

By Brian G. Long, Ph.D., C.P.M.

Director, Supply Chain Management Research Grand Valley State University (269) 870-0428

West Michigan Current Business Trends

January 9, 2023

WEST MICHIGAN ECONOMY EDGES LOWER

Key Take-Aways from December 2023 Statistics:

- Sharp Drop in NEW ORDERS
- U. S. Economy Continues to Soften
- Local Employment Remains Positive

200ai 2mpio imene nemano i obiene	
Key Index Results:	Dec. Nov.
NEW ORDERS Index (business improvement)	-24 - 2
PRODUCTION Index (aka "output")	-10 + 7
● EMPLOYMENT Index	+14 +20
U LEAD TIMES Index	-14 - 5

The Local Economy. Although our data have softened during the past few months, this month's statistics now meet the criteria of being our first official negative report since the end of the recent pandemic-induced recession. According to the data collected in the last two weeks of December, NEW ORDERS, our closely-watched index of business improvement, posted at -24, down sharply from November's -2. In confirmation of the trend, the December PRODUCTION Index came in at -10, down from +7. Partially because of the increased level of pessimism pervading many local firms, the index PURCHASES sank to a thirty-month low of -19, down from -2. The LEAD TIMES Index, which reached a forty-year high of +93 about 21 months ago, eased to -14 from November's -5, a clear indication that many (if not most) of the bottlenecks in the supply chain have been resolved. Just like last month, business conditions for the West Michigan office furniture firms remain soft, while our automotive parts producers are generally holding their own. Hence, the comments from our survey participants vary by industry. Overall, we can expect our survey numbers to bounce around until the direction of the 2023 economy becomes clearer.

The U.S. Economy. According to the January 4 press release from the Institute for Supply Management (ISM), the national economy continues to slowly contract. ISM's

Key Participant Comments for December:

"Business is still strong, but we're starting to see future orders for some customers to drop off."

"Sales are softening. We still have a lot of backlog to work through, but are starting to talk about what we'll do when the recession starts to hit us."

"Our customers have too much inventory and are tightening purchasing policies to adjust to higher carrying costs associated with interest rate hikes. "

"After several months of gently slowing in sales, we saw a significant reduction in new orders in the month of December."

NEW ORDERS Index posted at -16, down from November's -12. In response to falling sales, ISM's December PRODUCTION (a.k.a., Output) Index fell to -9 from +2. Order Backlogs, another key ISM index, remained significantly negative at -17. NEW EXPORT ORDERS fell to -8, and IMPORT ORDERS declined to -10. After statistical adjustments, ISM's Composite December Manufacturing PMI posted at 48.4, the third negative reading since the post-pandemic recovery.

West Michigan Index of New Orders: 2020-2022





A somewhat more pessimistic view of the U.S. industrial economy comes from British-based international consulting firm S&P Global. The December S&P Composite Index came in at 46.2, down from November's 47.7 reading. Just as last month, both the Output and New Orders indexes posted significant declines. The S&P index of Order Backlogs fell at the steepest rate since the onset of the recent pandemic. However, just like our local survey, the S&P Employment Index remains modestly positive. Siân Jones, Senior Economist at S&P Global Market Intelligence, further commented:

"The manufacturing sector posted a weak performance as 2022 was brought to a close, as output and new orders contracted at sharper rates. Demand for goods dwindled as domestic orders and export sales dropped. Muted demand conditions also led to downward adjustments of stock holdings, as excess inventories built earlier in the year were depleted in lieu of further spending on inputs. With the exception of the initial pandemic period, stocks of purchases fell at the steepest rate since 2009. Concerns regarding the outlook for demand weighed on hiring decisions. Job creation was only slight, and largely linked to skilled hires, as firms displayed caution. Sinking demand for inputs and greater availability of materials at suppliers led to a further easing of inflationary pressures. In fact, the rate of input price inflation fell below the series trend. Selling price hikes also eased, albeit still rising steeply. Slower upticks in inflation signal the impact of Fed policy on prices, but growing uncertainty and tumbling demand suggest challenges for manufacturers will roll over into the new year."

The World Economy. Driven by tenuous business news coming from numerous news reports, J.P. Morgan Worldwide Manufacturing PMI contracted to 48.6 from 48.8. JPM's New Orders Index fell to 46.3 from November's 46.7. By contrast, December's Output Index remained below the break-even point of 50.0 but improve to 48.5 from 47.8. Only seven countries in JPM's survey posted positive PMIs, namely India, Russia, Mexico, Colombia, Indonesia, the Philippines, and Australia. The December PMI from Canada, our largest trading partner, eased to 49.2 from 49.6. The PMI for Mexico, our second largest trading partner, rose to 51.3 from 50.6. By contrast, China, our third largest trading partner, posted a December PMI of 49.0, down from 49.4. The J.P. Morgan report author further noted:

"Global manufacturing production declined for the fifth successive month in December, although the rate of contraction was slightly slower than November's 29-month record. The trend in demand fared worse, with new orders falling at the quickest pace for over two-and-a-half years and new export business declining to one of the greatest extents since mid-2020."

Although the winter fuel scare in the Eurozone has only partially subsided, the December PMI came in at a three-month high of 47.8, up from 47.1. However, just as last month, the PMIs for all of the major economies in the Eurozone remain negative. Although business confidence in the Eurozone marginally improved in December, inflation, high energy bills, and the ongoing risk of a

recession continue to cloud the outlook. Chris Williamson, Chief Business Economist at S&P Global Market Intelligence, commented:

"A second successive monthly cooling in the rate of loss of factory output brings some cheer for the beleaguered manufacturing sector as we start the new year. The number of optimists regarding the year ahead has also now exceeded pessimists for the first time since August, hinting at a steady improvement in business confidence. Prospects have brightened amid signs of healing supply chains and a marked softening of inflationary pressures, as well as a calming of concerns over the region's energy crisis, thanks in part to government assistance. Hence the supply chain and inflation headwinds facing businesses have moderated from the heightened state of alarm seen in the autumn. The brighter news is tempered, however, by the ongoing weakness of demand, with inflows of new orders continuing to fall at a far faster rate than companies are reducing output, suggesting that manufacturers will have to cut production sharply further in coming months unless demand revives soon. With the global economic backdrop darkening and eurozone interest rates rising again in December, risks to the demand outlook remain skewed to the downside, ...with the Ukraine-Russia war remaining the key threat to stability in the region.

Automotive. Although the ongoing automotive chip shortage continues to improve, 2022 sales for the U.S. auto industry tallied to 14,582,347, the lowest sales level in eleven years. The marginal winner for the year was General Motors, with total sales of 2,258,283, up 2.5 percent from 2021. Sales at Toyota, which had been the top selling brand in previous years, came in at 2,108,455 units, down 9.6 percent from 2021. Although nationwide bad weather for December held the SAAR estimate (Seasonally Adjusted Annualized Rate) for December down to 13.59 million units, the reading was well above December 2021's 12.9 million rate. For the 2022 fourth quarter sale report, the big winner was General Motors, boasting a 41.8 percent growth rate over 2021. Other quarterly winners included Toyota at 13.1 percent, Hyundai-Kia, 23.4 percent, and VW, 4.6 percent. Losers for the same period included Stellantis (Chrysler), down 15.5 percent, Ford losing 4.8 percent, and Honda dropping 11.1 percent. Thomas King, vice president of data and analytics at J.D. Power, further noted:

"Even with the probability of an economic downturn, pent-up consumer demand from the past two years will keep inventory levels relatively low. Therefore, 2023 is likely to be another year of relatively healthy pricing and profitability."

Industrial Inflation. For many months, our survey respondents have made anecdotal references to falling prices. However, it was not until this month that the West Michigan index of PRICES finally turned negative at -2, down from November's +10 which is the lowest the index has been since the onset of the pandemic. Because of falling prices for many major commodities, the ISM national index of PRICES eased to -21 from -14. Commodity prices for the world market are also improving, but because of the ongoing Ukrainian war, the



J.P. Morgan world index of PRICES remains above the 50.0 equilibrium point but moved lower to 56.8 from 59.2. Commenting on the latest inflation numbers, Laura Denman at S&P Global Market Intelligence said:

"The picture for global price and supply pressures brightened further in the final month of 2022. In fact, the Global Price Pressures Index posted at its lowest reading since June 2020, as most monitored commodities registered a decline in the volume of higher price reports. That said, gas and electricity were two of the eight commodities to report a worsening of price pressures at the end of the year, given the ongoing war in Ukraine and the especially high demand for the two commodities throughout the winter months in the northern hemisphere. In terms of supply, the respective index dropped for an eighth successive month to reach a 26-month low. The easing was led by a sharp reduction in reports of supply shortages for transport, which fell to the lowest level since late 2020."

West Michigan Unemployment. Despite falling NEW ORDERS, despite reduced PRODUCTION, and despite rising recession fears, the December West Michigan index of EMPLOYMENT posted at +14, modestly lower than November's +20, but still surprisingly strong. Some firms are continuing to backfill open positions, and others are reluctant to begin laying off any part of the workforce they have worked so hard to build over the last two years of tight labor markets. Only 7 percent of the December survey respondents reported layoffs, although this number will probably increase in coming months if our statistics continue to soften. The Michigan unemployment rate for November (latest month available) rose modestly to 4.3 from 4.2 percent. Although most of our local economies are also posting modest unemployment upticks, the overall unemployment rates for most West Michigan counties remain well below the rest of the state. The lowest local rate is currently Ottawa County (2.8 percent), followed by Kent County (3.0 percent), Barry County (3.2 percent) and Kalamazoo County (3.4 percent). At the risk of being redundant, we must remember that unemployment statistics are lagging indicators. Because of aforementioned reasons, this premise may be even more relevant to the current business cycle. Ultimately, employment rates will start to risé at a greater pace, but we may not see significant increases in unemployment until early summer, if then.

Business and Consumer Confidence. Despite rising levels of negative economic rhetoric, the December report from the Conference Board reported that the latest reading from the Index of Consumer Confidence now stands at 108.3 (1985=100), up nicely from 101.4 in November. In a similar move, the University of Michigan's index of Consumer Sentiment upticked to 59.7 from 56.8. Although the current reading is still about 15 percent below the report from a year ago, the authors still applauded the "move in the right direction." At the local level, the West Michigan survey of the SHORT-TERM BUSINESS OUTLOOK Index for December, which asks local firms about the business perception for the next three to

six months, posted at -12, up from November's -22, but still negative. However, the LONG-TERM BUSINESS OUTLOOK Index, which queries the perception for the next three to five years, bounced to +31, up from November's +22. As we enter 2023, it is worth noting that both consumer and business confidence could be much worse.

GDP. On December 22, the Bureau of Economic Analysis (BEA) released a third estimate of GPD growth for the 2022 third quarter. Primarily because of increases in consumer spending, the new estimate for third quarter growth now stands at 3.2 percent, up from 2.9 percent. Most forecasters are now turning their attention to the 2022 fourth quarter, which will probably be slower than the third quarter but still shows no sign of turning negative. As of January 5, the Atlanta Fed's GDPNow model is predicting a fourth quarter gain of 3.8 percent, a considerable increase over last month's estimate of 2.8 percent. A more pessimistic estimate comes from the Blue Chip consensus forecast, which currently predicts a Q4 growth rate of 1.1 percent. According to 38 forecasters surveyed by the Federal Reserve Bank of Philadelphia, the fourth quarter should grow at a rate of only 1.0 percent. At 0.7 percent, the forecast from the Conference Board is currently the most pessimist. In short, highly educated economists with abundant resources and ample experience are offering a wide range of predications. Rather than embarrass themselves, it may be that the New York Fed was right to suspend further GDP estimates altogether until the economy regains some new form of stability.

Summary. It is obvious to almost everyone that the Federal Reserve plans to control inflation by raising interest rates further, and that higher interest rates will restrain the economy. As we enter 2023, even the Fed is not sure how high rates will have to go to cool inflation back down to the Fed's target rate of two percent. Instead of a shallow recession, a recent report from Deloitte, the international accounting firm, suggests that we could experience a "growth recession" in 2023. They propose that GDP may turn modestly negative for two or three quarters, while unemployment may rise by only a percentage point or two from the current levels. However, even if we do enter a growth recession, many firms will still find a shortage of skilled tradespeople. As interest rates rise, interest rate sensitive sectors of the economy, especially housing and construction, will decline as the cost of typical 30-year mortgages rises dramatically. Other sectors of the economy that are not interest-sensitive may continue to grow. Many (but not all) consumers increased their savings rate during the pandemic, providing a cushion for any financial weakness in the 2023 economy. Last but not least, we need to keep an eye on inventories in the industrial sector. During the siege of shortages and supply chain bottlenecks, many firms ignored the concept of JIT and built some significant raw materials inventories. If they perceive that normal supply chains have been restored, they may decide to quit ordering and use their inventories. Historically inventory liquidation on an industrial scale has been a factor in creating economic instability.



DECEMBER 2022 Survey Statistics

	UP	SAME	DOWN	N/A	Dec. Index	Nov. Index		25 Year Average
Sales (New Orders)	12%	52%	36%	0%	-24	- 2	-12	+14
Production (Gross Output)	9%	60%	19%	12%	-10	+ 7	+ 5	+14
Employment	21%	69%	7%	2%	+14	+20	- 2	+ 8
Purchases	5%	71%	24%	0%	-19	- 2	-12	+ 7
Prices Paid (major commodities)	17%	64%	19%	0%	- 2	+10	+ 7	+15
Lead Times (from suppliers)	17%	50%	31%	2%	-14	- 5	- 5	+11
Purchased Materials Inv. (Raw materials & supplies)	14%	55%	24%	7%	-10	-20	-19	- 4
Finished Goods Inventory	17%	42%	29%	12%	-12	- 9	- 2	- 8
Short Term Business Outlook (Next 3-6 months)	14%	60%	26%	0%	-12	-22	-14	-
Long Term Business Outlook (Next 3-5 years)	38%	53%	7%	0%	+31	+22	+ 5	-

Items in short supply:

Electronics, engineered fasteners, trucks and equipment, some truck transportation, some aluminum, machined components, laminated glass, fasteners, steel tubing, some bronze components, phosphoric acid 75%, motors, explosion proof motors, reducers, casings cabinet makers, burners, variable frequency drives, controls DDC, and anything else that you may not think of.

Prices on the UP side:

Paper products, chemicals, eggs, E-coat, concrete, steel, stainless steel, aluminum, steel, PVDF resins, engineered resins, pulp, labor, packaging, grain.

Prices on the DOWN side:

Steel *, carbon steel, aluminum, copper, lumber, wood panel products, plywood, particle board, plastics, polypropylene, styrenics, nylon, ABS, pallets, corrugated packaging, nitrile gloves, natural gas, transportation.

Latest Unemployment Reports:

(Except as noted, data are NOT seasonally adjusted)

Nov.		Nov.	Aug. 2	20-Year
	2022	2021	2009	Low
State of Michigan (Nov.)	4.3%	5.2%	14.6%	3.2%
State of Michigan (Unadj	.)3.5%	4.0%	14.1%	2.9%
Kent County	3.0%	3.1%	11.9%	2.1%
Kalamazoo County	3.4%	3.3%	11.1%	2.1%
Calhoun County	4.3%	4.6%	12.8%	2.7%
Ottawa County	2.8%	2.7%	13.3%	1.8%
Barry County	3.2%	3.0%	10.9%	2.2%
Kalamazoo City	4.3%	4.2%	15.2%	3.2%
Portage City	3.2%	3.1%	8.7%	1.3%
Grand Rapids City	4.0%	4.1%	16.1%	3.0%
Kentwood City	2.8%	2.9%	10.7%	1.4%
Plainfield Twp.	2.2%	2.3%	8.0%	1.4%
U.S. Official Rate (Nov.)	3.7%	4.2%	9.6%	3.5%
U.S. Rate (Unadjusted)	3.4%	3.9%	9.6%	3.4%
U.S. U-6 Rate (Nov.)**	6.7%	7.7%	22.9%	6.7%
**U-6 for Michigan = 8.0% for Q3 of 2021 thru Q2 2022				

^{*}Item reported as both up AND down in price



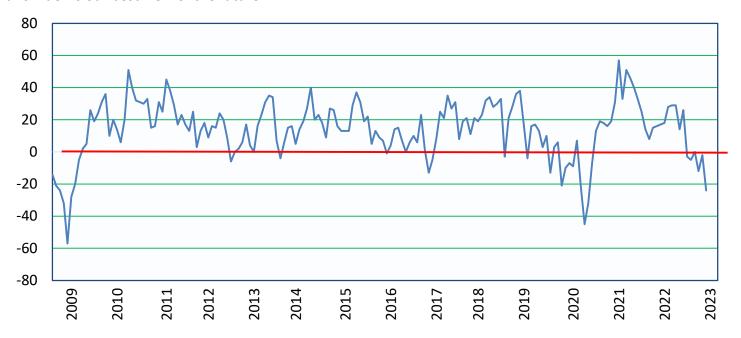
DECEMBER COMMENTS FROM SURVEY PARTICIPANTS

"2022 is ending with less excitement than planned, but we're hopeful for a strong 2023."	"Pricing seems to have stabilized over the last couple of months."
"Business is still strong, but we're starting to see future orders for some customers to drop off."	"DOE is going to make every single thing cost more and be in short supply by our government, along with your energy costs. Just hang on. 98% of the people do not know it or understand it."
"Sales are softening. We still have a lot of backlog to work through, but are starting to talk about what we'll do when the recession starts to hit us."	"We're in the typical end of year slowdown that starts Nov 15 with deer season. Overall, we will have a good year. 2023 looks good if the supply chain continues to improve availability of product."
"Our entire value chain is chasing a new supply/demand equilibrium. Demand is low, and expected to remain low through spring. Customers have too much inventory and are tightening purchasing policies to adjust to higher carrying costs associated with interest rate hikes. Our prices are	"Sales have softened in the short term."
relatively stable after minor downside adjustments, but we're expecting them to retreat further in Q1."	"We are seeing another price increase (3rd this year) from our European machinery suppliers."
"After several months of gently slowing in sales, we saw a significant reduction in new orders in the month of December. We're not quite sure if it's overstocked customers not wanting to take any more inventory before the end of the year or the beginning of a downward economic trend. One month does not	"We are getting a lot of (4-8%) pricing increases as 1/1/23."
make a trend, so we'll have to wait and see."	"Happy Holidays."



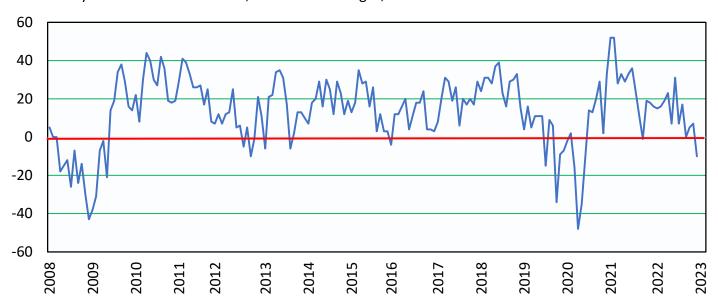
West Michigan Index of New Orders: 2008-2022

As the name implies, the NEW ORDERS index measures new business coming into the firm, and signifies business improvement or business decline. When this index is positive for an extended period of time, it implies that the firm or organization will soon need to purchase more raw materials and services, hire more people, or possibly expand facilities. Since New Orders are often received weeks or even months before any money is actually paid, this index is our best view of the future.



West Michigan Index of Production (Output): 2008-2022

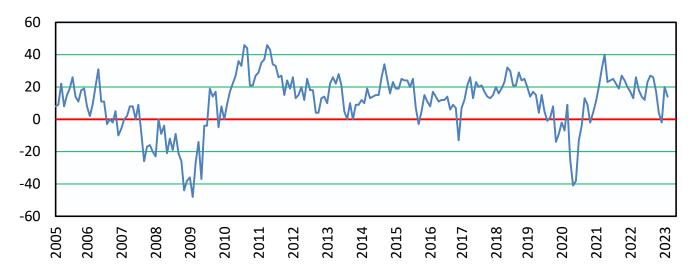
As new orders come in and materials arrive at the loading dock, production schedules are posted to meet the customer's needs. Although production schedules respond to demand, they also respond to seasonal factors such as holidays as well as bad weather, materials shortages, or other external influences.





West Michigan Index of Employment: 2005-2022

The index of EMPLOYMENT measures the firm's increases and decreases in staffing, including permanent workers and temps. After economic downturns, it measures new hires as well as previous workers called back to work. When this index is positive for an extended period of time, it almost always signals a reduction in industrial unemployment for West Michigan. Normally, there is about a month or two in lag time between this report and the payroll numbers being reflected by the government statistics. However, almost all employment indexes are laggards, meaning that firms often wait until upticks in orders are confirmed before adding staff, and conversely laying off staff only after a downturn in orders appears to be certain for the foreseeable future.



Michigan Future Business Outlook: 2013-2022

The indexes of LONG-TERM BUSINESS OUTLOOK and SHORT-TERM BUSINESS OUTLOOK provide a glimpse at current and future attitudes of the business community. Traditionally, most businesses are more optimistic about the long term, although current event can result in perceptions changing very rapidly. Both short and long-term attitudes reflect current business conditions, and are usually higher when sales, production, and employment are positive.

LONG TERM BUSINESS OUTLOOK (3-5 YEARS)
SHORT TERM BUSINESS OUTLOOK (3-6 MONTHS)

