The Impacts of Electricity Industry Reforms on Electricity Prices

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Overview

Electricity industry reforms have been underway worldwide for nearly three decades now. One of the major motivations for the reform was to correct the price abnormalities that existed in the electricity industry in the pre-reform era, and to reinstall the pricing mechanism based on market competition. The ensuing electricity prices, it was suggested, would be cost-reflective, and hence provide appropriate signal for system expansion. The proponents for reform also argued that the pressures coming from competitive market could further drive down the electricity prices, and hence contribute to economy-wide benefits (Bacon and Besant-Jones 2001). Till now, the majority of developed countries and more than 70 developing countries have undertaken steps to reform their electricity industries (Besant-Jones 2006). While the overall guidance for such reform has come from the 'standard textbook model' (namely, introduction of competition through unbundling, privatisation and re-regulation), the actual implementation has varied across these countries. The outcomes of the reforms (especially the promised outcomes associated with the electricity prices) have been markedly mixed across these countries (Nagayama 2007, Wamukonya 2003). In general, it seems that there is a significant disparity between expectations from reform and its actual outcomes.

Much of the debate on the reasons behind such a disparity has been carried out from a neo-liberal perspective. This perspective attributes the reasons for the disparity to the lack of depth to which reforms have been implemented, and to governmental interference (see, for example, Pollitt 2004, 2008). This study contends that this perspective is narrowly-focused and unlikely to provide adequate insights into the real reasons for the disparity (Sharma 2003). This is because this perspective mainly focuses on economic factors, and largely ignores the importance of other factors (namely, social, cultural, and political) on shaping the reform process, and on determining electricity prices. Furthermore, these factors are context-specific, varying from country to country. Therefore, an analysis of these contexts and how they impact

electricity industry reform (drivers, models, and electricity prices) is a prerequisite for developing a more meaningful understanding of the reasons for the disparity.

Against this background, this study intends to develop an institutional perspective on electricity industry reforms, with specific focus on the understanding of how the country-specific contexts define the boundary of reform, and hence influence electricity prices. This perspective, this study argues, could provide a much fuller understanding of the underlying reasons for the disparity.

Methods

The method of this study is developed based on the *transaction cost economics* (Williamson 1975, 1985, 1995), the *property right analysis* (Demsetz 1967, Alchian and Demsetz 1973, Alchian 1977), and *the historical and political economic approach* (North 1990, 2005, libecap 1989) from the new institutional economics tradition. This method views electricity reform as a process of changing the institutions (the governance structure, the property rights system, for example) that govern the electricity industry, and examines how these institutional changes are shaped by the country-specific contexts. Within these country-specific contexts, different interest groups and political forces pursue their preferred institutions of electricity industry under the constraints of political institutions. Their preferences are further shaped by the non-institutional contextual factors (such as, macroeconomic conditions, local and international experiences with electricity reform) and institutional contextual factors (such as, socio-cultural institutions).

Besides, the analysis of this study will focus on 9 countries namely, Australia, Brazil, China, Chile, some countries from European Union (including, United Kingdom, and Germany), and some ASEAN countries (including, Malaysia, Philippines, and Thailand). This selection, this study argues, could provide a sufficient coverage (in terms of, for example, socio-cultural settings, political institutions, motivations for reform, models of reform, and the experience with reform), and a solid foundation for developing a fuller understanding of the influences of country-specific contexts on reform process, and the electricity prices.

Expected Results

The results of this study are expected to provide deeper insights into the reasons for the disparity between expectations for reform and its actual outcomes (focusing on

electricity prices). These insights would be useful for policy makers and policy analysts, and enable them to make more informed decisions on the design of the institutions for the electricity industry.

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