

High Powered Expert Committee

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# Public-Private Partnerships in Korea

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Part-01

# Evolution of PPP System



# History of PPP Act

- ❑ Aug. 1994, PPP Act legislated. 'Act on Promotion of Private Investment into Social Overhead Capital'
  - o In the early 1990s, the 'infrastructure gap' was regarded as a bottleneck of economic growth. To cope with high logistics costs undermining international competitiveness
  - o Transport Facility Special Account was established; and PPP procurement scheme was introduced.
- ❑ Jan. 1999, PPP Act amended to promote PPP market
  - o No strong financial sector to introduce project financing
  - o Losing momentum in the wake of the Asian financial crisis in 1997-8
  - o Encouraging private parties to develop projects by awarding bonus points in bidding to initial proposers.
  - o Risk Sharing (Minimum Revenue Guarantee)
- ❑ Jan. 2005, PPP Act amended. 'The Act on Private Investment on Infrastructure'
  - o Introduction of BTL Scheme and expansion of facility types to include social infrastructure
  - o Strengthened **fiscal discipline**
    - Alignment of PPP management with public investment management through establishment of PIMAC (Public and Private Infrastructure Investment Management Center)
    - VfM (Value for Money) test introduced
    - Promotion of competition
    - Performance based government payment
    - Sharing the benefits of re-financing by 50:50.

# Regulatory Framework of PPP System

- ❑ Hierarchy of legal and administrative framework of PPP System
  - ✓ PPP Act
    - ✓ Enforcement Decrees on PPP Act
      - ✓ Annual PPP Plan
        - ✓ PPP Guidelines
  
- ❑ The PPP Act is a special act that precedes other acts
  - o SPCs (Special Purpose Companies) may be exempted from strict regulations of national property management
  - o Granting a SPC (Special Purpose Company) special rights such as expropriating land from landlords.
  
- ❑ The PPP Act directs the MOSF (Ministry of Strategy and Finance) and PIMAC to issue an **Annual PPP Plan** that provides detailed and practical guidelines for implementing PPP projects.
  
- ❑ PIMAC has developed **PPP Guidelines** to deliver transparency and objectivity in PPP project implementation
  - o Guidelines for PPP project management
  - o Guidelines to conduct VfM (Value for Money) test
  - o Templates for RFP (Request for Proposals), output specification, tender evaluation, concession agreements

# Government Support by PPP Act (1)

- ❑ Financial support
  - Construction subsidy to set tariff at a reasonable level
    - The land compensation is usually borne by government
    - Maximum construction subsidy as rule of thumb is 30% for roads, and 40% for metro rails
    - For a profitable project, private parties bid with donation (or, negative subsidy).
  - Tax incentives: exemption from acquisition, registration taxes, and VAT on construction services.
- ❑ Land acquisition by SPC
  - Granting SPC land expropriation rights
  - National or public property in designated areas may be sold to the concessionaire
  - Concessionaires are allowed to use national or public property without charge or at lower price
- ❑ Government-financed 'Infrastructure Credit Guarantee Fund' provides credit guarantees for PPP project finance to enhance the timely payment of debt service.
  - guarantee for facility loans (during construction), guarantee for working capital loans (during operation), guarantee for bridge loans, guarantee for refinancing, guarantee for infrastructure bond

# Government Support (2)

## Minimum Revenue Guarantee (MRG)

- o A fraction of projected annual revenues may be guaranteed when the actual operating revenue falls considerably short of a projected revenue prescribed in the contract
- o Not applicable to unsolicited projects and projects that earn less than 50% of projected revenue

### <Profile of Minimum Revenue Guarantee>

	Jan 1999		May 2003	January 2006	
	Solicited	Unsolicited		Solicited	Unsolicited
Period	Whole operating period		15 Years	10 Years	Abolished
Guarantee Level (Max)	90%	80%	First 5 Years 90% Next 5 Years 80% Last 5 Years 70%	First 5 Years 75% Next 5 Years 65%	
Condition	None		No MRG applied if Actual Revenue < 50% of Forecasted Revenue	Same as Left	

- Buyout options in case of force majeure (natural disaster or political turmoil)

Part-02

# Status Quo of PPP investment



# PPP Facility Types and Procurement Schemes

## □ Facility types

- o Strict positive list system as stipulated by the PPP Act
  - Privilege of government support should be extended with prior approval of the national assembly
- o 45 facilities in 15 categories are eligible for PPP
- o Social as well as economic infrastructure can be procured through PPP

## □ Procurement schemes

- o BTO (Build-Transfer-Operate)
  - Economic infrastructure: roads, seaports, and railway projects, etc
  - High risk, high return
- o BTL (Build-Transfer-Lease) (Similar with Private Finance Initiative of UK)
  - An SPC **builds** a facility, **transfers** ownership to a public entity and gets operational rights in return, and **leases** the property to the public entity to get return on investment.
  - Social infrastructure: schools, public housing, hospitals, museums, and military housing, etc
  - Government payments (Lease fee + operating costs)
  - Low risk, low return
- o BOT (Build-Operate-Transfer), and BOO (Build-Own-Operate)

# Distribution of PPP Projects by Sector as of Dec. 2007

## Distribution of BTO Projects

(unit: number (Trill. KRW))

Phase		Road	Rail	Port	Env't	Others	Total
National Projects*	Solicited	10	7	12	1	10	40(27.8)
	Unsolicited	21	3	7	6	2	39(27.5)
Competent Authority Projects	Solicited	9	-	-	17	27	53(2.0)
	Unsolicited	4	-	-	28	6	38(2.6)
<b>Total</b>		<b>44</b>	<b>10</b>	<b>19</b>	<b>52</b>	<b>45</b>	<b>170(59.9)</b>

\* Large-scale projects whose total costs are 200bill. or more are monitored by the PPP Review Committee chaired by Minister of Strategy and Finance.

## Distribution of BTL Projects

(unit: number, Trill. KRW)

	Schools	Univ. Dorms	Vocational Colleges	Sewage systems	Military quarters	Cultural Facilities	Medicare and Welfares	Railroads	Science Museums	Total
Number	136	14	3	61	37	24	9	1	3	288
Amount	5.3	0.9	0.1	4.3	2.9	0.6	0.1	2.3	0.07	16.5

# Trend of Private Investment on PPP

## Trends of Public & Private Investment on Infrastructure

(unit: trillion KRW, %)

	'98	'00	'01	'02	'03	'04	'05	'06	'07
Private Investment (A)	0.5	1.0	0.6	1.2	1.2	1.7	2.6	3.0	3.0
Gov't Investment (B)	12.7	15.2	16.0	16.0	18.4	17.4	18.3	18.4	18.4
A / B (%)	3.9	6.6	3.4	7.5	6.6	9.8	14.2	16.3	16.3

A : Public works completed

B : Annual budget in transportation and regional development sector, *The Five-year National Fiscal Management Plan*

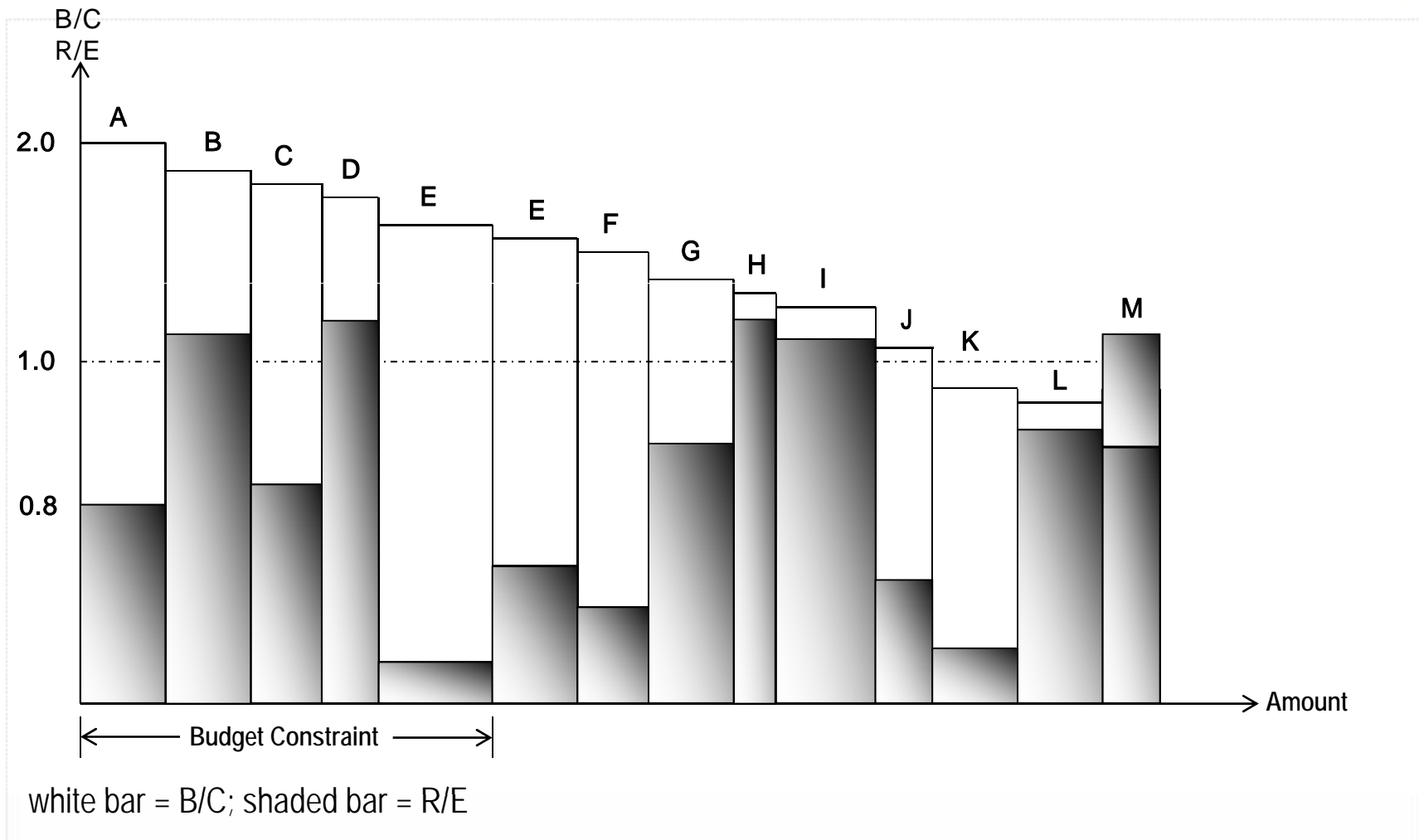
Part-03 | Benefits from and Challenges to PPP



# Benefits from PPP

- ❑ Fiscal Flexibility
  - Faced with budget constraint due to increase in welfare expenditure and slow economic growth, government can take PPP as a financial option to fill the infrastructure gap timely.
- ❑ Efficiency Gain
  - Increase 'Value for Money' by utilizing creativity and efficiency of private sector
  - Minimizing LCC (Life Cycle Costs) by integrating DBFO (Design-Build-Financing-Operation) into a single contract
  - Little possibility of cost and time overrun (Optimism Bias)
  - Competition between public and private parties (e.g. national express way, & public housing)
- ❑ Quality Service
  - Private operators are more responsive to preference of consumers
  - A fraction of government payment is subtracted as a penalty when operators do not meet pre-specified output quality
- ❑ An ex post evaluation of PPP
  - Few cases of time overrun reported
  - Consumer satisfaction survey shows that end-users are more satisfied with service quality of PPP than that of conventional procurement

# Fiscal Flexibility



By implementing B and D via PPP, government can allocate saved resources to E and F projects.

# PPP in Local Governments

## □ Fiscal Independence Index (FII) as of 2008

	Higher Tier Govt			Lower Tier Govt		
	Seoul	Metro	Province	City	County	District
Average	85.7	60.5	34.8	40.7	17.2	37.1

FII = Self-raised revenue / Total revenue \* 100

## □ Total revenue of all local governments as of 2008 (Trill. KRW)

Total	Self-raised			Inter-governmental transfer			
	Tax	Non-tax	Bonds	Grant	Subsidy		
125.0	77.1	43.5	30.1	3.5	47.8	24.1	23.7

## □ PPP in local government context in Korea

- Tool to resolve present fiscal constraint
- PPP is often regarded as a fiscal reform initiative (or new public management) by electorates because of its innovative (new) features
  - Some elected governors / mayors are very active in developing PPP projects
  - Not too many local public officials like PPP projects due to lack of technical skills for PPP

## Case (1): Seoul Metro Line No. 9

### □ Project scope

- 25.5km, 25 stations; Link a domestic airport to a urban center
- BTO, 30 year operation; 3 year construction (start operation in May)
- MRG for 15 years: 1-5 (90%), 6-10(80%), 11-15 (70%)

### □ Unique Features

- Share of construction works
  - Lower part by SMG (1.9 trill. KRW) : tunneling and bedding through turnkey contract
  - Upper part by the project company (0.9 trill. KRW) : building track, electronic facility, operation system, and purchasing trains
- ★ The budget size of SMG (2009) : 21.3 trill. KRW; FII = 85.7%
- This project is proposed as PPP to gain efficiency in operation period
- Critique on higher tariff (fare) than existing lines

## Case (2): Gaun Sewage Treatment Facility in Munkyoung City

### □ Project scope

- 2,000 ton/day, 20.74km collection pipeline
- BTO, 20 year operation
- MRG for 15 years: 1-5 (90%), 6-10(80%), 11-15 (70%)
- Demand risk borne by the project company without MRG
- Private investment of 15.7 bill KRW is to be recovered by tariff of 1,000/ton paid by the Munkyoung City.
  - The city collects tariffs from end users according to a municipal code set by the city council.

### □ Subsidy from central government

- About 70% of construction subsidy from the central government as stipulated by a mid-term national environmental facility plan
  - Subsidy rate is correlated with fiscal dependency of a local government
- Fiscal status of the Munkyoung city (2008): Budget size = 276.1 bill. KRW; FII = 17.3%

# Challenges to PPP: Are we better off through PPP?

- ❑ Government support, in particular, MRG scheme
- ❑ Transferring fiscal burden to next generation (Inter-generational equity)
  - BTL : Lease Contract; and BTO : Reducing construction cost by utilizing future toll revenue
  - Following the UK practice, the Five-year National Fiscal Management Plan (2007-2011) set a limit to the size of PPP program
  - The total annual government payment on PPP project should be less than 2% of the total government expenditure
- ❑ Selection Criteria of PPP projects
  - The order of profitability does not necessarily go with priority of public interest
  - The criteria include economic feasibility ( $B/C > 1$ ), Value for Money ( $PSC > PFI$ ), and bankability.
- ❑ Promotion of competition
  - Competition is the source of creativity and efficiency of private sector
  - Reimbursement of bidding costs to qualified losers
- ❑ Capacity building for public officials to manage PPP projects
  - Long-term period of PPP contract (20-50 years), while time horizon of desk officer is 1-2 years on average
  - Limited knowledge covering DBFO procedures, in particular on financing technique
  - Establishment of PPP units and/or utilizing external experts