



Insight

The Impact of Federal Regulations on U.S. Manufacturing

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While the United States (U.S.) manufacturing sector has undergone a decline as a percent of Gross Domestic Product (GDP) from 27.0 percent in 1957 to 12.2 percent in 2011, U.S. manufacturing has made a surprising comeback since 2009. Through July 2012, the Federal Reserve reports that factory output rose 21.9 percent since its recession low was reached in June 2009, and it is just 1.7 percent below the pre-recession peak for factory output reached in April 2007. The recent positive economic performance of U.S. manufacturing – and manufacturing’s economic multiplier effect on the U.S. economy is stronger than any other American business sector – has occurred in spite of the growing burden of federal regulations.

On August 21, 2012, the Manufacturers Alliance for Productivity and Innovation (MAPI), an Arlington, VA-based industry nonprofit, released *Macroeconomic Impacts of Federal Regulation of the Manufacturing Sector*, a study it commissioned with NERA Economic Consulting to examine the qualitative and quantitative impacts of the federal government’s financial, labor, energy, environmental and transportation regulations on the U.S. manufacturing sector. NERA Economic Consulting employed its general equilibrium model (“the NERA ERA integrated model”) of the U.S. economy to evaluate the macroeconomic consequences of major federal regulations – that is, those major new rules with an estimated cost to the U.S. economy exceeding \$100 million. The NERA integrated model is designed to capture both direct and indirect effects of increases in the manufacturing sector’s cost of production by modeling interactions among all parts of the economy.

The MAPI Study

The MAPI study’s findings show that since 1998, the costs of major federal regulations have far exceeded manufacturing sector growth, with the cumulative inflation-adjusted cost of compliance for major regulations growing by an annualized rate of 7.6 percent.

Furthermore, the cost of major regulations has also significantly exceeded overall economic growth, as annual growth in the physical volume of manufacturing sector output averaged only 0.4 percent since 1998, while U.S. inflation adjusted GDP growth averaged 2.2 percent annually. The NERA researchers estimate that such major regulations could reduce the manufacturing sector's output by up to 6.0 percent over the next decade. In 2012, the cost of major regulations could reduce the total value of shipments from U.S. manufacturers by up to \$500 billion in constant 2010 dollars and lower manufacturing exports by 17 percent.

The MAPI study also found that U.S. manufacturers are subject to an estimated 2,183 unique regulations between 1981 and April 2012, and that because 95 percent of the regulations are non-major (having estimated costs of less than \$100 million) and not accounted for in the study (since the federal government does not track their costs or those of independent agencies), the aggregate burden of these non-major regulations could be equal to the cost of the major regulations. NERA researchers also found that the U.S. Environmental Protection Agency (EPA) imposes the largest regulatory burden on the manufacturing sector by count (72 regulations in total, with 122 major regulations) and by cost (\$117 billion in constant 2010 dollars), followed by the U.S. Departments of Transportation (880 regulations in total, 69 major regulations) and cost (\$25 billion in constant 2010 dollars); and followed by count, the U.S. Department of Labor (214 regulations in total, 27 major regulations), and the U.S. Department of Energy (106 regulations in total, 17 major regulations); and by cost, the U.S. Department of Health and Human Services (\$10 billion in constant U.S. dollars), and the U.S. Department of Homeland Security (\$7 billion in constant U.S. dollars).

Based on several scenarios considered by NERA researchers, federal regulations are estimated to reduce manufacturing sector output by between two and 10 percent annually. The NERA researchers note that when federal regulations are analyzed collectively - or "layered" on top of another in practice - the resulting interaction creates added distortions that lead to higher costs to manufacturers and the U.S. economy.

Trends in the Growth of Federal Regulations

The MAPI study found that the average number of major federal regulations each year has risen over the last three administrations, with 36 per year during the Clinton administration, 45 under George W. Bush, and 72 over the 2009 to 2011 time frame under President Obama. For 2012, NERA researchers also estimate that the U.S. GDP loss attributable to the cumulative burden of federal regulations ranges from \$240 billion to \$630 billion in constant 2010 dollars, and the average U.S. household's loss in purchasing power could range from \$1,800 to \$5,000 in constant 2010 dollars. The increase in major regulations on American business and consumers under the Obama administration has been particularly

onerous.

In a March 13, 2012, report (“Red Tape Rising: Obama-Era Regulation at the Three-Year Mark”) issued by *The Heritage Foundation*, regulatory policy research fellows James L. Gattuso and Diane Katz report that the Obama administration had instituted 106 new major regulations in its first three years, increasing the regulatory burden on Americans by more than \$46 billion – over five times the cost (\$8.1 billion) imposed by the George W. Bush administration during its first three years. *The Heritage Foundation’s* Gattuso and Katz note that the federal agencies performing the benefit-cost analyses of these major new rules have a “natural incentive” to minimize or obfuscate the costs of their own regulations; for some, costs are only partially quantified, while for others, not quantified at all.

Naturally, the benefits of federal regulations, such as cleaner air and water, improvements in energy efficiency, or the safety of employees, need to be balanced against these regulatory costs. The rigorous applications of benefit-cost analysis, where the benefits exceed the costs of regulation, are paramount to keeping the U.S. manufacturing sector globally competitive. The MAPI study’s recommendations on regulatory stewardship should be embraced by both the executive and legislative branches of the federal government if the recent revival of the U.S. manufacturing sector is to be sustained, namely: 1) revisiting and revising existing regulations; 2) slowing the growth of new regulations; and 3) ensuring any new regulations mesh as well as possible with existing regulations rather than being duplicative or unnecessary.