

The Trade-off between Traditional Procurement and Public-Private Partnerships: Economic Parameters and Legal Criteria (British and French Practices)

Universita della Svizzera Italiana

Lugano, May 2008

MECOP Lunch Seminar

Istituto di Microeconomia e Economia Pubblica

Frédéric MARTY

CNRS - GREDEG-Université de Nice Sophia-Antipolis

OFCE-Département Innovation et concurrence

marty@gredeg.cnrs.fr

frederic.marty@ofce.sciences-po.fr

<http://hp.gredeg.cnrs.fr/marty/>



CENTRE NATIONAL
DE LA RECHERCHE
SCIENTIFIQUE



- ❑ Why, up to economic and financial viewpoints, choosing the PPP route ?

- ❑ What are the critical dimensions of the decision to commit into a partnership contract ?

- ❑ What are the legal and economic criteria used in the United Kingdom and in France ?

- ❑ What are the lessons of their experiences ?

I – The Economic Determinants of Public-Private Partnership contracts

o The economic determinants of the government decision to prefer a PPP contract to a conventional procurement scheme

→ The potential sources of a PPPs' greater efficiency

- ✓ Contractual incentives produced by the fixed price
- ✓ Disappearance of the soft budget constraint regime
- ✓ Innovations developed by private sector
- ✓ The contracts' bundling (build and operate)

- In practice, limited cost savings
 - 10% in average for UK
 - in the case of the MoD : from 20 % to 4 %

- Why the promises of cost savings are not always and significantly kept
 - ✓ The additional cost of private financing compared to sovereign debt must be taken into account
 - ✓ Transaction costs induced by the competitive process and the contractor monitoring
 - ✓ The lack of competition for the market for some contracts or informational asymmetries induces rents for private contractor.

o Why do cost savings appear as disappointing ?

→ The additional cost of private finance compared to guilt

- ✓ A public programme financed through guilt is 150bp cheaper
- ✓ Financial tools (securitization, monoline insurance,...) allow to limit to 80bp the additional cost
- ✓ But, according to HM Treasury (2006), they just represent 5% of the overall cost of a project

→ The transaction costs induced by PPPs

Ex ante : search costs and ink costs

Ex post : monitoring costs

Ex ante transaction costs : some British assessments

- ❑ Bidding costs represent 3 % of the project total expected cost (Allen, 2001) : It is three time higher than those induced by conventional procurement schemes.
- ❑ The public body is often bound to compensate the costs incurred by reserve bidders to make sure of a sufficient competitive pressure : £150M were budgeted by the London Underground for Metronet, £275M were finally paid (NAO, 2004).
- ❑ Advisory costs for the public partner amount to 3.7% on average but can reach 10 % for very complex project (Välilä, 2005).

Ex post monitoring costs : indirect appraisals

- In the USA, they are assessed between 3 and 25% of the capital value.
- For the franchised UK railways, franchise management represented a third of the Strategic Rail Authority operating budget.

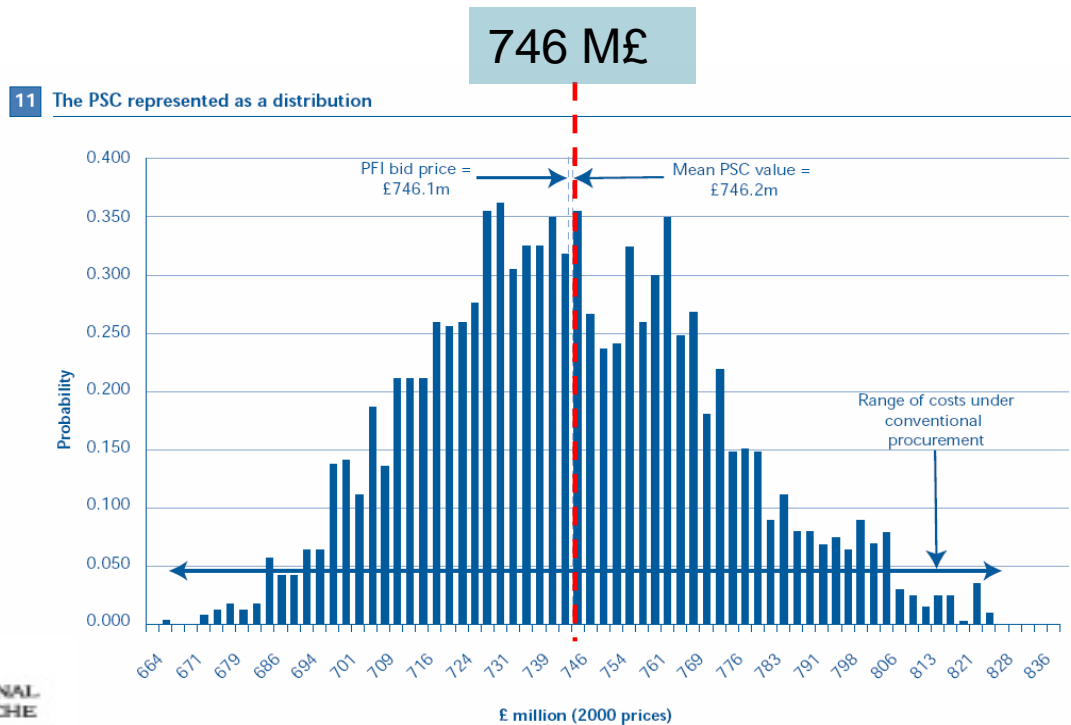
o The value for money produced by PPPs is dependent from the actual level of competition for the market....

o In the same time the evolution of PPPs deals with very complex and risky domains will reduce the number of potential competitors and by the way the competitive pressure.

o Are the uncertainties about the actual cost savings condemned the PPP model ?

- We must also consider costs in a dynamic point of view
- PPPs rely on fixed price contracts, which offer a guarantee against the cost and delays overruns.
- Such overruns constitute, in fact, some hidden, but very significant, costs of conventional procurement schemes (47 % in the United Kingdom according to the NAO)
- Even if the PPP induces an additional cost, compared to another contract, it could be considered as an insurance premium... the price of certainty.

- Cost savings is less the critical dimension of the decision to commit into a PPP contract than the optimal risk management
- A proof by the Main Building Redevelopment contract of the MoD
- Public and private costs are both estimated at £ 746M
- The private solution was chosen because it protects government from cost and delays overruns



PSC distribution for the MBR (NAO, 2002)

How the risks of cost and delay overruns can be determinant for choosing a PPP contract ?

Some evidences from the PSC assessed for the MBR Contract

NPV (£ million at Q1 2000 prices)	Base costs	Risk	Risk as % of base costs
Capital Expenditure	208.6	61.5	29.5
Replacements	101.7	15.7	16.0
Operating costs	202.4	8.0	4.0
Rent, Contribution in Lieu of Rates, and Leasehold risks	133.1	0.0	
Disposals and dilapidations	-12.8	0.2	
Legislative Change	0.0	4.6	
Latent defects	0.0	2.9	
Loss due to fire etc.	0.0	4.2	
Inflation different to base case	0.0	5.8	
Cancellation charge	10.3	0.0	
Total	643.3	102.9	17.2
Total PSC		746.2	

Risk appraisal derived from past experiences on conventional procurement schemes



Cost overruns in construction stage : 47 % on average in UK



Construction risk has a strong impact on the Value for Money because of the Net Present Value calculation

Source: National Audit Office

Cost and delay overruns : compared performance of PPP and traditional procurement schemes (NAO, 2003)

	Conventional Procurement	PFI
Delay overruns	70 %	24 %
Cost overruns	73 %	22 %

- Using PPPs (long term contracts with a fixed price) can be analysed as “a form of insurance against the public failure to control costs in procurement” (Banc-Brude, 2007)

- 2 different levels must be considered :
 1. At the project level, a fixed price contract eliminates (or could eliminate) the risk of wasteful time or cost overruns.
 2. At the portfolio level, contracting with a fixed price scheme and within a scheme in which government is bound to make payments all the contract long, eliminates the risk of sub-standard maintenance and congestion.

o It puts into relief the three critical dimensions of the economic appraisal of PPP contracts

1. Value for Money
2. Risk Transfer
3. Affordability assessment

o How these criteria are used in practice ?

- ✓ The British Experience
- ✓ The French Practice

II – The British Experience

o How these criteria are used in practice ?

→ The British Experience

- The criteria introduced by the Treasury
 - ✓ The Public Sector Comparator (1997)
 - ✓ The Quantitative Spreadsheet Analysis (2004)

- The criteria in practice... and the theoretical controversies

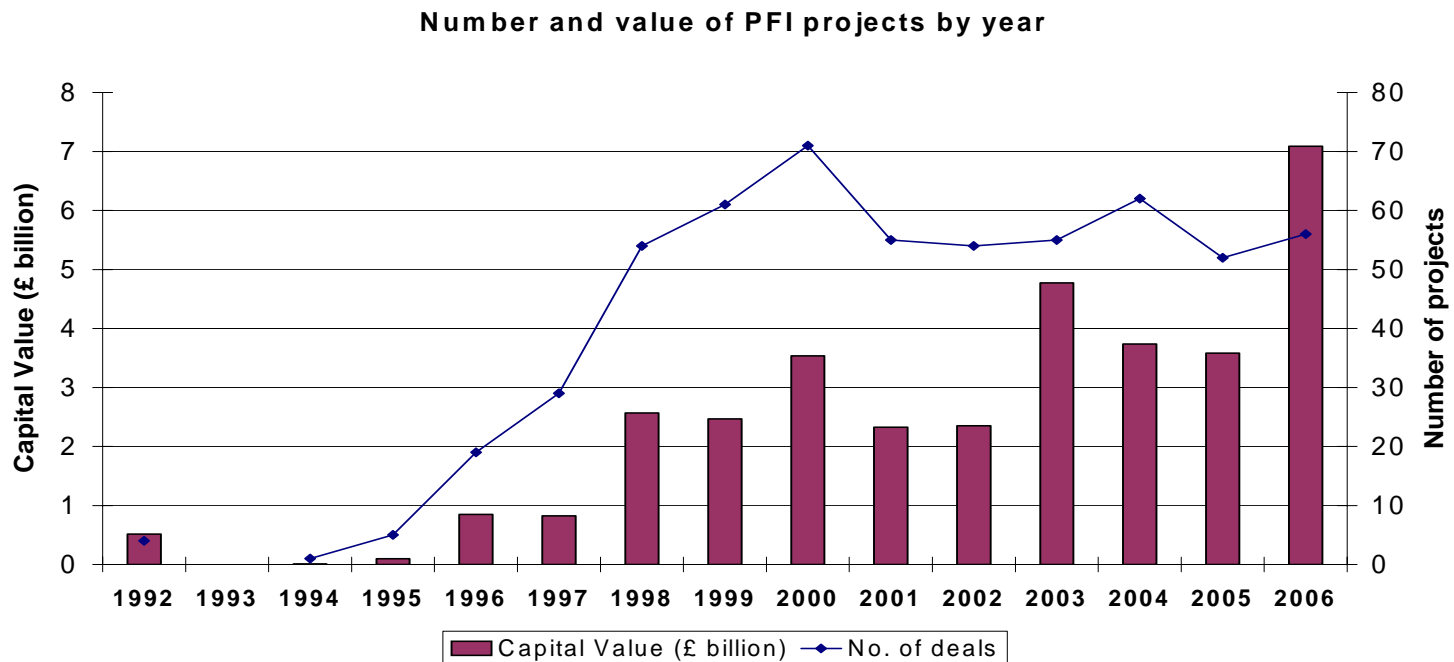
- o The cost comparisons in United Kingdom : What are the rules to follow ?
 1. The Private Finance Initiative was launched in 1992 (a first “PFI-type” contract in 1987 : The Elisabeth II Bridge).
 2. Scathing criticisms of the National Audit Office until 1996
 - No demonstration of the benefits induced by the partnership.
 - Risk of fiscal opportunism (off-balance sheet strategies)
 3. Issuance of the Public-Sector Comparator by the Treasury in 1997
 4. Quantitative Spreadsheet Analysis (2004).

The Public Sector Comparator : Principles

- Introduced by the Technical Note n° 3 of the HMT in 1997
- Based on the contract assessments made by the NAO and the Treasury since 1992
- Defines what would be the project cost if it would be realized with conventional public sector methods.
- The PSC is the reference cost to be compared to the PFI solution.
- It allows to appraise the Value to Money offered by the deal.

The Public Sector Comparator : Principles

→ The PSC was one of the three major improvements of the PFI policy in 1997 (with the standardization of contracts and the decision to adopt accrual accounting and budgeting for the public sector), which allows its take-off.



- The criticisms against the British PSC

- ✓ The result is excessively dependent on the hypothesis made and the parameters chosen (discount rate, in house costs...).

- ✓ A deceptive mathematical objectivity ?

- The PSC is irrelevant, prone to error and based on a pseudo-scientific mumbo-jumbo (Coleman, 1992)

- ✓ It relies on hypothesis concerning in-house performance and expectations on the private offers (the PSC is an ex ante comparison made before the competition for the contract).

- ✓ Is the PSC a realistic choice ? If there is no public funds available, we have not to compare to a hypothetical PSC but with a Fall Back Position (FBP).

- The criticisms against the British PSC

- ✓ Difficulties to predict cash-flows for a 30-year period.
- ✓ Distortion induced by the convention that public sector can not spread costs over time through financing; thus the discounted cash-flow model creates an artificial advantage for PFI option where the financial flows are spread over the contractual period.
- ✓ What is the treatment of the additional risks induced by the PFI option (renegotiations, risk of *commodification* of the public service)

- The criticisms of the British PSC
 - ✓ Some controversial appraisals : The London Underground and the National Air Traffic Service PFI contracts.
 - ✓ Must we condemn the PSC ?
 - An economic and financial assessment : unperfected but essential to evaluate the value for money of a deal.
 - A guarantee against creative public accounting choices (off balance sheet strategies) and political pressures on public investments

- A recognition of the limits (or pitfalls) of the PSC by the HMT : the Quantitative Spreadsheet Analysis (2004)

- The Quantitative Spreadsheet Analysis (2004)

- ✓ As the portfolio of PFI increases and the new contracts rely more and more on complex and risky services, the cost differences between the PFI and the PSC become less and less significant

- ✓ HM Treasury, (2004), *Quantitative Assessment User Guide*, August, 49p.

- ✓ Introducing qualitative dimensions – multi-criteria analysis

« Quantitative analysis is only one of the element of the VfM assessment and should be used only in conjunction with the qualitative assessment, which is completed in parallel »

- ✓ An Excel-based utility for comparing the two options (standardizations of practices within the whole government).

III – The French practices

- The PPP is a dispensatory contract. Its use is subordinated to legal criteria : emergency or complexity.
- A mandatory preliminary economic assessment must be realized in order to demonstrate that the partnership contract is more efficient than traditional procurement scheme (public market or concession).
- Example.
- The future evolutions of the French legislation.

The preliminary economic assessment for the French ordinance of June 2004

- Realizing a comparative analysis of the economical, financial or legal motives, which justify to choose the PPP.
- Demonstrating that PPP is a less costly or a more advantageous device, than other administrative contracts, to achieve its objectives.
- An example (of the limits of such assessment ?) : The Toulouse Airport Sewage Works

Opinion of the French Ministry of Finance PPP Task Force (MAPPP) n° 2006-7 : Sewage Works of the Toulouse-Blagnac Airport

- o No rain water treatment in Toulouse Airport
- o Authorization in 2005 for the airport extension, which forces the Airport to be compliant with European environmental regulation.
- o The Chamber of Commerce and Industry, who manages the Airport, wants to choose the PPP route.

- o The legal criterion of complexity is satisfied (according to the Airport's management)
 - o Airport specificities (no constant flow, specific run-offs)
 - o Constraints of localization (safety regulations, proximity of water table...)
 - o Management of interface risks and technical upgradeability of the whole system

Opinion of the French Ministry of Finance PPP Task Force (MAPPP) n° 2006-7 : Sewage Works of the Toulouse-Blagnac Airport

- o A trade-off between partnership contract and two successive traditional contracts (a design and build one and an operate one).

The comparison

Duration of the PPP :

20 years

Duration of the building stage :

29 months for the PPP / 39 for the conventional procurement

A better coordination in the case of PPP

But unrealistic hypothesis for the contracting stage (9 months for a PPP / 16 months → **in fact, negotiations are longer for a global contract !**)

Designing and Constructing Costs

The PPP is 5 % cheaper → realistic (bundling design and build)

The transaction costs are assessed at 57 000 € for a conventional procurement and at 80 000 € for a PPP

Opinion of the French Ministry of Finance PPP Task Force (MAPPP) n° 2006-7 : Sewage Works of the Toulouse-Blagnac Airport

Operating and Maintaining Costs

15 % of cost savings (the effect of the bundling)

Financing scheme

High leverage profile (95 % Debt and 5 % Equity)

Spread of 80 bp. (interest rate of 4.8 % / 4 % public discount rate)

RoE of 12 %

Third party revenues

Not taken into account (watering of airport Greenfield sites)

Global cost savings expected from the PPP = 1.8 % [< margin of error]

Because of the additional costs induced by private finance

Surprising explanation : the cash flows for the PPP solution must be paid earlier

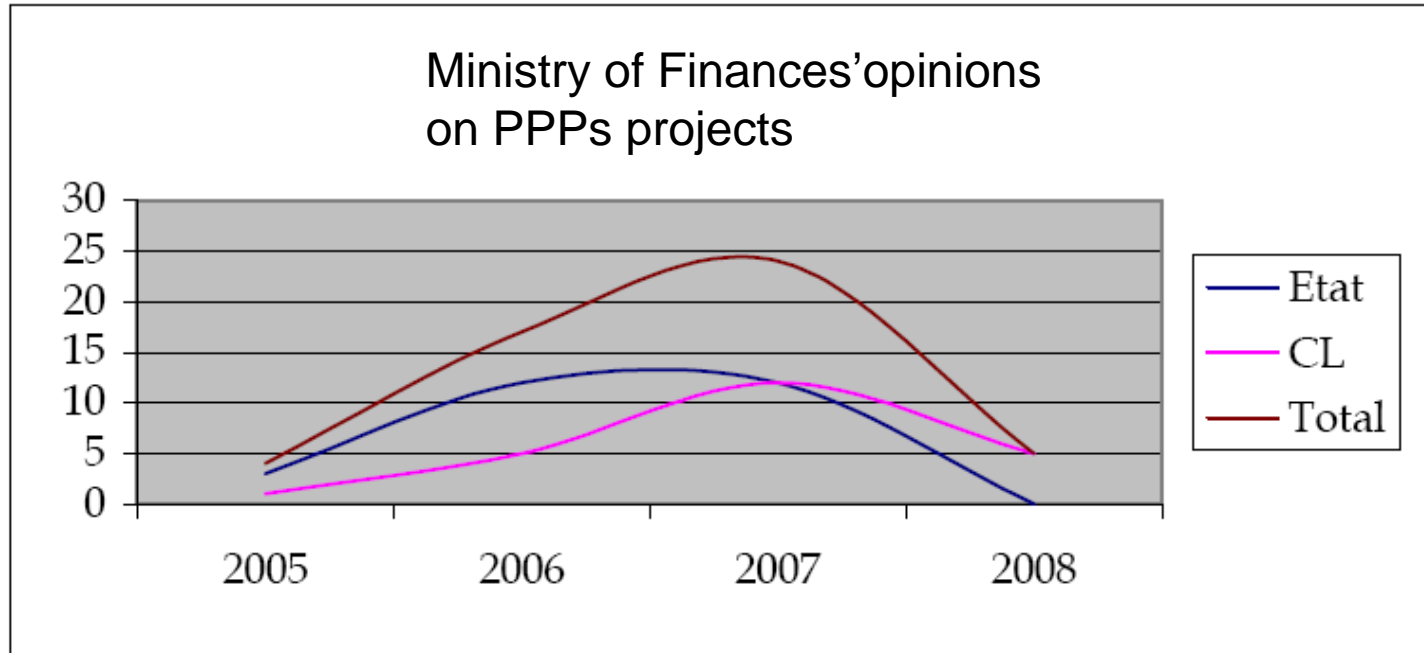
A risk appraisal on a purely qualitative basis !

A project validated by the ministry of Finance because of the need to comply with environmental regulation...

The French Partnership Contract : An appraisal

- ❑ An unsatisfying start of the Partnership Contract (ordinance of June 2004)
- ❑ February 2008, just 27 contracts financially closed (20 for local authorities)
 - ❑ 30 % of the contracts concern public real estate
 - ❑ 25 % urban facilities
 - ❑ 15 % cultural or sports infrastructures
- ❑ Total of capital values of the signed deals : 1,5 billion €
- ❑ Individual capital values from 2M€ (public lightening of Auvers-sur-Oise) to 765 M€ (Stadium of Lille – not yet signed in February)
- ❑ 75 % of the deals are inferiors to 30 M€... in the same time HMT considers that the minimum value to run a PFI is £20M

Ministry of Finances' opinions on PPPs projects



French PPP contracts – February 2008

Collectivités locales

Type de projet	Nombre
1 - Bâtiment	1
2- Transport	0
3 - Culture et sport	0
4 - Infrastructures de télécom	1
5 - Système Informatique	1
6- Equipement urbain	15
7 - Energie / Traitement des déchets	2
8 - Formation	0
TOTAL	20

Etat

Type de projet	Nombre
1 - Bâtiment	2
2- Transport	0
3 - Culture et sport	0
4 - Infrastructures de télécom	0
5 - Système Informatique	1
6- Equipement urbain	0
7 - Energie / Traitement des déchets	3
8 - Formation	1
TOTAL	7

CONTRATS DE PARTENARIAT ATTRIBUES

		Personne publique	Secteur
COLLECTIVITES TERRITORIALES	1	Ville d'Auvers-sur-Oise	Eclairage public
	2	SIDOM d'Antibes	Déchets
	3	Ville de Castelnau-le-Lez	Eclairage public
	4	CA Castelroussine	Voirie
	5	Ville de Thiers	Eclairage public
	6	CG du Loiret	Collèges
	7	CG d'Eure-et-Loir	Informatisation des collèges
	8	Ville de Rouen	Eclairage public
	9	Ville d'Agde	Eclairage public
	10	Ville de Saumur	Eclairage public
	11	Ville de Saint Fons	Eclairage public
	12	Ville de Bussy-Saint Georges	Eclairage public
	13	Ville de Châtillon sur Chalaronne	Eclairage public
	14	Ville de Saint Raphaël	Pôle multimodal
	15	Ville d'Hérouville Saint Clair	Eclairage public
	16	Ville de Sénart	Eclairage public
	17	Ville d'Autun	Eclairage public
	18	Région Auvergne	Internet HD
	19	SMIRITOM de la zone Nord	Déchets
	20	Ville de Libourne	Eclairage public
	21		

Sources: CEFO - PPP et MAPPF

Central Government's PPP – February 2008

		Personne publique	Secteur
ETAT	1	Ministère JSVA-INSEP	Equipement sportif
	2	EP Musée de Versailles	Système informatique
	3	CCI de Toulouse	Traitement des eaux
	4	Centre Hospitalier de Roanne	Fourniture d'énergie
	5	Centre Hospitalier d'Alès	Fourniture d'énergie
	6	MinJustice-AMOTMJ	3 ^{ème} lot de prisons
	7	EA ALAT de Dax.	Ministère de la Défense

- The reasons for a slow development :
 - ✓ Perceived legal risks or uncertainty (the METP experience... or traumatism)
 - ✓ The time needed to negotiate such complex contract
 - ✓ The internal competition of other type of PPP public contracts, introduced in 2002-2003, for the ministries of Defense, Health, Justice and for the Home Office

- But a strong political push (the case of prisons – the third investment block) and an increasing number of opinions delivered by the expert group of the ministry of Finance

Some key features of the project of law adopted in April 2008 by the French Senate

Two novel ways of recourse for partnership contracts

1. A public authority can choose a PPP at the condition that it will be more advantageous (or economically more efficient) than conventional procurement devices.

2. Until December 2012, PPP can be applied in a limited-list of priority sectors (ITC for homeland security, transport infrastructures, which contribute to sustainable development, urban renewal programs,...) if the preliminary economic assessment is not obviously unfavourable.

The necessity to rely on an accurate preliminary economic assessment of PPP contracts :

The Public Report of the French Superior Audit Institution (Cour des Comptes) on two real estate innovative operations (Archives of Foreign Office and Intelligence services of the Home Office)

- It was not two partnership contracts but two financially innovative contracts (leasing schemes), which were not subject to a mandatory ex ante economic assessment.
- The Cour des Comptes considers that Government will have to bear significant additional costs on the whole-life of the contracts (41 % for the Foreign Office)
- The PPP was not chosen because it achieves Value for Money but mainly to by-pass budgetary credits limitation (in addition the contract is off the books).

- A PPP contract is prone to induce cost-overruns as soon as it will be chosen for smoothing the budgetary investments.
- To be efficient a PPP contract must optimize public expenditures on an inter-temporal basis.
- Creative public accounting devoted to by-pass budgetary constraints or deferred payment strategies are the two bad reasons to prefer a PPP.
- In such cases, the additional costs induced by private funding and transaction costs will be not balanced.
- Are some off-balance sheet strategies or myopic trade-offs realistic ?
 - Less and less because of the improvements of budgeting and accounting rules.
 - Perhaps still : If 15 % of the French Public investment was realized trough off-the-books PPP, the “Maastricht” public debt would be reduced by 0,6 % of GNP.