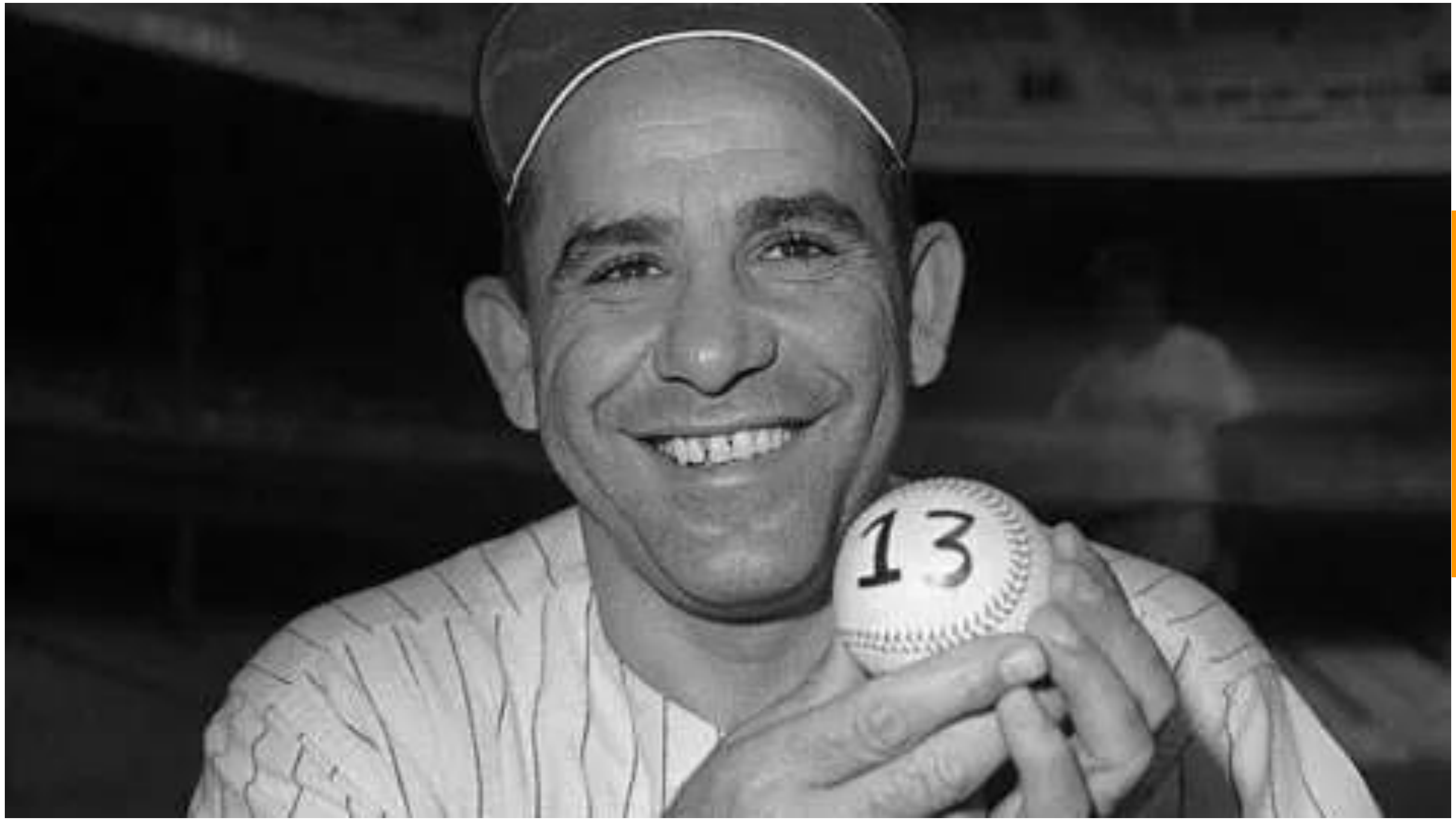
Looking Ahead: Market Shapers

February 2022

Keith Prather, Managing Director, Armada Corporate Intelligence

It's a Yogi Berra Kind of Market.



"It's tough to make predictions, especially about the future."

South Dakota GDP by Industry (Cumulative YTD)

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Sector	2019:Q3	2020:Q3	2021:Q3	Q/Q	Y/Y	Vs. 2019
All industry total	46,630.3	46,920.6	48,943.9	-0.3%	4.3%	5.0%
Private industries	41,506.2	41,750.7	43,693.2	-0.4%	4.7%	5.3%
Mining, quarrying, and **oil and gas** extraction	140.9	183.5	241.4	-1.8%	31.6%	71.3%
Waste management	748.9	743.6	877.9	3.4%	18.1%	17.2%
Arts, entertainment, and recreation	279.5	224.4	262.2	2.3%	16.8%	-6.2%
Agriculture, forestry, fishing and hunting	4,782.8	5,542.4	6,303.4	-4.0%	13.7%	31.8%
Professional, scientific, and technical services	1,623.4	1,628.9	1,785.4	2.1%	9.6%	10.0%
Accommodation and food services	1,296.0	985.1	1,076.8	1.9%	9.3%	-16.9%
Finance and insurance	6,530.8	6,630.9	7,189.7	2.2%	8.4%	10.1%
Durable goods manufacturing	2,617.1	2,638.0	2,860.2	-0.9%	8.4%	9.3%
Manufacturing	3,870.2	3,981.2	4,270.2	0.4%	7.3%	10.3%
Nondurable goods manufacturing	1,251.0	1,342.6	1,407.4	2.8%	4.8%	12.5%
Health care and social assistance	4,841.2	4,915.6	5,124.3	0.5%	4.2%	5.8%
Management of companies and enterprises	782.2	774.8	801.4	1.7%	3.4%	2.5%
Information	1,610.0	1,606.7	1,644.6	1.2%	2.4%	2.1%
Real estate and rental and leasing	4,032.3	4,021.4	4,074.7	-0.4%	1.3%	1.1%
Construction	1,596.7	1,537.7	1,555.4	-4.4%	1.2%	-2.6%
Educational services	323.4	275.4	274.3	-1.3%	-0.4%	-15.2%
Transportation and warehousing	1,002.9	942.2	930.2	2.7%	-1.3%	-7.2%
Wholesale trade	3,102.9	3,198.1	3,131.8	-2.1%	-2.1%	0.9%
Retail trade	3,434.6	3,375.1	3,192.9	-4.7%	-5.4%	-7.0%
Utilities	772.4	823.4	761.8	-3.5%	-7.5%	-1.4%
Government and government enterprises	5,113.4	5,160.2	5,247.8	1.0%	1.7%	2.6%
Federal civilian	933.8	973.6	984.2	0.2%	1.1%	5.4%
Military	488.5	499.4	475.6	0.2%	-4.8%	-2.6%
State and local	3,700.0	3,698.7	3,797.2	1.3%	2.7%	2.6%

From a Jobs Perspective, SD Performing Well

Data Series	December 2021 (1,000's)	December 12 Month % Change
Civilian Labor Force	470.9	
Employment	458.7	
Unemployment	12.2	
Unemployment Rate	2.6	
Total Nonfarm	435.0	0.8
Mining, Logging, and Construction	27.5	10.0
Leisure & Hospitality	44.9	7.7
Manufacturing	44.3	1.6
Government	78.2	0.9
Information	4.8	0.0
Professional & Business Services	32.4	-0.3
Trade, Transportation, and Utilities	85.4	-1.2
Education & Health Services	72.5	-2.3
Financial Activities	27.8	-2.8

SD had 71.4% more jobs open Y/Y in January according to Indeed.

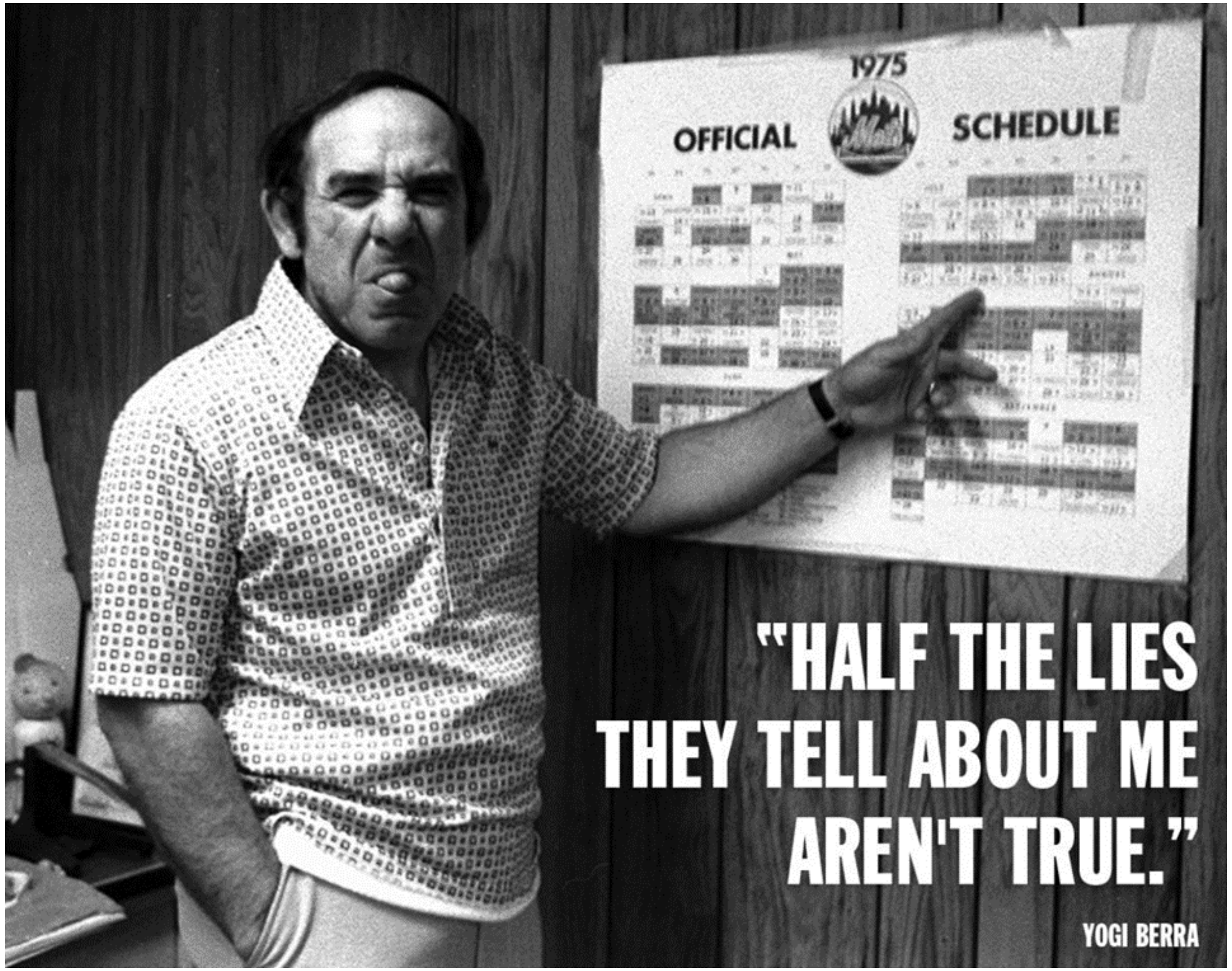
US rate 4.0%

Permits in SD near 15-year highs. Inventories of homes at 7-year lows.

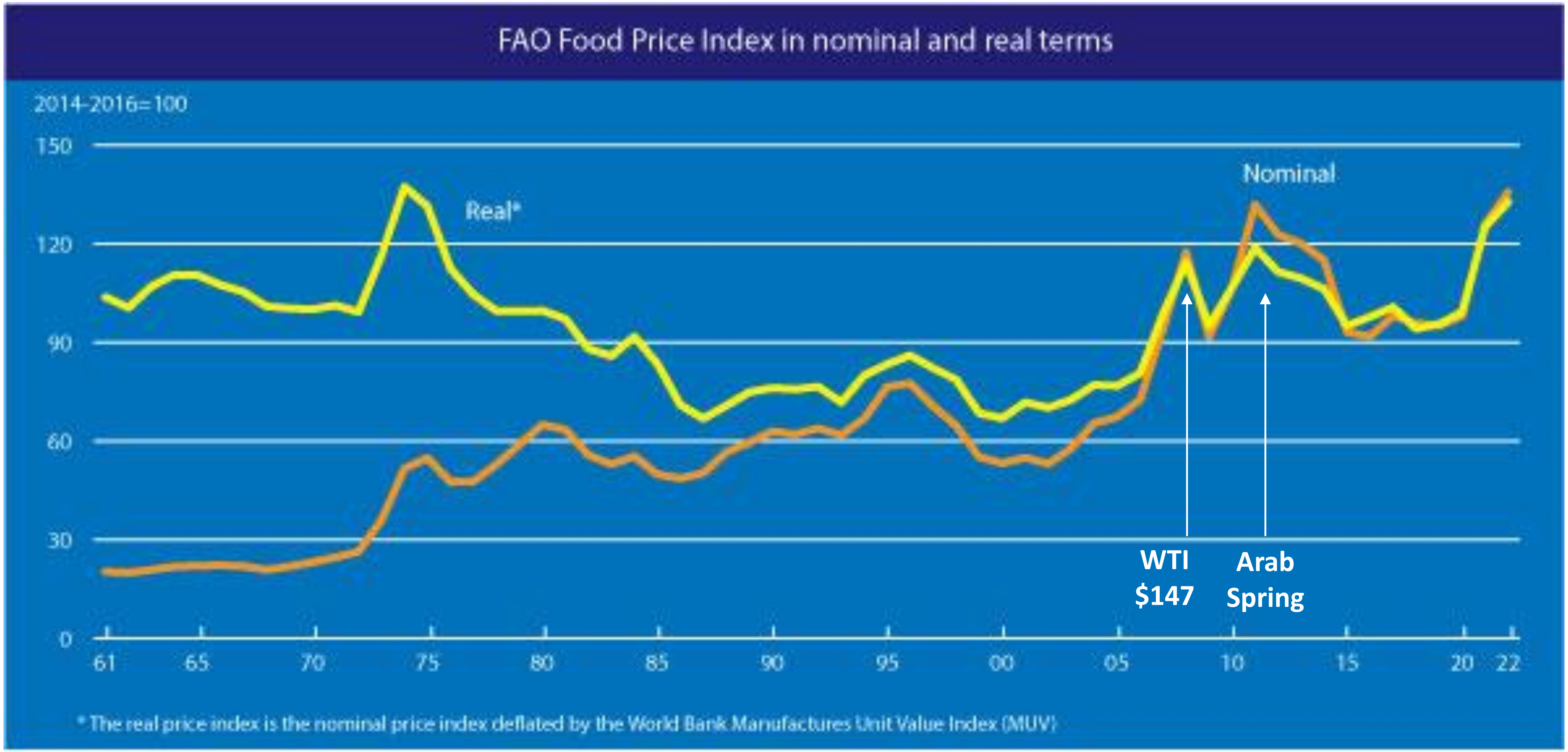
Some of the largest employment sectors slightly lower. But not a concern. Much of this is voluntary, quits.

kprather@armadaci.com

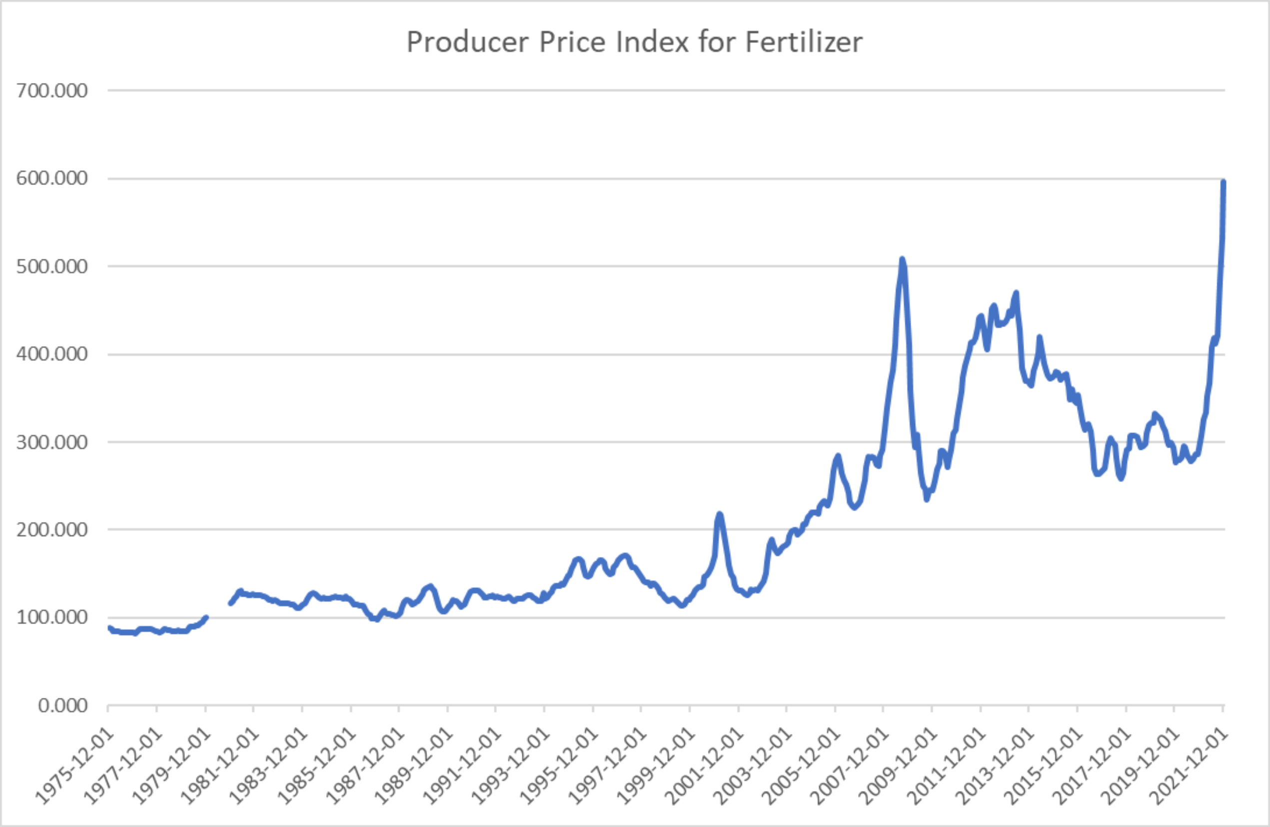
Shapers of the 2022 Economy



Cutting Right to the Chase: The Ag Situation



Farmers Facing Unprecedented Input Price Pressure – But Demand is also Surging.

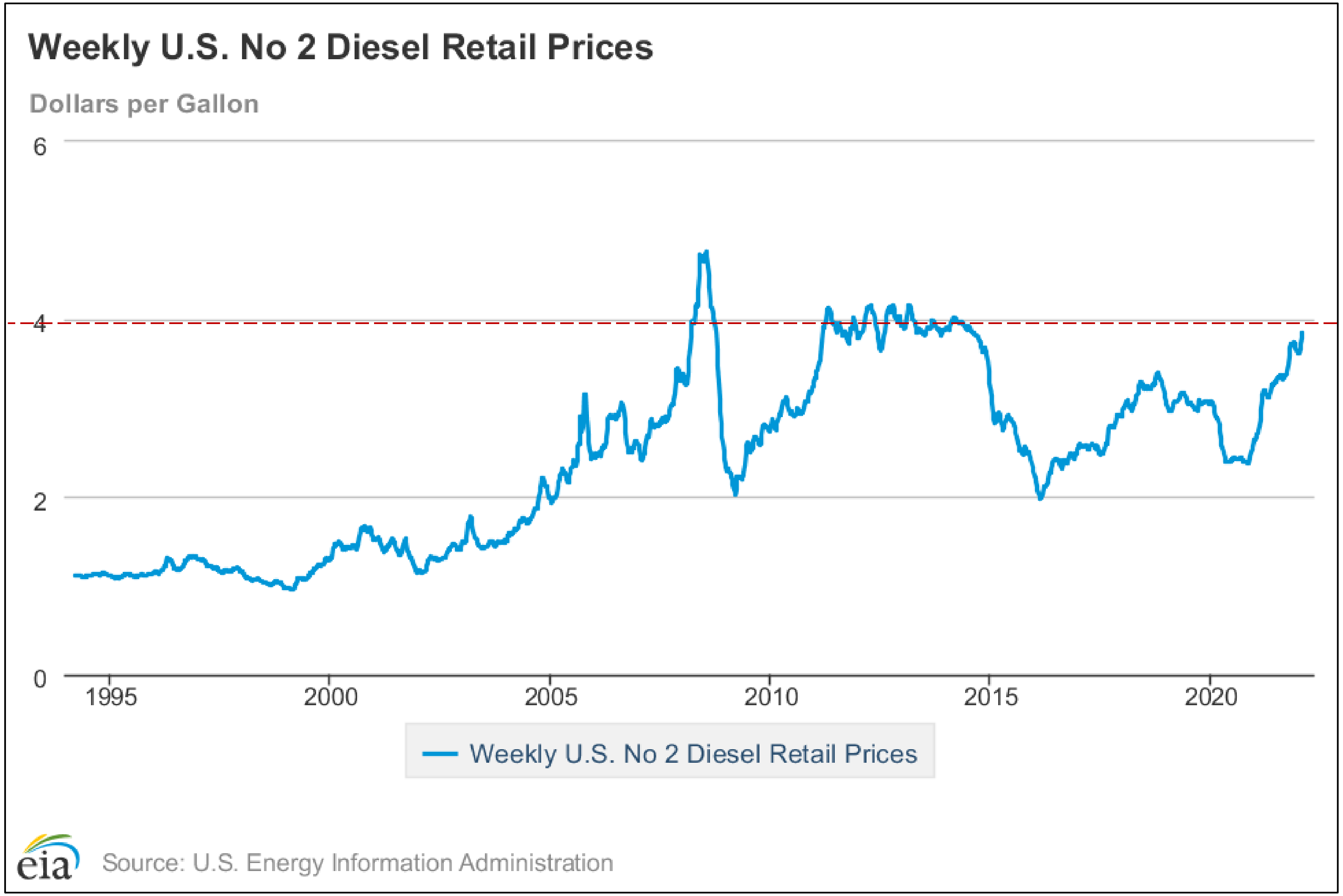


Prices Received, Prices Paid, and Ratio of Prices Received to Prices Paid Indexes 2011 Base – United States: December 2021 with Comparisons

Index Group	December 2020	November 2021	December 2021
	(percent)	(percent)	(percent)
Prices received by farmers	91.0	108.8	112.6
Prices paid by farmers	110.2	119.4	120.7
Ratio of prices received to prices paid	83	92	93

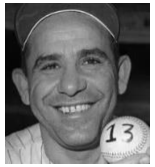
Better Y/Y, but the prices paid index in December was on top of lower prices for diesel and gasoline – which have now surged.

Diesel Prices Hitting Highs Not Seen Since 2014

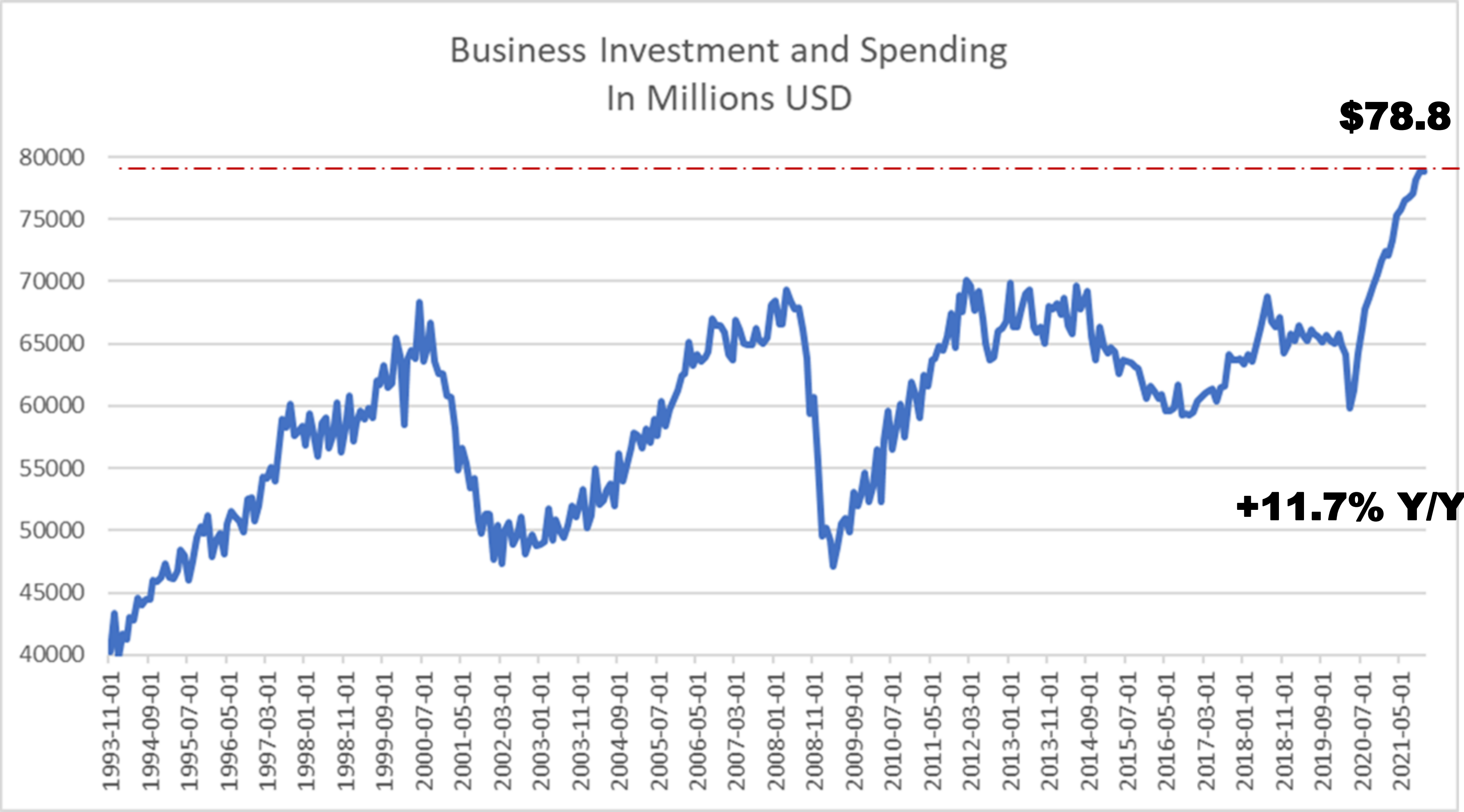


US Corporate Investment Continues to Hit Records

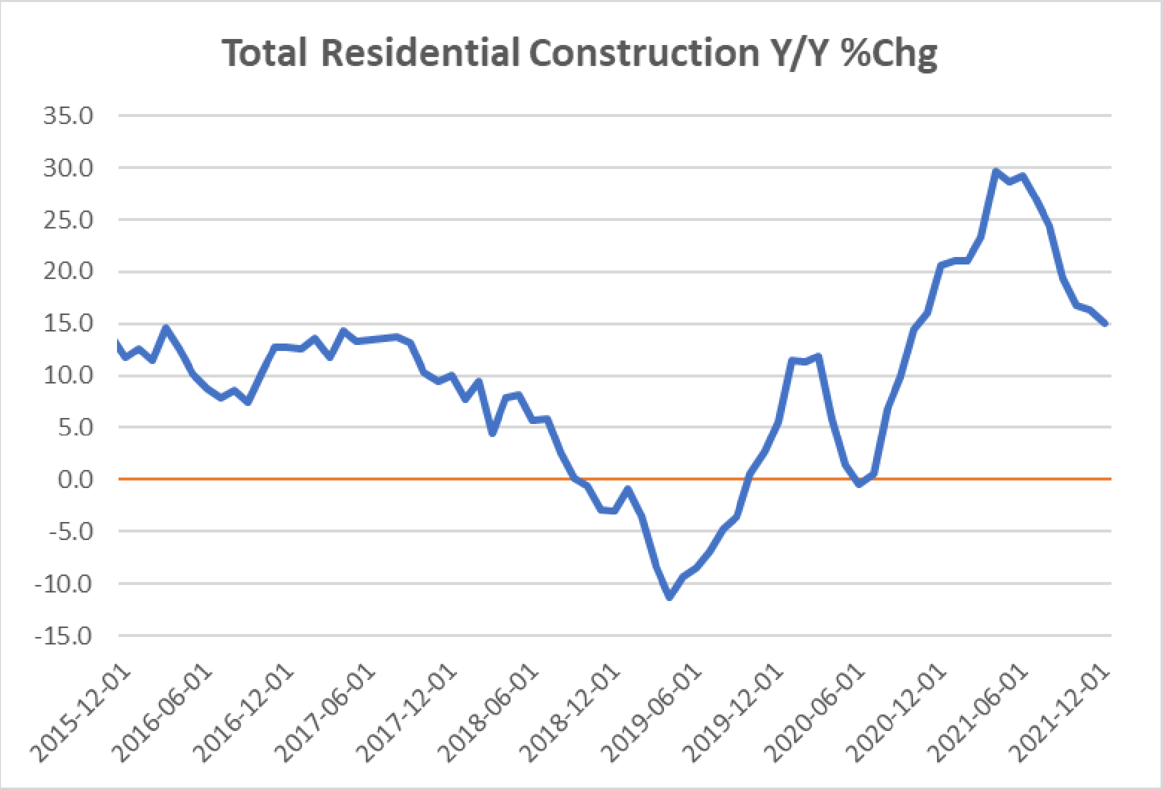
> **"I always thought that record would stand until it was broken."**

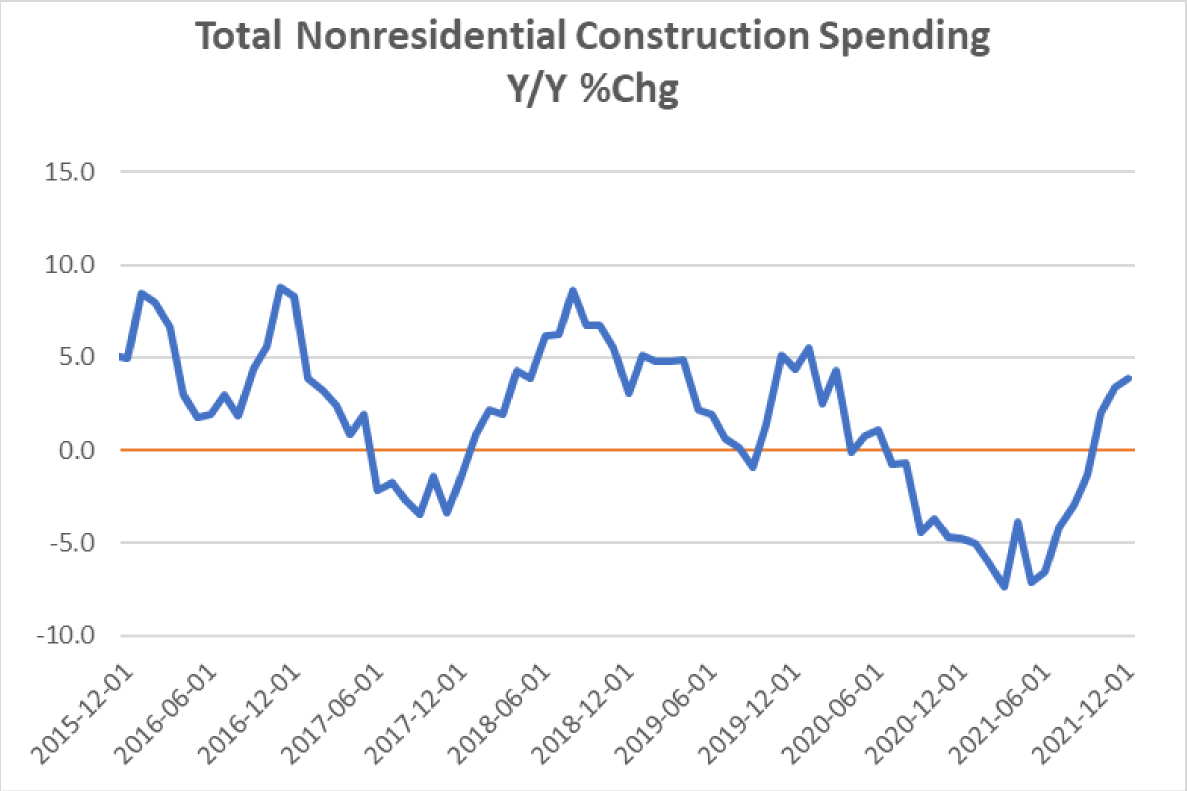


- **Strong Pent-up demand**
- **Race to get ahead of rising rates**
- **Will continue a robust growth rate in '22, slight slowing in '23 likely**
- **US Private investment driving:**
  - Manufacturing
  - Construction
  - Wholesale Trade
  - Imports



Demand: Commercial Construction Rejoins the Economy





Private Annualized Spending in $'s

2019: $550B

2021: $810B (Dec)

+15.0% YoY

Private Annualized Spending in $'s

2019: $815B

2021: $820B (Dec)

+3.9% YoY

Jan 20' peak: $885B

Demand: Construction Activity Accelerating, Will Be Strong in 2022

- **Total construction spending was 9% higher Y/Y through December.**
- **Sectors that are expected to accelerate in 2022 include:**
  - Manufacturing
  - Health care
  - Education
  - Highway and street (infra. Bill)
  - Communication (infra. Bill)
  - Amusement and recreation
  - Lodging

Type of Construction:	Annualized Construction Spending (Millions of Dollars)			Percent change Dec 2021 from -	
	Dec 2021	Nov 2021	Dec 2020	Nov 2021	Dec 2020
Total Construction	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 (1)	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 (2)	49,445	50,158	46,263	-1.4	6.9
Office	83,827	83,484	79,991	0.4	4.8
Sewage 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 (3)	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

Capacity Update: Job Openings Still Too High

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- **Job Openings came in at 10.9M in December (10.7M in the prior month), the second highest on record and exceeding unemployed (6.3M) in December.**
- **Childcare and parents unwilling to send children to after school care are the biggest factor keeping workers from returning.**
  - Surveys suggest that nearly 7 million parents have not returned to work and stay at home to care for children or elderly parents.

Levels by Industry (in thousands)	Job openings Dec. 2020	Job openings Nov. 2021	Job openings Dec. 2021	%Chg. Y/Y
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%

Demand: Infrastructure Bill +$550 Billion in Incremental Spending (front loaded over the first 5 years?)

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Earmarked Spending that could increase near term freight demand…

1. **$17B port infrastructure**
2. **$25B airports repair and maintenance**
3. **$110B roads, bridges, and major infrastructure**
4. **$40B repairs of bridges**
5. **$16B "special projects" that the White House will fund**
6. **$11B "crash mitigation" (special turn lanes to prevent pedestrian accidents)**
7. **$1B reconstruction of street grids**
8. **$39B "modernize public transit"**
9. **$66B passenger freight rail development**
10. **$65B improving nation's broadband infrastructure**
11. **$7.5B zero emission buses and ferries**
12. **$7.5B build a nationwide network of plug-in electric vehicle chargers**
13. **$65B rebuild the electric grid**
14. **$55B upgrade water infrastructure**
15. **$50B protect water systems from floods, drought, etc.**
16. **$21B clean up former land-based mining and orphaned gas well areas**

Impact:

- Expected to **boost construction spending by 7% annually for the first 5 years**.
- Overall, it's positive for the economy. Replaces some stimulus spending taking place now.
- But will **tighten labor market** for other types of businesses, especially CDL drivers.
- Will also push **raw material prices higher**.
- Spending on public/private partnerships will be slower but will **multiply the overall impact**.
- Heavy impacts could be seen later in 2022/2023.

kprather@armadaci.com

Consumer was still very strong in Q4…

- **December retail was weaker than expected on a sequential basis.**
  - Early buying
  - Gift card buying up 27%
- **Q4 retail spending 15.1% higher Y/Y.**
  - Holiday spending 9% higher Y/Y after a strong 2020.
- **E-commerce up 11% Y/Y; up 60% vs. 2019**
- **Conclusion: consumer is still strong despite headwinds.**

	Percent Change	
	Nov. 2021	Dec. 2020
Retail & food services, total	**-1.9**	**16.9**
Retail (less fuel and auto)	-2.1	14.4
Motor vehicle & parts dealers	**-0.4**	**10.2**
Furniture & home furn. stores	**-5.5**	**11.1**
Electronics & appliance stores	**-2.9**	**14.6**
Building material & garden eq. & supplies dealers	**0.9**	**12.5**
Food & beverage stores	**-0.5**	**8.4**
Grocery stores	-0.7	8.2
Health & personal care stores	**0.5**	**8.4**
Gasoline stations	**-0.7**	**41.0**
Clothing & clothing accessories stores	**-3.1**	**29.5**
Sporting goods, hobby, musical instrument, & book stores	**-4.3**	**18.1**
General merchandise stores	**-1.5**	**14.6**
Department stores	-7.0	22.5
Nonstore retailers	**-8.7**	**10.7**
Food services & drinking places	**-0.8**	**41.3**

But…Personal Savings Back to Pre-Pandemic Levels

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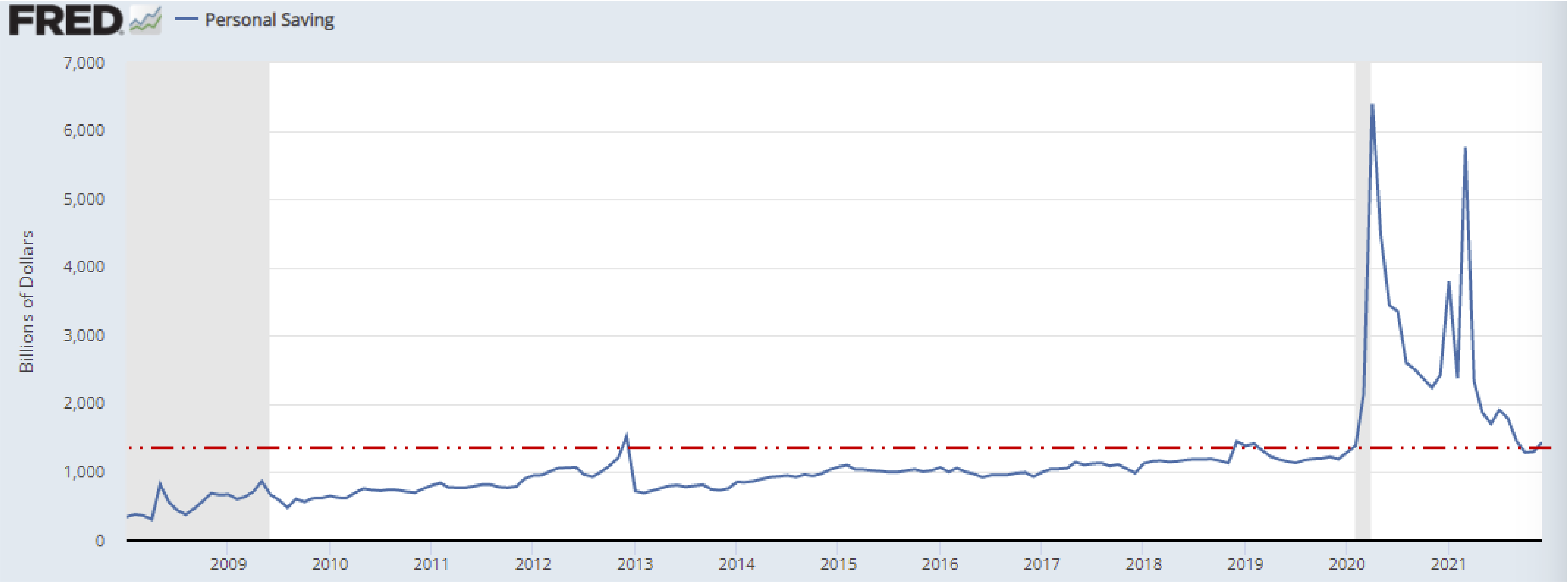
- Stimulus-driven savings that surged to between $5T and $6T have now returned near the 15-year average.
- The personal savings rate is 7.9%; prior to the pandemic it averaged 7.5% for the five years prior to Q1 2020.



Source: Federal Reserve

Demand: Global Manufacturing Activity

- **All but three markets still expanding. Only contracting markets were China, Mexico, and Brazil.**

- **Some month-over-month deceleration, much of this supply chain and Omicron related.**

- **Some slight softening in new orders, but input prices continued to be at all time highs and output prices were muted as companies fought for sales. <u>That is starting to squeeze profit margins for manufacturers</u>.**

- **Chinese manufacturers (interestingly) were starting to lay off some workers as foreign demand for products softened in January.**

- **Key themes continue to be the same:**
  - Raw material shortages
  - Component parts shortages
  - Inflationary pressure
  - Labor shortages
  - But demand is generally still very strong
  - Inventories are low (keeps supply chain in cycle and reorder activity strong)

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	Jan	53.2	54.3	-1.1	Dec	54.6	55.6	-1.0
Eurozone PMI	Jan	58.7	58.0	0.7	Dec	53.1	55.9	-2.8
US	Jan	55.5	57.7	-2.2	Dec	57.6	58.0	-0.4
China	Jan	49.1	50.9	-1.8	Dec	53.1	52.1	1.0
Canada	Jan	56.2	56.5	-0.3				
Mexico	Jan	46.1	49.4	-3.3				
Japan	Jan	55.4	54.3	1.1	Dec	52.1	53.0	-0.9
Germany	Jan	59.8	57.4	2.4	Dec	48.7	52.7	-4.0
South Korea	Dec	51.9	50.9	1.0				
UK	Jan	57.3	57.9	-0.6	Dec	53.6	58.5	-4.9
France	Jan	55.5	55.6	-0.1	Dec	57.0	57.4	-0.4
India	Jan	54.0	55.5	-1.5	Dec	55.5	58.1	-2.6
Italy	Jan	58.3	62.0	-3.7	Dec	53.0	55.9	-2.9
Taiwan	Jan	55.1	55.5	-0.4				
Brazil	Jan	47.8	49.8	-2.0	Dec	53.6	53.6	0.0
Spain	Jan	56.2	56.2	0.0	Dec	55.8	59.8	-4.0
Russia	Jan	51.8	51.6	0.2	Dec	49.5	47.1	2.4
Netherlands	Jan	60.1	58.7	1.4				
Ireland	Jan	59.4	58.3	1.1	Dec	55.4	59.3	-3.9
Greece	Jan	57.9	59.0	-1.1				
Poland	Jan	54.5	56.1	-1.6				
ASEAN	Dec	52.7	52.3	0.4				
Vietnam	Jan	53.7	52.5	1.2				
Philippines	Jan	50.0	51.8	-1.8				
Australia	Jan	55.1	57.7	-2.6	Dec	55.1	55.7	-0.6
Switzerland	Jan	63.8	62.7	1.1				
Hong Kong	Dec	50.8	52.6	-1.8				
Singapore	Dec	55.1	52.0	3.1				

Demand: The Inventory Story and What to Watch

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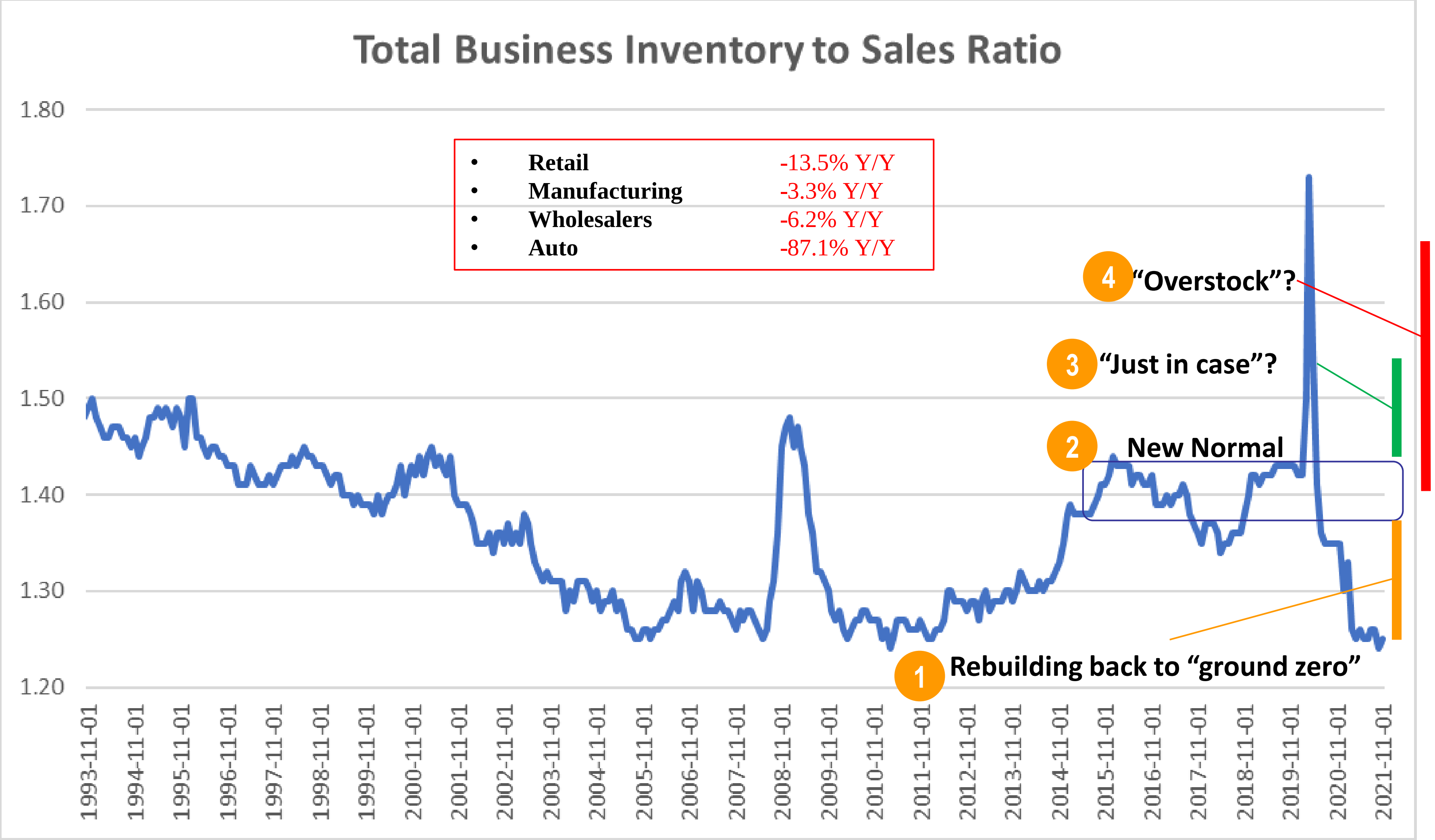
1. **Current phase – most sectors just trying to get inventories back to ground zero. Amit estimated that it will take retailers until 2023/2024 to "get back to normal".**

2. **This is the range of the new normal. Remember that demand destruction is also part of this. If the Fed tightens too fast, we get here sooner.**

3. **Just-in-case philosophies could allow these rates to go higher, and reorder activity stays in cycle.**

4. **But at some point, overstock situations emerge. Some CFO's already starting to challenge purchasing managers over current inventory levels (believe it or not). As the Fed hikes rates, that pressure will build.**



China Backlogs have Intensified; US Anchorages Surge

- **China's distribution system struggling again with throughput**
  - Ningbo, Shanghai, Tianjin at 7-14 day backlogs
- **Major ports once again overwhelmed**
  - US ports now backed up in all markets except Virginia
- **100+ Ships at anchor (mix of inbound and outbound) off the coast of China**
  - 190 ships slow steaming or at anchor in the US (175 was at the height of Q3 inbound peak season)
- **Inland distribution systems breaking again in China, Olympics and Lunar New Year impacts still to come.**
- **But new orders for Chinese goods are slowing – is this because of alternative sourcing? (near-shoring or reshoring)**

Transportation Was a Big Part of the Inflation Story in '21

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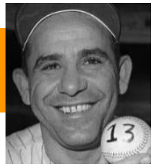
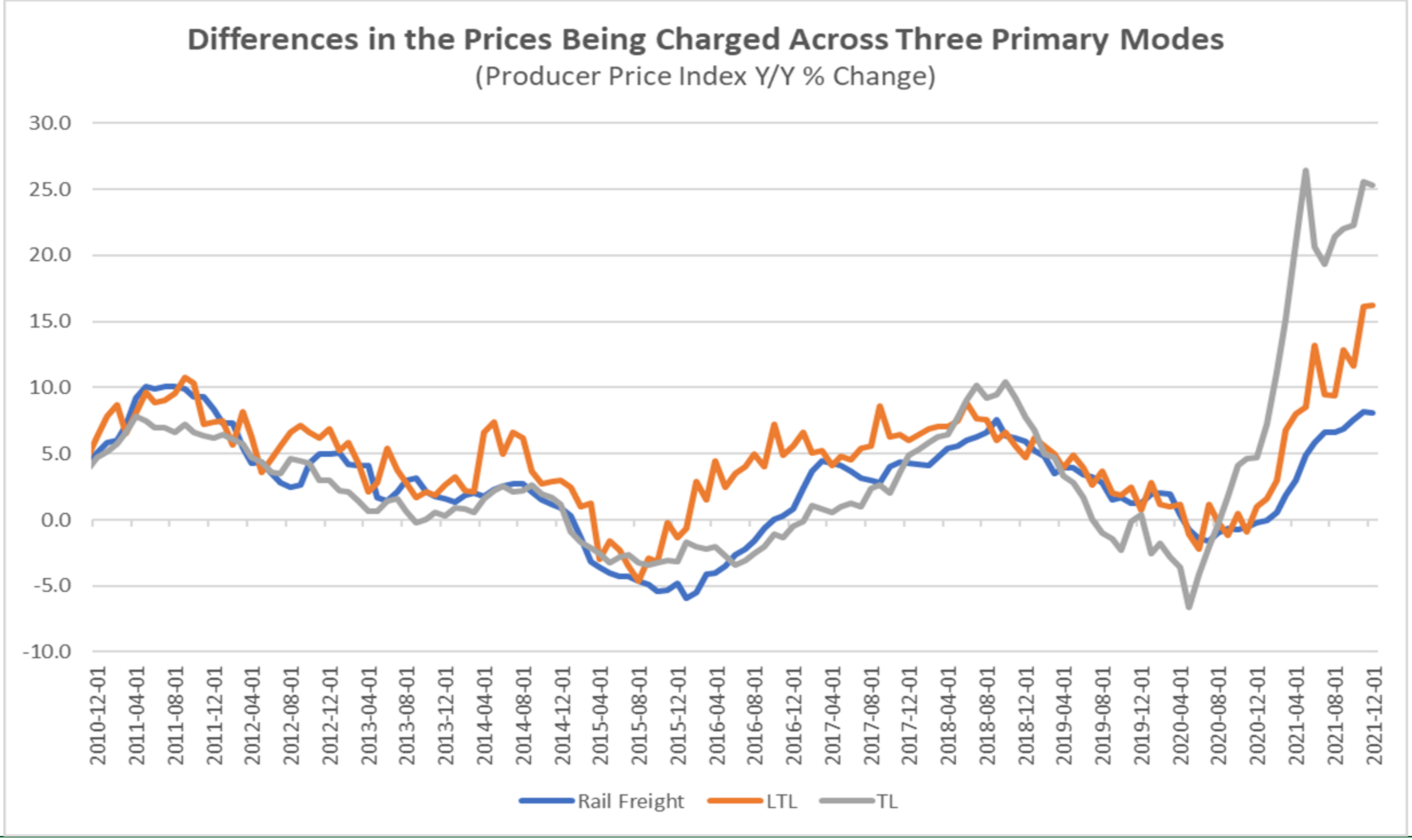
"If you can't imitate him, don't copy him."





TL 25.3% Y/Y

LTL 16.2% Y/Y

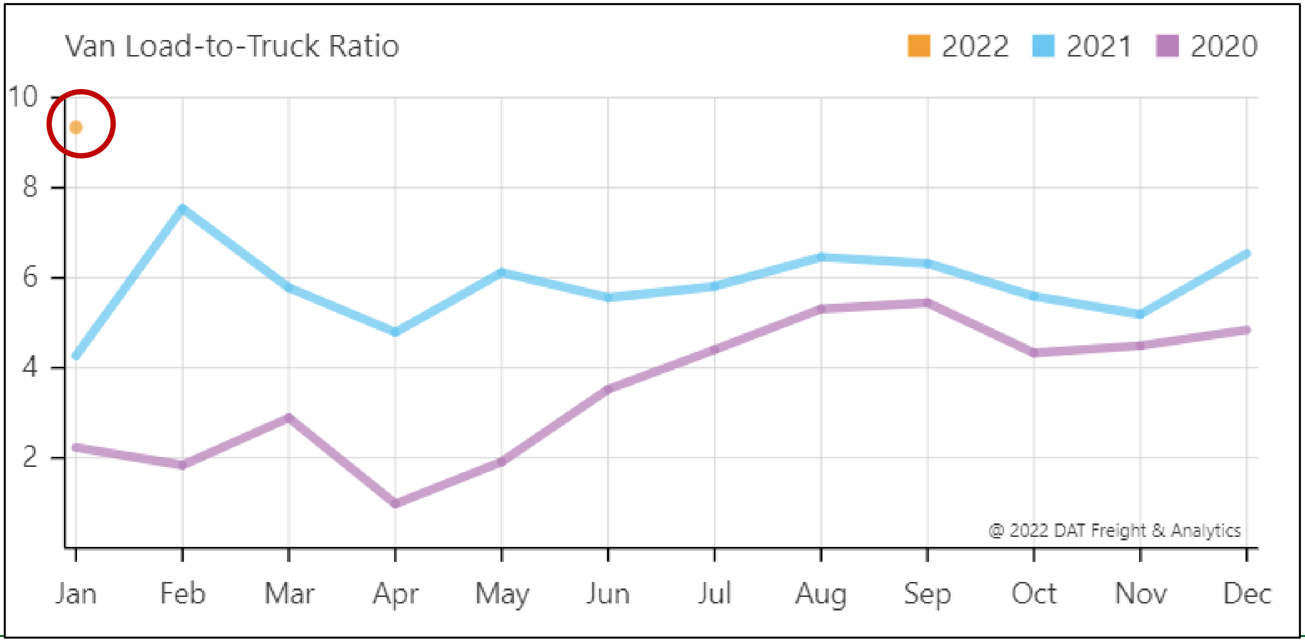
Rail 8.1% Y/Y

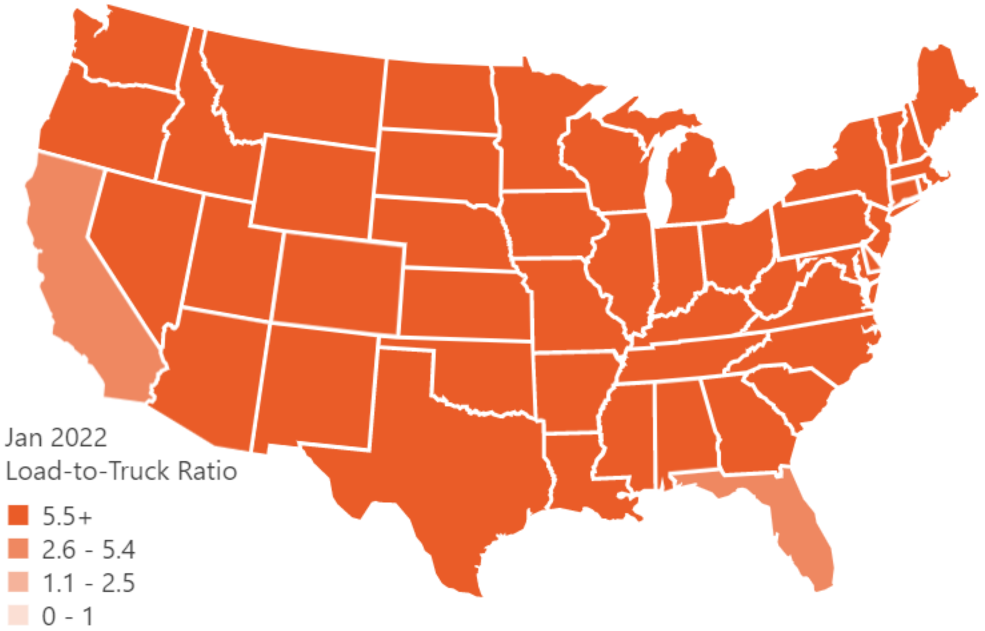
Pricing: Spot Market Ridiculous in January

- All but 2 states have the highest ratio of loads to trucks. The LTR was also 5 times higher than January of 2020 and twice as high as 2021.

- Load demand was up 95.8% Y/Y, spot rates were up 32% with fuel surcharges adding 38.9% in January.

INDUSTRY TRENDS	MONTH JAN 2022 VS. DEC 2021	YEAR JAN 2022 VS. JAN 2021
Spot Load Posts	31.4%	95.8%
Spot Truck Posts	-16.0%	-7.6%
Van Load-To-Truck	44.9%	122.0%
Van Spot Rates	**4.0%**	**32.0%**
Flatbed Load-To-Truck	71.4%	82.9%
Flatbed Spot Rates	2.0%	25.9%
Reefer Load-To-Truck	48.1%	154.9%
Reefer Spot Rates	3.5%	38.2%
Fuel Prices	**2.3%**	**38.9%**





Watching the Trend: We Have a Problem

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- **Nearly 80,000 drivers out of the workforce because of failed drug tests alone**
  - Only 60% are successfully returning to duty over a **6-month period of time**
  - 62% of failures are marijuana related, and more states are now legalizing usage
  - Since last year, approximately **4,500 a month** are added to these roles after failed drug testing, 3,300/month in the last 3 months.
- **Attorneys suggest that the real number here is closer to the 100,000 mark.**
  - Drivers with one violation (but not in prohibited status) could open up liability issues for carriers, especially if they have an accident while being under the influence.

December

CDL/CLP Holders in the Return-to-Duty (RTD) Process
as of 12/1/2021

RTD STATUS	# DRIVERS
All Drivers (with at least 1 violation)	100,398
CDL/CLP holders in Prohibited Status	78,180
RTD Process Not Started	58,811
Substance Abuse Professional (SAP) Request Sent	657
SAP Designation Confirmed	1,935
SAP Request Declined	420
Initial SAP Assessment Complete	3,637
Determined Eligible for RTD Testing	12,720
CDL/CLP Holders in Not-Prohibited Status*	22,218
RTD Test with Negative Results	20,373
Follow-Up Testing Plan Complete	1,845

September

CDL Holders in the Return-to-Duty (RTD) Process
as of 9/1/2021

RTD STATUS	# DRIVERS
All Drivers (with at least 1 violation)	87,438
CDL holders in Prohibited Status	69,937
RTD Process Not Started	52,691
Substance Abuse Professional (SAP) Request Sent	609
SAP Designation Confirmed	1,617
SAP Request Declined	322
Initial SAP Assessment Complete	3,262
Determined Eligible for RTD Testing	11,436
CDL Holders in Not-Prohibited Status*	17,501
RTD Test with Negative Results	16,336
Follow-Up Testing Plan Complete	1,165

Source: Department of Transportation, FMCSA Drug and Alcohol Clearinghouse Database

You know this story already…Consumer Price Index Surges

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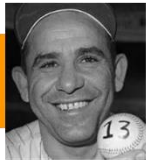
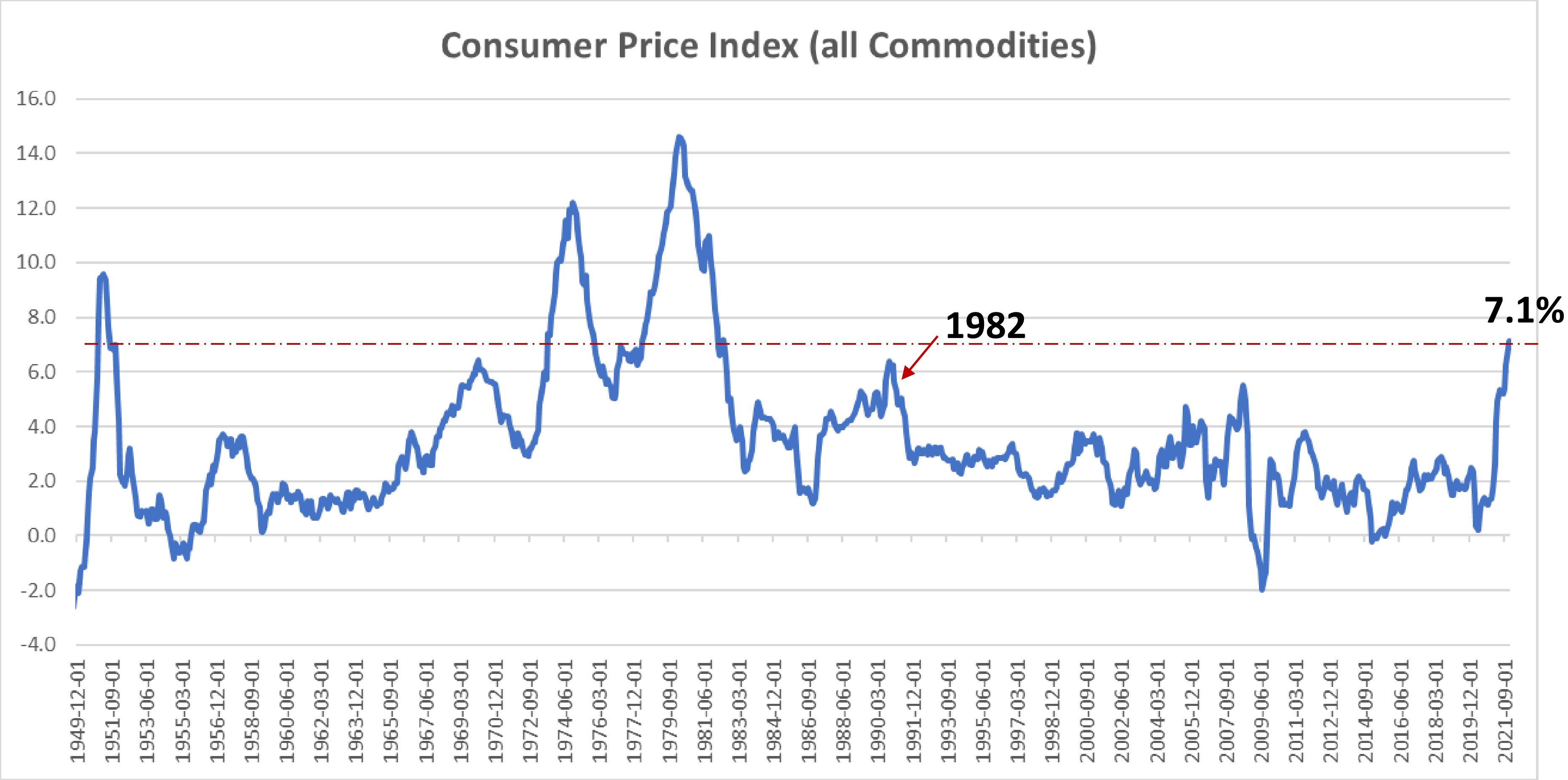
- Headline CPI hit 7.1% (highest since 1981)
- Core inflation was 5.5% (highest since 1991)

"A nickel isn't worth a dime anymore."

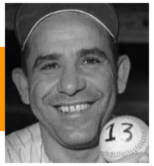


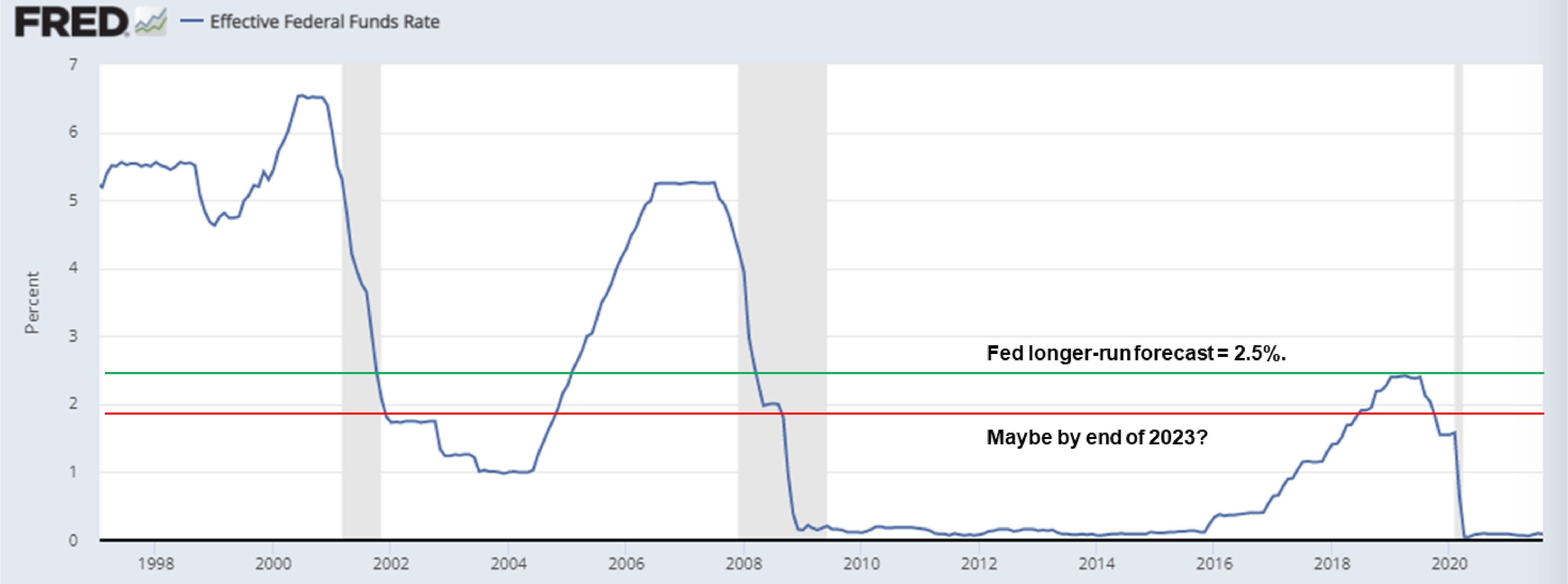


The result: at least 4 Quarter Point Rate Hikes in '22: What does that look like on a historic basis?

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

"The future ain't what it used to be."

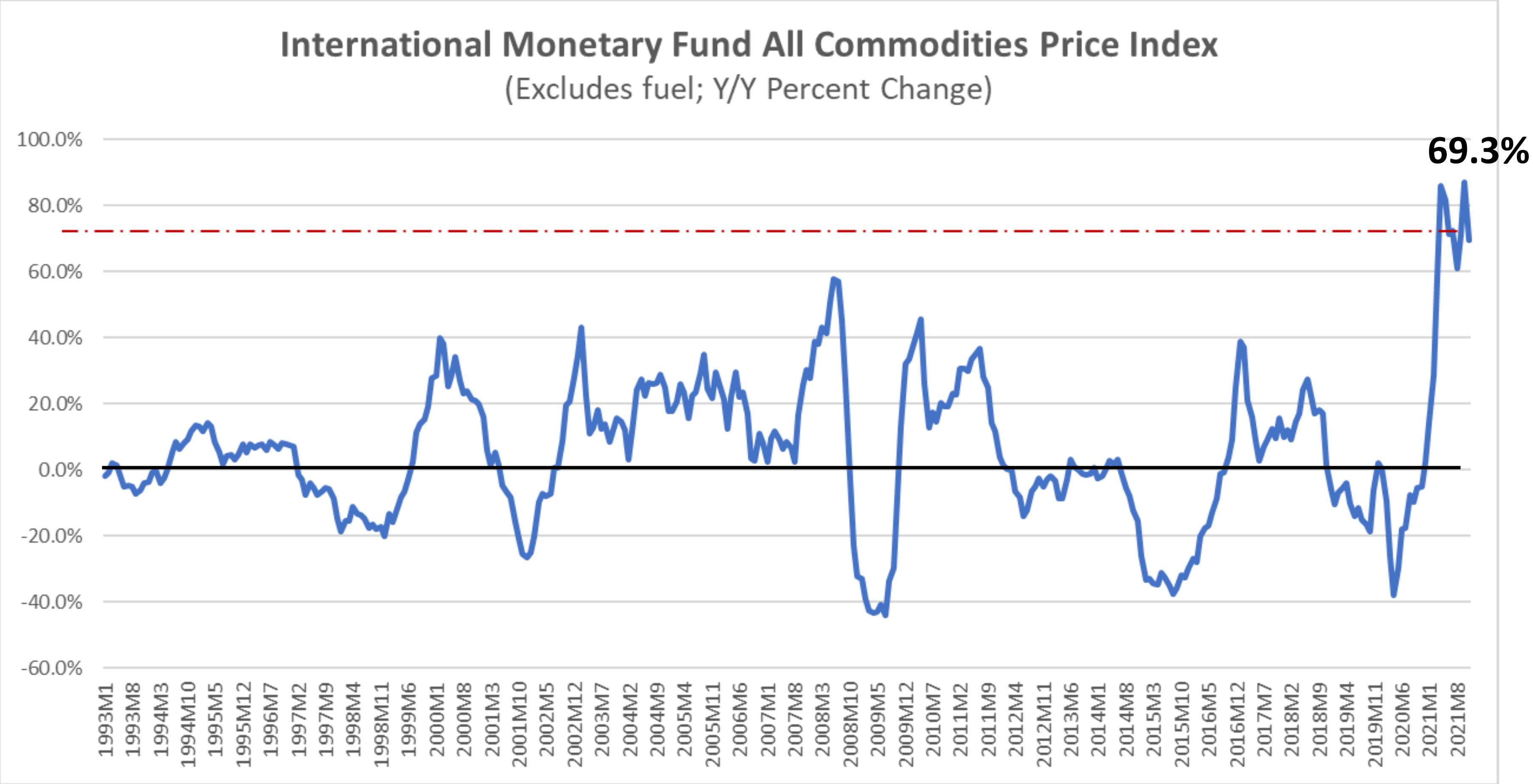




Other factors: commodities

- Global commodity prices are 69.3% higher year-over-year. Other than peaks hit earlier this year in April and October, prices remain at all-time highs.

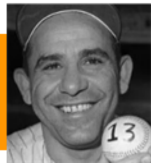
- This will continue to put pressure on global profits and increase some risk among emerging market economies. Mexican firms are certainly feeling this pressure.

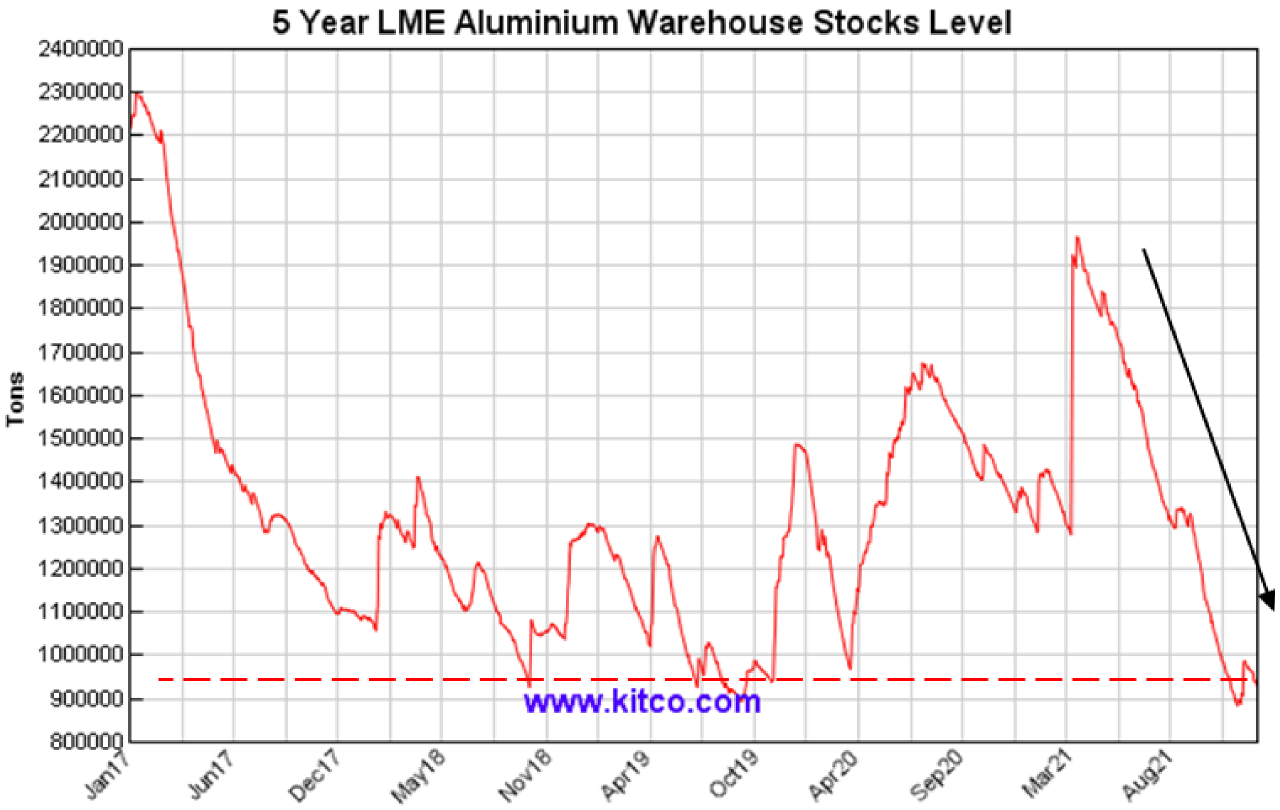


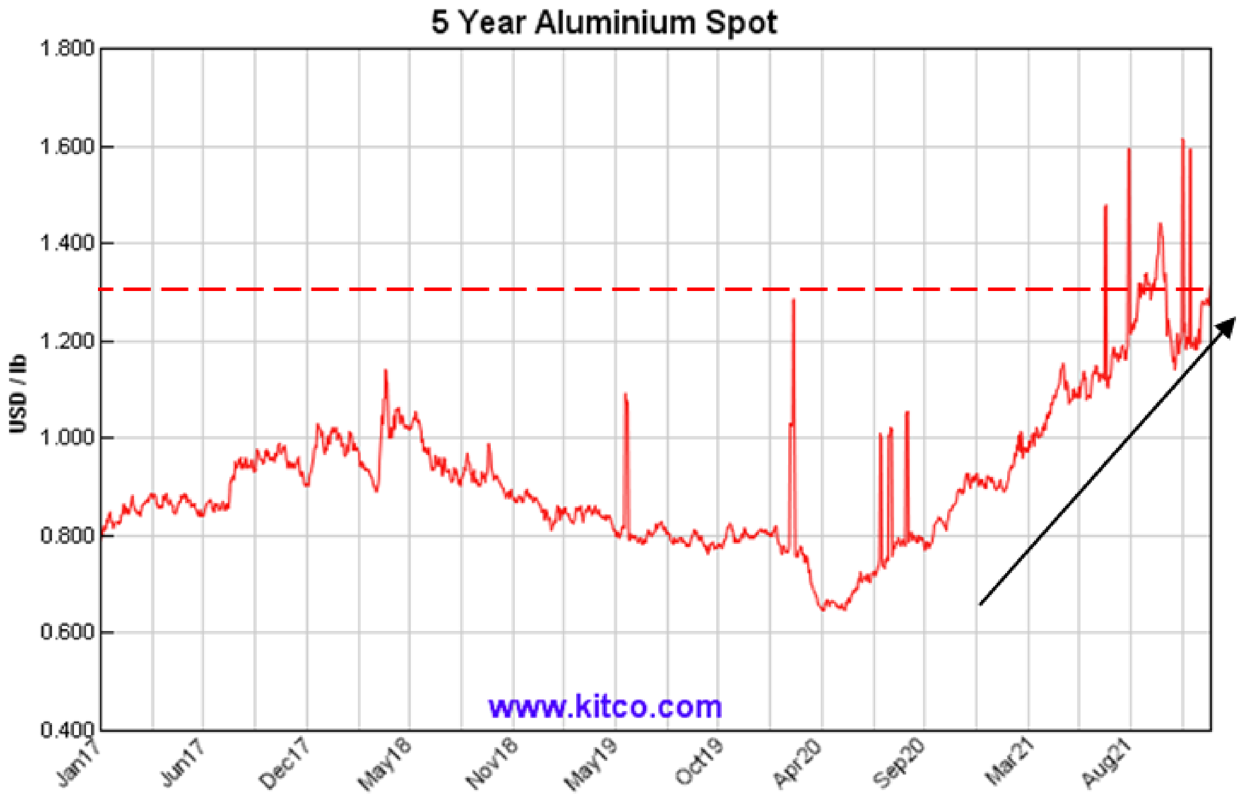
Risks: Warehouse Levels on Most Commodity Metals are Still Falling – Especially Aluminum

- Global warehouse levels are still dropping, and prices are remaining stable.
- Some domestic US drop in demand was seen in January. Some of this could be the post-holiday seasonal lull that typically comes. But on a global basis, inventories at warehouses are just not improving.

"Baseball is ninety percent mental, and the other half is physical."



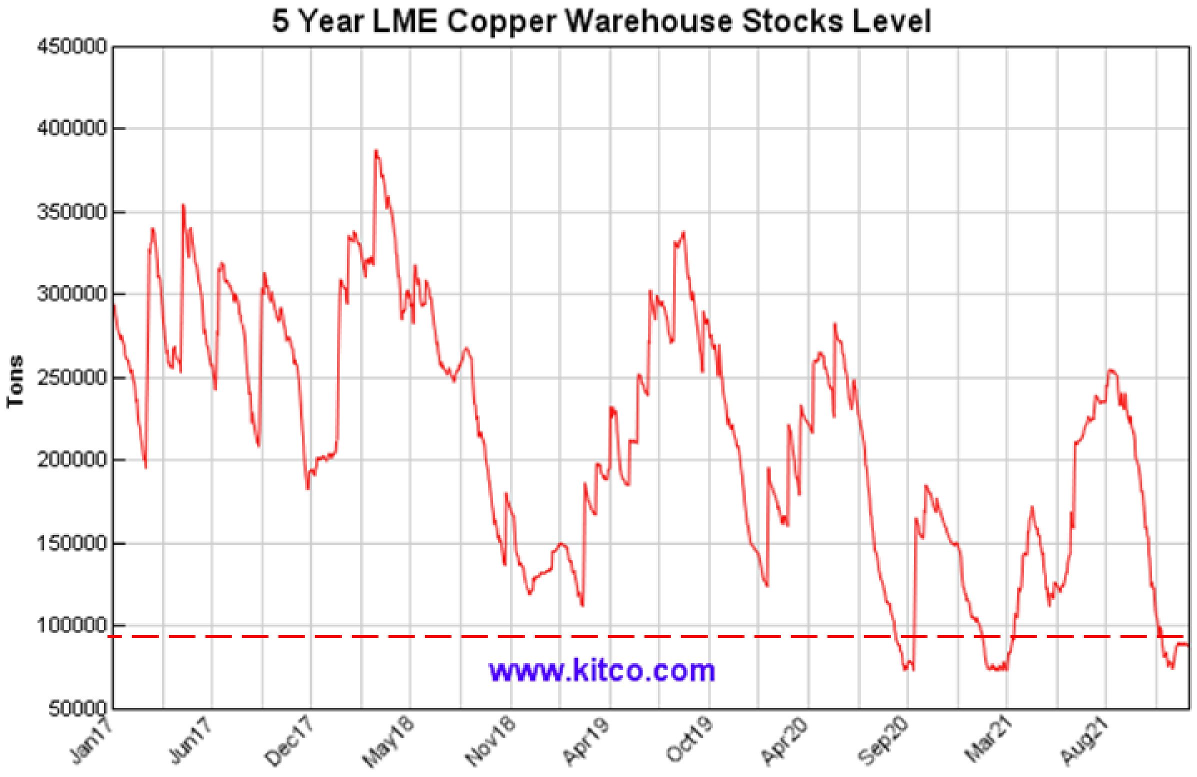


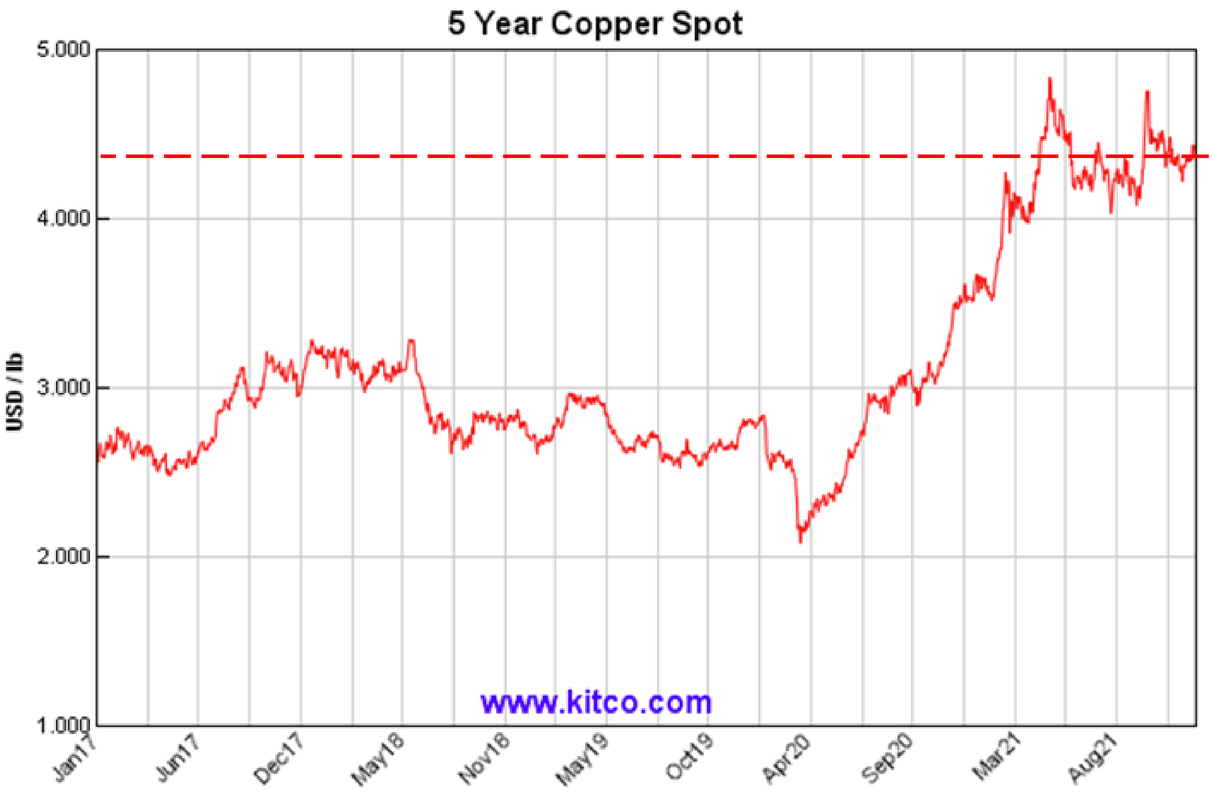


Risks: Copper Warehouse Levels Now Near Historic Lows – Prices Rising.

"Baseball is ninety percent mental, and the other half is physical."

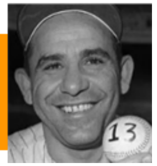
- **Copper was showing the same story. Some challenges could emerge in South America (Chile and Peru) where changes in leadership could create nationalistic challenges to foreign copper producers.**





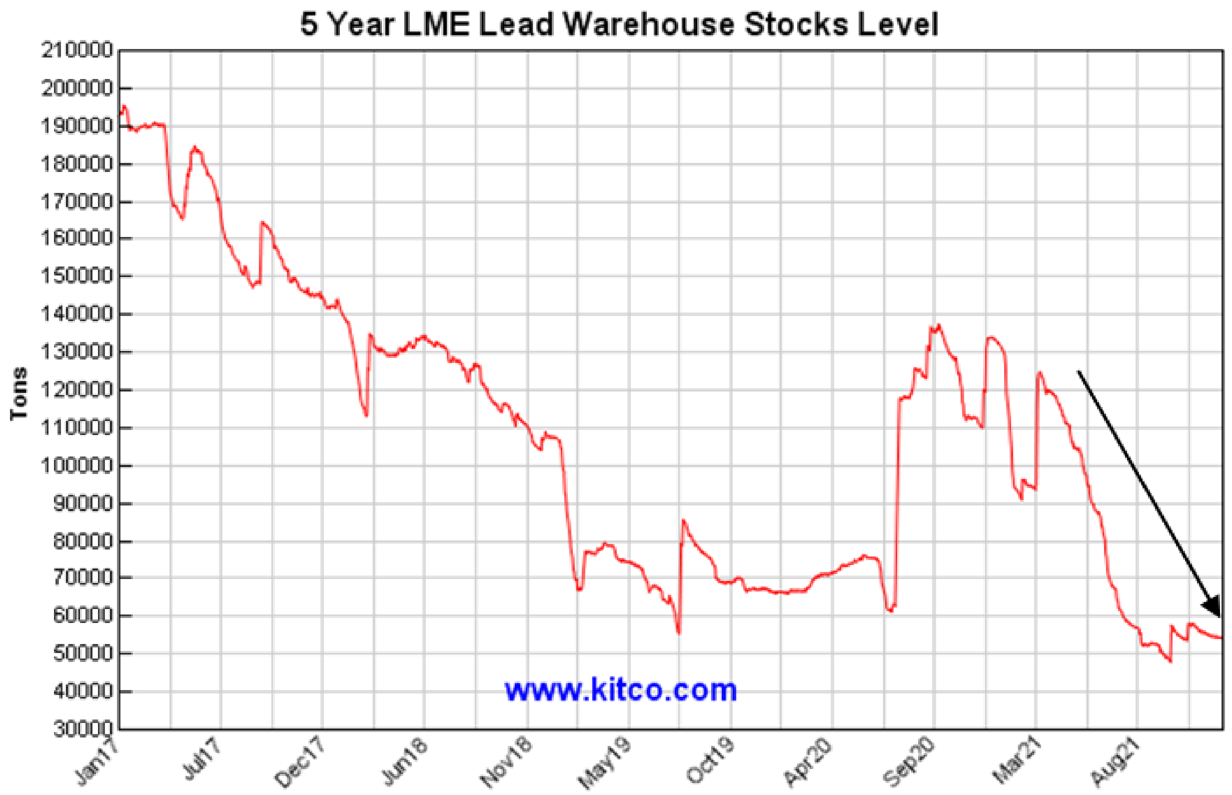
Risks: Nickel in the Same Situation

ARMADA

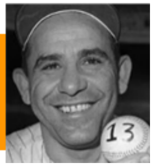


"Baseball is ninety percent mental, and the other half is physical."

- Nickel is a key ingredient in making steel and other metals corrosion proof. Also, the key ingredient in stainless steel.
- The big factor here is that this could delay some production and output of products that use these metals, if there isn't already sufficient inventories "sitting" in manufacturer's warehouses.

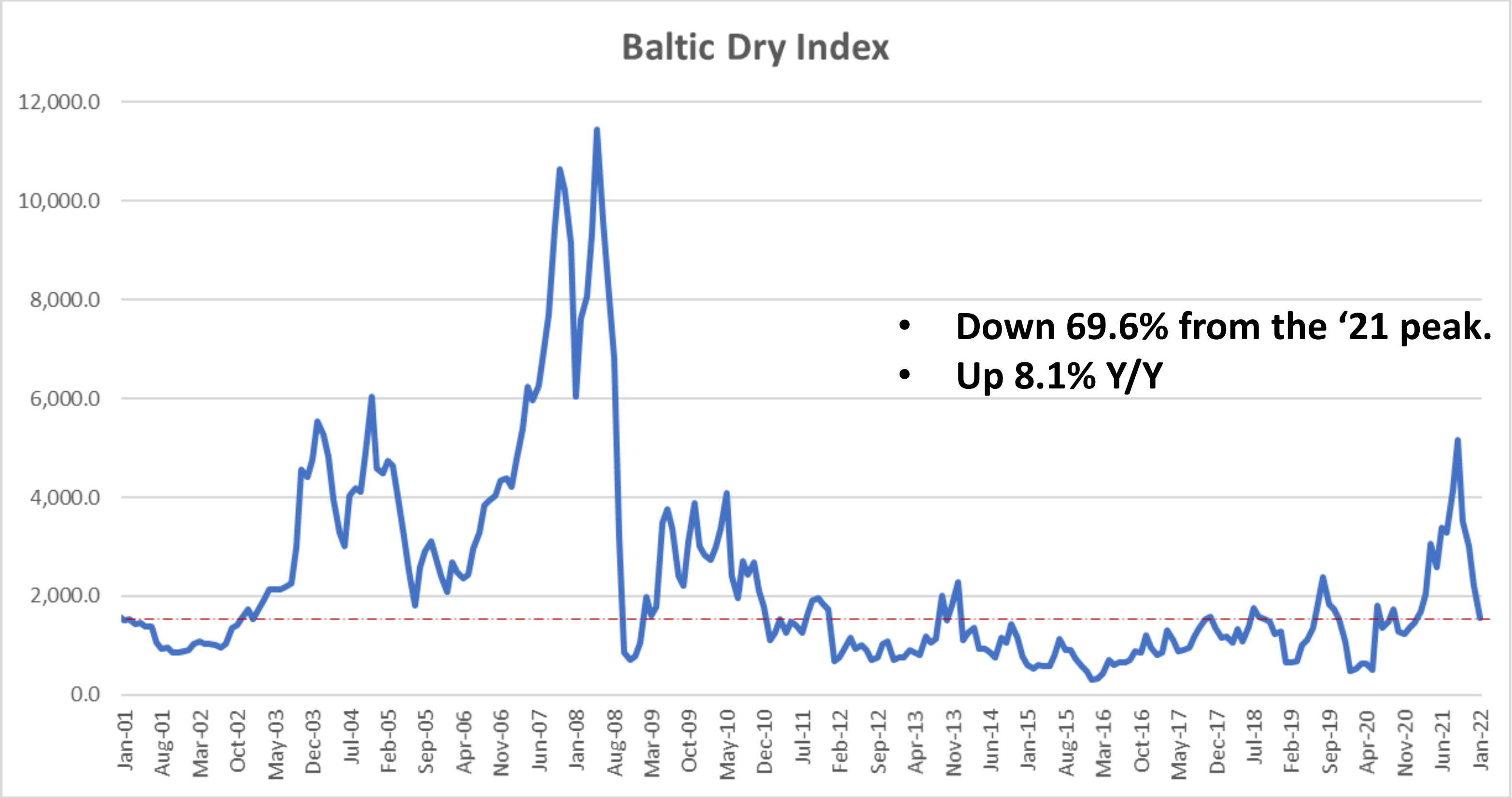


Risks: Bulking Up on Commodities is Either Already Over, Or another Raw Material Supply Problem is Coming.



"Baseball is ninety percent mental, and the other half is physical."

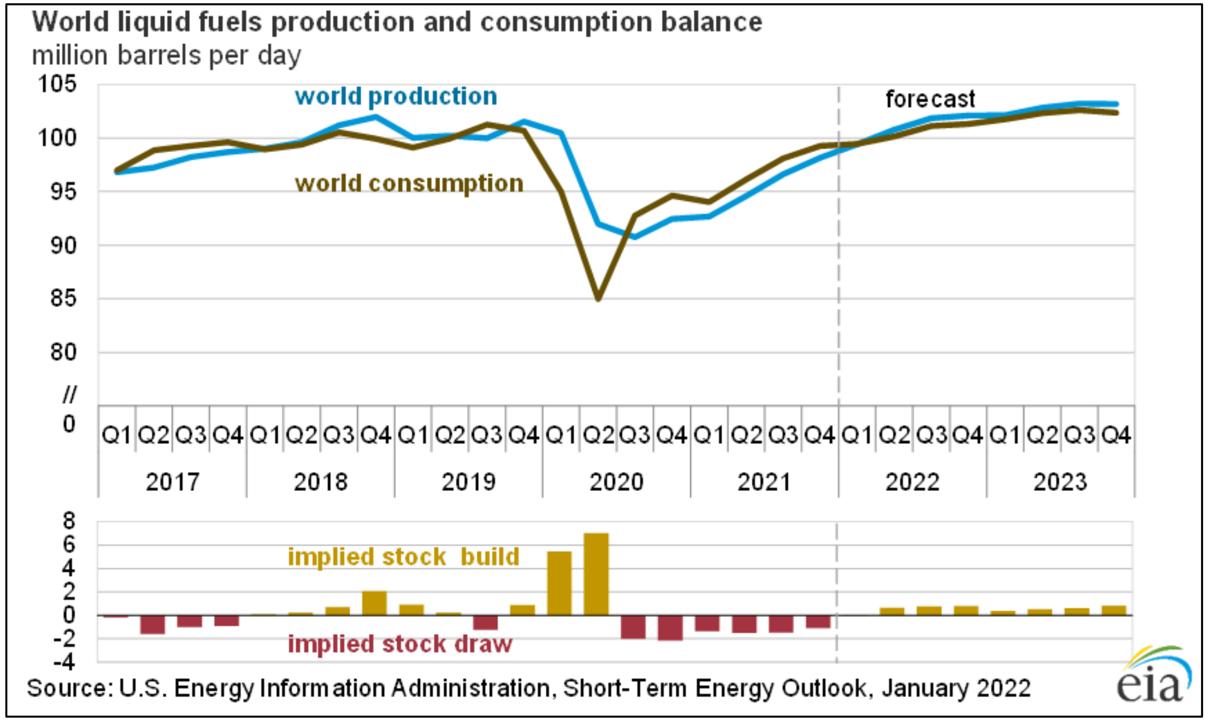
- One of the oldest indexes in the world, dating to the 1800's. The Baltic Dry Index leads global supply chain activity by nearly 60 days.
- There has been a notable turn in the index, down 69.6% in the last 30 days.
- It should be going the other way…if inventories really are this low?
- Bigger question: are supplies just not available? Or are manufacturers sitting on "just-in-case" levels?



Predictions of $100 Per Barrel Oil are Increasing

ARMADA

- Forecasts still predict $100 per barrel on weaker investments in production, Russia/Ukraine tension. This, despite total production levels worldwide seemingly keeping pace with EIA forecast.



Crude forecast:
- 2021 $68.21
- 2022 $74.95
- 2023 $67.50

Gasoline forecast:
- 2021 $3.02
- 2022 $3.06
- 2023 $2.81

Diesel forecast:
- 2021 $3.29
- 2022 $3.33
- 2023 $3.27

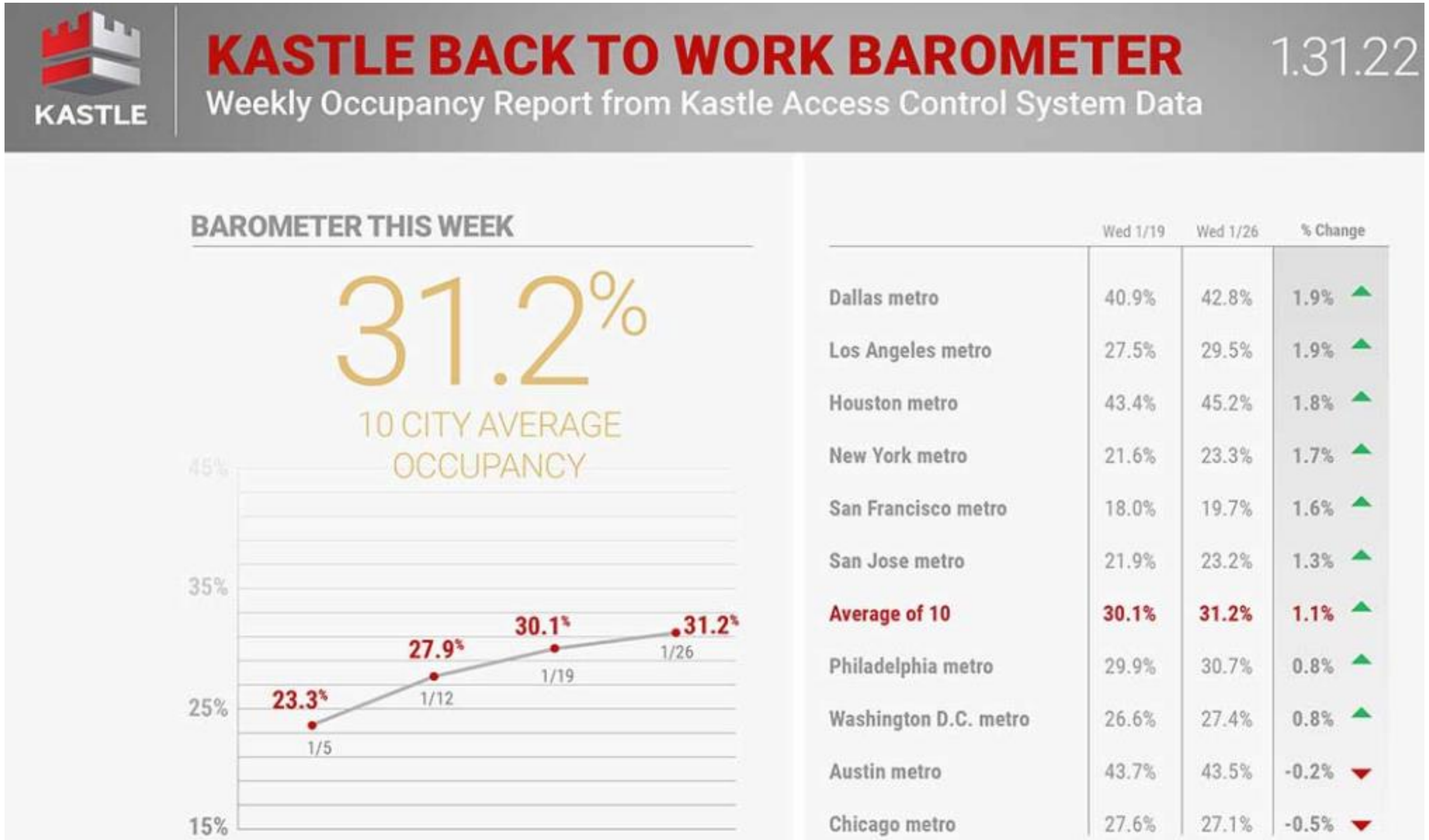
- 226 higher than last year (224 last quarter)
- Investment could lag by 25% a year through the end of the decade according to Wall Street analysts

Area	Last Count	Count	Change from Prior Count	Date of Prior Count	Change from Last Year	Date of Last Year's Count
U.S.	28 Jan 2022	610	+6	21 Jan 2022	+226	29 Jan 2021
Canada	28 Jan 2022	217	+5	21 Jan 2022	+43	29 Jan 2021
International	Dec 2021	834	+17	Nov 2021	+169	Dec 2020

1,023 in 2019

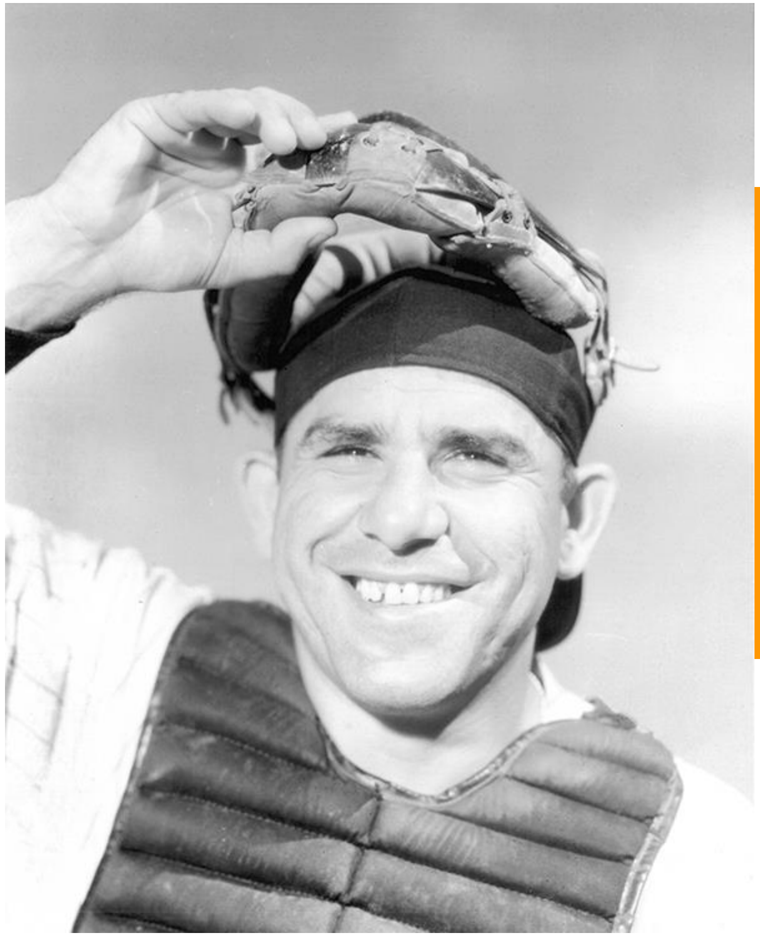
Back-to-the-Office Key in Commercial Construction Restart

- Texas markets have resumed a stronger back-to-work push than other markets. Austin (43.5%), Houston (45.2%), and Dallas (42.8%) lead the nation.
- Omicron could set things back however; some companies have already said that they will delay plans to return to work right after the first of the year.
- Most companies have pushed back the return to office trend until March.



	Wed 1/19	Wed 1/26	% Change
Dallas metro	40.9%	42.8%	1.9%
Los Angeles metro	27.5%	29.5%	1.9%
Houston metro	43.4%	45.2%	1.8%
New York metro	21.6%	23.3%	1.7%
San Francisco metro	18.0%	19.7%	1.6%
San Jose metro	21.9%	23.2%	1.3%
Average of 10	30.1%	31.2%	1.1%
Philadelphia metro	29.9%	30.7%	0.8%
Washington D.C. metro	26.6%	27.4%	0.8%
Austin metro	43.7%	43.5%	-0.2%
Chicago metro	27.6%	27.1%	-0.5%

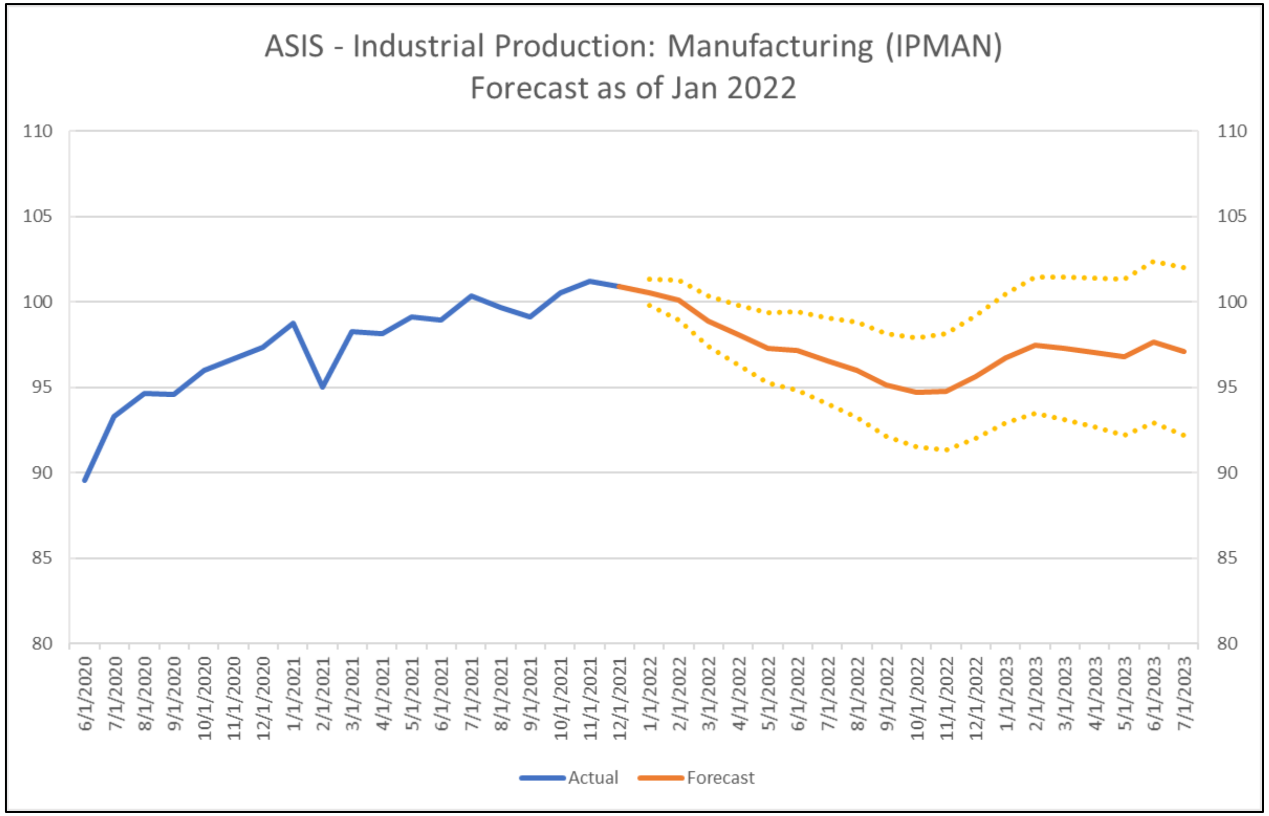
Last Two Items to Watch

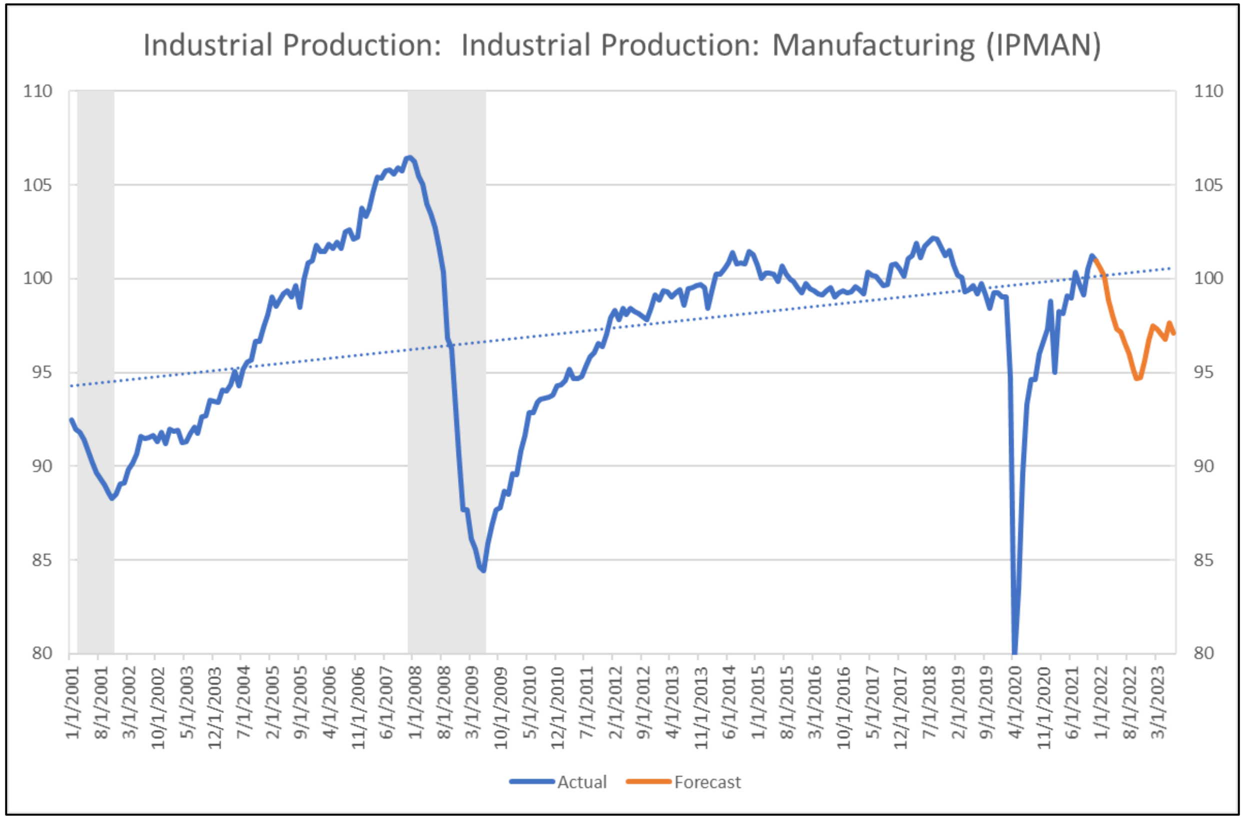


"If you don't know where you are going, you might wind up someplace else."

Forecast: Industrial Production for Durable Manufacturing

ARMADA





- **Canary in the Coal Mine?**
- **The models are reading some pressure…inventories higher than thought?**

For Putin: Why is it Worth War With Ukraine?

Kaliningrad Oblast (exclave)

NATO Chokepoint

Novorossiysk (largest Russian port)

Vladimir Putin is former KGB and remembers the former borders with NATO (yellow borders).

The borders over time have collapsed inward, and he fears a closing off of his largest supply lines.

He can't allow Ukraine to become part of NATO – which would force all NATO nations to defend Ukraine with troops and advanced support.

They would also theoretically be required to help Ukraine take back Eastern Ukraine and Crimea, essentially surrounding Russia's only good all-season port at Novorossiysk.

Russian Ports and Risks to Distribution

Not year-round

Land Locked without seizing former Soviet Baltic States of Estonia, Latvia, and Lithuania

Turkish Straits Chokepoint

Land-locked, dependent upon Iran

Trans-Siberian Rail Line
(6 full days transit to Moscow)

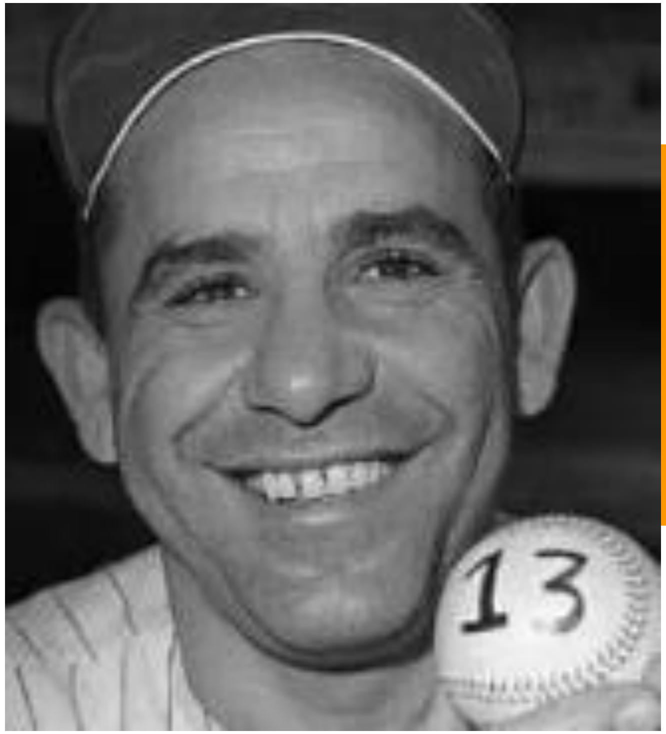
North Korea

Too far cargo to get to population centers in the Western part of Russia.

No sophisticated port infrastructure or distribution systems set up beyond rail (which is not easily defensible in wartime).

1. Novorossiysk (141MMT)
2. Ust-Luga (102MMT)
3. Vostochny (77MMT)

Wrap Up



“I usually take a one-hour nap from one to four.”

Summary/Conclusion

ARMADA

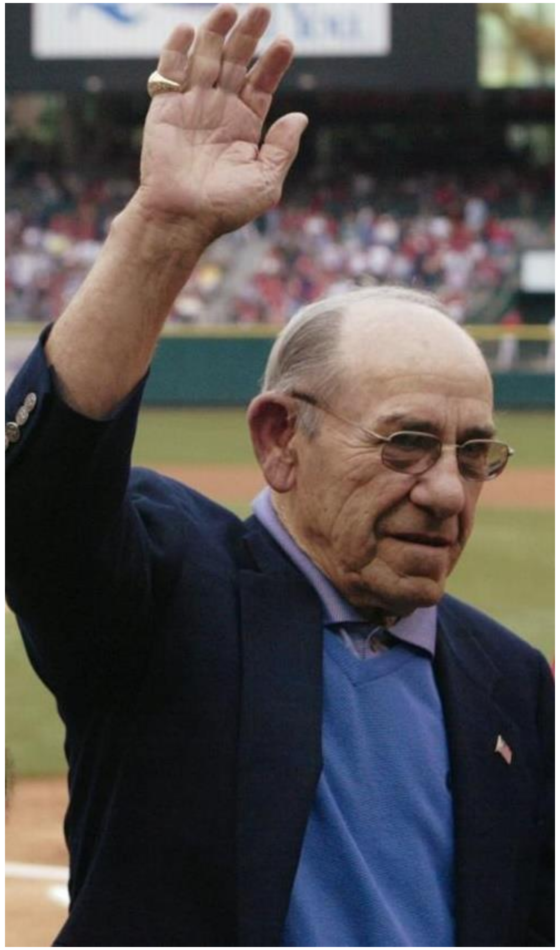
- **Demand environment will continue to improve**
  - GDP 3.5% in 2022
  - Retail and consumer spending to remain strong
  - Manufacturing outlook strong
  - Wholesale trade inbound volumes strong
  - Bottlenecks will eventually ease
  - Housing stable
  - Commercial construction will pick up in 2022 and 2023

- **Labor market unchanged until COVID risk for kids reduces, labor shortages still a historic problem. Long-term, demographics show system problem.**

- **Inflationary pressure could start to weigh on demand in 1H ‘22…**

- **Pressure builds more heavily in 2H of 2022**

Questions? (Easy ones…)



"If you ask me anything I don't know, I'm not going to answer."

"I want to thank you for making this day necessary."

Yogi Berra Day quote at Sportsman's Park, St. Louis

Extra Slides

Macroeconomic Outlook Summary

ARMADA

- **Strong Freight Environment LIKELY to Continue:**

1. Consumer spending remains strong (3.5% growth on top of current spending levels is a rapid growth rate)
2. Residential investment weakens in '22 as interest rates start to tick up
3. Nonresidential picks up in '22 and '23
4. Government spending really kicks off 2H '22
5. Inflation decelerates second half 2022

Percentage Change, Seasonally Adjusted Annual Rates								
	2022				2020	2021	2022	2023
	I Q	II Q	III Q	IV Q	ANNUAL	ANNUAL	ANNUAL	ANNUAL
Real GDP	2.2	3.1	2.9	2.8	-3.4	5.6	3.5	2.9
Real Disposable Income	1.0	1.5	1.7	2.0	6.2	2.6	-1.9	2.2
Real Consumer Spending	2.5	2.9	2.4	2.1	-3.8	8.0	3.5	2.6
Residential Investment	2.0	3.0	2.5	2.0	6.8	9.1	-0.2	1.5
Nonresidential investment	5.0	5.2	4.8	4.8	-5.3	7.5	4.7	4.4
Inventory Change (bln chn '12$)	50.0	55.0	60.0	65.0	-42.0	-71.0	58.0	40.0
Total Gov't Spending	2.5	3.0	3.8	4.1	2.5	0.8	2.3	4.2
Exports	2.0	6.1	5.1	4.0	-13.6	3.6	3.0	4.4
Imports	6.0	6.0	5.0	4.0	-8.9	13.3	5.6	4.1
Unemployment Rate (%)	4.0	3.8	3.7	3.6	8.1	5.4	3.8	3.3
PCE Inflation (%Y/Y)	4.6	3.5	3.0	2.8	1.2	3.8	3.5	3.0
Core PCE Inflation (%Y/Y)	4.3	3.6	3.2	2.9	1.4	3.3	3.5	3.0

Fed's target rate is 2%

Demand: Transportation Demand Index

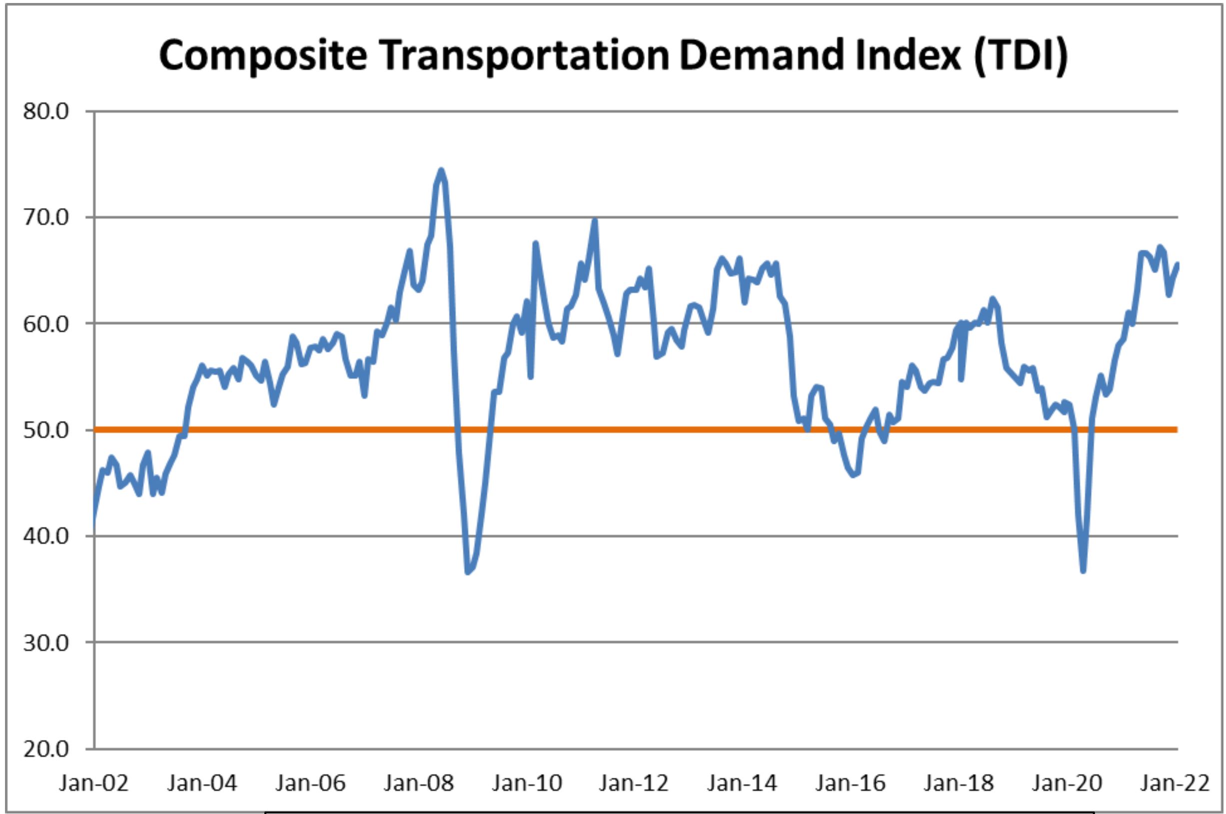
ARMADA

- The composite Transportation Demand Index (TDI) is a strong <u>indicator of future freight activity</u>. It measures 26 key global drivers of freight demand and functions like a leading economic indicator for US freight.

- Demand remains strong with a TDI of 65.8, up 12.1% Y/Y and 2.2% M/M.

- Monthly demand statistics showed deceleration across two of the modes. But remember that this is a demand index and does not translate directly into market pricing dynamics.

- Also note that all of the indexes are above 61 points (50 being the midpoint between expansion and contraction).



	22-Jan	21-Dec	21-Jan	Y/Y Change %	M/M Change %
Composite	65.6	64.2	58.5	12.1%	2.2%
Rail	62.8	61.7	56.7	10.8%	1.8%
Trucking	65.8	64.2	58.4	12.7%	2.5%
Air	70.7	72.2	68.3	3.5%	-2.1%
Maritime	68.9	71.1	66.8	3.1%	-3.1%

Source: Proprietary Armada, Inc., DAT Trendlines

Demand: Is It Time To Start Putting the Inventory Story Away?

ARMADA

- **Inventory sentiment in January showed that shippers believe that their inventory levels are now fairly balanced. That could affect future orders – although they remained strong in January across both services and manufacturing sectors.**
- **Customer inventories for manufacturers were still far too low.**
- **But retailers and wholesalers are balanced and feeling like they are where they need to be in January. This could change as we go into the rest of the quarter – these figures could dive if consumer spending remains robust.**
- **Supplier deliveries were still far too slow.**
- **Prices also surged again to near record highs.**
- **Conditions are still good, but they are showing (at least temporarily) some potential challenges building.**

ISM® SERVICES SURVEY RESULTS AT A GLANCE COMPARISON OF ISM® SERVICES AND ISM® MANUFACTURING SURVEYS*

January 2022

	Services PMI®						Manufacturing PMI®		
Index	Series Index Jan	Series Index Dec	Percent Point Change	Direction	Rate of Change	Trend** (Months)	Series Index Jan	Series Index Dec	Percent Point Change
Services PMI®	59.9	62.3	-2.4	Growing	Slower	20	57.6	58.8	-1.2
Business Activity/ Production	59.9	68.3	-8.4	Growing	Slower	20	57.8	59.4	-1.6
New Orders	61.7	62.1	-0.4	Growing	Slower	20	57.9	61.0	-3.1
Employment	52.3	54.7	-2.4	Growing	Slower	7	54.5	53.9	+0.6
Supplier Deliveries	65.7	63.9	+1.8	Slowing	Faster	32	64.6	64.9	-0.3
Inventories	49.4	46.7	+2.7	Contracting	Slower	8	53.2	54.6	-1.4
Prices	82.3	83.9	-1.6	Increasing	Slower	56	76.1	68.2	+7.9
Backlog of Orders	57.4	62.3	-4.9	Growing	Slower	13	56.4	62.8	-6.4
New Export Orders	45.9	61.5	-15.6	Contracting	From Growing	1	53.7	53.6	+0.1
Imports	51.1	55.5	-4.4	Growing	Slower	4	55.1	53.8	+1.3
Inventory Sentiment	47.5	38.3	+9.2	Too Low	Slower	10	N/A	N/A	N/A
Customers' Inventories	N/A	N/A	N/A	N/A	N/A	N/A	33.0	31.7	+1.3

US Macroeconomic Outlook – Industrial Production

ARMADA

- **Industrial Production in Manufacturing has a higher correlation to freight movement and accounts for 75% of total IP, it was up 3.7% Y/Y (up 4.9% Y/Y in last month's briefing).**
  - Sequentially it was down 0.3% (+1.2% last month)
- **Durable manufacturing was higher Y/Y by 3.8% (+5.4% last month). Much of this sector is still being impacted by microchip shortages, but other components and labor shortages are also dampening output.**
  - GM announced that they should be "back to normal" with chipset availability by this summer.
- **Non-durable manufacturing was down 0.4% Y/Y (+4.3% higher last month) sequentially.**
- **Some of the impact of Omicron and absenteeism from it impacted output in December (which is what this is measuring).**
- **As mentioned in prior months, as the million or so containers get processed in Q1, it should improve overall material supply and increase output. Continue to watch the entire industrial complex for improvements.**

Category of Industrial Production	Percent of Total Industrial Production	M/M Growth Nov 2021 vs. Dec 2021	Y/Y Growth Dec 2021 vs. Dec 2020
Manufacturing (NAICS)	73.9	-0.3	3.7
Durable manufacturing	38.1	-0.4	3.8
Wood products	1.7	1.2	0.5
Nonmetallic mineral products	2.3	1.5	-0.7
Primary metals	2.3	-0.2	9.4
Fabricated metal products	6.0	-1.2	4.2
Machinery	5.4	0.7	8.0
Computer and electronic products	5.0	0.7	7.5
Electrical equipment/appliances	1.9	0.0	3.8
Motor vehicles and parts	4.9	-1.3	-5.9
Aerospace/Transport Equipment	4.8	-1.0	7.9
Furniture and related products	1.2	0.5	3.0
Miscellaneous	2.8	-2.7	2.5
			3.6
Nondurable manufacturing	35.8	-0.2	-0.4
Food, beverage, and tobacco products	12.4	0.2	4.1
Textile and product mills	0.6	0.1	2.6
Apparel and leather	0.2	-1.5	0.4
Paper	2.4	-1.2	5.6
Printing and support	1.3	-1.8	7.5
Petroleum and coal products	3.3	-1.6	7.2
Chemicals	11.9	0.7	3.1
Plastics and rubber products	3.5	-1.8	-2.5
Mining	12.2	2.0	11.0
Utilities	11.9	-1.5	-3.4
Electric	10.3	-0.4	-1.9
Natural gas	1.6	-7.9	-12.3

Demand: Industrial Production Forecast Dashboard

- **These models have been trending at 95-97% accuracy over the past 6 months. They each incorporate 18-20 different metrics in each model.**

	2020					2021					2022					2023	
	Q1	Q2	Q3	Q4	Y/Y	Q1	Q2	Q3	Q4	Y/Y	Q1	Q2	Q3	Q4	Y/Y	Q1	Q2
Industrial Production: Manufacturing	-4.57%	-5.41%	5.59%	2.88%	-1.94%	0.95%	0.72%	0.20%	1.79%	3.71%	-2.04%	-1.75%	-2.04%	0.49%	-5.26%	1.75%	0.37%
Aerospace and miscellaneous transportation equipment IPG3364T9S	-18.76%	-9.44%	14.45%	3.05%	-13.23%	6.84%	0.25%	1.29%	-0.50%	7.94%	2.77%	-2.71%	-6.83%	4.14%	-2.99%	-2.97%	-7.46%
Computer and electronic product IPG334S	1.05%	-0.72%	0.77%	2.18%	3.30%	2.76%	3.85%	0.08%	0.67%	7.53%	-3.48%	-0.52%	-0.81%	0.51%	-4.28%	0.63%	1.78%
Electrical equipment, appliance, and component IPG335S	-0.84%	-6.96%	2.61%	4.06%	-1.49%	3.73%	-1.70%	2.67%	-0.85%	3.80%	1.36%	-2.00%	2.56%	3.81%	5.75%	-0.49%	3.41%

Demand: Industrial Production Forecast Dashboard

- These models have been trending at 95-97% accuracy over the past 6 months. They each incorporate 18-20 different metrics in each model.

	2020					2021					2022					2023	
	Q1	Q2	Q3	Q4	Y/Y	Q1	Q2	Q3	Q4	Y/Y	Q1	Q2	Q3	Q4	Y/Y	Q1	Q2
Fabricated metal product IPG332S	-2.54%	-6.82%	3.57%	0.53%	-5.45%	3.38%	-0.78%	1.30%	0.25%	4.17%	-0.19%	-1.08%	-2.00%	2.99%	-0.36%	-0.07%	-3.28%
Machinery IPG333S	-1.19%	-9.21%	8.95%	1.55%	-0.75%	4.72%	0.02%	2.39%	0.70%	8.00%	6.72%	3.58%	1.15%	-1.73%	9.88%	-3.63%	-3.78%
Motor Vehicles and Parts IPG3361T3S	-24.30%	9.41%	21.98%	1.88%	2.93%	-6.50%	-7.26%	-2.44%	11.26%	-5.88%	0.98%	6.04%	-2.55%	-1.46%	2.83%	-1.50%	8.80%
Primary Metal IPG331S	-4.87%	-19.13%	15.43%	3.83%	-7.80%	4.16%	3.39%	-0.05%	1.63%	9.40%	-8.93%	-10.05%	-1.96%	4.99%	-15.67%	0.69%	-5.70%