



**AMERICAN MOLD
BUILDERS ASSOCIATION**

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ASSOCIATION FOR RUBBER
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MANUFACTURERS ASSOCIATION
FOR PLASTICS PROCESSORS

Market Forecast Report

July 2024

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Economic Overview

Economic prospects have taken a positive turn, and we have adjusted many of our forecasts upward. On net, the economic evidence indicates that a plateau in 2024 is more likely than the previously forecasted mild recession for B2B spending and industrial activity, though this plateau may have a slight downward bias. Consumer- and services-heavy US Real GDP and US Total Retail Sales will slow in growth in 2024. Leading indicators signal a stronger year for the US macroeconomy come 2025.

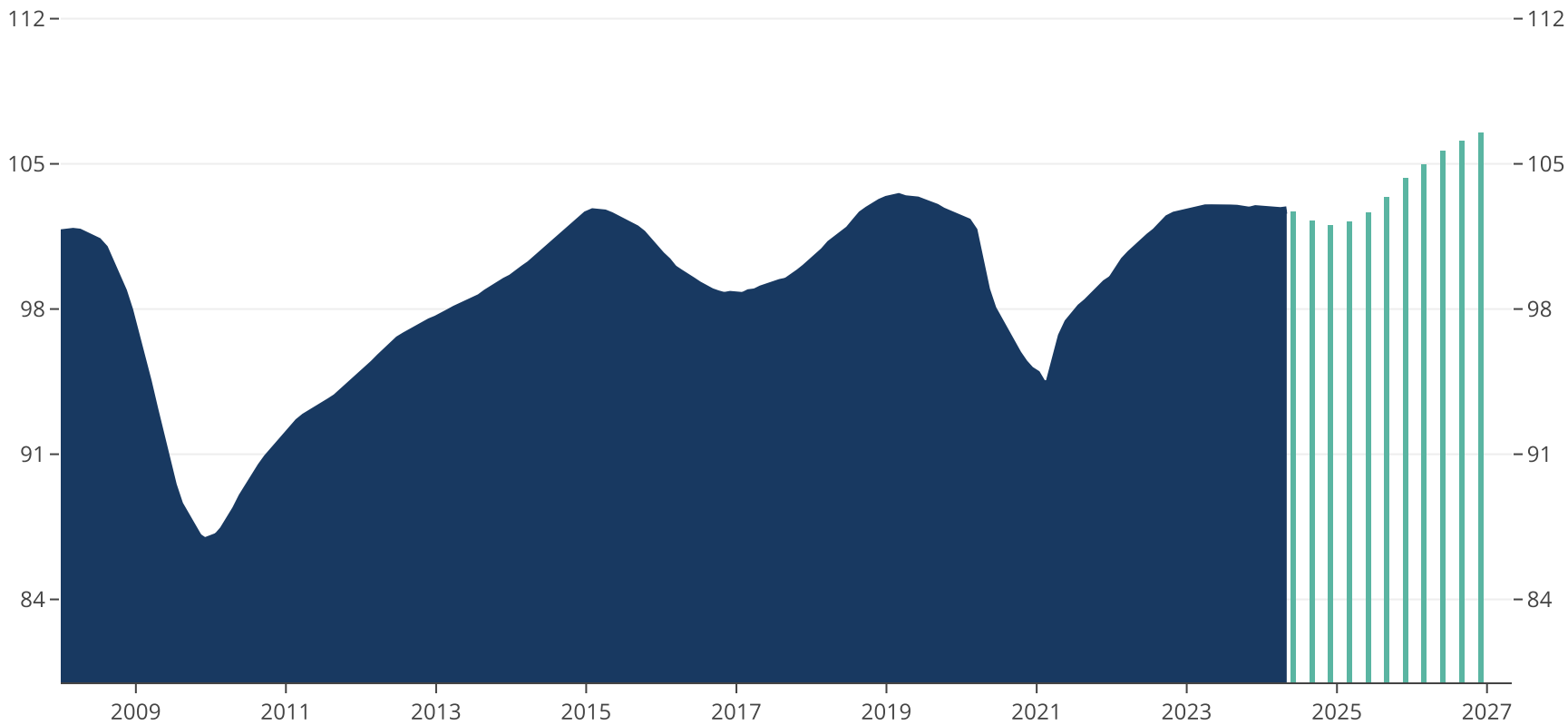
Stimulating Factors and How to Harness These Trends

- 1) Nearshoring and onshoring: While semiconductor and chip manufacturing dominate the news on onshoring efforts, manufacturers across the economy are moving supply chains closer to home at an accelerated pace post-COVID. Producing closer to home can improve agility, protection of intellectual property, and environmental compliance. Look for opportunities to gain market share from this trend of de-globalization; however, be aware that higher costs are a likely side effect. Margin-improvement is a must to sustain profitability in the coming years.
- 2) Government spending: Federal government spending has increased considerably from 2020 onward. Knock-on effects to the private sector have shifted over the course of this business cycle in a milder direction. While the longer-term impacts remain to be seen, the near-term impacts are higher manufacturing and nonresidential construction activity than we would have otherwise seen. Consider targeting markets with exposure to government investments, either directly or indirectly.
- 3) Corporate cash balances are elevated: Many businesses were able to pass along costs during the inflationary burst following the pandemic and were therefore able to build up cash holdings. This cash buffer makes the 2022-23 jump in interest rates less of an issue for some. If you are flush with cash, put it to use with a focus on reducing your dependency on labor, embracing new technology to improve efficiency, and prepping for an environment of higher inflation in the years ahead. Consider new products or markets to expand into over the longer term to buck some of the headwinds we see coming in the 2030s.
- 4) Resilient consumers: The tight labor market has kept upside pressure on wages. As a result, US Real Personal Incomes are rising, allowing consumers to continue spending at a pace exceeding inflation. Like in the business world, outcomes are divergent. Look for ways to cater to consumers with more discretionary spending. Lower-income consumers are feeling the pinch of inflation and high interest rates more acutely.

Planning for Challenges Ahead

With large amounts of government spending, inflation is likely to be “sticky.” Persistent inflation poses financial planning challenges and could increase the difficulty of passing along price increases. A further consequence of inflation is its impact on Federal Reserve policy; a rate cut is still on the table for later this year, but slow progress on inflation increases the risk of higher-for-longer rates. A delayed lowering of rates could prolong economic pain for industries most sensitive to rates. Additionally, while the tight labor market will likely be a boon for consumers in the coming years, it will constrain opportunities for growth if your business is unable to staff up to meet demand. To that end, efficiency gains in your business—whether through implementation of AI, automation, or process improvements—will allow you to remain competitive. These challenges are not insurmountable; advanced planning can you help manage risks and get a step ahead of your competition. Remember to zoom out from the day-to-day to reflect on your competitive advantages and your longer-term strategy.

US Industrial Production Index Annual Average (12MMA)



Terminology and Methodology

Data Trends: Moving Averages and Totals

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

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

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

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

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

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

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

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

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

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

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

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

Growth Rates

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

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

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

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

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

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

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

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

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

Business Cycle Phases



Recovery (A)

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



Accelerating Growth (B)

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



Slowing Growth (C)

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



Recession (D)

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

Markets Dashboard

		Current		Annual Growth Rate Forecast (12/12), Year-End*		
Page Number	Indicator	Growth Rate**	Phase	2024**	2025**	2026**
4	US Total Retail Sales	3.3%	C	3.1%	4.6%	4.5%
5	North America Light Vehicle Production	6.5%	C	0.5%	0.9%	3.7%
6	US Medical Equipment and Supplies Production Index	1.7%	C	1.9%	-0.5%	1.9%
7	US Private Nonresidential Construction	11.9%	C	3.6%	-5.2%	1.8%
8	US Agriculture, Construction and Mining Machinery Production Index	-4.7%	D	-3.9%	5.7%	2.8%

*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)



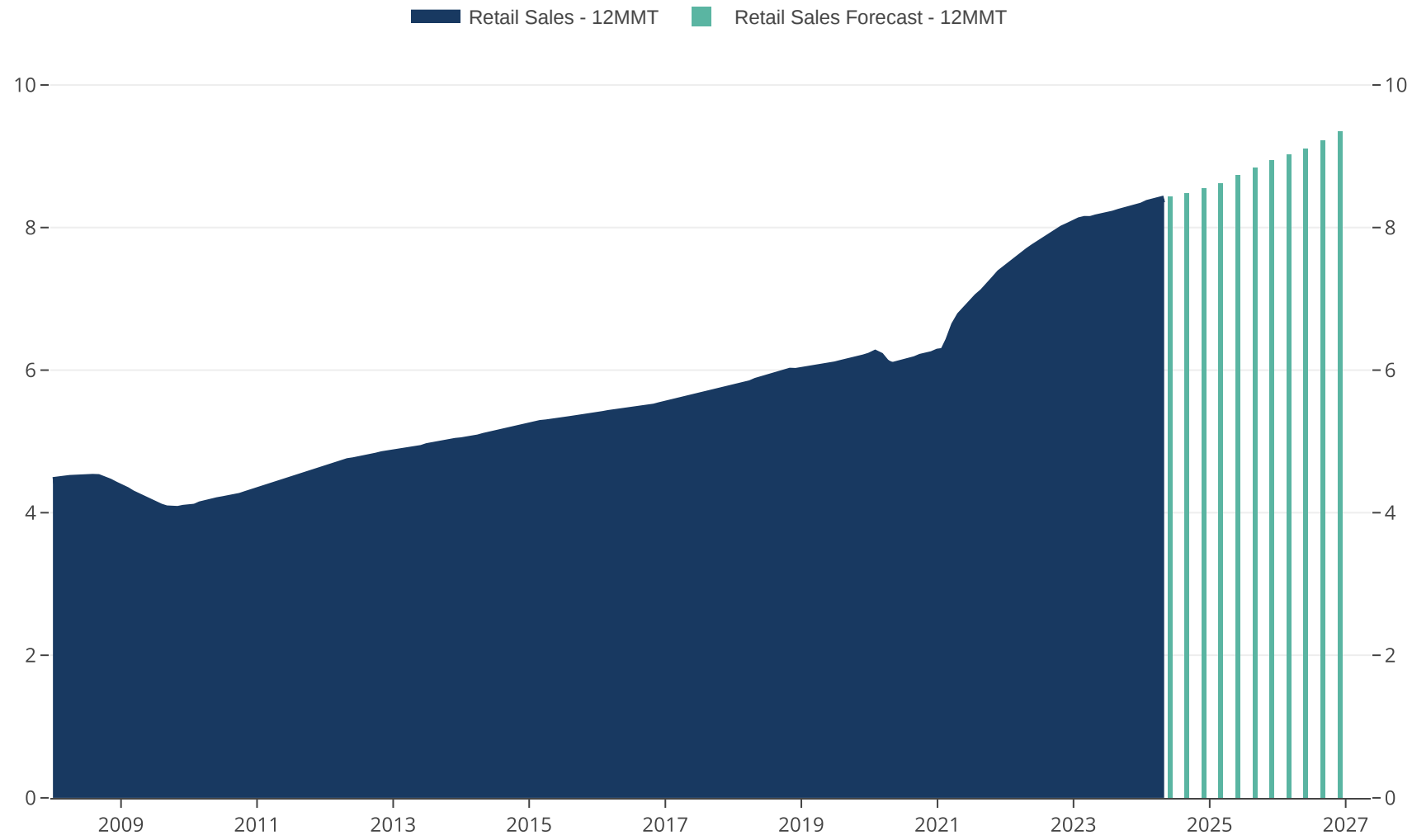
Slowing Growth (C)



Recession (D)

Forecast Revised Due to Consumer Strength, Stubborn Inflation; Expect Rise Through at Least 2026

Annual Total (12MMT)



Annual Growth Rate (12/12)



Current Phase



Phase C
Slowing Growth

Current Indicator
Amplitude

- May 2024 Annual Growth Rate (12/12): 3.3%
- May 2024 Annual Total (12MMT), Trillions of USD: \$8.403

Industry Outlook

Year Annual Growth Rate

2024	3.1%
2025	4.6%
2026	4.5%

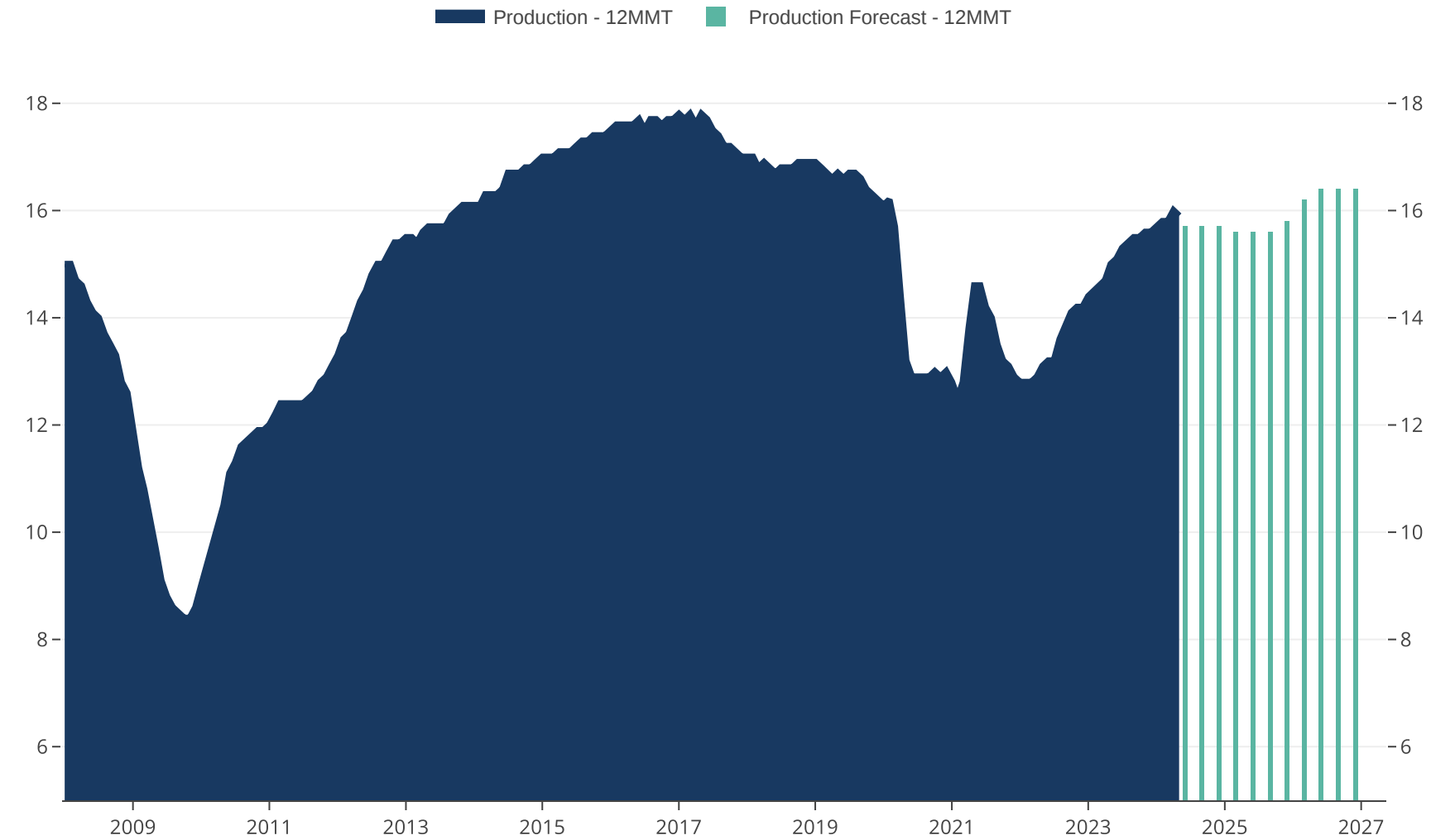
Outlook & Supporting Evidence

- We revised the US Total Retail Sales forecast upward by 4%-5%. Consumers have remained resilient despite higher interest rates, continuing to spend on both goods and services. Additionally, consumer inflation was running higher than anticipated, resulting in an upgrade to our US Consumer Price Index outlook. This upgrade means that we expect higher results for dollar-denominated Retail Sales. We still expect real (inflation-adjusted) growth in Retail Sales, but at a lower pace than the dollar figures suggest.
- We are now projecting that this will be a non-recessionary cycle for Retail Sales. The tight labor market is expected to continue, which will drive rise in inflation-adjusted wages. These higher wages are likely to translate to increased spending. As a result, we expect annual Retail Sales will rise through at least 2026.
- Much of Retail Sales rise is being driven by middle-to-upper-income consumers, who have fared relatively better than their lower-income counterparts through the period of high inflation. Consider these differences when marketing to different demographics - stress value when targeting groups that are feeling the squeeze of inflation. Even if your business itself is not consumer-facing, given that roughly two-thirds of the US economy is consumer spending, there is likely an impact down the line.

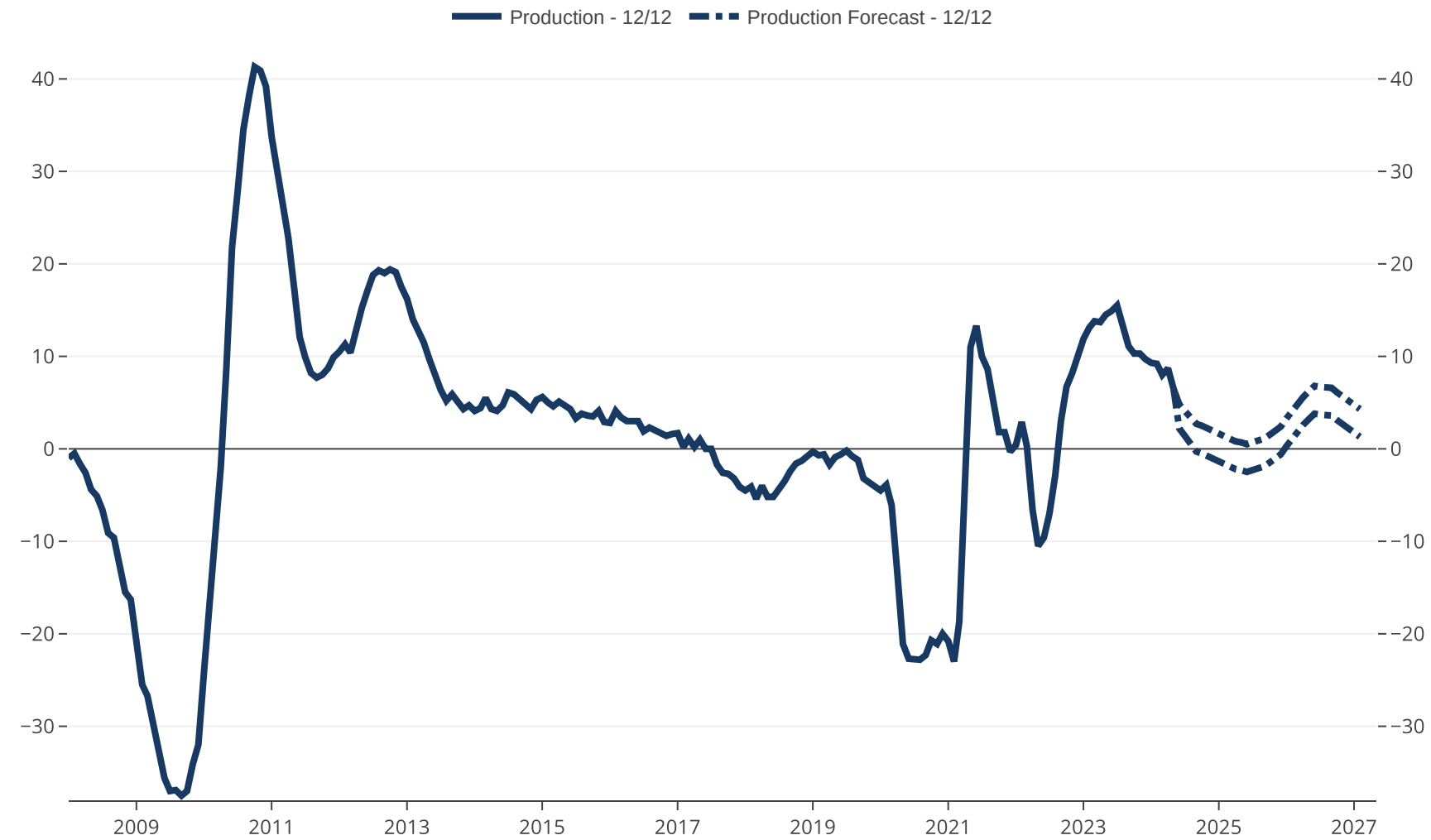
North America Light Vehicle Production

Production to Plateau This Year; High Interest Rates Downside, Resilient Consumer Upside

Annual Total (12MMT)



Annual Growth Rate (12/12)



Current Phase



Phase C
Slowing Growth

Current Indicator
Amplitude

- May 2024 Annual Growth Rate (12/12): 6.5%
- May 2024 Annual Total (12MMT), Millions of Units: 15.9

Industry Outlook

Year Annual Growth Rate

2024	0.5%
2025	0.9%
2026	3.7%

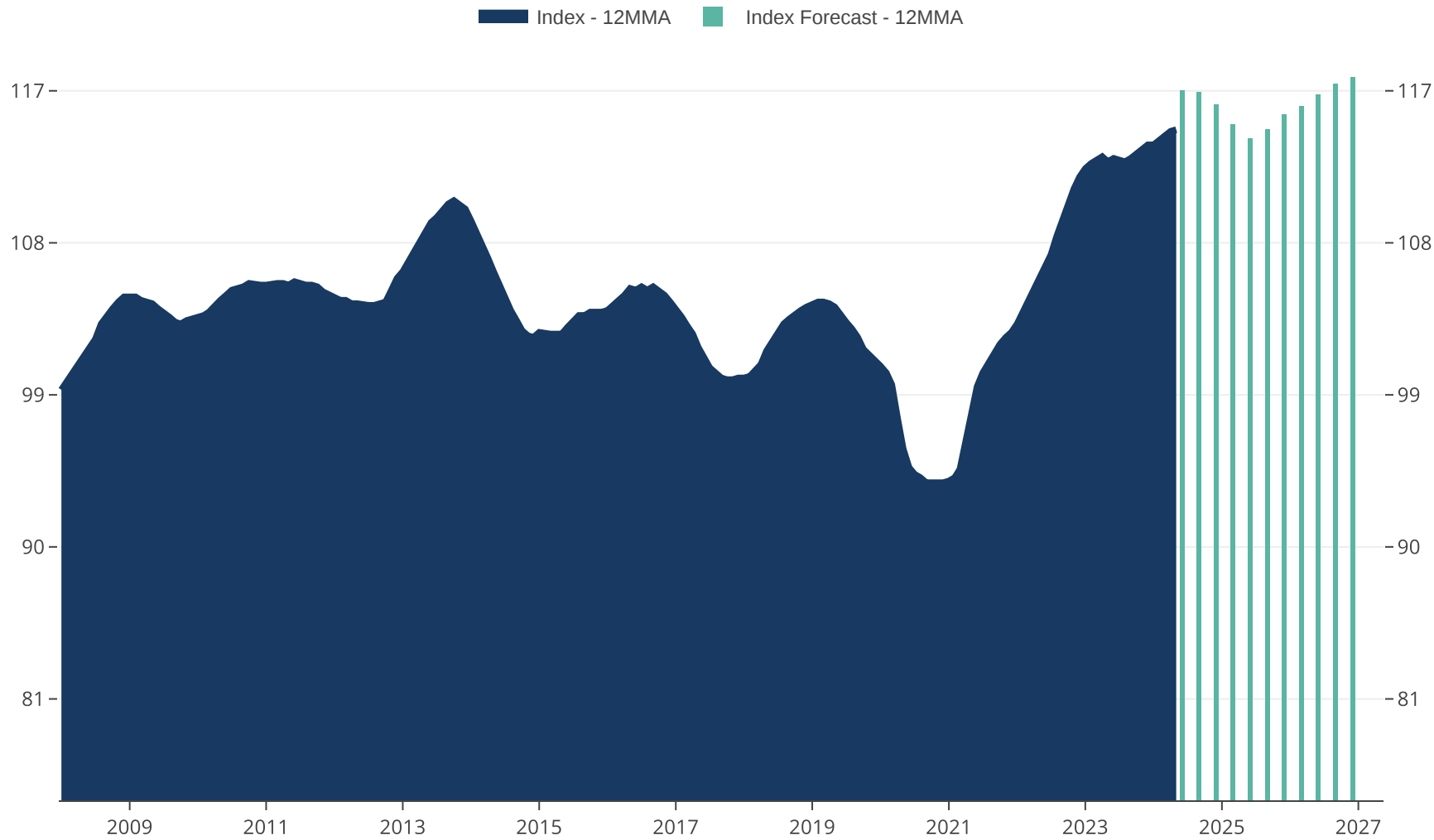
Outlook & Supporting Evidence

- Annual North America Light Vehicle Production will plateau with a mild downward bias through the first half of 2025. A plateau in Production is a result of opposing factors. There are upsides from a rebuilding of light vehicle inventory and a more resilient middle-to-upper-income consumer. Expect downward pressure on Production from high interest rates and from rising, but still relatively low, auto loan delinquency rates.
- Annual Production will begin to rise in the second half of 2025 amid a growing macroeconomy, with most consumers finding themselves in better financial positions given a tight labor market and more dovish monetary policy. Rise will persist through at least 2026, with annual Production up 3.7% year-over-year.

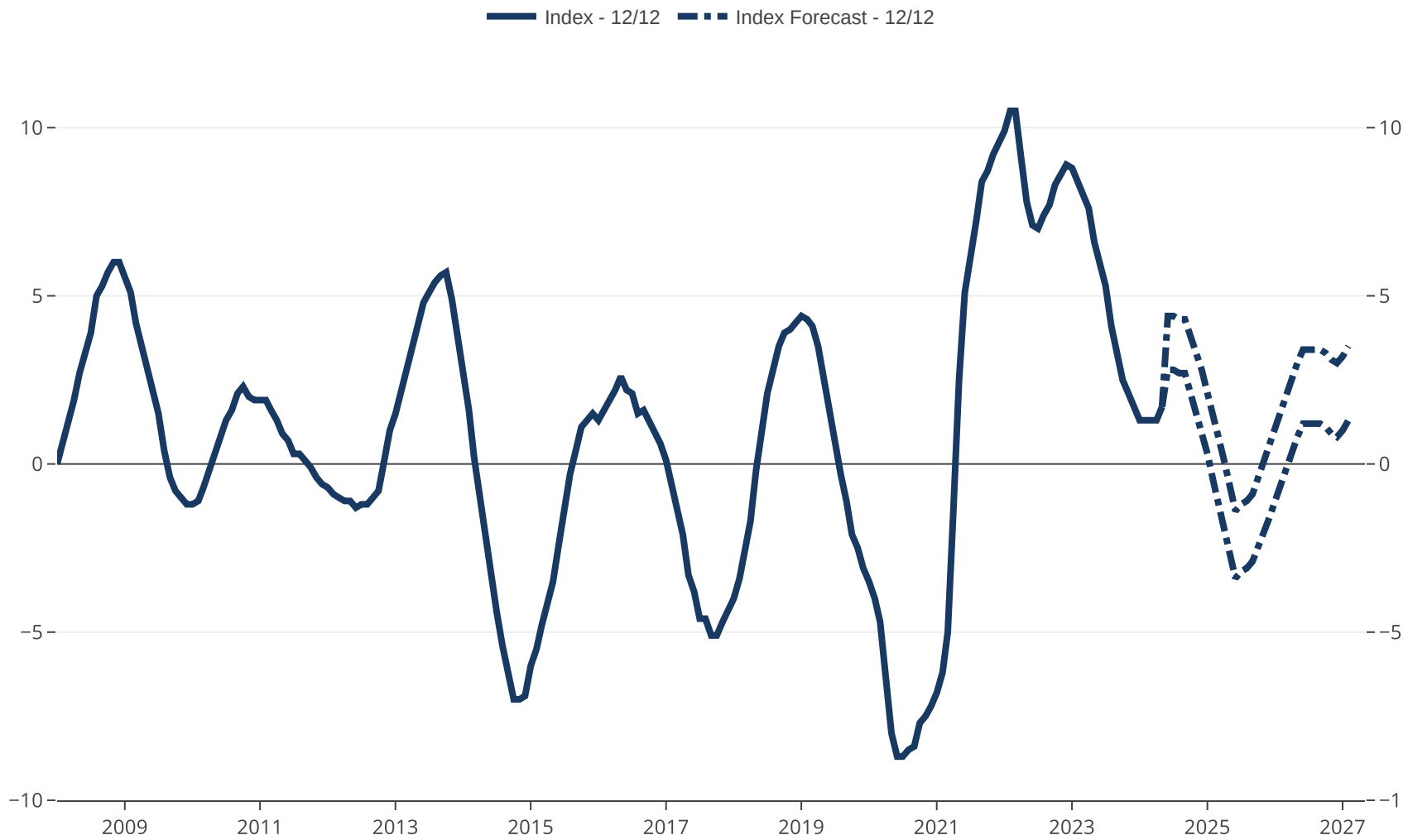
US Medical Equipment and Supplies Production Index

Domestic COVID-Induced Market Share Gains Likely to Hold; Near-Term Mild Production Decline Expected

Annual Average (12MMA)



Annual Growth Rate (12/12)



Current Phase



Phase C
Slowing Growth

Current Indicator
Amplitude

- May 2024 Annual Growth Rate (12/12): 1.7%
- May 2024 Annual Average (12MMA), 2017=100: 114.7

Industry Outlook

<u>Year</u>	<u>Annual Growth Rate</u>
2024	1.9%
2025	-0.5%
2026	1.9%

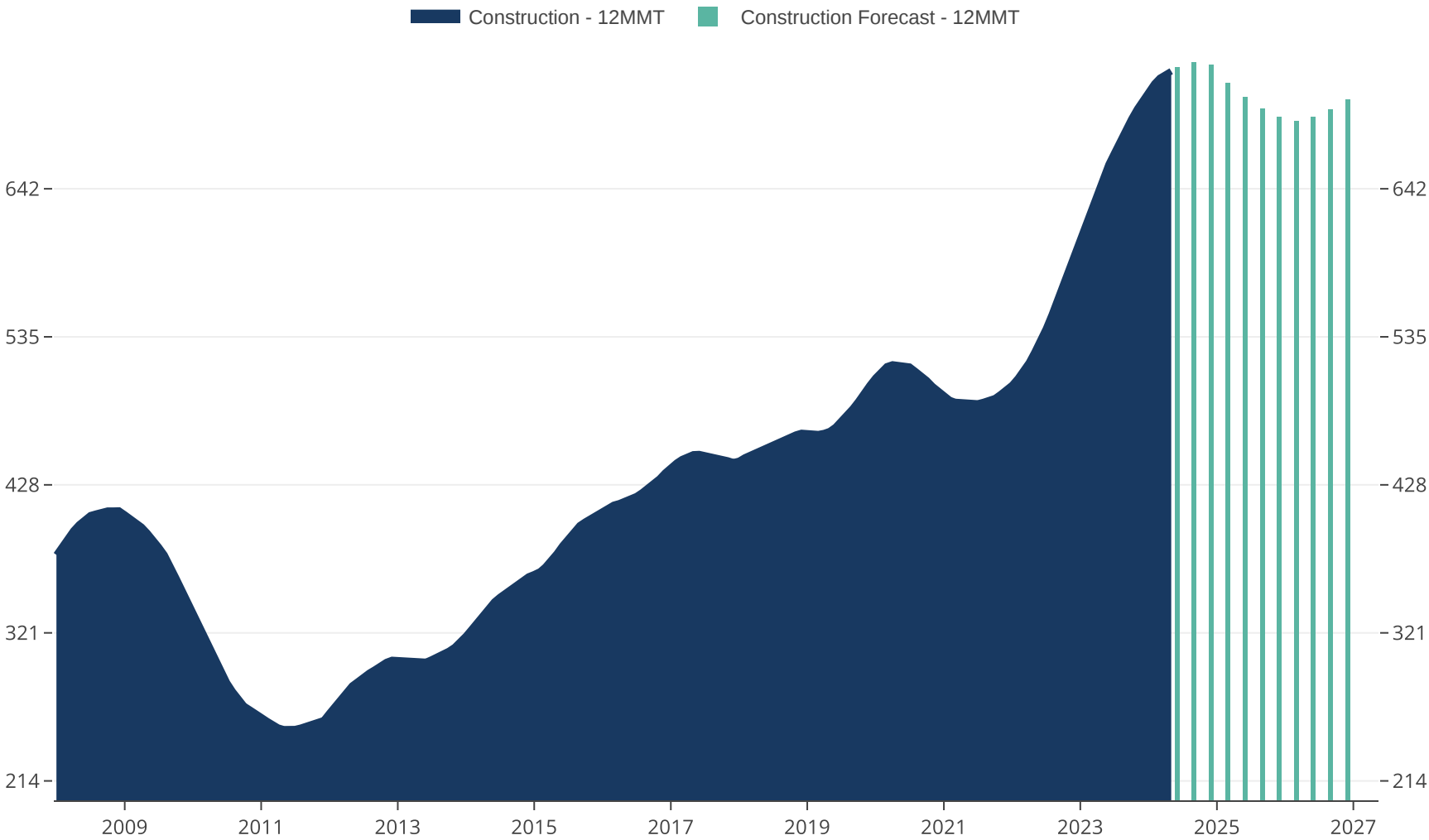
Outlook & Supporting Evidence

- US Medical Equipment and Supplies Production in the 12 months through May came in 1.7% above the year-ago level. We expect mild decline in Production to occur in the near term, with decline extending into around the middle of next year. Subsequent annual Production rise will extend through at least 2026.
- Hard landings (Phase D, Recession) are typical for the medical equipment and supplies market, but market conditions shifted significantly following the pandemic, and our analysis suggests some of the market share gains made in recent years are likely to be kept or improved upon. As a result, we expect decline to be mild this cycle. Recently increased tariffs on some Chinese medical products, including syringes and needles, certain respirators and face masks, as well as rubber gloves, offer an opportunity for domestic producers to gain additional market share.
- This market continues to offer long-term opportunity given an aging demographic profile in the US and abroad. The baby boomer generation is the largest generation to retire thus far, and they will likely increase medical spending as they age. This larger market will offer opportunity for increased business.

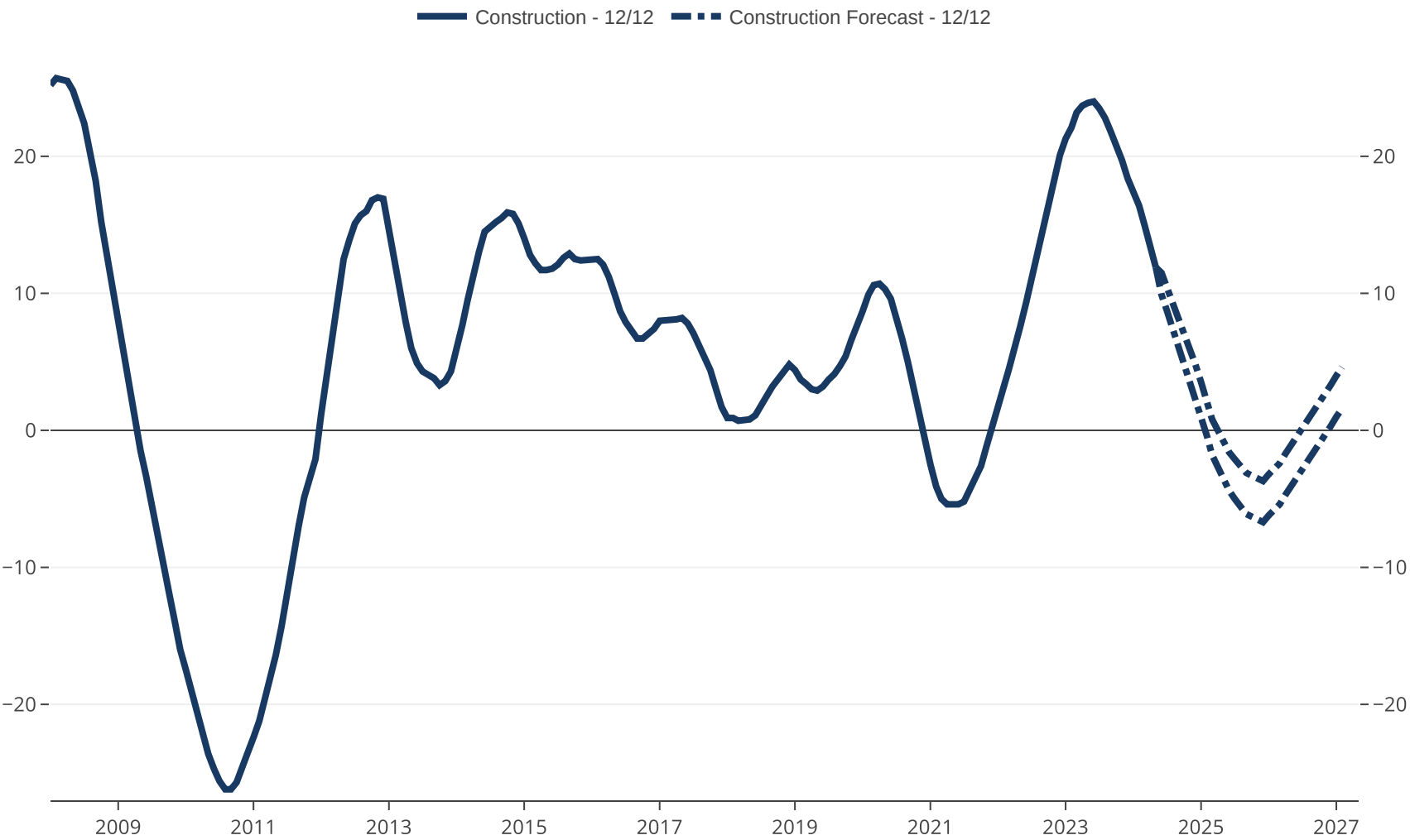
US Private Nonresidential Construction

Forecast Revised Due to Data Revision, Updated Macroeconomic and Industrial Sector Expectations

Annual Total (12MMT)



Annual Growth Rate (12/12)



Current Phase



Phase C
Slowing Growth

Current Indicator
Amplitude

- May 2024 Annual Growth Rate (12/12): 11.9%
- May 2024 Annual Total (12MMT), Billions of USD: \$727.0

Industry Outlook

<i>Year</i>	<i>Annual Growth Rate</i>
2024	3.6%
2025	-5.2%
2026	1.8%

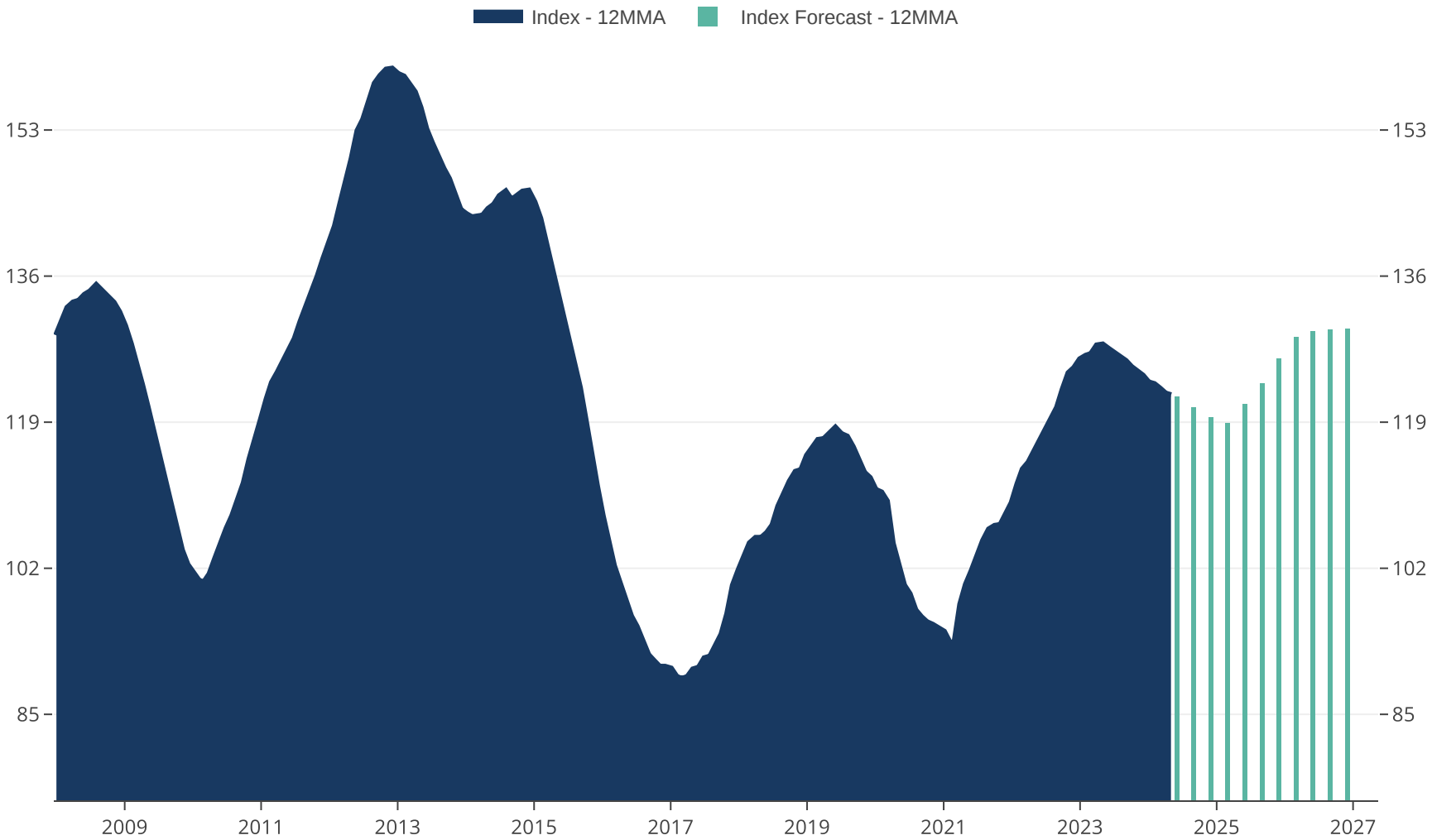
Outlook & Supporting Evidence

- An annual data revision by the US Census Bureau necessitated a revision to the US Private Nonresidential Construction forecast. Our overarching expectations for nonresidential construction are largely similar to the prior outlook, though we also incorporated some higher macroeconomic and industrial sector expectations into our analysis.
- Previous residential construction negativity and decline in the US Architecture Billings Index indicate downward pressure on Construction, signaling that the Construction annual growth rate will decline in the coming quarters. Interest rate impacts will also contribute to business cycle decline in this market. However, the expected "soft landing" in the macroeconomy and relative plateau in the industrial sector will mitigate the extent of decline in Construction.
- We anticipate an annual Construction peak in the near term. Subsequent decline will extend into early 2026, given aforementioned signals from interest rates, the housing market, and architecture billings, among others. We expect Construction rise from mid-2026 through at least the end of that year.

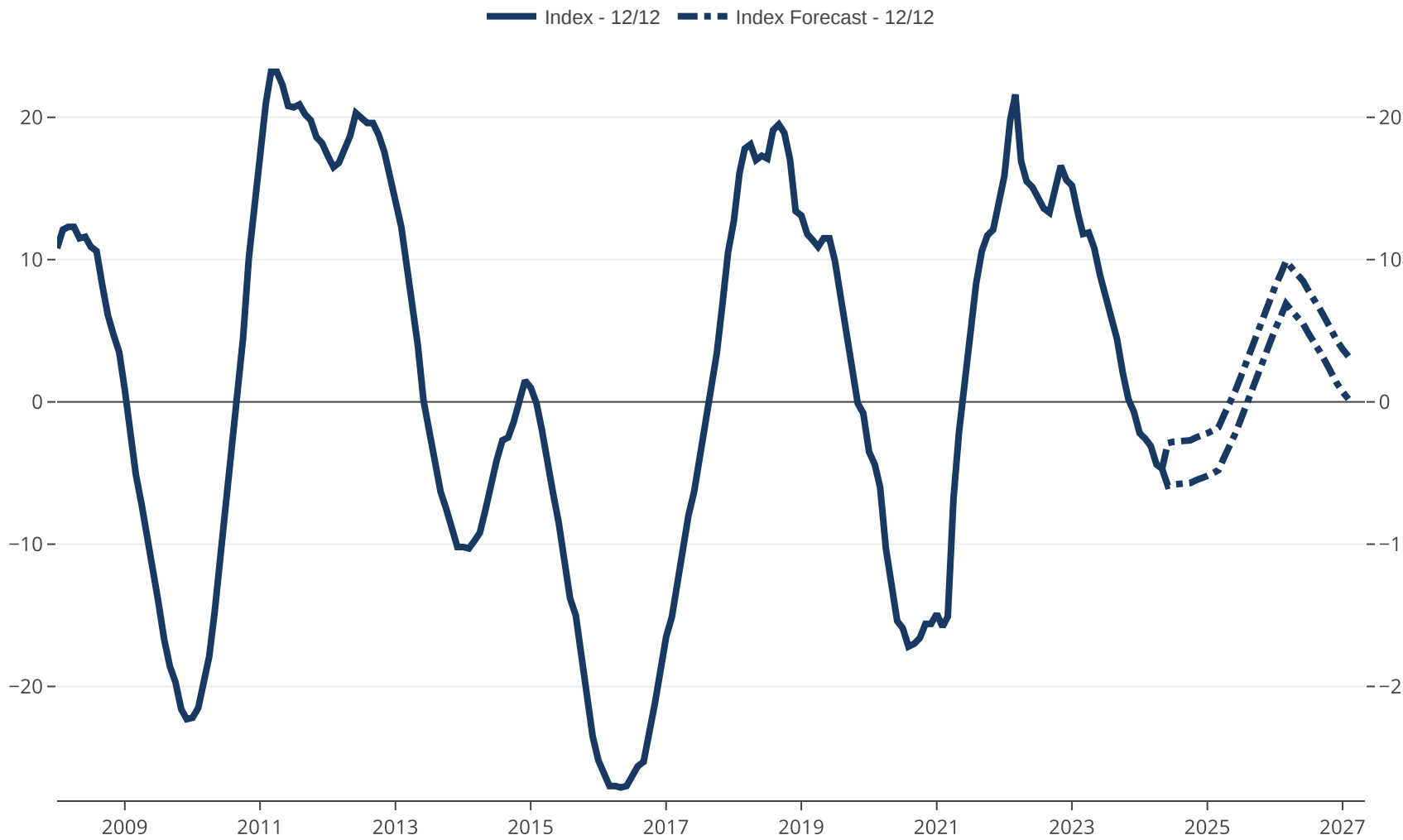
US Agriculture, Construction and Mining Machinery Production Index

Forecast Lifted; Utilization Rates, Stock Prices, and Housing Starts Signal Phase A, Recovery, Soon

Annual Average (12MMA)



Annual Growth Rate (12/12)



Current Phase



Phase D
Recession

Current Indicator
Amplitude

- May 2024 Annual Growth Rate (12/12): -4.7%
- May 2024 Annual Average (12MMA), 2017=100: 122.1

Industry Outlook

Year Annual Growth Rate

2024	-3.9%
2025	5.7%
2026	2.8%

Outlook & Supporting Evidence

- Following cumulative upgrades to our outlooks for residential construction, mining and oil field machinery, and overall US Industrial Production, we raised the Production forecast by 8.8%, 3.7% and 3.6% for 2024, 2025, and 2026, respectively.
- The latest trends in the US Support Activities for Mining Capacity Utilization Rate, along with upside pressure signals from industry stock prices, are signaling a near-term transition to Phase A, Recovery, for Production. Our longer-term outlook is informed by expected trends in US Mining Production as well as expected movements in residential construction markets, especially rising US Single-Unit Housing Starts.
- Annual Production will mildly decline into early 2025. Subsequent Production rise will extend through at least 2026. Production will surpass the prior peak, set in 2023, around early 2026.
- Potential risks to the outlook include higher-than-typical Machinery, Equipment, and Supplies Wholesale Inventories, which may limit the need for new Production, a downside risk.

US Leading Indicators

Indicator	Direction		
	3Q24	4Q24	1Q25
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

- Rise across a number of our key leading indicators supports our forecast for economic growth in 2025 to be more robust than in 2024.
- The strength of leading indicator rise is weak in some cases, lending support to our forecast for 2025 rise to be milder than in the stimulus-iunduced growth period of 2021-22, for example.
- The ITR Retail Sales Leading Indicator™ rose in May. Consumers continue to increase their spending, as rising incomes amid a tight labor market support higher spending levels.
- Notable downside threats to the economy include sustained high interest rates, a still-inverted yield curve, and inflation-adjusted consumer savings running below the long-term trend. The knock-on effects of government spending are an upside threat.

While leading indicators are flashing green, downside pressures will linger into late this year for many industrial and manufacturing markets. The lagging nonresidential construction sector will decline next year. Use the current slower period to prepare for a stronger 2025 for most sectors and a 2026 recovery in the nonresidential sector. Focus on improving margins and reducing your dependence on labor. Given the diverging trends across end markets, look for ways to tap into projects benefiting from government spending.

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).

North America Light Vehicle Production

Passenger car and light-duty truck production (classes 1-3) in the US, Canada, and Mexico combined, including transplants. A passenger car is a road motor vehicle, other than a motorcycle, intended for the carriage of passengers and designed to seat no more than nine persons (including the driver). Source: WardsAuto. Measured in millions of units, not seasonally adjusted (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, not seasonally adjusted (NSA).

US Total Retail Sales

Total retail sales in the United States, including motor vehicles and parts, furniture and home furnishings, electronics and appliances, building materials and garden supplies, food and beverages, health and personal care products, gasoline stations, clothing, and other miscellaneous goods. Includes store and non-store retail sales. Non-store retailers include those that sell via television commercials, catalogs, the internet, etc. Source: US Census Bureau. Measured in trillions 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 Agriculture, Construction and Mining Machinery Production Index

Agriculture, construction, and mining machinery manufacturing. Includes farm machinery and equipment, powered mowing equipment and other powered home lawn and garden equipment; construction machinery, surface mining machinery, and logging equipment; oil and gas field and underground mining machinery and equipment. Source: Federal Reserve Board (FRB). Index, 2017 = 100, not seasonally adjusted (NSA).

Management Objectives™

Phase A	Phase B	Phase C	Phase D
<div><div></div><div>Recovery</div></div> <div><ul style="list-style-type: none">● 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</div>	<div><div></div><div>Accelerating Growth</div></div> <div><ul style="list-style-type: none">● 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</div>	<div><div></div><div>Slowing Growth</div></div> <div><ul style="list-style-type: none">● 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</div>	<div><div></div><div>Recession</div></div> <div><ul style="list-style-type: none">● 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</div>