

Industrial Supply Association

March 2021
Forecast Report



Table of Contents

Economic Overview.....	1
Terminology & Methodology.....	2
Business Cycle.....	3
US Industrial Production Index.....	4
US Civilian Aircraft Equipment Production Index.....	5
US Automobile Production Index.....	6
US Private Nonresidential Construction.....	7
US Primary Metals Production Index.....	8
US Real Gross Domestic Product.....	9
US Leading Indicators.....	10
Appendix — Market Definitions.....	11
Management Objectives™.....	12

[Click Here for a Brief Explanation of How to Read This Report](#)

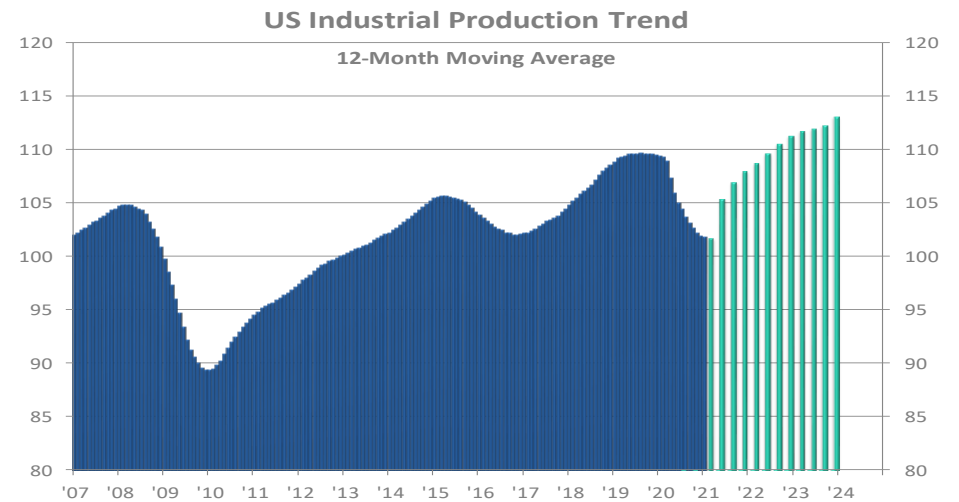
overview

With the onset of the new year, there are a multitude of signals suggesting cause for optimism moving forward. Recovery in the US Industrial Production quarterly data has already begun, and our dashboard of leading indicators suggests that the annual Production trend will transition to Phase A, Recovery, imminently.

Though several European countries have reinstated shutdown orders (to varying degrees) in response to rising COVID-19 case numbers, US governors are generally prioritizing keeping state economies open. The COVID-19 vaccine may bolster US businesses' confidence in the burgeoning economic recovery and incentivize investment in the new year. We also expect a more inflationary environment in 2021 as recovering industrial activity yields higher demand for inputs.

Further cause for optimism stems from US Nondefense Capital Goods New Orders (excluding aircraft); New Orders in the fourth quarter of 2020 were up 13.6% from the fourth quarter of 2019. We expect business-to-business spending to generally rise through at least 2021. Within the business-to-business sector, US Computers and Electronics New Orders and US Nondefense Communications Equipment New Orders are driving recent positivity as employees and firms invest in equipment to facilitate remote work and investment related to the 5G rollout occurs. In contrast, the US Machinery New Orders segment of the B2B world is recovering more sluggishly; fourth-quarter New Orders were up 3.2% from the fourth quarter of 2019. Those tied to this sector may still experience some weakness early in the year, but it is expected to strengthen as 2021 progresses.

The strength of the consumer is already readily apparent in the single-family housing market. US Existing Home Sales in the fourth quarter of 2020 were up 23.2% from the fourth quarter of 2019. Historically low mortgage rates and low home inventories will likely drive an increase in US Single-Unit Housing



Starts during at least the first half of 2021. Further good news for the consumer lies in the general decline of monthly US Initial Unemployment Insurance Claims as more firms find their footing in the pandemic-impacted business environment. Some data has softened recently: Unemployment Claims ticked up in early January, and the Conference Board's US Leading Indicator monthly rate-of-change flattened in the first month of the year. However, these are isolated data points, at least for now. Don't get caught up in the volatility of individual data points; instead, remember to watch trends. For the retail sector, general rise in the Retail Sales quarterly growth rate – at 4.0% as of January – illustrates the general trend.

With the above giving confidence for the year ahead, work quickly to capitalize on the growth to come. Consider conducting market research to determine whether consumer preferences have changed due to the shutdowns. Ensure your online platform is competitive and that your products still align with your target market. Most importantly, make sure you have the people and equipment you need to take on growth this year. Those too timid to invest in the near term may face higher prices and longer lead times for capital purchases, which may in turn result in lost market share. Look at the economic evidence and act now.

Terminology & Methodology

Data Trends:

Monthly Moving Total (MMT) vs Monthly Moving Average (MMA):

Totals are used when it makes sense to add the data together, as with units sold or total dollars spent. Averages are used when the data cannot be compounded, such as with an index, percent, price level, or interest rates.

3MMT/A and 12MMT/A:

A 3-month or 12-month moving total/average is the total/average of the monthly data for the most recent 3 and 12 months, respectively. The 3MMT/A illustrates the seasonal changes inherent to the data series. The 12MMT/A removes seasonal variation in order to derive the underlying cyclical trend. It is also referred to as the annual total or annual average.

Rates-of-Change:

A rate-of-change figure is the ratio comparing a data series during a specified time period to the same period one year ago. **Rates-of-change** are expressed in terms of the **annual percent change in a 12MMT/A, 3MMT/A, and actual monthly data**.

Rates-of-change reveal whether activity levels are rising or falling compared to last year. A rate-of-change trend illustrates and measures cyclical change and trends in the data.

ITR Economics' three commonly used rates-of-change are the **1/12**, **3/12**, and **12/12**, which represent the year-over-year percent change of a single month, 3MMT/A, and 12MMT/A (respectively).

A rate-of-change above 0 indicates the data is higher than one year prior, while a rate-of-change below 0 indicates the data is below one year earlier.

Accelerating Growth (B): 12/12 is rising and is above zero; the data trend is accelerating in its ascent and is above the year-ago level. This is the second positive phase of the business cycle.

Recovery (A): 12/12 is rising but is below zero; the data trend is below the year-ago level and is either heading toward a low or is in the early stages of rise. This is the first positive phase of the business cycle.

Business Cycle:

The data trends and rates-of-change identify positions in the business cycle. Those positions are:



Slowing Growth (C): 12/12 is declining but remains above zero; the data trend ascent is slowing or has stopped its rise, but it is still above the year-ago level. This is the first negative phase of the business cycle.

Recession (D): 12/12 is declining and is below zero; the data trend is below the year-ago level and the rate of decline is increasing. This is the second and final negative phase of the business cycle.

Business Cycle

<u>Page Number</u>	<u>Industry</u>	<u>Current 12/12</u>	<u>Phase</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
4	US Industrial Production Index	-6.9%	D	5.9%	3.1%	1.6%
5	US Civilian Aircraft Equipment Production Index	-29.6%	D	6.3%	5.6%	-0.9%
6	US Automobile Production Index	-21.9%	A	21.1%	3.0%	3.4%
7	US Private Nonresidential Construction	-4.4%	D	-13.8%	-2.9%	9.9%
8	US Primary Metals Production Index	-15.3%	D	7.0%	4.5%	0.9%
9	US Real Gross Domestic Product*	-2.4%	A	1.3%	2.5%	2.0%

*Quotes the quarterly growth rate (4Q21 relative to 4Q20 for 2021, for example).



RECOVERY

ITR Economics™



ACCELERATING GROWTH



SLOWING GROWTH

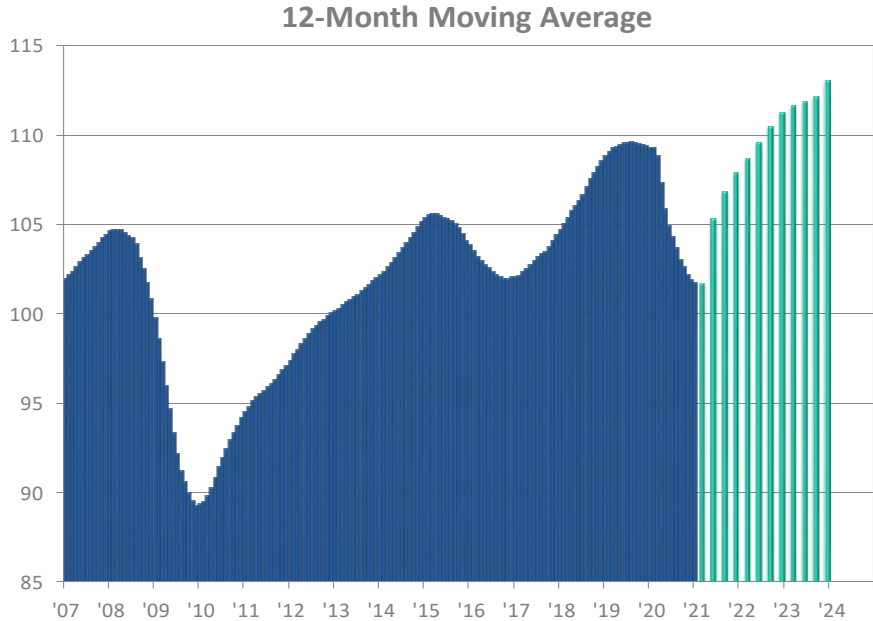


RECESSION

March 2021

US Industrial Production Index

Forecast Revised Upward; Rise Imminent, Will Extend Through at Least Year-End 2023



Industry Outlook

US Industrial Production Index
2012 = 100

	Mar-21	Jun-21	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23
<i>Lower Forecast Range</i>	-7.0	-0.1	3.2	5.4	6.4	3.5	2.9	2.6	2.2	1.6	1.0	1.1
Annual Growth Rate (%)	-6.6	0.4	3.7	5.9	6.9	4.0	3.4	3.1	2.7	2.1	1.5	1.6
<i>Upper Forecast Range</i>	-6.2	0.9	4.2	6.4	7.4	4.5	3.9	3.6	3.2	2.6	2.0	2.1
<i>Lower Forecast Range</i>	101.3	104.8	106.3	107.4	108.2	109.0	110.0	110.7	111.1	111.3	111.6	112.5
Annual Production (2012 = 100)	101.7	105.4	106.9	107.9	108.7	109.6	110.5	111.3	111.6	111.9	112.2	113.0
<i>Upper Forecast Range</i>	102.1	105.9	107.4	108.4	109.2	110.1	111.1	111.8	112.2	112.4	112.7	113.6

Phase & Amplitudes

Phase D

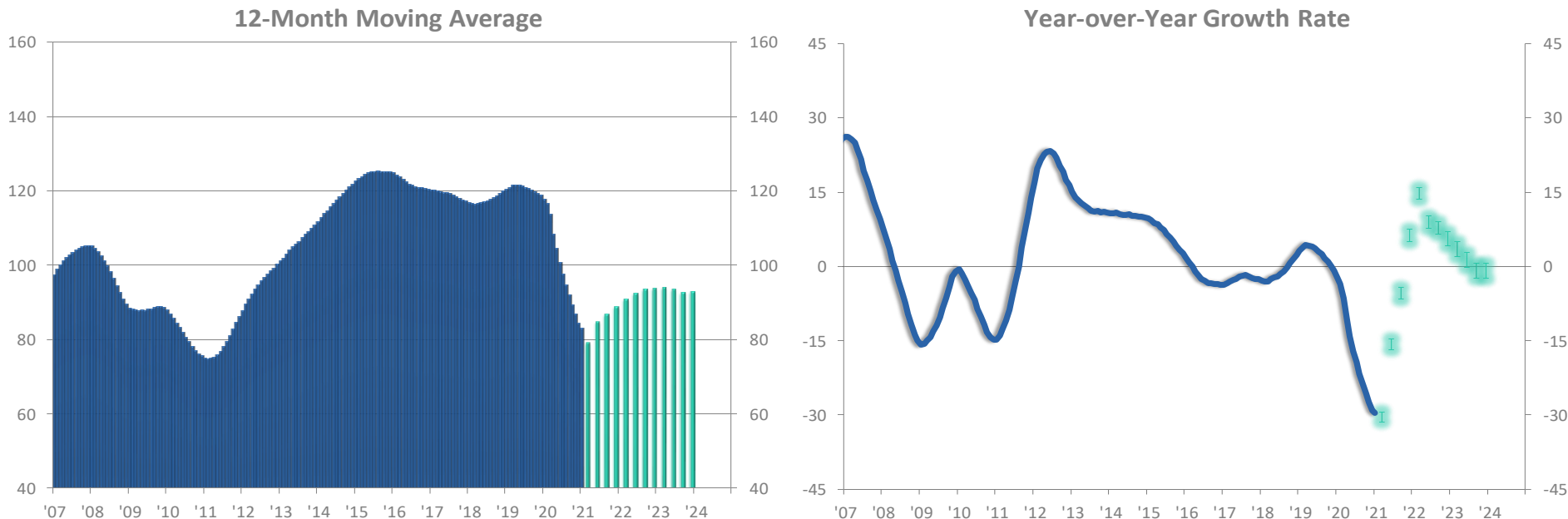
Recession

January 2021 Annual Growth Rate (12/12): -6.9%

January 2021 Annual Average (12MMA): 101.8

US Civilian Aircraft Equipment Production Index

Forecast Revised Upward; Expect Production Rise Into Early 2023, Relatively Slow Recovery



Industry Outlook

US Civilian Aircraft Equipment Production Index

2012 = 100

	Mar-21	Jun-21	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23
<i>Lower Forecast Range</i>	-31.5	-16.9	-6.5	5.1	13.6	7.7	6.5	4.2	2.0	-0.2	-2.4	-2.4
Annual Growth Rate (%)	-30.5	-15.8	-5.4	6.3	14.8	9.0	7.8	5.6	3.5	1.3	-0.9	-0.9
<i>Upper Forecast Range</i>	-29.5	-14.7	-4.3	7.5	16.0	10.3	9.1	7.0	5.0	2.8	0.6	0.6
<i>Lower Forecast Range</i>	78.2	83.7	85.7	87.6	89.6	91.0	92.1	92.3	92.5	92.0	91.1	91.4
Annual Production (2012 = 100)	79.0	84.6	86.6	88.6	90.7	92.2	93.4	93.6	93.9	93.4	92.5	92.7
<i>Upper Forecast Range</i>	79.8	85.5	87.6	89.7	91.8	93.4	94.6	94.9	95.3	94.8	93.9	94.1

Phase & Amplitudes

Phase D

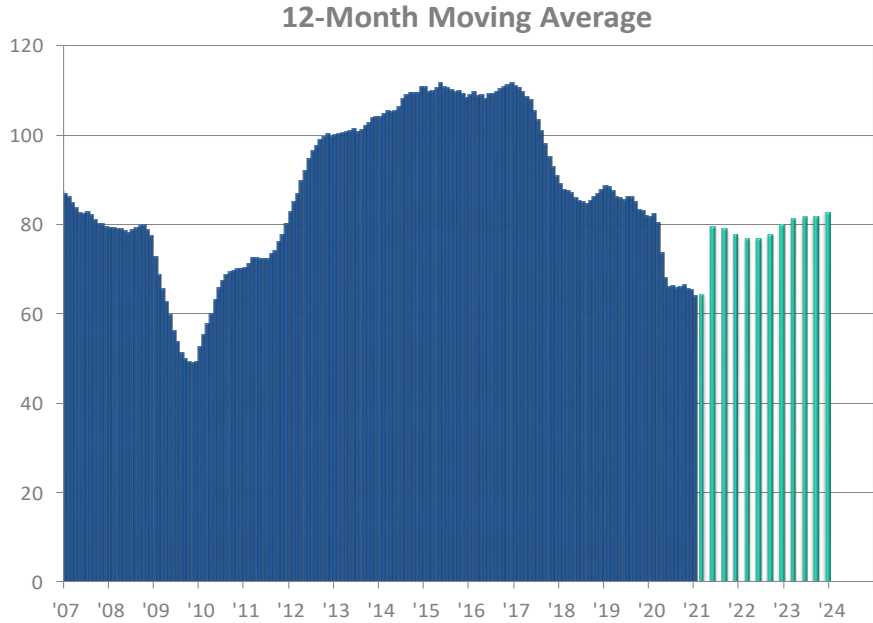
Recession

January 2021 Annual Growth Rate (12/12): -29.6%

January 2021 Annual Average (12MMA): 82.9

US Automobile Production Index

Vehicle Demand Outstripping Supply; Remote Work May Hinder Longer-Term Production Rise



Industry Outlook

US Automobile Production Index
2012 = 100

	Mar-21	Jun-21	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23
<i>Lower Forecast Range</i>	-21.5	19.5	19.7	19.6	17.8	-5.0	-3.0	1.5	4.2	5.0	3.4	1.8
Annual Growth Rate (%)	-20.0	21.0	21.2	21.1	19.3	-3.5	-1.5	3.0	5.8	6.6	5.0	3.4
<i>Upper Forecast Range</i>	-18.5	22.5	22.7	22.6	20.8	-2.0	0.0	4.5	7.4	8.2	6.6	5.0
<i>Lower Forecast Range</i>	63.4	78.4	77.8	76.6	75.7	75.6	76.7	78.9	80.0	80.5	80.4	81.4
Annual Production (2012 = 100)	64.4	79.6	79.0	77.7	76.8	76.8	77.8	80.1	81.3	81.9	81.7	82.8
<i>Upper Forecast Range</i>	65.4	80.8	80.2	78.9	78.0	77.9	79.0	81.3	82.6	83.2	83.0	84.1

Phase & Amplitudes

Phase A

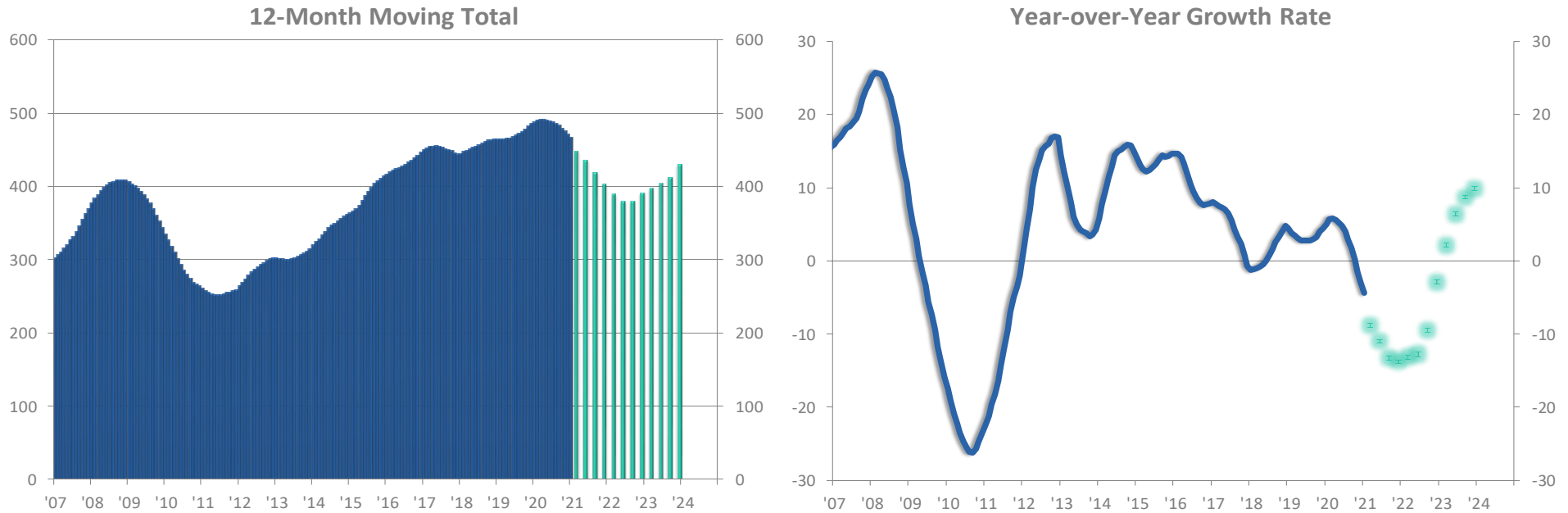
Recovery

January 2021 Annual Growth Rate (12/12): -21.9%

January 2021 Annual Average (12MMA): 63.9

US Private Nonresidential Construction

Forecast Revised Upward; Annual Construction to Be Below the Current Level Through at Least 2023



Industry Outlook

US Private Nonresidential Construction

Billions of dollars

	Mar-21	Jun-21	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23
<i>Lower Forecast Range</i>	-9.5	-11.8	-14.2	-14.8	-14.2	-13.8	-10.5	-3.9	1.1	5.3	7.4	8.5
Annual Growth Rate (%)	-8.8	-11.0	-13.3	-13.8	-13.2	-12.8	-9.5	-2.9	2.2	6.5	8.7	9.9
<i>Upper Forecast Range</i>	-8.1	-10.2	-12.4	-12.8	-12.2	-11.8	-8.5	-1.9	3.3	7.6	10.0	11.3
<i>Lower Forecast Range</i>	445.5	432.7	415.5	398.8	385.6	376.5	375.7	387.2	393.6	400.2	407.1	423.9
Annual Construction (Billions of Dollars)	448.7	436.2	419.3	402.8	389.5	380.3	379.4	391.2	398.0	404.9	412.5	429.9
<i>Upper Forecast Range</i>	451.8	439.7	423.1	406.9	393.4	384.2	383.2	395.1	402.4	409.5	417.8	435.9

Phase & Amplitudes

Phase D

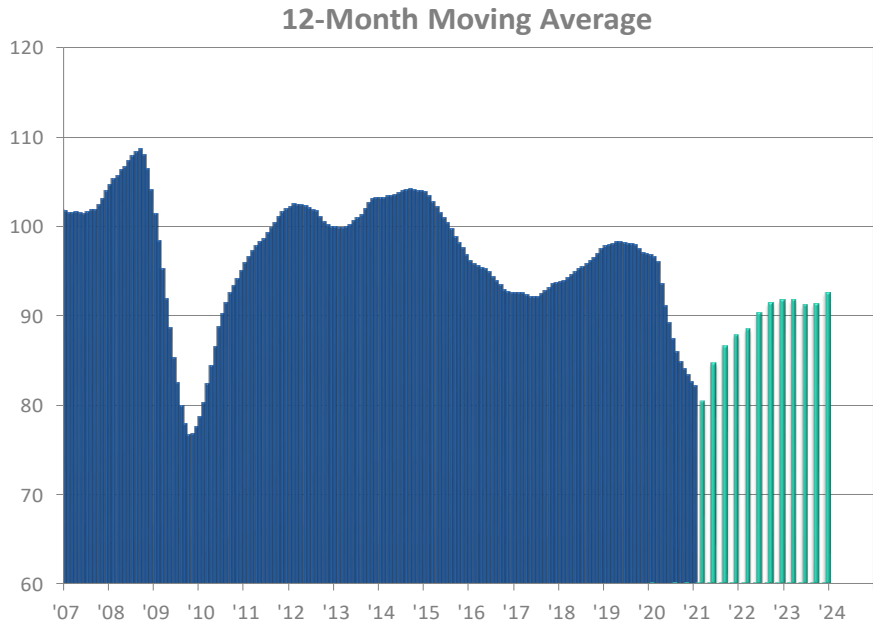
Recession

January 2021 Annual Growth Rate (12/12): -4.4%

January 2021 Annual Total (12MMT): \$467.3 billion

US Primary Metals Production Index

Industrial Sector Recovery to Boost Metals Demand in 2021-2022; Production to Be Flat in 2023



US Primary Metals Production Index

2012 = 100

	Mar-21	Jun-21	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23
<i>Lower Forecast Range</i>	-17.2	-6.0	1.0	6.0	9.0	5.4	4.2	3.0	2.1	-0.6	-1.8	-0.8
Annual Growth Rate (%)	-16.4	-5.1	2.0	7.0	10.1	6.6	5.5	4.5	3.6	1.0	-0.1	0.9
<i>Upper Forecast Range</i>	-15.6	-4.2	3.0	8.0	11.2	7.8	6.8	6.0	5.1	2.6	1.6	2.6
<i>Lower Forecast Range</i>	79.6	83.8	85.6	86.8	87.4	89.1	90.0	90.2	90.2	89.6	89.6	90.9
Annual Production (2012 = 100)	80.3	84.6	86.5	87.7	88.4	90.2	91.2	91.6	91.6	91.1	91.1	92.4
<i>Upper Forecast Range</i>	80.9	85.3	87.3	88.5	89.4	91.2	92.4	93.0	92.9	92.5	92.7	94.0

Phase & Amplitudes

Phase D

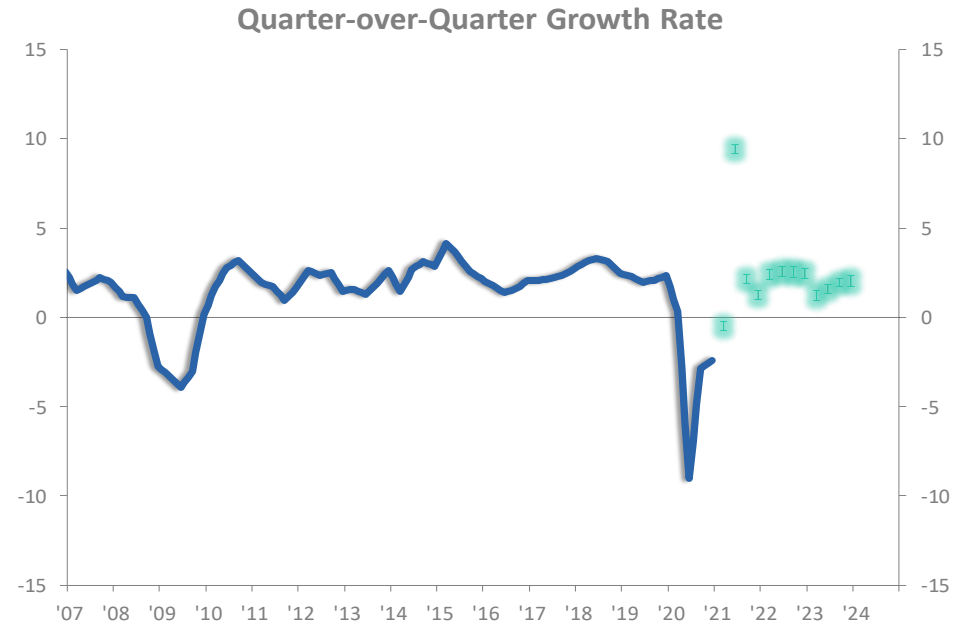
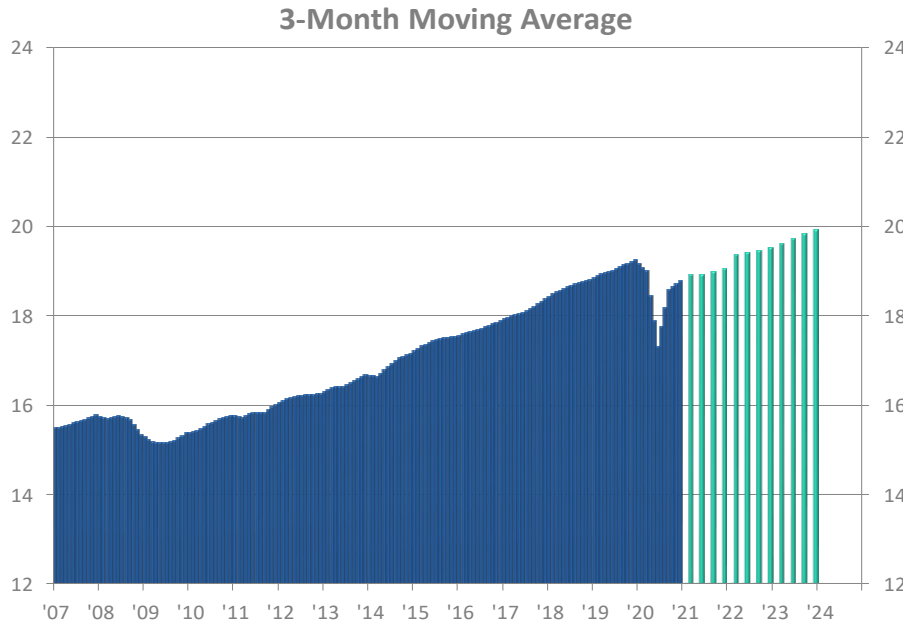
Recession

January 2021 Annual Growth Rate (12/12): -15.3%

January 2021 Annual Average (12MMA): 82.1

US Real Gross Domestic Product

GDP to Surpass December 2019 Peak Between Late 2021 and Early 2022



Industry Outlook

US Real Gross Domestic Product
Trillions of dollars

	Mar-21	Jun-21	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23
<i>Lower Forecast Range</i>	-0.7	9.2	1.9	1.0	2.1	2.3	2.3	2.2	0.9	1.3	1.7	1.7
Quarterly Growth Rate (%)	-0.5	9.4	2.2	1.3	2.4	2.6	2.6	2.5	1.2	1.6	1.9	2.0
<i>Upper Forecast Range</i>	-0.2	9.7	2.4	1.5	2.7	2.9	2.9	2.8	1.5	1.8	2.1	2.3
<i>Lower Forecast Range</i>	18.9	18.9	18.9	19.0	19.3	19.4	19.4	19.5	19.5	19.7	19.8	19.9
Quarterly GDP (Trillions of Dollars)	18.9	18.9	19.0	19.1	19.4	19.4	19.5	19.5	19.6	19.7	19.9	19.9
<i>Upper Forecast Range</i>	19.0	19.0	19.0	19.1	19.4	19.5	19.5	19.6	19.7	19.8	19.9	20.0

Phase & Amplitudes

Phase A














Recovery

December 2020 Quarterly Growth Rate (3/12): -2.4%

December 2020 Quarterly Average (3MMA): \$18.8 trillion

INDICATORS

US Leading Indicators

Indicator	Direction			What it means for the US economy
	1Q21	2Q21	3Q21	
ITR Leading Indicator™				<ul style="list-style-type: none"> • Ongoing rise in the majority of leading indicators suggests rise for the US industrial sector for at least the majority of 2021. • A tick-down in the US ISM PMI (Purchasing Managers Index) is not cause for concern, as this leading indicator is prone to dips amid overall rising trends. • The US government has now purchased a sufficient number of vaccine doses to inoculate every eligible individual in the country against COVID-19. This development may boost firms' confidence and bodes well for rising activity this year.
ITR Retail Sales Leading Indicator™				
The Conference Board's US Leading Indicator			N/A	
US ISM PMI (Purchasing Managers Index)				
US Total Capacity Utilization Rate			N/A	
<p>Green denotes that the indicator signals cyclical rise for the economy in the given quarter. Red denotes the opposite.</p>				

The US industrial sector is on the cusp of a transition to Phase A, Recovery. If you haven't already, start preparing your business now for sustained rise this year. If you wait, you may miss out on growth and be faced with higher capital prices and longer wait times. Use the leading indicator evidence to bolster confidence to invest.

Appendix — Market Definitions

US Industrial Production Index — Index of total industrial production in the United States; includes manufacturing, mining, and utilities. Source: Federal Reserve Board. Index, 2012 = 100, not seasonally adjusted (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: Federal Reserve Board. NAICS Code: 336412,3. Index, 2012 = 100, 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: Federal Reserve Board. NAICS Code: 336111. Index, 2012 = 100, NSA.

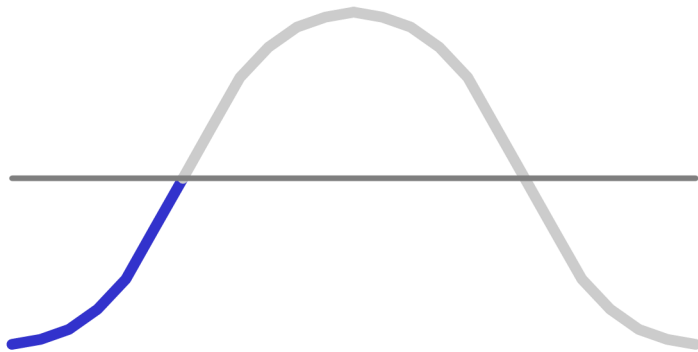
US Private Nonresidential Construction — Private nonresidential construction in the United States. Includes private construction of the following types: office, commercial, automotive, lodging, dining, retail, warehouse, storage facilities, schools, dormitories, sports facilities, galleries, museums, 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 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: Federal Reserve Board. NAICS Code: 331. Index, 2012 = 100, 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



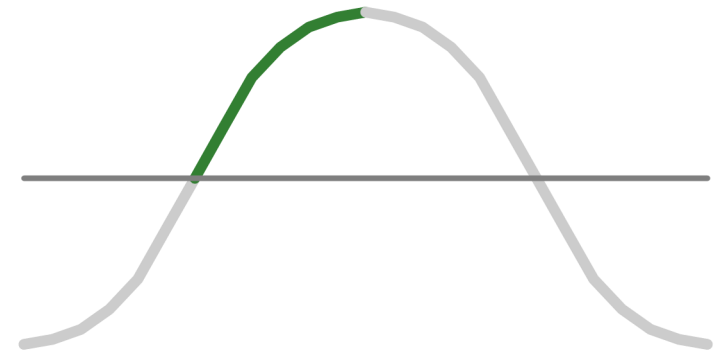
A

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

Management Objectives™

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

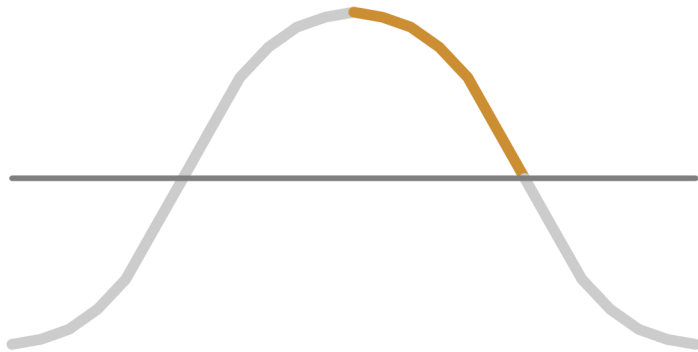
Phase



B

Management Objectives™

Phase



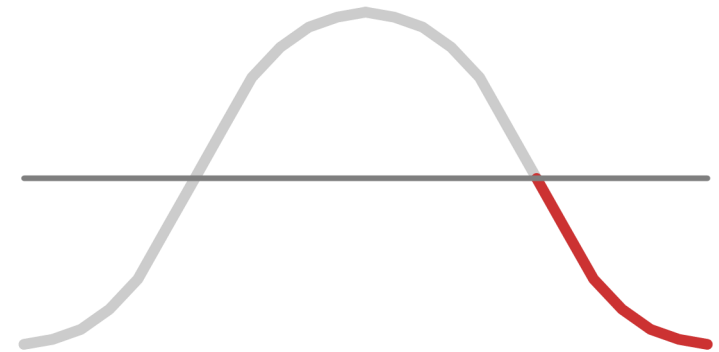
C

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

Management Objectives™

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

Phase



D