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FOR PLASTICS PROCESSORS

Market Forecast Report

April 2024

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Economic Overview

Divergent Outcomes Are Likely in 2024

Consumers are the bedrock of the US economy, and middle-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 middle-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 middle-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. 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 benefiting 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 toward capex amid the slowing macroeconomy, high borrowing costs, and tight credit conditions. Total Manufacturing New Orders have plateaued and existing manufacturing capacity is 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 mildness of the downturn.

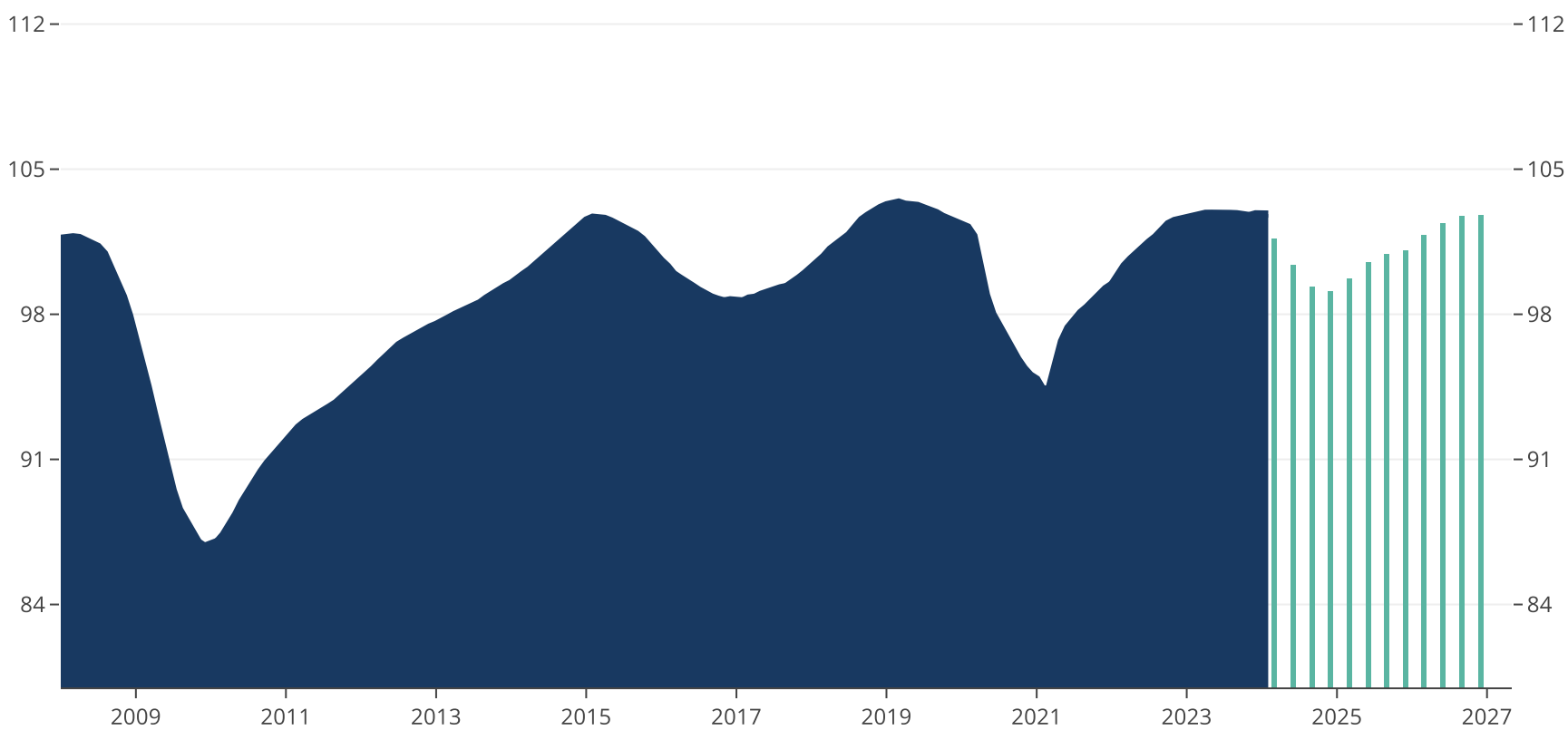
Growth Will Follow in 2025 and 2026; What to Know for Planning

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.

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).

First Resource, Inc. 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	2.7%	C	-0.7%	4.8%	4.2%
5	North America Light Vehicle Production	9.2%	C	0.5%	0.9%	3.7%
6	US Medical Equipment and Supplies Production Index	1.6%	C	1.9%	-0.5%	1.9%
7	US Private Nonresidential Construction	21.3%	C	8.1%	-5.0%	2.5%
8	US Agriculture, Construction and Mining Machinery Production Index	-3.0%	D	-9.8%	10.9%	2.9%

*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)

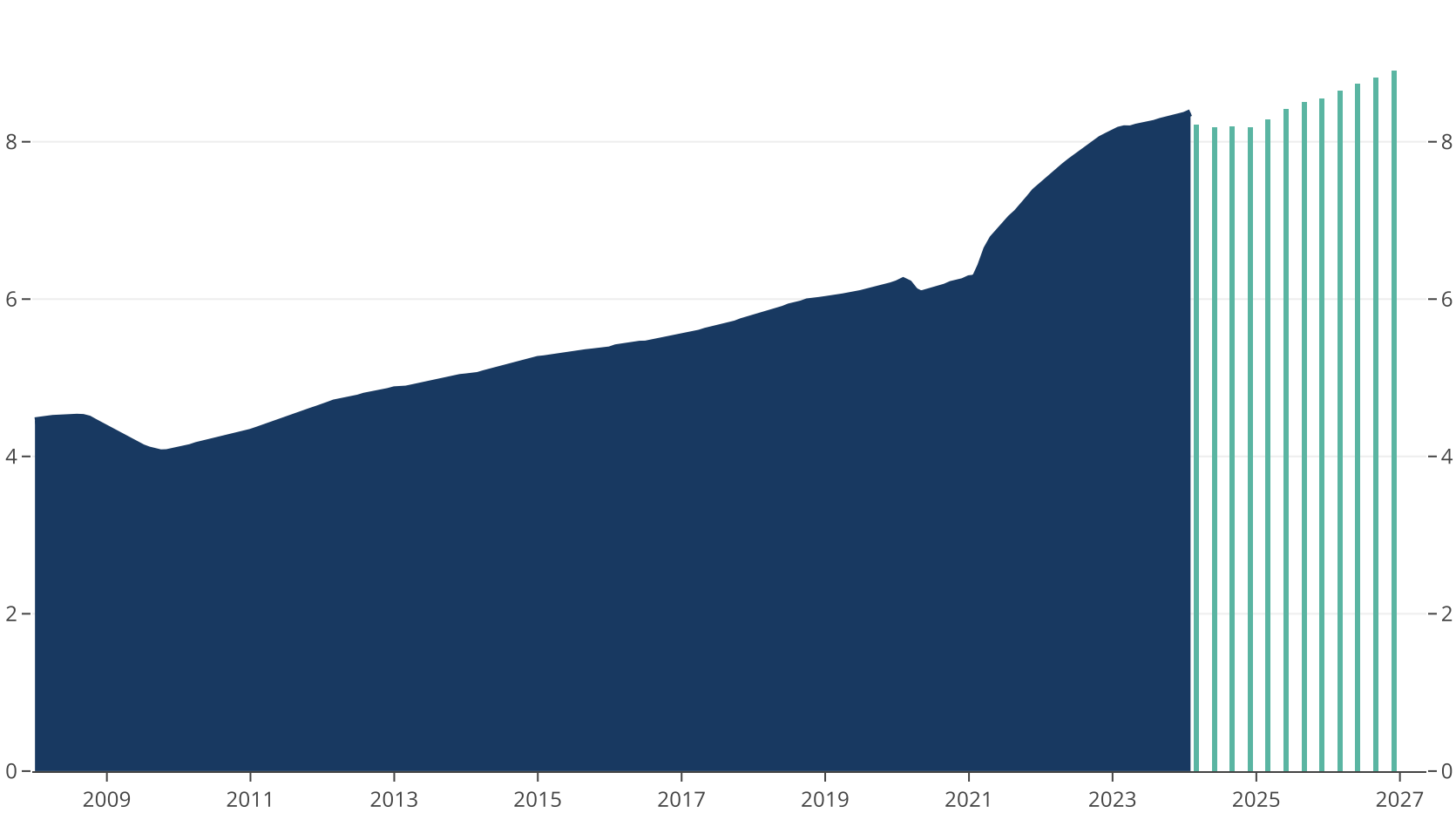


Recession (D)

Retail Sales Likely to Plateau This Year as Consumers Showcase Financial Resilience

Annual Total (12MMT)

Retail Sales - 12MMT Retail Sales Forecast - 12MMT



Annual Growth Rate (12/12)

Retail Sales - 12/12 Retail Sales Forecast - 12/12



Current Phase



Phase C
Slowing Growth

Current Indicator
Amplitude

- February 2024 Annual Growth Rate (12/12): 2.7%
- February 2024 Annual Total (12MMT), Trillions of USD: \$8.370

Industry Outlook

Year Annual Growth Rate

2024	-0.7%
2025	4.8%
2026	4.2%

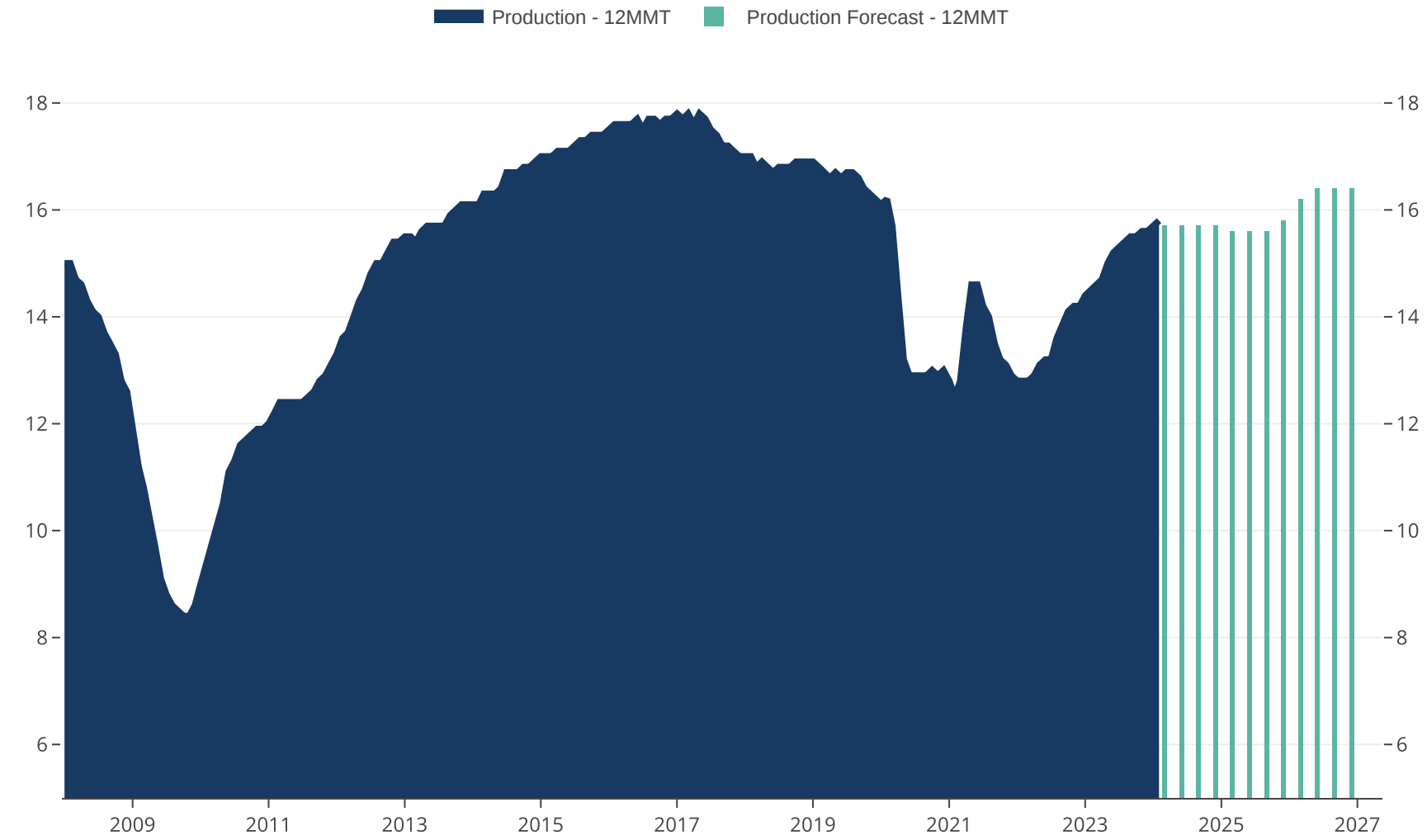
Outlook & Supporting Evidence

- Annual US Total Retail Sales totaled \$8.370 trillion in February, up 2.7% from the year-ago level. Both dollar-denominated and volume-based metrics for Retail Sales are at record highs.
- Consumers are showing more resilience than anticipated, particularly those in middle-to-upper-income demographics. The wealth effects of relatively high valuations of stocks and homes are likely contributing to higher spending, while lower-income consumers are feeling the pinch of inflation more acutely. Performance across the retail sector will likely vary based on the target customers' demographics. The upper-income consumer is having more of an impact on overall US Total Retail Sales. Retail Sales are likely to track the upper end of our forecast range, with a plateau more probable than a mild decline.
- Demographic trends suggest the labor market will remain tight. Wage growth is cooling, following the slowdown in inflation. US Real Personal Income (excluding current transfer receipts) ticked down in February from a record high. Consumers are saving just 3.6% of their income, which is notable, as it is low relative to the pre-COVID average of 6.1%. We are also monitoring US Consumer Credit Card Delinquency Rates which are rising but remain relatively low.
- Retail Sales will rise in both 2025 and 2026. The slowdown in 2024 will help work out some inefficiencies, and labor market conditions suggest consumer finances will improve. We expect interest rates to move slightly lower, though there is a risk that the Federal Reserve may delay rate cuts due to sticky inflation.

North America Light Vehicle Production

Forecast Revised Upward; Low Inventories and Resilient Consumers Signal Flat Production in 2024

Annual Total (12MMT)



Annual Growth Rate (12/12)



Current Phase



Phase C
Slowing Growth

Current Indicator
Amplitude

- February 2024 Annual Growth Rate (12/12): 9.2%
- February 2024 Annual Total (12MMT), Millions of Units: 15.8

Industry Outlook

Year Annual Growth Rate

2024	0.5%
2025	0.9%
2026	3.7%

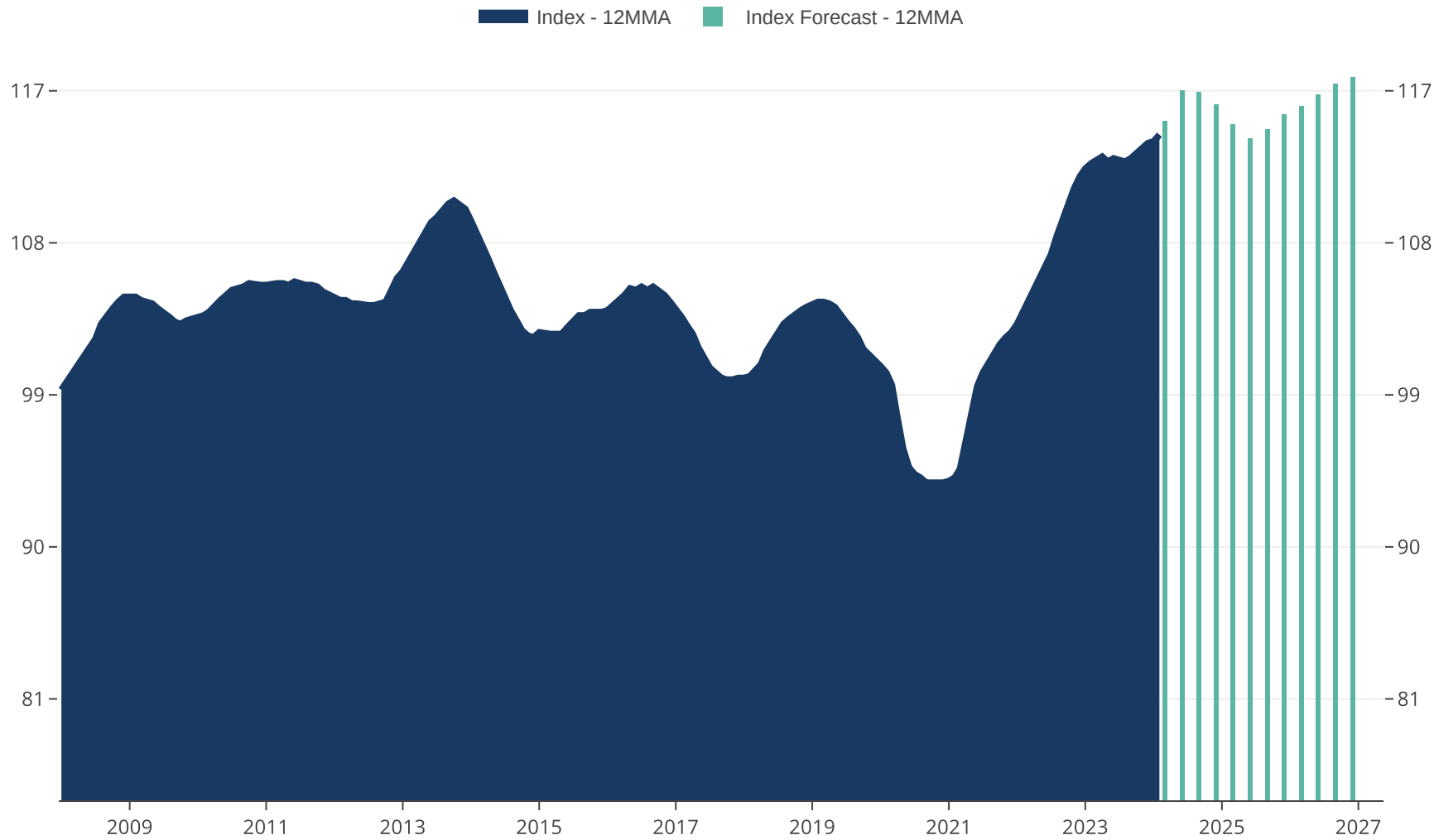
Outlook & Supporting Evidence

- We revised the forecast upward by roughly 1 million units (7.2%) for 2024, as middle-to-upper-income consumers are proving more resilient than anticipated. We now expect relative flatness instead of decline in 2024. The units forecast for 2025 is virtually unchanged. 2026 was revised upward by 1.4%, or about 220 thousand vehicles.
- Annual US Light Vehicles Retail Sales are up 11.8% from one year ago, but are slowing in growth. The February-to-March change in Light Vehicles Retail Sales was the least positive in over 20 years, excluding 2008 and the onset of COVID. Vehicle loan delinquency rates are rising and US Real Personal Income (excluding current transfer receipts) ticked down in February. While consumers have proven more resilient than originally anticipated, most notably those in the middle-to-upper-income brackets, these headwinds are signaling weakened momentum in Production.
- Expect Production to plateau in 2024 and have a slight downward bias for most of 2025 as dealers restock, though inventory levels are unlikely to return to pre-COVID levels due to higher interest rates. Production will then rise in 2026, ending the year at roughly 4%, or around 600 thousand vehicles, above the current level.

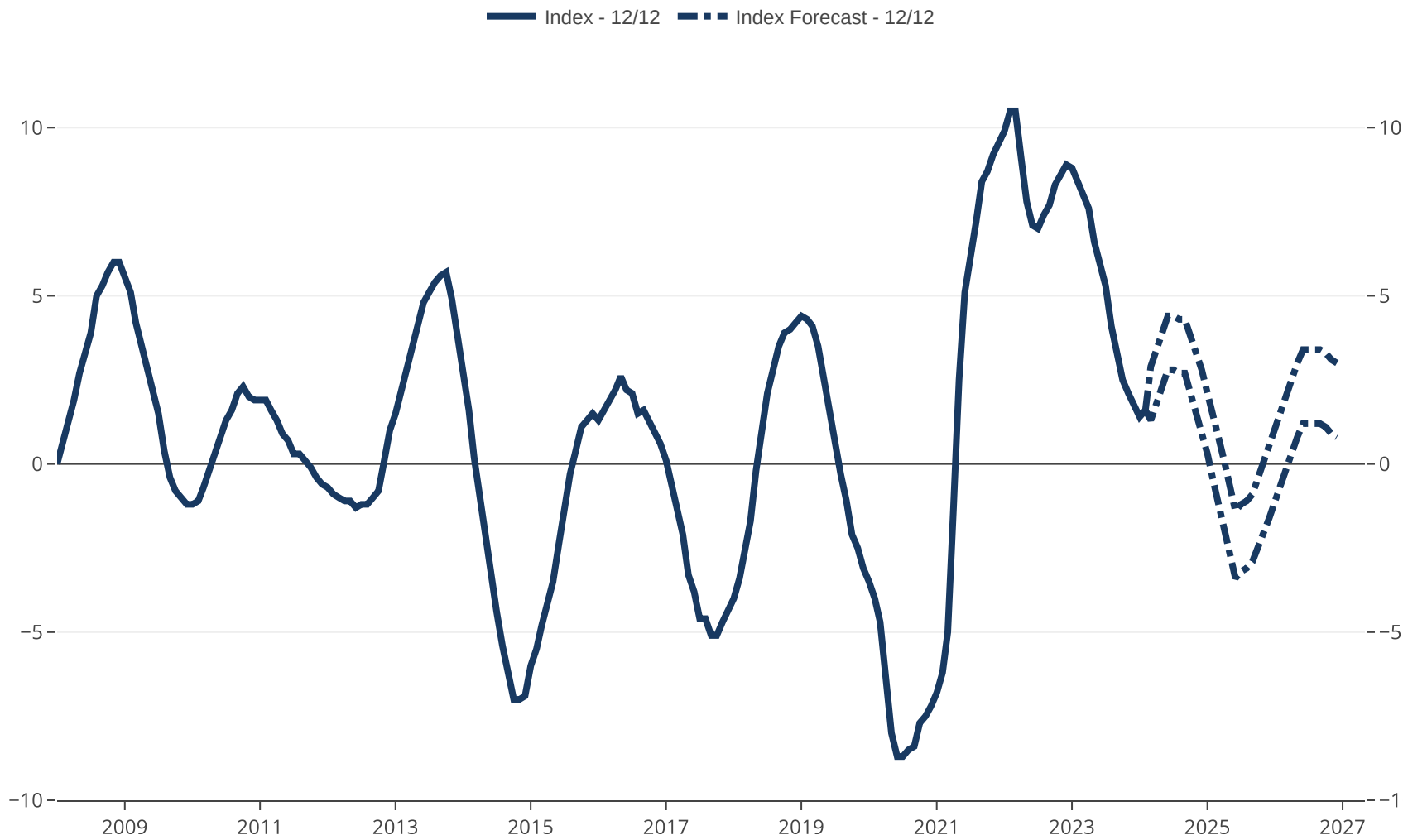
US Medical Equipment and Supplies Production Index

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

Annual Average (12MMA)



Annual Growth Rate (12/12)



Current Phase



Phase C
Slowing Growth

Current Indicator
Amplitude

- February 2024 Annual Growth Rate (12/12): 1.6%
- February 2024 Annual Average (12MMA), 2017=100: 114.4

Industry Outlook

Year Annual Growth Rate

2024	1.9%
2025	-0.5%
2026	1.9%

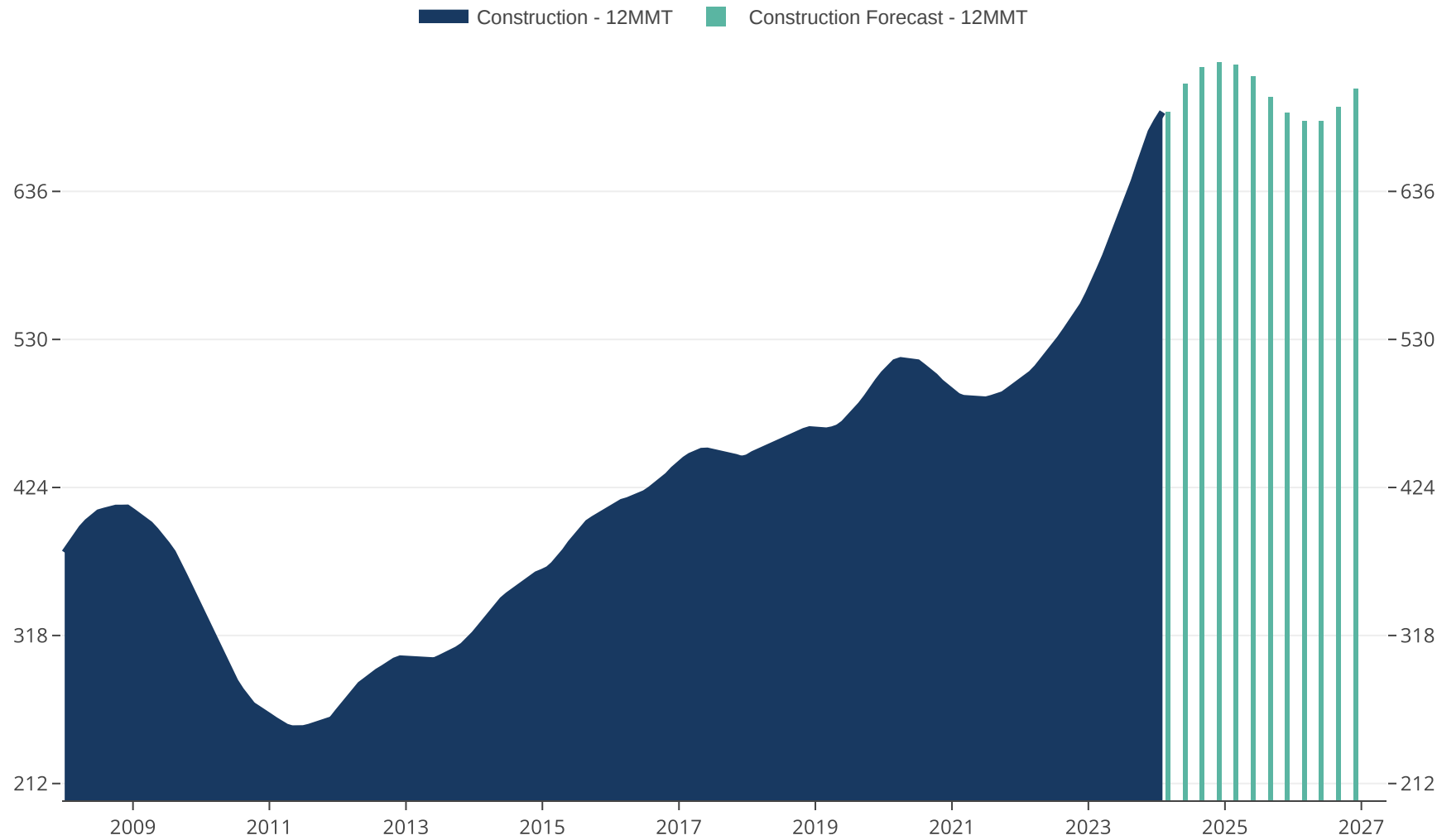
Outlook & Supporting Evidence

- 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, as the equipment and supplies market is more susceptible to downward pressure, we expect it to experience a hard landing, as it typically does.
- The combination of onshoring and an aging demographic bodes well for the long-term trajectory of Production. Production will reach record highs in the near term and in late 2026.

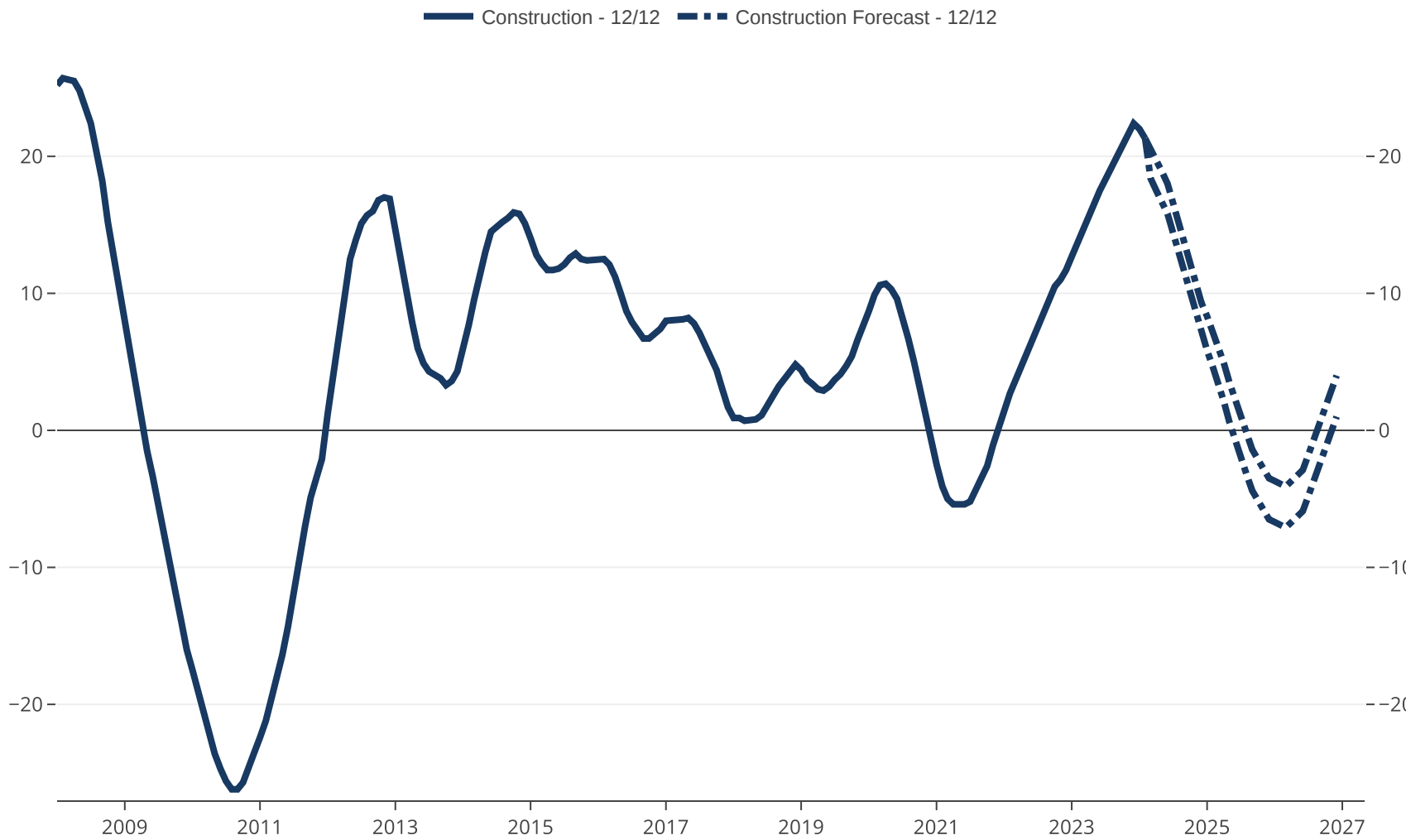
US Private Nonresidential Construction

Growth Will Slow in 2024; Backlogs and Architecture Billings Signal Upcoming Softening

Annual Total (12MMT)



Annual Growth Rate (12/12)



Current Phase



Phase C
Slowing Growth

Current Indicator
Amplitude

- February 2024 Annual Growth Rate (12/12): 21.3%
- February 2024 Annual Total (12MMT), Billions of USD: \$692.8

Industry Outlook

Year Annual Growth Rate

2024	8.1%
2025	-5.0%
2026	2.5%

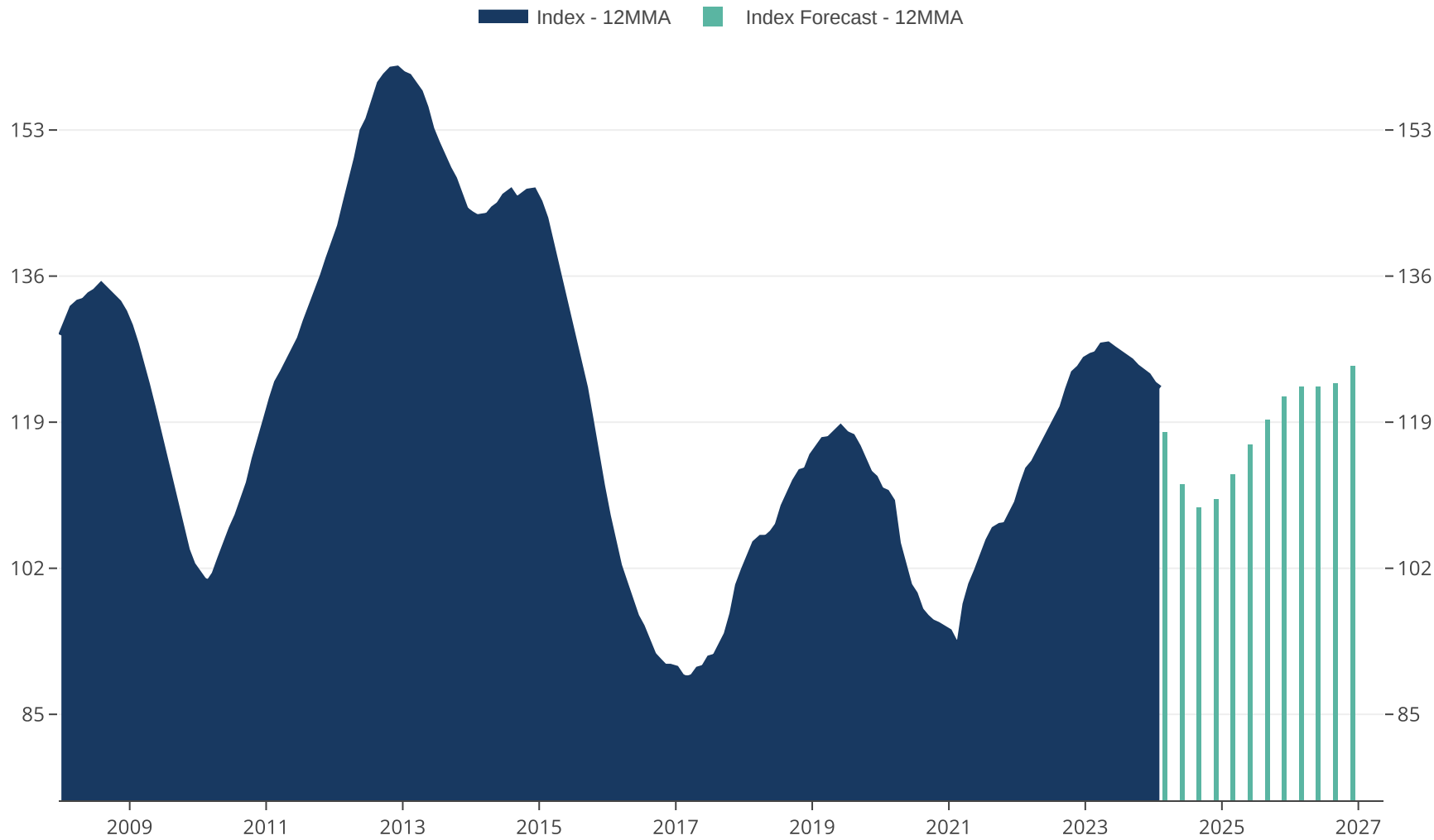
Outlook & Supporting Evidence

- Annual US Private Nonresidential Construction through February totaled \$692.8 billion, up 21.3% from the year-ago level.
- While Construction will continue to rise in 2024, the pace of growth will slow to the single digits. Momentum from existing projects will help drive further rise. Government spending, which previously contributed to Construction's accelerating growth, is likely to taper.
- Construction, which generally lags the industrial sector by about one year, will decline in 2025, as the current environment of economic uncertainty, high borrowing costs, and downward pricing pressures will negatively impact expansion plans and impact the dollar-value of Construction. Declining construction backlogs and overall contractionary signals in the Architecture Billings Index corroborate that new projects are already slowing down.
- Construction will then rise by mid-2026, a little over a year after we see improvements in the industrial sector.

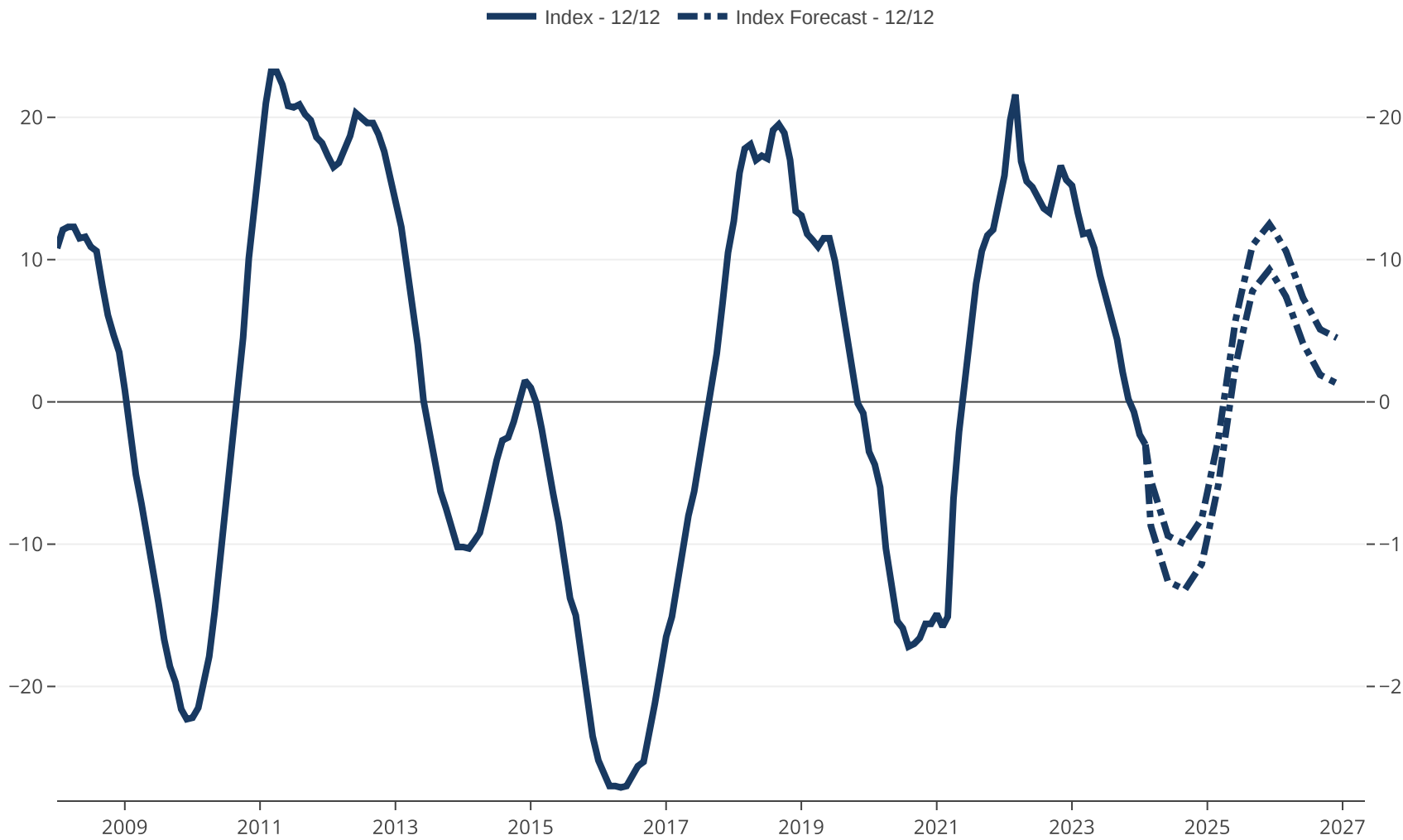
US Agriculture, Construction and Mining Machinery Production Index

End Markets and High Borrowing Costs Signal Further Decline Into the Second Half of 2024

Annual Average (12MMA)



Annual Growth Rate (12/12)



Current Phase



Phase D
Recession

Current Indicator
Amplitude

- February 2024 Annual Growth Rate (12/12): -3.0%
- February 2024 Annual Average (12MMA), 2017=100: 122.9

Industry Outlook

Year Annual Growth Rate

2024	-9.8%
2025	10.9%
2026	2.9%

Outlook & Supporting Evidence

- Annual US Agriculture, Construction and Mining Machinery Production through February was 3.0% below the year-ago level. Annual Machinery Production decline will persist into the second half of 2024.
- Demand from end-use markets is in decline. For mining, the US Mining Production Index (excluding oil and gas) is in Phase D, Recession. While Oil and Gas Extraction is likely to continue to rise, upstream exploration and drilling is contracting, negatively impacting demand for new machinery. Construction machinery demand has been spurred by government-funded projects, but prior trends in US Single-Unit Housing Starts and our expectations for nonresidential construction suggest downward pressure ahead. For agriculture, decline in the prices of commodities, such as corn and soybeans, has cut into US Farm Proprietors Income, and elevated interest rates have impacted farmers' ability to finance agricultural machinery. The culmination of these headwinds will likely limit annual Production this year.
- Prepare for growth in 2025 and 2026, as we expect that demand will pick back up in the end-use markets for this type of machinery and that borrowing conditions improve.

US Leading Indicators

Indicator	Direction		
	2Q24	3Q24	4Q24
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

- The ITR Leading Indicator™ rose in February, which is likely due to consumer resilience, especially for consumers in the middle-to-upper-income bracket. Despite this upward momentum, we continue to anticipate an imminent and mild decline in the US Industrial sector, which recently ticked down on an annual basis and is nearing Phase D, Recession.
- The US ISM PMI (Purchasing Managers Index) monthly rate-of-change ticked down in February, but this is normal volatility in the indicator and the overall trend remains positive and generally rising.
- The US Total Industry Capacity Utilization Rate monthly rate-of-change ticked up in February, though it has been vacillating around the same level for several months. The overall trend is generally flat, likely due to the varying severity of contraction across industrial markets.

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 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).

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>