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Market Forecast Report
October 2024

Reports ITR Economics

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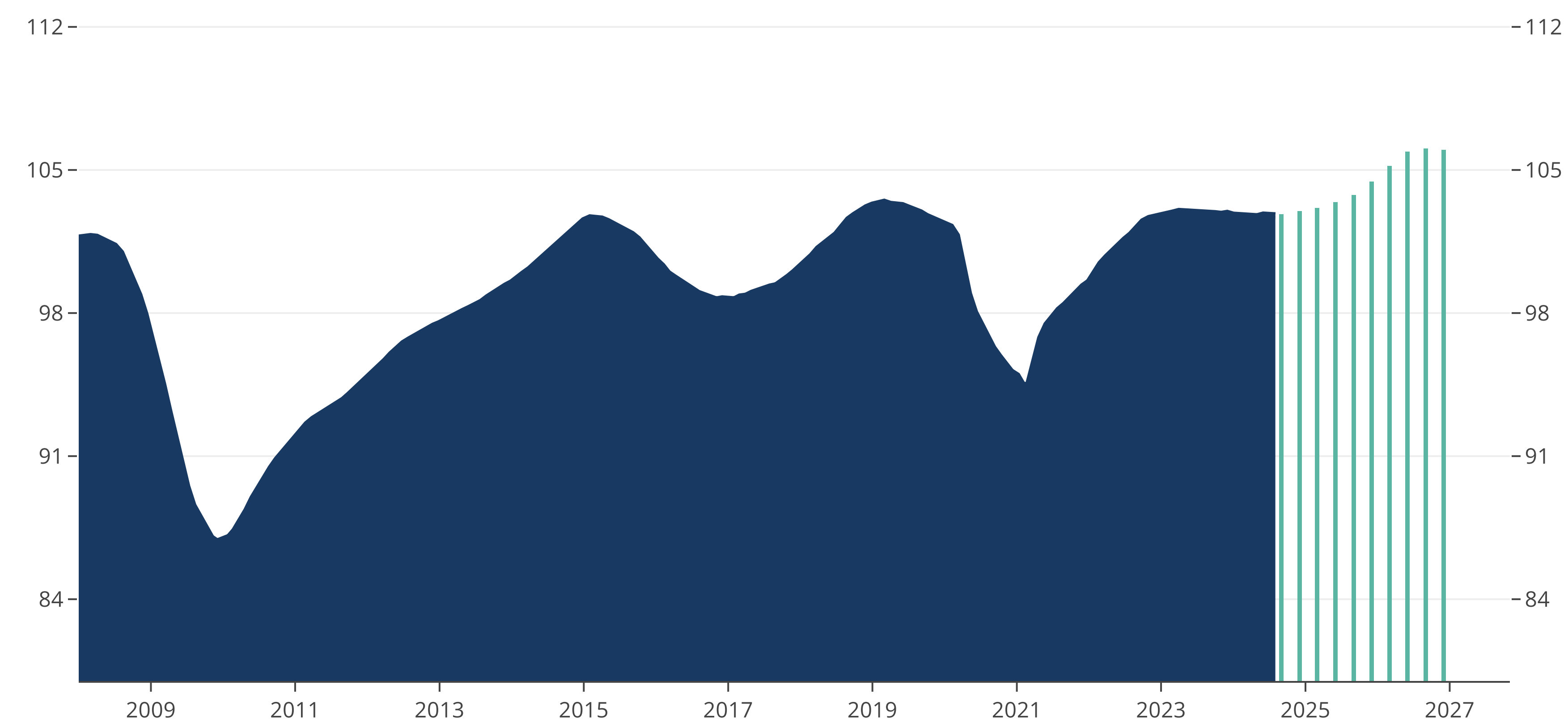
Economic Overview

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 has begun to lower rates. 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 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 a good time to ensure you have not fallen behind with regards to labor and capital investments that will be needed to support mild growth 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.

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	3.2%	C	3.1%	4.6%	4.5%
5	North America Light Vehicle Production	2.6%	C	0.5%	0.9%	3.7%
6	US Medical Equipment and Supplies Production Index	0.3%	C	-1.1%	0.9%	0.8%
7	US Private Nonresidential Construction	8.7%	C	3.6%	-5.2%	1.8%
8	US Agriculture, Construction and Mining Machinery Production Index	-5.9%	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.*

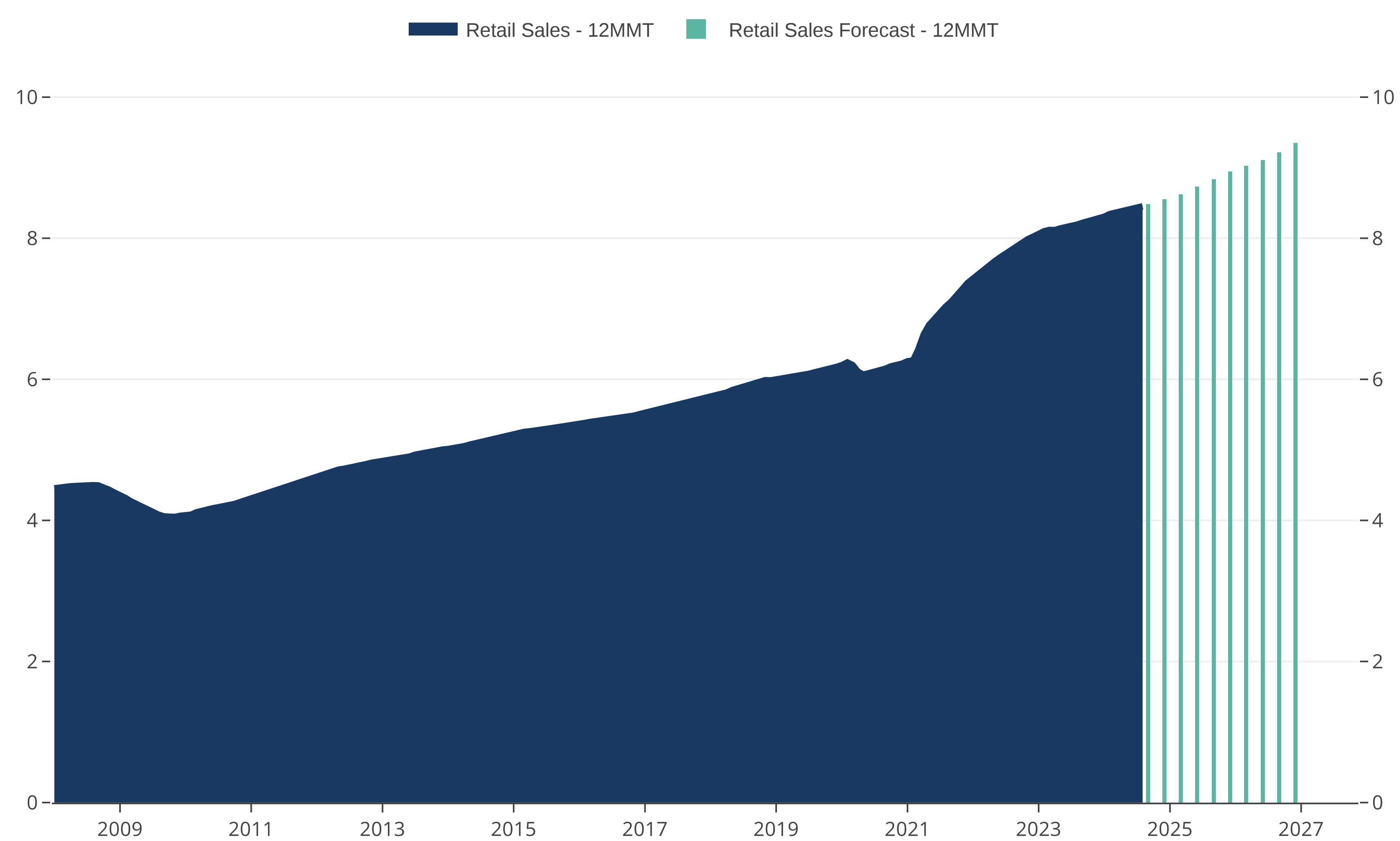
***Annual growth rate (12/12) except where otherwise noted.*

Recovery (A) Accelerating Growth (B) Slowing Growth (C) Recession (D)

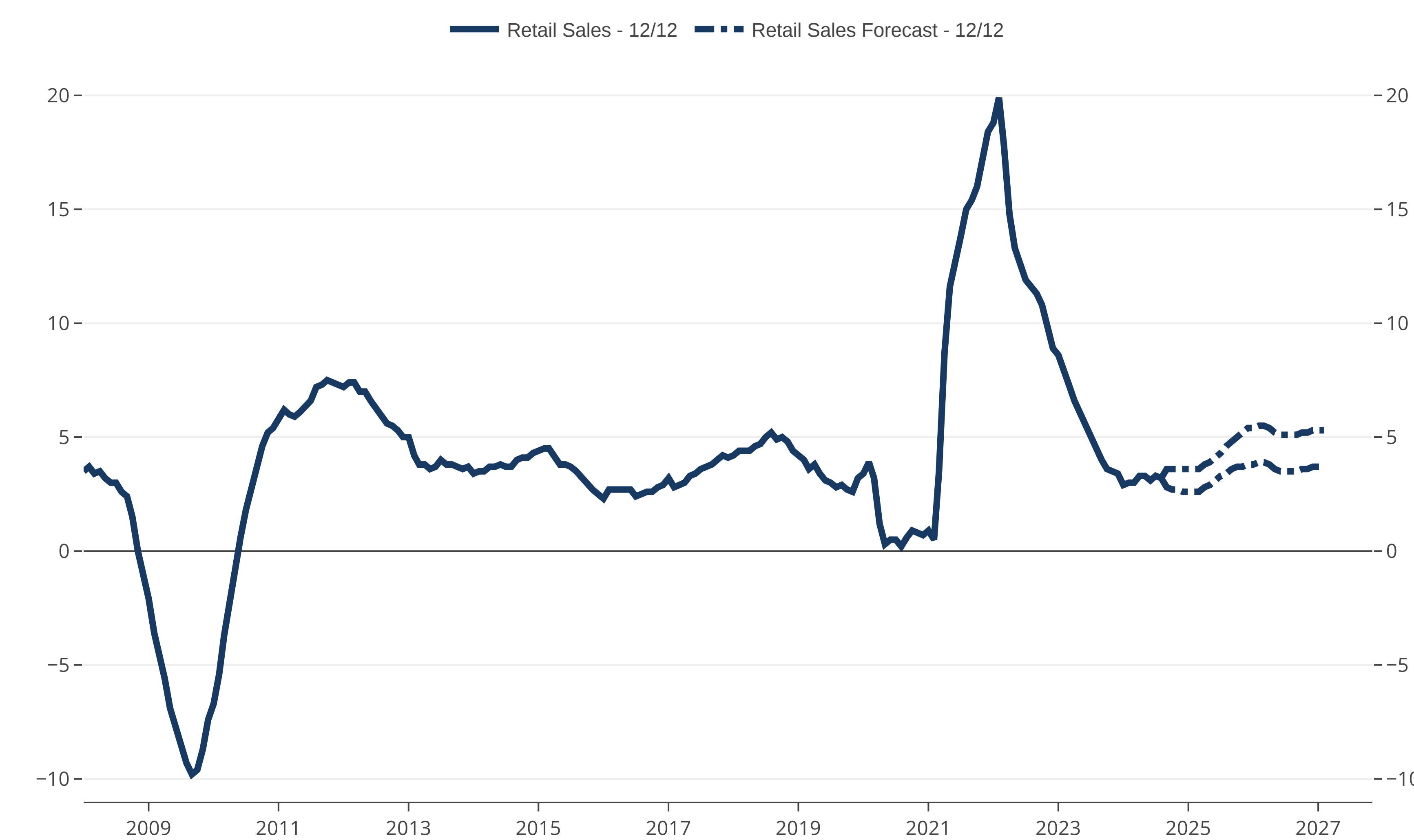
US Total Retail Sales

Wealth Effects for Middle-to-Upper-Income Consumers Driving Annual Retail Sales Rise

Annual Total (12MMT)



Annual Growth Rate (12/12)



Current Phase

Phase C
Slowing Growth

Current Indicator Amplitude

- August 2024 Annual Growth Rate (12/12): 3.2%
- August 2024 Annual Total (12MMT), Trillions of USD: $8.452

Industry Outlook

Year	*Annual Growth Rate*
2024	3.1%
2025	4.6%
2026	4.5%

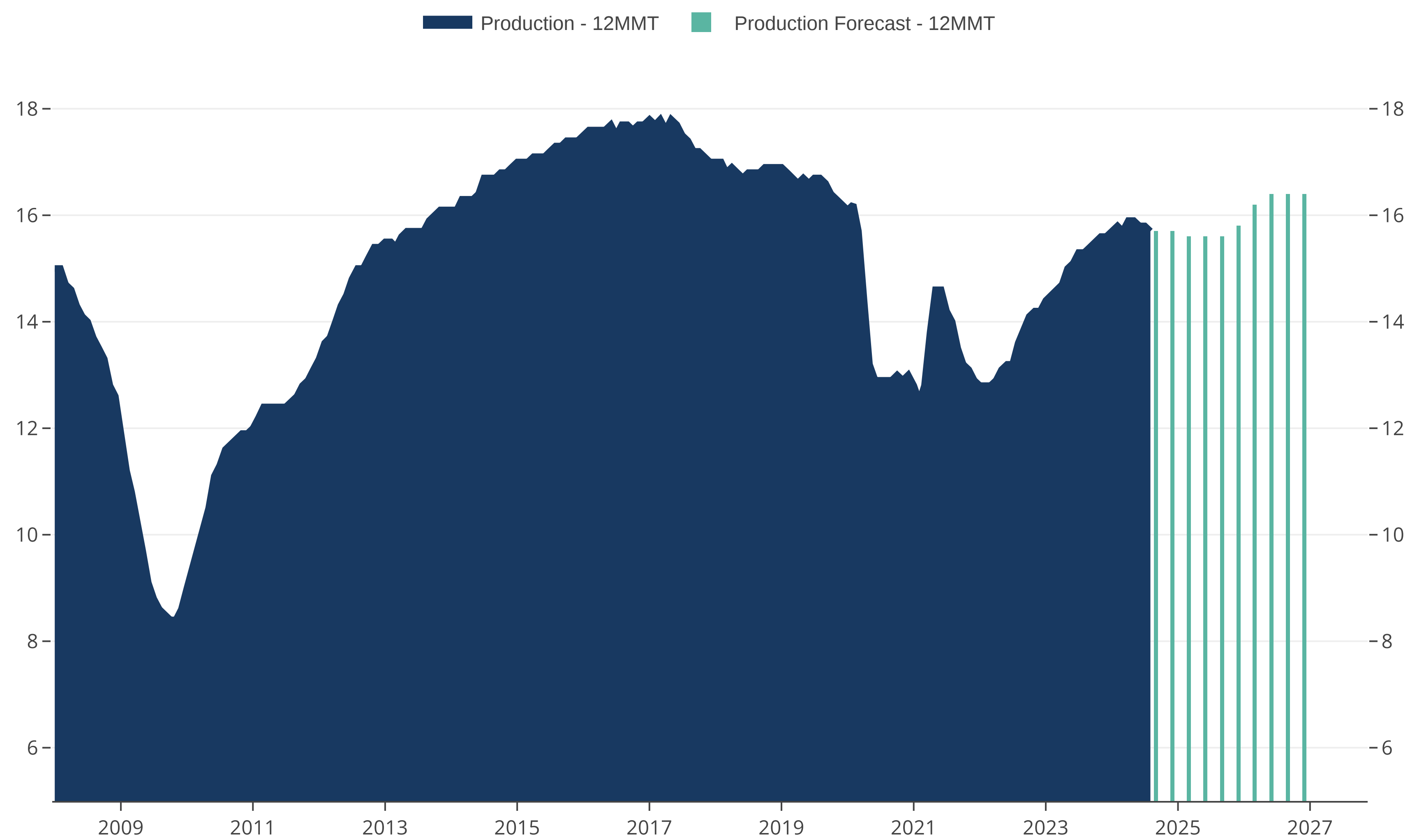
Outlook & Supporting Evidence

- US Total Retail Sales in the 12 months through August totaled $8.452 trillion, 3.2% above the year-ago level. We are forecasting rise through at least 2026.
- The annual growth rate will be muted into early 2025. This is due in part to consumers dealing with the impacts of cumulative inflation. While inflation has eased considerably to 2.4%, this does not negate the steep rise of prices in preceding years.
- Lower-income consumers are grappling with the longer-term effects of prior high inflation more acutely. Despite real personal incomes rising, some consumers may be seeking lower-cost items, trimming discretionary spending, and saving less. Make sure your marketing messages value, especially for those consumers hunting for a bargain.
- Middle-to-upper-income consumers are in a slightly better financial position, especially those who were able to lock-in relatively low mortgage rates in the early 2020s as well as those consumers who have seen their stock portfolios and home prices largely increase in value. This has wealth effects on the spending behavior of consumers, propelling them to potentially increase spending. Recent and likely further interest rate cuts paired with a tight labor market that will help to improve wages will further boost consumer sentiment. Retail Sales' pace-of-growth will pick up from mid-2025 into early 2026.

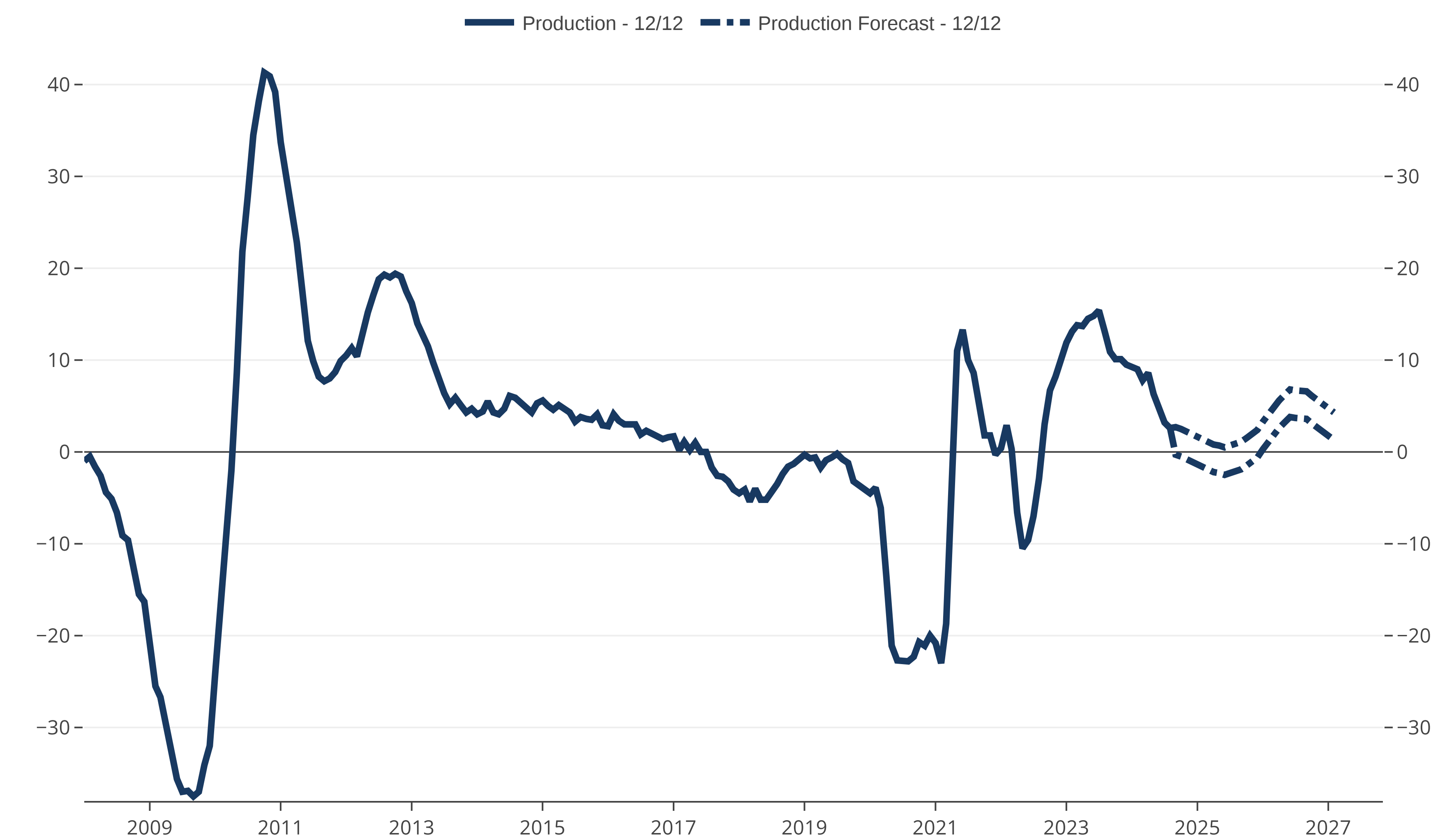
North America Light Vehicle Production

Vehicle Sales and Pricing Mildly Softening; Production to Plateau With a Downward Bias Into Mid-2025

Annual Total (12MMT)



Annual Growth Rate (12/12)



Current Phase

Phase C
Slowing Growth

Current Indicator Amplitude

- August 2024 Annual Growth Rate (12/12): 2.6%
- August 2024 Annual Total (12MMT), Millions of Units: 15.7

Industry Outlook

Year	Annual Growth Rate
2024	0.5%
2025	0.9%
2026	3.7%

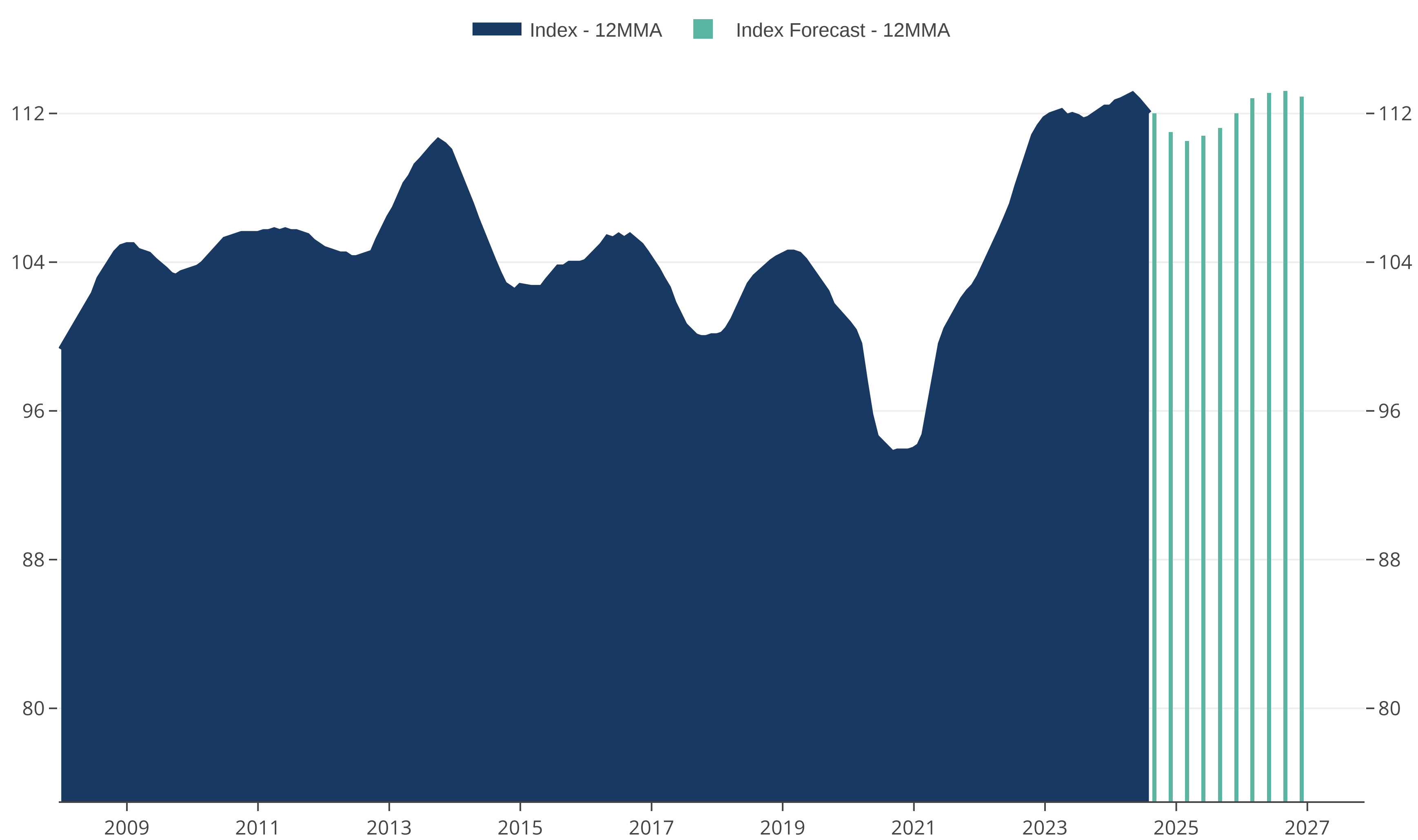
Outlook & Supporting Evidence

- Annual North America Light Vehicle Production will plateau with a mild downward bias through the first half of 2025.
- A slightly softer consumer is reflected in vehicle sales and pricing. New Vehicle Prices moved marginally lower, with third-quarter prices down 1.2% from one year ago. Preferences are shifting to lower-cost models. To attract more buyers, dealers are increasing incentives on new vehicles. Cox Automotive reports the average incentives rose to $3,522 per transaction. On a volume basis, the number of light vehicles sold is down 2.3% in the third quarter compared to one year prior. Trends in the US Automobiles and Light-Duty Motor Vehicles Manufacturing Capacity Utilization Rate 1/12 corroborate general weakness ahead for Production.
- While the recent 50 bps interest rate cut from the Federal Reserve will likely drive some auto demand, rates are still generally elevated and will stall some consumers from purchasing big-ticket items until more interest rate relief is realized.
- Sustained rise in annual Production will begin in the second half of 2025 given broader macroeconomic improvements and lower interest rates, which will attract some consumers to purchase new vehicles. Rise in annual Production will extend through at least 2026.

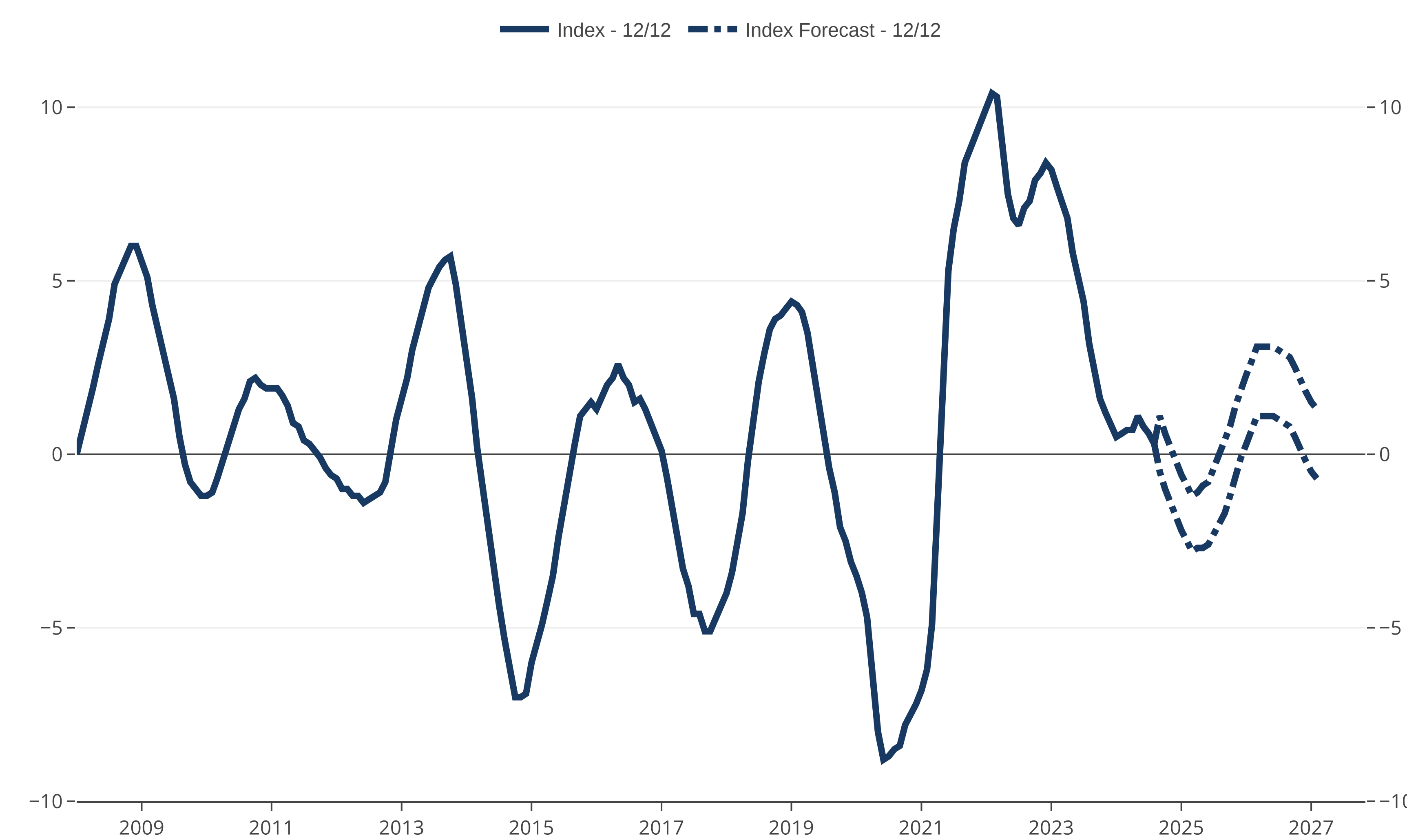
US Medical Equipment and Supplies Production Index

Production Poised for Mild Hard Landing; Aging Population and Onshoring Are Upsides

Annual Average (12MMA)



Annual Growth Rate (12/12)



Current Phase

Phase C
Slowing Growth

Current Indicator Amplitude

- August 2024 Annual Growth Rate (12/12): 0.3%
- August 2024 Annual Average (12MMA), 2017=100: 112.0

Industry Outlook

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

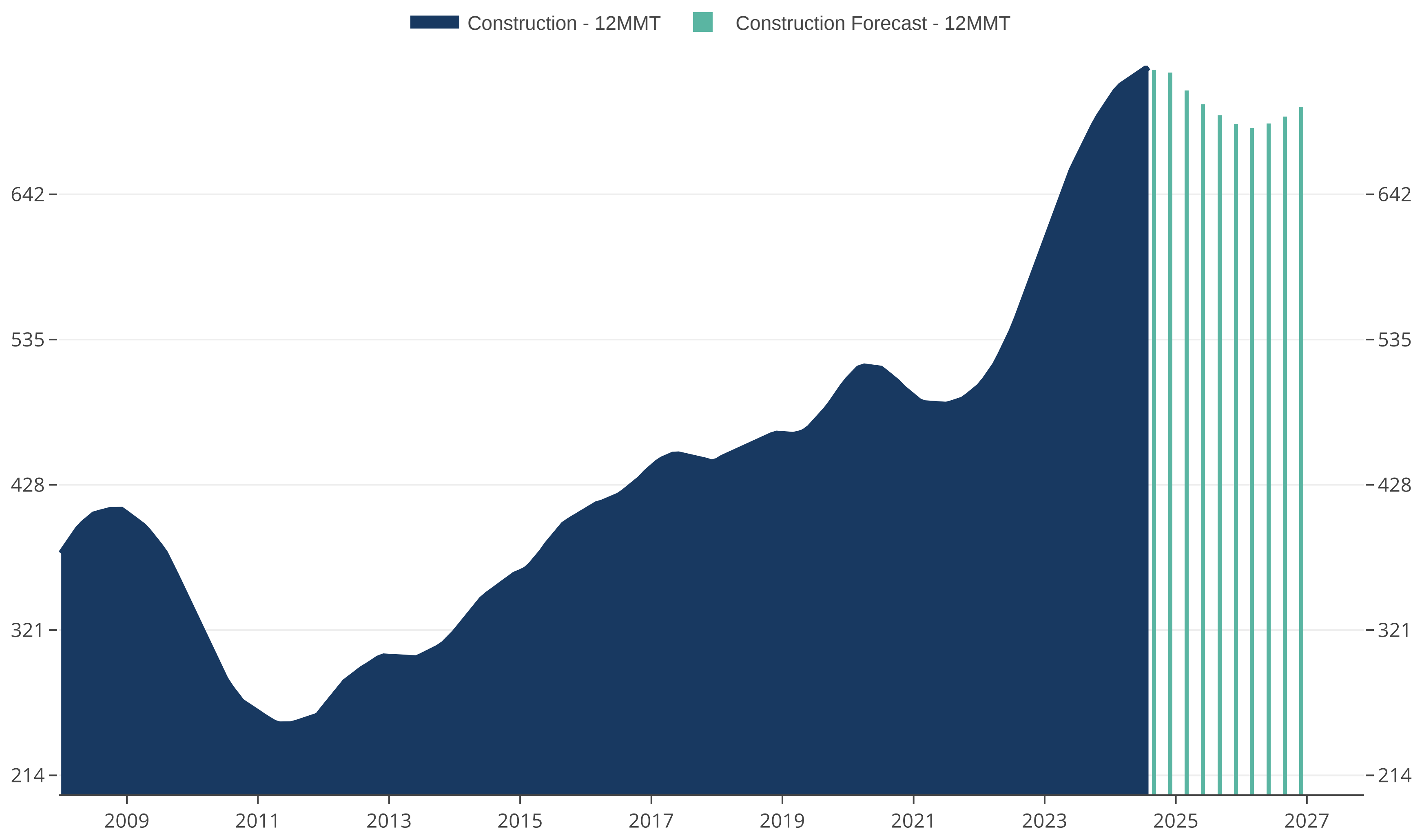
Outlook & Supporting Evidence

- The annual US Medical Equipment and Supplies Production was 0.3% above the year-ago level in August. 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. Additionally, some consumers are still squeezed by cumulative inflation and still-elevated interest rates make it less likely that medical professionals will opt in to purchase new equipment.
- 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 that decline will be mild. Nearshoring trends are providing a buffer along the back side of the business cycle. An aging US population will boost demand for medical services, supporting our long-term Production outlook. 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 that further opportunities in medical-care-related markets are forthcoming. Annual Production will rise from early 2025 into the second half of 2026.

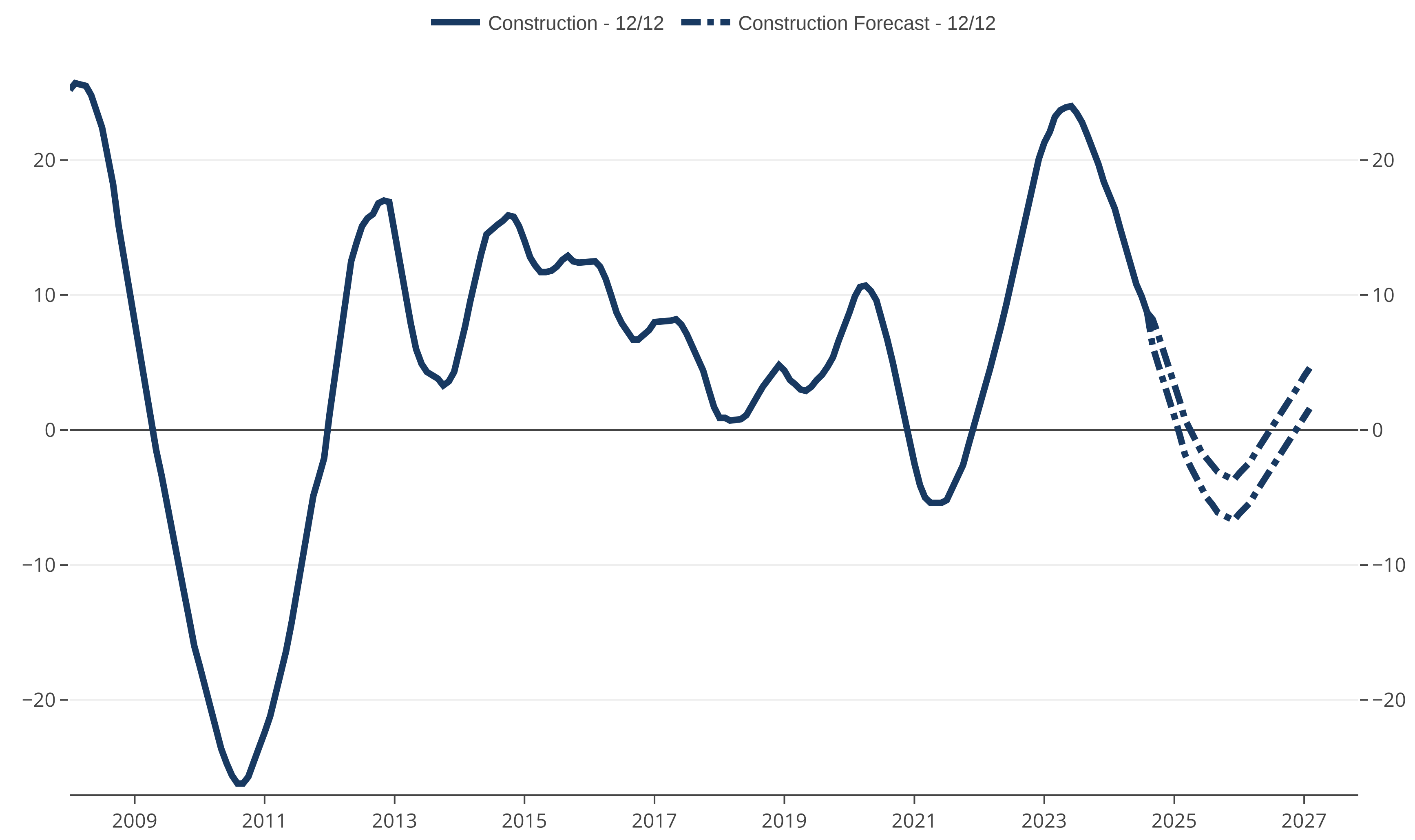
US Private Nonresidential Construction

Upcoming Decline Is the Result of Costly Borrowing Conditions and a Sluggish Economy

Annual Total (12MMT)



Annual Growth Rate (12/12)



Current Phase

Phase C
Slowing Growth

Current Indicator Amplitude

- August 2024 Annual Growth Rate (12/12): 8.7%
- August 2024 Annual Total (12MMT), Billions of USD: $735.8

Industry Outlook

Year	*Annual Growth Rate*
2024	3.6%
2025	-5.2%
2026	1.8%

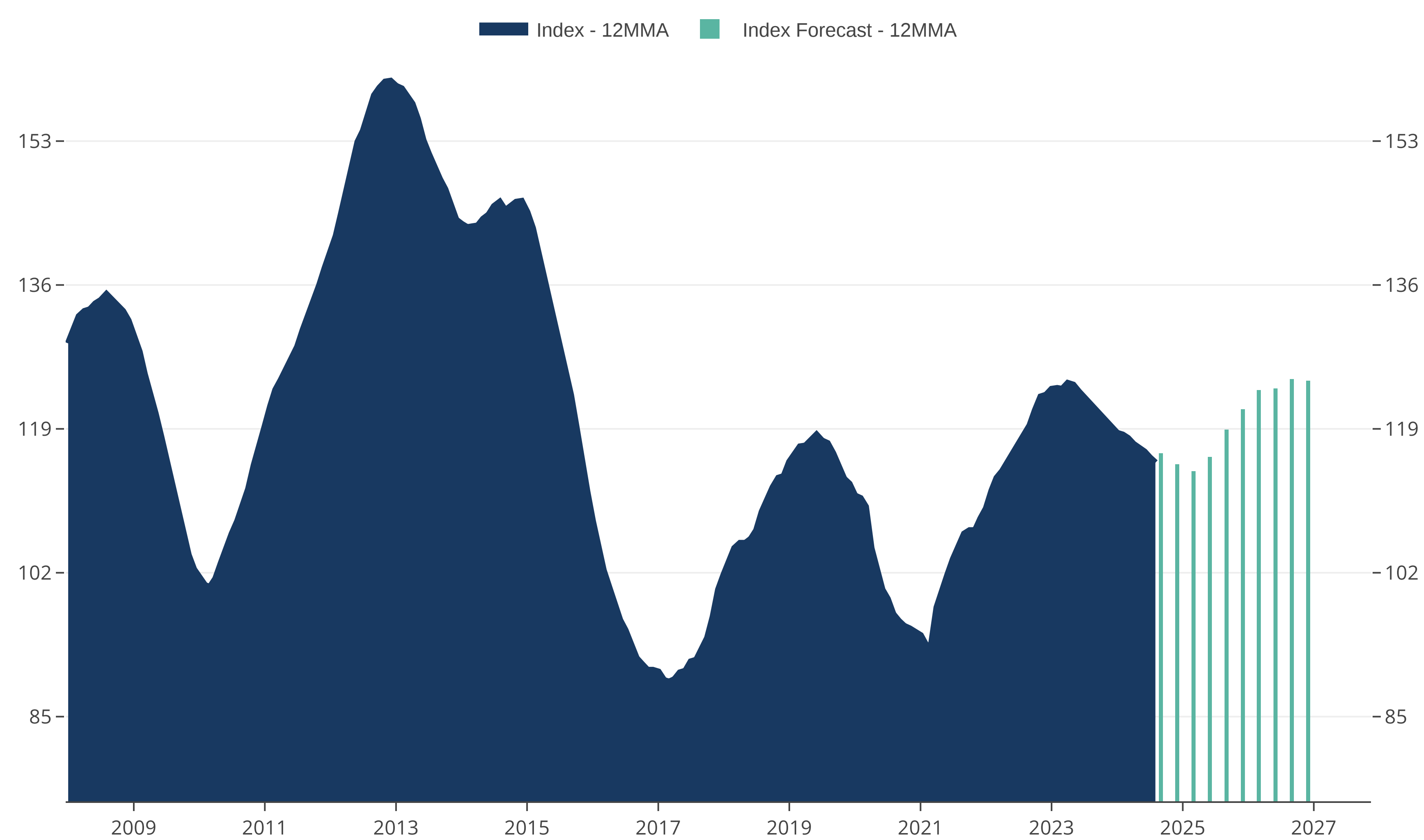
Outlook & Supporting Evidence

- Annual Construction spending will peak around year-end and then decline by around 4.4%-7.3% from that peak into early 2026. Subsequent rise in annual Construction spending will extend through at least 2026.
- Construction is likely to decline as projects planned in the early 2020s - an era characterized by high stimulus, low interest rates, and a strong macroeconomic environment - are completed. The inflow of new projects has been dampened by high financing costs and macroeconomic uncertainty in the last year. This is corroborated by prior trends in the residential construction sector and architecture billings, which are more immediately sensitive to changing economic conditions and thus lead the nonresidential sector. Additionally, construction backlog for commercial, industrial, and heavy highway/infrastructure markets is down 6.8% year-over-year, per the Associated Builders and Contractors, Inc.
- Mild rise is forecasted for much of 2026 in response to the expectation for an improving macroeconomy and lower rates in 2025. Annual Construction is, however, likely to remain below current levels throughout the forecast period.
- The Federal Reserve cut rates in September, a welcome move that makes financing more affordable. While some faster-moving projects may prove to be opportunities in the near term, the bulk of the positive impact will likely materialize in for this market in late 2026 or 2027.

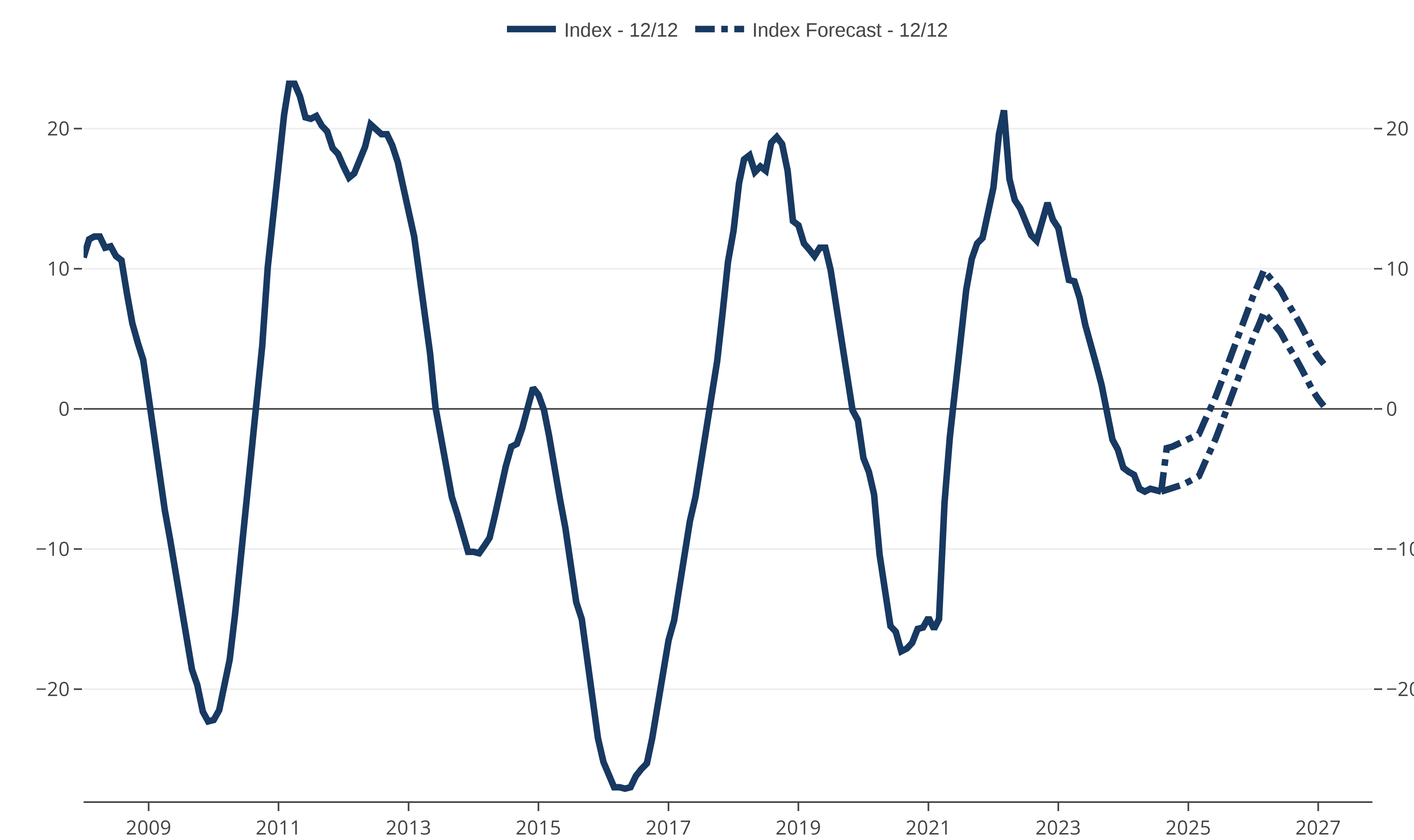
US Agriculture, Construction and Mining Machinery Production Index

Downside Pressure From Interest Rates Will Linger, but Improving Economy in 2025 Will Spur Growth

Annual Average (12MMA)



Annual Growth Rate (12/12)



Current Phase

Phase D Recession

Current Indicator Amplitude

- August 2024 Annual Growth Rate (12/12): -5.9%
- August 2024 Annual Average (12MMA), 2017=100: 115.0

Industry Outlook

Year	Annual Growth Rate
2024	-3.9%
2025	5.7%
2026	2.8%

Outlook & Supporting Evidence

- Ongoing annual Production decline will persist into early 2025. Annual Production will then rise from mid-2025 through at least 2026.
- Farm machinery faces downside pressure from agriculture commodity prices below year-ago levels. Lower US Farm Proprietors Income paired with still-elevated interest rates will likely hinder machinery demand in at least the near term.
- Construction machinery faces mixed pressures: upside from infrastructure spending and prior rise in residential building and downside from the lagging nonresidential segment. Nonresidential construction is slowing due in part to high financing costs, a shrinking construction backlog, and a sluggish economy.
- While oil prices are generally above the break-even level, the oil and gas industry has been more conservative investing in new capacity given elevated interest rates, already record levels of oil and gas extraction, a plateau in domestic industrial activity, and slowing growth in global industrial activity. We expect headwinds for the US and global economies to begin to dissipate around the end of 2024. As the US economy heats back up in 2025 and 2026, oil prices will likely move higher and the oil and gas sector will likely regain confidence to invest.

US Leading Indicators

Indicator	Direction 4Q24	Direction 1Q25	Direction 2Q25
ITR LEADING INDICATOR™	Green	Green	N/A
ITR RETAIL SALES LEADING INDICATOR™	Green	Green	Green
US OECD LEADING INDICATOR	Green	Green	N/A
US ISM PMI (PURCHASING MANAGERS INDEX)	Green	Green	Red
US TOTAL CAPACITY UTILIZATION RATE	Green	Green	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

• Leading indicators are predominantly flashing green, but the strength is more muted than robust, with some leading indicators edging lower in recent months.

• The US ISM PMI (Purchasing Managers Index) monthly rate-of-change is now below zero, which could portend weakness in the industrial sector for 2025 if taken alone. Our analysis suggests this is likely to be a blip within an overall rising trend, but if that analysis proves to be incorrect, it would be a downside threat to our 2025 forecast for mild industrial sector growth.

• Recovery in the ITR Leading Indicator™ has been somewhat muted in recent months, indicating that firms should plan for a sluggish upturn – rather than breakneck rise – for industrial sector activity in 2025.

While many indicators are signaling positivity, we will not likely see that translate to stronger activity until mid-2025. Economic conditions, such as still-elevated interest rates and a price-conscious consumer, will have a lingering effect. While there were recent stumbles for 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.

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

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

