



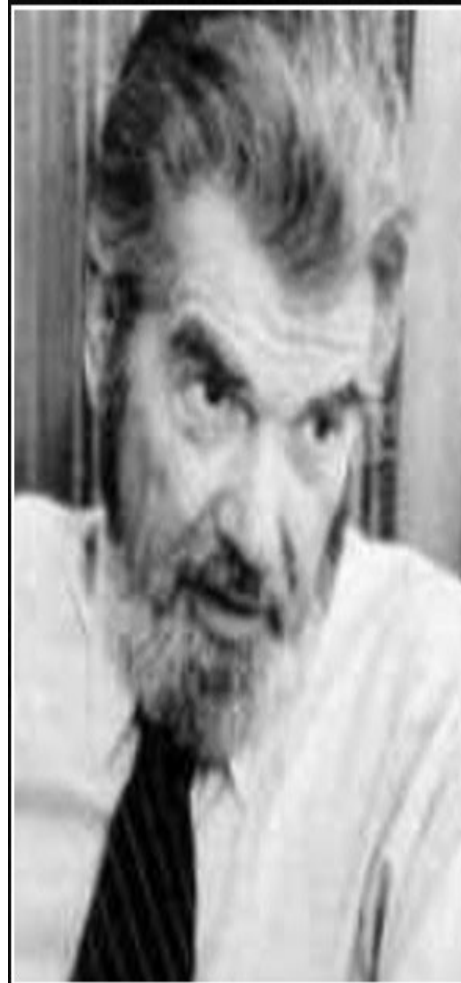
ARMADA

Factors Shaping the Economy in 2022

CFSA

Chris Kuehl - Armada

April 2022



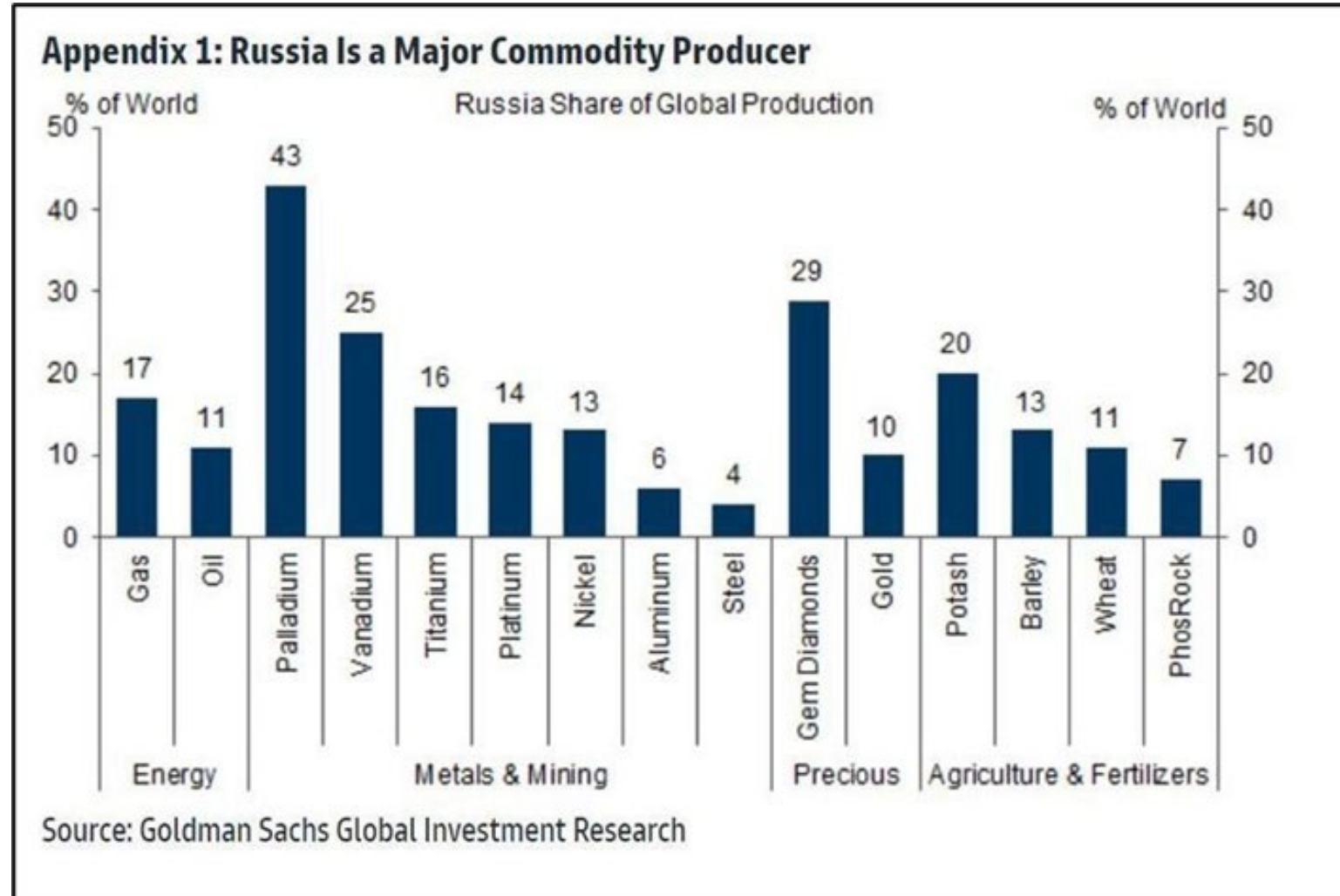
An economist is an expert who will know tomorrow why the things he predicted yesterday didn't happen today.

— *Laurence J. Peter* —

AZQUOTES

War In Ukraine – Impact on Commodities

- Supplies are ample, but they aren't as cheap or as available for the next 60-90 days.
- Prices have eased a bit but remain near historical highs.
- Major fluctuations are being driven by speculation.
- Biggest impact is still on energy and food



Impact on Global Economy

Growing pressures

Prices for energy, grains, and metals soared since the invasion of Ukraine, signaling that inflation rates are poised to accelerate.

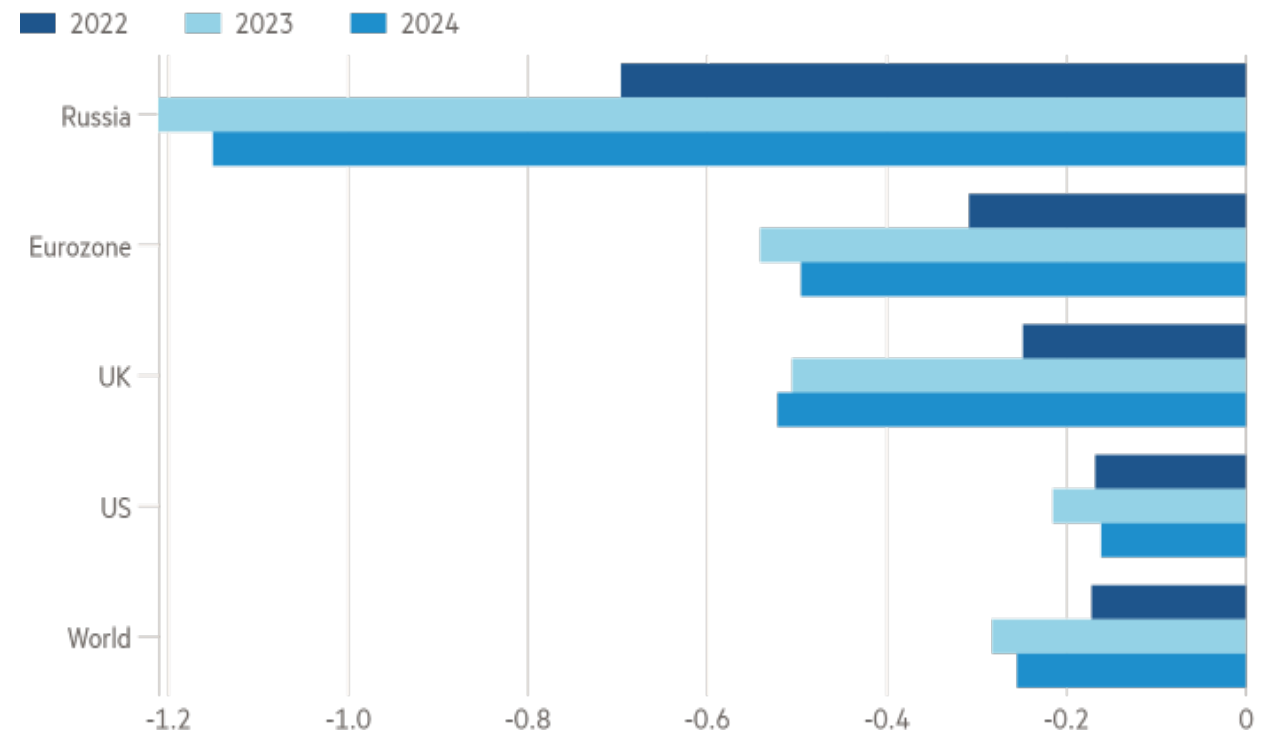


Source: Bloomberg, USDA, Datastream, and IMF staff calculations.
 Note: *European & US natural gas prices use the Dutch TTF and Henry Hub as proxies, respectively. **Base Metals Price Index includes aluminum, nickel, copper, iron ore, lead, polyethylene, steel, tin, strontium, and zinc.

IMF

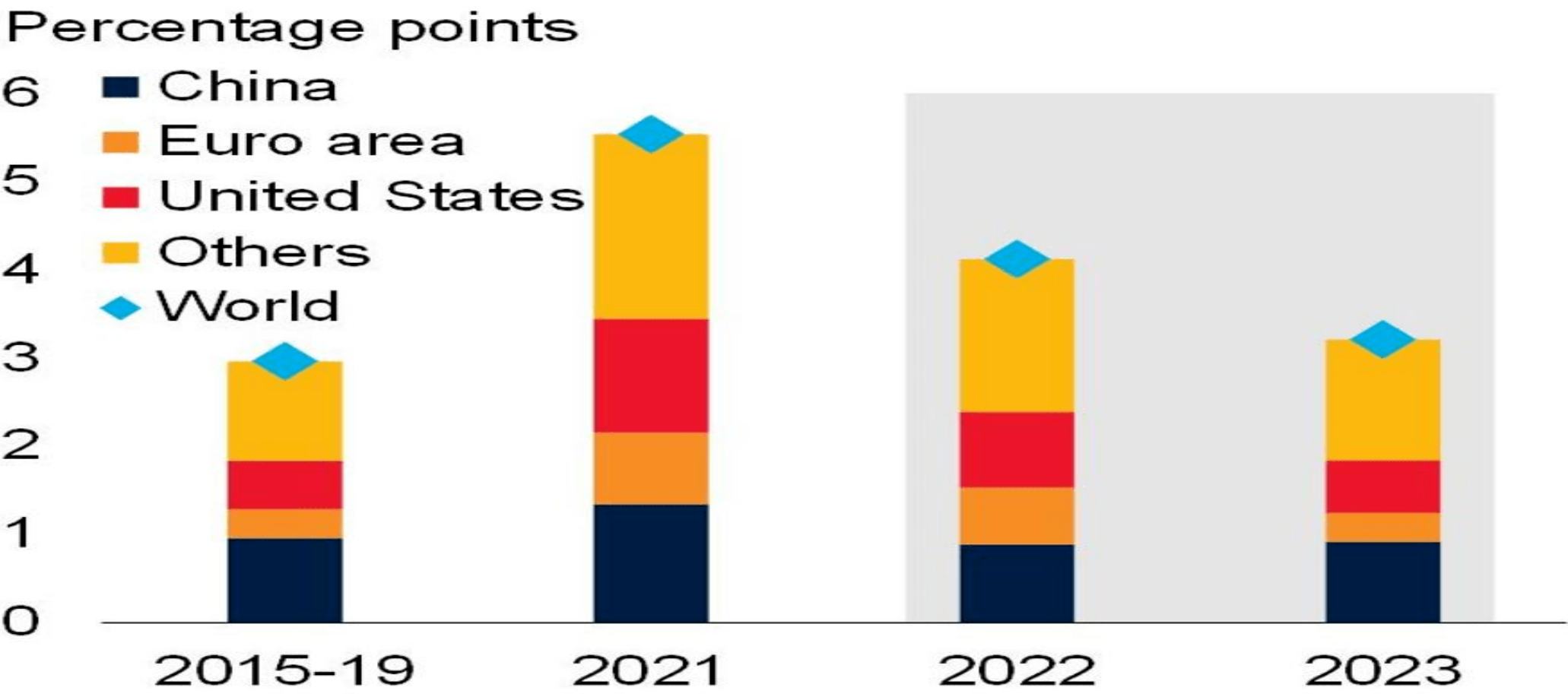
Estimated impact of Ukraine crisis on global economic growth

% change in gross domestic product from no conflict baseline

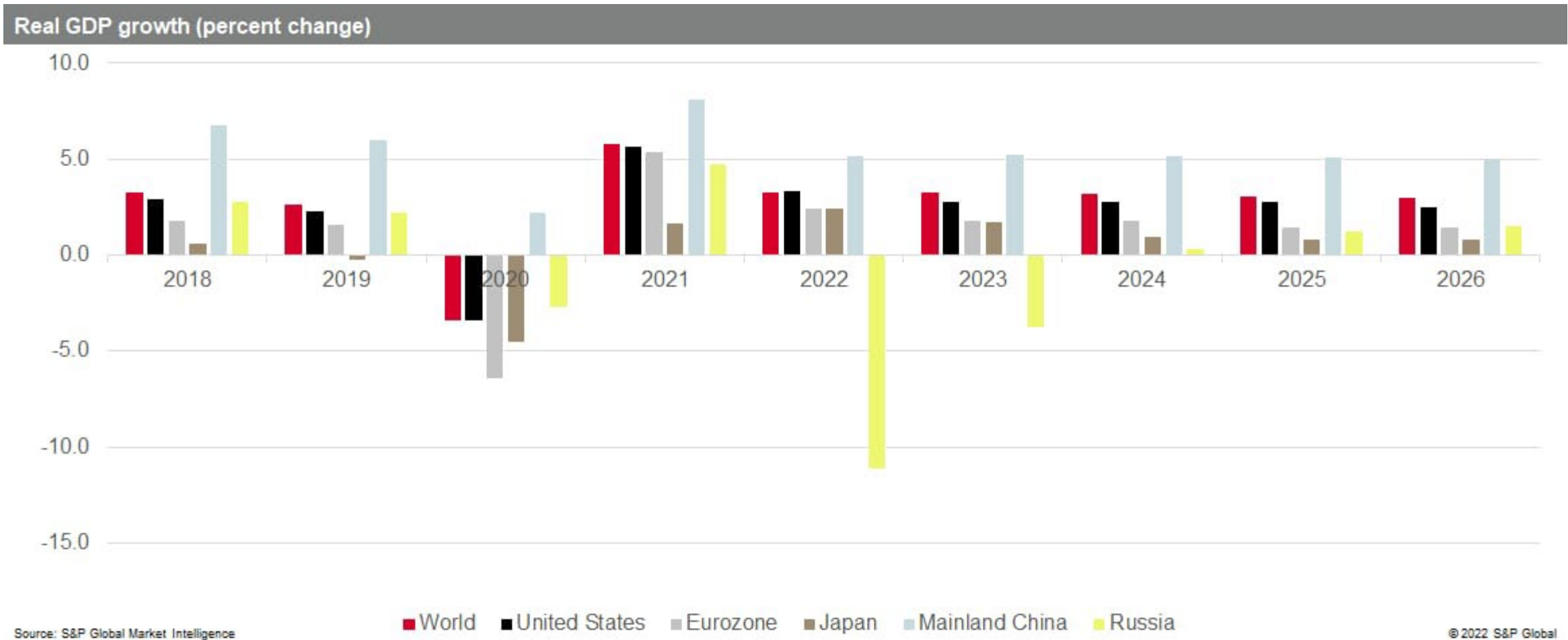


Source: Oxford Economics
 © FT

Slow Decline in Global Growth



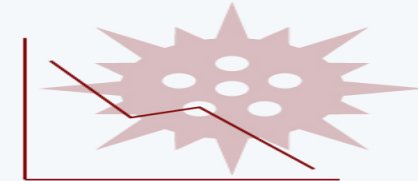
Another Optimistic Future Assessment



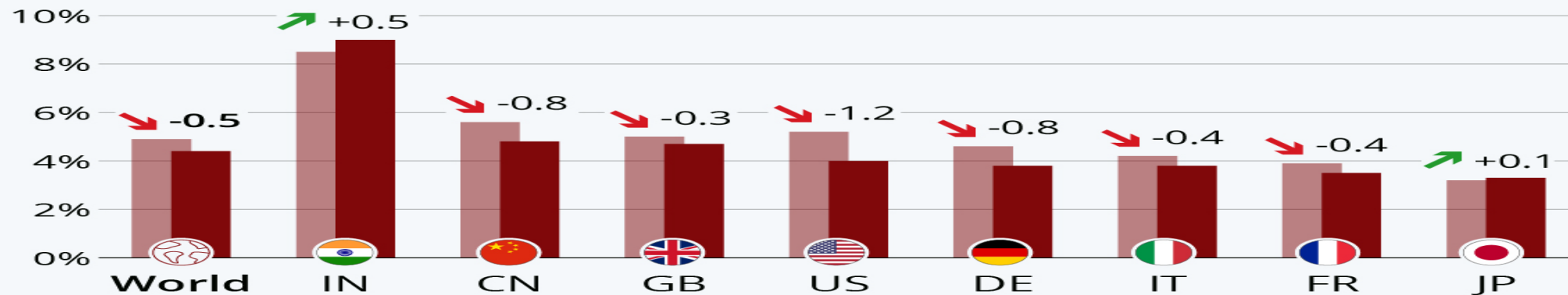
Pessimistic Before Ukraine War

IMF Slashes Growth Forecast for 2022

Real GDP growth forecast for the world's largest economies in 2022*



■ October 2021 Forecast ■ January 2022 Forecast
 ↘ / ↗ p.p. change from previous forecast



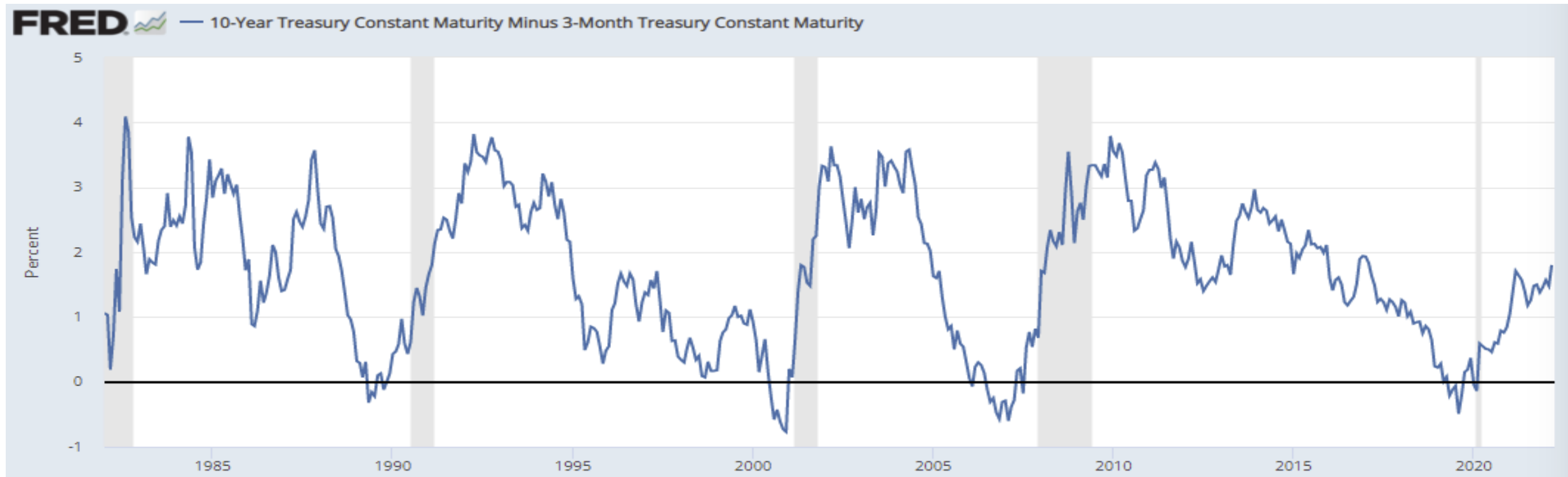
* the world's largest economies based on 2021 GDP
 Source: IMF



statista

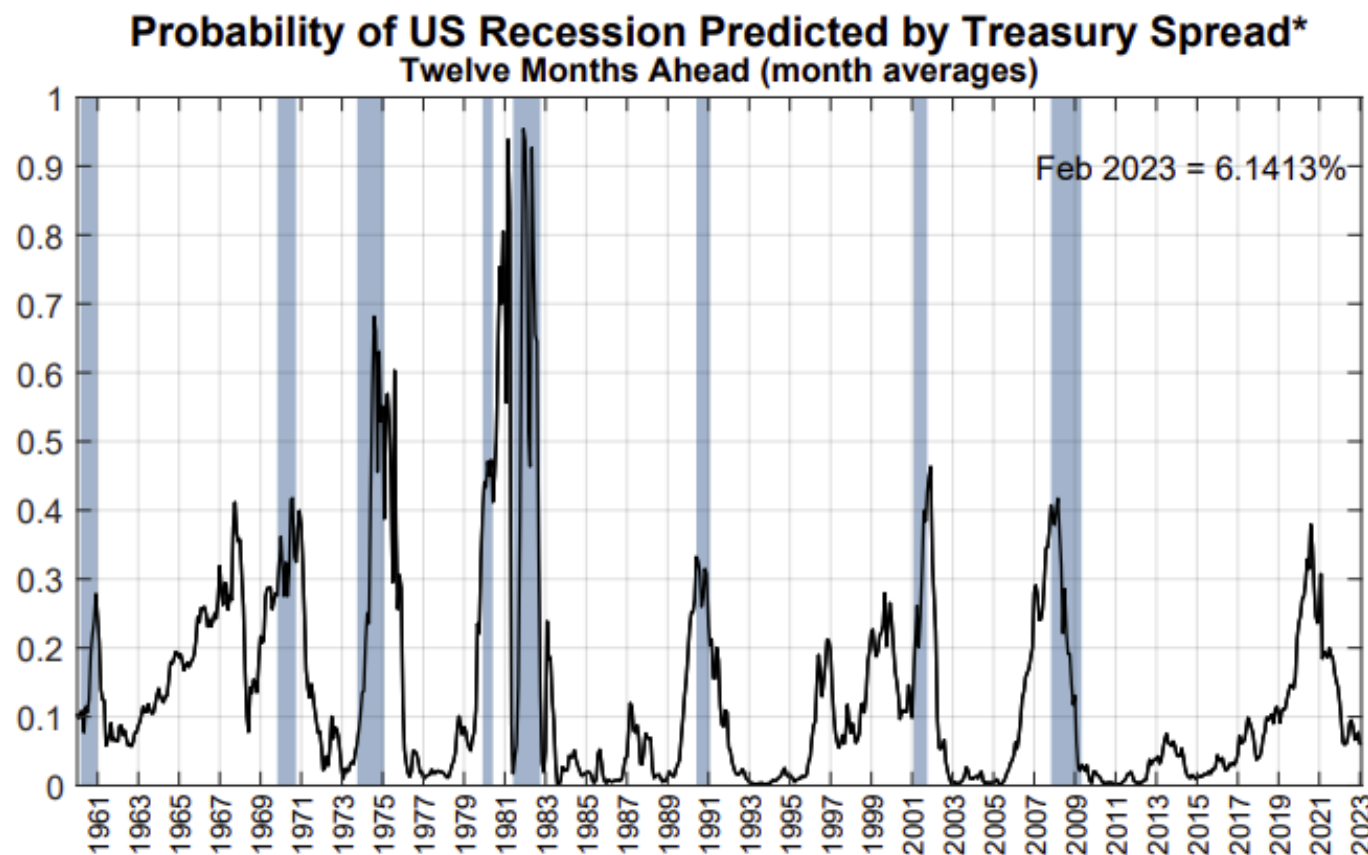
Quick Discussion on Yield Spreads

The New York Fed watches the 10Y/3Month spread. It typically inverts just before recessions start (within 3-6 months). The 10Y/2Y spread has historically indicated recession within 6-24 months – an eternity in the business world.



Recession Probabilities

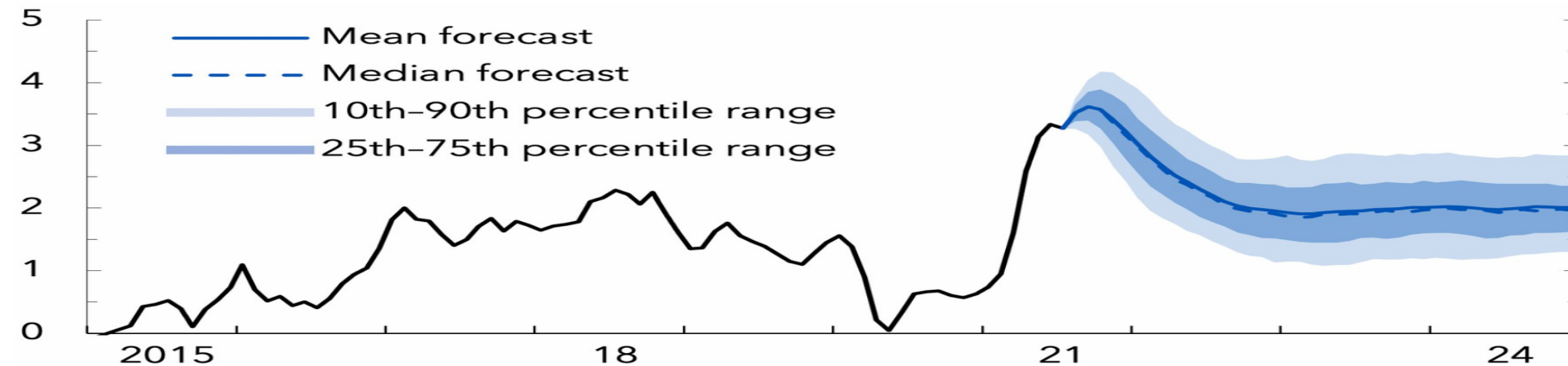
- The New York Fed still has recession probabilities extremely low. The recession risk was just 6% in February.
- To interpret this correctly, the recession probability is high when it begins to hit 25-30%. Usually, the recession risk increases when the spread is on the upswing.



Easing a Bit but Not Falling Back Much

Headline inflation: advanced economy group

Higher inflation will likely continue in the coming months before returning to pre-pandemic levels by mid-2022.
(percent)



Sources: Consensus Economics; Haver Analytics; IMF, CPI database; and IMF staff calculations.

Note: Lines are averages weighted by countries' purchasing-power-parity GDP. Central tendencies for headline inflations are adjusted to ensure consistency with mean *World Economic Outlook* inflation forecasts.

IMF

Interest Rates Will Affect Economy

Fed Expects Rate Hikes for 2022 and Beyond

Upper limit of the U.S. federal funds target rate range*



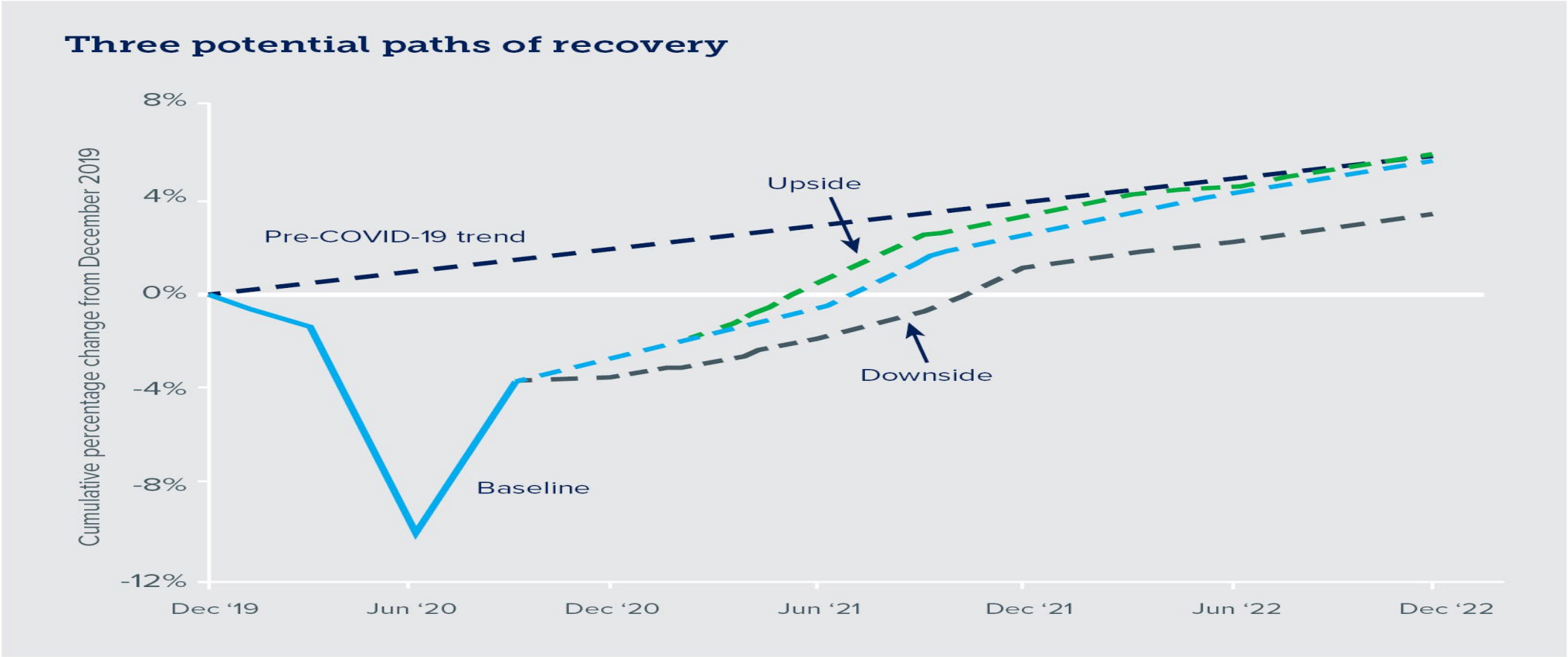
* rates for 2022 and beyond are median projections of the upper limit of the appropriate target range for the federal funds rate at the end of the specified calendar year; as of December 2021

Source: U.S. Federal Reserve



statista

Recovery Year? Maybe Later!

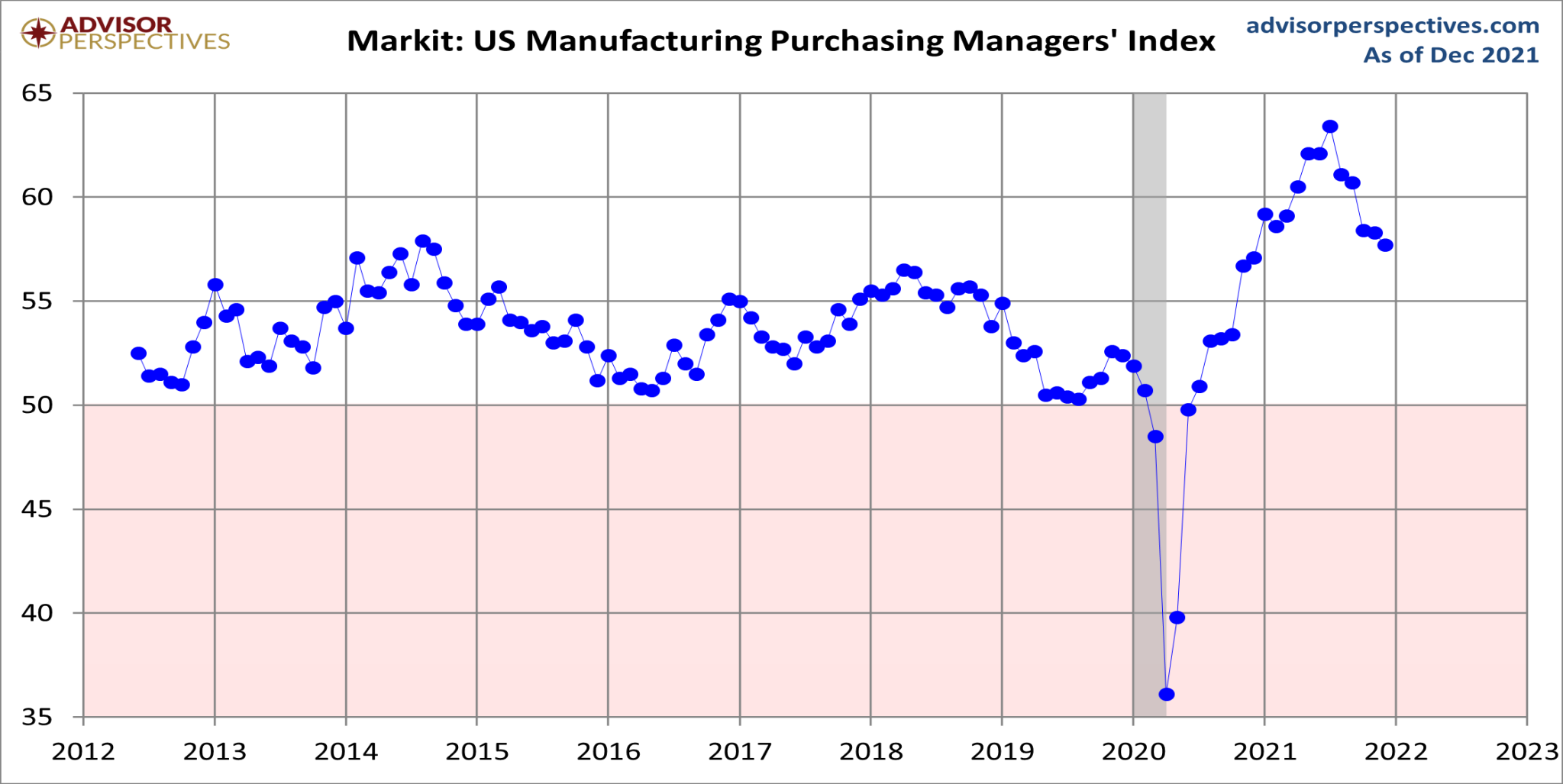


Source: The Conference Board, Vanguard, and Refinitiv

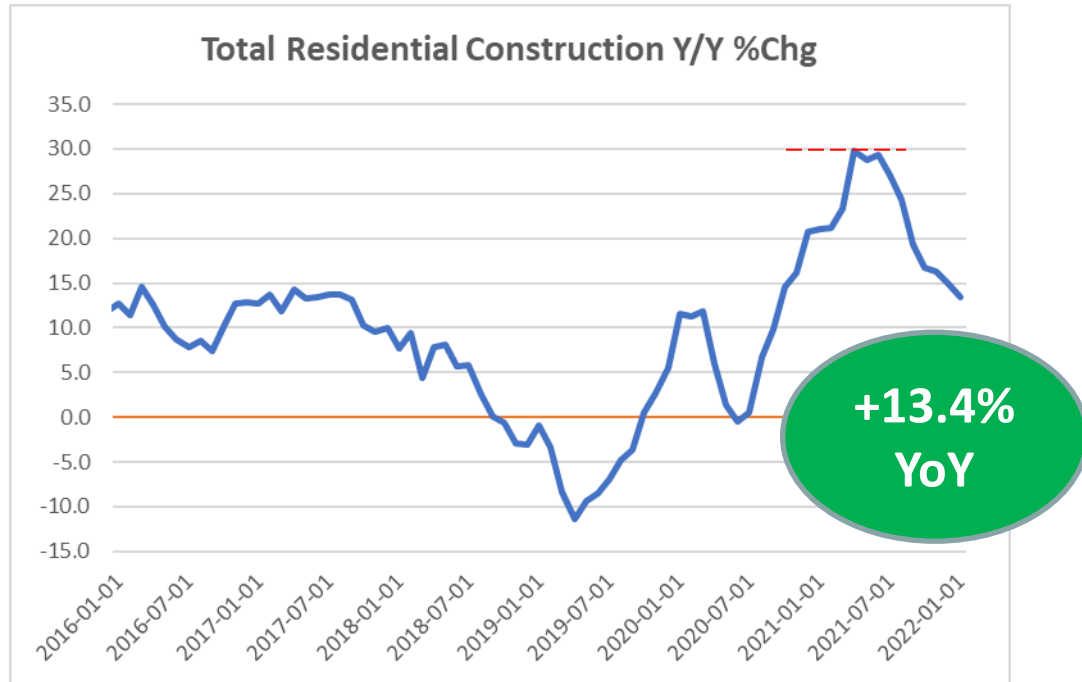
Demand: Global Manufacturing Activity

| Country | Current Month | Latest Month Manuf. PMI | Prior Month Manuf. PMI | M/M Change | Current Month | Latest Month Services PMI | Prior Month Services PMI | M/M Change |
|--------------|---------------|-------------------------|------------------------|------------|---------------|---------------------------|--------------------------|------------|
| Global PMI | Feb | 53.6 | 53.2 | 0.4 | Feb | 53.9 | 51.0 | 2.9 |
| Eurozone PMI | Feb | 58.2 | 58.7 | -0.5 | Feb | 55.5 | 51.1 | 4.4 |
| US | Feb | 57.3 | 55.5 | 1.8 | Feb | 56.5 | 51.2 | 5.3 |
| China | Feb | 50.4 | 49.1 | 1.3 | Feb | 50.2 | 51.4 | -1.2 |
| Canada | Feb | 56.6 | 56.2 | 0.4 | | | | |
| Mexico | Feb | 48.0 | 46.1 | 1.9 | | | | |
| Japan | Feb | 52.7 | 55.4 | -2.7 | Feb | 44.2 | 47.6 | -3.4 |
| Germany | Feb | 58.4 | 59.8 | -1.4 | Feb | 55.8 | 52.2 | 3.6 |
| South Korea | Feb | 53.8 | 52.8 | 1.0 | | | | |
| UK | Feb | 58.0 | 57.3 | 0.7 | Feb | 60.5 | 54.1 | 6.4 |
| France | Feb | 57.2 | 55.5 | 1.7 | Feb | 53.1 | 55.5 | -2.4 |
| India | Feb | 54.9 | 54.0 | 0.9 | Feb | 51.8 | 51.5 | 0.3 |
| Italy | Feb | 58.3 | 58.3 | 0.0 | Feb | 52.8 | 48.5 | 4.3 |
| Taiwan | Feb | 54.3 | 55.1 | -0.8 | | | | |
| Brazil | Feb | 49.6 | 47.8 | 1.8 | Jan | 52.8 | 53.6 | -0.8 |
| Spain | Feb | 56.9 | 56.2 | 0.7 | Feb | 56.6 | 46.6 | 10.0 |
| Russia | Feb | 48.6 | 51.8 | -3.2 | Feb | 52.1 | 49.8 | 2.3 |
| Netherlands | Feb | 60.6 | 60.1 | 0.5 | | | | |
| Ireland | Feb | 57.8 | 59.4 | -1.6 | Feb | 61.8 | 56.2 | 5.6 |
| Greece | Feb | 57.8 | 57.9 | -0.1 | | | | |
| Poland | Feb | 54.7 | 54.5 | 0.2 | | | | |
| ASEAN | Feb | 52.5 | 52.7 | -0.2 | | | | |
| Vietnam | Feb | 54.3 | 53.7 | 0.6 | | | | |
| Philippines | Feb | 52.8 | 50.0 | 2.8 | | | | |
| Australia | Feb | 57.0 | 55.1 | 1.9 | Feb | 57.4 | 46.6 | 10.8 |
| Switzerland | Feb | 62.6 | 63.8 | -1.2 | | | | |
| Hong Kong | Feb | 42.9 | 48.9 | -6.0 | | | | |
| Singapore | Feb | 50.2 | 50.6 | -0.4 | | | | |

Still Strong but Some Retreat

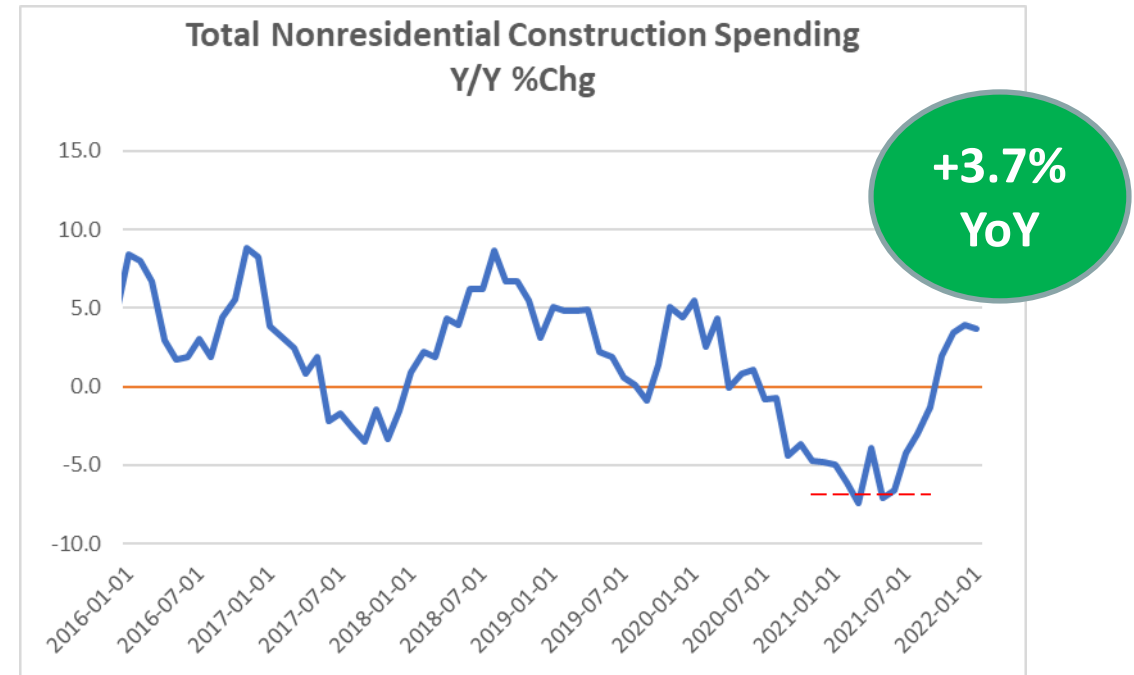


Demand: Construction Will Accelerate After Good Performance in '21



Private Annualized Spending

2019: \$550B
2021: \$838B (Jan)



Private Annualized Spending

2019: \$815B
2021: \$838B (Jan)

Spending (in dollars) eclipsed pre-pandemic levels in 2021.

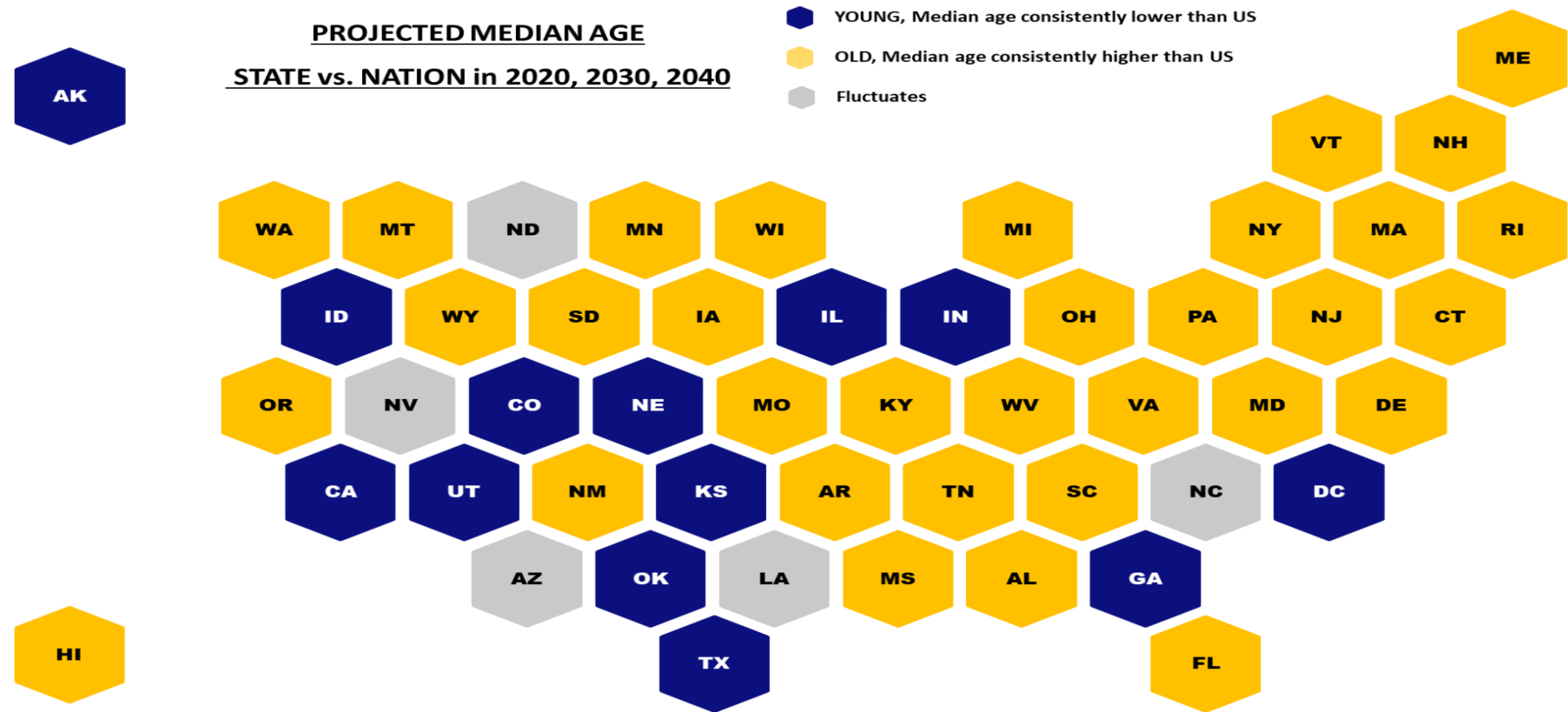
*US needs 5M homes, on track to build 1.7M in '22

Job Openings Still Near All-Time Highs

- Job Openings came in at 11.5M in January (11.9M in the prior month), the second highest on record.
- Good opportunities are everywhere, wage growth is about 5.5%.
- Good for consumers that aren't worried about job prospects or taking on loans.

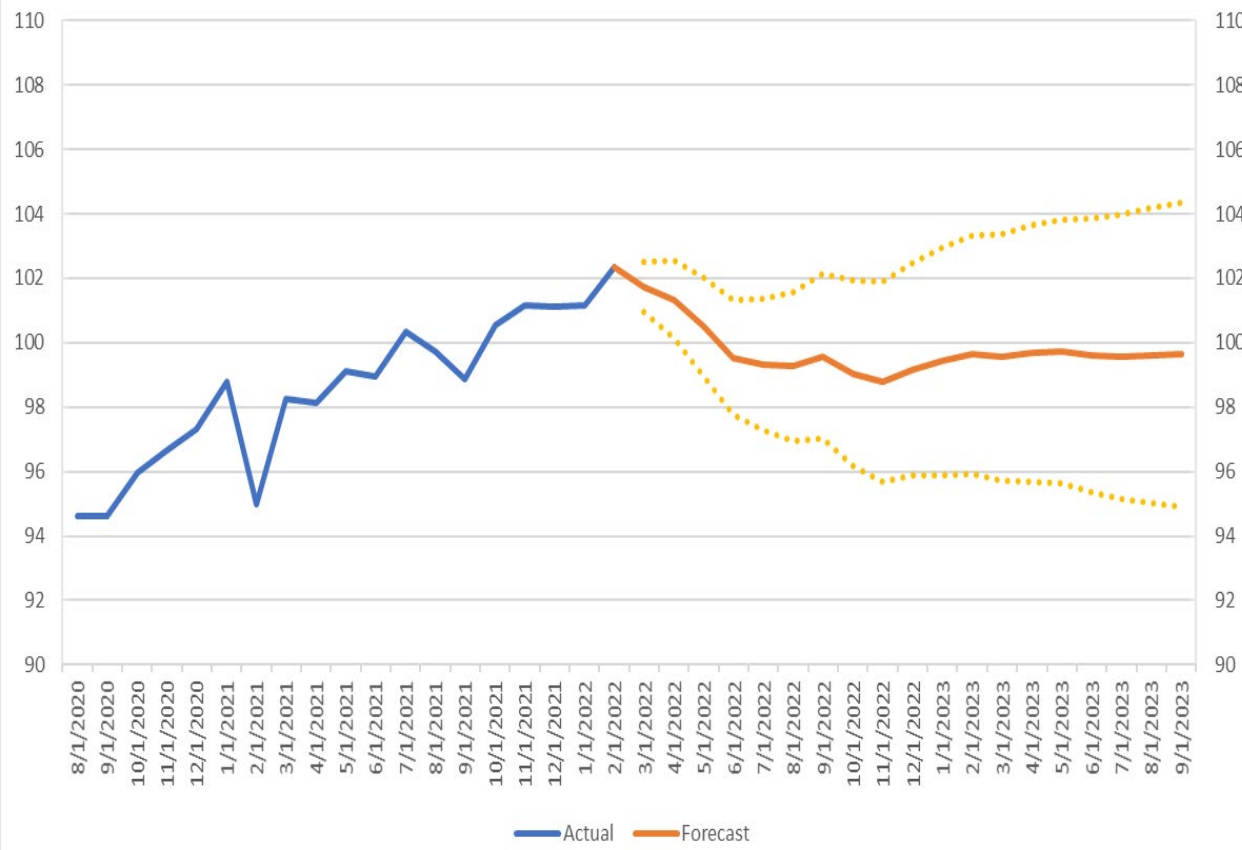
| Levels by Industry (in thousands) | Job openings | | | %Chg. Y/Y |
|--|--------------|--------|--------|--------------|
| | Dec. | Nov. | Dec. | |
| | 2020 | 2021 | 2021 | |
| Total | 6,752 | 10,775 | 10,925 | 61.8% |
| Total private | 6,094 | 9,753 | 9,882 | 62.2% |
| Mining and logging | 21 | 41 | 46 | 119.0% |
| Construction | 267 | 358 | 337 | 26.2% |
| Manufacturing | 479 | 853 | 856 | 78.7% |
| Trade, transportation, and utilities | 1,215 | 1,892 | 1,868 | 53.7% |
| Wholesale trade | 173 | 322 | 274 | 58.4% |
| Retail trade | 764 | 1,025 | 1,014 | 32.7% |
| Transportation, warehousing, and utilities | 277 | 546 | 580 | 109.4% |
| Information | 109 | 177 | 217 | 99.1% |
| Financial activities | 295 | 529 | 445 | 50.8% |
| Professional and business services | 1,478 | 1,854 | 1,875 | 26.9% |
| Education and health services | 1,277 | 2,006 | 2,067 | 61.9% |
| Educational services | 90 | 180 | 207 | 130.0% |
| Health care and social assistance | 1,187 | 1,826 | 1,859 | 56.6% |
| Leisure and hospitality | 747 | 1,585 | 1,716 | 129.7% |
| Arts, entertainment, and recreation | 62 | 185 | 183 | 195.2% |
| Accommodation and food services | 685 | 1,400 | 1,533 | 123.8% |
| Government | 659 | 1,021 | 1,042 | 58.1% |
| Federal | 98 | 164 | 174 | 77.6% |
| State and local | 561 | 858 | 868 | 54.7% |
| State and local education | 217 | 331 | 362 | 66.8% |
| State and local, excluding education | 344 | 526 | 506 | 47.1% |

Population growth estimates based on older/younger generation

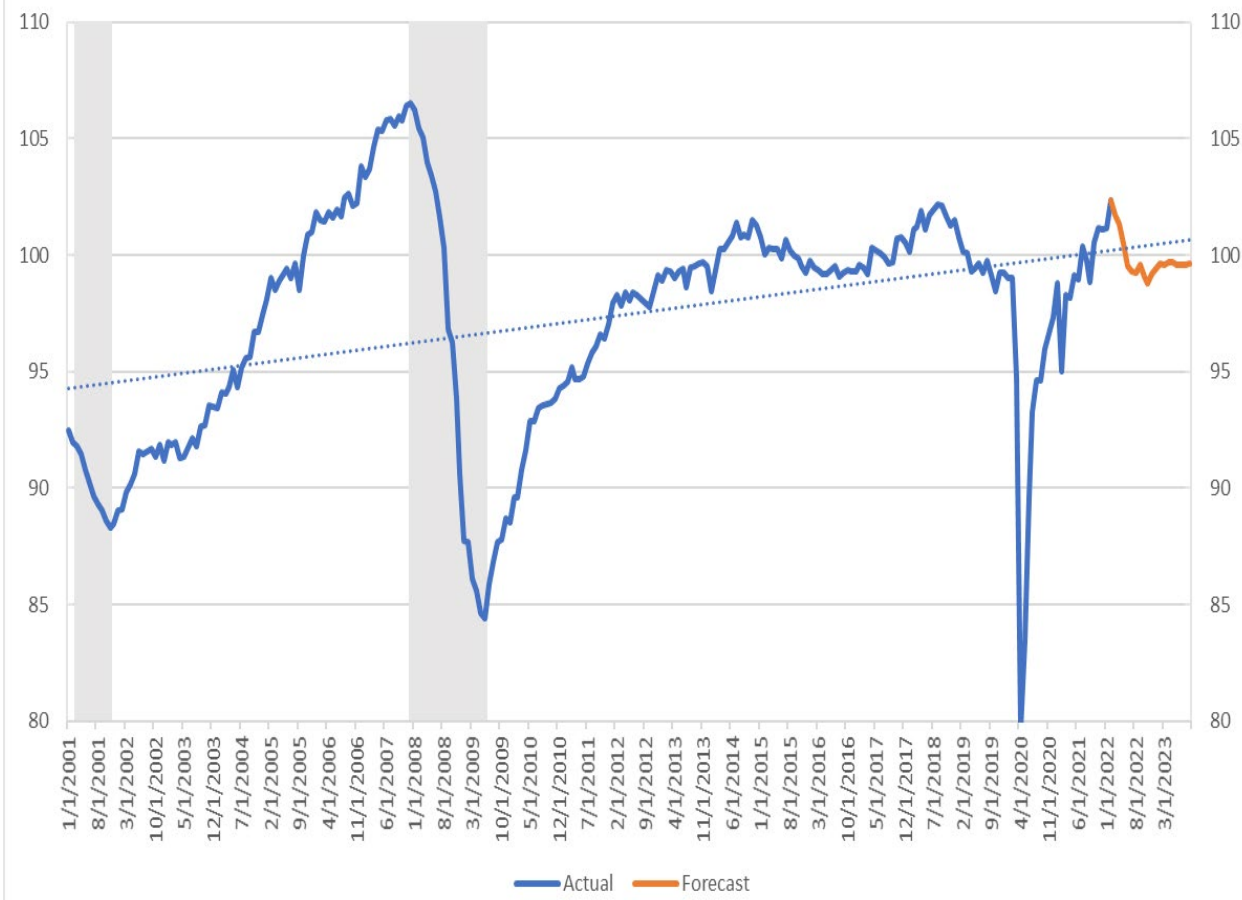


Forecast: Industrial Production for Durable Manufacturing

ASIS - Industrial Production: Manufacturing (IPMAN)
Forecast as of Mar 2022



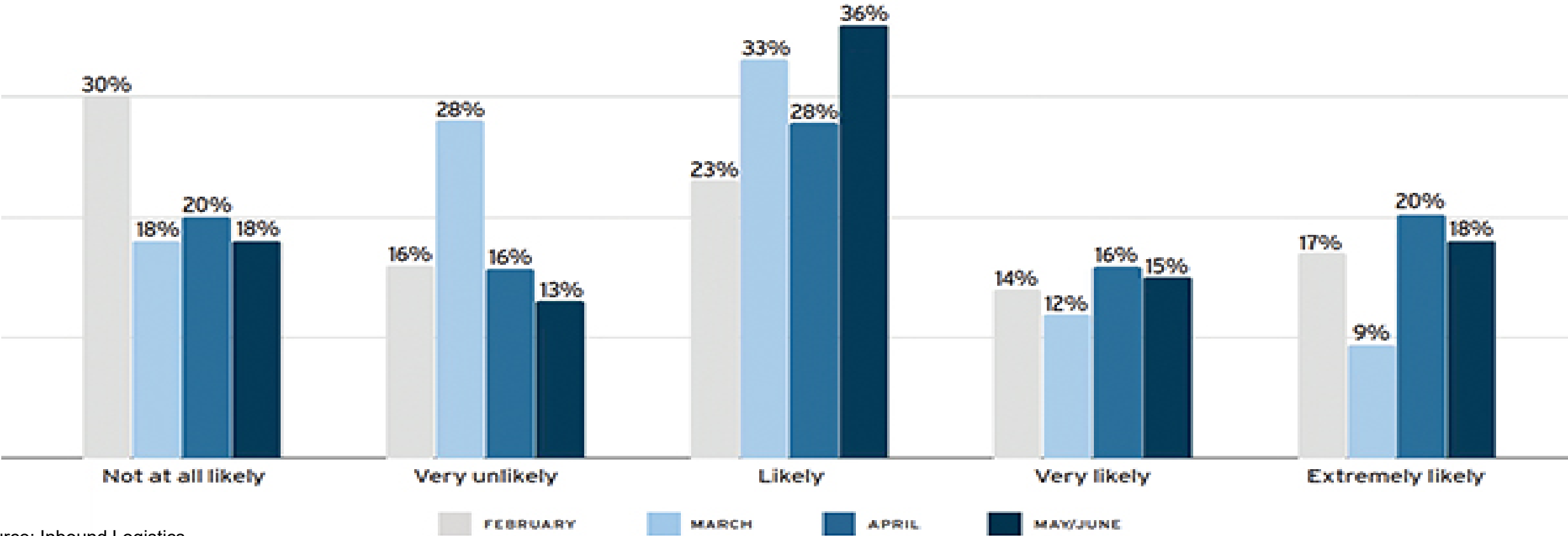
Industrial Production: Manufacturing (IPMAN)



The reshoring and nearshoring discussion continues to heat up

INCREASED INTEREST IN RESHORING: 69% OF MANUFACTURERS INDICATE THEY ARE “LIKELY TO” OR “EXTREMELY LIKELY TO” RESHORE IN THE FUTURE

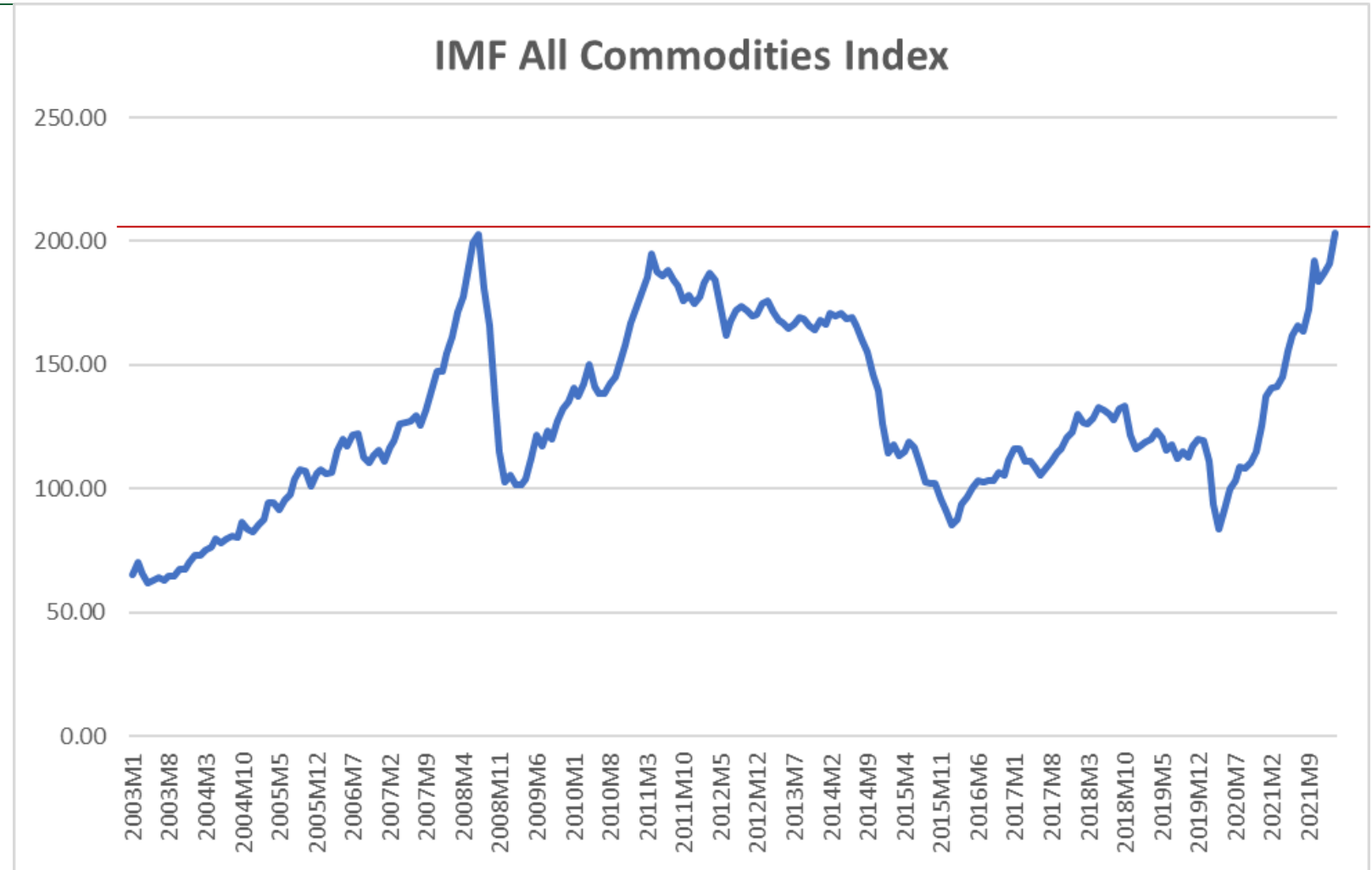
How likely are you to bring more production/sourcing back to North America after this outbreak?



Source: Inbound Logistics

Risks: Commodity Shortages Are a Problem Worldwide

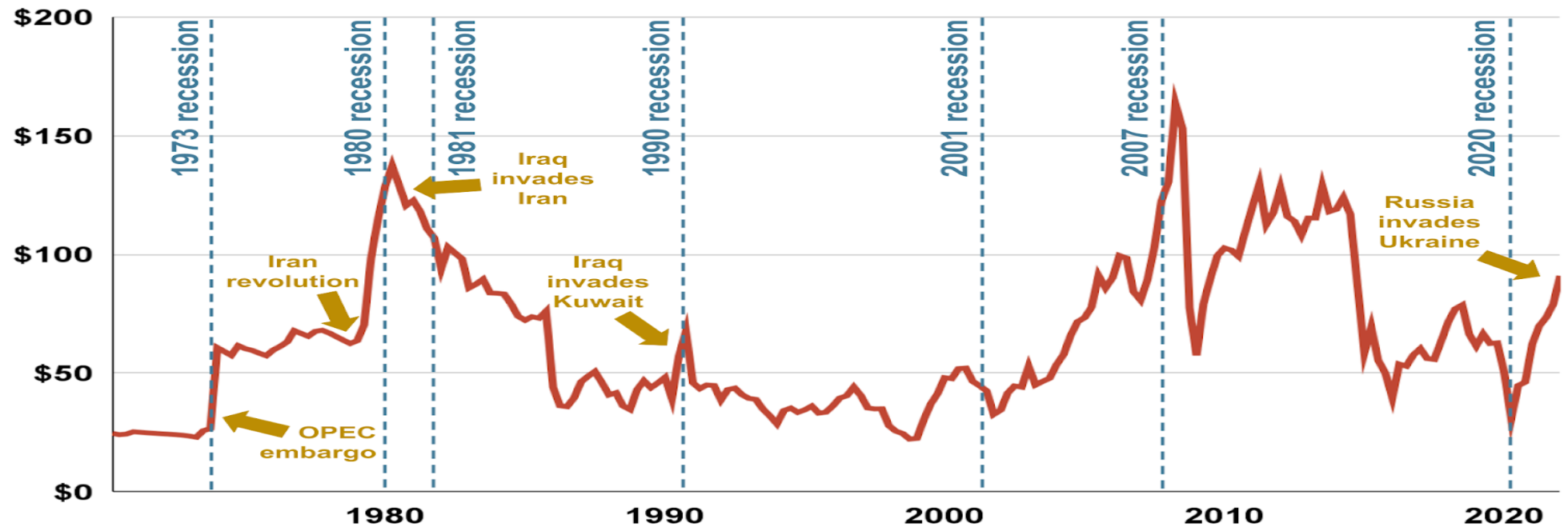
- Global commodity prices are **44.6% higher year-over-year**, but are **70.7% higher vs. pre-pandemic levels**.
- **Vs. 2019:**
 - Industrial inputs +50.3%
 - Agriculture Prices +44.6%
 - Food Price Index +48.6%
 - All Metals +52.2%
 - Base Metals +60.8%
 - Fertilizer +126.5%
 - Crude Oil +51.7%
 - Natural Gas +253.1%
 - Coal +164.9%



2016=100

Recessions often coincide with rising oil prices

West Texas Intermediate crude oil price per barrel, 2022 dollars

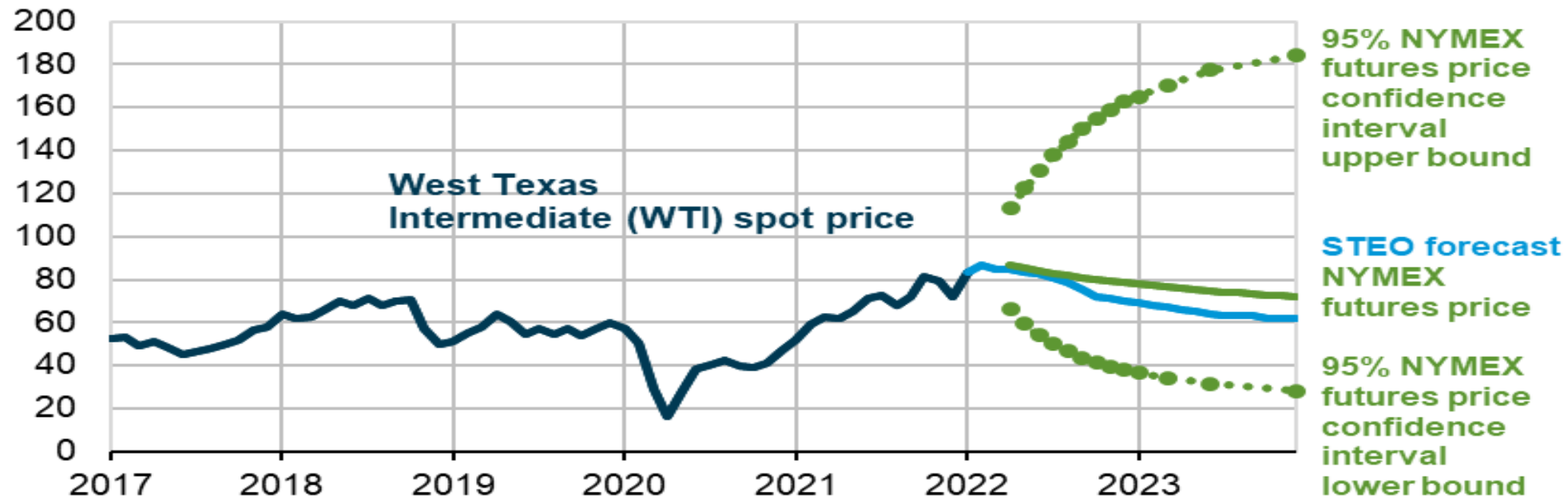


Sources: Energy Information Administration, Bureau of Labor Statistics, James Hamilton

 FULL STACK ECONOMICS

It ALL Depends on Russia

West Texas Intermediate (WTI) crude oil price and NYMEX confidence intervals
dollars per barrel



Note: Confidence interval derived from options market information for the five trading days ending Feb 3, 2022. Intervals not calculated for months with sparse trading in near-the-money options contracts.

Sources: U.S. Energy Information Administration, Short-Term Energy Outlook, February 2022, CME Group, Bloomberg, L.P., and Refinitiv an LSEG Business



Depending on Sanction Policies

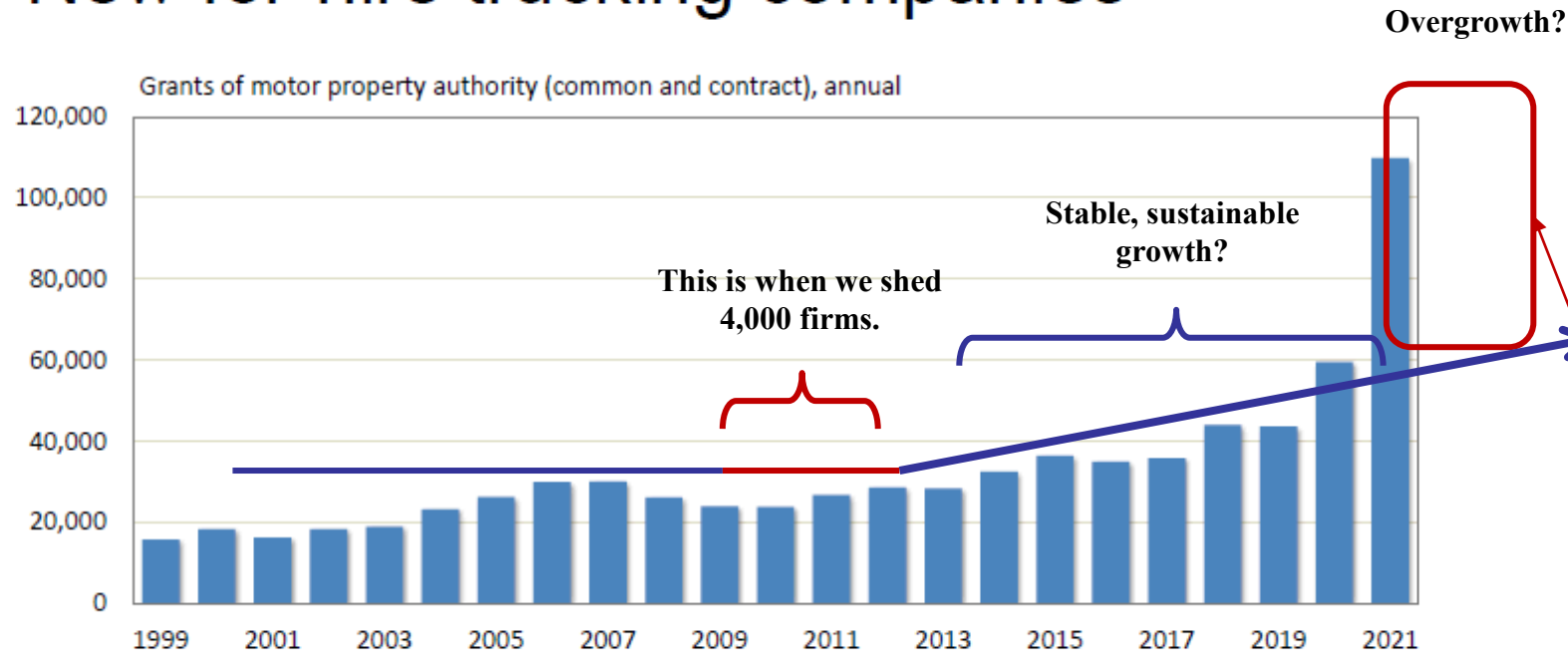
Oil price forecasts 2022

| | Brent | WTI |
|------------------------|-------------|-------------|
| Bank of America (BofA) | \$110/bbl | \$105/bbl |
| Fitch Solutions | \$82/bbl | \$73/bbl |
| Fitch Ratings | \$100/bbl | \$95/bbl |
| ANZ Research | \$115.3/bbl | \$112.3/bbl |

Sources: Bank of America (BofA), Fitch Solutions, Fitch Ratings, ANZ Research

Record Diesel Prices Can Lead to TL Bankruptcies

New for-hire trucking companies

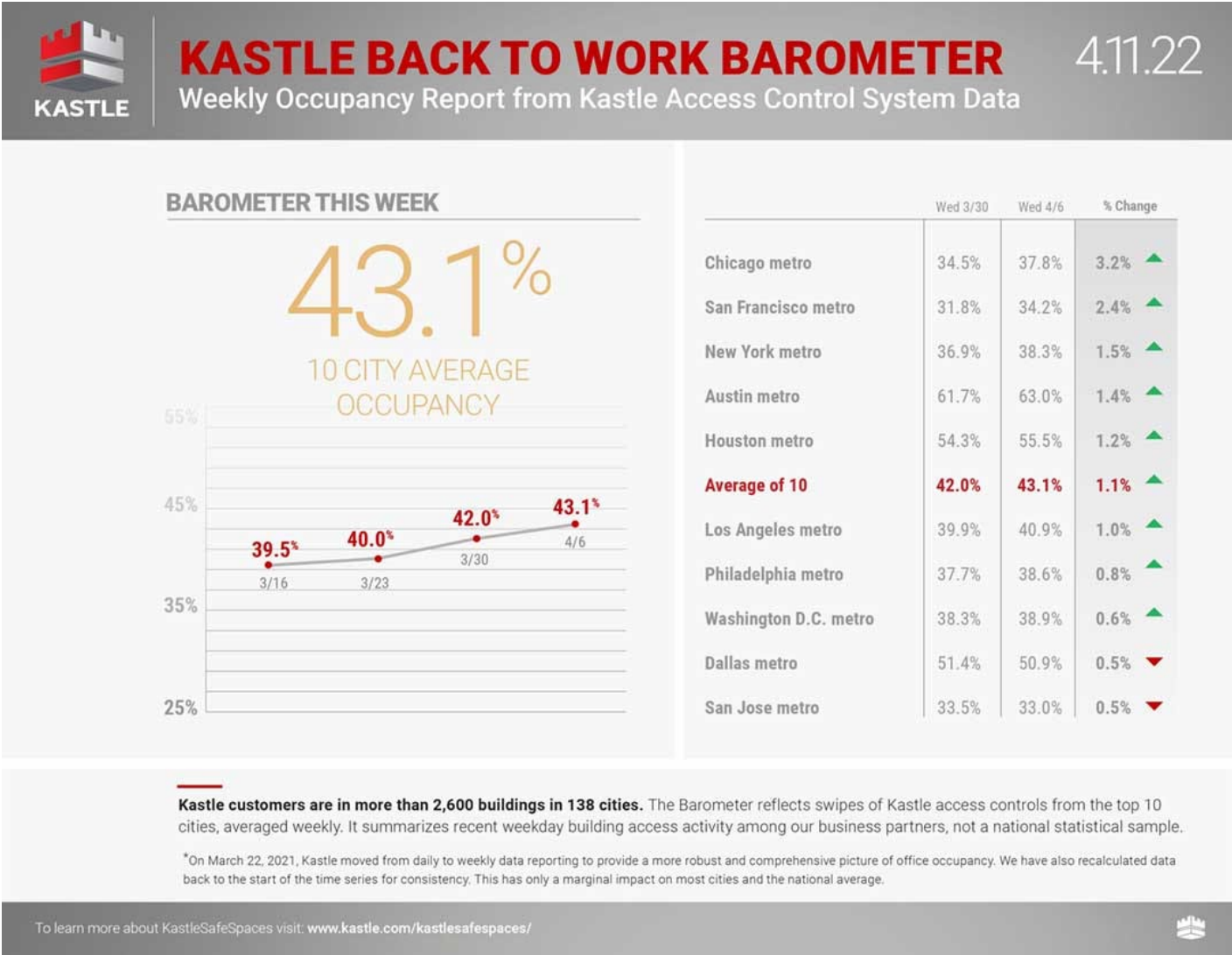


These **68,000 new additions** to the TL sector over the past 24 months are probably ‘at risk’.

This is where the failures will come from, and that’s a big pool. Many of these are single-operators, but in 2008, the highest risk segment was in firms with 5-45 trucks.

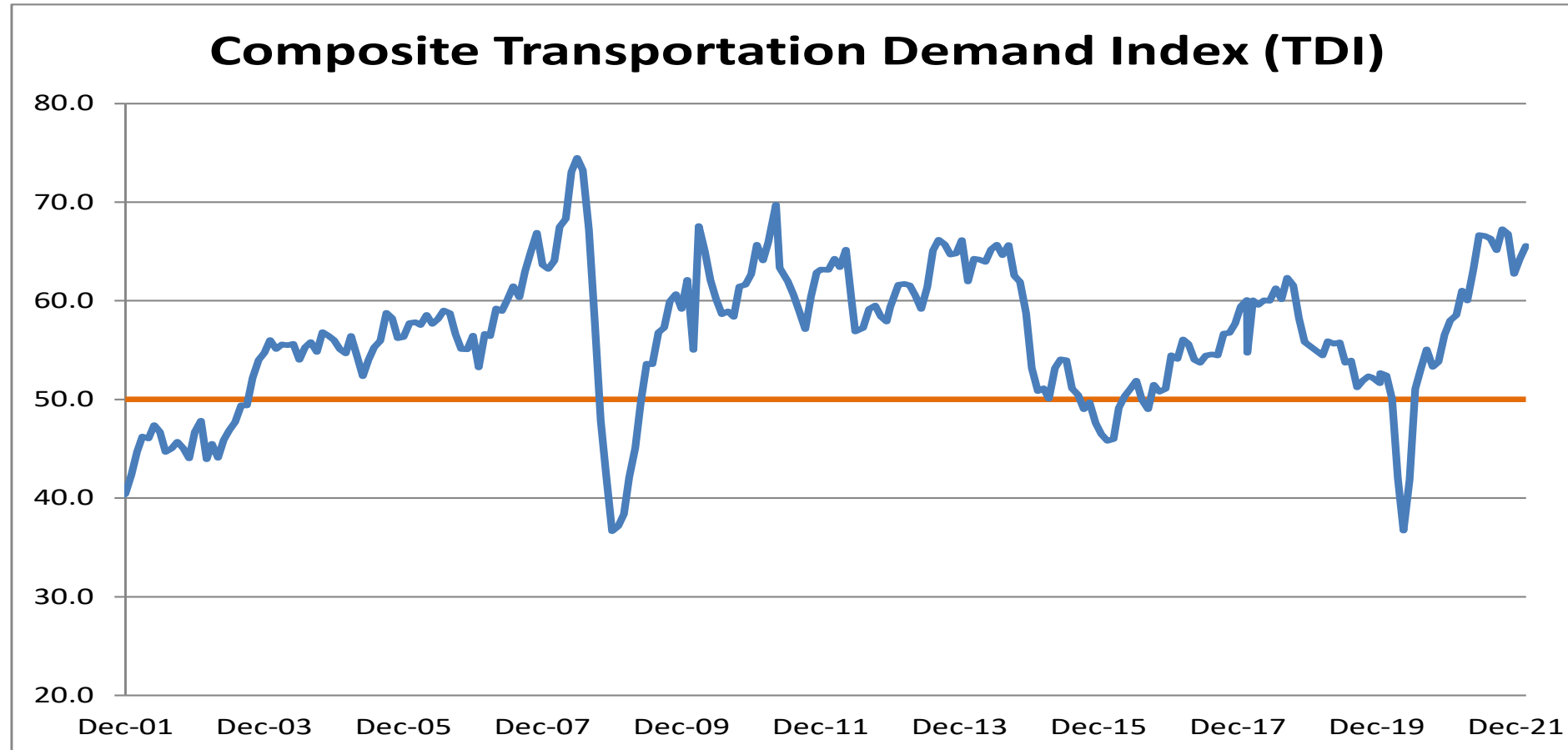
Office Utilization Still Not Recovering

- National occupancy rates still just 43.1% (36.8% in the last update).
- Questions starting to emerge about whether a return to 80-85% occupancy by Q2 '22 is possible or feasible.

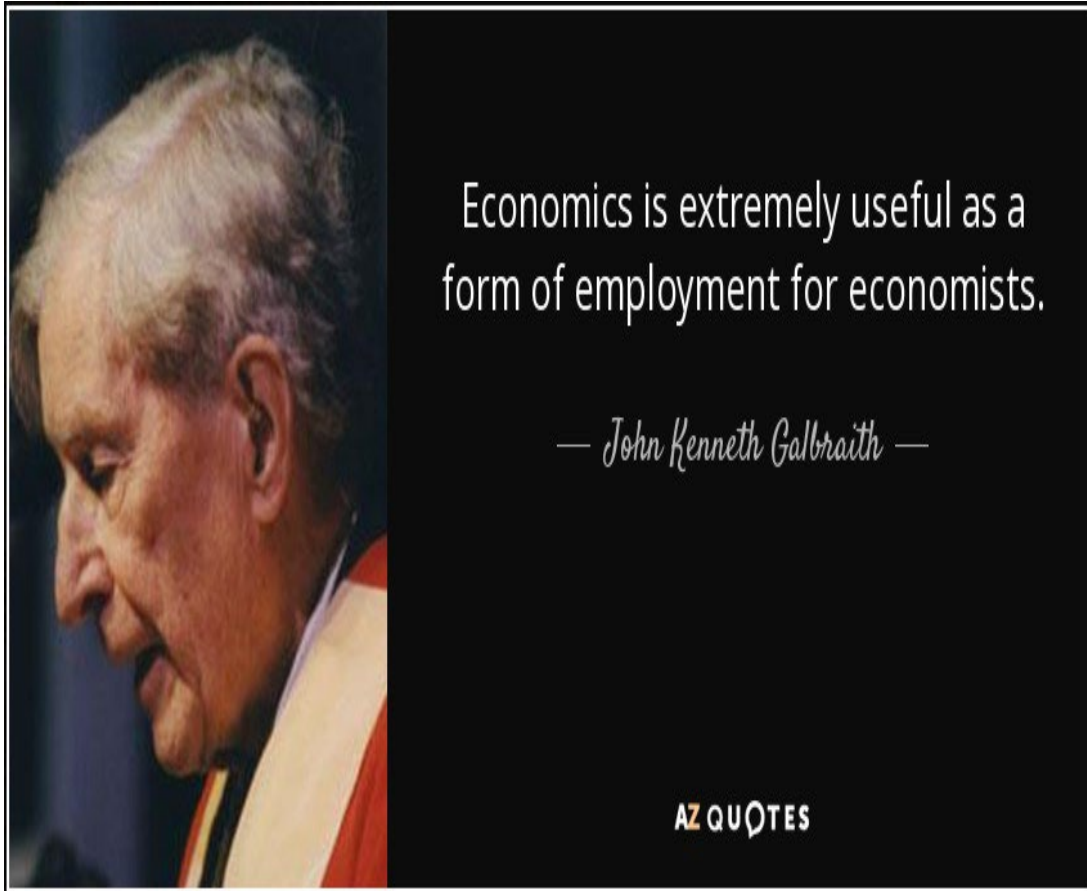


Source: Kastle

Improvement Overall



You Just Know You Want More!



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 - Focus on manufacturing
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