CERIS: Civil Engineering Research and Innovation for Sustainability



3rd International Seminar on Water Resources Management Governance and performance of water utilities: tools and best practices

Institutional analysis and the development of rules for PSP in the Brazilian water sector: governing next generation PPPs in Brazil

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Governing next generation PPPs in Brazil

Overview: scenario and drivers



* Investment gap to cover infrastructure deficit is 265 Billion BRL until 2030 (PLANSAB)

* http://www.bndes.gov.br/wps/portal/site/home/transparencia/desestatizacao/ppi







Private sector participation: market figures

Overview







- ✓ 287 municipalities were served by private water utilities (5%)
- ✓ 27 million inhabitants (approx. 14% of Brazil's population)
- ✓ 128 have full concessions
- ✓ 22 have partial concessions
- ✓ 66 have PPP projects
- ✓ Since 1994, 111 PPP contracts signed (aver. 5.5 PPP per year)
- ✓ 26 PPP players, but only four major players (84% of market share).
- ✓ The largest operator (Oderbrecht) serves 38% of the population (approximately 10.4 million).
- Recently, Odebrecht were partly acquired by a foreign investor.
- ✓ The private sector 5.5 billion BRL plus 6.5 billion forecasted for 5 years (Abcon & Sindcon, 2014)





Private sector participation: PPP generations in Brazil

Overview

1 st Generation (1900's)	 Lack of technology or capital to implement infrastructure Foreign capital to fund infra (debt) Overseas guarantees Service agreement model (early concessions) Government subsidies
2 nd Generation (1994 -2007)	 Economic crisis, State Reform Program and PMSS Collapse of old model for public provision (PLANASA) Poor discretionary regulation and unclear institutional framework Local and State private concessions under new Concession Law Foreign participation (operation) New corporate strategies of State Owned Companies
3 rd Generation (2007 - ?)	 Exit of foreign operators and concentration of the private operation (big contractors) Improved discretionary regulation (regulatory agencies) New Water Law, New Federal WSS Law, New Public Consortia Law, and New PPP Law New PPP arrangements Increased role of the federal government (Ministerio das Cidades) New Water Supply Plan (PLANSAB)

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How to govern next generation PPPs in the Brazilian water industry ?

Research question

Objective	√	Elaborate an analytical framework for legal and policy decision–making about next generation PPPs in the Brazilian water industry
Main assumption	√	PPPs are incomplete contracts that require both independent discretionary regulation and contract management (Marques 2016b; Marques 2016a)
	✓	In Brazil, there are limited competition for the market and entry barriers to foreign companies (Marques 2016a)
Secondary questions	~	How to improve regulatory governance to maximize the relative efficiency of PPP arrangements, mitigate regulatory risk and limit opportunistic behaviour?
	✓	By Improving contract design and balancing allocation of risk, can PPP arrangements secure public interest (Marques 2016a)?
	✓	What are the limits to "rules in form" (problems of institutional sintax and compliance) ?
Methodology	~	Review empirical and theoretical publications on PPP, governance and institutional analysis ("state of the art")
	√	Identify and classify "rules in form" based on the AIAD Framework to determine the evolution of PPP arrangements in the Brazilian sector
	√	Apply the AIAD Framework to the selected Brazilian PPP arrangements (Case studies)





Proposed approach: Institutional analysis

Theoretical framework



Proposed approach: AIAD Framework

Theoretical framework



Figure 1. A Framework for Institutional Analysis. Source: Adapted from E. Ostrom (2005, p. 15).





Proposed approach: Rules-in-Use

Theoretical framework



Figure 3. Rules as Exogenous Variables Directly Affecting the Elements of an Action Situation. Source: Adapted from E. Ostrom (2005, p. 189).





Limitations and expected results

Limitations	 ✓ Access to "public" material at the local level ✓ The challenge of working with "rules-in-use"
Expected impact	 Better understanding the evolution and the impact of rules-in-form of next generation of PPP in the Brazilian water sector
	✓ Contribute to the awareness about the risks (and potential benefits) of PPP arrangements
	✓ Assess the need for institutional change to foster competition for the market and improve regulatory governance
	 Contribute to the discussion on contract design for PPP arrangements (legal and policy perspectives)
Novelty	✓ IAD Framework has only recently been used to Urban WSS
	✓ Next generation PPP arrangements is a work in progress and IPP has just been launched
Status	 ✓ State of art "on going" ✓ Preliminary assessment of case studies concluded ✓ First working paper early 2017





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