

IMEC MARCH 2024

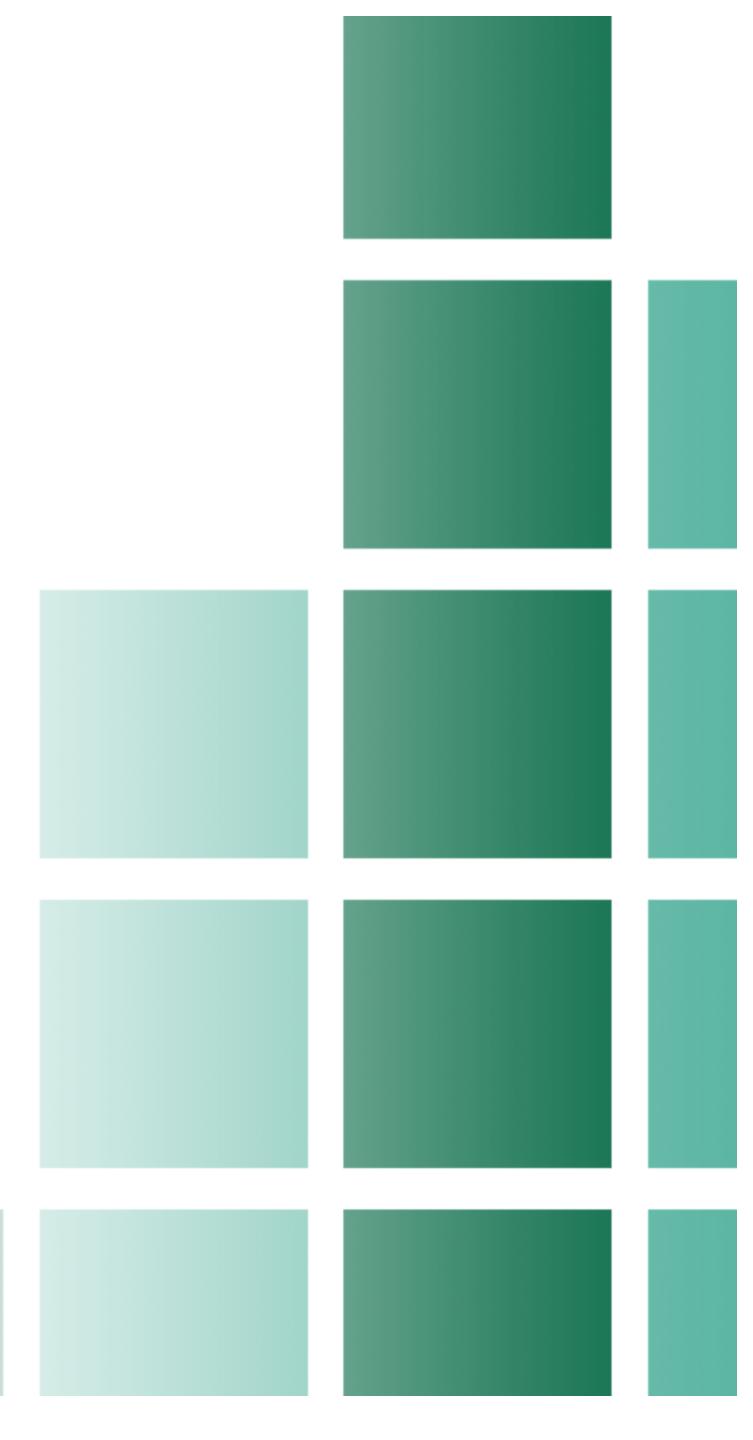








Table of Contents

Economic Overview	1
Terminology and Methodology	
IMEC Markets Dashboard	
US Industrial Production Index	
US Nondefense Capital Goods New Orders (excluding aircraft)	
US Machinery New Orders	
US Food Production Index	
US Medical Equipment and Supplies Production Index	8
US Leading Indicators	g
Market Definitions	10
Management Objectives™	11





Economic Overview



Divergent Outcomes Are Likely in 2024

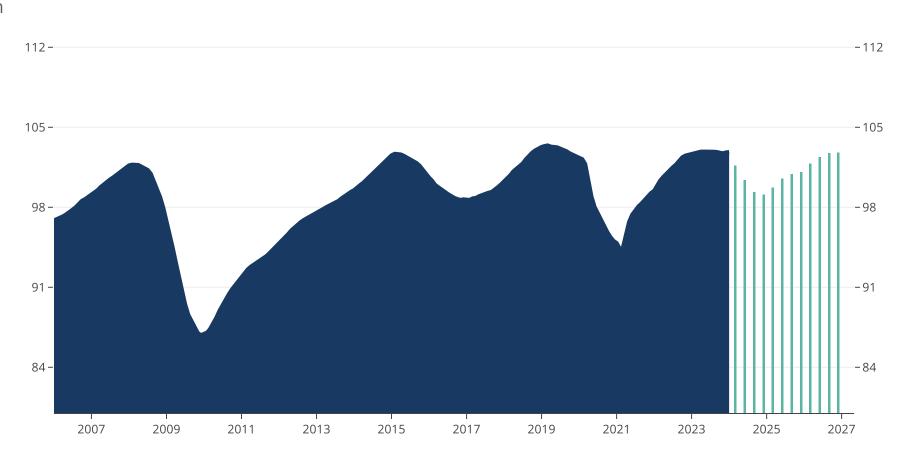
Consumers are the bedrock of the US economy, and mid-to-upper-income demographics are proving resilient. Consumers are buying a record dollar-value and volume of goods and services, funded through rising income, lower savings, and - in some cases - more debt. Record buying is occurring despite material economic headwinds. Consumer prices are up roughly 20% over the last four years and borrowing costs have soared from record lows to multi-decade highs. These pressures have been felt more acutely by lower-income consumers. Meanwhile, many mid-to-upper-income consumers are benefiting from relatively high home values and growing cash balances. Our analysis indicates that spending by higher-income consumers is having a larger impact on the economic data relative to spending by lower-income consumers.

Relatively strong mid-to-upper-income consumers are driving growth in housing construction, as they are more likely to be able to buy despite still-elevated mortgage rates. Rise in US Single-Unit Housing Starts is likely to persist in the coming years given the tight stock of existing homes and expected improvement in financial conditions in the coming years. There are also regional differences at play here due in part to domestic migration trends; much of this recent growth is in the South and West regions of the US.

We expect slowing growth for US Real GDP in 2024, with the potential for one quarter of mild decline. Retail spending is likely to plateau, while the services sector will slow in growth. Sizable government spending is an upside for the economy and is benefitting not only the public sector, but it is also having knock-on positive effects in the private sector, noticeable in the nonresidential construction and services sectors.

Businesses are showing hesitance towards capex amid the slowing macroeconomy, high borrowing costs, and tight credit conditions. Total Manufacturing New Orders have plateaued and existing manufacturing capacity is

US Industrial Production Index Annual Average (12MMA)



being utilized at a lower rate. Contraction is likely for many industrial markets in 2024, if it has not already materialized. Businesses, including those in the manufacturing sector, are holding larger amounts of cash than is typical this cycle, which may offset some of the downside impact of monetary policy. This is part of the reason we expect this downturn to be mild. The resilient consumer and near-sourcing will also contribute to the downturn being mild.

Growth Will Follow in 2025 and 2026; What to Know for Planning

Know your markets and where your products place relative to your competition. If your business caters directly to consumers, consider your end users' demographics, as your sales performance may differ depending on customers' income levels or on regional trends. Consider how price and interest-rate-sensitive your clients are, as it will likely be hard to lift prices this year, and rates will likely move lower but remain relatively high. Companies with exposure to the services sector or public spending are more likely to experience a soft landing relative to the industrial sector. Look for opportunities tied to reshoring.

If possible, try to keep an extra cash buffer this year to help you mitigate the current high interest rates and to provide both security and flexibility. This year will also be a good time to try to improve efficiencies and cut back on discretionary spending to help offset the impacts of wage pressures.

Evidence for the next rising trend is already forming. Recovery in US Single-Unit Housing Starts, which lead the US economy, suggests rise will begin in 2025. Additionally, the FOMC is messaging potential rate cuts this year. Discernable impacts to the economy typically lag changes in rates, meaning much of the impact of these potential cuts would be seen in 2025. Even if your market is poised for a downturn this year, make sure to look beyond and focus on how your business can be best positioned for the rise coming in 2025 and 2026.





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).







IMEC Markets Dashboard

		Current		Annual Growth Rate Forecast (12/12), Year-End*		2), Year-End*
Page Number	Indicator	Growth Rate**	Phase	2024**	2025**	2026**
4	US Industrial Production Index	0.1%	С	-3.6%	2.0%	1.7%
5	US Nondefense Capital Goods New Orders (excluding aircraft)	1.2%	С	-3.3%	3.8%	1.6%
6	US Machinery New Orders	0.0%	С	-3.0%	4.7%	1.5%
7	US Food Production Index	-2.1%	D	-0.2%	1.7%	1.5%
8	US Medical Equipment and Supplies Production Index	1.3%	С	1.9%	-0.5%	1.9%

*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)



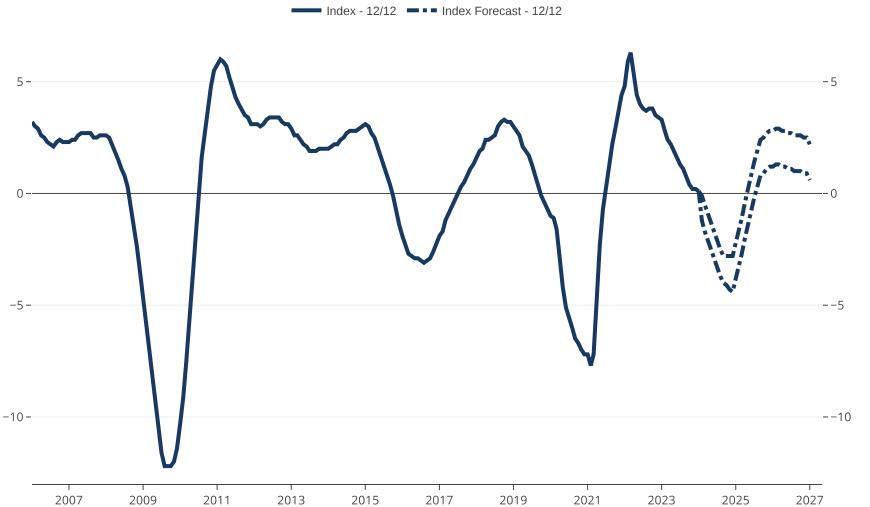


US Industrial Production Index



Healthy Corporate Cash Suggests Decline Will Be Mild in 2024; Support for Rise in 2025 Is Building





Annual Growth Rate (12/12)

Current Phase



Phase C Slowing Growth

Current Indicator Amplitude

- January 2024 Annual Growth Rate (12/12): 0.1%
- January 2024 Annual Average (12MMA), 2017=100: 102.8

Industry Outlook

<u>Year Annual Growth Rate</u>

2024 -3.6% 2025 2.0% 2026 1.7%

- Following a flat 2023, annual US Industrial Production is likely to decline mildly in 2024. Strong business financial metrics, such as corporate cash holdings, have helped stay the downside effect of higher interest rates and suggest decline will be relatively mild. A relatively resilient middle-to-upper-income consumer and the knock-on effects of government spending may cause Production to trend closer to the upper bound of our forecast.
- Expected decline is informed by headwinds such as bloated inventories, below-average business confidence, high borrowing costs, and lower utilization of existing capacity. The impacts of monetary policy changes are lagged; therefore, prior elevated rates will likely negatively impact the interest-rate-sensitive industrial sector throughout much of 2024. The Federal Reserve has indicated that interest rate cuts and other dovish approaches are likely later this year, which will have more of an impact on Production post-2024.
- Extra inventory will likely be absorbed in 2024. Tight labor conditions will likely put upward pressure on wages, which will improve the financial health of consumers and allow them to buy more goods, ultimately benefiting the industrial sector. The single-unit housing market, which leads the industrial sector by three to four quarters, is on an established recovery path. These trends will contribute to annual Production rise in 2025 and 2026, though rise in the later half of 2026 will be muted.

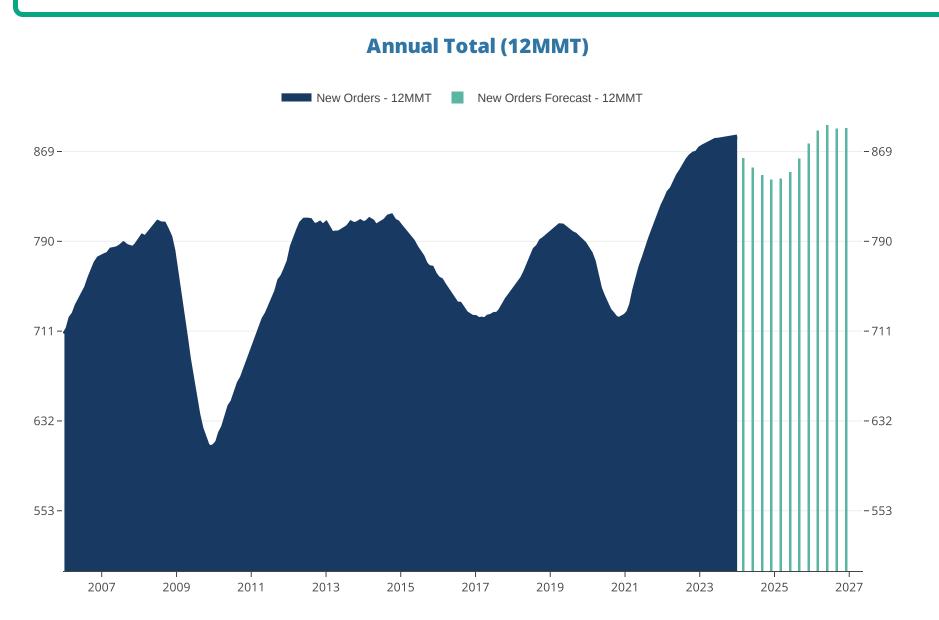




US Nondefense Capital Goods New Orders (excluding aircraft)



New Orders to Track Upper Forecast Range; Mild Decline Probable This Year



Annual Growth Rate (12/12) New Orders - 12/12 --- New Orders Forecast - 12/12



Current Phase



Phase C
Slowing Growth

Current Indicator Amplitude

- January 2024 Annual Growth Rate (12/12): 1.2%
- January 2024 Annual Total (12MMT), Billions of USD: \$882.2

Industry Outlook

<u>Year Annual Growth Rate</u>

2024 -3.3%2025 3.8%2026 1.6%

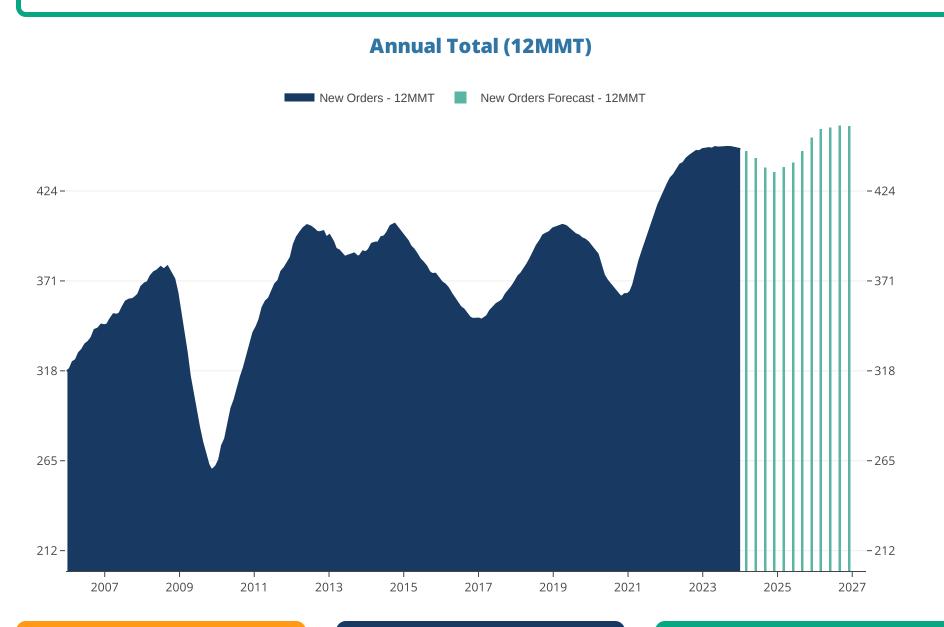
- Annual New Orders tentatively peaked in December, but more data is needed to confirm this.
- We anticipate that New Orders will trace the upper end of the forecast range, at least in the near term, due in part to previously elevated corporate cash holdings. This padding in cash is currently allowing businesses to keep spending despite the harsh financing environment. Still, we expect imminent decline in New Orders, as businesses will likely be more conservative in their capex plans given waning economic data. Additionally, some may put off financed purchases until the Federal Reserve brings rates down.
- General decline will persist through 2024, with contraction in the low single-digits. New Orders will then rise in 2025 and the first half of 2026 before plateauing.
- Monetary and fiscal decisions have had an outsized impact on the economy in the last four years. Consequently, hawkish Federal Reserve action or any new stimulus would pose a risk to our forecast. Our forecast is based on the expectation of gradual decline in rates later this year.



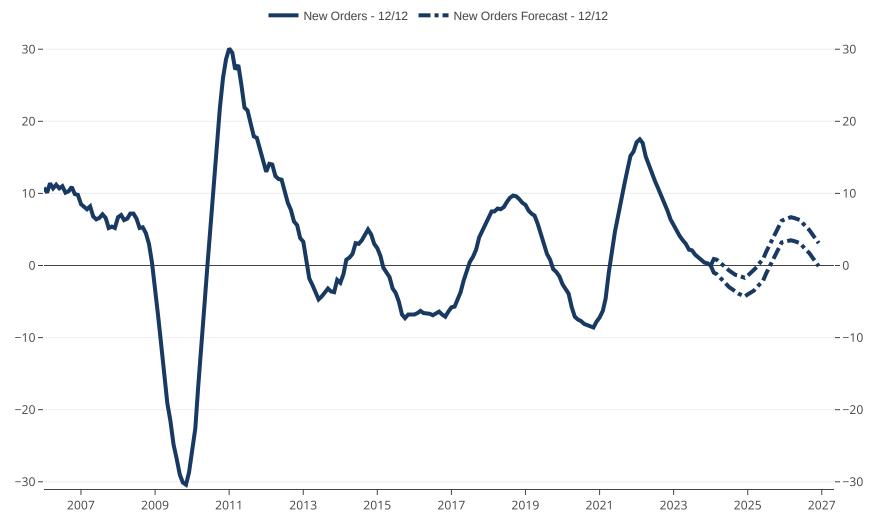
US Machinery New Orders



Declining Manufacturing and Slack in Existing Capacity Suggest Decline in Machinery New Orders



Annual Growth Rate (12/12) New Orders - 12/12 --- New Orders Forecast - 12/12



Current Phase



Phase C
Slowing Growth

Current Indicator Amplitude

- January 2024 Annual Growth Rate (12/12): 0.0%
- January 2024 Annual Total (12MMT), Billions of USD: \$448.1

Industry Outlook

<u>Year Annual Growth Rate</u>

2024 -3.0% 2025 4.7% 2026 1.5%

- Annual US Machinery New Orders are mildly declining and were roughly even with the year-ago level in January. Quarterly New Orders fell below the year-ago level, supporting our expectation for further decline.
- Mild decline in New Orders will persist until the end of 2024. New Orders, a dollar-denominated series, will be weighed down by deflation this year along with the lagged effects of prior interest rate hikes. The manufacturing sector is declining, and the US Manufacturing Capacity Utilization Rate suggests existing slack and thus less of a need to add new machinery. Decline will be relatively mild, however, contracting roughly 3% from the 2023 level.
- Annual New Orders will then rise through the second half of 2026. During that time, the macroeconomy will rise, likely assisted by more accommodative monetary policy. Inflation will also heat back up, pushing up on the dollar value of machinery.
- Look for opportunities tied to nearshoring and government investment in the semiconductor industry. Annual US High-Technology Industries Production Index is up 9.9% and accelerating, a stark contrast to the current plateau in overall Industrial Production. Additionally, the labor market is likely to remain tight, increasing demand for labor-saving automation.



2023

2025

2027



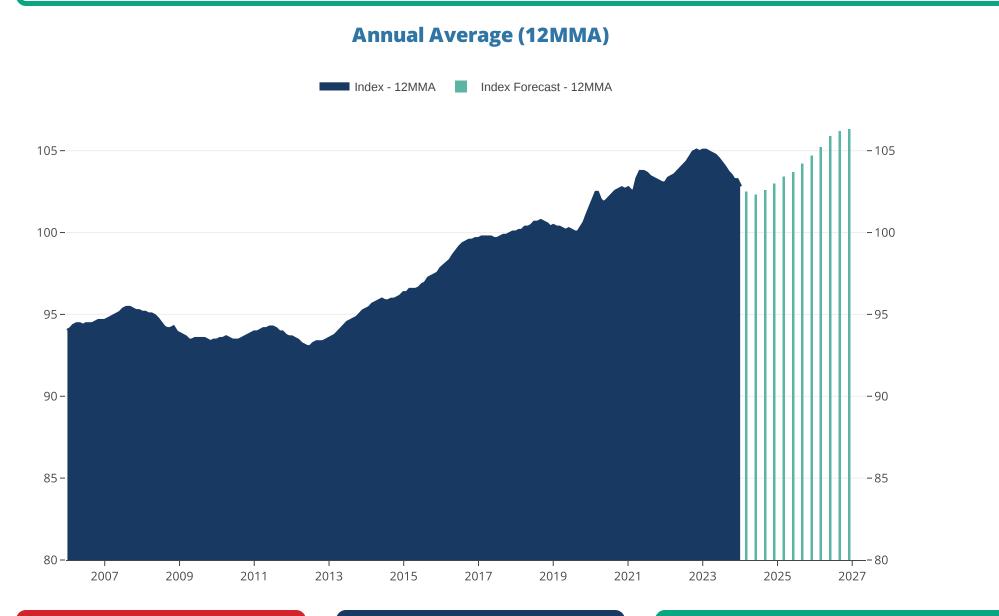
US Food Production Index



Consumer Demand Slowing but Still Strong; Production Will Begin to Rise Around Mid-2024

2007

2009



2017

2019

2021

Current Phase



Phase D Recession

Current Indicator Amplitude

- January 2024 Annual Growth Rate (12/12): -2.1%
- January 2024 Annual Average (12MMA), 2017=100: 102.8

Industry Outlook

<u>Year</u>	<u>Annual Growth Rate</u>
2024	-0.2%

2024 -0.2% 2025 1.7% 2026 1.5%

Outlook & Supporting Evidence

2013

2015

2011

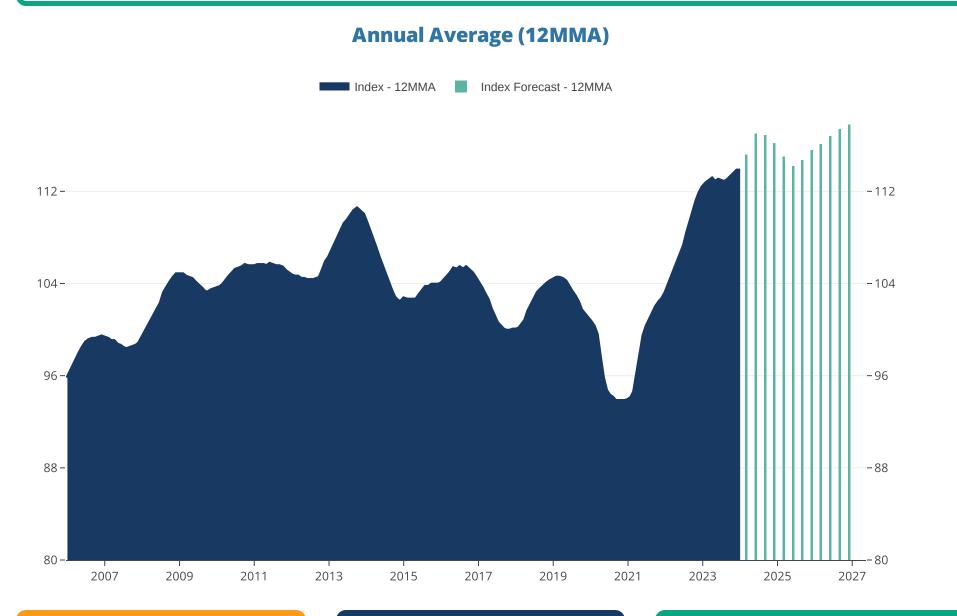
- Annual Production will continue to decline in the near term as the impact of prior extreme weather events weighs on farmers and downstream food producers. Improvement in the US Drought Severity and Coverage Index could suggest improvement in future crop yields, although some regions still face drought. We expect rise in Food Production by the second half of this year, which will generally persist through at least 2026.
- The food industry could benefit from a resilient consumer base in the middle-to-upper-income range and rising US Real Personal Income. Consumers are dining outside the home at a record level, though the pace of growth is slowing. Meanwhile, consumers have scaled by their volume of purchases at grocery stores to roughly pre-pandemic levels. For grocery wholesalers, annual growth is at +1.6%, while the quarterly rate dropped to -0.2%. The food production sector, which has more exposure to agricultural trends, is underperforming relative to retail and wholesale trends.
- Food manufacturing corporate cash holdings are mildly rising and well above pre-pandemic levels, which could be put to use investing in new capacity. However, the decline in existing capacity utilization may stunt capex.



US Medical Equipment and Supplies Production Index

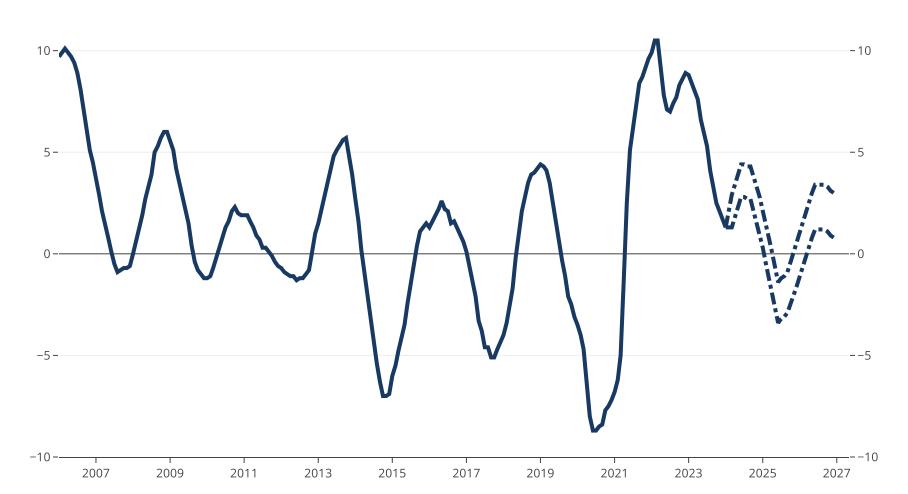


Forecast Revised Upward Primarily for 2024; Timing of Peak and Trough Pushed Out Slightly



Annual Growth Rate (12/12)





Current Phase



Phase C
Slowing Growth

Current Indicator Amplitude

- January 2024 Annual Growth Rate (12/12): 1.3%
- January 2024 Annual Average (12MMA), 2017=100: 113.8

Industry Outlook

<u>Year</u>	Annual Growth Rate	

2024	1.9%
2025	-0.5%
2026	1.9%

- We revised our outlook for US Medical Equipment and Supplies Production based on recent outperformance, potentially stemming from onshoring trends. The most notable revision to our forecast was for 2024, which was revised upward by 3.5%. We now expect a later peak and trough. As a result, the year-end growth rates were changed by +2.8, -4.0, and +2.1 percentage points.
- Annual Production will rise in the near term before transitioning to decline by the second half of the year. Mild decline in Production will extend into the first half of 2025.
- We expect the services sector to slow in growth this year due to the cumulative economic pressures that consumers face. However, the equipment and supplies market is more susceptible to downward pressure and typically experiences a hard landing.
- The combination of onshoring and an aging demographic bode well for the long-term trajectory for Production, which will reach record highs in the near term and in late 2026.



US Leading Indicators



Indicator	Direction		
	1Q24	2Q24	3Q24
ITR LEADING INDICATOR™			N/A
ITR RETAIL SALES LEADING INDICATOR™			
US OECD LEADING INDICATOR			
US ISM PMI (PURCHASING MANAGERS INDEX)			
US TOTAL CAPACITY UTILIZATION RATE			N/A
Green denotes that the indicator signals cyclical rise quarter. Red denotes the opposite.	e for the eco	onomy in th	e given

What It Means for the US Economy

- The ITR Leading Indicator™ rose in January, though it has been vacillating around the same level for several months. Prior sharp decline in the Indicator, the sluggishness of the subsequent ascent, and the likelihood of lagged effects from quantitative tightening support our expectation for mild decline in industrial activity this year.
- The ITR Retail Sales Leading Indicator™ moved higher in January. This supports our expectation that US Total Retail Sales growth will pick up in late 2024/early 2025.
 Meanwhile, tight lending conditions and rising delinquency rates support our expectation for slowing Retail Sales growth in the near term.
- The US ISM PMI (Purchasing Managers Index) monthly rate-of-change moved higher in January and has been generally rising for the past several months. On its own, this would suggest that we could see an earlier-than-forecasted low in US Industrial Production. However, a collection of indicators would be needed to confirm such a trend, and general downward movement in the monthly US Total Industry Capacity Utilization Rate supports our forecast for industrial sector decline in 2024. Stay tuned for further updates as the indicators realign later this year.

Downward pressure is likely to last for much of 2024 but will be relatively mild. Be conservative in your approach to 2024 and make sure you have plenty of cash. However, it is also important to start preparing now for the next cyclical rising trend in 2025 and 2026, keeping implementation times in mind. What can you do to improve efficiency and margins? What can you do to reduce your dependence on the tight labor market? What new markets or products might you want to move into?





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). Index, 2017 = 100, not seasonally adjusted (NSA).

US Machinery New Orders

New orders for machinery in the United States. Industries in the machinery manufacturing subsector create end products that utilize mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining, which are used to shape individual pieces of metal. Processes such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process. NAICS Code: 333. Source: US Census Bureau. Measured in billions of dollars, not seasonally adjusted (NSA).

US Medical Equipment and Supplies Production Index

Medical equipment and supplies manufacturing index for the United States. Examples of products made by these establishments are surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, ophthalmic goods, dentures, and orthodontic appliances. Source: Federal Reserve Board. NAICS Code: 3391. Index, 2017 = 100, not seasonally adjusted (NSA).

US Nondefense Capital Goods New Orders (excluding aircraft)

New orders for nondefense capital goods, excluding aircraft, in the United States. Includes farm machinery and equipment, construction machinery, mining machinery, nondefense small arms and ordnance, industrial machinery, commercial and service industry equipment, other general purpose machinery, photographic equipment, metalworking machinery, turbine and generator manufacturing, power transmission equipment, pumps and compressors, material handling equipment, electronic computers, computer storage devices and peripheral equipment, communications equipment, nondefense search and navigation equipment, electrometrical equipment, electrical equipment, heavy duty truck manufacturing, railroad rolling stock, nondefense ship and boat building, office and institutional furniture, and medical equipment and supplies. Source: US Census Bureau. Measured in billions of dollars, not seasonally adjusted (NSA).

US Food Production Index

Industries in the US Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products. The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers. Source: Federal Reserve Board. NAICS Code: 311. Index, 2017 = 100, not seasonally adjusted (NSA).





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

