REGULATORY REFORM IN THE JAPANESE ELECTRIC POWER INDUSTRY: AN EVENT STUDY ANALYSIS
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Overview
In this paper, we observe the effects the recent regulatory reform on the electric power industry in Japan. The industry has nine major companies, and had been tightly regulated as natural monopoly until the mid-1990s. After 1995, to promote liberalization and de-regulation, the Electricity Business Act was revised several times. With respect to entry regulation, the Electricity Business Act was revisited in 1995. By this revision, IPP (Independent Power Producers) could enter the power generating market, SSEB (Specified Scale Electricity Business) was approved to enter the particular retail area, and the regulation on the wheel access was relaxed. The act secondly revised in 1999. The 1999 revision liberalized the power generating market for extra-high volume (more than 20000V), and enabled PPS (Power Producer and Supplier) to enter the market by using incumbent companies network. Also the new rule of wheeling access service was established. The third amendment was in 2003. ESCJ (Electric Power System Council of Japan) and JEPX (Japan Electric Power Exchange) were established. The revision intended to promote fairness and transparency in the transmission and distribution sector.

Recently, the regulatory reform in the electricity industry had drastically developed after 2011 (Fukushima-disaster) in Japan. The government provided the guideline about the Electricity System Reform in 2013. The guideline consists of three parts: 1) To expand the cross-regional coordination of transmission, 2) Fully deregulation of the retail and power generation sectors, 3) Legal separation of power generation and transmission/distribution, which is so called “unbundling”. After the guideline was announced, the Electricity Business Act has revised for 3 steps. By the first revision on 13th November 2013, the Organization for Cross-regional Coordination of Transmission Operators (OCCTO) was established. Entries to electricity retail business were fully liberalized in the second revision on 11th June 2014. As the third step, it was decided on 17th June 2015 that the transmission/distribution sector will be unbundled legally on 1st April 2020. These events seemed to have strongly impacts on the electricity market. To see this, we employ an event study methodology and observe the effects of the regulatory reform on the market. Regarding the event study, papers such as Kothari and Warner (2006), Mackinlay (1997), and Binder (1998) reviewed comprehensively. With respect to regulated industry, some studies such as Schwert (1981) and Binder (1985) examined the effects of the regulation by using an event study.

The paper is organized as follows: First, we introduce the our research motivation, and describe the situation of regulatory reform in the electric power industry in the next section. Then, we employ an event study with the recent regulatory reform of the electricity market in section 3, and give some interpretations in section 4. Lastly, we conclude our research.

Methods
We use an event study analysis to observe the effect of the regulatory reform from 2011 to 2016. To address this, we use not only stock price data of electric power companies, but also JEPX’s wholesale electricity price data. Detailed explanations will be provided in the extended abstract.

Results and Conclusions
First, we describe detailed explanations regarding recent regulatory reform in the Japanese electricity industry. Second, we show the results of an event study with electricity market in Japan from 2011 to 2016. From the results, we confirm the impacts of these events on the electricity market and provide some policy interpretations. Especially, we interpret the relationships between stock prices of electricity companies and wholesale electricity prices when some regulatory events occur.
Detailed results and conclusions will be shown in the extended abstract.
References


