

## Manufacturing: Don't Take it for Granted

Manufactured goods are an integral part of our life at home and work. Almost everything that we use or enjoy is a manufactured good. So how can the manufacturing sector represent only 11 percent of gross domestic product (GDP)? Manufacturing is a far larger part of the economy than the official government estimates. According to new research from the MAPI Foundation, manufacturing actually accounts for 32 percent of GDP.

According to Stephen Gold of MAPI, the Manufacturers Alliance for Productivity and Innovation, the two measures used by the federal government to measure the economic impact of manufacturing on society are flawed. The proportion of GDP and manufacturing's multiplier, or the effect that manufacturing has on other industries, both grossly underestimate the effect of manufacturing.

Official U.S. government data shows that the manufacturing share of GDP is only around 11 percent. We are surrounded by manufactured goods in every aspect of our life, yet surprisingly the government thinks that manufacturing is only a little over 10 percent of the economy.

As precision machinists, we know better. Take a product, any product, and we can show you multiple parts we produced that are critical to its production. For example, breakfast cereal will have been manufactured on equipment using precision machined parts. The package and fill line will have a number of precision machined parts involved in its operation. Finally, the glue to seal the box will be applied using nozzles made by precision machinists.

We all know that there are precision machined parts on our automobiles and trucks to help them go and stop safely, but how many people recognize the precision machined parts at the gas pump, on the hose fittings, breakaways and the delivery nozzle?

MAPI Foundation Chief Economist Dan Meckstroth reanalyzed data provided by the University of Maryland INFORUM and found that the manufacturing value chain actually accounts for about one third of U.S. GDP. This is three times the impact that the more narrowly defined official government figures suggest.

The MAPI analysis also determined that the "Multiplier Effect" for manufacturing in the U.S. is about 3.6, again, three times the official number. This means that every dollar of manufacturing value added generates \$3.60 of value added elsewhere in the economy.

How is it that the official government figures can be so far off the mark? MAPI reports that the feds look too



narrowly at manufacturing and miss the value creation, both upstream and downstream from our actual production. The upstream activities of the manufacturing supply chain are valued at \$3.1 trillion. The value created by manufacturing producers to manufacture final goods, plus the value added downstream in transportation, wholesaling, retailing, rental and leasing (think automobiles), as well as professional services, maintenance, insurance and repair add up to approximately \$3.6 trillion.

The economic impacts of manufacturing, such as combined upstream, producers, and downstream value added, as well as inputs created for non-manufacturing supply chains, total \$6.7 trillion, or approximately one-third of GDP.

Manufacturing accounts for one third of the economy. One dollar in value added in manufacturing creates \$3.60 in the broader economy. Without precision machined components, almost every modern technology would not be able to function.

Prioritizing manufacturing, and the jobs that manufacturers create, ought to be the top priority of policymakers and officials in government.

We account for one-third of the economy. That's a significant seat at the table.

For the MAPI publication, visit: short.productionmachining.com/MAPI