Power Sector Reform Tracker (PSRT), V1
Codebook and Data Collection Protocol

Johannes Urpelainen
Johns Hopkins SAIS

Joonseok Yang
Columbia University

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General Comments

This document contains the data collection protocol and the codebook for Power Sector Reform Tracker (PSRT), V1, new data on power sector reform. We constructed the country-level power sector reform data, 1982-2013 based on Erdogdu (2011)'s data. For every country in the dataset, we use available sources such as government websites, newspapers and academic articles on electricity sector reform in a country to identify any new reforms between 2009-2013. Focusing only on developing countries, we first listed the countries in the order of total GDP in 2013, and then selected the highest 83 countries that are not covered by (Erdogdu, 2011). We extend the dataset by including data on another 83 developing countries and by extending the temporal coverage to 2013. As a result, the data are available for 142 non-OECD countries from 1982 to 2013. We also correct some errors in the original dataset based on a systematic review of each data point.

This project aimed at collecting reliable data from a range of sources on the following eight variables about types of power sector reforms: Liberalization law, corporatization, independent regulatory agency, independent power producers, unbundling, privatization, wholesale electricity markets, and choice of suppliers.

For details, see: Urpelainen, Johannes and Joonseok Yang. Forthcoming. "Global Patterns of Power Sector Reform, 1982-2013." Energy Strategy Reviews.

Coding Scheme

The power sector reforms were defined as follows for the coding:

- Liberalization law: Enacting laws to mandate the restructuring of power sector (Kessides, 2012).

  Key question: "Has an 'Energy Law' [a law to permit the creation of a sector that could be unbundled and/or privatized in part or in whole] been completely passed by the legislature?" (World Bank, 1999: 8)

  Example (Albania in 1995): "In August 1995, Parliament approved an Electricity Law providing for unbundling and possible privatization of the power sector and involvement of independent power producers, and a Law on Privatization of the Electrical Power Department providing for privatization of the power sector beginning with distribution" (World Bank, 2003: 8).

- Corporatization: Corporatizing and commercializing state-owned utilities by removing the direct control of government or by creating an independent corporation (World Bank, 1999).

  Key question: "Has the electric utility [state owned enterprise] been commercialized and corporatized?" (World Bank, 1999: 8)

  Example (Bangladesh in 1994): "[T]he (Bangladesh) Government adopted a power sector reform program in 1994 entitled Power Sector Reforms in Bangladesh (PSRB). As part of PSRB, the Government of Bangladesh (GOB) decided to corporatize Bangladesh Power Development Board (BPDB) making it into a holding company" (Asian Development Bank, 2009: 1).

- Independent regulatory agency: creating and authorizing independent regulatory agencies to set electricity tariffs, issue licenses, and control access to the transmission network, and enforce regulatory requirements.

  Key question: "Has an 'independent' regulatory body [a body that is separate from the utility and from the Ministry] started work?" (World Bank, 1999: 9)

  Example (Malaysia in 1990): In 1990, the Malaysian government enacted the Electricity Supply Act "to provide for the regulation of the electricity supply industry, the supply of electricity at reasonable prices, the licensing of any electrical installation, the control of any electrical installation, plant and equipment with respect to matters relating to the safety of persons and the efficient use of electricity and for purposes connected therewith" (Suruhanjaya Tenaga Energy Commission, 1990: 7).

- Independent power producers: Legalizing Independent Power Producers (IPPs) to contemplate private sector participation and allowing private investors to set up their own generation facilities even without comprehensive reform (World Bank, 1999).

  Key question: "Is there any private sector investment on greenfield sites in operation, or under construction?" (World Bank, 1999: 9)[1]

  Example (Thailand in 1994): "The IPP program launched in December 1994 represented a significant departure from the prior centrally coordinated and planned Thai electric power sector" (Woo, 2005: 7).

- Unbundling: Using vertical and horizontal restructuring to separate generation and retail activities from the natural monopolistic segments, such as transmission and distribution, and to introduce competition.

  Key question: "Has the core state-owned electric utility been restructured/separated vertically into generation, distribution and transmission parts and restructured/separated horizontally in generation sector?" (World Bank, 1999: 10)

  Example (Kenya in 1997): "Among the first reforms to take place after the official liberalization was the unbundling of the state utility in 1997. Kenya Generating Company Limited (KenGen), which remained entirely in state hands, became responsible for all generation assets. Kenya Power & Lighting Company Limited (KPLC) assumed responsibility for all distribution and transmission" (Eberhard and Gratwick, 2005: 3).

- Privatization: Privatizing operating entities to restore financial discipline, create incentives for performance improvements and cost efficiency, and limit political interference (Kessides, 2012).

[1] In other words, is the entry of independent power producers legalized?

Key question: "Has any existing state-owned enterprise been privatized [including outright sale, 'voucher' privatization, and joint ventures]?" (World Bank, 1999: 10)

Example (Nigeria in 2005): The Nigerian government enacted Electric Power Sector Reform (EPSR) Act 2005, focusing on the liberalization and privatization of the sole power provider, the Power Holding Company of Nigeria (PHCN) (Aminu and Peterside, 2014).

- Wholesale electricity markets: Creating voluntary public wholesale energy market institutions to allow competitive suppliers and marketers to generate electricity, access to the grid and facilitate trade among suppliers and between buyers and sellers (Joskow, 2008).

  Key question: Has a competitive wholesale electricity market been established? Have individual traders (or power marketers), who buy power on the open market and re-sell it, been allowed?

  Example (Philippines in 2001): In June 2001, Congress in Philippines passed the Electric Power Industry Reform Act (EPIRA) for key institutional changes such as the establishment of the Wholesale Electricity Spot Market (WESM) (Asian Development Bank, 2005).

- Choice of supplier: Allowing competing generators and intermediaries to offer services to consumers; enabling consumers to choose their own retail power suppliers (Joskow, 2008).

  Key question: Do consumers have a choice of the retail supplier of electricity?

  Example (Lithuania in 2007): According to the Article 40 of Law on Electricity of the Republic of Lithuania (No VIII - 1881) in 2000, all electricity customers in Lithuania can choose their supplier and buy electricity at contractual prices since 2007.

Codebook

Variable	Description
cntry	Name of the country
year	Year of the observation
r_ipp	A binary indicator for indendent power producers
r_prv	A binary indicator for privatization
r_und	A binary indicator for unbundling
r_wem	A binary indicator for whole sale market
r_reg	A binary indicator for independent regulatoray agency
r_cos	A binary indicator for choice of suppliers
r_law	A binary indicator for liberalization law
r_cor	A binary indicator for corporatization

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