

Regulatory Reforms and Productivity: An Empirical Analysis of the Japanese Electricity Industry

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Abstract

The Japanese electricity industry has experienced regulatory reforms since the mid-1990s. This article measures productivity in Japan's steam power-generation sector and examines the effect of reforms on the productivity of this industry over the period 1978 to 2003. We estimate the Luenberger productivity indicator, which is a generalization of the commonly used Malmquist productivity index, using a data envelopment analysis approach. Factors associated with productivity change are investigated through dynamic GMM estimation of panel data. Our empirical analysis shows that the regulatory reforms have contributed to productivity growth in the steam power-generation sector in Japan.

Key Words: regulatory reforms, productivity measures, electricity industry, data envelopment analysis

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