Korea's Leading Think Tank

Fiscal Risk Management in Public-Private Partnerships

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Part-01

Why PPPs?

Why PPPs?

- Enhancement in Efficiency : Private sector management and innovation can lead to better value-for-money.
  - Advantages of bundling asset creation and service provision
  - Package deal of DBFO
  - Delivery on time and on budget

- Increased Resource : Private financing can support increased infrastructure investment without adding to government borrowing.

Why PPPs?

- However, better value-for-money for PPP could be accomplished when
  - A PPP delivers high-quality services at lower cost than government.
  - The cost of operations and maintenance depends on construction, so that minimizing total life-cycle costs requires careful, interdependent choices, and the private firm is better than the government at making these choices.

- Otherwise, public finance with separate construction and operation contracts may be as good as or better than PPP finance.

Why PPPs?

- To screen a project with better value-for-money, a value for money(VfM) test is well designed.
  - 1st stage : Decision to Invest
  - 2nd stage : Decision to Implement by PFI rather than PSC
  - 3rd stage : Present the best implementation practice

Part - 02 Fiscal Concerns for PPPs

Fiscal Concerns for PPPs

- PPPs are likely to be chosen over traditional public investment and government supply of services to move public investment off budget and debt off the government balance sheet.
- However, the government still bears considerable risk, and faces potentially large fiscal costs.
- Proper accounting and reporting of the fiscal implications of PPPs is essential to prevent their misuse, and to make increased efficiency.

Part - 03 | Accounting and Reporting

Accounting and Reporting

- There is not yet a general fiscal accounting and reporting standard for PPPs.

- **United Kingdom** : Lease and contract for services are treated differently.
  - Lease is treated according to the general lease accounting rule.
  - Contract for service is not necessarily defined as assets or liabilities.
  - When lease and contract for services are not separable, the one who bears more property-related risks is defined as the owner of the asset.

- **Australia** : A PPP contract is classified as a financial lease if
  - The lease term spans more than 75% of the economic life of the asset;
  - The present value of the minimum lease payment exceeds the 95% of the fair value of leased property; and
  - The contract includes a clause that gives the government an option to purchase the property at the cost lower than the fair value.

Accounting and Reporting

- **Eurostat** :
  - Assets involved in PPP should be defined as non-government assets if the private partner takes the construction risk and at least one of the availability risks and the demand risks.
  - Availability risk : Private partner failing to provide the agreed volume and service
  - Demand risk : Changes in service demand caused by the business cycle, market trends, competition or technological obsolescence

Accounting and Reporting

- **Korea** :
  - Argument 1: The present value of government payments should be counted into liabilities, and the government should get approval of PPP contracts from the national assembly in advance.
  - Argument 2: The government obligation arising from PPP contract, which is a service contract, does not constitute a liability and does not need an approval from the National Assembly.
  - The MOSF sets the investment ceiling for BTL projects of the fiscal year and reports it to the National Assembly with the annual budget.

Accounting and Reporting

- **IMF(2005)** : An Alternative Approach
  - An alternative accounting and reporting approach would be to record PPP assets on private sector balance sheets, consistent with legal ownership.
  - The fiscal costs and risks associated with PPPs would then be assessed, quantified, and disclosed.
  - It is unclear what approach will be taken in formulating a general accounting and reporting standard for PPPs.
  - In the meantime, PPP costs and risks should be taken into account when assessing debt sustainability.

Box 1 : Disclosure Requirements for PPPs (IMF, 2005)

For each PPP Project or group of similar projects, information should be provided on :

- Future payment obligations for the following periods : 1~5 years; 5~10 years; 10~20 years; over 20 years.
- Significant terms of the project(s) that may affect the amount, timing, and certainty of future cash flows, valued to the extent feasible (e.g., contingent liabilities, the period of a concession, the basis upon which renegotiation is determined).
- The nature and extent of rights to use specified assets (e.g. quantity, time period, or amount as appropriate), obligations to provide or rights to expect provision of services, arrangements to receive specified assets at the end of the concession period, and renewal and termination options.
- Whether PPP assets (or any part thereof) are recognized as assets on the government's balance sheet, and how the project affects the reported fiscal balance and public debt.
- Whether PPP assets (or any part thereof) are recognized as assets either on the balance sheet of any special purpose vehicle, or on the private partner's balance sheet.
- Any preferential financing for PPPs provided through government on-lending or via public financial institutions.
- Future expected or contingent government revenue, such as lease receipts, revenue or profit-sharing arrangements, or concession fees.
- Any project financing or off-balance sheet project support (giving rise to contingent liabilities) provided by entities owned or controlled by government.

Part - 04 Government Guarantees and Contingent Liabilities

Government Guarantees and Contingent Liabilities

- The key to assessing the fiscal risk posed by guarantees is valuation, in the sense of estimating likely spending on called guarantees or pricing the guarantee as a financial instrument.

- Minimum Revenue Guarantee(MRG) in Korea and Chile
  - PPPs inherently carry high risks for the investor due to uncertainties regarding demand forecasting. The government is operating a risk-sharing system as a means of inducing private investment.
  - Under the MRG provision, the government provides partial coverage for yearly operating revenue that falls below a specified limit of the estimated revenue stipulated in the agreement.
  - When yearly operating revenue exceeds the estimated revenue by a specified limit, the excess revenue is redeemed.

Government Guarantees and Contingent Liabilities

<Table > Minimum Revenue Guarantee System in Korea

	1998 ~ April 2003	May 2003 ~ 2005	Revised in 2006
Guarantee period	• 20~30 years	• 15 years	• 10 years
MRG coverage	• 80~90% of estimated operating revenue	• 80~90% during initial 5 years, 10% yearly reduction after 5 years	• Abolition in unsolicited project • Solicited projects; 75% during initial 5 years, 65% during following 5 years
Conditions	No guarantee when realized revenue falls below 50% of estimation		

Government Guarantees and Contingent Liabilities

- Valuing Guarantees
  - A number of analytical techniques are available to value guarantees.
  - Monte Carlo simulation analysis / Black-Scholes options pricing formula.

- Accounting for Guarantees
  - Under cash accounting, guarantees are recorded in the fiscal accounts when a covered contingency occurs and a cash payment is made.
  - Under accrual accounting, it is necessary to judge whether a guarantee should be treated as a liability.
  - Guarantees and other contingent liabilities are formally recognized as a liability by creating a provision. Creating a provision is often used to refer to the practice of setting funds aside to meet a specific payment when it falls due.

- Information on guarantees should be disclosed in budget documents and government financial statements.

Part - 05 | Limit the Size of PPP Programs

Limit the Size of PPP Programs

- It might be prudent under certain circumstances to limit the size of a PPP program.

- **United Kingdom**
  - Sustainable investment rule : public sector net debt as a proportion of GDP will be held over the economic cycle at a stable and prudent level. Other things being equal, net debt will be maintained below 40 percent of GDP over the economic cycle.
  - Annual payments under PFI unitary charges make up a very small proportion - under 2 percent – of departments' total annual resource budgets.

Government Guarantees and Contingent Liabilities

- **Brazil**
  - Overall expenditure annual limit with PPP of 1% of the government net current revenues in the fiscal year that the contract will be signed and in the 10 next years (PPP Law).

- **Korea**
  - To set up a PPP payment allowance rule or ceiling as a fraction of total budget has recently been discussed. The government may effectively manage the expected payment for signed PPP contracts under the Medium-Term Expenditure Framework (MTEF).
  - Following the UK practice, the total annual government payment on PPP project should be less than 2% of the total government expenditure.
  - The current forecast on PPP project suggests that the figure will reach up to 1.9%.

Part - 06 | Unitary Payment vs. Separate Payment

Unitary Payment versus Separate Payment

- Lease payment in service contract : Construction cost + Operation cost
- Penalty is charged on the basis of service performance.
  - Whether to reduce the payment for operation only or reduce the payment that covers both construction and operation cost.
- Unitary payment makes the lease fee for construction at risk.
  - Difficulties in inducing capital from the financial market because of increased financial uncertainty.
- United Kingdom / Australia : Unitary payment system
  - Penalty affects payment for both construction and operation cost. There is no maximum or minimum in calculating the penalty.
- Japan / Korea : Separate payment system.
  - Penalty only affects operation cost. In general, there is maximum ceiling in calculating the penalty.
  - In late 2007, partially unitary payment system was introduced in Korea.

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Thank you

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