

PUBLIC PARTNERSHIP PRIVATE

**on Institutional Arrangement and Policy Implications
Case Studies from the Republic of Korea**

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What is PPP?

There exists no standard definition of what constitutes the PPP. In Korea the PPP is a project to build infrastructure with capital, creativity and efficiency of the private sector.




	<p><i>"agreement between the government and one or more private partners"</i></p> <p><i>"service delivery objectives of the government = profit objectives of the private partners"</i></p>
	<p><i>"arrangements typified by joint working between the public and private sectors"</i></p> <p><i>"covering "all types of collaboration across the private-public sector"</i></p>
<p>• • • • •</p>	
	<p><i>"project to build infrastructure with private capital"</i></p> <p><i>"tapping the creativity and efficiency of the private sector"</i></p>

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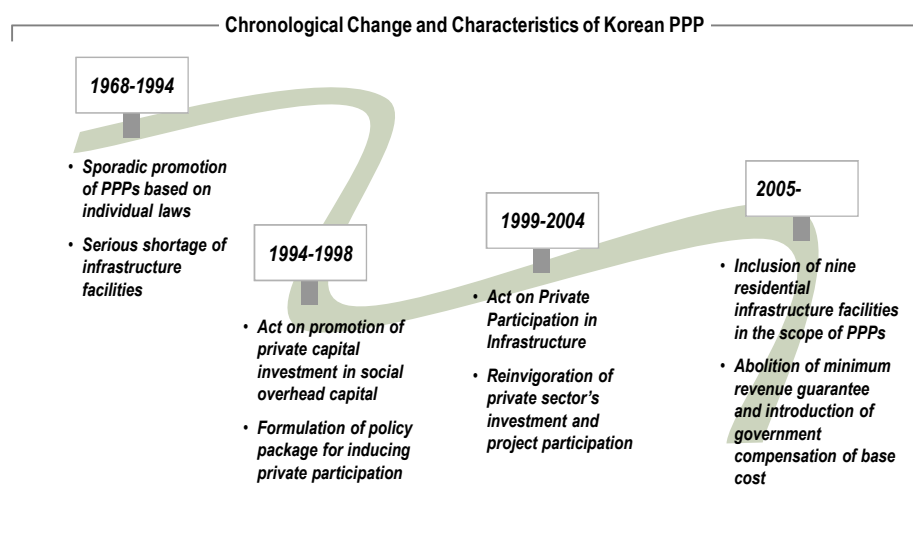
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Institutional Arrangement and Reform on Korean PPPs

Background in Chronology

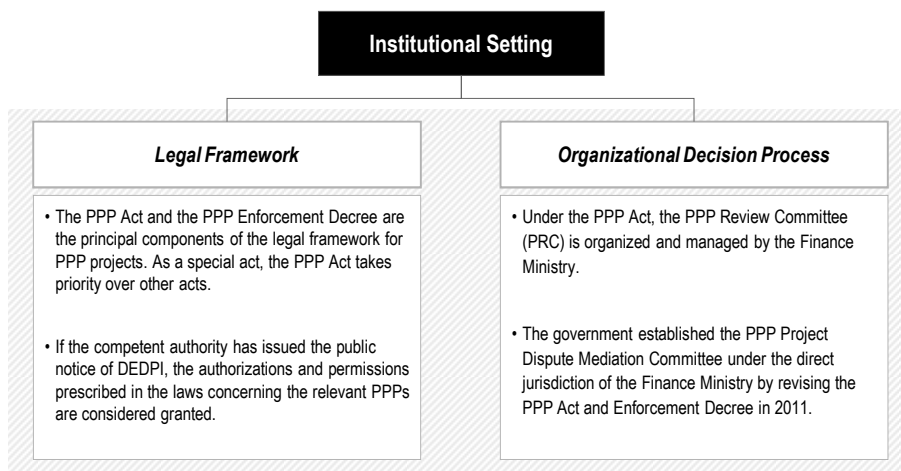
Chronologically, the changes in the nation's PPP project characteristics can be roughly divided into four periods.



Institutional Arrangement and Reform on Korean PPPs

Institutional Setting

Institutional settings including legal framework and organizational effectiveness over decision process have been critical factors for promoting PPP projects.



Institutional Arrangement and Reform on Korean PPPs

Procurement Schemes – 1 Eligible Infrastructure Facility Types by Sector

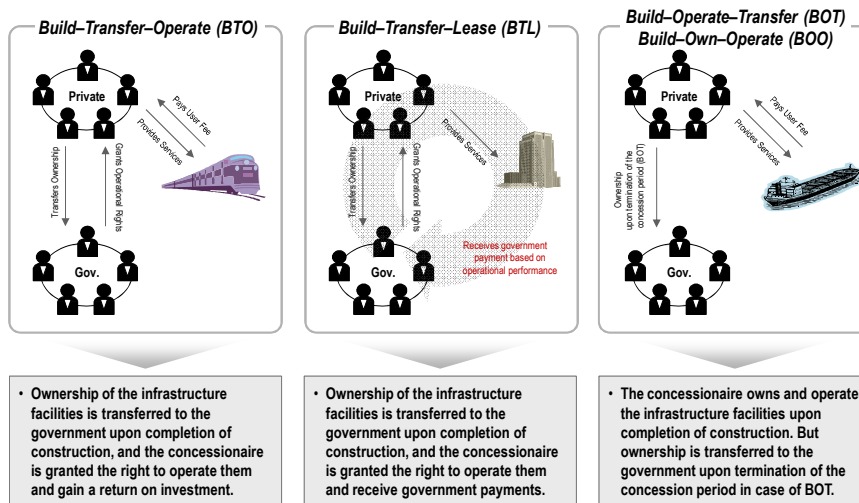
According to the PPP Act, 48 types of facilities in 16 sectors are currently defined as eligible types including not only economic infrastructure but social infrastructure.

Sector	Infrastructure Type	Sector	Infrastructure Type
Road (4)	Roads and ancillary facilities, parking facilities, intelligent transport systems and transfer centers, bicycle facilities	Logistics (2)	Distribution complexes and cargo terminals, passenger terminals
Rail (3)	Railways, railway facilities, urban railways	Culture & Tourism (9)	Tourist sites or complexes, youth training facilities, public and/or professional sports facilities, libraries, museums and art galleries, international conference facilities, cultural facilities, urban parks
Port (3)	Port facilities, fishing port facilities, eligible facilities for new port construction	Education (1)	Pre-schools and schools
Airport (1)	Airport facilities	National Defense (1)	Facilities for military training and military residency and ancillary facilities for serviceperson's welfare and sports activities
Water resources (3)	Multipurpose dams, river-affiliated ancillary structures, waterworks	Housing (1)	Public rental housing
Communications (5)	Telecommunication facilities, information communication systems, information superhighway, Geographic information systems, ubiquitous urban infrastructure	Welfare (3)	Senior homes and welfare medical facilities and facilities for remarried seniors, public health and medical facilities, child care facilities, welfare facilities for the disabled
Energy (4)	Electric source facilities, gas supply facilities, collective energy facilities, renewable energy facilities	Forestry (2)	Natural recreational resorts, arboretums
Environment (5)	Sewage and sewage treatment facilities, waste treatment facilities, public livestock treatment facilities, wastewater treatment facilities, recycling facilities	Industrial (1)	Industrial complex facilities

Institutional Arrangement and Reform on Korean PPPs

Procurement Schemes – 2 Procurement Methods

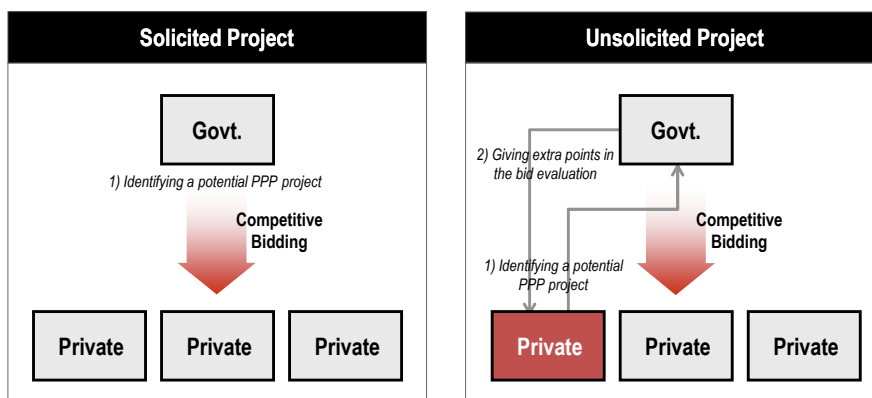
Eligible procurement methods are divided into BTO and BTL, depending on the structure of the PPPs. Other methods, such as BOT and BOO are applicable as well.



Institutional Arrangement and Reform on Korean PPPs

Procurement Schemes – 3 Procurement Initiation

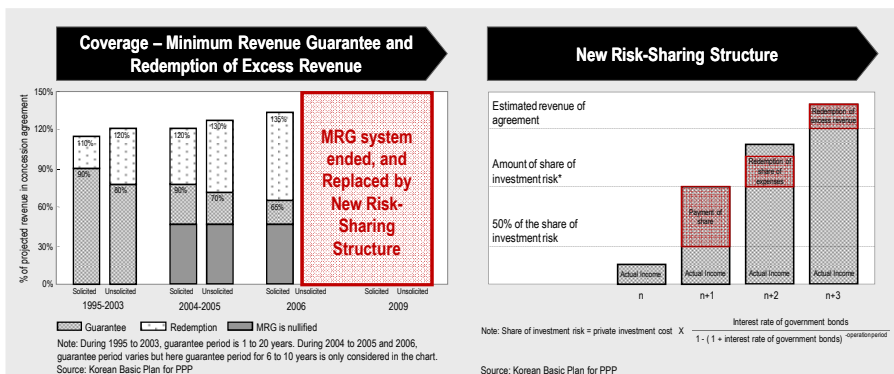
Government has recently made efforts to promote more solicited projects, since they can be implemented in line with the overall infrastructure investment plan and priorities.



Solicited projects have not attracted much intention from the competent authority because it takes considerable time and costs to initiate a PPP project, whereas unsolicited projects have been actively sought and implemented because the private sector assumes associated costs and risks.

Institutional Arrangement and Reform on Korean PPPs
Government Support and Risk Sharing Mechanisms

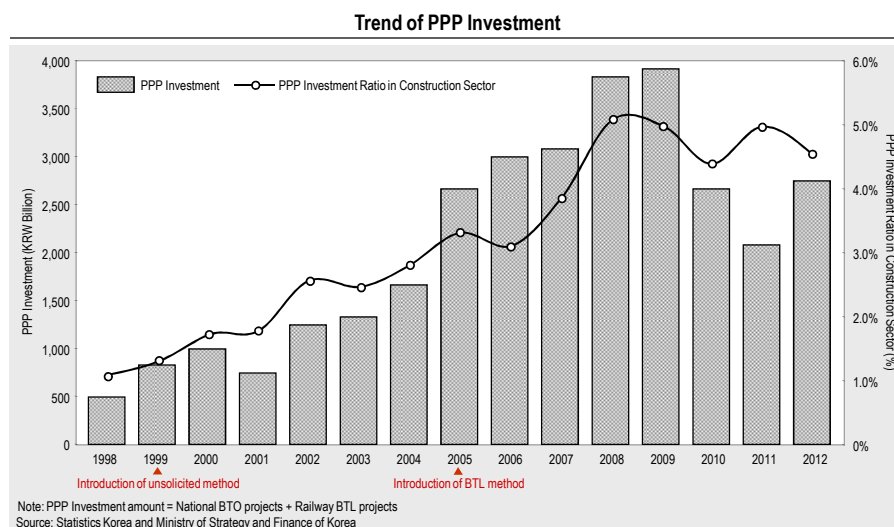
While the MRG encouraged private participant, the newly adopted policy decreases the investment risk for private participants and enhances their motivation to make profit.



The MRG payment provided support for private participant's minimum revenue as projected in the concession agreement; the newly adopted policy compensates for the private participant's base cost.

Korean PPPs Performance Analysis
Trends of PPP

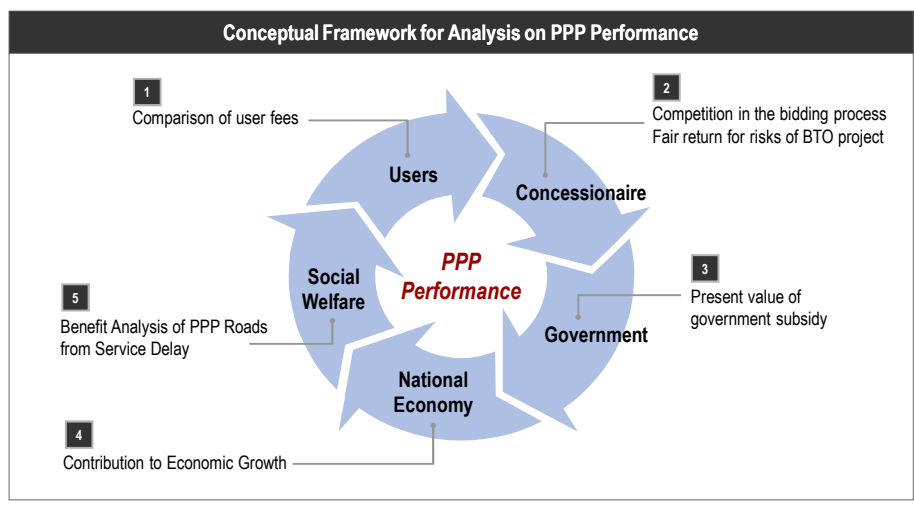
In 1995 when PPPs were first introduced, PPP investment was just 0.5% of the public investment in SOC. But now it reached over 10%.



Korean PPPs Performance Analysis

Analysis of PPPs' Efficiency and Contribution to the National Economy

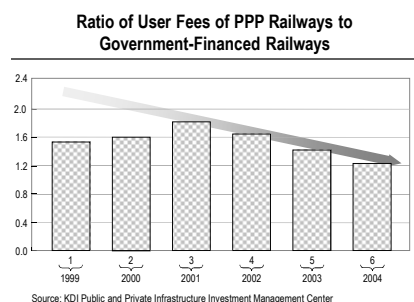
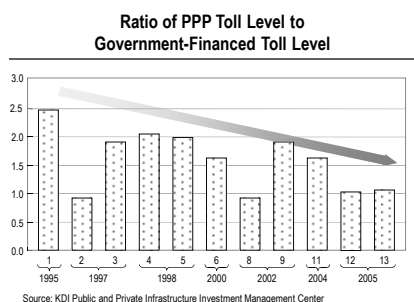
It would be reasonable to evaluate PPP performance based on five perspectives: users, concessionaires, government, national economy and social welfare.



Korean PPPs Performance Analysis

Analysis of PPPs' Efficiency and Contribution to the National Economy – 1 Users

The results from analyses of comparing fees between PPP and government-financed on both roads and railways confirm the efficiency of PPP projects.



The difference has decreased over time from 2.54 to 1.11.

The difference has decreased over time from 1.50 to 1.23.

✓ Economic Efficiency of PPP

Korean PPPs Performance Analysis

Analysis of PPPs' Efficiency and Contribution to the National Economy – 2 Concessionaire

PPP environment for private participants has become more competitive over time, enhancing its economic efficiency.

Number of Bidders on PPP by Year

Year	Number of Bidders				Total	Percentage			
	1	2	3	4		1	2	3	4
1995	1				1	100			
1997	2	1			3	67	33		
1998	1	1			2	50	50		
1999	5	1			6	83	17		
2000	7				7	100			
2001	6	4			10	60	40		
2002	4	1		2	7	57	14		29
2003	5	3	1	1	10	50	30	10	10
2004	1				1	100			
2005	7	1	1		9	78	11	11	
2006	1			1	2	50			50
2007	3				3	100			
Under Negotiation	5	1	2		8	63	12	25	
Total	48	13	4	4	69	69	19	6	6

Source: KDI Public and Private Infrastructure Investment Management Center

Results of Fair Return for BTO Road Projects

Project	Concession Agreement				Results	
	Real	Nominal	GBS	Premium Against 5yr KTR	Fair Premium	Excess Return
A - expressway	9.70	15.19	4.88	10.31	5.60	4.71
B - expressway	9.34	14.81	3.67	11.14	3.18	7.96
C - expressway	9.24	14.70	4.47	10.23	3.80	6.43
D - expressway	9.83	14.85	4.29	7.93	3.04	4.89
E - tunnel	8.03	12.35	4.77	7.58	4.74	2.84
F - bridge	9.20	14.66	4.19	10.47	3.32	7.15
G - expressway	8.48	13.90	6.33	7.57	3.46	4.11
H - expressway	8.86	14.30	4.41	9.89	3.50	6.39
I - expressway	8.28	13.69	5.13	8.56	2.69	5.87
J - bridge	8.20	13.61	5.16	8.45	3.57	4.88
K - bridge	8.00	12.32	4.88	7.44	2.43	5.01
L - expressway	8.00	12.32	4.88	7.44	3.82	3.62
M - expressway	7.01	11.29	11.29	3.89	3.63	3.77
N - expressway	7.04	11.70	11.70	3.89	3.61	4.20

Source: KDI Public and Private Infrastructure Investment Management Center

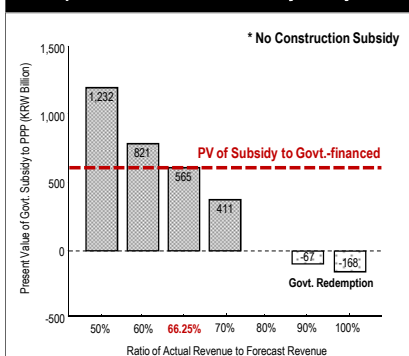
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Korean PPPs Performance Analysis

Analysis of PPPs' Efficiency and Contribution to the National Economy – 3 Government

To examine its efficiency, the government subsidy is needed to be compared with the subsidy for government-financed public projects.

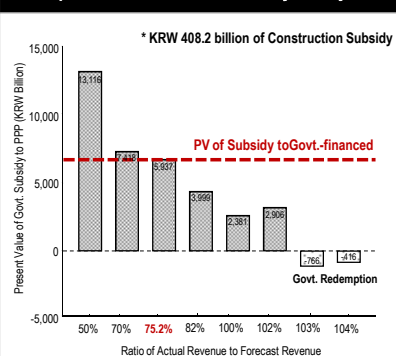
Comparison of Government Subsidy in Project A



If the ratio falls below 66.25%, it would be more efficient to carry out government-financed project.

Source: KDI Public and Private Infrastructure Investment Management Center

Comparison of Government Subsidy in Project B



If the level falls to less than 75.20%, it would be more efficient to carry out the project in the form of a government-financed project.

Source: KDI Public and Private Infrastructure Investment Management Center

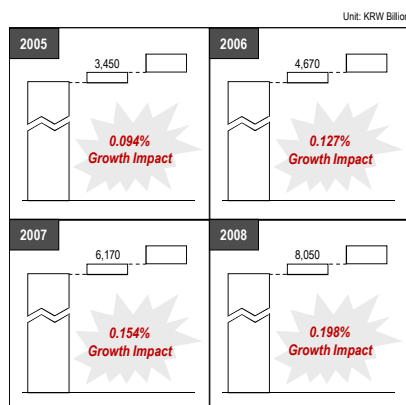
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Korean PPPs Performance Analysis

Analysis of PPPs' Efficiency and Contribution to the National Economy – 4 5 Economy and Social Welfare

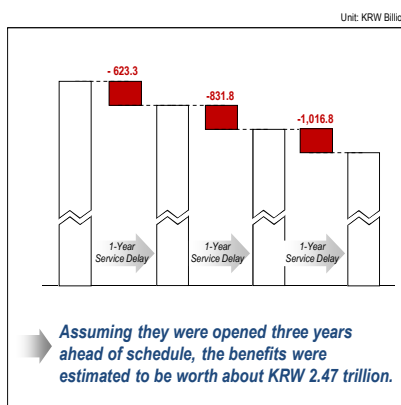
Economic analyses confirm that Korean PPPs contributed to economic growth (0.198% growth impact in 2008) and made positive welfare effects.

4 Estimation of Growth Impact of PPP



Source: Statistics Korea, Ministry of Strategy and Finance of Korea, and KDI Public and Private Infrastructure Investment Management Center

5 Early Realization of Benefits from 14 PPP Roads



Source: KDI Public and Private Infrastructure Investment Management Center

Key Factors and Policy Implications

Characteristics of Korean PPP

Korea PPP has grown into a stable and profitable financial market, thanks to the government's systematic support and management but...

Indicator	Score	Description
Legal Framework	●	The PPP Act clearly defining eligible infrastructure types...as a special act, it takes priority over other acts. However...may restrict the flexibility
Organizational Decision Process	●	The finance ministry plays a central role...implementing PPP. The PPP Review Committee is organized and managed by the finance ministry.
Government Support	●	Infrastructure financing...land expropriation, construction subsidies and compensation for bid costs, and tax incentives and risk sharing mechanism
Efficiency in User Perspective	●	The difference in user fees between government financed and PPP projects have decreased over time, confirming the efficiency of PPP.
Efficiency in Private Perspective	●	Promoting competition is one of the key elements in enhancing efficiency, confirmed by previous studies but the number of bidders is still not sufficient.
Efficiency in Govt. Perspective	●	Previous case studies compare the cash flow of subsidies between government-financed and PPP but not all the projects appeared to be efficient.
Contribution to National Economy	●	PPP had the effect of expanding the economy and as a new mode to make up for insufficient government funding but it has decreased since 2010.
Contribution to Social Welfare	●	Positive social welfare effect is confirmed by the analysis on early realization of benefit from 14 PPP roads.

Institutional Arrangement and Reforms
 Korean PPP Performance
 ◀ ○ ● ▶
 low middle high

Key Factors and Policy Implications

Lessons from Korea and Policy Implications

A concerted effort of leadership, unified framework, and monitoring and evaluation would be essential to ensure that resources are managed for the benefit of all citizens.

