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# LIBERALIZATION IN THE WATER SECTOR: THREE MODELS

*New Thinking on Water Governance*  
Institute of Water Policy,  
National University of Singapore, July 2-4, 2009

# *LIBERALIZATION IN THE WATER SECTOR*

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**

# *LIBERALIZATION 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**

Region	% people	
	2004	2008
Western Europe	45%	44%
C & E Europe	5%	10%
ME & Africa	4%	6%
South & Central Asia	0%	1%
South East Asia	6%	12%
Oceania	10%	25%
North America	19%	21%
Latin America	21%	17%
<b>World total</b>	<b>9%</b>	<b>11%</b>

***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?)



# *LIBERALIZATION IN THE WATER SECTOR*

⇒ **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?**

# ***LIBERALIZATION***

**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

# *LIBERALIZATION*

## **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

# *LIBERALIZATION*

## II : THREE LEADING MODELS

→ 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**



# *LIBERALIZATION*

## II : THREE LEADING MODELS

### 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**

# *LIBERALIZATION*

## II : THREE LEADING MODELS

### 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 ...**

# *LIBERALIZATION*

## 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

# *LIBERALIZATION*

## 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**

# *LIBERALIZATION*

## II : THREE LEADING MODELS

### 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

# *LIBERALIZATION*

## II : THREE LEADING MODELS

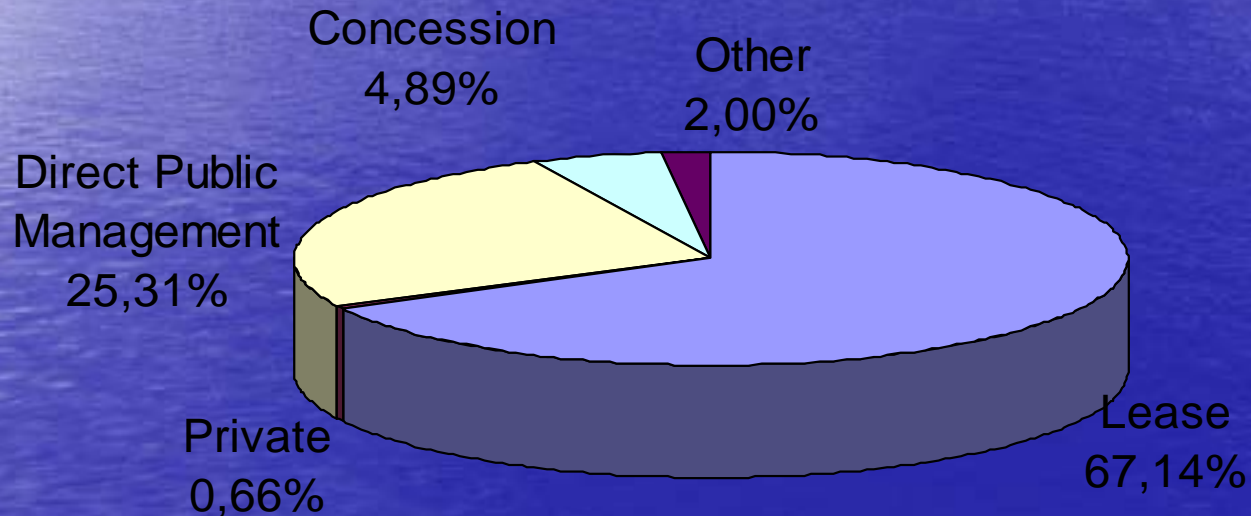
### II.3: **FRANCE**: PSP

- (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





# *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)

# *LIBERALIZATION*

## 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

# *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**

# *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

# *LIBERALIZATION*

## II : THREE LEADING MODELS

### 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)

# *LIBERALIZATION*

## II : THREE LEADING MODELS

### II.4: **GERMANY**: Corporatization

- a) Only 30 % population receiving water from entities involving PSP
- b) **Strong resistance of population to privatization of public services or even to Private Participation (see Munster, Leipzig ..)**

# *LIBERALIZATION*

## II : THREE LEADING MODELS

### 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

# *LIBERALIZATION*

## II : THREE LEADING MODELS

### II.5: **PUZZLING // DISTURBING FACTS**

(a) Data from 2005

	UK	FR	DE
UFW (%)	19,2	26, 4	7,3
Invest/ M3	0,47 €	0,37 €	0,55 €
Water bill/year (per capita)	100 €	85 €	82 €



# *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

# *LIBERALIZATION*

## II : THREE LEADING MODELS

### II.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

# *LIBERALIZATION*

## II : THREE LEADING MODELS

### 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 ...)

# ***LIBERALIZATION***

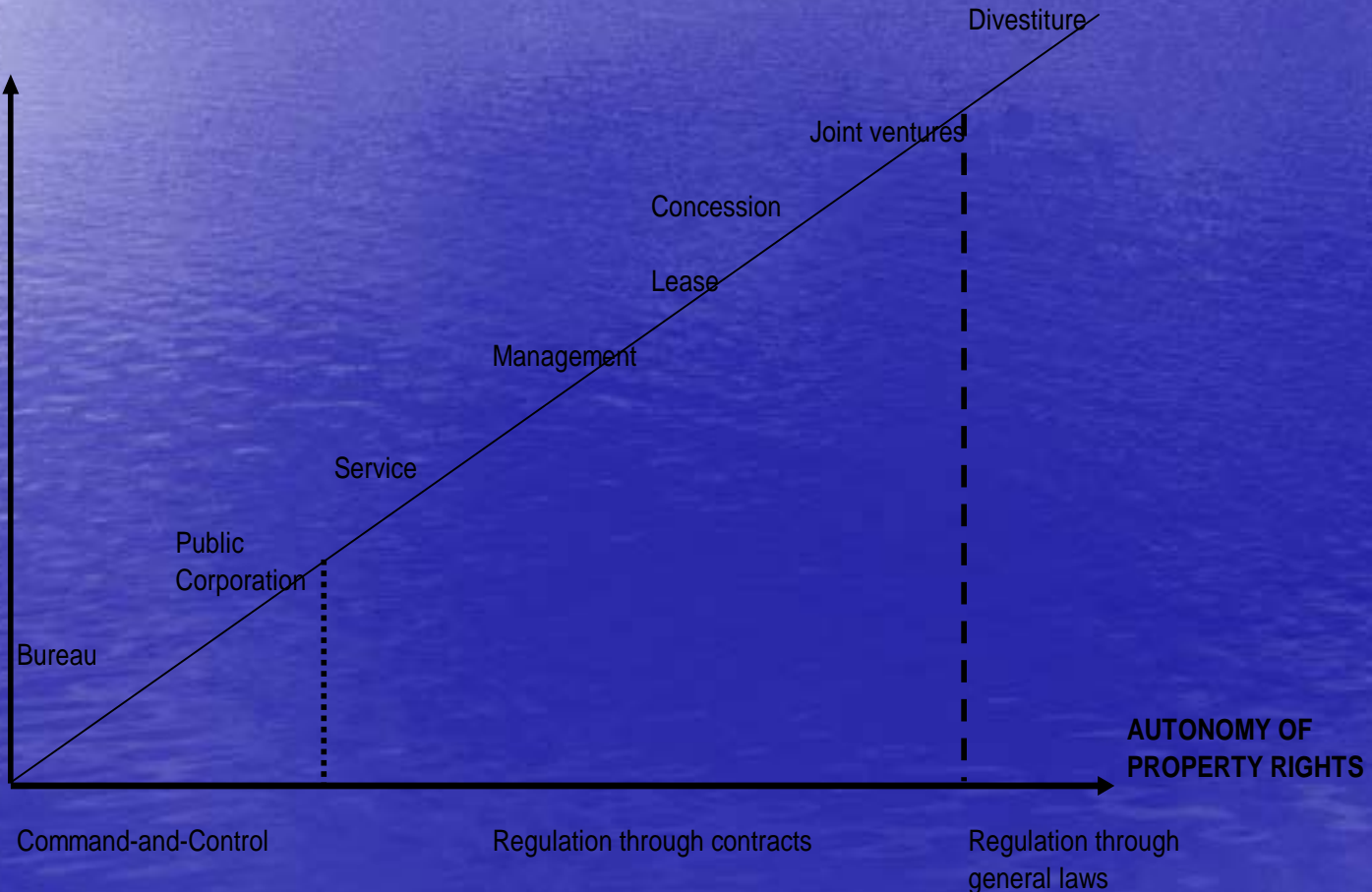
## **III. HOW TO CHOOSE ?**

# *LIBERALIZATION*

## III : HOW TO CHOOSE?

### III.1: MANY **DIFFERENT FORMS**

AUTONOMY OF  
DECISION //  
INCENTIVES



AUTONOMY OF  
PROPERTY RIGHTS

Command-and-Control

Regulation through contracts

Regulation through  
general laws

# *LIBERALIZATION*

## **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 !**

# *LIBERALIZATION CONCLUSION*

⇒ **Governance is the main issue**  
not liberalization

⇒ **How to avoid // limit opportunistic  
behavior?**

\* Complete contracts? => Rigidity

\* Independent regulator ?

Political control almost unavoidable

\* Corporatization?

Nominating process as key issue

# *LIBERALIZATION CONCLUSION*

→ 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

# ***LIBERALIZATION CONCLUSION***

More on these micro-institutions in:  
Menard & Ghertman eds. (2009)  
***Regulation, Deregulation and  
Reregulation***, E.Elgar ed.

And in

Menard (2008) "Redesigning Public Utilities: the Key Role of Micro-institutions". In J. Kornai, L. Mathyas and G. Roland, ***Corruption, Development and Institutional Design***. London: Palgrave-MacMillan, chap. 10.

***LIBERALIZATION  
CONCLUSION***

**THANK YOU FOR YOUR  
ATTENTION  
And  
INDULGENCE !!!**