The political economy of electricity market liberalization: a cross-country approach

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Abstract

More than half of the countries in the world have introduced a reform process in their power sectors and billions of dollars have been spent on liberalizing electricity markets around the world. Ideological considerations, political composition of governments and educational/professional background of leaders have played and will play a crucial role throughout the reform process. Adapting a political economy perspective, this paper attempts to discover the impact of political economy variables on the liberalization process in electricity markets. Empirical models are developed and analysed using panel data from 55 developed and developing countries covering the period 1975–2010. The research findings suggest that there is a significant negative relationship between electricity market liberalization and the size of industry sector, meaning that countries with larger industry sectors tend to liberalize less. Also, we detect a negative correlation between polity score and power sector liberalization, that is; it cannot be argued that liberalization policies are stronger in more democratic countries. On the other hand, our results imply that countries that receive foreign financial aid or assistance are more likely to liberalize their electricity markets. In OECD countries, single-party governments accelerate the reform process by reducing public ownership and vertical integration. Moreover, we detect a negative relationship between the years the chief executive has been in office and the reform progress in OECD countries. Furthermore, we identify a decrease in vertical integration in electricity industry during the terms of parties with “right” or “left” ideologies in OECD countries. Additionally, professional and educational
background of head of executive branch (prime minister, president and so on) seem to have very significant impact on reform process in OECD countries, but this is not the case in non-OECD countries. Leaders with a professional background as entrepreneurs speed up electricity market liberalization process in OECD countries while those with a background as economists slow it down. As for educational background, the reforms seem to progress slower in OECD countries if the head of executive has an educational background in economics or natural science. As a final point, the study suggests that EU or OECD membership, the existence of electricity market reform idea, population density, electricity consumption, income level, educational level, imports of goods and services (as % of GDP) and country specific features have a strong correlation with liberalization process in electricity markets.

Keywords
Electric utilities, industrial policy, political economy

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