

# Knowing the FIELD for water regulation at local level: actors, information, incentives Daniele Russolillo, Turin School of Local Regulation

Workshop on Institutions, markets, regulation and local development, 15 October, 2015, Torino

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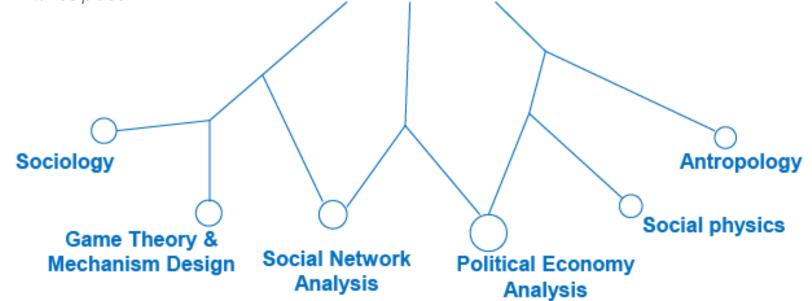
### **THE DESIGN**

- What is the **local dimension** and is it relevant for infrastructure/service regulation? (national vs. local)
- Are there peculiar critical aspects in local regulation? ...denser networks, greater info asymmetry for the lack of level playing field, improper costs of sanctioning due to osmosis, lower capacity building than in national agencies, difficulty to split the local level from the political cycle, greater difficulty to estabilish personal incentives on the workplace...
- How to prepare the playing level field for better regulatory framework at local level?
- From information to knowledge to awareness for strategic decisions making ... through the analysis of relationships, actors/players, incentives, information endowment and information exchange



# Framework of Incentives to Empower Local Decision-makers

A multidisciplinary methodology for the analysis of local actors, incentives and information endowment that surround and lie behind the success or the failure of local services, infrastructures and projects, defining the playing field where their implementation and regulation takes place.



#### Local Regulators Network Table

	Water and sanitation			
	Bulgaria	India	Serbia	
Who has the <b>ownership</b> of networks and plants?	State; Local governments	Local governments PUBLIC	State; Local governments	
How is the service assigned?	Public tender	In-house providing	Direct assignment	
If applicable, <mark>who</mark> is in charge of <mark>tendering</mark> the services?	Local governments State Government	Only the capital works are tendered. The utility tenders the work on behalf of the local governments	Local governments	
What is the average duration of <mark>concessions</mark> ? Can they be re-negotiated?	<u>On average</u> : 25 years <u>Renegotiation</u> : possible			
Who operates the services?	Generally public companies. 1 case of PPP	Local governments	Local governments and public companies	
Is <b>PPP</b> a common practice in the sector?	No. It exists, but this model is not common.	No	No	
Who <b>regulates tariff</b> profits/revenues and so on:	The State Energy and Water Regulatory Commission	Local governments	State Government sets a reference price; Local governments set tariffs.	
Who plans investments?	Service operators with approval by the regulator	Local governments	State Government (Directorate for Water of the Ministry of Water Management); Local governments	
What is the structure of <b>revenues</b> ?	Customer bills (+) EU funds (-)	Customer bills State subsidies	Customer bills (+) State subsidies (-)	



http://turinschool.eu/lorenet/table



### **FIELD : THE MATRIX**

#### **PLAYERS**

- Politicians
- Public officials
- Market actors (financial and nonfinancial, local or national or international)
- Lobbies
- Consumer
   organizations
- Administrative tribunals
- Consumers / final users



INCENTIVES (institutional/shadow)

- Efficiency in provision of the service
- Profit
- Market share
- Effectiveness and quality
- Equity / redistribution / accessibility
- Electoral consensus
- Consensus
- Political control
- Religious control
- Ethnic control
- Maintaining / increasing own budget
   ←→ burocracy
- Financial public budget constraints
- Legacy



### RELATIONSHIP

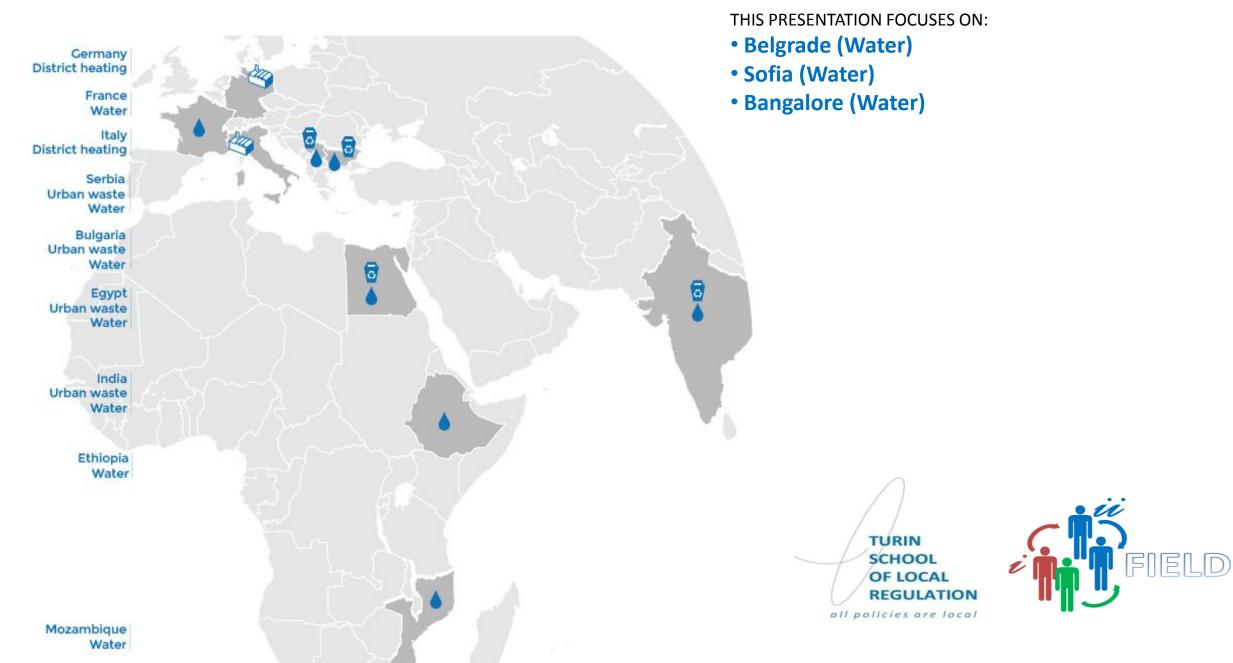
- Appointment
- Election
- Lobby pressure
- Strong political influence: political influence
- Corruption
- Command
- Control
- Regulation: price, quantity, quality, accessibility, distributional
- Rule of law / judicial enforcement
- Assignment
- Business relationship
- Market power



#### **INFORMATION** (in house/transmitted)

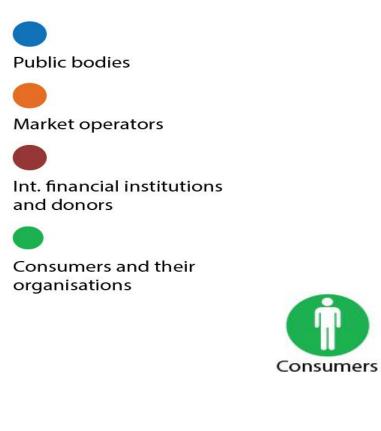
- Information on industrial costs of the service
- Information on
   Investment costs
- Information on physical assets (length of network, buildings, geolocation, equipment, ...)
- Information on revenues
- Information on demand side

#### THE CASE STUDIES ANALYZED SO FAR



# SOFIA: PLAYERS & INCENTIVES

# Sofia | Water sector - Players







PPP operator. Now Municipality of Sofia (22.9 %) and the French company Veolia Water (77.1 %).







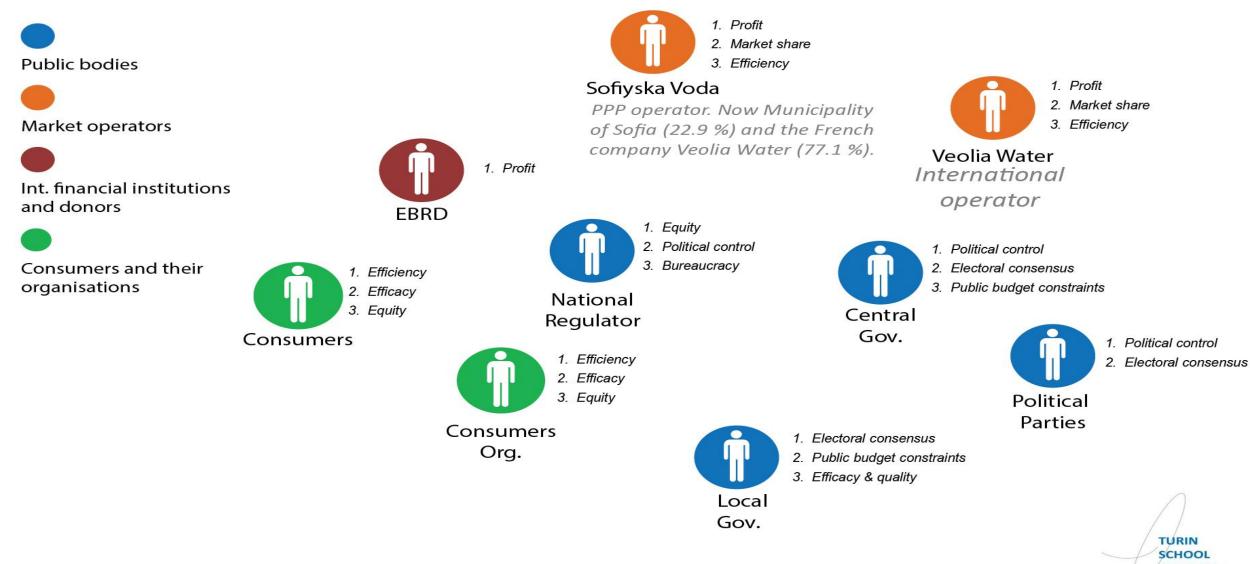






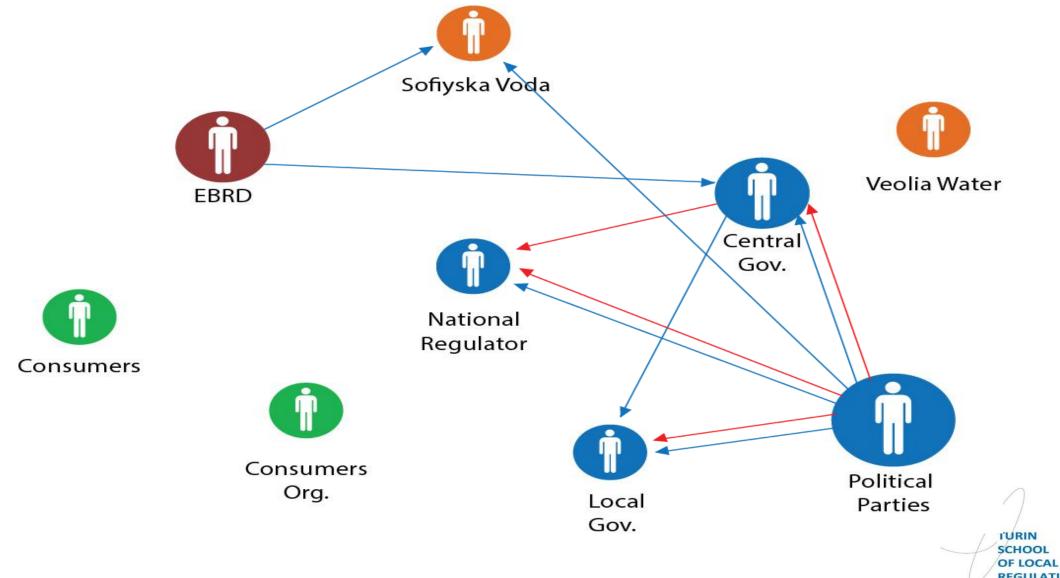


## Sofia | Water sector – Players' Incentives



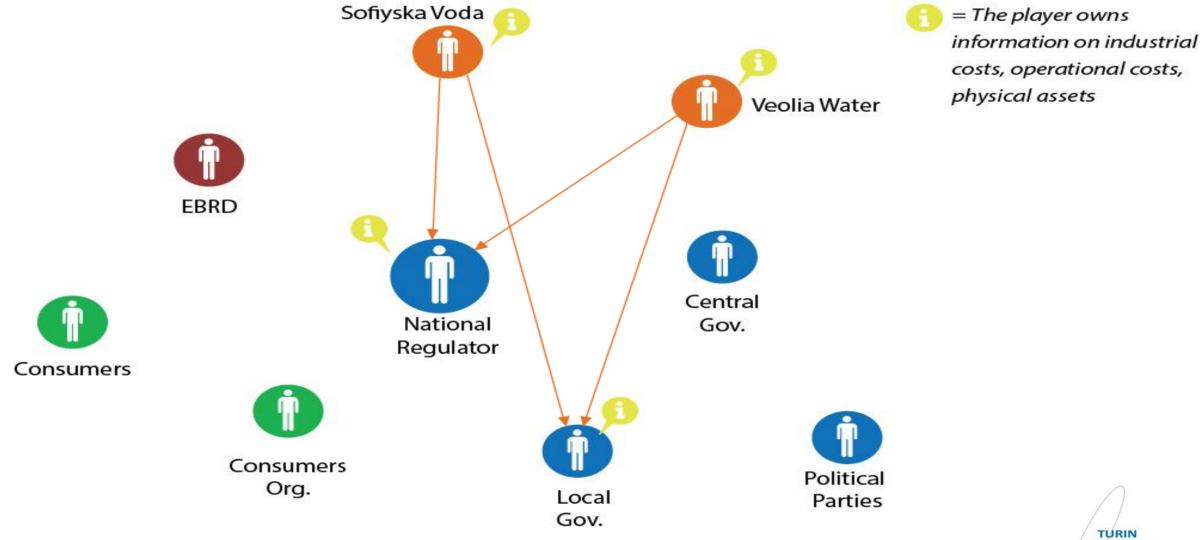
OF LOCAL REGULATION

# Sofia | Water sector: Relationship of Strong political influence; Appointment



all policies are local

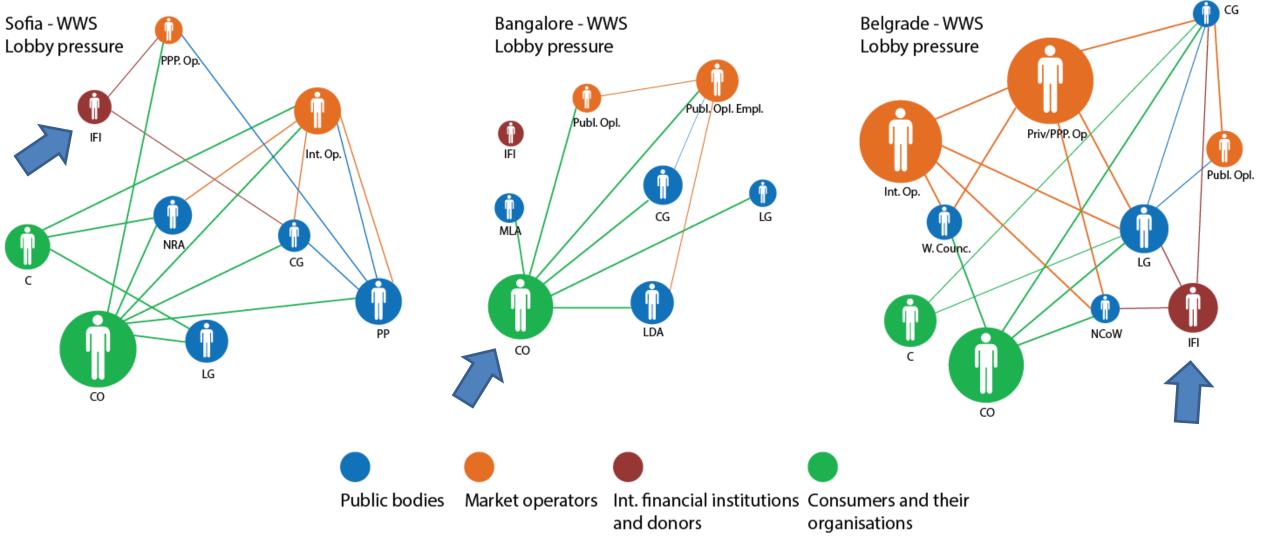
# Sofia | Water sector: Data transfer



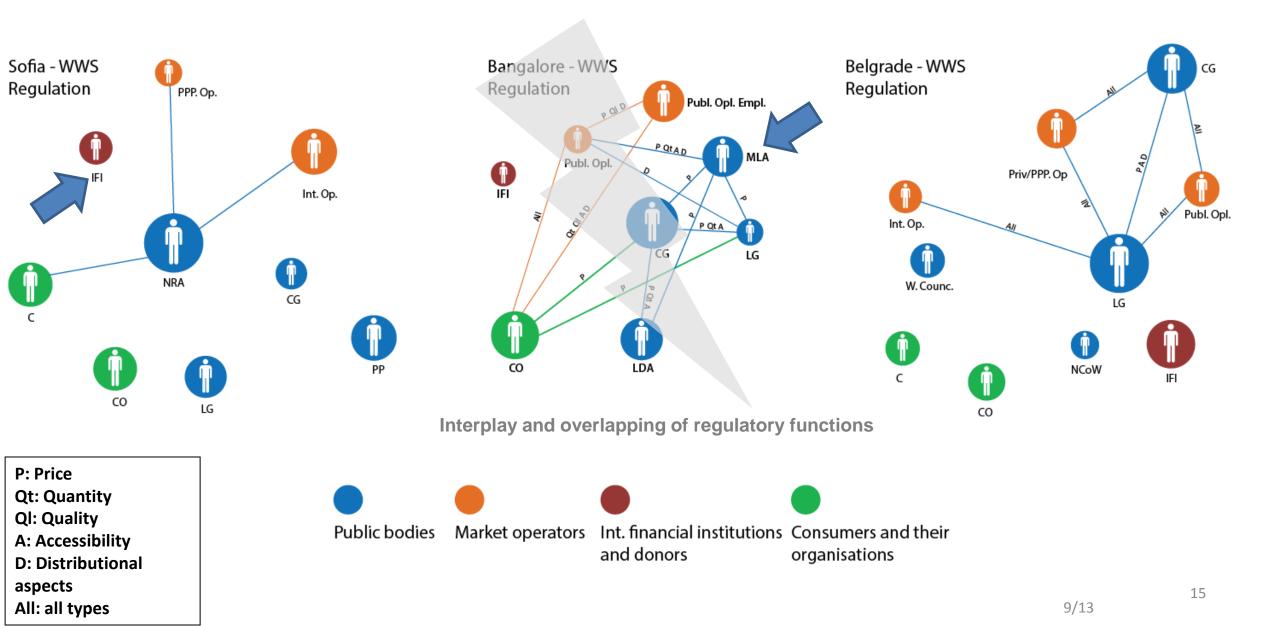
TURIN SCHOOL OF LOCAL REGULATION

# **Comparative results**

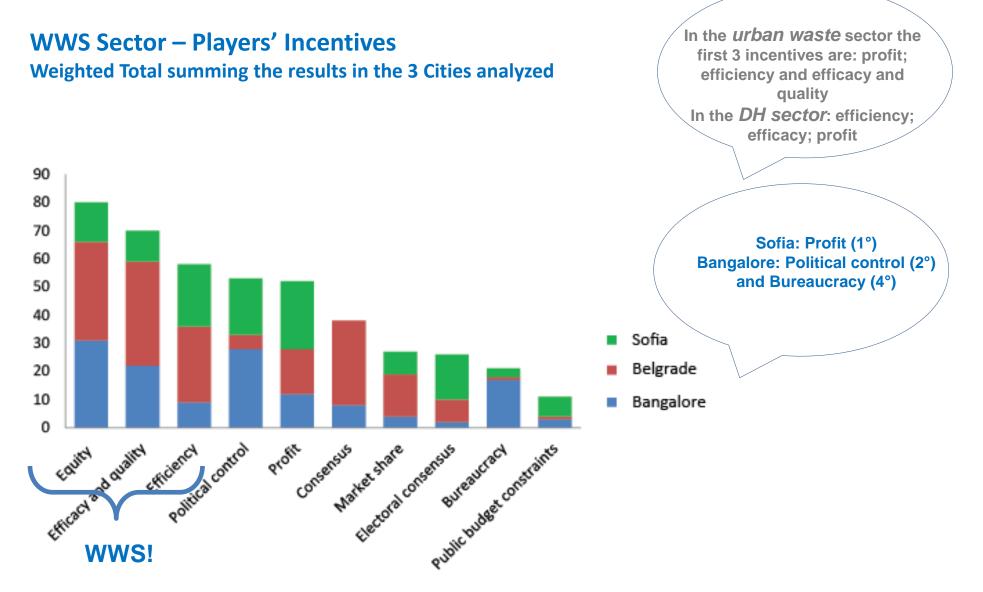
#### RELATIONSHIP IN THE WATER SECTOR: LOBBY PRESSURE



#### RELATIONSHIP IN THE WATER SECTOR: REGULATION



#### SOME PRELIMINARY RESULTS: INCENTIVES



1<sup>st</sup> position: 8 | 2<sup>nd</sup> position: 4 | 3<sup>rd</sup> position: 3 | 4<sup>th</sup> position: 2 | 5<sup>th</sup> position: 1

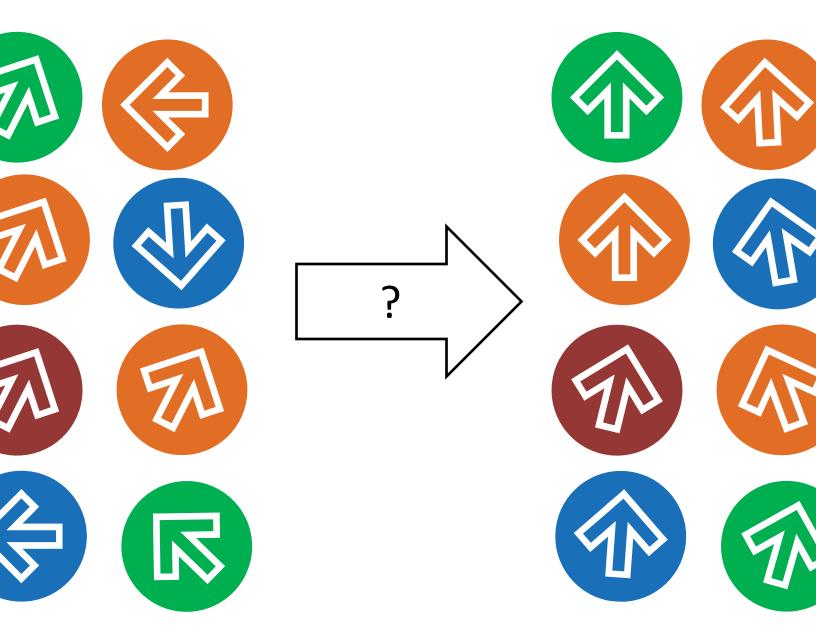
### **INCENTIVES ALIGNMENT...**



Market operators

Int. financial institutions and donors

Consumers and their organisations



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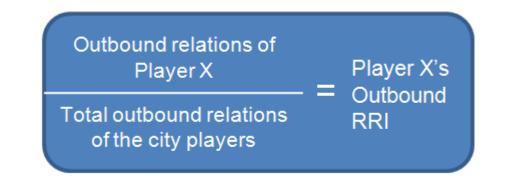




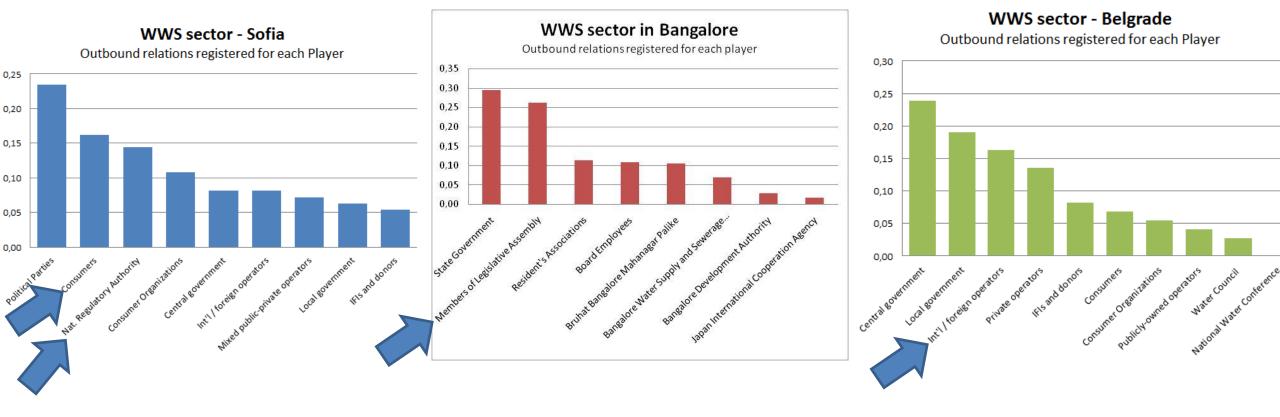
"outbound" and "inbound" relations registered for each player were calculated, according to who is the agent of the relation and who is the passive target.

An **index** was created to assess the "influence" of each player in the context analyzed, based on the number of outbound relations that the player exerts. The index has been calculated dividing the sum of outbound relations registered for a single player by the total sum of outbound relations registered in that city (Outbound relations ratio).

The same procedure has been adopted for inbound relations (Inbound relations ratio).



### **Outbound** Relation Ratio Index: a demonstration



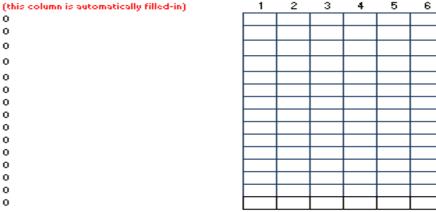
Outbound relations of Player X		Player X's	
Total outbound relations of the city players	-	Outbound RRI	

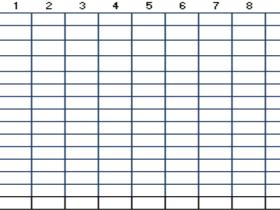


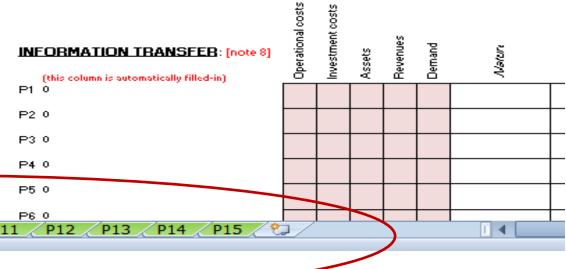


P1 0 P2 0 Description of the state of the art of the main players involved in P3 0 the local regulatory agenda, their relationship, the information flows, the incentive system that drives their choices P4 0 P5 0 PLAYER: [note 1] P6 0 P7 0 insert name add a description P8 0 P9 0 P10.0 CATEGORY OF PLAYER: [note 2] P11 0 select from the menu-Player's attitude [note 4] P12.0 Player's nature [note 3] P13 0 Market actors (non-financial) if other, please specify P14 0 P15.0 PLAYER'S INCENTIVES: [note 5] select from the menu: Trow for each scale them according add a description (please try to specify, define, measure the achievement) their relevance [free text] [free text] [free text] [free text] [free text] [free term [free\_text] I 🕨 🕨 FRONT P1 P2 P3 P4 P5 P6 P7 P8 P9 P10 P11 P12 P13 P14 nto 🚬

#### **BELATIONS WITH THE OTHER PLAYERS: [note 7]**









Investment costs

Physical assets

Revenues

Demand side



Description of the state of the art of the main players involved in the local regulatory agenda, their relationship, the information flows, the incentive system that drives their choices

PLAYER: [note 1] insert nome	odd a description	
CATEGORY OF PLAYER: [note 2] select from the menu Market actors (non-financia) if other, please specify	Player's nature (note 3)	Player's attitude (note 4)
PLAYER'S INCENTIVES: [note 5]		

select from the menu:			
1 row for each incentive scale them according to their relevance		cription (please try easure the achieve	
	[free text]		
INFORMATION FLOWS [note 6			In case of indirect ownership, what
Operational costs	Yes / No	Ownership	the costs to obtain information?

[free text]

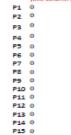
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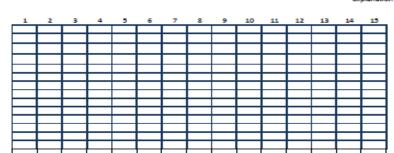
[free text]

[free text]

er's attitude (note	41	







1 Appointment 2 Election 3 Lobby pressure 4 Strong political influence 5 Corruption 6 Regulation of price 7 Regulation of quantity 8 Regulation of quality 9 Regulation of accessibility 10 Regulation of distributional aspects 11 Rule of law / judicial enforcement 12 Assignment

Operational costs	Investment costs	Assets	Revenues	Dem and	Nature	Truth-revealing incentive compatible?	Key truthrevelation mechanisms in place?	if yes , please specify:
					<u> </u>			[free text]
								[free text]
								[free text]
			$\Box$	$\square$				[free text]
				$\square$	[			[free text]
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					[			[free text]

#### INFORMATION TRANSFER: [note 8]

- (this column is automatically filled-in) P1 0 P2 0 P3 0
- P4 0 P5 0

P6 0

P7 0

P8 0

P10 0

P11 0

P14 0

P15 0

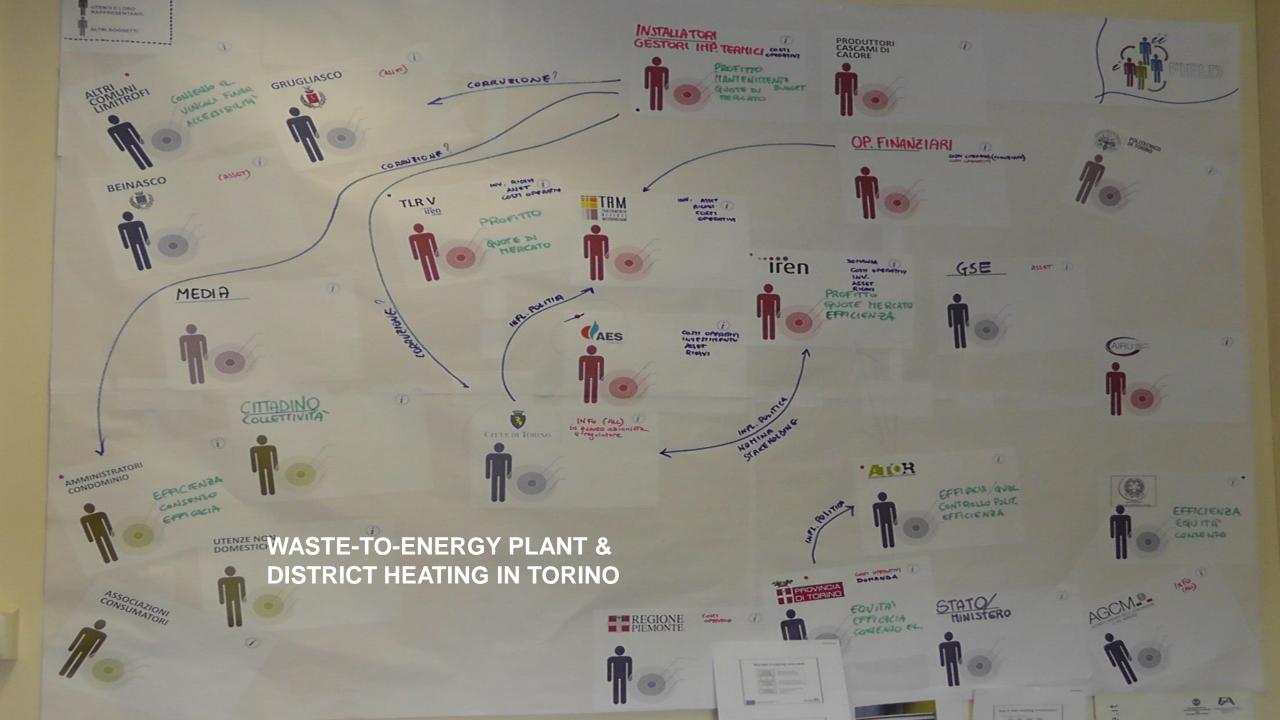
P12 0 P13 0

P9 0

13 Market power 14 Command 15 Control

#### explanation

Types of relations



**FINAL CONSIDERATIONS** 

Areas of risk of failure:

□ Truth-revealing tecniques

□ Engagement of <u>all</u> relevant stakeholders

Subjectivity of the analysis when provided by one single expert

## **POWER QUESTIONS & NEXT STEPS**

- Did we pose the right questions?
- Are there other institutions that are asking the same questions in other contexts ? → enlarging literature survey ?
- Are questions suitable for a quantitative representation? are we really leaning towards this objective? Can econometrics give answer to complex socio-economic phenomena and relationships ?
- How to reduce subjectivity? → pools of referees (see the case in Turin) ... workshop with local stakeholders/players to test data and results?
- Is it possible to transform the Outbound/Inbound Relations Ratio Index into something more than a purely descriptive tool?

#### ...currently under development:

Build a large portfolio of case studies to further test it:
Local welfare (Italy)
Bioenergy power station (Italy)
Local public transport (Turkey)
Water services (Etiopia, Mozambique, France)

# palgiave The POLITICAL ECONOMY OF LOCAL REGULATION The impact of the local level on economic regulation according to the Turin School of Local Regulation

# 25 chapters, 30 authors

Currently under development....ready in 2016 Q3

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Credits:

#### The co-authors: Franco Becchis

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