

ABSTRACT

In this paper the authors examine the effects of publicly financed infrastructure and R&D capitals on the cost structure and productivity performance of twelve two-digit U.S. manufacturing industries. The results suggest that there are significant productive effects from these two types of capital. Their effects on the cost structure vary across industries and their contributions to growth of labor productivity vary over time as well. Not only is the cost function shifted downward in each industry, generating productivity inducement, but the factor demand in each industry is also affected by the two types of public capitals, suggesting bias effects. The authors also calculate the marginal benefits of these services in each industry and estimate the "social" rates of return to these capitals for the industries in their sample.

JEL-AEA classification: D24, H40, H54, H59