

Exploring the Determinants of “best practice” in Network Regulation: The Case of the Electricity Industry

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Aoife Brophy Haney and Michael G.Pollitt

Although incentive regulation of energy networks is now widespread, the same cannot be said for best practice in the application of associated benchmarking methods. In our earlier paper (Haney and Pollitt, 2009), we presented the results of an international survey of energy regulators in 40 countries conducted between June and October 2008. The regulators were drawn from Europe, South America and Australasia. Evidence from our survey suggests that there is a wide variety of methods being implemented internationally; very few countries adhere closely to best practice principles as defined by Lovell (2006); and there are interesting regional effects at work where regulators appear to be influenced by their neighbours' paths.

In this paper we formalise the lessons from the summary responses of regulators to our survey by developing a model for best practice in efficiency analysis. We focus on the electricity industry where we have the most survey responses. We use the best practice index developed in our earlier paper to investigate which sector and institutional characteristics have the most significant effects on the implementation of advanced regulatory techniques. Our analysis provides some initial evidence that industry size, economic and political institutions play an important role in determining best practice in electricity regulation. Due to the nature and size of our sample it would be inappropriate to offer definitive conclusions. What we can say, however, is that there is more at work than regional differences in approach.

We expected to find some more evidence of a neighbourhood effect that might help to explain the dissemination of best practice methods within a particular region (e.g. to explain Austria vs Argentina). There is no statistically significant general regional effect, but there are



some effects for specific regions. Additionally, the qualitative responses to our survey suggest that this type of effect can be relevant for some countries and regions. We did find that the age of the regulatory agency has a positive impact on best practice. Higher levels of experience tend to increase the credibility of the regulator and as a result there tends to be greater capacity to adopt more complex methods (e.g. UK vs Peru).

Our paper is a first attempt at providing empirical evidence for the reasons behind differences in regulatory approaches in the electricity industry. It appears that the underlying reasons are inextricably linked to those that drive differences in economic development across countries. Future work would benefit from increasing the size of our country sample and its regional representativeness.

Contact ab748@cam.ac.uk
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