

Institutions and Performance of Regulated Firms: Evidence from Electric Utilities in the Indian States

EPRG Working Paper 1809

Cambridge Working Paper in Economics 1823

Tooraj Jamasb, Manuel Llorca, Pavan Khetrapal, Tripta Thakur

Abstract

It is commonly accepted that institutions influence economic development of countries. But, can we also trace the effect of institutional endowment to specific sectors and regions of a country? There is a significant gap in knowledge and evidence of this issue in the literature. This paper examines this effect in the Indian electricity distribution sector and explores the influence of state-level institutional quality and economic factors on the performance of network utilities in India. Since the 1990s, India has adopted reform steps to improve the efficiency of its electricity sector. However, there remain performance differences among the utilities. We examine the performance of 52 electricity distribution utilities in 24 Indian states for the period from 2006-07 to 2011-12. The findings confirm that the quality of institutions and state-wide economic development affect the performance of the electricity distribution utilities in different states. Additionally, we simulate the cost savings from utilities' performance improvements linked with institutional enhancements. The results indicate the need to strengthen the institutions, for example through regulatory agencies reform to improve the performance of the sector.

Keywords: Quality of state institutions; electricity distribution in India;

heteroscedastic stochastic frontier models; inefficiency determinants.

JEL Classification D22, L51, L94, O43

Contact tooraj.jamasb@durham.ac.uk

Publication March 2018

Financial Support Durham Energy Institute (DEI) and the Institute of Advanced Studies,

Durham University.