

Where Are We Now? Stumbling from One Crisis to the Next



Chris Kuehl – Armada Corporate Intelligence

Crisis du Jour?



- Debt Ceiling Plenty of political drama and little or nothing accomplished as far as the actual debt is concerned.
- Bank crisis mostly overblown but banks now looking at commercial real estate as next pain point
- Oil prices on the way up? What will OPEC reduction really mean given that many in OPEC are not backing Saudi Arabia.
- Al Scare what jobs are really at risk? Is this another situation similar to the impact of technology on manufacturing in the 1990s?

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Is China/US trade really in jeopardy? Who wins and who loses?

The Bottom Line...

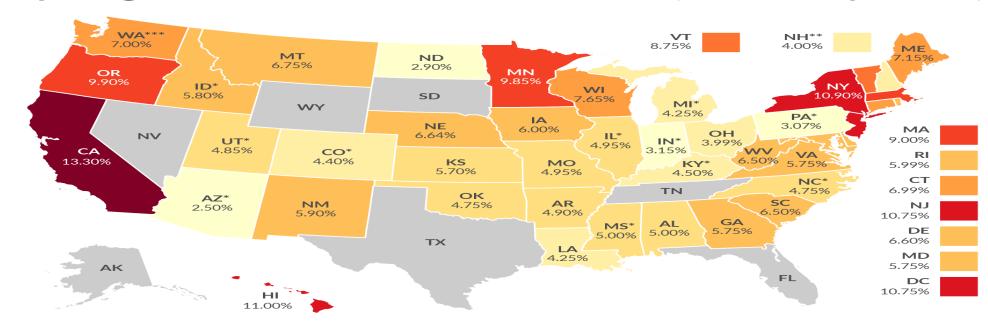


- US Economy is not yet hitting stall speed. But pressure is mounting on the commercial side of the economy.
- Jobs are still strong, and consumers are spending.
- Inflation is still too hot, and the Fed will continue to tighten if this continues.
- Foreign markets are slowing quickly, and a weak peak season will push them further. This could be a counterbalance to inflation.
- But, natural materials, the war effort, and other factors are keeping average inflation too hot.
- Hold on Loosely. 2024 and 2025 look like a slow dig out of the doldrums if we hit them in 2023.

Middle of the Road



Top Marginal State Individual Income Tax Rates (as of January 3, 2023)



Note: Map shows top marginal rates: the maximum statutory rate in each state. This map does not show effective marginal tax rates, which would include the effects of phase-outs of various tax preferences. Local income taxes are not included.

(*) State has a flat income tax.

(**) State has a flat income tax. (**) State only taxes interest and dividends income.

(***)State only taxes capital gains income.

Sources: Tax Foundation; state tax statutes, forms, and instructions; Bloomberg Tax.

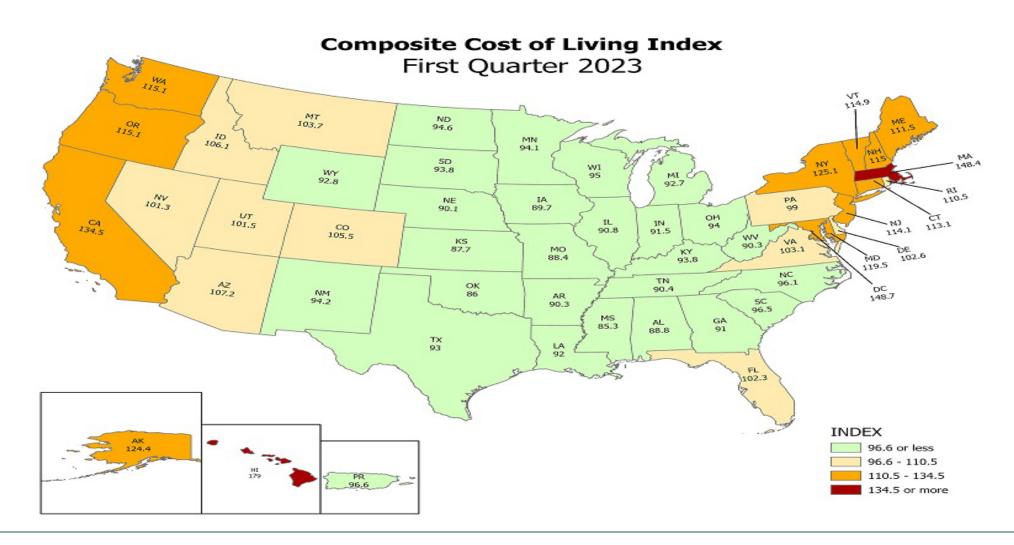


TAX FOUNDATION



Cost of Living Better in the Middle

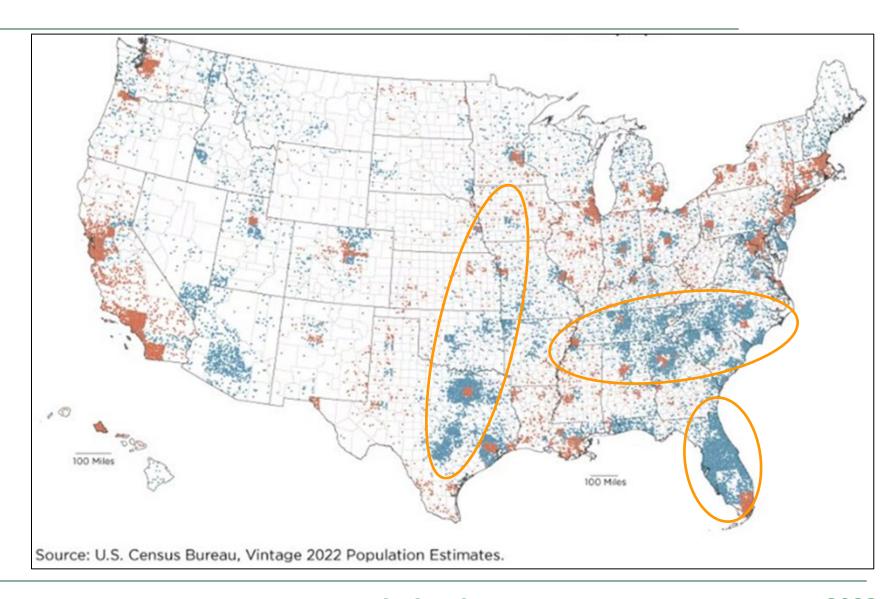




Population Changes 2021 – 2022



- Note the flight even out of popular (but dense) population centers like downtown Dallas and Miami, but flight to suburbs in those regions are among the fastest growth rates in the country.
- Corridors seem to be continuing to get population influxes...
 - I35 corridor
 - Tennessee Valley Region +Atlanta
 - And Florida



Mini Banking Crisis Sector Update



- 100 of 4,700 regional banks under intensified "watch" with elevated risk
- Fundamentally, most are passing regulatory checks…\$1.1 T reportedly has flowed out of high-risk banks over the past year, outflows have stabilized
 - FDIC has \$125 billion in reserve (\$23 billion in payouts YTD)
- But "Bank runs" are too easy today.
 - Digital banking creates an easier environment for the proverbial "bank run" and can quickly destabilize specific bank entities

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- More risks remain, but they look more traditional:
 - Commercial real estate risk could be as high as \$3 trillion?

St. Louis Financial Stress Index Low for Now



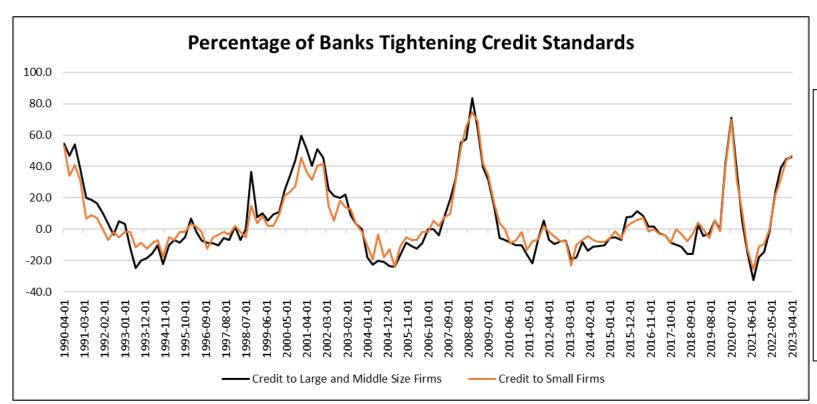


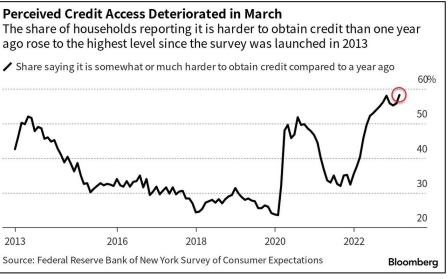
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Bank Credit Tightening Could be the Biggest Risk Moving Forward.



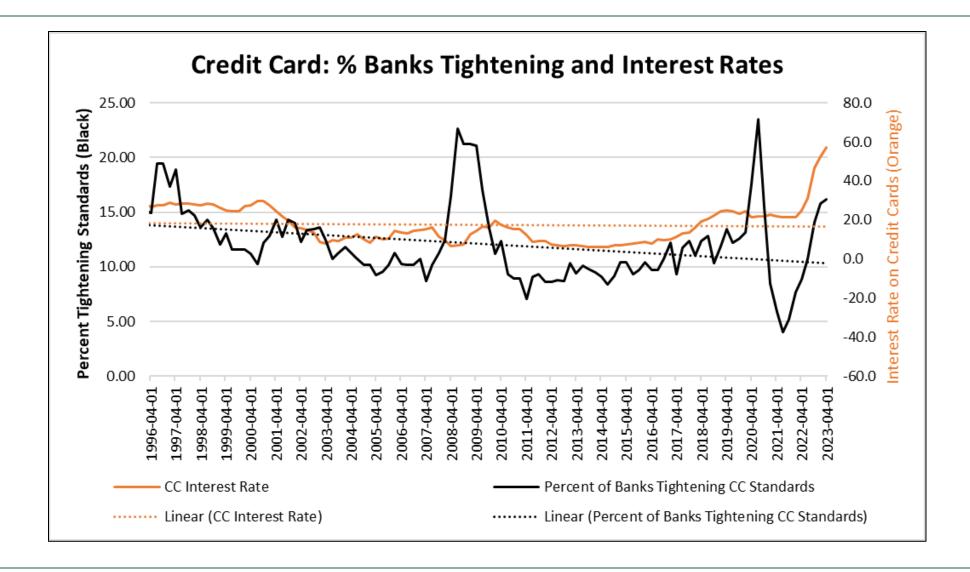
- Bank credit standards were already tightening before the early March mini banking crisis started.
- Data suggests that lending was slowing at the fastest sequential rate in history (\$45 billion decrease in small banks alone, \$105 billion overall drop in lending activity outside of normal seasonality).
- The New York Fed household surveys show that bank credit was tightening at the fastest rate since the measure was collected.





Pressure on Consumers building





Construction Spending Remains Strong

Nonresidential construction spending still growing 25.3% Y/Y vs. residential which was down 9.1%

> Single family -23.3%

Multi-family +23.6%

- Manufacturing construction activity up 103.8% Y/Y on \$189B in annualized spending. (Normal is \$60B)
- Infrastructure spending beginning to build momentum.
- Lodging up 40.8%
- Travel and entertainment still strong

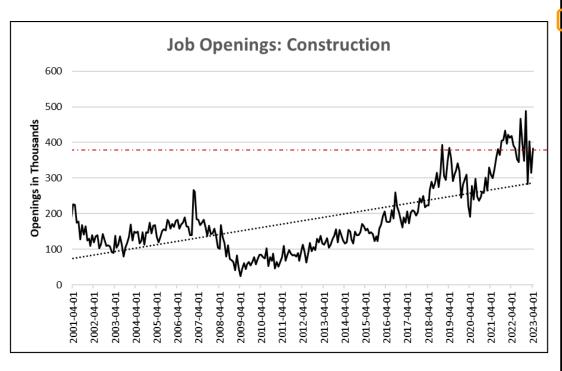
Table 1. Value of Construction Put i	in Place , Seas	sonally Adjus	ted Annual F	Rate
(Millions of dollars. Details may no	t add to total:	s due to roun	ding.)	
				Percent

(Willions of dollars. Details may not			, , , , , , , , , , , , , , , , , , ,	Percent	t change
Type of Construction	Apr	Mar	Apr	Mar	Apr
	2023	2023	2022	2023	2022
Total Construction	1,908,378	1,884,985	1,780,890	1.2	7.2
Residential	855,206	851,460	940,598	0.4	-9.1
New single family	362,398	365,138	481,022	-0.8	-24.7
New multifamily	125,571	124,827	100,519	0.6	24.9
Nonresidential	1,053,171	1,033,526	840,292	1.9	25.3
Manufacturing	189,282	174,255	92,881	8.6	103.8
Lodging	23,624	23,015	16,781	2.6	40.8
Conservation and development	11,807	11,143	9,011	6.0	31.0
Water supply	25,396	25,082	20,055	1.3	26.6
Commercial	128,990	128,052	104,262	0.7	23.7
Sewage and waste	37,566	38,297	30,619	-1.9	22.7
Highway and street	125,438	123,940	103,301	1.2	21.4
Religious	3,159	3,129	2,679	1.0	17.9
Office	97,183	96,431	85,214	0.8	14.0
Health care	58,231	57,677	51,063	1.0	14.0
Transportation	62,073	61,371	54,598	1.1	13.7
Educational	110,168	110,307	97,600	-0.1	12.9
Amusement and recreation	29,701	29,215	26,488	1.7	12.1
Public safety	11,627	11,536	11 10,705	0.8	8.6
Communication	24,915	24,894	23,561	0.1	5.7
Power	114,012	115,183	111,473	-1.0	2.3

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Construction Experienced an April Surge in Job Openings





	Leve	el in Thous	DA /DA	v /v	
Name	Apr-23	Mar-23	Apr-22	M/M	Y/Y
Total Nonfarm	10,103	9,745	11,755	3.7%	-14.1%
Total Private	9,140	8,710	10,726	4.9%	-14.8%
Construction	383	315	418	21.6%	-8.4%
Manufacturing	676	702	1,024	-3.7%	-34.0%
Durable Goods	382	422	631	-9.5%	-39.5%
Non-durable goods	294	281	393	4.6%	-25.2%
Trade, Transportation and Utilities	1,765	1,436	1,962	22.9%	-10.0%
Retail Trade	942	733	1,121	28.5%	-16.0%
Professional and Business Service	1,748	1,805	2,309	-3.2%	-24.3%
Education and Health Services	2,097	1,932	2,223	8.5%	-5.7%
Health Care and Social Assistance	1,907	1,722	2,034	10.7%	-6 .2 %
Leisure and Hospitality	1,377	1,463	1,511	-5.9%	-8.9%
Arts, Entertainment and Recreation	237	243	156	-2.5%	51.9%
Accommodation and Food Services	1,140	1,220	1,354	-6.6%	-15.8%
Government	963	1,034	1,029	-6.9%	-6.4%
State and Local	833	902	922	-7.6%	-9 .7 %
Cen	sus Regior	ıs			
Northeast	1,589	1,623	1,838	-2.1%	-13.5%
South	4,059	4,039	4,560	0.5%	-11.0%
Midwest	2,159	2,022	2,653	6.8%	-18.6%
West	2,296	2,060	2,705	11.5%	-15.1%

New Orders for Durable Goods Started to Accelerate Once Again in April



Some growing sectors through April included:

- Computers
- Electrical equipment and appliances
- Automotive
- Defense sector

Weak sectors include:

13

- Communications equipment
- Fabricated metals

Estimates are shown in millions of	dollars.]						
		Mon	thly		Year to Date		
Durable Goods Category							Percent
Dui able Goods Category	Apr	Mar	Apr				Change
	2023	2023	2022	Y/Y	2023	2022	2023/2022
Total:	272,806	312,538	265,210	2.9%	1,096,981	1,069,199	2.6
Primary metals:	26,347	29,408	27,901	-5.6%	108,865	111,447	-2.3
Fabricated metal products:	35,675	39,112	36,923	-3.4%	142,522	145,376	-2.0
Machinery:	37,061	40,955	37,467	-1.1%	150,782	149,217	1.0
Computers and electronic products:	22,130	27,777	21,610	2.4%	92,066	89,929	2.4
Computers and related products:	1,789	2,168	1,441	24.1%	7,222	5,821	24.1
Communications equipment:	2,506	3,577	2,776	-9.7%	11,170	11,557	-3.3
Electrical equipment, appliances,	13,596	15,573	13,440	1.2%	55,549	52,289	6.2
Transportation equipment:	90,931	110,037	79,649	14.2%	363,032	337,746	7.5
Motor vehicles and parts:	58,068	70,277	57,315	1.3%	244,726	226,990	7.8
Nondefense aircraft and parts:	12,514	20,211	10,818	15.7%	49,853	57,902	-13.9
Defense aircraft and parts:	7,415	6,681	3,278	126.2%	22,622	14,502	56.0
Capital goods:	98,241	113,508	87 <i>,</i> 550	12.2%	383,700	373,446	2.7
Nondefense capital goods:	79,751	95,869	77,751	2.6%	324,436	327,557	-1.0
Excluding aircraft:	71,130	80,632	70,347	1.1%	291,796	283,988	2.7
Defense capital goods:	18,490	17,639	9,799	88.7%	59,264	45,889	29.1

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Table 1. Durable Goods Manufacturers' Shipments and New Orders 1

Macroeconomic Outlook



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

		2023			2024			2019	2020	2021	2022	2023	2024	2025	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021	2022	2023	2024	2025
Real GDP	1.1	1.0	-1.4	-1.9	-0.5	1.9	2.2	2.3	2.3	-2.8	5.9	2.1	0.7	0.7	1.8
Unemployment rate (%)	3.5	3.6	3.8	4.0	4.5	4.5	4.4	4.3	3.7	8.1	5.4	3.6	3.8	4.3	4.5
PCE Inflation (%Y/Y)	4.6	3.6	3.1	3.1	2.5	2.3	2.1	2.0	1.5	1.1	4.0	5.6	3.1	2.2	2.0
Core PCE Inflation (%Y/Y)	4.7	4.3	3.8	3.5	2.5	2.3	2.1	2.0	1.7	1.3	3.5	4.8	3.5	2.2	2.0
Fed Funds Rate	4.9	5.1	5.1	5.2	5.2	4.9	4.4	3.8	1.6	0.1	0.1	4.4	5.2	3.8	3.1
Canada Real GDP	-	-	-	-\	-	-	-	-	1.8	-5.2	4.5	3.4	/ 1.3	1.5	-
Unemployment rate (%)	- /	-	-	- \	-	-	-	-	5.8	9.5	7.4	5.3	5.7	6.0	-
Mexico Real GDP	-/	-	-	-	-	-	-	-	-1.8	-8.2	5.0	2.7	1.6	2.1	-
Unemployment rate (%)	/-	-	-	-	-	-	-	-	3.6	4.4	4.1	3.3	3.4	3.3	-

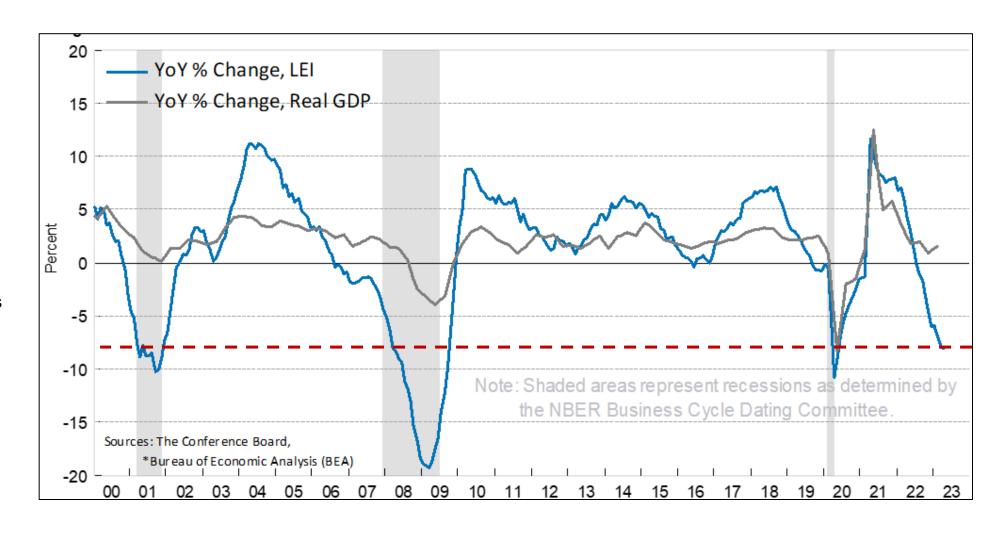
- 1. Greatest recession risk is being pushed further out, but it appears greatest between Q3 and Q1 of 2024.
- Some estimates suggest that this could easily get pushed out, depending on how quickly the unemployment rate rises (which will have a disinflation effect and reduce inflation risk).

4. To hit 2% inflation target, estimates suggest the Fed will have to hit a peak Effective Funds Rate of 5.1% to 5.5% and unemployment will likely still approach 4.5%.

Latest Leading Economic Indicator – April 2023 Shows Continuing Contraction



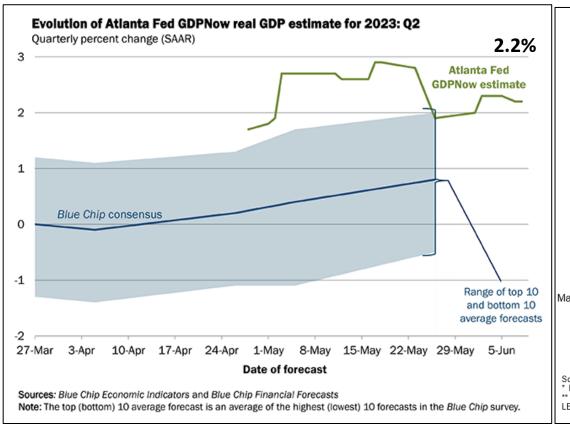
- The latest LEI from the Conference Board shows the fourth lowest levels in the past 23 years.
- Other periods with an LEI this low signaled that the country was in recession.
- The latest data also suggests that all indicators have now gone negative, including basic labor indicators.

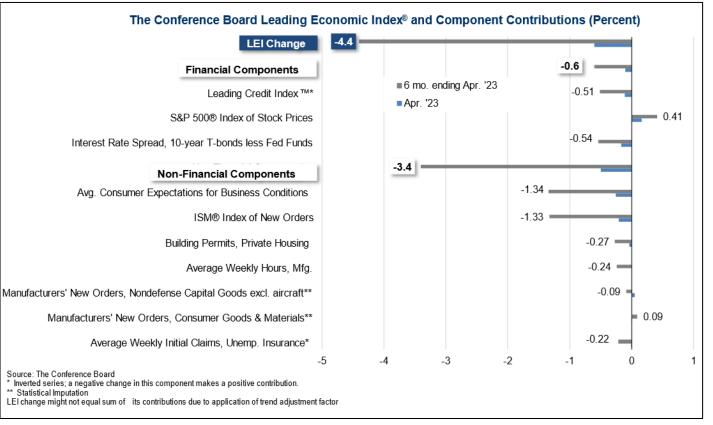


Backdrop: But Real GDP Remains Hotter Than Expectations Largely Because Labor Conditions Remain Stable.



- Current GDP trackers are showing Q2 starting at 2.2% (Blue Chip Estimates have risen to 0.7%), being boosted by a strong labor environment.
- However, the latest LEI measure likely signals that the economy has turned a weaker corner in the latest 30 days. Nearly every measure in the LEI was negative in March data. The LEI predicts economic strength over the next six months.

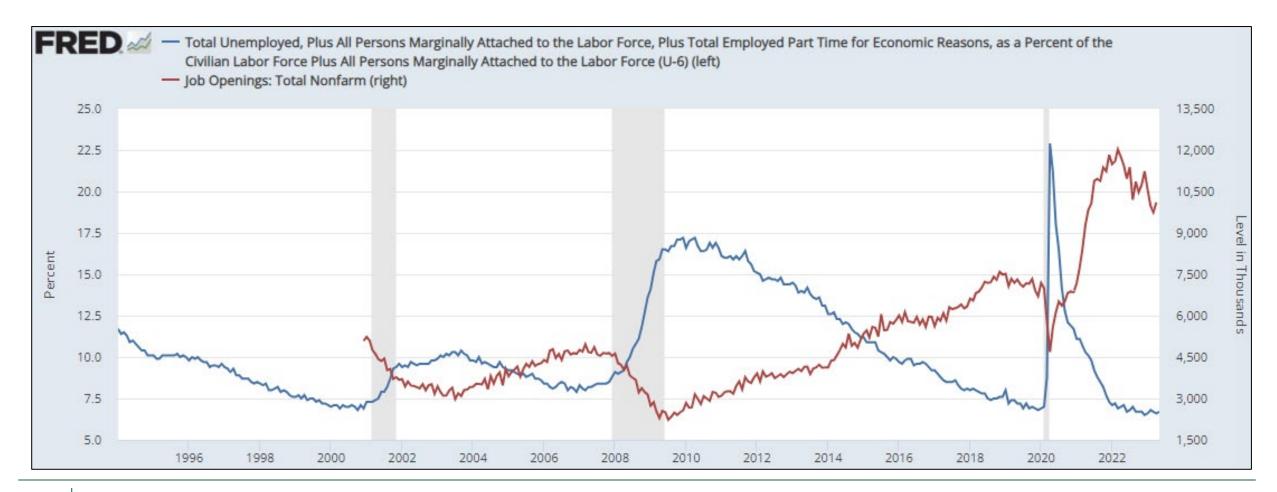




Backdrop: Labor Market Remains Overheated and Unemployment Remains Low.



- Despite job openings falling to 10.1M in April (latest available), a normal balanced market is 6M. Openings are still too high, and wages remain elevated.
- The U-6 Unemployment rate stayed at 6.7%, down from the 2023 high of 6.8% in February but also remains near all-time lows.

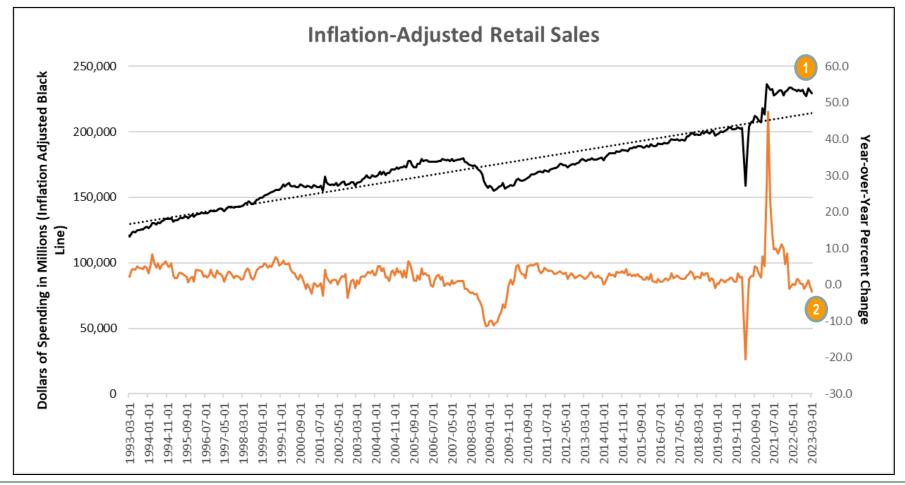


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But Inflation-Adjusted Retail Spending Continued to Remain Stable and Near Historically High Rates Through March, despite Some Deceleration.



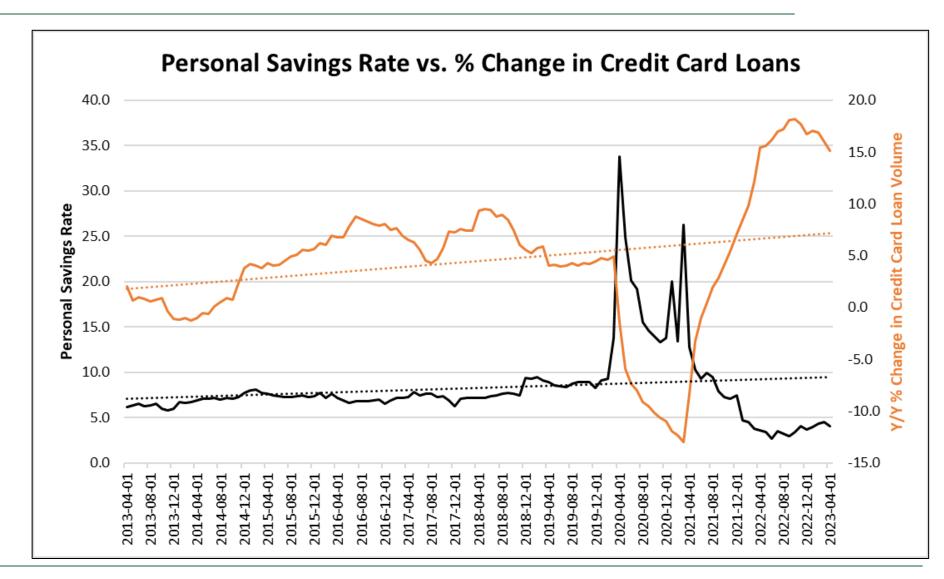
- 1. Inflation-adjusted retail sales continued to outpace the 30-year trend through March.
- 2. The growth rate has now fallen below the ten-year average, some fatigue in consumer spending was beginning to show up in March and inflation-adjusted sales fell 1.9% Y/Y.





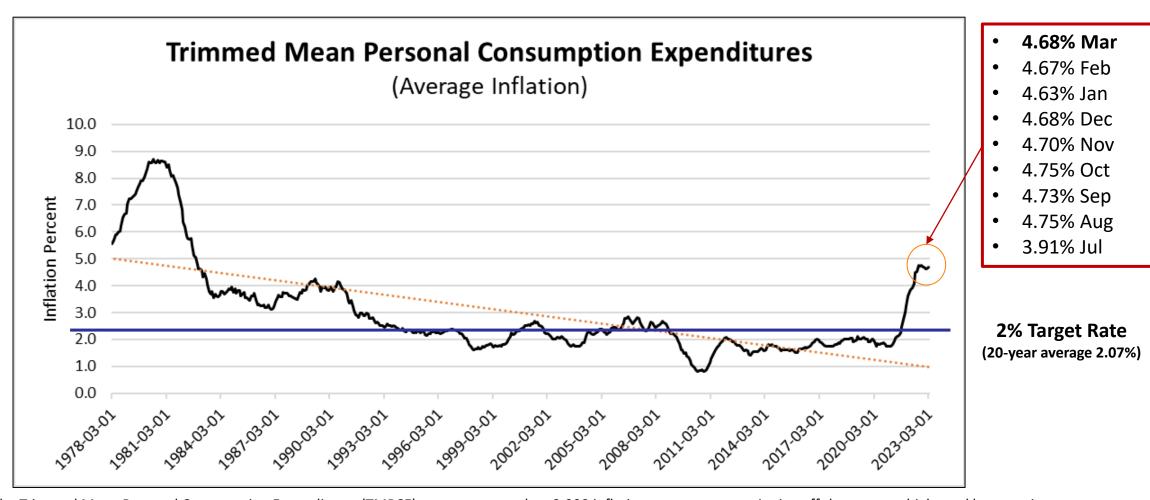


- Borrowing has improved, and consumers did work on paying down their debt – but spending remained stable
- Credit card interest rates have hit new all-time highs in February 2023 of 20.09%.
- LendingClub Data shows:
 - 61% living check-to-check (about the same since 2020)
 - >\$100K 49% (up from 42% a year ago)
 - \$50K-\$100K 63%
 - <\$50K 73% (down from 80% a year ago)



That's Why the Fed is Still Fighting...it Can't Allow 78M Households to Fail.

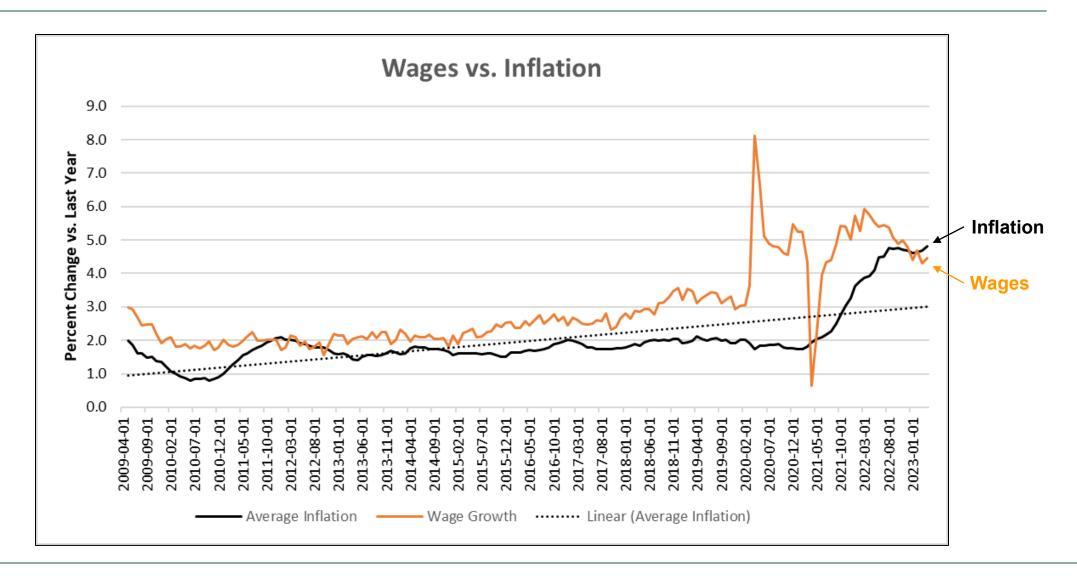




Note: The Trimmed Mean Personal Consumption Expenditures (TMPCE) averages more than 3,000 inflationary measures, stripping off the extreme highs and lows to give us a more accurate view of street level inflation.

Again, We Haven't Seen This in a While

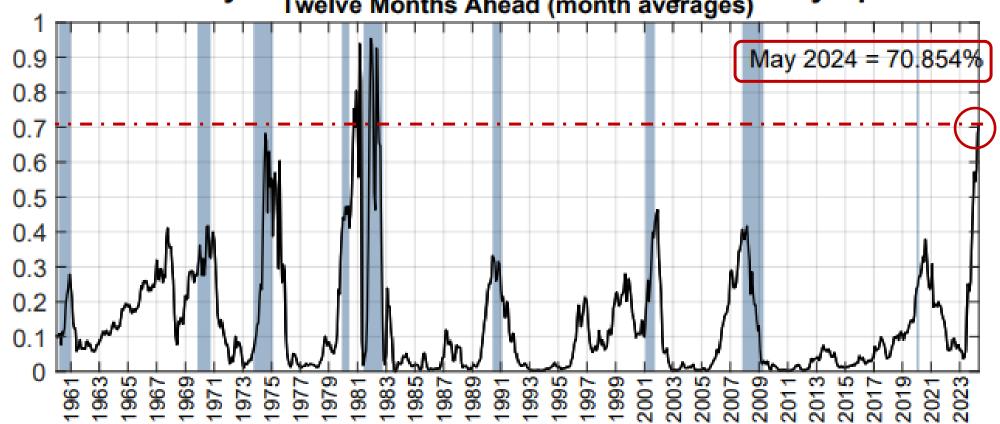




The New York Fed Uses the Yield Curve for Recession Probability **Predictions, Current Curves Still Show Second Highest Probability in** History.







^{*}Parameters estimated using data from January 1959 to December 2009, recession probabilities predicted using data through May 2023. The parameter estimates are α =-0.5333, β =-0.6330.

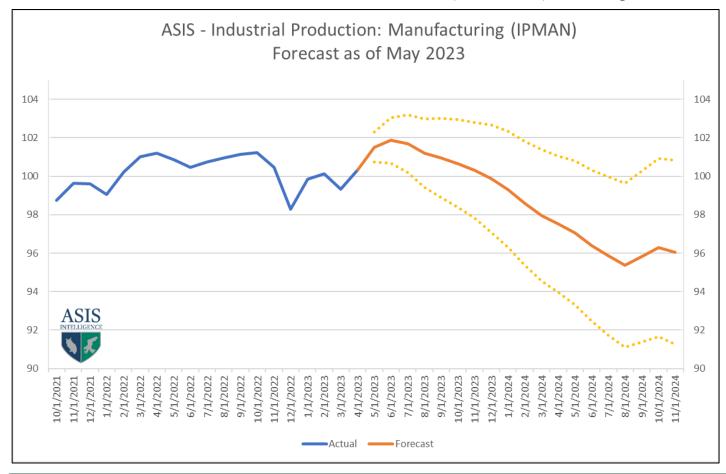
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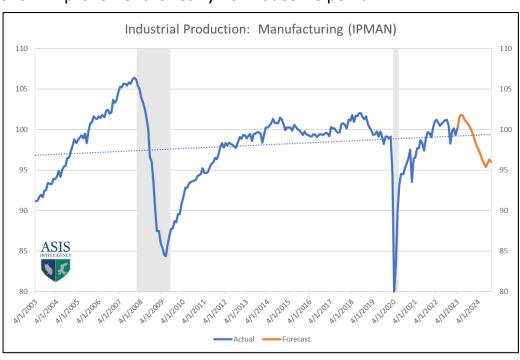
Updated 03-Jun-2023

Armada Forecast For Industrial Production in Manufacturing (High Correlation to Broader Activity). This Carries Out the Durable Manufacturing New Order Estimates 18 Months in Advance.



- 1. These models use 18-22 economic metrics to forecast output from each of the following sectors of durable manufacturing.
- 2. This model for industrial production in manufacturing shows slowing continuing through the end of the year at this stage. Pay attention to the curve over the next six months, the tail end of the curve (6 months +) will change and should show improvement for early 2024 at some point.



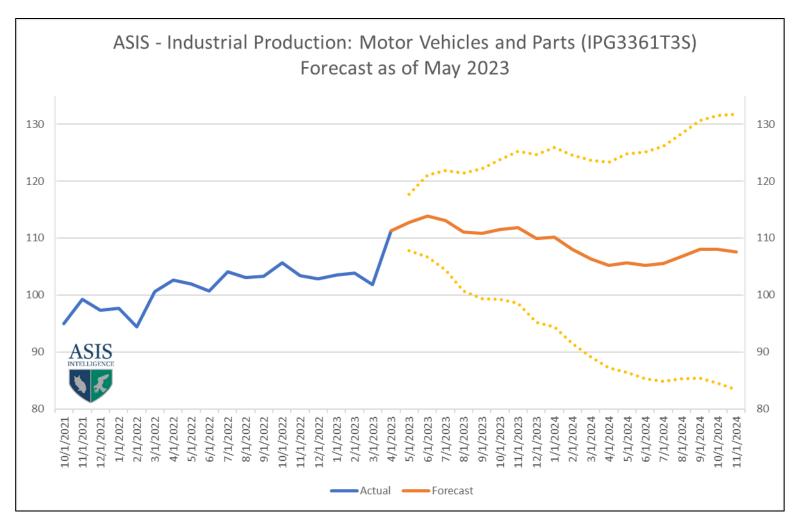


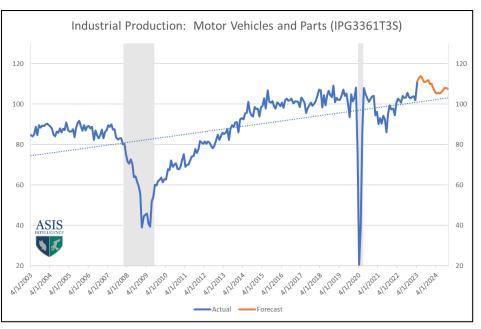
Accuracy:

3 months: 99.65%6 months: 93.88%

Forecast For Automotive has flattened in the past 60 days; projecting a much weaker outlook.





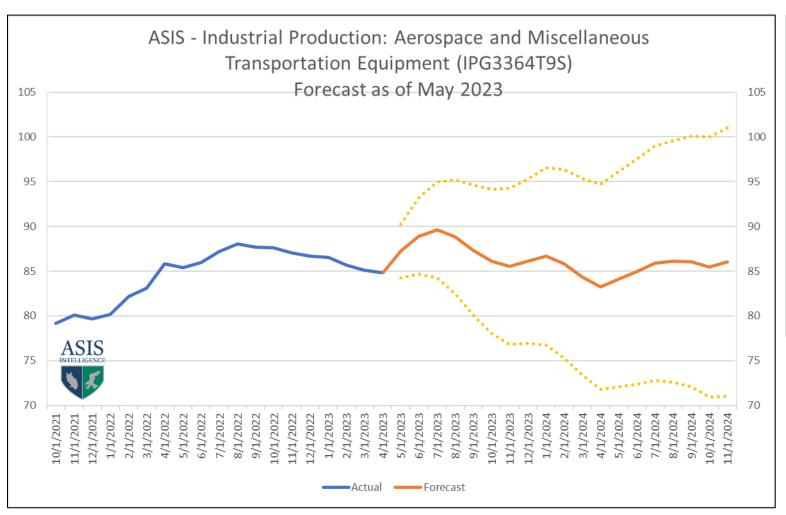


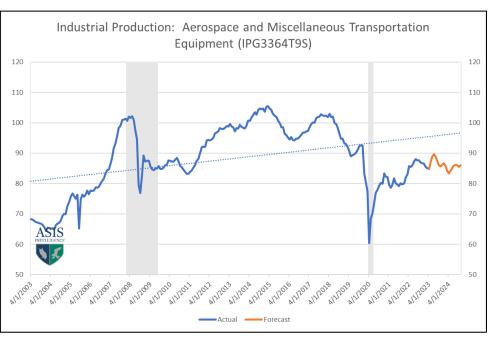
Accuracy:

3 months: 99.63% 6 months: 98.45%

Aerospace sector softening amid supply chain shortages; demand remains strong.





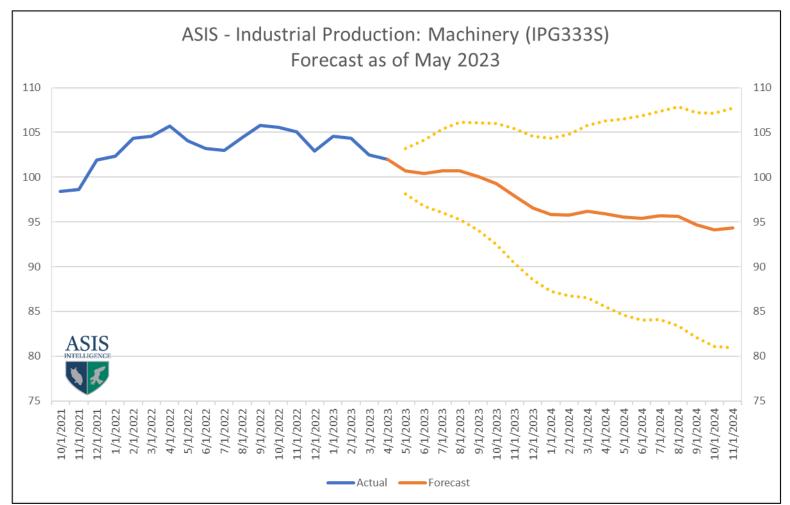


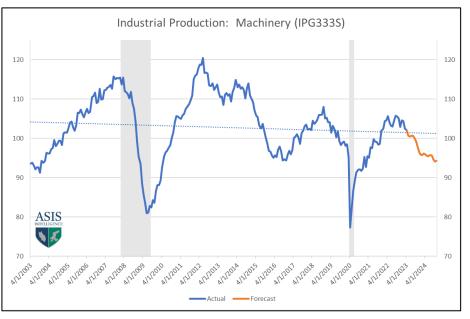
Accuracy:

3 months: 99.93% 6 months: 94.24%

Forecast For Machinery Manufacturing Volatile; transportation orders pulling it lower.





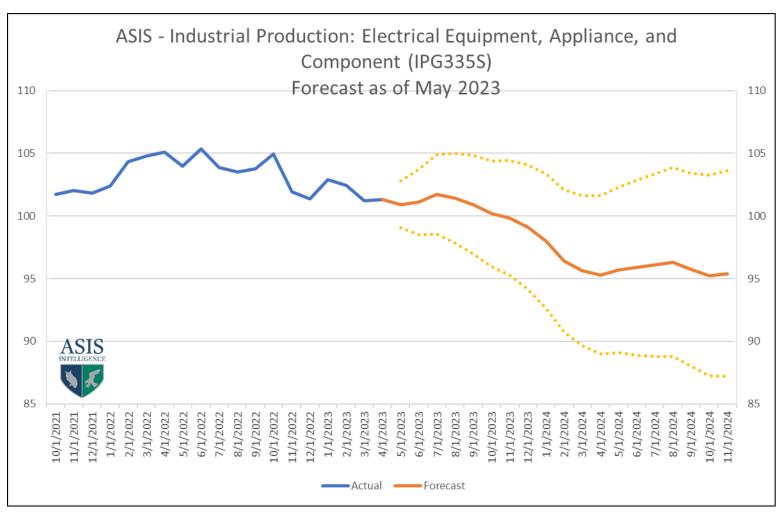


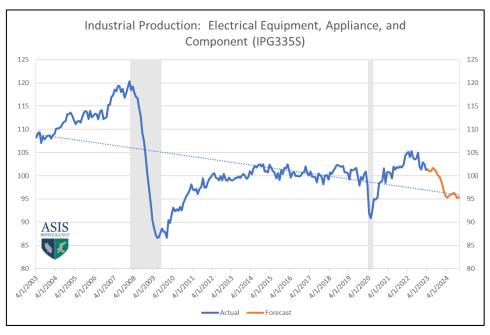
Accuracy:

3 months: 96.90%6 months: 90.64%

Forecast For Electrical Equipment and Appliances inches up. Shortages of these products hitting construction supply chains.







Accuracy:

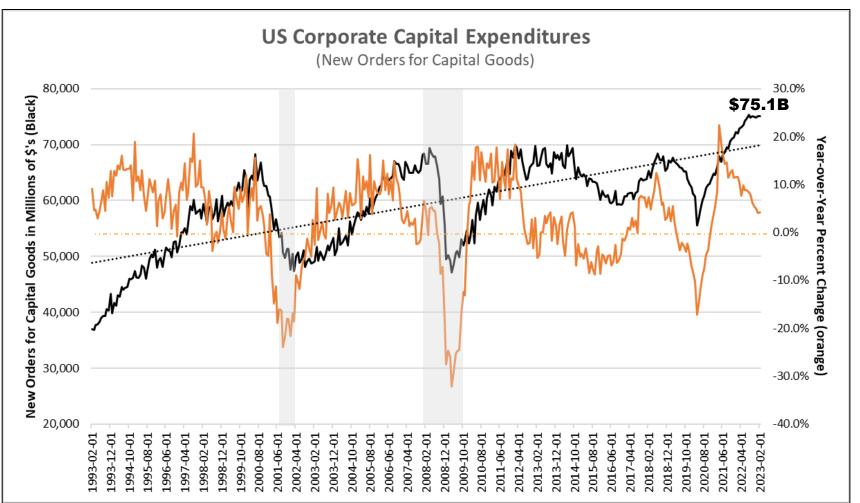
• 3 months: 95.19%

6 months: 87.29%

Corporate Investment Remains Steady



• Small business surveys show investment has started to decline, but still not showing in this view of the national data yet



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+4.2% Y/Y

Global Manufacturing Highlights

- 19 countries had manufacturing sectors in contraction in May
- Europe is now likely in recession.

- Asia is reeling from lack of demand in NA and Europe
- India is booming because of shifting sourcing patterns
- Canada and the US in contraction, Mexico just barely hanging on.
- This could make some raw materials more plentiful, and help clear backlogs
- But from a global economy perspective, its not great news.

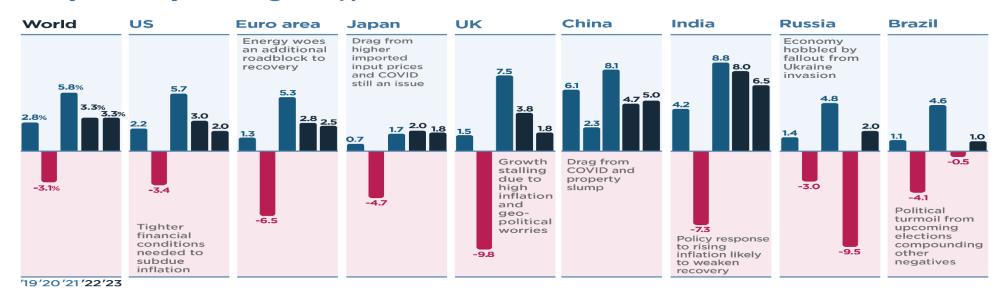
		Latest	Prior			Latest	Prior	
Country		Month	Month			Month	Month	
Country	Current	Manuf.	Manuf.	M/M	Current	Services	Services	M/M
	Month	PMI	PMI	Change	Month	PMI	PMI	Change
Global PMI	May	49.6	49.6	0.0	May	55.4	55.5	-0.1
Eurozone PMI	May	44.8	45.8	-1.0	May	55.1	56.2	-1.1
US	May	48.4	50.2	-1.8	May	54.9	53.6	1.3
China	May	50.9	49.5	1.4	May	57.1	56.4	0.7
Canada	May	49.0	50.2	-1.2				
Mexico	May	50.5	51.1	-0.6	,			
Japan	May	50.6	49.5	1.1	May	55.9	55.4	0.5
Germany	May	43.2	44.5	-1.3	May	57.2	56.0	1.2
South Korea	May	48.4	48.1	0.3	,			
UK	May	47.1	47.8	-0.7	May	55.2	55.9	-0.7
France	May	45.7	45.6	0.1	. May	52.5	54.6	-2.1
India	May	58.7	57.2	1.5	May	61.2	62.0	-0.8
Italy	May	45.9	46.8	-0.9	May	54.0	57.6	-3.6
Taiwan	May	44.3	47.1	-2.8	,			
Brazil	May	47.1	44.3	2.8	May	54.1	54.5	-0.4
Spain	May	48.4	49.0	-0.6	May	56.7	57.9	-1.2
Russia	May	53.5	52.6	0.9	May	54.3	55.9	-1.6
Netherlands	May	44.2	44.9	-0.7				
Ireland	May	47.5	48.6	-1.1	May	57.0	58.4	-1.4
Greece	May	51.5	52.4	-0.9				
Poland	May	47.0	46.6	0.4				
ASEAN	May	51.1	52.7	-1.6	,			
Vietnam	May	45.3	46.7	-1.4				
Philippines	May	52.2	51.4	0.8	,			
Australia	May	48.4	48.0	0.4	May	52.1	53.7	-1.6
Switzerland	May	42.3	45.3	-3.0	,			
Hong Kong	May	50.6	52.4	-1.8	,			
Singapore	May	49.5	49.7	-0.2				
	Eurozone PMI US China Canada Mexico Japan Germany South Korea UK France India Italy Taiwan Brazil Spain Russia Netherlands Ireland Greece Poland ASEAN Vietnam Philippines Australia Switzerland Hong Kong	Global PMI May Eurozone PMI May US May China May Canada May Mexico May Japan May Germany May South Korea May UK May France May Italy May Italy May Taiwan May Brazil May Spain May Russia May Russia May Netherlands May Ireland May Greece May Poland May ASEAN May Philippines May Switzerland May Hong Kong May Current May May Canada May May May May May France May May May May Russia May Netherlands May	Country Current Manuf. Month May Eurozone PMI May US May China May Canada May Mexico May May South Korea UK May	Country Current Manuf. Manuf. PMI Month Manuf. PMI Month Manuf. PMI Global PMI May 49.6 49.6 Eurozone PMI May 44.8 45.8 US May 48.4 50.2 China May 50.9 49.5 Canada May 49.0 50.2 Mexico May 50.5 51.1 Japan May 50.6 49.5 Germany May 43.2 44.5 South Korea May 48.4 48.1 UK May 45.7 45.6 India May 45.7 45.6 India May 45.9 46.8 Taiwan May 45.9 46.8 Taiwan May 47.1 44.3 Spain May 48.4 49.0 Russia May 48.4 49.0 Russia May 48.6 49.0 Greece May </td <td>Country Current Month Manuf. Month Manuf. Month Month Month PMI Month Manuf. PMI Month Manuf. Month Manuf. PMI M/M Change Global PMI May 49.6 49.6 0.0 Eurozone PMI May 44.8 45.8 -1.0 US May 48.4 50.2 -1.8 China May 50.9 49.5 1.4 Canada May 49.0 50.2 -1.2 Mexico May 50.5 51.1 -0.6 Japan May 50.6 49.5 1.1 Germany May 43.2 44.5 -1.3 South Korea May 48.4 48.1 0.3 UK May 45.7 45.6 0.1 India May 45.7 45.6 0.1 India May 45.9 46.8 -0.9 Taiwan May 45.9 46.8 -0.9 Taiwan May 44.3 47.1 -2.8</td> <td>Country Current Month Manuf. Manuf. Month Manuf. PMI Month Manuf. PMI Month Manuf. PMI M/M Current Month Manuf. PMI M/M Change Month Month Manuf. PMI Change Month Month Manuf. PMI Month May May 49.6 49.6 0.0 May May May 48.4 50.2 -1.8 May May</td> <td>Country Current Month Manuf. PMI Month Manuf. PMI Month Manuf. PMI M/M Current Month Services PMI Global PMI May 49.6 49.6 0.0 May 55.4 Eurozone PMI May 44.8 45.8 -1.0 May 55.1 US May 48.4 50.2 -1.8 May 54.9 China May 50.9 49.5 1.4 May 57.1 Canada May 49.0 50.2 -1.2 </td> <td>Country Current Month Month Manuf. Month Month Month PMI Month Change Month Month Services PMI Month Services PMI Global PMI May 49.6 49.6 0.0 May 55.4 55.5 Eurozone PMI May 48.4 50.2 -1.8 May 55.1 56.2 US May 48.4 50.2 -1.8 May 54.9 53.6 China May 49.0 50.2 -1.2 ————————————————————————————————————</td>	Country Current Month Manuf. Month Manuf. Month Month Month PMI Month Manuf. PMI Month Manuf. Month Manuf. PMI M/M Change Global PMI May 49.6 49.6 0.0 Eurozone PMI May 44.8 45.8 -1.0 US May 48.4 50.2 -1.8 China May 50.9 49.5 1.4 Canada May 49.0 50.2 -1.2 Mexico May 50.5 51.1 -0.6 Japan May 50.6 49.5 1.1 Germany May 43.2 44.5 -1.3 South Korea May 48.4 48.1 0.3 UK May 45.7 45.6 0.1 India May 45.7 45.6 0.1 India May 45.9 46.8 -0.9 Taiwan May 45.9 46.8 -0.9 Taiwan May 44.3 47.1 -2.8	Country Current Month Manuf. Manuf. Month Manuf. PMI Month Manuf. PMI Month Manuf. PMI M/M Current Month Manuf. PMI M/M Change Month Month Manuf. PMI Change Month Month Manuf. PMI Month May May 49.6 49.6 0.0 May May May 48.4 50.2 -1.8 May May	Country Current Month Manuf. PMI Month Manuf. PMI Month Manuf. PMI M/M Current Month Services PMI Global PMI May 49.6 49.6 0.0 May 55.4 Eurozone PMI May 44.8 45.8 -1.0 May 55.1 US May 48.4 50.2 -1.8 May 54.9 China May 50.9 49.5 1.4 May 57.1 Canada May 49.0 50.2 -1.2	Country Current Month Month Manuf. Month Month Month PMI Month Change Month Month Services PMI Month Services PMI Global PMI May 49.6 49.6 0.0 May 55.4 55.5 Eurozone PMI May 48.4 50.2 -1.8 May 55.1 56.2 US May 48.4 50.2 -1.8 May 54.9 53.6 China May 49.0 50.2 -1.2 ————————————————————————————————————

Better than 2020 but Starting to Sag



Growth slows across the global economy after a year of recovery

Real year-over-year GDP growth, percent



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30

Purchasing power parity weights used to calculate global GDP. Data refer to annual-average-over-annual-average growth rates.

Consensus forecasts for 2019-2021 and PIIE forecasts for 2022-2023.

International Issues

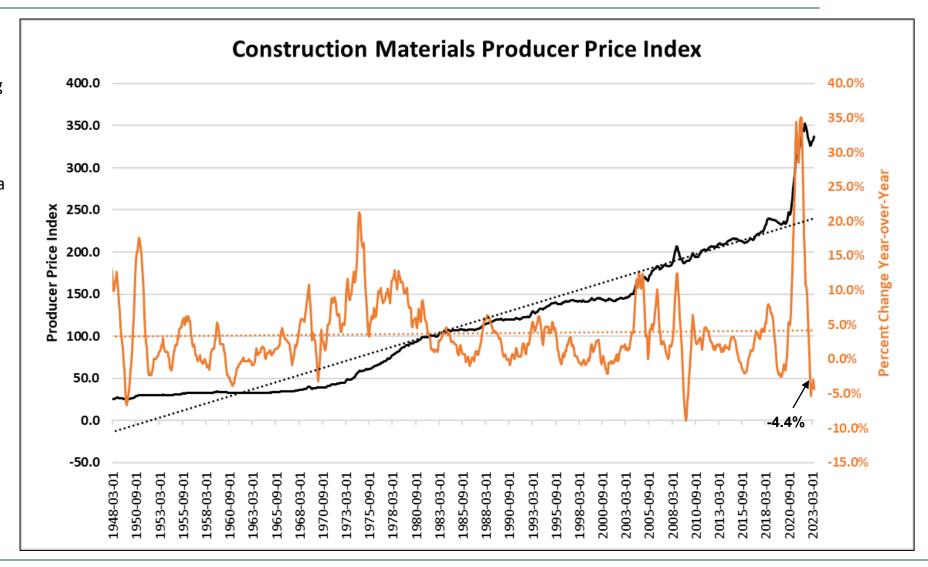


- EU already dealing with recession at least in Germany. Others are not far behind
- Inflation has peaked and is starting to come down but this has been driven mostly by the energy market.
- Ukraine war grinds on and patience in the western nations has started to wane. The most recent events in Russia have been encouraging however – also more threatening
- India on a fast growth pace establishing much closer ties to US.
- China struggling to resume previous economic growth pace may not make the 5.0% growth goal
- Japan worried about demand for manufacturing output starting to see real inflation
- Mexico closely tied to US and that has helped stimulate near shoring growth still relatively solid
- Most of Latin America in distress especially Brazil, Argentina, Colombia.
- Deterioration of globalization continues

Construction Prices / Material Prices Are Still Historically High Despite Coming Off of the Post-Pandemic Peak.



- Producer Prices released for April (latest available) shows some continued slight softening in construction material prices.
- Relative to the past decade, construction material prices at a macro level are still running well above the 43-year trend.
- This is both a sign of supply chain congestion and actual demand for products in the construction sector.
- This includes both residential and non-residential construction.



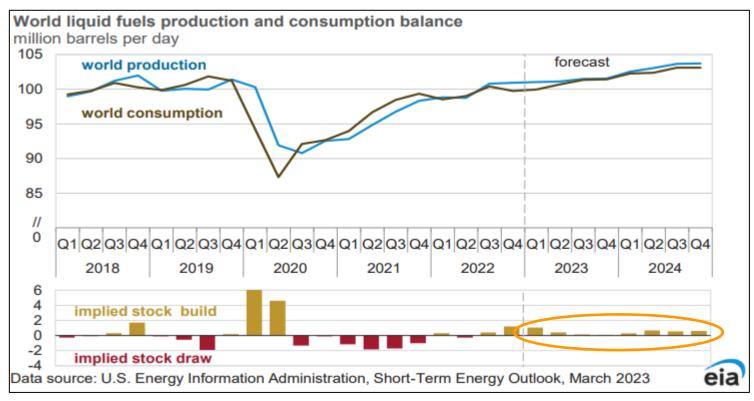
EIA still predicting a net build in inventories based on a global recession.



- Now an implied a slight net build through most of 2023 according to EIA
 - Consumption is still 20M Bpd currently with US production at 12.5M Bpd; 7M Bpd gap must still be imported
 - The US will start rebuilding the SPR in 2023 and 2024?
 - OPEC cut of 1.13M Bpd will hit in May, and could drive more demand for US crude oil when that trend hits
 - Concerns that global excess capacity is still just 1.2% higher currently, when China and Europe are largely consuming less.

China has now lifted quotas on refiners and have told them to import as much as possible.





Diesel forecast:

	2021	\$3.29
	2022	\$4.97
	2023	\$4.17
,	2024	\$3.73

Gasoline forecast:

www.armada-intel.com

•	2021	\$3.02
•	2022	\$3.97
•	2023	\$3.49
•	2024	\$3.25

Here is Why So Much of the Economy is Shut Down



- February is the latest data available.
- 62.8% of the marketplace remains overstocked through the end of February relative to 10-year average between Dec 2009 and Dec 2019.
- 19.4% were reporting understocked conditions that were understocked on a historical basis.
- 17.7% are effectively "balanced".
- Said another way, approximately 37% of the market is likely in a continuous reorder cycle, but the majority of the market is likely still conservatively ordering for the rest of 2023. Especially with the cost of capital rising for carrying additional inventory.
- Some supply chain pressures in China could reverse this thinking for sourcing managers.

	Inventory to Sales Ratio (ISR) Analysis				
	Sector	March Sales (Millions)	9/12/09 - 09/12/19 10-YR Average	Mar-23	ISR Percent Above/Below Pre-pandemic
	Total Business		1.34	1.39	3.7%
9 1	Automotive		2.49	0.68	-72.6%
2	Retail		1.43	1.30	-9.1%
3	Merchant Wholesalers		1.29	1.40	8.5%
4	Manufacturing		1.35	1.48	9.6%
1	Department Stores (ie. Nordstrom's)	11,529	2.11	1.96	-7.1%
2	Drugs Wholesalers	83,754	1.09	1.05	-3.7%
3	General Merchandise (ie. Walmart)	72,812	1.43	1.40	-2.1%
4	Food and Beverage Stores	81,911	0.78	0.78	0.0%
5	Apparel Stores	25,574	2.39	2.42	1.3%
6	Chemical Wholesalers	13,866	1.17	1.19	1.7%
7	Machinery Wholesalers (ie. John Deere, Vermeer)	52,166	2.60	2.67	2.7%
8	Paper Wholesalers (ie. National Paper)	8,337	1.09	1.12	2.8%
9	Furniture, Appliance Stores (i.e NFM)	19,180	1.63	1.68	3.1%
10	Furniture Wholesalers	10,443	1.71	1.80	5.3%
11	Computer Wholesale Distributors	24,229	0.79	0.84	6.3%
12	Building Material Stores (ie. Home Depot)	35,566	1.85	1.97	6.5%
13	Grocery Wholesalers	73,281	0.68	0.76	11.8%
14	Lumber and Construction Material Wholesalers	18,472	1.49	1.67	12.1%
15	Durable Goods Wholesalers	306,718	1.59	1.83	15.1%
16	Commerical Equipment Wholesalers	48,979	1.09	1.28	17.4%
17	Hardware, Plumbing, Heating Wholesalers	19,594	2.05	2.48	21.0%
18	Household Appliances/Electronics Wholesalers	63,721	1.10	1.38	25.5%
19	Alcohol Wholesale Distributors	16,108	1.31	1.65	26.0%

Armada Transportation <u>Demand</u> Index Showing a Similar Pattern...Although This Index Suggests the Market "Normalizing" Relative to Pre-Pandemic Levels of Activity.







					M/M
				Y/Y	Change
	23-Apr	23-Mar	22-Apr	Change %	%
Composite	56.7	57.0	67.4	-15.9%	-0.5%
Rail	55.1	55.0	65.2	-15.4%	0.3%
Trucking	56.8	57.2	67.9	-16.4%	-0.8%
Air	61.8	61.2	66.2	-6.7%	0.9%
Maritime	60.0	59.1	64.6	-7.1%	1.6%

- All measures still over 50, but the "normalization" is obvious.
- March ushered in a bit of a flattening of the demand curve, and it remains stable relative to historical values.

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