

# Transaction Cost Regulation

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# What is TCR?

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- The study of
  - Interaction between governments and utility investors
  - Regulation as its governance
  - Fundamentally affected and determined by contracting hazards

# How Does it Differ from Other Approaches to Regulation?

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- No “optimal” regulation
  - It emphasizes real behavior, by real people, in real environments, with real institutions
- Rent seeking, yes
  - But emphasizes interaction of sector hazards with the environment in which it operates

# First Attempt: OEW's 1976 CATV

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- Contractual details of franchise bidding vs standard regulatory processes

# OEW's Determinants of Alternative Regulatory Modes

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- ☐ Technological uncertainty
  - ☐ Demand uncertainty
  - ☐ Incumbent's idiosyncratic skills
  - ☐ Extent of specific investments
  - ☐ Efficacy of scalar bidding
  - ☐ Preference aggregation
  - ☐ Susceptibility of political process to opportunistic representations and differential proclivity, among modes, to make them
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- TCE
- PPT

# The Two Pillars of a TC Theory of Regulation

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- Transaction costs economics
- Positive political theory
  - Micro-analytics
  - Proper institutional comparison

# What are Utilities?

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- ❑ Widespread domestic consumption
  - People care about utility pricing
- ❑ Economies of scale / scope
  - Wiff of monopoly always present
- ❑ High level of sunk investments
  - Once sunk, investors willing to operate at below LR cost
- Pricing becomes highly political

# Fundamental Hazards

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- Governmental opportunism
  - Ability of governments to change the rules of the game and extract quasi-rents of utility investors
- Third party opportunism
  - Interested third parties challenge regulatory implementation
    - Even if proper
    - Regulation as public contracting



# Where is “Firm Opportunism”?

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- ❑ Fundamental assumption of TCE:
  - Opportunism inherent to all economic & political agents
    - ❑ Including firms, regulators and politicians
- ❑ Firm opportunism as a hazard requires transaction irreversibility
  - One-sided in utility investments
    - ❑ Governments can always expropriate
      - Not present in private to private contracts
      - Costly disruption may provide for firm opportunism
    - ❑ Investors have sunk assets
- ❑ Not a fundamental determinant of regulatory outcomes
  - Does not imply that governments should not care

# Governmental Opportunism

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- ❑ Risk of unilateral changes to the rules of the game (Spiller et al)
  - Legislative changes
  - Changes in interpretation
    - ❑ Vague legislation
    - ❑ Presidential Decrees
    - ❑ Changes in rule making decrees
  - May be subtle, does not require taking over assets but use of quasi-rents
- ❑ Affects both private and public companies
  - Spiller & Savedoff
- ❑ Impact on judicial decisions concerning contracting

# Implications of Governmental Opportunism

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- Private agents require more safeguards to undertake contract with public sector
  - More contract specificity than among private agents
  - More judicial independence
  - More procedural safeguards
  - Higher price / shorter return

# Example: Compañía de Aguas del Aconquija

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- ❑ Invested in water services in Tucuman, Argentina in 1995
- ❑ Terminated by the Province in 1997
- ❑ Forced to continue operating until 1998
  - ❑ "In the Arbitration between Compañía de Aguas del Aconquija S.A. and Vivendi Universal S.A. Claimants v. Argentine Republic, Respondent, Case No. ARB/97/3," award issued on August 20, 2007
  - ❑ Awarded US\$105 MM + 6% interest

# Compañía de Aguas del Aconquija (Cont.)

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- ☐ Electoral change soon after concession was granted
- ☐ Provincial Government used
  - Formal powers
    - ☐ Regulatory decisions
    - ☐ Legislative acts
    - ☐ Executive decrees
    - ☐ Attorney general recommendations
    - ☐ Judicial decisions
  - and informal powers
    - ☐ Press releases
    - ☐ Ombudsman's letters
    - ☐ Public announcements
- ☐ To force the company's hand to accept a tariff reduction

# Third Party Opportunism

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- ❑ Regulation as a public contract
- ❑ Essence of public contracts is their publicity (Spiller 2010)
  - Involves the use of “your” monies
  - Reasonably working societies subject public contracts to public scrutiny
    - ❑ Individual department auditing units
    - ❑ Executive auditing units (in US: OMB, GAO)
    - ❑ Legislative auditing units (in US: CBO)
  - Interested third parties
    - ❑ McCubbins & Schwartz (1984) “fire alarms” more effective than agency supervision
    - ❑ Fundamental of democratic societies

# Third Party Opportunism II

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- Interested parties are “interested”
  - May behave opportunistically
    - Pursue own political interests rather than public
- Incentives for third parties to challenge “probity” of public agent
  - Action may be ethic and legal
    - Marshall, Meurer & Richard (1994): Protest oversight
      - One third of all major IT information procurement protested in the 1980s, following CICA (1984)
      - Introduction of protests “inefficiently” increased competitive bidding – Kelman (1990)
      - Monetary payments to settle protests

# Third Party Opportunism III

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- Potential for third party opportunism exists
  - When third party competes with public agent in another (political) market
    - Democracies
- Benefits may arise in political or economic spheres
  - In both it may involve displacing the incumbent
- Political competition is dangerous for public agent, as it may
  - Have to spend significant costs in defending itself
  - Leave office
  - Be prosecuted



# Third Party Opportunism IV

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- Given informational asymmetries between the third party, courts and public in general
  - The more complex the public/private transaction
  - The more visible incentive payments
  - The higher the incentive for third party opportunism

# Example: Aguas del Tunari

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- Management contract granted in the city of Cochabamba, Bolivia – Sept 1999
  - Operations started in November 1999
  - Average 35% tariff increase in January 2000
    - 10% for low income
    - +100% for high income
- In January 2000 civil protests started
  - Led first by “civic committee”
    - Demand: renegotiate the contract
  - “Coalition in Defense of Water and Life”
    - Represented Cochabamba citizens, but also *tanqueros*, coca growers, industry and others
    - Demand: terminate the contract
  - Violent protests in February led to roll back of tariff increase
  - Violence pursued and intensified in April 2000
  - After deaths etc, concession was terminated same month

# Aguas del Tunari II

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- ❑ Highly complex contract
  - Prior tender failed to attract investors
  - Current tender attracted only one bidder
    - ❑ IWL, Bechtel, Edison, Abengoa, ICE and Soboco
  - Consortium did not own facilities nor resources
  - Required to invest in unprofitable dam and aqueduct (Misicuni project)
  - Pay down public utility's debt
  - Contract involved only potable water, not agricultural water
    - ❑ Only connected, not private or community wells
- ❑ Nevertheless
  - Emphasis on agricultural and local water "rights"
  - Fear of company appropriation

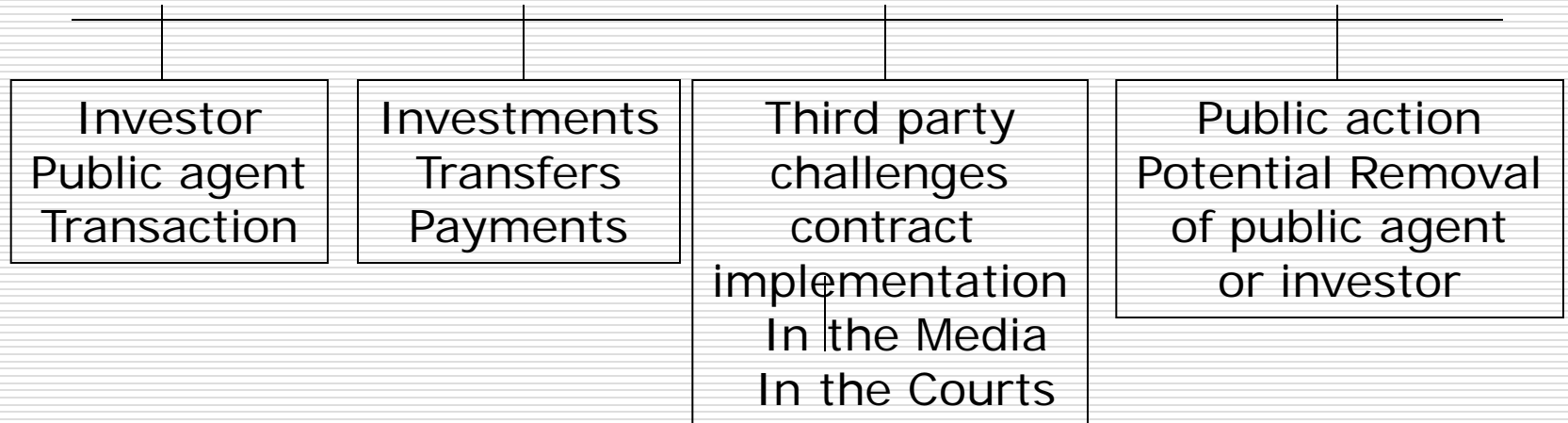
# Players in TPO Game

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- Public agent
  - Regulator, public official
- Investor
- Interested party
  - Potentially opportunistic
- Media, courts
- Public at large

# Sequence of TPO Game

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# Implications of Third Party Opportunism

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- ❑ Increases risk to investor and regulator
- ❑ Investors/regulators will require highly specific regulatory contracts
- ❑ More procedural rigidity
  - ❑ More formal requirements for renegotiation
  - ❑ More conflicts

# Implications of Third Party Opportunism II

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## ☐ Basic results:

- Risk of third party opportunism reduces probability of “regulatory relational contracting”
  - ☐ Democracies higher risk than in totalitarian or highly corrupt environments
- The more complex the public/private transaction, the higher the demand for rigidities
  - ☐ Reverse of standard TCE literature (Crocker/Reynolds, Masten, Tadelis)

## ☐ “Inefficiency” of regulatory contracting

- It is an equilibrium
  - ☐ Does not pass Williamson’s “remediableness” test

# Institutional Environments

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- Political contestability and fragmentation
  - Facilitates TPO, limits GO
    - Centralized politics limit TPO
      - Break up of LDP and PRI
- Political instability
  - Facilitates TPO and GO
- *Open v Natural* states
  - Open states
    - Facilitate TPO, limit GO
  - *Natural* states
    - Facilitate GO, limit TPO



# Interactions

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- Regulatory adaptations to hazards
  - High risk of TPO
    - Procedural specificity
      - Procedural rigidity
    - Low power incentives
  - High risk of GO
    - Limits to regulatory discretion
      - Regulatory rigidity
- VI when adaptations fail to remove hazards
  - Public ownership does not eliminate hazards
    - GO and TPO also affect public entities
- Complete absence of intervention not credible in utility sectors

# Regulatory Inefficiencies

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- Unavoidable
  - Rigid procedures
  - Limited discretion
  - Low power incentives
- Political adaptation to public/private contracting hazards
- Attempts to eliminate “inefficiencies” may backfire
  - Government ownership as default mode

# The End

