

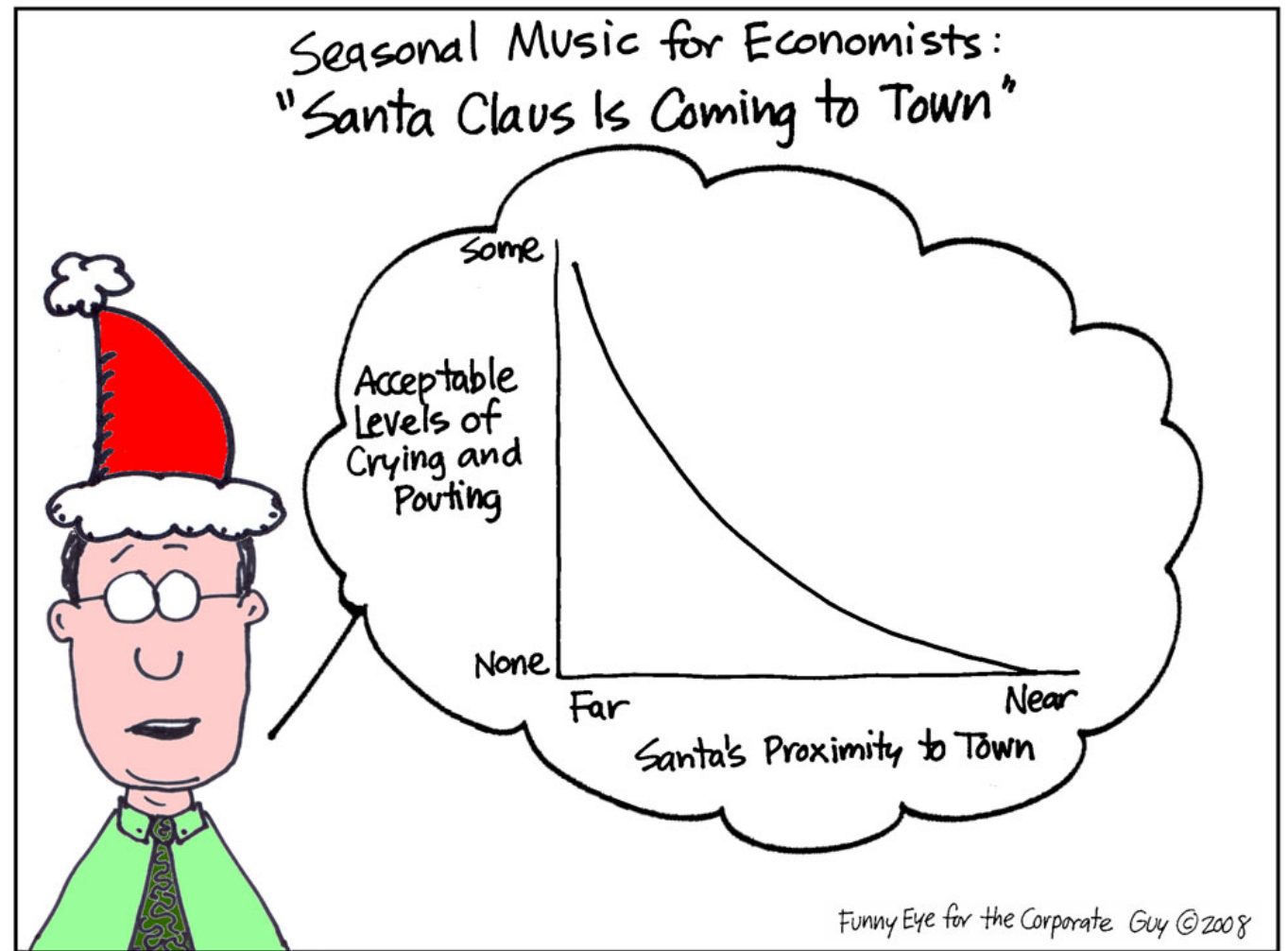


# Now What? Expectations for 2023 and Beyond

## UHY – Executive Briefing

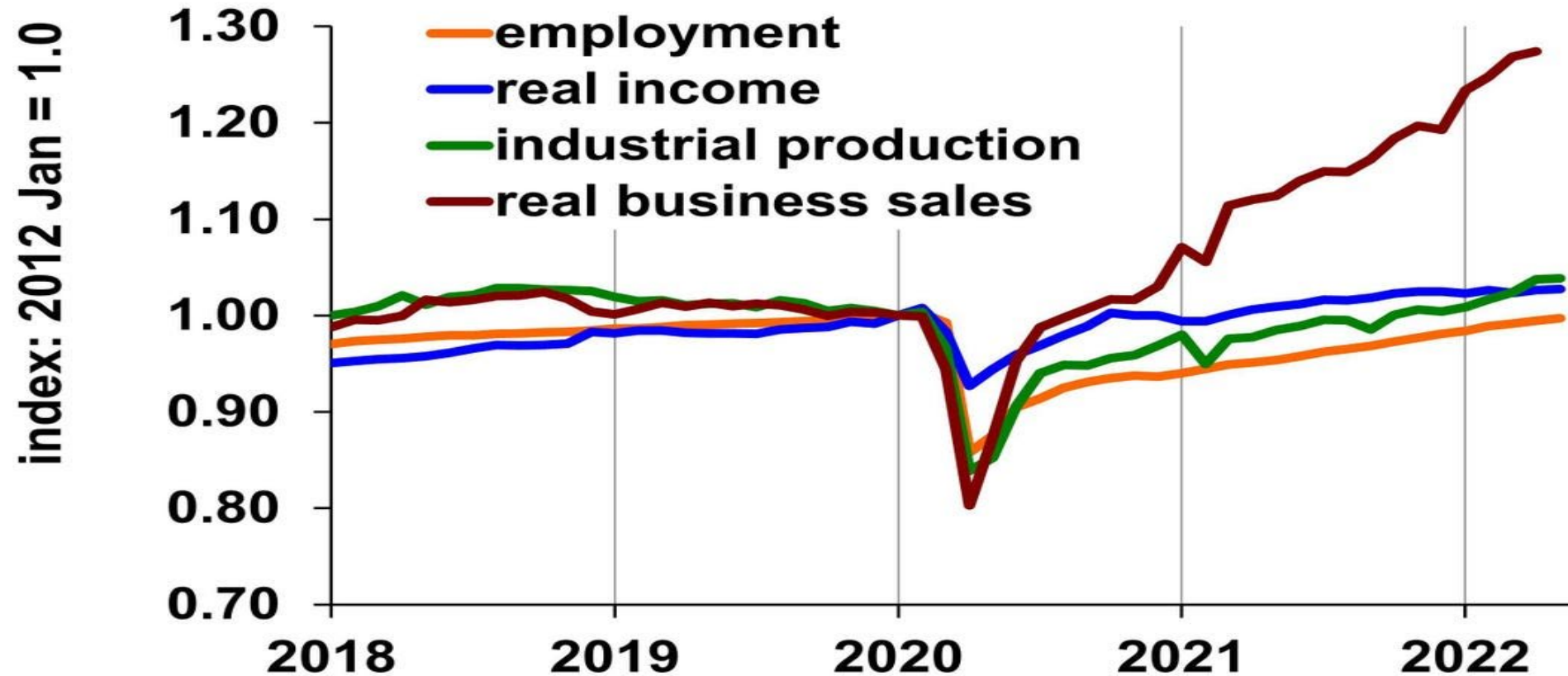
**Chris Kuehl - Armada**

**December 2022**



# Still Not Sending a Desperate Signal

## Economic Coincident Indicators



# Good News on the Horizon or Not?

- **Global Inflation Peaking?**
  - Factory gate pricing – producer price index
  - Commodity prices declining
  - Shipping rates down
  - Expectations for inflation have diminished (somewhat)
- **Central Banks Talking Rate Slowdown**
- **Potential Improvement in Supply Chain (depends on China)**
- **Job Growth Still Exceeding Expectations**
- **Oil and Gas Remain Volatile Until Europe Gets Through Winter**
- **China Still Pushing Zero Tolerance**
- **Global Wage Growth, More Risk of Strikes and Generally More Labor Leverage**

# Quick Macro Outlook

### 3. Back to sub-2% growth through '25

	2022				2023				2019	2020	2021	2022	2023	2024	2025
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4							
Real GDP	-1.6	-0.6	2.6	-0.5	-0.5	0.5	2.0	3.0	2.3	-3.4	5.7	0.2	1.2	1.7	1.8
Unemployment rate (%)	3.8	3.6	3.6	3.6	3.7	3.9	3.9	4.4	3.7	8.1	5.4	3.8	4.4	4.4	4.3
PCE Inflation (%Y/Y)	6.3	6.5	6.3	4.2	3.4	3.0	2.9	2.8	1.5	1.2	3.9	5.4	2.8	3.3	2.0
Core PCE Inflation (%Y/Y)	5.2	4.8	4.6	4.4	3.4	3.2	3.1	3.1	1.7	1.4	3.3	4.5	3.1	2.3	2.1
Fed Funds Rate	0.4	1.6	3.1	4.4	4.4	4.5	4.6	4.6	1.6	0.1	0.1	4.4	4.6	3.9	2.9

1. Although officially showing recession here, the contraction is still not steep

2. But Q3 '22 and Q2 '23 are razor thin. There is nearly a year here of stagnant market conditions. Which will not allow companies to sell down on inventories and it will stall freight movement.

4. To hit 2% inflation target, estimates suggest the Fed will have to hit a peak Effective Funds Rate of 5.25% and unemployment will likely approach 5.0%.

# Inflation – What the Fed Is ‘Really’ Watching...

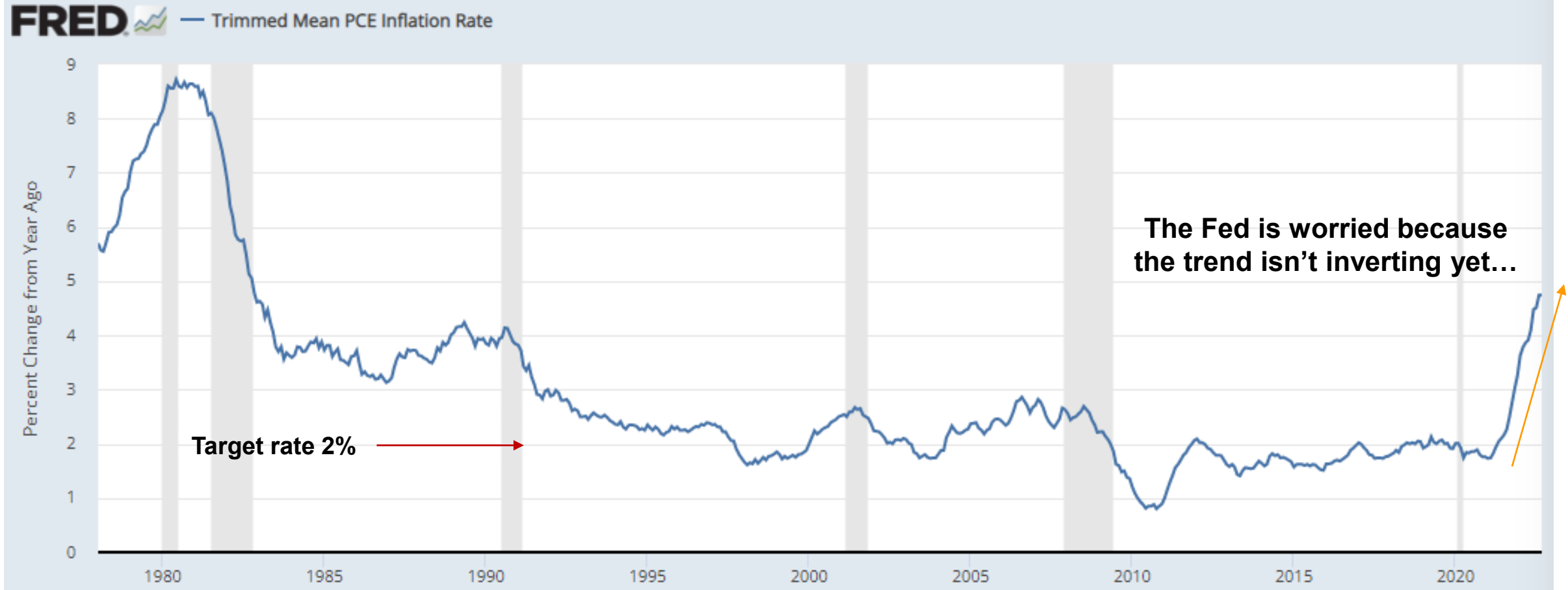
## Six-month PCE inflation, annual rate

	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sept-22
PCE	7.1	7.1	8.0	6.6	5.9	4.6
PCE ex F&E	5.3	5.0	5.2	4.3	4.6	4.8
Trimmed mean	4.3	4.5	5.0	4.5	4.8	5.0

## 12-month PCE inflation

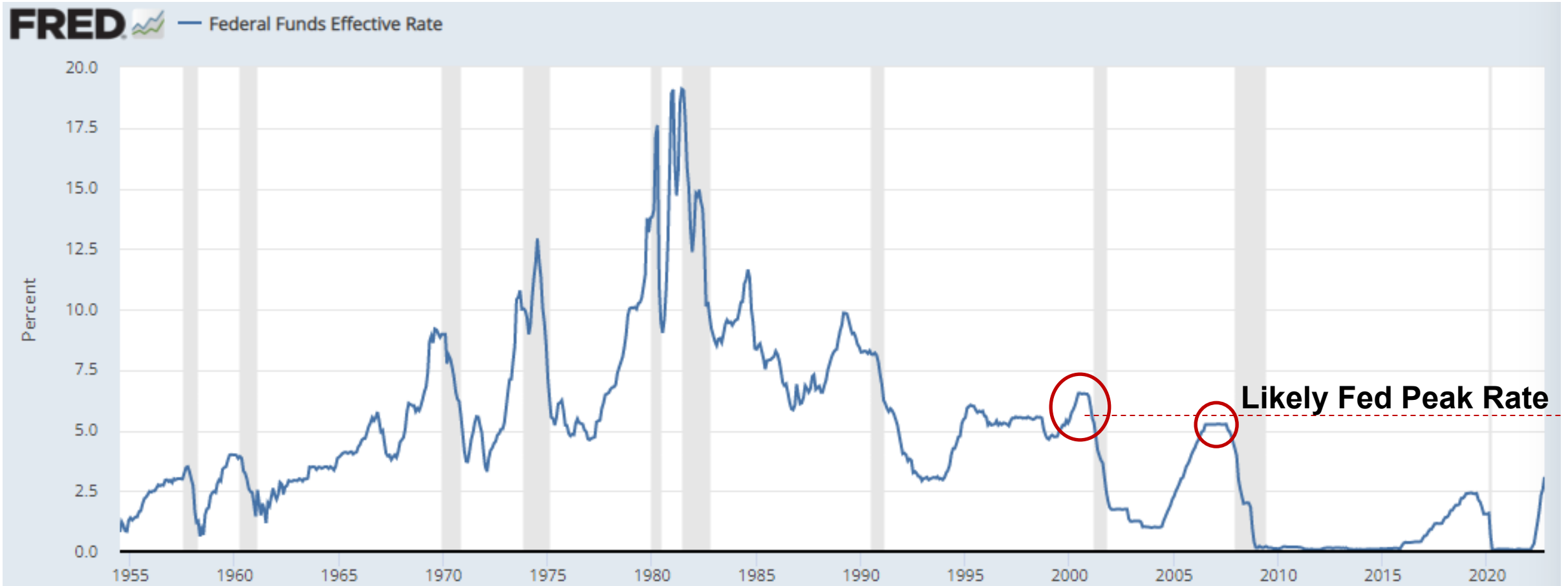
	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sept-22
PCE	6.4	6.5	7.0	6.4	6.2	6.2
PCE ex F&E	5.0	4.9	5.0	4.7	4.9	5.1
Trimmed mean	3.9	4.1	4.5	4.5	4.7	4.7

# Inflation Summary – What the Fed Is Watching the Historic View



# Peak Rate Would Hit Levels Prior to Great Recession

- Many companies have not operated in this environment for 24 years...we forget what it looks like.



# Import Demand: the US Dollar Continues to Gain Strength, Importing Will Continue to be Robust

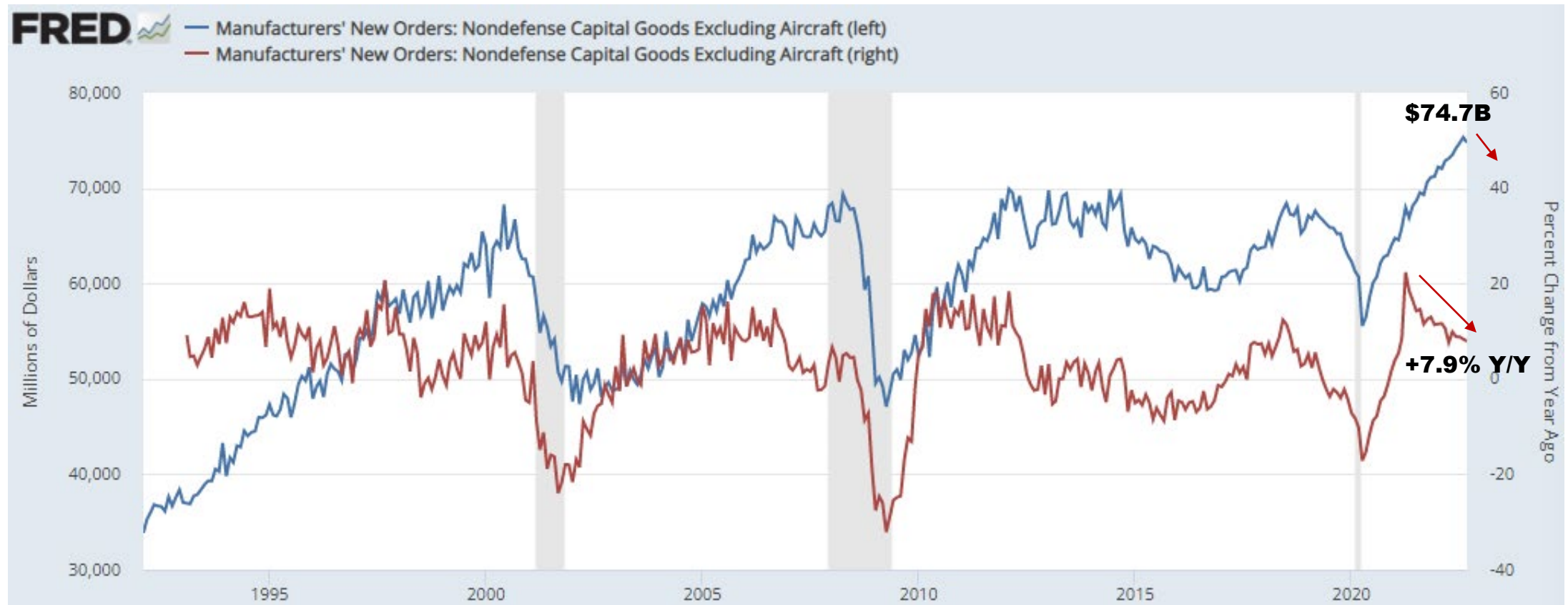
- Risk: the developing world can't afford to purchase food, energy, etc. Anything denominated in dollars.
- Even Europe is struggling.
- This could eventually become a headwind, but for now it remains a tailwind for US importers.



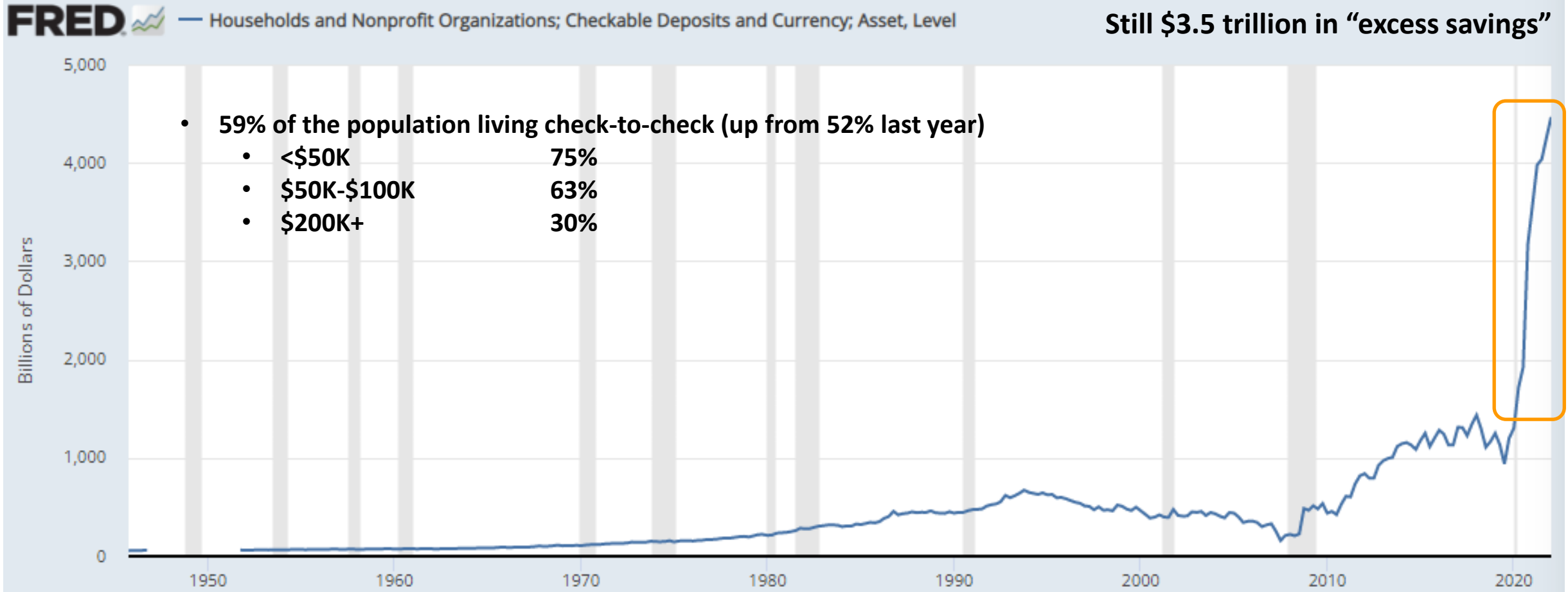


# Corporate Investment Now Starting to Show the Fourth Quarter Decline that We Have Been Expecting

- Some surveys of corporate CEO's have indicated planned slowing of spending in the second half of the year if recessionary risk continues to grow.
- US Private investment driving Manufacturing (automation and robotics); Construction

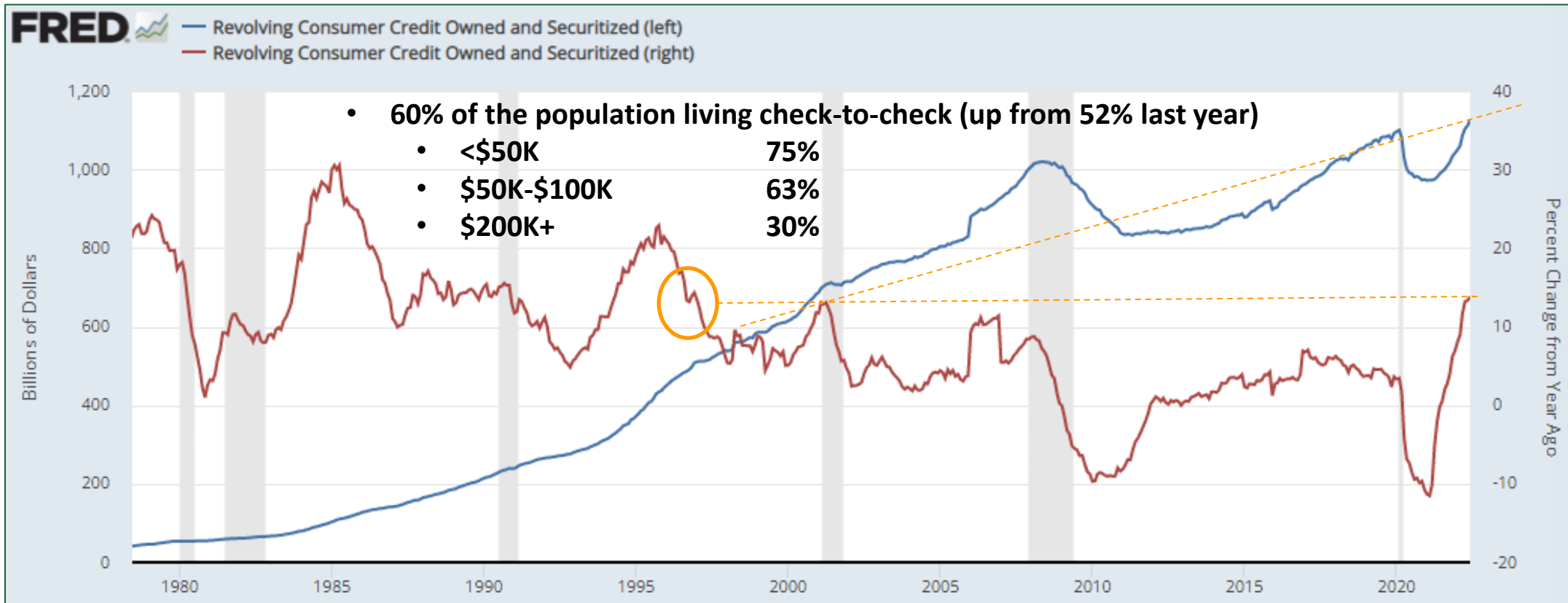


# A Lot Of Cash Still Sitting On The Sidelines



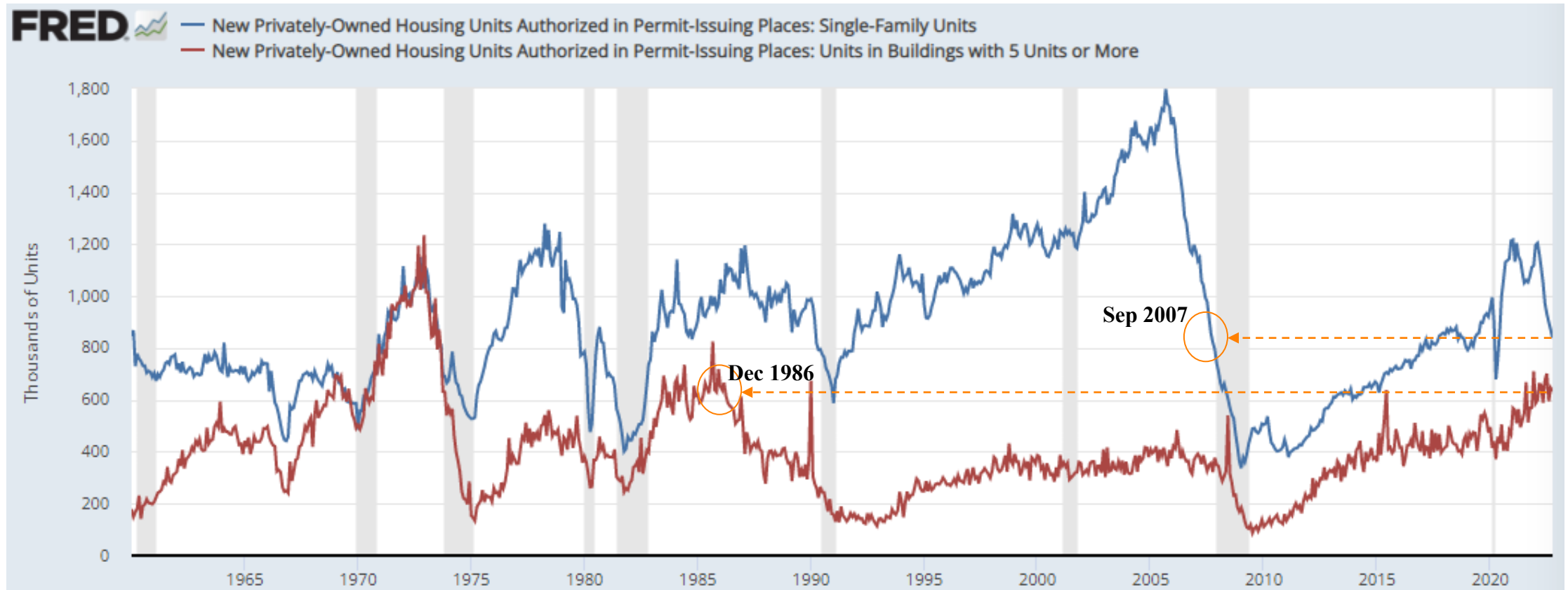
# Consumer Credit Use Is Surging...Or Is It?

- Here is the other side of that equation. Household use of revolving debt has hit record levels. The overall savings rate has also now dropped below the 10-year trend and households are under increasing pressure.

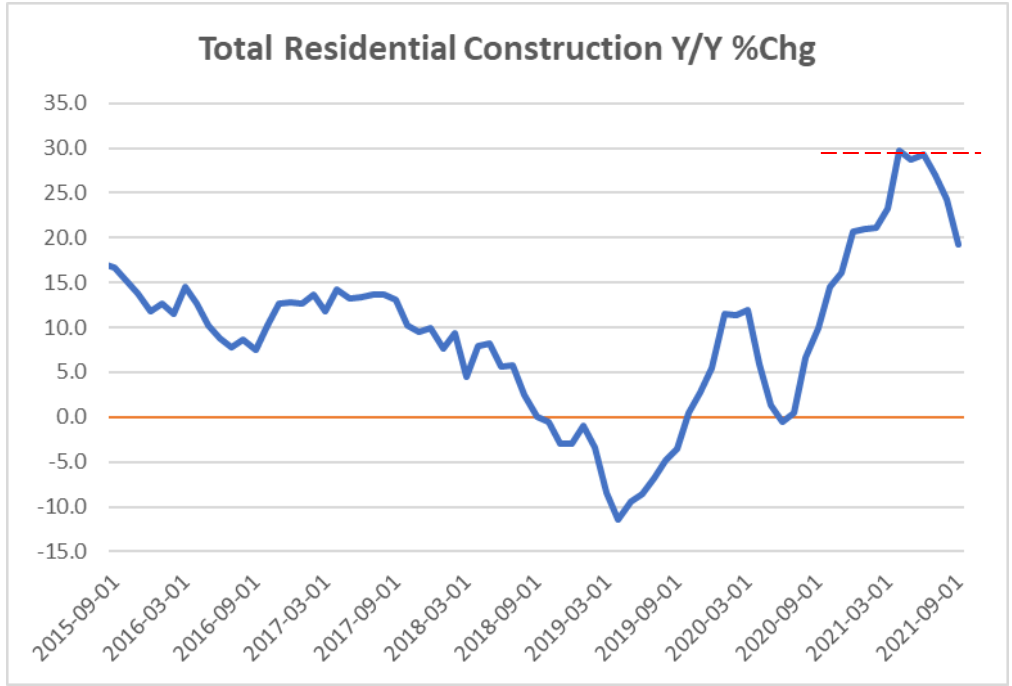


# Housing Getting Hit – But Multifamily Still Stable

- Permits are forward-looking, total permits down 10.1% Y/Y.
- Multi-family strongest permits since 1986, up 11.2% Y/Y through October.
- Single family home permits getting hit hard, permits down 22.1% Y/Y.
- Estimates that the US still needs 2.8 million units (not including migrant population) affordability is the issue, hence multi-family.



# Some Continued Recovery in Commercial Construction

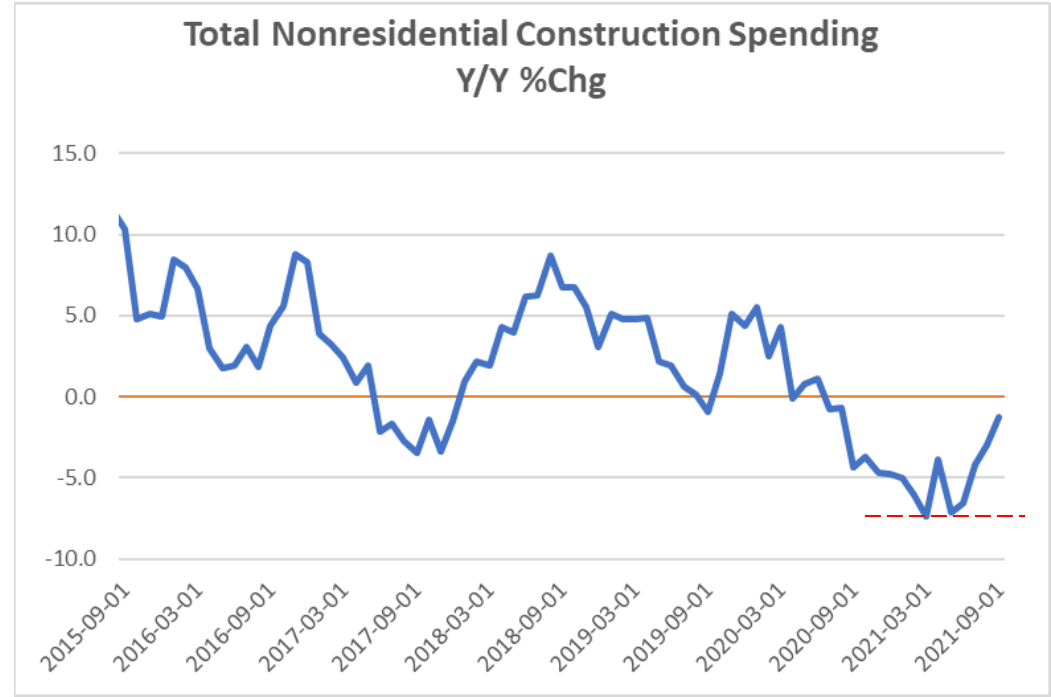


## Private Annualized Spending

**2019: \$550B**  
**2021: \$786B**

**+19.3%  
YoY**

+24.3% in last update



## Private Annualized Spending

**2019: \$815B**  
**2021: \$788B**

**-1.3%  
YoY**

Jan 20' peak: \$885B

-3.0% in last update

# Likely the New Normal vs 2019 – Keeping Commuter Traffic Down

- The back-to-office barometer is not changing materially in most markets.
- This could be the new normal relative to pre-pandemic levels.
- Any dramatic changes to the percentages of people going back to the office would change commuter volumes and increase fuel consumption in the process.



## KASTLE BACK TO WORK BAROMETER

11.21.22

Weekly Occupancy Report from Kastle Access Control System Data

### BAROMETER THIS WEEK



	Wed 11/9	Wed 11/16	% Change
Houston metro	56.6%	58.5%	1.9% ▲
San Francisco metro	41.6%	43.1%	1.6% ▲
Los Angeles metro	44.7%	46.1%	1.5% ▲
<b>Average of 10</b>	<b>47.5%</b>	<b>48.1%</b>	<b>0.6% ▲</b>
Austin metro	62.2%	62.7%	0.5% ▲
San Jose metro	37.5%	37.0%	0.5% ▼
New York metro	47.2%	47.6%	0.4% ▲
Dallas metro	53.8%	54.0%	0.3% ▲
Philadelphia metro	40.9%	41.2%	0.3% ▲
Washington D.C. metro	44.7%	44.6%	0.2% ▼
Chicago metro	46.0%	46.0%	0.1% ▲

# 20 Countries In Contraction – Does This Create a Green Shoot Surprise Early in 2023?

- In November, 20 countries/regions had manufacturing sectors in contraction (15 last month).
  - 10 had services sectors in contraction (signaling broader economic pressure)
- The question is: What does this do for materials that are in short supply?
  - Microchips
  - Steel beams
  - Tires and suspensions
  - Etc.

Country	Current Month	Latest Month Manuf. PMI	Prior Month Manuf. PMI	M/M Change
Global PMI	Nov	48.8	49.4	-0.6
Eurozone PMI	Nov	46.0	43.8	2.2
US	Nov	47.7	50.4	-2.7
China	Nov	49.4	49.2	0.2
Canada	Nov	49.6	48.8	0.8
Mexico	Nov	50.6	50.3	0.3
Japan	Nov	49.0	50.7	-1.7
Germany	Nov	46.2	45.1	1.1
South Korea	Nov	49.0	48.2	0.8
UK	Nov	46.5	46.2	0.3
France	Nov	48.3	47.2	1.1
India	Nov	55.7	55.3	0.4
Italy	Nov	48.4	46.5	1.9
Taiwan	Nov	41.6	41.5	0.1
Brazil	Nov	44.3	50.8	-6.5
Spain	Nov	45.7	44.7	1.0
Russia	Nov	53.2	50.7	2.5
Netherlands	Nov	46.0	47.9	-1.9
Ireland	Nov	48.7	51.4	-2.7
Greece	Nov	48.4	48.1	0.3
Poland	Nov	43.4	42.0	1.4
ASEAN	Nov	50.7	51.6	-0.9
Vietnam	Nov	47.4	50.6	-3.2
Philippines	Nov	52.7	52.6	0.1
Australia	Nov	51.3	52.7	-1.4
Switzerland	Oct	54.9	57.1	-2.2
Hong Kong	Nov	48.7	49.3	-0.6
Singapore	Nov	56.2	57.7	-1.5

Source: Markit and Various Global Reporting Agencies/Banks

# Spending has Started, Manufacturing Construction 33.5% Higher Y/Y On \$112B In Total Spending

- Manufacturing construction activity among the fastest non-infrastructure sectors growing.
- Some of the manufacturing re-shoring speculation is starting to show up in real spending – manufacturing construction spending up 33.5% year-over-year. There are big pockets of demand out in the marketplace.
- Infrastructure spending also picking up pace.

Type of Construction	Oct 2022 <sup>p</sup>	Sep 2022 <sup>r</sup>	Oct 2021	Percent change Oct 2022 from -	
				Sep 2022	Oct 2021
<b>Total Construction</b>	<b>1,794,949</b>	<b>1,800,105</b>	<b>1,644,332</b>	<b>-0.3</b>	<b>9.2</b>
Residential	896,505	899,328	825,903	-0.3	8.5
Nonresidential	898,444	900,777	818,428	-0.3	9.8
<b>Manufacturing</b>	<b>111,618</b>	<b>115,451</b>	<b>83,632</b>	<b>-3.3</b>	<b>33.5</b>
Water supply	25,470	25,660	19,140	-0.7	33.1
Commercial	117,411	117,924	95,950	-0.4	22.4
Lodging	19,125	18,882	15,655	1.3	22.2
Sewage and waste disposal	32,706	33,061	28,051	-1.1	16.6
Amusement and recreation	28,186	27,475	25,026	2.6	12.6
Highway and street	114,273	115,096	102,161	-0.7	11.9
Conservation and development	9,114	9,040	8,171	0.8	11.5
Public safety	11,736	11,556	10,601	1.6	10.7
Health care	52,410	52,207	48,655	0.4	7.7
Educational	98,218	97,817	93,380	0.4	5.2
Transportation	56,597	56,633	55,314	-0.1	2.3
Office	87,138	86,891	86,352	0.3	0.9
Communication	24,849	24,707	24,777	0.6	0.3
Religious	2,835	3,148	2,889	-9.9	-1.9
Power	106,758	105,229	118,677	1.5	-10.0



# Estimates Suggest \$1 Trillion To Be Invested In The US Annually Over The Next 7 Years For Re-shoring, Mexico Benefitting As Well.

- **Government drive to secure supply chains**
  - Military
  - Pharma
  - Microchips
  - Food and food security
  - High-tech
- **Long-term environmental risk**
- **Geopolitical risk**
- **Trade-War Impacted**

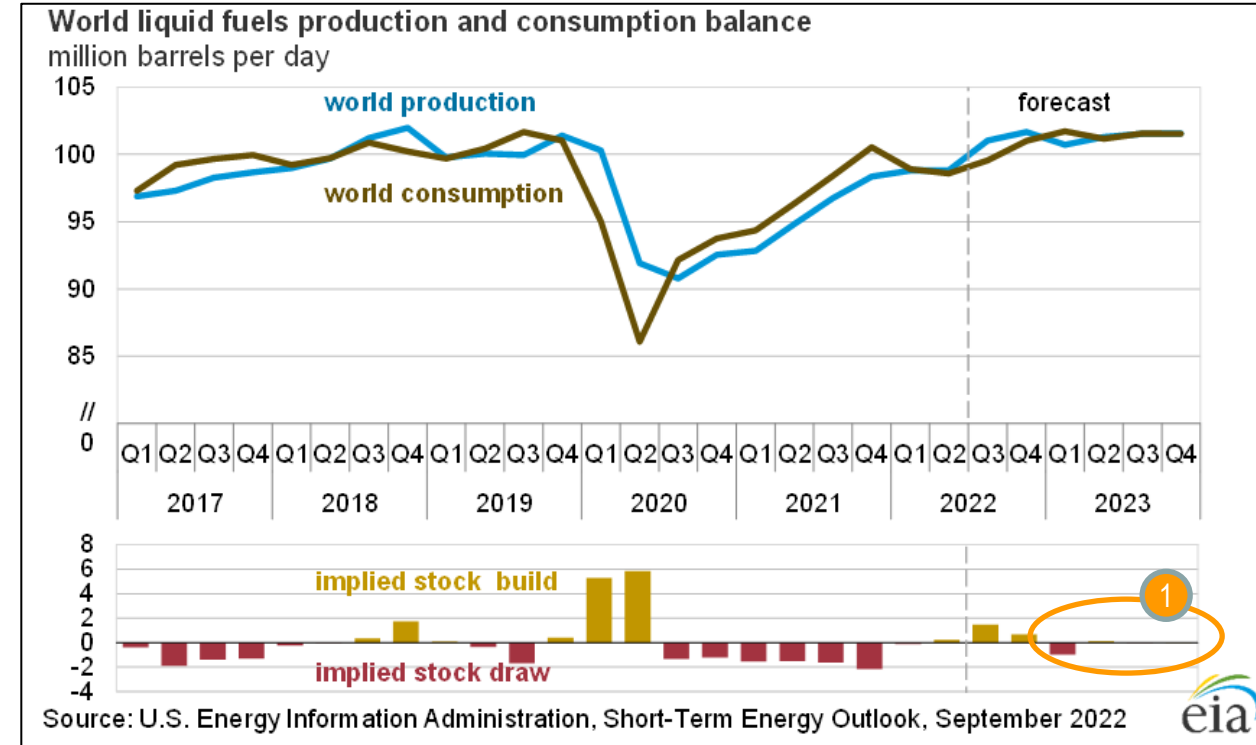


**Strategic importance of USMCA  
more pronounced**

# Oil Outlook Still Uncertain

## 1. Implied net draw through most of 2023

- US production will hit an all-time high next year of 13M Bpd
- But, with commuter traffic cut off, consumption is 20M Bpd currently
- 7M Bpd gap must be imported
- SPR releases (@1M Bpd) end in November
- The US will start rebuilding the SPR in 2023 and 2024
- Concerns that global excess capacity is just 1.2% higher at this time, when China and Europe are largely consuming less.
  - Chinese imports of petroleum down 4.7% YTD
  - Refinery shutdowns in China could lead to more import activity



### Crude forecast:

- 2021 \$68.21
- 2022 \$98.79
- 2023 \$89.75

### Gasoline forecast:

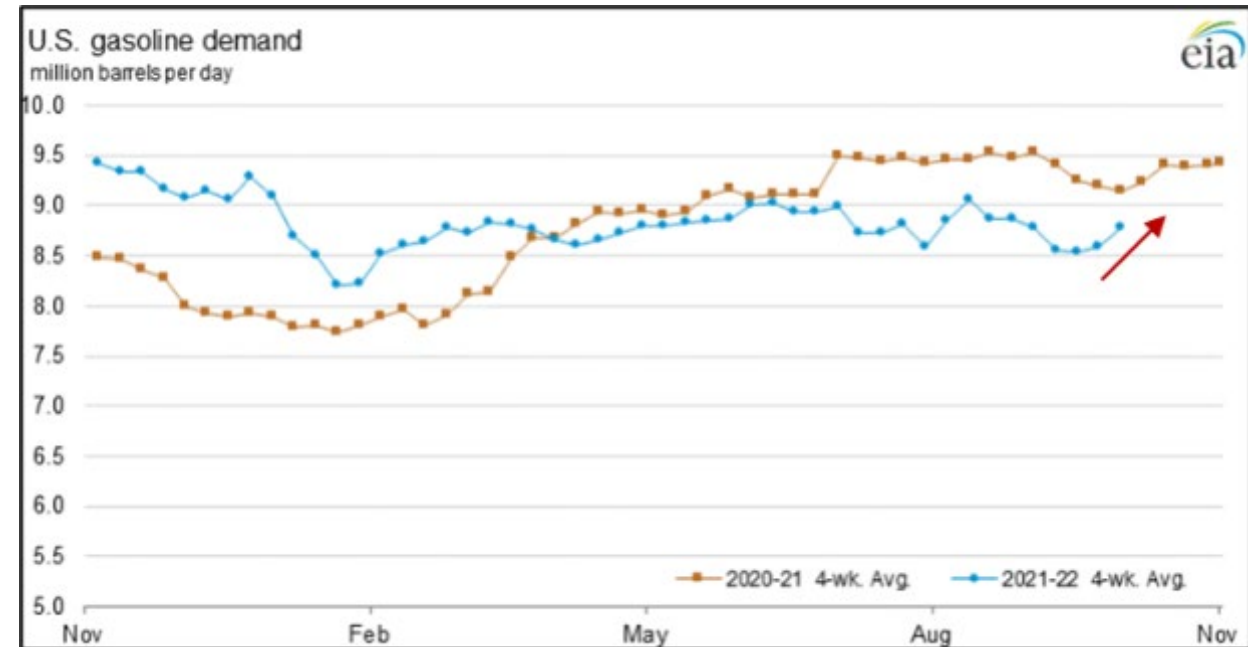
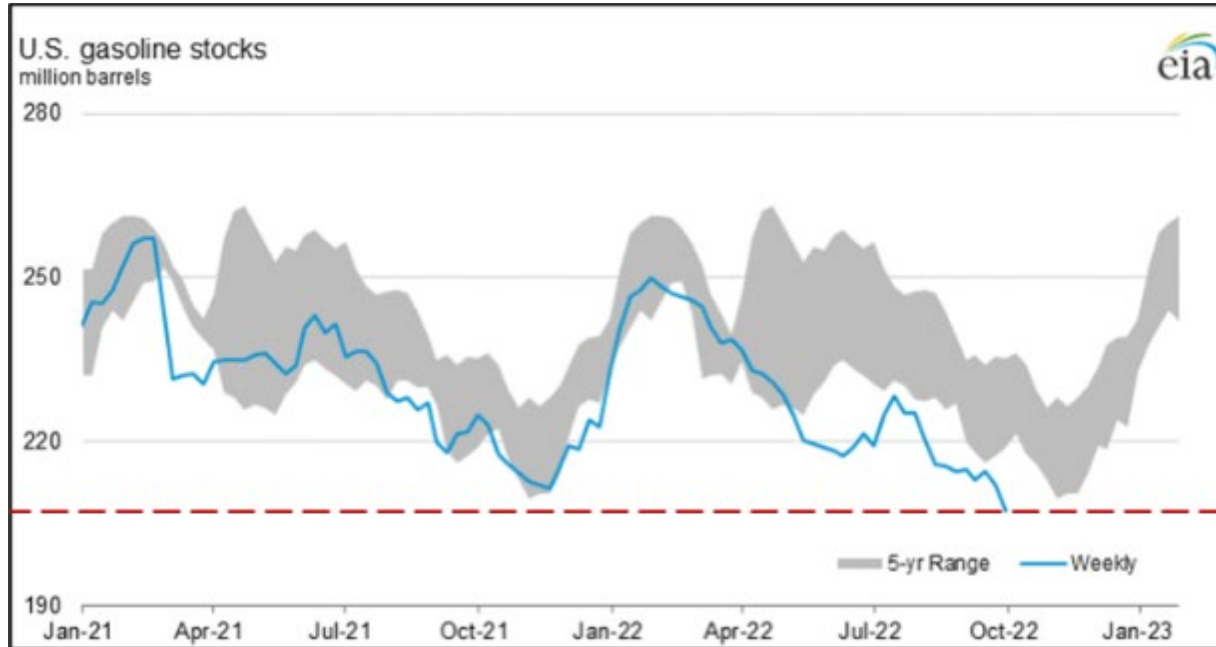
- 2021 \$3.02
- 2022 \$4.05
- 2023 \$3.57

### Diesel forecast:

- 2021 \$3.29
- 2022 \$4.73
- 2023 \$4.07

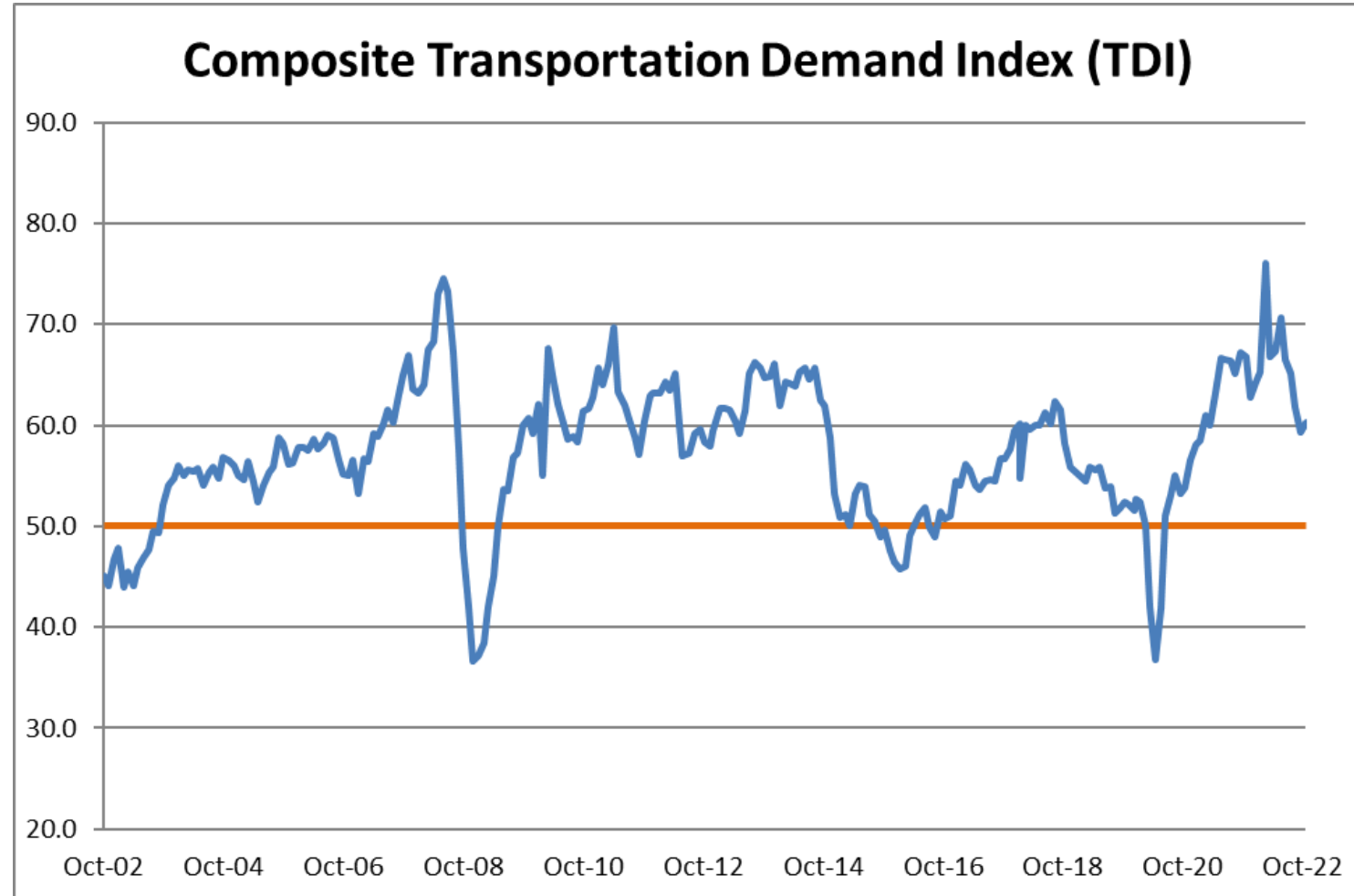
# Gasoline Inventories are low, Demand Improving

- Inventories running well below the 5-year average
- RBOB prices still 14.6% higher YTD and 26.6% higher Y/Y.
- National gasoline prices are just 7% higher than last year.



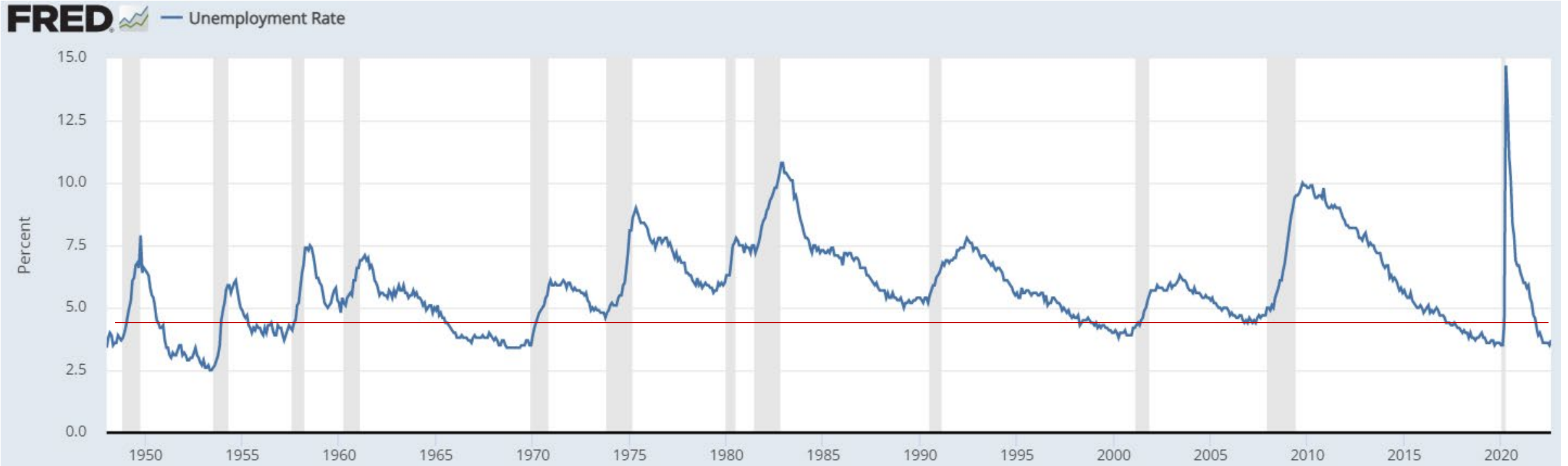
# Transportation demand index falling back into a historically normal range

- Demand across the board stabilized slightly into seasonality between September and October.
- On a year-over-year basis, all of the modes were decelerating quickly against last year's strong (near historic) averages.
- Remember that 2018 was a strong demand environment for trucking, and the current TDI is returning into that range, still a solid story overall but decelerating.



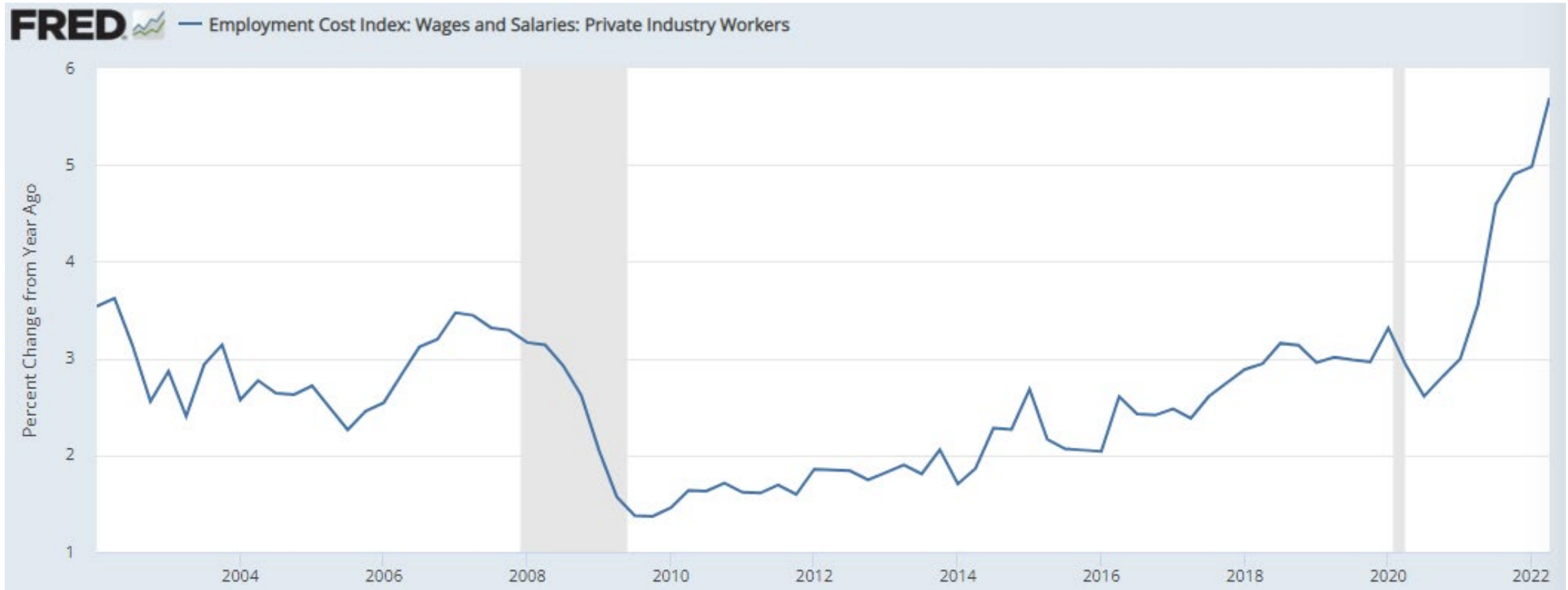
	22-Oct	22-Sep	21-Oct	Y/Y Change %	M/M Change %
<b>Composite</b>	60.3	59.3	66.8	<b>-9.7%</b>	1.7%
<b>Rail</b>	57.8	57.5	64.2	<b>-10.0%</b>	0.5%
<b>Trucking</b>	60.6	59.5	66.9	<b>-9.4%</b>	1.8%
<b>Air</b>	63.1	63.1	74.3	<b>-15.1%</b>	0.0%
<b>Maritime</b>	61.2	61.6	72.6	<b>-15.7%</b>	<b>-0.6%</b>

# Unemployment Still Low – Fed Target is 4.5% - Which Is Still Low – Which Bodes Well for 2023 and 2024

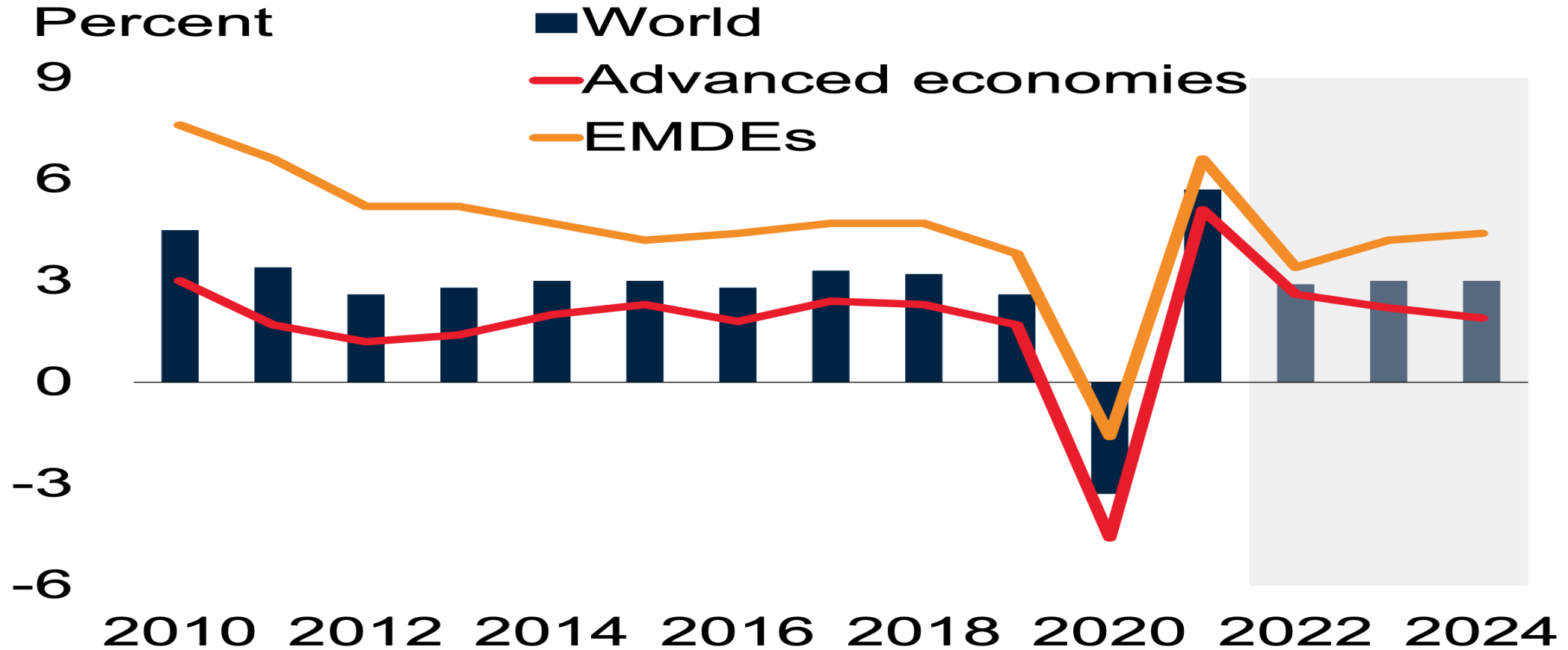


# Labor Costs Are Sticky Inflation, Wages Rising Faster Than Any Time Since The Early 2000's

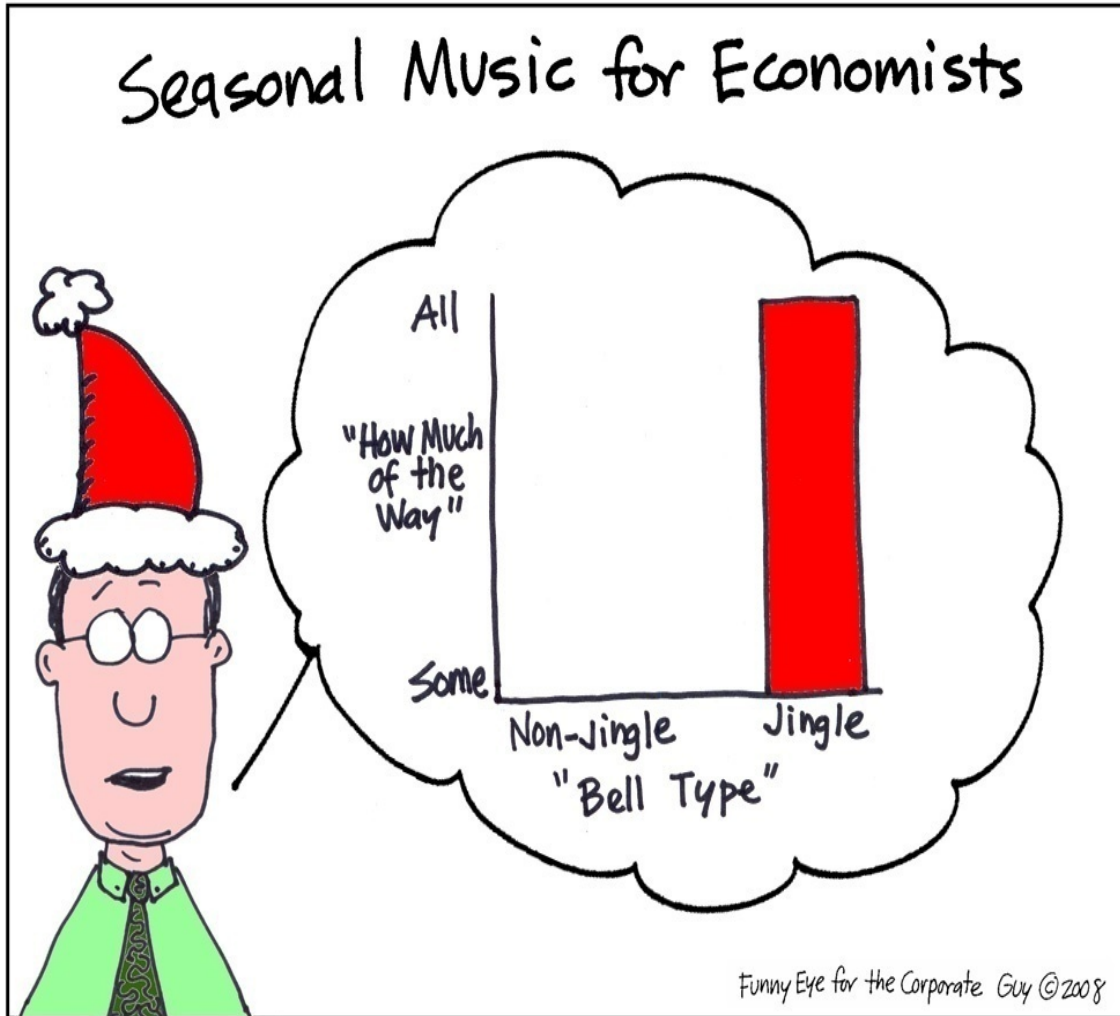
- Good for keeping a consumer consuming.
- Tougher for employers and maintaining profits.



# Not Expected to be Deep or Long Lasting



# Which Way Are We Heading?



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