

The background of the slide is a blue-tinted image of an industrial manufacturing environment. It features robotic arms and machinery, with bright orange sparks flying from a welding or grinding process, creating a sense of active production.

# **WE ARE KMS**

## **Q2'22 ECONOMIC IMPACTS ON KANSAS MANUFACTURERS WEBINAR**



*Trusted Advisors for Growth*

**[www.weareKMS.com](http://www.weareKMS.com)**

# WEBINAR HOUSEKEEPING

- Everyone attending the webinar is muted. To ask a question, type your question in the Question text box on your GoToWebinar panel.
- We will ask as many questions as we can at the end of the presentation.
- This webinar is being recorded. The link to the recording will be included in a follow-up email being distributed tomorrow.
- Please check our website [www.wearekms.com](http://www.wearekms.com) frequently for new webinars and events. (or register to receive our quarterly KMS newsletter)

# WE ARE KMS

KMS exists to help Kansas manufacturers compete.

From trusted advisor to vocal advocate for manufacturing in Kansas, we are working to help you be successful by providing value proven solutions to increase your competitiveness in the domestic and global markets.



# Armada



**Dr. Chris Kuehl**  
**Managing Director of Armada**  
**Corporate Intelligence**

# **Factors Shaping the Global Economy**

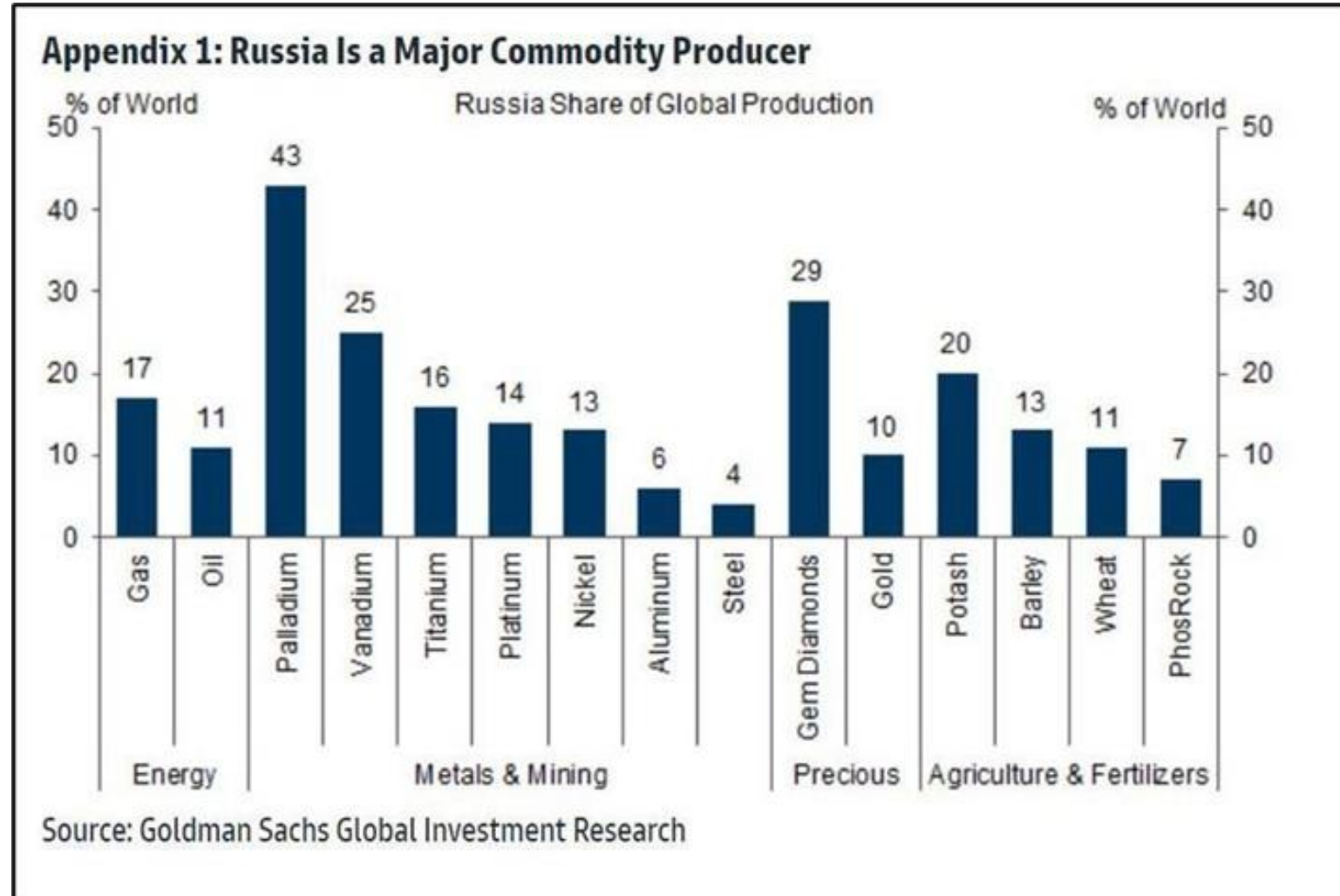
**KMS Webinar**  
**Chris Kuehl - Armada**

**April 2022**

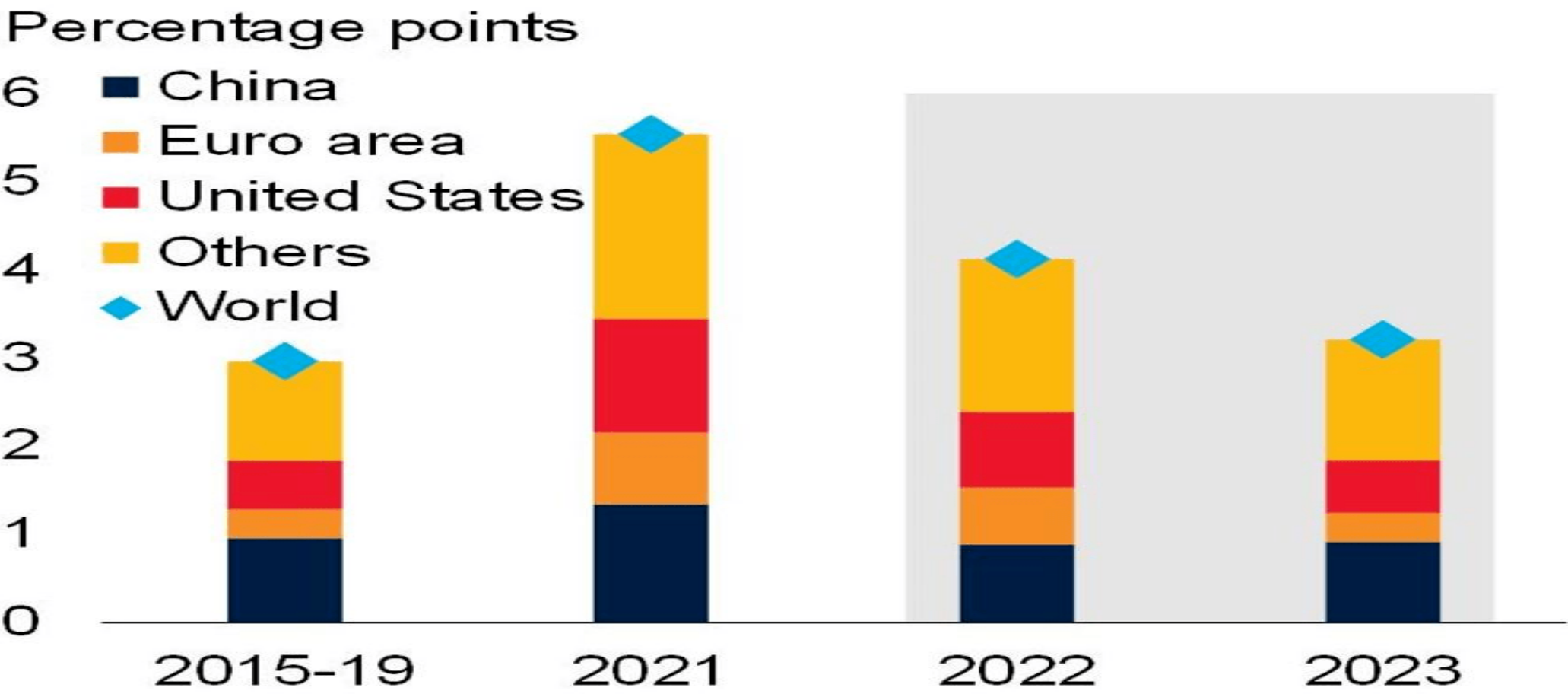


# War In Ukraine – Impact on Commodities

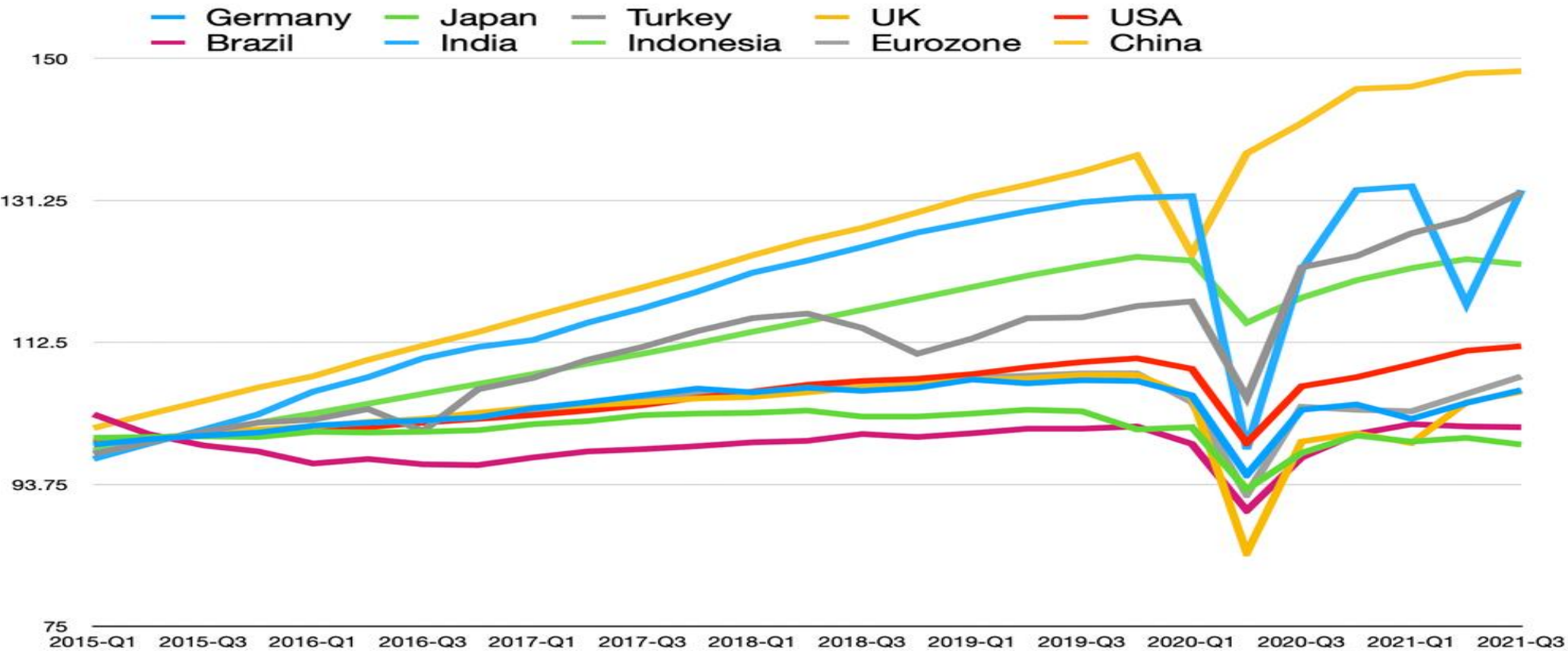
- Supplies are ample, but they aren't as cheap or as available for the next 60-90 days.
- Prices have eased a bit but remain near historical highs.
- Major fluctuations are being driven by speculation.
- Biggest impact is still on energy and food



# Slow Decline in Global Growth



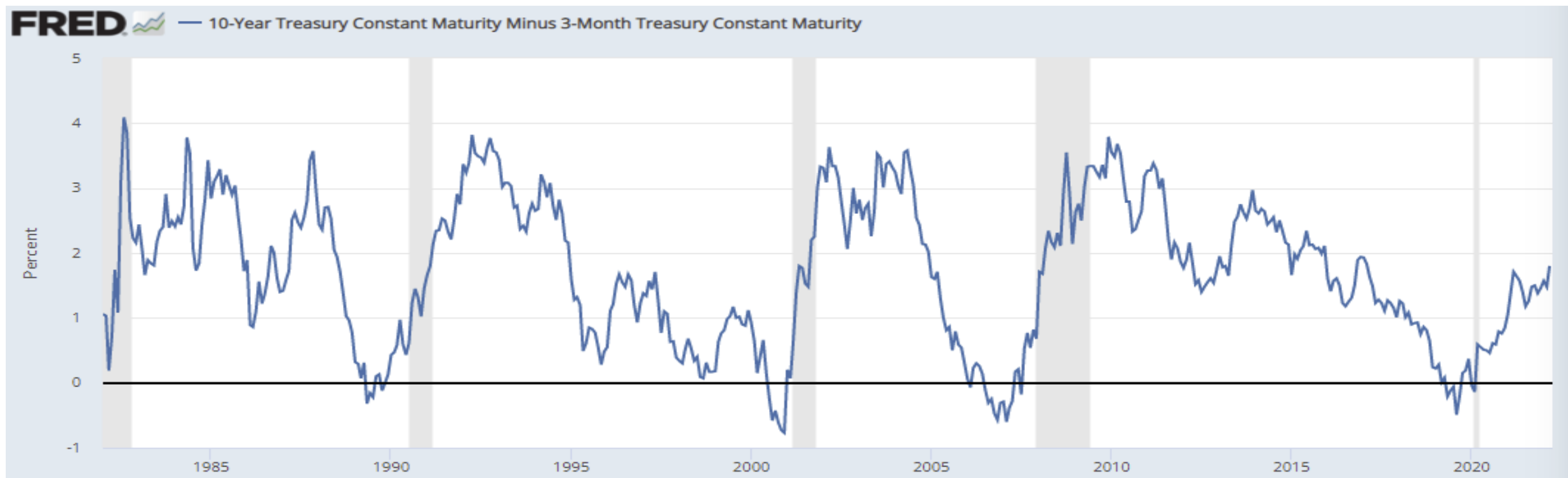
# Erratic Patterns





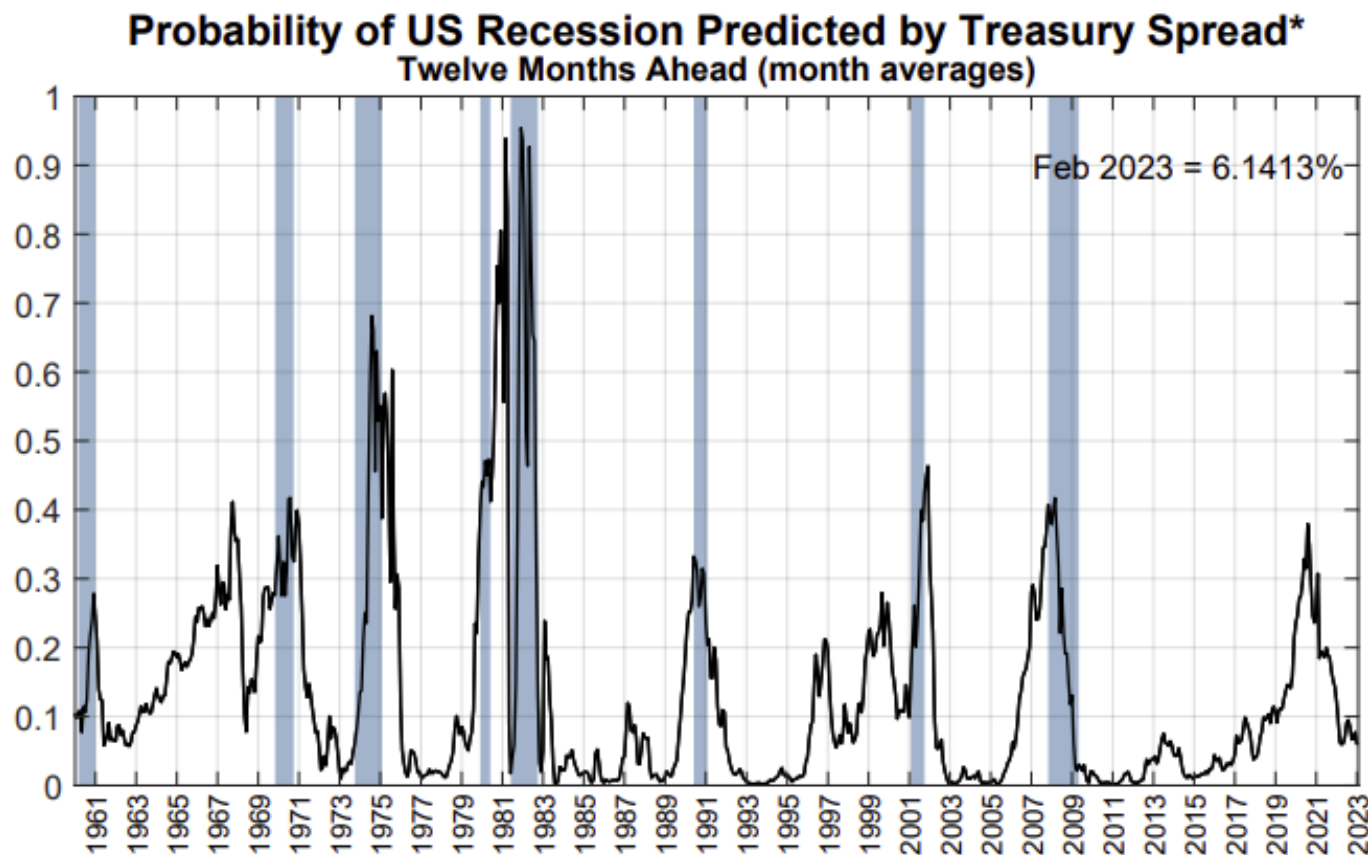
# Quick Discussion on Yield Spreads

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.



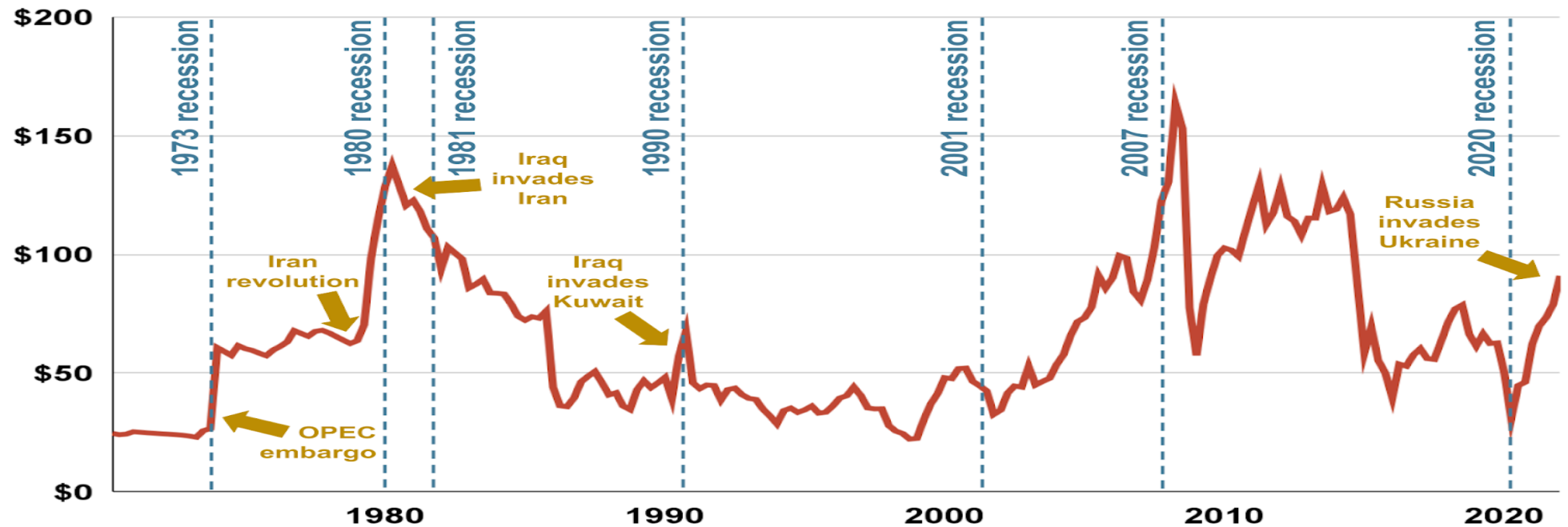
# Recession Probabilities

- 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.



## Recessions often coincide with rising oil prices

West Texas Intermediate crude oil price per barrel, 2022 dollars



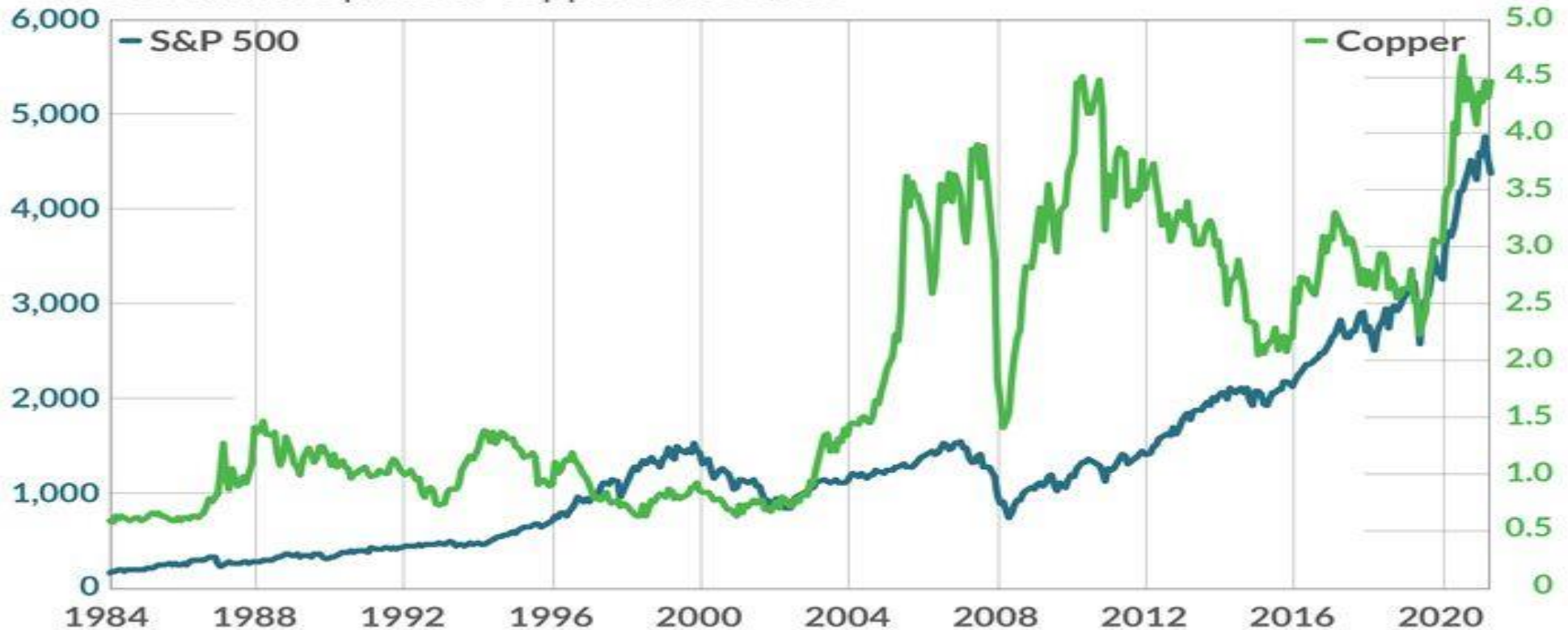
Sources: Energy Information Administration, Bureau of Labor Statistics, James Hamilton

 FULL STACK ECONOMICS

# Indicators Not Always Accurate

## What correlation?

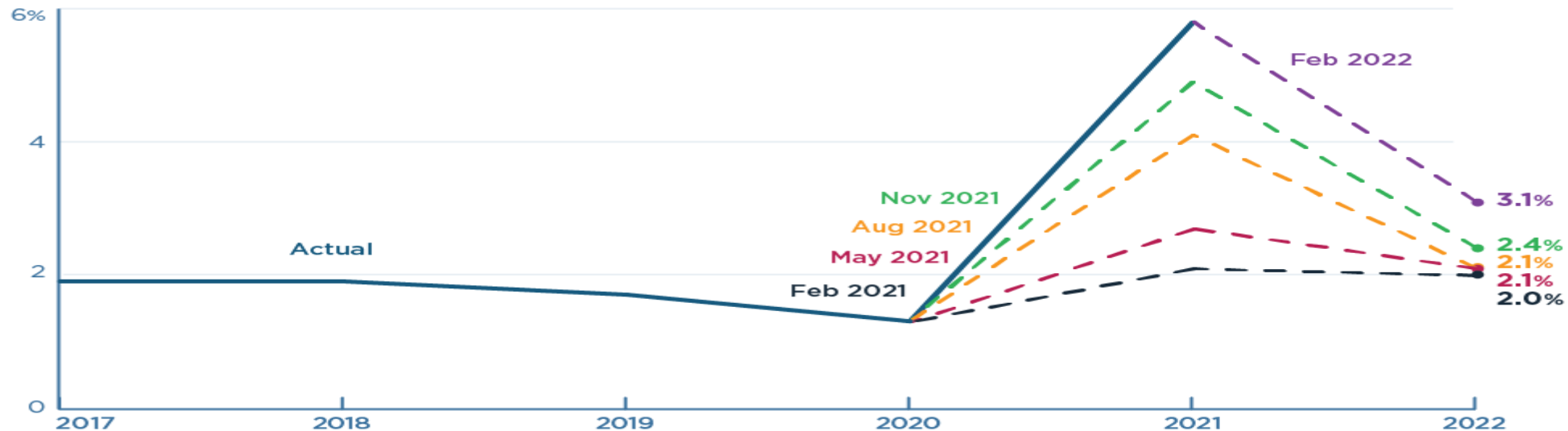
S&P 500 and the price of copper since 1984



Source: FactSet, Hulbert Ratings

## Forecasters underestimated US inflation in 2021 and are now revising 2022 forecasts up

Projected and actual percent change in Q4/Q4 inflation by forecast month



#PIIECharts

Learn more at [piie.com/research/piie-charts](https://piie.com/research/piie-charts)



**Note:** Data refer to personal consumption expenditures inflation.

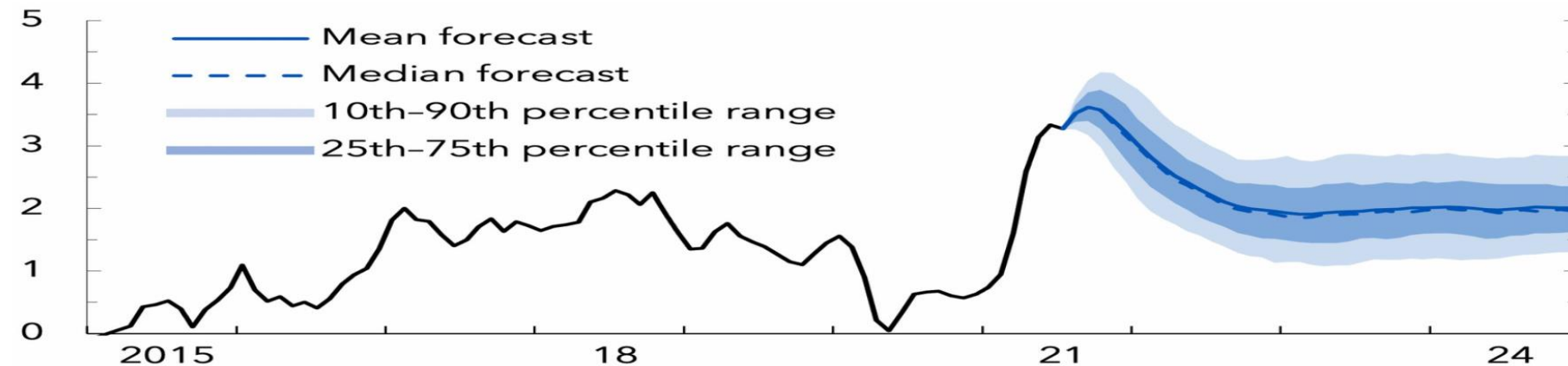
**Source:** Karen Dynan's blog post, "What is needed to tame US inflation?"



# 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)



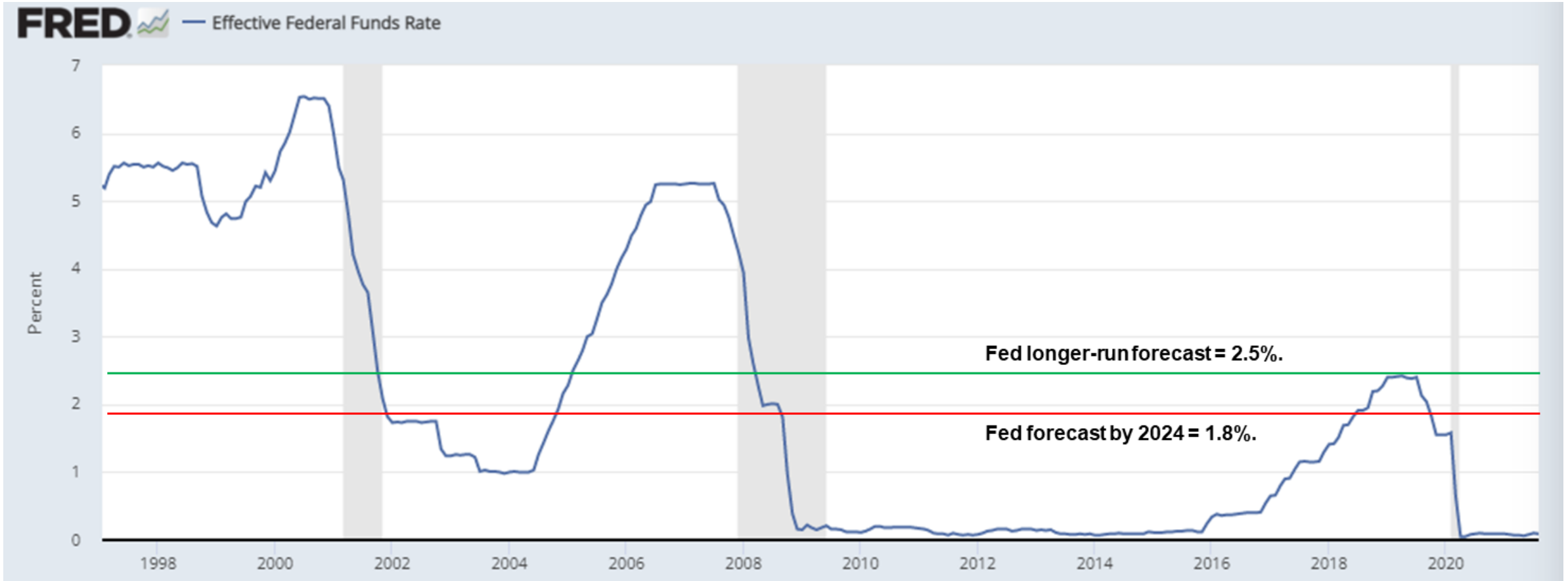
Sources: Consensus Economics; Haver Analytics; IMF, CPI database; and IMF staff calculations.

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.

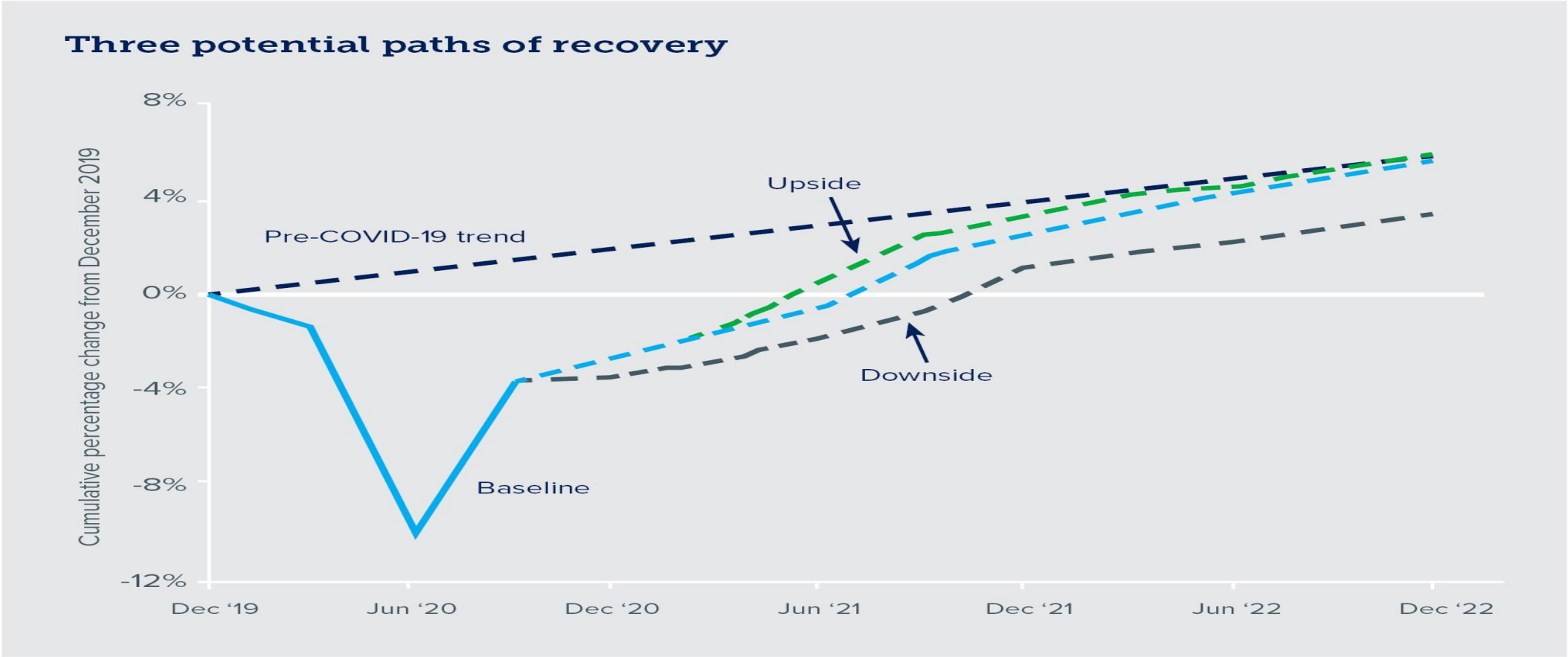
**IMF**

# Could Interest Rates Affect Economy? Not Likely.

- There are just no forecasts showing interest rates returning to anything that looks historically high...
- Rates are expected to remain accommodative.



# Recovery Year? Maybe Later!



Source: The Conference Board, Vanguard, and Refinitiv

# Macroeconomic Outlook Summary

## THE CONFERENCE BOARD US ECONOMIC OUTLOOK, 2020-2021-2022-2023

Percentage Change, Seasonally Adjusted Annual Rates

	2022				2019*	2020*	2021*	2022	2023
	I	II	III	IV	ANNUAL	ANNUAL	ANNUAL	ANNUAL	ANNUAL
	Q	Q	Q	Q					
Real GDP	1.7	1.3	1.7	2.2	2.3	-3.4	5.7	3.0	2.3
Real Disposable Income	0.5	0.3	1.0	1.4	2.3	6.2	2.2	-3.4	1.7
Real Consumer Spending	2.0	1.4	0.9	1.6	2.2	-3.8	7.9	2.5	1.7
Residential Investment	1.0	0.0	0.5	1.0	-0.9	6.8	9.0	-1.2	1.0
Nonresidential investment	5.9	3.4	3.8	4.0	4.3	-5.3	7.3	4.2	4.0
Inventory Change (bln chn '12\$)	120.0	75.0	60.0	45.0	75.0	-42.0	-38.0	75.0	35.0
Total Gov't Spending	3.0	3.0	3.8	4.1	2.2	2.5	0.5	1.5	4.2
Exports	6.6	4.0	3.7	3.7	-0.1	-13.6	4.6	7.0	4.0
Imports	4.5	1.6	1.5	2.0	1.1	-8.9	14.0	5.9	3.0
Unemployment Rate (%)	3.9	3.7	3.6	3.4	3.7	8.1	5.4	3.6	3.1
PCE Inflation (%Y/Y)	6.0	6.6	6.3	4.2	1.5	1.2	3.9	5.8	3.1
Core PCE Inflation (%Y/Y)	5.2	5.9	5.1	4.4	1.7	1.4	3.3	5.2	3.1

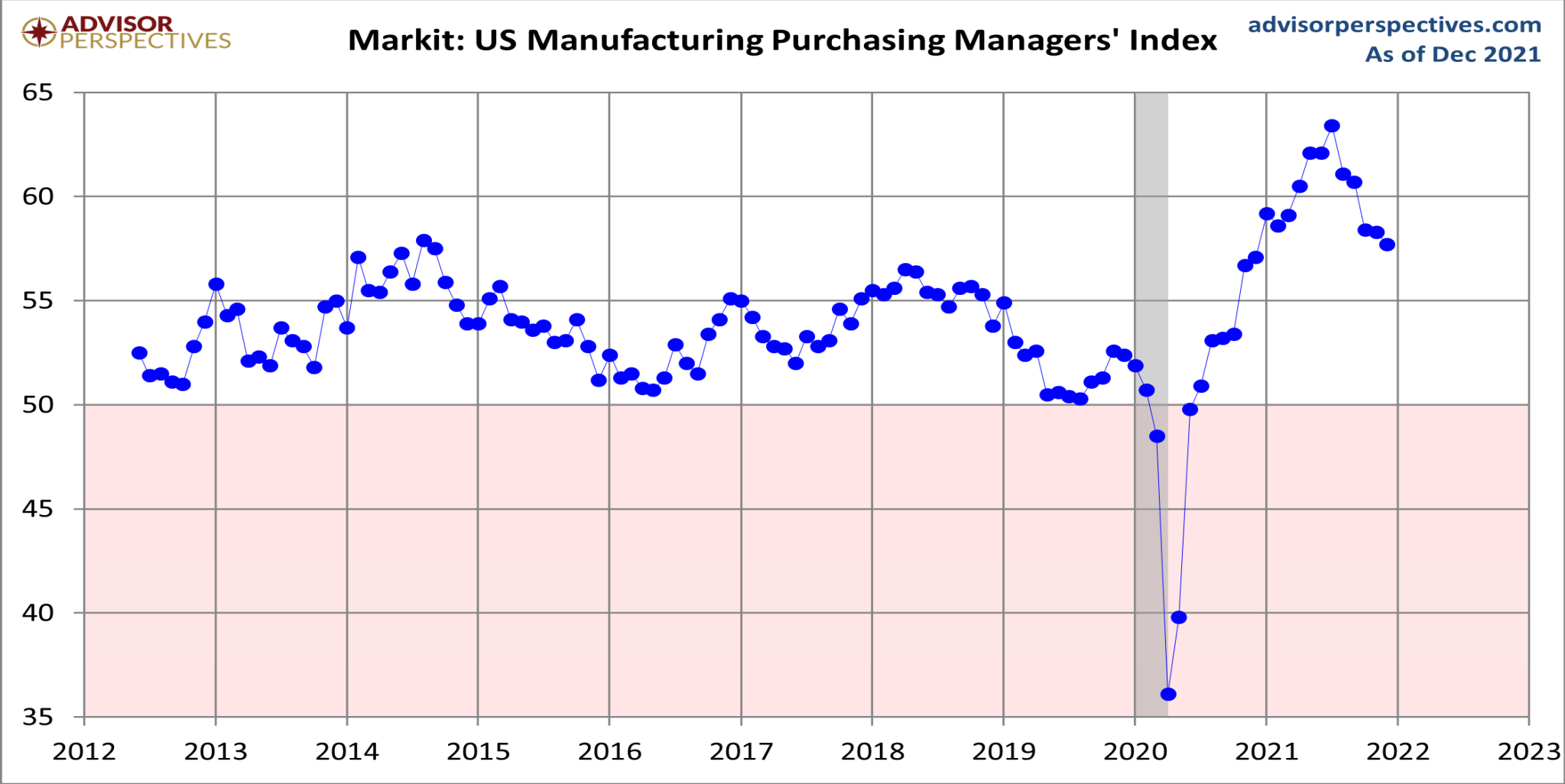
# Demand: Global Manufacturing Activity

- All but four markets still expanding. Only contracting markets were Mexico, Russia, Hong Kong, and Brazil.

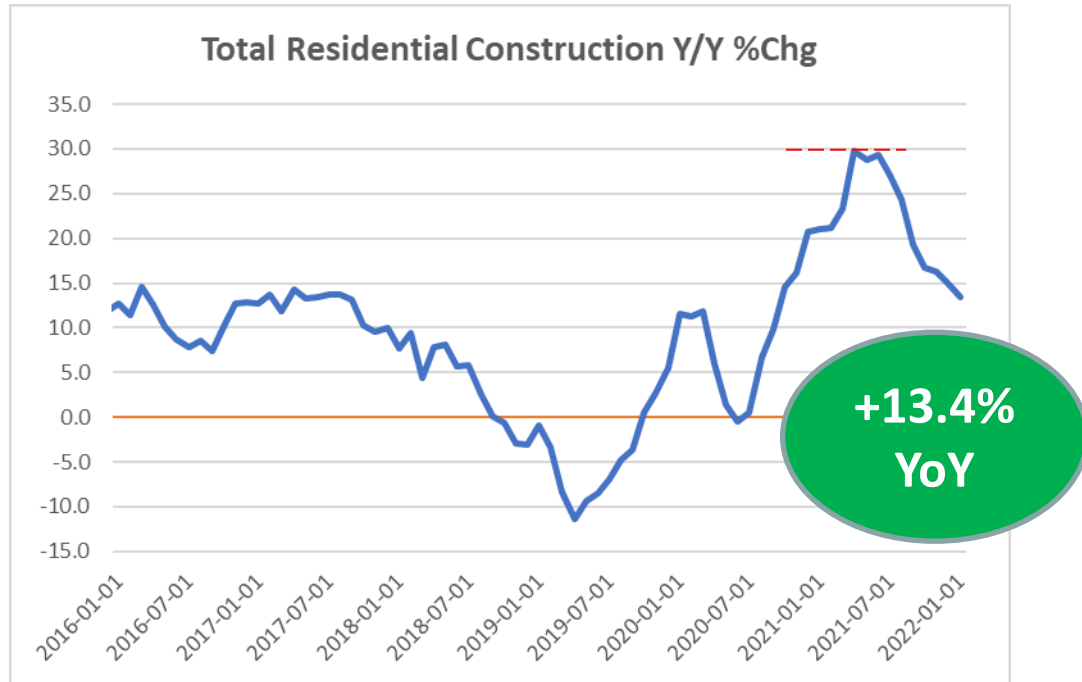
Country	Current Month	Latest Month Manuf. PMI	Prior Month Manuf. PMI	M/M Change	Current Month	Latest Month Services PMI	Prior Month Services PMI	M/M Change
Global PMI	Feb	53.6	53.2	0.4	Feb	53.9	51.0	2.9
Eurozone PMI	Feb	58.2	58.7	-0.5	Feb	55.5	51.1	4.4
US	Feb	57.3	55.5	1.8	Feb	56.5	51.2	5.3
China	Feb	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

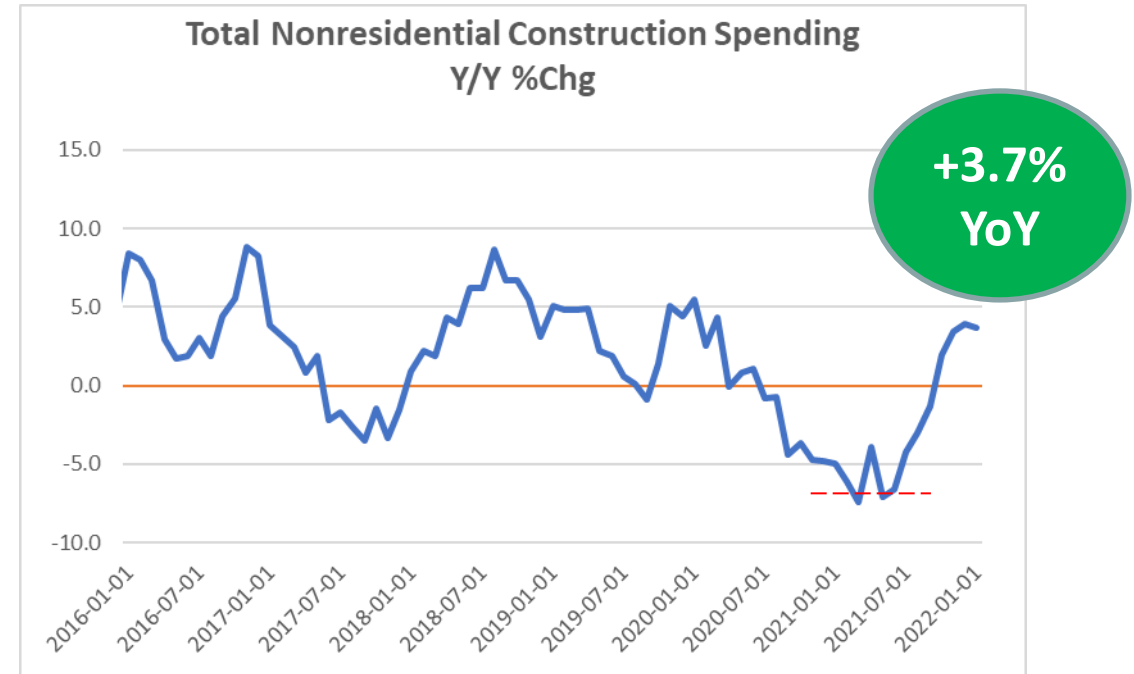


# Demand: Construction Will Accelerate After Good Performance in '21



## 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

# Demand: Construction Growth is a Double-Edged Sword

Type of Construction:	Annualized Construction Spending (Millions of Dollars)			Percent change Dec 2021 from -	
	Dec 2021	Nov 2021	Dec 2020	Nov 2021	Dec 2020
<b>Total Construction</b>	1,639,864	1,636,525	1,504,188	0.2	9.0
Residential	819,135	810,106	713,995	1.1	14.7
Nonresidential	820,729	826,419	790,192	-0.7	3.9
Manufacturing	86,414	88,062	66,229	-1.9	30.5
Commercial	94,808	94,898	81,144	-0.1	16.8
Water supply	19,206	19,359	17,778	-0.8	8.0
Power	115,026	114,957	106,826	0.1	7.7
Health care	49,445	50,158	46,263	-1.4	6.9
Office	83,827	83,484	79,991	0.4	4.8
Sew age and waste disposal	26,843	27,930	26,440	-3.9	1.5
Highway and street	104,257	103,925	102,812	0.3	1.4
Amusement and recreation	25,999	25,825	25,762	0.7	0.9
Communication	21,962	22,047	21,937	-0.4	0.1
Conservation and development	7,921	8,031	7,969	-1.4	-0.6
Transportation	55,976	57,261	58,985	-2.2	-5.1
Educational	97,927	98,947	105,219	-1.0	-6.9
Religious	3,122	3,161	3,379	-1.2	-7.6
Lodging	17,979	17,652	23,984	1.9	-25.0
Public safety	10,017	10,723	15,475	-6.6	-35.3

**Manufacturing Near  
all-time highs;  
includes reshoring  
and nearshoring of  
manufacturing  
activity.**

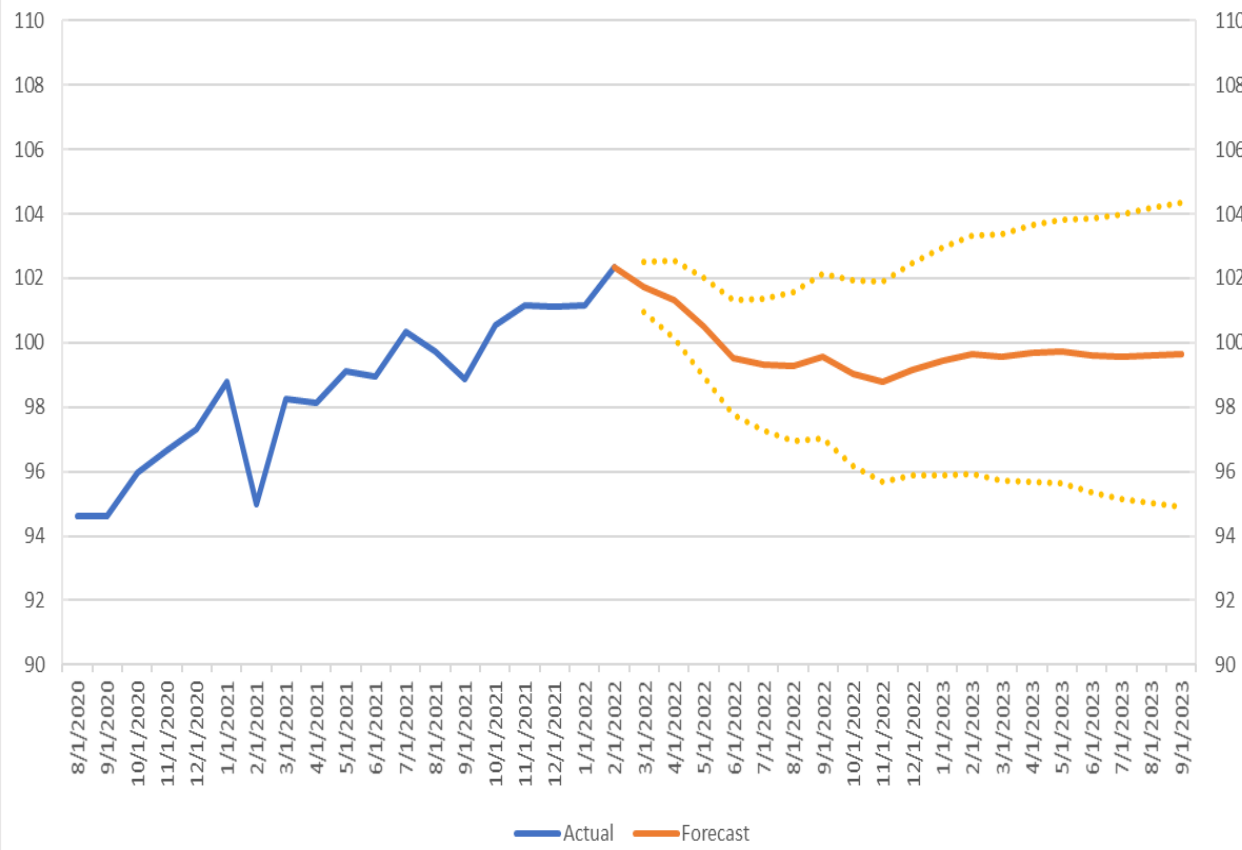
# Job Openings Still Near All-Time Highs

- 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.

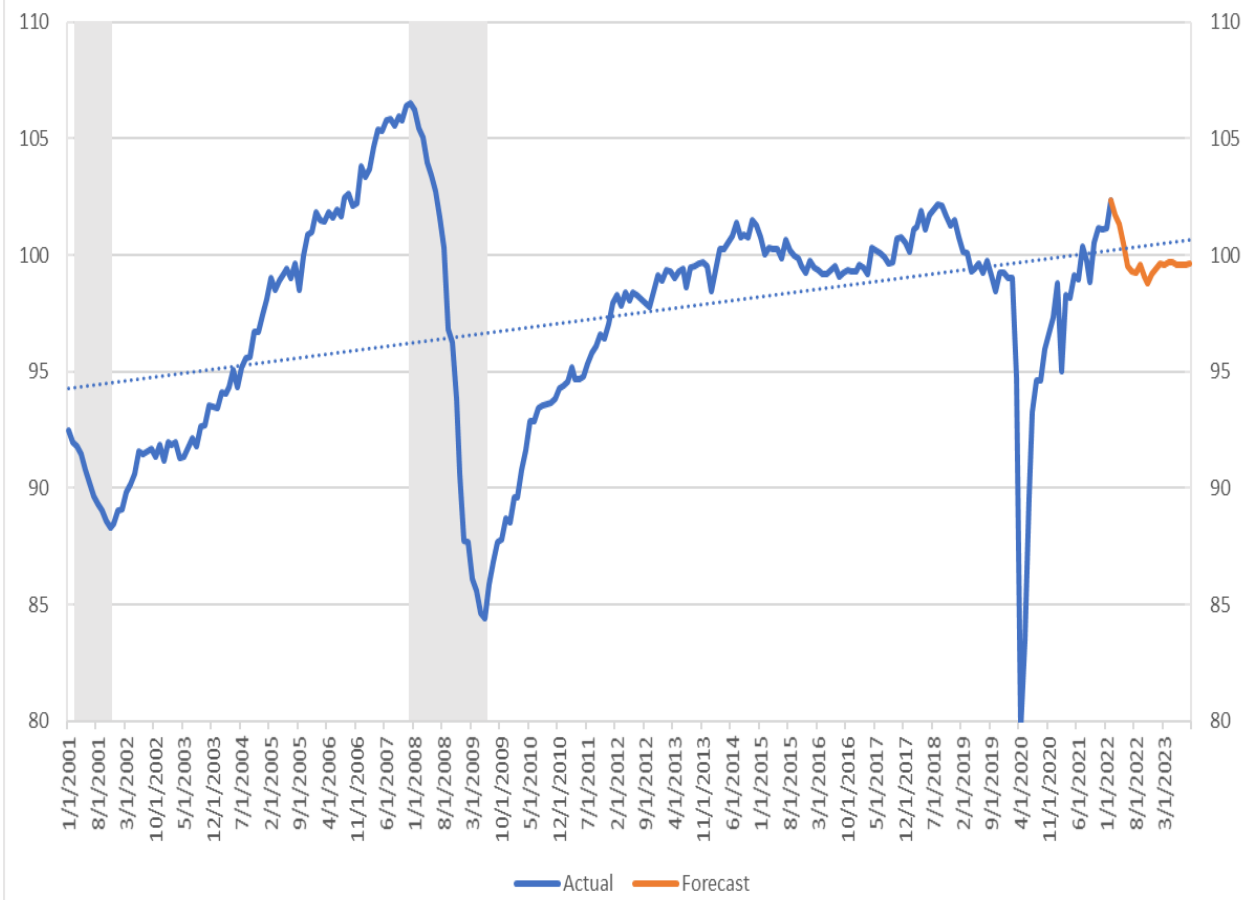
Levels by Industry (in thousands)	Job openings			%Chg. Y/Y
	Dec.	Nov.	Dec.	
	2020	2021	2021	
Total	6,752	10,775	10,925	61.8%
Total private	6,094	9,753	9,882	62.2%
Mining and logging	21	41	46	119.0%
Construction	267	358	337	26.2%
Manufacturing	479	853	856	78.7%
Trade, transportation, and utilities	1,215	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%

# Forecast: Industrial Production for Durable Manufacturing

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



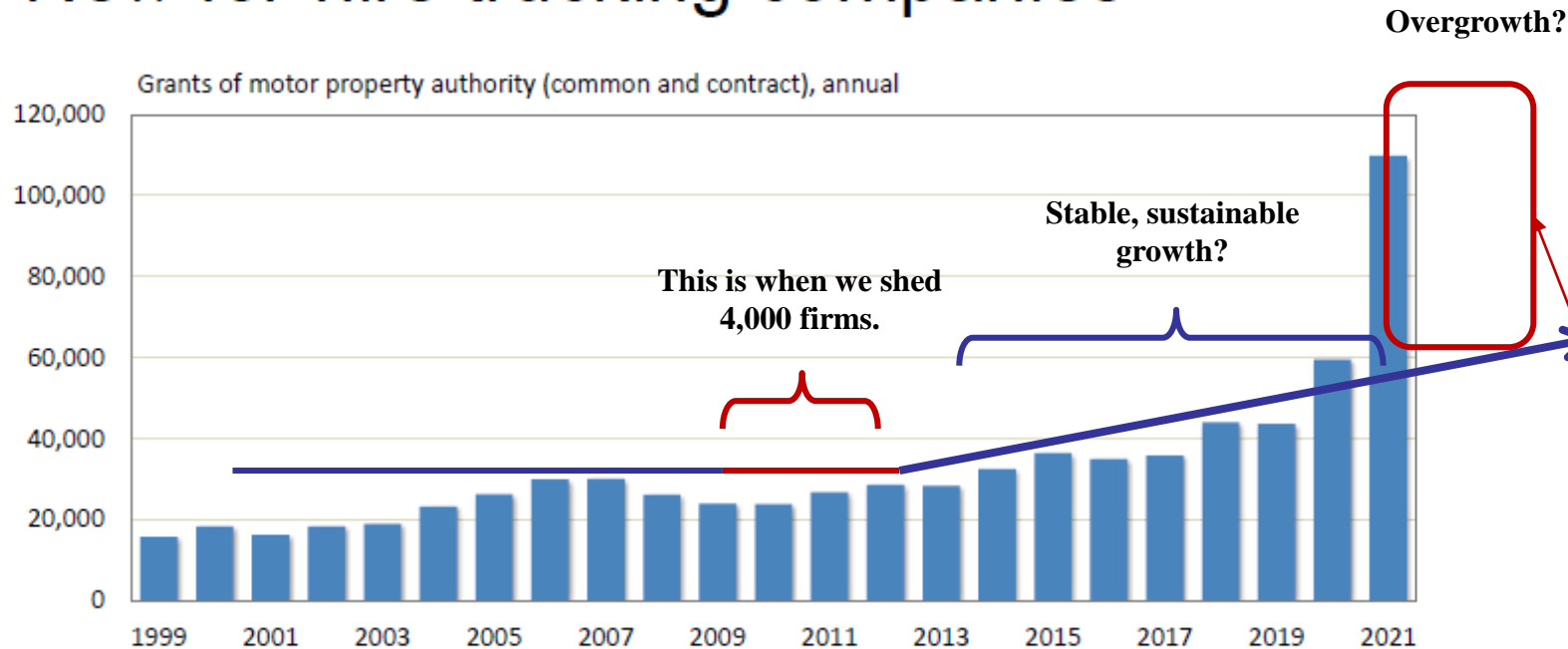
Industrial Production: Manufacturing (IPMAN)





# Record Diesel Prices Can Lead to TL Bankruptcies

## New for-hire trucking companies

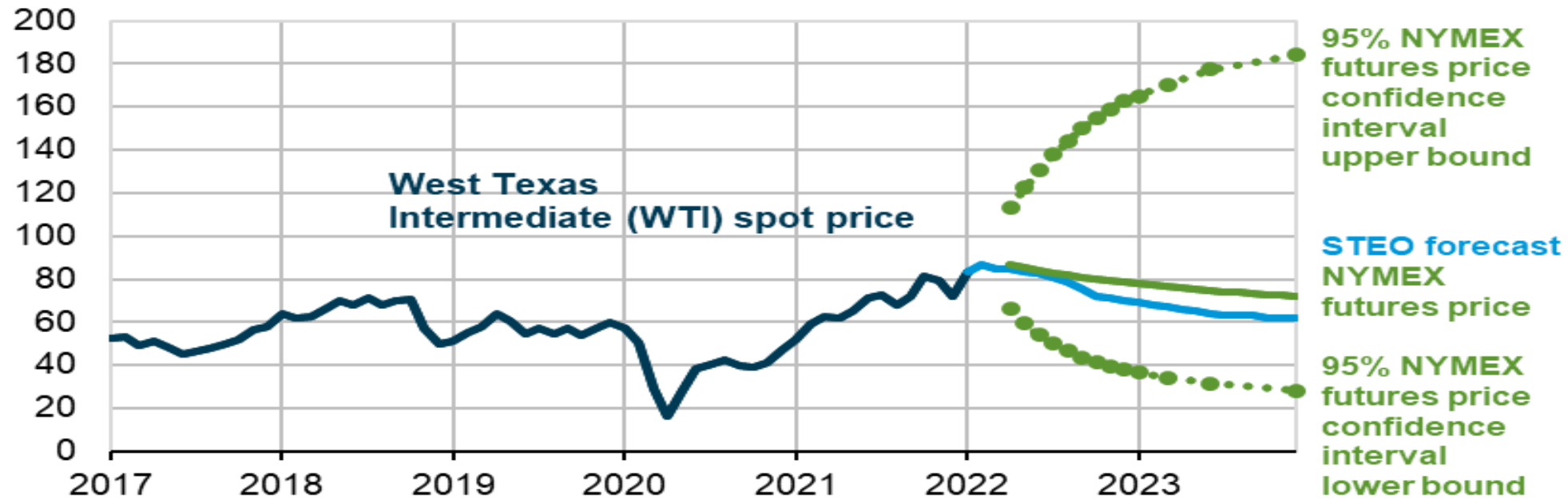


These **68,000 new additions** to the TL sector over the past 24 months are probably ‘at risk’.

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.

# It ALL Depends on Russia

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



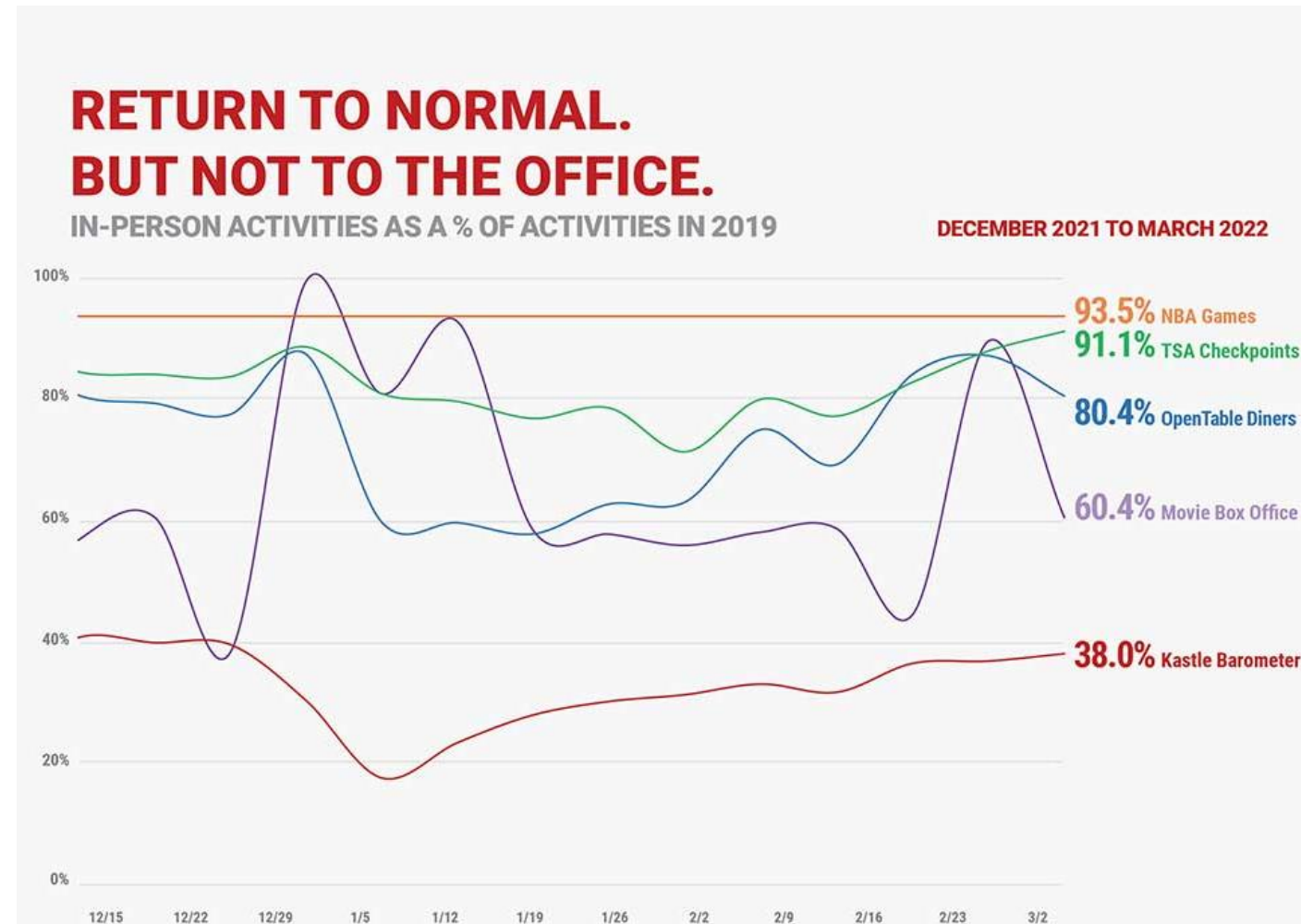
Note: Confidence interval derived from options market information for the five trading days ending Feb 3, 2022. Intervals not calculated for months with sparse trading in near-the-money options contracts.

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



# Back-to-the-Office Slow to recover

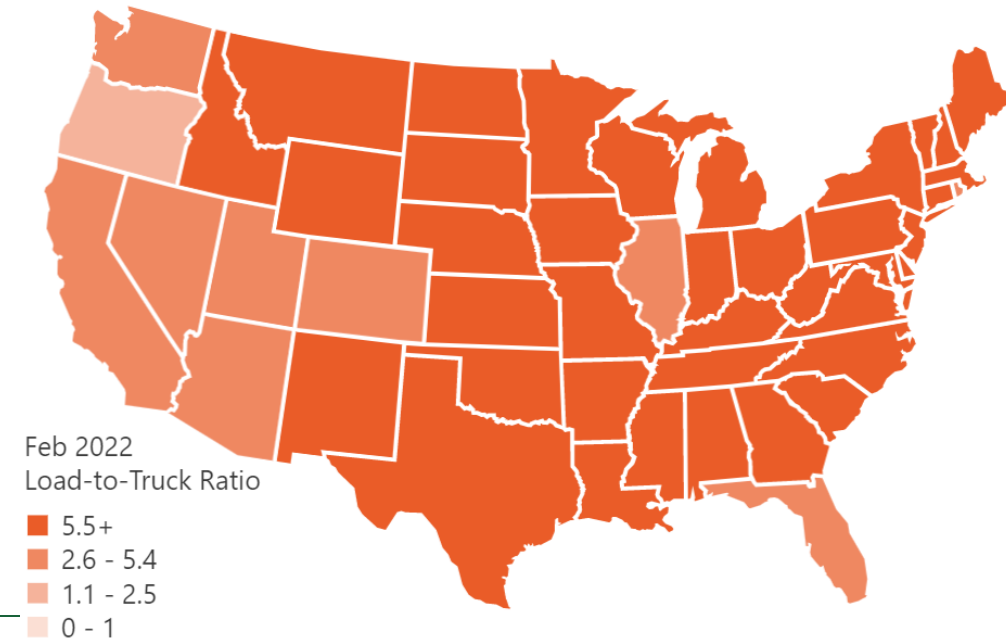
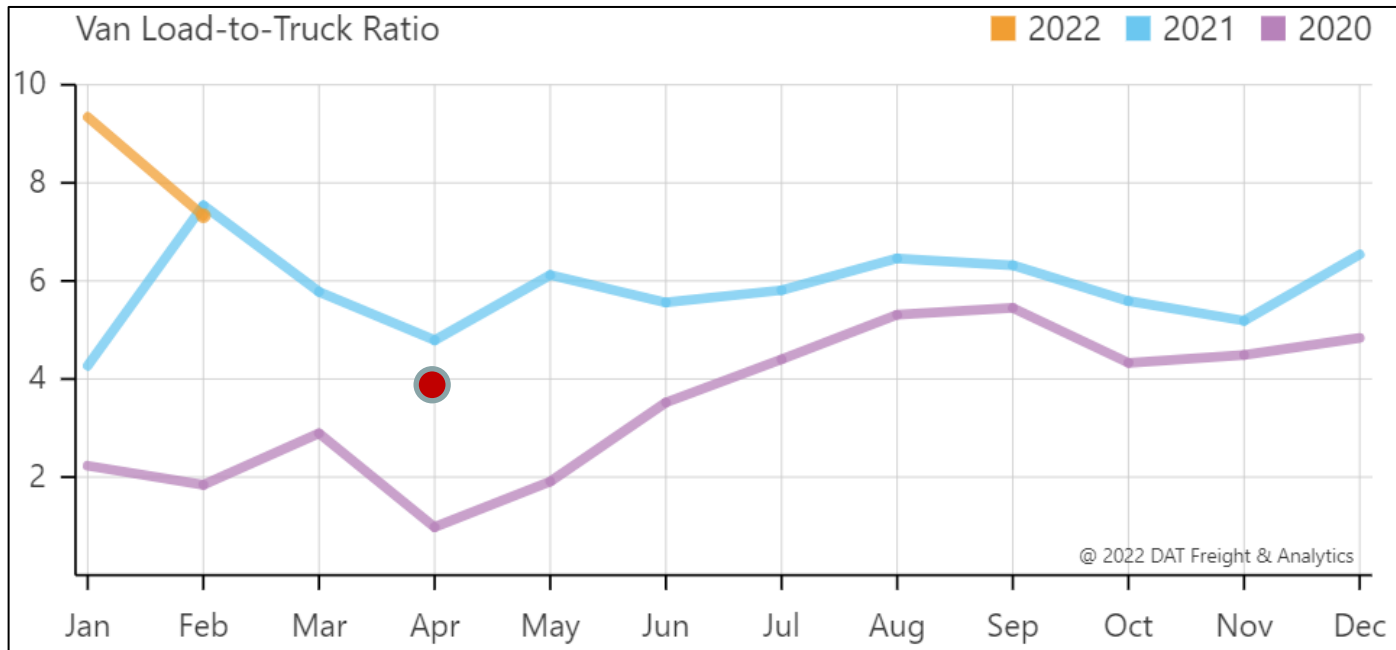
- Light duty vehicles account for 92% of all gasoline consumption in the United States (similar for Canada).
- Companies have not made a decision to delay return to office (the back to office barometer has jumped 8 percentage points in 30 days) because of higher fuel prices. But they could.



# Pricing: Spot Market Ridiculous in January

- The load-to-truck ratio has decelerated recently and was at 3.85 nationally at the end of March.
- Inbound freight volumes continue to appear to be strong.

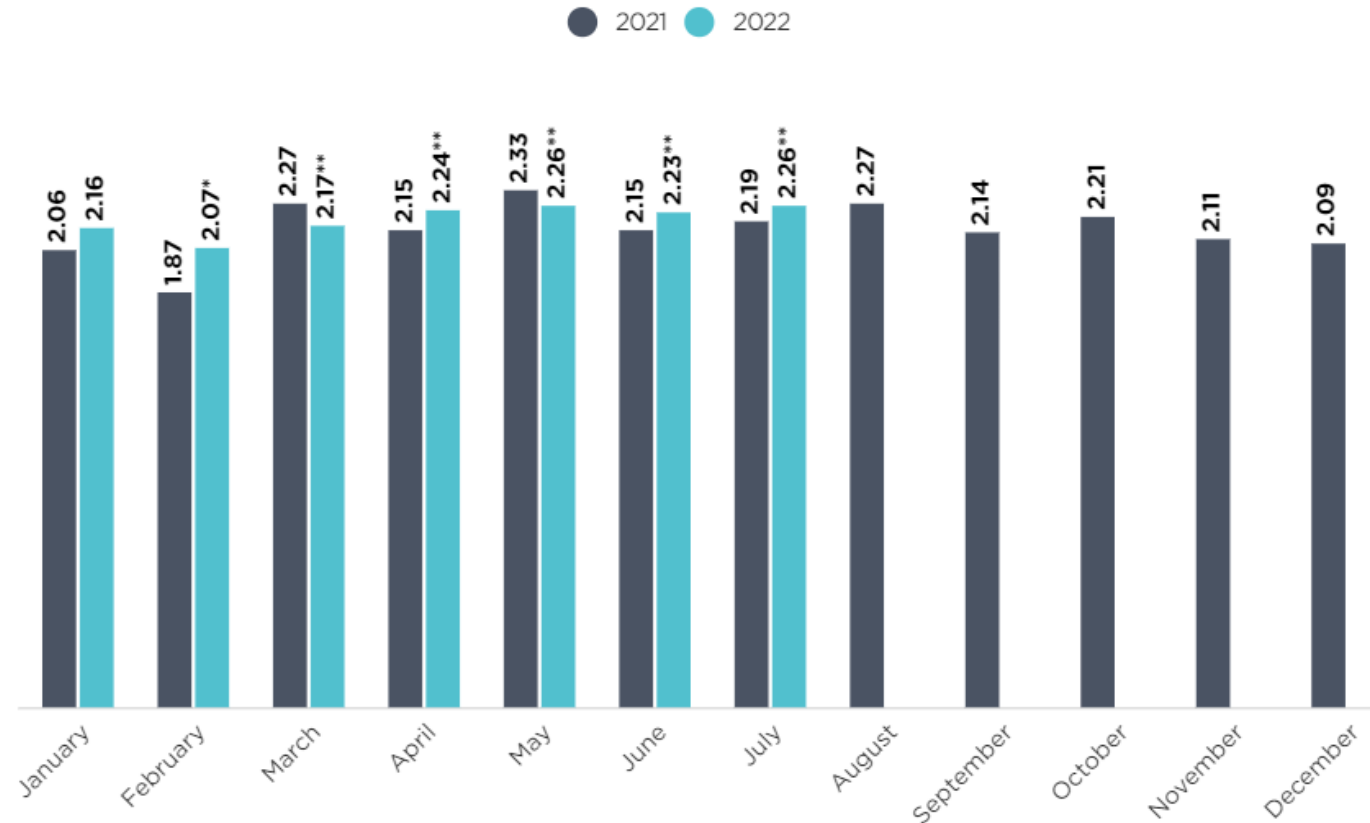
INDUSTRY TRENDS	MONTH	YEAR
	Feb 2022 vs. Jan 2022	Feb 2022 vs. Feb 2021
Spot Load Posts	-12.8%	24.1%
Spot Truck Posts	3.9%	12.9%
Van Load-To-Truck	-21.9%	-2.7%
<b>Van Spot Rates</b>	<b>-0.4%</b>	<b>28.5%</b>
Flatbed Load-To-Truck	-3.5%	34.8%
Flatbed Spot Rates	23.6%	23.6%
Reefer Load-To-Truck	-13.6%	-13.6%
Reefer Spot Rates	30.7%	30.7%
<b>Fuel Prices</b>	<b>62.0%</b>	<b>62.0%</b>



# Ports Have Largely Recovered for Now – Inbound Volumes will Recover

- The forecast for inbound TEU's is still strong with more than 2 million per month expected to flow into the US.
- The bottom line here is that expected freight flows are not currently expected to be any weaker than last years – which was a record setting year.

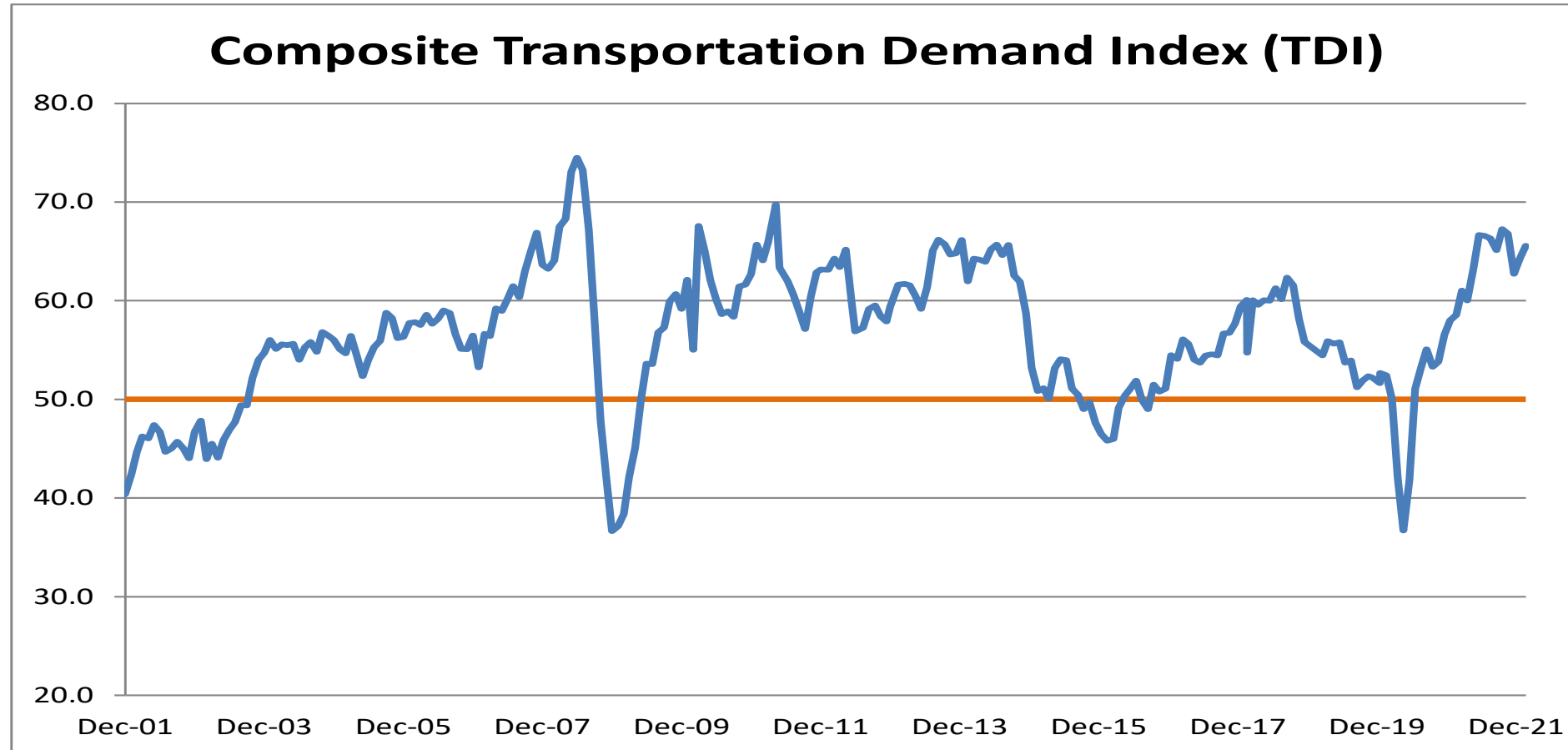
## Monthly retail imports 2021-2022 (TEU-Millions)



Source: NRF/Hackett Associates Global Port Tracker \*Estimated \*\*Forecast



# Improvement Overall



# You Just Know You Want More!

- **Flagship**
  - Published every Monday, Wednesday and Friday
  - Domestic and global economic coverage
  - Free trial for one month. \$7 a month subscription
- **Strategic Intelligence System**
  - Focus on manufacturing
  - Published monthly
  - Free two month trial - \$74 per month

# FINISHING UP

- This webinar has been recorded. A link to the webinar replay and the presentation deck will be included in a follow-up email to you tomorrow.
- Visit [www.wearekms.com/events](http://www.wearekms.com/events) for upcoming events and webinars.
  - LEAN to Improve Webinar Series – starts 4.21.22 at 2:30pm
  - Q3'22 Economic Update Webinar – Scheduled for 8.3.22