Global Roundtable
on Value for Money

Value for Money Test in Korea

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CONTENTS

Part-01 | Overview

VfM Test Introduced in 2005

- **VfM test was introduced in 2005 in response to rising concern about inefficient management of PPP projects**
- **Evolution of the PPP Act**
  - Aug. 1994, PPP Act legislated
  - Jan. 1999, PPP Act amended to promote PPP market
    - Risk Sharing (Minimum Revenue Guarantee)
    - Awarding bonus points in bidding to initial proposers.
  - Jan. 2005, PPP Act amended to strengthen fiscal discipline in PPP
    - Alignment of PPP project management with government projects through establishment of PIMAC (Public and Private Infrastructure Investment Management Center)
    - VfM (Value for Money) test introduced
    - Promotion of competition
    - Sharing the re-financing gains by 50:50.
    - Performance based government payment

VfM Test Is a Legal Requirement

- **The PPP Act, PPP Enforcement Decrees and Annual PPP Plan stipulate:**
  - The competent authority should conduct a VfM test before it designate a PPP project.
  - For an unsolicited proposal, the competent authority is to utilize VfM report as basic information to decide whether to proceed with the PPP project or not.
  - All the unsolicited proposals are subject to VfM tests conducted by PIMAC

- **VfM test is to seek**
  - The best use of available resources; and
  - Efficient and effective public service delivery

PPP Project Initiation & VfM Test

- **Both the government and private companies can initiate a PPP project.**
- **Solicited Projects**
  - A competent authority identifies a PPP project and invites private parties to invest in it.
  - Competent authorities develop a potential PPP project considering related plans and demands for the facility. They then assess available procurement options to determine whether the PPP is more efficient procurement than the traditional procurement.
- **Unsolicited Projects**
  - For an unsolicited project, a private company (project proponent) submits a proposal, and then the competent authority examines the feasibility, and value for money of the proposal before they designates it as a PPP project.

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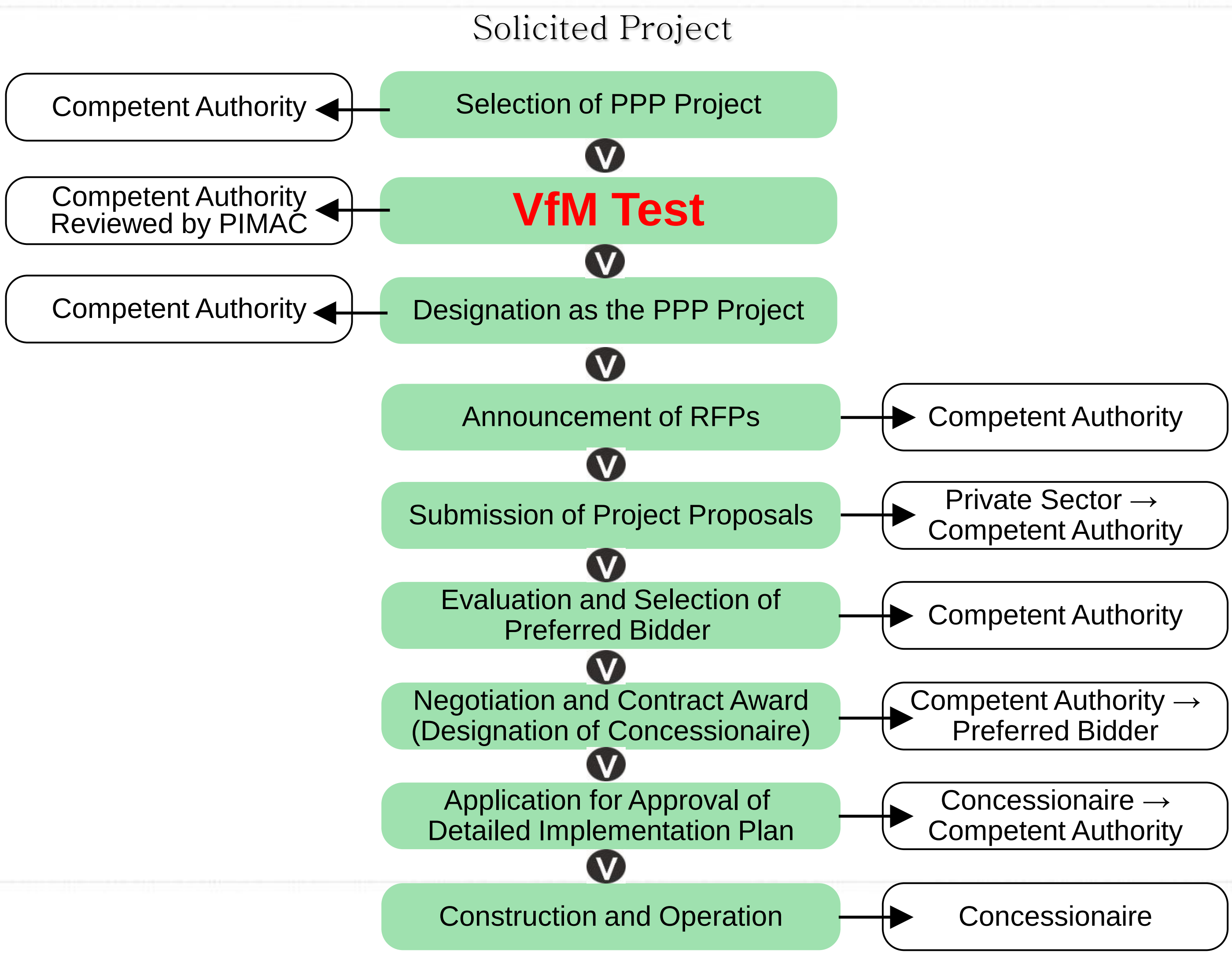
Procurement Steps of a Solicited Project



Procurement Steps of an Unsolicited Project

Unsolicited Project

Submission of Project Proposal	Private Sector → Competent Authority
VfM Test	PIMAC
Notification of Project Implementation	Competent Authority → Proponent
Announcement of RFPs	Competent Authority
Submission of Project Proposals	Private Sector → Competent Authority
Evaluation and Selection of Preferred Bidder	Competent Authority
Negotiation and Contract Award (Designation of Concessionaire)	Competent Authority → Preferred Bidder
Application for Approval of Detailed Implementation Plan	Concessionaire → Competent Authority
Construction and Operation	Concessionaire

Implementation of VfM Test by PIMAC

- **VfM test is carried out in accordance with 'Guidelines for implementation of VfM Test/Review of Proposal for unsolicited BTO projects'.**

- **Multi-disciplinary VfM team**
  - KDI (Project Manager)
  - External experts: Demand forecast (university professor), Cost estimation (engineer), financial analysis (CPA)

- **It takes about six months to complete a VfM test**
  - Five interim review meetings are held

- **Objectivity, consistency, and independence as well as professional expertise are important pillars of VfM tests.**

Number of VfM Tests Conducted (Unsolicited)

(unit: number)

Year	Total	Road	Rail	Environ-ment	Port	Culture, Sports &Tourism	Others	No. of Projects VfM>0
2005	15	6	5	3			1	5
2006	20	6	3	9			2	15
2007	18	7	3	5		1	2	10
2008	35	21	3	5		3	3	19
2009	29	5	6	14		3	1	14
2010	18	5	1	9	1	1	1	4
2011	11	2		6		3		2
2012	4		1	1	1		1	3
Total	150	52	22	52	2	11	11	72

Results of VfM Tests

(unit: number)

Year	TOTAL	B/C>0		B/C<0		
		VfM>0	VfM<0	VfM>0	VfM<0	VfM N.A.
2005	15	2	9	3	0	1
2006	20	8	2	7	3	0
2007	18	8	2	2	5	1
2008	35	12	10	7	3	3
2009	29	6	2	8	10	3
2010	18	3	6	1	3	5
2011	11	2	2	0	2	5
2012	4	3	0	0	0	1
Total	150	44	33	28	26	19

Value for Money through PPP

Year	No. of Projects, VfM>0	Amount of VfM achieved (in bill Won)
2005	5	36.8
2006	15	520.6
2007	10	442.0
2008	19	737.2
2009	14	742.4
2010	4	92.0
2011	2	13.3
2012	3	59.4
Total	72	2,643.7

Part-02

Scope and Implementation Process of VfM Test

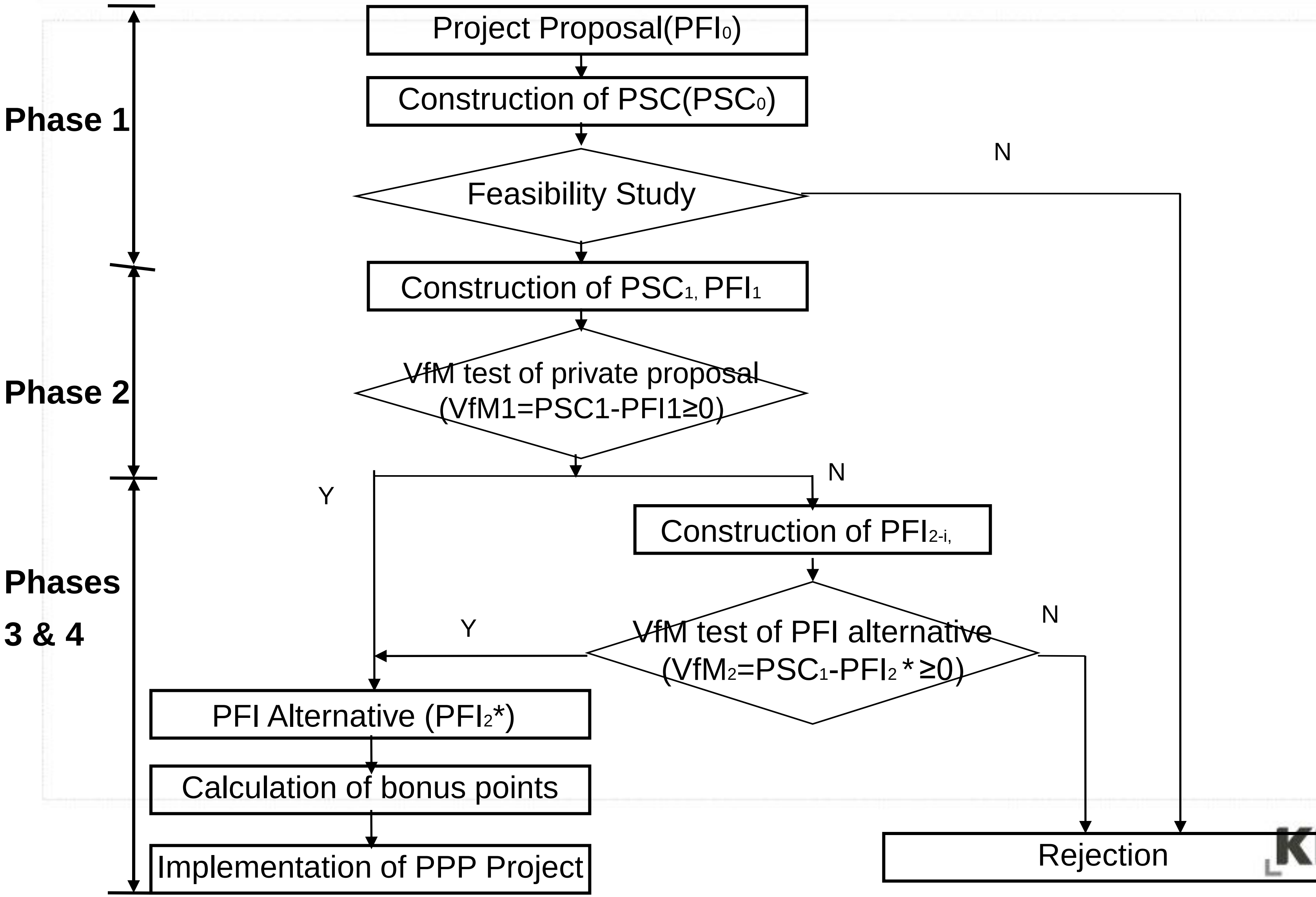
Scope of a VfM Test

- **Phase 1: Feasibility study (Decision to Invest)**
  - Cost- benefit analysis
  - Policy analysis
- **Phase 2: VfM Assessment (Decision on PFI)**
  - The government payment of PSC (Public Sector Comparator) is compared against that of PFI (Private Finance Initiative) to assess whether the PFI achieves VfM.
- **Phase 3: Formulation of PFI alternatives**
  - Based on the results of phase 2, an appropriate PFI alternatives are formulated
  - The government can set details of the PPP project including construction subsidy and user fee, etc before it announces a RFP.
- **Phase 4: Award bonus points to the initial proponent (Unsolicited)**
  - Bonus points (10% max.) awarded to the initial proponent are estimated based on the results of VfM tests and the quality of the proposal.

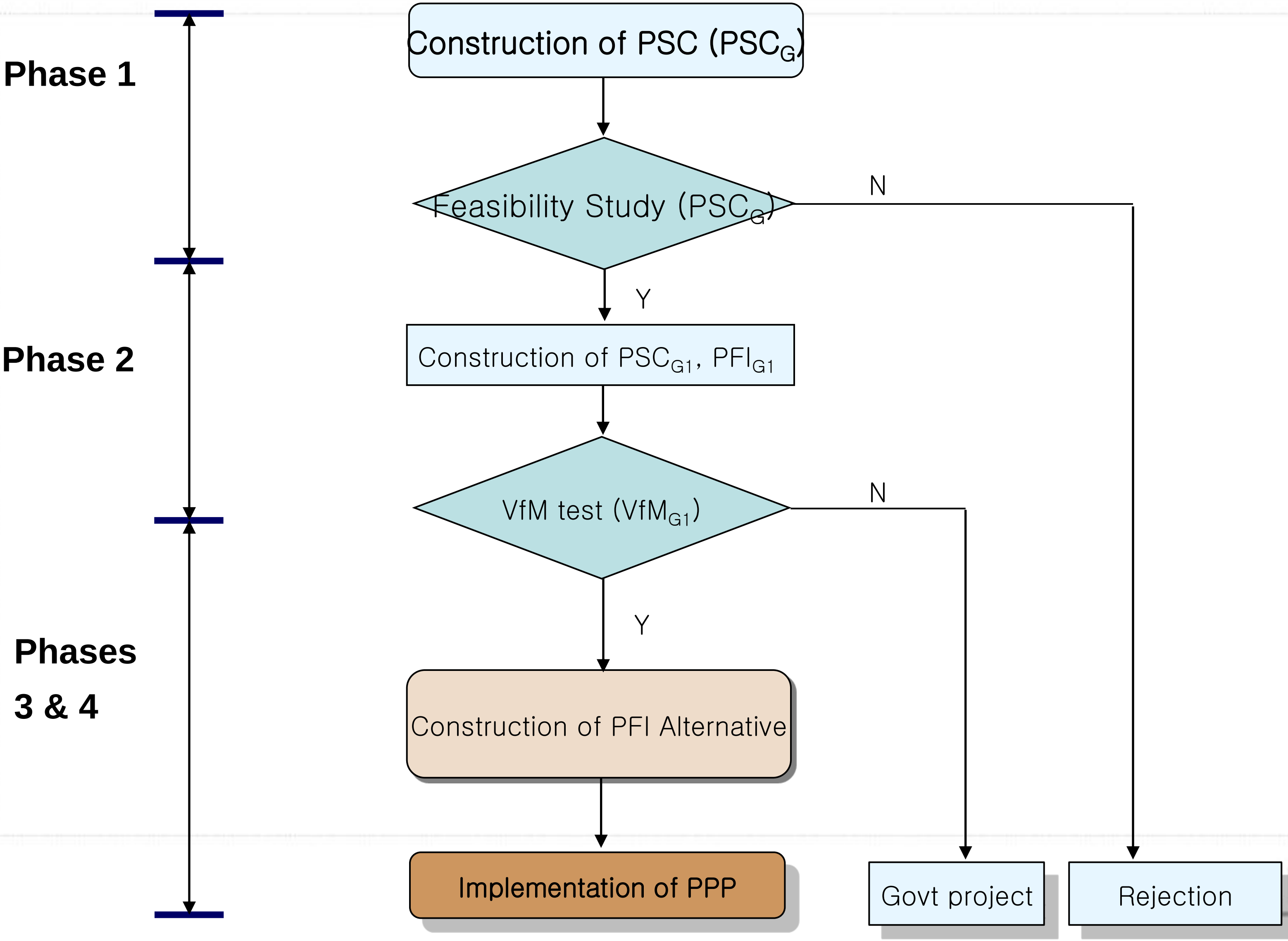
Setting Comparators for VfM Assessment

	Unsolicited	Solicited
Private Finance Initiate	PFI_p (based on proposal)	PFI_G (research team)
Public Sector Comparator	PSC_p (estimated by research team)	PSC_G (research team)

Flowchart of a VfM Test (Unsolicited)



Flowchart of a VfM Test (Solicited)



Phase 1: Feasibility Study

- FS on PSC is conducted
  - Basic assumption is that the same level of service will be provided by both PSC and PFI options
- Cost-benefit analysis is used to assess the economic feasibility of a project
  - CBA is conducted in accordance with guidelines developed for PFS (Preliminary Feasibility Study) on government projects
- Policy analyses are carried out (if necessary)
  - Relevant policy issues are assessed: balanced regional development; consistency with higher level plan and policy directions; and environment impact assessment, etc.
- The overall feasibility of a project is assessed based on economic and policy analyses

Phase 2: VfM Assessment (1)

- **Government spending of the PSC is compared against government payment requested by PFI proposal to assess if PPP procurement improves the value of tax payer's money**

- **Features of VfM assessment**
  - It assists government making decision on appropriate procurement options: conventional public procurement vs. PPP procurement.
  - It provides a quantitative VfM level and a justification for the decision on procurement option.
  - It provides a reliable benchmark and specifies project scope.
  - It encourages project appraiser to consider risks early in the project lifecycle, and address risk transfer options in the bidding process.
  - It reduces negotiation time and increases the efficiency of bidding costs as the scope of private sector bids are more aligned with the public sector needs, and risk transfer profiles.

Phase 2: VfM Assessment (2)

- **Cost items adjusted for competitive neutrality between PSC and PFI options**
  - Revenue from user fee is deducted from government payment of PSC
  - Revenue from supplementary project is taken into account in consideration of both options
  - VAT and other tax payments are adjusted
  - Same amount and payment schedule of land acquisition is applied to both options
  - Administrative costs incurred by governments for project management are excluded from both options
  - Insurance fee are estimated in different ways, reflecting the difference in market valuation of project risk by project owners
  - Additional government support if requested by private company is included in both options based on estimated spending

Phase 2: VfM Assessment (3)

Item		PSC		PFI	
Capital costs	Project costs	Construction cost	(1) Cost of survey (2) Design cost (3) Construction cost	Construction cost	(1) Cost of survey (2) Design cost (3) Construction cost
		Land acquisition cost	(4) Compensation for land and other possessions	Land acquisition cost	(4) Compensation for land and other possessions
		Supplementary cost	(5) Cost for feasibility study (6) Cost for transportation impact assessment (7) Cost for environmental impact assessment (8) Cost for supervision (9) Insurance costs	**Supplementary** cost	(5) Cost for feasibility study (6) Cost for transportation impact assessment (7) Cost for environmental impact assessment (8) Cost for supervision (9) Insurance costs
		(10) Cost for operation equipment		(10) Cost for operation equipment	
		(11) Taxes and fees		**(11) Taxes and fees**	
		(12) Business setup costs		(12) Business setup costs	
	Financing costs	(13) Financing costs		(13) Financing costs	
operating costs		(14) Operation costs (15) Maintenance costs (16) Management and supervision costs		(14) Operation costs (15) Maintenance costs (16) Management and supervision costs	
① Base cost born by the government		**(Capital costs + operating costs) - operating revenue**		**Construction subsidy + land acquisition cost +additional government support**	
② Risk adjustment costs		**Cost and time overrun**			
Total government payment		**① + ②**			

Phase 2: VfM Assessment (4)

- **Present value of government payments for PSC and PFI options are estimated (discount rate = 5.5%) and VfM(%) is calculated**

$$VfM\,(\%) = \frac{GP(PSC) - GP(PFI)}{GP(PSC)}$$

- **GP(PSC) = Capital costs + operating costs – Revenue**

- **GP(PFI) = Construction subsidy + Compensation costs + Additional government support**
  - GP(PFI) is the government subsidy requested by the private party in the project proposal

Phase 2: VfM Assessment (5)

❑ Qualitative VfM assessment

- Allocation of risks (construction, operation risks, etc.)
- Improvement of service qualities
- And other ripple effects (positive externalities): Promote the financial market through the adoption of an advanced financial technique, etc.
    - ➢ Quantification of project risk transfer is not satisfactory and those qualitative effects are not incorporated into overall VfM assessment so far

Phase 3: Formulation of PFI Alternatives

- **Financial analysis and sensitivity analysis are carried out to assess the profitability (bankability) of a project**

- **Based on the VfM assessment and financial analyses, PFI alternatives including the following components, are formulated:**
  - Total project costs
  - User fee
  - IRR (Internal Rate of Return)
  - Total government payments
  - Other components related to the implementation of the project

- **The Competent Authority chooses the most appropriate PFI option and invites third parties to tendering**
  - If it is impossible to formulate a PFI alternative that delivers VfM at a reasonable level of IRR, then the PFI option is rejected

Phase 4: Bonus Points for Initial Proponent

- The VfM test team makes decision on bonus points (10% max) to be awarded to the initial proponents based on the VfM(%) and quality of the proposal

- Alternative ways to reward the initial proposal considered to promote competition
  - Swiss Challenge: the original proponent has right to counter-match any superior offer.
  - Best and Final Offer: the winning bidder compensates the original proponent for project development costs.

Use of VfM Test Results

- The VfM test sets the bottom line to meet the condition of 'VfM≥0' in selecting preferred bidder and following phases of a project.
- VfM reports are used as an important reference when tender evaluation committee conducts their work.
- VfM reports provide useful information to prompt negotiation process.
- VfM reports are used as reference when ex-post VfM tests are conducted.

Key Elements of VfM

- VfM is often a comparative assessment
  - Requires a benchmark cost : PSC (Public Sector Comparator)
- PSC is a benchmarking and evaluation tool : a key tool
  - Benchmarks the cost of government service delivery
  - Evaluates whether VfM is delivered from bids
  - PSC is calculated based on a reference project, and includes cash flow over the life of the project
- VfM is a generic fiscal management principle applicable to government procurement in general, not limited to PPP.
  - There is a discussion in Korea to introduce market testing method as a reform initiative in construction & operation of high speed railway which used to be monopolized by a SOE (KORAIL).
- Innovation, asset utilization, risk sharing, competition, and service integration are main key drivers of VfM
  - Presence of VfM justifies PPP.

Part-03 Some Issues and Concluding

How robust and useful is the VfM test?

- VfM test can be understood as a project management process rather than a highly stat-based rigorous analysis.

- It is at best a hypothetical analysis on average reference project based on many (unrealistic) assumptions.
  - E.g. VfM amount is sensitive to discount rate which does not always reflect realistic market conditions.

- However, VfM is still useful and maybe necessary tools
  - It helps government officials in charge to set their position in project implementation either PPP or GP. They should understand PSC before they start PPPs.
  - Sometimes the rhetoric of number is useful to meet political challenges against PPP

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All or Limited Projects with Government Subsidy?

- No reason to confine VfM application to projects requiring public contribution.
  - The concept of VfM is a generic principle applicable to fiscal management in general. The concept of VfM can be expanded to public sector procurement as a reform initiative.
  - If private parties do not require government subsidy, they may enjoy excessive profit from those PPPs. Based on PSC, the government can formulate a bidding scheme in a way private parties bid for their maximum contribution as well as for minimum government subsidy.

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Announce PSC before the tendering?

- It depends on its impact on competition.
  - What is important is to formulate the tender evaluation scheme 1) to achieve VfM and 2) to promote effective price competition among bidders.
  - In Korea, sometimes bottom line of price bidding is set to achieve VfM. In practice, the results of VfM (PSC) is released to the potential bidders either in direct or indirect way.

PPP Promotion vs. Fiscal Discipline

- The PPP is justified when it not only expands fiscal space but only increases the value of tax payer's money.

- Korea's experience of PPP demonstrates the importance of keeping balanced between market promotion and fiscal discipline in the practice of PPP policy.

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THANK YOU!

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