

The Experience with Independent Power Projects (IPPs) in Developing Countries

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Overview:

- Methodology and goals of PESD study
- Current scorecard: country performance
- Explaining country performance
- Exploring project performance
- Discussion

Methodology and Status of PESD Research

- Organized around three clusters of variables:
 - Country investment climate
 - Country electricity sector
 - Project structure and management
- Proceeding in two stages:
 - Country studies – 9 countries
 - Project studies – 12-15 projects

What Are We Trying to Explain?

- Country Performance:

- Legal outcomes – did the country enforce critical IPP contracts?
- Project outcomes – did the country exploit private investors or respect the underlying relationship?

Country Performance: Legal Outcomes

8 of 10 sample countries = Widespread changes to contracts

IPP Contracts Stable	IPP Contracts Unstable
Mexico	Argentina
Turkey	Brazil
	China
	India
	Malaysia
	The Philippines
	Poland
	Thailand

Country Performance: Project Outcomes

Tentative Conclusions

5 of 10 Countries = Exhibit positive country performance

Positive Country Performance	Negative Country Performance
Mexico	Argentina
The Philippines	Brazil
Poland	China
Thailand	India
Turkey	Malaysia

Country Performance: Core Propositions

- Evaluating country performance requires distinguishing legal outcomes and project outcomes.
- Legal outcomes are largely driven by economic and financial factors.
- Positive country performance can exist in seemingly adverse conditions. The question is how?

Country Characteristic #1: Investment Climate

- Cluster of variables relating to country conditions:
 - LEGAL: rule of law, enforcement of contracts
 - FINANCE: public finance, capital markets
 - ECONOMIC: macroeconomic and currency stability
 - POLITICAL: political risk, corruption

Country Characteristic #1: Investment Climate

- No country factor seems critical across countries.
 - Rule of law –
 - China clearly problematic, but poor rule of law didn't limit Mexico, Philippines, and often did not seem relevant.
 - Finance –
 - Local finance helped somewhat in Thailand and Malaysia, yet lack thereof has not limited performance in the Philippines.
 - Macroeconomy –
 - Seems to drive legal outcomes, but not overall country performance.
 - Political risk –
 - Relevant in India, but intense political controversy has not limited the Philippines from performing well in managing stress.

Country Factor #2: Electricity Sector

- Financial health of the electricity sector.
- Status and goals of sector reform efforts.
- Legal framework for private investment in power.

Country Factor #2: Electricity Sector

- Again, no measure seems critical across countries.
 - Financial Status of Sector:
 - Contributes to legal outcomes (*secondary to macro context*)
 - ... but does not constrain overall performance.
 - Electricity Sector Reform:
 - Continuing reform is often difficult on IPPs (China).
 - Stalled reform may be positive (e.g. Mexico).
 - Legal Framework for IPPs:
 - Poor legal framework clearly important to investors
 - Poor framework can drive outcomes (e.g. China).
 - But, more work is necessary to isolate this variable.

Explaining Legal Outcomes

- Allocation of market and currency risk to the host government in standard IPPs seems to have failed under pressure ...
 - Malaysia, Thailand, Philippines, Argentina: macro
 - China: supply-demand situation
- Counterexamples:
 - Mexico, Turkey: IPPs have not been stress tested.

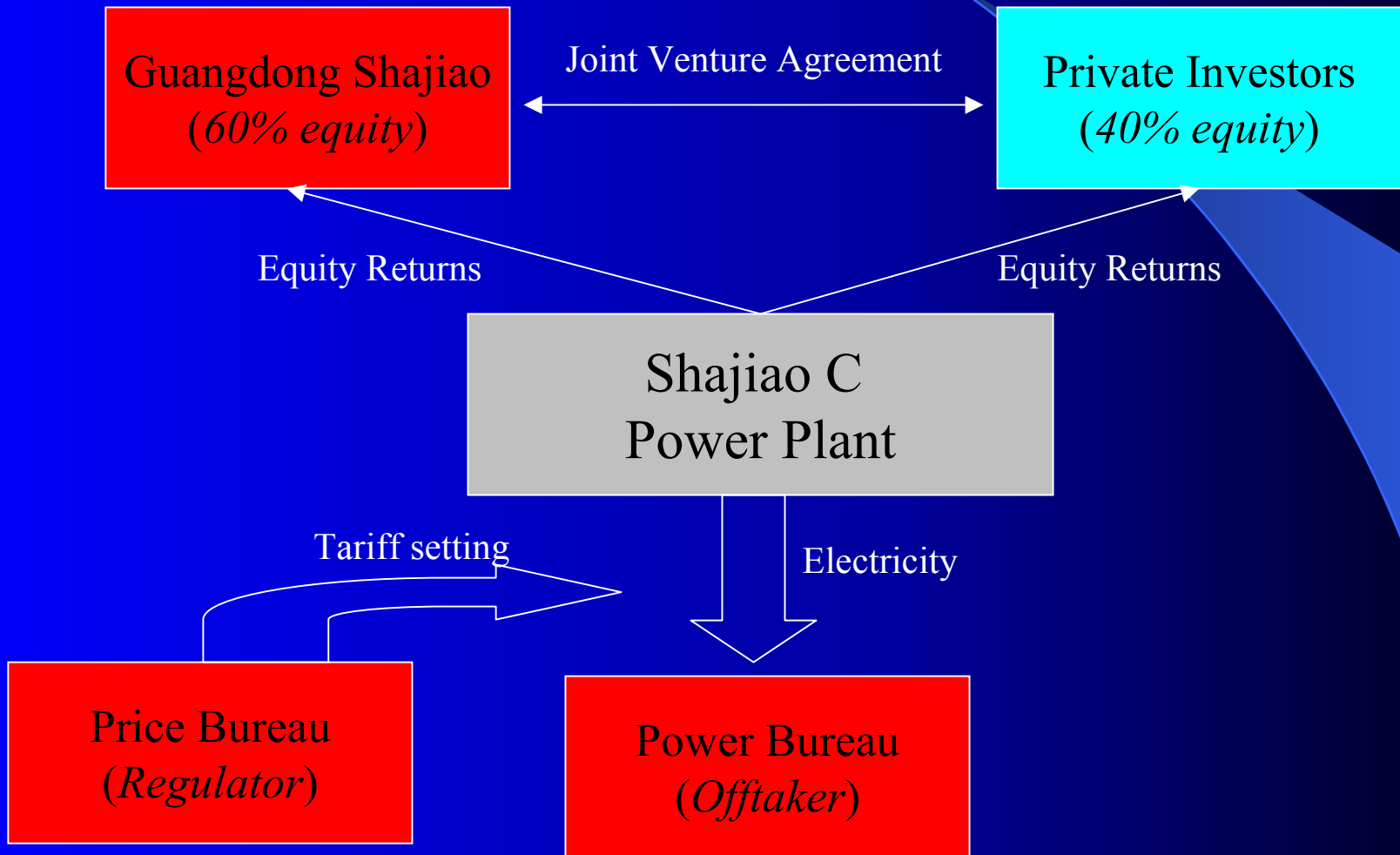
The Puzzle: Explaining Country Performance Beyond Legal Outcomes

- The Philippines: How does a country with indications of a foreign investment disaster end up with credible policy in the wake of crisis?
- Argentina: Is the radical reversal of policy explained only by the severity of the 2001 crisis?
- China: Would they have to improve “rule of law” in the country in order to improve IPP results, or would more modest (but focused) changes suffice?
- India: Why does political risk seem to have a more direct impact on contracts here than elsewhere?

Project Performance: Overview

- Has a project met the reasonable expectations of key stakeholders?
- How can we explain the variation in project performance?
 - What factors allow a project to manage legal or political risk more effectively?
 - What makes a project better able to respond effectively to changing circumstances?

Case Study: Shajiao C



Case Study: GVK

- PPA renegotiated three times (1994, 1996, current).
 - But, earning enough money to justify an expansion of capacity.
- How?
 - GVK is a prominent local businessman.
 - IFC involved as equity- and debt-holder.
 - Debt service and O/M are covered at 68.4% PLF.
 - Tariff has been roughly 4¢/kWh.
 - Construction financed on balance sheet.

Key Questions:

- Why not design a project for instability?
What would such a project look like?
- How should we evaluate observed outcomes such as what we see in the Philippines?
 - What factors determine investors' and lenders' response to change?

Conclusion: Next Steps for PESD Research

- Country Visits:
 - Refine understanding of country experience.
 - Test our basic hypotheses.
- Project Case Studies:
 - Compile testable database of projects.
 - Assemble case studies that test hypotheses.
- Evaluation of Specific Issues:
 - Effectiveness of specific legal mechanisms.
 - Effectiveness of partnering strategies.