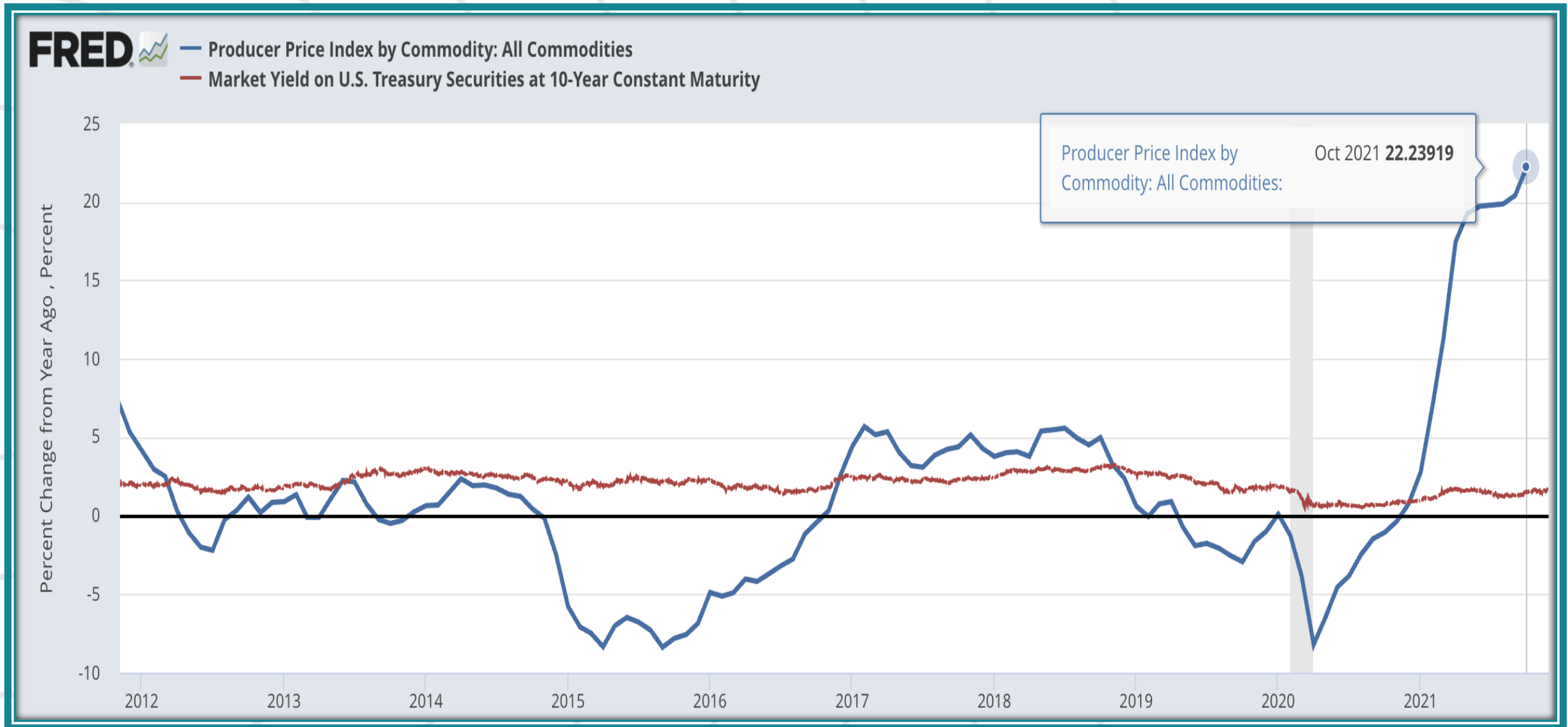
The Ease is Ending

- US begins taper and may end by April
- 1st US rate **hike** by June?
- Brazil, Argentina, Turkey & Russia raising rates



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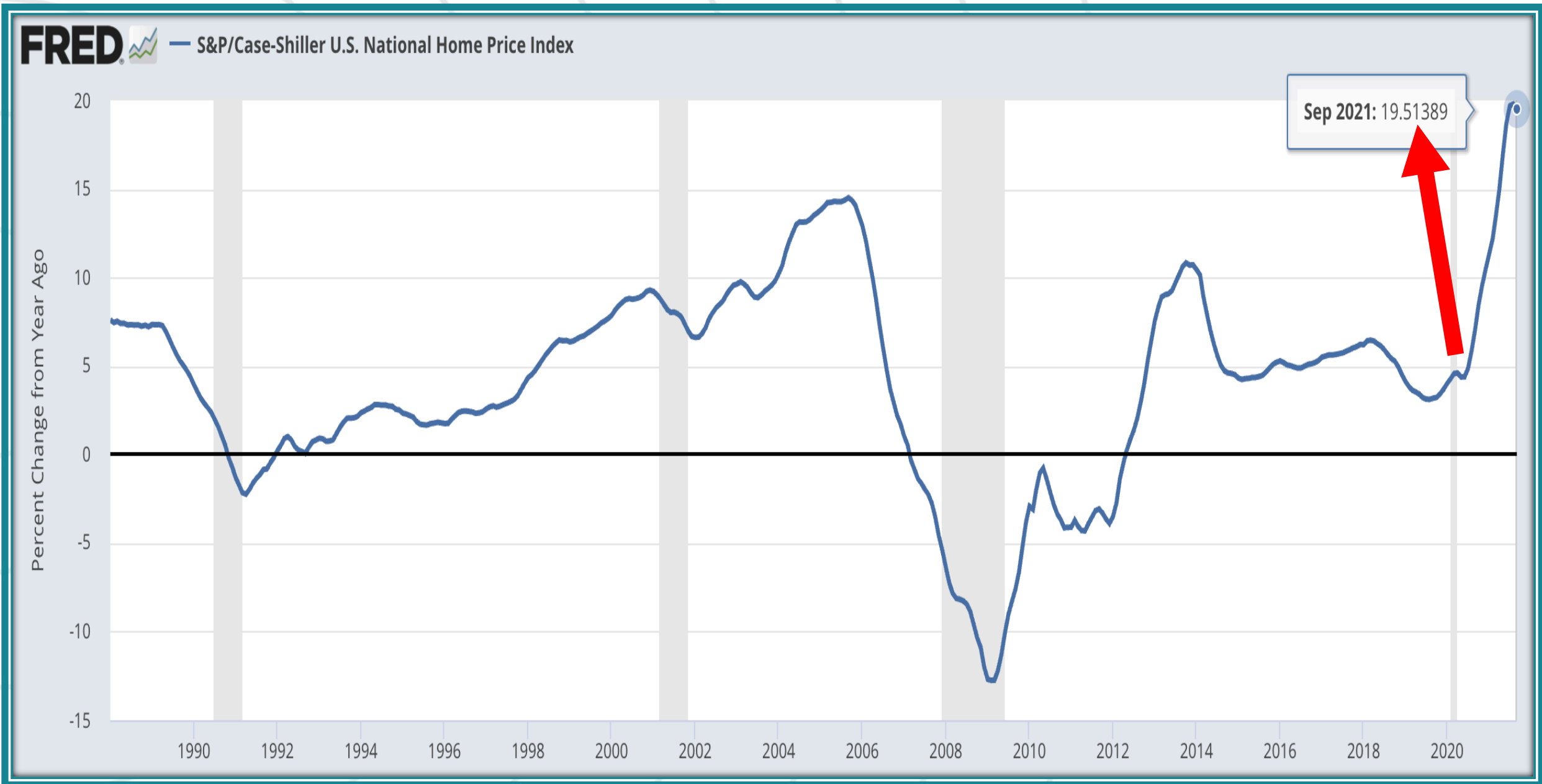
Inflation **Surges**, Rates to Follow?



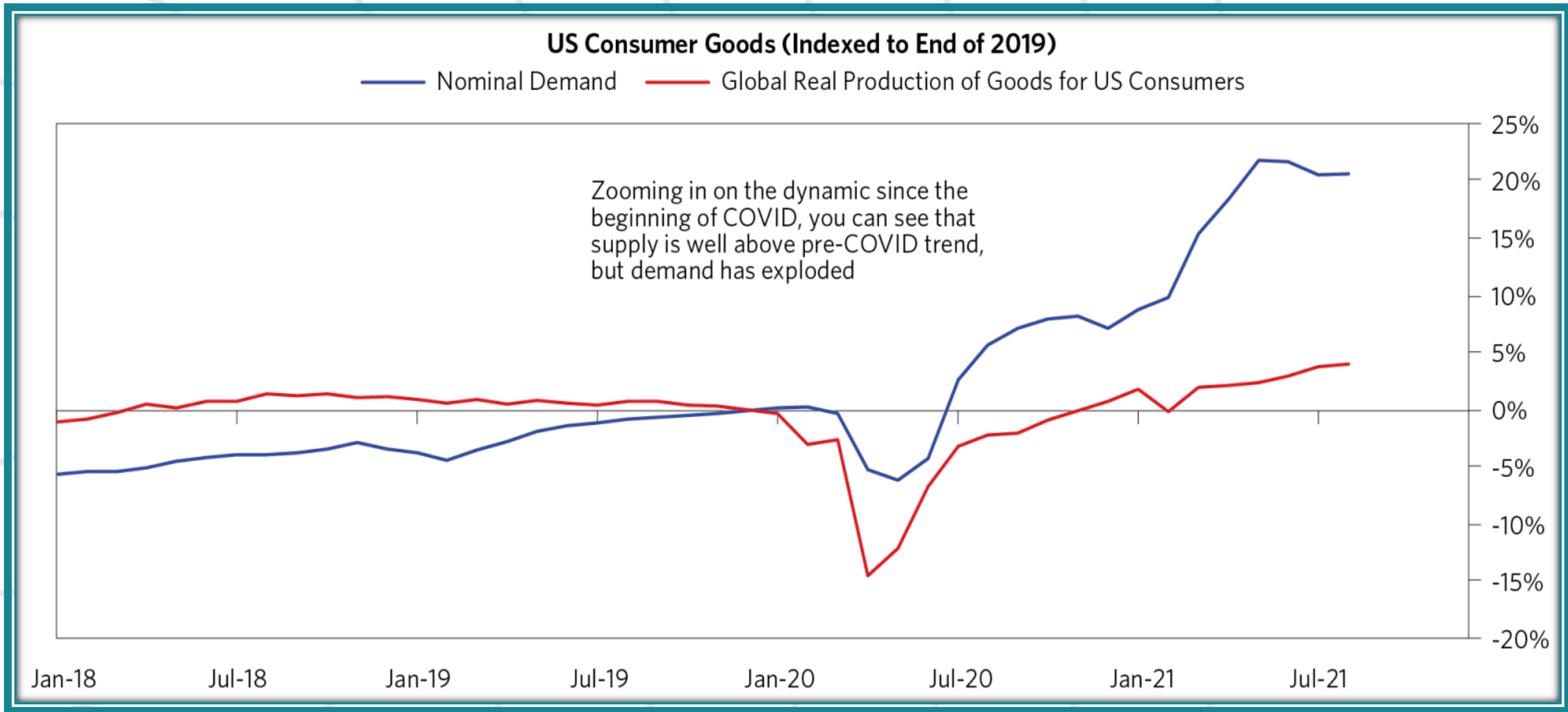
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Source: [FRED](https://fred.stlouisfed.org/)

Now that's a Housing Surge!



Not Supply Problem, but a *Demand* Problem



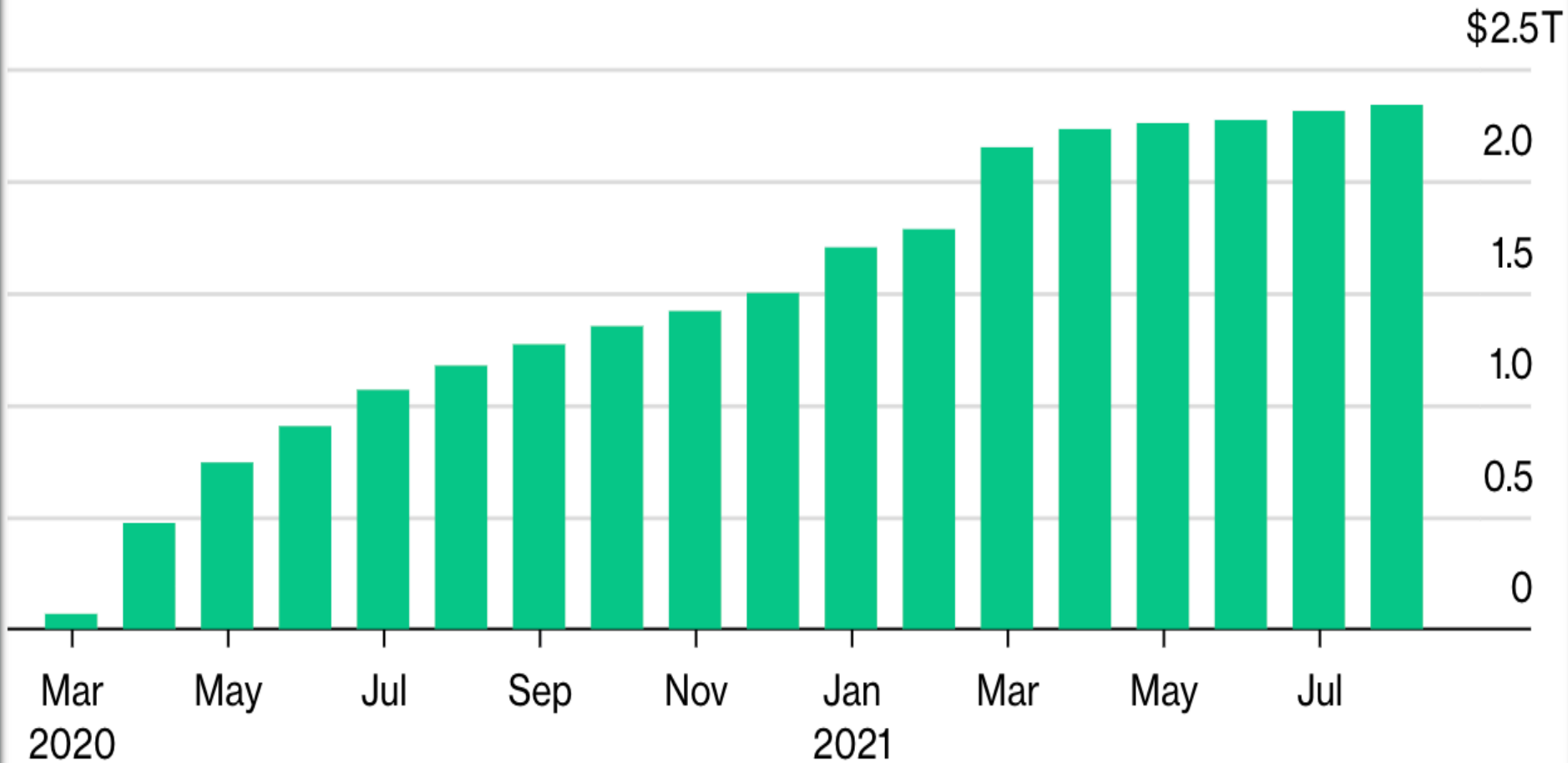
Source: Bridgewater

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■ Accumulated U.S. savings in excess of pre-pandemic run rate (Feb. 2020 = 0)



Source: BEA, Bloomberg Economics

**Massive
Saving=
Potential
\$2T
“Revenge”
Spending
Spree**

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Supply Chain **Disruption** Drivers

- China shut down the country in Q1
- US and EU shutdown in Q2
- Chinese no warning port closures due to outbreaks
- Dock workers in LA quarantining due to COVID
- A ship stuck in the Suez Canal for a week
- *Snowmageddon* in Texas
- The Delta variant reducing RTO



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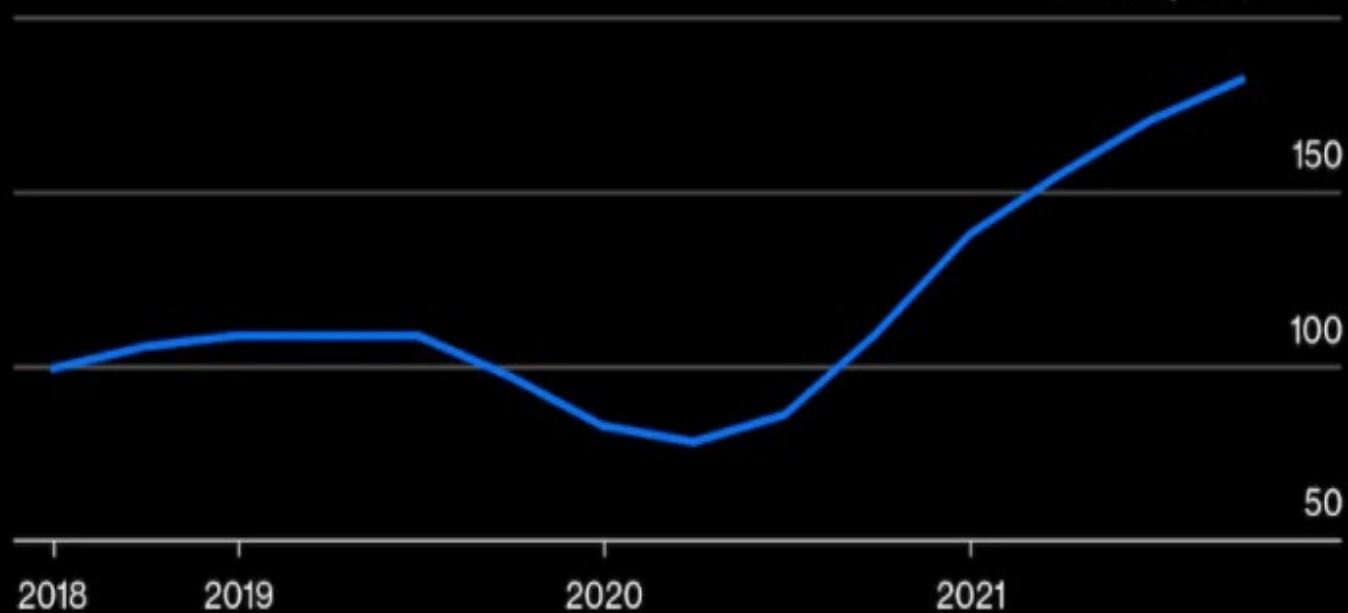
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Semi-Good News?

Piled High

TSMC's inventories hit a record as the company, and customers, build stockpiles to tackle global shortages and logistics hiccups

Inventory NT\$200 b



Source: TSMC

BloombergOpinion

*“Our third quarter business was mainly supported by strong demand across all four growth platforms, which are **smartphone, HPC, IoT and Automotive-related** applications.”*

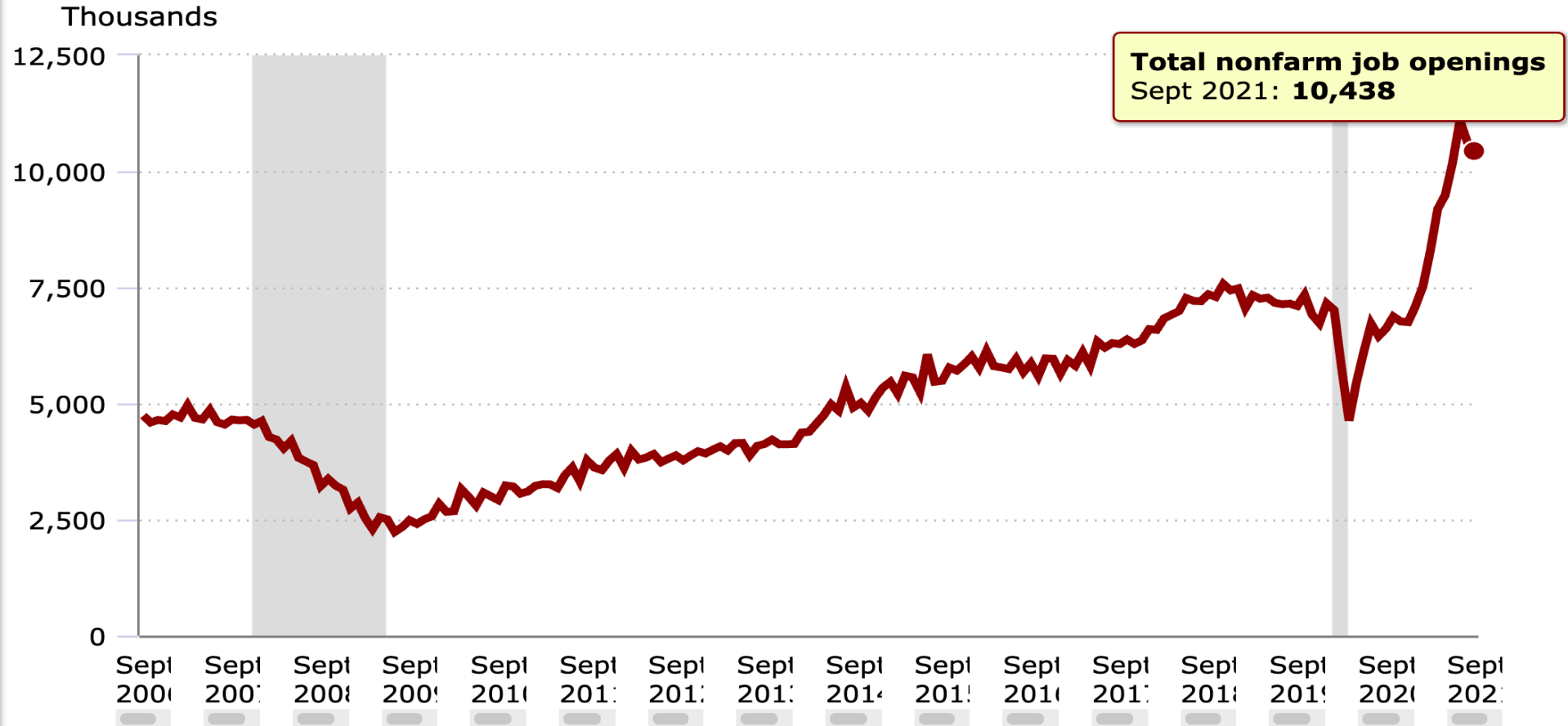
- TSMC's inventories up 66% with 85 days of inventories
- GM sees more stability in supplies, but normal won't happen until late 2022
- EVs use 2x # of chips vs. combustion engines
- Intel, Samsung and TSMC have plans to build new plants in US

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Job openings, hires, and separations levels, seasonally adjusted

Click and drag within the chart to zoom in on time periods

- Total nonfarm job op...
- Total private job ope...
- Government job ope...
- - Total nonfarm hires
- - Total private hires
- - Government hires
- Total nonfarm separ...
- Total private separat...
- Government separati...

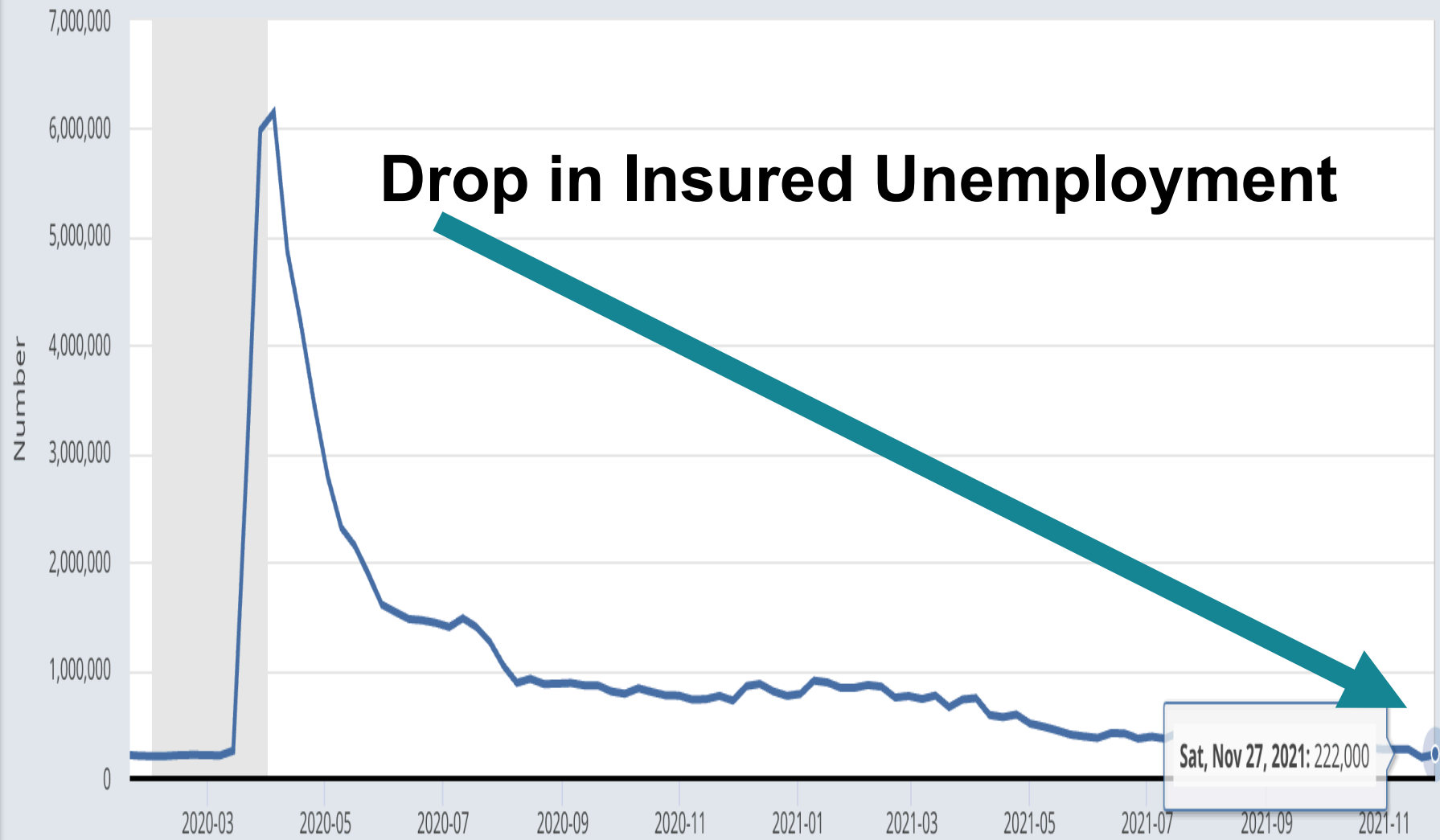


Labor Shortage Or Pricing Problem?

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Drop in Insured Unemployment

**Best News
on Labor?**

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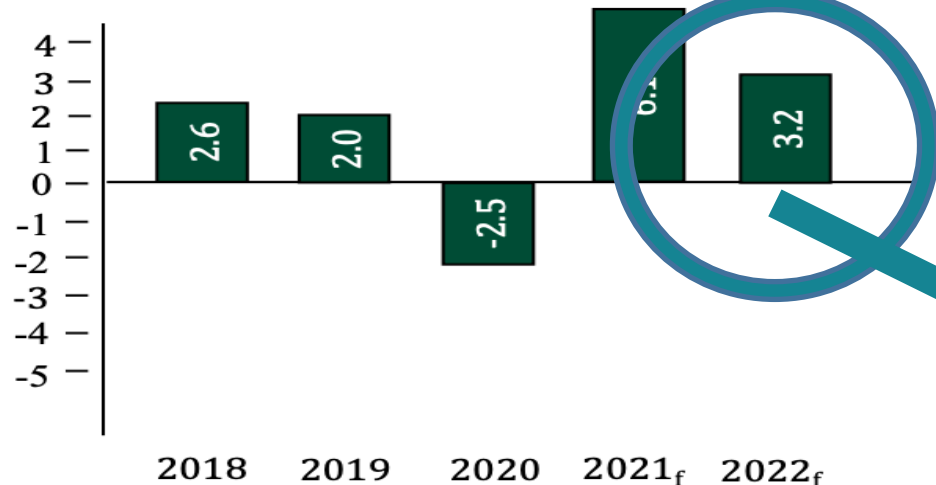
Table 1.1. **The global recovery is continuing, but remains imbalanced**

OECD area, unless noted otherwise

	Average 2013-2019	2020	2021	2022	2023	2021 Q4	2022 Q4	2023 Q4
		Per cent						
Real GDP growth¹								
World ²	3.3	-3.4	5.6	4.5	3.2	3.8	3.9	3.2
G20 ²	3.5	-3.1	5.9	4.7	3.3	4.1	3.8	3.3
OECD ²	2.2	-4.7	5.3	3.9	2.5	4.4	3.3	2.2
United States	2.4	-3.4	5.6	3.7	2.4	5.1	3.0	2.3
Euro area	1.9	-6.5	5.2	4.3	2.5	4.9	3.3	2.1
Japan	0.8	-4.6	1.8	3.4	1.1	0.0	3.1	0.9
Non-OECD ²	4.3	-2.2	5.8	4.9	3.8	3.2	4.3	4.0
China	6.8	2.3	8.1	5.1	5.1	3.9	5.5	5.0
India ³	6.8	-7.3	9.4	8.1	5.5			
Brazil	-0.3	-4.4	5.0	1.4	2.1			
Unemployment rate⁴	6.5	7.1	6.2	5.5	5.2	5.7	5.4	5.1
Inflation^{1,5}	1.7	1.5	3.5	4.2	3.0	4.9	3.4	3.1
Fiscal balance⁶	-3.2	-10.4	-8.4	-5.2	-3.7			
World real trade growth¹	3.4	-8.4	9.3	4.9	4.5	6.1	5.2	4.2

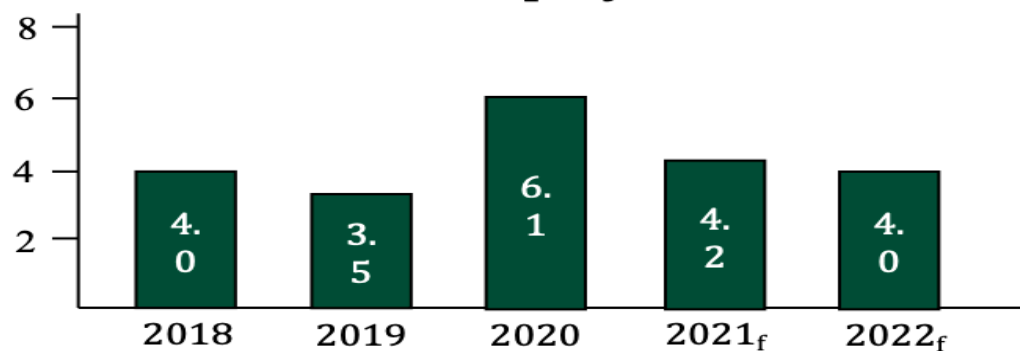
2022 US GDP 3.7%
2023 US GDP 2.4%
2024+ 1.8%?

Annual Growth Rates In Real GSP



GSP/Gross State Product is a yardstick that measures the total output of a state's economy for a given year. It is analogous to the U.S. Gross Domestic Product (GDP).

Year-End Seasonally Adjusted North Carolina Unemployment Rates



North Carolina

2021 ALEC-LAFFER STATE ECONOMIC COMPETITIVENESS INDEX

14

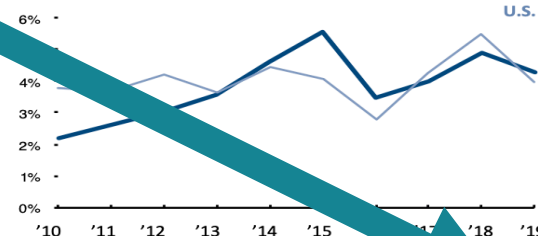
Economic
Performance Rank

Economic Performance Rank (1=best 50=worst)

A backward-looking measure based on the state's performance (equal-weighted average) in the three important performance variables shown below. These variables are highly influenced by state policy.

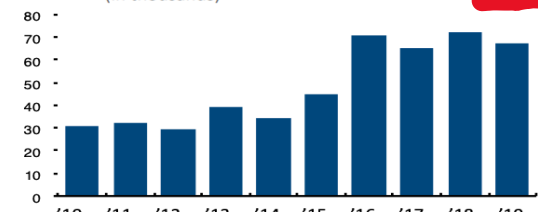
State Gross Domestic Product
Cumulative Growth 2009-2019

45.4% Rank: 24
NC
U.S.



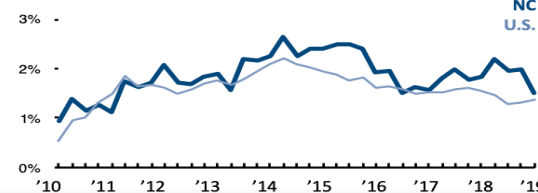
Absolute Domestic Migration
Cumulative 2010-2019
(in thousands)

485,416 Rank: 3



Non-Farm Payroll Employment
Cumulative 2009-2019

19.0% Rank: 14
NC
U.S.



5

Economic
Outlook Rank

Economic Outlook Rank (1=best 50=worst)

A forward-looking forecast based on the state's standing (equal-weighted average) in the 15 important state policy variables shown below. Data reflect state and local rates and revenues and any effect of federal deductibility.

Historical Ranking Comparison 2014 2015 2016 2017 2018 2019 2020
ECONOMIC OUTLOOK RANK 6 4 2 3 7 6 5

Variable	Data	Rank
Top Marginal Personal Income Tax Rate	5.25%	19
Top Marginal Corporate Income Tax Rate	2.50%	4
Personal Income Tax Progressivity (change in tax liability per \$1,000 of income)	\$7.53	19
Property Tax Burden (per \$1,000 of personal income)	\$22.05	10
Sales Tax Burden (per \$1,000 of personal income)	\$23.71	29
Remaining Tax Burden (per \$1,000 of personal income)	\$16.06	19
Estate/Inheritance Tax Levied?	No	1
Recently Legislated Tax Changes (2019 & 2020, per \$1,000 of personal income)	\$0.43	33
Debt Service as a Share of Tax Revenue	4.9%	12
Public Employees Per 10,000 of Population (full-time equivalent)	529.6	29
State Liability System Survey (tort litigation treatment, judicial impartiality, etc.)	70.9	16
State Minimum Wage (federal floor is \$7.25)	\$7.25	1
Average Workers' Compensation Costs (per \$100 of payroll)	\$1.31	20
Right-to-Work State? (option to join or support a union)	Yes	1
Number of Tax Expenditure Limits (0=least/worst 3=most/best)	1	15

GOVT. POLICIES

\$1.2T Bi-Partisan Infrastructure (BIF)

\$550B new spending:

1. **\$110B** roads & bridges
2. **\$66B** passenger & freight rail
3. **\$65B** broadband
4. **\$55B** water systems
5. **\$39B** public transit



No new taxes and \$256B in new deficits

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\$1.75T Build Back Better (BBB)

- **\$555B Green Energy**
- **\$600B Social Safety Net**
- **\$150B Housing**
- **\$100B Immigration**
- **\$814B Corp. taxes**
- **\$640B Upper income taxes**

Source: [CRFB](#)

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House Democrats hunt for votes to pass Biden's domestic agenda

Written By: Emily Cochrane and Jonathan Weisman © 2021 The New York Times Company • The New York Times
Washington, United States • Published: Nov 05, 2021, 01:35 PM(IST)



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- \$134B Part 1 – **Renewable** Electricity and Reducing Carbon Emissions
- \$43B Part 2 – **Renewable** Fuels
- \$39B Part 3 – **Green** Energy and Efficiency Incentives for Individuals
- \$42B Part 4 – **Greening** the Fleet and Alternative Vehicles
- \$9.6B Part 5 – Investment in the **Green** Workforce
- \$5B Part 6 – Qualified **Environmental** Justice Credit
- \$38B Part 7 – Reinstatement of **Superfund**

Major Parts of the **Green** Spending

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Source: JCT

Last Minute Congressional **Shopping**



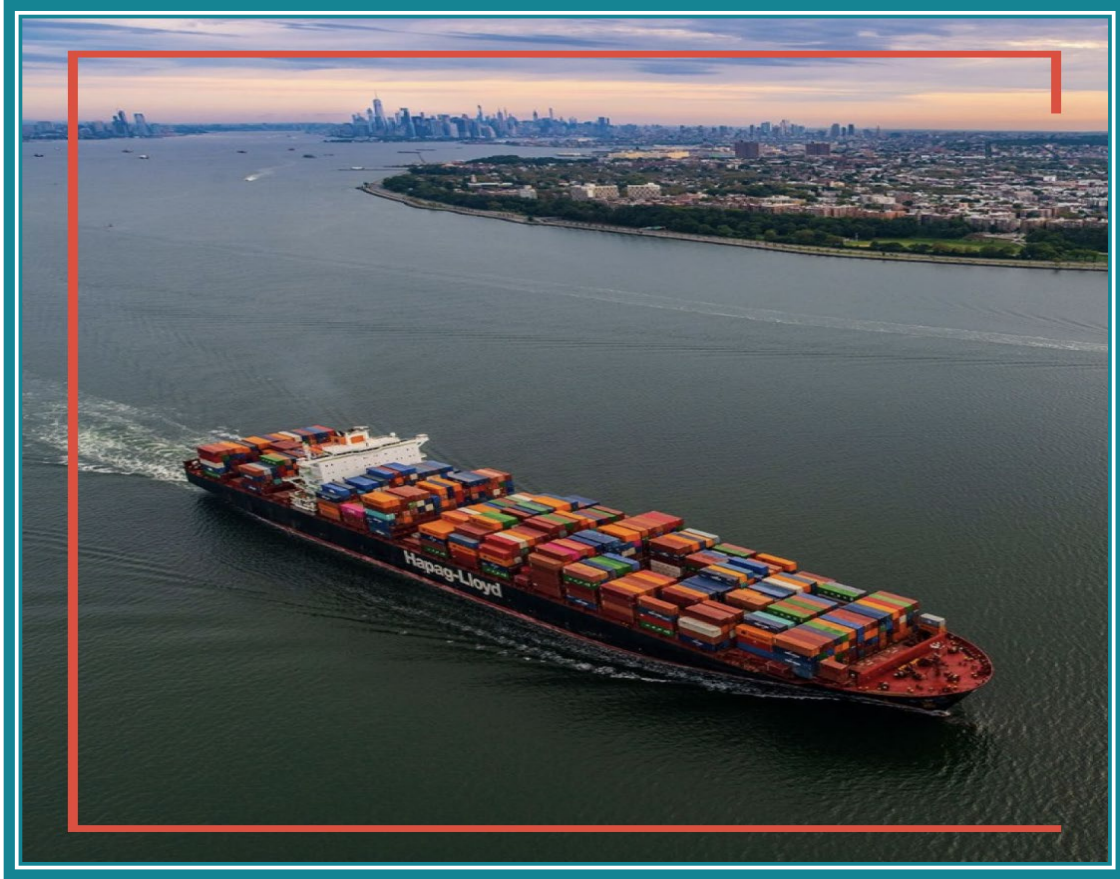
- **National Defense Authorization Act**
- **Debt ceiling increase**
- **\$1.75T Build Back Better**

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Unbalanced Trade: **Cold** China & **Warm** EU



- AUKUS & Quad countries vs. China
- HK and Xinjiang import ban
- US-China Conflict over Taiwan
- Improvement w/EU & tax tech
- Carbon mitigation added
- Supply chain problems **persist**

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E&E: Biggest **Shift** of All Policy Plans!



- 2035 Carbon Neutral Grid
- 2050 Net Zero Emissions
- Rejoined Paris Climate
- John Kerry as Envoy
- Emulate EU Plan and Cooperate on CBAM

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COP 26 Glasgow Climate Pact



200 countries agree to:

- **Reduce carbon emissions**
- **“Phase out” coal power and fossil fuel subsidies**
- **Provide more \$ to LDCs for adaptation**
- **Rules for carbon credits**

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COP 26 International Rules on Carbon Credits

- Global supervisory body to oversee the CC **formal** marketplace:
 - Technical methodologies
 - Registration
 - Monitoring processes
 - EU, China and California examples
- Harmonize **informal** credits for planting trees, restoring peatlands for carbon offsets



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Where are the 2025 opportunities for growth?

- A. Resiliency Construction
- B. Space Supplies and Materials
- C. Autonomous electric vehicles (AEVs)
- D. Robots/3D printing

***TREND
OPPORTUNITIES***

Opportunities: Prior Trends **SUPERCHARGED**

WFH=WFA=WFCB

Digital-First Commerce

Climate Shift

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COVID WFH/WFA/WFCB Trends

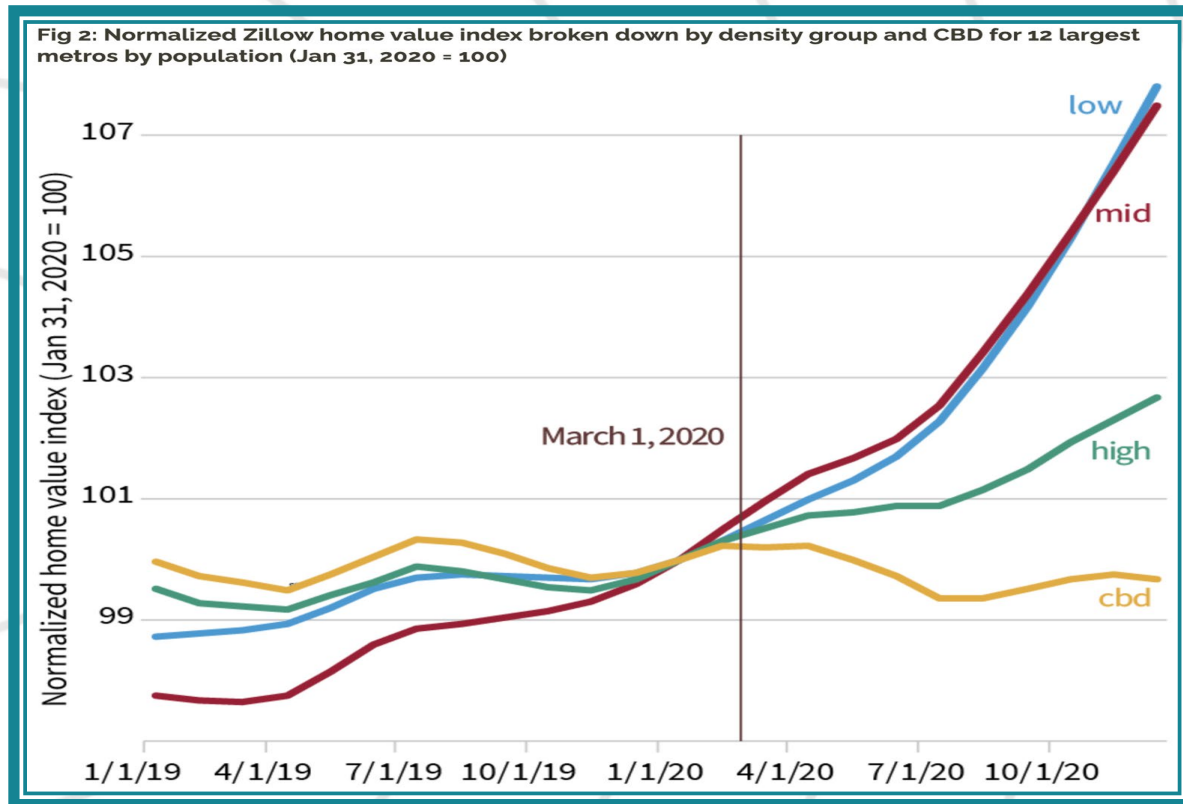
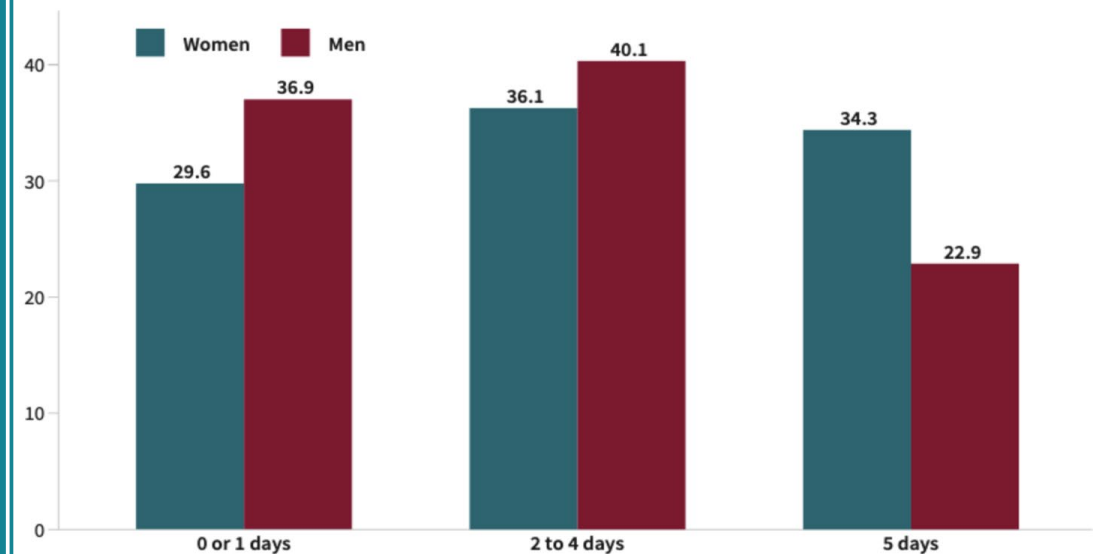


Figure 4: College-educated women and men with younger children differ in the number of days they want to WFH post-pandemic.

Response to: "In 2022+ (after COVID) how often would you like to have paid work-days at home?"



Note: College educated employees with children under 12.

Source: Stanford University

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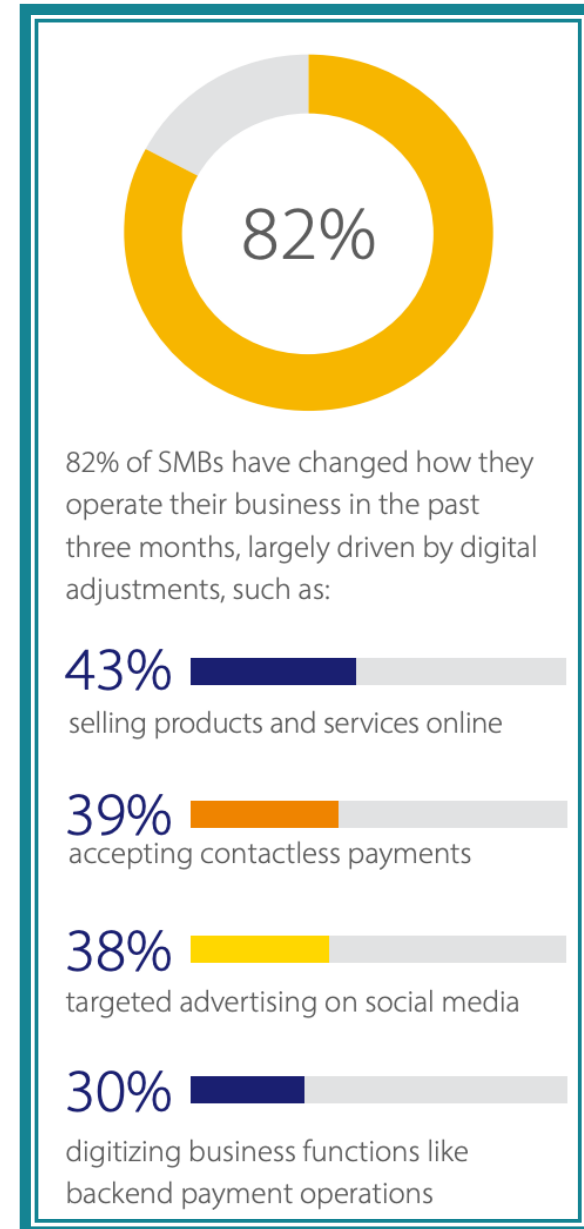


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SMBs Digital-First Commerce Shift

- COVID drives consumer safety concerns for sanitation, click-and-collect and delivery
- Ecommerce solutions adopted to drive sales
- 56% of consumers used contactless payment
- Omnicustomer forever
- Pulled forward 10 years of tech sales?

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ESG & Roy Kent

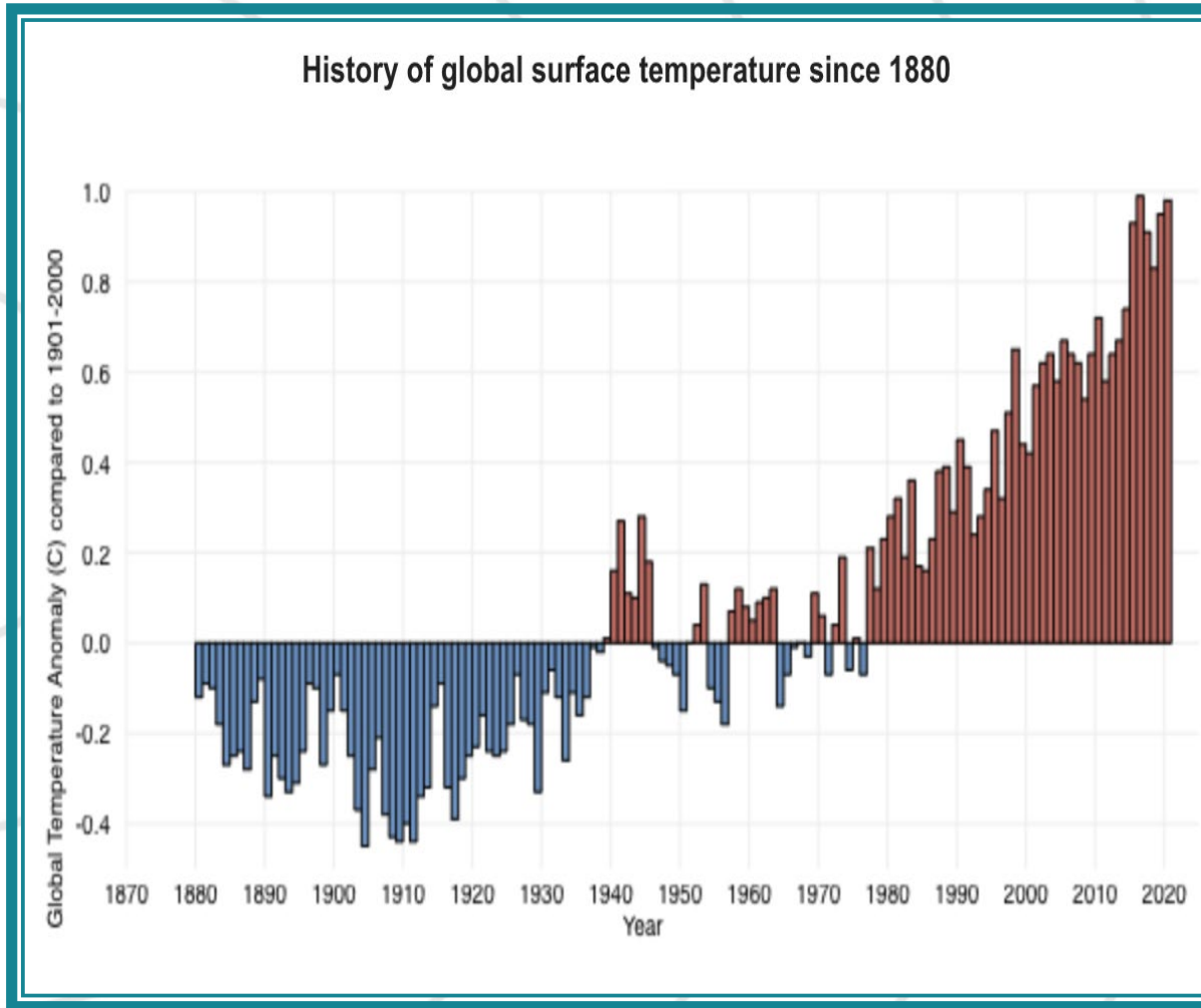


- ESG assets to hit **\$53T** by 2025
- **85%** of investors considered ESG factors in their investments in 2021
- **Climate Awareness:** heat & floods
- U.S. Climate-Related Financial Risk Executive Order
- **COP 26**

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CASE STUDY

Case Study: Asheville Challenges



- Surging material prices
- Supply Chain
- Labor Supply
- **LT: Extreme weather volatility with humidity**
- Changing regulations (Vaccine Mandates, Climate Change)
- Education & training
- Attracting top tech talent

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Growth Drivers Part I: Angel \$ Asheville

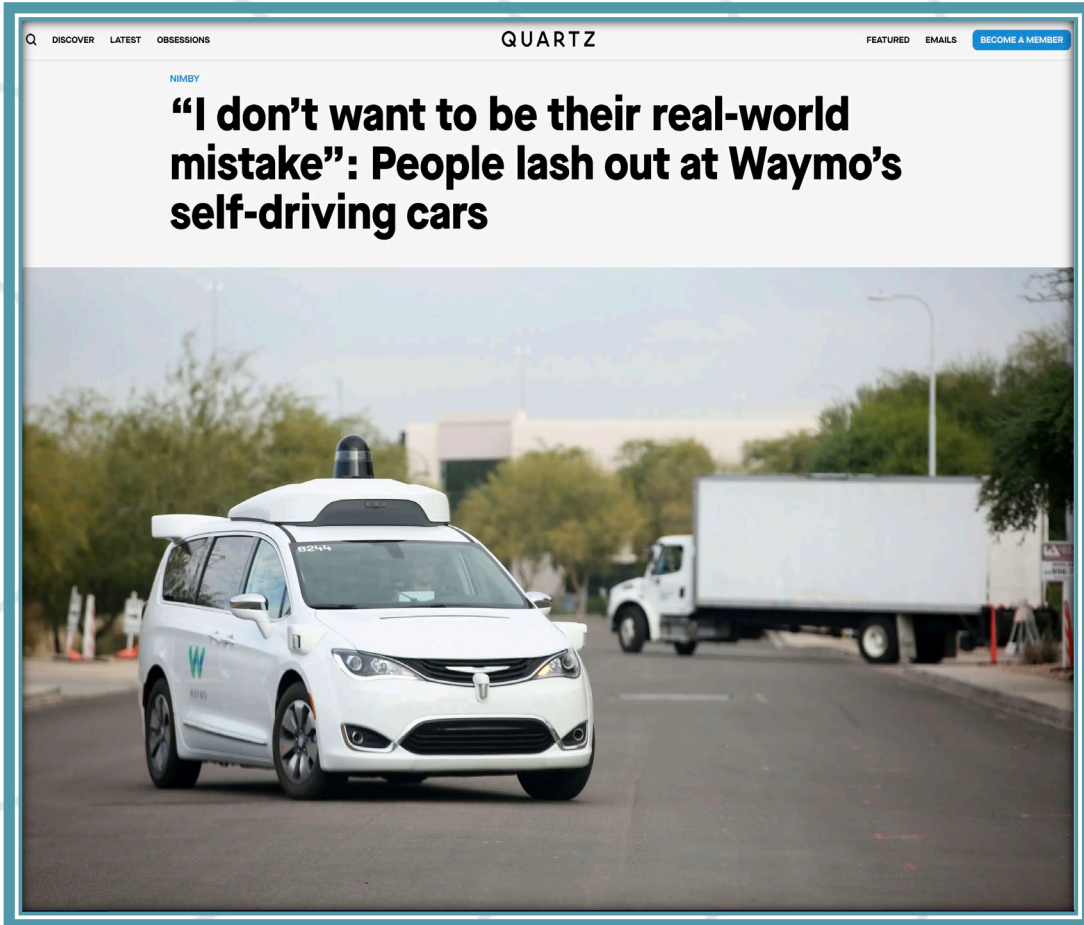


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Growth Drivers Part II: VC \$ Venture South



Growth Drivers Part II: **AEVs**



Autonomous EV Trucks and Cars

- TaaS: transportation as service
- **Adoption by 2025-2030 or sooner**

Expect:

- Drop in car & truck sales due to longer life of EVs
- Drop in oil prices
- Increase in productivity
- Increase in disposable income
- Increase demand for EV recharging stations (retrofit?) and materials

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Growth Drivers Part III: Space

- **Rockets and launches**
- **Space labs**
- **Space debris clean up**
- **Satellites**
- **Moon base construction**
- **Space ports (cube-square law)**
- **Space elevator**
- **Solar Arrays**

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NASA will spend \$93 billion on Artemis moon program by 2025, report estimates

By [Mike Wall](#) about 23 hours ago

And NASA likely won't return astronauts to the moon until several years after 2024, the report found.



Embrace the Opportunities

- *Rethink* Economic Stimulus
- *Redirection* on Govt. Policy
- *Recognize* Supercharged Trends

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Key Takeaway: Get Ready Now!

What's the Big Idea?

**Future provides big opportunities
for those prepared to jump!**

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Questions?