

# U.S. auto supply chain at a crossroads: study

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A troubled but enduring automotive supply chain in the United States can become stronger if a more collaborative strategy can gain wider acceptance, a research team at Case Western Reserve University has determined.

The report "The US Auto [Supply Chain](#) at a Crossroads" includes findings of the [National Survey](#) of Automotive Suppliers, conducted by researchers at Case Western Reserve as part of the Driving Change [consortium](#), led by the Labor Market Information Offices of Indiana, Michigan and Ohio.

Suppliers in tiers serve the nation's automotive industry, which has played a critical role in the expansion of America's middle class for nearly a century. The industry, facing intense global competition in recent decades, was also profoundly affected by the recession of 2008-2009 – auto sales fell by 40 percent and two of the Detroit Big 3 automakers entered bankruptcy.

Studies of the auto industry have tended to focus on original equipment manufacturers (OEMs ), and their large tier 1 direct suppliers. Susan Helper, Weatherhead School of Management Carlton Professor of Economics, led a research team concentrating on smaller firms within the industry's supply chain (those with fewer than 500 employees). These firms typically do not supply automakers directly; that is, they are usually tier 2 or tier 3 suppliers. These smaller firms account for 30 percent of employment in the auto supply chain, but are sometimes difficult to identify as auto suppliers in existing data. By combining

multiple databases the researchers have been able to construct a clearer picture of the industry as a whole.

“Throughout our research, we find evidence of two possible futures for America’s automotive industry,” Helper said. “One future is characterized by collaborative relationships between firms at all tiers of the supply chain, wherein firms share cost savings from identifying and eradicating inefficiencies that they might not have been able to address on their own.”

In contrast, adversarial relationships within the supply chain could impede the industry’s progress.

“In this future, instead of developing better products and thinking critically about how to remove inefficiencies from processes that span multiple firms, firms at each level of the supply chain generate profits by squeezing margins of firms in the tier under them. This path is a recipe for industry-wide stagnation,” Helper said.

The study finds that large segments of the automotive supply chain are characterized by each of these two scenarios, demonstrating certain elements of both.

The research report notes evidence that many first tier firms continue to protect their profit margins by cutting the margins of their suppliers, rather than by trying to build positive-sum relationships. In response, many suppliers focus on short-term cost-cutting and are reluctant to invest in modernizing their operations. For example, barely a third of survey respondents have adopted Toyota-style practices such as involving workers in problem-solving groups, despite widespread evidence that such practices improve performance.

On a more positive note, the study also found some evidence that

relationships are becoming more collaborative, as many firms report that their main customers are more likely now to work with them to reduce costs than they were in 2007 before the recession. In addition, about 20 percent of suppliers have adopted “high road” practices, which include high wages, worker training and investment, and empowerment at all job levels. Such firms experienced 10.9 percent less sales loss during the recession than did the group of firms that least exhibited these high road characteristics.

The study concludes by arguing that the high road scenario has significant social benefits, and proposes public policies that would help firms realize this potential.

**More information:** To read the study, go to [drivingworkforcechange.org/reports/supplychain.pdf](https://drivingworkforcechange.org/reports/supplychain.pdf).

For more information on studies undertaken by the Driving Change consortium , please see [drivingworkforcechange.org/](https://drivingworkforcechange.org/).

Provided by Case Western Reserve University

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