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DECEMBER 2023

Reports
ITR Economics

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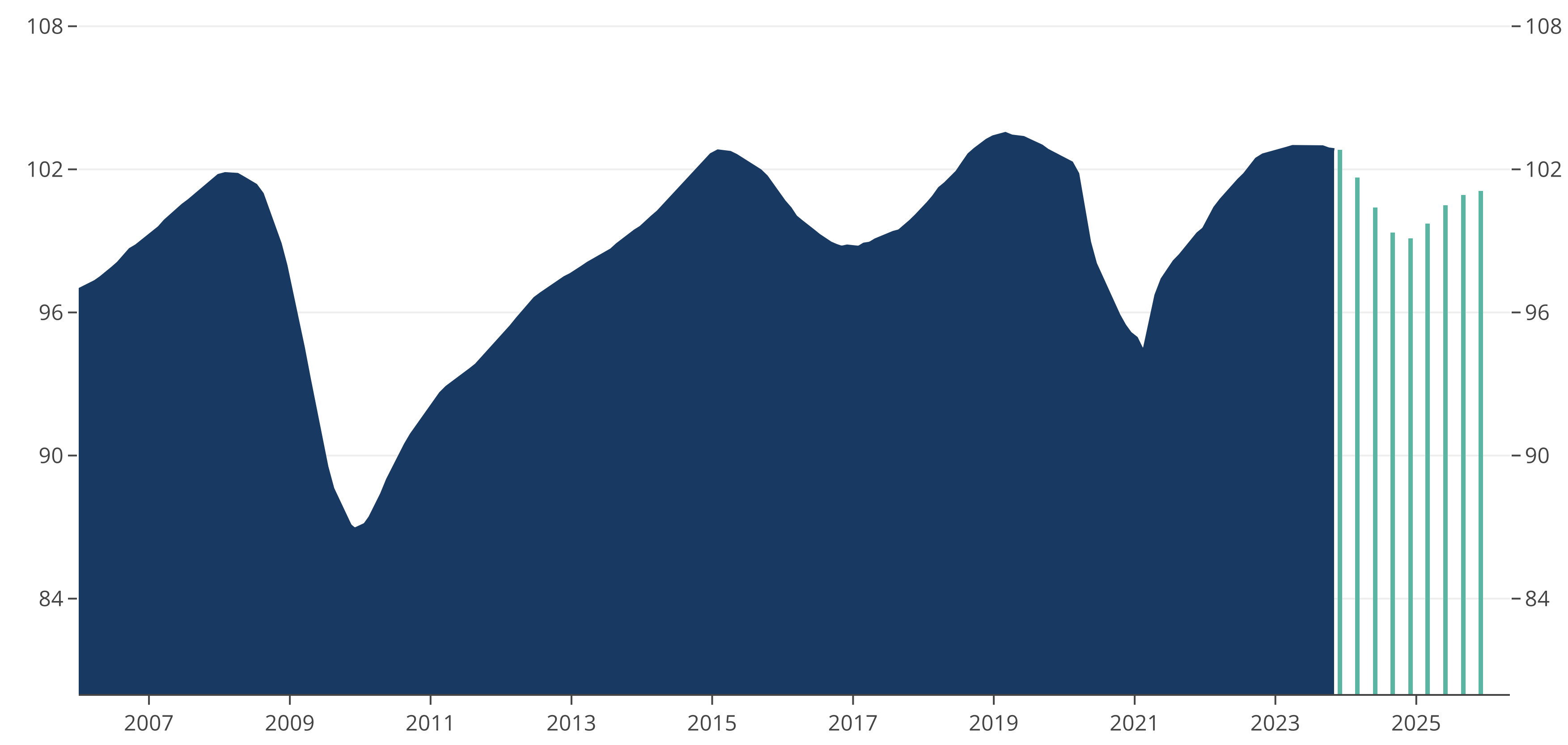
Economic Overview

Downward pressure is pervasive and intensifying as consumers struggle with the cumulative impact of elevated inflation and tighter financial conditions. Wholesalers and manufacturers are already contending with year-over-year contraction, while retail and business-to-business spending growth is slowing to a crawl. US Single-Unit Housing Starts, which typically lead the economy, are an exception to this widespread weakness; Starts are in the early stages of recovery. The nonresidential construction sector is also an outlier, but the current acceleration will soon give way to slowing growth.

Supply chains continue to adapt to the ripple effects of 2020. A few industries – such as automotive and aerospace – are still rebuilding inventories, while others have overbuilt inventories and are now correcting course. We are keeping a close eye on inventory-to-sales ratios and the state of the supply chain. We are encouraging our clients to try to improve communications along their supply chains in order to minimize any bullwhip effect.

US Industrial Production Index

Annual Average (12MMA)



Evidence for the Mild Decline in 2024

For many markets, mild decline will be the predominant trend in 2024. Consumers, who are a driving force of the US economy, are facing budget challenges. Credit card delinquencies are trending around the highest level in a decade, and savings balances (adjusted for inflation) are running below the long-term trend. The cumulative effect of prior high inflation and elevated borrowing costs will put further pressure on consumers' budgets into 2024, impacting many retail markets and the broader economy.

On the business side, corporate profits are below the year-ago level, corporate bond yields are elevated, and bank lending standards are tightening. Amid these financial factors, coupled with softening economic data, businesses will likely be more conservative in their capital goods investments. However, it is important to note that Corporate Cash Holdings are well-above pre-2020 levels, and businesses are so far managing their debts relatively well. These factors suggest the economic decline will be relatively mild. How 2024 feels to your company will depend on its exposure to the more budget-constrained consumer, its sensitivity to interest rates, its inventory levels, and any market share changes.

Opportunities Lie Ahead – Plan for Rise in 2025

Try not to get caught up in the volatility and pessimistic bent of the media. Instead, follow data-driven economic analysis and apply the strategies that align with the pertinent phase of the business cycle. Check out the Management Objectives™ on the last page of this report for some ideas, and be sure to look ahead to the Phase A, Recovery, strategies so that you are ready to implement them for maximum benefit when the time comes. The US is still a great place to do business, and we expect the economy to resume its ascent in 2025. A shift in monetary policy to something more accommodative will likely be a contributing factor. Additionally, we think a 2024 characterized by disinflation and reduced spending will help consumers regain stronger financial funding.

As the volatility of the early 2020s recedes further into the past, the economic ripples will slowly dissipate. Businesses will adapt to new conditions. Still, some challenges will remain. We expect inflation and borrowing costs will remain higher than in the 2010s, so have a plan to protect your margins and do not expect cheap money. Demographic trends will keep the labor market relatively tight, so look for ways to reduce your dependency on labor and increase your efficiency.

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*	
Page Number	Indicator	Growth Rate**	Phase	2024**	2025**
4	US Industrial Production Index	0.2%	C	-3.6%	2.0%
5	US Nondefense Capital Goods New Orders (excluding aircraft)	1.8%	C	-3.3%	3.8%
6	US Machinery New Orders	0.8%	C	-3.0%	4.7%
7	US Food Production Index	-1.5%	D	-0.2%	1.7%
8	US Medical Equipment and Supplies Production Index	2.2%	C	-0.9%	3.5%

**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

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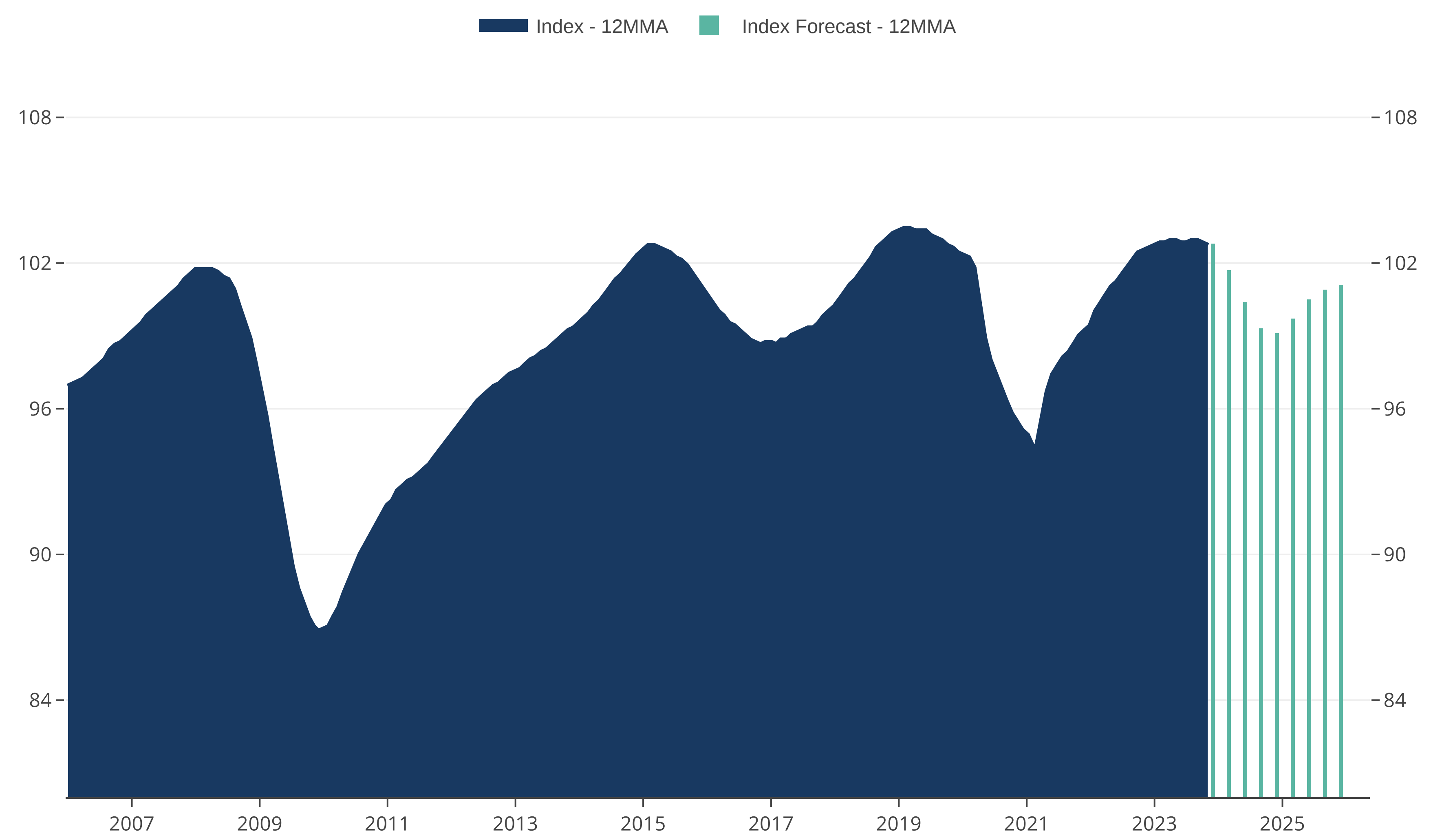
More Pronounced Decline in Annual Production Looms as High Interest Rates Weigh on Sector

Annual Average (12MMA)



Annual Growth Rate (12/12)

Current Phase

Phase C
Slowing Growth

Current Indicator Amplitude

- November 2023 Annual Growth Rate (12/12): 0.2%
- November 2023 Annual Average (12MMA), 2017=100: 102.7

Industry Outlook

Year	Annual Growth Rate
2023	0.2%
2024	-3.6%
2025	2.0%

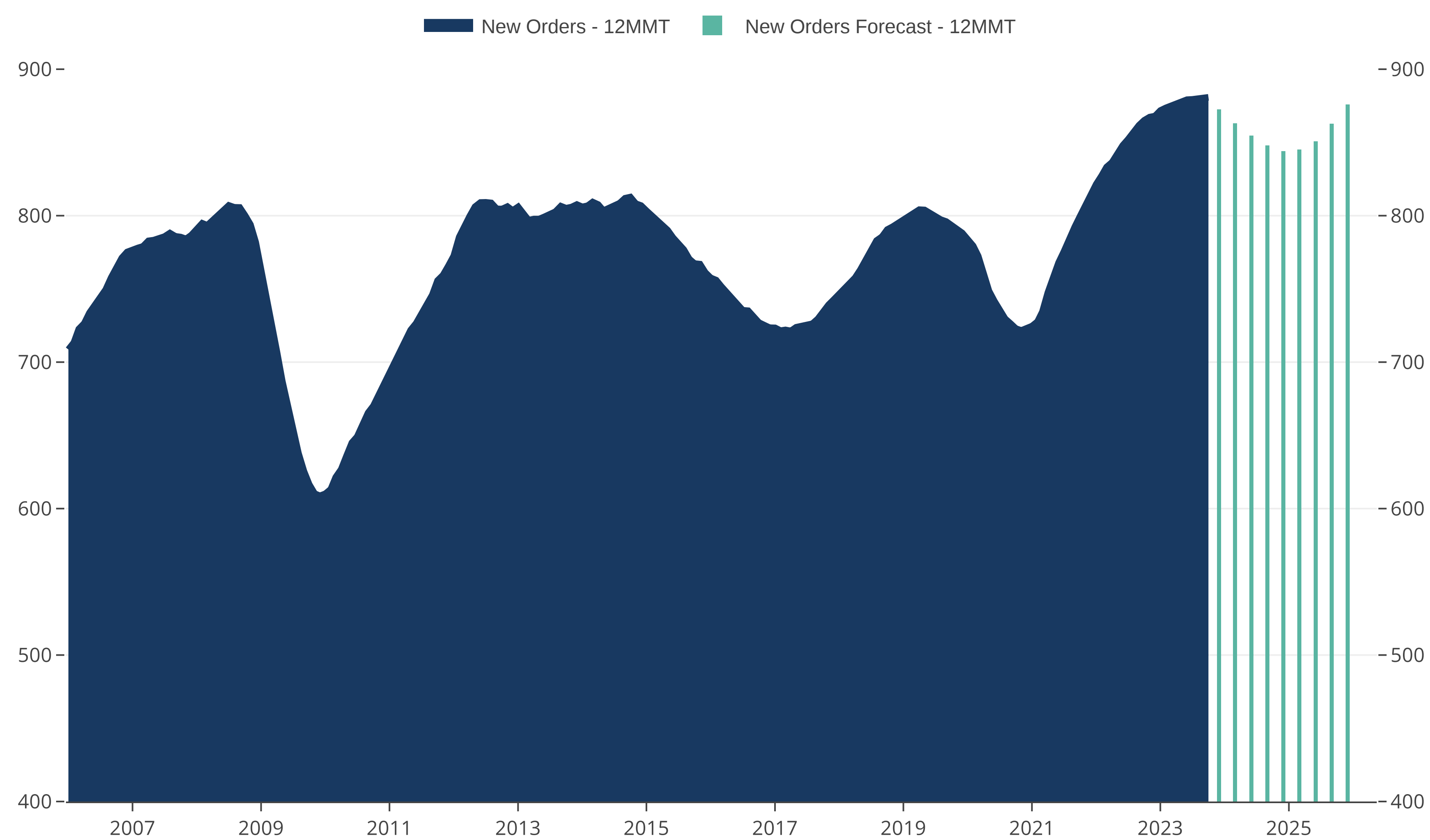
Outlook & Supporting Evidence

- US Industrial Production in the 12 months through November was 0.2% above the year-ago level. Annual Production has tentatively peaked and is mildly declining to close out 2023. We expect a more pronounced declining trend in 2024. Total peak-to-trough decline will be about 4%, similar to the decline in the early-2000s recession and the 2015-17 oil-driven recession.
- US Manufacturing Production, which accounts for about three-quarters of US Industrial Production, transitioned to Phase D, Recession, in the third quarter. The decline was most severe with nondurable goods, such as food, beverage, rubber, plastic, and paper products. Durable goods recently began to decline, and the decline likely to intensify in the near term as businesses face unfavorable sales-to-inventory ratios and elevated interest rates, which negatively impact big-ticket durable goods. This will put downside pressure on Industrial Production.
- Conversely, the mining component of Production is rising due to the current strength of the US oil and gas market. The annual US Oil and Gas Extraction Production Index has surpassed its pre-COVID record high by approximately 5%.
- Though declining, businesses currently have elevated profits and cash holdings. This will allow them to not only mitigate the downturn in 2024 but also leverage their financials to invest in efficiency and productivity gains and ultimately capitalize more effectively on Production rise in 2025.

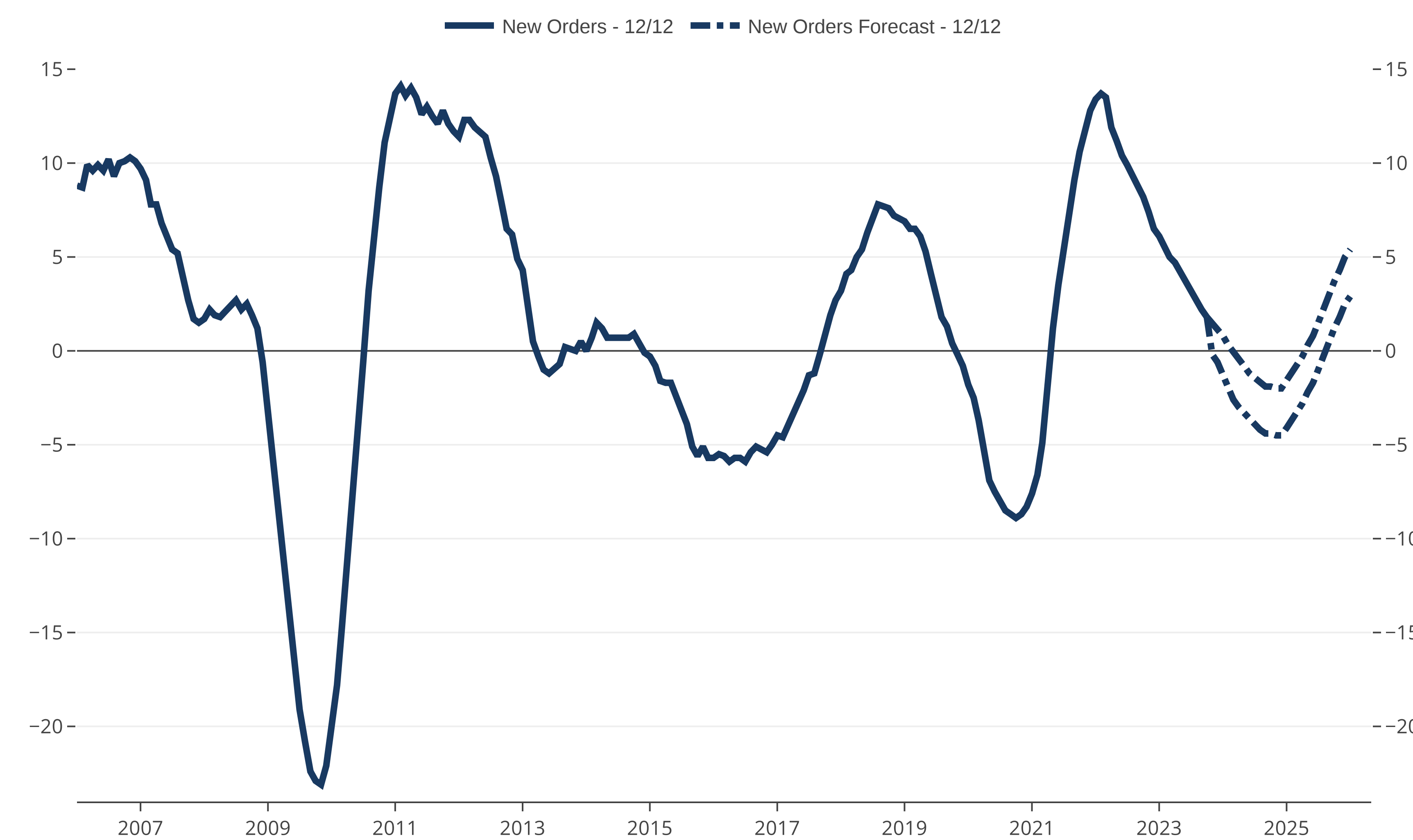
US Nondefense Capital Goods New Orders (excluding aircraft)

Imminent New Orders Decline to Persist Through 2024 From Strained Consumers and Hesitant Businesses

Annual Total (12MMT)



Annual Growth Rate (12/12)



Current Phase

Phase C
Slowing Growth

Current Indicator Amplitude

- October 2023 Annual Growth Rate (12/12): 1.8%
- October 2023 Annual Total (12MMT), Billions of USD: $880.8

Industry Outlook

Year	*Annual Growth Rate*
2023	0.3%
2024	-3.3%
2025	3.8%

Outlook & Supporting Evidence

- Annual US Nondefense Capital Goods New Orders (excluding aircraft) totaled $880.8 billion in October, 1.8% above one year ago. Expect New Orders to commence decline imminently; decline will persist through year-end 2024. The decline will be relatively mild, and, even at their lowest point, New Orders will remain well-above the pre-COVID average level.
- Consumers are weakening – savings balances are generally falling (when adjusted for inflation), housing affordability remains an issue, and credit card delinquency rates are rising. A strained consumer will be problematic for businesses, as consumers are the backbone of the US economy. Companies will likely reduce capital goods investments given lower levels of activity and heightened economic uncertainty. The decline will be manageable for most, as businesses generally have solid, though declining, profits and cash holdings to weather the macroeconomic recession.
- While many businesses will pause expansion plans given economic conditions, investing in your business may still be a good idea this year. Identify any efficiency improvements, labor-saving changes, or new capabilities that would help you maximize the next rising trend, which will arrive in 2025 as financial headwinds ease for both consumers and businesses. Try to time your improvements to come online in time for that 2025 rise, but keep in mind that record highs are likely further off in 2026.

US Machinery New Orders

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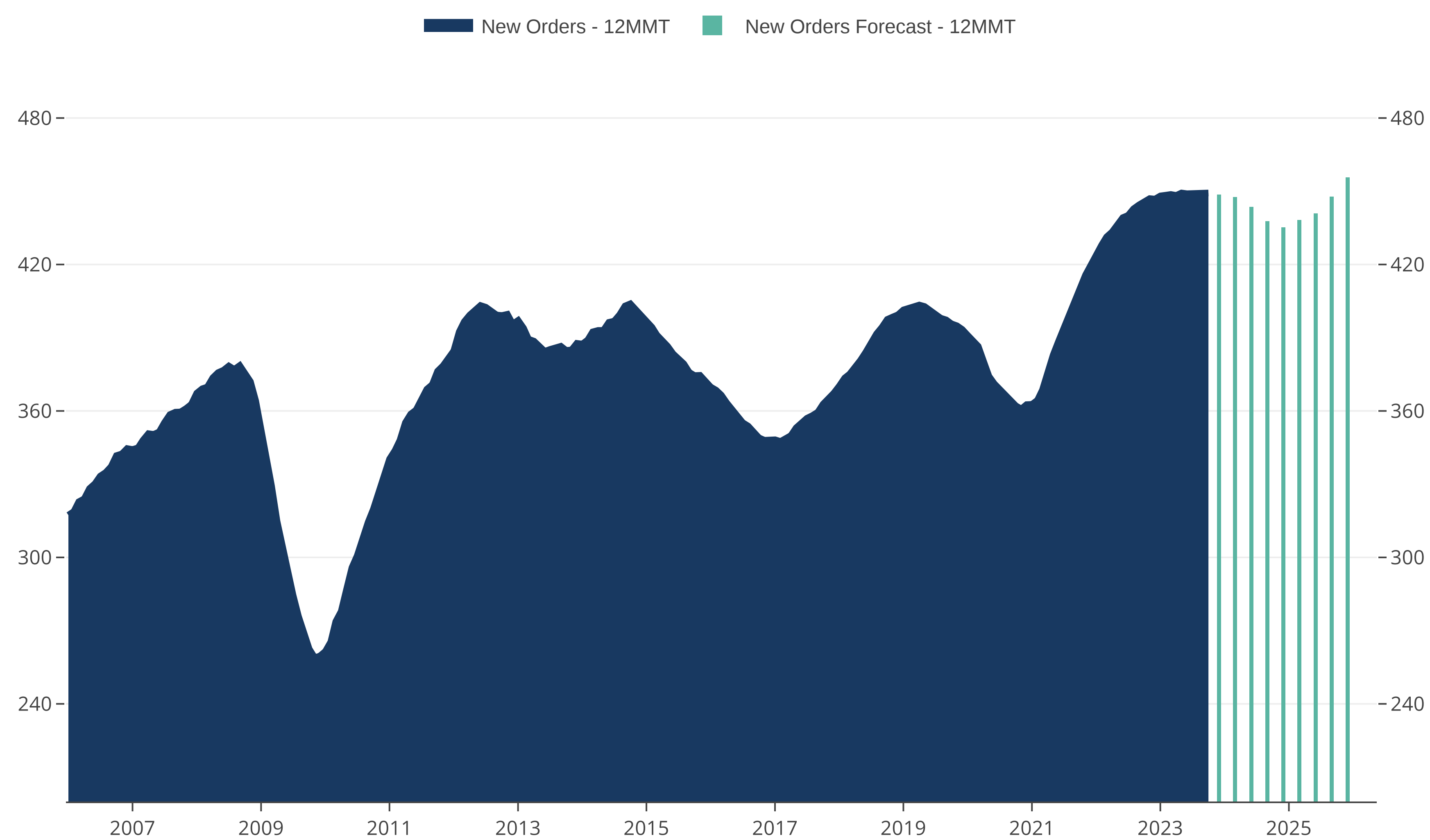
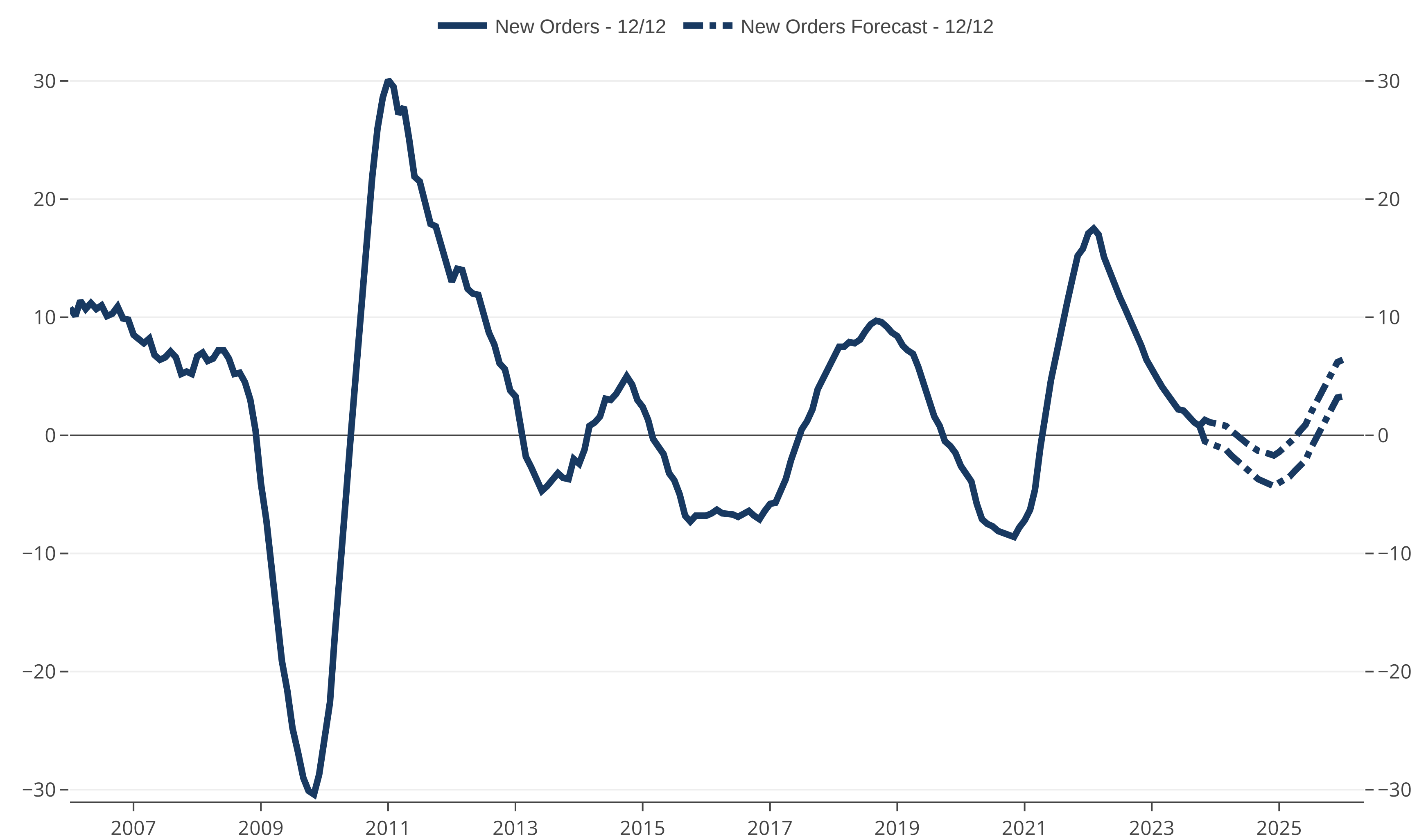
New Orders to Decline Through 2024 From a Weakened Industrial Sector and Tightened Credit Standards

Annual Total (12MMT)



Annual Growth Rate (12/12)



Current Phase

Phase C
Slowing Growth

Current Indicator Amplitude

- October 2023 Annual Growth Rate (12/12): 0.8%
- October 2023 Annual Total (12MMT), Billions of USD: $449.3

Industry Outlook

Year	*Annual Growth Rate*
2023	0.2%
2024	-3.0%
2025	4.7%

Outlook & Supporting Evidence

- Annual US Machinery New Orders totaled $449.3 billion in October, 0.8% above the year-ago level. Annual New Orders have tentatively peaked and are mildly declining. Our forecast shows that more pronounced, though still relatively mild, decline is likely throughout 2024. Expect peak-to-trough decline of about 3%.
- Signals from several key leading indicators, such as US Domestic Corporate Profits, materials prices, and US Exports of Goods to the World, indicate an imminent shift to Phase D, Recession, for New Orders.
- Decline will be caused by a contracting industrial sector (see the US Industrial Production Index page for more details) and an unfavorable lending environment. Businesses often turn to credit to purchase and update machinery, but with still-elevated interest rates and tightened lending criteria, this option has become more difficult and less appealing.
- At its last meeting, the Federal Reserve decided to hold the federal funds rate steady for now and signaled that rate cuts are likely in 2024. The exact timetable is not yet known. The full impact of prior monetary tightening will continue to manifest in 2024. Be prepared to take advantage of less-restrictive lending criteria when it presents itself, but don't expect a return to the low rates of 2020.
- Rise is expected for 2025 as the industrial sector rebounds and financial constraints lessen.

US Food Production Index

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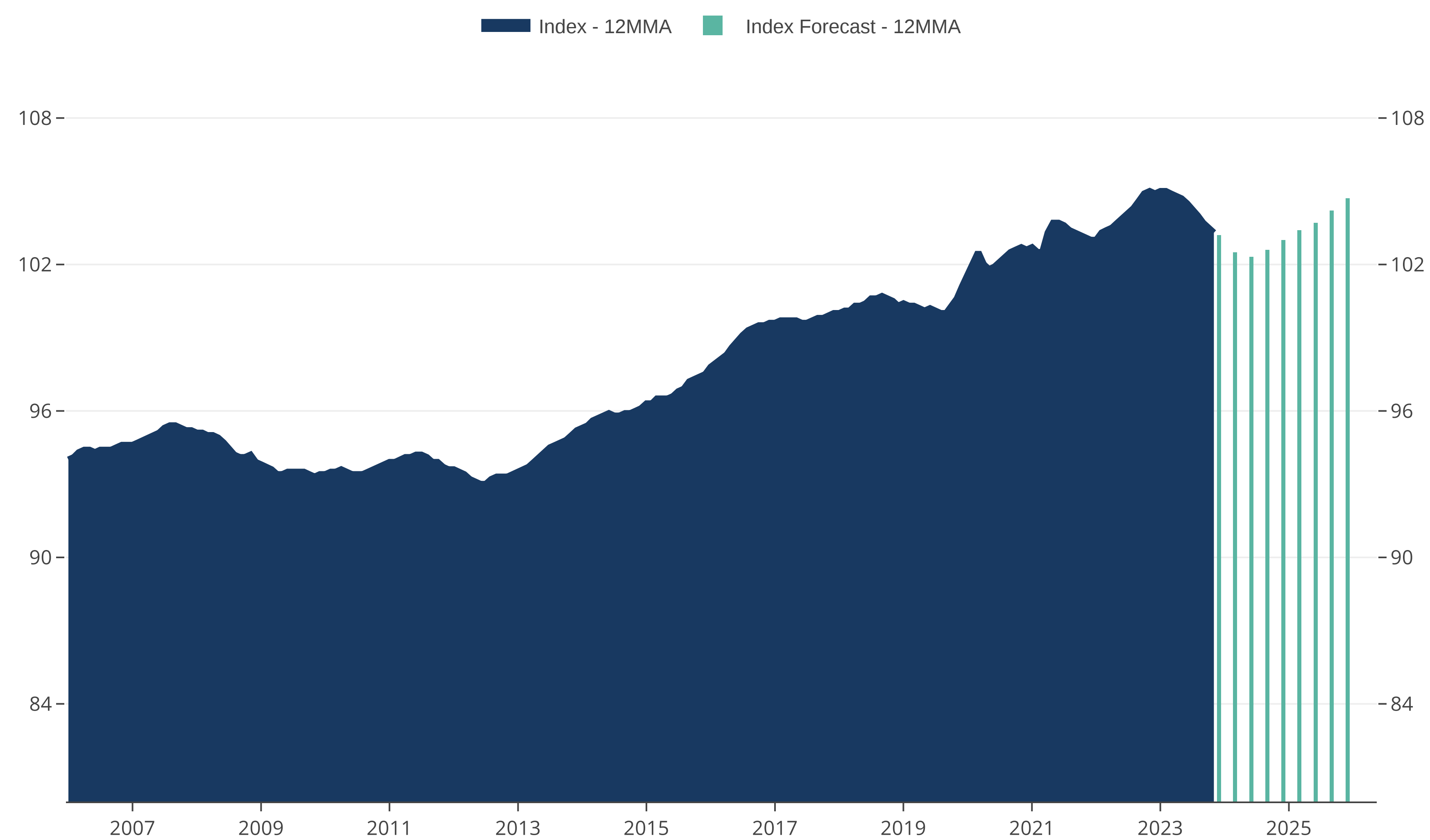
Forecast Revised; Production to Mildly Decline Into Mid-2024 and Then Rise Through at Least 2025

Annual Average (12MMA)



Annual Growth Rate (12/12)

Current Phase

Phase D
Recession

Current Indicator Amplitude

- November 2023 Annual Growth Rate (12/12): -1.5%
- November 2023 Annual Average (12MMA), 2017=100: 103.3

Industry Outlook

Year	*Annual Growth Rate*
2023	-1.7%
2024	-0.2%
2025	1.7%

Outlook & Supporting Evidence

- Annual US Food Production is now in Phase D, Recession. In November, Production came in 1.5% below the year-ago level. We recently revised the forecast downward to account for extreme weather events, plant closures, and general disruption in food supply chains. 2023 has been widely regarded as the hottest year on record, and the heat took its tool on livestock, crops, and, likely, farm worker efficiency.
- Continued descent in the US Food Utilization Rate supports our expectation for further mild decline in Production in the near term; we expect decline to persist through the first half of 2024. Decline is occurring in the majority of the Production components, including animal processing, dairy, sugar, fruits and vegetables, and grain.
- Leading indicator evidence suggests the Production low point will occur in early 2024, which is earlier than the overall macroeconomic low, forecasted to be closer to the end of 2024. We expect resumed rise for Production in the latter half of 2024 as the exogenous and market-specific factors of 2023 resolve.
- Growth rates in the low single digits are the norm for this market. While budget-strapped consumers may limit their discretionary spending, the food production market is typically not as sensitive to downturns.

US Medical Equipment and Supplies Production Index

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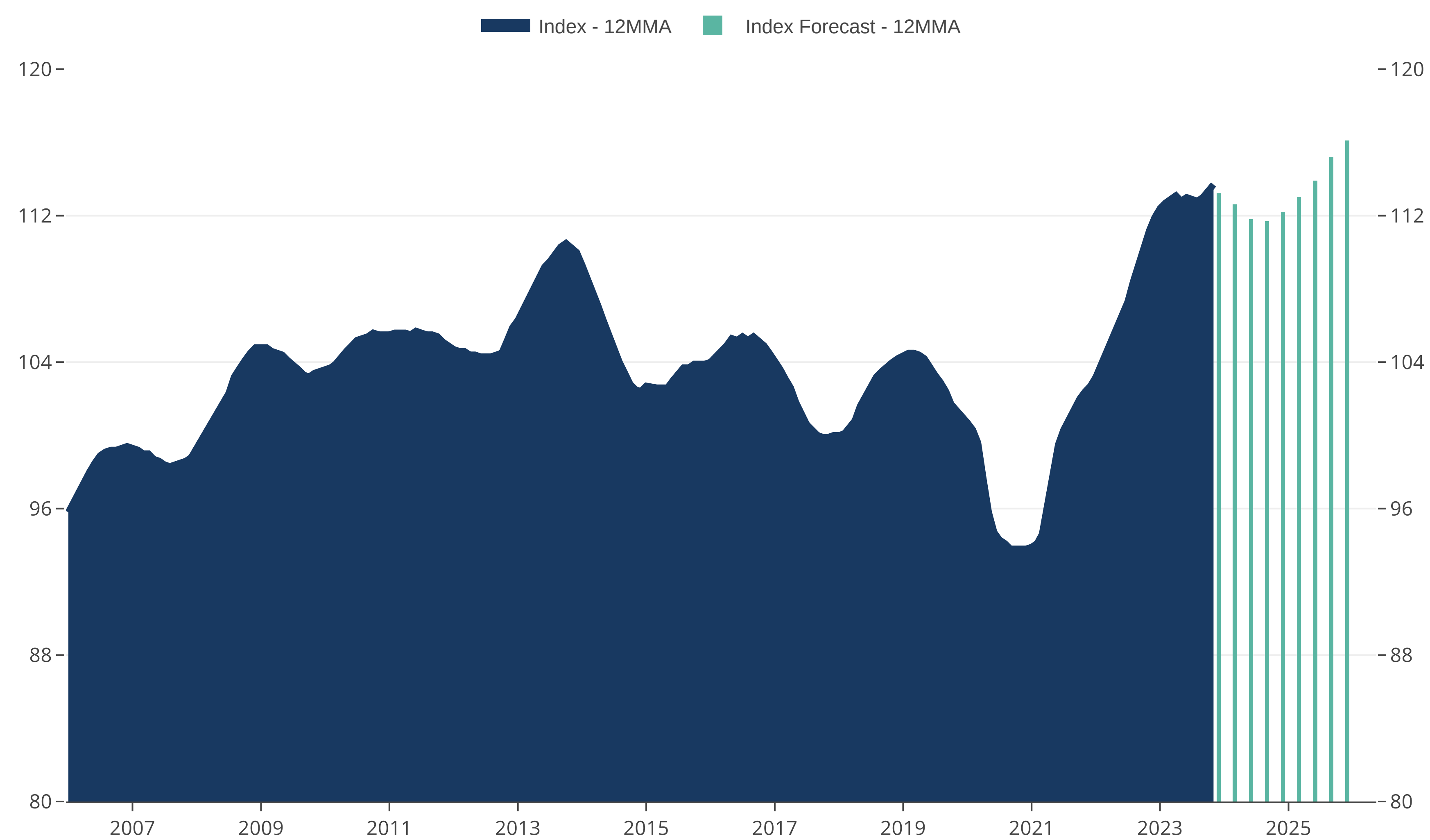
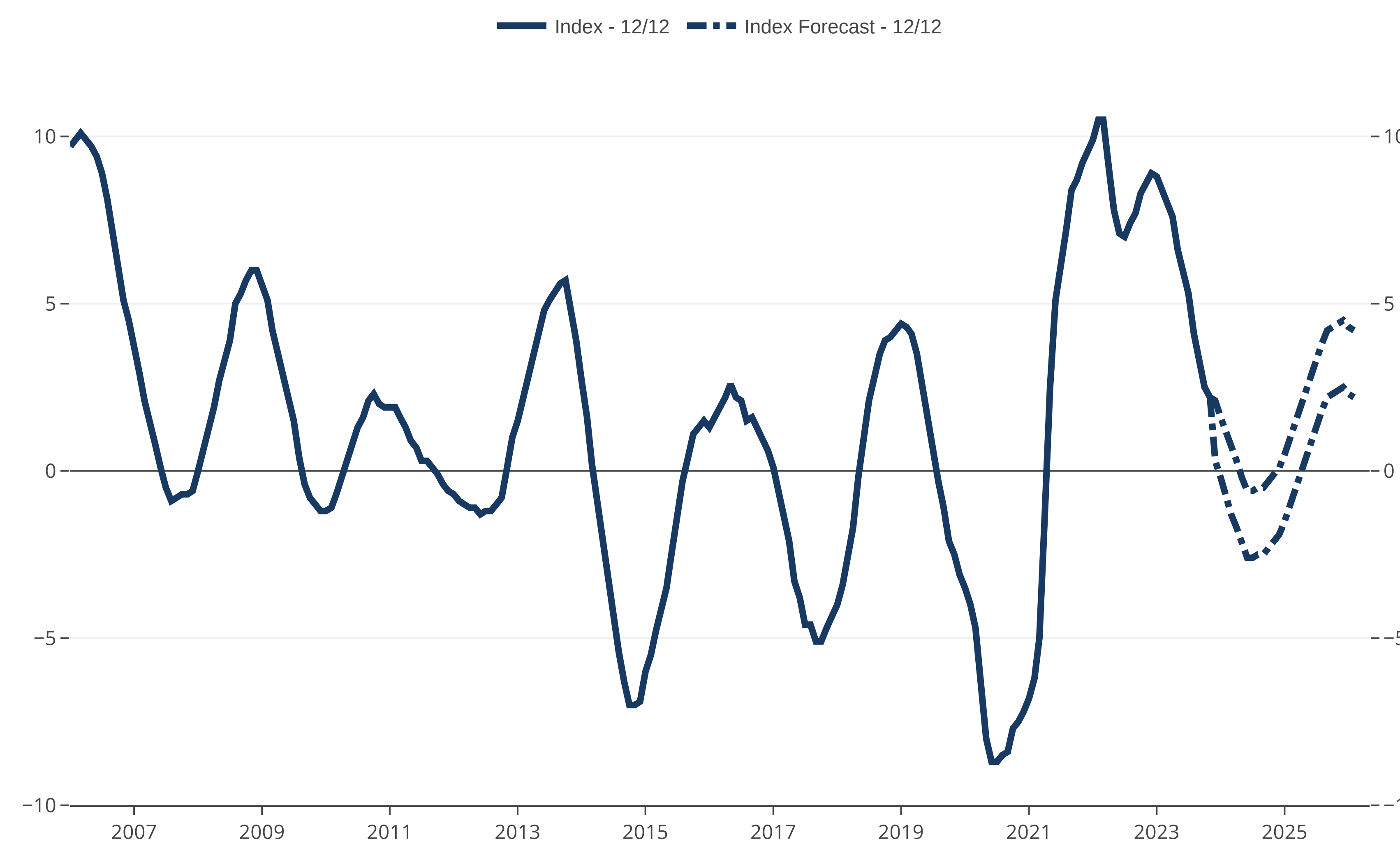
Weaker Consumer Will Hinder Demand for Discretionary Purchases; Mild Decline Is Probable in 2024

Annual Average (12MMA)



Annual Growth Rate (12/12)



Current Phase

Phase C
Slowing Growth

Current Indicator Amplitude

- November 2023 Annual Growth Rate (12/12): 2.2%
- November 2023 Annual Average (12MMA), 2017=100: 113.7

Industry Outlook

Year	*Annual Growth Rate*
2023	1.2%
2024	-0.9%
2025	3.5%

Outlook & Supporting Evidence

- Annual US Medical Equipment and Supplies Production was 2.2% above the year-ago level in November. Production is currently plateauing, but we anticipate decline, albeit mild, into late 2024. From there, expect rise through at least 2025 with annual Production ending that year at a record level.
- Several leading indicators, such as the US ISM PMI (Purchasing Managers Index) and ITR Retail Sales Leading Indicator™, are signaling further rate-of-change decline as both manufacturing and consumer-facing industries face worsening economic conditions. Consumers continue to weaken financially. While medically necessary procedures are not likely to decline, expect consumers to reduce spending on elective procedures.
- Both the essential nature of this market and broader near-souring trends are likely to contribute to the mildness of decline this cycle.
- The current Phase A, Recovery, trend in US Medical and Diagnostic Laboratories Services Revenue and our outlook for improved macroeconomic conditions suggest rise for Production in 2025. However, US Hospital Services Revenue poses the potential upside risk of an earlier cyclical low for Production.

US Leading Indicators

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Indicator	Direction		
	1Q24	2Q24	3Q24
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 for the economy in the given quarter. Red denotes the opposite.

What It Means for the US Economy

- General ascent in the ITR Leading Indicator™ stalled in November, suggesting the upcoming recovery could be choppy and sluggish for the industrial sector.

- The US ISM PMI (Purchasing Managers Index) monthly rate-of-change rose in November. The historic relationship between the Index and US Industrial Production would suggest that Industrial Production could begin recovering as early as 2Q24. However, our analysis of the PMI components in conjunction with the preponderance of economic evidence, including a still-inverted yield curve, suggests industrial activity will decline through 2024.

- The US Total Industry Capacity Utilization Rate ticked up in November, but the overall trend for the Utilization Rate is still negative. The overarching trend in the Rate 1/12 suggests US Industrial Production 12/12 decline into at least mid-2024, in line with the forecast.

Many indicators point to decline in industrial activity in the quarters ahead. Sustained inversion of the yield curve remains a downside risk, and we foresee consumer weakness on the horizon. Evaluate your cash position periodically as we head into a mild macroeconomic recession, and lead with optimism, as downturns are temporary.

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 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. Measured in billions of dollars, not seasonally adjusted (NSA). Source: US Census Bureau.

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

