Industrial Supply Association JUNE 2022

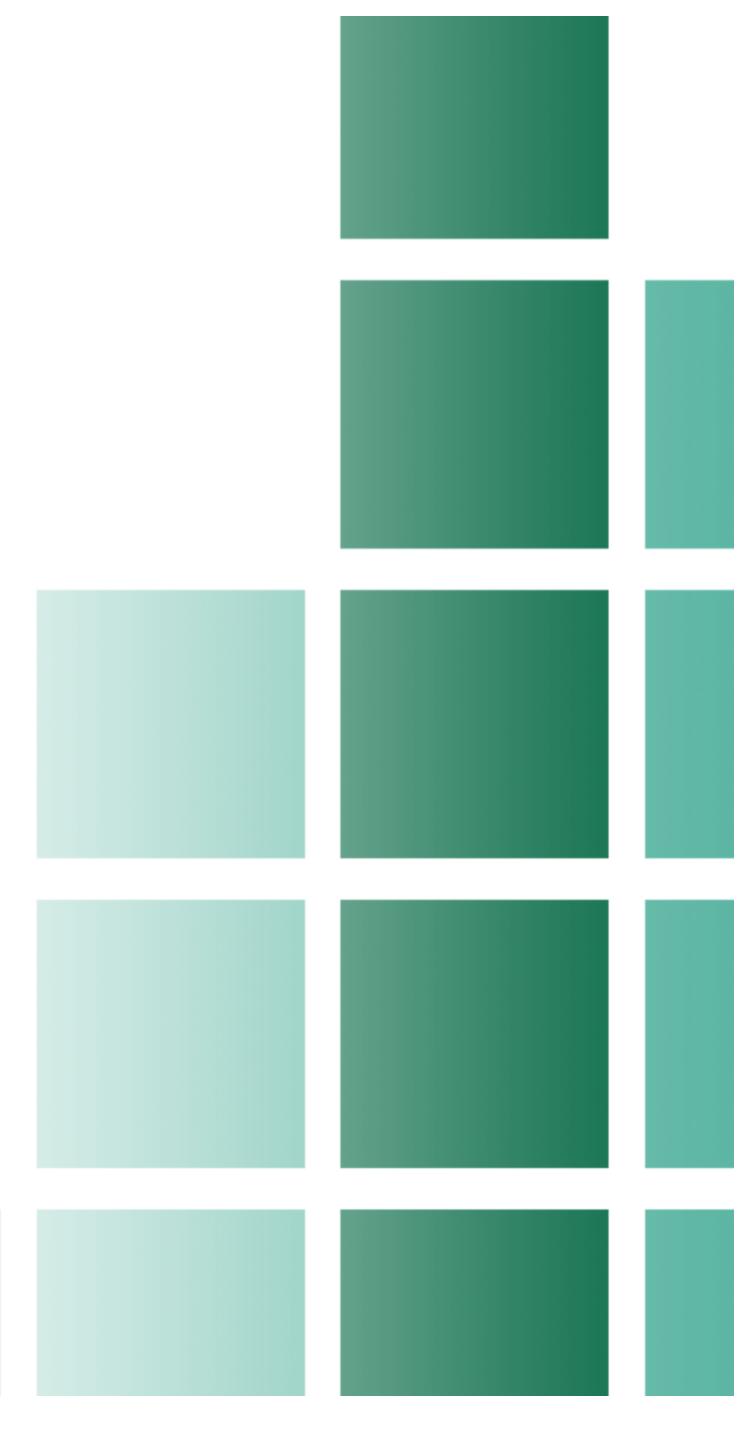






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Economic Overview

It is getting scarier out there in the economy. We have a bear market, Federal Reserve tightening, multi-decade highs in inflation, recent decline in real personal income (including transfer payments), and a tick-down in first-quarter US Real Gross Domestic Product (GDP). With all this, it's no surprise that talk of recession is splashed across the business news nearly every day, and confidence is waning among both consumers and businesses.

How concerned should you be? Some prudence on the back side of the business cycle is always a good idea, but here is what you really need to know:

- 1. Are we headed for Great Recession 2.0? We are not. Consumers and businesses are starting this period of business cycle softening in very strong fiscal shape. The situation is nearly the opposite of the period immediately prior to the Great Recession.
- 2. So what should you do? Focus on your margins and know your markets.

We are calling for relatively flat Real GDP at the bottom of this business cycle. Irrespective of whether actual results come in showing slight contraction or anemic growth, some markets will undergo mild recessions and others will have the proverbial "soft landing" – i.e., no recession, just slowing growth. This report will help you sort these markets. If you need more detail, or information on markets not covered in this report, reach out to us. We would love to help.

"There is so much uncertainty." We are hearing some version of this quite frequently from business leaders. We understand. There are an abnormally high number of disparate economic datapoints and risk factors muddying the waters. That being said, it is our job to identify the relative certainties in this cycle:



- 2. Inflation will moderate at least somewhat as demand cools and supply ramps up.
- 3. Labor will remain scarce and expensive given the myriad of factors causing the shortage. (Remember, the labor shortage predates COVID-19, which then exacerbated the issue.)
- 4. Consumers and businesses are well-positioned to take the punch presented by issues 1, 2, and (for employers) 3. Capitulation is not around the next corner.
- 5. Consumers' and businesses' financial firewalls won't always be so robust. Be prepared for a rocky economic period during the middle of the decade.

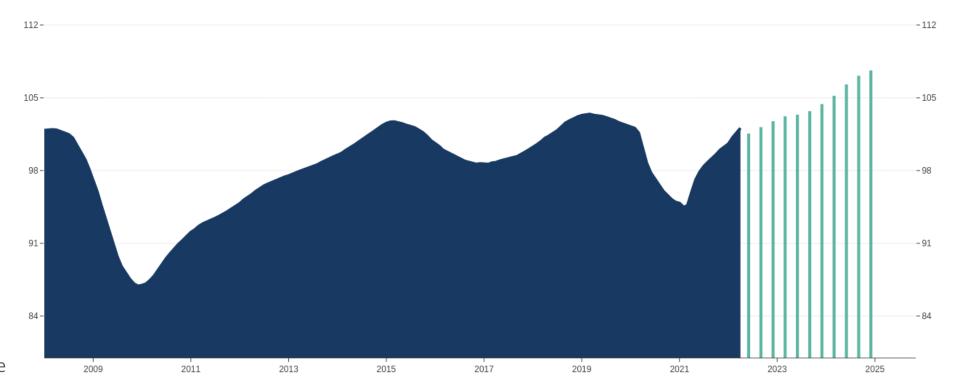
What do these factors mean for you?

First, now is a good time to borrow at fixed rates IF you have a project that promises to save on future costs in the more expensive world we find ourselves in this decade. Emphasize projects that have a short ROI or that combat labor scarcity and expense.

Second, margins will be squeezed if you aren't careful. Your customers may well start pushing back on price increases, especially as the elevated inflationary period sticks around. You may also find yourself in a period of "profitless prosperity" wherein your top line rises along with inflation, but a peek at the bottom line reveals struggles. Walmart and Target's disappointing first-quarter earnings reveal that even the blue chips are not immune.

Third, don't worry excessively. There is a lot of negative sentiment in the media and among consumers right now. Headlines and consumer sentiment are not reliable predictors of what is to come. Take comfort in the solid financial underpinnings of the economy and focus on what you can control.

US Industrial Production Index Annual Average (12MMA)





Terminology and Methodology

Data Trends: Moving Averages and Totals

Quarterly Average (Three-Month Moving Average, or 3MMA)

The average of the latest three months of data, updated every month. In the example, \$57.79 is the quarterly average for the three months ending in March 2021 (i.e., the average for January, February, and March 2021).

Example: Monthly US Crude Oil Spot Prices averaged \$57.79 in the first quarter of 2021, a 26.3% increase from the first quarter of 2020.

Quarterly Total (Three-Month Moving Total, or 3MMT)

The total of the latest three months of data, updated every month. In the example, \$257.8 billion is the quarterly total for the three months ending in February 2021 (i.e., the total for December 2020, January 2021, and February 2021).

Example: Quarterly US Capital Goods New Orders totaled \$257.8 billion in February 2021.

Annual Average (12-Month Moving Average, or 12MMA)

The average of the latest 12 months of data, updated every month. In the example, 119.0 million is the annual average for February 2021 (i.e., the average for the 12-month period from March 2020 through February 2021).

Example: US Private Sector Employment averaged 119.0 million workers during the 12 months through February 2021, down 7.5% from one year earlier.

Annual Total (12-Month Moving Total, or 12MMT)

The total of the latest 12 months of data, updated every month. In the example, \$5.849 trillion is the annual total for February 2021 (i.e., the total for the 12-month period from March 2020 through February 2021).

Example: US Wholesale Trade totaled \$5.849 trillion during the 12 months through February 2021.

Growth Rates

Monthly Growth Rate (1/12 Rate-of-Change)

The percentage change between a given month and the same month one year earlier. In the example, 79.3% is the monthly growth rate for March 2021.

Example: Monthly US Copper Futures Prices were at \$4.00 per pound in March 2021, 79.3% above the March 2020 level of \$2.29.

Quarterly Growth Rate (3/12 Rate-of-Change)

The percentage change between a three-month period and the same three-month period from one year earlier. In the example, 26.3% is the quarterly growth rate for March 2021.

Example: US Crude Oil Spot Prices averaged \$57.79 in the first quarter of 2021, a 26.3% increase from the first quarter of 2020.

Annual Growth Rate (12/12 Rate-of-Change)

The percentage change between a 12-month period and the same 12-month period from one year earlier. In the example, -7.5% is the annual growth rate for February 2021; that is, US Private Sector Employment during March 2020 through February 2021 came in 7.5% below Employment from March 2019 through February 2020.

Example: US Private Sector Employment averaged 119.0 million workers during the 12 months through February 2021, down 7.5% from one year earlier.

Business Cycle Phases



Recovery (A)

The annual growth rate (12/12) is rising, but the rate of growth is still negative. We denote this phase with blue (for improving).



Accelerating Growth (B)

The annual growth rate (12/12) is rising, and the rate of growth is positive. We denote this phase with green (for go).



Slowing Growth (C)

The annual growth rate (12/12) is positive, but the rate of growth is declining. We denote this phase with yellow (for caution).



Recession (D)

The annual growth rate (12/12) is declining, and the rate of growth is negative. We denote this phase with red (for warning).





Industrial Supply Association Markets Dashboard

		Current		Annual Gro	wth Rate Forecast (12/12), Year-End*
Page Number	Indicator	Growth Rate**	Phase	2022**	2023**	2024**
4	US Industrial Production Index	6.4%	С	2.8%	1.6%	3.1%
5	US Civilian Aircraft Equipment Production Index	13.0%	С	8.1%	-1.1%	10.1%
6	US Automobile Production Index	-11.7%	A	17.6%	9.0%	11.7%
7	US Private Nonresidential Construction	4.5%	В	13.4%	7.6%	3.9%
8	US Primary Metals Production Index	13.1%	С	5.0%	0.6%	4.6%
9	US Real Gross Domestic Product (Quarterly Growth Rate)	3.5%	С	1.7%	2.0%	3.2%

^{*}Coloring denotes the business cycle phase at year-end. For example, if a value in the 2021 column is colored blue, the corresponding indicator is forecasted to be in Phase A, Recovery, at year-end 2021.

Green denotes Phase B, yellow Phase C, and red Phase D.

**Annual growth rate (12/12) except where otherwise noted.



Recovery (A)



Accelerating Growth (B)



Slowing Growth (C)



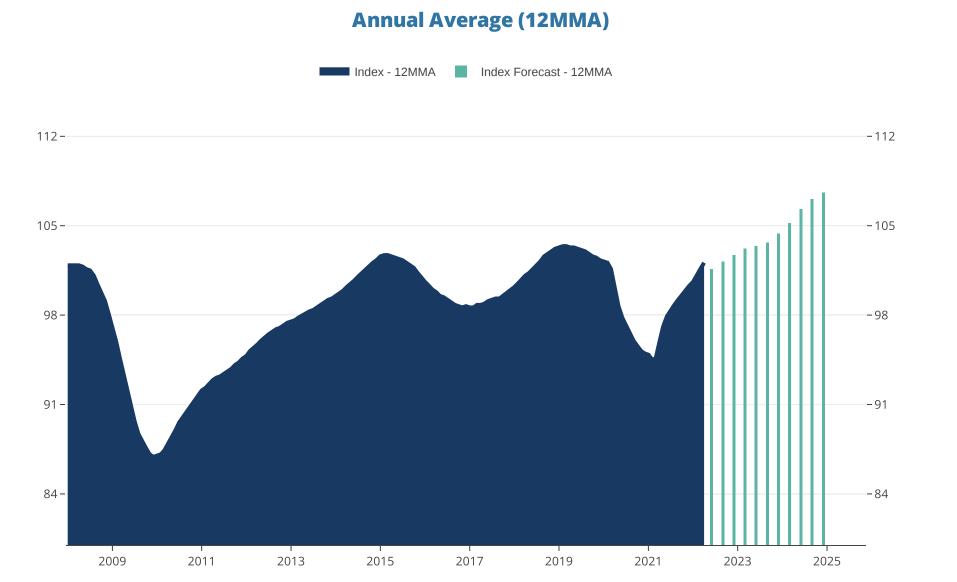
Recession (D)

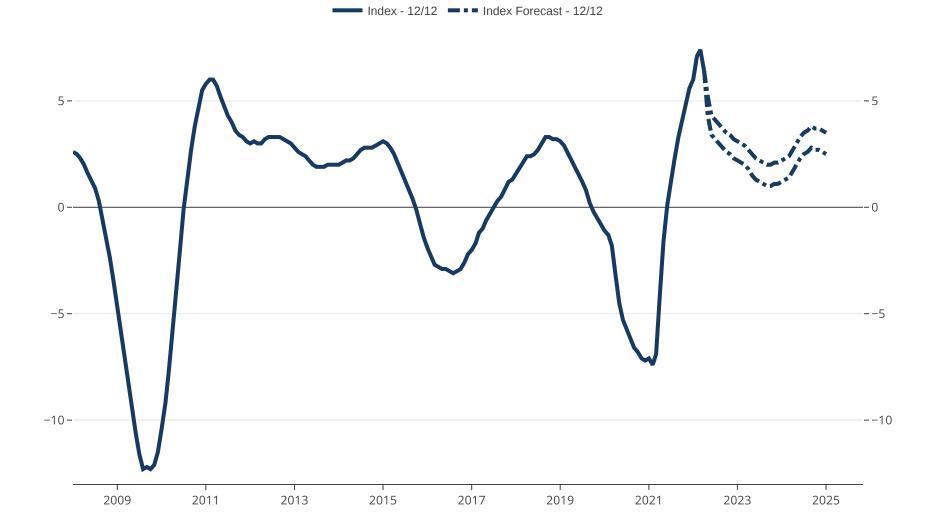




US Industrial Production Index

Production Transitioned to Phase C; Leading Indicators Suggest Trend Will Persist Into at Least 2023





Annual Growth Rate (12/12)

Current Phase

Phase C
Slowing Growth

Current Indicator Amplitude

- April 2022 Annual Growth Rate (12/12): 6.4%
- April 2022 Annual Average (12MMA), 2017=100: 102.1

Industry Outlook

 Year
 Annual Growth Rate

 2022
 2.8%

 2023
 1.6%

 2024
 3.1%

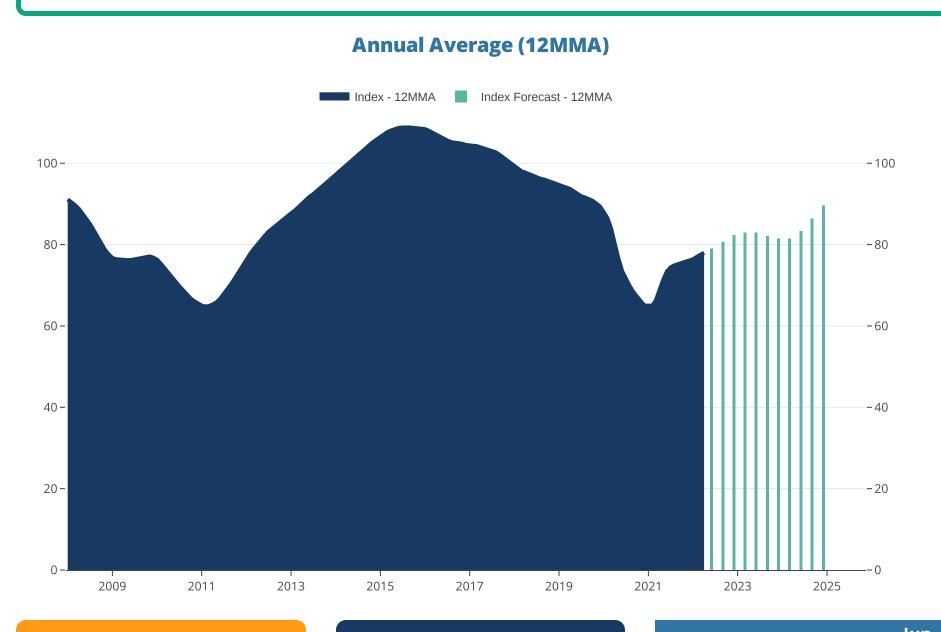
	Jun- 22	Sep- 22	Dec- 22	Mar- 23	Jun- 23	Sep- 23	Dec- 23	Mar- 24	Jun- 24	Sep- 24	Dec- 24
Lower Forecast Range	3.4	2.8	2.3	2.0	1.3	1.0	1.1	1.4	2.3	2.8	2.6
Annual Growth Rate (%)	3.9	3.3	2.8	2.5	1.8	1.5	1.6	1.9	2.8	3.3	3.1
Upper Forecast Range	4.3	3.7	3.2	2.9	2.3	2.0	2.1	2.4	3.3	3.8	3.6
Lower Forecast Range	101.1	101.7	102.3	102.8	102.9	103.2	103.9	104.7	105.8	106.6	107.1
Annual Average Index (2017=100)	101.6	102.2	102.7	103.2	103.4	103.7	104.4	105.2	106.3	107.1	107.6
Upper Forecast Range	102.0	102.6	103.2	103.7	103.9	104.2	104.9	105.7	106.8	107.6	108.1





US Civilian Aircraft Equipment Production Index

Forecast Lowered Due to Production Headwinds; Business Cycle Decline Expected Into Early 2024





Current Phase

Phas Slow

Phase C
Slowing Growth

Current Indicator Amplitude

- April 2022 Annual Growth Rate (12/12): 13.0%
- April 2022 Annual Average (12MMA), 2017=100: 78.0

Industry Outlook	
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Year Annual Growth Rate2022 8.1%2023 -1.1%

10.1%

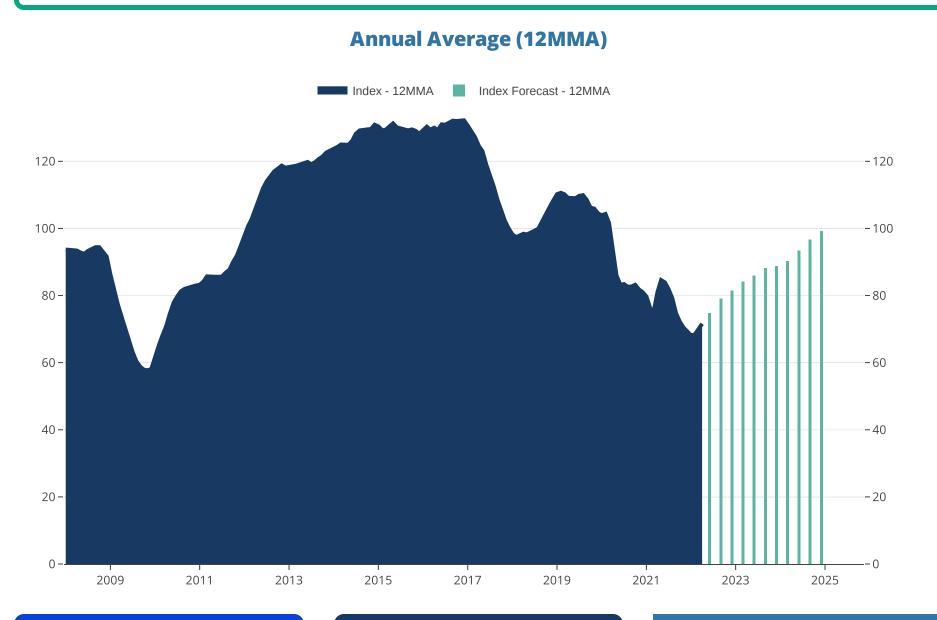
2024

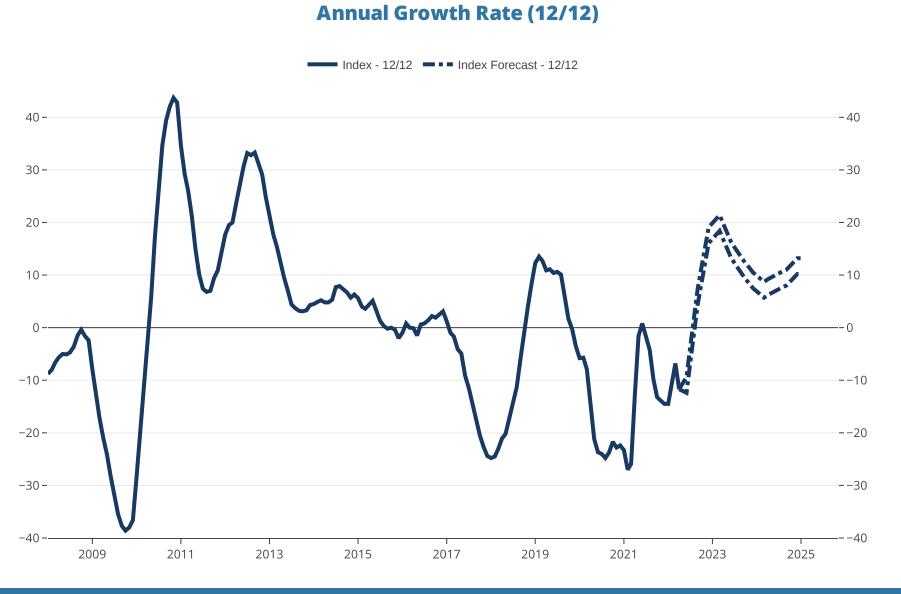
	22	22	22	23	23	23	23	24	24	24	24
			22	23	23	23	23	24	24	4	24
Lower Forecast Range	6.3	5.7	6.6	5.4	3.4	0.2	-2.8	-3.2	-1.0	3.9	8.6
Annual Growth Rate (%)	7.6	7.2	8.1	6.9	4.9	1.7	-1.1	-1.7	0.5	5.4	10.1
Upper Forecast Range	8.9	8.7	9.6	8.4	6.4	3.2	0.6	-0.2	2.0	6.9	11.6
Lower Forecast Range	78.1	79.5	81.1	81.7	81.7	80.8	80.0	80.2	82.1	85.2	88.4
Annual Average Index (2017=100)	79.0	80.6	82.3	82.9	82.9	82.0	81.4	81.4	83.3	86.4	89.6
Upper Forecast Range	80.0	81.8	83.4	84.0	84.1	83.2	82.8	82.7	84.5	87.7	90.8



US Automobile Production Index

Input Shortages Remain but Have Improved, Leading Us to Lift the Forecast; Demand Remains Robust





Current Phase



Phase A Recovery

Current Indicator Amplitude

- April 2022 Annual Growth Rate (12/12): -11.7%
- April 2022 Annual Average (12MMA), 2017=100: 71.6

 Year
 Annual Growth Rate

 2022
 17.6%

 2023
 9.0%

 2024
 11.7%

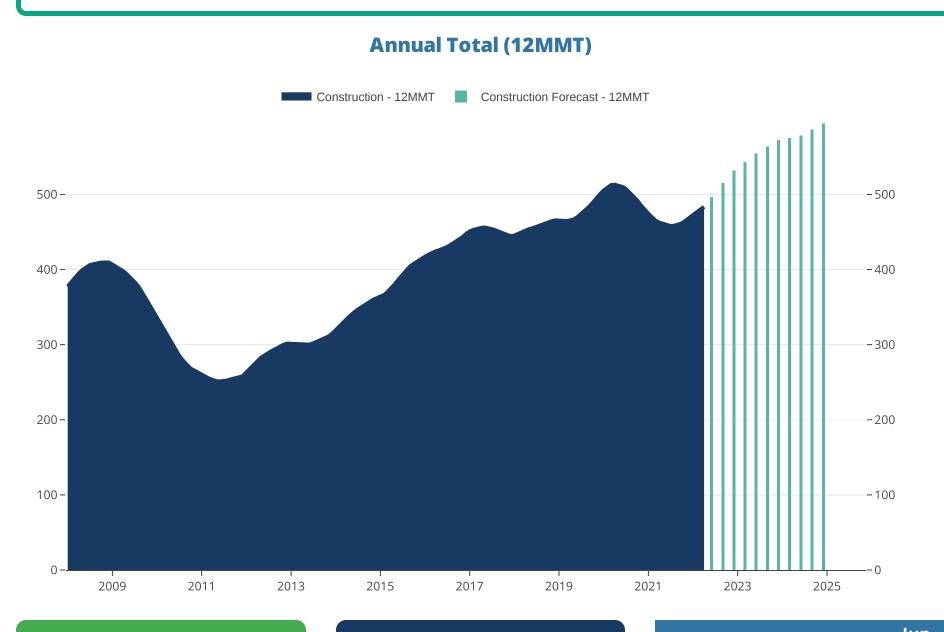
	Jun- 22	Sep- 22	Dec- 22	Mar- 23	Jun- 23	Sep- 23	Dec- 23	Mar- 24	Jun- 24	Sep- 24	Dec- 24
Lower Forecast Range	-12.4	4.4	16.1	18.4	13.4	10.1	7.5	5.7	7.1	8.0	10.2
Annual Growth Rate (%)	-10.9	5.9	17.6	19.9	14.9	11.6	9.0	7.2	8.6	9.5	11.7
Upper Forecast Range	-9.4	7.4	19.1	21.4	16.4	13.1	10.5	8.7	10.1	11.0	13.2
Lower Forecast Range	73.5	77.9	80.4	83.0	84.8	87.0	87.6	88.9	92.0	95.3	97.9
Annual Average Index (2017=100)	74.7	79.0	81.5	84.1	85.9	88.2	88.8	90.2	93.3	96.6	99.2
Upper Forecast Range	76.0	80.2	82.5	85.1	87.0	89.4	90.0	91.4	94.6	97.9	100.5



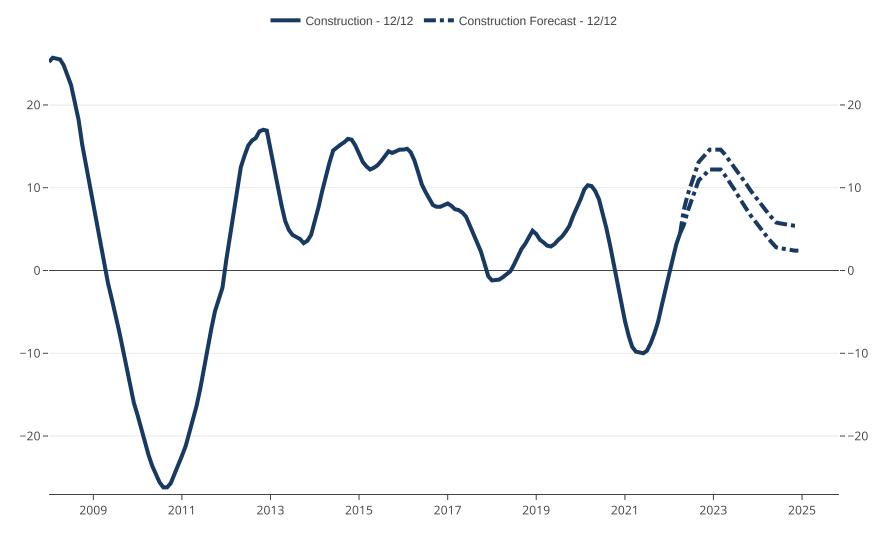


US Private Nonresidential Construction

Construction to Rise Nearly 23% Above Current Level by End of 2024, in Part Due to Inflation



Annual Growth Rate (12/12)



Current Phase



Phase B
Accelerating
Growth

Current Indicator Amplitude

- April 2022 Annual Growth Rate (12/12): 4.5%
- April 2022 Annual Total (12MMT), Billions of \$: 483.4

Industry Outlook

 Year
 Annual Growth Rate

 2022
 13.4%

 2023
 7.6%

 2024
 3.9%

Upper Forecast Range

500.7

520.0

537.2

	Jun- 22	Sep- 22	рес- 22	маr- 23	Jun- 23	Sep- 23	Dec- 23	Mar- 24	Jun- 24	Sep- 24	Dec- 24
Lower Forecast Range	7.1	10.9	12.2	12.2	10.4	8.0	6.1	4.3	2.8	2.5	2.4
Annual Growth Rate (%)	8.1	12.0	13.4	13.4	11.7	9.5	7.6	5.8	4.3	4.0	3.9
Upper Forecast Range	9.1	13.1	14.6	14.6	13.0	11.0	9.1	7.3	5.8	5.5	5.4
Lower Forecast Range	491.6	509.8	526.0	537.4	547.7	556.1	564.0	566.5	569.7	577.9	585.5
Annual Total Construction (Billions of \$)	496.1	514.9	531.6	543.1	554.2	563.8	572.0	574.6	578.0	586.4	594.1

560.6

571.5

580.0

582.8

548.9



586.3

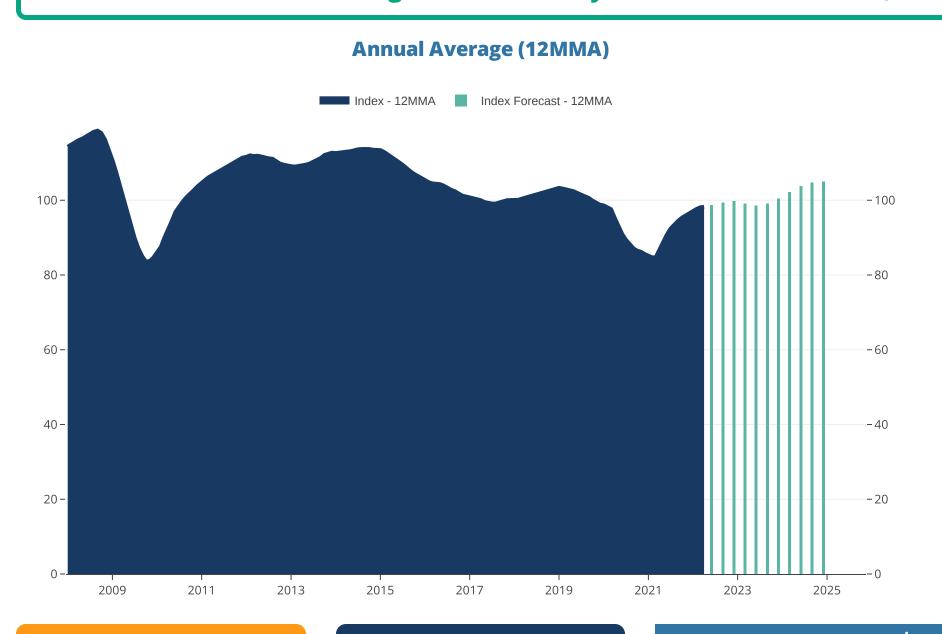
594.8

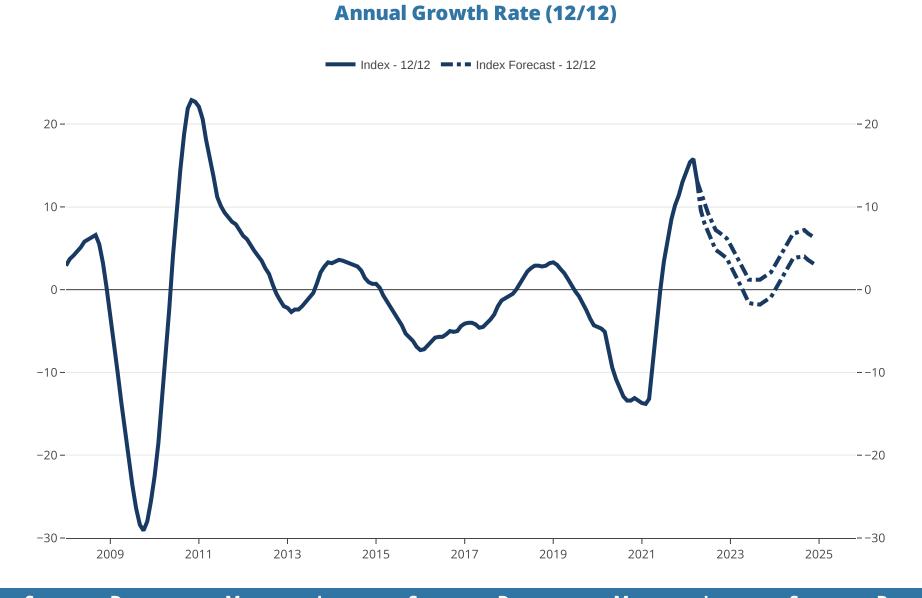
602.6



US Primary Metals Production Index

Slowing Global Economy to Cool Metal Demand, but Domestic Sources May Benefit From Russian Sanctions





Current Phase

Phase C
Slowing Growth

Current Indicator Amplitude

- April 2022 Annual Growth Rate (12/12): 13.1%
- April 2022 Annual Average (12MMA), 2017=100: 98.2

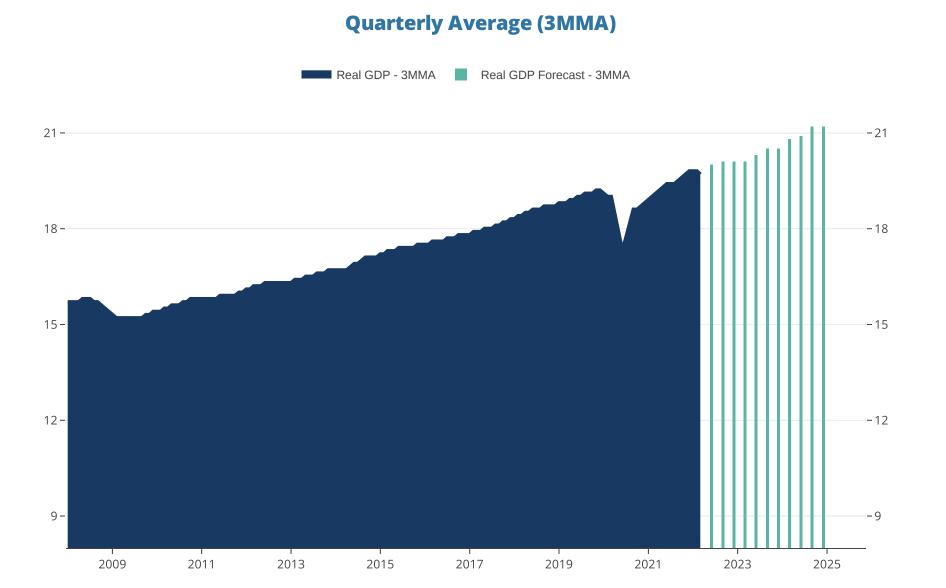
Industry Outlook									
<u>Year</u>	Annual Growth Rate								
2022	5.0%								
2023	0.6%								
2024	4.6%								

	Jun- 22	Sep- 22	Dec- 22	Mar- 23	Jun- 23	Sep- 23	Dec- 23	Mar- 24	Jun- 24	Sep- 24	Dec- 24
Lower Forecast Range	8.0	4.8	3.8	1.2	-1.6	-1.8	-0.9	1.5	3.8	4.0	3.0
Annual Growth Rate (%)	9.1	6.0	5.0	2.5	-0.2	-0.3	0.6	3.0	5.3	5.6	4.6
Upper Forecast Range	10.2	7.2	6.2	3.8	1.2	1.2	2.1	4.5	6.8	7.2	6.2
Lower Forecast Range	97.7	98.3	98.7	97.9	97.1	97.7	98.9	100.6	102.2	103.1	103.4
Annual Average Index (2017=100)	98.7	99.4	99.8	99.1	98.5	99.1	100.4	102.1	103.7	104.7	105.0
Upper Forecast Range	99.7	100.6	100.9	100.4	99.9	100.6	101.9	103.6	105.2	106.2	106.6



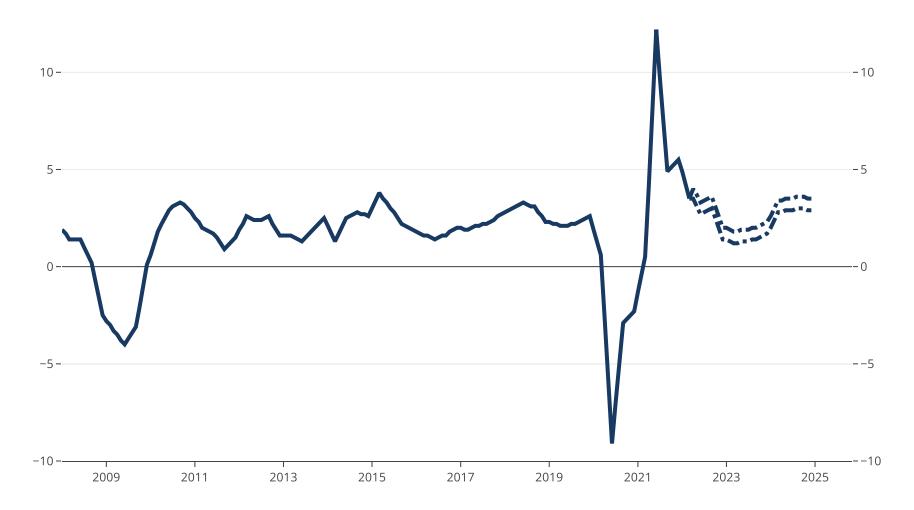
US Real Gross Domestic Product

GDP Will Be Relatively Flat Into Early 2023; Prolonged or Deep Recession Is Unlikely This Cycle



Quarterly Growth Rate (3/12)

Real GDP - 3/12 Real GDP Forecast - 3/12



Current Phase



Current Indicator Amplitude

- March 2022 Quarterly Growth Rate (3/12): 3.5%
- March 2022 Quarterly Average (3MMA), Trillions of Chained 2012 \$: 19.7

Industry Outlook

<u>Year</u>	<u>Quarterly Growth Rate</u>	
2022	1.7%	
2023	2.0%	
2024	3.2%	

	Jun- 22	Sep- 22	Dec- 22	Mar- 23	Jun- 23	Sep- 23	Dec- 23	Mar- 24	Jun- 24	Sep- 24	Dec- 24
Lower Forecast Range	2.7	3.0	1.4	1.2	1.3	1.4	1.7	2.8	2.9	3.0	2.9
Quarterly Growth Rate (%)	3.0	3.3	1.7	1.5	1.6	1.7	2.0	3.1	3.2	3.3	3.2
Upper Forecast Range	3.3	3.6	2.0	1.8	1.9	2.0	2.3	3.4	3.5	3.6	3.5
Lower Forecast Range	19.9	20.1	20.1	20.1	20.2	20.4	20.5	20.7	20.9	21.1	21.1
Quarterly Average Real GDP (Trillions of Chained 2012 \$)	20.0	20.1	20.1	20.1	20.3	20.5	20.5	20.8	20.9	21.2	21.2
Upper Forecast Range	20.0	20.2	20.2	20.2	20.3	20.5	20.6	20.8	21.0	21.2	21.3





US Leading Indicators

Indicator	Direction				
	3Q22	4Q22	1Q23		
ITR LEADING INDICATOR™			N/A		
ITR RETAIL SALES LEADING INDICATOR™					
US OECD LEADING INDICATOR			N/A		
US ISM PMI (PURCHASING MANAGERS INDEX)					
US TOTAL CAPACITY UTILIZATION RATE			N/A		
Green denotes that the indicator signals cyclical rise f quarter. Red denotes the opposite.	or the econor	ny in the gi	ven		

What It Means for the US Economy

- Ongoing descent in the majority of leading indicators suggests the nascent slowing growth trend in US Industrial Production is likely to hold.
- The preponderance of leading indicators are exhibiting cyclical trends that signal Production will be on the back side of the business cycle into at least early next year.
- We expect a soft landing or no-recession scenario for the US industrial sector this cycle given the financial health of consumers and businesses, as well as ongoing interest in reshoring and shortening supply chains.

Slowing growth is the predominant trend for the US economy and many end markets, and leading indicators suggest further waning momentum ahead. While the back side of the business cycle will pose new challenges, don't expect much improvement in the tight labor market. Focus on reducing your dependence on labor, increasing efficiency, and improving your benefits and company culture.



Market Definitions

US Industrial Production Index

Index of total industrial production in the United States; includes manufacturing, mining, and utilities. Source: Federal Reserve Board (FRB). 2017 = 100, not seasonally adjusted (NSA).

US Automobile Production Index

Automobile Production. This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only. Source: FRB. Index, 2017 = 100, NSA.

US Primary Metals Production Index

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products. Source: FRB. Index, 2017 = 100, NSA.

US Civilian Aircraft Equipment Production Index

Index for US establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications). Source: FRB. NAICS Code: 336412,3. Index, 2017 = 100, NSA.

US Private Nonresidential Construction

Private nonresidential construction in the United States. Includes private construction of the following types: office, commercial, automotive, lodging, dining, retail, warehouse, storage facilities, schools, dormitories, sports facilities, galleries, museums, hospitals, medical buildings, special care facilities, religious buildings, fitness centers, amusement parks, movie theaters, social centers, transportation facilities, power facilities, and manufacturing facilities. Source: US Census Bureau. Measured in billions of dollars, NSA.

US Real Gross Domestic Product

Real (inflation-adjusted) gross domestic product (GDP) in the United States. GDP is the monetary value of all the finished goods and services produced within a country's borders in a specific time period. GDP includes all private and public consumption, government outlays, investments and exports minus imports that occur within a defined territory. Put simply, GDP is a broad measurement of a nation's overall economic activity. Source: Bureau of Economic Analysis. Measured in trillions of 2012 chained dollars, seasonally adjusted annual rate (SAAR).





Management Objectives™

Phase A



Recovery

- Scrupulously evaluate the supply chain
- Model positive leadership (culture turns to behavior)
- Start to phase out marginal opportunities
 (products, processes, people); repair margins
- Perform due diligence on customers and extend credit
- Be on good terms with a banker; you will need the cash more now than in any other phase
- Invest in customer market research; know what they value and market/price accordingly
- Hire key people and implement company-wide training programs ahead of Phase B
- Allocate additional resources to sales and marketing
- Invest in system/process efficiencies
- Make opportunistic capital and business acquisitions; use pessimism to your advantage

Phase B



Accelerating Growth

- Ensure quality control keeps pace with increasing volume
- Invest in workforce development: hiring, training, retention
- Ensure you have the right price escalator; space out price increases
- Maximize your profit margins through differentiation; stand out from the crowd and set yourself apart
- Use improved cash flow to strategically position the business to beat the business cycle
- Expand credit to customers
- Improve corporate governance (rent a CFO; establish a board of advisors or board of directors)
- Communicate competitive advantages; build the brand
- Query users for what they want and what is important to them
- Sell the business in a climate of maximum goodwill

Phase C



Slowing Growth

- Know if your markets are headed for a soft landing or a hard landing
- Cash is king; beware of unwarranted optimism
- Stay on top of aging receivables
- Revisit capital expenditure plans
- Lose the losers: if established business segments are not profitable during this phase, eliminate them
- Use competitive pricing to manage your backlog through the coming slowdown
- Avoid committing yourself to long-term expenses at the top of the price cycle, but lock in revenue
- Go entrepreneurial and/or counter-cyclical
- Evaluate your vendors for financial strength; if needed, look for additional vendors as a safety net
- If the cycle looks recessionary, cross-train key people to prepare for workforce attrition/reduction

Phase D



Recession

- Implement aggressive cost-cutting measures
- Offer alternative products with a lower cost basis
- Perform due diligence on acquisitions while valuations are falling
- Reduce advertising as consumers become more price conscious
- Enter or renegotiate long-term leases
- Negotiate labor contracts
- Consider capital equipment needs for the next cycle
- Tighten credit policies
- Develop programs for advertising, training, and marketing to implement in Phase A
- Lead with optimism, remembering that Phase D is temporary

