Public-private partnerships and transport infrastructure

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Rationale for having PPPs

- The perceived higher levels of efficiency of the private sector
  - Private sector skills and capability
- Government keeps control over output quality and quantity

The trend towards PPPs in infrastructure

- Really took off during the last two decades.
- The PPP experience of most countries usually start with transportation infrastructure PPPs
- As the expected benefits (most commonly measured by VFM) begin to materialise, move gradually to other sectors.

- Majority of the projects in OECD countries:
  - Transportation infrastructure: airports, railroads, roads, bridges and tunnels.
- AECOM (2005): between 1985-2004, globally public-private financing in 2096 projects = nearly $887 billion.
- Of this total, $325 billion went to 656 transportation projects.

Table 2 – The capital value of UK PFI deals up to April 2007 - £ million

	Including London underground projects		Excluding London underground projects	
	Total capital value	% of total	Total capital value	% of total
Health	8 290	16	8 290	23
Transportation	22 496	42	4 902	14
Defence	5 644	11	5 644	16
Education	4 388	8	4 388	12
Others	7 203	13	7 203	20
Scotland, Wales and Northern Ireland	5 380	10	5 380	15
Total	**53404**	**100**	35 807	**100**

Source: HM Treasury 2007

- UK: substantial number of road and bridge projects, as well as light railways (PricewaterhouseCoopers 2005)
- South Korea: Recently accelerated PPP/PFI. Followed similar path to other OECD countries, starting with transportation infrastructure projects. (Park 2006)
- Spain: Focus very much on transportation. Private sector role set to be key element in 2005-2020 transportation plan of government
  - €214 billion over the fifteen year period, of which the private sector is said to contribute approximately 20% (PricewaterhouseCoopers 2005)

- France:
  - A 62-year contract with ALIS in 2001 to design, build, finance and operate a 125km motorway in the Northwest of France (total cost: €900 million). Motorway opened in October 2005. (OECD 2006)
  - Other French projects include part of TGV Rhine-Rhone line
- Greece: Airport projects
- Portugal: Vasco da Gama bridge and toll roads
- Other OECD countries with large transportation projects: Ireland and Italy

- European Investment Bank (2004) reports that transportation is the most prominent sector (followed by schools and hospitals)
- Regional breakdown shows that road and rail projects dominate in all continents except Middle East and North Africa (where water projects dominate) (AECOM 2005)

Reason for going the PPP route: Value-for-money

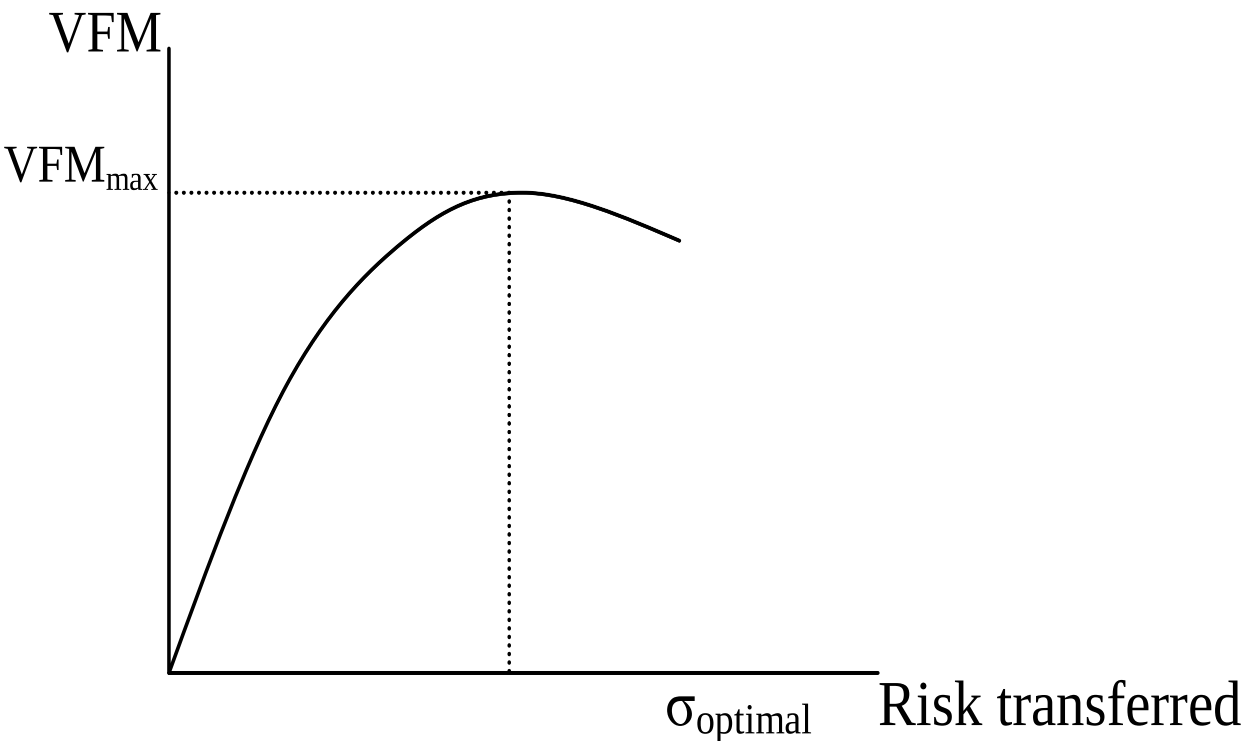
- UK National Audit Office (2003): 22% of UK PFI deals experienced cost overruns and 24% delays; compared to 73% and 70% of public sector projects
- Scottish Executive and CEPA study (HM Treasury 2006):
  - Authorities: 50% received good VFM, 28% reported satisfactory VFM.
- KPMG survey (2007) among private project managers in the UK:
  - 59% of respondents said performance of their projects in 2006 was very good, compared to 49% in 2005

VFM and risk transfer

- However, having private partner is not in itself sufficient: need transfer of risk
- Studies confirmed importance of risk transfer
- *Risk: The measurable probability that the actual outcome will deviate from the expected (or most likely) outcome*
- Private partner carries risk if its income and profit is linked to the extent that its actual performance complies or deviates from expected (and contractually agreed) performance

- Many factors that may affect its actual performance
- Some can be managed, others not
- Thus, need to distinguish between endogenous and exogenous risk
- Transfer endogenous risk: Company can influence the extent to which actual outcome deviates from expected outcome
- Transfer of risk in PPP does not imply the maximum transfer of risk to the private partner
- It means that the party best able to carry the risk, should do so.

Principles of Optimal Risk Transfer



- Confusion about what ‘best able to carry risk’ means
- Leiringer (2005): Is this the party with largest influence on the probability of an adverse occurrence happening, or the party that can best deal with the consequence after an adverse occurrence?
- Corner (2006): To best manage risk means to manage it at least cost
- If cost of preventing an adverse occurrence is less than cost of dealing with consequences of the adverse occurrence, then risk should be allocated to the party best able to influence the probability of occurrence

Measuring performance

- PSC to measure relative VFM of a PPP *prior* to contract
  - Helps to set a performance benchmark
  - However, not sufficient to ensure that actual performance will yield the expected VFM.
- PPP contract needs to state KPIs
- These have to be measured and monitored during the lifetime of the contract
- Private partner remuneration dependent on actual, measured performance relative to contractually agreed performance

- UK: monitoring in form of both formal and informal analysis to assess VFM
  - Formal analysis: Market-testing and benchmarking exercises for soft services as set out in the original contract
  - Informal analysis: Compare outturn data to original assessments.
- Government uses target benchmarks for Key Performance Indicators (KPIs).
- KPI targets often specified in terms of acceptable range of performance rather than single-point measures of performance.

- Victoria: VFM as part of the contract. Agreement on fixed price for the delivery of services that meet specified financial and non-financial KPIs.
- After conclusion of contract, focus not on whether government is getting better VFM than was agreed upon in contract.
- Rather, government assesses
  1. whether or not the contractor is actually delivering the VFM agreed upon in the contract and
  2. whether or not the financial and non-financial investment benefits of the project (identified as part of the business case / investment logic map in the pre-contract phase) are being delivered.
- The government of Victoria expects all KPIs to have specified target levels that contractors are expected to deliver on.

- France: Where performance is measurable, PPP contracts contain key performance benchmarks, i.e. target levels for performance benchmarks.
- Brazil: Contracts generally establish standards or target levels that must be followed by the private partner
- Hungary: Contracts also contain performance indicators

- PPP performance measured using basket of performance indicators. These indicators include:
  - **Efficiency measures** defined in terms of inputs and outputs (e.g. the provision of a health service at the fee (if government pays) / user charge (if client pays) agreed upon with government)
  - **Effectiveness measures** in terms of outcomes (e.g. quantity, level of coverage of area or population.)
  - **Service quality measures**
  - **Financial performance measures**
  - **Process and activity measures**

Table 4 – Performance indicators used by governments to measure PPP performance

	UK	Victoria	France	Brazil	Hungary
Efficiency measures defined in terms of inputs and outputs	✓	✓		✓	✓
Effectiveness measures in terms of outcomes	✓	✓	✓	✓	✓
Service quality measures	✓	✓	✓	✓	✓
Financial performance measures	✓	#			
Process and activity measures	✓	✓		✓	✓

Although contracts in Victoria do not typically include financial performance measures, the government does monitor the financial performance of a concessioneer and its principal contractors (private parties must submit their financial documents to government).

- The frequency with which governments measure the performance of private partners also differs between countries.
- UK: Performance is measured continuously.
- France: Private parties must report annually their results to government.
- Brazil: It depends on the indicator and the of type of project (highway, railroad, etc).
- Hungary: Private parties must report their results on a quarterly basis to government.

- Victoria:
  - Private party must prepare and deliver to government a regular periodic performance report (usually monthly).
  - The private party must (on an annual basis) also provide government with:
    - a copy of its business plan for the following year and
    - its budget for the next two financial years.
  - It must also provide unaudited financial documents on a six-monthly basis and
  - audited financial documents on an annual basis.
  - At any time up to six months after the end of the contract term, government may (at its own cost) require an independent audit of any financial statements or accounts provided.

- If in case where government pays a fee, the private partner falls short on a KPI, effective performance management requires that the fee is reduced to the extent to which they fall short.
- Threat of a fee reduction: Incentive to the private partner to ensure that its performance matches the target defined in terms of the performance indicator.
- Thus, fee reductions ensure the effective transfer of risk to the private partner.

- UK:
  - Increasingly punitive deductions are involved where KPIs are missed.
  - Small one-off miss may not incur a payment deduction
  - A continuous small miss or large one-off miss will have proportionally higher payment deductions.
- Victoria:
  - A similar regime in place, with a distinction between a 'major' and 'minor' default regime is considered appropriate.
- France:
  - Fee component linked to the operation may be affected if performance falls short;
  - Fee component relating to the investment is not necessarily affected.
- Brazil:
  - PPP Law requires that any payment by government must be linked to service provision.
  - If the private partner does not meet service level parameters, there can be deductions from the agreed fee.

Conclusion

- PPPs are able to harness the capacity of the private sector to produce VFM
- However, there are some prerequisites:
  - Sufficient risk transfer
  - Performance must be measured
  - Effective risk transfer implies that payments are affected if KPI are missed