LIBERALIZATION IN THE WATER SECTOR: THREE MODELS

New Thinking on Water Governance
Institute of Water Policy,
National University of Singapore, July 2-4, 2009
When it comes to urban water systems, we all know what the main problems are:
LIBERALIZATION IN THE WATER SECTOR

1) Immensity of needs to be satisfied: over 1 billion people without access to safe drinkable water

2) Huge financial requirements to begin matching these needs

3) Important externalities:
   - social: health / survival
   - economic: disruption of activities

4) Significance of sunk costs
   - 80 % of total costs according to AWA
LIBERALIZATION IN THE WATER SECTOR

For a while we thought we knew THE solution

Changes in ownership (from public to private)

+ Liberalization = competition
LI BERALI ZATION
IN THE WATER SECTOR

We now know it is not that simple:

a) Political dimension inevitable

b) Highly controlled // regulated sector

c) Deeply rooted in institutional environment

d) With very slow progress in Private Sector Participation (PSP)
## Liberalization in the Water Sector

### % of persons served with private participation per area

<table>
<thead>
<tr>
<th>Region</th>
<th>% people</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2004</td>
<td>2008</td>
</tr>
<tr>
<td>Western Europe</td>
<td>45%</td>
<td>44%</td>
</tr>
<tr>
<td>C &amp; E Europe</td>
<td>5%</td>
<td>10%</td>
</tr>
<tr>
<td>ME &amp; Africa</td>
<td>4%</td>
<td>6%</td>
</tr>
<tr>
<td>South &amp; Central Asia</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td>South East Asia</td>
<td>6%</td>
<td>12%</td>
</tr>
<tr>
<td>Oceania</td>
<td>10%</td>
<td>25%</td>
</tr>
<tr>
<td>North America</td>
<td>19%</td>
<td>21%</td>
</tr>
<tr>
<td>Latin America</td>
<td>21%</td>
<td>17%</td>
</tr>
<tr>
<td><strong>World total</strong></td>
<td><strong>9%</strong></td>
<td><strong>11%</strong></td>
</tr>
</tbody>
</table>
LIBERALIZATION IN THE WATER SECTOR

CENTRAL MESSAGE:

THERE IS NO OPTIMAL ANSWER TO WATER PROBLEMS:
EMBEDDEDNESS IS A KEY ISSUE
LIBERALIZATION IN THE WATER SECTOR

EMBEDDEDNESS INVOLVES INSTITUTIONAL DESIGN

Which has TWO DIMENSIONS:

→ Organizational
  (e.g., unbundling or not? Contracting or not? What type of contracts etc.)

→ Institutional framework
  (e.g., what regulation? What level in charge?)
Problem of choice:
How to select feasible / efficient / effective reform?

Political dimension at the core:
(some might even argue: desirable ... under some conditions)
LIBERALIZATION
IN THE WATER SECTOR

SUMMARY:

I: BACKGROUND: A VERY BRIEF REMINDER

II: THREE LEADING MODELS OF LIBERALIZATION

III: HOW TO CHOOSE?
I: BACKGROUND: A SHORT REMINDER

(Section dropped; see paper for details)
LIBERALIZATION

I: BACKGROUND: A VERY BRIEF REMINDER

(f) **Data available:** ambiguous results when comparing SOEs to private sector participation as well as when comparing various forms of private participation

(Menard & Saussier, 2002; Gassner et al., 2009; Wallsten & Kosec, 2008).

• Here: focus on qualitative aspects ...

• ...in **urban water systems** leaving aside problems of liberalization in irrigation, and the difficult trade-offs it involves
II : THREE LEADING MODELS OF LIBERALIZATION
LIBERALIZATION

II : THREE LEADING MODELS

II.1: Introduction

Liberalization can take many different forms

In what follows: Liberalization = organizational changes challenging the opacity / non-transparency of monopolies i.e., it runs from corporatization to ...full privatization
Focus on European experience:
* most significant area in terms of PSP
* most radical experiences
* Diversity of solutions among countries with similar level of development

Three polar cases:
* England and Wales (privatization)
* France (Private Sector Participation)
* Germany (Public)
LIBERALIZATION

II : THREE LEADING MODELS

II.2: ENGLAND AND WALES

Surely one of the most radical experience of liberalization of that amplitude.

Main characteristic: Full privatization

but very tightly monitored

(a) Several regulatory authorities involved, with key role of OFWAT
II.2: ENGLAND AND WALES: Privatization

(a) Several regulatory authorities involved, with key role of OFWAT

(b) Pioneer in consumers’ participation:
   10 Consumers’ Councils for Water
   - one per region / river bassin
II.2: ENGLAND AND WALES: Privatization

(a) Several regulatory authorities involved, with key role of OFWAT

(b) Pioneer in consumers’ participation: 10 Consumers’ Councils for Water - one per region / river bassins

(c) Yardstick competition: price cap and benchmarking, but ...
II : THREE LEADING MODELS

II.2: ENGLAND AND WALES: Privatization

But ...
(d) Regional monopolies
(e) Public outcry on prices (and profits)
(f) Substantial and continuing changes in the rules of the game
LIBERALIZATION

II : THREE LEADING MODELS

II.2: ENGLAND AND WALES: Privatization

Conclusion: looking for New methods / New tools

intending to introduce some
competition IN the market:

* Competition on vertical supply markets
* Common carriage
* Cross-border suppliers
II : THREE LEADING MODELS

II.3: FRANCE

Main characteristic: tradition of Private Sector Participation (PSP) in water
→ The “French Model”
(but with new institutional rules intended to increase competitive pressure while actually limiting risks for operators)
(a) Almost 80 % of population served through forms of PSP
II.3: FRANCE: PSP

(a) Almost 80% of population served through forms of PSP

(b) Decentralized: initially local, then structured along river basins, with increasing role of regional authorities
II.3: FRANCE: PSP

(a) Almost 80% of population served through forms of PSP

(b) Decentralized: initially local, now increasing role of river basins

(c) Oligopolistic structure on supply side: Veolia, Suez and SAUR

(the first two being also international leaders)
LIBERALIZATION
II : THREE LEADING MODELS

Table summarizing PSP in FRANCE

- Private: 0.66%
- Lease: 67.14%
- Direct Public Management: 25.31%
- Concession: 4.89%
- Other: 2.00%
LIBERALIZATION

II : THREE LEADING MODELS

II.3: FRANCE: PSP

Some recurrent problems (and controversies)

a) limited transfer of responsibilities / risks to private operators

(and increasingly so: hence source of controversies about advantages of PSP)
II : THREE LEADING MODELS

II.3: FRANCE: PSP

a) limited transfer of responsibilities / risks:

b) 88 % of delegations = lease contracts:

responsibility to invest largely in hands of public authorities
II : THREE LEADING MODELS

II.3: FRANCE: PSP

a) limited transfer of risks
b) 88% of delegations = lease contracts: investments → public authorities
c) No competition IN the market
LIBERALIZATION

II : THREE LEADING MODELS

II.3: FRANCE: PSP

a) limited transfer of risks
b) 88% of delegations = lease contracts: investments → public authorities
c) No competition IN the market
d) Repeated deviations from formal rules of the game (appendices to contracts, renegotiations, etc.)

See French National Audit
II.4: GERMANY

Sticking to the tradition of Public Utilities

Main characteristic: Corporatization as step towards liberalization

a) Only 30% population receiving water from entities involving private participation

(and massively in former East Germany)
II.4: GERMANY: Corporatization

a) Only 30% of the population receiving water from entities involving PSP

b) Strong resistance of the population to privatization of public services or even to Private Participation (see Munster, Leipzig ..)
II.4: GERMANY: Corporatization

c) Hence reform took another course: Evolution from direct public management (bureaus, departments at municipal level) to corporatization: from less than 13% in 1986 to over 30% in 2005
II.5: PUZZLING // DISTURBING FACTS

(a) Data from 2005

<table>
<thead>
<tr>
<th>UK</th>
<th>FR</th>
<th>DE</th>
</tr>
</thead>
<tbody>
<tr>
<td>UFW (%)</td>
<td>19.2</td>
<td>26.4</td>
</tr>
<tr>
<td>Invest/ M3</td>
<td>0.47 €</td>
<td>0.37 €</td>
</tr>
<tr>
<td>Water bill/ year (per capita)</td>
<td>100 €</td>
<td>85 €</td>
</tr>
</tbody>
</table>
LIBERALIZATION
II : THREE LEADING MODELS

II.5: PUZZLING // DISTURBING

(b) Problems in institutional design

→ “Command-and-control” (Germany):
** Political interferences on tariffs and employment
** Artificially Low rates and overstaffing
** Political cycle vs. investment cycle: benign neglect in short run?
Not obvious in case of Germany
III : THREE LEADING MODELS

III.5: PUZZLING AND DISTURBING

(b) Problems in institutional design

→ "Centrally regulated" (England and Wales):

** Changes in missions of regulator
  → generating uncertainties

** Multiple regulators

** Under-investment

** Oligopolistic structure
II.5: PUZZLING AND DISTURBING

(b) Problems in institutional design

→ “Contractual approach” (France):

** Relatively high Tariffs

** High rate of renegotiation

** Under-investment, particularly at end of contract

** Concentration of operators, dispersion of public authorities: asymmetric power (negotiation, monitoring ...
III. HOW TO CHOOSE?
III : HOW TO CHOOSE?

III.1: MANY DIFFERENT FORMS

- Divestiture
- Joint ventures
- Concession
- Lease
- Management
- Service
- Public Corporation
- Bureau

- Command-and-Control
- Regulation through contracts
- Regulation through general laws

- AUTONOMY OF DECISION // INCENTIVES
- AUTONOMY OF PROPERTY RIGHTS
III : HOW TO CHOOSE?

III.2: CHOICE SQUEEZED BETWEEN TWO SETS OF DETERMINANTS

(a) Financial dictum:

** Main driver: how to develop / improve system under tight public finance constraints

** Second (and secondary) driver: socio-economic efficiency
Liberalization

III : How to Choose?

III.2: Choice squeezed between two sets of determinants

(b) Transaction costs involved

** Tend to be ignored
  (e.g. costs of renegotiations)

** ‘Alignment principle’ particularly relevant here

** Integration almost inevitable in water sector
LIBERALIZATION

III : HOW TO CHOOSE?

III.2: CHOICE SQUEEZED BETWEEN TWO SETS OF DETERMINANTS

(c) Choice then reduced to trade-off:

Corporatization

Or

Concession (lease: suboptimal)
LIBERALIZATION

III : HOW TO CHOOSE?

III.2: CHOICE SQUEEZED BETWEEN TWO SETS OF DETERMINANTS

(d) Problem is:

** IN ORDER TO BE EFFICIENT, BOTH ARRANGEMENTS NEED STRONG, WELL BALANCED INSTITUTIONS

** BUT IF SUCH INSTITUTIONS ARE IN PLACE, CHOICE BECOMES RELATIVELY NEUTRAL!
Governance is the main issue not liberalization

How to avoid / limit opportunistic behavior?

* Complete contracts? => Rigidity
* Independent regulator?
* Corporatization?

Political control almost unavoidable

Nominating process as key issue
In last resort, what really matters is: WHAT INSTITUTIONS FRAME THE SECTOR?

=> key role of MICRO-INSTITUTIONS

that is: those institutions that are intermediaries between general institutional framework (e.g., laws framing the sector) and organizations actually in charge of water systems
More on these micro-institutions in:

And in
LIBERALIZATION
CONCLUSION

THANK YOU FOR YOUR ATTENTION
And
INDULGENCE !!!