

Winter 2021

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Recommended Citation

Long, Brian G. (2021) "West Michigan's Supply Chain Disruption," *Seidman Business Review*. Vol. 27: Iss. 1, Article 6.

Available at: <https://scholarworks.gvsu.edu/sbr/vol27/iss1/6>

West Michigan's Supply Chain Disruption

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



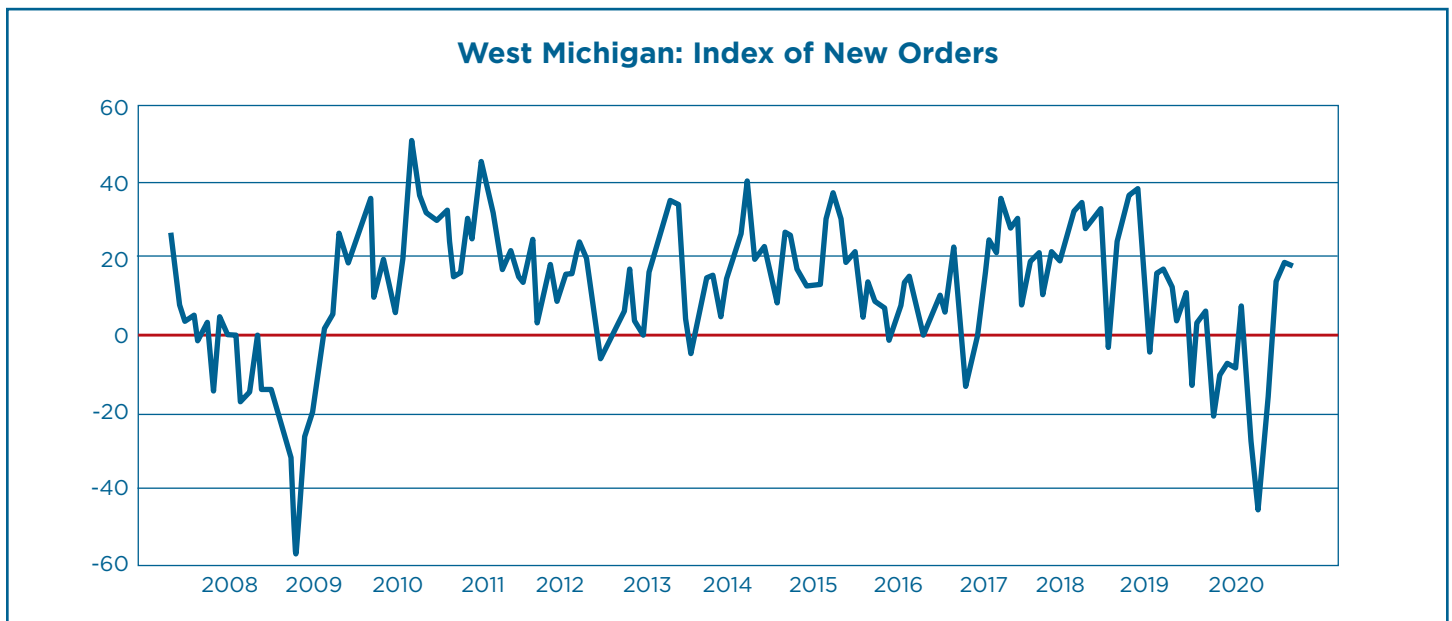
A frequent criticism of the capitalistic system is that private ownership and individual decision-making periodically result in the entire economy sliding into an economic downturn, otherwise known as a recession. For over 70 years, the formal definition of a recession has been recognized as two consecutive quarters of negative growth in our nation's Gross Domestic Product, or GDP. In more recent years, the National

Bureau of Economic Research (NBER) has further refined this definition to include an analysis of real income, employment, industrial production, and wholesale-retail sales. Hence, NBER has determined that the recent Great Recession for the U.S. began in December 2007 and bottomed out around June 2009. Although June 2009 has been termed the end

of the recession, it may more accurately be described as the beginning of the recovery. By most estimates, it took about seven years for us to dig ourselves out of the deepest economic hole since the Great Depression.

The ensuing record-breaking expansion lasted until February 2020 when we were blindsided by the COVID-19 recession. In response, the government mandated significant shutdowns of many retail and industrial firms resulting in the biggest decline (although temporary) in economic activity in U.S. history.

In December 2008, our local NEW ORDERS survey index fell to an all-time low of -57, and four months later, rebounded to +3. By contrast, the index NEW ORDERS, which measures future business activity, only fell to a low of -45 in April 2020, and rebounded to a positive growth rate of +13 by July. Subsequent reports have all been positive, and barring future shutdowns, suggest that the worst may be behind us.



Source: Current Business Trends, a monthly Grand Valley State University publication

No two recessions have ever been exactly alike, and the COVID-19 slump is clearly no exception. By early 2020, Michigan had recovered from a 2019 General Motors strike which stymied the growth for some automotive parts suppliers. According to our monthly survey, both the NEW ORDERS and EMPLOYMENT indexes had returned to positive in early 2020, and the outlook looks positive for the foreseeable future.

Whereas all previous recessions have been driven by economic imbalances, the COVID-19 recession was almost entirely driven by the forced closure of all businesses and activities except those determined by various governmental

units to be "essential," such as those producing, selling, or transporting most forms of food and medicine. In addition, SOME repair businesses, SOME medical services, SOME governmental units, SOME transportation services like UPS and FedEx and almost all grocery and drug stores were allowed to stay open. In the case of one local manufacturing firm on the brink of closing, a reprieve was granted when a sizeable order was received from a major medical manufacturer. Many manufacturers and retailers that were allowed to stay open often posted record sales, while other "non-essential" firms waited for permission to reopen. Unlike other recessions, many permanent layoffs were avoided when the federal government offered a multi-trillion dollar relief

package to help support businesses and individuals impacted by the shutdown. Furthermore, business conditions for most of our local firms were fairly solid on the eve of the pandemic, which allowed them to reopen with at least some orders already on the books.

2010-2020: A Decade of West Michigan Growth

For a ten-year period, the growth of the West Michigan economy set post-war records. Using NBER’s December 2007 figures as the peak before the Great Recession, total employment in West Michigan’s three largest counties, Ottawa, Kent, and Kalamazoo, stood at about 559,200. Over the next 18 months, Michigan’s Department of Technology, Management & Budget (DTMB) reported a 6.7 percent employment decline to a June 2009 low of 521,200. By contrast, employment for the entire state declined by

8.4 percent. As West Michigan recovered from the Great Recession, total employment for the three largest counties grew to 648,700, an expansion of 16.0 percent from the previous 2007 peak. Construction of new housing did not keep up with the percent employment growth, and housing shortages began to pop up throughout West Michigan. By contrast, the state employment for Michigan gained only 3.2 percent during the same time period. This meager gain has now been more than obliterated by the current recession.

Although West Michigan is blessed with many different types of manufacturing, a major portion of the recent growth came from our automotive parts suppliers. About 14 percent of the world’s office furniture is made in West Michigan, so growth in this industry also contributed to the economic boom.

Table 1: Michigan vs. West Michigan Employment

| Location | December 2007 | June 2009 | February 2020 | September 2020 |
|--------------------------------------|---------------|-----------|---------------|----------------|
| State of Michigan | 4,620,000 | 4,232,000 | 4,770,000 | 4,474,000 |
| Percent Change from December 2007 | | -8.4% | +3.2% | -3.2% |
| Ottawa, Kent, and Kalamazoo Counties | 559,200 | 521,200 | 648,700 | 615,600 |
| Percent Change from December 2007 | | -6.8% | +16.0% | +10.1% |

Source: Michigan Department of Technology, Management & Budget

West Michigan Supply Chain Disruption

The theory of modern supply chain management states that every firm should know the ENTIRE supply chain for every product, commodity, or service they purchase that becomes assembled into their final product or service. Hence, if a firm purchases electric motors, they need to know the secondary supply chain for the motor manufacturer. The motor manufacture in turn buys wire, and the wire manufacture buys copper. Somewhere in the world, there is the proverbial “hole in the ground” from which the raw copper ore was mined. Recent history has shown that knowledge of the entire supply chain offers the opportunity for cost reduction, but also alerts supply chain managers to potential threats for supply chain disruption.

Supply chains in recent years have become increasingly convoluted. Needless to say, many local firms have now realized that they have lost track of the details in their supply chains. Supply chain disruptions that have been experienced during the COVID-19 recession have come from (1) suppliers that were shut down, (2) transportation systems that were partially shut down, and (3) U.S. ports and

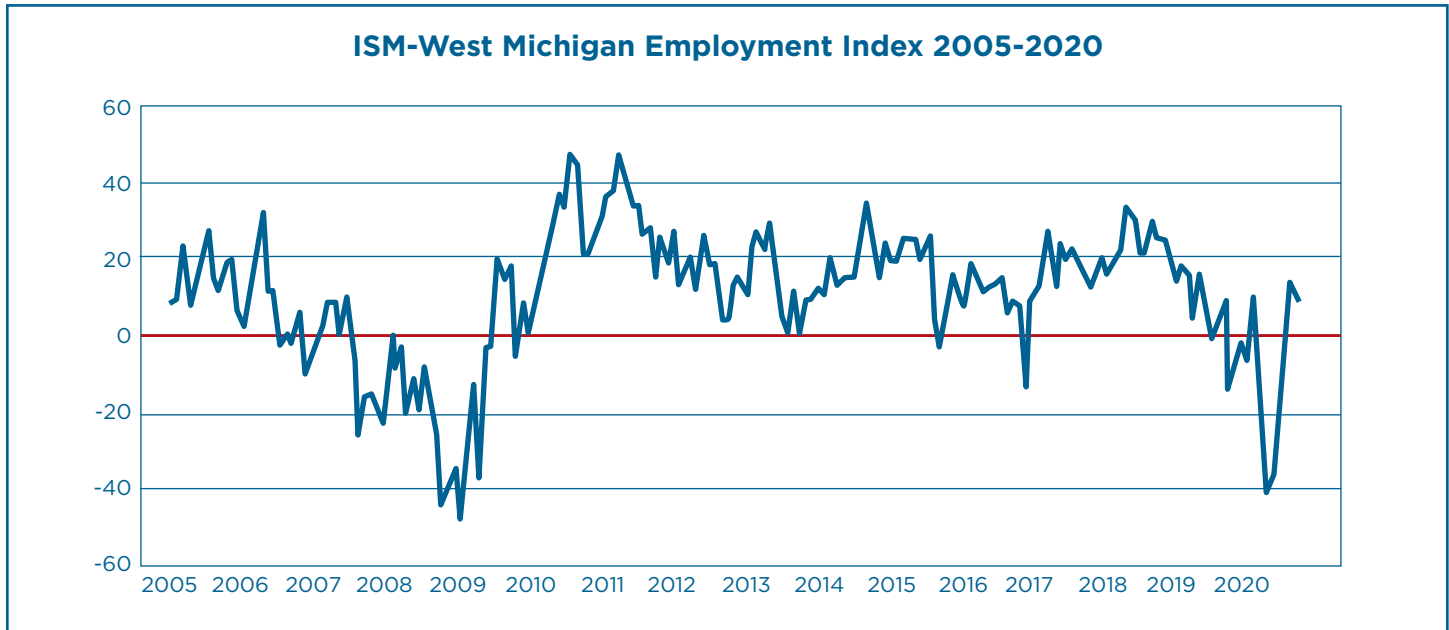
custom checkpoints that caused delays. Most firms had not experienced these kinds of disruptions since the 1970’s when an ill-conceived government program of wage-price controls created a similar configuration of shortages. In short, the “magic pipeline,” which had for many years delivered goods and services without significant interruption had broken down.

Just like the 1970’s, many firms scrambled to find alternate sources of materials to keep their operations going. One firm commented that the internet made the task much easier, although the alternative sourcing sometimes came at higher prices. Although many, but not all, of these bottlenecks have now been cleared, spot shortages still persist. In most economic downturns, weak demand almost always brings the prices of most products and services down. Despite the COVID-19 recession, these shortages in the supply chain have kept many industrial prices for some commodities from falling.

West Michigan Jobs Return

For at least five years prior to the COVID-19 recession, numerous West Michigan firms reported problems filling open positions with qualified candidates. By February 2020, most of our local auto parts suppliers had recovered from the October 2020 General Motors strike. The index of EMPLOYMENT, which had been very strong for the previous two years, returned to normal. Although the pandemic had

forced most non-essential manufacturers and distributors to close, the ensuing layoffs were considered to be temporary. The West Michigan Index of EMPLOYMENT turned sharply negative, but returned to double-digit growth in August. However, as many firms reopened, not all of the workers that were recalled returned to work. Hence, the problem of filling open positions with qualified candidates has returned.



Source: Current Business Trends, a monthly Grand Valley State University publication

Changes Going Forward

Thirty years ago, Just-In-Time inventory (JIT) became a religion for the manufacturing world. Some firms proudly announced that their on-site materials inventories were limited to a few hours supply. However, when the auto industry got caught by hurricane-induced shutdowns from Korean suppliers a few years ago, many firms began to reevaluate their inventory policies. Although there are many costs to maintaining inventory, accounting professionals tend to focus on the opportunity cost of money. As interest rates have continued to fall, so has the overall cost of carrying inventory. With lower inventory carrying costs, many of our local firms are now carrying more inventory. In fact, our local survey now finds that materials inventories are at a 15-year high.

The trend toward shortening the supply chain has also seen a resurgence, especially now that the risks of long supply chains have been exposed. Until recently, many firms were unaware of various small components and sub-assemblies that were coming from China or Mexico. Reshoring, the practice of bringing manufacturing back to the U.S. from overseas, has become a new priority for some firms. When adding the cost of freight, tariffs, inconvenience, and delivery delays, many firms are discovering that the total cost of doing business may be reduced by using suppliers closer to home. At least some West Michigan automotive parts producers may be well situated to take advantage of this new trend. However, the situation for the West Michigan office furniture

industry is more problematic. Just like most recessions, most firms are not going to be opening new office space, which usually fuels the demand for new office furniture. It is somewhat obvious that corporate America is in the process of redefining the traditional office concept. Many people who were essentially forced to work from home have now indicated that they would now prefer to permanently work from their own at-home office. Unfortunately, the West Michigan office furniture industry has not focused on the home office market. They have successfully developed new entries in the ever-growing medical service industry, and a few have been designing new "social distancing" office concepts. At this time, it seems uncertain how long it will take for our local firms to turn the corner and service the new office reality.

The permanent damage from any recession comes from the firms, businesses, and organizations that never reopen. Like the recovery uptick from most recessions, the current rebound in many statistics can be attributed to pent-up demand. Therefore, it will take several months before the permanent damage to the West Michigan economy can be assessed. Fortunately, the local economy was strong before the COVID-19 recession, and some firms that reopened or stayed open are already posting job openings. Despite these glimmers of hope, a return to the optimistic economic growth we reported in February 2020 will take some time to materialize. ■