

# Global Financial Crisis and Fiscal Implications of PPPs in Korea

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PIMAC, KDI

- What kinds of policies are effective for stimulating consumption and/or **investment**?
- What are the basic principles and experiences to stimulate consumption and/or **investment**?
- **How to select projects** in a quick but effective way? How to speed-up implementation?
- Large parts of the fiscal stimulus package were invested in infrastructure development in China, **how to better manage infrastructure investment** and improve its effectiveness?
- Is there crowding out of **private investment**?

# C O N T E N T S



1. Motivation and Background
2. Public Investment and PPPs in Korea
3. Global Crisis and SOC Investment in Korea
4. Fiscal Risk Management for PPPs in Korea

Part-01

# Motivation and Background

KDI

# 1. Motivation and Background

*“ASEM member countries, including Korea, are now showing signs that recession is bottoming out, in response to massive financial and fiscal stimulus policies. And yet, **uncertainties still remain in the global economy, while many governments in Asia and Europe are likely to have less financial and fiscal resources to spend in critical areas for sustained growth.**”*

Young-Geol Lee (Deputy Minister of Strategy and Finance, Korea)

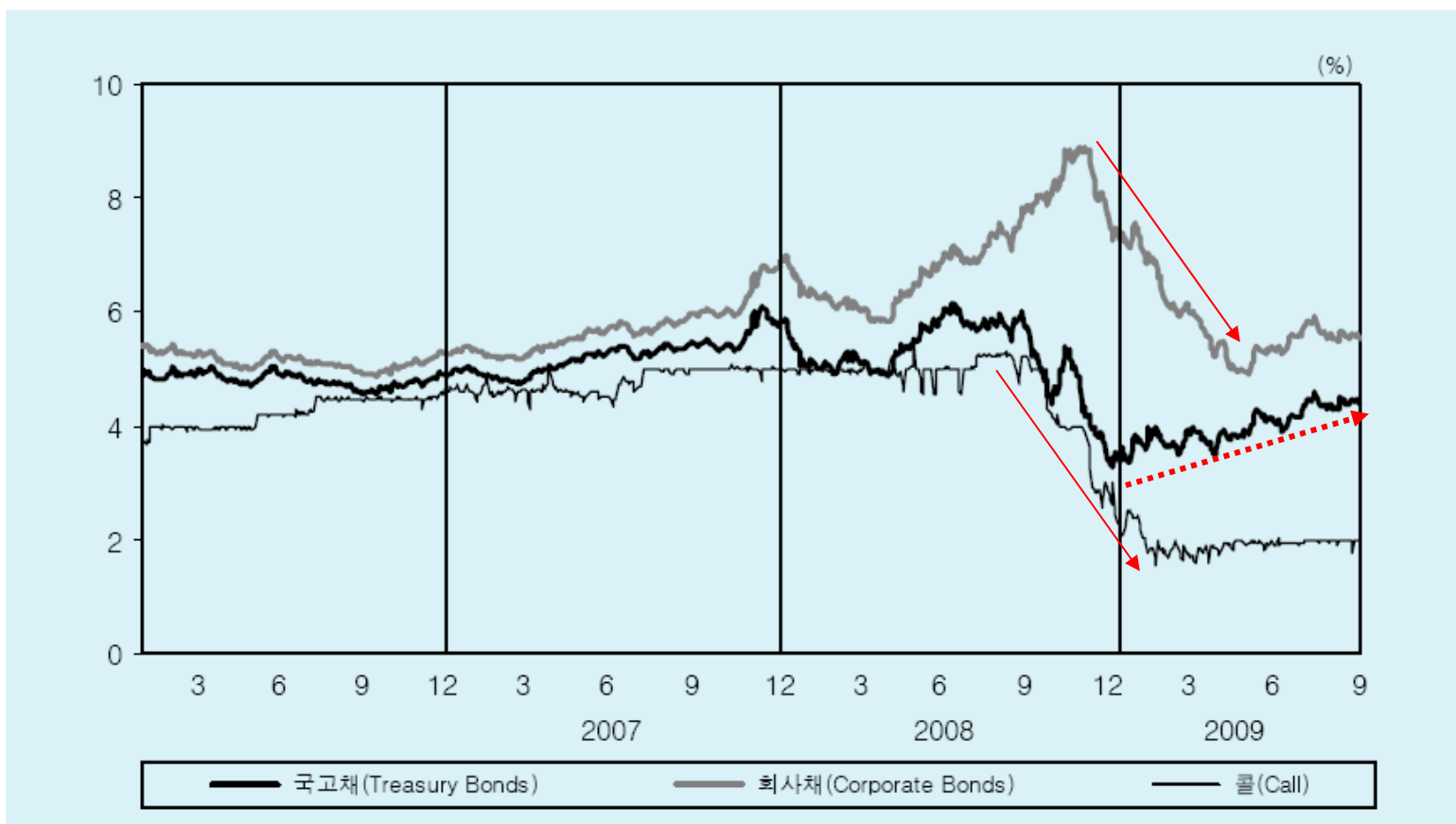
# 1. Motivation and Background

*“Looking further ahead, it is clear that **the exceptional degree of policy stimulus afforded by current monetary and fiscal policy stances is resulting in a substantial increase in government indebtedness.** Concerns in this regard are already putting upward pressure on bond yields in many countries. Keeping such pressures in check will hinge on establishing credibility for a return to **fiscal sustainability.**”*

Mario Amano (Deputy Secretary General, OECD)

# 1. Motivation and Background

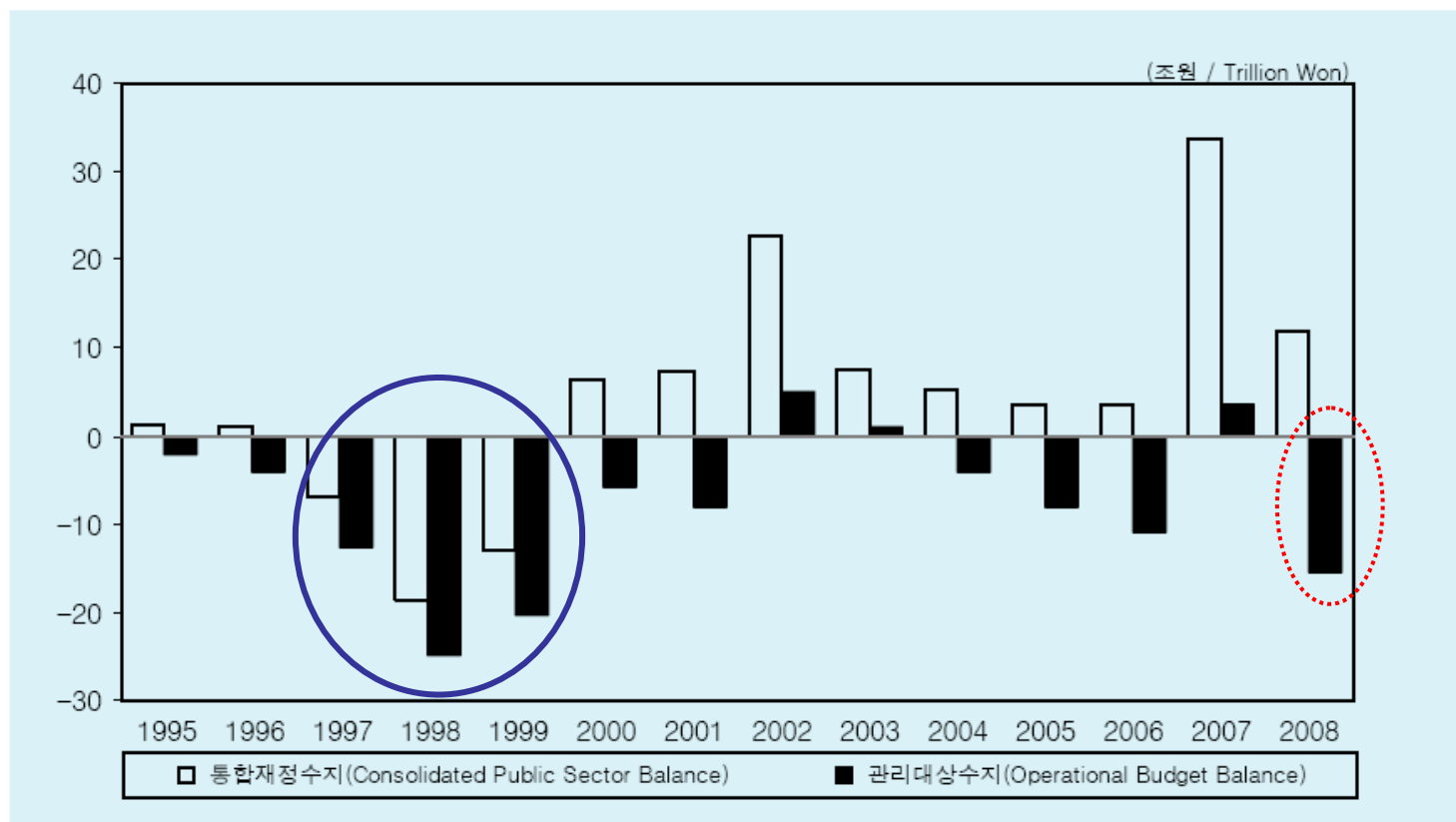
국고채 및 회사채수익률, 콜금리  
Treasury & Corporate Bond Yields, Call Rate



# 1. Motivation and Background

## 통합재정수지

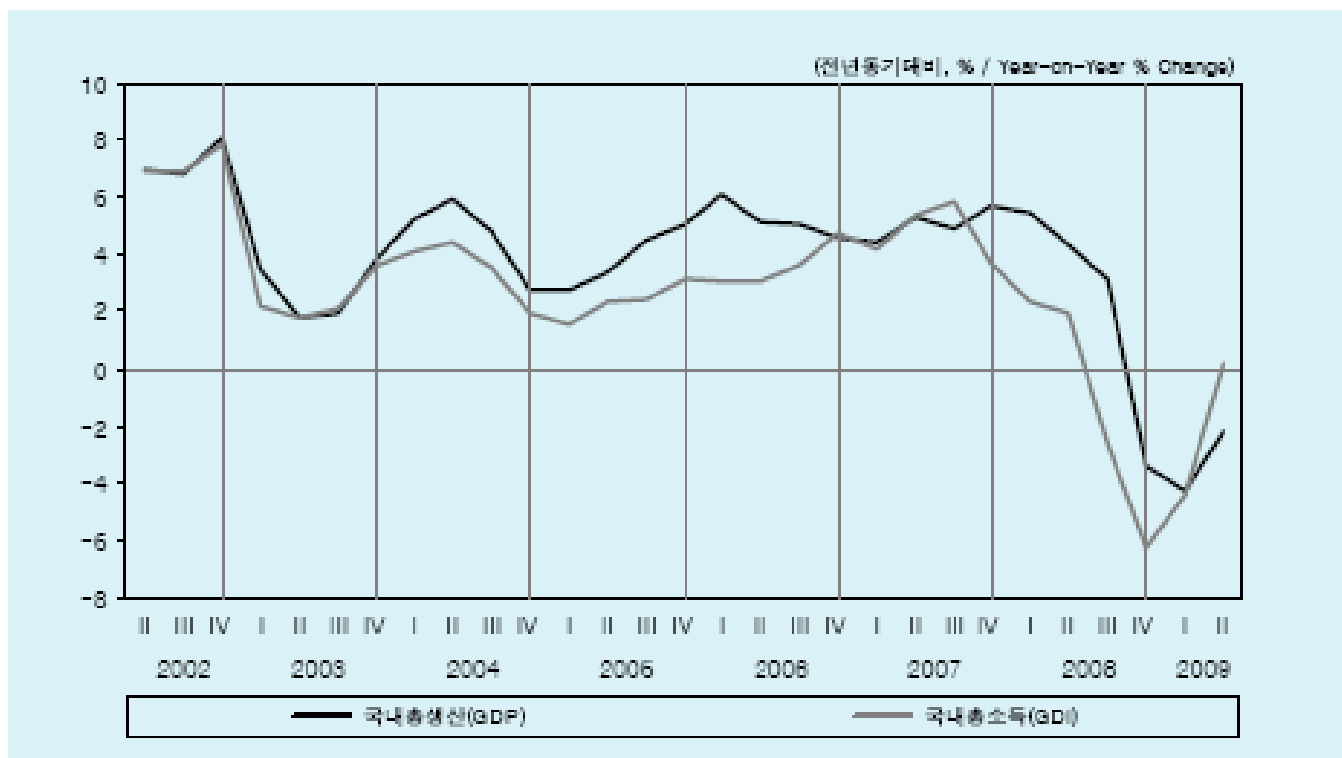
Balance of Consolidated Public Sector Finance



# 1. Motivation and Background

## 국내총생산 및 국내총소득의 성장률

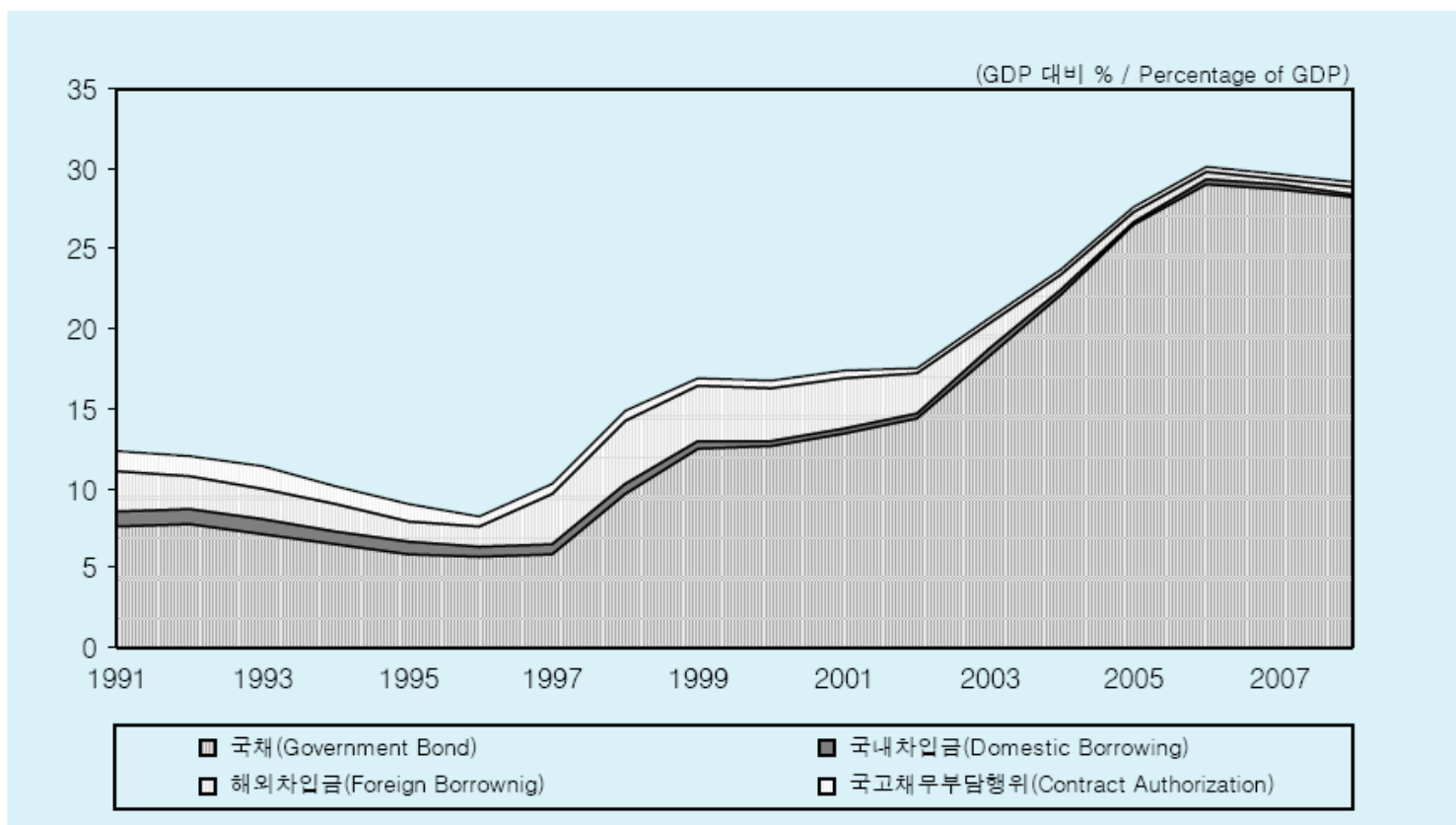
Growth Rates of GDP and GDI



# 1. Motivation and Background

## 중앙정부 채무

Central Government Debt



**Part-02** | **Public Investment and  
PPPs in Korea**

**KDI**

## 2. Public Investment and PPPs in Korea

### Public & Private Infrastructure Investment Trends

Unit: Trill. KRW, %

	'98	'00	'01	'02	'03	'04	'05	'06	'07	'08
<b>Private Investment (A)</b>	0.5	1.0	0.6	1.2	1.2	1.7	2.6	3.0	3.0	3.4
<b>Gov't Investment (B)</b>	12.7	15.2	16.0	16.0	18.4	17.4	18.3	18.4	18.4	19.6
<b>A / B (%)</b>	3.9	6.6	3.4	7.5	6.6	9.8	14.2	16.3	16.3	17.3

A : Public works completed

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

## 2. Public Investment and PPPs in Korea

### New Initiatives of Public Investment Management

1994

TPCM introduced

1999

PFS introduced

RSF introduced

2003

RSF guidelines developed

2006

RSF strengthened

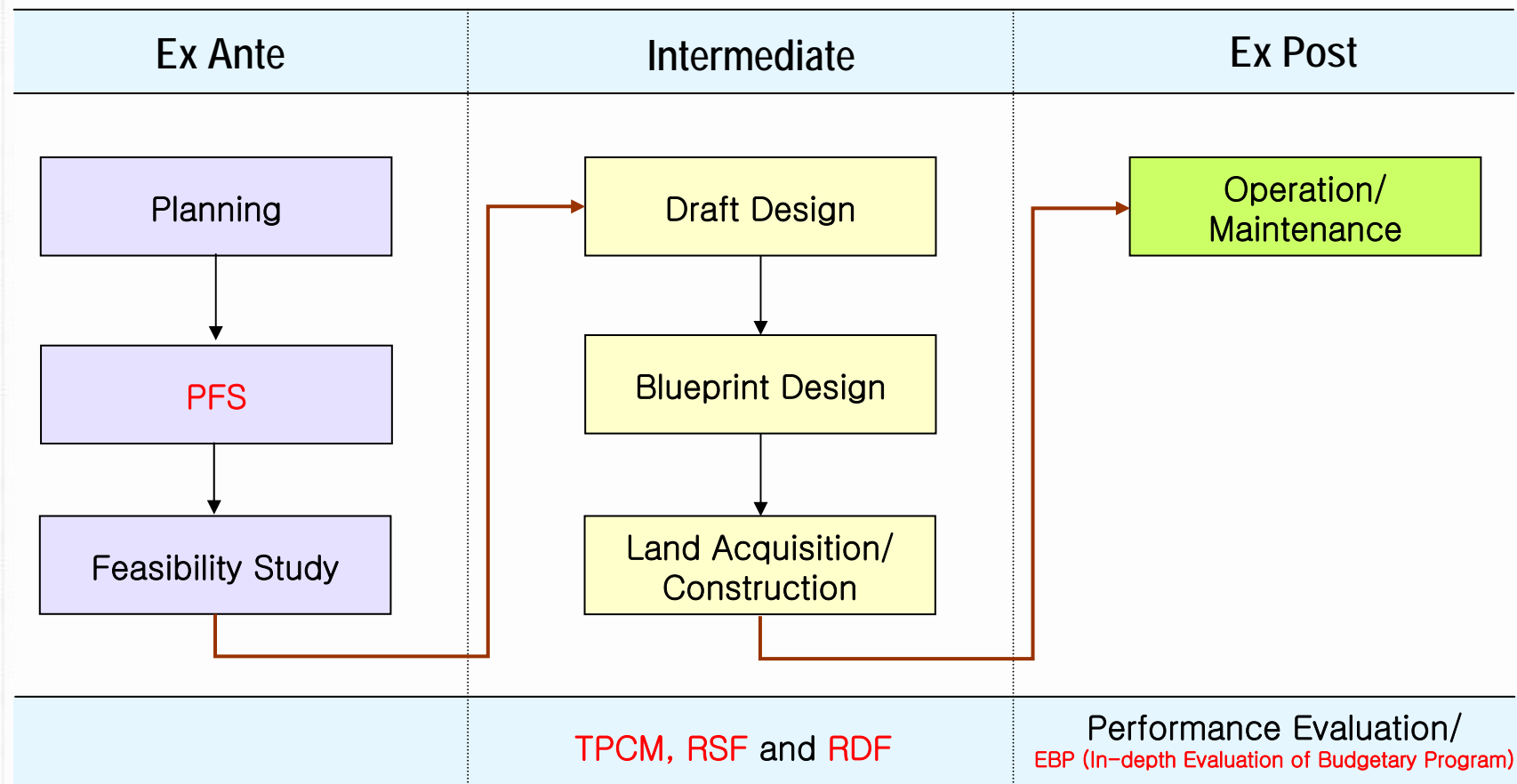
RDF introduced

The **National Finance Act** legislated

- ✓ TPCM (Total Project Cost Management)
- ✓ PFS (Preliminary Feasibility Study)
- ✓ RSF (Re-assessment Study of Feasibility)
- ✓ RDF (Re-assessment of Demand Forecast)

## 2. Public Investment and PPPs in Korea

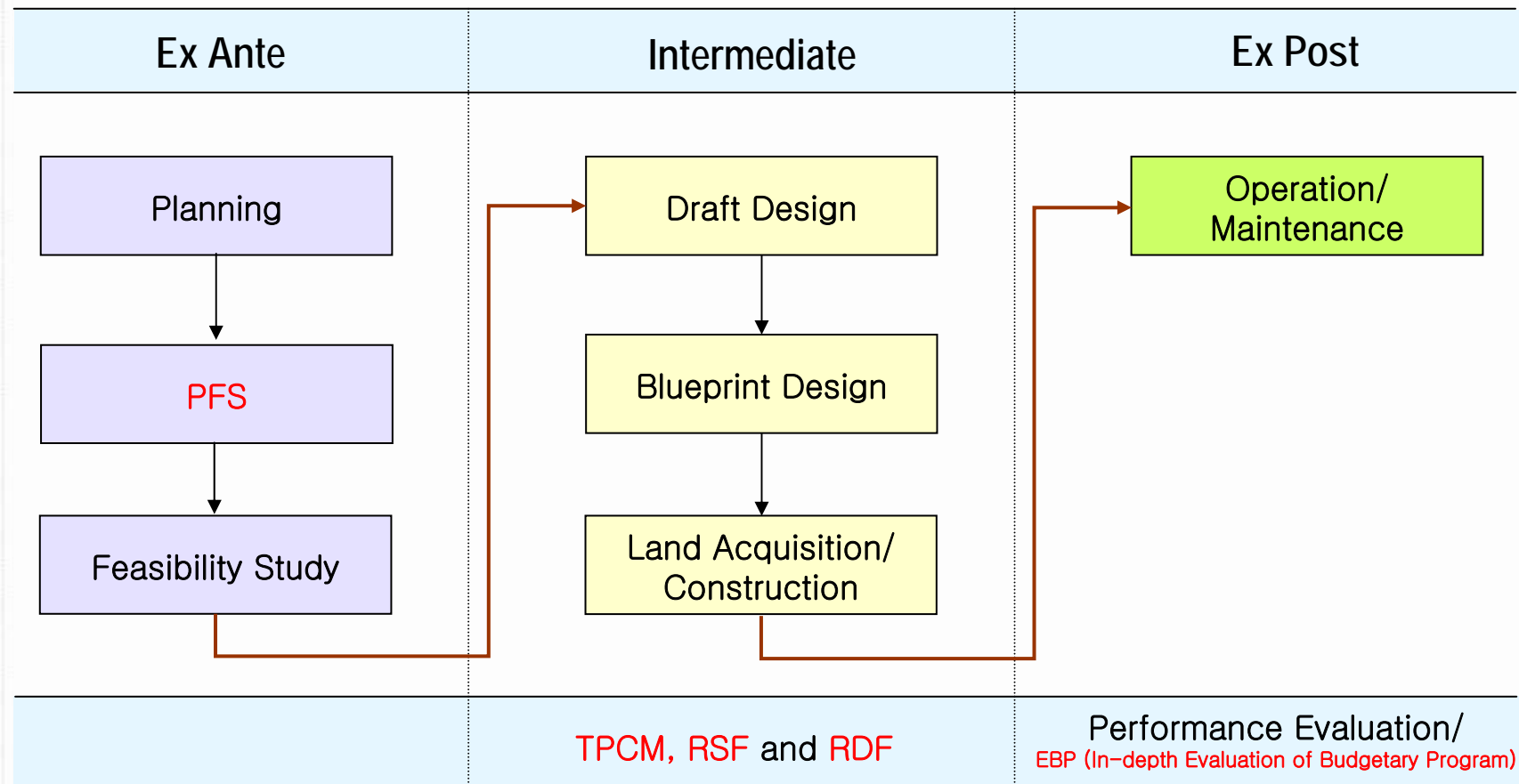
### Implementation Process of Public Investment



\* Evaluation works in RED characters are owned by budget ministry (i.e., Ministry of Strategy and Finance).

## 2. Public Investment and PPPs in Korea

### Implementation Process of Public Investment



\* Evaluation works in RED characters are owned by budget ministry (i.e., Ministry of Strategy and Finance).

## 2. Public Investment and PPPs in Korea

### What is a Preliminary Feasibility Study (PFS)?

- Short and brief evaluation of a project to produce information for budgetary decision
  - Owned by the Ministry of Strategy and Finance (MOSF)
  - Managed by PIMAC
- Meaning of “PRELIMINARY” is two-folded:
  - Provisional; and
  - Preceding a (detailed) feasibility study
- The **National Finance Act of 2006** provides the legal framework of PFS.

## 2. Public Investment and PPPs in Korea

### Coverage of PFS?

- All new large-scale projects with total costs amounting to 50 billion Won (\$50 million USD) or more are subject to PFS.
  - Before the NF Act, PFS was centered on infrastructure projects.
  - PFS has expanded to non-infrastructure (e.g. R&D, welfare) programs.
- Local government and PPP (Public-Private Partnership) projects are also subject to PFS if central government subsidy exceeds 30 billion Won.
- The following types of projects are exempted from PFS:
  - Typical building projects such as government offices and correctional institutions
  - Legally required facilities such as sewage and waste treatment facility
  - Rehabilitating projects and restoration from natural disaster
  - Military facilities and projects related with national security

## 2. Public Investment and PPPs in Korea

### Number of PFS by Sector (1999~2008)

Unit: number

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Sum
Road	11	11	20	9	11	24	11	27	30	12	166
Railway	2	7	14	8	7	13	6	10	4	2	73
Seaport	1	5	1	2	3	1	2	5	1	4	25
Culture & tourism	3	2	5	2	5	2	1	5	1	3	29
Water resources	1	1	0	5	5	3	3	1	1	2	22
Others	1	4	1	4	2	12	7	4	8	15	58
Sum	19	30	41	30	33	55	30	52	45	38	373

## 2. Public Investment and PPPs in Korea

### Proportion of Feasible Projects by Sector (1999~2008)

Unit: %, number

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Total Projects (A)	Feasible Projects (B)	(B)/(A)
Road	45.5	27.3	30.0	33.3	72.7	87.5	36.4	63.0	63.3	75.0	166	95	57.2
Railway	50.0	57.1	35.7	75.0	71.4	53.8	83.3	40.0	25.0	100.0	73	40	54.8
Seaport	100.0	80.0	100.0	50.0	100.0	100.0	100.0	40.0	100.0	100.0	25	19	76.0
Culture & Tourism	100.0	0.0	40.0	0.0	0.0	100.0	100.0	40.0	0.0	100.0	29	13	44.8
Water Resources	100.0	100.0	0.0	0.0	60.0	66.7	66.7	100.0	100.0	50.0	22	12	54.5
Others	100.0	75.0	0.07	75.0	50.0	66.7	71.4	50.0	50.0	46.7	58	35	60.3
Average	63.2	50.0	34.1	43.3	60.6	74.5	63.3	53.8	57.8	68.4	373	214	57.4

- The allocation of 86.7 trillion Won for 157 non-feasible projects (i.e., 49% of 177 trillion Won for total 373 projects) had been prevented through PFS.

## 2. Public Investment and PPPs in Korea

### Public-Private Partnerships?

- 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.

## 2. Public Investment and PPPs in Korea

- PPP was first introduced in Korea with the enactment of the *Promotion of Private Capital into Social Overhead Capital Investment Act* in 1994.
- The Act was amended to the *Act on Private Participation in Infrastructure* (PPI Act) in 1998, after the onset of Asian financial Crisis in 1997.
- In the amendment of the PPI Act in 2005, a service contract type (BTL) of private participation was introduced in addition to the existing user fee type (BTO).

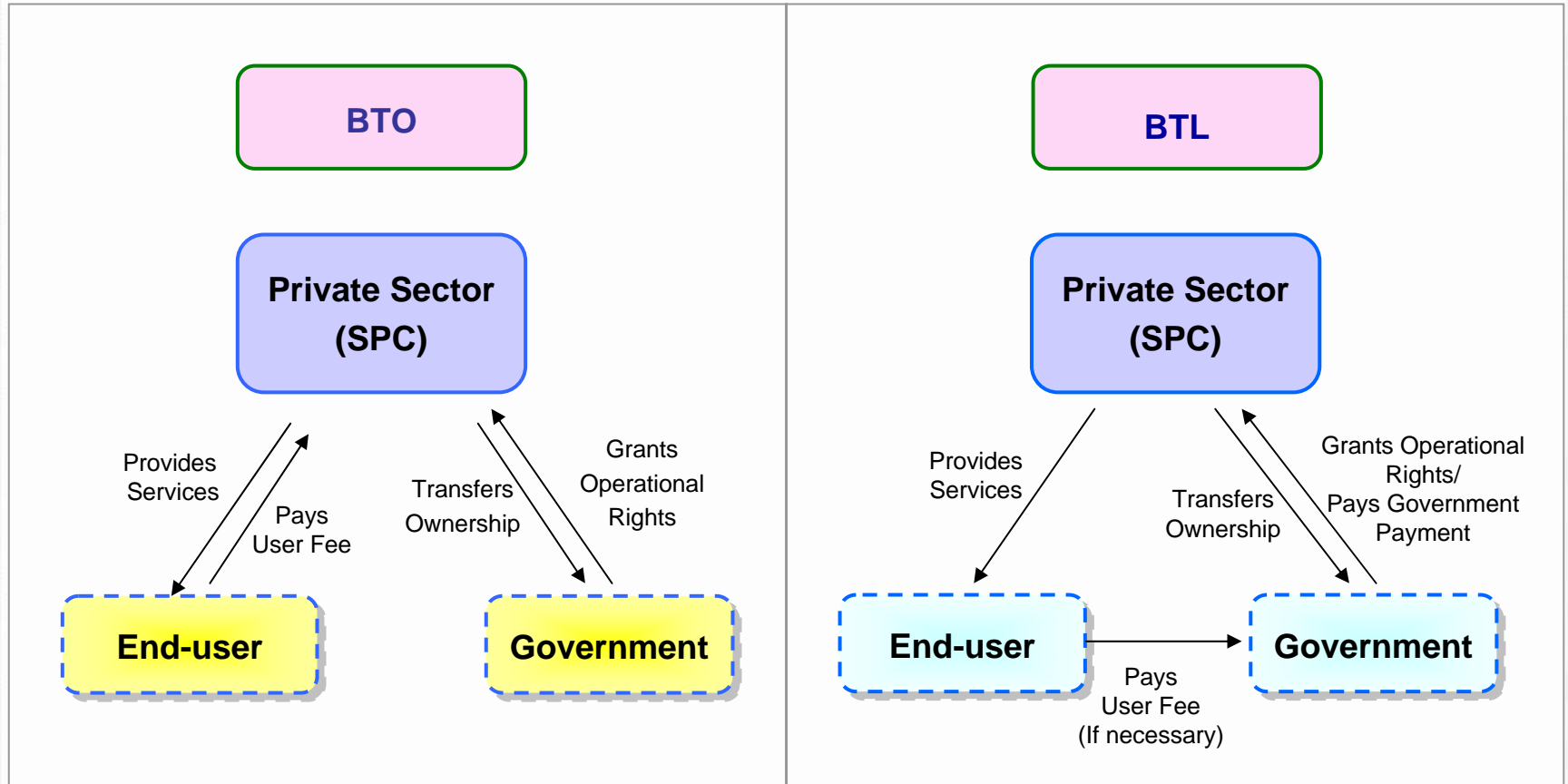
## 2. Public Investment and PPPs in Korea

### Procurement Schemes

- BTO (Build-Transfer-Operate) Scheme
  - Both solicited and unsolicited projects are eligible
  - Roads, seaports, and railway projects, etc
  - User-fees, Minimum Revenue Guarantee (MRG) for solicited projects
- BTL (Build-Transfer-Lease) Scheme
  - Only solicited projects are eligible
  - School, dormitory, military housing, etc
  - Government payments (Lease rent +operating costs)
  - Low risk-low return

## 2. Public Investment and PPPs in Korea

### Structure



## 2. Public Investment and PPPs in Korea

	BTO	BTL
Investment Recovery	User fees Construction subsidy MRG*	Lease payment (Fixed Revenue)
Project risk	Demand risk on concessionaire	Little demand risk on concessionaire
Return	High risk, high return	Low risk, low return
Eligibility	Both solicited and unsolicited projects	Solicited projects only

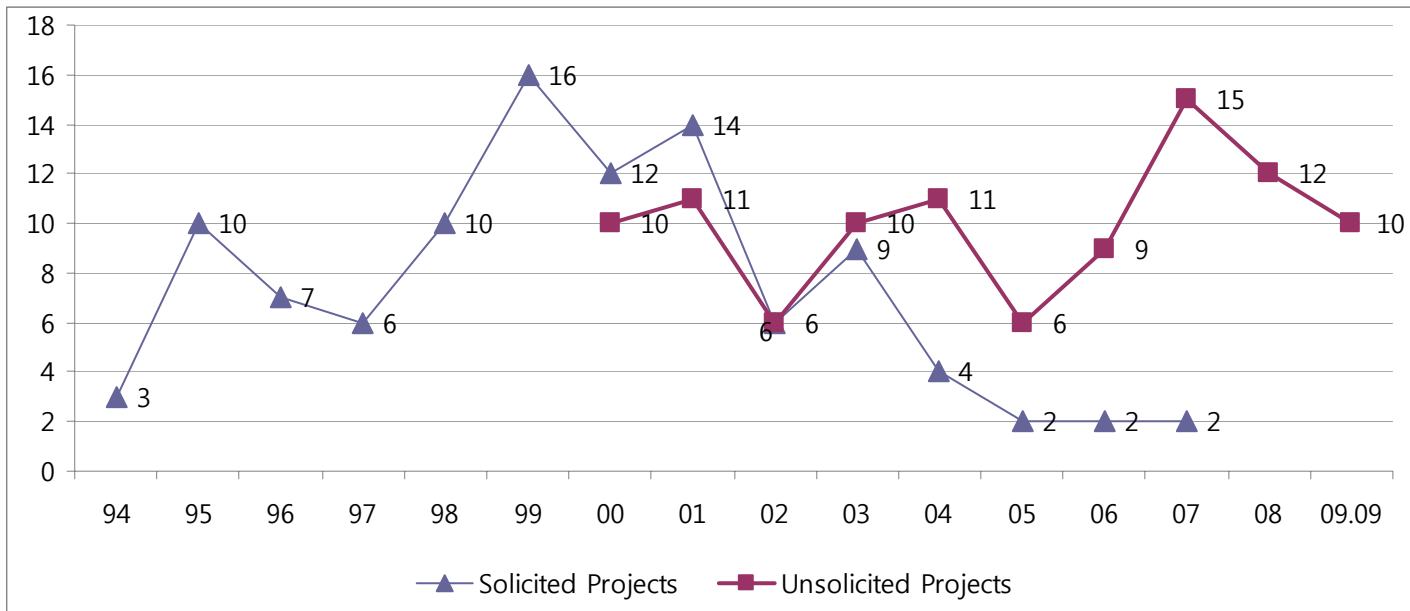
\* Abolished in 2009

### Project Initiation

- Solicited Projects
  - A competent authority identifies a project for private investment and announces a RFP
- Unsolicited Projects
  - A private company (project proponent) submits a project proposal, and then a competent authority examines and designates it as a PPP project

## 2. Public Investment and PPPs in Korea

### Number of Solicited and Unsolicited BTO projects



## 2. Public Investment and PPPs in Korea

### PPP Projects by Procurement Scheme (As of Sep. 2009)

Unit: number (Trill. KRW)

Step \ Type	BTO		BTL	Total
	National Projects***	Competent Authority Projects		
Under Operation	29 (18.4)	81 (3.8)	142 (5.3)	252 (27.5)
Under Construction	32 (22.1)	12 (0.5)	92 (6.5)	136 (29.1)
Preparing to construct	10 (8.9)	9 (0.9)	8 (0.4)	27 (10.2)
Under Negotiation	15 (9.5)	9 (1.3)	79 (3.8)*	103 (14.6)
Under Review	-	6 (0.7)	45 (3.7)*	51 (4.4)
Subtotal	86 (58.8)	117 (7.3)	<b>366</b>	<b>569</b>
<b>Total</b>	<b>203 (66.1)</b>		<b>(19.7)</b>	<b>(85.8)</b>

\*:as of Dec.2007

\*\*\* Large-scale projects whose total costs are 200bill. or more are monitored by the PPP Review Committee organized by the MOSF

## 2. Public Investment and PPPs in Korea

### BTO Projects by Sector and Type (As of Sep. 2009)

Unit: number (Trill. KRW)

Phase		Road	Rail	Port	Env't	Others	Total
National Projects	Solicited	12	7	12	1	10	42 (28.4)
	Unsolicited	26	4	5	9	2	46 (30.8)
Competent Authority Projects	Solicited	8	-	-	23	30	61 (2.0)
	Unsolicited	15	-	-	31	8	54 (4.9)
<b>Total</b>		<b>61</b>	<b>11</b>	<b>17</b>	<b>64</b>	<b>50</b>	<b>203 (66.1)</b>

## 2. Public Investment and PPPs in Korea

### BTL Projects by Sector (As of Sep. 2009)

	Schools	Univ. Dorms	Vocational Colleges	Sewage	Military Housing
Number	136	14	1	56	10
Amount	5.1	0.9	0.03	3.8	0.5

Unit: number (Trill. KRW)

	IT	Cultural Facilities	Medicare & Welfare	Railways	Science Museums	Total
Number	12	18	2	2	2	<b>242</b>
Amount	0.2	0.5	0.2	1.0	0.05	<b>12.2</b>

Note: Projects before contract awarded are excluded.

## 2. Public Investment and PPPs in Korea

### Value for Money (VfM) Test

- What is a VfM Test?
  - Conducting feasibility study and assessing VfM (Value for Money) by comparing PFI against PSC to test if PPP procurement improves the value of tax payer's money
    - ✓ PFI (Private Finance Initiative)
    - ✓ PSC (Public Sector Comparator)
- Why conduct a VfM Test?
  - Article 7, Paragraph 3 of the Enforcement Decree of the PPP Act stipulates the implementation of a VfM Test
  - The Competent Authority uses VfM reports as basic material to make a judgment on whether to move forward with the PPP project proposed by the private proponent
- VfM Test Strengthened by PIMAC in 2005
  - 1<sup>st</sup> stage : Feasibility study → Decision to Invest
  - 2<sup>nd</sup> stage : VfM assessment → Decision to Implement by PPP
  - 3<sup>rd</sup> stage : Present a best implementation practice

## 2. Public Investment and PPPs in Korea

### Turn-Down Rate of Unsolicited Projects

		'05	'06	'07	'08	Total
BTO	Number of VFM Tests conducted	16	21	18	36	91
	Deliver value for money	11	21	16	29	77
	Not deliver value for money	5	-	2	7	14
	<b>Rate of project turn-down</b>	<b>31%</b>	<b>0%</b>	<b>11%</b>	<b>19%</b>	<b>15%</b>

# Major Projects: BTO (Under Operation)



## ❑ Incheon International Airport Expressway

- Total Project Cost: KRW 1,334 billion
- Length: 40.2 km, 8 lanes
- Competent Authority: Ministry of Land, Transport, and Maritime Affairs
- Construction Period: 1995-2000
- Operation Period: 30 years
- Capital Structure: Equity/Debt/Subsidies = 25%/59%/16%



## ❑ Seoul Beltway Northern Section

- Total Project Cost: KRW 1,471 billion
- Capital Structure: Equity/Debt/Subsidies = 23%/51%/25%
- Length: 36.3 km, 8 lanes (Total Length: 128 km)
- Competent Authority: Ministry of Land, Transport, and Maritime Affairs
- Construction Period: June 2001-June 2008 (currently in operation)
- Operation Period: 30 years



## ❑ Busan New Port Phase 1

- Total Project Cost: KRW 1,648 billion
- Capital Structure: Equity/Debt/Subsidies = 20%/55%/25%
- Work Scope: 9 berths (50,000 t), 3.2 km
- Competent Authority: Ministry of Land, Transport and Maritime Affairs
- Construction Period: 2001-2009
- Operation Period: 50 years

# Major Projects: BTL (Under Operation)



## ❑ Chungju Military Apartment Housing

- Total Project Cost: KRW 18.6 billion
- Work Scope: 200 households and convenience facilities
- Competent Authority: Ministry of Defense
- Construction Period: 2005-2007
- Operation Period: 20 years



## ❑ Ulsan National Institute of Science and Technology

- Total Project Cost: Approximately KRW 250 billion
- Work Scope: Site 1,028,200 m<sup>2</sup>, Total Floor Area 153,691 m<sup>2</sup>
- Competent Authority: Ministry of Education, Science and Technology
- Construction Period: 2007-2010 (1st Phase 2007-February 2009)
- Operation Period: 20 years



## ❑ Anhwa High School

- Total Project Cost: Approximately KRW 962 million
- Work Scope: Site 13,264.03 m<sup>2</sup>, 5 stories above ground
- Competent Authority: Gyeonggi Province Office of Education
- Construction Period: 2006-2007
- Operation Period: 20 years

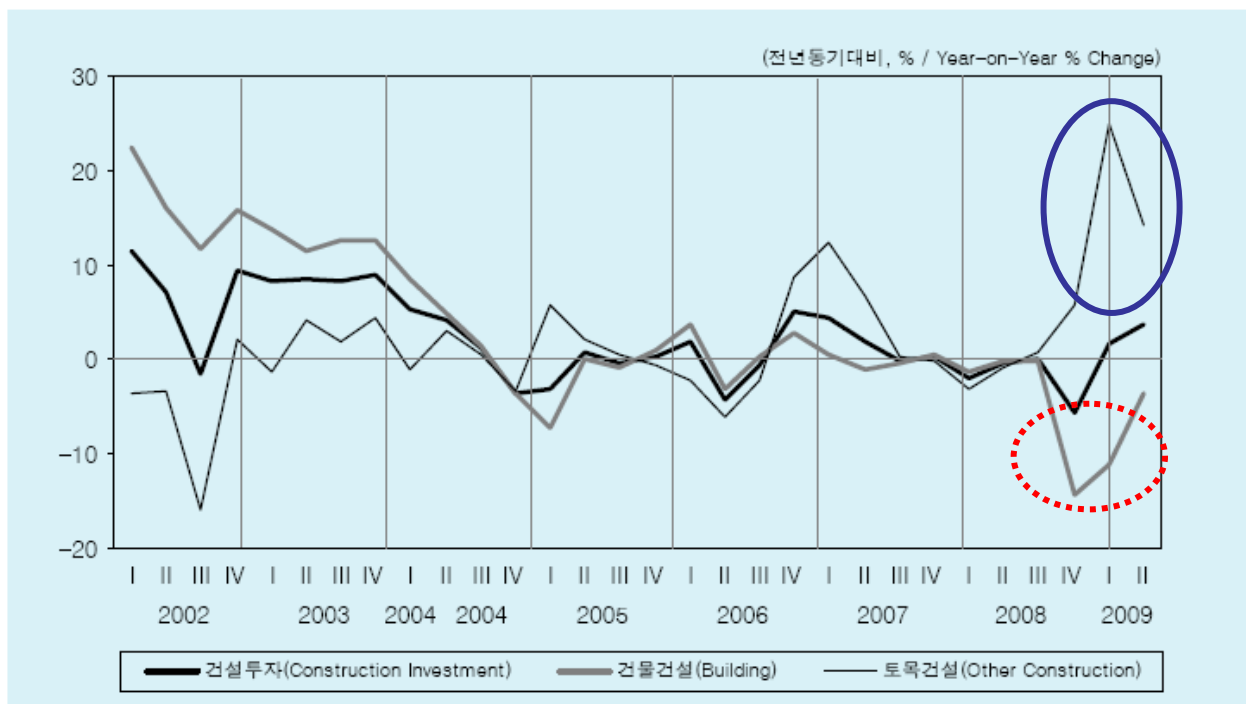
Part-03

# Global Crisis and SOC Investment in Korea



### 3. Global Crisis and SOC Investment in Korea

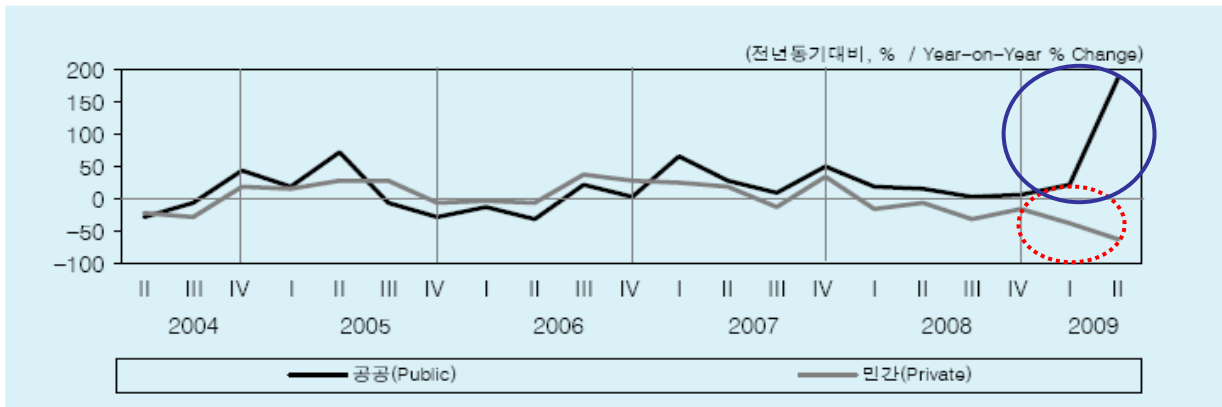
**건설투자**  
Construction Investment



# 3. Global Crisis and SOC Investment in Korea

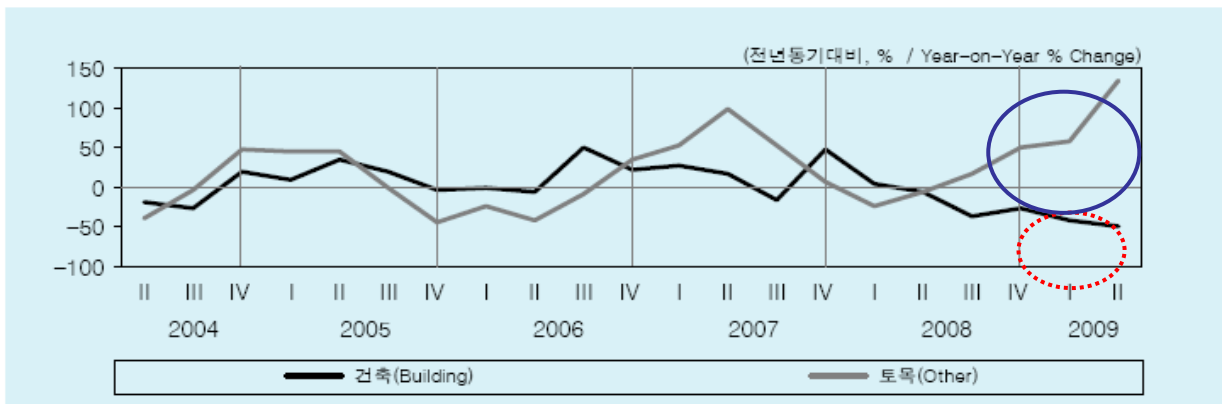
## 발주자별 건설수주액

Construction Orders Received by Orderer



## 공사종류별 건설수주액

Construction Orders Received by Type



Source: KDI, Major Indicators of Korean Economy (October, 2009)

### 3. Global Crisis and SOC Investment in Korea

#### Impacts of Global Crisis on PPPs in Korea

- Decline in new PPP projects

Unit: Trill. KRW (number of projects)

	2005	2006	2007	2008 first half	2008 second half
BTO	6.06 (9)	3.65 (7)	4.26 (9)	1.61 (2)	4.60 (7)
BTL	0.37 (8)	2.88 (66)	5.91 (103)	1.89 (46)	1.11 (19)

- Delays in implementation

- 12 BTO projects and 44 BTL projects, which were scheduled to start construction by February 2009, have failed to reach financial closure.
- Interest rates and access to financing were identified as the main channels through which the financial crisis has affected or is expected to affect PPP projects.

### 3. Global Crisis and SOC Investment in Korea

#### Announced Measures for Reinvigorating PPPs

- Lower equity capital requirements on concessionaires
- For large-scale projects, higher ceilings on guarantees provided by the Infrastructure Credit Guarantee Fund
- Help in changing equity investors for some projects
- Compensation for the preparation of proposals to encourage more vigorous competition during bidding
- Sharing of interest rate risks with concessionaires
- Compensation for the excess changes in base interest rates through grading of risks at the time of the concession agreement
- Shorter periods for readjusting benchmark bond yields

### 3. Global Crisis and SOC Investment in Korea

#### Fiscal Concerns for PPPs

- While easing fiscal constraints on SOC investment, PPPs can also be used to bypass spending controls and 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. Therefore, proper accounting and reporting of the fiscal implications of PPPs is essential to prevent their misuse and to enhance efficiency.
- Growing number of PPPs in recent years and their contractual structures may entail fiscal risks for governments that can be exacerbated by the financial crisis.
- Government guarantees for PPP projects could create problems, as they are not usually subject to the same degree of scrutiny through the budget process as regular spending.
- These problems are compounded by the fact that guarantees often have potentially significant fiscal consequences, which can be particularly severe during times of crisis.

### 3. Global Crisis and SOC Investment in Korea

#### 10-3. 국가채무

Government Debt

(실역원, Billion Won)

	국가채무(보증채무 포함)									
	Government Debt	중앙정부 채무						국고채무 부담행위 Contract Authorization	보증채무 Government Guaranteed Liabilities	지방정부 채무 Local Gov't Debt <sup>1)</sup>
		Central Government Debt	국채 Government Bond	Borrowing	차입금					
					국내 Domestic	해외 Foreign				
1991	37,524	27,681	17,083	7,754	2,054	5,700	2,844	9,843	-	
1992	44,662	30,974	19,948	7,789	2,268	5,521	3,237	13,688	-	
1993	44,612	32,846	20,825	8,173	2,679	5,494	3,848	11,766	-	
1994	47,756	34,432	21,980	8,486	2,820	5,666	3,966	13,324	-	
1995	50,655	35,626	23,295	8,242	3,001	5,242	4,089	15,029	-	
1996	44,383	36,771	25,657	7,973	2,922	5,051	3,141	7,612	-	
1997	77,293	50,454	28,554	18,492	3,170	15,322	3,408	13,039	9,855	
1998	154,691	71,437	46,648	21,760	2,976	18,785	3,029	71,953	8,957	
1999	180,119	89,715	65,806	21,386	2,443	18,943	2,522	81,505	8,897	
2000	185,907	100,942	76,325	21,907	1,901	20,006	2,710	74,565	10,448	
2001	228,885	113,116	87,758	22,536	2,104	20,432	2,822	106,770	8,950	
2002	236,101	126,630	103,131	20,736	2,296	18,440	2,763	102,471	6,983	
2003	246,215	158,825	140,633	15,750	3,170	12,580	2,441	80,590	6,885	
2004	269,087	196,087	182,932	10,655	2,040	8,615	2,500	66,000	6,989	
2005	302,966	238,766	229,002	7,625	2,055	5,570	2,139	55,000	9,206	
2006	319,284	273,214	264,317	6,436	2,157	4,279	2,461	36,500	9,570	
2007	332,002	289,102	280,466	5,724	2,167	3,557	2,912	33,100	9,800	
2008 <sup>P</sup>	336,300	297,900	289,400	5,300	1,500	3,800	3,200	28,100	10,300	

Source: KDI, Major Indicators of Korean Economy (October, 2009)

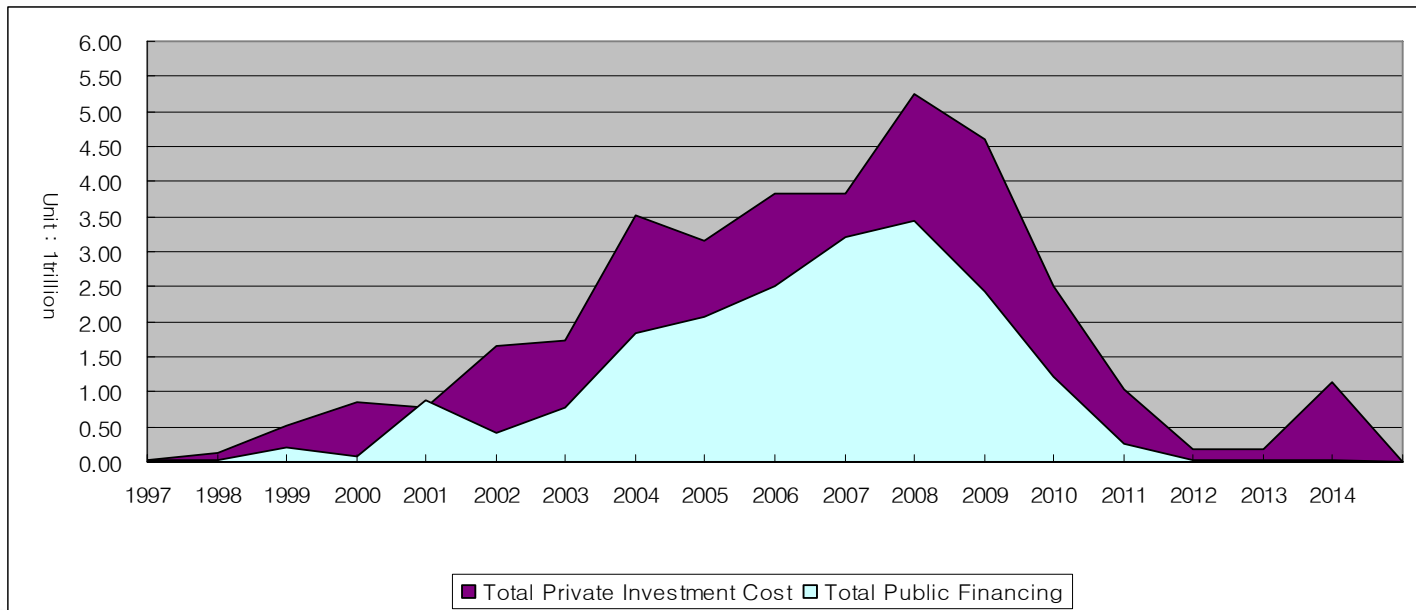
Part-04 | **Fiscal Risk Management for  
PPPs in Korea**



## 4. Fiscal Risk Management for PPPs in Korea

- Fiscal Commitment for Signed BTO Projects
  - Total investment commitment of 53.4 trillion won.  
(private investment : 33.9 trillion won, government investment : 19.5 trillion won)
  - Total private investment and public financing steadily increase since the early stage to peak in 2008.

### Total Private Investment and Public Financing of Signed BTO Projects



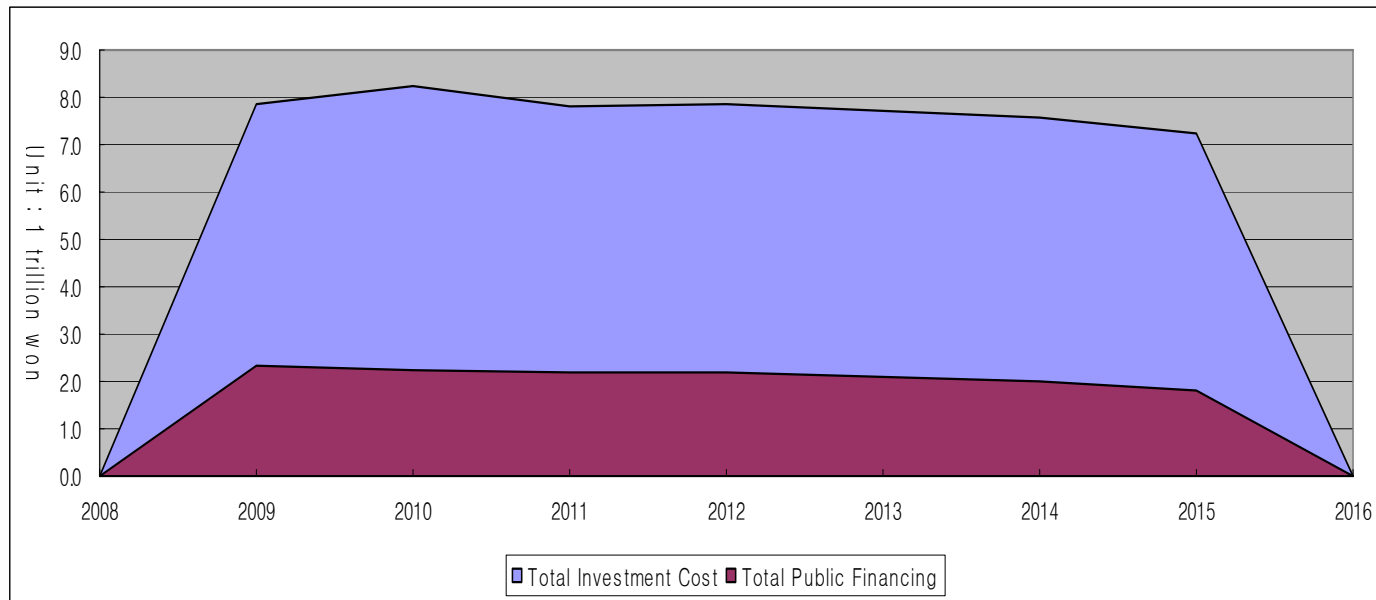
Source: Jay-Hyung Kim (2008)

## 4. Fiscal Risk Management for PPPs in Korea

- Fiscal Commitment for Planned BTO Projects

- With the planned BTO projects, which are included in the Medium-Term PPP Plan of 2006, annual government payment increases 8.2 trillion won in 2010, and decreases slowly.
- There exists a possibility that government payment will increase if new projects, not yet included in the Medium-Term PPP Plan, are promoted.

### Private Investment and Public Financing of Planned BTO Projects



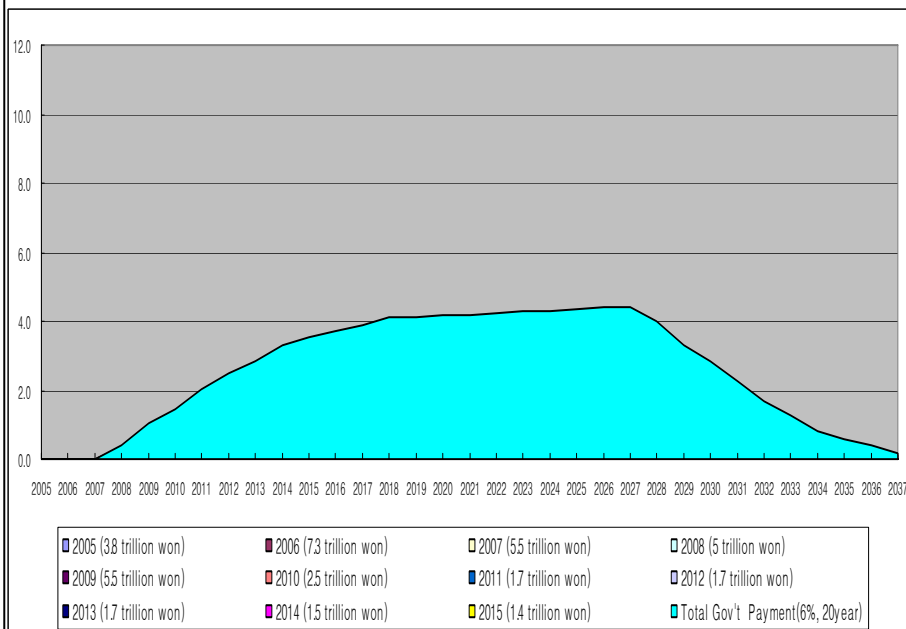
Source: Jay-Hyung Kim (2008)

# 4. Fiscal Risk Management for PPPs in Korea

- Fiscal Commitment for Simulated BTL Projects

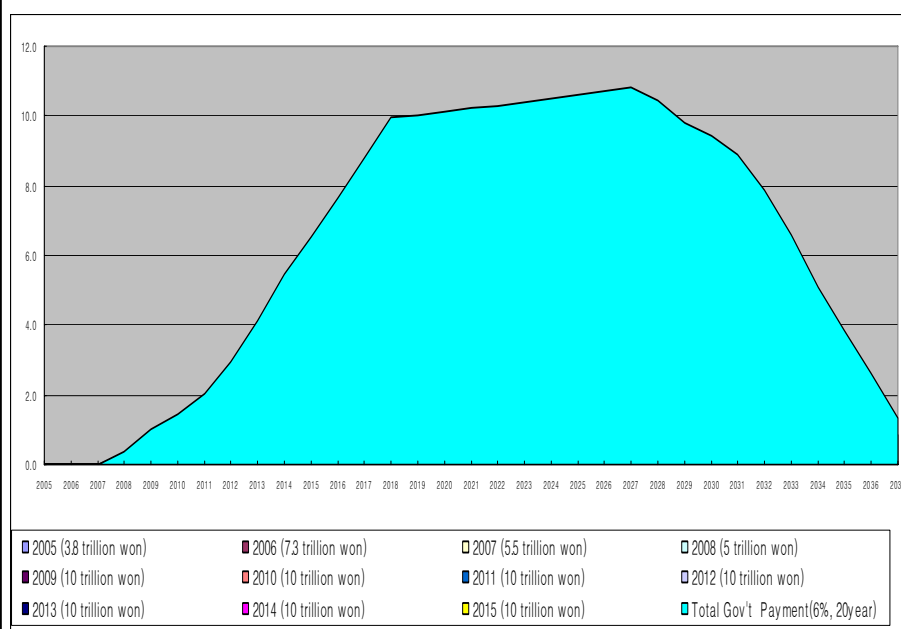
## Scenario 1 : 37.6 trillion won for 10 yrs

Annual Government Payment for BTL Project



## Scenario 2 : 81.6 trillion won for 10 yrs

Annual Government Payment for BTL Project



Assumptions: 1. Gov't payment = facility lease fee (rate of margins 6%, 20 yrs) + operation cost (25% of estimated construction cost, adjusted for 4% of inflation). 2. Period of design and construction is 3-5 years.

Source: Jay-Hyung Kim (2008)

## 4. Fiscal Risk Management for PPPs in Korea

- A **safeguard ceiling for PPPs** may emphasize that even if a government drives a large-scale PPP project forward, that is, involving large-scale borrowing from future generations, the aggregate fiscal commitment should be limited to a sustainable level for maintaining fiscal soundness and stability.
- United Kingdom
  - Annual government payment for PFI : about 2% of total government expenditure.
  - PFI investment : 10% to 15% of total public investment.
- IMF
  - Give high priority to the institutional framework for PPPs.
  - No standardized principles, but suggest an alternative approach, considering adopting a method, in which if either adopts lease accounting standards or takes into account EUROSTAT standards.
  - Recommend a Comprehensive Disclosure Requirement for PPPs, and, when appropriate, ceilings on PPP programs.

## 4. Fiscal Risk Management for PPPs in Korea

- EU
  - Set rules on the PPPs.
  - EUROSTAT : Allowing to record as private investment PPPs that transfer to the private sector the bulk of construction risk and either of the performance or demand risk.
- Korea : Setting a **safeguard ceiling on government payment**
  - Annual government payment : 2% of total government budget expenditure, or,
  - PPP investment : 10% to 15% of total public investment.

Source: Jay-Hyung Kim (2008)

## 4. Fiscal Risk Management for PPPs in Korea

- Set criteria on government 'budget', which becomes a denominator of the ceiling rate :
  - Plan 1 : 2% of revenue of central government (general + special net accounting)
  - Plan 2 : 2% of expenditure of central government (general + special net accounting)
  - Plan 3 : 2% of expenditure of central+local government participating PPPs (general + special net accounting)
  - Plan 4 : 2% of expenditure of central +local government (general + special net accounting)
  - Plan 5 : 10% to 15% of capital budget of the government

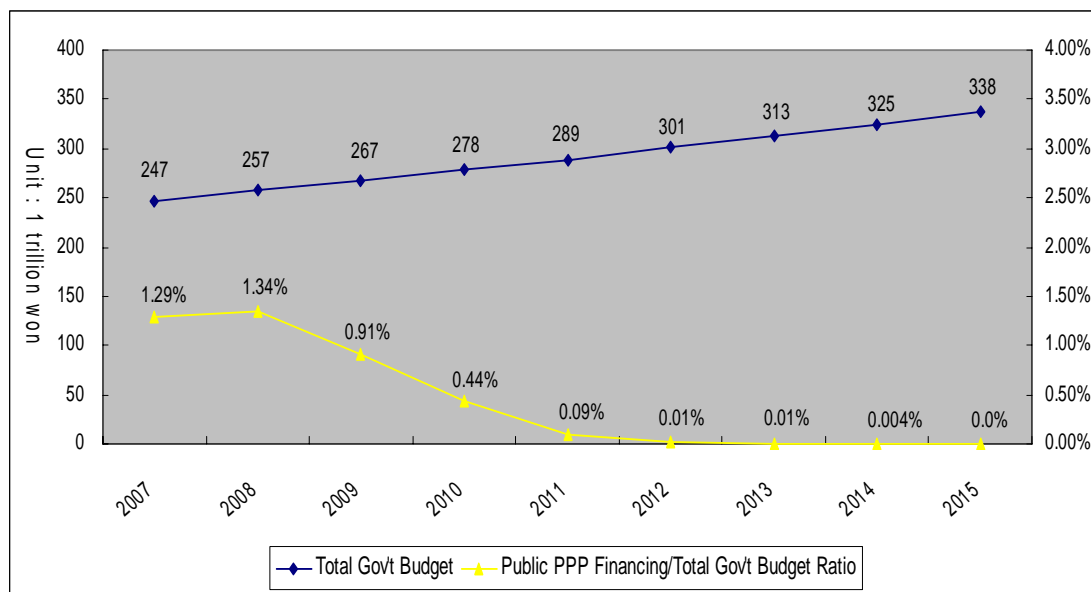
Source: Jay-Hyung Kim (2008)

# 4. Fiscal Risk Management for PPPs in Korea

## □ Simulation 1

- Examines whether public financing for signed BTO projects exceeds the 2% ceiling.
- Far less than 2% ratio.

Forecast on Public PPP Financing/Government Expenditure Ratio of Signed BTO Projects



Assumptions: 1. Estimation of amount of public PPP financing : Current value on agreements

Source: Jay-Hyung Kim (2008)

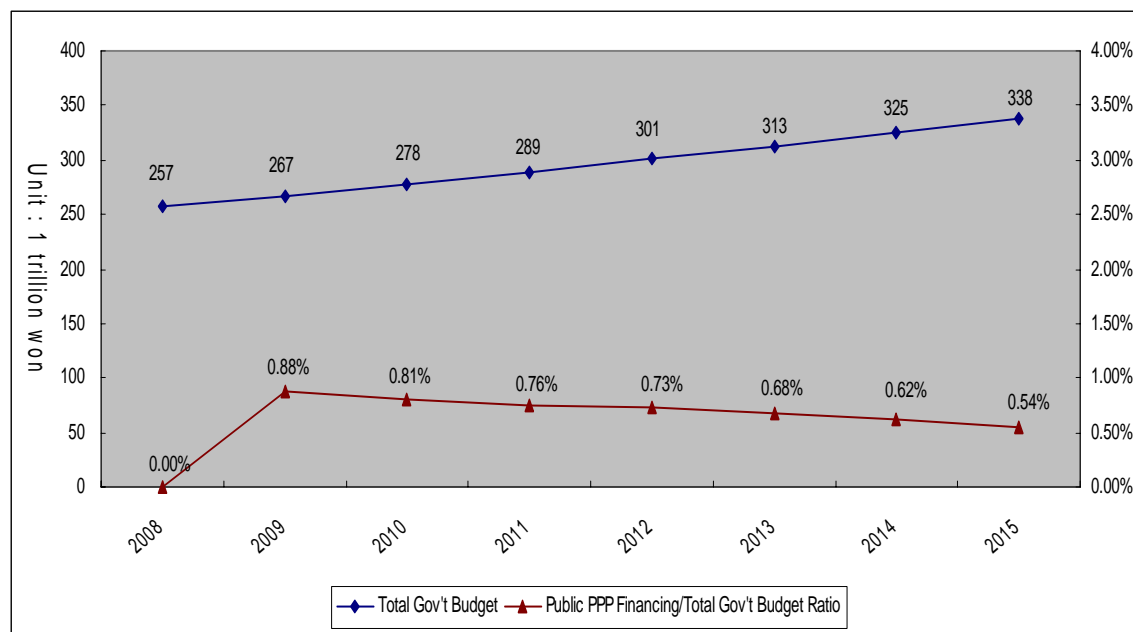
2. Estimated total government expenditure = (247 trillion won in 2007, adjusted for 4% inflation)

# 4. Fiscal Risk Management for PPPs in Korea

## Simulation 2

- Examines whether public financing of planned BTO projects exceeds the 2% ceiling.
- Far less than 2% ratio.

Forecast on Public PPP Financing/Government Expenditure Ratio of Planned BTO Projects



Assumptions: 1. Estimation of amount of public PPP financing : Current value on agreements  
 2. Estimated total government expenditure = (247 trillion won in 2007, adjusted for 4% inflation)

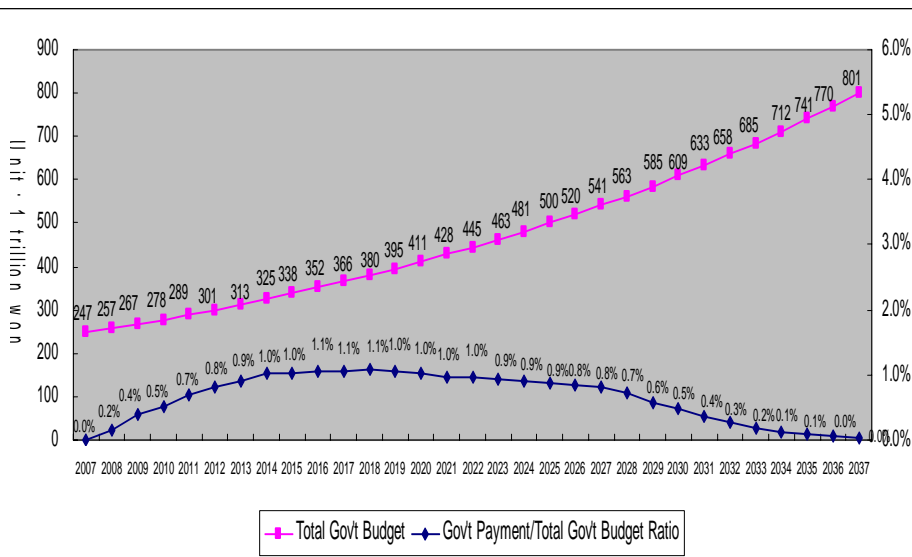
Source: Jay-Hyung Kim (2008)

# 4. Fiscal Risk Management for PPPs in Korea

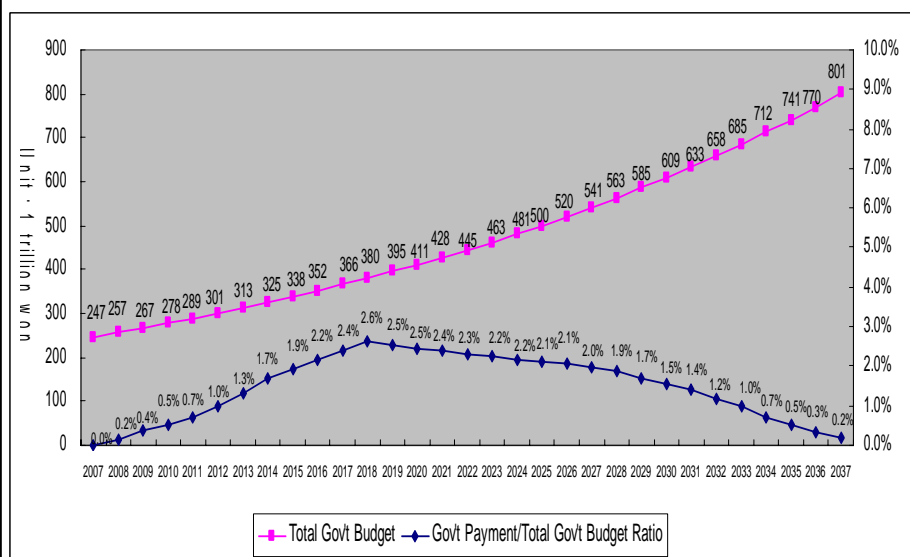
## Simulation 3

- Examines whether public financing of BTL projects exceeds the 2% ceiling.
- The result depends on investment scenario.

Forecast on BTL Government Payment/  
Government Expenditure Ratio: Scenario 1



Forecast on BTL Government Payment/  
Government Expenditure Ratio: Scenario 2



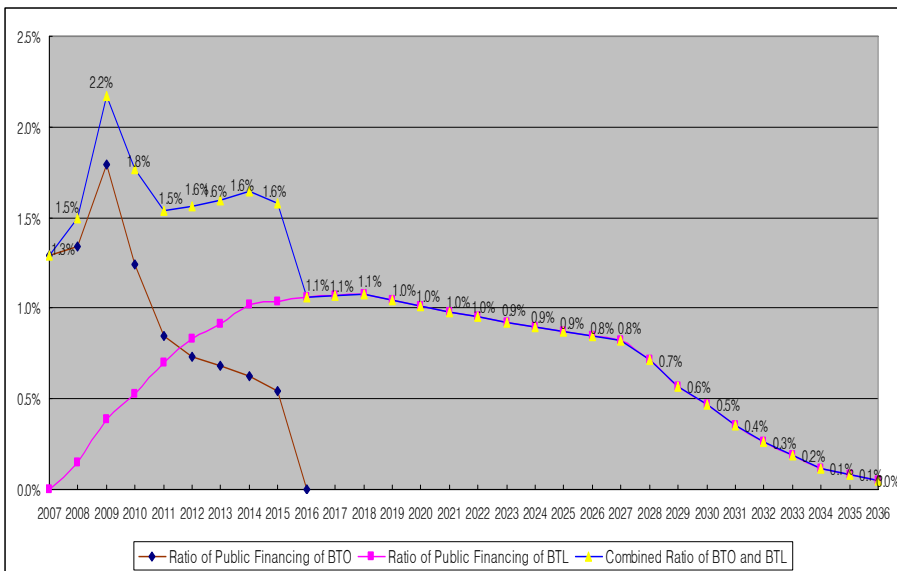
Assumptions: 1. Government payment = facility lease fees (rate of return 6%, 20 yrs)+operation cost (25% of estimated construction cost, adjusted for 4% inflation) 2. Estimated total expenditure = (247 trillion won in 2007, adjusted for 4% inflation) 3. Period of design and construction: 3-5 years

# 4. Fiscal Risk Management for PPPs in Korea

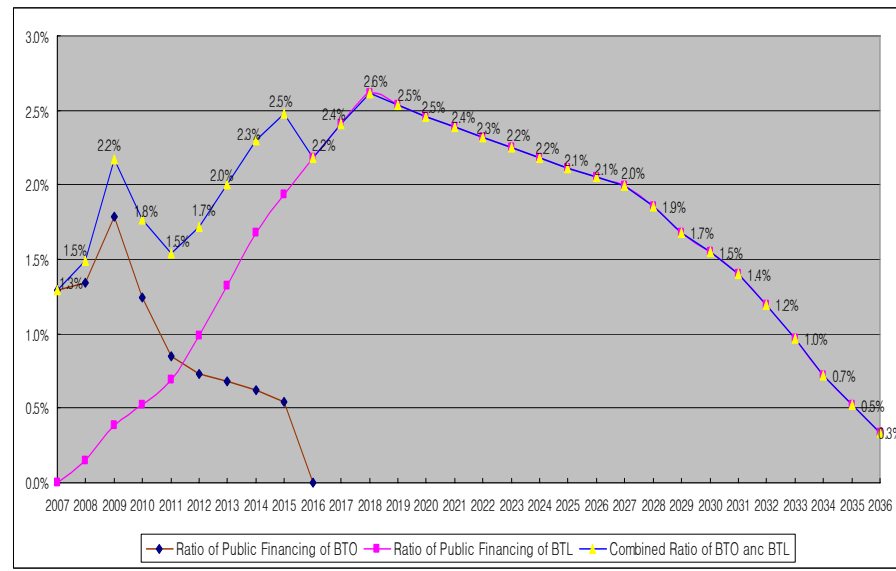
## Simulation 4

- Examines whether total amount of public financing of signed and planned BTO plus BTL projects exceeds the 2% ceiling.
- In Scenario 1, still less than 2%, but, in Scenario 2, higher than 2% .

Forecast on Ratio of Public Financing of Signed and Planned BTO plus BTL Projects: Scenario 1



Forecast on Ratio of Public Financing of Signed and Planned BTO plus BTL Projects: Scenario 2



Assumptions: 1. Calculation of amount of public financing of BTO: Based on agreements+Planned 2. Estimated period of BTL projects in Scenario 1: 10 years (3.8 tri.(2005), 7.3 tri.(2006), 5.5 tri.(2007), 5.0 tri.(2008) to be invested each year in 2009-2015) 3. Estimated government expenditure = (247 trillion won in 2007, adjusted for 4% inflation)

## 4. Fiscal Risk Management for PPPs in Korea

### Implications and Challenges

- The amount of public financing for **signed and planned BTO projects** is not yet at a level that can affect the stability of fiscal management.
- If the government carries out **BTL projects** for a limited amount of 37.6 trillion won in 2005~2015 like in Scenario 1, there will be no fiscal problem. However, if the government carries out BTL projects for more than a decade or longer at a cost of annual 10 trillion won in Scenario 2, it may stiffen the government fiscal management.

## 4. Fiscal Risk Management for PPPs in Korea

### Implications and Challenges

- The government should take into account the additional fiscal burdens for MRG when making policy judgment on the scales of BTO and BTL projects to be launched in the future.
- To effectively monitor 2% ceiling on PPPs, the following issues should be characterized in detail :
  - Who evaluates the ceiling?
  - When and how often evaluates the ceiling?
  - Is the ceiling kept mandatorily?
  - How to report to and get approval from the National Assembly?

- What kinds of policies are effective for stimulating consumption and/or **investment**?
- What are the basic principles and experiences to stimulate consumption and/or **investment**?
- **How to select projects** in a quick but effective way? How to speed-up implementation?
- Large parts of the fiscal stimulus package were invested in infrastructure development in China, **how to better manage infrastructure investment** and improve its effectiveness?
- Is there crowding out of **private investment**?

*Thank you*

Korea's Leading Think Tank

