Evaluation of Market Liberalization in developing countries in the case of the ASEAN and the Philippines in particular

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Overview

The development of the electricity and energy demand in developing countries and developed industrial countries are different. They have different structures of population, wealth, different infrastructures and other demands in their respective industries. Economically, the developed world is not growing as quickly and steeply as many developing countries. In the future it would be foolish to ignore the energy demand of the developing countries. Developing countries will consume more energy than all of the OECD countries combined and they will continue to rival in the resource market. It is also very important for the governments of the developing countries to react and to plan ahead according to their development of demand. In the past, the governments of the ASEAN countries have faced the issue of rising electricity demand and different measures have been conducted to secure the supply of electricity. Markets have been opened for Independent Power Producers (IPPs) and some countries such as the Philippines took the step towards full market liberalization. The effects of those measures will be analyzed in this paper, while putting a focus on the Philippines and recommending actions for addressing current issues in the market.

Methods

In order to gain an overview of the ASEAN and in particular the Philippine energy market, we carry out an indepth metastudy of the relevant literature and include data from the World Bank, the Asian Development Bank, the OECD, etc.

Results

Starting with the Philippines in 1987, many of the ASEAN countries adopted the Independent Power Producer (IPP) model which was introduced in the United States with the Public Utility Regulatory Act in 1978. The IPP model in the ASEAN was a single buyer model which allowed private investors to generate electricity and sell it to the national power company. This is considered a popular first step towards liberalization with what could be considered a minor deregulation of generation. The contract between the power company and the IPPs usually consisted of long-term power purchasing agreements (PPA) with take-or-pay quotas aimed to reduce market risks for investors. PPAs in southeast Asia were often poorly negotiated and were frequently fully indexed to exchange rate variations. During the 1997 Asian financial crisis it became apparent how the exchange rate indexing and especially the take-or-pay quotas were a critical mistake. The Asian financial crisis did not only lead to the devaluation of local currencies in ASEAN countries towards the US-dollar but also slowed down the growth of the economy and therefore had an impact on the affordability of the PPAs. On one hand the currency devaluation soared the cost for the PPAs in domestic currencies and on the other hand the economical slowdown influenced the power demand of the industry, which did not match the predictions on which the PPAs were made. Therefore the paradoxical scenario emerged that affordable state owned utilities had to reduce their power generation in order to absorb the higher priced output from IPPs. Subsequently future planned IPP projects were either cancelled or indefinitely postponed and reduced the private investment into the power sector for several years.

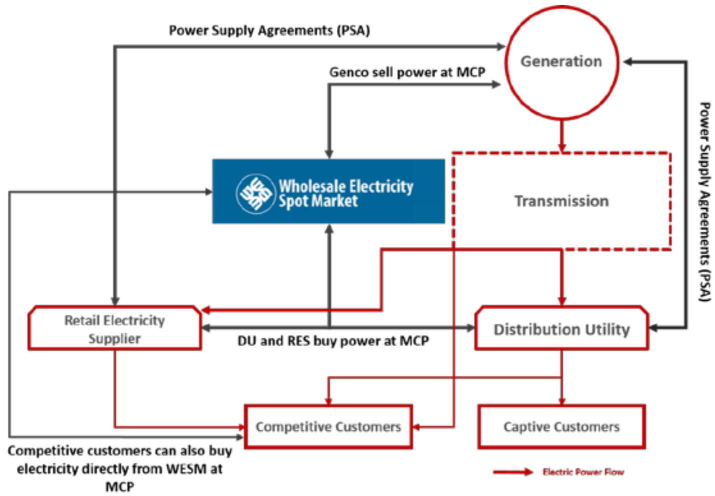

Figure 1: Post "Electric Power Industry Reform Act" market structure (own simplified depiction)

The Philippines were experiencing heavy power shortages in the 1990s due to the industry and population growth and so did most of the other ASEAN countries. But in contrast to the other ASEAN countries, the Philippine's National Power Company (NPC) had signed more than 40 IPP contracts (mostly BOT) in 1994 to secure the electricity generation with NPC being the sole purchaser of power . Subsequently the Philippines were affected during the Asian Financial Crisis because of the take-or-pay agreements and the exchange rate indexing. Electricity prices in the Philippines rose to a level second only to Japan. Instead of slowing down the deregulation and market liberalization process, as in some other ASEAN countries, the Philippines pushed towards full market liberalization with the 2001 reform law, the Electric Power Industry Reform Act (EPIRA).

With the NPC being theoretically bankrupt due to the IPP liabilities and threatening to affect the government's own fiscal stability, the step towards market liberalization was motivated.

Conclusions

The market liberalization case of the Philippines showed that the regulatory framework needs to be adjusted to avoid collusion in the procurement of PSAs. This ultimately leads to the question if those regulatory loopholes existed purposely or mistakenly. With the Philippine's and and Meralcos history on corruption it cannot be dismissed that the regulations were not implemented in favor of Meralco. According to the Corruption Perceptions Index (CPI), the Philippines rank at 95 on par with Mexico, Mali and Armenia and behind other ASEAN countries such as Thailand. Further considering the positive correlation between the Human Development Index (HDI), which assesses the development of a country, and the CPI, one can derive the conclusion that for developing countries, market liberalization attempts tend to be impaired through corruption.

Governmental interference with the electricity market affected the attractiveness for investors to invest into the electricity market of the Philippines. With this in mind one needs to consider the risks involved in a completely deregulated electricity market structure for developing countries. Looking at the Californian electricity crisis and the subsequent electricity rates as the worst case scenario the risks need to be assessed adequately. The impact on the Philippines rising economy would have possibly been worse than on the developed economy in California and therefore the amount of governmental interference needs to be carefully measured when introducing a liberalized market in a developing country.

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