



FACT SHEET

Rebuilding the Competitiveness of U.S. Domestic Manufacturing

By Marc Jarsulic March 11, 2021

There are two major challenges facing U.S. manufacturing. The first is building competitiveness with global manufacturers, especially for small- and medium-sized U.S. enterprises (SMEs), and the second is overcoming strategic risks to health care, national defense, and other areas where the United States depends on global supply chains.

As to the first challenge, the long-run competitiveness of U.S. manufacturing, along with the higher-wage employment that it has traditionally offered, is at risk. Productivity growth, which depends in significant measure on technical innovation, is the basis for long-run competitive success. Greater output per unit of input means longer-term success in the marketplace. Unfortunately, however, in most U.S. manufacturing sectors, productivity growth is substantially below the best-in-class standard set by Germany. In addition, many U.S. SMEs are not productive enough to compete with the cost advantages of Chinese and other low-wage competitors.

These failures present a puzzle. The United States is the world leader in scientific research, and scientific discovery is the basis of manufacturing innovation. So why has competition from firms in countries such as Germany and China, with scientific establishments inferior to those of the United States, not caused U.S. manufacturers to translate an absolute advantage in basic science into a similar advantage in manufacturing innovation and productivity growth? Why has America been less successful than Germany at diffusing technology across the U.S. manufacturing sector, especially to SMEs? Why can't U.S. small firms overcome low-wage competition through innovation that delivers higher quality and greater efficiency, as do many German firms?

The source of these failures lies in public good and collective action problems that have not been addressed. Individual profit-maximizing firms underinvest in applied proof-of-concept research, measurement technology and standards, and workforce development, because they cannot capture all the benefits of those investments. This slows productivity growth, since these kinds of investments are needed to translate basic scientific discoveries into manufacturing processes and allow workers to adapt to continual technical change. The Center for American Progress report "Building U.S. Manufacturing Competitiveness and Capacity"¹ proposes a number of steps to solve these problems, including:

- Reconfigure and expand the existing Manufacturing Extension Partnership program (MEP) to help SMEs translate cutting-edge scientific discoveries into new manufactured products and manufacturing processes and deliver higher wages and employment levels for manufacturing workers.
- Reconfigure and expand the Manufacturing USA program (MUSA) to ensure that early-stage scientific research suitable for use in manufacturing production is sited in the United States and to develop the production processes that are specifically geared to address climate change.
- Mandate that the U.S. Department of Labor develop workforce training for firms participating in MEP and MUSA in order to enable workers to adapt to new production processes.
- Require the federal government to buy manufactured goods from high-performing U.S. firms, with high productivity, high wages, and good workforce training, in order to support good jobs and encourage innovation.

The second challenge to U.S. manufacturing, as noted above, is overcoming strategic risks presented by global supply chains, particularly with respect to health care, national defense, and other crucial areas. The COVID-19 pandemic, for example, has revealed weaknesses in the U.S. supply chain in areas ranging from vaccine production to personal protection equipment. Evaluations by the U.S. Department of Defense point to several areas where secure, trusted, and technically advanced manufacturing needs to be fostered. Fully understanding the risks posed by lack of domestic manufacturing capacity is critical, but that understanding is hampered by a lack of knowledge of how supply chains actually function. The following policy recommendations are aimed at addressing these concerns and include:

- Carefully map supply chains for strategically important manufactured products.
- Support expansion of important domestic manufacturing capacity where strategically necessary.
- Develop supply agreements with trusted partner nations where important strategic risks exist.

Taking the steps outlined above can help to expand the ability of U.S. manufacturing industries to meet the challenges of global competition; expand the population of high-road firms that provide high-wage employment and training for their workers; and reduce the risks that arise when America does not have access to manufacturing capacity that meets health, defense, and other strategic domestic needs.

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Endnotes

¹ Marc Jarsulic, "Building U.S. Manufacturing Competitiveness and Capacity" (Washington: Center for American Progress, 2021), available at <https://www.americanprogress.org/?p=496920>.