Adoptability of Korean PPP Scheme from the Recipient's Perspective

By

Jisun Lee

THESIS

Submitted to
KDI School of Public Policy and Management
in partial fulfillment of the requirements
for the degree of

MASTER OF PUBLIC POLICY IN ECONOMIC DEVELOPMENT

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Approval as of November, 2011

ABSTRACT

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In trying to have the lessons from the Korean PPP and developing countries' actual circumstances communicated, this paper conducts an online-survey on the adoptability of the Korean infrastructure public private partnerships (PPPs) scheme. This paper traces five root constraints in adopting the Korean infrastructure PPP scheme from the recipient's perspective and gives tailored solutions derived from the Korean PPP experiences regarding these constraints. It provides policy makers with a road map for making efficient use of ODA to achieve better PPPs as well as tangible development that require governance and entrepreneur spirit to tango.

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"But I have a bad experience of the PPP project in Bangladesh!" Mr. Rahman, Ministry of Commerce Bangladesh, said during my presentation on the best practices of the Korean infrastructure Public Private Partnerships. I had tried to suggest a developmental policy package for the developing countries. He continued, *"We built a toll road that cut the detouring road with heavy traffic jam but no one used it, ending up leaving the newly constructed road as well as the land devastated".* The package might have constructed another road that devastates; it could have been a destroying tool rather than a developing tool as the lesson Mr. Rahman learned from his experience – *"It works for you, it doesn't work for us".*

Would the lesson turn out to be the same if the project took a different procurement scheme? Is it the PPPs itself which has to take the blame or the institutions and the schemes that to be blamed? Can Korean PPP provide a solution that works for each country, especially concerning locality? If he knew that the Korean PPP can resolve the problem, could he still say no to it?

1. Introduction

According to the World Bank Institute (2011), Governments have employed the Public Private Partnerships (PPPs) for nearly two decades to enhance investment in infrastructure and to improve service delivery. So far, many advanced countries, organizations and institutes have published reports on their best practices of the PPP experiences, aiming to share their lessons learned with the developing countries. However, there are little reports that talk about how to make the lessons work for the developing countries (typically, those with tight national budget and poor infrastructure systems).

Caution should be taken in applying the best PPP practices to other countries, considering the unique and diverse context for each of them. The size, nature and maturity of their markets and governance conditions vary significantly. Then, can the best practices of the PPP projects from the developed countries work in the developing countries without any alterations; what are the constraints in applying the Korean PPP to the developing countries? Do the recipient countries consider their own binding constraints prior to adopting a foreign policy scheme for developmental purposes? This paper claims that there have been little research on the constraints recognized by themselves (i.e. the recipients) and there is little effort to remind ourselves (i.e. the developers), on the importance of raising awareness prior to applying or taking foreign schemes and policies.

This paper aims to assess the five root constraints in adopting the Korean infrastructure PPP scheme from the recipient's perspective and provides tailored solutions derived from the Korean PPP experiences over these constraints. This research is about how to make the globally proven factors of development to work locally, in a practical and realistic manner. It examines three hypotheses: first, recipients are not willing to adopt the Korean PPP scheme without any alternation; second, there are at least three significant constraints that people from developing countries recognize; and third, recipients' attitudes toward adopting the Korean PPP scheme will be changed when they have a chance to think about the possible constraints they may face.

The Korean case has been chosen because Korea has successful stories of the PPPs and has graduated from the emerging economy; thus, its successful factors of PPPs can be more applicable for the emerging economies' implementations. There are publications of the Korean PPP that introduce their best practices and lessons learnt; however, few of them care to see if the lessons can be applied to the developing countries. In trying to have the lessons from the Korean PPP and developing countries' actual circumstances communicated, this paper conducts an online-survey on the adoptability of the Korean infrastructure PPP scheme.

This paper is taking the road less traveled by the developed who try to help the developing countries. It reviews the general definition and performance of PPPs in the literature review in the following chapter. In the third chapter, it introduces the Korean PPP with its chronicle changes and performances by stages and recognizes six important changes that led to better PPP performances. In the forth chapter, it conducts a survey on the adoptability of the Korean PPP scheme to analyze the adaptability of the scheme; and, it also revisits the Korean PPP scheme changes to provide a remedy to the survey results. In providing the answer, this chapter also recommends merging PPPs with the Official Development Assistance (ODA). The fifth chapter finalizes this research and concludes with policy recommendations.

2. Literature Review

2.1. Definition of PPP

OECD (2008) defines PPP as:

An agreement between the government and one or more private partners (which may include the operators and the financers) according to which the private partners deliver the service in such a manner that the service delivery objectives of the government are aligned with the profit objectives of the private partners and where the effectiveness of the alignment depends on a sufficient transfer of risk to the private partners.

However there is no standard definition of what constitutes a public-private partnership because there are different country definitions of public-private partnerships, OECD (2010). "Definition of PPP isn't clear in Korean context. It is because the definition of PPP is different county by county" Jay-Hyung Kim, the managing director of PIMAC clarified this during an interview on 24 June 2011.

In addition, this report finds the advantages and disadvantages of a dedicated PPP unit. It recognizes line ministries/agencies together with the finance/planning ministry have expertise in assessing cost-benefits of projects and political prioritization of projects as an argument against the dedicated PPP unit. However, it is important to point out that the argument is not quite persuasive in Korea. It was when Korea changed decision making process that its PPP performance significantly increased.

Earlier a line ministry used to select projects and conducted a feasibility study on them; however, the Ministry of Strategy & Finance decided to conduct Preliminary Feasibility Study by PIMAC, which is not easily influenced by politics as an independent evaluation unit for public investment. In Korean context, unlike the argument, it was not a matter of expertise but a matter of politics and transparency.

2.2. Principles for Private Sector Participation in Infrastructure

The report published by OECD in 2007 established principles covering five important sets of challenges for national authorities in private sector participation in infrastructure, ensuring the success of PPP:

1. Deciding on public or private provision of infrastructure services
2. Enhancing the enabling institutional environment
3. Goals, strategies and capacities at all levels
4. Making the public-private co-operation work
5. Encouraging responsible business conduct

It is absolutely understandable that the governments need capital from the private investors; therefore, want to involve the private capital through PPP. However, the PPP does not guarantee the success of the infrastructure projects. It has to be the government who needs to carefully look into PPP-ability of the project and the capacities within themselves to carry out the project through PPP and deliver the success of the infrastructure project.

Korean PPP scheme also possess the mentioned five points. More precisely speaking, it was not until when the Korean government equipped with the points that the government brought operational efficiency and notable success of PPPs.

2.3. Successful Case of PPP from the Republic of Korea

Kim et al. (2011) categorized chronological changes as well as characteristics of Public–Private Partnership Financing in Korea. There are 4 categories: Phase 1 of 1968-1994, Phase 2 of 1994-1998, Phase 3 of 1999-2004, and Phase 4 of 2005-present. It focuses to explain the institutional arrangement and reform efforts of the Korean government for developing and managing public investment programs. The Korean case demonstrates indirectly the impact of PPPs not only on the infrastructure development but also on the whole public investment system, including appraisal system.

Attention is worth noting on the current situation that there is no publication on adoptability of PPPs from the recipients' perspective; neither did the Korean case study suggest the way of applying the PPPs to the developing countries. So, this research has been conducted to find out empirical evidences on adoptability of PPPs (scheme) from the recipient's perspective, thus applicability of Korean PPPs to the developing countries.

2.4. Application of PPPs for Developing Countries

There has been an attempt to make the PPP, which works in Korea, work in the developing countries. KDI PIMAC (2009) studied effectiveness and efficiency of ODA projects in connection with Public Private Partnerships to propose a policy toward maximizing participations and active orders in ODA projects from the Korean private sector side. It also reviews ODA-PPP projects in other countries.

However, it does not examine how to make the linkage between ODA and PPPs, paying little attention to the prosperity of the local. Hence, it leaves a room to elaborate the ODA-ability of PPP which will be discussed in the last stage of this paper.

2.5. Fundamental Condition for Development, Entrepreneurship

David Osborne and Ted Gaebler (1992) argue that American government and possibly other governments in the world should shift its bureaucratic system to result-oriented market, highlighting the importance of providing less government but more governance. They provide ten principles that would transform our governments into the better governments that work in this era.

The principles can be traced in the Korean PPP scheme that has been transformed since the Korean economy crisis. However, it is not clear who changed what; that is, if it was the government that reformed the Korean PPP scheme or vice versa. However what is clear is that current Korean PPP is more result-oriented and competitive that serves its customer, Korean people and businesses.

R. Glenn Hubbard and William Duggan (2009) warn non-governmental organizations (NGOs) and governments to stay away from running development projects other than helping pro-business projects. Many international NGOs have implemented development projects in the form of giving free goods, selling cheap and disturbing local businesses whose competitiveness are much weaker than the international big brother. They persuasively argue that thriving local and private businesses are the best hope for the developing countries to end poverty and start prosperity. Finally, they advice rich citizens and companies who desire to contribute themselves or feel burdened to do something to the developing world: make a distinction between humanitarian and economic aid, and if you want to do the latter, foster local businesses.

The co-authors argue to challenge the problems of our time and have shown us the direction to the development. The solution is private business. They enlighten the fundamentals of development that is equipping the locals with competitiveness not by giving them free goods but by fostering their businesses.

Although the authors do not say much about how to foster local businesses fundamentally, the untaught methodology can be found in PPPs. Companies, either local or international, build or run their business on the basis of social overhead capitals (SOCs) which are built by the governments with huge money. PPPs would allow even a poor government to build the SOCs by connecting with private capitals and technologies if the private businesses see a profit from it and able to secure their profits. ODA-ability of PPPs avails this idea. Is it not only able to guarantee revenues to the private firms but also can increase capacity of the local people from policy and technical consultations.

3. The Korean PPP

3.1. Public Private Partnerships (PPP) in Korea

3.1.1 PPP Performance

The Korean government defines a PPP as an initiative that invoices the public and private sectors to provide infrastructure and public service (OECD, 2010). Korea has many successful infrastructure PPP projects that have provided public services to people in Korea, reducing government's financial burden and creating long term investment opportunities for the private companies who desire high return-high risk business opportunities.

According to Kim, J.W. 2010, PPP has made contributions to Korean economy resulting from input of private capital and the reduced government's fiscal burden through better Value For Money (VFM), and to social welfare resulting from on-time delivery and early realization of benefits. As PPP projects give tangible outcomes, the value of completed project has been increased by 25.9 percentages on average over years from 2000 to 2008. Plus, the construction subsidy by the government was much smaller than the private investment in 2008.

Box1. The trends of value of completed project,%

	Total	Fiscal Investment by Government Agencies	Private Investment	PPP Investment
2000	-3.1	-5.6	-1.5	29.7
2001	10.0	4.4	14.6	16.0
2002	11.2	-8.1	24.5	59.9
2003	16.6	10.7	20.6	13.9
2004	11.1	4.9	14.8	23.6
2005	4.1	-3.7	7.5	20.6
2006	2.6	0.6	4.0	-2.7
2007	6.6	8.4	4.5	33.2
2008	4.7	6.5	1.7	38.6
Average	7.1	2.0	10.1	25.9

Note: Based on nominal price
Source: Statistics

Source: PIMAC,2010

Box2. Total PPP Investment by Process Step (as of Dec. 2008)

(unit:: 0.1billion, KRW)

	No of Projects		Total Amount	Average
Preparing to Construct	27 (11)	Total Investment	100,933	3,738
		Construction Subsidy	9,835	894
		Total Private Investment	91,098	3,374
Under Construction	152 (43)	Total Investment	352,629	2,320
		Construction Subsidy	86,588	2,014
		Total Private Investment	266,042	1,750
Under Operation	243 (67)	Total Investment	198,825	818
		Construction Subsidy	35,619	532
		Total Private Investment	163,206	672

Note : ( ) is the number of projects which have construction subsidies

Source: PIMAC, 2010

3.1.2 Chronicle changes in the Korean PPP

The idea of PPPs was initially conceived in 1960s and has taken effect in 1990s. Since late 1990s Korean PPP has been developing with institutional changes. Kim et al, 2011, explains the chronicle changes in Korean PPP projects' characteristics by stages.

Box3. Chronicle changes of Korean PPPs Scheme

Public–Private Partnership Financing in the Republic of Korea

Phase	Period	Characteristics
Phase I	1968–1994	• Sporadic promotion of public–private partnership (PPP) projects based on individual laws (Road Act, Port Act, etc.)
Phase II	1994–1998	• The Republic of Korea began to induce private capital to build infrastructure facilities through systematic procedures with enactment of the Act on Promotion of Private Capital Investment in Social Overhead Capital • Implementation remained sluggish due to immature PPP conditions, government's failure to play the proper roles, and excessive regulations due to fear of controversies over preferential treatment • Formulation of policy package for inducing private participation, across-the-board legal revision through the Act on Private Participation in Infrastructure
Phase III	1999–2004	• Positive government support and division of role for revitalizing private investment • Reinvigoration of private sector's investment and project participation
Phase IV	2005–present	• Revision of the Act on Private Participation in Infrastructure • Inclusion of nine residential infrastructure facilities in the scope of PPP projects and the introduction of the build–transfer–lease formula as a new method • Introduction of mandatory feasibility study for unsolicited projects (costing W200 billion or more) • Revitalization of infrastructure fund through public subscription • Abolition of minimum revenue guarantee and introduction of government compensation of base (raw) cost

Source: Ministry of Strategy and Finance. Act on Promotion of Private Capital Investment in Social Overhead Capital and Act on Private Participation in Infrastructure (PPP Act). Seoul.

During the phase I, the Korean government conducted PPP projects based on individual laws for roads and ports.

In phase II, the governemtn set criteria on concession periods, user fees, and government support, and specified project implementation processses with revision in the Act on Private Participation in Infrastructure, enacted in 1998, to encourage private investment. The private sector also shared the risk as subsidies are provided only when the actual operational revenue is greater than 50% of the risk-sharing revenue. Before the revision, the Act on Promotion of Private Capital Investment in Social Overhead Capital was enacted during August 1994 to December 1998.

In spite of the changes designed to promote private investment, the private investment drastically declined due to the financial crisis in 1997. This period was when the government needed more private investment to stimulate the economy and more foreign direct investment to improve Korea's sovereign credit rating. There was even greater need to reinvigorate PPP projects; therefore, the governemtn took steps to make a a wide range of systemic improvement.

In phase III, the government introcued various support systems to reinvigorate private investment projects; Marginal Revenue Gurantee (MRG) was introduece for the private investers; project promotion patterns were diversified as solicited and unsolicited projects, feasibility and appropriateness studies for the selection of projects were required; Korea Infrastrucrue Credit Guarantee Fund (ICGF) system was improved; an infrastructure fund was established and operated; buyout rights were granted; and Public and Private Infrastructure Investment management Center (PIMAC) was estabilished.

In Phases IV, the government revised the Act on Private Participation in Infrastructure, expanding the categories of PPP project from economic production facilities to social and residential facilities. During this time, it introduced Build-Transfer-Lease (BTL) method in January 2005 and diversified the PPP implementation methods.

3.1.3 Institutional reformation of Korean Public Investment Management (PIM)

Along with the chronicle changes, the overall procedures and systems of the PPP have also been amended. To understand the changes in the Korean PPP system, it is worth to see the Major Players in Korea's Budget Process.

Box4. Major Players in Korea's Budget Process

Players	Roles
Ministry of Strategy and Finance (MOSF) – the budget ministry	• Compiles budget bids and prepares the draft budget • Allocates funds to spending ministries • Approves the transfers of funds between line items
Treasury Bureau of the MOSF	• Releases cash to spending ministries • Manages the treasury single account held in the Bank of Korea • Issues treasury bonds and manages assets and liabilities • Collects ministerial financial reports, prepares the whole-of government financial reports, and sends them to the BAI • Produces the government financial statistics
Tax and Customs Office of the MOSF	• In charge of tax policy • Prepares revenue forecasts • Oversees the National Tax Service and the Customs Service
Line ministries	Execute the budget and prepare financial reports
Board of Audit and Inspection (BAI)	• The supreme audit institution in Korea, whose head is nominated by and reports to the President. The National Assembly can also request audits on specific issues to the B.A.I. • Checks the regularity of ministerial activities • Prepares and tables the financial report to the National Assembly
National Assembly	• Deliberates and votes on the budget • Approves the transfers of funds between programs • Reviews and approves audit reports

Source: Kim, 2010. Lecture Note. KDI School

3.2. Six Effective Changes

This research recognizes six schemes of revision in institutional settings of PPPs that had been introduced through above mentioned phases, mostly in phase 3 and 4. It tries to give the idea of each scheme and changes rather than to elaborate upon the structure and performance of the scheme. This chapter acknowledge that it has taken references from Dr. Kim's memo "*What Made Public Investment Management Reform Happen in Korea"*.

Change 1. Establishment of Dedicated PPP Unit

As a statutory organization, Public and Private Infrastructure Investment Management Center (PIMAC) was established as a merger of Private Infrastructure Investment Center of Korea (PICKO, 1999) and Public Investment Management Center (PIMA, 2000) by the amendment of 'The Act on Private Participation in Infrastructure' in January 2005.

An independent review by PIMAC with some help from the policy analysts makes judgement on project desirability; PIMAC performs quality control on the Preliminary Feasibility Study (PFS), Re-Assessment Study of Feasibility (RSF), and Re-Assessment of Demand Forecast (RDF), and with policy analysts they explicitly report their independent judgment to budget agency, the Korean National Assembly, and the public. Their judgments, explicitly quantified, are respected in most government decision-making.

Having an independent appraisal institute played a crucial role in developing the PPP performance in Korea while some believe that it is not necessary. They argue that line ministries have capacity to conduct the appraisal; thus an independent PPP unit is unnecessary (OECD, 2010). Empirical evidences have shown that the political independency of the institute is the key factor of having the institute in Korean context where public projects are strongly influenced by politic.

Change 2. Appraisal/Evaluation Scheme for Public Investment Management

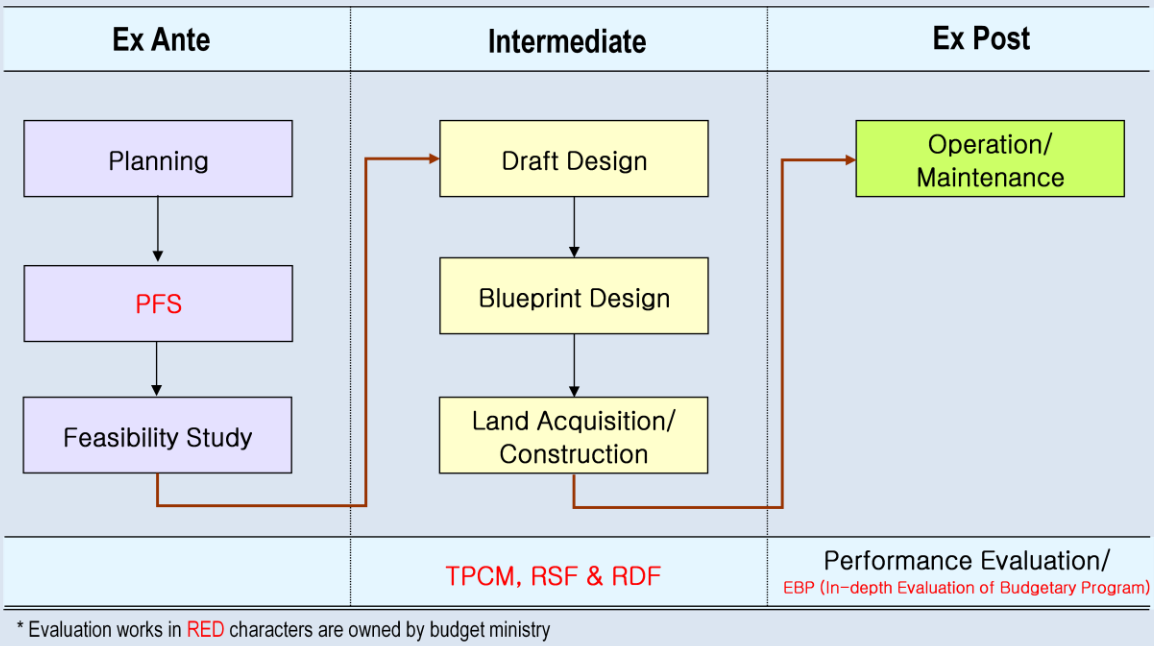
The Ministry of Strategies and Finance (MOSF) monitors expenditures on public investment and checks increase in project cost throughout the project cycle through the Total Project Cost Management system (TPCM) introduced 1994. It also invented a tool for prioritizing and evaluating public investment, Preliminary Feasibility Study (PFS) in 1999.

PFS is a rather unique feature of the Korean PPP. The term, PFS, is commonly used in academia and many other countries as a general screening work before the PF, whereas Korea distinguishes it as an independent legal system that has to be taken through in prior to the PF system. PFS, which is owned by the MOSF but managed by KDI/PIMAC, was stipulated by the National Finance Act of 2006 as a legal system.

Through the PFS, RSF, and RDF, the MOSF has been able to produce its own information more reliably than before and they have contributed to the establishment of the public inquiry process at line ministries and lower-tier governments, according to Kim, d.n. With the establishment of a legal framework for public investment, the MOSF produces information necessary for decision-making on budgeting and in-depth program evaluation. Investigating the projects in detail, new devices allowed the MOSF to manage public investment with higher effectiveness.

The positive impact on public management by the new schemes is clear. The request for TPC increase in percentage reduced from 26.4% to 4.4% between the time spans during 1996 to 1999 and 2000 to 2003, respectively.

Box 5. The implementation Process of Public Investment



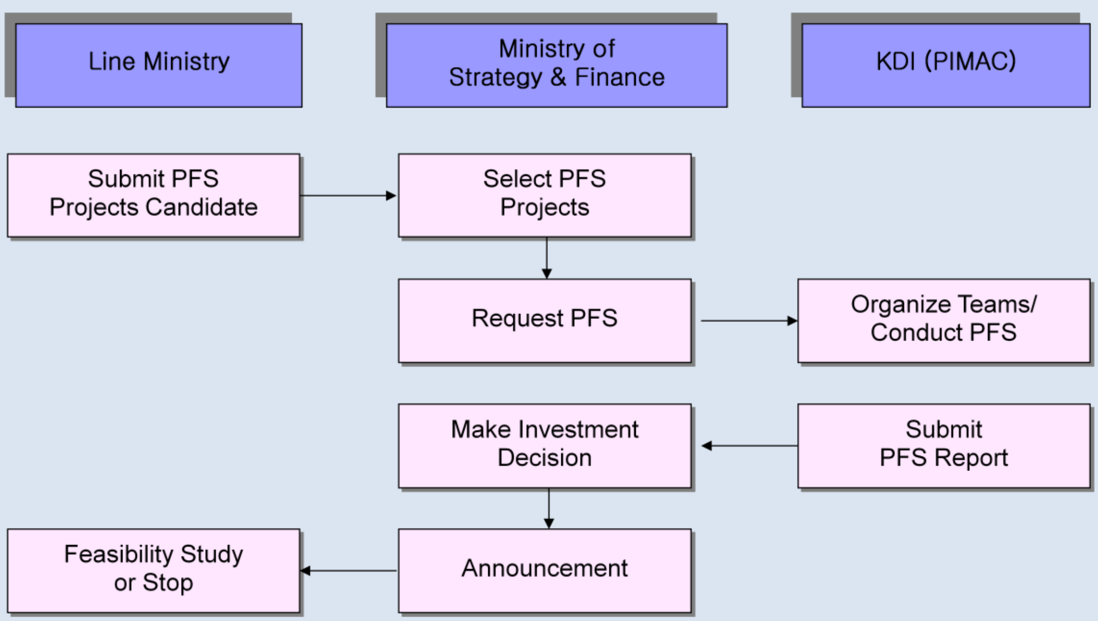
Source: Kim, d.n. a mimeo, KDI

Change 3. Change in Decision Making Process

The new schemes mean not only new initiatives of public investment management, but also signify changes in decision making procedures within the fundamental institutions. Earlier, line ministries had conducted feasibility studies to procure government budget for the projects; 32 out of 33 projects were evaluated as feasible between 1994 and 1998. It illustrates that the Feasibility Study (FS) team in the line ministries tended to underestimate the project costs and overestimate its benefit, resulting in manipulated higher B/C ratio, polluted by political interest groups.

The government introduced the Medium Term Expenditure Framework (MTEF) with top-down budgeting in 2004. Before the MTEF, MOSF focused more on the control of inputs and budgeted for next single budget year. However after the MTEF, MOSF paid more attention to outputs or outcomes and budgeted for over next five year including the current year. With the establishment of a transparent and clear ownership scheme of the project appraisal and approval system, the MOSF provided higher quality information for the decision-making process in budget allocation.

Box 6. PFS Procedure



Source: Kim, d.n. a mimeo, KDI

Change 4. Government Support: Land Expropriation, Financial and Tax Incentives, Minimum Revenue Guarantee (Enactment of the PPI Act, PPP Act) [1]

To facilitate infrastructure financing from the private investors, government has enforced various policies in favour of them. The government provided construction subsidy and compensation for the base (raw) cost in form of subsidy, infrastructure credit guarantee via the Infrastructure Credit Guarantee Fund (ICGF) in form of guarantee system, tax incentives and guidelines for early termination.

- **Land Expropriation, Financial and Tax Incentives**

In accordance with a law, the government has set a subsidy guideline for the roads of between 20 to 30%, for the ports of 30 or 40%, and for the railways of up to 50% of subsidy for the total project cost as included in the Article 53 in PPP Act and Article 73 in Enforcement Decree.

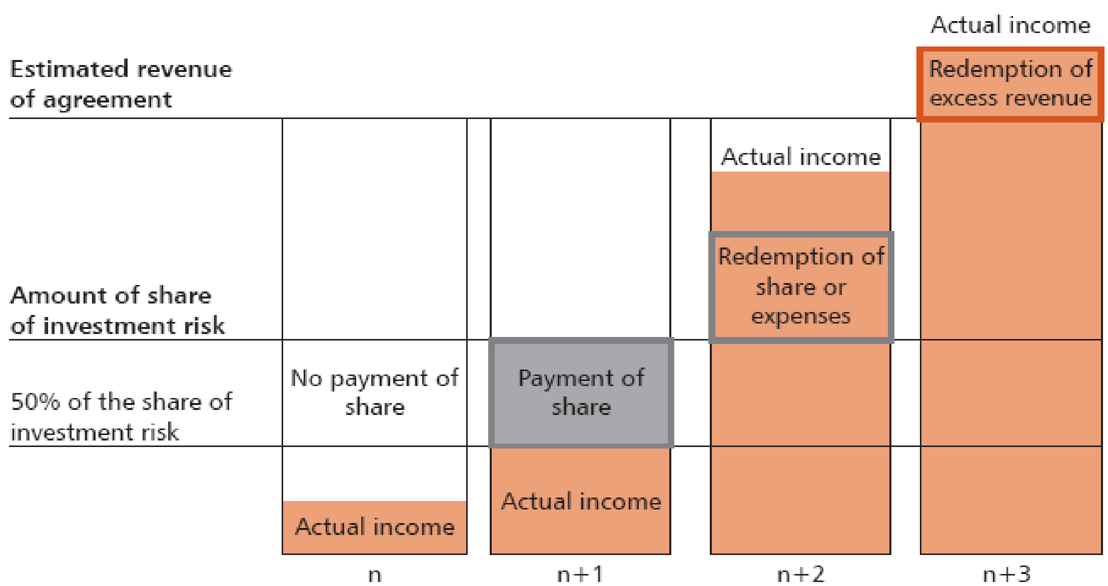
PPP Act Article 57 (Reduction and Exemption of Tax) also stipulates that 'The State or local governments may reduce or exempt the taxes to promote private investment under the conditions as prescribed by the Restriction of Special Taxation Act and the Local Tax Act'. In accordance with the Act, the government provide tax incentives for infrastructure financing in four categories: special taxation, corporate tax, local tax, and exceptions from charges. Appendix 1 shows these taxes in details.

[1] These policies are well explained in details by Kim et al., 2011.
[2] Yoon, Young-Hoon. 2010. Private Sector Perspective on PPP: Typical issues and experiences for success of PPP project in Korea.

➢ **Minimum Revenue Guarantee**

The MRG system is a method for private participants and the government to share the revenue forecast risk. The system and the redemption of excess revenue agreement have a two-part structure as they set upper and lower revenue limits. Through the system and redemption agreement, the government provided an operational revenue subsidy until the revision of the PPP Basic Plan in October 2009 (Kim et al., 2011). However, as the history of MRG that was abolished in 2009 illustrates, excessive MRG may increase financial burden on the government.

Box 7. MRG



n = operational period in concession agreement.

Source: Ministry of Strategy and Finance. 2009. Basic Plan for Private Participation in Infrastructure. Seoul.

➢ **Buy-Out Right**

In addition, a "risk-mitigating factor" for private participants was also recognized. (Kim et al., 2011). The concessionaires of facility can request a local or central government to buy out the project and pay the predefined early termination payment in case of that construction or management & operation of the facilities are impossible due to circumstances like natural disaster.

Exit plan is an assured point of project success in private sector perspective (Yoon, 2010)[2]. The buyout right attracts the private investors to a project by minimizing their financial risk; by securing the financial risk on the private parties, the investors' confident level on the project is higher.

Change 5. Setting a safeguard ceiling on government payment

Note: this paper only considers BTO and BTL procurement schemes.

The government also internally set up a safeguard ceiling in order to finance its budget for other commitments to run the nation. The ceiling can be allocated based on either Annul government payment or PPP investment. That is either 2% of total government budget expenditure or 10% to 15% of total public investment.

[2] Yoon, Young-Hoon. 2010. Private Sector Perspective on PPP: Typical issues and experiences for success of PPP project in Korea. Asia Public-Private Partnership Practitioners' Network (APN) Training, 8 October 2010, Seoul, Korea

Change 6. Procurement schemes:

- **BTO (Build-Transfer-Operate) Scheme**

Korea has adopted the BTO scheme whereas many other countries adopt BOT that private sectors build and operate the facility for a certain period stated in the concession contract and then transfer it to the government. In Korea context, the national perception of the private having ownership of and operating the social overhead capital (SOC) is not friendly because they believe that the private companies are after business profits rather than social welfare. As a result, the private company transfers the facility upon completion of construction; then the government gives a concession to the private company to operate the facility during the contract year. In this case, the private does not bear a responsible for land requisition and its related tax.

During the period, the private party is responsible for financing the project and is entitled to retain all revenues generated by user-fees, having the facility still owned by the government. Both solicited and unsolicited projects are eligible for BTO scheme. The concessionaire bears high risk on demand but still gets high return as they earns as they operate the facilities. The private investor recovers its investment as it receives user-fees, construction subsidy, and MRG. User-fees and Minimum Revenue Guarantee (MRG) are available only for solicited projects. However the MRG was repealed in 2009 due to heavy burden on the government.

- **BTL (Build-Transfer-Lease) Scheme**

BTL is another form of financing introduced to Korea in addition to the BTO scheme in January 2005. Under BTL, a private entity builds a complete project and leases it to the government; the government lends and operates the facility for the benefit of its people. The private company can avoid operational risk while maintain the property rights. The private investor recovers its investment as it receives fixed revenue in the form of lease payment from the government, having little demand risk. Only solicited projects are eligible for BTL scheme to build facilities with low risk and low return.

This procurement scheme is recommended for non-economic facilities such as parks and museums. In general, it is also recommended for the governments whose people have a little capacity to afford the user-fees, having the government bear the financial burden. However, the capacity of the government should also be taken into accounts, especially for the developing countries whose governments are also poor to subsidize the burden.

3.3. Korean PPP, the showcase of scheme changes

As mentioned in chapter 2.5. the causation of the changes in Korean PPP scheme as well as of its overall public investment management system (PIM) is not clear. Nevertheless the endeavour the Korean government made should be acknowledged for the changes had been made throughout years of revisions under the leadership of the government; the changes allowed the government to reap the fruits of changes, developed efficiency and transparency in public investment, developed infrastructure, and increased foreign investment in Korea.

The Korean PPP scheme has been and is evolving. The Korean government adopted policies that seemed to work in Korea and abolished policies that were not working in Korea to attract foreign investors and to achieve developed Korean infrastructure PPP. For instance, the internationally accepted procurement scheme had to change its term from BOT to BTO, reflecting the Korean market psychology. Moreover, the MRG, which had attracted the foreign investors, was abolished resulted from the harsh criticism on the financial risk of the government.

The Korean PPP scheme had made substantial contributions to developing infrastructure in Korea. It might and/or might not work in other countries, especially the developing ones. However, the process of the scheme changes can give practical lessons to the countries willing to develop their infrastructure PPP as well as public investment system.

4. Data and Findings

4.1. Survey

The empirical evidences from the previous chapter proved that the changes have increased operation efficiencies within the government, levels of social welfare, and business opportunities as well as profits for the investors. Then, can we apply the transformed Korean infrastructure PPP scheme directly to the developing countries without any alterations?

Objectives

In trying to have the lessons from the Korean PPP are communicated and to find out potential barriers for the Korean PPPs to be replicable, an online-survey on adoptability of the Korean infrastructure PPP was conducted with sample size of 103 from 25 July 2011 to 3 September, 2011[3].

Sample

The sample was randomly selected among KDI School students and alumni from the developing countries. KDI School's international students were targeted firstly because they have working experiences in either public or private sector with majority of the government sector; secondly, they have knowledge of both the home country and Korea. Note to be taken that the sample may contain potential biases toward "Korea" elements; the respondents have or had been supported with scholarship by Korean companies and agencies; thus, their reliability to Korea is relatively high.

[3] Initially, invitations were sent to 475 people but only 103 responded during the period

4.1.1 Design

After providing the participants with background information on Korean PPP scheme changes, the survey asks 10 questions on PPP and 4 questions on personal information. The survey consists with 6 blocks: 1 - Background information, 2 - Personal information, 3 - Awareness of the general PPPs, 4 - Awareness of the Korean PPP and of adopting foreign scheme, 5 - Awareness and recognition of root constraints in respondents' country, and 6 - Change of perception on adopting Korean scheme.

The background information is given in the first section prior to questionnaires to provide the participants with an idea of Korean PPP scheme and to examine the first hypothesis. It does not provide in-depth schemes but simply listed out the key changes in Korean PPP scheme. The information is designed to be brief because in reality a PPP host country may not know the scheme in-depth; authorities of the country may be forced to make a decision under the circumstance. See Appendix 2-survey.

In Block 2, respondents are asked to provide their personal information including their affiliation, which will provide values to their answers as it shows their direct or indirect experiences in public investment, including PPPs. In Block 3-6, the respondents are asked to provide their views on PPPs. Especially, a question on willingness to adopt Korean PPP is asked twice: in Block 4 and in Block 6.

The Block 4 is designed to ask the question to prove hypothesis 1: recipients do not think the Korean PPP can be applied without any alternation. This hypothesis will be concluded to be true if more than 90% of participants reject adopting in the first stage. The Block 6 is designed to repeat the same question to confirm if there is a change in respondents' perception on adopting a foreign policy scheme when they see and realize the possible constraints in their countries in the course of answering Block 5. The block 6 is designed to result in proving hypothesis 3, recipients' attitude toward adopting the Korean PPP will be changed when they have a chance to think about possible constraints their country have.

In Block 5, respondents are asked to score the level of constraints on a scale of 1 to 5 to prove hypothesis 2: at least three constraints are significant among the listed twelve constraints. The constraint is considered to be significant if the average scale on each constraint exceeded 3.0. Combining words and numbers in a 5-point rating scale with 1 being weak constraint provides clarity of the answers, in accordance with a question in Block 3 on a scale of 1-7 with 1 being very satisfied. The scale options have negative values on higher numbers.

To ensure the respondents are aware of the difference between the countries settings and of potential barriers, twelve root constraints are given in Block 4. An open-end questionnaire on further constraints is also provided to capture what has not been able to be listed and to have the respondents concerned on the constraints in their country.

4.1.2 Analysis

This paper excludes any possibility of regression between the PPP satisfactory level (Block 3 - question 2) and constraints (Block 5 - question1) because the values scored by the respondents were very much qualitative and inconsistent over questionnaires. Instead, it analyzes the survey through 2 stages, total response and screened response.

Twelve potential root constraints were given to the respondents to level the seriousness of each constraint in their countries context. The factors were grouped into four categories, Public Governance, Government Capacity, Financial Constraints and Human resources. But the categories were concealed to the respondents to have them focused on the level of each factor.

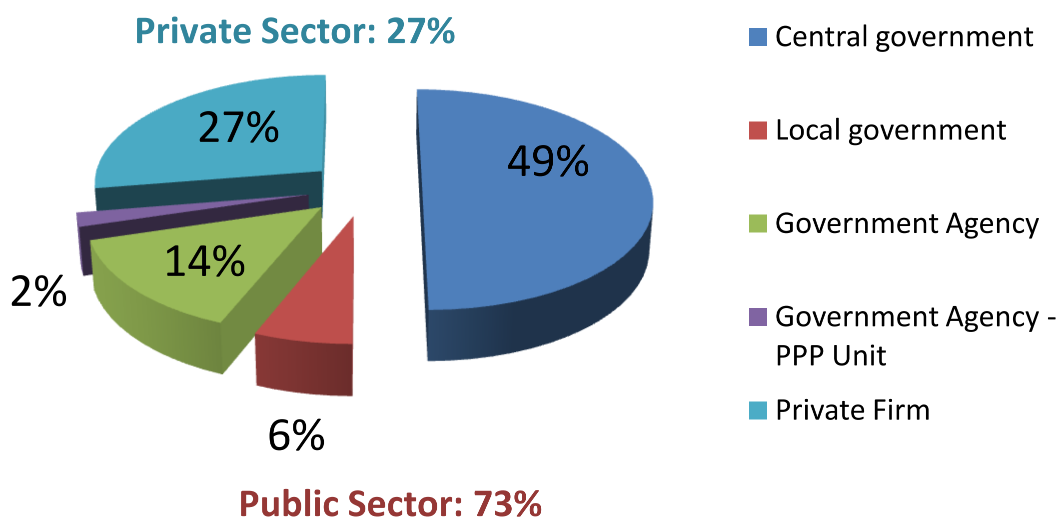
In result, both the total and screened responses, the government capacity was considered to be the most significant constraints with an average score of 3.21 to 3.23 out of 5.00 and public governance with an average score of 3.34 to 3.39. Financial constraints and human resources were recognized as insignificant constraints compare to the mentioned ones.

- **Initial stage: total response**

Among the 103 respondents 83% of them have heard about PPPs in general. As 37% of them thought that the Korean PPP scheme would work in their countries without any alteration, the first hypothesis is rejected, concluding recipient will adopt the Korean PPP scheme without any alteration. Their willingness to adopt the scheme as it is was decreased by 2 % when they were asked again after having them thoroughly considered given the constraints.

Within the groups, Bureaucratic hurdles, High corruption in the public sector, Poor leadership of political institutions, Weak institutional capacity within the government, and Lack of financial resources within the government were recognized as significant and ranked one to five, respectively.

<Table 1> **Sectoral composition of sample**



- **Second stage: screened response**

To capture more valuable data from the survey, responses were screened with criteria of a minimum level of knowledge in PPPs and working experiences of 5.2 years on average in either public or private sector. Fifty respondents were selected from the previous stage, consisting of the respondents from 76% of the government sector and 24% of the private sector.

Among the 103 respondents 36% of them thought the Korean PPP scheme would work in their countries without any alteration and their willingness to adopt the scheme without alteration was increased to 50% after considering the potential constraints, rejecting the two hypotheses 1 and 3. This increasing pattern was consistent both in the government sector from 18% to 37% and in the private sector from 17% to 33%.

This can be attributed to their knowledge of effectiveness of PPPs in infrastructure developing and their ability to recognize development of PPP schemes in the Korean scheme. Nevertheless, the increasing pattern shows that the respondents neglect to cautiously compare their country settings to the Korean ones.

However, the increasing pattern on the willingness does not indicate that Korea can go ahead apply the scheme. 50% of those who were willing to adopt even without alteration did recognize that there will be hindrances due to different context of countries; they commented that it is important to the acknowledge the difference in political and economic contexts and to improve ex-ante appraisal capacity in the open-end questionnaire.

Among the given constraints, there were six constraints recognized as significant in screened responses: Bureaucratic hurdles, Poor leadership of political institutions, High corruption in the public sector, Weak institutional capacity within the government, Lack of financial resources with the government, and Poor human resource capability within the government, ranking one to six, respectively.

<Table 2> Survey result: root constraints

Constraints (Strongest to weak)	Total Response		*Screened Response	
	Average	Rank	Average	Rank
B. Public Governance	**3.3916**	1st	**3.3537**	**1st**
5.Bureaucratic hurdles (Red tapism, long official procedure, etc.)	3.6796	1	3.6200	1
6. High corruption in the public sector	3.5049	2	3.5200	3
4.Incentive Mechanism for private partners (Tax intensives, other grants, etc.)	2.9903	6	2.8600	7
A. Government Capacity	**3.2136**	2nd	**3.2585**	**2nd**

3.Poor leadership of political institutions	3.4660	3	3.5600	2
1.Weak institutional capacity within the government	3.2427	4	3.2600	4
2.Poor human resource capability within the government	2.9320	7	3.0200	6
C. Financial Constraints	**2.7314**	3rd	**2.7211**	**3rd**
7. Lack of financial resources with the government	3.2330	5	3.2600	5
8. Poor economy health of the country	2.7864	8	2.7800	9
9. Unwillingness to allow foreign labours to the country (work force)	2.1748	11	2.0200	12
D. Human Resources	**2.3657**	4th	**2.4014**	**4th**
12. Lack of technical human capital in the economy	2.7282	9	2.8200	8
10. Low education in the country (High illiteracy)	2.2524	10	2.2600	10
11. Less human capital (Less work force in the country)	2.1165	12	2.0400	11

*Screened response: 50 respondents who have heard about PPPs before were selected out of 103.

Comparing these outcomes to the result from the previous stage, the screened respondents gave more weight on poor leadership of political institutions than the corruption in the public sector and poor human resource capability within the government.

4.1.3 Hypotheses Testing Summary

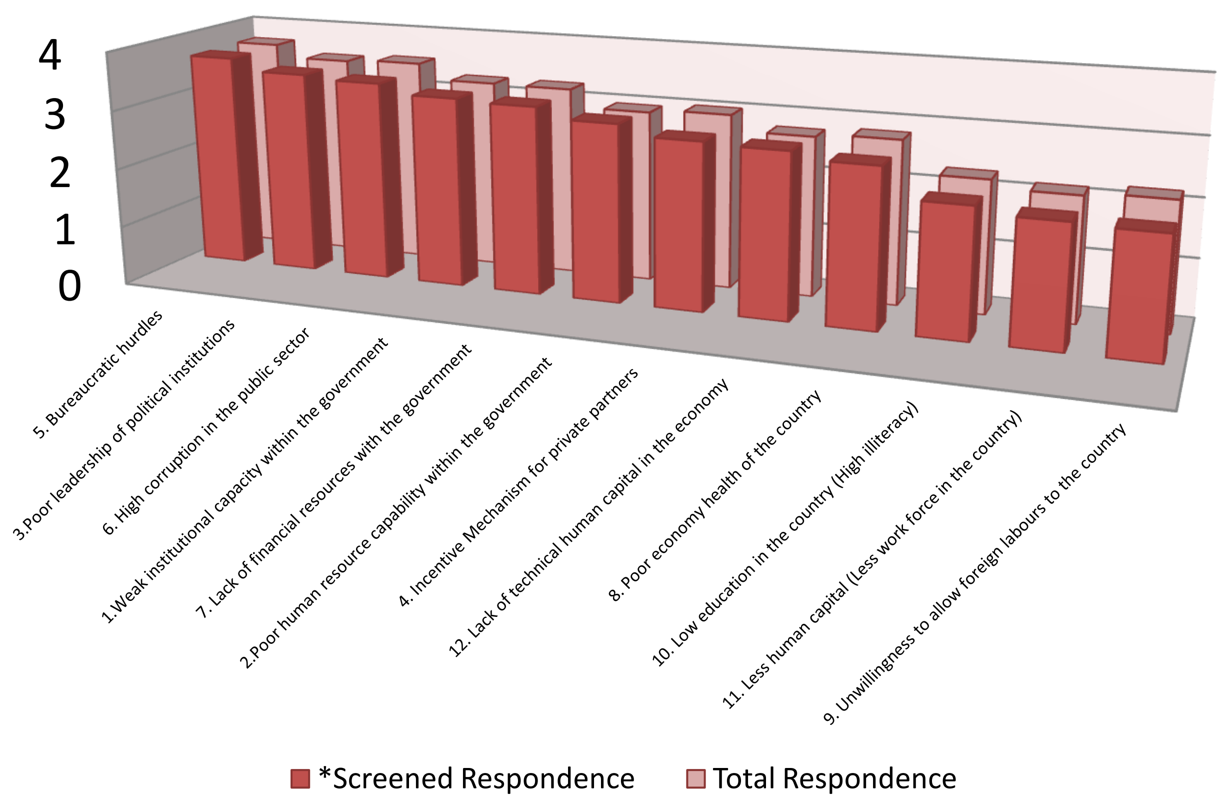
- Hypothesis 1: recipients do not think the Korean PPP scheme can be applied without any alternation in their countries.

37% of general and 34% of screened respondents thought the scheme would work without any alteration in their countries, rejecting the hypothesis. Only about 65% of people do not think the Korean PPP scheme can be applied directly. This result implies potential indiscretion that the host countries' policy makers have in the adoption of foreign policies.

➢ Hypothesis 2: at least three constraints are significant among the listed twelve constraints.

The general respondents recognized five and the screened recognized six constraints as significant as they could hinder adopting the Korean PPP scheme to their countries, not rejecting the hypothesis. Both the two groups identified bureaucratic hurdles, poor leadership of political institutions, high corruption in the public sector, weak institutional capacity within the government, and lack of financial resources with the government. Additionally, the factor of poor human resource capability within the government was also identified as significant by the screened respondents.

<Table 3> Level of Constraints



- Hypothesis 3: recipients' attitude toward adopting the Korean PPP will be changed when they have a chance to think about possible constraints their country have.

The hypothesis was proved to be true as the two groups changed their perception on adopting the Korean PPP and the percentage changes were greater once the constraints removed. However, the direction of the change was different between the groups toward adopting the scheme without alteration.

Among the general 37% respondents who thought the Korean PPP scheme can be applied as it is to their countries, 2% of them negatively changed their perception as the percentage was reduced to 35% as a result of consideration on their own root constraints in adopting the scheme. However, 88% of total respondents answered that they are willing to adopt the Korean scheme when the constraints are removed.

Unlike the general, the screened respondents' perception on directly applying the Korean PPP scheme was increased from 34% to 50% even after having concerned their own constraints. As the general respondents answered, 88% of screened ones also answered that they are willing to adopt the Korean scheme once the constraints are removed.

4.2. Empirical evidences from the Korean PPP

The constraints recognized in this survey seem quite general as they can also be the ones for development. Yet, the results gave this study still a hope; a hope that the recipient country can achieve development when the constraints become insignificant. Empirical evidences from the Korean PPP scheme show that the major constraints the survey addressed are curable.

This empirical study does not overlook the importance of governance as the first priority to achieve development for a country. It rather tackles the issues within the developing country governments in attempt to provide a map to achieve good governance.

4.2.1 Corruption and Institutional Capacity Issues

Corruption is caused when there is little transparency, in order words asymmetry of information between the public and private or amongst authorities, in the course of project planning and implementation. Empirical evidences from the Korean PPP scheme show that the attempt to commit corruption is declined when cross-ministerial task force systems are implemented as the change 2 and 3 explained in Chapter 3.

The system allows both the planning party and the spending party to have symmetric information on a project as the two parties conduct separate project appraisal on the project. Now the ownership of appraisal is not only in the line ministries who conduct FS to procure government budgets for the projects, but also in the budget ministry who conducts PFS prior to the FS. It follows that the project passing rate was over 90%[4] before the PFS was invented but the rate has been reduced to 60.5% from 1999 to 2010 when the PFS has been in act.

4.2.2 Bureaucracy

> *The decisive reason for the advance of bureaucratic organization has always been its purely technical superiority over any other form of organization. The fully developed*

[4] During 1994 to 1998, 32 out of total 33 large-scale projects were evaluated as feasible in main feasibility studies conducted during the period.

bureaucratic apparatus compares with other organizations exactly as does the machine with the non-mechanical modes of production. Precision, speed, unambiguity, knowledge of the files, continuity, discretion, unity, strict subordination, reduction of friction and of material and personal costs- these are raised to the optimum point in the strictly bureaucratic administration, and especially in its monocratic form.

- *Max Weber*

Whereas bureaucracy developed in a slower-paced society, we live in an era of breathtaking change. Whereas bureaucracy developed in a hierarchy that only those at the top of the pyramid had enough information to make informed decisions and focused on inputs to avoid corruption, we live in an era of participatory politics and of outcomes. "We live in the environment that demands institutions that are extremely flexible and adaptable and that deliver high-quality goods and services, squeezing ever more bang out of every buck and that empower citizens rather than simply serving them" (Osborne and Gaebler, 1992).

In general, PPPs molds an administrative government into an entrepreneur government that deliver high-quality goods and services to the citizens, focusing on outcomes. The government secures necessary financial resources for an infrastructure projects from the private funding and encourages private competitions through an open bid to achieve the best services from the private sectors for public welfare. The evidence is easy to be found in the Korean PPP scheme. The Korean government tries to maximize the services with the better quality; it opens solicited project as well as unsolicited project, allowing chances of unrealized project to be recognized. This is also related to the constraint – poor leadership of political institutions in the Section 4.2.4.

The Korean PPP scheme also provide a degree of answer to the bureaucracy issue because its focal point had been retargeted from the input to the outcomes when the MOSF introduced MTEP and top-down budgeting. When reviewing the ministerial budget requests, MOSF now places less emphasis on the microscopic control of line items and more on the strategic alignment of budget requests with overall policy directions to deliver the outcome. See Change 3 in the Chapter 3.2.

The top-down budgeting might be regarded as a bureaucratic system. It could be it; it could be even more bureaucratic by the definition defined by Weber in a positive way. Indeed, it has led the line ministries to be more transparent and efficient in budgeting for they no longer need to exaggerate their budget plan unrealistically; previously, they had no information on how much they are going to be allocated with, so they needed to overstate their project costs in order for them to secure their budget for the projects.

4.2.3 Capacity within the government

As the Change 1 in Chapter 3.2 illustrates, Korean PIM system introduced the independent PPP units, PIMAC. By entrusting project appraisal and evaluation that require expertise, the demand on sophisticated capacity within the government to process the work is now being transferred to PIMAC, which is capable of conducting the most complicated and integrated appraisal and evaluation. Now, higher quality of projects are being proposed and managed with higher standards. Plus, the good projects can be secured by the independent appraisal and evaluation conducted by independent unit, which is literally independent from political power.

4.2.4 Poor leadership of political institutions

It is important to have good leadership in a country. Good leadership provides what is needed for the people, listens to what has been raised by the people, and tries to increase the integrated welfare of the people. In that sense, it is equally important to have a good system that can allow a third party to initiate a project, which in turn increase the welfare of the people, especially when there is poor leadership in the political institutions.

The Korean PPP scheme allows both solicited and unsolicited projects. By allowing an unsolicited project, the system helps initiating a good project which was failed to be recognized by the government. Thus, the government leadership can reduce the gap between what the government has provided and what people need not by their initiatives but by the system.

Nevertheless, it is true that the government should evolve by itself to attract the investors, building mutual trust. As the Korean PPP scheme changes show, a level of government supports should also be guaranteed financially and politically. On one hand, the fanatical guarantee can be given to the investors in the form of tax incentives and so forth. On the other hand, the political guarantee should also be given from the planning stage with government buy-in that will be continued to the next government.

4.2.5 A lack of financial resources with the government

As a lack of financial resources has been an inveterate constraint for the development of a country, it is also a constraint for doing PPPs even with a well developed PPP scheme. Unfortunately, the Korean PPP scheme cannot solve this issue; therefore, there is a need to set up a new paradigm that can secure both finance and development within the Korean PPP scheme to make it adaptable to the environment of developing countries. The new tool that could solve the financial issue will be discussed in the next part.

4.3. Resolution: Infrastructure PPP+ODA

Lighten up the burden

Speaking of the importance of infrastructure in developing countries is obsolete. What has been less shared is the way of bring an opportunity to build the infrastructure. As discussed PPPs provide a key to bring the opportunity; it is an effective procurement tool for infrastructure development especially when the government has insufficient funds. The PPPs contributes to achieving better welfare for the people and more business opportunities for the companies and less government financial burden.

Consideration should be made; with PPPs the fiscal burden of government to carry out an infrastructure PPP project is less, not zero; the financial burden is still there and still heavy for the developing country governments to carry out. The government tries to secure their budget for the PPP project and when their budget is still not sufficient they sell out their endowments by giving concessions for their natural resources to a foreign investor in exchange for the PPP project. However, this exchange seems sceptical in terms of B/C for the countries with the endowments; as a matter of fact, the long-term cost on the governments looks bigger due to their forgone profits from selling when time is right. Thus, an alternative is demanded.

ODA-able PPP: hard infrastructure and soft infrastructure

In doing PPPs, the government burden can be lightened by ODA in "DAC-able" countries those are not a member of Development Assistance Committee (DAC). The government can secure its funds for making payments to the investors and supporting the investors with incentives by using money from Official Development Assistance (ODA).

Merging the PPPs and ODA can benefit the three: the developing countries, the private investors and the developed countries, especially the DAC members. It could allow the developing countries to attract the private investors; it could allow the private investors to make profits; it could allow the DAC members to achieve their ODA goals, altogether contributing global development.

Empirical evidences say that ODA can be just another type of aid that weakens recipients' immune system to self-sustain (Moyo, 2009). Against the criticism, the sustainability issue can be treated if the ODA is used concurrently for building both hard infrastructure and soft infrastructure. PPPs and ODA interact; ODA can provide seed money for PPPs and PPPs will provide SOCs, foundation for businesses and better standard of living.

4.3.1 ODA Grant for soft infrastructure

ODA grant can strengthen both the structures for PPPs in policy perspective and the capacity of human capital in project perspective. Especially for those countries that are in the early stage of development, ODA should be given in the form of grant throughout ex-ante, implementation, and ex-post stages. See Table 4. Methodology for implementing a PPP project with ODA.

In ex-ante stage, the developing country government will face a lack of appraisal structure in their PIM and encounter with some codes that are needed to be revised or to be built to achieve higher level of development, including that of infrastructure. To conduct assessment on the structure to be strengthened, the government need money for hiring the expertise. To review lists of domestic legislation subject to amendment, the government needs money for hiring the expertise. ODA can be utilized in carrying out the PIM assessment and legislation review.

In implementation stage, once the projects are approved, implementation from design to maintenance is in the private investors' hand. Therefore it is necessary for the government or the government agency for PPPs to be equipped with appraisal and evaluation ability to conduct feasibility study, to oversee the implementation that is many times carried out by the international companies and to monitor the outcomes. To amplify their ability, their capacity should be built and strengthened though education and training such as consensus building, capacity building and sector specific workshop programmes. And the programmes can be subsidized by ODA grant in non-monetary form.

PPPs policies or structural changes and capacity can be thoroughly strengthened with ODA grant in the form of forums, workshops or consultancy services that can make direct impact on PPPs, not in a monetary form that can be utilized elsewhere as the empirical evidences taught us. As it strengthens the grantee, it becomes an attractive market for commercial business; then, in near future, it will open up a favourable climate for commercial business activities also for the granter in return, as the two now share similar business environment.

Nonetheless, it is worth to mention that the grant should be untied. The reason is simple. ODA should be given first for the development of the recipient countries and their people by the definition of aid. As a whole it is true that the public money should be spent for the development of the people of a donor country as well. But priority matters. No one is that naïve in this millennium, believing aid should solely benefit the recipient countries. ODA should be a strategic tool for development in the globe; nevertheless ODA, more generally aid, should not be degraded as a business tool but be maintained as a development tool, giving the ownership to the recipients.

4.3.2 ODA Loan for hard infrastructure

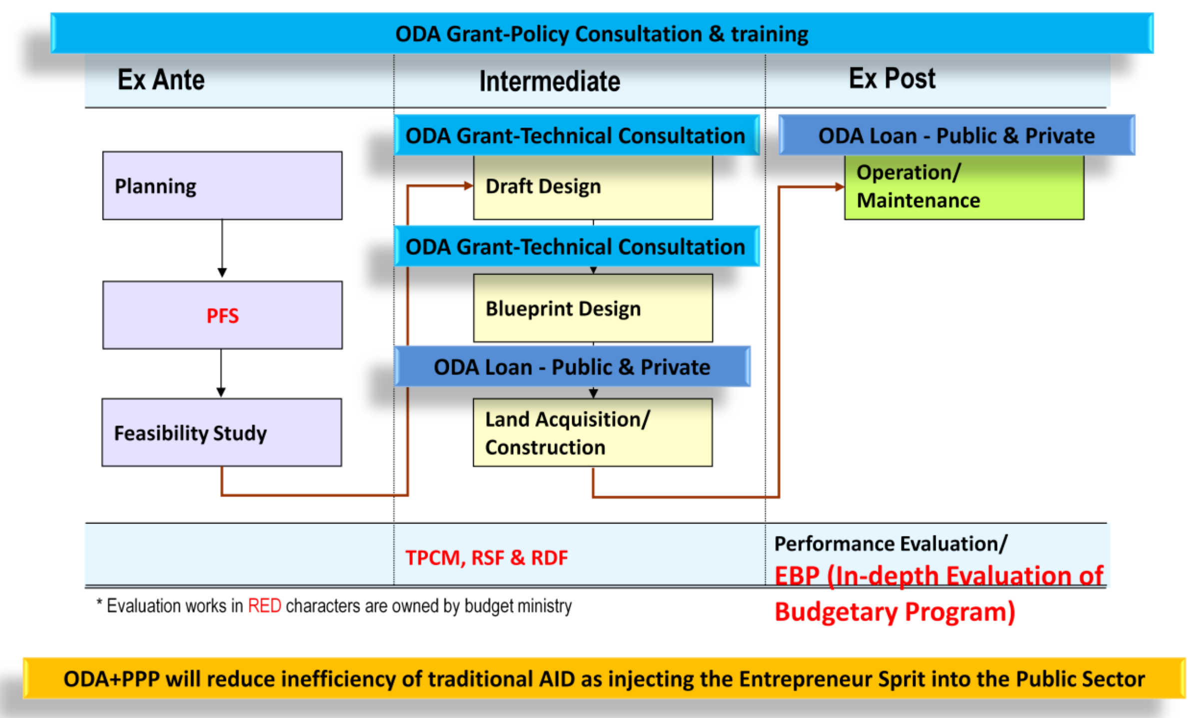
Long-term ODA loans can secure the developing country governments with financial resources for attracting investors. The government can utilize the ODA loans in three ways: project payments, tax incentives and interest rates.

On the one hand, the ODA loan can provide the government with direct financial support in making leasing fees to the private investors for BTL projects. While most BTL projects are known for museums and schools, the BTL projects are comprehensively interpreted here – they cover highways. Some people might criticize applying BTL for a highway project without a toll using BTO, saying that the users are not the poorest of the poor. However, they should be reminded that some countries do not even have the paved road which people can take as an alternative to the toll.

Let’s suppose the highway without an alternative has a toll that is operated by the private company. The company can charge the high fee, holding a monopoly of the only paved road. The fee will not necessarily be as high as the one private company charges if the toll is operated by the government. By operating the highway, the government will also learn how to make profits for repaying the loans, keeping their people's burden small.

On the other hand, With ODA loans the government provide subsidy for introducing tax intensives and for supporting financial institutions to offer better interest rates for the investors. As Korean PPP illustrates, the various forms of government support build trust in investing PPP projects because they secure financial risks on the investors. The loan will allow the government to provide investment friendly environment for the private investors who participate in PPP projects.

<Table 4> Methodology for implementing a PPP project with ODA



* Blue bars: Provided ODA in due course

5. Conclusions

Policy Recommendations for the Korean Policy Makers

The PPPs are one of the best ways for building infrastructure and their best outcomes can be delivered only through a well designed and executed PPP scheme as the Korean PPP history shows. Nevertheless, consideration should be made on the survey result. Forty percent of the total participants do not question much whether the Korean PPP scheme would fit into their countries' context while the definition of PPP differs country by country.

The 40% of respondents might endanger their countries to face a heap of debt by taking PPPs while neglecting their capacities to carry out PPPs and ignoring the differences between their countries' setting and that of Korea. Therefore, it is important for Korea to raise awareness of its PPP scheme, which can strengthen the developing countries' soft infrastructure, and to set up a tool for self assessment as well as a program for consensus building prior to apply the scheme.

The empirical study on the Korean PPP scheme in Chapter 4 discovered a map in itself that treats the binding constraints in adopting the Korean PPP as well as in achieving development in the developing countries. However, the map can be realized only by the merging Korean PPP, which includes its scheme, and ODA, which secures financial support. Unlike the traditional aids, the combination of the Korean PPP and the ODA can reduce inefficiency of the aids as PPPs inject an entrepreneur spirit into the public sectors.

In the course of carrying out the infrastructure PPP projects which are supported by the Korean PPP scheme and ODA, the government of the host country will face internal reformation and learn entrepreneur spirit throughout the competitive stages to deliver the best outcomes, to meet the basic needs of their people and to provide improved public services to their people. This will lead to increase in foreign investments.

Besides the foreign investments, domestic businesses will also find broadened opportunities domestically as well as internationally as they now have developed infrastructure that links the region to another region and to other countries. With entrepreneur spirit, they will make the next step to development by themselves, repaying the ODA. Plus, it will open up an attractive market for the foreign countries, bringing prosperity to the host country as well as to the globe.

Policy Recommendations for Policy Schemes of the Korean PPP and ODA

The Korean infrastructure PPP scheme can lead the developing countries out to sustainable development through the infrastructure PPPs when it utilizes ODA, achieving her ODA goal that is set by 2015. Likewise, the developing countries can achieve successful infrastructure PPPs with ODA as they can attract investment capital for the infrastructure PPP projects, equipping themselves with capacity to monitor and to evaluate the projects. Hence, the Korean scheme is recommended to adopt the merged version of the PPPs with ODA to deliver the outcome, prosperity, demanded by Korea and the recipients.

Appendix 1

Special Taxation for Public–Private Partnership Projects	
Type	Contents
Infrastructure Bond	The concessionaire and other parties may issue an infrastructure bond for implementing PPP projects. A separate tax rate of 14% is applied to the interest revenue from such bonds with 15 years of maturity or more (such application has been extended through 31 December 2009: Article 29 of the Restriction of Special Taxation Act).
Value-Added Tax	A 0% tax rate is applied for the value-added tax for infrastructure facilities or construction services of such facilities provided to the central or local governments pursuant to Article 4 Subparagraph 1 (build–transfer–operate), Subparagraph 2 (build–transfer–lease) and Subparagraph 3 (build–operate–transfer) of the PPP Act or for construction services with the purpose that the concessionaire under Article 2 Subparagraph 7 intends to operate a project that is charged with the value-added tax (such application has been extended through 31 December 2009: Article 105 Paragraph 1 Subparagraph 3-2 of the Restriction of Special Taxation Act). A 0% tax rate is applied for the value-added tax charged on urban railway construction work provided directly to the concessionaire under Article 2 Subparagraph 7 of the PPP Act (such application has been extended through 31 December 2009: Article 105 Paragraph 1 Subparagraph 3 of the Restriction of Special Taxation Act).
Foreign Investment Zone	Reduction of an exemption from taxes, including corporate tax, income tax, acquisition tax, registration tax, and property tax, are applied to foreign investment of $10 million in newly established private investment facilities in the Foreign Investment Zone (Article 116 Paragraph 2 Subparagraph 3-3(e) of the Restriction of Special Taxation Act).
Infrastructure Fund	For the dividend income distributed for the infrastructure fund, a 5% tax rate is applied to the dividend income from the equity investment portion up to W300 million and a 14% tax rate is applied to the dividend income from the equity investment portion exceeding W300 million (such application has been extended through 31 December 2009; Article 91-4 of the Restriction of Special Taxation Act; Article 129 Paragraph 1 Subparagraph 2 of the Income Tax Act).

Source: Restriction of Special Taxation Act, Income Tax Act, Republic of Korea

Corporate Tax for Public–Private Partnership Projects

Type		Contents
Infrastructure Credit Guarantee Fund (ICGF)	The bad debt allowance for redeemable liabilities of the ICGF pursuant to the PPP Act is categorized as an expense (Article 63 of the Enforcement Decree of the Corporate Tax Act). When the ICGF accepts the bad debt allowance for redeemable liabilities as an expense, the amount is included as an expense in the process of calculating earnings for the year within the range of 1/100 of the remaining amount of the credit guarantee as of the end of the business year (Article 63 Paragraph 1 Subparagraph 3 and Paragraph 2 of the Enforcement Decree of the Corporate Tax Act).	
Way of Calculating Earnings	When used to grant subsidy	When a domestic corporation uses granted subsidy for the purpose of acquisition or reform of business assets with an aim to carry out PPP projects, the amount pursuant to such use is included as expense in the process of calculating earnings of the year (Article 64 Paragraph 1 and Paragraph 6 Subparagraph 3 of the Enforcement Decree of the Corporate Tax Act).
	For concessionaire	When the concessionaire distributes as dividend 90% or more of the distributable income by meeting the terms of a nominal investment company as stipulated under Article 51-2 of the Corporate Tax Act (the equity capital of the concessionaire corporation for the projects other than build–transfer–lease projects shall be W5 billion or more and the equity capital of the concessionaire corporation for the BTL projects shall be W1 billion or more), that amount is deducted when calculating earnings (Article 51-2 of the Corporate Tax Act; Article 86-2 Paragraph 4 Subparagraph 1 of the Enforcement Decree of the Corporate Tax Act).
Taxes on Land	Land developed for the implementation of PPP projects is exempted from additional taxation of capital gains tax and corporate tax (Article 55-2 Paragraph 1 Subparagraph 3 and Paragraph 2 Subparagraph 4(c) of the Corporate Tax Act; Article 92 Paragraph 1 Subparagraph 3 of the Enforcement Decree of the Corporate Tax Act).	
Source: Corporate Tax Act, Republic of Korea		

Local Tax Exemptions in Public–Private Partnership Projects

Type	Contents
Exemption of three times the registration tax	An exception of three times the registration tax applies to newly established corporations incorporated within the capital region (which includes the city of Seoul and Kyonggi Province) for the implementation of a PPP project (Article 138 Paragraph 1 of the Local Tax Act; Article 101 Paragraph 1 Subparagraph 3 of the Enforcement Decree of the Local Tax Act).
Exemption from acquisition and registration tax	Build–operate–transfer projects are exempt from acquisition tax and registration tax on real estate (Article 106 and Article 126 Paragraph 2 of the Local Tax Act).

Source: Local Tax Act, Republic of Korea

Exception from Charges for Public–Private Partnership Projects

Type	Contents
Exception from charges	50% of the farmland preservation charge and substitute afforestation charge are exempted for each facility (Article 57 of the Enforcement Decree of the Farmland Act, and Article 24-2 of the Enforcement Decree of the Forest Act).

Source: Farmland Act and Forest Act, Republic of Korea

Appendix 2

Online Survey

What is the level of constraint in adopting Korean PPP Scheme for your country's context?

	1.Weak Constraint	2.	3.	4.	5. Strong Constraint
1. Weak institutional capacity within the government	○	○	○	○	○
2. Poor human resource capability within the government	○	○	○	○	○
3. Poor leadership of political institutions	○	○	○	○	○
4. Incentive Mechanism for private partners (Tax intensives, other grants, etc.)	○	○	○	○	○
5. Bureaucratic hurdles (Red tapism, long official procedure, etc.)	○	○	○	○	○
6. High corruption in the public sector	○	○	○	○	○
7. Lack of financial resources with the government	○	○	○	○	○
8. Poor economy of the country	○	○	○	○	○
9. Unwillingness to allow foreign labours to the country	○	○	○	○	○
10. Low education in the country (High illiteracy)	○	○	○	○	○
11. Less human capital (Less work force in the country)	○	○	○	○	○
12. Lack of technical human capital in the economy	○	○	○	○	○

In your opinion which is the strongest constraint in Question 5? Please select one constraint from the previous question

Is there any other constraint(s) in your country? Please write below.

Survey Completion

1. Background Information

This is a survey being conducted for thesis research on 'Adaptability of Korean Public Private Partnerships (PPP) in the developing countries'.

Survey Privacy Statement
This is to inform you that this survey is strictly for thesis research work. The information provided by you will be kept confidential and will not be used for any other purposes.

Background Information
In common parlance the PPP is an agreement between the government and one or more private partners (which may include the operators and the financers) according to which the private partners deliver the service in such a manner that the service delivery objectives of the government are aligned with the profit objectives of the private partners. The effectiveness of the alignment depends upon a sufficient transfer of risk to the private partners. In the context of Korea, PPP projects are undertaken in the fileds of basic infrastructure development such as roads, ports, railways, schools and environmental facilities-which have traditionally been constructed and run by government funding.

Salient Success Factors of Korean PPP Scheme:
Korea has many successful infrastructure PPP projects. The idea of PPP was initailly conceived in 1960s and have taken its effect in 1990s. Since late 1990s Korean PPP has been developing with institutional changes as below:-

- PIMAC (Dedicated PPP unit for Project Appraisal) was established in 1999 after the Korean Economic Crisis in 1997
- Change in decision making process: Earlier Line Ministry used to select projects and conducted Feasibility Study on them. However, Ministry of Strategy & Finance decided to conduct Preliminary Feasibility Study by PIMAC.
- Evaluation/Implementation scheme: Benefit-Cost, Value For Money / Ex-Ante, Intermediate, Ex-Post
- Government support for land expropriation, financial and tax incentives, Minimum Revenue Guarantee (Enactment of the PPI Act, PPP Act)
- Setting a safeguard ceiling on government payment: Annul government payment : 2% of total gov budget expenditure or PPP investment : 10% to 15% of total public investment
- Procurement schemes: Build-Transfer-Lease (BTL) introduced in addition to Build-Transfer-Operate(BTL)

2. Personal Information

What is your nationality (If dual citizenship, choose the country you reside in)

Which organization do you work for?

- Central Government
- Local Government
- Government Agency

- Government Agency - PPP unit
- Private Firm

What is your organization's name? Please write the Name of organization & Your division

Organization	
Division	
Position	

How long have you been working in this organization? e.g. 1year and 3 months: 1.3

3. Infrastructure PPP for development

Have you heard about PPP before?

- Yes
- No

How much are you satisfied with the PPP projects going on or done in your country?

1. Very Satisfied	2. Satisfied	3. Somewhat Satisfied	4. Neutral	5. Somewhat Dissatisfied	6. Dissatisfied	7. Very Dissatisfied
○	○	○	○	○	○	○

4. Korean Infrastructure PPP

Have you ever heard about the success stories of Korea's PPP projects?

- Yes
- No

Do you think the Korean PPP Scheme would work in your country without any alterations?

- Yes
- No

5. Constraints in adopting the Korean PPP

What is the level of constraint in adopting Korean PPP Scheme for your country's context?

	1.Weak Constraint	2.	3.	4.	5. Strong Constraint
1. Weak institutional capacity within the government	○	○	○	○	○
2. Poor human resource capability within the government	○	○	○	○	○
3. Poor leadership of political institutions	○	○	○	○	○
4. Incentive Mechanism for private partners (Tax intensives, other grants, etc.)	○	○	○	○	○
5. Bureaucratic hurdles (Red tapism, long official procedure, etc.)	○	○	○	○	○
6. High corruption in the public sector	○	○	○	○	○
7. Lack of financial resources with the government	○	○	○	○	○
8. Poor economy of the country	○	○	○	○	○
9. Unwillingness to allow foreign labours to the country	○	○	○	○	○
10. Low education in the country (High illiteracy)	○	○	○	○	○
11. Less human capital (Less work force in the country)	○	○	○	○	○
12. Lack of technical human capital in the economy	○	○	○	○	○

In your opinion which is the strongest constraint in Question 5? Please select one constraint from the previous question

Is there any other constraint(s) in your country? Please write below.

6. Confirmation of willingness

Would you like to adopt the Korean PPP Scheme in your country as it is?

- ○ Yes
- ○ No

Would you like to adopt the Korean PPP Scheme in your country if the constraints are removed?

- ○ Yes
- ○ No

Any other comment(s) you would like to provide? Please write below.

7. Acknowledgement

I would like to highly appreciate your participation in my survey. Thanks.

by Jisun Lee | MPP/ED | KDI School of Public Policy and Management

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