Does It Outsourcing Pay Off? Evidence from U.S Industry-Level Data

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Abstract

To leverage advanced technologies and skills at lower costs, firms are increasingly outsourcing their information technology (IT) functions to third parties. Despite the growing importance of IT outsourcing in today's economy, however, research efforts to objectively measure IT outsourcing and estimate its economic contributions have been surprisingly lacking. This study treats IT outsourcing as a factor input in production, and evaluates the economic contributions of IT outsourcing. We estimate an industry production function based on a panel data set from 61 private sector industries in the United States over the 1998 to 2004 period, and find the following. First, our data and modeling indicate that IT outsourcing has made a positive and significant contribution to industry output growth. Second, we find that the economic contributions of IT outsourcing have been substantially greater than those of the other materials and services outsourcing. Finally, our analysis of split data samples show differences between industries that produce goods and those that produce services in terms of the use and contributions of IT outsourcing—services-producing industries tend to not only use more IT outsourcing but also get more out of IT outsourcing as compared with goods-producing industries.

Keywords: Economic Analysis, Industry Analysis, Information Technology, IT Impacts, Outsourcing, Output Elasticity, Production Function, Production Theory, Productivity.