

UNIVERSITÉ PARIS 1 PANTHÉON - SORBONNE

Seminar in Paris

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**"Public Private Partnerships
in order to Provide Public Services:
Opportunity or Illusion?"**

Slides available on the web site

INSTITUT D'ADMINISTRATION DES ENTREPRISES DE PARIS

1. PPPs: Context

- In 1996, it was estimated that €400 billion would be needed by 2010 to deliver the proposed trans-European multi-modal transport network, generally referred to as TEN-T. The fourteen priority projects identified would require €125 billion over the same period.
- The 2001 Commission White Paper, "A time to decide" proposed a program of 60 measures and an action plan aimed at prioritizing substantial improvements in the quality and efficiency of transport in Europe. By 2003, little progress had been made and the investment need had increased. It was recognized that renewed efforts would be required to deliver the proposed investment in 65 300 km of roads, 78 000 km of rail, 330 airports, 270 international sea ports and 210 inland ports ...
- Such investments need have been reaffirmed during the March 2005 summit...



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PPPs: A hot issue

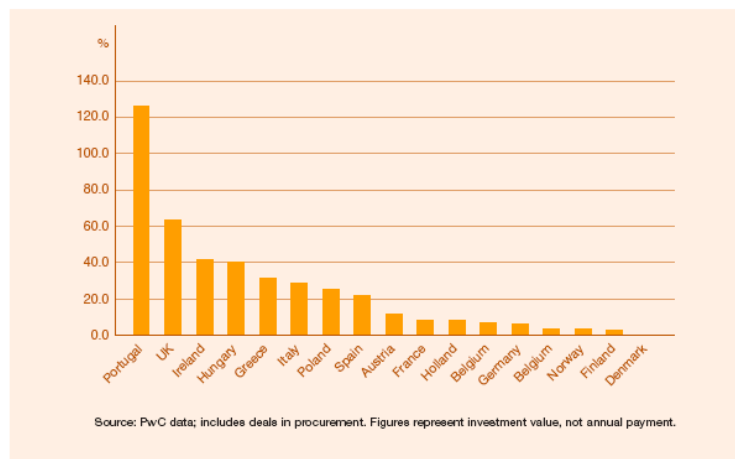
- Infrastructure's need in Europe
- Infrastructures and growth in Europe
- Financial constraints for States and local authorities
- One ideal "hybrid" solution?

“ Efficient use of PPP schemes in delivering necessary transport investments can help ease the pressure on public finances and deficits as well as contribute to more stable economic growth and increased transparency of public spending; by maximizing the value of public money, more can be built and operated with given amounts of public resources. Zoltan Kazatsay, Deputy Director General, DG TREN, European Commission at the 2005 PPP Transport Summit ”



PPPs: Context

Figure 5: Average 2000-2005 PPP activity as a percentage of mean GDP



PWC 2005



PPPs: Context in France

✓ **LAW GIVING BIRTH TO NEW “CONTRACT OF PUBLIC PRIVATE PARTNERSHIPS”, JUNE 17TH 2004**

« **THE PRESIDENT OF THE FRENCH REPUBLIC, NICOLAS SARKOZY, ASKED IN A LETTER ADDRESSED TO THE PRIME MINISTER, TO PROPOSE A NEW LAW THAT WOULD PERMIT TO RELEASE PPPs IN FRANCE, FROM A TOO RESTRICTIVE REGULATION, BEFORE THE END OF THE YEAR** ». **LE MONDE, OCTOBER 07**

✓ **NEW LAW, JULY 28TH, 2008, WITH THE OBJECTIVE TO SEE PPPs TAKE PART OF THE FRENCH PLAN TO STIMULATE THE ECONOMY**



Goals of this class

1. What are we talking about? What are PPPs?
2. Why should we use PPPs? Common arguments.
3. Feedbacks on PPPs
4. Toward an Economic Analysis of PPP's advantages and failures



1. What PPPs are not?

Traditional procurement is characterized by:

- The public sector procures assets, not services, from the private sector
- Assets are input-specified; the public sector carries out design prior to procurement
- The private sector is responsible for delivering assets, not for their long-term performance beyond standard warranty periods
- The project management of procurement typically remain with the public sector, including the risk of successfully integrating multiple works contracts



What differences with PPPs?

“Private sector expertise and experience has always been utilized in public sector procurement, but, where in traditional procurement, private companies built and then walked away, PFI seeks to ensure that the private sector takes responsibility for the quality of design and construction it undertakes, and for long term maintenance on an asset, so that value-for-money is achieved.” Source: HM Treasury (UK) July 2003.



DEFINITION: What are PPPs?

- There is no clear definition of PPPs (OECD 2008)
- The term « PPP » covers a range of different structures where the private sector delivers a public project or service.
 - (French) Concession contracts are good examples
 - Concession-based transport and utilities project have existed in EU member countries for many years (especially in France, Spain, Italy)
 - Demand risk is supported by the private operator and revenues are derived from payments by end-users
 - English PFI and new French contract or PPP (since June 2004) expanded this concept to a broader range of public infrastructures and combined it with the introduction of services being paid for by the public sector instead of end-users.
 - Demand risk is supported by the public sector and revenues can be based on performance indicators



France : A longstanding experience of Public Private cooperation in infrastructure

- XVIth-XVIIth C. • Construction of Canals & Bridges
- XIXth C. • Railways, Metro, Water, Sanitation, Electricity, ...
- XXth C. • Motorways, Waste management, District Heating...
- Last decade: • Stadiums, Museums, Hospitals, Prisons, Courts,

⇒ This experience gave birth to the concept of Concession, and its operating variant Affermage, which took its legal form in the early 19th century

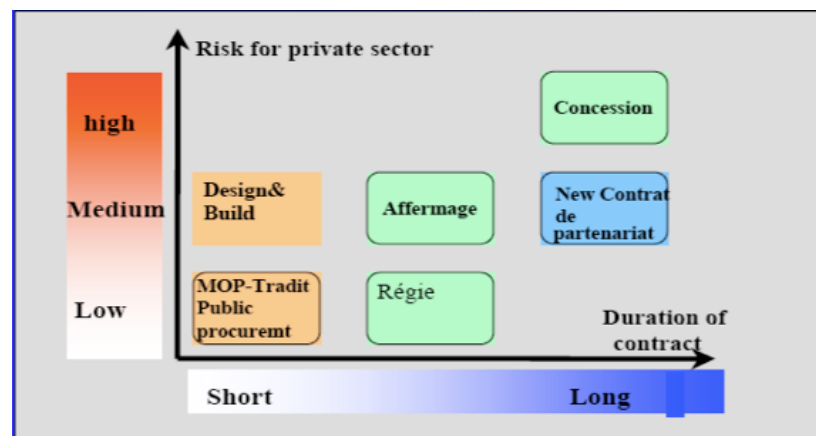
A PUBLIC SERVICE IS TRANSFERRED (« DELEGATED ») TO A PRIVATE COMPANY, TO BE IMPLEMENTED, FINANCED AND OPERATED OVER A LONG PERIOD OF TIME, UNDER THE CONTROL OF THE ADMINISTRATION, THE COMPANY BEING PAID BACK THROUGH USER FEES

PPPs in France: A Need for Rejuvenation

- Since the 1980s, Public sector is no longer able to handle ever-increasing demands of infrastructure-linked services by citizens and users, both quantitatively and qualitatively
 - Delayed investments in health, education or transportation networks resulting in deterioration of infrastructures
 - A need to extend PPPs to services that are not financeable by end-users on availability-payment basis
 - French new contrat de partenariat / English PFI



Where does the new PPP fit?



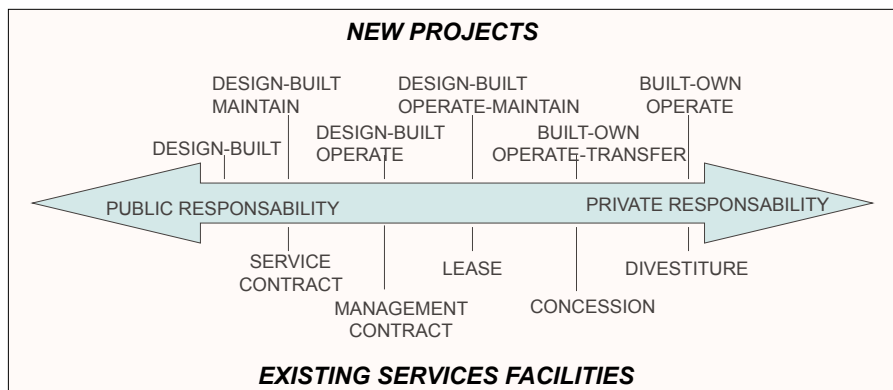
PPPs in the US

Service	# Cities Providing	Method of Provision		
		Inhouse	Public	Private
Animal control	857	0.61	0.21	0.13
Building security	721	0.75	0.02	0.20
Buildings and grounds maintenance	1003	0.62	0.01	0.30
Collection of delinquent taxes	584	0.40	0.39	0.17
Commercial solid waste collection	558	0.32	0.01	0.43
Crime prevention/patrol	1021	0.86	0.07	0.00
Drug and alcohol treatment programs	201	0.05	0.38	0.39
Emergency Medical service	769	0.54	0.14	0.19
Fire prevention suppression	932	0.82	0.07	0.00
Insect/rodent control	443	0.42	0.36	0.16
Inspection/code enforcement	1013	0.84	0.03	0.08
Legal services	842	0.34	0.02	0.58
Operation/maintenance of recreation facilities	974	0.72	0.06	0.10
Operation of daycare facilities	194	0.24	0.09	0.55
Operation of libraries	632	0.56	0.29	0.03
Operation of museums	342	0.25	0.16	0.29
Operation of parking lots and garages	411	0.68	0.03	0.19
Parks landscaping and maintenance	996	0.69	0.05	0.18
Programs for the elderly	582	0.28	0.20	0.19
Residential solid waste collection	750	0.47	0.01	0.33
Sanitary inspection	496	0.51	0.40	0.04
Sewage collection and treatment	868	0.68	0.20	0.08
Snow plowing/sanding	698	0.80	0.05	0.09
Solid waste disposal	565	0.32	0.18	0.35
Street repair	1011	0.45	0.02	0.36
Street/parking lot cleaning	935	0.72	0.02	0.18
Tree trimming/planting on public rights on way	939	0.42	0.02	0.39
Utility meter reading	727	0.78	0.04	0.13
Vehicle towing and storage	596	0.09	0.02	0.81
Water treatment	783	0.78	0.14	0.06

Sources: ICMA, Levin-Tadelis City Manager Survey.



PPPs: A large range of organizational choices



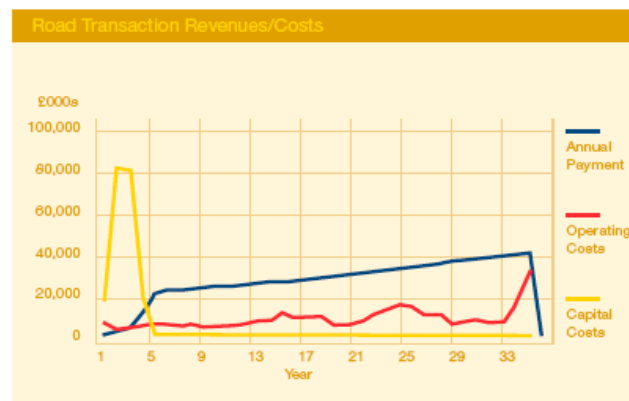
SOURCE: DELOITTE 2006



2. PPPs' advocacy: Why should we use PPPs?

- **Projects are more affordable, because payments are spread all over the length of the project**

Figure 2: Profile of a PPP Transaction



Source: PWC 05

Why should we use PPPs? (2)

PPPs maximize the use of private sector skills

PPPs require the private sector to:

- Deliver assets on time and budget
- Ensure that those assets deliver the service levels required by the public sector
- Manage the overall delivery of the project
- Ensure that the individual assets and other elements of the project that have been procured work together to successfully deliver service

Why should we use PPPs? (3)

Under PPPs, the private sector takes life cycle cost risk

- PPPs require the private sector to compete to deliver services over the long-term at the most economically advantageous price
 - Franchise Bidding
 - Not only investment costs but also exploitation costs that are minimized
- Under PPPs the private sector is designing and pricing to absorb life cycle risks
 - Its pricing might look more expensive than the traditional procurement. However under traditional procurement, this risk is retained by the public sector and would reflect in extra costs.



Why should we use PPPs (4)

With PPPs, risks are allocated to the party best able to manage or absorb each particular risk

- Particularly true when the public sector has a lack of competencies
- However this risk transfer must be limited to the kinds of risk that are controllable by the private party
 - Highways, demand risk and « Winner's curse effect » are counterexample ... (See Engel-Fisher-Galetovic 2006)



Why should we use PPPs? (5)

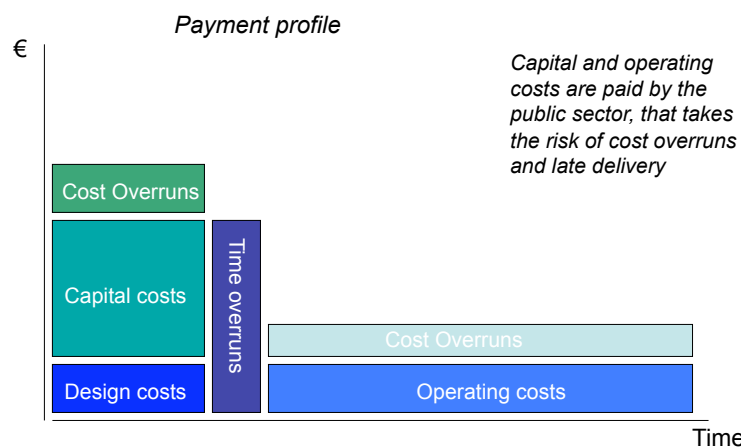
PPPs deliver budgetary certainty

- At the financial close of a transaction, the future cost of PPP project is known
 - The public sector will receive known outputs for known costs!
- No cost overruns and delays.



To resume

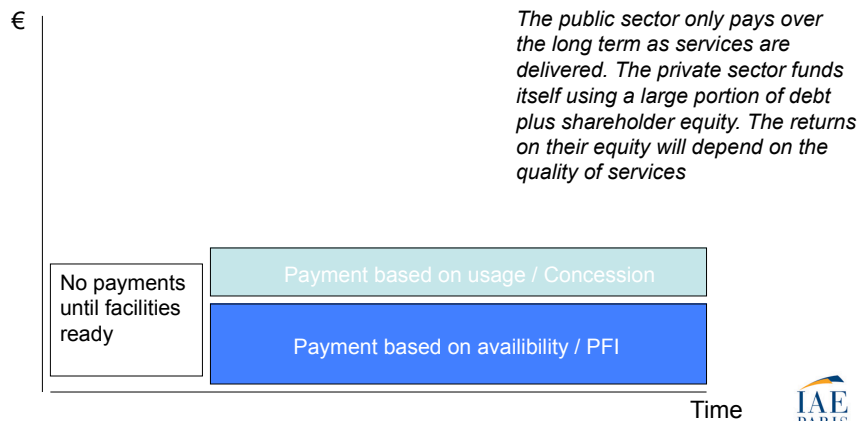
Traditional procurement



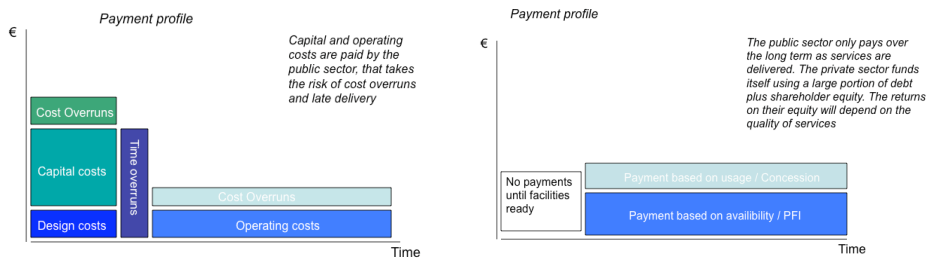
To resume

PPPs

Payment profile



PPPs vs. traditional procurement



• What is implicit is:

- You can avoid overruns by contacting with a private operator
- You can pay a « fair price » by putting in competition for the market private operators
- No other cost appears with PPPs.

3. Let's look at the facts!

“An increasing body of evidence has shown that the better risk management of PFI results in a greater proportion of assets being delivered on time and to budget.”

Source: HM Treasury Value for Money Assessment Guide August 2004



Facts (2)

The key findings of HM Treasury's research into 61 PFI projects were:

- 89 % of [PFI] projects were delivered on time or early;*
- 77 % of public sector managers stated that their projects were meeting their initial expectations, i.e. the overall performance of the private sector partner was matching up to expectations at the time of contract close. ...*



Facts (3)

... A study in 1999 by the UK National Audit Office found that only 30% of non-PFI major construction projects were delivered on time and only 27% were within budget, whereas the NAO's report on PFI construction performance showed that over 70% of PFI projects were delivered on time, and no construction cost overruns were borne by the public sector. This record reflects a number of weaknesses that have beset public procurement in the past. In particular, the full costs of projects have not been calculated accurately beforehand, risk management procedures have not been implemented, and there have been insufficient incentives, for management or organisation wide, to ensure that projects are driven forward successfully.

Source: HM Treasury "PFI: Meeting the Investment Challenge" July 2003



Facts (4)

Development of PPPs in Europe

Member States	Central Accommodation	Airports	Defence	Housing	Health & Hospitals	IT	Ports	Prisons	Heavy Railway	Light Railway	Roads	Schools	Sports & Leisure	Water & Wastewater (incl solid waste)
Austria	○	○			◐	○		○			◐	○		○
Belgium		◐		◐					◐	○	◐	○		◐
Denmark	◐							○		○	○	◐	○	
Finland			○		○				○	○	◐	◐		○
France	◐	○	○		◐		○	◐	◐	◐	◐	◐	◐	◐
Germany	◐	○	◐		◐	◐		◐	○	○	◐	◐	◐	◐
Greece	○	◐			○						◐	◐	◐	◐
Ireland	○			◐				○			◐	◐	◐	◐
Italy	◐	◐		◐	◐		◐	○		◐	◐	◐	◐	◐
Luxembourg		○			◐									
Netherlands	◐		◐	○	○		○	◐	◐		◐	◐	◐	◐
Norway (not EU)	○		○		◐			○			◐	◐	◐	◐
Portugal	○	○		○	◐	◐	◐	○	○	◐	◐	◐	◐	◐
Spain	◐	◐			◐		◐	◐	◐	◐	◐	◐	◐	◐
Sweden			○					○		○		○		◐
UK	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐

Legend

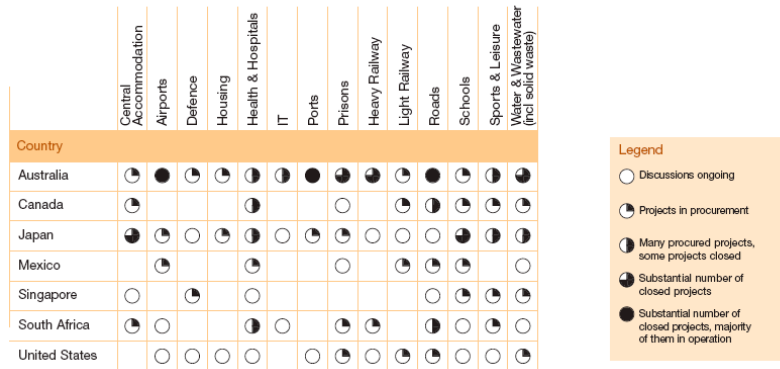
- Discussions ongoing
- ◐ Projects in procurement
- ◑ Many procured projects, some projects closed
- ◒ Substantial number of closed projects
- ◓ Substantial number of closed projects, majority of them in operation

* Procurement activity in these sectors relates to traditional style concession contracts



BUT Facts [5]

Figure 10: Summary of PPPs by country and sector



Facts [6]

• A negative feedback from LDCs

- « After reaching a peak of US\$85 billion in 1997, PPI commitments have however steadily dropped and reached about US\$41 billion in 2003 and barely recovering to about US\$45 billion in 2004. This is a strong indication that many of the relationships have gone sour. In fact, as seen in many experiences in Latin America, Eastern Europe, Asia or Africa, the new millennium seems to bring many requests for separation or divorce from this policy. » (A. Estache - WORLD BANK 06)
- J.L. Guasch (WORLD BANK 2004)
 - Looking at more than 1 000 concession contracts
 - More than 50% are renegotiated the first two years after their signature



• Counterexamples in developed countries

- Engel & al 2006: Highways in US
- Chong & al 2006: Water in France

Incidence of renegotiation

	Incidence (% of total contracts)
	Guasch (2004)
Total	41.5
Electricity	9.7
Transport	54.7
Roads	
Railroads	
Water & sanitation	74.4



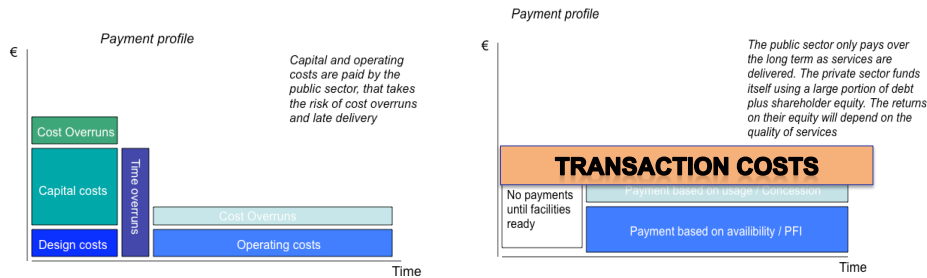
Facts

- Such feedbacks suggest that
 - PPPs may be are not the optimal solution in every situations
 - PPPs might have their own failures!

↳ Economic analysis might helps us to identify such failures



Main Issue Stressed by Facts



- What is implicit is:
 - You can avoid overruns by contacting with a private operator
 - You can pay a « fair price » by putting in competition for the market private operators
 - No other cost appear with PPPs.

With a transaction cost analysis, what becomes clear is that PPPs are characterized by their own transaction costs & failures



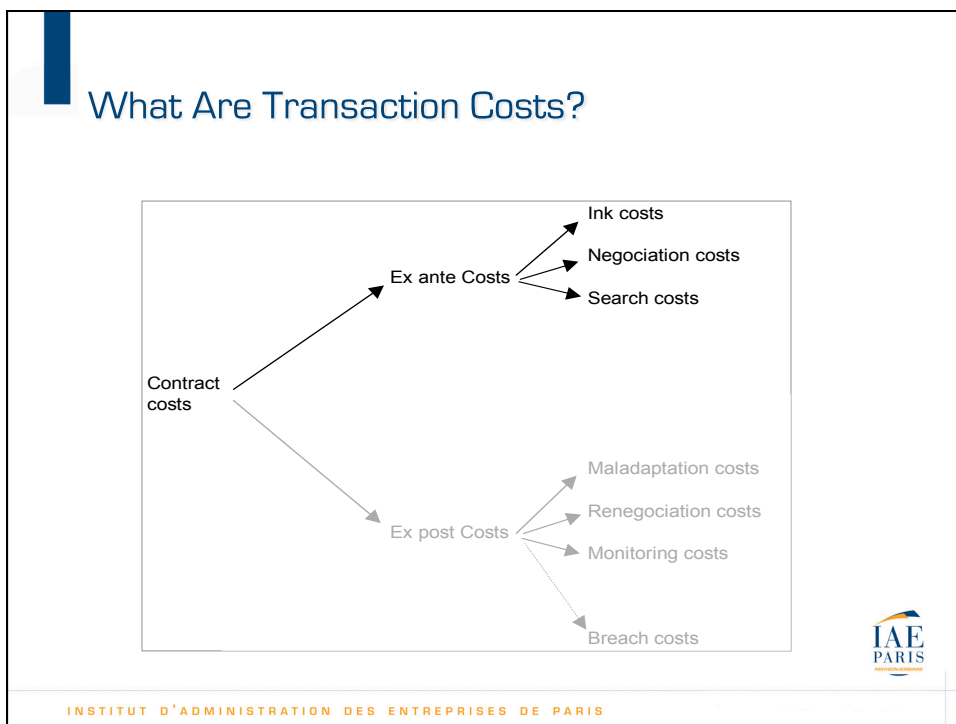
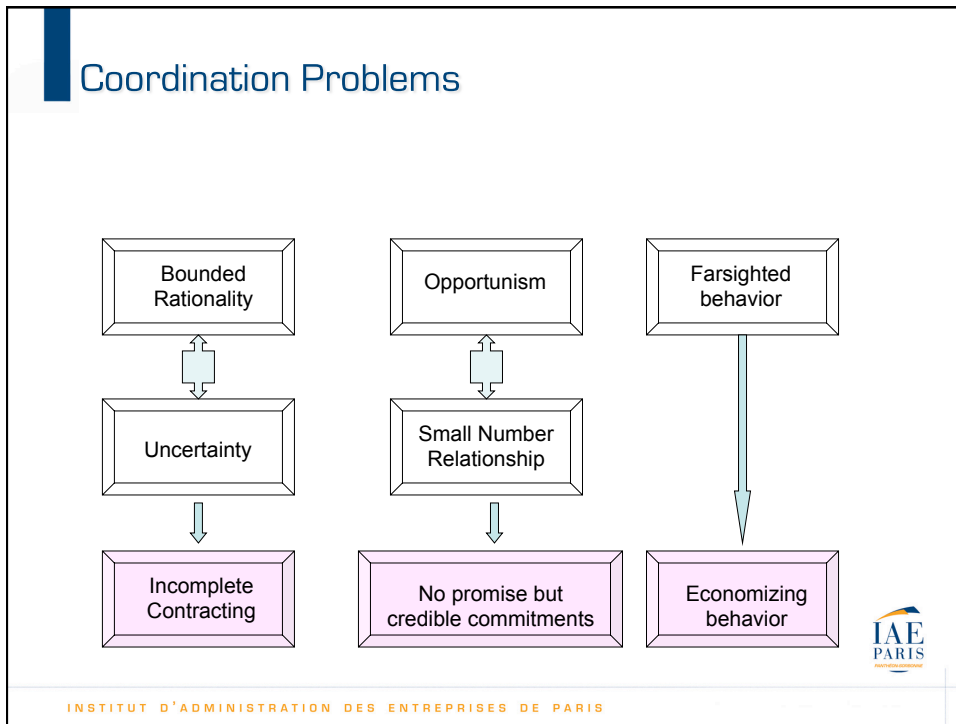
4. Toward an Economic Analysis of PPPs: Transaction Cost Economics



Williamson O.E.
 U. of California
 Berkeley
 1932 -

<p><u>Behavioral Assumptions</u></p> <ul style="list-style-type: none"> • Bounded rationality • Opportunism • Farsighted behavior 	<p><u>Environmental assumptions</u></p> <ul style="list-style-type: none"> • Uncertainty • Small number relations
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What Are the Sources of Transaction Costs?

- Small number relationships and asset specificity
- Uncertainty



Integration or Outsourcing: What Propositions?

		Characteristics of investments		
		Non Specific	Moderately Specific	Highly Specific
Uncertainty level around transactions	low	Market		
	High			

Where do you place PPPs?

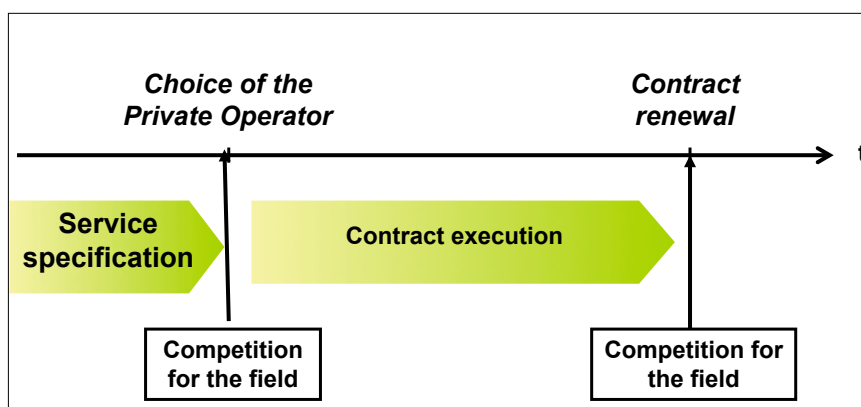


What Implications?

- Never choose to integrate only for production cost considerations: market always do better!
- Only transaction cost considerations should drive the decision



PPPs and transaction costs



PPP's failures (1)

- The difficulties to put firms in « competition for the field »
 - Price criteria does not always resume what is expected from the private operator
 - Price criteria might be complex (price vector instead of one single price)
 - Artificial and obscure award criterion
 - CATV - Oakland Case (Williamson 1976)
 - Aggressive bids
 - “Winners’ curse”
 - Collusion: ex: case of urban transport in France (2005) – penalty 12M€
 - Corruption: anti-corruption law in France in 1993



Potential (imperfect) solutions

- Menu auctions
 - But difficulty to identify the winning bid
 - Lack of transparency
 - Still room for opportunistic behavior
- Pre qualification criteria
 - (e.g. engineering, safety, human resources, financial capacities)
- Bids formulated in terms of a constant revenue stream (Engel-Fisher-galetovic 1997)
 - Viaduc de Millau case
- Allocation of risk
 - (e.g. risk associated with demand growth assumed by the franchisor) –
- Negotiation instead of competition! (Bajari-Mcmillan-Tadelis 07)
 - “dialogue compétitif” in France
 - “intuitu personae”



Other solutions?

- Case of urban transport in London (Amaral & al 2009)
 - Choose the size of the market
 - Have flexible tendering rules
 - Change the distribution of property rights



PPP's failures (2)

- Difficulties to enforce (incomplete) contractual agreements
 - Disconnection between price and costs over time
 - Penalties are difficult to apply (CATV Case)
 - Non-verifiable dimensions of the contract
- Opportunistic behaviors might arise
 - Delay in construction and provision (CATV Case)
 - Efforts to evade or renegotiate the contract (Guasch 2004)
 - Underinvestment (Bordeaux - Lyonnaise Case)
 - Investments at the beginning of the contract, not at the end
 - Lower level of quality than promised (CATV)
 - Price increase
 - Absence of responsiveness to consumer's needs
 - Connected to the kind of PPPs contract
 - Concession vs. PFI



Potential (imperfect) solutions

- Dissuasive but realistic penalty provisions
- Monitoring and accounting procedures
- Open book policy
- Yardstick competition
- Information transparency
- Indexation of prices
- Put in place a regulator



PPP's failures (3)

- Long term contracts and refranchising are problematic
- Specific Investments \Rightarrow Long term contracts \Rightarrow Lack of bidding parity at franchise renewal (« Fundamental transformation »)



Conclusion: The Need for an Adequate Institutional Framework in order to Limit Transaction Costs



Douglass North
U. of Saint Louis
Nobel Price 2003



Jean-Jacques Laffont
1947-2004

- The use of PPPs obliges public authorities to think about clear juridical and political frameworks (OECD 2008)
 - Needs for credibility
 - Especially true when local authorities are concerned and are dealing with main private actors of the domain
 - Needs for competencies to deal and manage PPPs
 - Need for regulation (local or national one)
 - Need for organized competition
 - Need for transparency (without collusion strategies)



Facts again

Summary of PPP institutional development

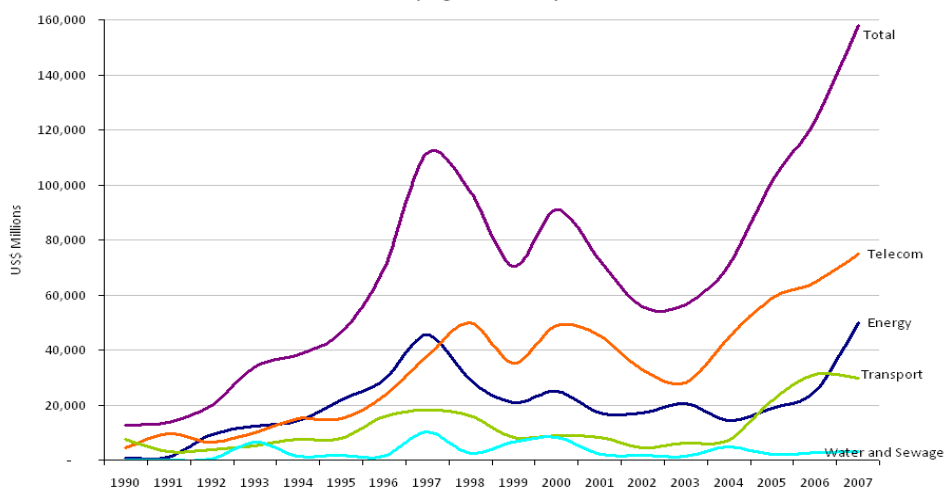
Key	
▲	Need for PPP unit identified and some action taken (or only a regional PPP unit existing)
▲▲	PPP unit in progress (or existing but in a purely consultative capacity)
▲▲▲	PPP unit existing (actively involved in PPP promotion)
■	Legislation being proposed
■ ■	Comprehensive legislation being drafted / some sector specific legislation in place
■ ■ ■	Comprehensive legislation in place

Member States	PPP Unit	PPP Law
Austria	▲▲▲	-
Belgium	▲	■ ■
Denmark	▲▲	-
Finland	-	■
France	▲▲	■ ■
Germany	▲▲	-
Greece	▲	■ ■
Ireland	▲▲▲	■ ■ ■
Italy	▲▲	■
Luxembourg	-	-
Netherlands	▲▲▲	-
Norway (not EU)	▲	-
Portugal	▲▲	■ ■
Spain	-	■ ■ ■
Sweden	-	-
UK	▲▲▲	-



PPPs, institutions and LDCs

Investment Commitments to Infrastructure Projects with Private Participation
in Developing Countries by Sector, 1990-2007



Source: World Bank, PPI Database, October 2008

Main references

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But Also

- IAE – University of Paris I Sorbonne
 - Chair « Economics of Public-Private Partnerships »
 - Web site next September.

