

Welcome to our October report covering results from Creighton's September supply manager survey. Creighton's monthly survey of supply managers in nine Mid-America states indicates that economic growth is in a range indicating a significantly weaker manufacturing sector with modest inflationary pressures.

Replacing Fossil Fuel Electricity Generation with Solar: Increases Costs and Income Inequality

When I was a graduate research assistant at Oak Ridge National Laboratory in 1983, pursuing my PhD. in economics, I worked on a contract with the Solar Energy Research Institute in Boulder, Colorado. At the time, solar energy electricity production was prohibitively expensive, requiring massive government subsidies for its mere existence. However, solar energy devotees argued that solar energy was an "infant" industry that, if properly supported with tax dollars, would become cost competitive with fossil fuel electricity production before the turn of the century.

Now, 36 years later, U.S. taxpayers subsidize solar electricity production to the tune of \$43.75 per billion kilowatt hours (BKWH) compared to \$1.04 per BKWH for coal, and \$0.46 per BKWH for nuclear. Even with these massive solar subsidies, the levelized cost of electricity (LCOE) generated by photo voltaic solar is approximately 30% above that of electricity produced by coal, while electricity produced by thermal solar is 239% greater than that of coal.

Despite colossal subsidies, coal electricity production represented 29.2% of the total while solar was only 1.2% in 2016. Replacing half of coal production with solar would cost consumers approximately \$2.9 billion in generation costs, and tax subsidies per year. The latest data show that, as a share of income, the lowest quintile of income earners spent roughly 7 times that of the highest quintile of income earners on utilities. Thus, in addition to economically burdening all U.S. consumers. The shift away from coal to solar will exacerbate income inequality in the U.S.

Even with this compelling data, a host of Democrat candidates argue for replacing coal with solar and, at the same time, for cutting income inequality. Julian Castro said he would put a "... halt to fossil fuel exploration and fracking on federal land and would boost wind, solar and other renewable energies." And late last week Democratic presidential hopeful Warren said that, "By 2030, no more cars with carbon emissions; and by 2035, no more production of electricity that has carbon emissions."

Thus, Democrat presidential candidates who argue for reducing income inequality at the same time as reducing the use of coal electricity generation, are being "disingenuous."

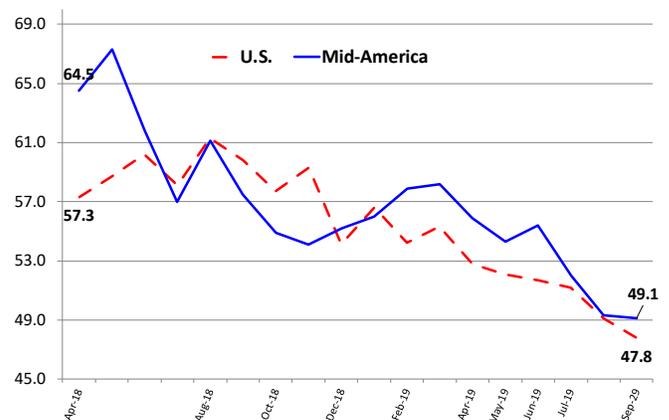
LAST MONTH'S SURVEY RESULTS

Mid-America Index Slumps Below Growth Neutral Again: Almost Half Supply Managers Reported Negative Trade Impacts

September Survey Highlights:

- Overall index sank for the fifth time in the past six months and moved below growth neutral.
- Approximately one-half, or 48%, of supply managers indicated that the trade war was having a negative impact on their company.
- Approximately 18% of supply managers reported that their firm had changed vendors due to the trade war and related trade retaliation.
- Business confidence remained fragile.

Leading Economic Indicators, last 18 months (50.0 = Growth Neutral)



The September Creighton University Mid-America Business Conditions Index, a leading economic indicator for the nine-state region stretching from Minnesota to Arkansas, fell below growth neutral for a second straight month.

Overall index: The Business Conditions Index, which ranges between 0 and 100, slumped to 49.1 from August's 49.3. After 32 straight months of above growth neutral readings, the region's overall index moved below 50.0 in August and September.

For 2019, the Mid-America economy has been expanding at a pace well below that of the nation. The trade war and the global economic slowdown have cut regional growth to approximately two-thirds that of the U.S. Based on the last two months of surveys of manufacturing supply managers, both the U.S. and Mid-America economies, are likely to move even lower in the months ahead.

Both the Mid-America and U.S. indices would have to move to between 42.0 and 45.0 to clearly signal a recession for the first half of 2020. However, the probabilities of a recession in the first half of 2020 have risen significantly in the past several months.

Employment: The September employment index increased to a weak 46.7 from August's 45.1, which was the lowest in 34 months.

For 2019, Mid-America annualized employment growth has been 0.8% compared to a much higher 1.3% for the U.S. This month almost one-half, or 48.0%, of supply managers reported that the trade war has had a negative impact on their business hiring and operations.

Wholesale Prices: The wholesale inflation gauge for the month indicated reduced inflationary pressures with a wholesale price index of 55.3 from 63.4 in August. Tariffs have, to date, have had little impact on our wholesale inflation gauge.

Moderate wholesale inflation from our survey and national surveys support another Federal Reserve rate cut. I expect the Federal Reserve to reduce short-term interest rates again at its September meetings. Record low interest rates by global central banks and a strong U.S. dollar are pushing the Fed to continue reducing rates.

Confidence: Looking ahead six months, economic optimism, as captured by the September Business Confidence Index, improved slightly to 47.7 from August's 45.0, a 35-month low for the confidence reading.

I expect business confidence to depend heavily on trade talks with China, and the passage of the nation's trade agreement with Canada and Mexico, or USMCA. Quick passage of USMCA is very important for the regional economy.

Inventories: Companies shrank inventories of raw materials and supplies for the month, but at a lower pace with an index of 46.4, which was higher than August's inventory index of 41.5. This is yet another signal of weak business confidence as manufacturers reduce their inventories of raw materials and supplies based on an anemic sales outlook.

Regarding buying from abroad, 18% of supply managers indicated that their firm had changed vendors due to tariffs and retaliation. Said one supply manager, "In some of the cases we have not changed suppliers, but have changed the location of manufacturing away from China to another country."

As reported by one supply manager, "(I) spent 2 weeks in China and Malaysia in September. Interesting to see China manufacturers building in other Asian countries to avoid tariffs."

Trade: The regional trade numbers were down again with both export orders and imports falling. The new export orders index sank to 36.2, down from August's 39.6, and the import index increased slightly to 42.4 from 42.3 in August.

Other survey components: Other components of the September Business Conditions Index were new orders at 47.6 down from August's 48.8; the production or sales index moved lower to 50.0 from August's 52.6; and speed of deliveries of raw materials and supplies index at 56.0 was down from last month's 58.6.

The Creighton Economic Forecasting Group has conducted the monthly survey of supply managers in nine states since 1994 to produce leading economic indicators of the Mid-America economy. States included in the survey are

Arkansas, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, Oklahoma and South Dakota.

The forecasting group's overall index, referred to as the Business Conditions Index, ranges between 0 and 100. An index greater than 50 indicates an expansionary economy over the course of the next three to six months.

The Business Conditions Index is a mathematical average of indices for new orders, production or sales, employment, inventories and delivery lead time. This is the same methodology, used since 1931 by the Institute for Supply Management (ISM), formerly the National Association of Purchasing Management. The Mid-America report is produced independently of the national ISM.

MID-AMERICA STATES

ARKANSAS: The September Business Conditions Index for Arkansas increased slightly to 48.3 from August's 48.2. Components of the index from the monthly survey of supply managers were new orders at 44.2, production or sales at 49.6, delivery lead time at 56.5, inventories at 47.1, and employment at 44.3. Construction activity remained strong in the state. Both durable and nondurable manufacturers experienced solid growth over the past several months. However, new orders and hiring among manufacturers for the last two months signal slowing economic conditions in the state.

IOWA: The state's overall Business Conditions Index sank below the 50.0 threshold for second straight month to 49.6 from August's 49.7. Components of the overall index from the monthly survey of supply managers were new orders at 45.9, production or sales at 49.1, delivery lead time at 57.0, employment at 48.3, and inventories at 47.9. Construction activity remained strong in the state. Both durable and nondurable manufacturers experienced solid growth over the past several months. However, new orders and hiring among manufacturers for the last two months signal slowing economic conditions. Ethanol producers in the state report significant pullbacks in the economic activity.

KANSAS: The Kansas Business Conditions Index for September rose to 51.1 from August's 49.9. Components of the leading economic indicator from the monthly survey of supply managers were new orders at 51.4, production or sales at 48.7, delivery lead time at 57.5, employment at 49.2, and inventories at 48.8. Durable and nondurable goods producers have been expanding at a slow, but positive pace, over the past several months. However, survey results over the past two months point to even slower growth in the months ahead.

MINNESOTA: The September Business Conditions Index for Minnesota fell to 48.4 from 48.6 in August. Components of the overall September index from the monthly survey of supply managers were new orders at 49.7, production or sales at 49.7, delivery lead time at 56.3, inventories at 43.1, and employment at 44.6. Construction activity in the state remains very strong even as durable and nondurable goods manufacturers reported pullbacks in economic activity. Medical equipment manufacturers are bucking the downward trend with solid gains, while food processors and ethanol producers continue to experience pullbacks in economic activity.

MISSOURI: The September Business Conditions Index for Missouri slumped to 49.2 from August's 50.1. Components of the overall index from the survey of supply managers were new orders at 48.9, production or sales at 48.8, delivery lead time at 55.2, inventories at 42.3, and employment at 48.8. Construction activity in the state continues to improve. Both durable and nondurable goods manufacturers are experiencing essentially flat growth with new orders and other indicators pointing to slow to no growth in the months ahead for manufacturing in the state with nonmanufacturing expanding at a slower pace.

NEBRASKA: After falling below growth neutral for August, Nebraska's Business Conditions Index once moved slightly into growth positive territory. The state's overall index climbed to 50.6 from August's 49.3. Components of the index from the monthly survey of supply managers were new orders at 49.3, production or sales at 49.0, delivery lead time at 57.1, inventories at 48.2, and employment at 49.4. Construction activity in the state continues to improve. Both durable and nondurable goods manufacturers are experiencing almost flat growth with new orders and other indicators pointing to slow to no growth in the months ahead for manufacturing in the state with non-manufacturing expanding at a slower pace.

NORTH DAKOTA: The September Business Conditions Index for North Dakota slipped to 50.1 from 51.2 in August. Components of the overall index were new orders at 49.2, production or sales at 49.4, delivery lead time at 56.6, employment at 47.7, and inventories at 47.4. Growth in the state's large energy sector and related industries has slowed for much of 2019. Slow growth in the state's durable goods manufacturing sector offset pullbacks among nondurable goods producers in the state. Overall growth in the state economy will remain positive, but slower in the final quarter of 2019.

OKLAHOMA: After moving below growth neutral for August, Oklahoma's Business Conditions Index once again advanced into positive territory in September. The overall index from a monthly survey of supply managers for September rose to 50.1 from August's 49.2. Components of the overall September index were new orders at 49.2, production or sales at 49.4, delivery lead time at 56.7, inventories at 47.5, and employment at 47.8. Growth in the state's large energy sector and related industries has slowed for much of 2019. Business pullbacks among the state's durable goods and nondurable goods manufacturing sectors offset improving growth among the state's nonmanufacturing sector. Overall growth in the state economy will remain positive, but slower in the final quarter of 2019 due to negative spillover from manufacturing.

SOUTH DAKOTA: The September Business Conditions Index for South Dakota sank to 47.8 from August's 48.3. Components of the overall index from the September survey of supply managers in the state were new orders at 42.6, production or sales at 49.5, delivery lead time at 56.5, inventories at 47.2, and employment at 43.2. Construction activity in the state continues to improve. Both durable and nondurable goods manufacturers are experiencing almost flat growth with new orders and other indicators pointing to slow to no growth in the months ahead for manufacturing in the state with nonmanufacturing expanding at a slower pace.



THE BULLISH NEWS

- The U.S. unemployment rate fell to 3.5%, its lowest level since 1969. This is good news for workers but not such good news for companies searching for workers.
- The U.S. inflation rate, as measured by the consumer price index (CPI), rose by 1.7% Aug. 2018 to Aug. 2019. The core CPI, which excludes prices of food and energy, climbed by a higher 2.4% over the same period. In my judgment, the inflation rate is getting a bit too high to be ignored by the Federal Reserve.
- The percentage of discouraged (not in labor market) continues to expand, albeit slowly.



THE BEARISH NEWS

- The U.S. economy added only 136,000 jobs in September. This is just another signal that U.S. growth is slowing.
- Year-over-year average hourly wage for September sank to 2.9% from 3.2% in August to \$28.09 per hour.
- Both Creighton's and the Institute for Supply Management's (ISM) index fell below growth neutral for September. ISM's reading plummeted to its lowest level since the 2008-09 recession.
- gender nonconforming identities has brought to light the importance of non-binary gender inclusivity." Even George Orwell did not see this one coming.

THE OUTLOOK

Conference Board. "Through the first half of 2019, the slowdown of global growth has clearly taken hold, and we do not see an easy way back up for now. The slowdown has been extraordinary synchronized around the globe, impacting the United States, Europe, China, India and large Latin American economies, notably Brazil and Mexico. At the same time, looking at our leading economic indicators, the risk of outright recession is still low for most large economies, with the exception of the United Kingdom due to Brexit, and possibly Brazil due to high unemployment and persistent ambiguity regarding reforms. But we are also getting more concerned about the growth trajectories in Germany and Japan, which create potential downside risk to the outlook. More broadly, the ongoing uncertainties with regard to trade disputes and other geopolitical upheavals impact in particular on business confidence. This will make companies more reluctant to deliver on large capital expenditure plans. It will also impact the outlook for the remainder of the year and – if this lingers on for much longer – also into 2020.

Goss (October 2019): I expect **Annualized GDP growth of 1.8% for Q3, 2019 and 1.3% in Q4 2019. **Year-over-year increase in U.S. housing prices (Case-Shiller) to fall below 2.5% in Q3 (and to continue to drop). **The Federal Reserve Open Market Committee (FOMC) to reduce short-term interest rates by another ¼ % (25 basis points) at their October 29-30 meetings.

WHAT TO WATCH

- **BREXIT:** On October 31, Great Britain is scheduled to exit the European Union (EU). A messy (hard) exit with no deal will be a significant negative for the global economy. It will not be good for equities, but increase bond prices and reduce yields as investors seek safe financial havens.
- **ISM and Creighton's PMIs for October:** On November 1, the Institute for Supply Management and Creighton University release their surveys of supply managers in the U.S. and Mid-America, respectively. This is an early reading of manufacturing growth. Both are trending downward and both were below growth neutral 50.0 for August and September.
- **FOMC Meetings.** On October 29-30 the interest rate setting committee for the Federal Reserve meets to consider changes in short-term interest rates. Listen to Fed Head Powell's comments afterward to gauge future actions.

STATISTIC OF THE MONTH

\$2,400. Presidential candidate Elizabeth Warren proposes to give every Social Security recipient an additional \$2,400 a year in benefits to be financed by a 14.8% tax on high income earners. This would cost taxpayers \$150 billion annually. President Franklin Roosevelt will not just rollover in his grave, he will somersault, as his beloved retirement program becomes another social entitlement expansion.

SUPPLY MANAGER CAREERS

Planner-Production Materials. Timpte, Inc., David City, Nebraska. Salary \$42K - \$62K. The Planner establishes and controls inventory levels of assigned materials, eliminate factory part shortages, processes and protects vendor cost & pricing data, as well as company purchase agreements. They will communicate and negotiate returns of rejected items to suppliers as required; processes returns & accounts for scrap. **Personal Attributes:** *You are a highly motivated, result-oriented self-starter, and can deliver successful results with minimal guidance.*Ability to learn quickly, make an immediate impact, and provide value added service to our clients, customers, and vendors. *Flexibility and openness to work on a variety of assignments, industries, and roles. High energy and enthusiasm, with a strong commitment to exceeding company expectations. **Desired Skills, Knowledge, and Qualifications:** *Possess a Bachelor's degree or minimum of 3 years planning experience for a manufacturing facility. *A strong analytical mindset and outstanding organizational skills. *Knowledge of market trends, data analysis and purchasing best practices including maintaining confidentiality of privileged information. *Excellent communication skills, both verbal and written. *Working knowledge Microsoft Office programs and MRP/ERP business software. <https://tinyurl.com/y2rmwswm>

GOSS EGGS (Recent Dumb Economic Moves)

The U.S. quickly imposed \$7.5 billion in tariffs aircraft, food products as well as other consumer products from Europe. The French government announced that it would immediately retaliate. Not only will U.S. consumers pay higher prices for European products, U.S. companies selling in Europe will be economically punished. When will national political leaders begin to understand that trade barriers are a losing proposition for both the implementor and the recipient?

Supply Manager Reading Room

"10% China tariffs and the supply chain scramble."

The tariffs will come as importers ramp up shipments for peak season, creating the potential to disrupt global supply chains and trade flows for the remainder of the year. The 10% tariffs announced Thursday in a four-part series of presidential tweets sent U.S. importers into what Sue Welch described as a "scramble." "It's really hard to plan for crazy," Welch, the CEO of Bamboo Rose, told Supply Chain Dive. "And this is crazy." The 10% tariffs are on \$300 billion worth of goods from China, also known as list four. The announcement was not altogether out of the blue, given that such tariffs on this fourth list had been threatened before and gone through a public comment period and hearings. But the timing of the announcement. <https://www.supplychaindive.com/news/10-tariffs-300-billion-china-supply-chain-scramble/560141/>

FOLLOW ERNIE

Survey results for October will be released on November 1, the first business day of the month.

Follow Goss on Twitter at <http://twitter.com/erniegoss>

For historical data and forecasts visit our website at

<http://business.creighton.edu/organizations-programs/economic-outlook>