

MEASURES TAKEN BY KOREAN GOVERNMENT TO FACILITATE ROAD PPPS IN RESPONSE TO THE GLOBAL FINANCIAL CRISIS¹

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ABSTRACT

The purpose of this paper is to introduce the recent strategies and the latest policy measures to reinvigorate PPP investment in light of the global financial crisis that began in 2008.

The PPP market in the Republic of Korea has continued to grow as the government has actively promoted PPP projects as an alternative method to supplement public investment. The government has tried to allocate strategically its limited resources and therefore has encouraged the role of the private sector where its efficiency and creativity can be effectively utilized. With the strong initiative of the government, PPP projects have contributed to providing infrastructure facilities and public services where large-scale investments were urgently needed for national economic development and growth, and the PPP market's position was solidified as a new mode of raising funds to make up for insufficient government funding.

However, the recent global financial crisis has frozen the national economy as well as the PPP market. The initiation of new PPP projects and the signing of contracts for existing projects declined sharply as risks and uncertainties in the financial market rapidly increased.

In order to counter the crisis, the Republic of Korea government announced several revitalization measures to assist PPP projects experiencing difficulties in financing by reducing project risks resulting from external factors. The revitalization measures include both financial and non-financial support, including interest rate risk sharing, an increase in the upper limit of the infrastructure credit guarantee amount, provision of short-term loans by the Korea Development Bank, lowering of the minimum equity capital ratio, shortening of the procurement process, change in the termination calculation method, etc.

1. INTRODUCTION

Following decades of rapid economic growth, the Republic of Korea found itself at the beginning of the 1990s with a serious shortage of infrastructure facilities, such as roads, railways, seaports, and airports. The government, judging there would be limits to its ability to fund the needed construction of infrastructure facilities, had come to feel the need to induce private sector participation in infrastructure investment as an alternative means of

¹ This paper is not original and is only written to provide background and references for oral presentation. The main contents of this paper can be found in the book written by Kim, Jay-Hyung, et al. 2011, *Case Studies from the Republic of Korea on Public-Private Partnership Infrastructure Projects*, Asian Development Bank

replenishing infrastructure. The government began to push for PPP projects in earnest with the August 1994 enactment of the Act on Promotion of Private Capital Investment in Social Overhead Capital.

The PPP market in the Republic of Korea has grown and developed into a stable and highly profitable financial market thanks to the government's systemic support and management to vitalize the PPP program over the past decade. This effort has solidified the PPP market's position as a new mode of raising funds to make up for insufficient government funding. The private sector's interest is rising in the government's policy to reinvigorate PPP financing, as part of the latter's efforts to improve its promoting strategy of PPPs.

However, although private participation in infrastructure projects has steadily increased since the introduction of the PPP system in the late 1990s, the initiation of new PPP projects has declined sharply as a result of the recent global financial crisis. The number of contracts signed sharply fell in since 2008, increasing the likelihood that the amount of private investment actually executed will shrink in the future. The number stood at less than 70% of initial projections because of the financial market crisis and delays in project progress. Accordingly, the government has worked out measures for revitalizing PPP projects by providing financial assistance to projects experiencing financing difficulties and by reducing project risks resulting from external factors.

The purpose of this paper is to introduce the recent strategies and initiatives for effective implementation and management of PPPs including the latest policy measures to reinvigorate PPP investment in light of the global financial crisis that began in 2008. By doing this, this paper provides insights about successes and failures of PPP development of infrastructure in Korea in response to the global financial crisis and draws some lessons for the PPP development. However, it should be noted that the conditions of Korea and decision making process are different from other countries, therefore, measures taken by Korea governments to facilitate road PPPs in response to the global financial crisis may not be adequate to other countries.

2. Trends and Current Status of PPP focusing on BTO projects

2.1 Number of Projects by Sectors and Implementation Phases

This section looks at the current status of PPP projects mainly focusing on BTO projects. As of September 2009, 203 BTO projects were in various stages: 110 completed, 44 under construction, 19 in preparation for construction, 24 under negotiation, and 6 at the RFP preparation stage. Among those projects, concessionaires for 173 projects have been chosen and their concession agreements signed. The 203 projects by sectors are: 61 roads, 11 railways, 17 port facilities, 64 environmental facilities, 5 logistics projects, and 45 other construction projects, including parking lots and cultural and tourism projects. Of the 203 projects, 86 are national projects and 117 are local projects.

Table 1 - Number of Build–Transfer–Operate Projects by Sector and Implementation Phase, as of September 2009

Phase		Road	Rail	Port	Environment	Logistics	Airport, parking, etc.	Total	
Completed	Nat'l	11	1	8	1	-	7	29	110
	Local	11	-	-	42	-	28	81	
Under	Nat'l	11	5	7	5	4	-	32	44

	Local	1	-	-	8	-	3	12	
Preparing Construction	Nat'l	6	1	1	1	1	3	10	19
	Local	4	-	-	2	-	-	9	
Negotiating	Nat'l	8	4	1	2	-	-	15	24
	Local	5	-	-	2	-	2	9	
Inviting Participants	Nat'l	-	-	-	-	-	-	-	6
	Local	4	-	-	-	-	2	6	
Total		61	11	17	64	5	45	203	

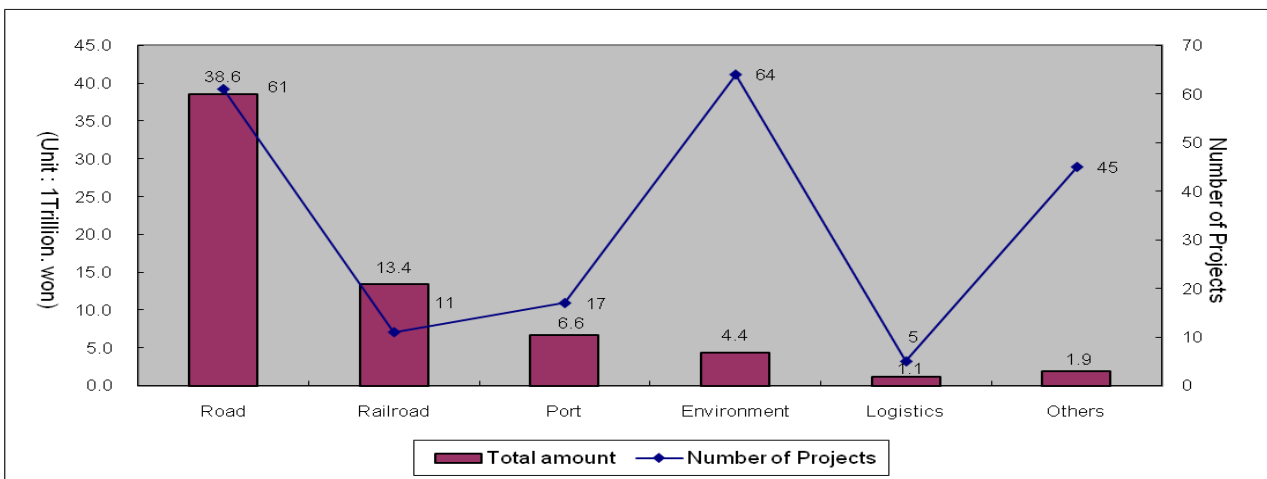
Note: Excluded are 22 projects that were discontinued or converted to fiscal projects.

Source: Internal Data from the Ministry of Strategy and Finance, Republic of Korea.

2.2 Investment Amount and Fiscal Subsidy

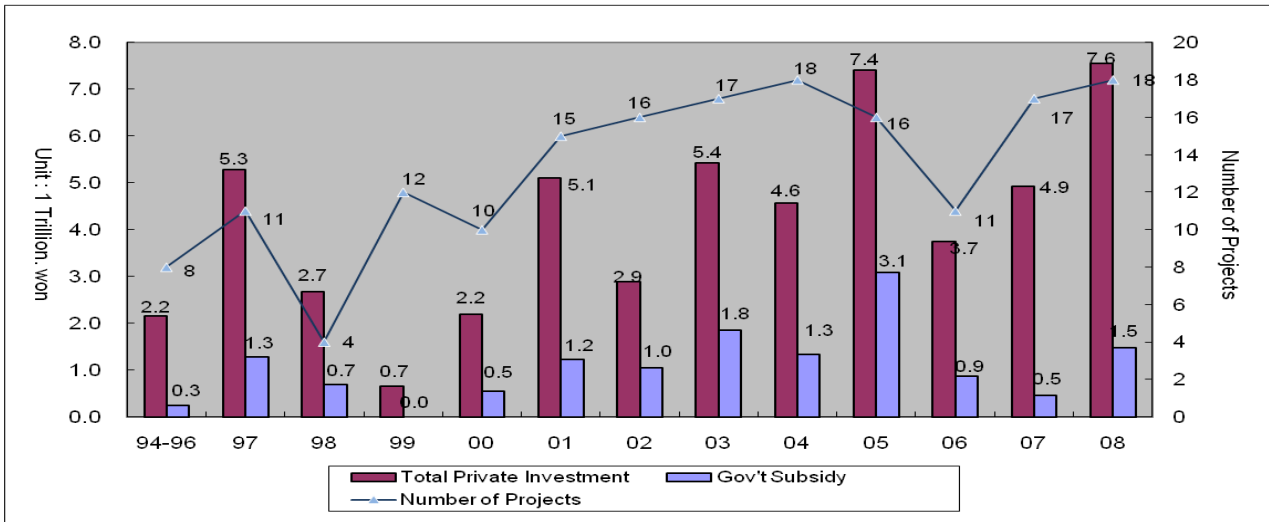
The 203 BTO projects announced as of September 2009 involved a total investment cost of W66.1 trillion. By sector (Figure 1), there are 61 road construction projects involving a total investment cost of W38.6 trillion, taking up 58.3% of the total investment cost. There are 11 railway projects with total investment cost of W13.4 trillion, which is 20.3% of the total, and 17 port projects that require an investment of W6.6 trillion, taking up 10% of the total investment cost. There are 64 environment projects with an investment cost of W4.4 trillion, making up about 6.7% of the total investment cost. There are also 5 projects in logistics with an investment cost of W1.1 trillion, which is just 1.7% of the total investment cost. Additionally, there are 45 projects in various other sectors, including airport, parking lot, and tourism projects, with an investment cost of W1.9 trillion, which is 2.9% of the total investment cost.

Among the 203 projects, there are 173 with signed concession agreements (Figure 2). Of the total investment cost of W54.5 trillion, approximately W40.4 trillion is private investment cost, while W14.1 trillion is government subsidy.



Source: Internal Data (as of September 2009) from the Ministry of Strategy and Finance, Republic of Korea.

Figure 1 - Investment and Number of Build-Transfer-Operate Projects by Sector



Note: The amounts are not the actual investment in the corresponding year but are the sum of total investment costs of signed agreements in each year.

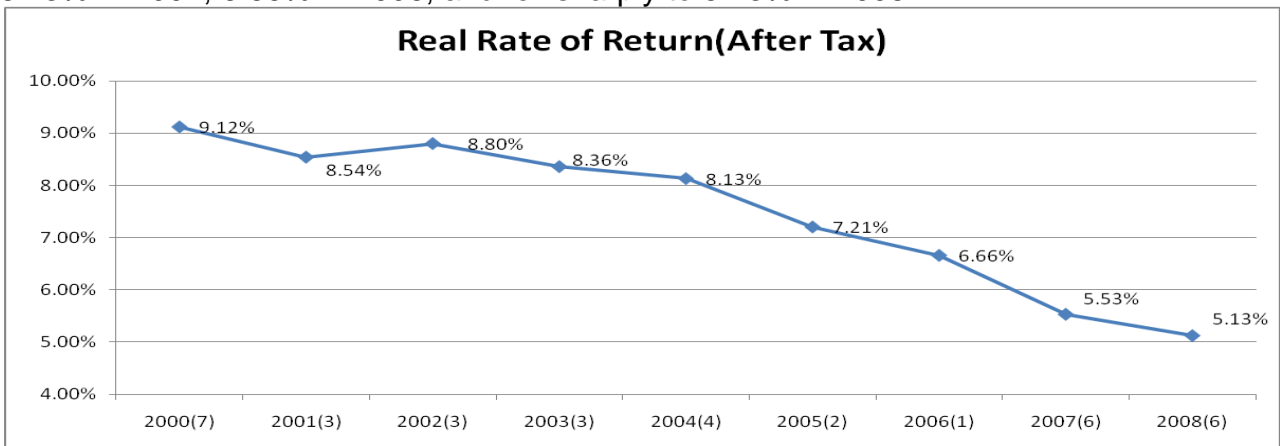
Source: Internal Data (1994–2008) from the Ministry of Strategy and Finance, Republic of Korea

Figure 2 - Private Investment Cost and Government Subsidy of Signed Build-Transfer-Operate Projects By Year

In 1997, concession agreements on private investments of W5.3 trillion were signed for 11 projects with total government subsidy of W1.3 trillion. The total investment decreased in 1998 and 1990. In 2000, investment gradually started to grow, with the highest levels reached in 2005 and 2008. In 2005, concession agreements for 16 projects with private investment of W7.4 trillion and government subsidy of W3.1 trillion were signed, while, in 2008, concession agreements for 17 projects with private investment of W7.5 trillion and government subsidy of W1.5 trillion were signed.

2.3. Rate of Return for BTO Road Projects

Rate of return for BTO projects is defined by the internal rate of return (IRR), which is the discount rate that makes the present value of cash inflow equal to outflow (net present value = 0). Rate of return of the project is determined through negotiations between the concessionaire and the government or by competition among project proponents. Among the signed BTO projects, the rate of return for 2000 was 9.12%; it gradually declined to 8.13% in 2004, 6.66% in 2006, and fell sharply to 5.13% in 2008.



Source: Internal Data (2000–2008) from the Public and Private Infrastructure Investment Management Center, Korea Development Institute.

Figure 3 - Rate of Return for Signed Build-Transfer-Operate Road Construction Projects

2. 4 Minimum Revenue Guarantee for BTO Road Projects

For promoting BTO projects, the government provided subsidies during the construction phase and also subsidized operation through the MRG program until 2006, when the MRG system was ended only for unsolicited projects. Different from other fiscal supports, such as the fixed amount of construction subsidies, the MRG created higher fiscal risks for the government because it was harder to estimate the costs and benefits. The government guaranteed private investors a certain percentage of expected revenue for a project. If revenue fell below the guaranteed level, the government filled up the gap. In return, the government had the right to redeem revenue above a certain revenue level based on projected revenue.

As of the end of 2008, about W1,390.3 billion in MRG subsidies were paid to private project companies. Though the MRG system for unsolicited projects was ended in 2006, the government still was required to pay the subsidies for the projects agreed to before the system ended. Early projects started operation but generated actual demands of only 50% of expected demand on average. As a result, large amounts of government payments have been made in MRG subsidies annually.

Table 2 shows the number of projects with MRG payments and the total amount paid per year. As more projects move into the operational phase, the MRG subsidy amount is expected to increase.

Table 2 - Total Amount of Minimum Revenue Guarantee Subsidies for Projects in Operation
By Year

(Unit: W billion)

	2001	2002	2003	2004	2005	2006	2007	2008 (Estimated)	Total
Number of Projects	2	2	3	6	5	7	8	8	-
Amount	65.3	73.7	142.0	157.8	123.3	186.2	285.7	376.2	1,390.3

Source: Internal Data (2001–2008) from the Ministry of Strategy and Finance, Republic of Korea.

One of criticisms of the MRG system was that the government took on most of the project risks, but provided unreasonable high returns to the private participants. Higher MRG levels imply more risk is transferred from the private participants to the government. As the MRG level becomes higher, the returns provided to private participants should be lower. In the early era of PPP projects, the returns to BTO road projects were very high despite the high MRG level provided by the government. Effectively, private participants received very attractive government guaranteed returns from their PPP investments, which exceeded the yield of the 5-year Treasury bond by 5%–8%.

Another criticism of the MRG system was that it discourages the project company from trying to maximize revenue, the so-called moral hazard problem. The worst case of the moral hazard problem arose in projects where the main user of the facility was the project company. Port projects are typical cases. Private port operators are susceptible to an extreme moral hazard if they are eligible for MRG subsidies and need not work to increase port traffic.

The MRG system has been a financial burden to the government. The revenue risk imposed on the government has been realized and has put considerable pressure on the national budget. Various efforts are being initiated by the government to mitigate the burden from its MRG commitments. One of most direct efforts is to consult with the project

company and develop plans to increase revenue. Other efforts include preparing refinancing guidelines. When the project company refinances, the principle of a 50:50 share of refinancing gains between the project company and the government is required in the annual PPP Basic Plan. In practice, the actual gain for the government varies depending upon the methods used for measuring the gain.

3. REVITALIZATION INITIATIVE FOR PPP PROJECTS TO ADDRESS THE GLOBAL FINANCIAL CRISIS

The credit crunch that hit the global financial market in 2008 has had an adverse impact on the PPP market in the Republic of Korea. Interest rates and access to financing were identified as the main channels through which the financial crisis has affected. Accordingly, the government has failed to reach financial closure on a number of pipeline projects², and the initiation of new PPP projects has declined sharply with the global financial crisis implying the likelihood that the amount of PPP investment actually executed will shrink in the future.

Table 3 - Decline of new PPP projects since Global Financial Crisis

(Unit : Trill. KRW (Number of Projects))

	2005	2006	2007	2008 (First Half)	2008 (Second Half)
BTO	6.06 (9)	3.85(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)

The Government of the Republic of Korea has worked out measures for revitalizing PPP projects by helping with financing and reducing project risks from external factors, including abrupt changes in interest rates. It also has improved procedures for implementation of the PPP projects. The government began implementing the first PPP revitalization program in its endeavor to ease the financial crunch in February 2009, much of its focus has been on short-term support measures; these include short-term funds and compensation for the difference in interest rates in the case where the borrowing rate exceeds the earnings rate. Then the government announced in August 2009 other three measures to create an enabling environment for active private investment through PPPs, while minimizing the financial burden on the government; these are (i) improvement in project structure, (ii) improvement of conditions for funding, and (iii) enhanced reliability for the relatively long term support.

3.1 The First Revitalization Initiative

To ease the financial burdens from the global financial crisis, the first revitalization initiative, which revised the PPP Basic Plan, was announced in February 2009. Major items in the initiative are as follows.

² For example, 12 BTO projects and 44 BTL projects, which were scheduled to start construction by February 2009, have failed to reach financial closure.

3.1.1 Reducing Financial Burdens

The government eased the financial burdens on concessionaires by lowering the equity capital requirement ratio. According to the PPP Basic Plan, the minimum ratio of equity capital requirement was 25% for BTO projects and 5%–15% for BTL project before the global financial crisis. The first initiative decreased the ratio to 20% for BTO projects and 5% for BTL projects.

Table 4 - The First Revitalization Initiative: Lowering Required Equity Capital Ratio

Classification	Present	Revised
Build–Transfer–Operate (when financial investors account for 50% or more)	25% (20%)	20% (15%)
Build–Transfer–Lease	5%–15%	5%

Source: Ministry of Strategy and Finance, Republic of Korea.

The government also expanded the upper limit of the payment guarantee provided by the ICGF by 50% (from W200 billion to W300 billion) to help ease difficulties in debt financing for large-scale PPP projects, and the government improved the system by easing regulations in case of change in composition of equity investors: projects that do not have MRG provisions are now exempt from refinancing profit sharing obligation in the case of simple changes in composition of equity investors. In the case of projects that have MRG provisions, however, the government has decided to maintain the original criteria to help reduce excessive MRG levels through sharing of refinancing gain.

3.1.2 Easing Burdens from Abrupt Changes in Interest Rates

Prior to the first revitalization initiative, concessionaires had shouldered all risks resulting from interest rate changes, but the government introduced a measure to share certain parts of the interest rate risks in case there are abrupt changes in interest rates due to the market situation.³

For BTO projects, when there is a change of 0.5 percentage point or more in the base interest rate (in the case of 5-year bank bonds with credit rating of AAA, for example) in the concession agreement, the government can make up for the change. The level of compensation depends on the extent of interest rate fluctuation.⁴ For BTL projects, the government has reduced the period for readjusting the benchmark bond yield (government bond) from 5 years to 2 years, while replacing or redeeming 60%–80% of excesses or shortages based on the interest rate gap of 50 basis points between government bonds and bank bonds.

3.1.3 Shortening of the Project Implementation Periods

In order to prevent delay in the negotiation period, competent authorities are required to complete the settlement of various points of contention and civil petitions through consultation with related agencies before they start negotiations with concessionaires. Also, the competent authorities can attach draft concession agreements when they announce RFPs. The government encourages early completion of construction by concessionaires by allowing them to start operation earlier than scheduled and generating additional revenues.⁵

³ This rule temporarily applies to projects commencing construction or reaching financial closure in 2009, depending on the negotiation between competent authorities and concessionaires.

⁴ $\pm 0.5\%$ – $\pm 1.0\%$: compensate or redeem 60%; more than $\pm 1.0\%$: compensate or redeem 70%

⁵ This rule temporarily applies to projects commencing construction in 2009.

3.2 The Second Revitalization Initiative

Though the government began implementing the first PPP revitalization program in its endeavor to ease the financial crunch in February 2009, much of its focus has been mainly on short-term support measures; these include short-term funds and compensation for the difference in interest rates in the case where the borrowing rate exceeds the earnings rate. Further aggravation resulted from the declining attractiveness of investment, as the PPP project structure became high-risk and low-profit. This is the result of two factors. First, concessionaires need to bear the operational risk, which thus far has been shared with the government through the MRG system. Since the MRG was reduced after 2006 and finally ended, the private sector has had to shoulder its own the revenue risk. Second, strengthened competition has curtailed profit rates. The profit rate (fixed, after tax) of road projects, for example, has been drastically reduced from 8.56% (1997–2005) to 5.15% (2006–2008).

To address these issues, the government announced in August 2009 three measures to create an enabling environment for active private investment through PPPs, while minimizing the financial burden on the government; these are (i) improvement in project structure, (ii) improvement of conditions for funding, and (iii) enhanced reliability.

3.2.1 Improvement of Public–Private–Partnership Project Structure

One of the areas that improvement in project structure focuses on is the revitalization of supplementary and ancillary projects. The private concessionaire first of all needs to be provided with a motive to maximize the use of supplementary and ancillary projects in connection with the main project. Target projects can be negotiated either using the current itemized approach or a comprehensive approach, so as to increase the number of supplementary projects. The target project would be expanded to include those recognized by competent authorities so that user fees can be lowered. This necessitates revision of the PPP Act.

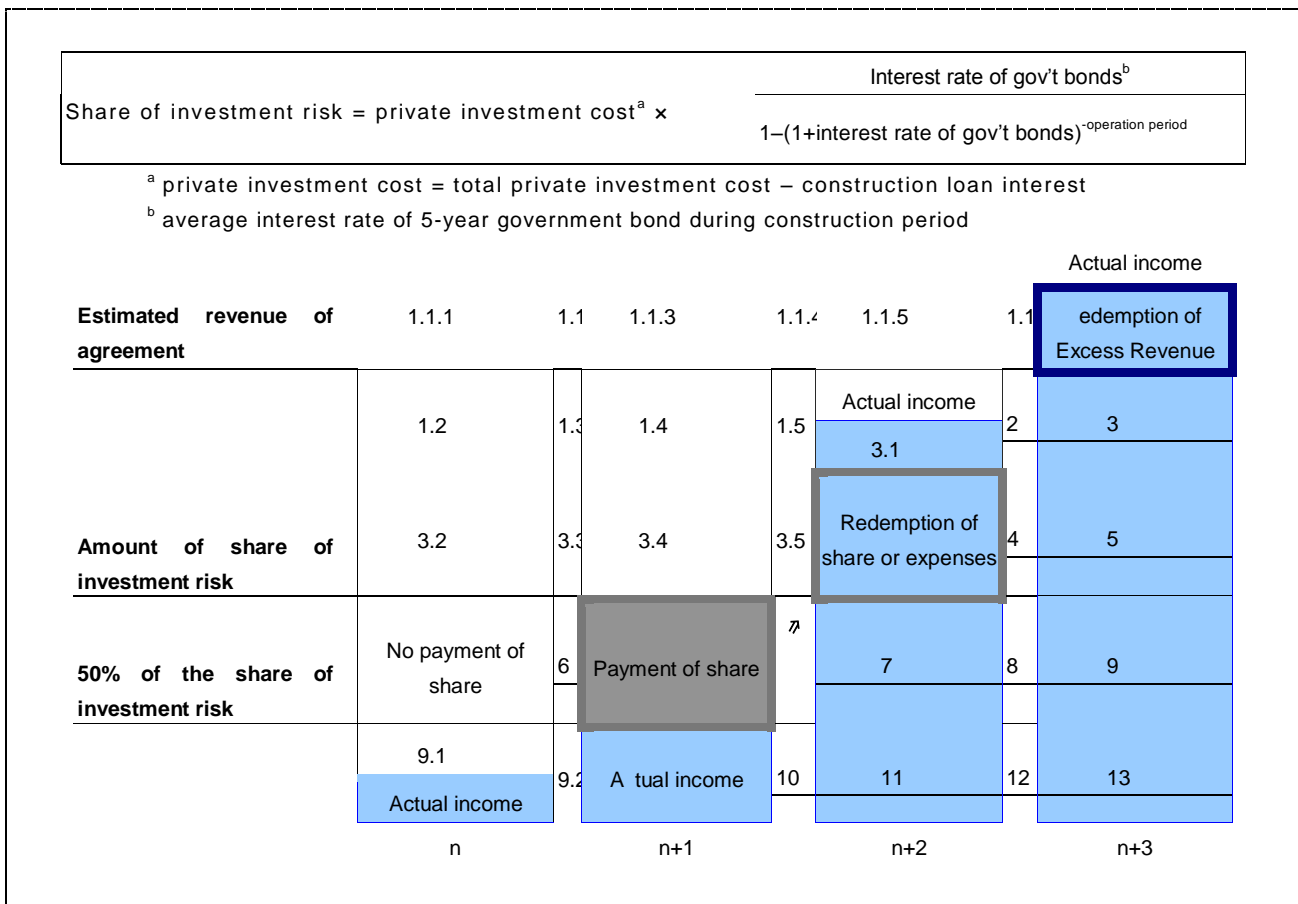
Second, the role of competent authorities is further strengthened. When the competent authorities issue a public notice or announce a third party proposal, they would provide grounds for concessionaires to develop supplementary projects and to carry out administrative procedures such as acquisition of land.

Third, distribution of excess profits would be improved. The competent authority needs to set rules in the concession agreement, project by project, mindful of the amount of profits gained from supplementary/ancillary projects in similar categories, as well as its role in the process. Currently, a predetermined amount of profit goes to the competent authority (reductions in subsidy and user fee), and the excess profit is shared between the competent authority and the concessionaire according to a 50:50 ratio.

Project structure improvement also concentrates on making a special case of estimating compensation for termination of a concession agreement. The government has introduced a special temporary arrangement concerning compensation for the concessionaire to pay back the invested funds when the project agreement is terminated due to inevitable reasons. The modification in calculation method can be described as follows: when the agreement is terminated during the operational period, the method of depreciation of the invested private funds has been revised from the current declining balance method to the straight line method. This is in order to have the effect of increasing capability of raising

senior debt by amplifying the security solvency of the project. It should also be noted that depreciation of SOC needs to use the straight line method based on general accounting and tax transaction principles, such as the accounting standards of the state. But in the case where the agreement is terminated because of the concessionaire's fault, subordinated debt and capital should be excluded from estimation of the amount payable in order to ensure greater responsibility on the part of the private operator. These measures are applicable for new projects for 2009–2010 in principle, but can be applied to projects for which financing agreements are not yet signed, according to the judgment of the competent authorities.

Introduction of a new investment risk sharing method, called the new risk-sharing structure, is another measure intended to improving the PPP project structure. Under the new risk-sharing structure, the government shares investment risk with the private company by compensating the base (raw) cost of the project, calculated as the sum of private investment cost and the interest rate on government bonds. The government payment is made for the amount of shortfall in the actual operational revenue compared to the share of investment risks by the government. When the actual operational revenue exceeds the share of investment risks, government subsidies are redeemed on the basis of and within the limit of the amount previously paid. Subsidies are provided only when the actual operational revenue surpasses 50% of the share of investment risks. Applicable projects are government solicited projects with significant public benefits (e.g., projects with the appropriate cost-benefit ratio). Concurrent with the introduction of the new risk-sharing structure, the MRG system was ended.



n = specific year when the mechanism begins to be applied.
 Source: Ministry of Strategy and Finance, Republic of Korea.

Figure 5 - Mechanism of the New Risk-Sharing Structure

3.2.2 Improvement of Conditions for Funding

As the government support measures for small and medium-sized companies, Korean financial institutions are required to lend a certain amount to small and medium-sized companies in order to satisfy the required ratio of loan amount for small and medium-sized companies to total loan amount. As a result, financial institutions have difficulty offering loans for PPP projects, given that they are classified as loans for large companies. Consequently, as a response to demands for improvement in PPP funding and procurement, the government has introduced measures to reduce burdens caused by regulations and restrictions on financial institutions. One such attempt is the exclusion of the amount of loans for PPP projects from the parameters for estimating loans for small and medium-sized businesses (loan amount for small and medium-sized companies/total amount of loans). The Financial Supervisory Service's rule for this purpose has been completed.

Also, active investment in PPPs by financial companies is encouraged by including contributions to PPP investment in one of the evaluation categories of the management performance evaluation for financial institutions. For this purpose, enforcement regulations of the Financial Supervisory Service were revised.

Also, creation of SOC funds is encouraged by lowering the minimum capital requirement (from W10 billion to W1 billion), which involves revision of the PPP Enforcement Decree.

Under another measure to improve conditions for PPP funding, the government is seeking to revitalize issuance of SOC bonds by expanding bond issuance organizations to include securitization companies, reflecting the specific character of PPP projects. As such, investors are expected to be diversified by securitizing investment funds. This will require revision of the PPP Act.

The ICGF is granted an enhanced role through expansion of the targets of guarantees and means of raising funds, while providing legal grounds for responsible operation (this requires revision of the PPP Act). Such expansion of targets of guarantees for infrastructure bonds implies an enlargement—from infrastructure bonds issued by concessionaires to those issued by financial institutions or securitization companies. This will provide grounds for receiving deposits from other funds to secure emergency liquidity, as well as a basis for active operation of funds. It will also contribute to greater responsibility by creating legal grounds for liability of reparation and exemption from obligation.

The government seeks to create a public investment fund by reviewing a plan to create an investment fund of W1 trillion through the Korea Development Bank and private financial resources. The government expects to expand relatively high-risk investment such as equity investments or subordinated loans.

Taxation support is actively being reviewed to extend the period of tax breaks and expand support for PPP projects in order to prevent increases in user fees and expand the investment base (this will require a revision of the tax exemption law). The period for applying a 0% value-added tax rate for PPP projects will be extended up to 3 years (from the end of 2009 to the end of 2012). The period of separate taxation of interest earnings from infrastructure bonds will likewise be extended up to 3 years (from the end of 2009 to the end of 2012). Beneficiaries are also expected to be enlarged (from maturity period of over 15 years to over 7 years). Since most of the infrastructure bonds issued in the past

have maturities of 8–17 years, the expansion of beneficiaries for this special taxation provision will benefit more bond holders.

Lastly, regulation of refinancing is expected to be eased in order to facilitate financing. As a temporary measure, refinancing gains will not be shared with the government if all of the following conditions are satisfied: i) the expected ROI after refinancing is smaller than ROI in the financial model of concession agreement; ii) no government financial support (MRG or construction subsidy) is provided; and iii) the level of user fee is lower than 1.2 times that of government procured projects. This measure would only be applied to projects that initiate construction in 2009–2010 and conclude financial agreement after the revised Basic Plan.⁶

3.2.3 Enhancement of Reliability

To enhance reliability of PPPs for the general public, measures to mitigate the burden on taxpayers for existing MRG programs have been introduced to reduce excessive financial burden caused by MRGs. One of these measures is to encourage efforts to reduce MRGs through refinancing. This requires SPCs to report to the competent authorities every half year on any occurrence that necessitates refinancing. A system for requesting refinancing by the competent authority also needs to take place.⁷ Secondly, MRGs are expected to be reduced through increased income and reduction in expenditures. Various measures for increasing income, such as improvement of the service charge systems, opening additional interchanges, and developing supplementary projects have been devised. Field examinations are conducted by the competent authority on the operation of projects with a heavy MRG burden; one of the items examined is the adequacy of operational expenses.⁸ A feasibility study is conducted on reducing the MRG and user fee by adjusting the period of operation.

The government plans to establish and operate a neutral dispute arbitration organization for fast and fair resolution of disputes (this requires revision of the PPP Act), tentatively named Dispute Arbitration Committee for PPP Projects. The committee intends to conduct fair arbitration of disputes that are difficult to be settled by the parties involved because of disagreements over unexpected incidents. Currently, while the opportunities for disputes are increasing because of the extensive period of PPP projects (20–50 years) and changes in business circumstances, there exists no extralegal option for resolving disputes. Moreover, other industrial sectors in the nation are operating extralegal dispute arbitration systems, such as the International Contract Dispute Resolution Committee, Construction Dispute Resolution Committee, and environment dispute resolution system; these provide the basis for the establishment of such a committee in the PPP arena.

4. SUMMARY AND CHALLENGES AHEAD

The PPP market in the Republic of Korea has continued to grow as the government has actively promoted PPP projects as an alternative method to supplement public investment. The government has tried to allocate strategically its limited resources and therefore has encouraged the role of the private sector where its efficiency and creativity can be effectively utilized. With the strong initiative of the government, PPP projects have contributed to providing infrastructure facilities and public services where large-scale

⁶ The Korea Development Bank provides W1 trillion to SPCs temporarily for 1 year in place of commercial financial institutions.

⁷ The competent authority would request that the SPC undertake refinancing if it finds better conditions for funding after financial closure (introduced in the UK, October 2008, to encourage application for projects before October 2008)

⁸ Projects that show more than a 50% difference between actual demand in the previous year and projected demand

investments were urgently needed for national economic development and growth, and the PPP market's position was solidified as a new mode of raising funds to make up for insufficient government funding.

However, the recent global financial crisis has frozen the national economy as well as the PPP market. The initiation of new PPP projects and the signing of contracts for existing projects declined sharply as risks and uncertainties in the financial market rapidly increased.

In order to counter the crisis, the Republic of Korea government announced several revitalization measures to assist PPP projects experiencing difficulties in financing by reducing project risks resulting from external factors. The revitalization measures include both financial and non-financial support, including interest rate risk sharing, an increase in the upper limit of the infrastructure credit guarantee amount, provision of short-term loans by the Korea Development Bank, lowering of the minimum equity capital ratio, shortening of the procurement process, change in the termination calculation method, etc.

Note that the government is still facing many issues and challenges that need to be resolved in order for the PPP program to be revitalized and should continue for PPP projects to be an alternative means of fiscal stimulus, alleviating the fiscal burdens on the government.

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