

*Material Handling Industry of America
Economic Series
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Material Handling Equipment Manufacturing

History and Forecast

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Material Handling Equipment Manufacturing Introduction



- The Material Handling Equipment Manufacturing (MHEM) series serves as a good proxy for the equipment based market in the Material Handling and Logistics Industry. Material Handling Equipment Manufacturing includes:
 - NAICS 333921 Elevators and Moving Stairways
 - NAICS 333922 Conveyors and Conveying Equipment
 - NAICS 333923 Overhead Traveling Cranes, Hoists, and Monorail Systems
 - NAICS 333924 Industrial Trucks, Tractors, Mobile Straddle Carriers and Stacker Machinery
- Data is collected and reported monthly by the U.S. Bureau of Census according to the North American Industry Classification System (NAICS).



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MHEM Forecast 2013 - 2014

Market Forecast for 2013 – 2014

Material Handling Equipment Manufacturing

As the current US economic expansion shifts from Cap-Ex driven to Consumer-led, we anticipate modest, positive MHEM growth for 2013. Principally due to the uncertainty related to pending US fiscal spending and debt resolution, and most recently the “fiscal cliff” escapades, Consumers and Investors remain wary. Housing, Auto and Non-res Construction rebounds will contribute to improved MHEM growth throughout 2013, into 2014 and beyond.

- MHEM New Orders grew 7.7% in 2012.

The outlook for 2013 is for growth of 6.0% and 10.0% or better for 2014; there remains some downside risk in the first half of 2013.

- MHEM Shipments grew 9.6% in 2012.

Shipments will grow about 7.0% in 2013, and 9.0% in 2014.

- MHEM Domestic Demand grew 10.6% in 2012.

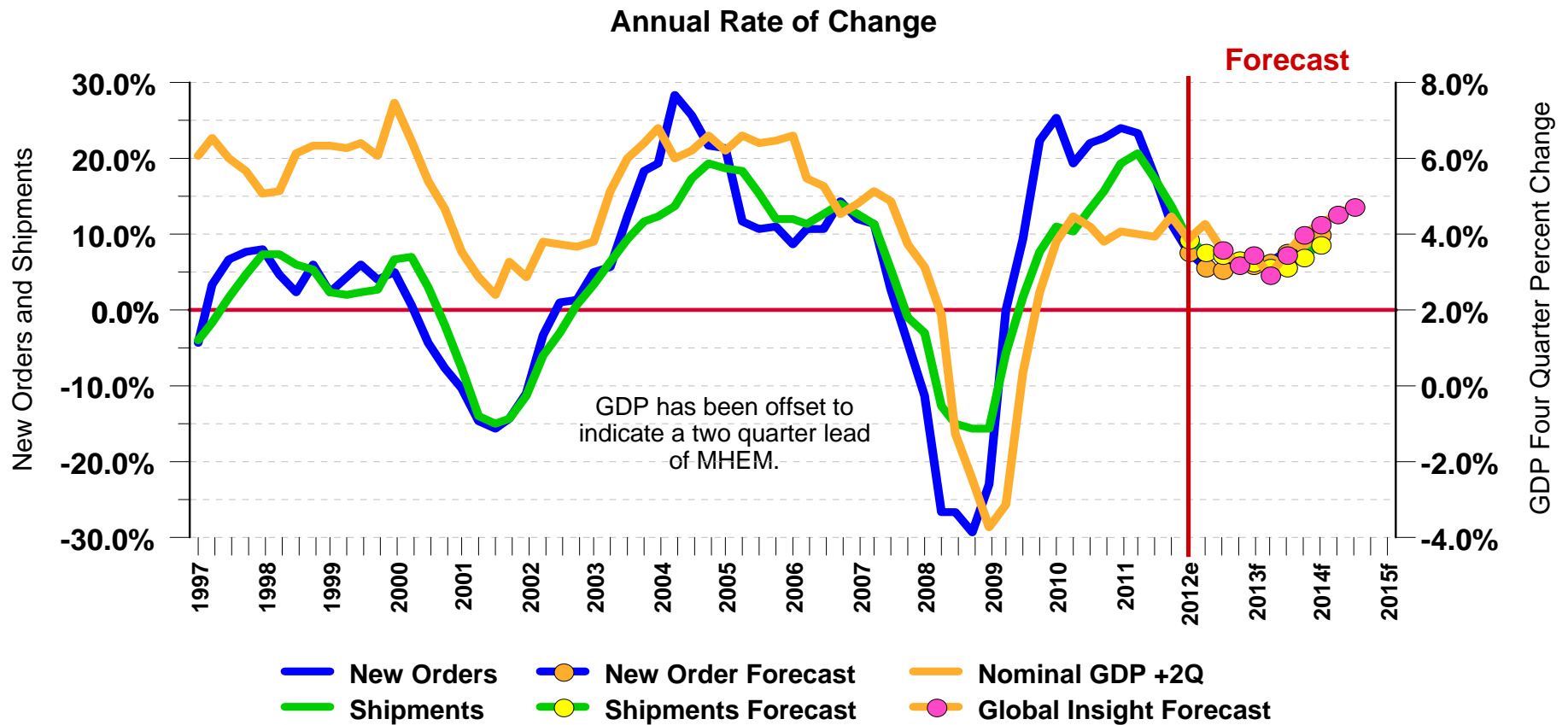
Domestic Demand (Shipments plus Imports less Exports) will mirror Shipment growth in 2013 at 7.0% and just over 9.0% in 2014.

- MHEM Trade growth slowed by more than 50.0% in 2012 reflecting reduced US demand and serious problems in foreign markets. Import growth in 2012 was 18.7%, down from 37.7% in 2011. Export growth was 12.7% in 2012, down from 26.2% in 2011.

MHEM Imports are expected to mirror New Order growth in 2013 and 2014, assuming that US production can support Domestic Demand. Exports are expected to slow by half again in 2013 and hold steady in 2014.

MHEM Forecast 2013 – 2014 vs. GDP

The outlook for 2013 is for growth of 6.0% and 10.0% or better for 2014; although, there remains some downside risk in the first half of 2013. Slow macro growth worldwide continues to hold downside risk for MHEM export prospects.

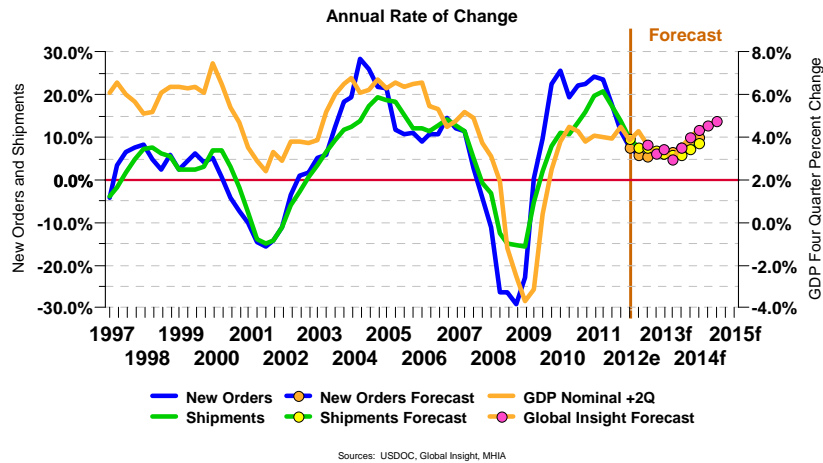


Sources: USDOC, Global Insight, MHIA

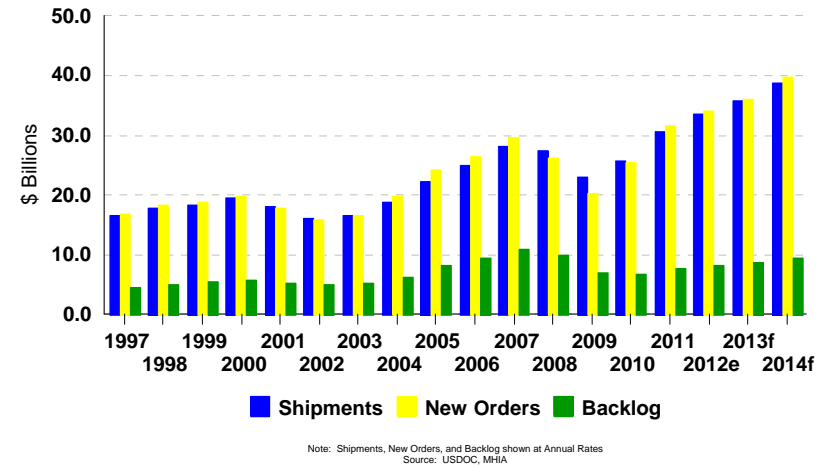
MHEM Forecast 2013 – 2014

Continued growth is forecasted for 2013 and 2014 for New Orders, Shipments, Imports, Exports and Domestic Demand.

MHEM vs. GDP



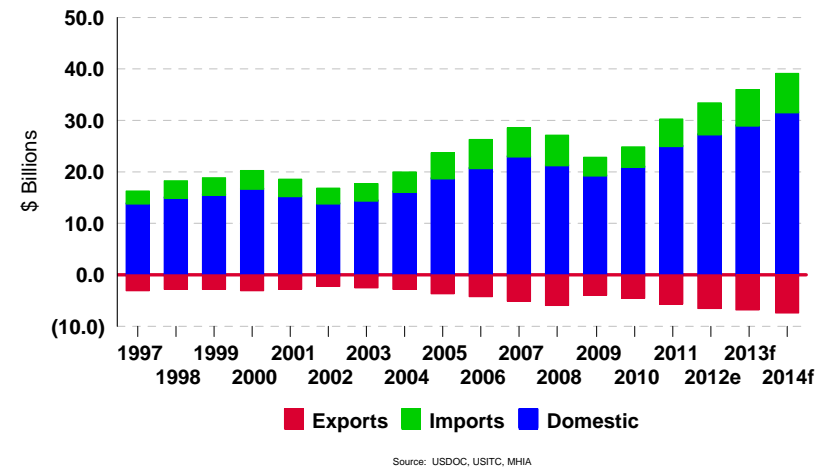
Domestic



Imports and Exports



Domestic Demand



Market Overview

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Market Overview – 2012e

Material Handling Equipment Manufacturing

| | <u>Annual Growth</u> | <u>Market Value</u> |
|-------------------|----------------------|---------------------------|
| • New Orders | 7.7% | \$34.1 Billion |
| • Shipments | 9.6% | \$33.6 Billion |
| • Unfilled Orders | 8.1% | \$ 8.0 Billion/2.8 Months |
| • Imports | 18.7% | \$ 6.2 Billion |
| • Exports | 12.7% | \$ 6.1 Billion |
| • Net Trade | | \$ - .1 Billion |
| • Domestic Demand | 10.6% | \$33.7 Billion |

Market Overview – 2011r

Material Handling Equipment Manufacturing

| | <u>Annual Growth</u> | <u>Market Value</u> |
|-------------------|----------------------|---------------------------|
| • New Orders | 24.2% | \$31.6 Billion |
| • Shipments | 19.6% | \$30.7 Billion |
| • Unfilled Orders | 13.4% | \$ 7.7 Billion/2.8 Months |
| • Imports | 37.7% | \$ 5.2 Billion |
| • Exports | 26.2% | \$ 5.4 Billion |
| • Net Trade | | \$ - .2 Billion |
| • Domestic Demand | 21.2% | \$30.5 Billion |

Market Overview – 2010r

Material Handling Equipment Manufacturing

| | <u>Annual Growth</u> | <u>Market Value</u> |
|-------------------|----------------------|--------------------------|
| • New Orders | 25.6% | \$25.4 Billion |
| • Shipments | 11.0% | \$25.7 Billion |
| • Unfilled Orders | - 3.0% | \$ 6.8 Billion/3.1Months |
| • Imports | 10.3% | \$ 3.8 Billion |
| • Exports | 23.3% | \$ 4.3 Billion |
| • Net Trade | | \$ - .5 Billion |
| • Domestic Demand | 9.1% | \$25.1 Billion |

Market Overview – 2009r

Material Handling Equipment Manufacturing

| | <u>Annual Growth</u> | <u>Market Value</u> |
|-------------------|----------------------|--------------------------|
| • New Orders | - 22.9% | \$20.3 Billion |
| • Shipments | - 15.6% | \$23.1 Billion |
| • Unfilled Orders | - 28.8% | \$ 7.0 Billion/3.4Months |
| • Imports | - 40.3% | \$ 3.4 Billion |
| • Exports | - 38.8% | \$ 3.5 Billion |
| • Net Trade | | \$ - .1 Billion |
| • Domestic Demand | - 15.9% | \$23.0 Billion |

Market Overview – 2008r

Material Handling Equipment Manufacturing

| | <u>Annual Growth</u> | <u>Market Value</u> |
|-------------------|----------------------|---------------------------|
| • New Orders | - 11.1% | \$26.3 Billion |
| • Shipments | - 3.0% | \$27.4 Billion |
| • Unfilled Orders | - 14.4% | \$ 9.9 Billion/4.6 Months |
| • Imports | + 5.8% | \$ 5.7 Billion |
| • Exports | +19.1% | \$ 5.7 Billion |
| • Net Trade | -94.2% | \$ 0.0 Billion (.036) |
| • Domestic Demand | - 5.0% | \$27.4 Billion |

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Economic Cycles

Economic Cycles Industrial Sectors



- Charting annual data is useful for a market overview; it is also very useful to view this data on a rate of change basis to better illustrate cyclical activity.
- For comparison purposes, the next chart was prepared by the Manufacturing Alliance – MAPI which illustrates the phases of a model business cycle and indicates the position within the cycle for twenty eight different industrial sectors based on the year-over-year change in the three month moving average of new orders. For details, visit <http://www.mapi.net>.
- Astute business developers position their companies and channel partners to cultivate customers in industry segments that are in the “accelerating growth” phase of the business cycle. Ultimately, it is the customer base that determines business cycle position for a company.
- We have included a chart for MHEM that shows both the year-over-year change in the three month moving average and in the twelve month moving total of new orders for comparison to the MAPI model business cycle. MHIA analyses employ the year-over-year rate of change on the twelve month moving total.

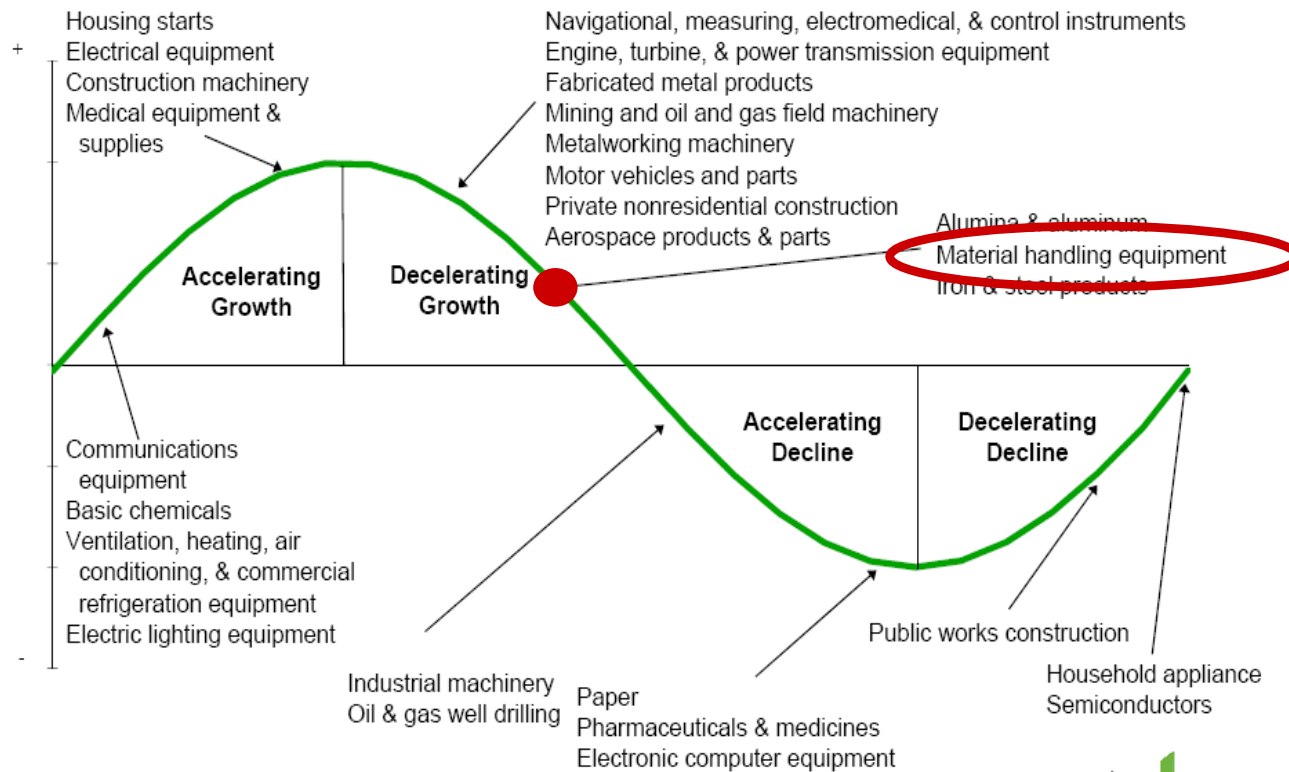
While continuing to expand on an annual rate of change basis, Material Handling Equipment Manufacturing has shifted from the “accelerating growth” to the “decelerating growth” phase and may continue to vacillate between these phases over the next nine to fifteen months as in prior expansion cycles. Notice that other key sectors are shifting to other phases of this cycle as well.

MAPI Industrial Outlook – December, 2012

Current Business Cycle for Major Industrial Sectors

Manufacturers Alliance – MAPI Industrial Sector by Phase of Cycle

Figure 1 - Industrial Sector by Phase of Cycle, October 2012



Source: MAPI

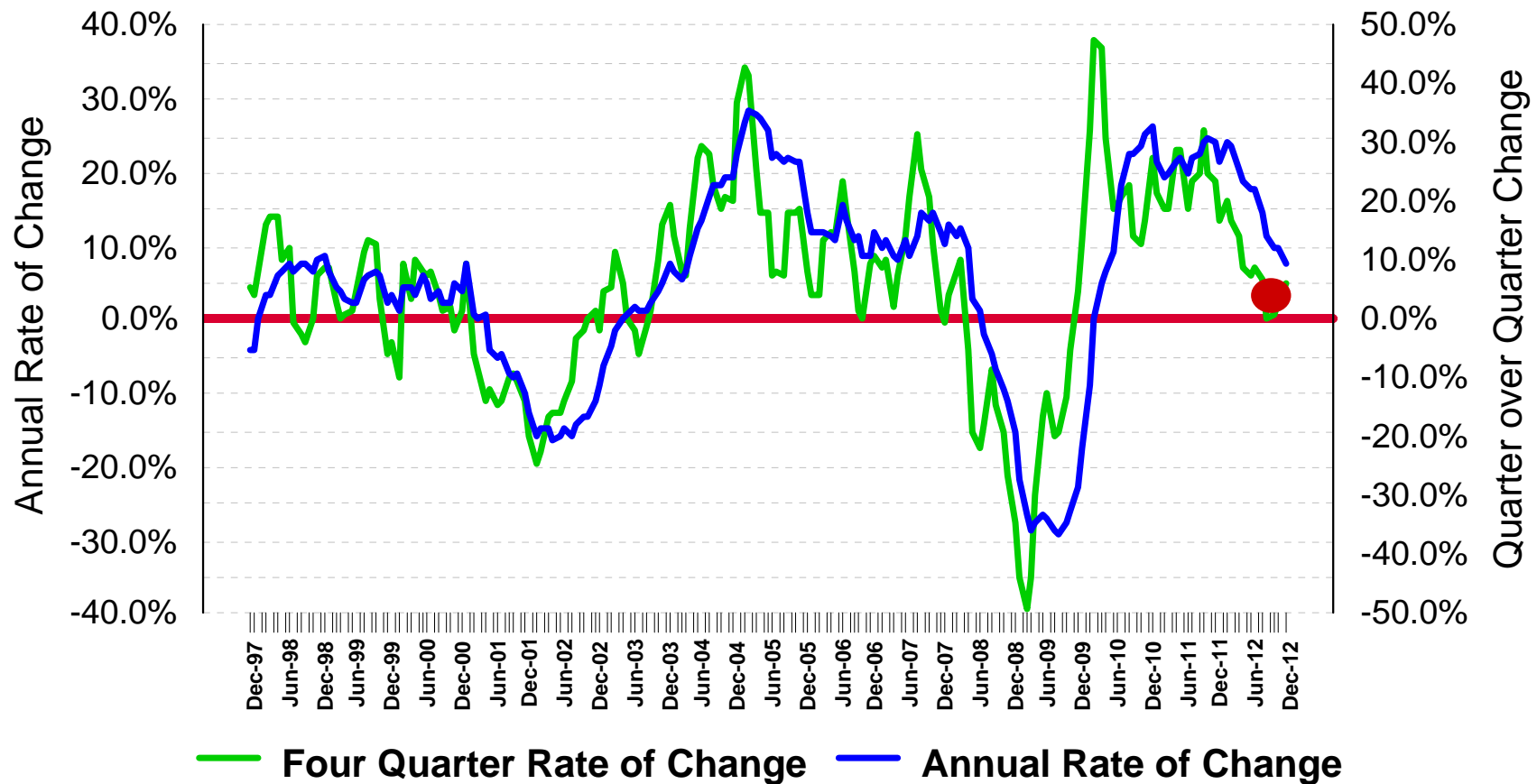


MHEM New Orders – 2012e

Annual Rate of Change vs. Four Quarter Rate of Change

Four quarter change is calculated by comparing the current quarter to the same quarter one year prior.
This short term measurement anticipates the change to expect in the annual rate of change.

Material Handling Equipment Manufacturing



Economic Cycles Material Handling Equipment Manufacturing

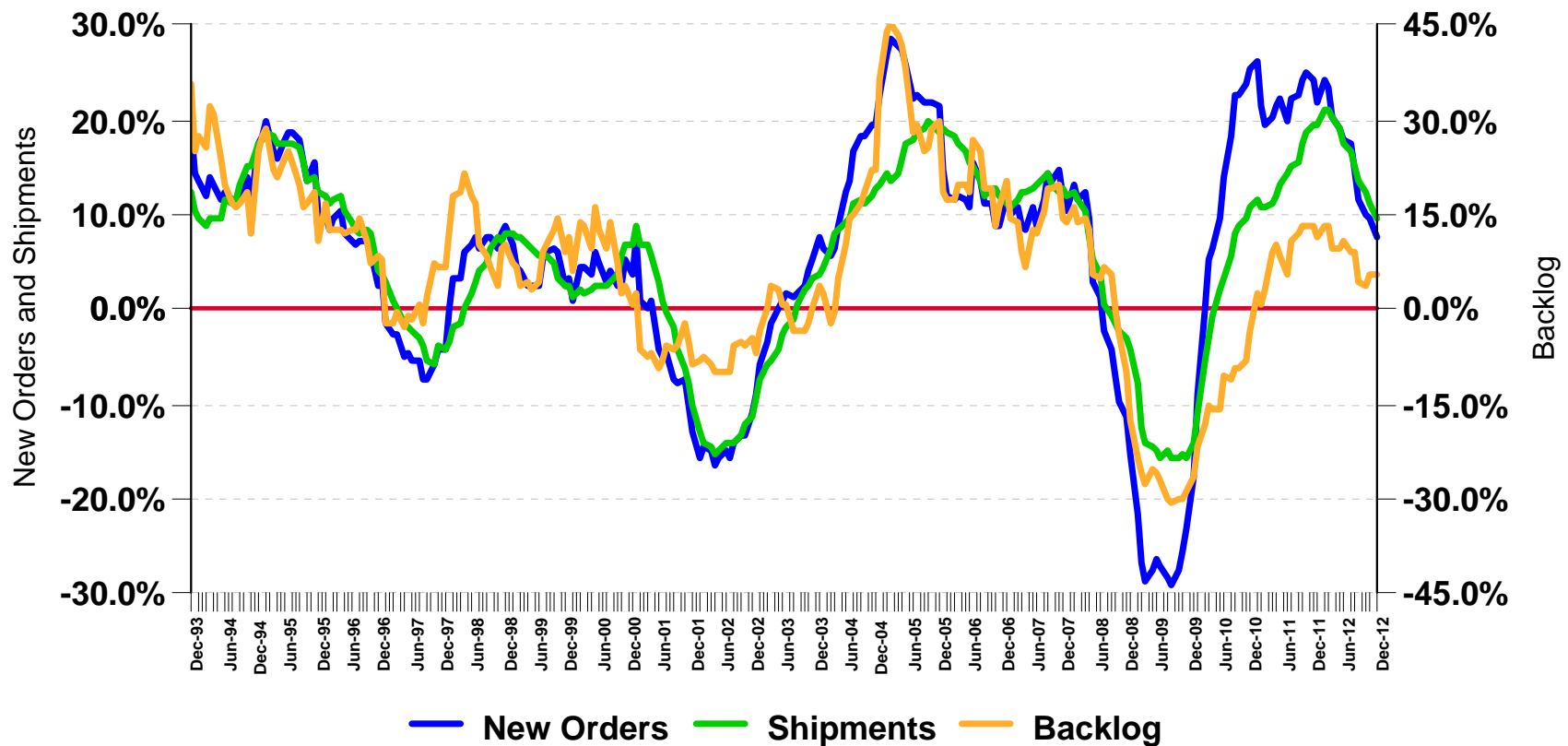
- The next charts reveal the annual rate of change for domestic new orders, shipments, backlog, imports, exports and net trade balance illustrating the position of these components of MHEM in the current economic cycle.
- The data in these charts represent year-over-year change in the twelve month moving total (in most cases) for the business activity indicated.
- It is important to note that value *above Zero* indicates *growth* (increasing at an increasing or decreasing rate) while any value *less than Zero* indicates *contraction* (decreasing at an increasing or decreasing rate).

Economic Cycles

Material Handling Equipment Manufacturing

MHEM established a trough for this business cycle in the third quarter of 2009, demonstrated robust growth in 2010, maintained position in 2011 and decelerated through 2012.

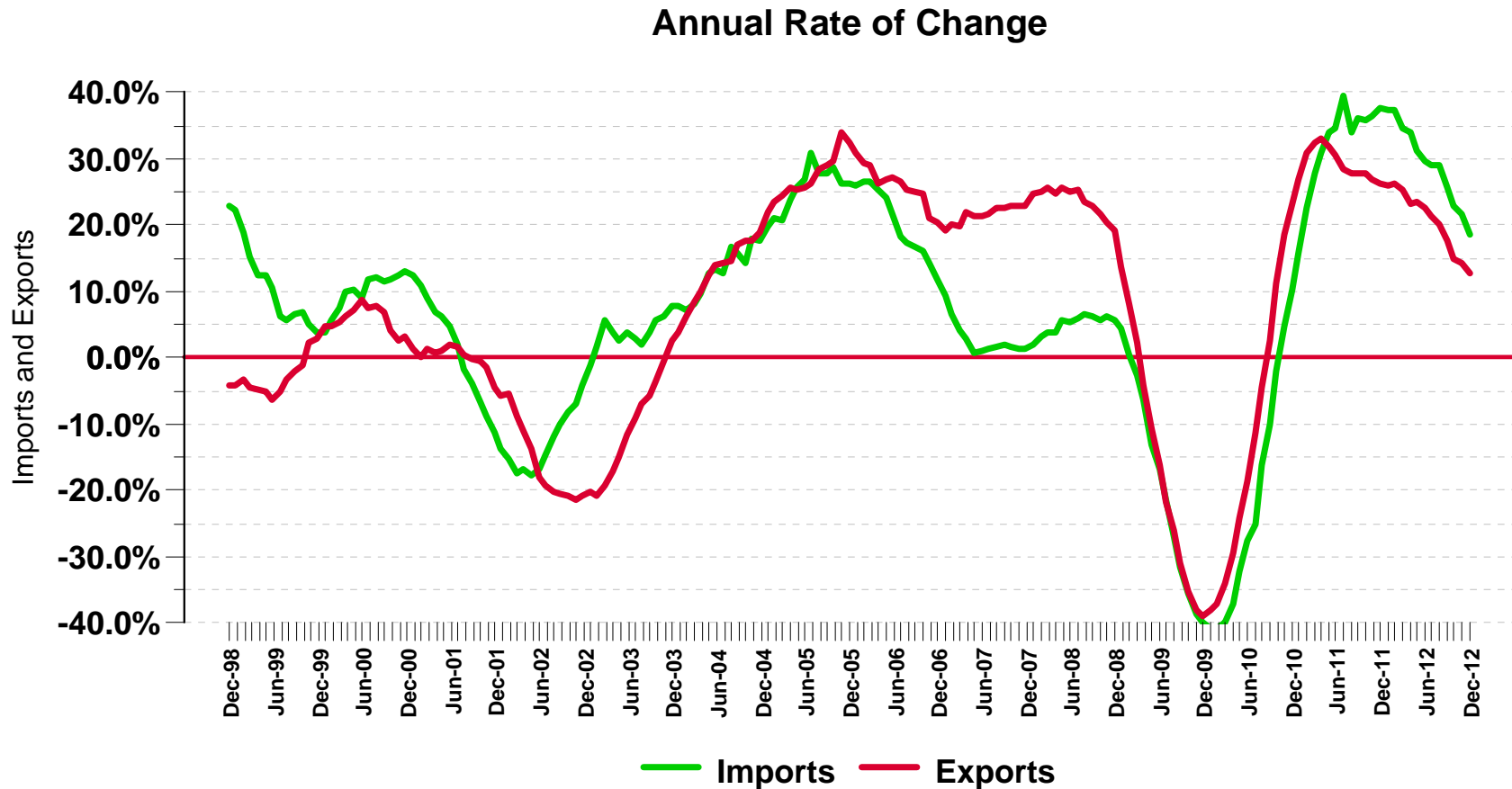
Annual Rate of Change



Source: USDOC

Economic Cycles – Imports and Exports Material Handling Equipment Manufacturing

Imports and Exports have been in an accelerated decline for some months indicating stalling markets.



Source: USITC

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Leading Indicators

Leading Indicators for Material Handling Equipment Manufacturing

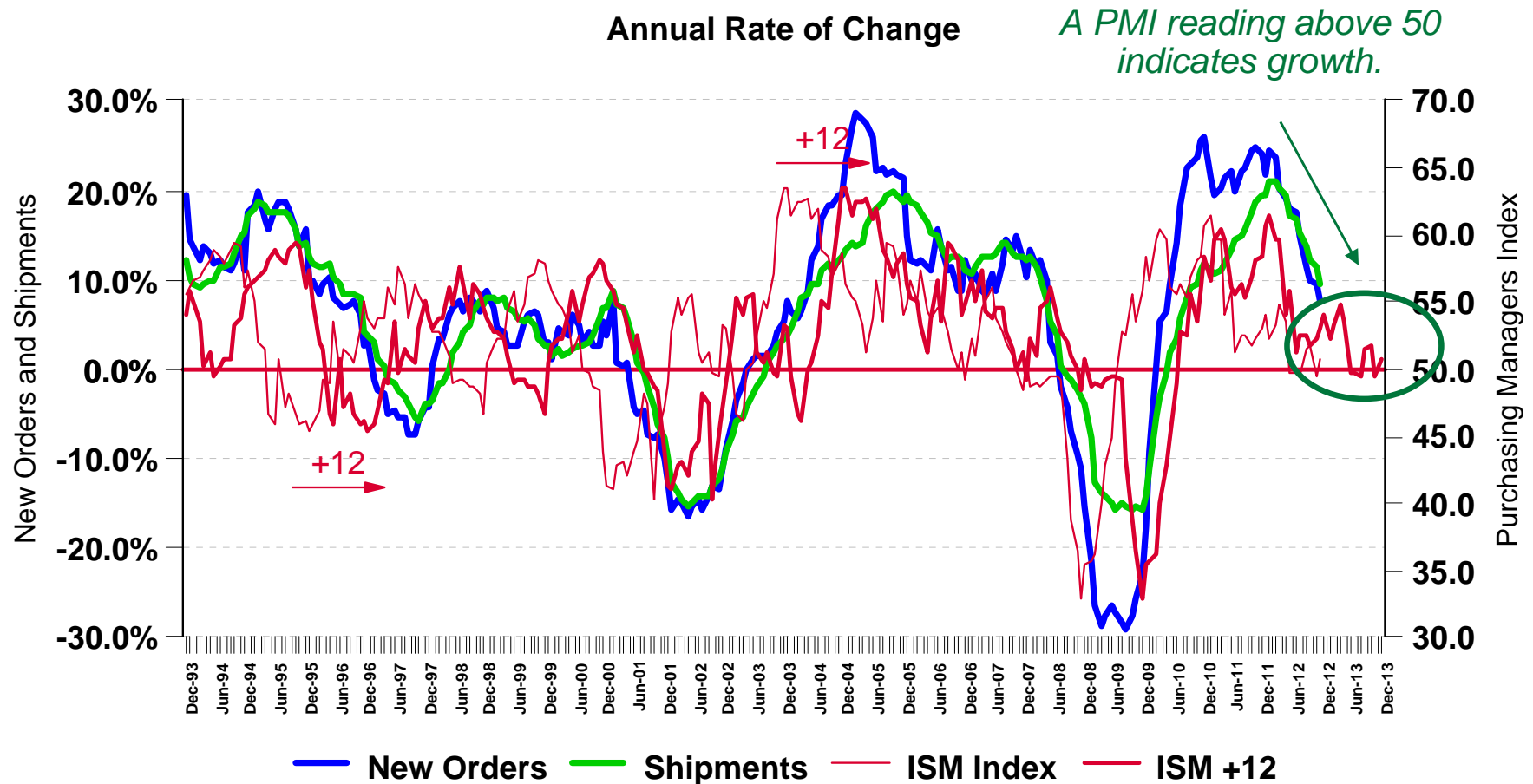
In economics, leading indicators are key economic variables that economists use to predict a new phase of the business cycle. A leading indicator is one that changes before the economy or one of its elements changes.

- Several economic time series tend to anticipate the cyclical nature of the Material Handling Equipment Manufacturing time series. We have found that these indicators lead MHEM by 12 to 21 months:
 - The Institute for Supply Management **PMI Index**, a barometer of Industrial Buyer Sentiment, leads MHEM by **12 Months**.
 - The FRB **Industrial Production** Index, an indicator of Industrial Activity and its companion series, **Capacity Utilization**, lead MHEM by **9 to 12 Months**.
 - The Index of **Consumer Sentiment**, which reflects Consumer Confidence, leads MHEM by **12 Months**.
 - **Housing Starts**, the most significant indicator of Residential Investment, historically led MHEM by **21 Months** until this business cycle. For the remainder of this cycle, it is likely to be **coincidental** at best. The influence of housing began its return in 2012 and will continue as housing rebounds.
- Therefore, some 12 to 21 Months after these series “peak” or “trough” in their cycle, MHEM very likely will do the same. This is illustrated in the next set of charts.

MHEM vs. Selected Leading Indicators

Buyer Sentiment - Purchasing Managers Index

The Institute of Supply Management (ISM) produces the PMI (Purchasing Managers Index), a monthly sentiment index reflecting attitudes about future manufacturing purchasing activity. The PMI is an important indicator to watch simply because Purchasing Managers write purchase orders or place them on hold.

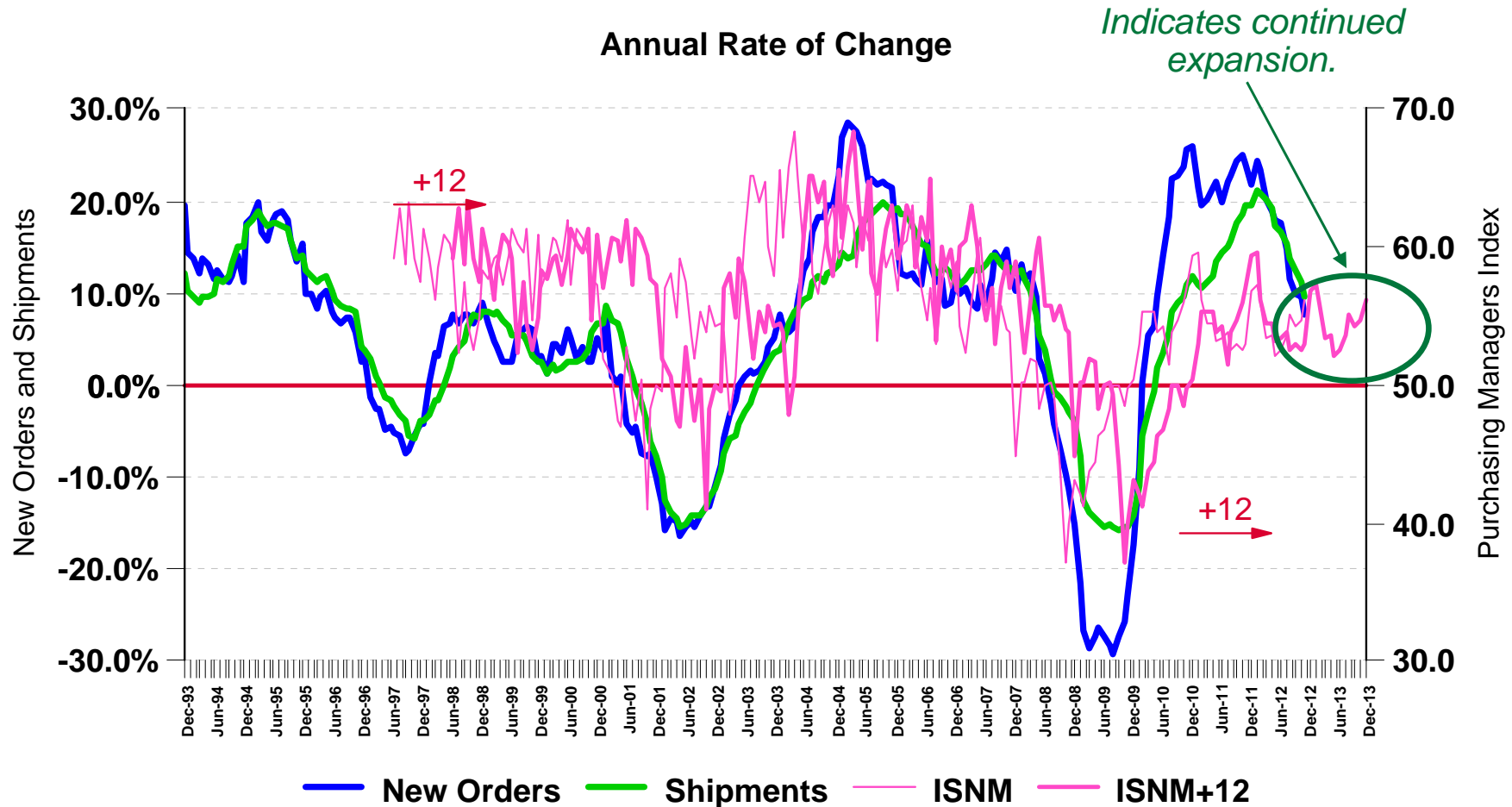


Source: USDOC, ISM

MHEM vs. Selected Leading Indicators

Buyer Sentiment – Non-Manufacturing Sectors

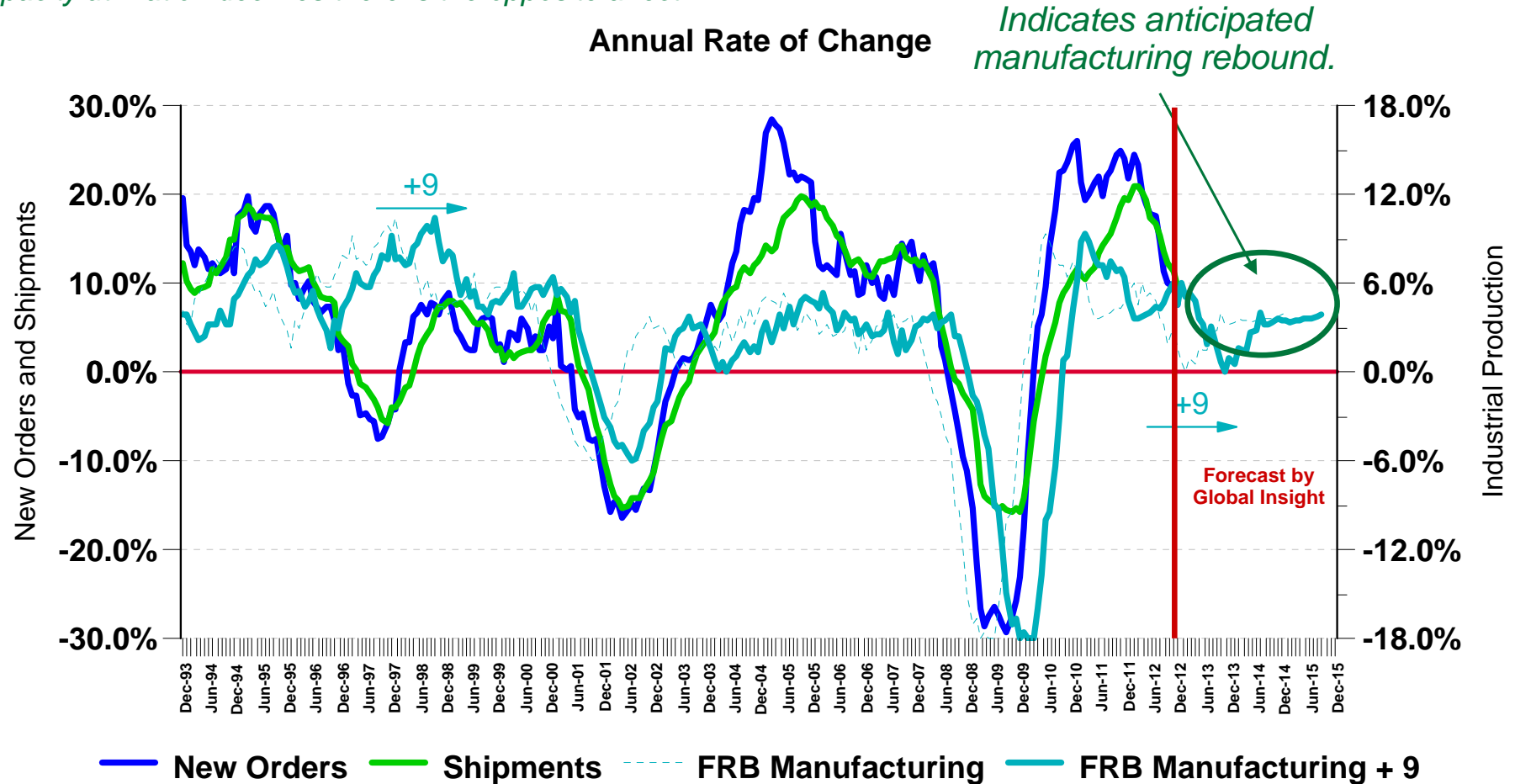
The Institute of Supply Management (ISM) also produces a monthly sentiment index reflecting attitudes about future non-manufacturing purchasing activity. The ISNM is an another important indicator to watch offering a perspective beyond manufacturing.



Source: USDOC, ISM

MHEM vs. Selected Leading Indicators Industrial Activity

Industrial Production drives much of our industry's activity generating demand for new plant and equipment as it expands. In those new or expanding plants, warehouses and distribution centers, new or upgraded material handling solutions are needed. When Industrial Production contracts and capacity utilization declines there is the opposite affect.

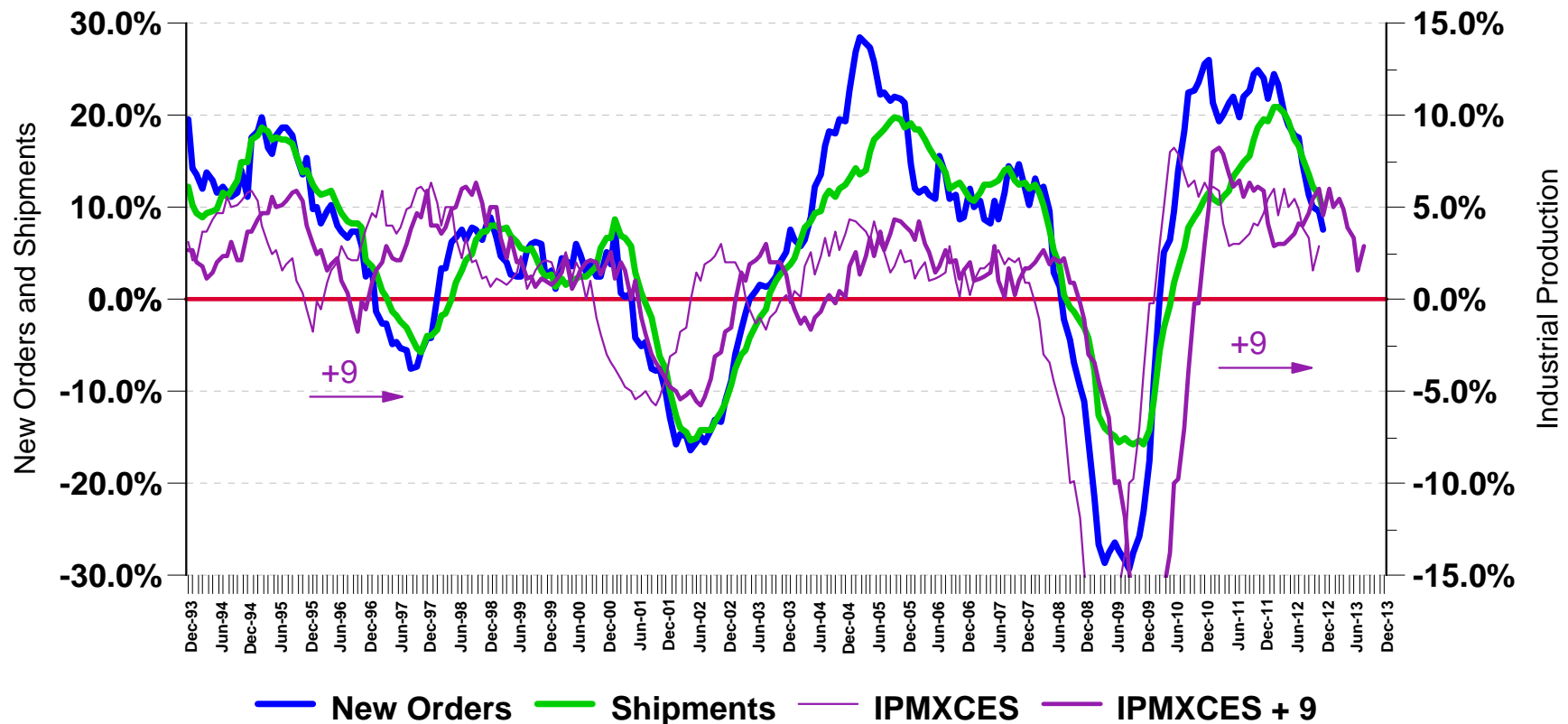


Source: USDOC, FRB

MHEM vs. Selected Leading Indicators Industrial Activity (Manufacturing *Excluding* Hi-Tech)

It is important to monitor industrial activity independent of high-tech segments (computers, electronics and semiconductors) due to their volatility and tendency to mask or over-state traditional manufacturing activity.

Annual Rate of Change

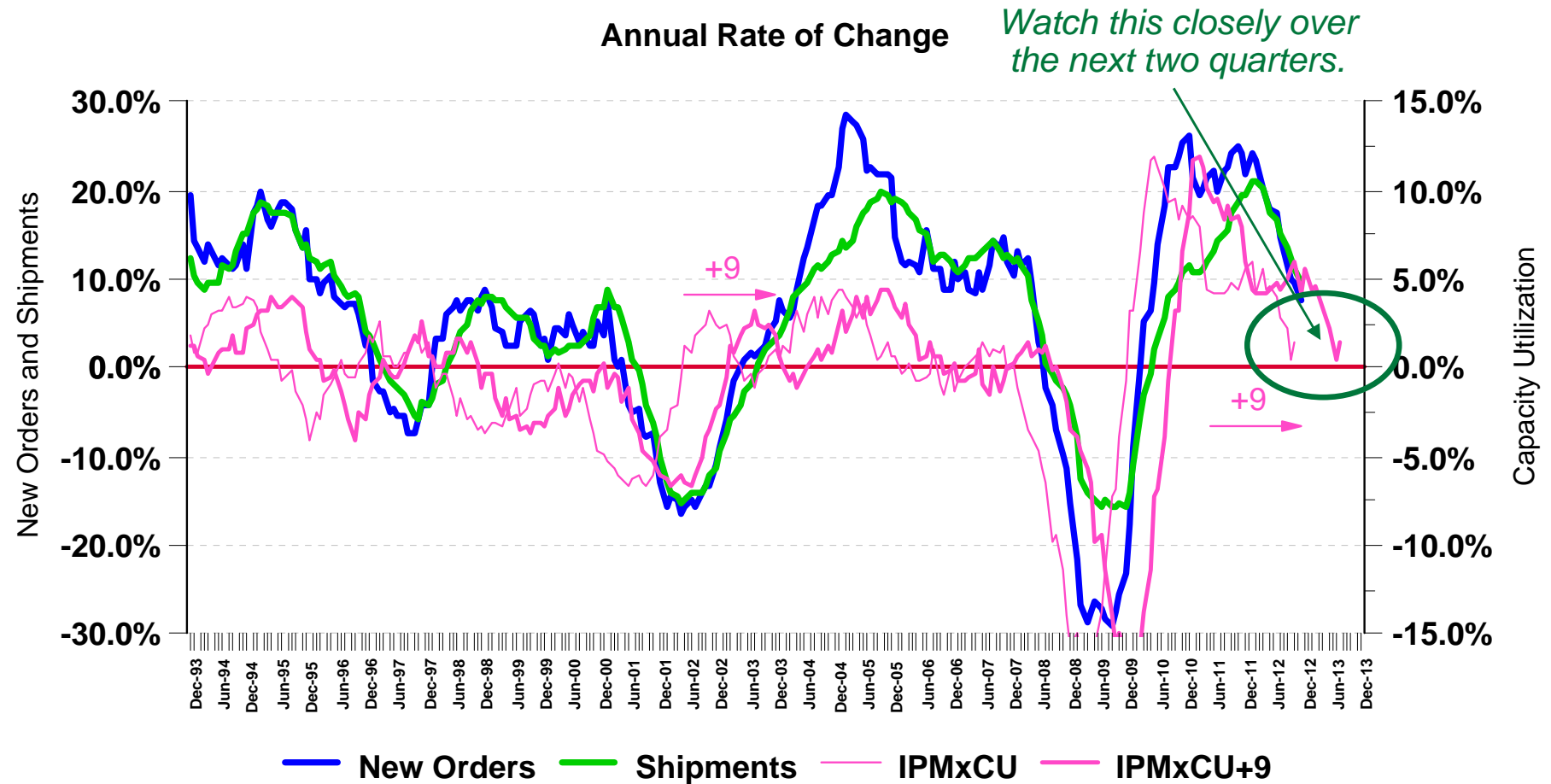


Source: USDOC, FRB

MHEM vs. Selected Leading Indicators

Industrial Activity (Capacity Utilization, Manufacturing *Excluding* Hi-Tech)

As Capacity Utilization increases at higher rates of change, it indicates mounting pressure to perform at higher output levels and the need for more efficient throughput solutions. In turn, this drives demand for material handling and logistics products. Reductions in Capacity Utilization have the opposite affect.

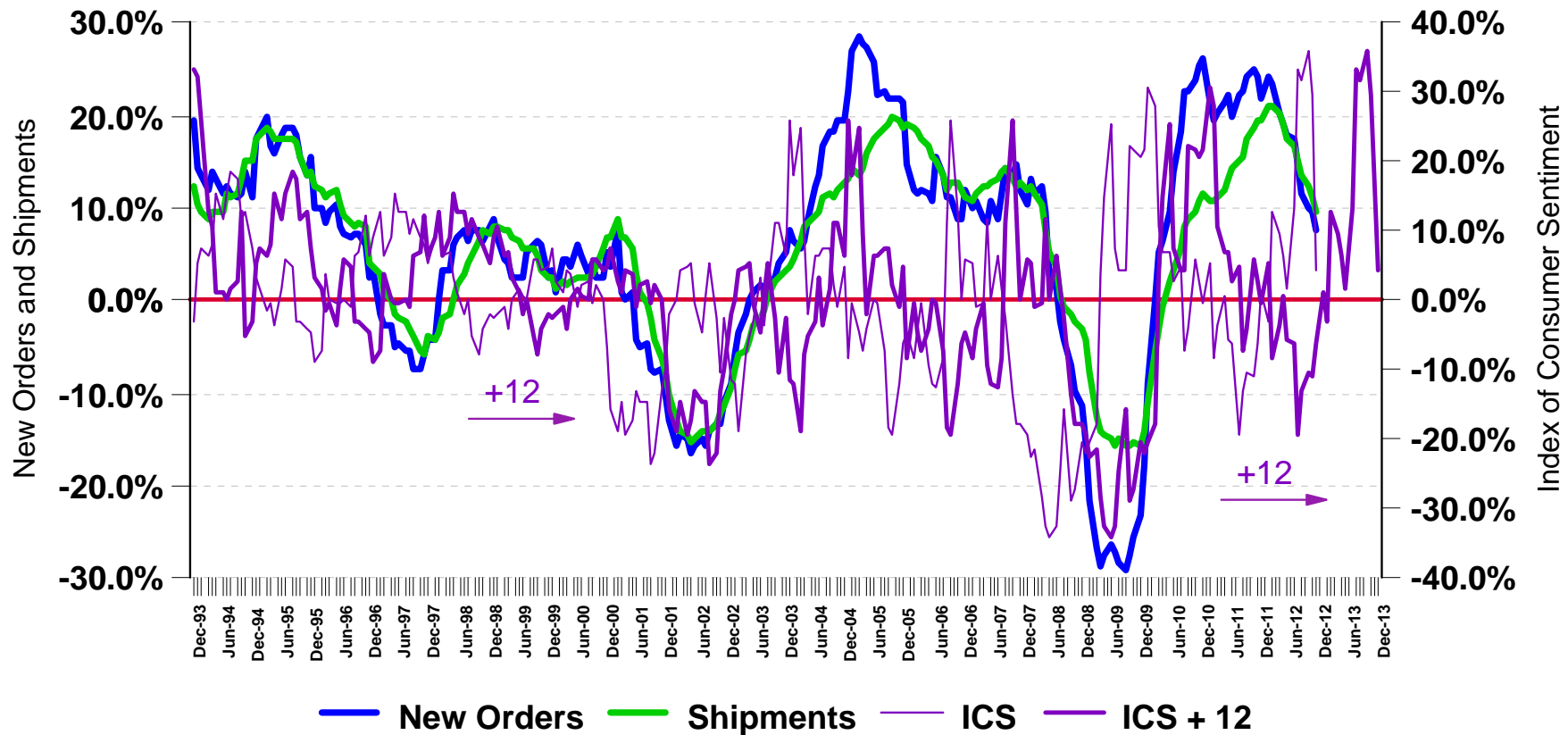


Source: USDOC, FRB

MHEM vs. Selected Leading Indicators Consumer Sentiment – University of Michigan

Consumption represents over two thirds of GDP, our economic engine. How Consumers feel greatly influences spending and saving behavior. Purchases of Consumer Durables (automobiles, home appliances, etc) and Residential Investment (new or existing homes) vary directly with Consumer Sentiment.

Annual Rate of Change

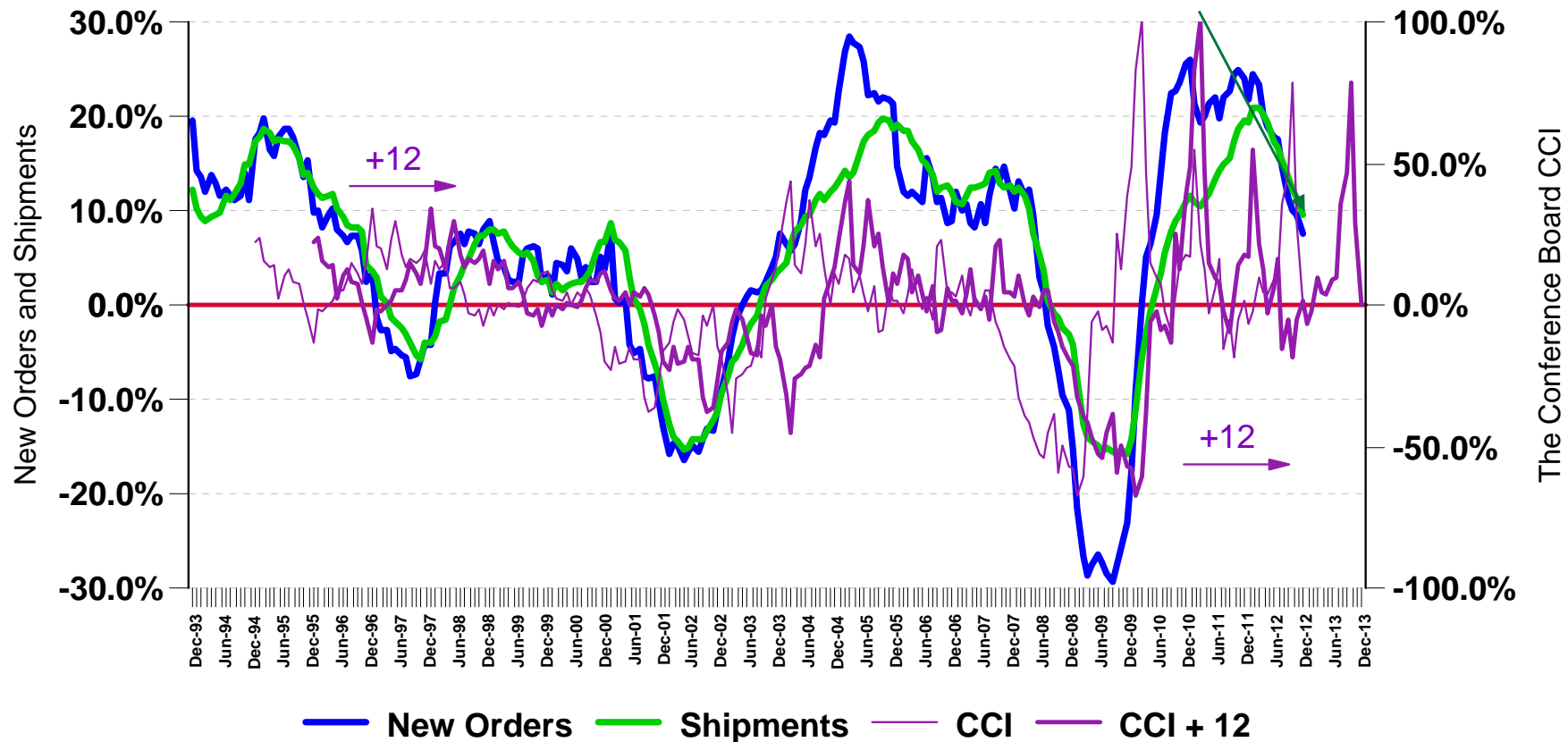


Source: USDOC, University of Michigan

MHEM vs. Selected Leading Indicators Consumer Confidence – Conference Board

Like Consumer Sentiment, Consumer Confidence influences buying and saving behavior. Improving Confidence promises continued or increasing Consumption and Residential Investment which eventually translates into increases in manufacturing, industrial production, etc.

Annual Rate of Change



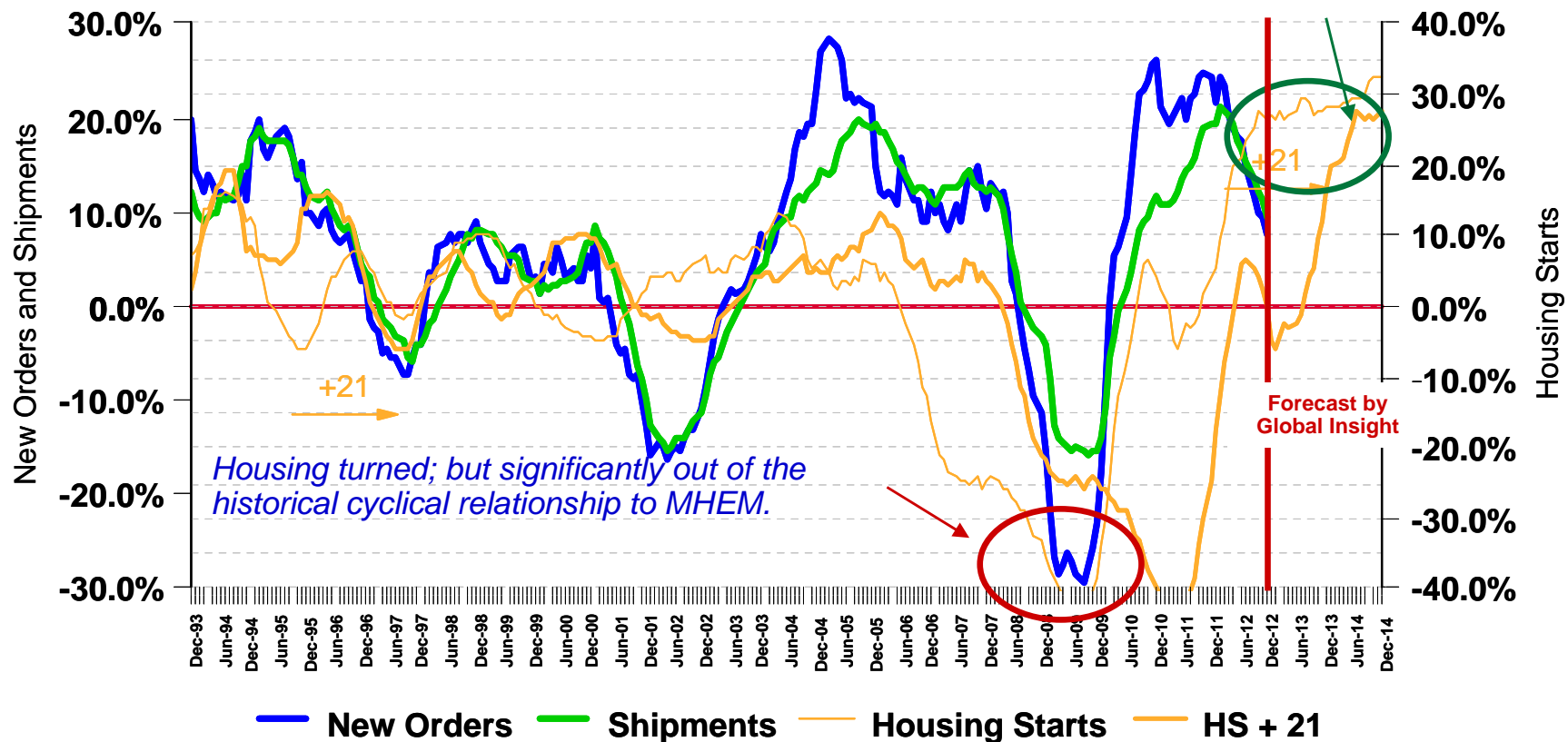
Source: USDOC, The Conference Board

MHEM vs. Selected Leading Indicators Residential Investment

Housing Starts is an indicator of Residential Investment. The change in Housing Starts signals changes to expect in consumer durables, materials, non-residential construction, etc. This indicator reliably led manufacturing activity throughout all phases of the business cycle until the last cycle. A correction in housing is in process and will continue beyond 2014.

Annual Rate of Change

A housing rebound is in play which will impact MHEM very positively 2014 and beyond.



Source: USDOC, Global Insight

Economic Commentary & Forecasts

Global Insight Forecast

Nigel Gault – January, 2013



Executive Summary

- The recovery has weak momentum and faces headwinds from Washington, but fundamentals, particularly in housing, are improving.
- We expect GDP growth of just 1.0% in both the fourth and first quarters. The fourth quarter was held back by corrections in defense spending and inventories, as well as a drag from Hurricane Sandy. The first quarter will be held back by the expiry of the payroll tax cut. We expect a gradual acceleration thereafter.
- The fiscal-cliff deal averted most (but not all) of the threatened 2013 tax hikes. It did not address the spending sequester nor the debt ceiling. Deadlines—and another political crisis—loom for both in two months.
- We assume that the Federal Reserve will continue quantitative easing into 2014, and will keep the federal funds rate near zero until late 2015, by when we expect the unemployment rate to drop below the Fed's 6.5% threshold.



Economic Forecast – Global Insight

Capital Spending, Corporate Profits, Industrial Production, Utilization

MHEM purchases include both capital goods (Non-residential Fixed Investment) and discretionary MRO items. Both depend on Corporate Profits for funding.

MHEM purchases are influenced greatly by two extreme scenarios: 1) heightened levels of Industrial Production activity and by Factory Operating Rates (Utilization) that approach the high 70s and low 80s indicating increasing pressure on in-place capacity in an expansion and 2) the pressure that is created in Industrial Production as the economy shifts from a recession into recovery mode (filling supply chain pipelines, re-establishing inventories, and responding to pent up demand).

While there are many economic elements to study, the four highlighted below are of the greatest interest when forecasting MHEM demand.

| U.S. Economy | History | | | | | 01/13 Forecast | | | | |
|---|--------------|---------------|---------------|-------------|-------------|----------------|--------------|-------------|--------------|--------------|
| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| Gross Domestic Product (Real) | 1.9 | (0.3) | (3.1) | 2.4 | 1.8 | 2.3 | 1.7 | 2.7 | 3.4 | 3.1 |
| Total Consumption | 2.3 | (0.6) | (1.9) | 1.8 | 2.5 | 1.9 | 1.8 | 2.6 | 2.7 | 2.8 |
| Nonresidential Fixed Investment | 6.5 | (0.8) | (18.1) | 0.7 | 8.6 | 7.5 | 3.9 | 6.9 | 7.6 | 5.7 |
| Residential Fixed Investment | (18.7) | (23.9) | (22.4) | (3.7) | (1.4) | 11.9 | 14.2 | 19.6 | 21.2 | 5.5 |
| Exports | 9.3 | 6.1 | (9.1) | 11.1 | 6.7 | 3.5 | 3.2 | 4.5 | 5.8 | 6.8 |
| Imports | 2.4 | (2.7) | (13.5) | 12.5 | 4.8 | 2.5 | 2.2 | 4.9 | 4.7 | 3.4 |
| Federal Government | 1.2 | 7.2 | 6.1 | 4.5 | (2.8) | (1.7) | (2.9) | (3.2) | (2.1) | (1.3) |
| State & Local Government | 1.4 | (0.0) | 2.2 | (1.8) | (3.4) | (1.3) | (0.5) | 0.1 | 0.8 | 0.9 |
| GDP Deflator | 2.9 | 2.2 | 0.9 | 1.3 | 2.1 | 1.8 | 1.5 | 1.7 | 1.5 | 1.5 |
| Consumer Prices | 2.9 | 3.8 | (0.3) | 1.6 | 3.1 | 2.1 | 1.4 | 1.7 | 1.6 | 1.8 |
| Industrial Production (% change) | 2.5 | (3.5) | (11.4) | 5.4 | 4.1 | 3.6 | 2.0 | 3.0 | 3.7 | 3.0 |
| Factory Operating Rate | 78.5 | 74.3 | 65.5 | 71.2 | 75.0 | 77.1 | 77.2 | 78.3 | 79.3 | 79.3 |
| Light Vehicle Sales (Million units) | 16.09 | 13.19 | 10.40 | 11.55 | 12.73 | 14.42 | 15.01 | 15.65 | 16.21 | 16.61 |
| Housing Starts (Million units) | 1.34 | 0.90 | 0.55 | 0.59 | 0.61 | 0.77 | 0.97 | 1.28 | 1.61 | 1.67 |
| Unemployment Rate (%) | 4.6 | 5.8 | 9.3 | 9.6 | 9.0 | 8.1 | 7.6 | 7.3 | 6.7 | 6.1 |
| Federal Surplus (Unified, FY, bil. \$) | (161.5) | (454.8) | (1,415.7) | (1,294.2) | (1,296.8) | (1,089.2) | (879.7) | (671.7) | (587.8) | (585.6) |
| Federal Funds Rate (%) | 5.02 | 1.93 | 0.16 | 0.18 | 0.10 | 0.14 | 0.16 | 0.16 | 0.19 | 1.64 |
| 10-Year Treasury Note Yield (%) | 4.63 | 3.67 | 3.26 | 3.21 | 2.79 | 1.80 | 2.01 | 2.60 | 3.02 | 3.89 |
| After-Tax Profits (Billions of \$) | 1,292.9 | 1,050.9 | 1,171.1 | 1,443.0 | 1,475.1 | 1,704.9 | 1,633.1 | 1,775.4 | 1,719.9 | 1,645.7 |
| After-Tax Profits (Percent change) | (4.2) | (18.7) | 11.4 | 23.2 | 2.2 | 15.6 | (4.2) | 8.7 | (3.1) | (4.3) |

Note: Annual percentage change unless otherwise indicated.

Economic Forecast – Global Insight

Capital Spending, Corporate Profits, Industrial Production, Utilization

Forecasts reflect solid growth in Industrial Production and in Nonresidential Investment.

Capacity Utilization drives toward 80%.

| U.S. Economy | 01/13 Forecast | | | | | | |
|--|----------------|-----------|-----------|---------|---------|---------|---------|
| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| Gross Domestic Product (Real) | 2.4 | 1.8 | 2.3 | 1.7 | 2.7 | 3.4 | 3.1 |
| Total Consumption | 1.8 | 2.5 | 1.9 | 1.8 | 2.6 | 2.7 | 2.8 |
| Nonresidential Fixed Investment | 8.7 | 8.6 | 7.5 | 3.9 | 6.9 | 7.6 | 5.7 |
| Residential Fixed Investment | (3.7) | (1.4) | 11.0 | 14.2 | 19.6 | 21.2 | 5.5 |
| Exports | 11.1 | 6.7 | 3.5 | 3.2 | 4.3 | 5.8 | 6.8 |
| Imports | 12.5 | 4.8 | 2.5 | 2.2 | 4.9 | 4.7 | 3.4 |
| Federal Government | 4.5 | (2.8) | (1.7) | (2.9) | (3.2) | (2.1) | (1.3) |
| State & Local Government | (1.8) | (3.4) | (1.3) | (0.5) | 0.1 | 0.8 | 0.9 |
| GDP Deflator | 1.3 | 2.1 | 1.8 | 1.5 | 1.7 | 1.5 | 1.5 |
| Consumer Prices | 1.6 | 3.1 | 2.1 | 1.4 | 1.7 | 1.6 | 1.8 |
| Industrial Production (%change) | 5.4 | 4.1 | 3.6 | 2.0 | 3.0 | 3.7 | 3.6 |
| Factory Operating Rate | 71.2 | 75.0 | 77.1 | 77.2 | 78.3 | 79.3 | 79.3 |
| Light Vehicle Sales (Million units) | 11.55 | 12.73 | 14.42 | 15.01 | 15.65 | 16.21 | 16.61 |
| Housing Starts (Million units) | 0.59 | 0.61 | 0.77 | 0.97 | 1.28 | 1.61 | 1.67 |
| Unemployment Rate (%) | 9.6 | 9.0 | 8.1 | 7.6 | 7.3 | 6.7 | 6.1 |
| Federal Surplus (Unified, FY, bil. \$) | (1,294.2) | (1,296.8) | (1,089.2) | (879.7) | (671.7) | (587.8) | (585.6) |
| Federal Funds Rate (%) | 0.18 | 0.10 | 0.14 | 0.16 | 0.16 | 0.19 | 1.64 |
| 10-Year Treasury Note Yield (%) | 3.21 | 2.79 | 1.80 | 2.01 | 2.60 | 3.02 | 3.89 |
| After-Tax Profits (Billions of \$) | 1,443.0 | 1,475.1 | 1,704.9 | 1,633.1 | 1,775.4 | 1,719.9 | 1,645.7 |
| After-Tax Profits (Percent change) | 23.2 | 2.2 | 15.6 | (4.2) | 8.7 | (3.1) | (4.3) |

Profit Decline in 2013 warrants caution for 2014.

Economic Forecast – Global Insight

Capital Spending by Major Segment

Improvement in key elements of Non-residential Fixed Investment (IT, Industrial Equipment and Transportation) is expected to continue through 2016. Structures (construction) will be off in 2013 and then will begin to expand at a healthy pace in 2014.

| U.S. Economy | History | | | | | 01/13 Forecast | | | | |
|--|---------|--------|--------|--------|-------|----------------|--------|-------|-------|-------|
| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| Nonresidential Fixed Investment | 6.5 | (0.8) | (18.1) | 0.7 | 8.6 | 7.5 | 3.9 | 6.9 | 7.6 | 5.7 |
| Equipment & Software | 3.3 | (4.3) | (16.4) | 8.9 | 11.0 | 6.9 | 5.7 | 6.5 | 7.5 | 5.4 |
| Information Processing Equipment | 8.1 | 2.1 | (4.1) | 4.6 | 5.0 | 3.3 | 6.0 | 8.6 | 7.5 | 6.5 |
| Computers & Peripherals | 14.0 | 7.9 | (5.8) | 3.1 | 12.3 | 0.9 | 9.2 | 15.6 | 13.5 | 12.2 |
| Communications Equipment | 11.3 | (5.1) | (9.9) | 12.6 | (5.8) | 5.3 | 7.8 | 9.7 | 9.7 | 9.6 |
| Industrial Equipment | 4.0 | (3.9) | (21.2) | (1.2) | 13.3 | 7.1 | 6.7 | 8.2 | 8.1 | 4.1 |
| Transportation equipment | (5.5) | (23.2) | (51.6) | 73.1 | 31.1 | 18.1 | 5.4 | 2.4 | 5.9 | 0.3 |
| Aircraft | 30.5 | (3.2) | (26.5) | 6.8 | (2.7) | 26.4 | 4.6 | 3.3 | 5.2 | 5.6 |
| Other Equipment | (0.7) | (3.5) | (18.2) | 3.0 | 12.5 | 6.7 | 4.1 | 3.2 | 8.2 | 8.2 |
| Structures | 14.1 | 6.4 | (21.1) | (15.6) | 2.7 | 9.1 | (0.4) | 8.0 | 7.9 | 6.5 |
| Commercial & Health Care | 10.0 | (3.7) | (30.7) | (25.0) | (2.3) | 7.0 | 3.3 | 17.0 | 24.9 | 20.2 |
| Manufacturing | 18.2 | 24.8 | 4.6 | (27.6) | 0.4 | 15.4 | (1.0) | 12.8 | 2.1 | 10.6 |
| Power & Communication | 39.2 | 9.1 | 0.7 | (16.1) | (9.1) | 17.3 | (10.6) | (1.4) | 6.0 | (2.1) |
| Mining & Petroleum | 6.1 | 8.4 | (34.8) | 16.9 | 22.6 | 4.6 | 0.8 | 4.5 | (3.1) | (6.2) |
| Other | 15.4 | 12.6 | (18.3) | (26.7) | (6.7) | 7.5 | 6.5 | 8.6 | 7.3 | 6.6 |

Note: Annual percentage change unless otherwise indicated.

Economic Forecast – Global Insight

Capital Spending by Major Segment



Continued expansion in Equipment and Software is expected through 2016, but the mix shifts.

| U.S. Economy | | | 01/13 Forecast | | | | |
|----------------------------------|--------|-------|----------------|--------|-------|-------|-------|
| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| Nonresidential Fixed Investment | 0.7 | 8.6 | 7.5 | 3.9 | 6.9 | 7.6 | 5.7 |
| Equipment & Software | 8.9 | 11.0 | 6.9 | 5.7 | 6.5 | 7.5 | 5.4 |
| Information Processing Equipment | 4.6 | 5.0 | 3.3 | 6.0 | 8.6 | 7.5 | 6.5 |
| Computers & Peripherals | 3.1 | 12.3 | 0.9 | 9.2 | 15.6 | 13.5 | 12.2 |
| Communications Equipment | 12.6 | (5.8) | 5.3 | 7.8 | 9.7 | 9.7 | 9.6 |
| Industrial Equipment | (1.2) | 13.3 | 7.1 | 6.7 | 8.2 | 8.1 | 4.1 |
| Transportation equipment | 73.1 | 31.1 | 18.1 | 5.4 | 2.4 | 5.9 | 0.3 |
| Aircraft | 6.8 | (2.7) | 26.4 | 4.6 | 3.3 | 5.2 | 5.6 |
| Other Equipment | 3.0 | 12.5 | 6.7 | 4.1 | 3.2 | 8.2 | 8.2 |
| Structures | (15.6) | 2.7 | 9.1 | (0.4) | 8.0 | 7.9 | 6.5 |
| Commercial & Health Care | (25.0) | (2.3) | 7.0 | 3.3 | 17.0 | 24.9 | 20.2 |
| Manufacturing | (27.6) | 0.4 | 15.4 | (1.0) | 12.8 | 2.1 | 10.6 |
| Power & Communication | (16.1) | (9.1) | 17.3 | (10.6) | (1.4) | 6.0 | (2.1) |
| Mining & Petroleum | 16.9 | 22.6 | 4.6 | 0.8 | 4.5 | (3.1) | (6.2) |
| Other | (26.7) | (6.7) | 7.5 | 6.5 | 8.6 | 7.3 | 6.6 |

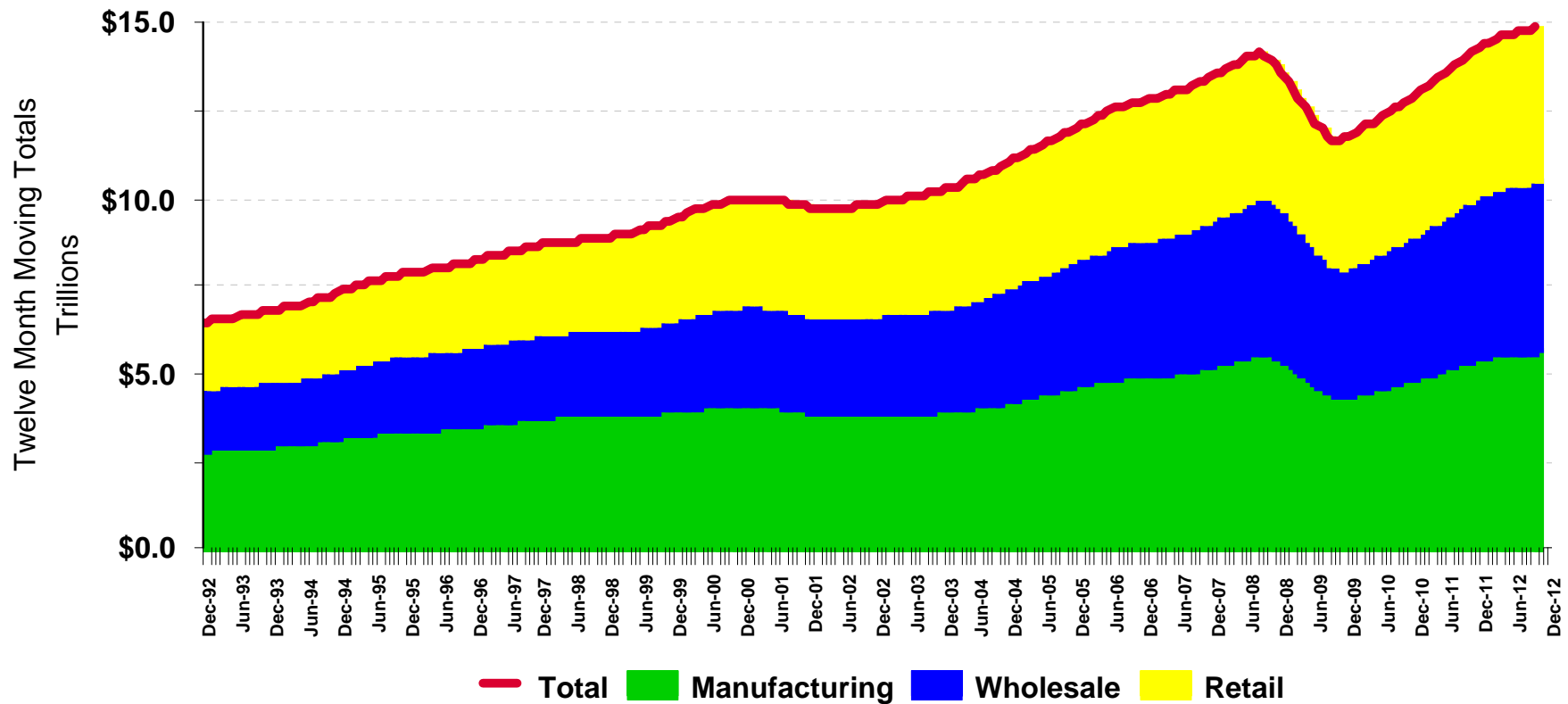
A strong expansion in Structures (Commercial, Health Care and Manufacturing) after 2013.

Total Business Sales Aggregate Analysis



Manufacturing, Retail and Wholesale Demand troughed in Q3 2009 and has continued to expand; but at a slower pace in 2012.

Total Business Sales Aggregate Analysis

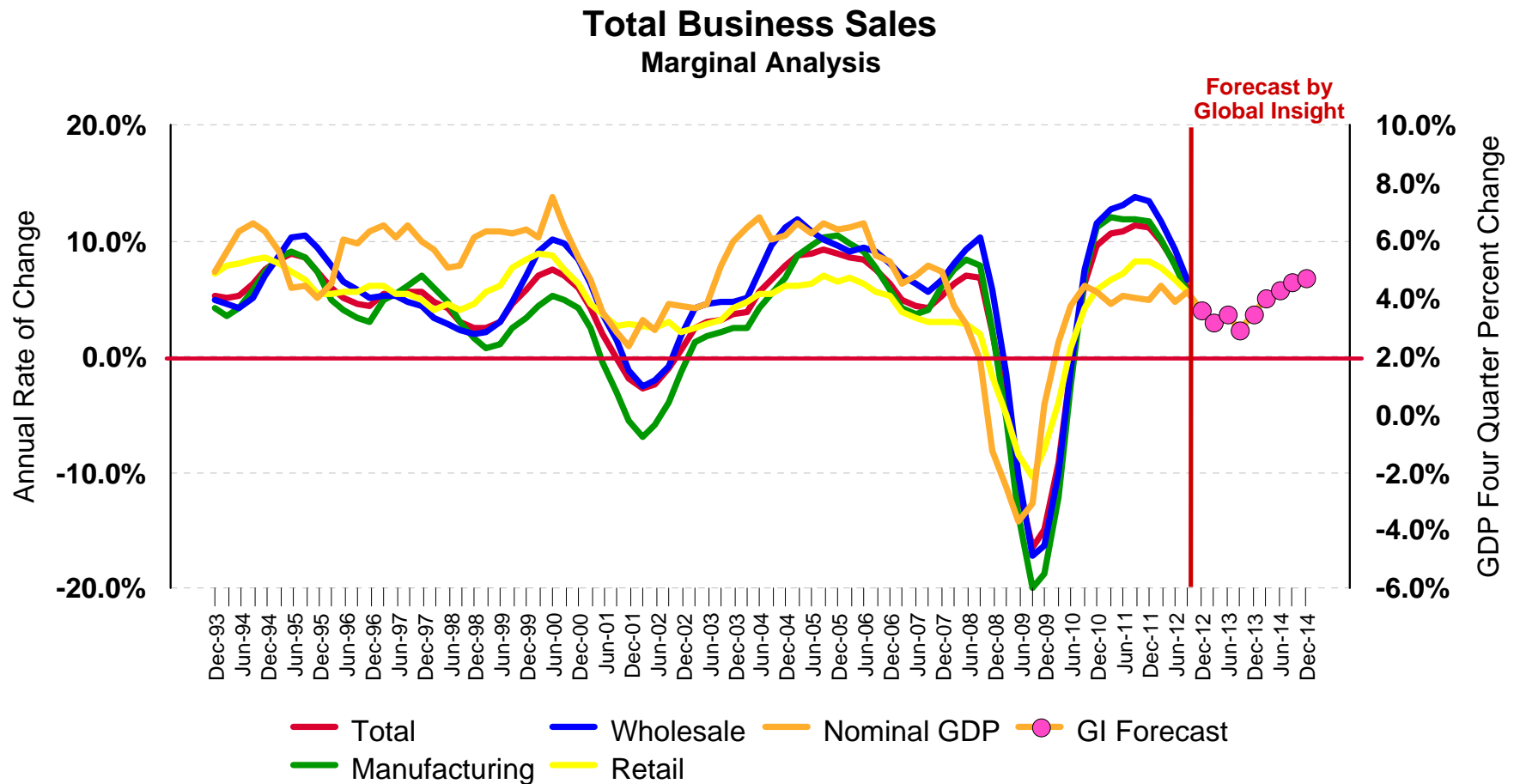


Source: Census MTIS Report



Total Business Sales Marginal Analysis

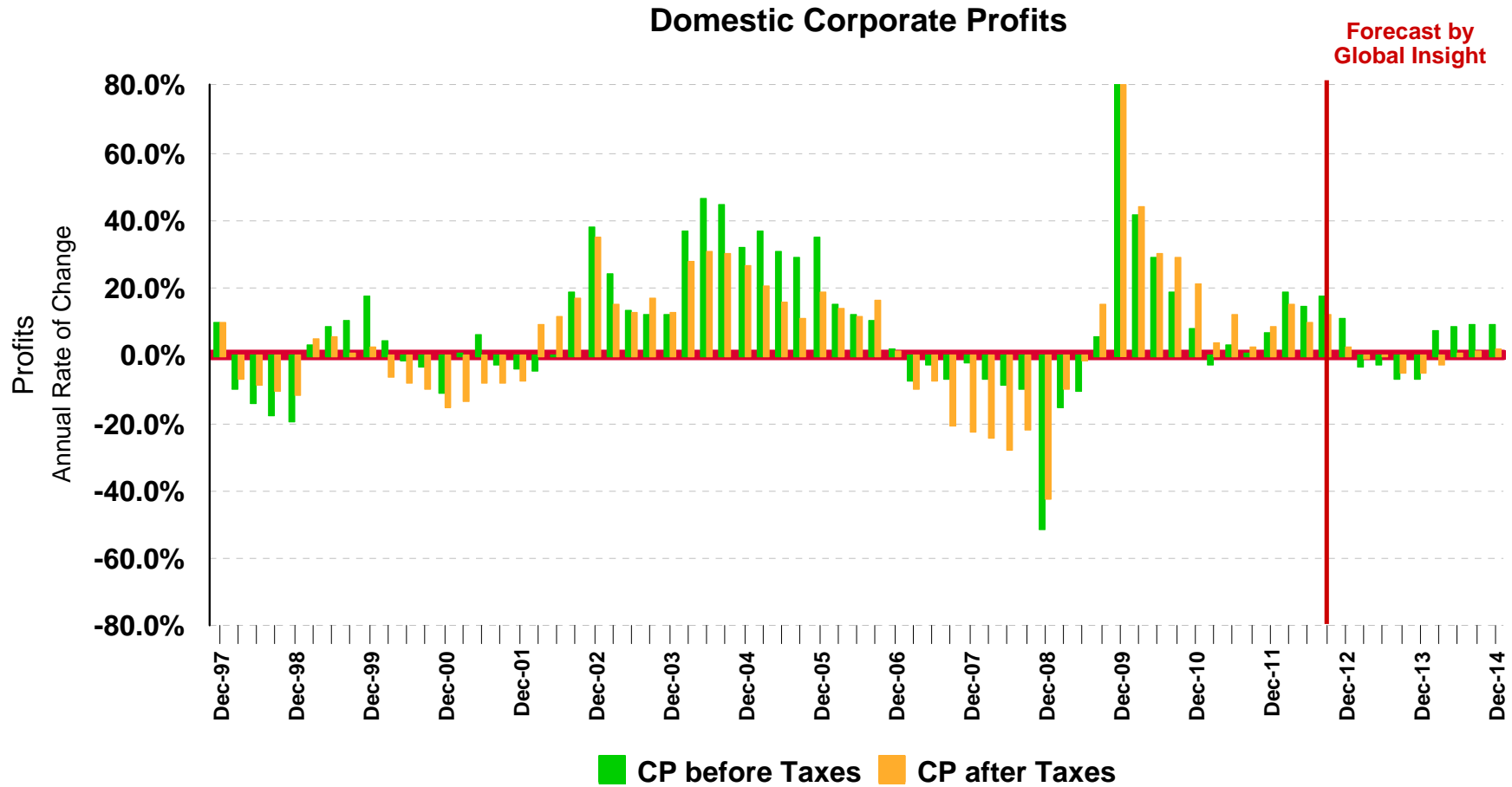
Sales and Nominal GDP growth troughed in Q3 2009, peaked in 2011 and declined through 2012. 2013 will slow modestly with an uptick in growth expected for 2014.



Source: Census MTIS Report, Global Insight, MHIA

Corporate Profits Before and After Taxes

Corporate Profits, which lead Investment by four quarters, will contract in 2013 modestly and rebound in 2014.

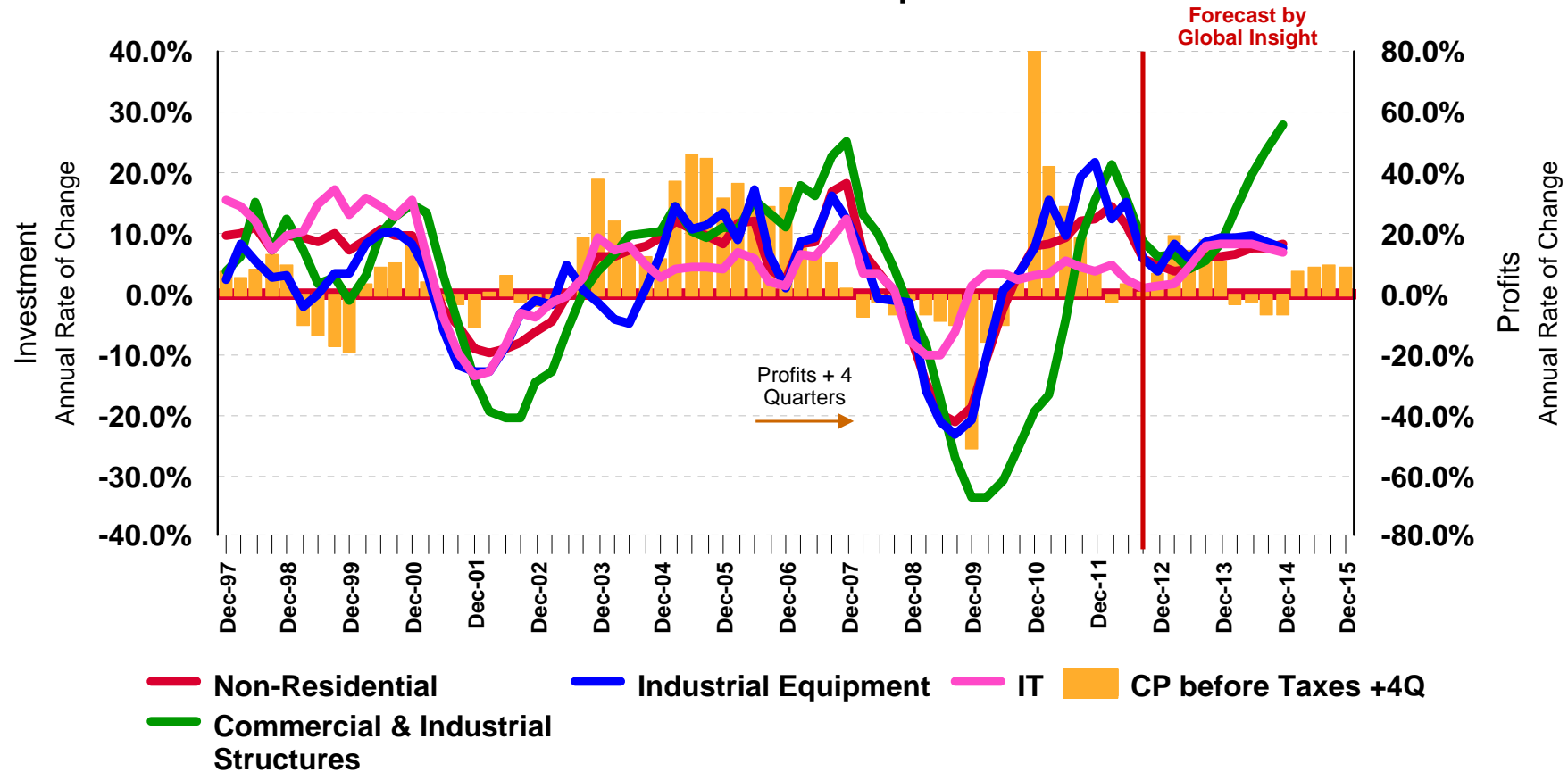


Source: BEA, Global Insight

Corporate Profits vs. Private Fixed Investment

Corporate Profits supported a surge of Investment growth for Equipment and Software beginning in 2010. Commercial & Industrial Structures outpace Equipment and Software beginning in 2013.

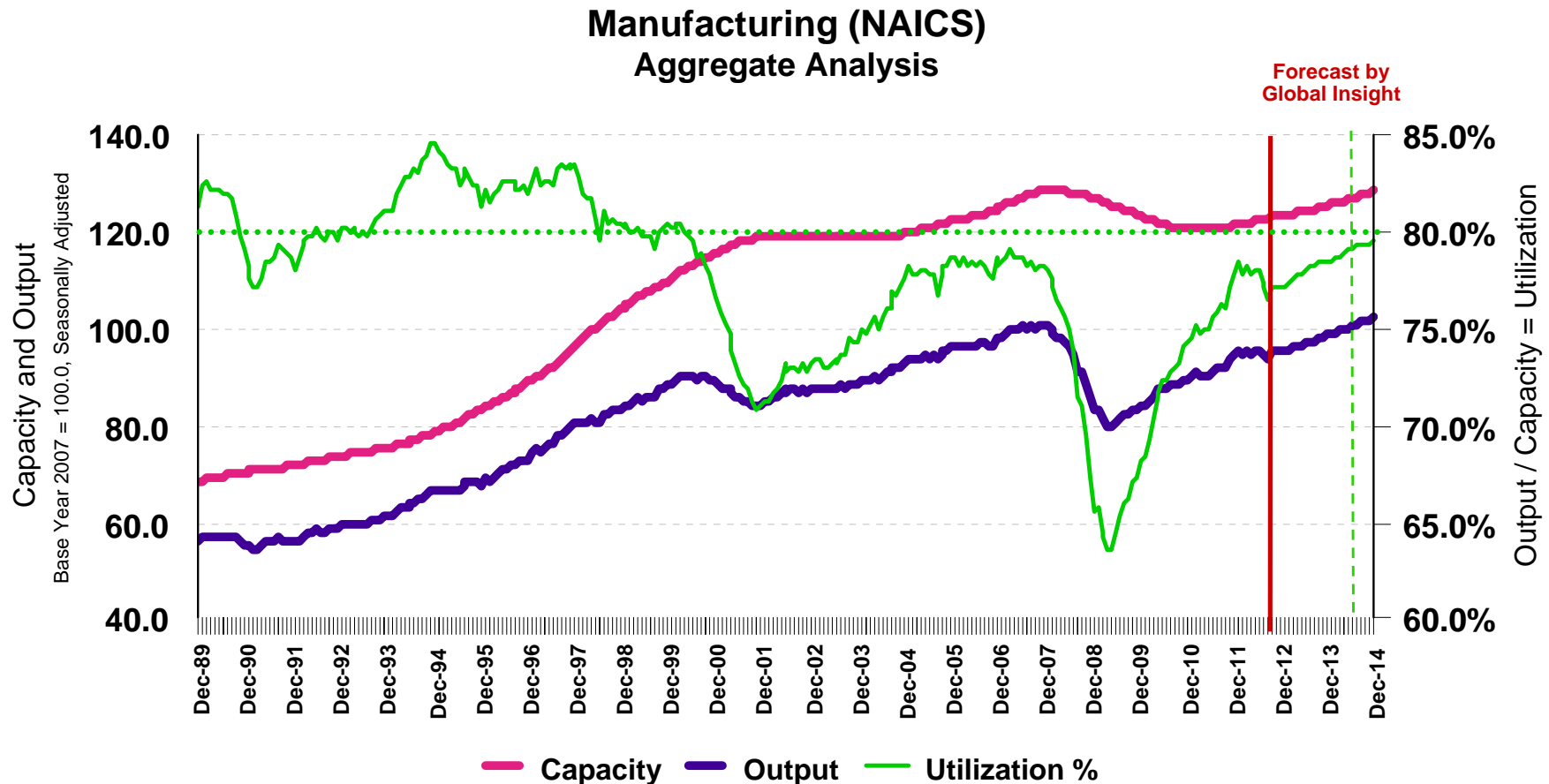
Private Fixed Investment vs. Corporate Profits +4Q



Source: BEA, Global Insight

US Industrial Production Manufacturing – Aggregate Indices

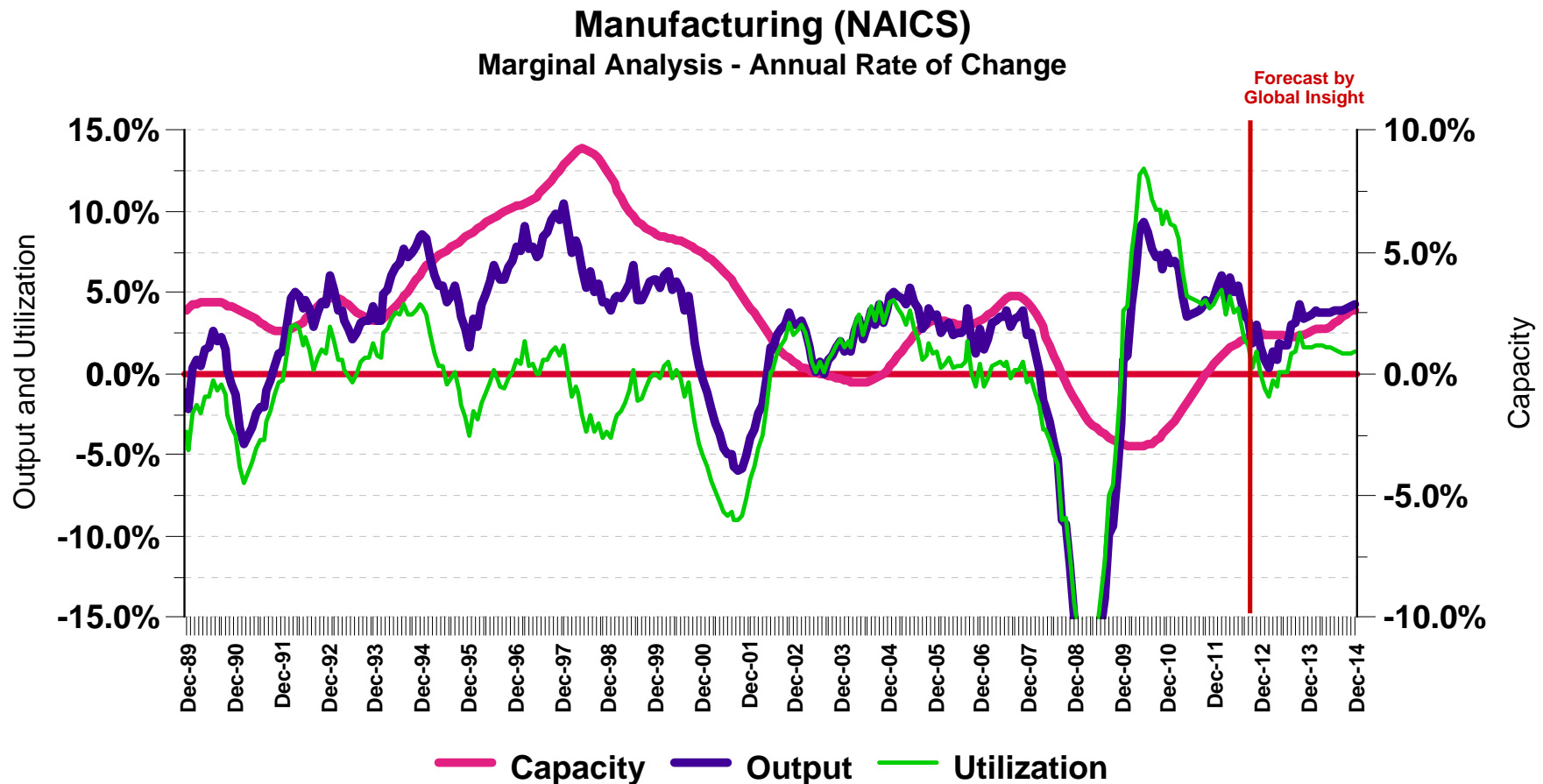
Historically, significant expansion activity takes place as Utilization approaches 80.0%. Utilization is now expected to approach 80.0% in the fourth quarter of 2014 as manufacturers struggle to find proper balance between capacity and shifting demand.



Source: Federal Reserve Board
77.6% IP '06

US Industrial Production Manufacturing – Annual Rate of Change

The combination of Capacity reductions and improved Output yielded rapid gains in Capacity Utilization beginning late 2009. Additions to Capacity began in 2011 and will return to the pre-recession pace in 2014.



Source: Federal Reserve Board
77.6% IP '06

Information Resources



- Material Handling Markets

- Material Handling Industry of America
- MHIA Business Planning Community
- Industrial Truck Association
- Conveyor Equipment Manufacturers Association

www.mhia.org

www.mhia.org/planning

www.indtrk.org

www.cemanet.org

- US Government Data

- US Bureau of Census
- US Bureau of Economic Analysis
- US Department of Labor
- US Federal Reserve Board

www.census.gov

www.bea.gov

www.dol.gov

www.federalreserve.gov

- Economics

- Manufacturers Alliance - MAPI
- National Association for Business Economics
- Global Insight

www.mapi.net

www.nabe.com

www.globalinsight.com



Updates and Feedback



Users are encouraged to visit the MHIA Business Planning Community at <http://www.mhia.org/planning> for a variety of planning inputs, including quarterly updates to the MHEM Forecast.

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