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SEPTEMBER 2024

Reports
ITR Economics

603.796.2500 itreconomics.com

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Economic Overview

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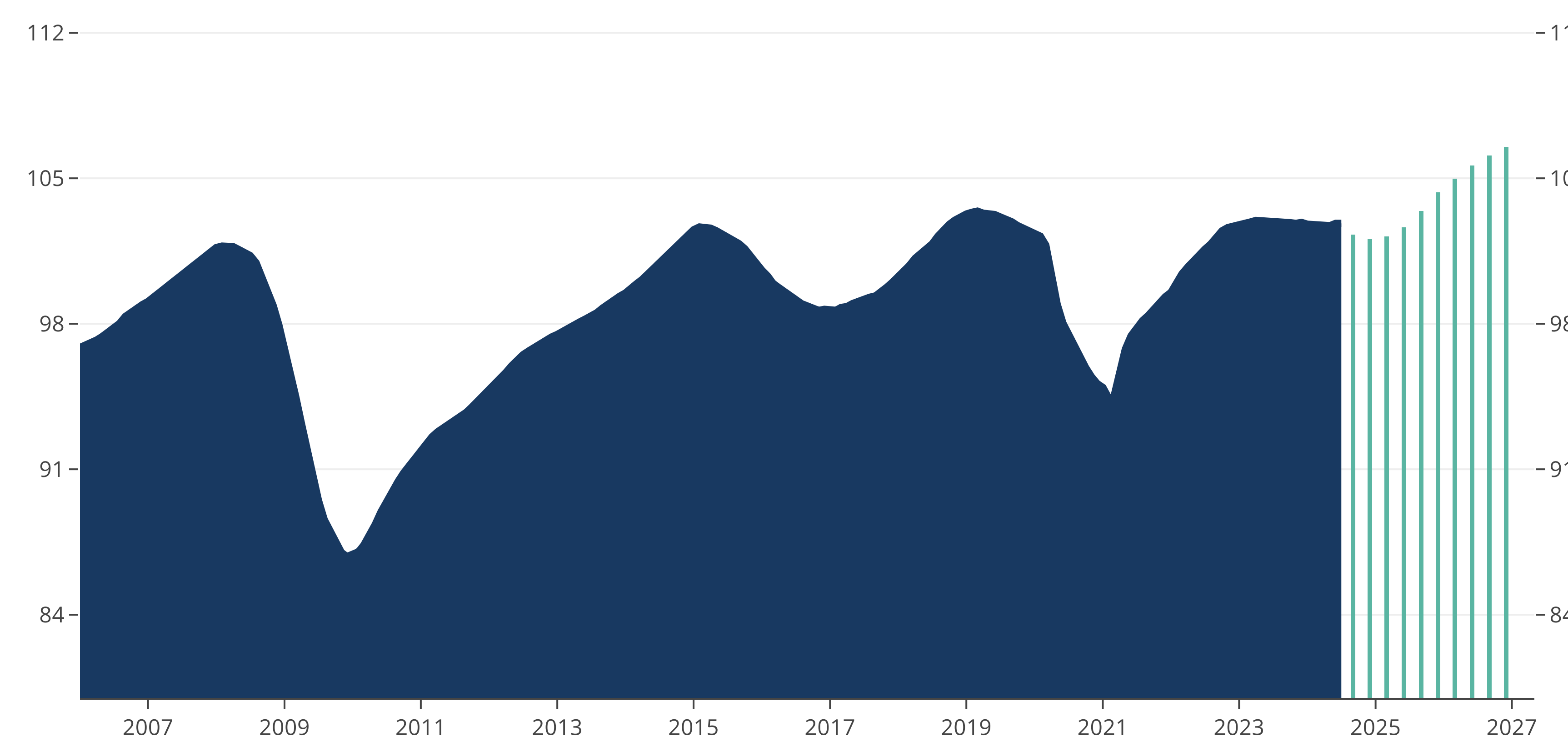
Mixed Signals

Economic signals are mixed. Inflation is easing, real incomes are rising, and employment is at record highs. However, interest rates remain elevated, muting demand for large-ticket items that are typically financed, and some demographics are under strain from the cumulative inflation of recent years. The industrial sector and B2B spending are plateauing, while US Single-Unit Housing Starts have hit a bump in the road. Consumer spending is keeping things moving but also cutting into consumers' saving ability. As we wrap up 2024 and head toward 2025, there are some key factors to keep in mind.

US Industrial Production Index
Annual Average (12MMA)



• Interest Rate Cuts: The Federal Reserve is likely to cut interest rates in the near term given abating inflation, but rates will likely come down gradually. Lower rates will provide an eventual boost for markets, such as durable goods and construction, and will offer some relief for consumers holding floating-rate debt, such as credit card debt. The direction of the impact is only half the story; the other key element for planning is the timing, which is unique to your specific business and market. The effects of interest rate cuts are unlikely to be instantaneous, instead taking time to develop. Some potential buyers may remain on the sidelines waiting for further cuts. In some markets, such as nonresidential construction, it can take between months and years for projects to go from conception to completion. Consider the stage of your market – using a construction analogy, are you or your customers doing the site work, putting up the framing, or painting the walls?

• Residential Construction: Prior rise in leading US Single-Unit Housing Starts is a solid signal for cyclical rise in the macroeconomy to come, but a recent tick down in Starts suggests there could be some waffling in the macroeconomy during 2025. We will be watching closely to see how reactive this sector is as rates are lowered. A tepid response in this market could pose a risk of stagnation in other sectors dragging on longer.

• Stock Market Volatility: In recent years, the S&P 500 has been rising faster than US Corporate Profits, a growing risk factor for stock valuations. Avoid conflating the stock market with the economy, as it is only a small part of the picture and is prone to volatility. Talk to your financial advisor to ensure that your portfolio matches your risk profile.

• Employment: The labor market has loosened somewhat but remains robust. Keep in mind that employment decisions lag the macroeconomy, so slowing growth in employment is a reaction to prior macroeconomic softening, not a harbinger of the future. Demographic trends suggest that the labor market will be tight in the coming years. Look for ways to reduce your dependence on labor, if possible. Take an active approach to managing employee morale and retention; otherwise, your growth in 2025-26 could be throttled by labor challenges.

Growth in 2025—Albeit Mild Growth—Brings Opportunities and Challenges

There are tentative signals that 2025 will be a somewhat stronger year than 2024, including rise in the ITR Leading Indicator™ and the ITR Retail Sales Leading Indicator™. For businesses closely tied to the industrial economy, now is the opportune time to assess labor and capital needs in preparation for the growth expected in 2025 and 2026. It is also important to be proactive in addressing longer-term challenges ahead, including the potential for higher energy prices, margin compression, and labor shortages. Reacting to changes alongside everyone else may result in missed growth opportunities – now is the time to get ahead of the curve.

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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).

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IMEC Markets Dashboard

		Current		Annual Growth Rate Forecast (12/12), Year-End*		
Page Number	**Indicator**	**Growth Rate****	**Phase**	**2024****	**2025****	**2026****
4	US Industrial Production Index	-0.1%	D	-0.8%	2.2%	2.1%
5	US Nondefense Capital Goods New Orders (excluding aircraft)	0.7%	C	-0.6%	3.4%	2.4%
6	US Machinery New Orders	0.3%	C	-0.3%	5.0%	4.4%
7	US Food Production Index	-1.6%	A	-0.2%	1.7%	1.5%
8	US Medical Equipment and Supplies Production Index	0.5%	C	-1.1%	0.9%	0.8%

**Coloring denotes the business cycle phase at year-end. For example, if a value in the first column under "Annual Growth Rate Forecast (12/12), Year-End" is colored blue, the corresponding indicator is forecasted to be in Phase A, Recovery, at the year-end indicated by the column. 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)**

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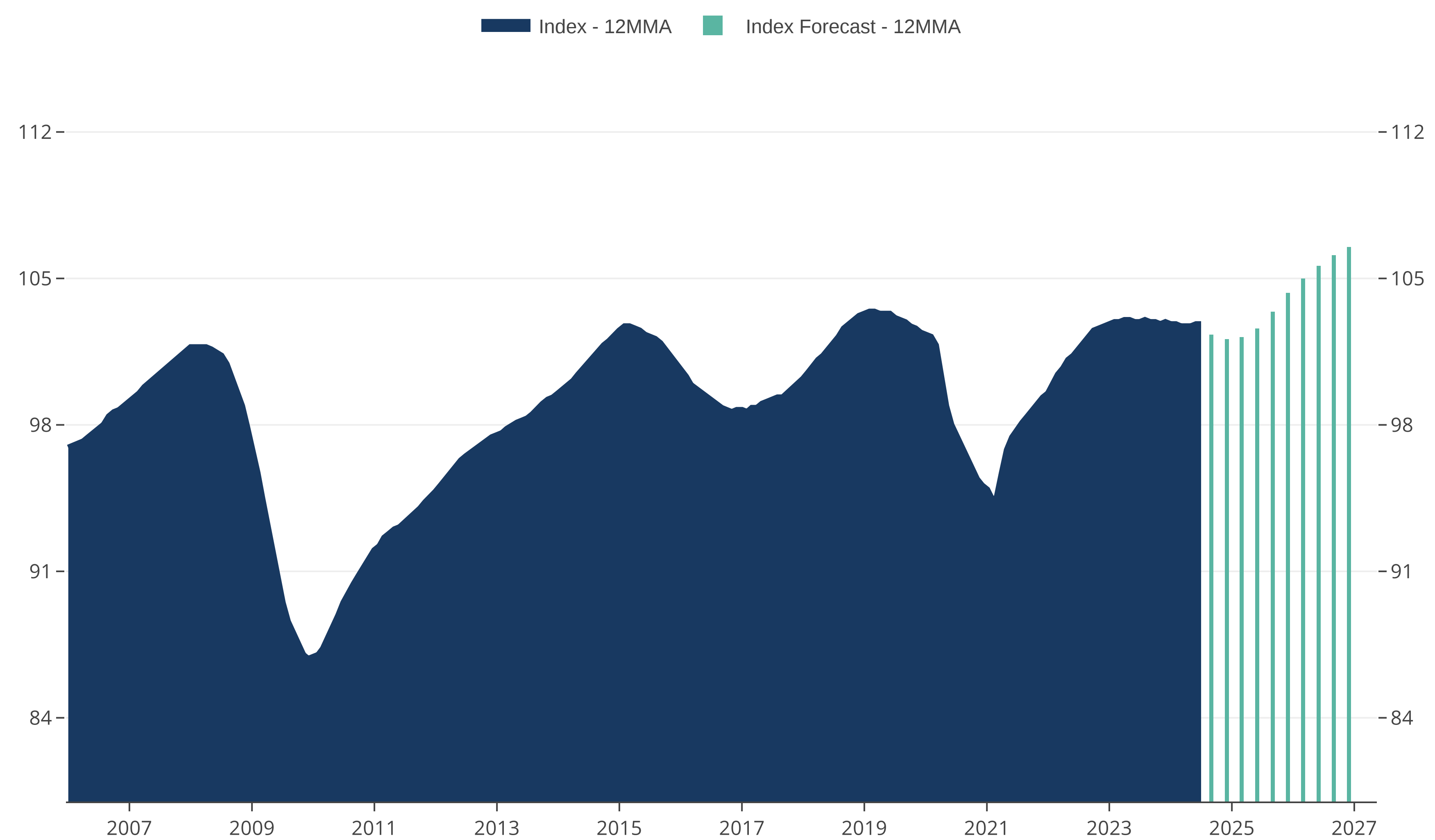
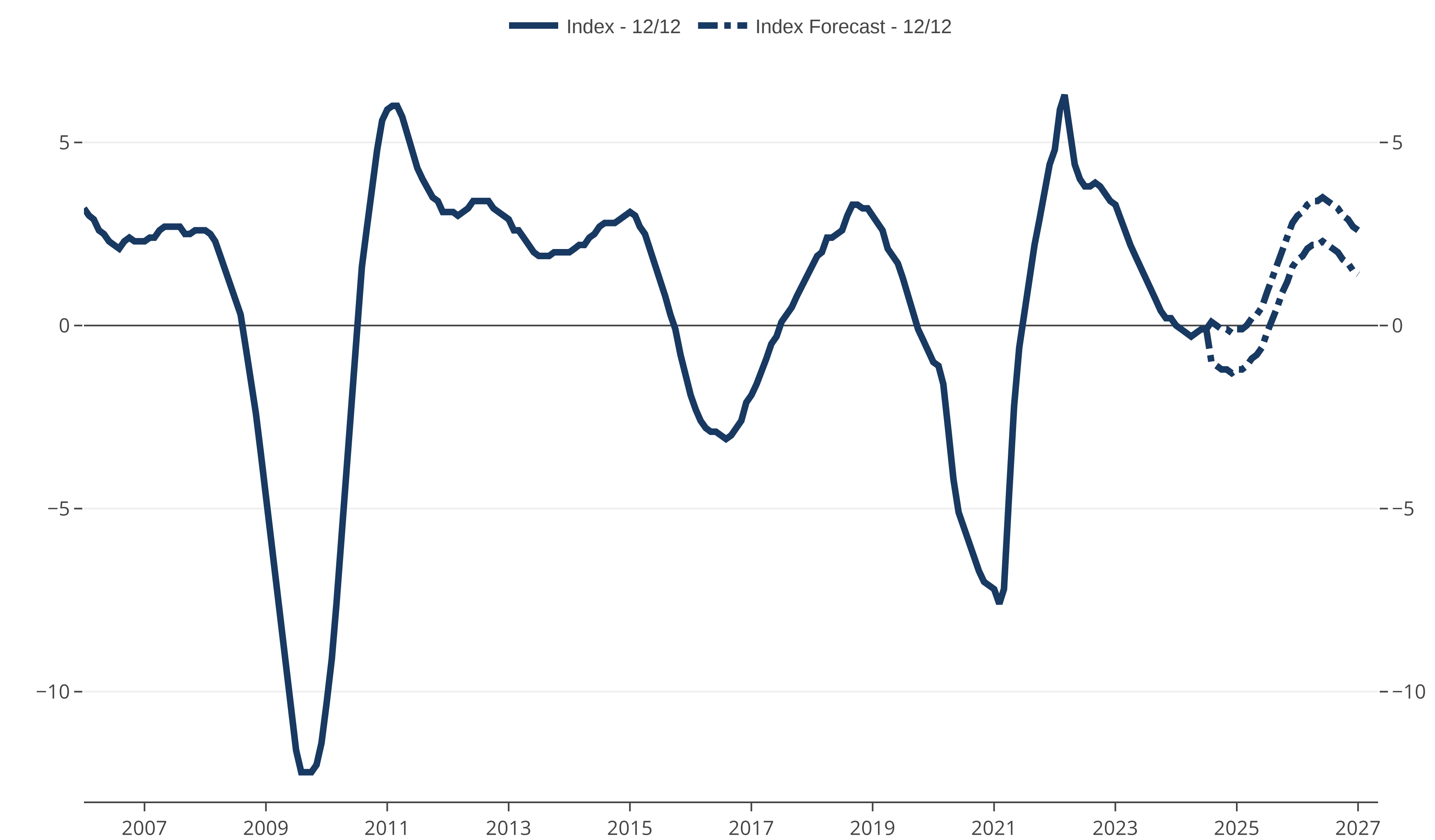
US Industrial Production Index

Fed Rate Cuts and Consumer Spending to Contribute to Rise in 2025 and 2026

Annual Average (12MMA)



Annual Growth Rate (12/12)



Current Phase

Phase D
Recession

Current Indicator Amplitude

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

Industry Outlook

Year	*Annual Growth Rate*
2024	-0.8%
2025	2.2%
2026	2.1%

Outlook & Supporting Evidence

- Annual US Industrial Production will plateau through the remainder of 2024. The consumer is facing challenging financial conditions, including elevated interest rates and inflation-adjusted savings balances below the long-term trend. However, inflation is easing and incomes are expected to rise given tight labor dynamics in the coming years, which will eventually revitalize consumer spending and improve business confidence. We anticipate that annual Production will rise in 2025 and 2026.
- Recent messaging from the Federal Reserve suggests interest rate cuts are likely in the near term. Interest rate changes take time to impact the market, but cuts are likely to benefit manufacturing end markets such as automotive, machinery, and construction, contributing to rise in 2025 and 2026.
- Companies adjusting inventory levels for the remainder of 2024 should be mindful of rise coming in 2025. Producer prices for finished goods are likely to be higher in 2025 and 2026 than through 2024. Now is also the time to assess labor and capital needs to prepare for growth ahead.

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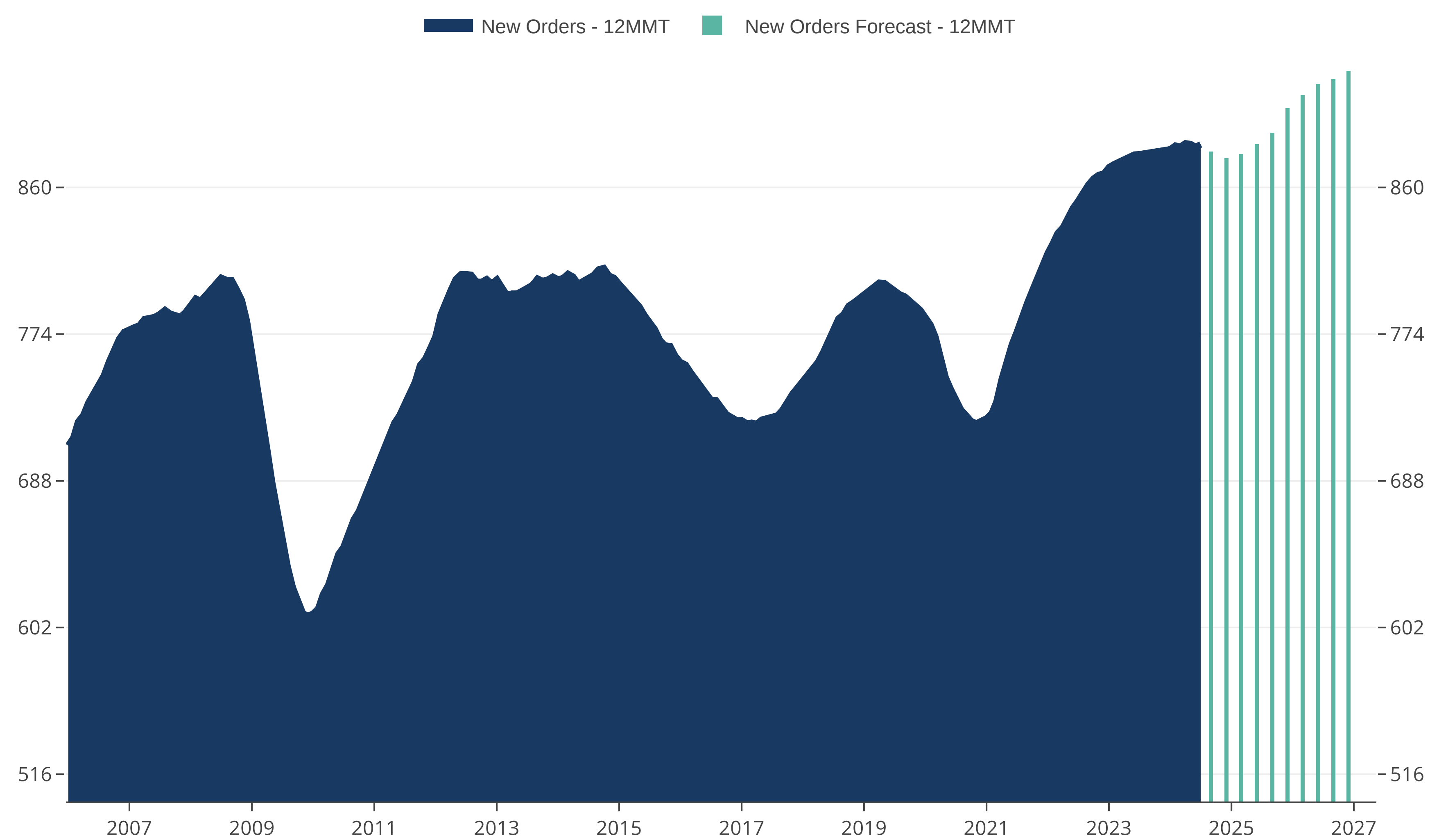
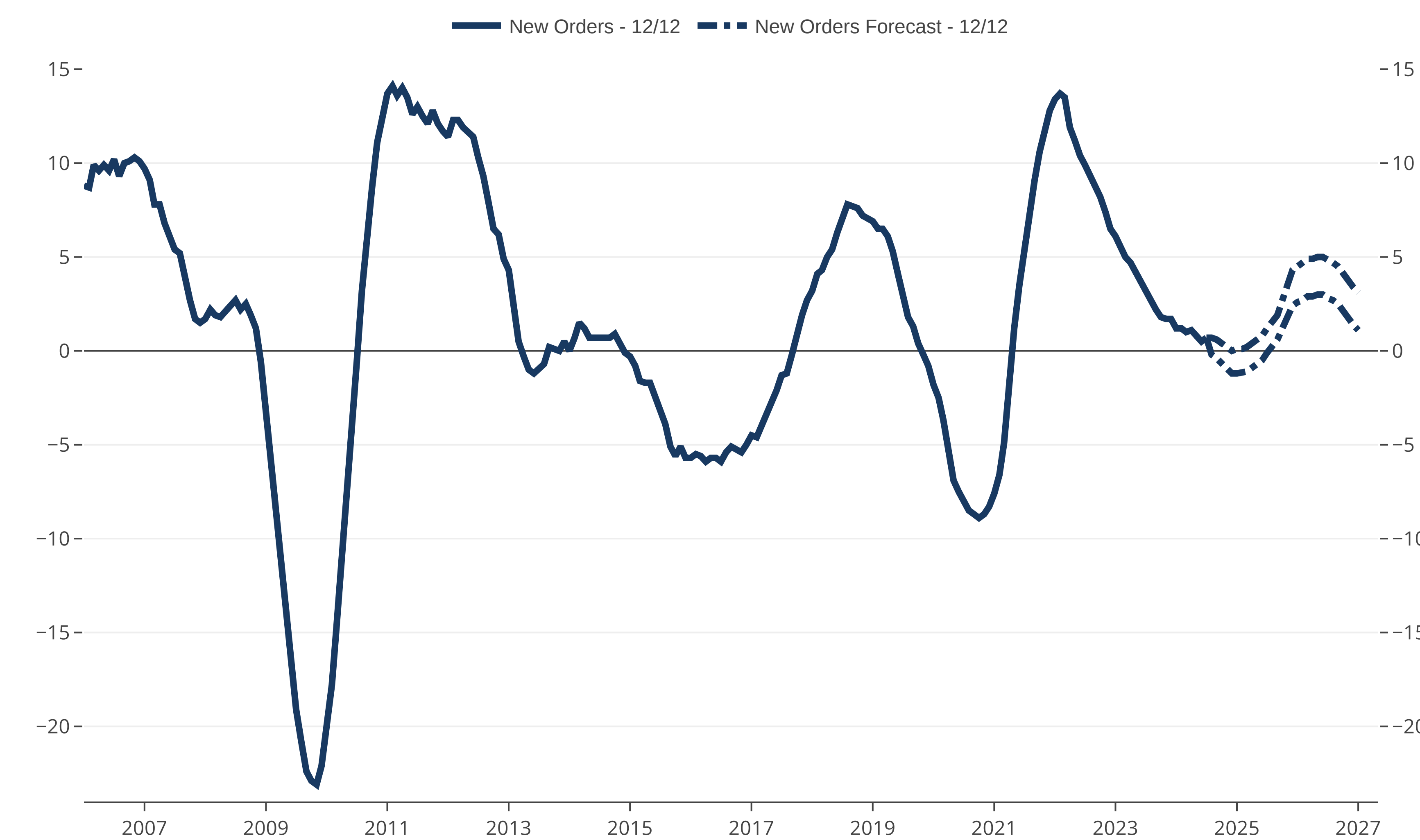
US Nondefense Capital Goods New Orders (excluding aircraft)

New Orders Spending Will Be Stronger in 2025 and 2026, Alongside Reheating Inflation

Annual Total (12MMT)



Annual Growth Rate (12/12)



Current Phase

Phase C
Slowing Growth

Current Indicator Amplitude

- July 2024 Annual Growth Rate (12/12): 0.7%
- July 2024 Annual Total (12MMT), Billions of USD: $885.2

Industry Outlook

Year	*Annual Growth Rate*
2024	-0.6%
2025	3.4%
2026	2.4%

Outlook & Supporting Evidence

- Annual New Orders will plateau with a downward bias through the remainder of 2024. Producers are working through pandemic-era backlogs and are potentially facing softer demand. However, elevated cash holdings have buffered some of the negative impacts of higher interest rates and inflation has been pushing up the dollar value of New Orders, contributing to a soft landing for New Orders overall.
- Rise will take hold in 2025 alongside a rising macroeconomy and reheating inflation. Interest rates are expected to begin to ease in the near term, which will also contribute to upcoming rise in New Orders by making capital goods investments more affordable. Plan for annual New Orders rise to extend through at least 2026.
- Inflation will cool this year, but kick back up again in 2025. Purchasing managers and consumers are likely to be feeling fatigue from the cumulative impact of inflation. Consider that price increases may not be as easy to pass on in 2025 as they have been in the past couple of years. Look for other strategies to improve your margins.

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US Machinery New Orders

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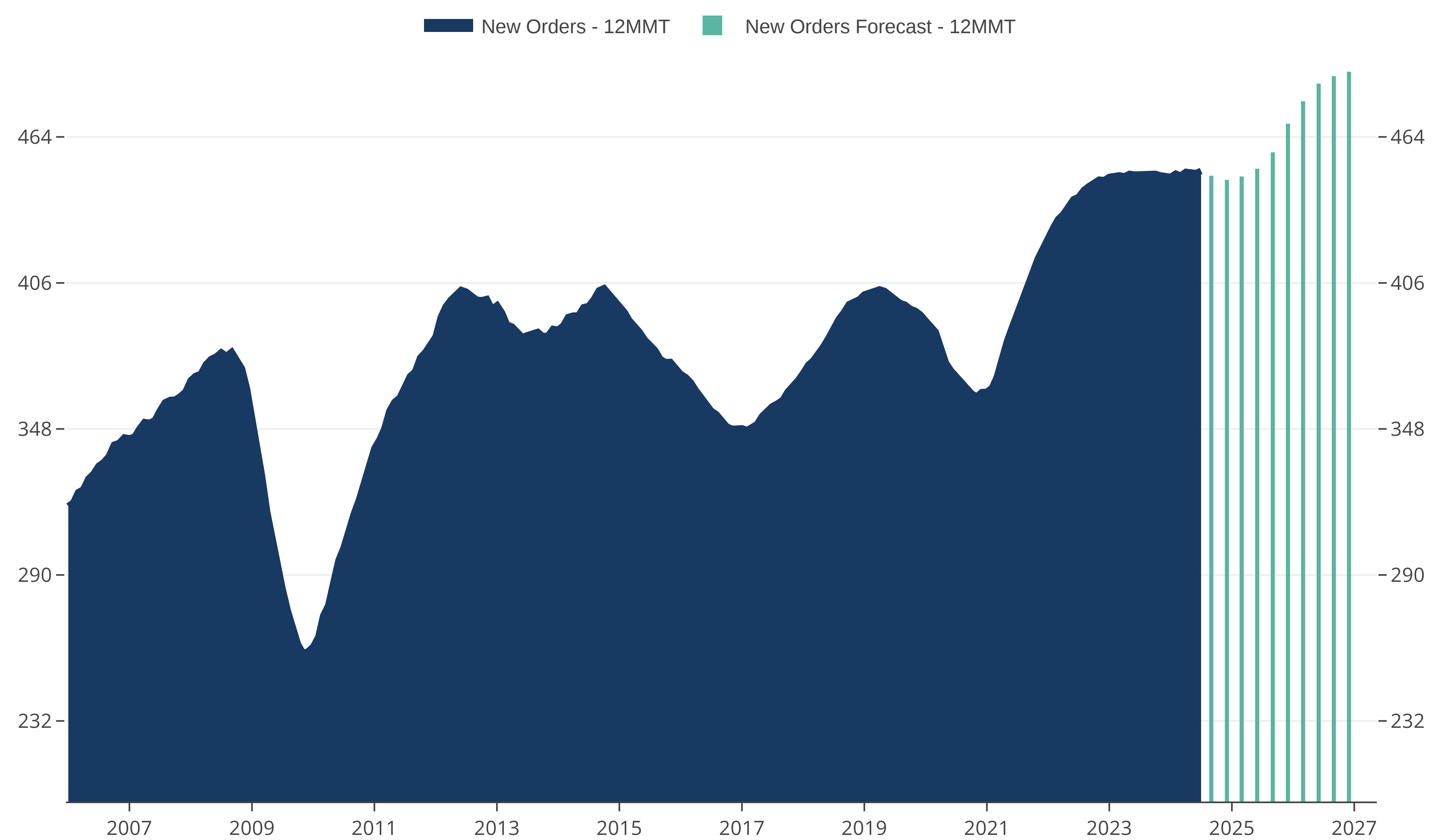
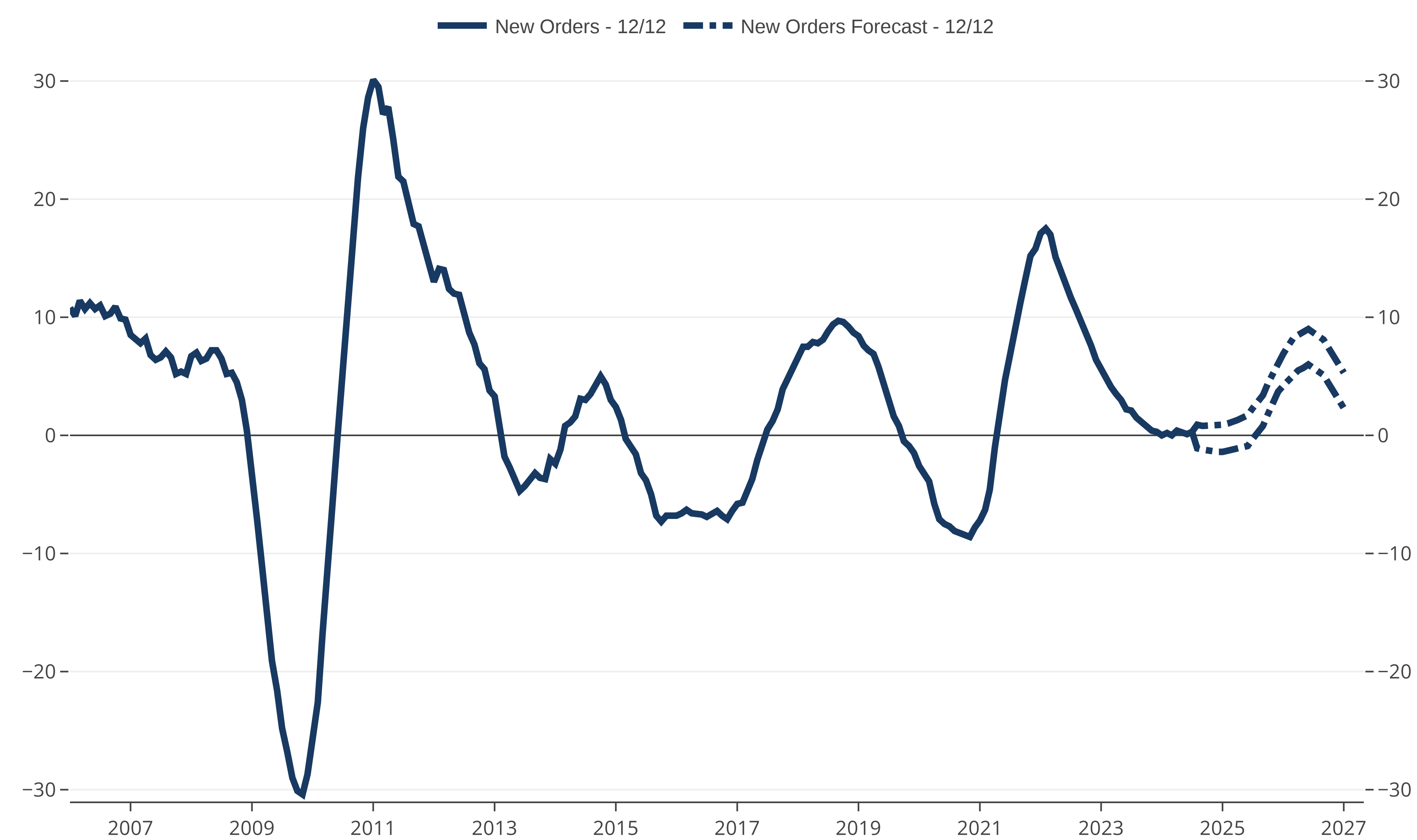
New Orders to Plateau Into Early 2025, Although Some Markets Will Vary Amidst Interest-Rate Woes

Annual Total (12MMT)



Annual Growth Rate (12/12)



Current Phase

Phase C
Slowing Growth

Current Indicator Amplitude

- July 2024 Annual Growth Rate (12/12): 0.3%
- July 2024 Annual Total (12MMT), Billions of USD: $450.5

Industry Outlook

Year	*Annual Growth Rate*
2024	-0.3%
2025	5.0%
2026	4.4%

Outlook & Supporting Evidence

- US Machinery New Orders in the 12 months through July were at $450.5 billion, up 0.3% from the year-ago level. Annual New Orders will plateau into early 2025 and then rise through at least 2026.
- Individual machinery markets are experiencing varied results. For example, US Construction Machinery New Orders is well above year-ago levels (annual rate-of-change of 6.9%), while US Material Handling Equipment New Orders recently transitioned to Phase D, Recession, with an annual rate-of-change of -0.2%. Pay attention to your relevant markets alongside broader Machinery New Orders and the varying levels of interest rate sensitivity by market.
- Elevated financing costs for machinery purchases are contributing to sluggish capital expenditures. Long-Term Bond Yields will decline gradually in coming quarters, but changes in rates generally take two years to impact New Orders. Annual New Orders will start to rise around the middle of 2025 alongside anticipated growth in consumer spending and the early effects of easing interest rate pressures.
- Demographic trends suggest that workforce constraints are likely to persist. Look to improve efficiencies in your business to avoid missing out on growth due to staffing issues.

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US Food Production Index

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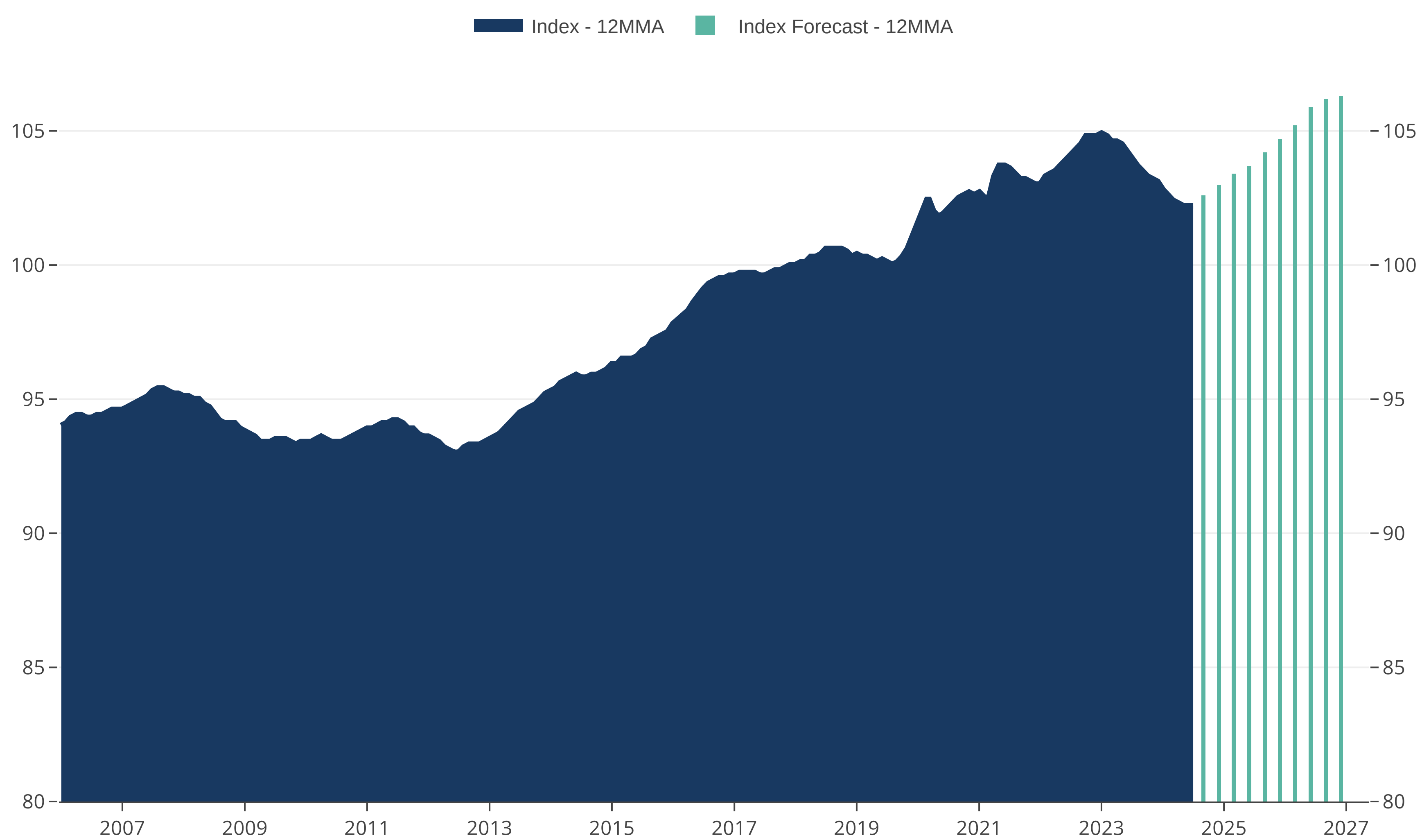
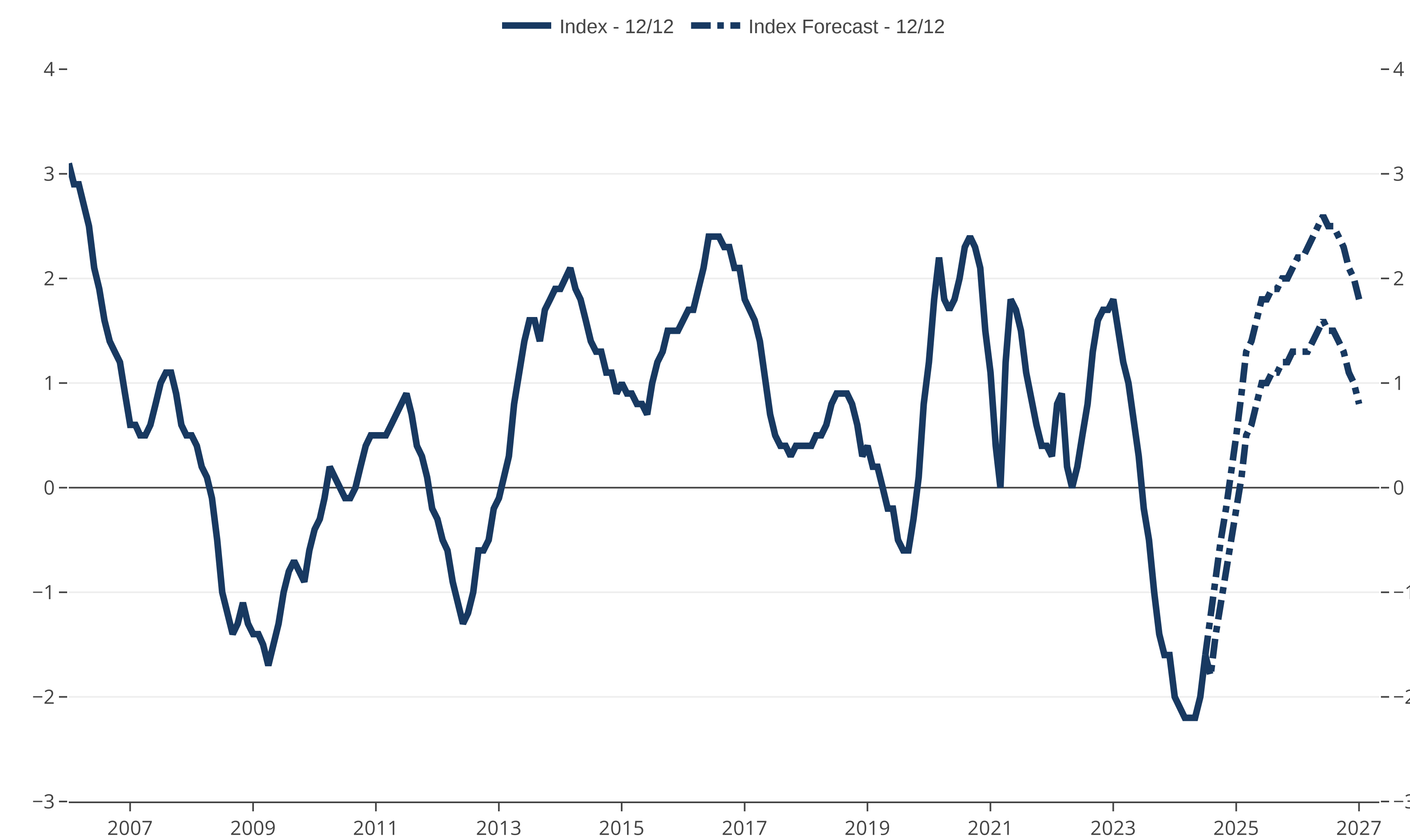
Production in Phase A, Recovery; Annual Production to Rise Imminently Through at Least 2026

Annual Average (12MMA)



Annual Growth Rate (12/12)



Current Phase

Phase A Recovery

Current Indicator Amplitude

- July 2024 Annual Growth Rate (12/12): -1.6%
- July 2024 Annual Average (12MMA), 2017=100: 102.2

Industry Outlook

Year	*Annual Growth Rate*
2024	-0.2%
2025	1.7%
2026	1.5%

Outlook & Supporting Evidence

- US Food Production in the 12 months through July was 1.6% below the year-ago level. Production is now in Phase A, Recovery. Annual Production will rise from the near term through at least 2026. Plan for Production to return to record highs by early 2026.
- Elevated interest rates make capital investments in agricultural and food processing equipment more expensive, but elevated food industry profits suggest producers generally have the financial footing to invest in expanding production. Upstream, US Farm Machinery Shipments and US Pesticides, Fertilizers, and Other Chemicals Shipments are both in Phase A, Recovery, a good sign for Production.
- Production will recover later this year and then rise as income improvements eventually allow consumers to increase their food budgets. Extreme weather events and their knock-on effects to the food supply chain can be a wild card, but we generally anticipate healthy growth in this market long term as the population grows and as incomes rise.

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US Medical Equipment and Supplies Production Index

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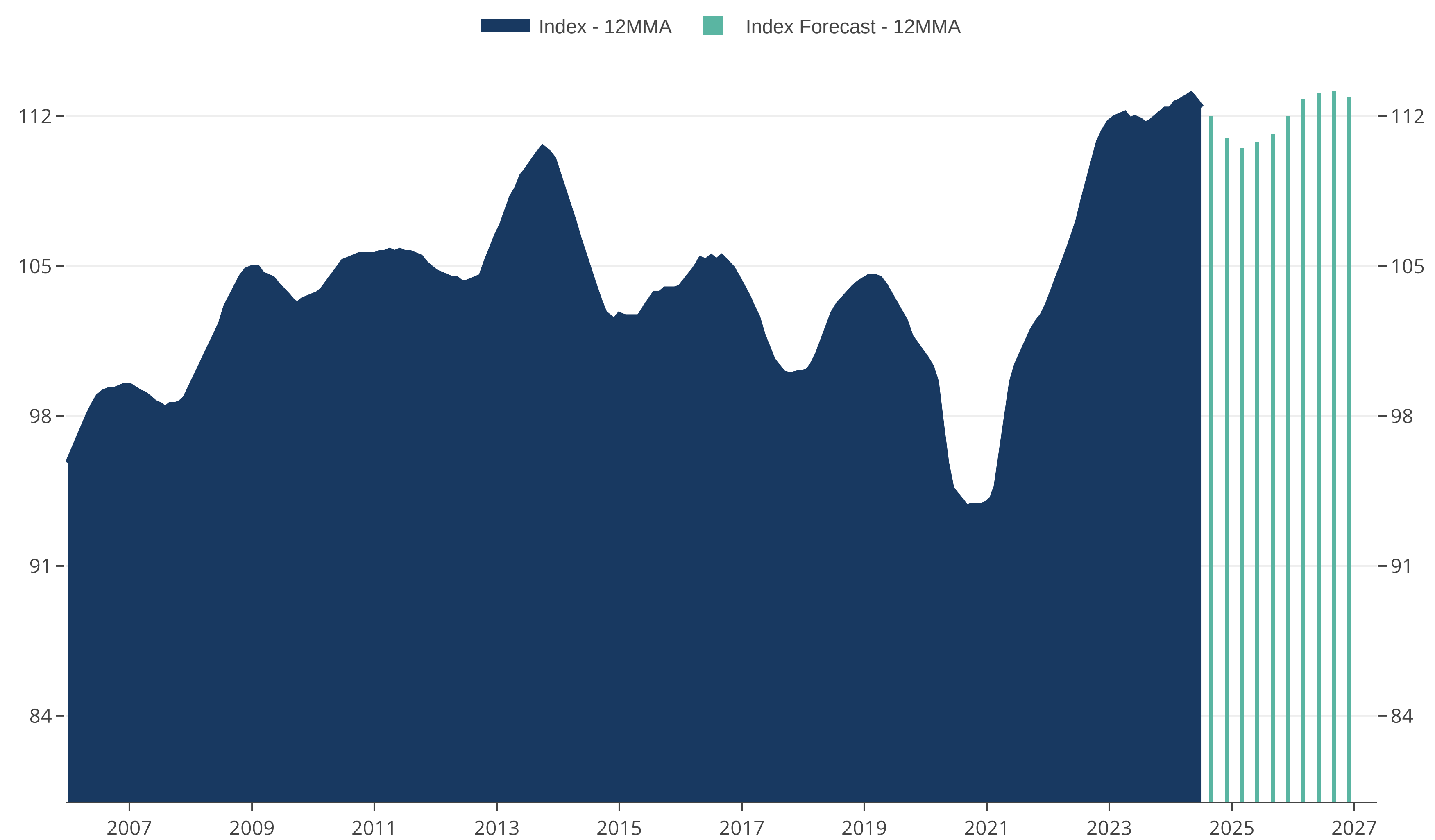
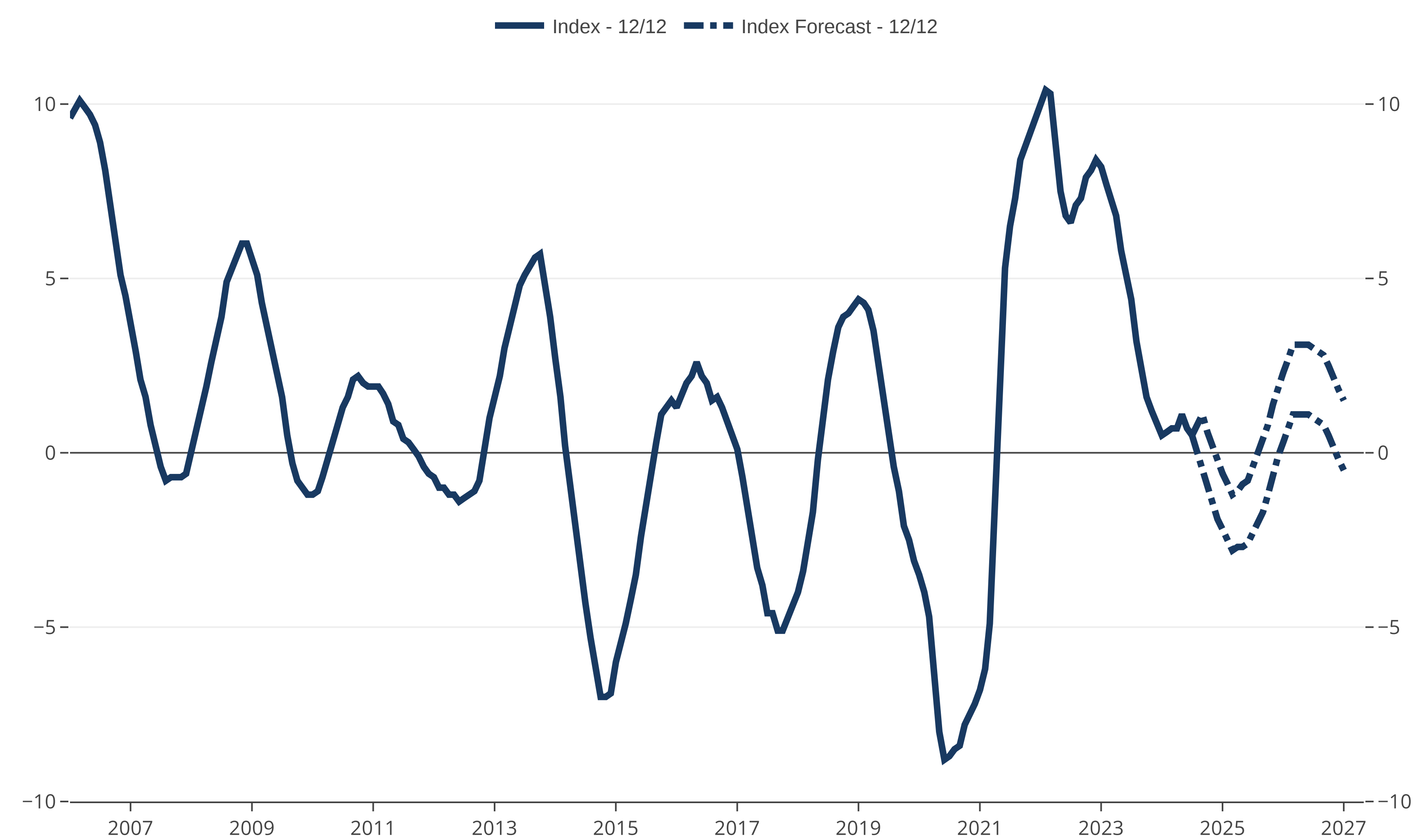
Production Poised for Hard Landing Due to Post-COVID Correction; Decline Will Be Mild

Annual Average (12MMA)



Annual Growth Rate (12/12)



Current Phase

Phase C
Slowing Growth

Current Indicator Amplitude

- July 2024 Annual Growth Rate (12/12): 0.5%
- July 2024 Annual Average (12MMA), 2017=100: 112.4

Industry Outlook

Year	*Annual Growth Rate*
2024	-1.1%
2025	0.9%
2026	0.8%

Outlook & Supporting Evidence

- The Annual US Medical Equipment and Supplies Production was 0.5% above the year-ago level in July. The ITR Checking Points™ system signals that Production is headed for Phase D, Recession, in the near term. Some amount of downward correction is likely as the medical industry normalizes in the wake of COVID-19 and catches up on backlogs from postponed care.
- The forecast has been revised to account for a revision to historical data by the Federal Reserve Board and mild underperformance. The shape of the forecast is little changed.
- Annual Production will decline into early 2025, but decline will be mild. Nearshoring trends are providing a buffer along the back side of the business cycle, as is relatively strong demand for medical services. Upside pressures are also suggested by leading indicators such as the US Drugs and Druggists' Sundries Wholesale Sales to Inventory Ratio and pricing trends in select healthcare stocks.
- Lead with optimism. Demographic trends suggest further opportunities in medical-care-related markets are forthcoming. Annual Production will rise from early 2025 into the second half of 2026.

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US Leading Indicators

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Indicator	Direction 3Q24	4Q24	1Q25
ITR LEADING INDICATOR™	●	●	●
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 for the economy in the given quarter. Red denotes the opposite.

What It Means for the US Economy

• We continue to expect upward momentum in 2025, as most leading indicators are pointing upward for this period. A few others, however, are sending mixed messages on the trajectory of the macroeconomy for later that year.

• Mild rise in the ITR Leading Indicator™ signals that businesses that align closely with US Industrial Production should see a mild upturn in growth rates moving into next year.

• The US ISM PMI (Purchasing Managers Index) monthly rate-of-change is in a nascent downward trend after exhibiting fairly consistent rise since late 2022. Should this weakness continue, it would pose a downside pressure to the industrial sector in the second half of 2025 based on its median lead time of roughly one year.

While many indicators are signaling positivity, we will not likely see that translate to stronger activity until early 2025. Economic conditions, such as still-elevated interest rates and a price-conscious consumer, are not favorable this year. While there were some recent stumbles in some leading indicators, improved B2B spending, a rebounding industrial sector, and a more stable consumer in 2025 and 2026 still seem probable. Activate plans now to capitalize on this stronger macroeconomy in the years to come.

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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).

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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

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