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The Role of Independent Regulation in the Relationship of Power Tariff and Election

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Overview

Due to its scale economy and a strong impact on the national economy, the electricity industry is regarded as a typical example of natural monopoly regulation. One can categorize the basic aspect of natural monopoly regulation into two parts—regulating entry and regulating price level. Scale economy is the justification of regulating entry and the consumer protection from monopoly is the justification of regulating price level. This paper examines whether independent regulatory body can insulate the retail price of electricity from the political influence of election. We conjecture that, if the regulators are independent, the political events such as presidential or parliamentary elections would not affect the retail power tariff.

Methods

To inspect the effect of regulatory body's independence on the retail power tariff, we used quarterly data of retail power tariff for 23 OECD member countries from 1978 to 2012 as our panel data set. To identify the independence of regulatory body of each IEA member country, we followed the classification of the IEA report on the electricity regulatory bodies of OECD member countries. We also acquired the election dates data of IEA member countries from WIKIPEDIA. We classified 23 OECD member countries into two groups according to the independence of the regulatory body. For the group of OECD countries with non-independent regulatory body retail power tariff for household rose by 1.6% right after elections. On the other hand, for the group of OECD countries with independent regulatory body retail power tariff for household rose by 1.1% before elections. The Chow test showed that the two groups are significantly different in these points.

Results

We found that, upon a request of tariff-raise from power industry, a country with independent regulatory body tends to raise the retail power tariff regardless of elections while a country with limited regulated independence tends to delay the timing of rate increase after elections.

Conclusions

To minimize the unhealthy impact of elections on the level of power tariff and the resulting distortion of resource allocation surrounding power industry, institutional improvement such as the establishment of independent regulatory body is highly recommendable.

References

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