

Restructuring of PPP Projects: The Case of Geoga Grand Bridge in Korea

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Korea's Leading Think Tank **KDI**

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Part-01 | Restructuring

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Why Restructuring?

- ❖ **According to article 33-3 of the Basic Plan for PPP, government is allowed to make changes in the project structure which is called “restructuring” under any of the following conditions:**
 - To reduce fiscal burden of MRG payment and the subsidy caused by not adjusting(or increasing) user fees regularly.
 - To raise fund for termination payment.
 - To replace the concessionaire who violated laws and ordinances.
 - To take an administrative measure for public interest.

Considerations when restructuring

- ❖ According to article 33-3 of the Basic Plan, alteration of project structure(or conditions) shall comprehensively consider the following factors:

- (1) Fiscal saving effect of restructuring vis-à-vis existing agreement
- (2) effect on refinancing gain sharing
- (3) effect on termination payment
- (4) effect on value of operation and management right
- (5) effect on user fee
- (6) effect on rate of return
- (7) effect on operation cost
- (8) effect on government risk and workload
- (9) effects on public interest through termination of contract

Common Factors of Restructuring

- ❑ **The shareholders' interests are protected.**
 - ❖ **If shareholders exit**, the competent authority should make up for opportunity cost for investment cost.
 - ❖ **If shareholders stay**, the competent authority should guarantee the return on equity based on the future cash flow of the concession agreement.
- ❑ **Based on refinancing unsubordinated debt, the competent authority takes the responsibility for repaying its principal and interest.**
- ❑ **The competent authority **takes** the following risks;**
 - ❖ Demand risk
 - ❖ Interest rate risk
 - ❖ Corporate tax risk

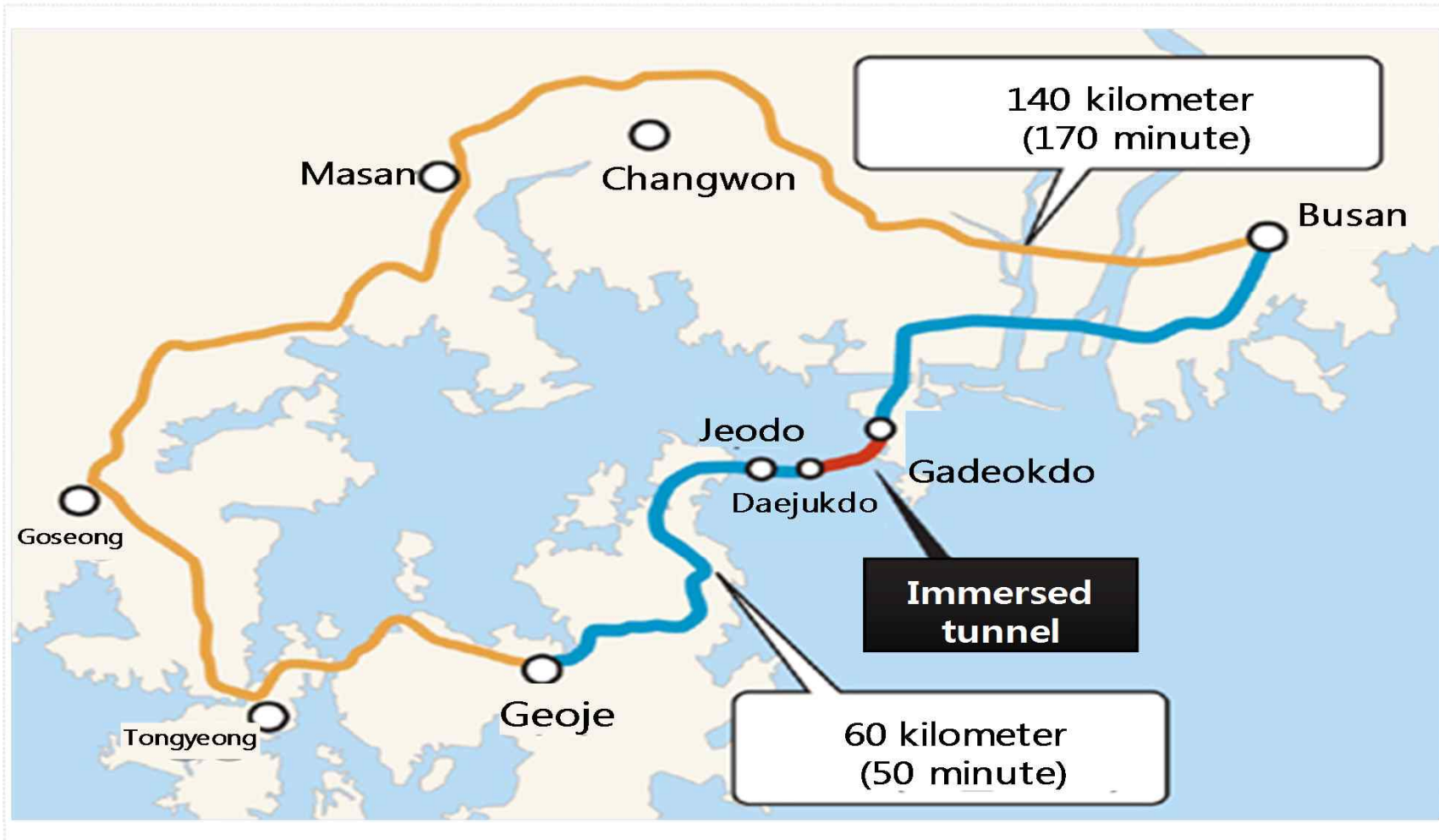
Part-02 | **Project Overview of
Geoga Grand Bridge**

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Geoga Grand Bridge



Potential Benefits of the Geoga Grand Bridge



Project Overview

	Project details
Method	Build-transfer-operate (BTO)
Competent authorities	Gyeongsangnam-do, Busan metropolitan city
Purpose	To drive up the nation's competitiveness by adding port capacity and develop a hub port in Northeast
Size	Length: 8,204.4 meters, Breadth: four lanes One immersed tunnel and two cable-stayed bridges Other incidental facilities
Total investment	US\$ 1,803 million
Government subsidies	US\$ 520 million
Private investment	US\$ 1,283 million

Project Overview

	Project details
Fund procurement	Equity capital: US\$ 391 million (30.47%) Debt capital: US\$ 892 million (69.53%) US\$ 1,283 million
Traffic fees	KRW 10,000 (US\$9.09)
Concession Period	40 years
MRG rate	77.55%

Financial Troubles Caused by Lack of Demand

(Units: US \$ mil)

	2011			2012		
	Projected revenue	Actual revenue	Actual rev. as % of projection	Projected revenue	Actual revenue	Actual rev. as % of projection
Total	140	73	52%	147	71	48%
Micro cars	57	2	106%	60	3	98%
Small cars		58			26	
Medium cars	22	3	14%	23	4	16%
Large cars	25	5	21%	27	4	13%
Extra-large Cars	36	4	10%	37	4	11%

Financial Troubles Caused by Lack of Demand

(Units: US \$ mil)

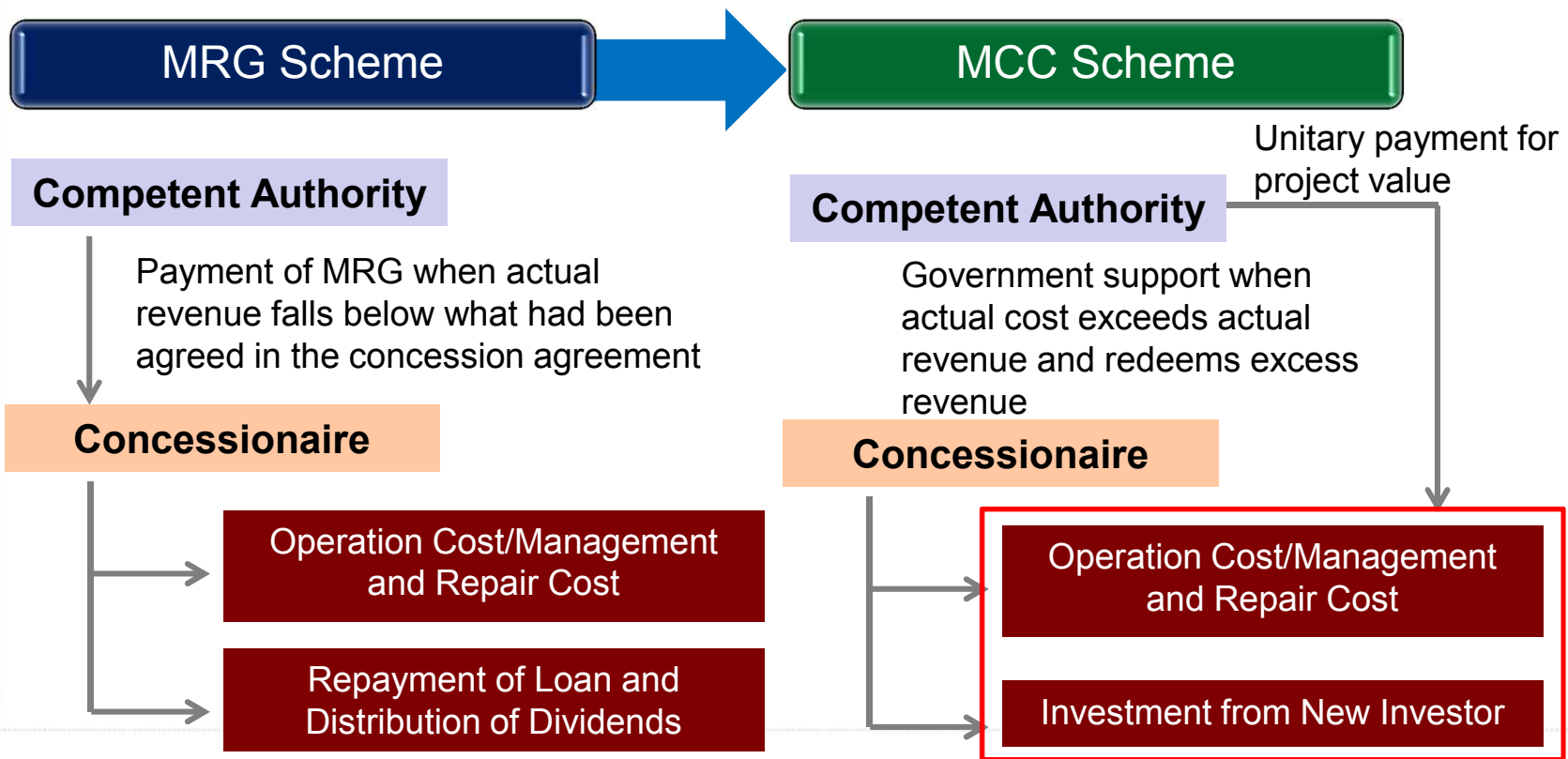
	MRG requested (A)		Road-related budgets (B)		MRG requested as % of budgets (A/B)	
	2011	2012	2012	2013	2012	2013
Busan	21	27	497	625	4.25%	4.39%
Gyeongsang nam-do	21	27	209	220	10.10%	12.44%
Total	42	54	705	845	5.98%	6.49%

Part-03 | **Restructuring of
Geoga Grand Bridge**

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Restructuring Scheme

- ❖ **MCC(Minimum Cost Compensation) is adopted in order to reduce fiscal burden and abolish MRG.**



Restructuring Scheme

	BTO_MRG	BTO_MCC
What do the competent authority Guarantee?	<ul style="list-style-type: none"> • MRG when actual revenue falls below what had been agreed in the concession agreement 	<ul style="list-style-type: none"> • Investment Cost of new shareholder(Balance of total debts + equity value + expenses) and the return on it • Operation and maintenance costs • Tax and dues
Who raise user fee?	SPC annually raises user fee based on CPI.	Competent authority adjusts the price by considering the price of other public goods.
How much is the rate of return	Higher than 9%.	4.7%.
Who bears demand risk and interest rate risk?	As a rule, SPC bears them. But MRG drastically mitigates the demand risk.	Competent authority bears them.

Concerned Parties of Restructuring

❑ Existing Investors

- ❖ Most of existing investors are composed of construction investors(CIs).
- ❖ CIs have an incentive to agree to restructuring.
 - ✓ They want to sell shares in the project at the market price that reflects the MRG value after construction completion.
 - ✓ They should want to liquidate initial investment through the stake sale in order to participate in other bids.

❑ New Investors

- ❖ MCC provides an inducement to include the project in a portfolio as a low risk investment alternative.
 - ✓ It provides a stable return on total investment over the long term.
 - ✓ It lowers investors' risks by placing demand risk and interest rate risk on a competent authority.
 - ✓ It could be an optimal investment approach for those who prefer low-risk, low-return investments such as build-transfer-lease (BTL) projects.

Concerned Parties of Restructuring

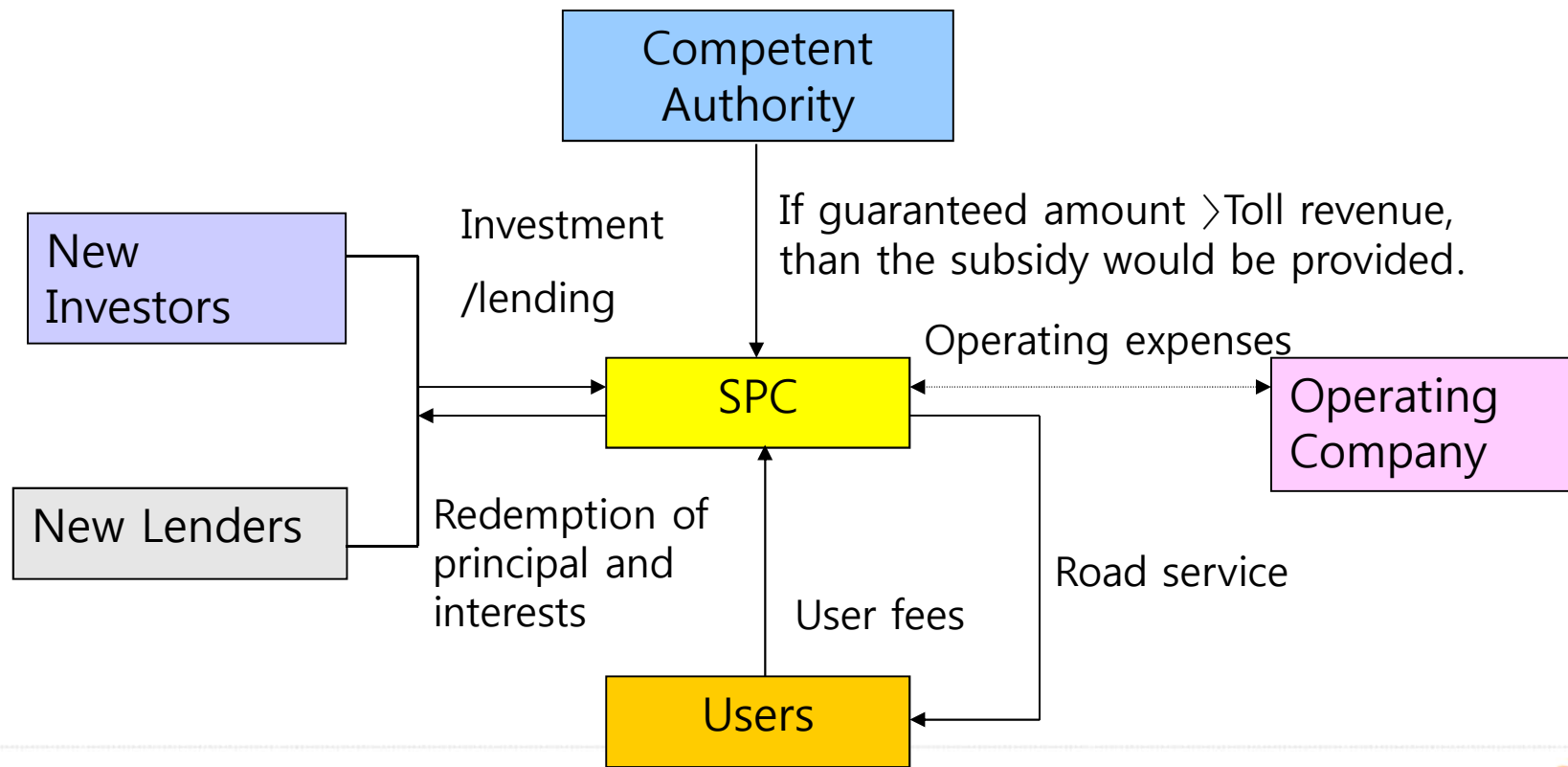
❑ Competent Authority

- ❖ Competent authority preferred MCC as a way to reduce an enormous MRG payment burden.
- ❖ The monthly average yield was above the 10% level in the 1990s but it has gradually declined since 2000.
 - ✓ MRG payment deteriorates fiscal conditions of a competent authority.
 - ✓ MRG becomes a cause of public criticism.

Restructuring Scheme

❑ Post-restructuring Structure of the Geoga Grand Bridge

- ❖ Restructuring involves the change of investors and lenders.



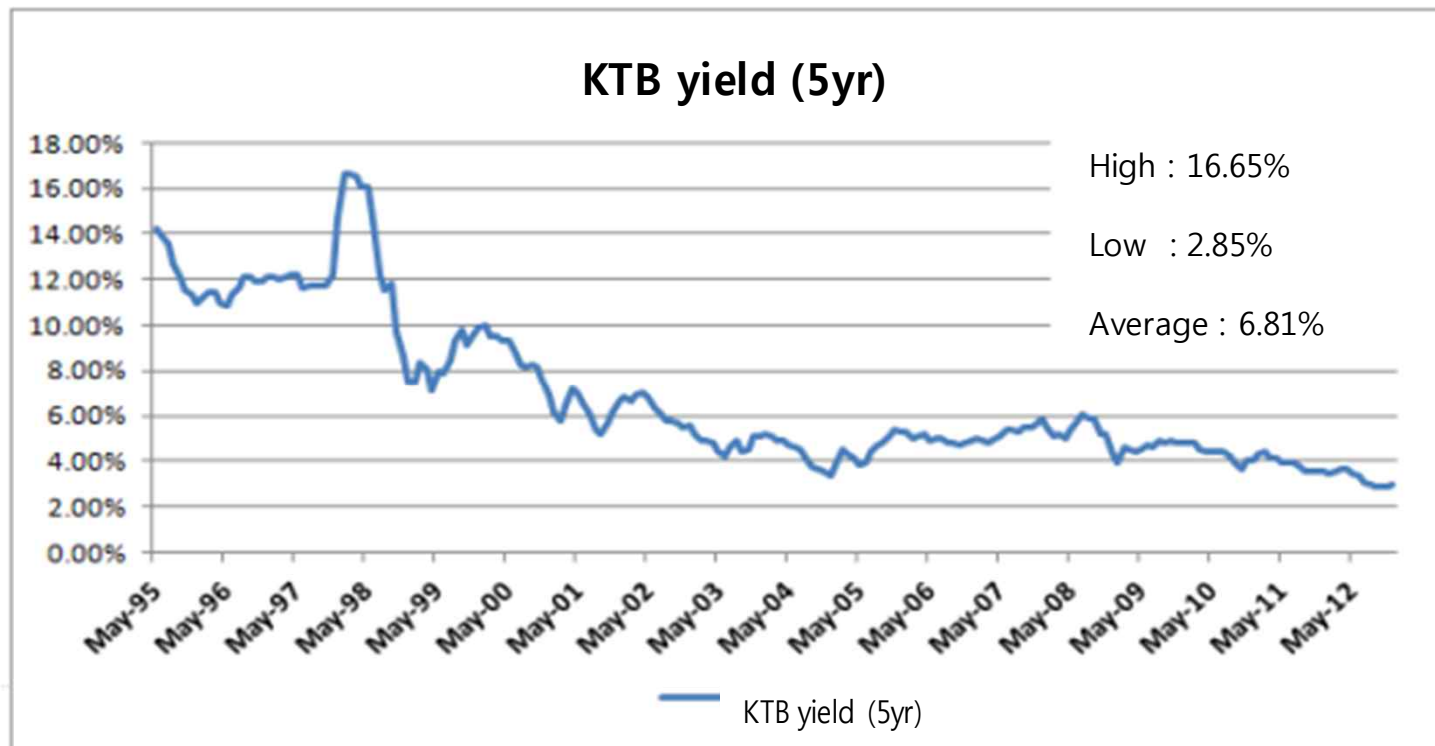
Financial Effects of Restructuring

- ❑ MCC lowered new investors' rate of return and financing costs.
 - ❖ It reduced the competent authorities' fiscal burden by US\$4,871 million.

	Operation period	Operation revenue		Current IRR	Remarks
		Subsidy	User fee revenue		
MRG	37.25 years	US\$ 4,962 mil	US\$ 4,503 mil	9.6%	user fees are lifted US\$1 for every 10 years
MCC		US\$ 92 mil	US\$ 4,503 mil	4.7%	

Backgrounds of MCC

- ❑ Yields on five-year Korean Treasury Bonds (KTB) have continued falling since 1995.
 - ❖ The monthly average yield was above the 10% level in the 1990s but it has gradually declined since 2000.



Backgrounds of MCC

- ❑ **Due to declining interest rates, refinancing was possible and lowered investors' IRR.**
- ❑ **Competent authority burdened the demand risk and interest rate risk.**
- ❑ **For those reasons, the Geoga Grand Bridge could be restructured and provide a stable investment opportunity for new investors.**

Part-06 | Policy Implications

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Policy Implications

- ❑ PPP projects under MRG scheme may impose an excessive fiscal burden if the related demand forecast is inaccurate.
 - ❖ As to the Geoga Grand Bridge project, the concession agreement was signed with MRG equal to 77.55% of the projected revenue.
 - ❖ The actual revenue came in at 52% of the projected level in 2011 and 48% in 2012.
 - ❖ It resulted in fiscal burden worth US\$42 million in 2012 and US\$55 million in 2013.
- ❑ When PPP was still in its infancy in Korea, only limited data and experience were available for demand forecast and its review.
- ❑ PPP projects are very likely to face serious challenges unless an rigorous economic feasibility study and value-for-money (VfM) analysis are thoroughly conducted in the planning stage.
 - ❖ A PPP unit is an institution that develops the process and methods of a project feasibility study and then carries out the study accordingly.

Policy Implications

- ❑ The Geoga Grand Bridge project's excessive MRG payment burden called the need for PPP into question.
- ❑ When the local governments suffered fiscal woes and public criticism heightened over PPP, the project's restructuring was put to consideration.
- ❑ As a PPP unit, KDI PIMAC provided technical support by assessing the Geoga Grand Bridge restructuring plan with objectivity and transparency
 - ❖ PIMAC modified the restructuring plan that the competent authority had proposed, and examined quantitative figures on it.
 - ❖ Based on the modified restructuring plan, the Ministry of Strategy and Finance approved the plan.
- ❑ The competent authorities and private investors can reach a mutual agreement on new contract terms.

Policy Implications

- ❑ For a sustainable advancement of PPP, it is essential for the Government and the PPP unit to review diverse issues arising throughout the project implementation and as well as to promote the long-term finance market.
 - ❖ The government should administer the restructuring plans in order to protect the intent of PPP law and public interest.
- ❑ Basic Plans for PPP was revised in May 2014 to reflect the appropriate regulations on restructuring PPP projects.
 - ❖ Article 33-3 of the Basic Plan was refined to administer and monitor the restructuring plans.
- ❑ Restructuring of the Geoga Grand Bridge was considered as a new attempt on the financial structure of PPP in Korea
 - ❖ Constant advancement of the capital market is also essential for sustainable PPP drives.
 - ❖ Attracting investors in a restructured project requires a wider pool of investors, which means it is critical to build a stronger capital market.

Thank you

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