



Plan. Implement. Excel.

Plan and Prosper

**Presented by ITR Economics
Senior Forecaster
Connor Lokar**

2021 Forecast Results

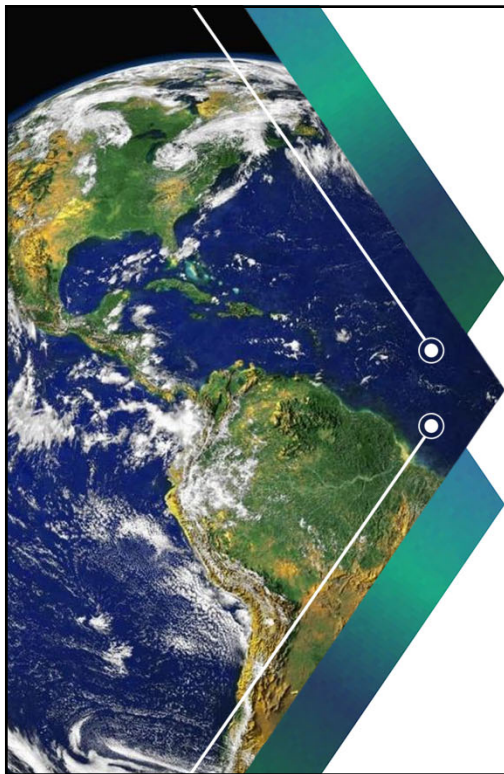
**Based on December Estimates*

Despite everything that happened...



	Duration	Accuracy
US GDP	15	98.6%
US Ind. Production	19	98.3%
Europe Ind. Production	11	97.3%
Canada Ind. Production	12	99.5%
China Ind. Production	14	97.7%
Retail Sales	11	90.6%
Housing - Single Family	12	93.1%
Employment-Private Sector	18	99.2%

ITR Economics provides the best economic intelligence to reduce risk and drive practical and profitable business decisions.



Global Issues

Ukraine-Russia Summary

-  **Direct impact to North American market from conflict is limited, US is 3rd largest market for Rus.**
-  **Indirect exposure from elevated inflation pressure (Energy, Ag, Metals), market volatility, S.C.**
-  **Global inflation/supply chain conditions were already severely strained, slowing growth in 2022 was already expected**

Next Steps

ITR has not yet moved to downgrade NA forecasts as a result, but what's unfolding is certainly a downside risk

Europe faces more immediate negative economic consequences

A Powerful Management Tool • Rates-of-Change

	Raw	3MMT	3/12	12MMT	12/12
Feb-20	4,548				
Mar-20	4,953				
Apr-20	4,039	13.5			
May-20	4,177	13.2			
Jun-20	4,864	13.1			
Jul-20	4,912	14.0			
Aug-20	4,866	14.6			
Sep-20	5,064	14.8			
Oct-20	5,293	15.2			
Nov-20	4,983	15.3			
Dec-20	5,399	15.7			
Jan-21	4,942	15.9		58.0	
Feb-21	4,803	15.1		58.3	
Mar-21	6,035	15.8		59.4	
Apr-21	5,850	16.7	23.2%	61.2	
May-21	5,756	17.6	33.9%	62.8	
Jun-21	6,216	17.8	36.2%	64.1	
Jul-21	5,982	18.0	28.7%	65.2	12.6%
Aug-21	6,075	18.3	24.8%	66.4	15.3%
Sep-21	6,208	18.3	23.1%	67.5	17.2%
Oct-21	6,279	18.6	21.9%	68.5	19.0%
Nov-21	6,366	18.9	22.9%	69.9	21.3%
Dec-21	6,524	19.2	22.3%	71.0	22.6%
Jan-22	6,056	18.9	20.8%	72.1	24.3%

3/12

Based on data from a consecutive 3-month period compared to one year earlier.

Anticipates shifts in business cycle trends.

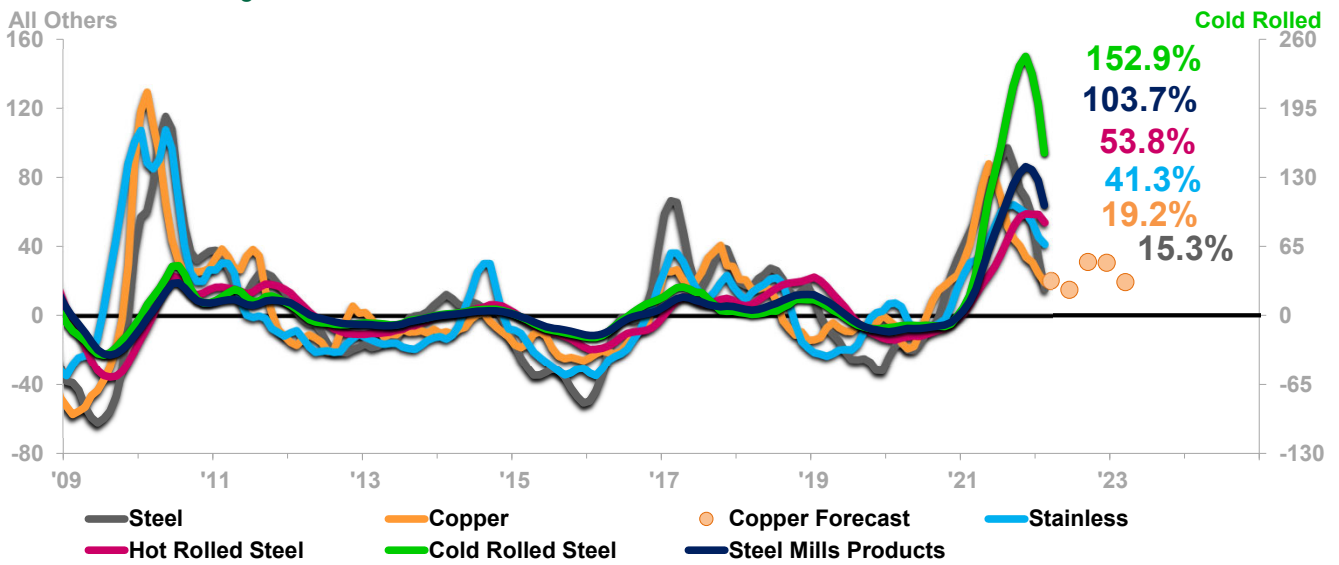
12/12

Based on data from a consecutive 12-month period compared to one year earlier.

Defines the business cycle.

Upside Inflation Risk In Near-Term

Copper Futures Prices to US Producer Price Indexes for Steel, Stainless Scrap, Cold Rolled Steel Sheets & Strips, Hot Rolled Steel Bars, Plates, & Structural Shapes, & Steel Mills Products
3/12 Rates-of-Change

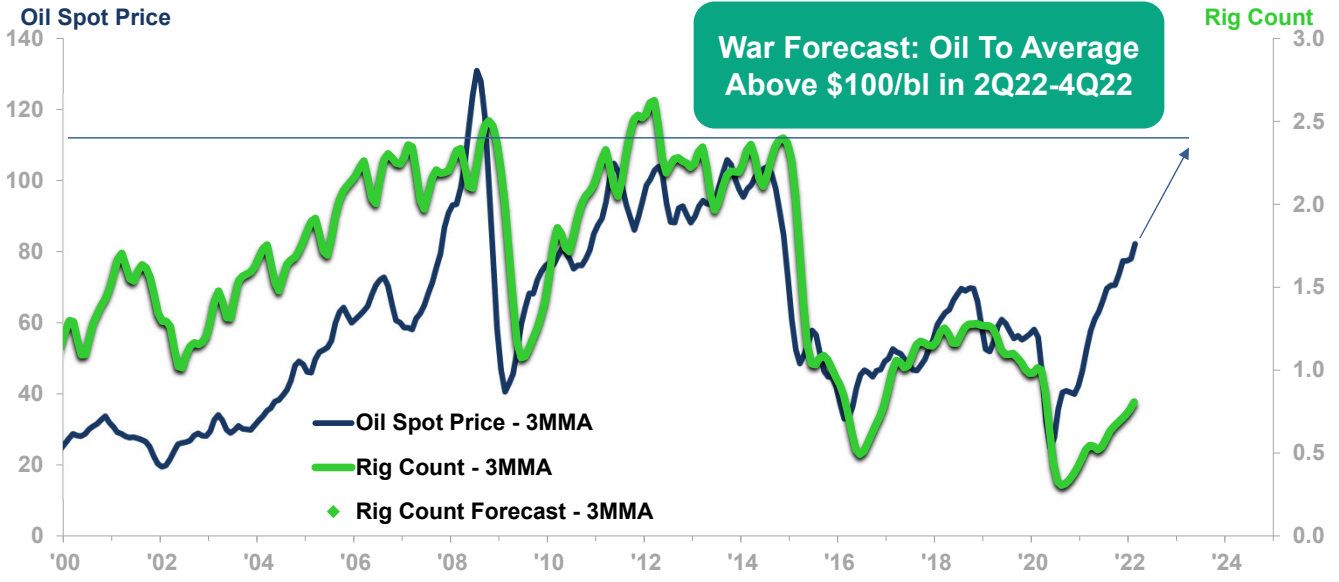


Oil Prices Adding Pressure On The Consumer

Sources: EIA, Baker Hughes

Crude Oil Spot Prices to North America Rotary Rig Count

Quarterly Data Trends

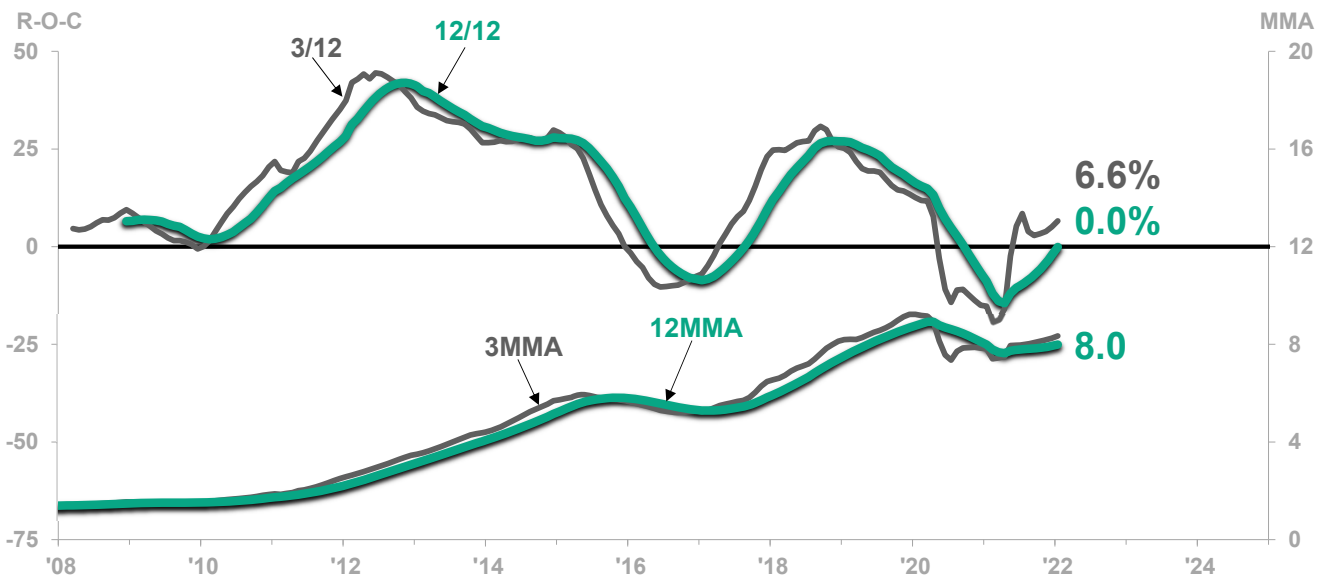


Fracking Oil Output Moving Back Into Phase B

Source: EIA

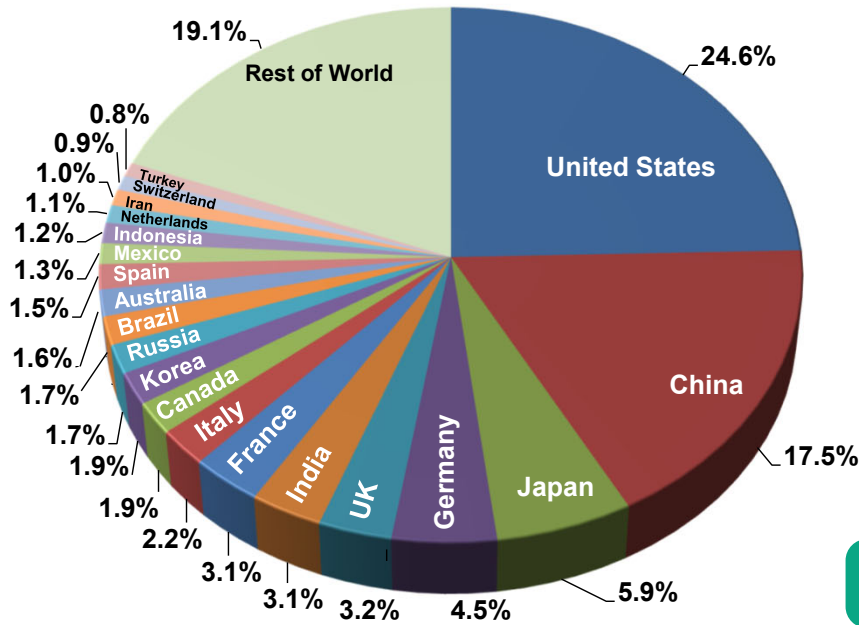
US Horizontal Drilling and Hydraulic Fracking Production

Millions of Barrels per Day



Percent of World GDP by Country, 2020

Source: IMF, *ROW: 69% are IMF Estimated Figures



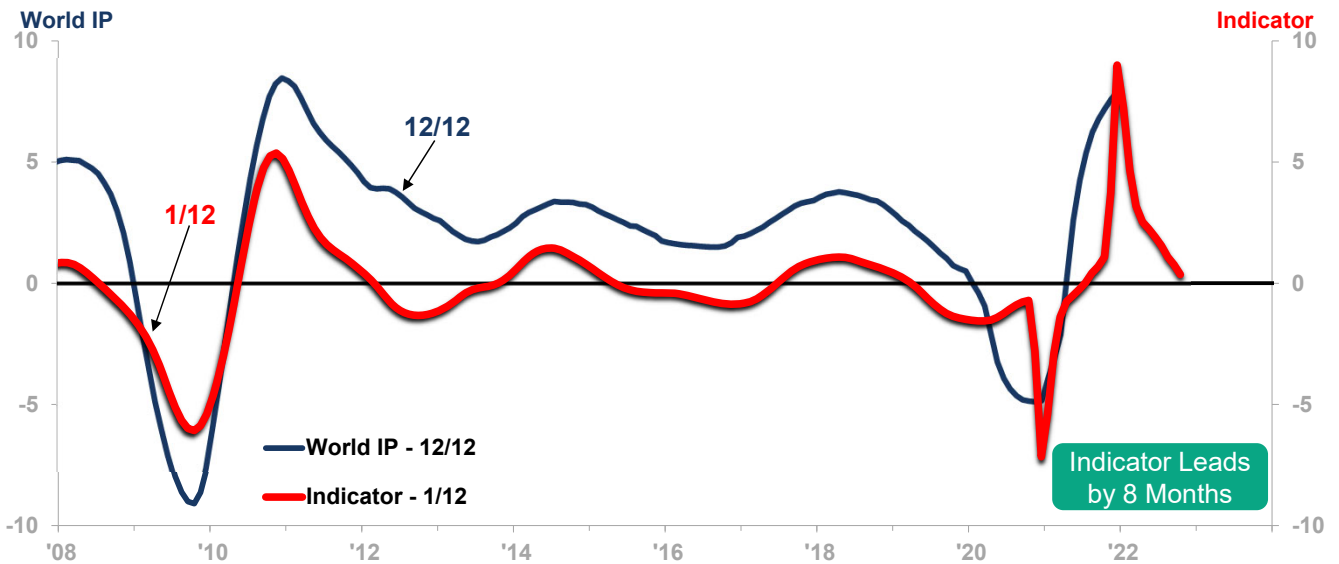
*Total World GDP: \$85.0 Trillion US \$

G7 Leading Indicator Calling Slowdown Pre-Ukraine

Sources: CPB Netherlands Bureau For Economic Policy Analysis, OECD



World Industrial Production Index to G7 Leading Indicator Rates-of-Change



Indicator Leads by 8 Months

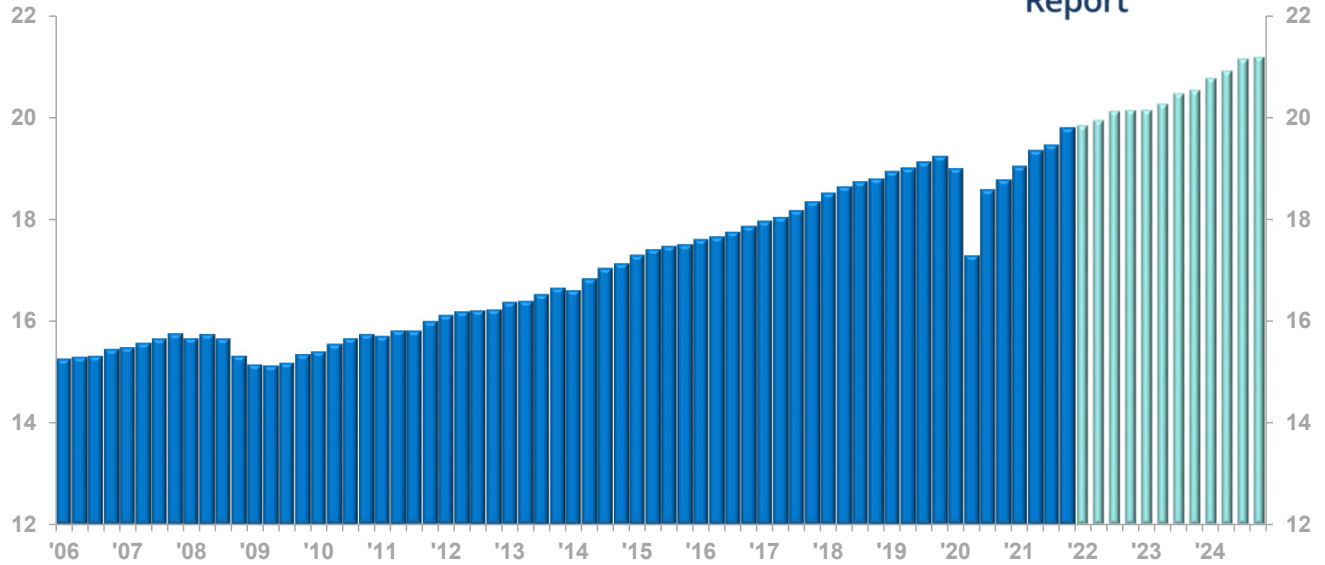
US Economy Slows Down This Year

Source: Bureau of Economic Analysis

US Gross Domestic Product, SAAR, Chained 2012 \$

3-Month Moving Average, Trillions of Dollars

as seen in
ITR Economics'
**Trends
Report**

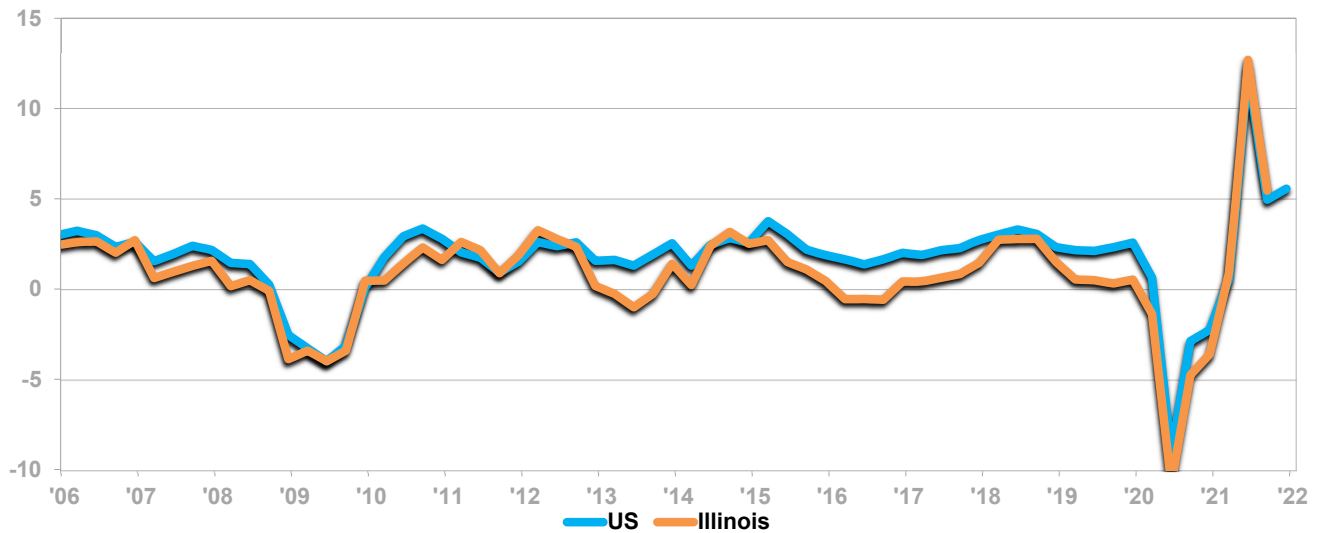


Strong Cyclical Correlation

Source: Bureau of Economic Analysis

US and Illinois GDP Growth Rate

3/12 Rates-of-Change



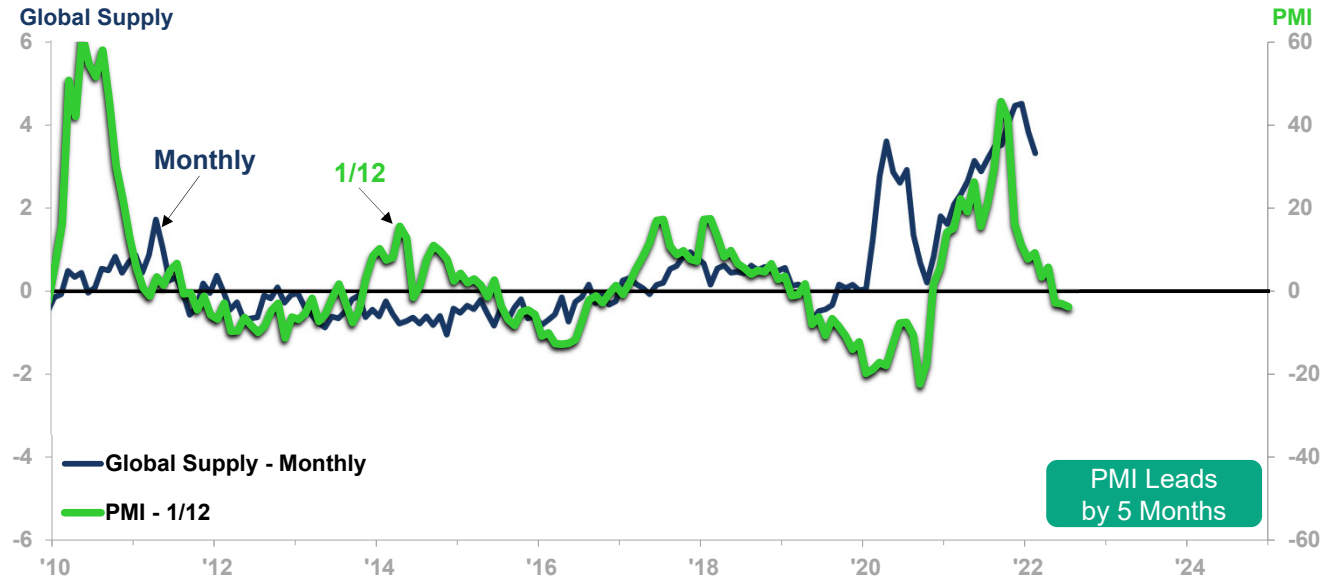
Slowing Economic Growth Means Less Supply Chain Pressure

Sources: FRBNY, ISM

Global Supply Chain Pressure Index to US Purchasing Managers Index

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Rates-of-Change



Global Summary

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- ☐ → Supply Chain Pressures Easing as Global Growth Slows Even Before Ukraine Invasion
- ☐ → Indications Are Europe More Exposed to Invasion Fall Out vs. NA Exposure
- ☐ → Onshoring and Near-Sourcing Trends Are Real

Next Steps

- Assess impact of ongoing high oil prices on your markets
- Slowing growth includes China, will impact demand and commodity prices

US Macroeconomic Trends

US Economic Leading Indicators: Deceleration in 2022 & 2023

Sources: ITR Economics, Institute for Supply Management, OECD, Yahoo Finance, US Census Bureau, FRB

Indicator	Trend	Macro Indication
ITR Retail Sales Leading Indicator	Decline	Deceleration probable for 2022...
ITR Financial Leading Indicator	Decline	Deceleration probable for 2022...
JPMorgan Global PMI	Decline	Deceleration probable for 2022...
OECD Leading Indicator	Decline	Deceleration probable for 2022...
G7 Leading Indicator	Decline	Deceleration probable for 2022...
Purchasing Managers Index (PMI)	Decline	Deceleration probable for 2022...
ITR Leading Indicator	Decline	Deceleration probable for 2022...
Wilshire Total Market Cap	Decline	Deceleration probable for 2022...
US Business Confidence Index	Decline	Deceleration probable for 2022...
Single-Family Housing Starts	Decline	Deceleration probable for 2022...
Total Industry Capacity Utilization	Decline	Deceleration probable for 2022...
US Exports, Goods – World	Decline	Deceleration probable for 2022...

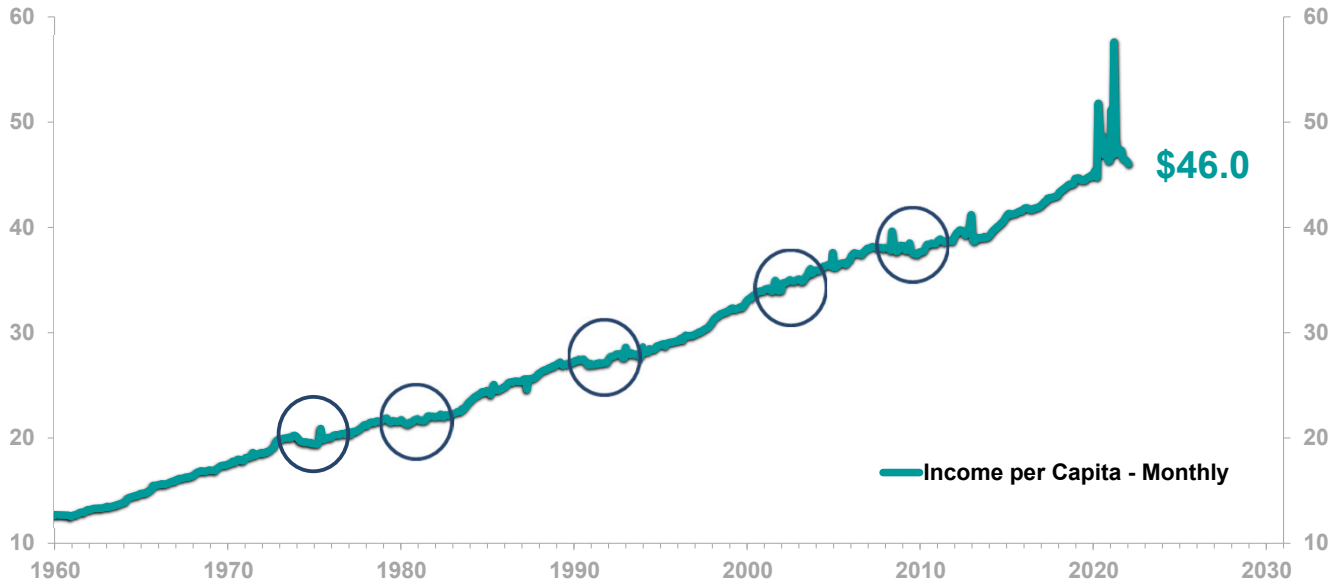
Income Trend Is Normalizing

Source: BEA

US Real Disposable Income Per Capita

Raw Data: Thousands of Chained 2012 Dollars

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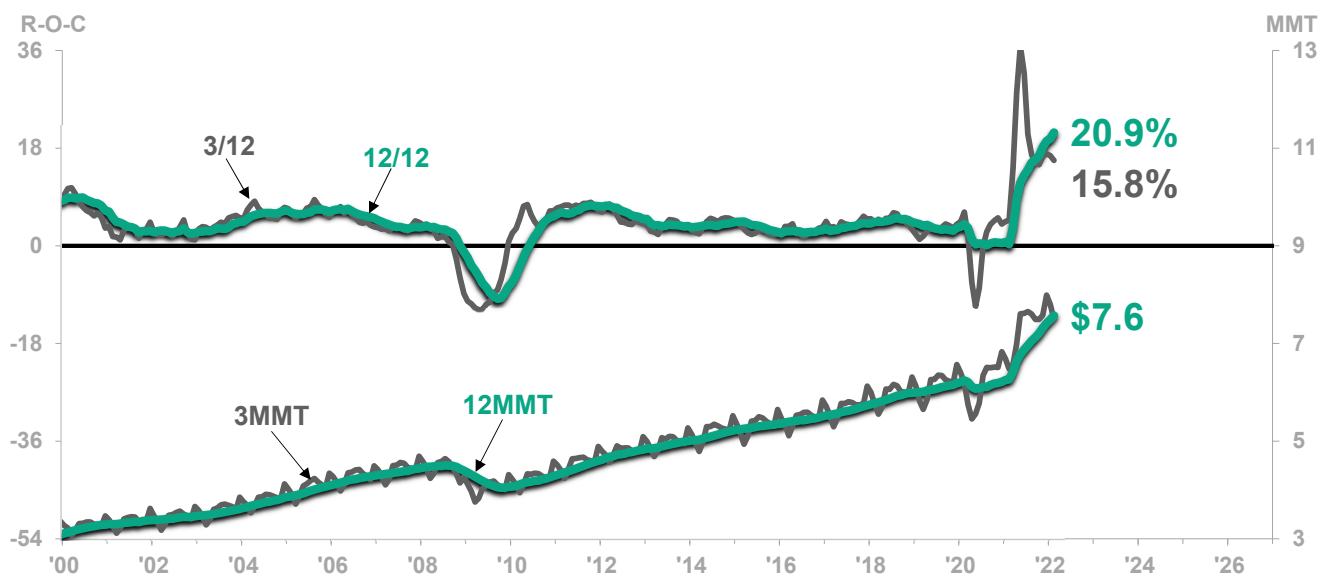
Stimulus-Driven Ascent Is Dissipating

Source: US Census Bureau

US Total Retail Sales

Trillions of Dollars

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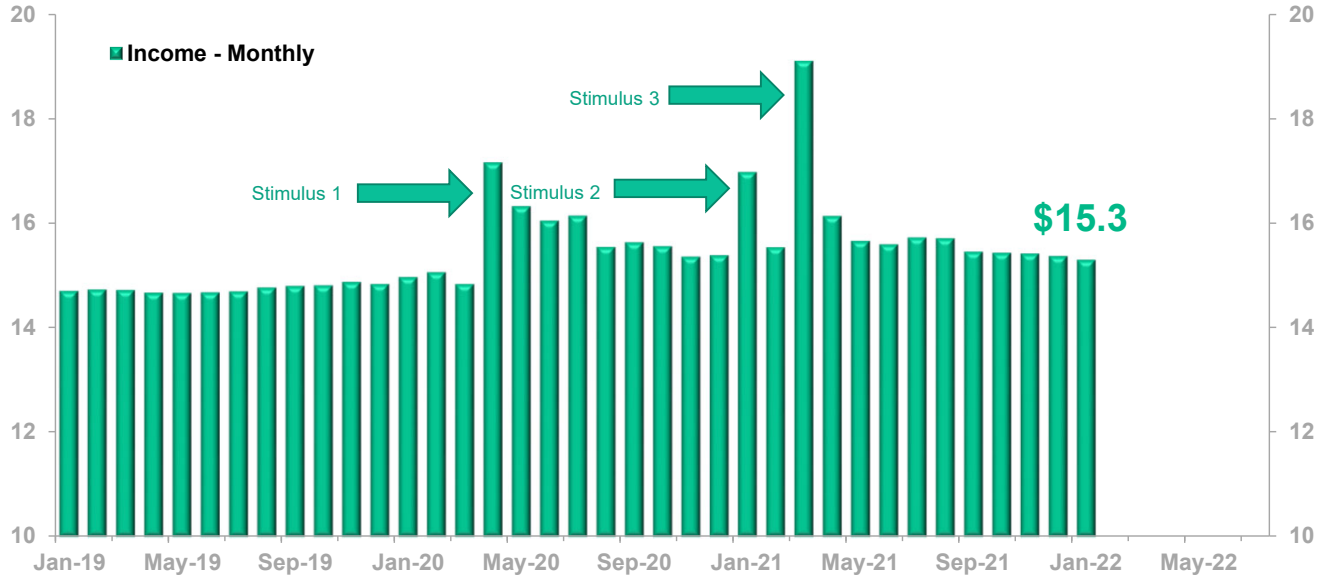


Consumer Spending Power Elevated Vs. Pre-COVID

Source: BEA

US Disposable Personal Income

Trillions of chained 2012 dollars, SAAR

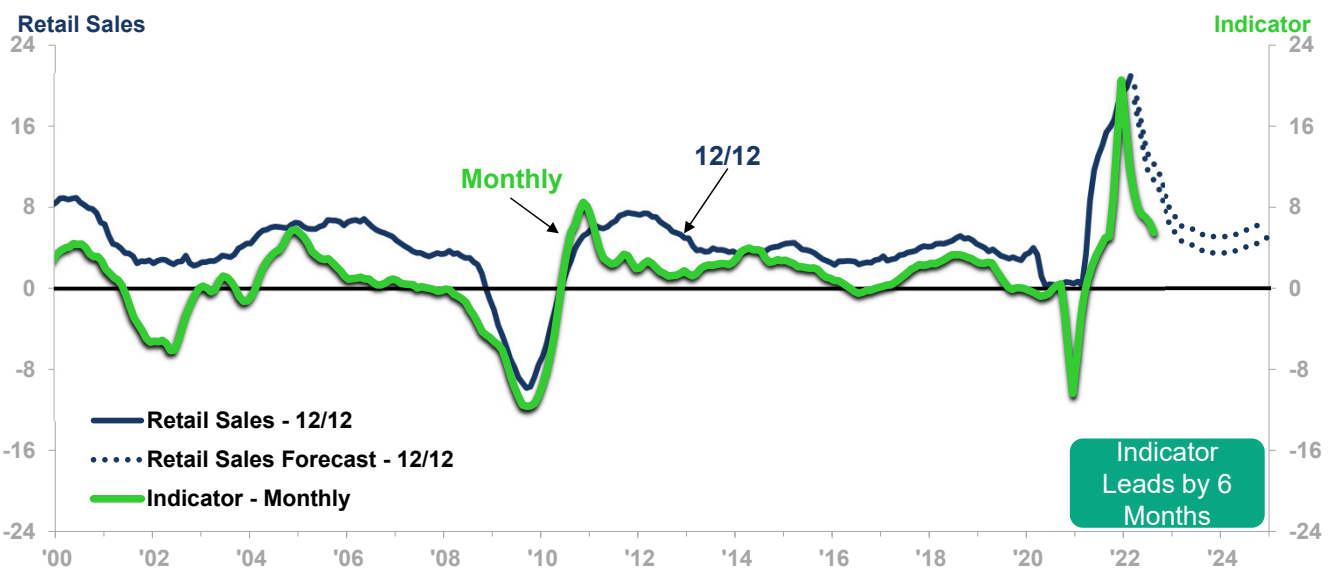


A Clear Indication of Decelerating Rise in 2022

Sources: US Census Bureau, ITR Economics

US Total Retail Sales to ITR Leading Indicator™

Rates-of-Change



A Clear Indication of Decelerating Rise in 2022

Sources: US Census Bureau, WSJ

US Total Retail Sales to US S&P 500 Stock Prices Index

Rates-of-Change

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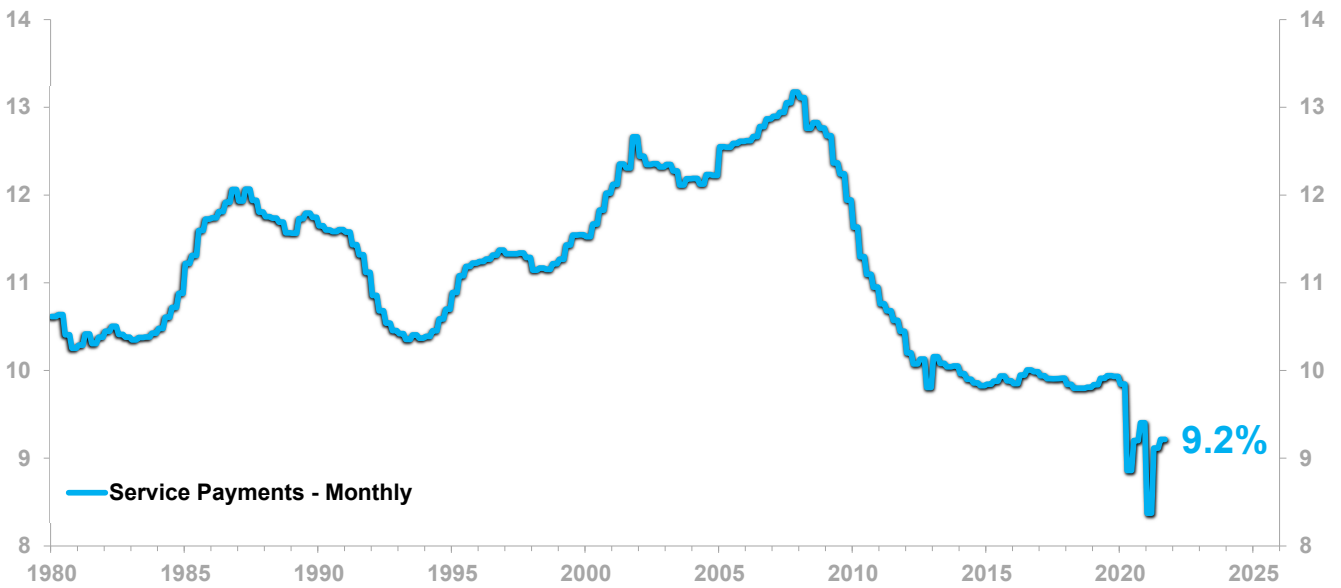
The Consumer Is In A Sound Financial Position




Source: FRB

US Household Debt Service Payments as a Percent of Disposable Personal Income

Raw Data: Percent

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-  Consumer Income Prospects Are Good
-  Businesses Are In Good Financial Condition With High Liquidity
-  Solid Balance Sheets Suggest a 2022-2023 Soft Landing for the Economy

Next Steps

It is time to initiate marketing and sales campaigns that tout your competitive advantages, provide for strong relationships and market share gains during the good times



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Pricing Pressures

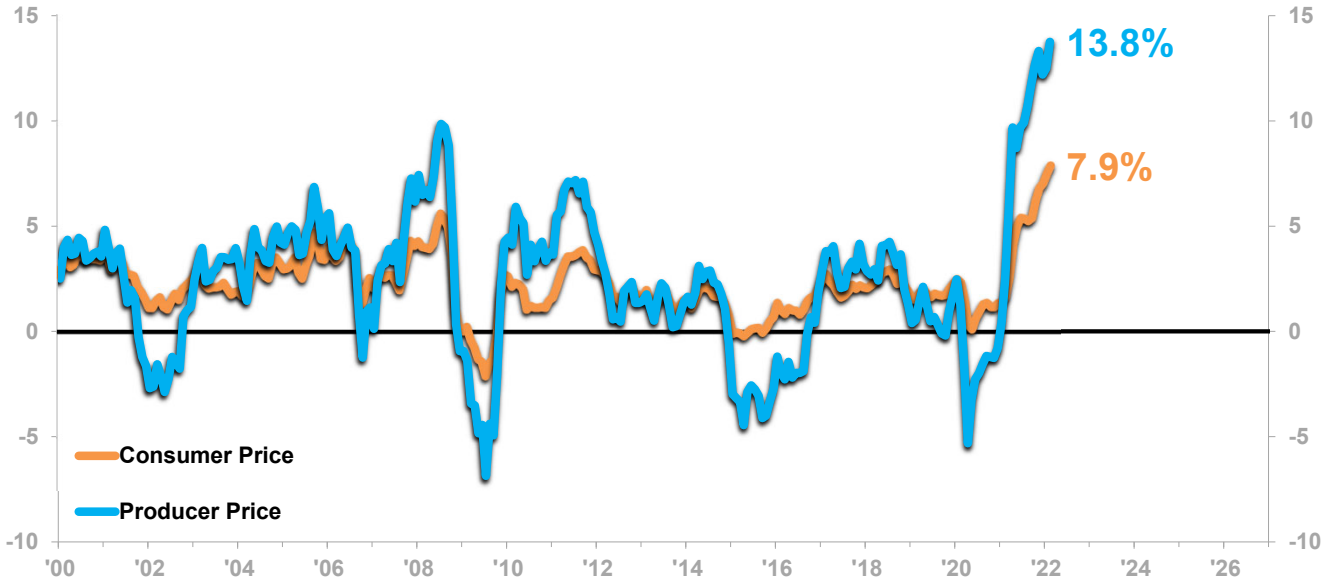
Disinflation Comes During 2H22

Source: BLS

US Consumer Price Index to US Producer Price Index

1/12 Rates-of-Change

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Lower Inflation Ahead Indicated Pre-Invasion

Sources: BLS, CPB Netherlands Bureau For Economic Policy Analysis

US Consumer Price Index to World Industrial Production Index

3/12 Rates-of-Change

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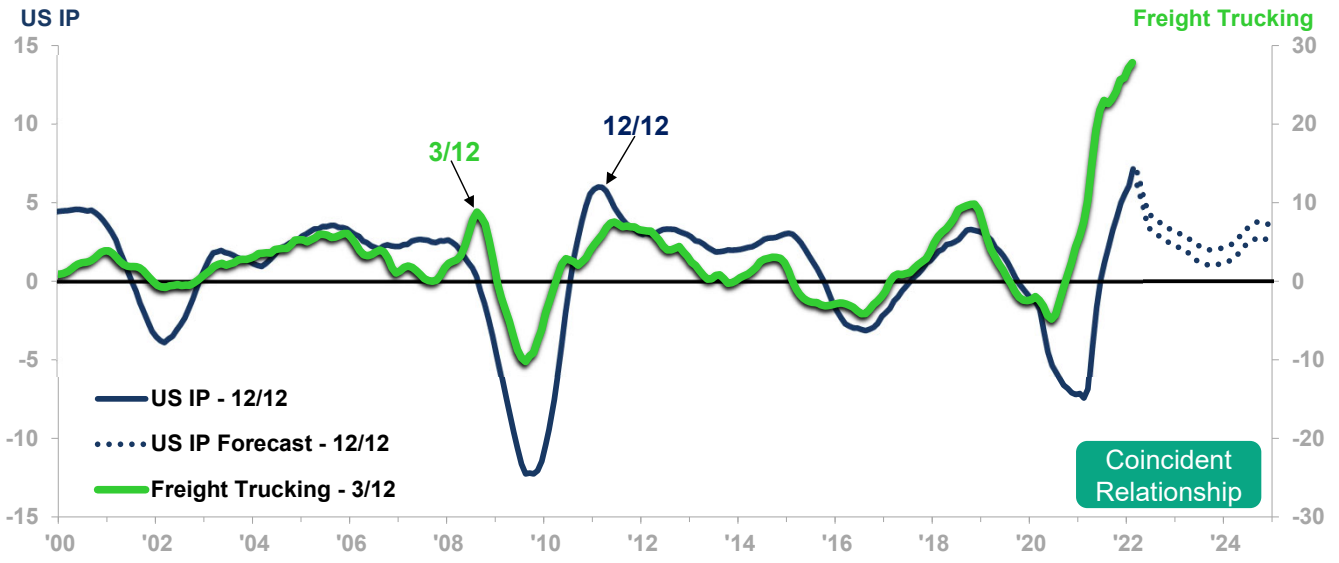


Freight Costs Track With Overall US Economy

Sources: FRB, BLS

US Industrial Production Index to US General Freight Trucking, Long Distance, Truckload Producer Price Index Rates-of-Change

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Indications of Disinflation As 2022 Progresses

Sources: BLS, ISM

US Long-Distance General Freight Trucking Truckload Producer Price Index to US Purchasing Managers Index Rates-of-Change

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Inflation Outlook Through 2024: Beginning of Higher Rates

Source: BLS

US Consumer Price Index

12/12 Rate-of-Change



Universal Inflation

Sources: BLS, Statistics Canada, Mexico National Institute of Statistics & Geography, Brazil National Confederation of Industry, Colombia National Statistics Administrative Department, Argentina National Institute of Statistics & Censuses (INDEC), Eurostat

Consumer Price Indexes

1/12 Rates-of-Change



Country	1/12	Phase
US	7.9%	B
Canada	5.7%	B
Mexico	7.1%	B
Brazil	10.4%	B
Colombia	8.0%	B
Argentina	50.7%	B
Europe	5.6%	B



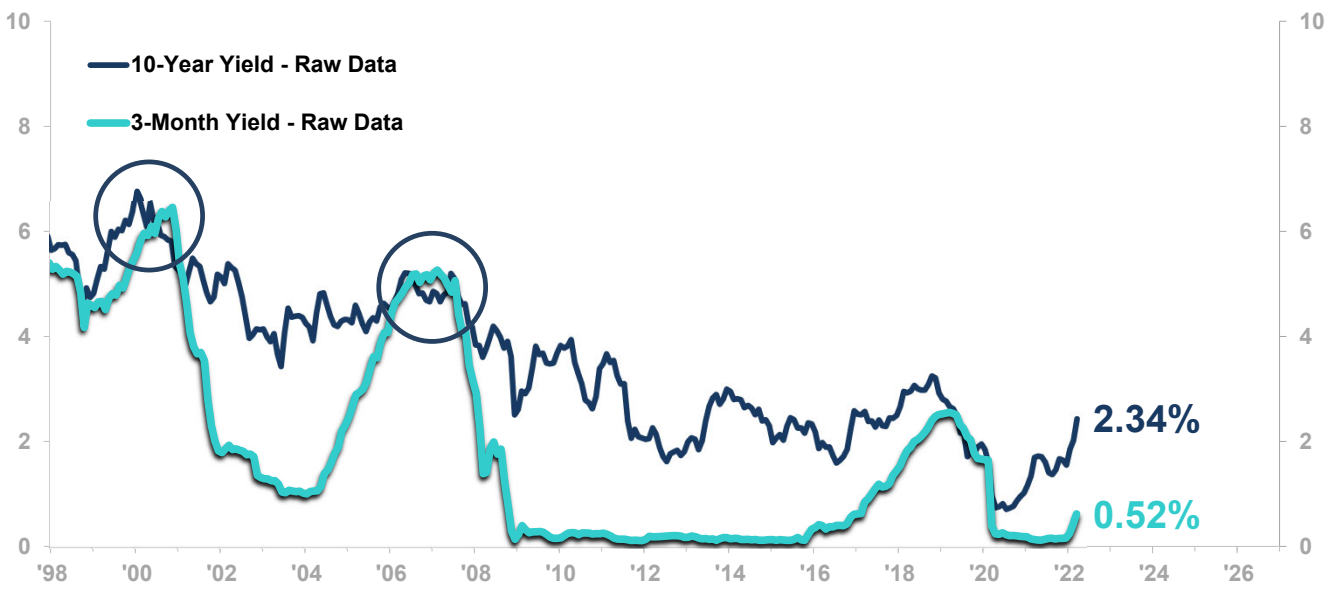
Financial Markets

Rising Interest Rate Environment In 2022

Source: US Treasury Dept.

US Government Long-Term Bond Yields to US 3-Month Treasury Bond Yield

Raw Data: Percent



Signs of a Coming Slow Down in Housing

Source: US Census Bureau

Single-Family Housing Permits

Thousands of Units



	12/12	Phase	3/12	Annual Trend	Direction
Illinois	11.1%	C	-1.0%	11.0	Down
Chicago MSA	23.9%	C	-9.5%	10.1	Down
*Aurora	-33.0%	A	42.8%	61.0	Up
*Joliet	-8.2%	D	-54.1%	213.0	Down
*Rockford	27.4%	C	0.0%	144.0	Down

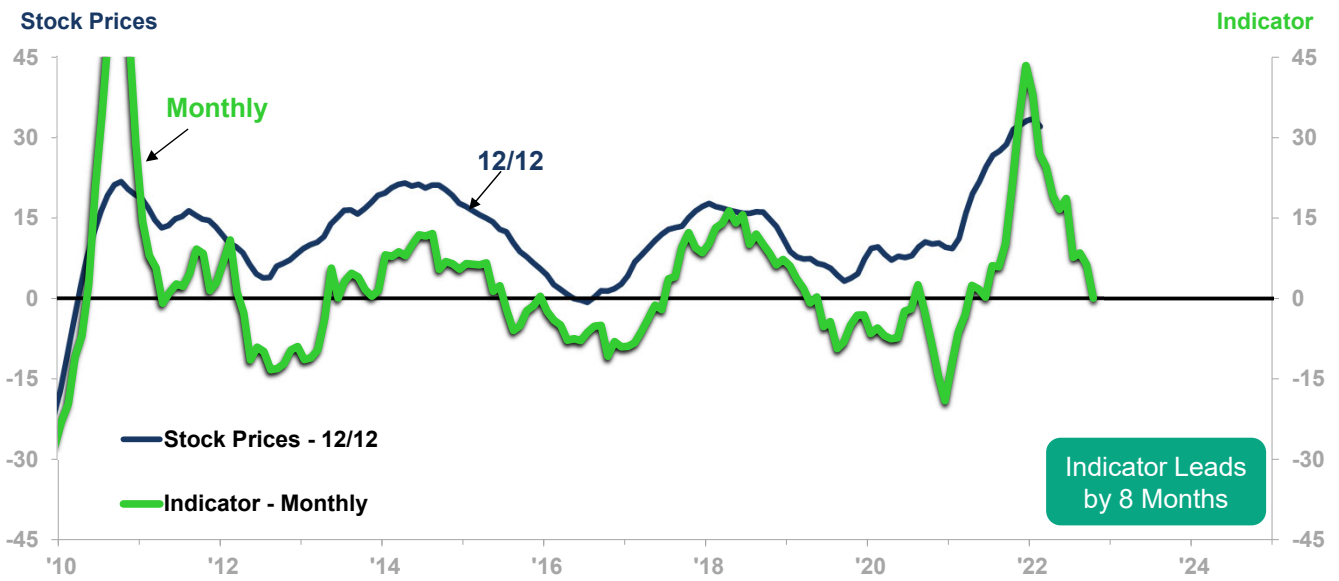


A Clear Signal of Downside Pressure on the S&P 500

Sources: WSJ, ITR Economics

US S&P 500 Stock Prices Index to ITR Financial Leading Indicator™

Rates-of-Change



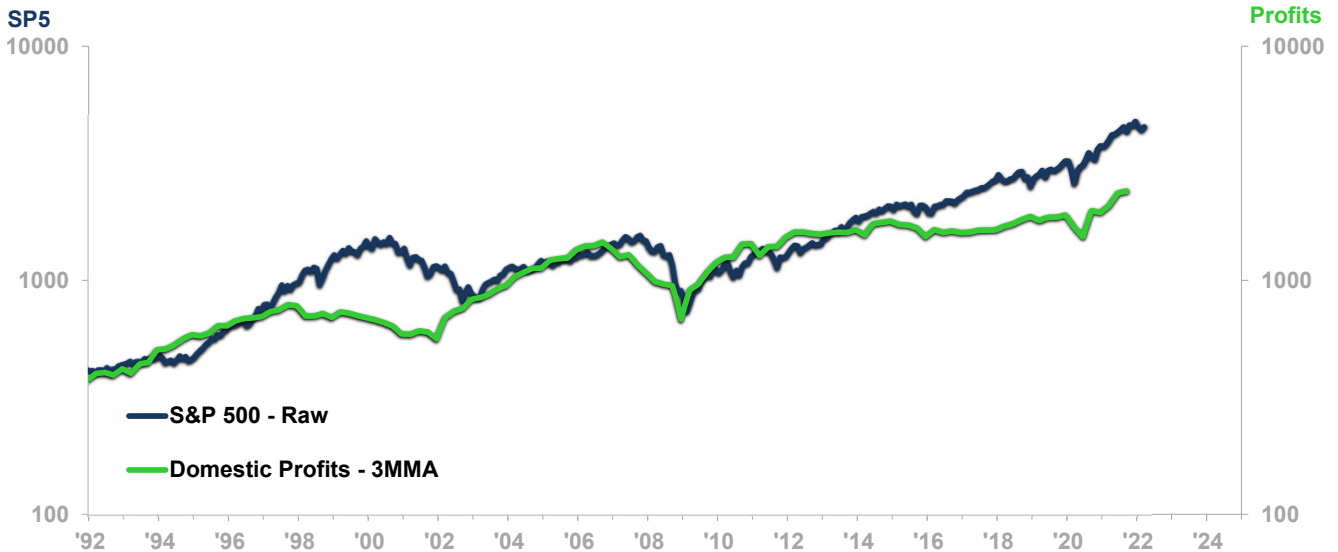
Increasingly Risk Laden

Sources: Wall Street Journal, Bureau of Economic Analysis

US Stock Prices Index to US Domestic Corporate Profits with Capital Consumption Adjustments



Data Trends



Financial Markets Summary



- ☐ → Higher inflation/interest rates will compress multiples
- ☐ → Optimizer Leading Indicator, M2, & Margin Debt signal caution regarding S&P 500
- ☐ → Caution does not mean exit the market; continue to build wealth but the strategies will change

Next Steps

Assess exposure to a future bear trend by market

Today's price correction is different than a bear market. Stay engaged.



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Your World

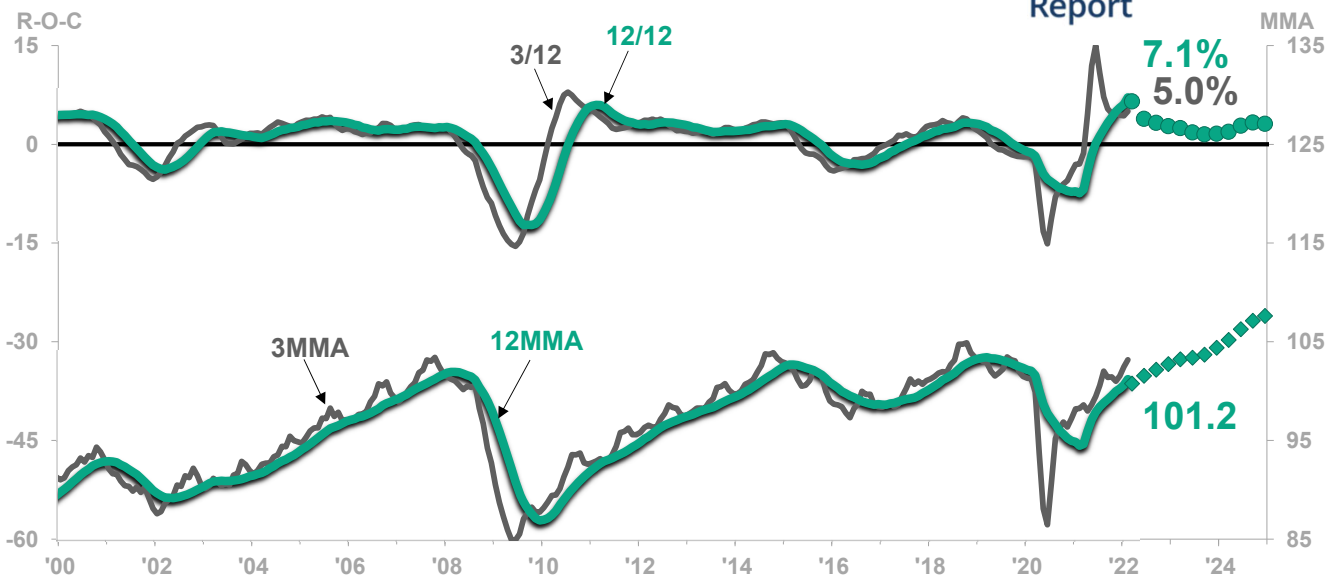
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US Industrial Production Rise Through 2024, Slowdown Into 2023

Source: FRB

US Industrial Production Index
2017 = 100

as seen in
ITR Economics' Trends Report
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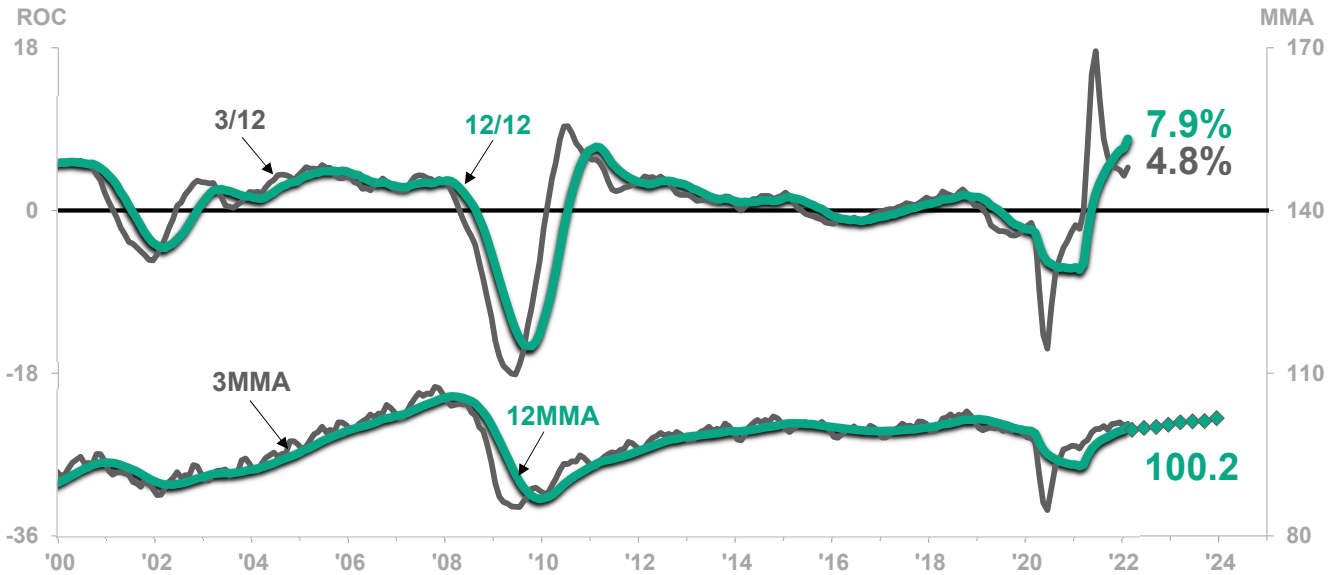
Domestic Manufacturing Will Rise This Year

Source: FRB

US Total Manufacturing Production Index

2017 = 100

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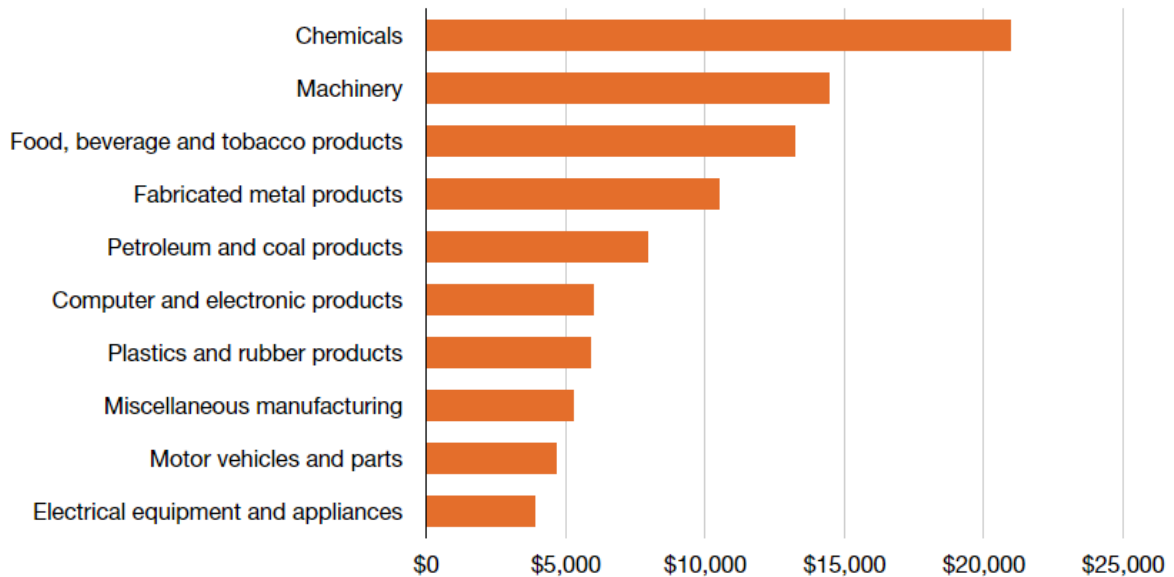


Top 10 Illinois Manufacturing Sectors

Source: NAM

Millions of Dollars

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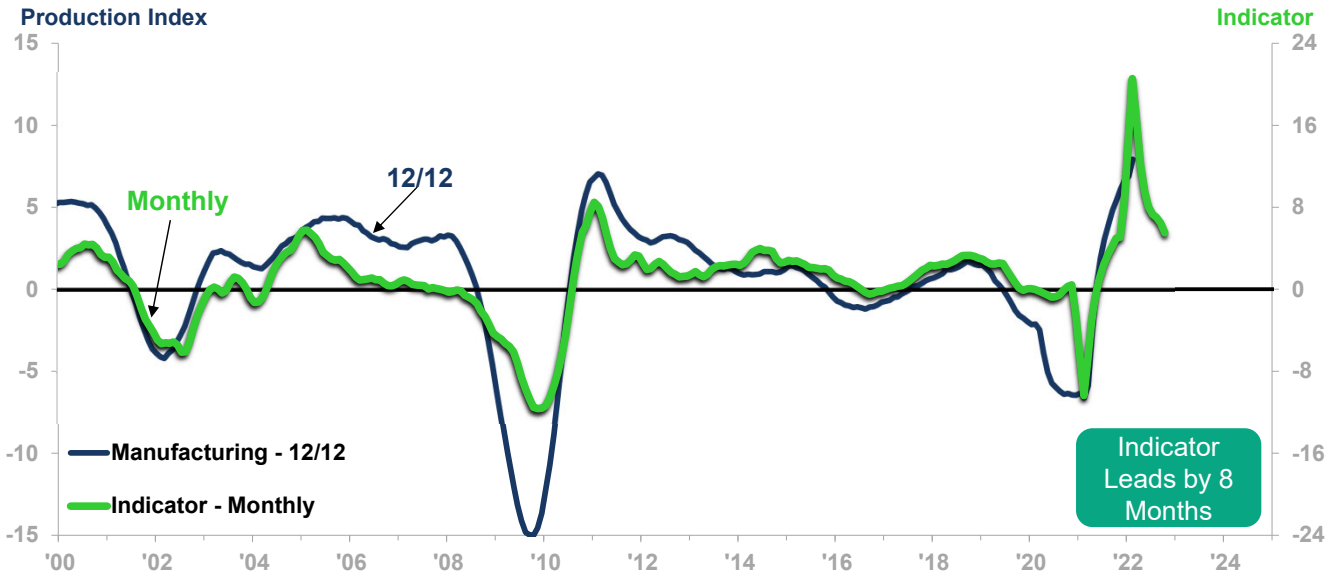


However, A Clear Indication of Deceleration in 2022

Sources: FRB, ITR Economics

US Total Manufacturing Production Index to ITR Leading Indicator™

Rates-of-Change



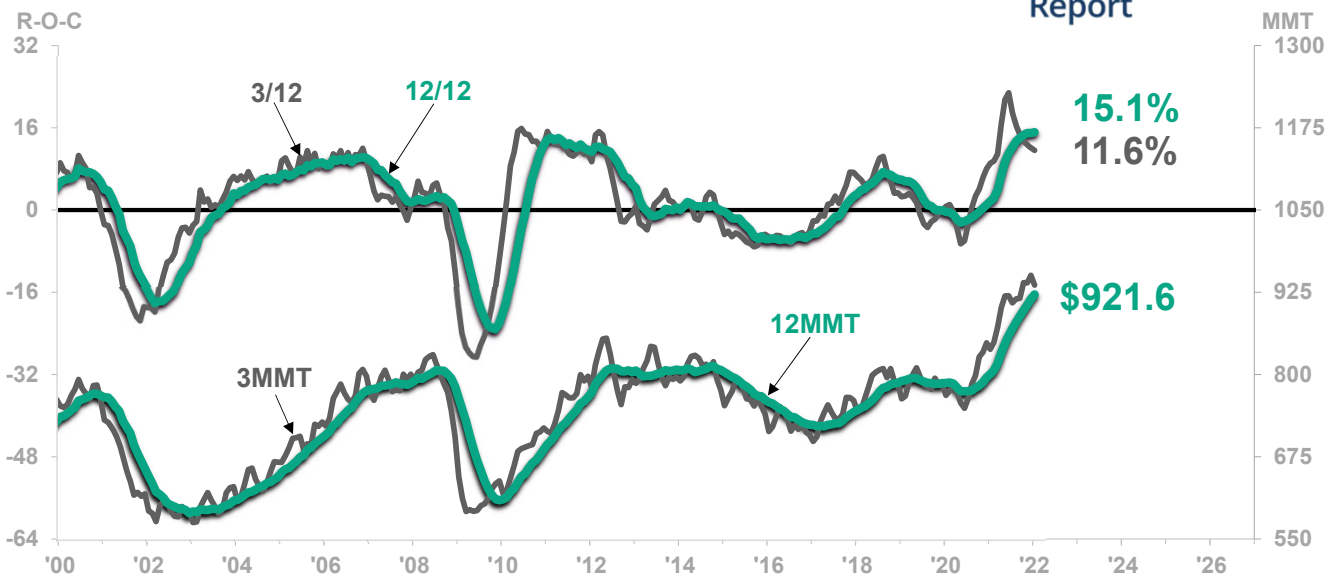
Capex Transitioning To Slower Growth

Source: US Census Bureau

US Nondefense Capital Goods New Orders (excluding aircraft)

Billions of Dollars

as seen in
ITR Economics'
**Trends
Report**



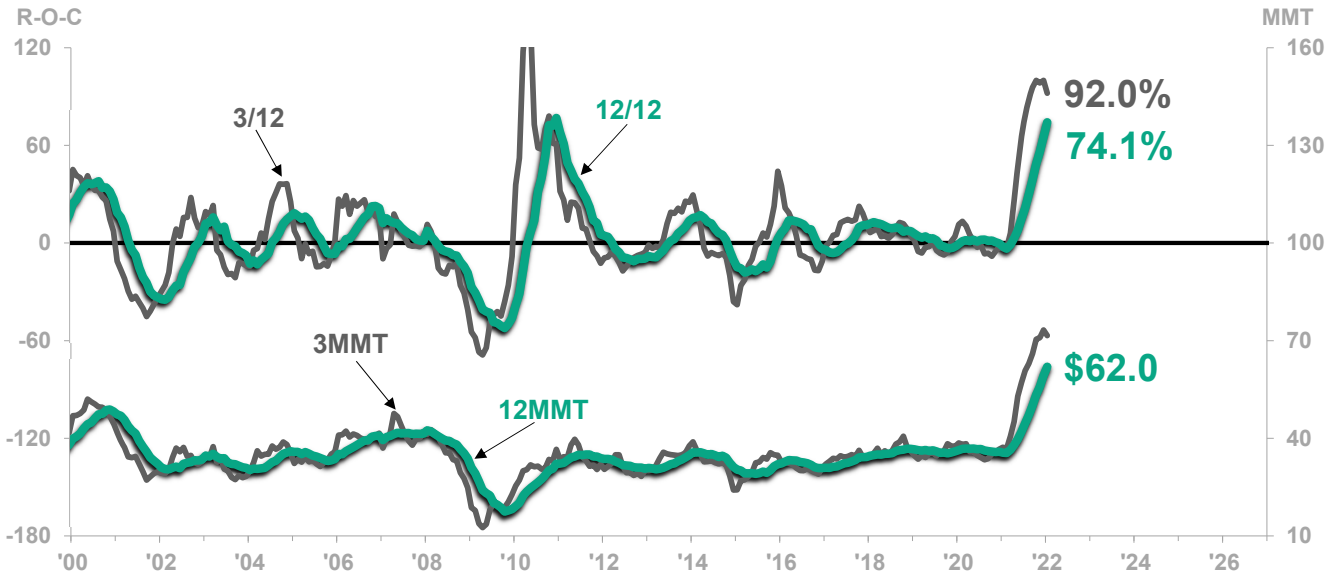
Unsustainable Rate of Growth

Source: US Census Bureau

US Industrial Machinery New Orders

Billions of Dollars

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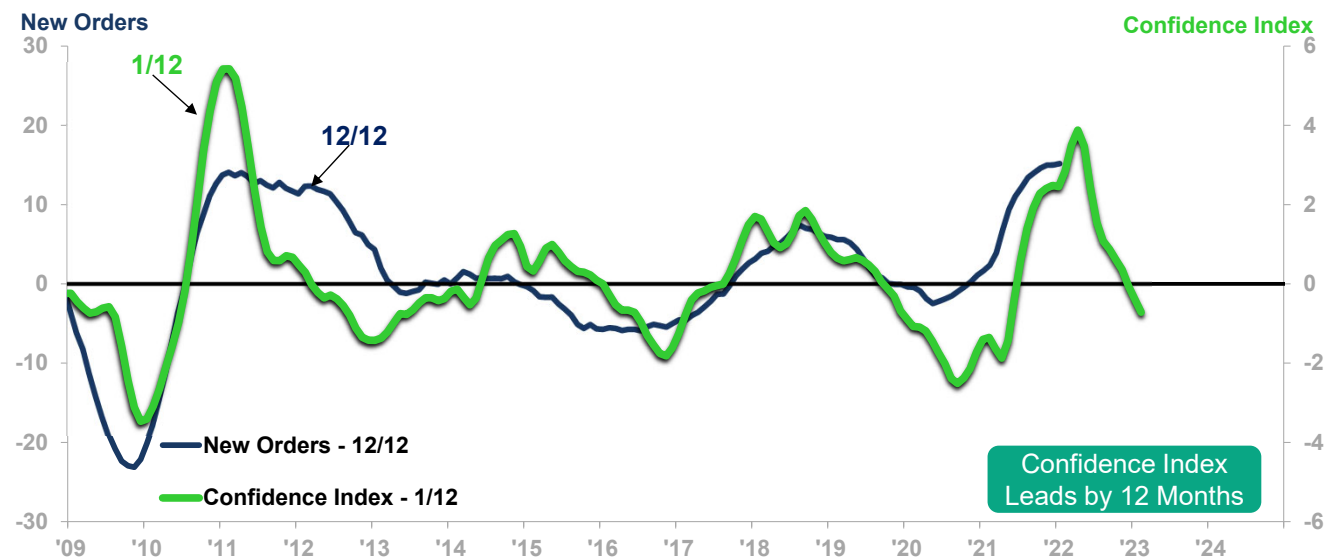
Weakening Confidence Leads Capex Slowdown By a Year

Sources: US Census Bureau, OECD

US Nondefense Capital Goods New Orders (excluding aircraft) to US Business Confidence Index

Rates-of-Change

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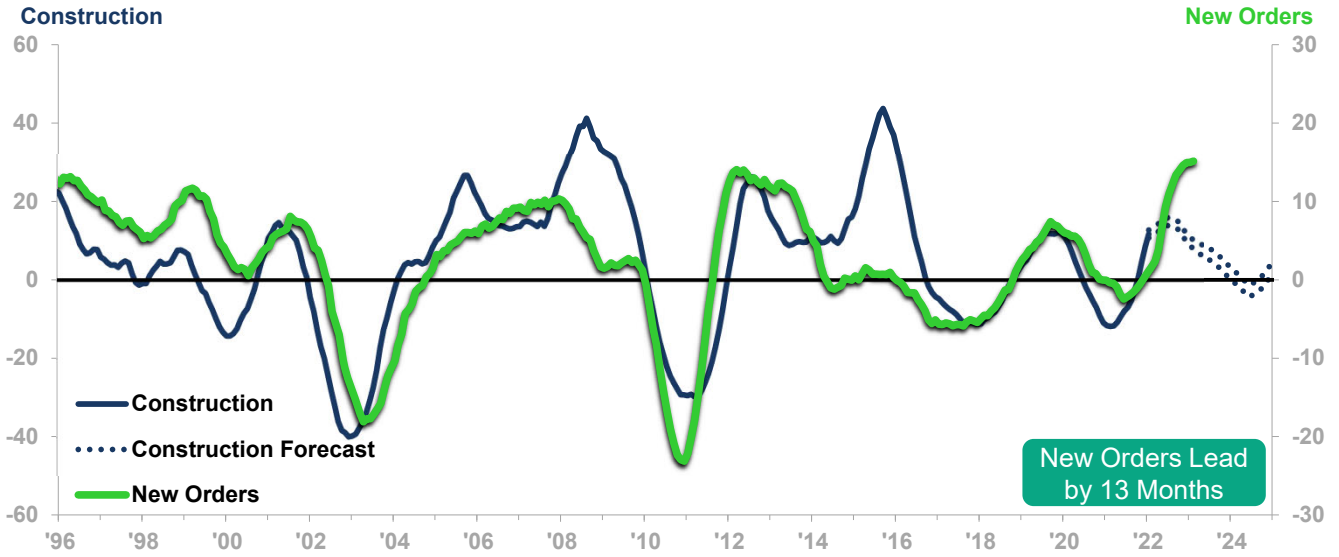
Capacity Expansion Slows Down Next Year

Source: US Census Bureau

US Private Manufacturing Construction to US Nondefense Capital Goods New Orders (excluding aircraft)

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12/12 Rates-of-Change



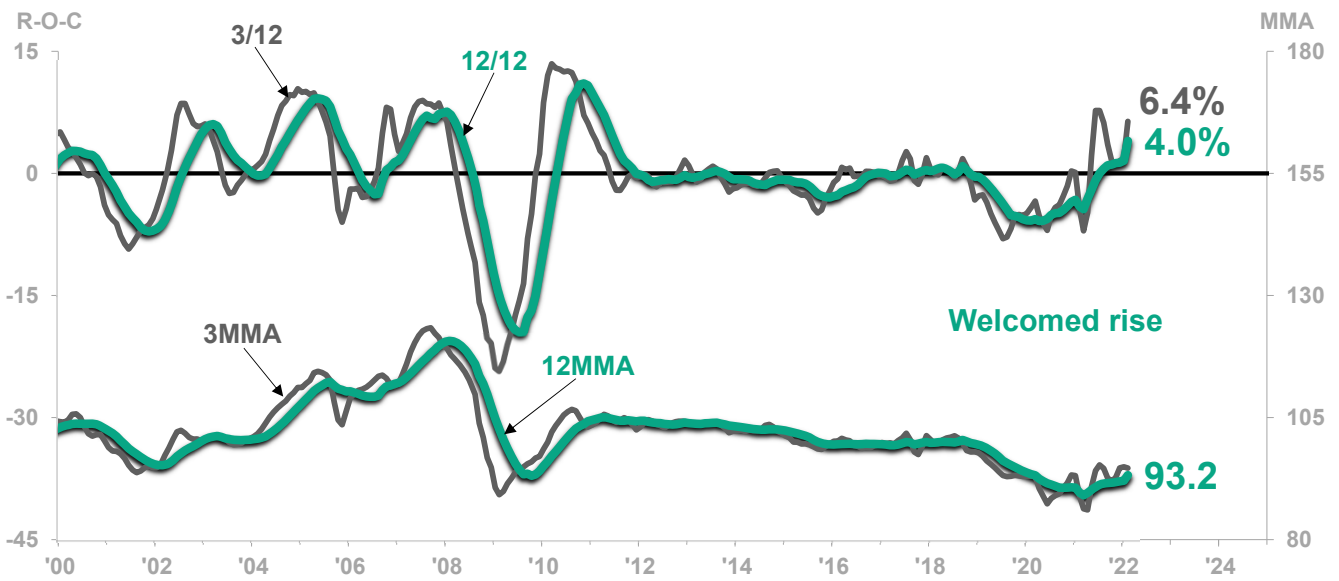
Expect Rise Through 2022

Source: FRB

US Chemical Products Excluding Pharmaceuticals and Medicines Production Index

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2017 = 100

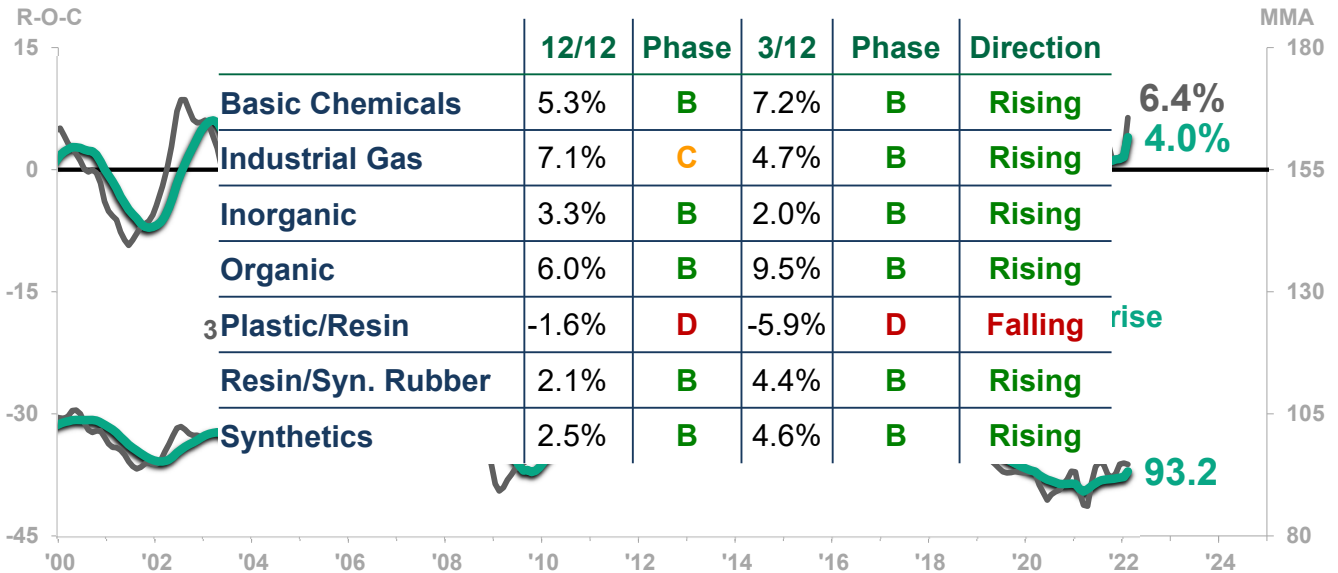


Expect Rise Through 2022

Source: FRB

US Chemical Products Excluding Pharmaceuticals and Medicines Production Index

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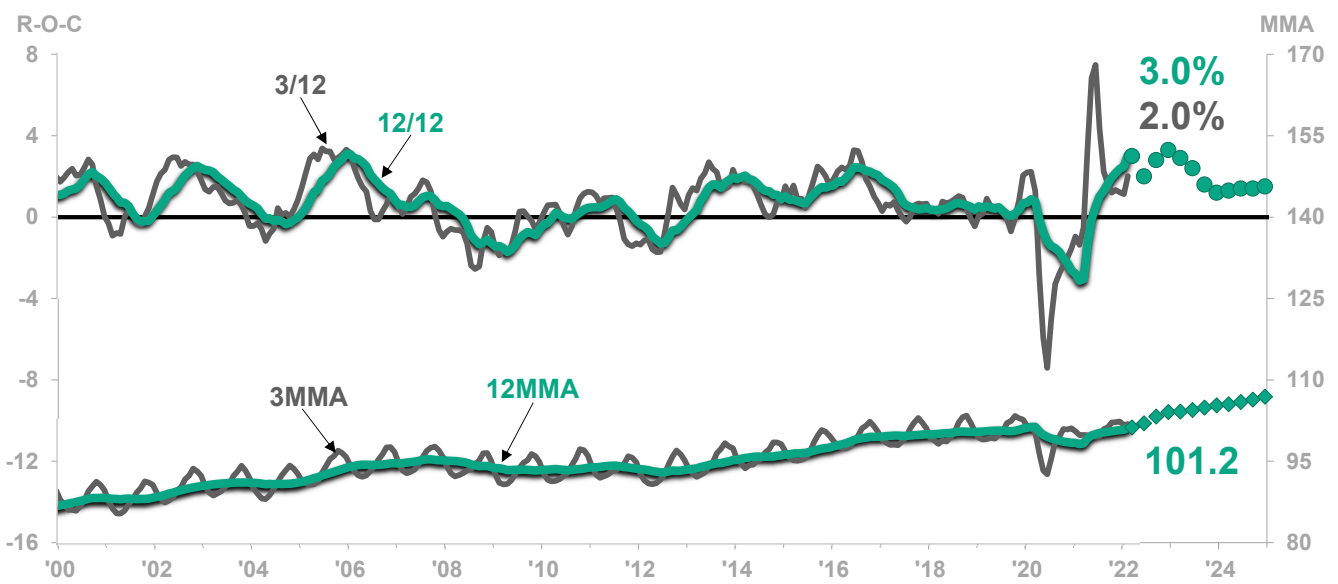


A Growing Market

Source: FRB

US Food Production Index

2017 = 100



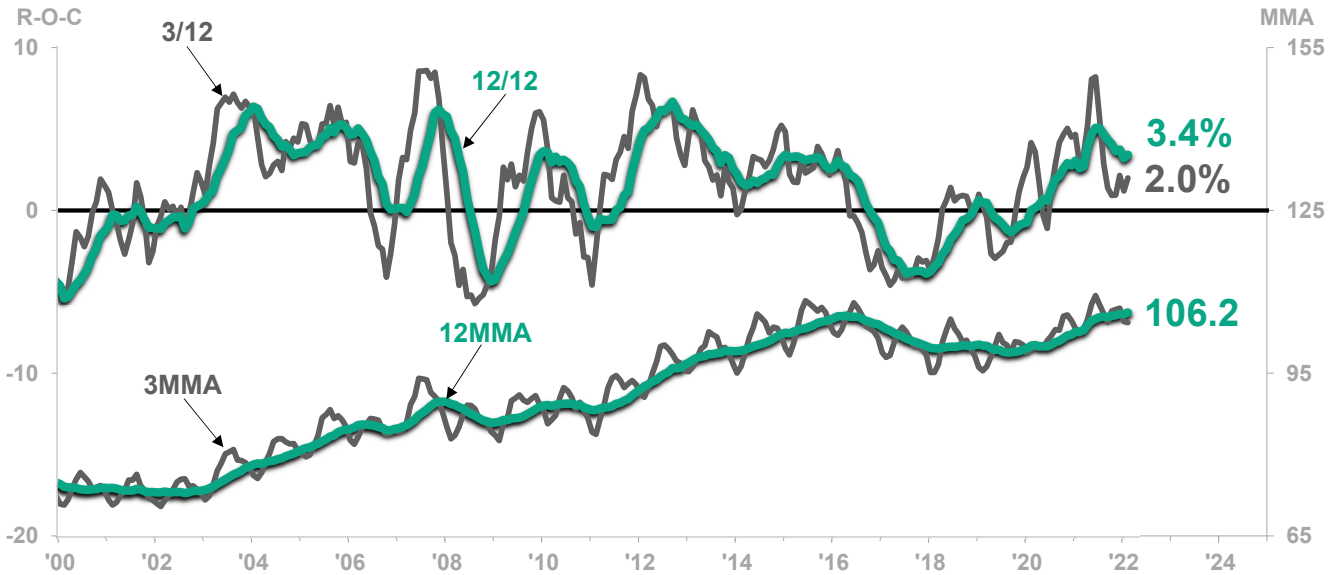
Production Rise Through 2023

Source: FRB

US Beverage, Coffee and Tea Production Index

2017 = 100

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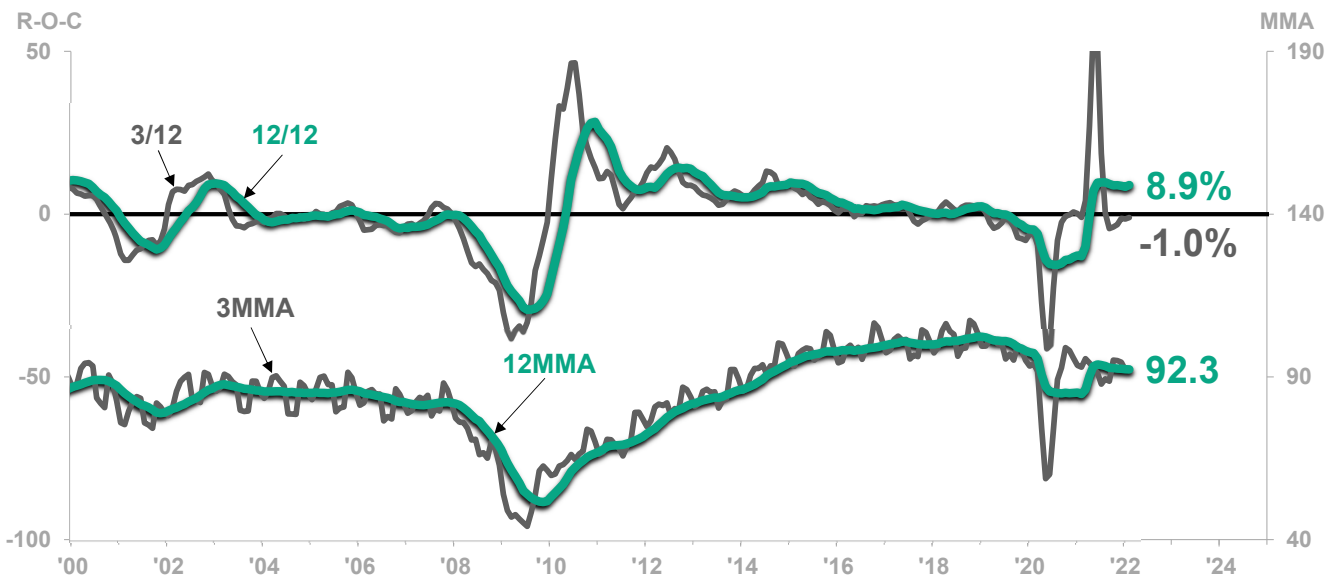
Stalled Production, Auto To Improve Late 2022 & 2023

Source: FRB

US Motor Vehicle Parts Production Index

2017 = 100

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US Industry Segments

Sources: FRB, US Census Bureau

	12/12	Phase	3/12	Phase	Notes
Manufacturing (excl. Motor Vehicles)	7.5%	B	5.1%	B	Rise through 2022
Industrial Machinery Production	21.8%	C	13.2%	C	Rise through 2022
Food Production	3.0%	B	2.0%	B	Rise through 2022
Aerospace Products & Parts	16.7%	C	7.0%	C	Rise through 2022
Chemical and Chemical Products	7.3%	B	8.2%	B	Rise through 2022
Pharmaceuticals	12.4%	B	11.0%	C	Rise through 2022
Fabricated Metals	6.1%	B	5.3%	B	Rise through 2022
Computer & Electronics New Orders	6.9%	C	6.6%	B	Rise through 2022
Rubber and Plastics	7.3%	B	3.6%	C	Rise through 2022
Electrical Equipment	7.0%	B	4.0%	B	Rise through 2022
Medical Equipment & Supplies	9.1%	B	5.4%	B	Rise through 2022



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People

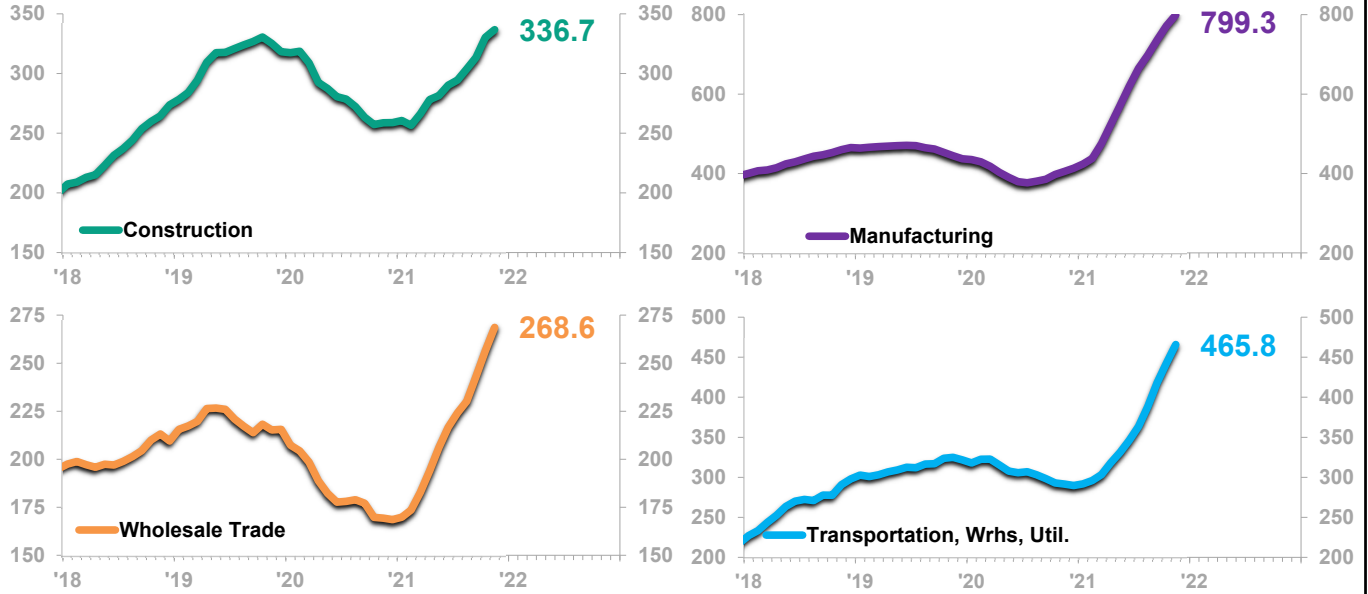
Labor Shortage Will Not End Anytime Soon

Source: BLS

US Job Openings by Industry

12MMA in Thousands

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Easing in the Quit Rate Will Moderate Employment Cost Rise

Source: BLS

US Employment Cost Index to US Quit Rate

Index: 12/12 Rate-of-Change, Quit Rate: Percent

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The Positive Implications of Younger Workforces

Source: US Census Bureau

Available Workforce

Percent of Total Population



	Gen Z	Millennials	Gen X	Boomers
US	20.8%	21.7%	20.4%	21.3%
IL	20.8%	21.8%	20.7%	21.1%
*Champaign	28.1%	24.6%	15.9%	17.8%
*Chicago	20.9%	22.5%	21.2%	20.4%
Peoria	20.1%	19.9%	19.9%	22.7%
Rockford	21.0%	19.7%	20.4%	22.5%
Springfield	19.8%	20.0%	20.3%	23.7%

*Metropolitan Statistical Area

Illinois Population Growth Rate

Source: US Census Bureau

Percent Change from Population Estimates 2016 to 2020

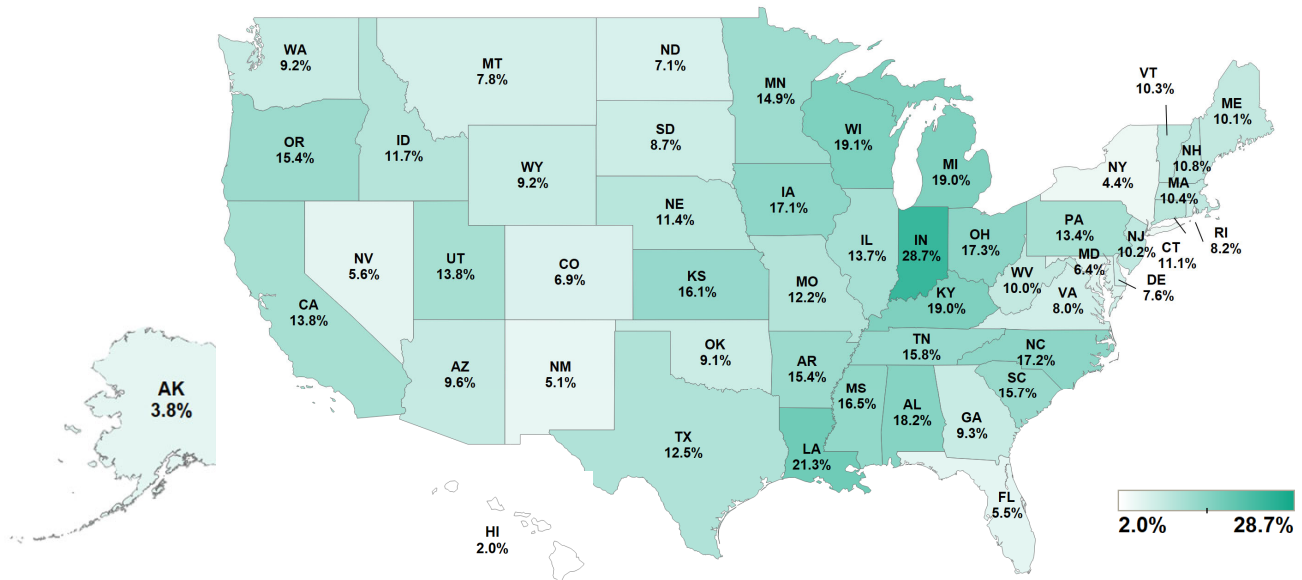
<u>City</u>	<u>Growth Rate</u>
Chicago	-1.4%
Aurora	-2.2%
Naperville	0.5%
Joliet	-0.8%
Rockford	-2.1%
Springfield	-2.0%
United States Total	2.0%



Manufacturing Output by State

Sources: BEA, BLS, Reshoring Initiative

Manufacturing Output as a Percent of State GDP



Manufacturing Output by State

Sources: BEA, BLS, Reshoring Initiative

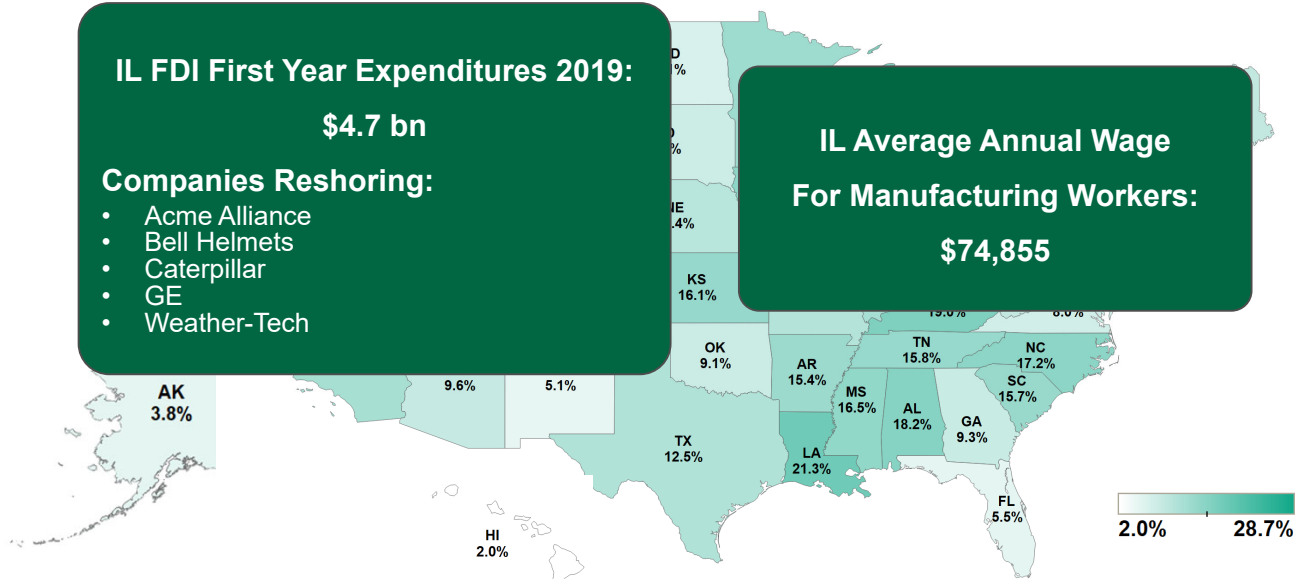
Manufacturing Output as a Percent of State GDP



IL FDI First Year Expenditures 2019:
\$4.7 bn
Companies Reshoring:

- Acme Alliance
- Bell Helmets
- Caterpillar
- GE
- Weather-Tech

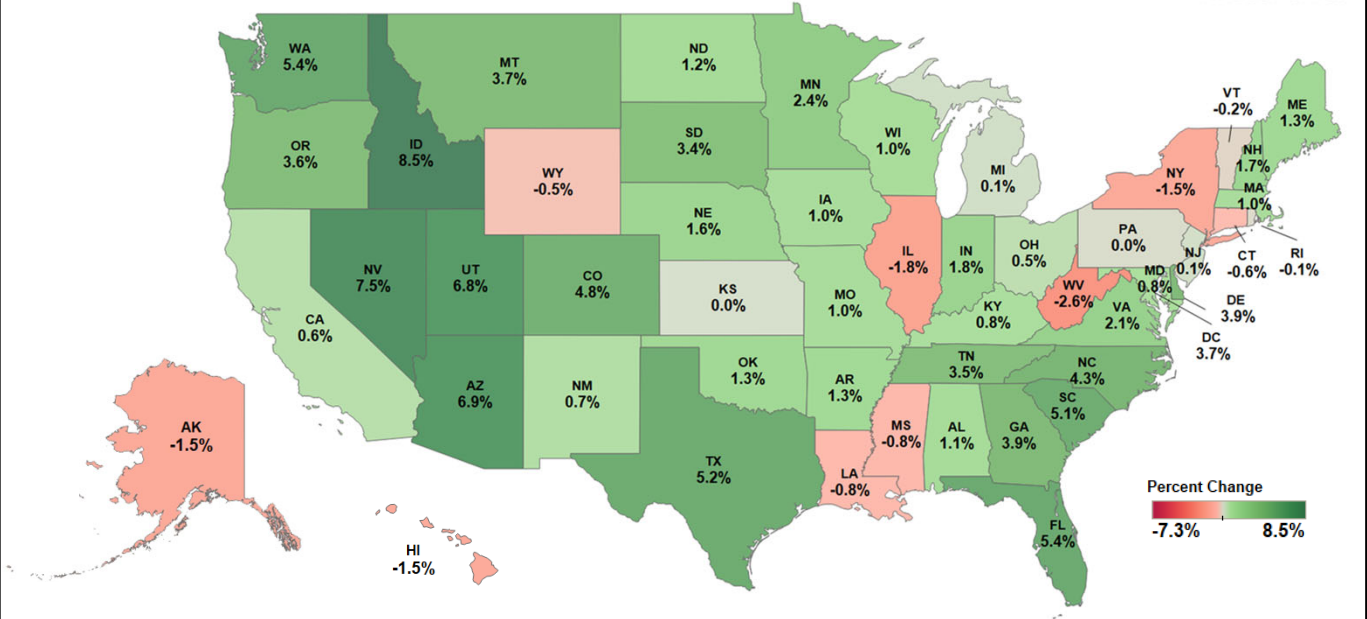
IL Average Annual Wage For Manufacturing Workers:
\$74,855



Threshold of Labor Pain Varies by State

Source: US Census Bureau

Population Growth 2016 – 2020, Percent Change



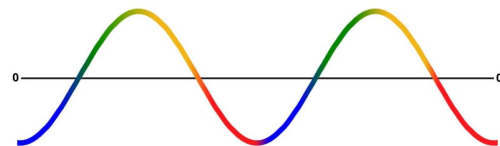
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TAKE ACTION

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Tips to Remember

- Most of 2022 & 1H23 will be Phase C, slowing growth
- With no recession in the forecast, stay aggressive re: investments, automation
- Pricing pressures are easing, but don't expect "normal pricing"
- Supply chain pressures will ease before labor pressures will abate



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ABOUT CONNOR

Few young economists present their insights with the authority, accuracy, and humor that Connor Lokar brings to the stage. From the intimate executive retreat to the standing room-only keynote, he delivers practical economic intelligence with charm and candor.

Connor has been giving economic keynotes, workshops, and webinars across North America since he joined ITR Economics in 2014. Using his quick wit and knack for storytelling, he leverages his youthful appearance to upend expectations and successfully captivate and educate audiences. Thousands of business leaders have enjoyed his dynamic approach; Connor emphasizes the applicability of economic intelligence and calls his audience to action.

When not on stage, Connor contributes his economic expertise in the role of trusted advisor, consulting directly with management teams of firms large and small. ITR's clients meet with Connor at critical planning junctures to ensure that their strategic plans, goals, and internal initiatives are in alignment with their tailored forecasts. As ITR Economics' senior forecaster, Connor has a particularly keen understanding of how forecasts are derived. The resulting insights enable clients to make the most of their economic outlooks.

Connor specializes in construction and industrial markets but consults and presents to businesses across all industries, helping them grow revenue and remain profitable through an everchanging business cycle.

ABOUT ITR ECONOMICS

Founded in 1948, ITR Economics is the oldest privately held, continuously operating economic research and consulting firm in the United States. With a long-term accuracy rating of 94.7%, ITR Economics has forecasted major economic events such as the Great Recession of 2008 years in advance. ITR provides reliable industry and company forecasts tailored to clients' needs. ITR Economics also offers economic webinars, subscription periodicals, consultative reports, and data-collection services.

TESTIMONIALS

"He knows his stuff and presents it well. More important to me, he flexes the conversation and presentation based on who's in the group and where the conversation leads. That is a great asset that seems to flow from him naturally. I wish it were true of more speakers." - [Gil Herman, Vistage Chair, Chicago, IL](#)

"Please high five Connor for me - and let him know we look forward to future opportunities to work with him here in Colorado. As you can imagine, it was a risk to opt for the young guy, and he made me look brilliant, as well as hit the mark with our guests. Thank you!" - [Mary Medley, CEO, Colorado Society of CPAs, Denver, CO](#)

"Connor was fantastic and we were happy to have him. He was knowledgeable and personable; everybody spoke highly of his presentation!" - [Garett Graubins, Bestop](#)



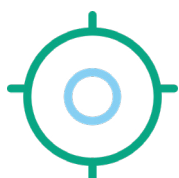
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