An analytical framework for innovative financial structures in water and sanitation

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General environment still difficult

- Polarized solutions have not worked
- Volatility makes long term solutions hard to identify
- Local conditions vary widely
- Financial markets inadequate
- Institutions are weak
- Can sustainable and viable transactions be designed?
A conceptual model

Step I

Tools
- Political Risk Insurance
- Partial Credit Guaranty
- Partial Risk Guaranty
- Subsidies
- Credit Enhancement
- Local Currency Financing

Project Structures
- Fully Public
- Cooperatives
- Outsourcing
- Management Contracts
- Franchise
- Leasing
- Concession
- BOT / BOOT / BOO
- Sale
- Fully Private

Local conditions

Available Tools
- Tool 1
- Tool 2

Available Project Structures
- Structure 1
- Structure 2
- Structure 3

Step II

Feasible project

Step 1 – evaluate local conditions, review available risk mitigants
Step 2 – tailor tools and project structure to local conditions
Structures Evolution

Available Project Structures

Scenario 1
- Fully Public
- Outsource
- Management Contract

Scenario 2
- Outsource
- Management Contract
- Franchise

Scenario 3
- Outsource
- Management Contract
- Franchise
- Concession
- BOT/BOO
- Fully Private

State of the local conditions

Low High
Determinant Factors

- Degree of **private funding** that a project can carry
- Degree of **public support** that a project need
- “**Who controls takes the risk**” principle
- Use the **private sector** where it is best
- **Timetables** are always too optimistic
- **Dedicated, resourced, skilled and empowered public sector team**
Risk mitigation tools

- Partial credit guarantees
- Partial risk guarantees
- Foreign exchange (policy, markets)
- Subsidies, shadow tolls
- Credit enhancements
- Local currency financing
- Escrow accounts
- Contingent credit facilities
- Political risk insurance
### Spectrum of Public to Private Options

**Allocation of Responsibilities according to Project Structure**

<table>
<thead>
<tr>
<th></th>
<th>O&amp;M</th>
<th>Commercial Risk</th>
<th>Capital Investment</th>
<th>Asset Ownership</th>
<th>Duration</th>
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<td>Public supply</td>
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<td>3 to 5 years</td>
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<td>Concessions</td>
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<td>Leasing</td>
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<td>8 to 15 years</td>
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<td>25 to 30 years</td>
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<td>20 to 30 years</td>
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<td>BOO</td>
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<td>20 to 30 years</td>
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<td>Divestiture by License</td>
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<td>Divestiture by sales</td>
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<td>Private supply</td>
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- **Private**
- **Public**
- **Public and private**
Project Feasibility Map Resulting from Two Step Analysis

Available Structures
Non-Feasible Structures
Tool-Enabled Structures

Suggested feasible structures

Note that feasible structures are only considered when a full column of circles exists.
A Complex Web of Contracts & Cash Flows

- Paying Users (?)
- Customer Contract
- Construction Co.
- EPC Contract
- Operating Co.
- Sponsor
- Sponsor
- Sponsor

70 to 95% Debt

- Senior lenders
- Subordinated lenders
- Financial equity investors

Higher

Risk appetite

Direct Agreement

Concession Agreement

Debt service

Loan Contract

Private Special Purpose Company

Shareholders Agreement

Revenues

Dividends

Capex

Opex

O&M Contract

Opex

EPC Contract

Construction Co.

70 to 95% Debt
Viability of Modalities under weak local conditions

Feasible modalities that mitigate the risks imposed by Fiscal Space and Macroeconomics Factors

<table>
<thead>
<tr>
<th>Federations with Low Rating</th>
<th>Fully public</th>
<th>Fully public - Corporate</th>
<th>Cooperatives</th>
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Available Modalities
Non-Feasible Modalities
Closing remarks

- Project Structures mitigants in itself
- Private Sector Participation, MAY help increase infrastructure investments (financial conditions not pre-eminent)
- But under prevailing conditions in developing countries, structures are a lot more complex
- Must be adapted to prevailing conditions and must withstand change
- Thorough analysis of conditions and available mitigants before structures are put in place to ensure more close matching with actual needs
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