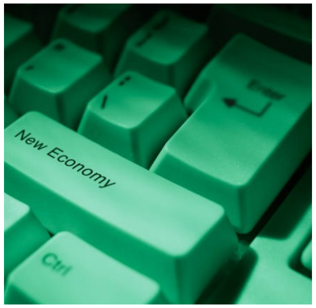

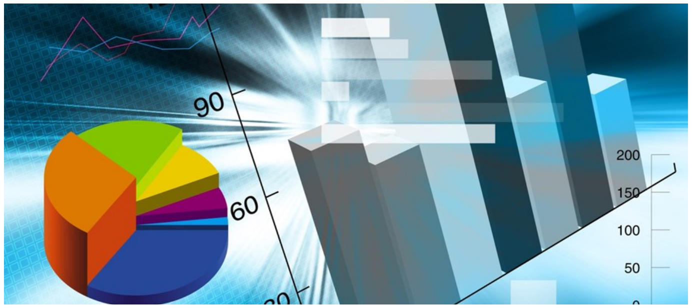

SINCE 1933

Forecast Report
November 2023

ITR ECONOMICS

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overview

The State of the Economy Looking Forward

On the leading edge of the economy, we are seeing green shoots of recovery in single-family residential construction. The tight supply of existing homes supports an underlying need for new construction, but affordability remains a constraint largely due to elevated interest rates. While more accommodating rates would be most impactful, inflation-adjusted income is rising and will help prospective buyers save.

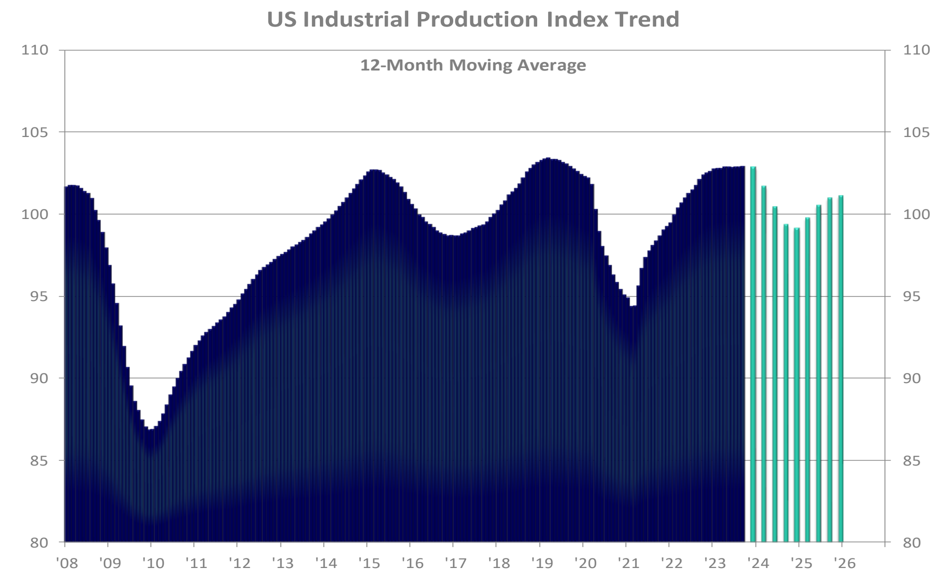
Core metrics of the macroeconomy such as Industrial Production, capex, and consumer spending are in late Phase C, Slowing Growth, and will contend with Phase D, Recession, in 2024. While it can be daunting to face a year of contraction, recovery in the housing market serves as an encouraging reminder that this decline is temporary. Rise will resume for most industries in 2025. Opportunity can be found in countercyclical and nondiscretionary markets; those which have received federal funding, such as semiconductors and renewables; and younger industries, such as e-commerce.

The lagging nonresidential construction sector is near its peak growth rate for this cycle and will soon slow. Decline is slightly further out on the horizon for nonresidential construction, occurring in late 2024 and into 2025.

Leading Indicators Are Mixed, the Fed Remains Hawkish

The ITR Leading Indicator™, US ISM PMI (Purchasing Managers Index) monthly rate-of-change, and the US OECD Leading Indicator rate-of-change have moved higher in recent quarters. In a typical business cycle, this burgeoning upward movement would suggest near-term recovery and rise for both the US industrial sector and the broader macroeconomy. However, when broadening the analysis to other key drivers, the consensus breaks down.

Many metrics - from corporate profits to lower supply chain pressures to industry utilization rates - are still pointing to rate-of-change decline for US Industrial Production for the coming quarters at least. Major indicators of the upcoming downturn remain the inverted US Treasury yield curve and prior softening in inflation-adjusted consumer savings.



While we do not forecast what the Federal Reserve will do, the messaging remains hawkish as it tries to tamp down inflation to its 2% long-run target. While many headlines suggest the US economy may be able to avoid a recession after all, our analysis suggests that is not likely. While the leading indicators remain mixed, the most convincing evidence still points toward a mild recession with a late-2024 low. The impact of contractionary monetary policy takes time to unfold, and further pursuit of this policy risks pushing out the timing of the business cycle low into early 2025.

Form Your Action Plan Looking at Least Half a Business Cycle Ahead

Utilize our market forecasts for your planning and have contingency plans for both the upside and downside. In addition, think back to previous economic booms – what do you wish you had done during the downturn to set your business up for success? Time those actions so you can capitalize on the general rise during 2025 and much of the second half of this decade. Look for ways to lean into your competitive advantages and take the time to address any competitive disadvantages you may have. Extra time may afford an opportunity for system upgrades or efficiency improvements. Lastly, we expect the labor market to remain relatively tight. Look to retain and cross-train key, high-performing employees to keep the business running, and look for ways to minimize your dependency on labor through efficiency gains.

Terminology & Methodology

Data Trends:

Monthly Moving Total (MMT) vs Monthly Moving Average (MMA):

Totals are used when it makes sense to add the data together, as with units sold or total dollars spent. Averages are used when the data cannot be compounded, such as with an index, percent, price level, or interest rates.

3MMT/A and 12MMT/A:

A 3-month or 12-month moving total/average is the total/average of the monthly data for the most recent 3 and 12 months, respectively. The 3MMT/A illustrates the seasonal changes inherent to the data series. The 12MMT/A removes seasonal variation in order to derive the underlying cyclical trend. It is also referred to as the annual total or annual average.

Rates-of-Change:

A rate-of-change figure is the ratio comparing a data series during a specified time period to the same period one year ago. **Rates-of-change** are expressed in terms of the **annual percent change in a 12MMT/A, 3MMT/A, and actual monthly data.**

Rates-of-change reveal whether activity levels are rising or falling compared to last year. A rate-of-change trend illustrates and measures cyclical change and trends in the data.

ITR Economics' three commonly used rates-of-change are the **1/12**, **3/12**, and **12/12**, which represent the year-over-year percent change of a single month, 3MMT/A, and 12MMT/A (respectively).

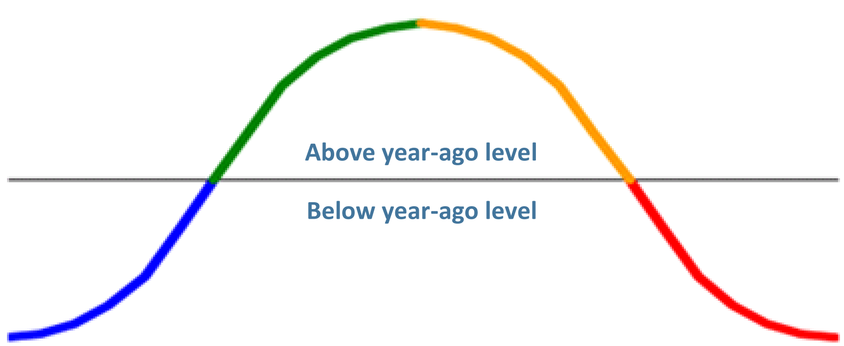
A rate-of-change above 0 indicates the data is higher than one year prior, while a rate-of-change below 0 indicates the data is below one year earlier.

Our video tutorials offer step-by-step instruction for

calculating rates-of-change and using leading indicators to see the future.

Business Cycle:

The data trends and rates-of-change identify positions in the business cycle. Those positions are:



Recovery (A): 12/12 is rising but is below zero; the data trend is below the year-ago level and is either heading toward a low or is in the early stages of rise. This is the first positive phase of the business cycle.

Accelerating Growth (B): 12/12 is rising and is above zero; the data trend is accelerating in its ascent and is above the year-ago level. This is the second positive phase of the business cycle.

Slowing Growth (C): 12/12 is declining but remains above zero; the data trend ascent is slowing or has stopped its rise, but it is still above the year-ago level. This is the first negative phase of the business cycle.

Recession (D): 12/12 is declining and is below zero; the data trend is below the year-ago level and the rate of decline is increasing. This is the second and final negative phase of the business cycle.

Business Cycle

Page Number	Industry	Phase	Current	2023	2024	2025
4	MTI Average Monthly Sales	C	14.4%	9.4%	-11.0%	6.9%
6	US Industrial Production Index	C	0.8%	0.2%	-3.6%	2.0%
7	US Nondefense Capital Goods New Orders (excluding aircraft)	C	2.6%	0.3%	-3.3%	3.8%
8	US Construction Machinery New Orders	C	11.5%	10.2%	-13.9%	1.0%
9	North America Light Vehicle Production	C	11.2%	7.7%	-4.3%	8.3%
10	US Heavy-Duty Truck Production	C	9.0%	3.1%	-12.9%	6.3%
11	US Oil and Gas Extraction Production	B	7.7%	6.3%	-0.8%	2.1%
12	US Medical Equipment and Supplies Production	C	3.0%	1.2%	-0.9%	3.5%
13	US Civilian Aircraft Equipment Production	C	7.0%	3.3%	7.2%	-1.3%
14	US Computers and Electronics New Orders	C	3.1%	-0.4%	-4.4%	2.9%
15	US Farm Machinery Shipments	D	-20.6%	-23.3%	0.1%	11.0%

A RECOVERY

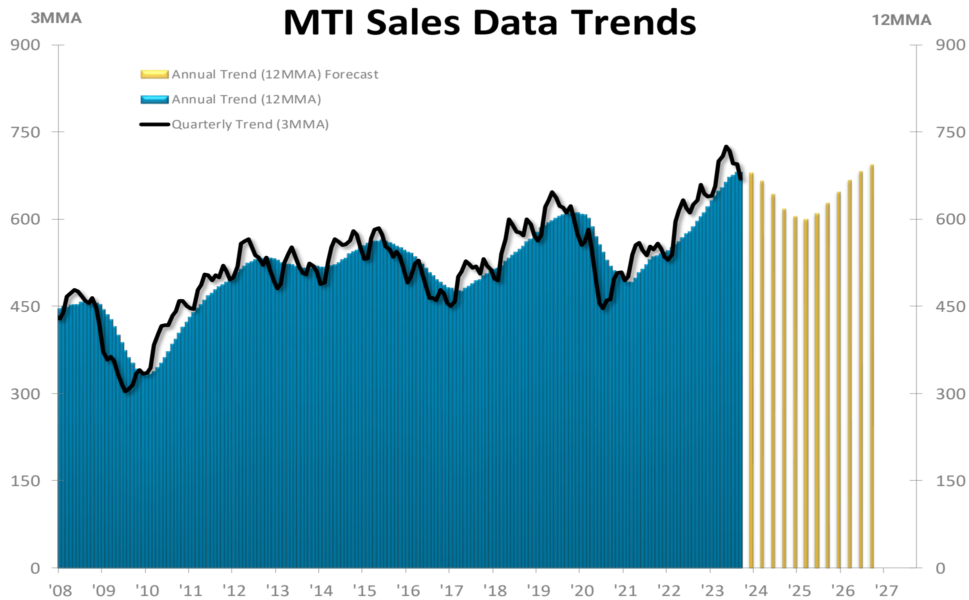
B ACCELERATING GROWTH

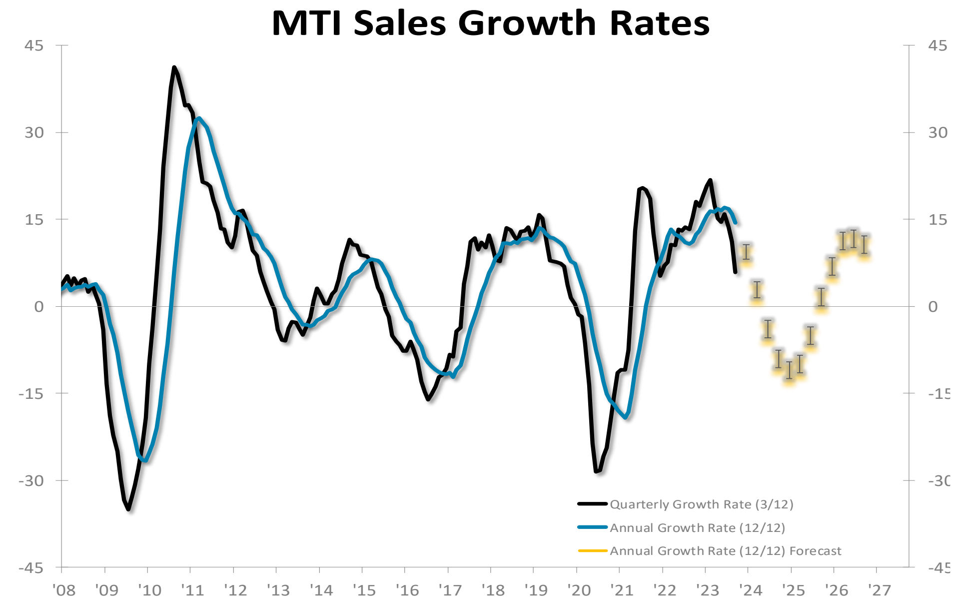
C SLOWING GROWTH

D RECESSION

MTI Average Monthly Sales

Broad-Based Decline Ahead for MTI Sales, but Rise Will Resume by Mid-2025





Industry Outlook

2023: 9.4%

2024: -11.0%

2025: 6.9%

Outlook & Supporting Evidence

- Annual average MTI Monthly Sales will peak around the end of this year and then decline by roughly 11% into early 2025. Decline will be broad-based as the lagged effects of the Federal Reserve's contractionary monetary policy take hold. Investment in new equipment is likely to be lower in the coming year, as financial conditions have deteriorated and the consumer, the backbone of the US economy, is showing signs of weakening. Additionally, pricing pressures will be to the downside, impacting top-line figures and compressing margins.
- Be cautious of cutting back too much, as rise in MTI Sales will resume by the middle of 2025 and extend through at least the third quarter of 2026. Determine which investments are likely to pay off in the long run and set you up for success in the next rising trend, but do not overextend your finances to do so.

Phase & Amplitudes

Phase C

Slowing Growth

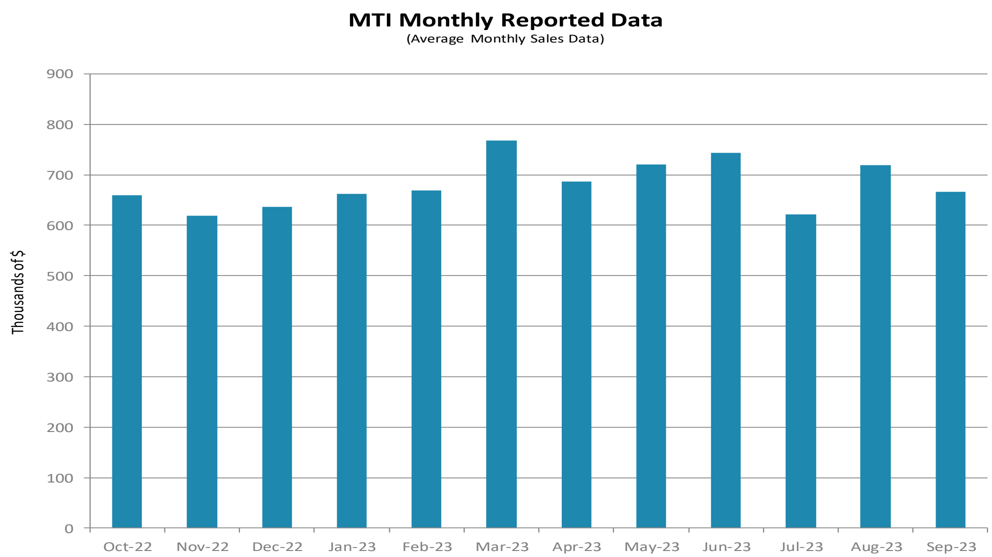
September 2023 Annual Growth Rate (12/12): 14.4%

September 2023 Annual Average (12MMA): $681.0 thousand

MTI Average Monthly Sales Forecast

	4Q23	1Q24	2Q24	3Q24	4Q24	1Q25	2Q25	3Q25	4Q25	1Q26	2Q26	3Q26
3MMA*	637.2	642.5	616.7	575.0	584.6	621.9	661.2	643.2	659.4	705.3	720.6	690.5
3/12	**-0.2%**	**-8.0%**	**-12.8%**	**-14.8%**	**-8.3%**	**-3.2%**	**7.2%**	**11.9%**	**12.8%**	**13.4%**	**9.0%**	**7.3%**
12MMA*	679.4	665.4	642.8	617.8	604.7	599.5	610.7	627.7	646.4	667.3	682.1	693.9
12/12	**9.4%**	**2.9%**	**-3.9%**	**-9.1%**	**-11.0%**	**-9.9%**	**-5.0%**	**1.6%**	**6.9%**	**11.3%**	**11.7%**	**10.6%**

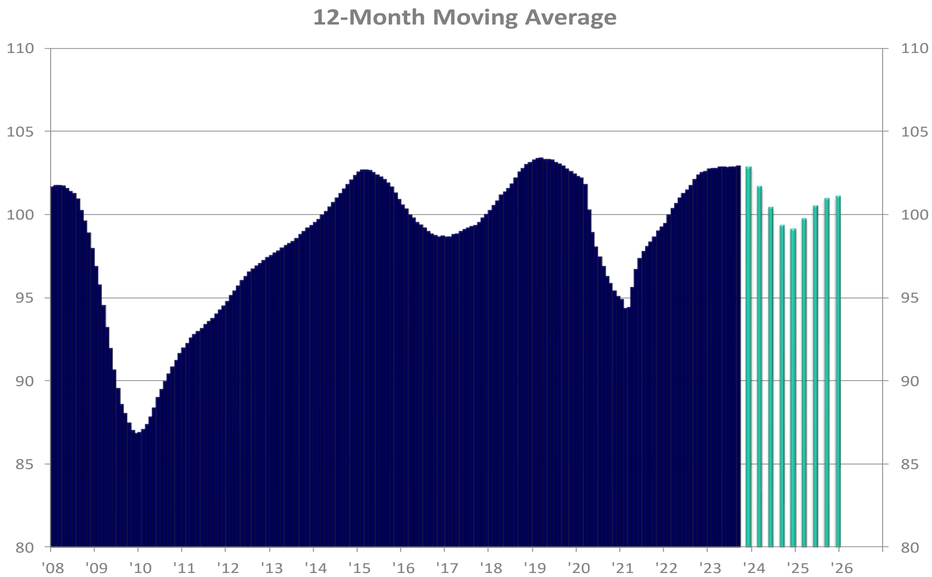
MTI Reported Average Monthly Sales Data

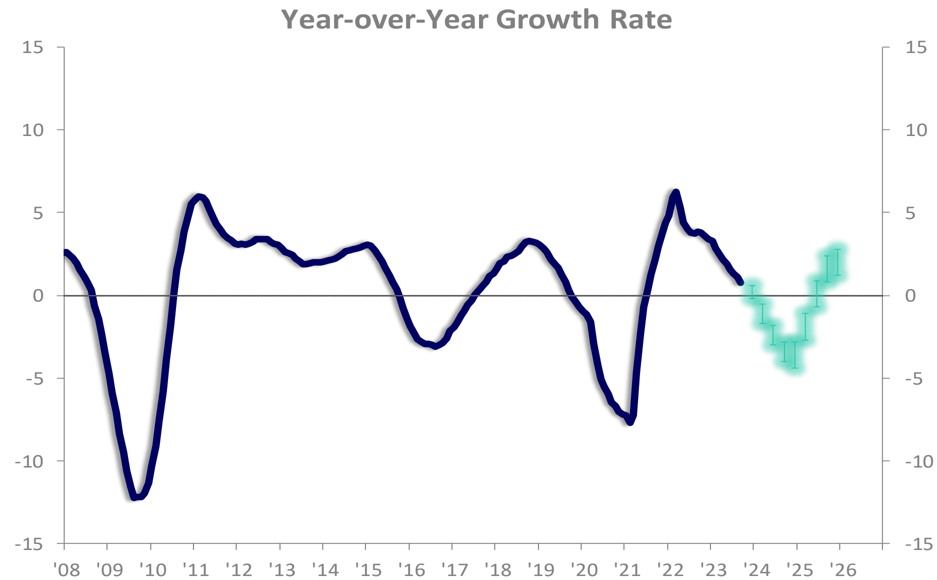


	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23
Monthly*	659.5	619.1	636.1	662.9	669.3	768.0	686.0	720.2	743.8	621.9	719.0	666.2
1/12	**18.0%**	**14.9%**	**25.3%**	**22.3%**	**18.3%**	**13.1%**	**14.6%**	**15.9%**	**17.2%**	**7.5%**	**8.4%**	**1.9%**
3MMA*	658.9	644.2	638.2	639.4	656.1	700.1	707.8	724.7	716.7	695.3	694.9	669.0
3/12	**18.1%**	**17.3%**	**19.3%**	**20.8%**	**21.8%**	**17.5%**	**15.2%**	**14.5%**	**16.0%**	**13.7%**	**11.1%**	**5.9%**
12MMA*	603.5	610.2	620.9	631.0	639.6	647.0	654.3	662.6	671.7	675.3	680.0	681.0
12/12	**12.5%**	**13.0%**	**14.6%**	**15.7%**	**16.4%**	**16.3%**	**16.9%**	**16.6%**	**17.0%**	**16.8%**	**15.9%**	**14.4%**

US Industrial Production Index

Manufacturing Fell Below Year-Ago Levels; Total Industrial Production Faces Decline in 2024





Industry Outlook

2023: 0.2%

2024: -3.6%

2025: 2.0%

Outlook & Supporting Evidence

- Annual Industrial Production has flattened out and is on the cusp of a declining trend that will likely last until around year-end 2024. However, the prolonged inversion of the yield curve suggests that the low may be pushed into early 2025. Relative to historical standards, this recession will be mild, more akin to the early 2000s than the Great Recession.
- US Manufacturing Production, the largest component, has already dropped below year-ago levels. Upward pressure is stemming from record highs in the oil and gas sector, but the same macroeconomic headwinds will mute the oil and gas market in the coming year.
- Rise is expected for much of 2025, though annual Production will not return to peak levels during that time.

Phase & Amplitudes

Phase C

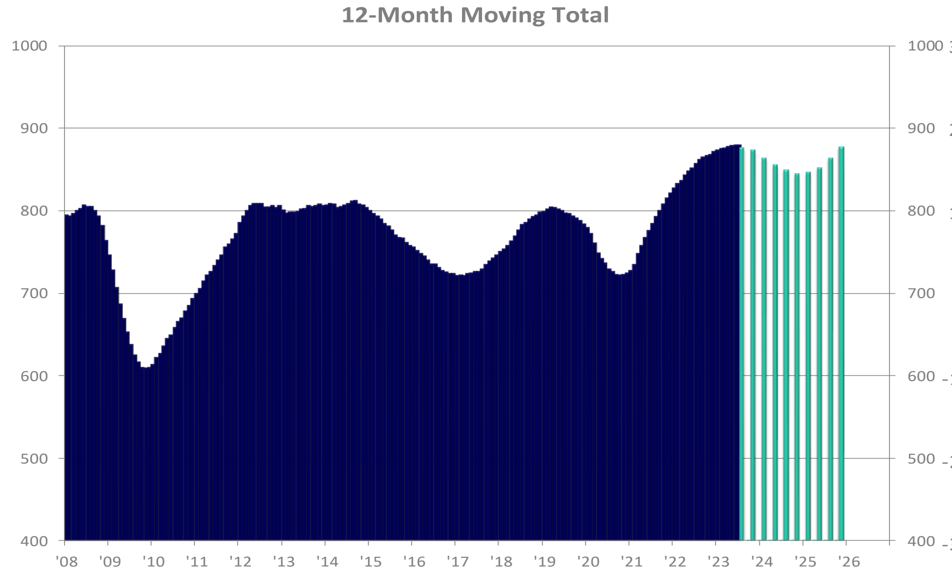
Slowing Growth

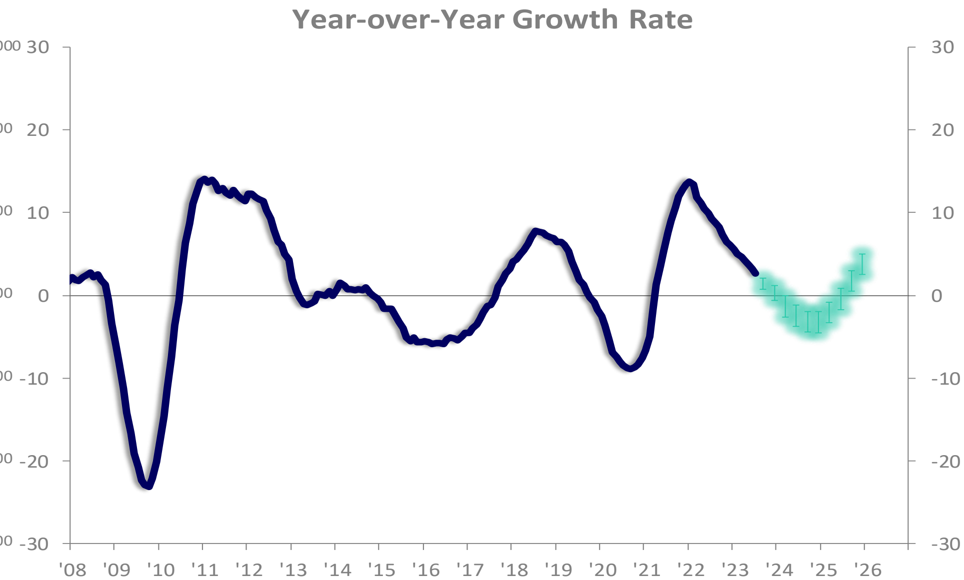
September 2023 Annual Growth Rate (12/12): 0.8%

September 2023 Annual Average (12MMA): 102.9

US Nondefense Capital Goods New Orders (excluding aircraft)

New Orders to Decline Given Declining Profits, Stricter Lending, and Waning Economic Data





Industry Outlook

2023: 0.3%

2024: -3.3%

2025: 3.8%

Outlook & Supporting Evidence

- Annual New Orders in August were 2.6% above the year-ago level and are nearing a peak. Subsequent decline will extend until around year-end 2024.
- Capital expenditures plans will likely be lower for 2024 given declining corporate profits, tighter lending criteria, elevated costs of borrowing, and waning economic data. These factors have shaken business confidence, which is below the long-term average, and will likely hinder New Orders.
- While consumers will experience disinflation (a slowing pace of rise in prices), producers are likely to face deflation (decline in prices) in 2024. This will push down on New Orders, which are denominated in dollars.
- New Orders rise will then take hold by early 2025 and persist through at least the end of that year.

Phase & Amplitudes

Phase C

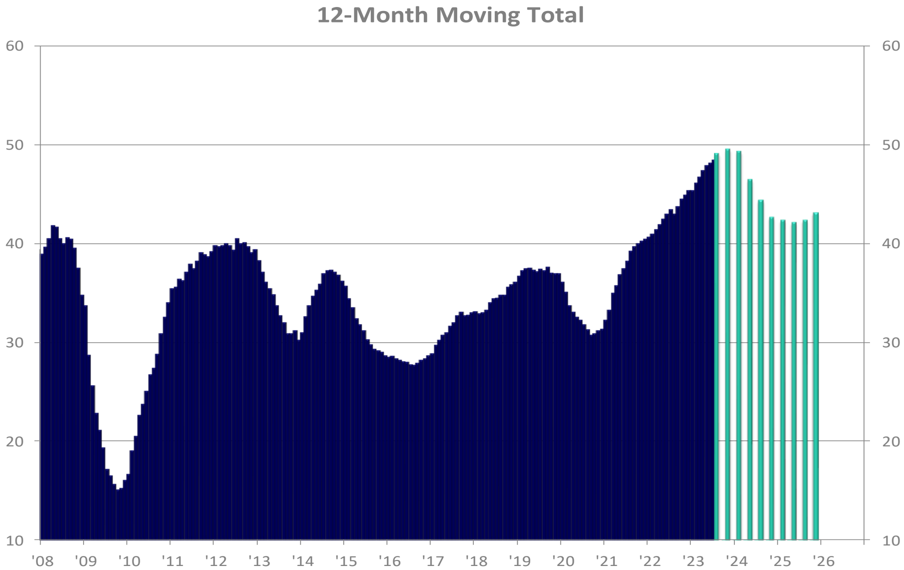
Slowing Growth

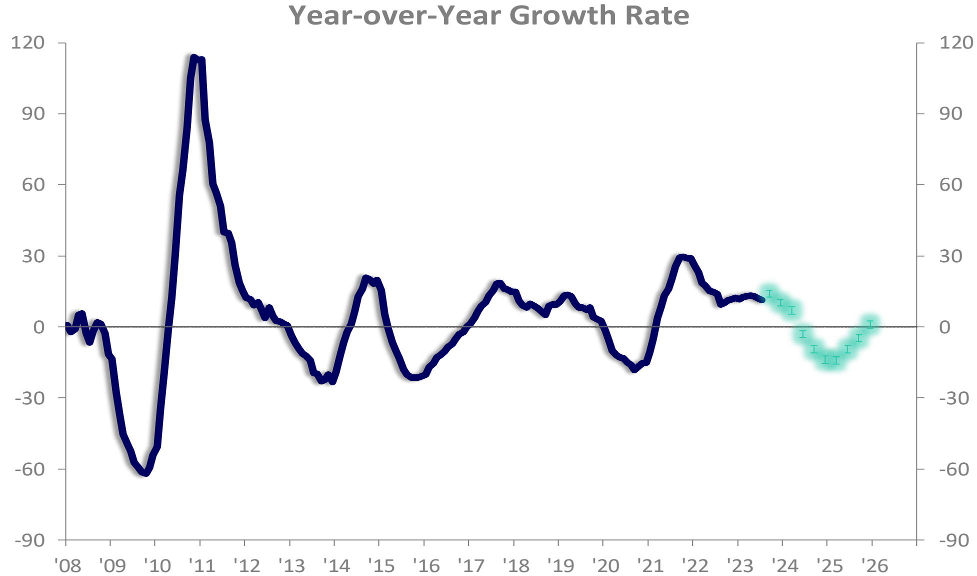
August 2023 Annual Growth Rate (12/12): 2.6%

August 2023 Annual Total (12MMT): $879.9 billion

US Construction Machinery New Orders

Forecast Revised; CRE and Financial Concerns to Hinder Building Activity, Lowering Orders





Industry Outlook

2023: 10.2%

2024: -13.9%

2025: 1.0%

Outlook & Supporting Evidence

- We revised the New Orders forecast. The near term was lifted due to stronger-than-anticipated pricing and exports. The 2024 rate-of-change is little-changed. We lowered the 2025 growth rate, as we now expect a slightly later low.
- Annual New Orders are expected to rise to around the start of 2024 and then decline into mid-2025. More restrictive financial conditions, commercial real estate concerns, and waning economic data signal developers are likely to pull back on building. Our expectations for US Private Nonresidential Construction suggest imminent downside pressure on the construction machinery market. Recovery in single-unit residential construction is encouraging, but the upside pressure to the machinery market likely will not develop until the latter half of 2024. Rise in New Orders will not begin until mid-2025.

Phase & Amplitudes

Phase C

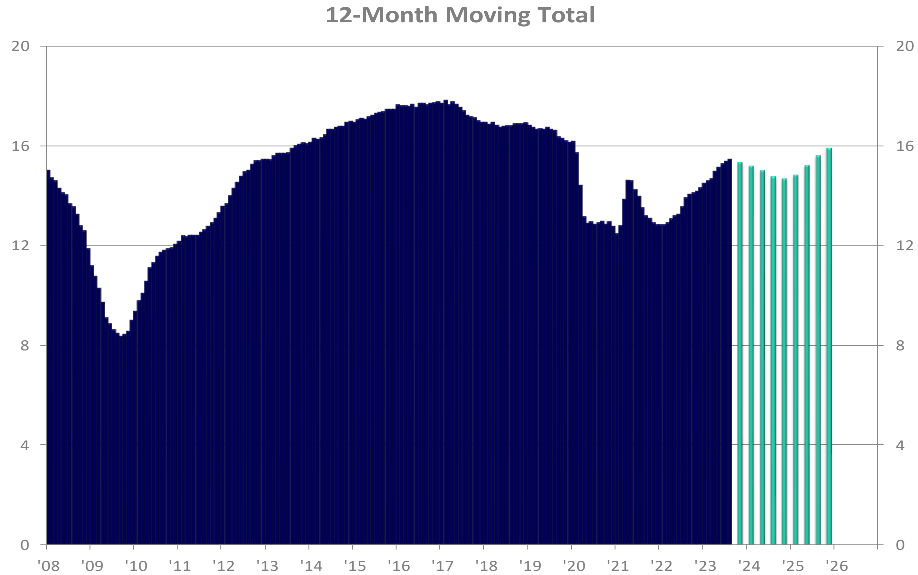
Slowing Growth

August 2023 Annual Growth Rate (12/12): 11.5%

August 2023 Annual Total (12MMT): $48.4 billion

North America Light Vehicle Production

Weakening Consumer to Hinder Vehicle Demand; Production Decline is Likely in 2024



Industry Outlook

2023: 7.7%

2024: -4.3%

2025: 8.3%

Outlook & Supporting Evidence

- The UAW strike may cause a near-term blip in the data, but our expectations, which are based on economic fundamentals, remain unchanged. Annual Production will peak imminently and then decline through 2024.
- Consumers keep buying and companies are rebuilding fleets despite high interest rates. However, the consumer's financial position is worsening. Credit card delinquencies and the percent of consumers making only the minimum payment have risen, and the subprime auto loan market is raising red flags. While rebuilding inventory will soften the blow, the vehicle market is likely to soften in 2024, resulting in Production decline.
- Annual Production will then rise in 2025, as we expect the prior year of more conservative spending and the tight labor market to put consumers in a better position to fuel growth.

Phase & Amplitudes

Phase C

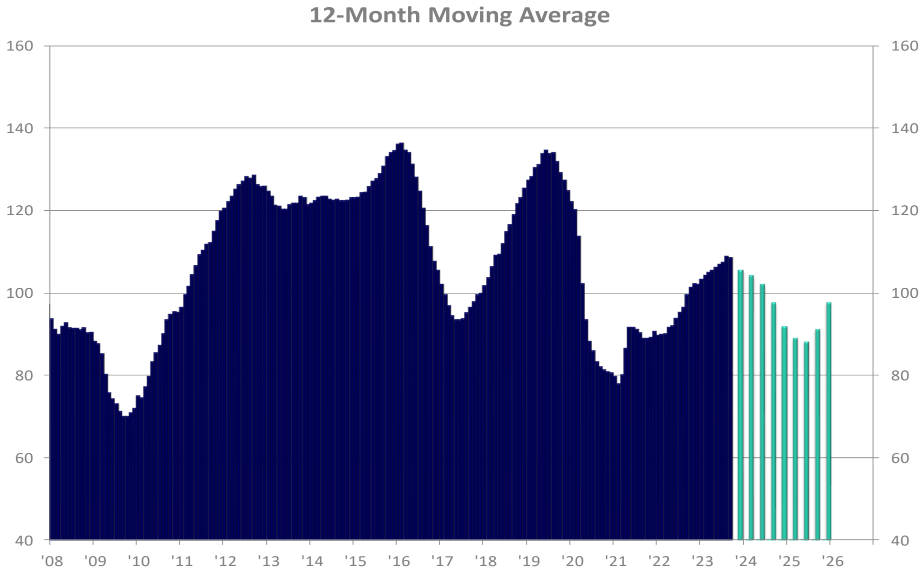
Slowing Growth

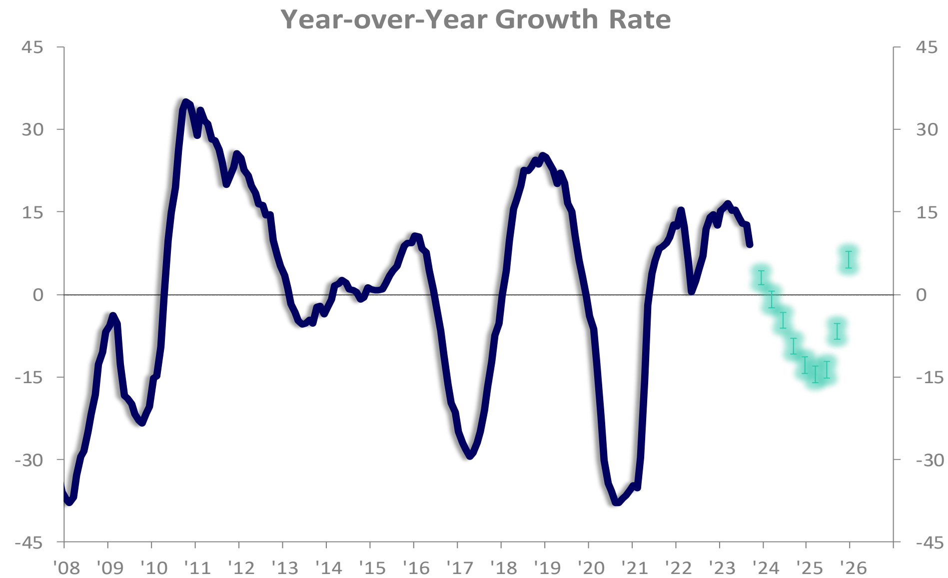
September 2023 Annual Growth Rate (12/12): 11.2%

September 2023 Annual Total (12MMT): 15.5 million units

US Heavy-Duty Truck Production Index

Forecast Revised; Lower Freight Movement and Financial Conditions Suggest Decline Ahead





Industry Outlook

2023: 3.1%

2024: -12.9%

2025: 6.3%

Outlook & Supporting Evidence

- We revised our Production outlook. The near term was lifted due to a data revision by the source and stronger-than-expected results. We lowered the rate-of-change forecast for both 2024 and 2025. The primary change is that we now expect the annual Production low to come two quarters later, in mid-2025, given the still-inverted yield curve and Fed actions.
- Cyclical decline hit the freight market early, with both volume and prices declining as supply chain conditions improved and inventories built up. Further decline is likely as the US, Canada, and Mexico move further along the back side of the business cycle in 2024, impacting domestic and cross-border trucking. Combined with more restrictive financial conditions, this will likely hinder demand for new heavy-duty trucks.
- Annual Production will decline from the near term into mid-2025.

Phase & Amplitudes

Phase C

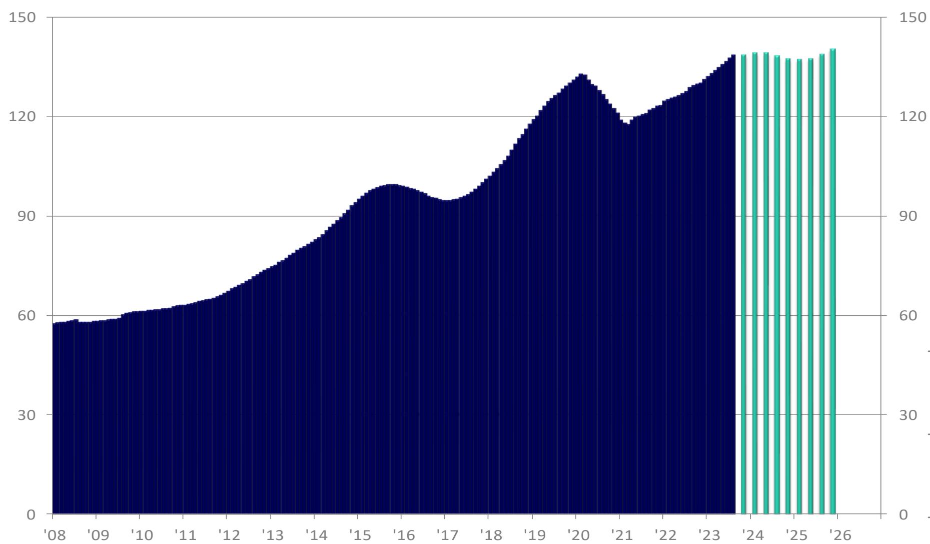
Slowing Growth

September 2023 Annual Growth Rate (12/12): 9.0%

September 2023 Annual Average (12MMA): 108.5

US Oil and Gas Extraction Production Index

Forecast Revised; Production to Peak in 1H24; Subsequent Decline Will Be Very Mild



Industry Outlook

2023: 6.3%

2024: -0.8%

2025: 2.1%

Outlook & Supporting Evidence

- We revised our forecast for annual Production upward by 2%-4%. The revision is to account for recent outperformance, due in part to strong natural gas exports. The outlook has a later low and, consequently, slightly lower growth in 2025 than previously forecasted.
- Annual Production will peak in the first half of 2024 and then decline mildly into early 2025. Peak-to-trough decline will only amount to around 1.5%. Oil Prices are expected to remain well above the breakeven for most US oil fields, and conflict in the Middle East could increase interest in domestic production. However, demand from end markets where petroleum is an input is likely to move lower as retail and B2B activity declines. Consequently, we expect decline—but only very mild decline.
- Production will likely reach record highs again by late 2025.

Phase & Amplitudes

Phase B

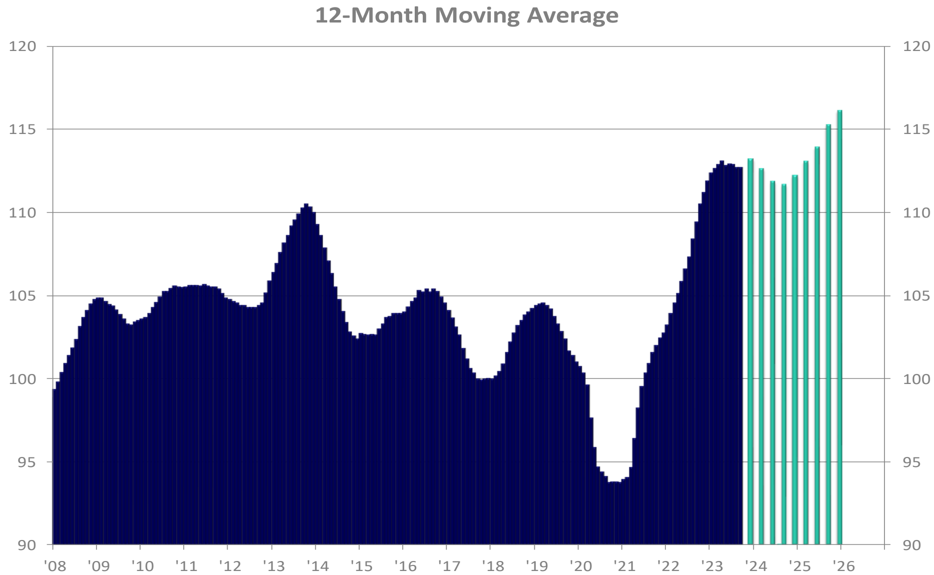
Accelerating Growth

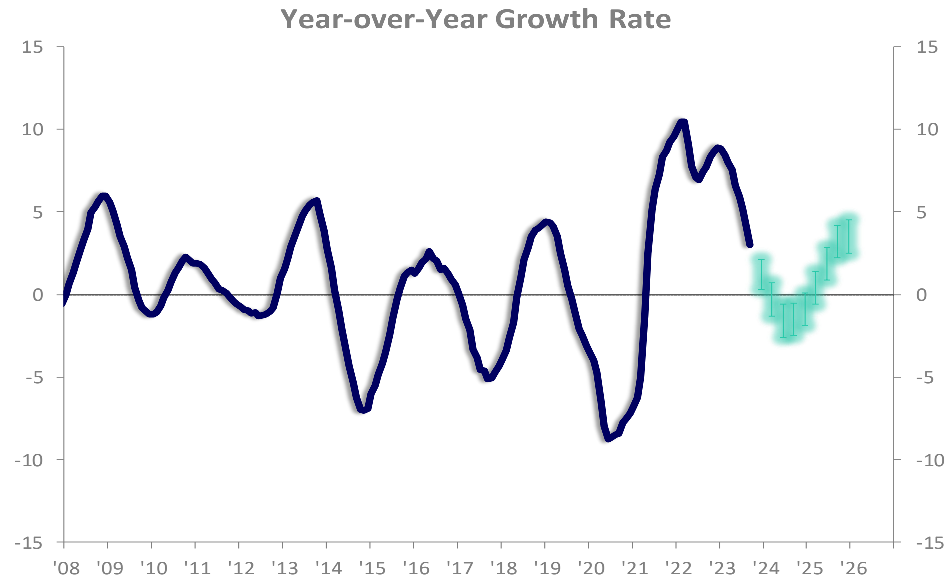
September 2023 Annual Growth Rate (12/12): 7.7%

September 2023 Annual Average (12MMA): 138.4

US Medical Equipment and Supplies Production Index

Consumer Trends Signal Further Production Decline in 2024; Reshoring Is an Upside





Industry Outlook

2023: 1.2%

2024: -0.9%

2025: 3.5%

Outlook & Supporting Evidence

- Annual Production is gradually declining but still above year-ago levels.
- Annual Production will decline further into late 2024. The medical industry is likely to experience a mild correction following the pandemic-fueled rise in recent years and subsequent profitability challenges in the medical industry. While essential services will carry on, elective procedures may be delayed as economic conditions become more challenging and consumers cut back on spending. Reshoring and recent movements in the US dollar exchange rate will likely benefit domestic production and suggest that decline will likely be relatively mild.
- Production rise will resume in 2025. This market may be an area of opportunity for MTI members, as it is less cyclical than machinery markets.

Phase & Amplitudes

Phase C

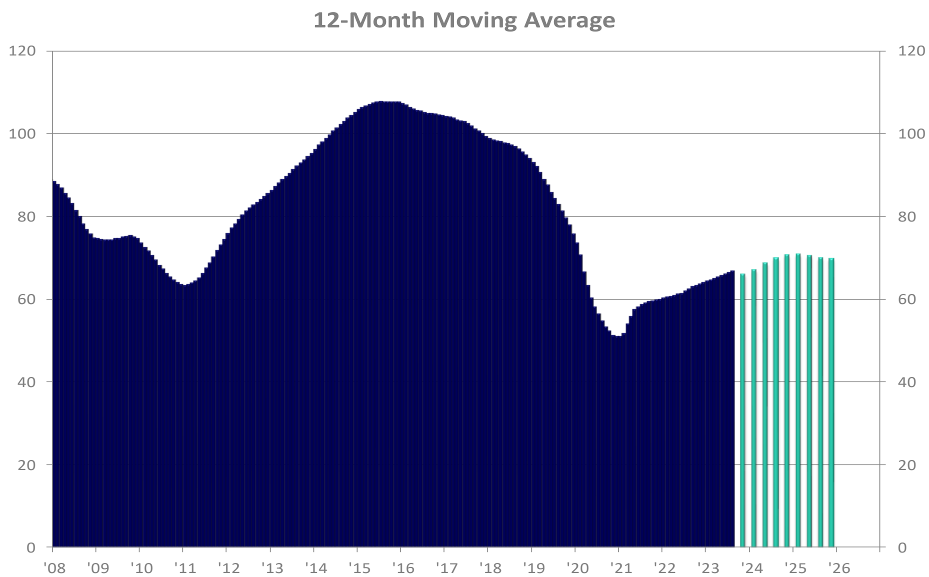
Slowing Growth

September 2023 Annual Growth Rate (12/12): 3.0%

September 2023 Annual Average (12MMA): 112.7

US Civilian Aircraft Equipment Production Index

Orders Are Elevated but Production Is Constrained; Muted Rise Expected Into 2025



Industry Outlook

2023: 3.3%

2024: 7.2%

2025: -1.3%

Outlook & Supporting Evidence

- In light of a data revision from the source, we adjusted our Production forecast since the last report. The overall shape of the forecast is little-changed; we still expect rise in annual Production into early 2025 and then decline for at least the remainder of that year.
- Annual US Nondefense Aircraft and Parts New Orders are up 31.7% from one year ago, showing that airlines intend to expand their fleets, as the volume of travelers is back above the pre-pandemic level. Given the lengthy production times, existing orders will drive further rise in annual Production. However, orders may be canceled and tougher economic conditions will materialize in Aircraft Equipment Production during 2025, later than the overall economy.

Phase & Amplitudes

Phase C

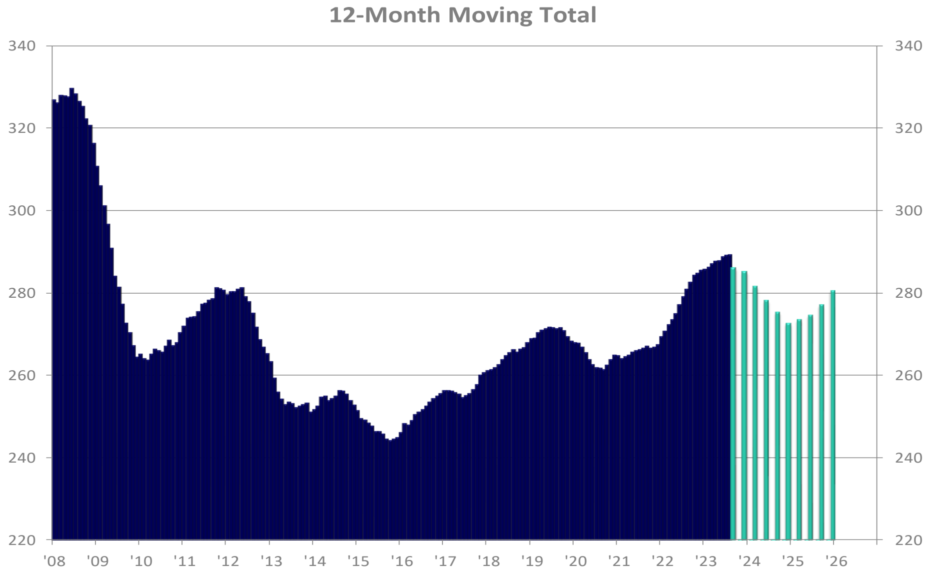
Slowing Growth

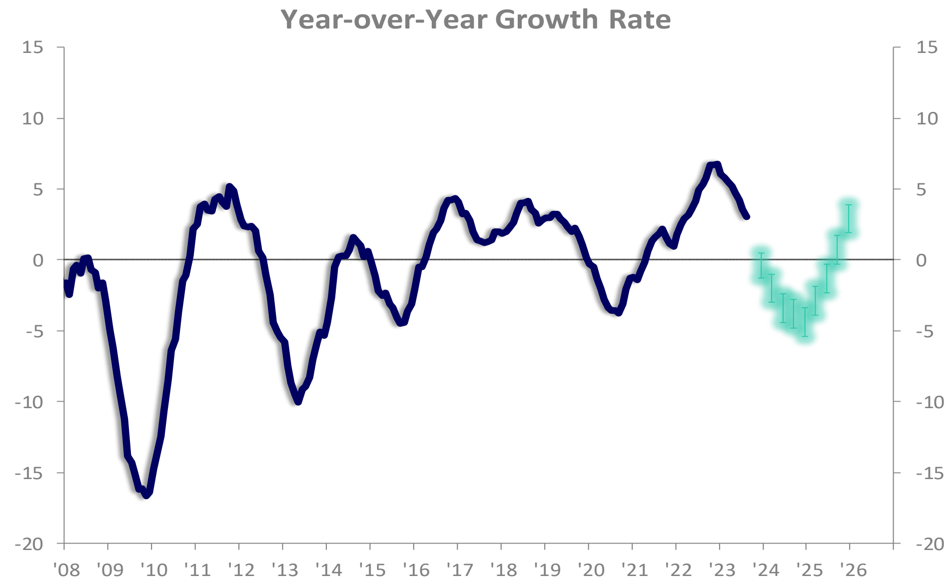
September 2023 Annual Growth Rate (12/12): 7.0%

September 2023 Annual Average (12MMA): 66.8

US Computers and Electronics New Orders

Expect More Conservative Spending in 2024 Given Financial Hurdles and Cooling Economy





Industry Outlook

2023: -0.4%

2024: -4.4%

2025: 2.9%

Outlook & Supporting Evidence

- Annual New Orders came in 3.1% above the year-ago level in August. We anticipate near-term decline in annual New Orders, which will last through 2024. Rise will follow in 2025.
- Both consumers and businesses are likely to be more conservative in their spending in the coming year given financial constraints and increasing concern about the state of the economy. Inflation has reduced the buying power of consumers' existing savings, and borrowing is now more costly and difficult. Nonessential purchases of electronics are likely to move lower, especially as this industry is historically interest rate-sensitive.
- MTI members may benefit from increased investment in domestic semiconductor and electronics capacity if producers are able to take market share from abroad.

Phase & Amplitudes

Phase C

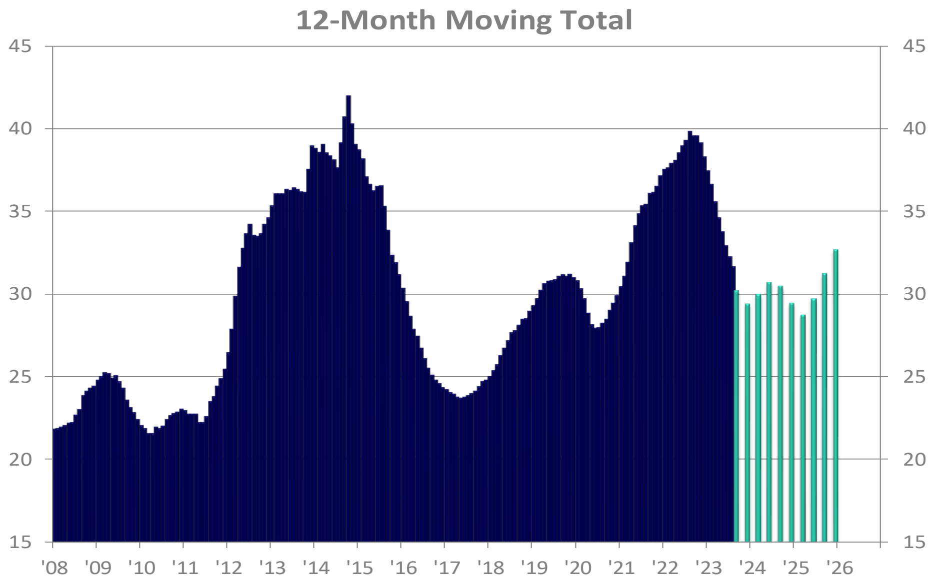
Slowing Growth

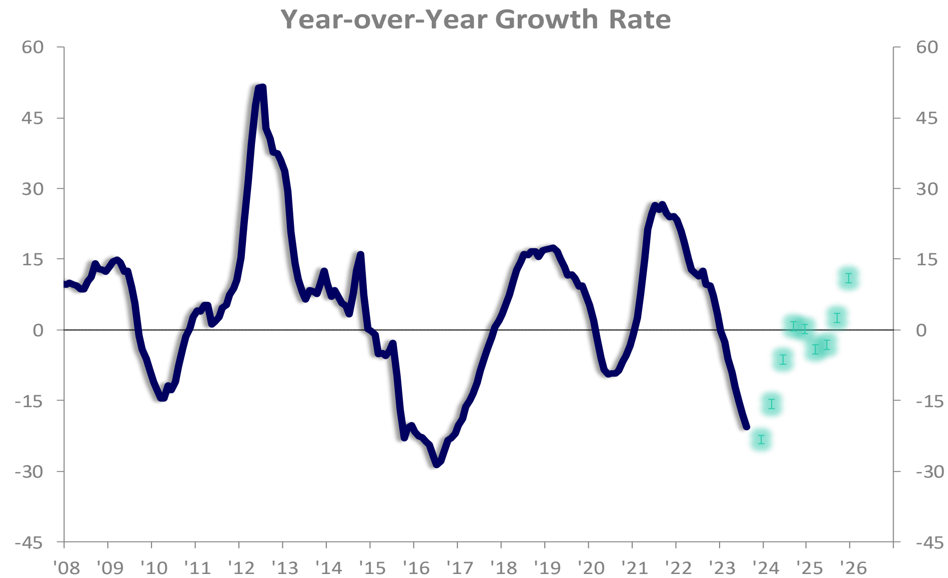
August 2023 Annual Growth Rate (12/12): 3.1%

August 2023 Annual Total (12MMT): $289.3 billion

US Farm Machinery Shipments

Shipments and Production Data Deviating, but Downside Pressure on Both Likely to Persist





Industry Outlook

2023: -23.3%

2024: 0.1%

2025: 11.0%

Outlook & Supporting Evidence

- Annual Shipments in the 12 months through September came in 20.6% below the year-ago level.
- We anticipate that annual Shipments will decline further in the near term and then oscillate in the range of roughly $28 billion to $30 billion through the middle of 2025. Pronounced rise will take hold in mid-2025.
- There is notable deviation between Farm Machinery Shipments and Production data. While both are declining, annual Production is still above the year-ago level, which suggests that MTI members may not be feeling double-digit decline in this market. However, both metrics are likely to move lower given elevated interest rates and decline in Farm Proprietors Income. The used farm machinery market has reported slightly softer, although still elevated, auction prices, which could indicate weakening demand.

Phase & Amplitudes

Phase D

Recession

August 2023 Annual Growth Rate (12/12): -20.6%

August 2023 Annual Total (12MMT): $31.6 billion

US Leading Indicators

Indicator	Direction		
	4Q23	1Q24	2Q24
ITR Leading Indicator™	🔴	🟢	N/A
ITR Retail Sales Leading Indicator™	🔴	🔴	🔴
US OECD Leading Indicator	🟢	🟢	🟢
US ISM PMI (Purchasing Managers Index)	🔴	🔴	🟢
US Total Capacity Utilization Rate	🔴	🔴	N/A
Green denotes that the indicator signals cyclical rise for the economy in the given quarter. Red denotes the opposite.			

What it means for the US economy

• Recent rise in the ITR Leading Indicator™, US OECD Leading Indicator, and the US ISM PMI (Purchasing Managers Index) may be calling for an earlier-than-forecasted low for the US Industrial Production rate-of-change. At this time, however, we still anticipate a US Industrial Production rate-of-change low around year-end 2024. This is supported by the preponderance of economic evidence, including other leading indicators with longer lead times, a still-inverted yield curve, softer consumer financials, and tightening commercial and industrial credit conditions.

• The ITR Retail Sales Leading Indicator™ is rising, but more data is needed to confirm whether the June reading represents a low. Prior decline in the Indicator suggests the US Total Retail Sales rate-of-change will decline into at least the second quarter of 2024, in line with our outlook.

• The US Total Industry Capacity Utilization Rate moved horizontally in September, but general decline is the dominant trend. This signals downward cyclical movement for the US industrial sector through at

Leading indicators are mixed but, overall, the evidence suggests recession ahead for the US economy. While contraction can be stressful, maintain a focus on the longer term and communicate your plans openly and regularly with your team. What can you do now to prepare for the next rising trend? Can you improve your competitive advantages and address your competitive disadvantages? How can you improve your margins in the longer term?

Appendix — Market Definitions

US Industrial Production Index — Index of total industrial production in the United States; includes manufacturing, mining, and utilities. Source: Federal Reserve Board. 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, NSA.

US Construction Machinery New Orders — New Orders for construction machinery in the United States. This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment. Source: US Census Bureau. NAICS Code: 33312. Measured in billions of dollars, 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, NSA.

US Heavy Duty Truck Production Index — Production index for heavy duty trucks in the US. This industry comprises establishments primarily engaged in (1) manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special purpose heavy duty motor vehicles for highway use or (2) manufacturing heavy duty truck chassis only. Includes trucks weighing 14,000 pounds or more. NAICS code: 33612. Source: Federal Reserve Board. Index, 2017 = 100, NSA.

Appendix — Market Definitions

US Oil and Gas Extraction Production Index — Includes exploration and extraction of crude petroleum and natural gas; drilling, completing, and equipping wells; operating separators, emulsion breakers, desilting equipment, and field gathering lines for crude petroleum and natural gas; and all other activities in the preparation of oil and gas up to the point of shipment from the producing property. Also includes the production of crude petroleum, the mining and extraction of oil from oil shale and oil sands, and the production of natural gas, sulfur recovery from natural gas, and recovery of hydrocarbon liquids. Source: Federal Reserve Board. NAICS Code: 211. Index, 2017 = 100, 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, NSA.

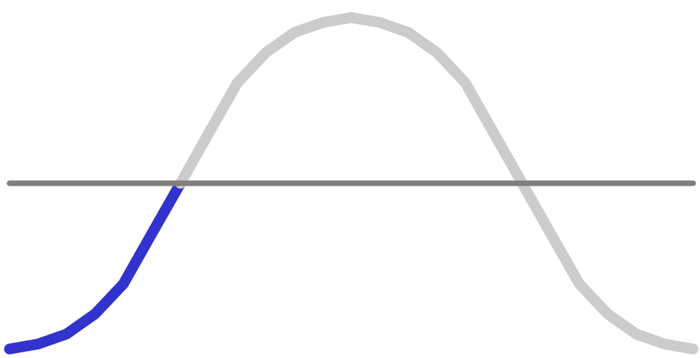
US Civilian Aircraft Equipment Production Index — Index for US establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications). Source: Federal Reserve Board. NAICS Code: 336412,3. Index, 2017 = 100, NSA.

US Computers and Electronics New Orders — New orders for computer and electronic products (excluding semiconductors) in the United States. Industries in the Computer and Electronic Product Manufacturing subsector aggregate establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. Source: US Census Bureau. NAICS Code: 334. Measured in billions of dollars, NSA.

US Farm Machinery Shipments — Total shipments in the United States includes agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type). Source: US Census Bureau. NAICS: 333111. Measured in billions of dollars, NSA.

Management Objectives™

Phase



A

1 Scrupulously evaluate the supply chain

2 Model positive leadership (culture turns to behavior)

3 Start to phase out marginal opportunities (products, processes, people); repair margins

4 Perform due diligence on customers and extend credit

5 Be on good terms with a banker; you will need the cash more now than in any other phase

6 Invest in customer market research; know what they value and market/price accordingly

7 Hire key people and implement company-wide training programs ahead of Phase B

8 Allocate additional resources to sales and marketing

9 Invest in system/process efficiencies

10 Make opportunistic capital and business acquisitions; use pessimism to your advantage

Management Objectives™

1 Ensure quality control keeps pace with increasing volume

2 Invest in workforce development: hiring, training, retention

3 Ensure you have the right price escalator; space out price increases

4 Maximize your profit margins through differentiation; stand out from the crowd and set yourself apart

5 Use improved cash flow to strategically position the business to beat the business cycle

6 Expand credit to customers

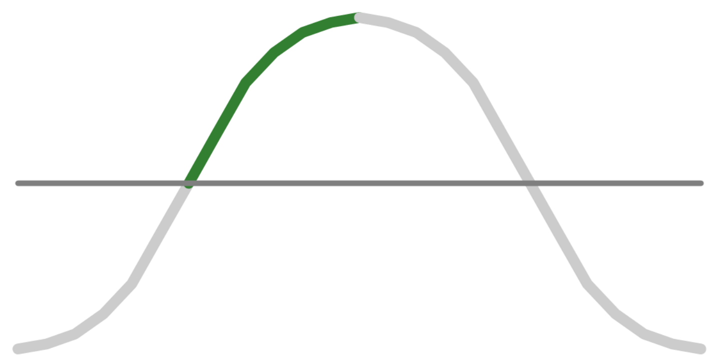
7 Improve corporate governance (rent a CFO; establish a board of advisors or board of directors)

8 Communicate competitive advantages; build the brand

9 Query users for what they want and what is important to them

10 Sell the business in a climate of maximum goodwill

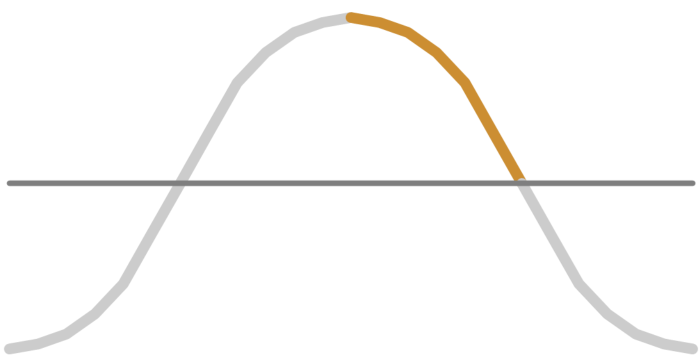
Phase



B

Management Objectives™

Phase



C

1 Know if your markets are headed for a soft landing or a hard landing

2 Cash is king; beware of unwarranted optimism

3 Stay on top of aging receivables

4 Revisit capital expenditure plans

5 Lose the losers: if established business segments are not profitable during this phase, eliminate them

6 Use competitive pricing to manage your backlog through the coming slowdown

7 Avoid committing yourself to long-term expenses at the top of the price cycle, but lock in revenue

8 Go entrepreneurial and/or counter-cyclical

9 Evaluate your vendors for financial strength; if needed, look for additional vendors as a safety net

10 If the cycle looks recessionary, cross-train key people to prepare for workforce attrition/reduction

Management Objectives™

1 Implement aggressive cost-cutting measures

2 Offer alternative products with a lower cost basis

3 Perform due diligence on acquisitions while valuations are falling

4 Reduce advertising as consumers become more price conscious

5 Enter or renegotiate long-term leases

6 Negotiate labor contracts

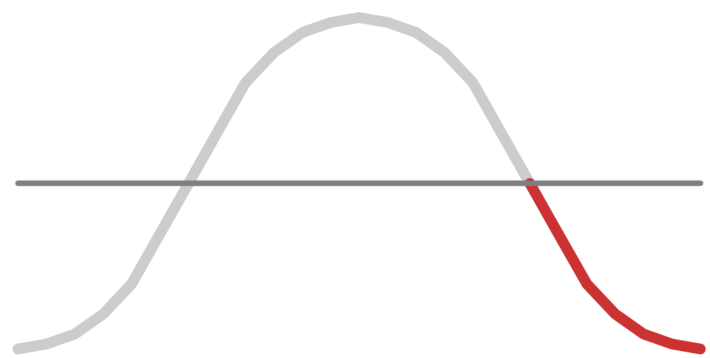
7 Consider capital equipment needs for the next cycle

8 Tighten credit policies

9 Develop programs for advertising, training, and marketing to implement in Phase A

10 Lead with optimism, remembering that Phase D is temporary

Phase



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