

**IMPROVING THE PUBLIC-PRIVATE-PARTNERSHIP SYSTEM IN
MONGOLIA: A COMPARATIVE STUDY OF THE REPUBLIC OF KOREA
AND MONGOLIA**

By

BANZRAGCH, Undrakh

THESIS

Submitted to

KDI School of Public Policy and Management

In Partial Fulfillment of the Requirements

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Approval as of May, 2018

Abstract

The concept of a Public-Private-Partnership (PPP) is an attractive, yet ambiguous one. It is a mechanism that has been widely welcomed and used to address huge infrastructure gaps and to reduce excessive government roles in public infrastructure development and provision in Mongolia. However, issues related to qualities of PPPs, fiscal problems, corruption, social disapprovals, manipulation - i.e. unknown risks - that are harmful to the society, have started to come up after 7 years of experience of actively promoting the PPP system.

This paper based on empirical and comparative analyses, discusses that, the main causes of failures of PPPs have been that: 1) the flexibility and ambiguity of the PPP concept is not balanced against its accountability and efficiency; 2) that there is a lack of political will to nurture genuine partnership and a lack in the capability of the public sector; and 3) an uncompetitive private sector and immature environment. These factors have together created the maneuvering space for the manipulation of the PPP concept, its types, applicable infrastructures, institution as well as combined to promote fake procurement, management, economic analysis of PPPs, tendering, in general artificially legitimizing distorted partnerships in Mongolia.

These distortions have enabled PPPs to be used in a socio-economically unbalanced way and have influenced the promotion of PPPs in an inefficiently allocative way at the expense of public interest. To eliminate confusions, instabilities and opportunisms within the PPP system, the paper proposes several must-implement policy recommendations by comparing the failure factors of Mongolian PPPs with success factors of the Republic of Korean PPPs. These are: to clarify all the existing confusions, to promote the check and balance mechanisms along with a fiscal safeguarding measures of various budget ceilings approaches, to enhance the accountability mechanism that is based on performance indicators for both public and private sectors as well as to shift from the 'artificial' PPPs procurement practice to the 'proper' and competitive procurement practice by taking various state-led deliberate measures. The paper concludes that if Mongolia could not take at least these must-implement measures, the PPP system might more harm the public interest than benefit it, due to the nature of infrastructure PPPs that are prone to rents.

Key words: Public-Private-Partnership, causes of PPPs failures, success and failure factors, public interest

Acknowledgements

I would like to express my deepest gratitude to my supervisors Professor Jongyearn Lee and Professor Kangsoo Kim for their time, valuable comments and generous support to this thesis.

I am also thankful to NG Xiuyan Sophie from the Writing Center, for her wonderful English editing.

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Abbreviations

AHP Analytic hierarchy process

BOO	Build own operate
BOT	Build operate transfer
BT	Build transfer
BTL	Build transfer lease
BTO	Build transfer operate
CBA	Cost benefit analysis
DBLT	Design build lease transfer
DBOO	Design build own operate
DBOT	Design build operate transfer
DBT	Design build transfer
DemBT	Demolish build transfer
DemDBT	Demolish design build transfer
DevOT	Develop operate transfer
DFBOO	Design finance build own operate
DFBOT	Design finance build operate transfer
DRT	Design renovate transfer
FOT	Finance operate transfer
GOM	Government of Mongolia
ICL Audit	Assessment of the Implementation of Concession Law by the Mongolian National Office
IMF	International Monetary Fund
MER	Monitoring and Evaluation Report by the National Development Agency of Mongolia
MNT	Mongolian national tugrik
MOF	Ministry of Finance of Mongolia
MOSF	Ministry of Strategy and Finance of the Republic of Korea
MRG	Minimum revenue guarantee
NDA	National Development Agency of Mongolia
NPM	New public management
ODA	Official development assistance
PFS	Preliminary feasibility assessment
PIM	Public Investment Management
PIMAC	Public and Private Infrastructure Investment Management Center of Republic of Korea
POO	Purchase own operate
PSC	Public sector comparator
RLOT	Renovate lease operate transfer
SOEs	State owned enterprises
SPV	Special purpose vehicle
SWOT	Strengths, weaknesses, opportunities and treats
VfM	Value for money

Introduction

Background and problem definition

As a typical representative of a developing country, Mongolia faces a huge infrastructure gap due to increased urbanization, industrialization and population development but a financial shortage to fill it. In that vein, PPPs have become the main solution to that. However, recently the efficiency and accountability of PPPs have been questioned due to several serious problems mentioned below.

The Parliament of Mongolia approved the Resolution on the Resignation of the Prime Minister J.Erdenebat and his leading Government in September 2017. This Government was selected and formed after the Parliamentary Election in 2016 and the resignation happened only after one year. One of the main reasons or as according to media information, could be said that there was an illegality of concession agreements which had conflicts of interests. Mainly, MNT 60 billion of concession agreements had been given to ministries, with further concessions given to people with conflicts of interest. According to Parliament Member Mr. B.Purevdorj, one concession was given to a company called “Zasag Chandmani Mins” whose owner has a conflict of interest, to build a paved road of more than 100 km from the mining site to the border of the Republic of China (hereinafter referred to as China) for the transportation of iron ore to China in 2017. The Parliament member further claimed that “...this paved road is not widely used by the ordinary people as well as does not have any social, industrial and economic importance for a society as a whole, but for the mining company” (Video by news.zasag.mn, 2017). On the other hand, the Head of the PPP Unit of the National Development Agency Mr. O.Munkhtur, officially said that, “...this road has been decided to be built through the concession contract, because the mining companies together proposed to build this road by their own expense and investment (Interview with the Head of PPP Unit of the National Development Agency Mr. O.Munkhtur, news.mn, 2017). In 2017, Mongolia received an IMF debt package and in connection to that, the IMF required the GOM to conduct an audit of PPPs due to PPPs’ potential for a high level of burden on the budget. Moreover, there have been various media news and public disapproval concerning the low quality of new

paved roads that were built through concession agreements. Overall, it could be understood that issues related to qualities of PPPs, fiscal problems, social disapprovals, manipulation - i.e. unknown risks - that are harmful to the society have started to come up after 7 years of experience in actively promoting the PPP system in Mongolia.

Purpose and research questions

In general, the use of PPPs has been accepted as a panacea at the introduction of the PPP system in Mongolia due to the various government failures and negative attitudes of the private sector concerning too much government intervention in a market economy. Currently, there are issues concerning PPPs in Mongolia because of various scandals related to rent seeking, budget problems and qualities on the one hand, and huge infrastructure gaps and financial incapability of the government to effectively handle the issues on the other hand. Consequently, the main purpose of the study is to clarify the inherent problems that have caused the failures of PPPs in Mongolia.

In line with that, the main research question would be: ***What have been the main causes of failures of PPPs in Mongolia? What have been the most vital aspects that have negatively influenced the PPPs' performance and inefficiency of management?*** Various sub-research questions are also contemplated and asked, in order to better understand and reason out the main research questions, such as what are the failure factors behind these problems; how and why have these failures occurred?; and what conducive factors and situations have influenced the occurrence of the failures of PPPs in Mongolia?

Thesis hypothesis

In response to the research questions – ***“What have been the main causes of failures of PPPs in Mongolia? What have been the most vital aspects that have negatively influenced the PPPs' performance and inefficiency of management?”***, this paper predicts that the highly complex and ambiguous nature of PPPs have led to political and private parties taking advantage, which has further led to socio-economically unbalanced PPP practices that were detrimental to the public interest in Mongolia.

Contributions and limitations

The current literature both in English and Mongolian greatly ignores empirical and normative analyses of causes of failures of Mongolian PPPs. Therefore, a narrower analysis of the failures, ground causes of failures and recommending principle directions and discussions would help to make a considerable contribution to improve the PPPs system of Mongolia.

Moreover, this paper contributes to the existing literature on experiences with PPPs of developing countries, by focusing on the Mongolian case for evidence-based learning. Importantly, the paper could have implications for other developing countries to formulate factors that could influence the performance of their own PPPs since the paper compares and analyzes the failure factors of Mongolian PPPs from a developing country perspective, using the success factors of Korean PPPs from a developed country perspective in a context-driven and analytic way. Finally, currently due to the globalization of the PPP market, this paper is crucial in enabling further research to be made from a cross-country perspective as well as to enable international PPP players to be informed of the risks, challenges, problems and opportunities in the contexts of Mongolian PPPs.

The monitoring and evaluation of PPPs has so far, not been conducted, nor has an integrated database for PPPs been created since the implementation of the PPP system. Consequently, the main limitation of the paper is that there is a limited analysis driven by the lack of data and evaluation reports about PPPs in Mongolia. It should be also mentioned that the relevant parts that define the costs, investments and fees of PPPs have been omitted from the publicly-available concession contracts, which has greatly hindered making a proper quantitative analysis of individual as well cumulative projects. This issue of lack of transparency should be addressed for better accountability and monitoring from independent scholars, researchers and the civil society.

Methodology

This paper uses research methods, such as empirical analysis, case analysis, comparative and deductive analysis, document analysis in order to develop reasonable comments and conclusions for the proper PPP system and practice in Mongolia. The discussion of the

theoretical foundation for the paper mostly relies on the relevant scholarly literature and case studies.

The part on the identification of failure factors of PPP practice is based on descriptive statistics, PPPs contracts, various government reports, media and yellow news. Also, more specific comparative case, legal and policy-based, institutional, procurement and fiscal framework analyses of the South Korean success factors and Mongolian failure factors are made to help for better understanding of the causes of failures and gaps in PPPs policies in Mongolia. This comparison is done to the extent to emphasize the gaps in Mongolia and the differences in contexts, but does not attempt to cover the PPP system in Korea in descriptive or critical ways. Finally, the paper would conclude and provide recommendations on the future direction of PPP policy in Mongolia.

Expected outcome

Based on the comparative analysis and scholarly literature, a recommendation would be proposed regarding the proper measures to take in order to address the current failure factors. This would help create a better PPP policy that is suitable for the level of social and economic development of Mongolia.

Composition of the paper

The remainder of the paper is organized as follows: Section I provides the existing literatures on the infrastructure PPPs around the world, specifically evaluation of implementations, identified failure and success factors.

Section II provides general information about Mongolia that should be taken in to consideration in the development of a proper PPP system as well as briefly provides information on the infrastructure gap and current financial incapability of Mongolia, as rationales for implementing an effective PPPs system in Mongolia.

Section III makes statistical, document, contracts and yellow news analyses to reveal the failure factors behind PPP practices.

Section IV focuses on comparative case, policy and legal, institutional, procurement and fiscal analyses in the framework of Korean success factors and Mongolian failure factors in order to

create the basis for understanding the causes of failures of PPPs in Mongolia for further policy recommendations.

Section V summarizes key causes of context specific failures for Mongolia and proposes recommendations and future perspectives of the PPP policy in Mongolia.

Section VI reflects the limitations of the paper.

Literature review on rationales, success and failure factors of PPPs

The literature review concentrates on existing research concerning analysis of rationales, criticisms of PPPs and critical analyses of experiences of PPPs in different contexts with the focus of failure and success factors of PPPs implementation. Also, the literature review briefly reviews the success factors behind PPPs in Korea specifically. At the end of the section, a literature review of PPPs solely for Mongolia is elaborated. In that way, theoretical and practical backgrounds are analyzed, which would further enable a critical analysis of causes of failures of PPPs in Mongolia to be made.

Rationales and criticisms of PPPs

The rationale behind the use of PPPs are based on various economic theories and practical justifications such as meta-theories; government regulation of business theory; regional and urban dynamics theory; public choice theory; principle agent theory; NPM; economics of collaborative behavior; learning and dynamic capabilities; concepts of relational contracting from transaction cost economics; complex adaptive systems perspective; resource dependency perspective; and neo-institutional theory etc. where the main conceptual bases and normative rationales of use of PPPs are increased efficiency over the life cycle of the project and enhanced social welfare (Ball, R., 2009; Carmeli et al., 2006; Child, 2005; Christensen, 2007; Flinders, 2006; Rosenau, 2000, Graeme A Hodge et al., 2010; Henry A Davis, 2008; Stefano Gatti, 2008; World Bank, 2004, 2006, 2009, 2011; OECD, 2009; IMF, 2008).

Particularly, the 1980s' insights of NPM has shifted the government responsibility to a more managerial direction by intensifying the use of market and quasi-market competition mechanisms; and by unbundling public services, so that only the '**public interest**' component of

services could remain for public authorities; but that the other components could be provided by the competitive and innovative private sectors for the sake of improving quality of services and reducing costs. By bringing various groups that have mutual goals together and by enabling them to deal efficiently with complex problems as a single decision-making entity, PPPs could internalize externalities and reduce transaction costs between their activities and achieve more added value, which should to a sufficient extent, attract the interests of public and private sectors.

Moreover, PPPs enable projects to have a single point of responsibility and this is a strong feature of PPPs in delivering better accountability, especially for large projects. Grimsey and Lewis emphasized that **accountability** and a regard for the **public interest** are most important as they assist in legitimizing and acceptance of contractual arrangements. They investigated the PPP relationship and concluded that a high dependency makes the risk of opportunistic behaviors problematic and challenging. Also, Erik-Hans Klijn expressed managerial efforts make a PPP work more efficiently rather than through an organizational form (Graeme A Hodge et al., p.77, 2010). Indeed, increased information-sharing among PPP project teams makes projects more flexible to changing business environments. For instance, PPP contracts usually last 20-30 years; in that way private parties have incentives to come up with more innovative designs, use more sustainable materials for construction and make the maintenance less costly and profitable. Consequently, efficiency increases for both building and operating the PPP more under the use of bundling than unbundling, leading to higher social welfare.

From a practical stand-point the following advantages of PPPs have been highlighted: PPPs are technically efficient; PPPs are able to take advantage of economies of scope since activities are bundled together; PPPs are able to postpone government cash outlay at least in the short-run since a government is able to pay a relatively small part of the cost upfront; the use of PPPs may improve governments' net cash flow; users are more willing to pay a toll or at least a higher toll to a private sector than to a government - although this may be costly as governments would be transferring risks to the private sector -; better punctuality and on budget delivery; political risk may be lower with PPPs since risks related to construction cost

overruns are transferred to private sectors and other similar factors. (Ball, R., 2009; Carmeli et al., 2006; Child, 2005; Christensen, 2007; Flinders, 2006; Rosenau, 2000, Graeme A Hodge et al., 2010).

Critiques of PPPs

Various criticisms from political economy, governance, postmodern theory and public-sector accounting perspectives concerning PPPs have been raised, such as those stating that PPPs have brought about debt that has to be paid by future generations. In some instances, a VfM assessment favors private finances especially when ‘arm’s length’¹ organizations lack; the appraisal process undermines transaction and externality costs; PPPs reduce governments’ policy flexibility through long-term contractual obligations; the monopolistic character of long-term contracts are against market ideology; incomplete contracts could take place where parties may behave strategically to the benefit of themselves; unbundling does not necessarily lead to efficient outcomes due to profit-seeking private parties and public sector players with unclear motives; the issue of an improper discount rate application may occur; there is a possibility of ruling out SMEs as well as third parties due to the front-loaded high bid prices - although risks are transferred to the private sector -; the government should pay high risk adjustment costs and other similar reasons such as where the main argument is PPPs are not panacea, but PPPs are a very complex phenomenon and there are ‘no free lunches’ when it comes to PPPs (PPIAF, 2014; Hodge, 2004; Shaoul, J et al., 2008; Shaoul, J et al., 2008; Heller, Pete, 2005; World Bank, 2004, 2006, 2009, 2011; NAO, 2007a, b; Graeme A Hodge et al., 2010; Henry A Davis, 2008; Stefano Gatti, 2008).

PPPs in different contexts: success and failure factors of PPPs

In general, PPPs have been considered as a more novel and efficient way of delivering public services and infrastructures in comparison to other traditional approaches all around the world (Fobil et al., 2008; Miraftab, 2004; Ke, 2014). The studies that concern the most recent international experiences of PPPs concluded that PPPs have already become the part of the

¹ In this paper, ‘arm’s length’ generally refers to an independent, check and balance institution. For more information: Harry Hillman Chartrand & Claire McCaughey, The arm's length principle and the arts: an international perspective - past, present and future, American Council for the Arts, N.Y.C, 1989.

government policy and the key institutional form for the cooperation of the public and private sectors around the world during the last few decades (Graeme A Hodge et al., 2010). Particularly, PPPs have been extensively used in developing countries than in developed countries, to help with reducing infrastructure gaps, poverty and promoting socio-economic growth (Harris. C, 2003; Graeme A Hodge et al., 2010).

Nevertheless, less than impressive initial empirical results have expressed caution towards PPPs, thus different criticisms concerning PPPs have been actively raised not only in developing but also in developed countries based on the recent experiences of PPPs (PPIAF, 2014; Hodge, 2004; Shaoul, J et al., 2008; Shaoul, J et al., 2008; Heller, Pete, 2005; World Bank, 2004, 2006, 2009; 2011; OECD, 2009; IMF, 2008; NAO, 2007a, b; Graeme A Hodge et al., 2010). Particularly, there are concerns about the actual financial sustainability of PPPs in various contexts in the medium to long-term due to the current short-term oriented fiscal analysis of PPPs.

Dr. Paul Numba-Um concluded based on the PPPs experiences of developing countries:

“PPPs face a wide variety of obstacles in developing countries. These range from a weak policy and regulatory environment; lack of a pipeline of viable and bankable projects; and weak capacity of public institutions to process PPPs; underdeveloped domestic financial and capital markets. In general, establishing a robust PPP policy and legal framework has proven to be challenging in most countries as it entails in-depth institutional reform in the way government operates and performs. In many countries in the developing world, there remains a gap between written policies and enacted legislations, and their implementation or enforcement on the ground.”

Further “...First, in many cases governments failed to understand that not all of their infrastructure projects should be undertaken as PPPs. ...Third, in many cases, unfortunately, governments failed to ensure consistency between their capital development programs in infrastructure and the pipeline of PPP projects...”.

Source: (Graeme A Hodge et al., p.470, 2010)

In developing countries, the implementation of PPPs has not been successful in all instances (Sirtaine et al., 2005). In addition, there have been various failure cases in developed countries (Soomro and Zhang, 2013; Tam, 1999; Kumaraswamy and Zhang, 2001; Monsalve, 2009; Liu et al., 2016, Graeme A Hodge et al., 2010). Although, the failure factors have differed to some extent in both developed and developing countries, the following failure factors of PPPs could be summarized: there is a weak institutional structure and human capacity; a lack of

proper support from government authorities; a lack of transparency and accountability; opportunism corruption, high level of rent-seeking behaviors; a lack of competitiveness or lengthy bidding process; a lack of coordination; a low level of public interest behind project decisions; huge rents for private operators; a complexity of lengthy contracts and negotiation; delayed finalization of contracts and negotiation; a problem of asset-currency mismatch; a lack of sophisticated equity and debt financing markets for long-term equity and debt financing needs; excess high level of use of unsolicited projects and so on. (Lossa and Martimort, 2013, 2015; Hoppe and Schmitz, 2013, Graeme A Hodge et al., 2010; Guillermo Takano, 2017).

A series of factors required for successful PPPs

Based on a thorough review of earlier literature, Osei-Kyei et al. developed a comprehensive set of criteria for measuring PPP project success (Osei-Kyei et al., 2017). These factors contributing to successful PPPs are as summarized below:

Table 1 Criteria for measuring a PPP project success

Success Criteria	Descriptions
Profitability	A continuous income/profit is received by parties during project operation
Long-term relationship and partnership	Cordial relationship and well-established coordination are instituted among stakeholders.
Satisfying the need for public facility and/or service	An implemented PPP project fully satisfies the need for a public facility and/or service.
Adherence to time	Project is constructed on and/or before time schedule for commissioning.
Adherence to budget	Project is constructed according to the estimated cost and is without any operational cost overruns.
Reduced litigations and disputes	Contract litigations and disputes are minimized throughout the project life cycle.
Reduced public sector administrative cost	Lower cost is incurred by the public sector in the administration of the project because major project risks are allocated to the private sector.
Effective technology transfer and innovation	Technical knowledge and innovation are effectively shared among stakeholders, particularly with local practitioners.
Local economic development	The project contributes to the economic development of the community within which the project is developed.
Environmental performance	The project does not affect the health and safety of residents or the environment.
Reduced project life cycle cost	Lower life cycle cost is realized, which enhances the project's value for the money.
Reliable and quality service Operations	Continuous and uninterrupted project services are provided and according to the satisfaction of users.
Meeting output specifications	The project meets the expected output standards and/or requirements and delivery.
Effective risk management	Risks are properly identified. The risk sharing and transfer mechanisms are agreed on and effectively implemented by the public and private parties.

Reduced public and political Protests	There are reductions in agitation and protests, which often arise due to increases in tariffs, lack of transparency, corruption, and so forth.
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Source: Osei-Kyei et al., 2017

Moreover, 14 critical success factors have been determined based on an empirical study conducted in Nigeria. These are: government involvement by providing guarantees; political support; competitive procurement process; transparency in the procurement process; availability of suitable and adequate financial market; project economic viability; commitment and responsibility of public and private sectors; appropriate risk allocation and risk sharing; appropriate project identification; technical innovation and technology transfer; thorough and realistic assessment of the cost and benefits; project technical feasibility; strong and good private consortium; and favorable legal framework (Solomon Olusola Babatunde, 2015).

Also, scholars extensively mention the following detailed failure factors and key measures to prevent problems in developing countries for PPP procurement.

Table 2 Key measures to prevent failures for PPP procurement in developing countries

Planning stage	An inadequate feasibility study, distorted risk sharing
Revenue and cost estimates	An improper or lack of detailed financial and economic analysis, inadequate forecasting demands
Compliance with contractual agreement	Both government and private sector compliance
Strong institutional arrangements	A lack of coordination between public organizations, between public and private sectors, unclear or unsustainable rules and regulations that increase transaction costs and information asymmetries, unskilled human resources
Value of competitive procurement	A lack of competitive bidding which enables the private sector to take advantage of its position

Source: Graeme A Hodge et al., p.543, 2010

Overall, it could be understood that on the one hand, there are still so many challenges and problems that could easily lead to failure of PPPs and, on the other hand, creating an environment for successful implementation of PPP policy is a challenging task. Specifically, in developing countries, not only multi-dimension, multi-stakeholder and multi-level efforts and measures need to be taken, but also that there needs to be the nurturing of well-established institutions, social and human capitals for a PPP policy to be successful.

Success factors of the Republic of Korean PPPs system

The PPP market of the Republic of Korea has over 20 years of experience and now the country has become one of the most advanced countries with a stable and highly profitable PPP

market (Jay-Hyung Kim et al., 2011; Kangsoo Kim, 2017). The following were mentioned as success factors: solid foundation of legal and institutional system; elaborated analytical tool and implementation guidelines; fair and transparent procurement system; and mature PPP projects market (Kangsoo Kim, 2017).

Here it must be mentioned that social capital, institutions, unwritten norms are critical in order for a collaboration between public and private sectors to be successful. For instance, Chris Skelcher claims “...societal norms and the underlying attitudes towards the way in which business should be conducted are important determinants” for successful collaboration. As an outstanding example could be Hong Kong’s great urban projects where the solidity and success depend on not only on their written norms and official institutions but also their interpersonal, inter-organizational and institutional embeddedness (Graeme A Hodge et al., 2010). Basically, it is claimed that, a collaboration based on more reliable governance structures and processes might significantly improve the efficiency of the overall production system. These findings critically indicate the importance of contexts for a successful partnership to take place between the public and private sectors.

Table 3 General facts of the Republic of Korea and Mongolia

Indicators as of 2016	The Republic of Korea	Mongolia
Population	51.245.707	3,081,677
Territory	100,210 km ² (38,690 sq mi) (107th)	1,566,000 km ² (605,000 sq mi) (18th)
Density	507/km ² (1,313.1/sq mi) (23rd)	1.97/km ² (5.1/sq mi) (238th)
GDP	USD 1.411 Trillion	USD 11 Billion
GDP per capita	USD 27533.3	USD 3660 USD
Current account balance	USD 98,677,400 Billion	USD -948,455,402 (2015)
HDI (2015)	0.901 very high – 18 th	0.735 high – 92 nd
Unemployment % total	3.7%	7.45% (2015)

Source: World Bank, World Economic Outlook Database; K-Developedia, Key development data for Korea, 2017

In that vein, it should be emphasized that, in addition to formal PPP success factors, in Korea, the necessary social capitals and culture have been nurtured in the past through its rich history, culture, and well-developed public policies. Korea has not only already well-developed fundamental infrastructure such as the accumulation of human and material capitals, but also the embedded, accountable, vision oriented state and well-developed mechanisms of collaboration with market players (Joseph E. Stiglitz, 1996; Danil Rodrik, 2008). Therefore, a

very careful consideration of contexts is required for a comparative policy analysis of PPPs of two countries, due to the relative immature socio-economic environment and low social capital of Mongolia.

Table 4 A short SWOT analysis of PPPs market in Mongolian context

<p>STRENGTHS</p> <ul style="list-style-type: none"> ▪ A fast-growing economy due to the growing export of natural resources ▪ A favorable policy and legal environment for the support of private sector participation in the infrastructure development ▪ A favorable and stable legal environment for foreign investment and companies ▪ Low input and labor costs ▪ A growing competitive private sector ▪ A high level of political will to reduce huge infrastructure gaps 	<p>WEAKNESSES</p> <ul style="list-style-type: none"> ▪ Lack of proper knowledge about PPPs ▪ Lack of incapable public and private sectors ▪ Lack of financial ability of public and private sectors ▪ Lack of technological innovation ▪ Lack of institutional stability and accountability mechanism ▪ Lack of political embeddedness ▪ Lack of development of financial markets ▪ Lack of implementation of laws ▪ Lack of social capitals
<p>OPPORTUNITIES</p> <ul style="list-style-type: none"> ▪ A high willingness of the Government to support the participation of the private sector in the infrastructure development ▪ A high and urgent demand for various kinds of economic and social infrastructures ▪ Urgent needs for public sectors to apply PPPs ▪ Rapidly developing and growing PPPs market ▪ A favorable business environment and a wide Government supports 	<p>THREATS</p> <ul style="list-style-type: none"> ▪ Political instability ▪ Fiscal shortfalls ▪ Unclear legal framework for PPPs ▪ Corruption ▪ Inflation risks ▪ Currency risks ▪ Lack of PPPs professionals ▪ Lack of accountability measures for public and private sectors

Literature review of Mongolian PPPs system

There are two vital studies that specifically focus on the PPP policy of Mongolia. The first one entitled, the “Public-Private Infrastructure Investment and Deposit Insurance in Mongolia” was conducted within the framework of Knowledge Sharing Program in 2011. This study was conducted right after the Adoption of the Concession Law of Mongolia in 2010, and a

comparative study with the Korean PPP system was made concerning the PFS system, legal framework, procedural guidelines and introduction of the limited deposit protection scheme in Mongolia (KDI, 2011).

The other study titled, the “Green Public-Private partnership for Public infrastructure in Mongolia: PPP Model and Technical Guidelines for Green Education Buildings” (hereinafter referred to as Green PPP study) was conducted in 2016, by the Global Green Growth Institute. This study mainly concerns the Mongolian PPP system in a general way and the study specifically focuses on PPPs for construction of eco-friendly educational buildings in Mongolia. The main findings concerning the key risks and challenges of the Green PPP study were divided into three categories: legal/institution, operational, and financial.

Table 5 Key risks and challenges of Mongolian PPP system

Area	Key Risks and Challenges
Legal/ Institutional	Weak legal framework for PPPs (the Concession Law, other associated laws); Lack of coordination among government stakeholders (between the central PPP authority and line ministries and between the central and local governments, etc.); Lack of contract enforcement power; Change in government policies on concessions and the focal agency affecting investor confidence; Lack of planning/screening and rigorous project assessment in project preparation; Underdeveloped procurement system; Lack of government emphasis on environmental sustainability in concession projects;
Operational	Lack of technical guidelines for project preparation and procurement; Lack of competition in bidding; No mechanism for performance evaluation for performance-based model PPP projects; Technical risk of inappropriate technical schemes or poor technical design for green education projects; Lack of incentives for green technologies; Weak government capacity to manage complex PPP deals; Lack of qualified private companies to undertake large-scale infrastructure projects;
Financial	Lack of long term finance in the local financial market;; Financial risk relating to interest rate and foreign exchange rate fluctuation; Limited state budget to meet long term payment obligations and/or to fill viability gap; Lack of incentives for green technologies;

Source: Global Green Growth Institute, p. 5, 2016.

Consequently, the policy recommendations given by the two studies are:

Legal/institutional Aspect: linking between the Law on Concession (PPP law) and other relevant laws; providing a clear definition of PPP; regulating performance-based payment or service contract PPP model as a PPP type; clarifying roles and responsibilities of concerned parties; PPP

project planning has to be in accordance with mid-to long-term infrastructure plans of the government and national investment priorities; involvement of the Ministry of Finance in the early stage of project development and approval, especially for service contract type PPP projects; setting up a consistent and transparent procurement process by law, supporting regulations and guidelines.

The Operational Aspect: creation of adequate databases; developing assessment guidelines and methodologies; avoiding direct contracting to increase market competition and ensure VFM; promoting participation of foreign companies and investors; establishing a performance evaluation (PE) system for performance-based model PPP projects.

Financial Aspect: introduction of ex ante evaluation system such as PFS, simplified PFS, Ex Officio Selection, as well as intermediate evaluation frameworks such as TPCM, RDF and RSF; and developing investments and risk sharing measures.

This study makes references for supporting arguments from these two studies where relevant. In general, the main distinguishing character of this paper would be to find out the causes of failure factors from the empirical data and cases analysis; analyzing the experiences and current problems of PPPs from a normative perspective; and proposing policy recommendations based on empirical and normative analyses that is suitable for the level of socio-economic development of Mongolia.

A Brief Introduction to Mongolian Context and Rationales for improvement of the PPP system

Mongolia is a land-locked country in the North-East Asia and borders with the People's Republic of China and the Russian Federation. Traditionally, Mongolia has been a nomadic country with a history of over 2000 years and, from 1930-1990eMongolia had been a socialist country. Most of the foundations of its cities and other infrastructure were initiated and built during 1960-1985 with the technical and financial support of the Soviet Union. However, starting from the 1990s, the country has made its transition to a market economy and with a new economic environment, the processes of economic liberalization, urbanization, industrialization, market privatization and open trade have started in Mongolia. Since the start

of the transition, the government has been the main player in the provision of infrastructure, with the private sector playing a limited role in sharing the burden in infrastructure development. In other words, since the transition, the collaboration between the private and public sectors has been underexplored. Therefore until very recently, no specific policies and regulations have been promoted by the Government of Mongolia (GOM) in the sphere of private sector support, development and collaboration, due to the promotion of a noninterventionist liberal market policy. Specifically, collaboration and partnership between the GOM and the private sector have remained unexplored in the area of infrastructure construction and provision. This fact might also be connected with the absence of competitive private companies, and a lack of human and knowledge capitals in the economy after the transition to the market economy. However, after a more than a decade of promoting a market economy, it has become clear that the state is incapable of successfully taking care of infrastructure development and provision. At the same time, the spread of globalization and NPM around the world as well as the appearance of national companies have come together to change policy perspective from being about state-led infrastructure provision to one that is partnership-oriented. As Mitchell-Weaver and Manning found out in the 1980s, the NPM paradigm driven by 'market discipline' had facilitated the quick promotion of PPPs amongst the Third World countries. (Graeme A Hodge et al., 2010). Overall, it could be understood that, in Mongolia, both the GOM and the private sector still have had very limited experiences in collectively and effectively working together, particularly in the area of infrastructure development and provision, which is one of the basic things to consider for the successful implementation of PPP policies in Mongolia.

In 2008, the Parliament adopted the National Development Strategy based on the Millennium Development Goals, where the importance of development and provision of various infrastructure in order to increase economic competitiveness and eliminate poverty, was strongly highlighted (National Development Strategy of Mongolia; Global Green Growth Institute, 2016). With the adoption of the National Development Strategy, public policy has been shifted towards the new direction of the promotion of a strong private sector, a high collaboration between public and private sectors, decentralization of government roles by

promoting the innovation and competition in public affairs, and so on. In particular, the National Strategy reflects ambitious aims for the infrastructure development such as: 1) to become a key electricity exporting country; 2) to develop and renew the intra- and intercity paved roads of the whole country; 3) to develop the transportation system (paved road and railway) in order to become a country that effectively ‘bridges’ Asia and Europe; 4) to develop railways so that mining products could be exported with fewer costs; and 5) while doing so, highly emphasizing in all spheres, the promotion of collaboration and partnership with the private sector.

Based on the National Development Strategy, the Private Sector Development Strategy was adopted in 2008. Based on the Private Sector Development Strategy, the State Policy on PPP and the Concession Law of Mongolia² was adopted in 2009 and 2010 respectively. All of these policy documents explicitly express the strong will of the State to promote the private sector and to reduce the burden of the GOM for developing infrastructure, providing social services and reducing infrastructure gaps. The reason for mentioning all of these initiatives is that one would be able to get the impression that the country would really be able to solve its various infrastructure problems efficiently if the private sector would be significantly involved through mutual collaboration and promotion. In other words, the state-led policy of infrastructure development has now, significantly shifted to favoring a high level of private sector participation.

Key infrastructure gaps in Mongolia

The National Development Strategy has assigned ambitious goals for its infrastructure developments to address huge gaps in various infrastructures in the country due to its increasing population, urbanization and industrial needs (mainly the export of mining products).

Road transport

Mongolia’s paved road network is extensively underdeveloped. In 2015, paved roads that connect the main provinces, the capital and other small cities in the whole country have reached 44.7% of total road coverage (Interview with D.Ganbat, Minister of Roads,

² Mongolia has taken technical assistance to set up PPP frameworks and to develop an institutional capacity for PPPs from IBRD/IDA (Graeme p.472).

Transportation, Construction and Urban Development, 2016). Mongolia's National Development Strategy considers road infrastructure to be a key instrument in fostering regional development. It targets an ambitious goal to pave the entire national road network (11,250 km) by 2021 (Government of Mongolia Action Plan 2016-2020, 2016). Certainly, in order to achieve this ambitious plan, huge road projects would be required and that would certainly demand more advanced technologies, human skills, and management processes, which in many cases the private sector possesses. It should also be highlighted that the detailed implementing policy documents expressly reflect that certain paved road projects should be accomplished through PPPs (The Detailed Implementing Plan of the Action Plan 2016-2020, 2016).

Overall, together with Ulaanbaatar's urban development plans, this would require building about 1,000 km of new paved roads each year (ADB, 2016). Moreover, the periodic maintenance of paved roads which had been ignored during the past years, would further raise the development and improvement of the paved roads of the country significantly (ADB, 2016). In 2016, MNT 55 billion was proposed to be allocated by the relevant Ministry for the repair and maintenance of roads, but only MNT 8 billion was approved by the Parliament (Interview with D.Zagdradnaa, 2016). This shows the insufficient budget of Mongolia to take care of the public infrastructure.

Rail transport

Mongolia has a large mineral resource export-oriented economy. In the past, railroads that crossed over big mining deposits to the Soviet Union were built with the assistance of the Soviet Union in order to export mineral, agricultural, and other products to the Soviet Union. Currently, new huge mining deposits are being explored and there is great demand to build railways from these deposits to the border of the Republic of China for transportation. However, currently, both paved and to a larger extent, unpaved roads are used for exporting these minerals, which is causing many environmental and social issues such as high costs of exportation, resulting dust, pollution, including conflicts with the local people and so on. Even nomadic people who have been living in the area for a long time, have had to leave the area due to the side effects and the impossibility of continuing a traditional way of living (Mining and Human Rights, National Human Rights Commission of Mongolia, 2012). Therefore, there is a

great demand to build new railways. For instance, some of these new railway projects are “Tavan tolgoi” a huge mining site is located 240 km from the north of the Chinese border and “Oyu tolgoi” is located 150 km from the “Tavan Tolgoi” railway project. This shows the extent of land area that would be affected.

Social infrastructure

The demand for social infrastructure is also an example of demand for educational facilities in Mongolia. The current capacity of educational facilities is overused due to a deficit of educational facilities in a country that has been driven by a rapid urbanization, population growth but a lack of a proper supply of new educational facilities during recent years. Therefore, decreasing the study shift of secondary schools from three to two was emphasized in the Government Action plan (Government of Mongolia Action Plan 2016-2020, 2016). Currently, secondary schools take 3-4 study shifts and classes enroll many more children than are the established standards and norms.

As of October 2015, children of kindergarten age and school age amount to 776,614; whereas the current capacity of educational facilities is able to host 472,082 children (Construction Development Center of Mongolia, Construction Need and Demand for Secondary School and Kindergarten in Mongolia, 2015). From this, although there are 505,343 school age children, the current capacity is only able to host 358,930 school age children. In other words, there is a need to build additional secondary schools for the surplus 146,413 children. For the kindergarten level, the current capacity is 113,15 whereas the total number of kindergarten age children is 271,251. In total MNT 1,758,282.8 million worth of investment is required in filling in the gap in education facilities (Global Green Growth Institute, 2016).

Electricity

In Mongolia, the need and demand for electricity rises about 7-8% each year. Mongolia imports the electricity from the Russian Federation, in total up to UD\$ 40 million each year (Mongolian National Broadcasting, 2017). The Government Action Plan aims to fully supply its own electricity needs domestically, and then exporting to foreign countries, particularly to the Republic of China due the fact that the country has great potential in producing renewable electricity, particularly in wind, water and solar (Government of Mongolia Action Plan 2016-2020, 2016).

The financial gap in Mongolia for infrastructure development

In the past several years, Mongolia's GDP growth has been decreasing due to fluctuations of mineral prices in the international market and due to an implementation of improper public policies which consist of extensive expenditure.

Table 6 Macroeconomic data of Mongolia

	2011	2012	2013	2014	2015
GDP Growth Rate (%)	17.3	12.3	11.6	7.9	2.3
GDP per capita (USD)	3736.1	4329.0	4365.4	4168.9	3951.9
Total invest (% GDP)	58.2	55.9	53.3	35.2	26.2
Average Inflation (% CPI)	7.7	15.0	8.6	13.0	5.9
Current Account (% GDP)	-26.5	-27.4	-25.4	-11.5	-4.8
Capital Account (% GDP)	-3.7	-8.3	-7.5	-8.8	-5.1
Gross External Debt (USD million)	9,627.5	15,386.5	19,022.1	20,942.3	21,829.5
Sovereign credit rating (Moody's)	B1	B1 -> B2	B2	B2 -> Caa1	Caa1
Public debt, total (% GDP)	32.7	51.3	67.3	76.5	N/A
External debt ratio	23.5	39.0	46.3	54.9	N/A
Domestic debt ratio	9.1	12.3	21.1	21.6	N/A
Ratio of actual spending over initial budget of the capital account in the budget law (%)	28.8	-18.1	-19.2	N/A	N/A

Sources: IMF, World Bank, World Economic Outlook Database, EIU, Country Report Mongolia, Bank of Mongolia. Cross referenced from KDI School, 2017.

It should also be emphasized that the Mongolian capital market is underdeveloped and does not play a big role in long-term investments and financing. While the banking sector dominates on one hand, on the other hand, the capital, stock and bond markets remain greatly underdeveloped. For instance, GOM bonds account for 98% of the total bond market, which directly indicates the imbalanced development of the bond market of Mongolia.

Figure 1 Structure of the Mongolia Financial Sector

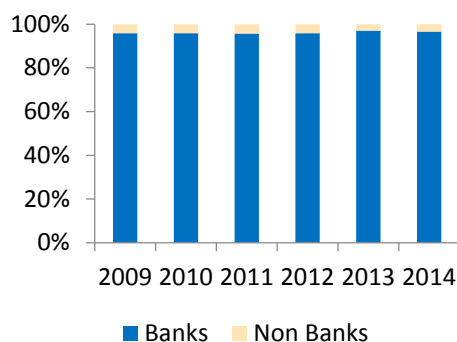
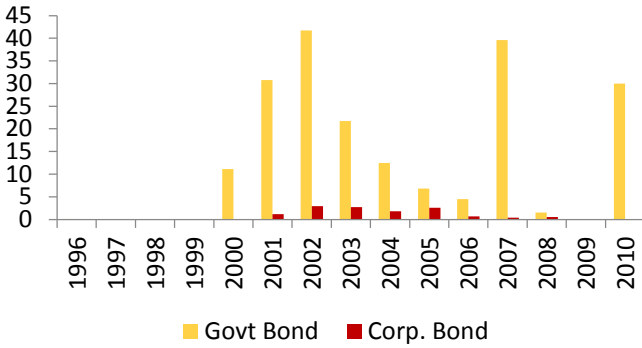


Figure 2 Government Bonds

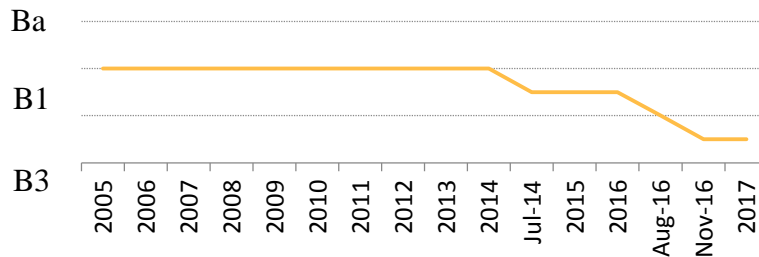
MNT
billions



Source: World Bank, World Economic Outlook Database, 2017

Currently, the Mongolian economy is considered to be in recession with a GDP growth rate of 2.3% in 2015. In 2017, the IMF approved UD\$ 5.5 billion financial package for Mongolia to support the country in resolving its financial crises by 2021. In 2016, the government debt of Mongolia had risen rapidly to 90% of the GDP in 2016 (IMF, year). Overall, it could be analyzed that the financial capability of the government to effectively decrease its infrastructure gaps in the coming years looks to be quite gloomy.

Figure 3 Sovereign Credit Rating History of Mongolia



Source: Moody’s Investor Service, 2017

PPPs experiences in Mongolia: Identification of failure factors

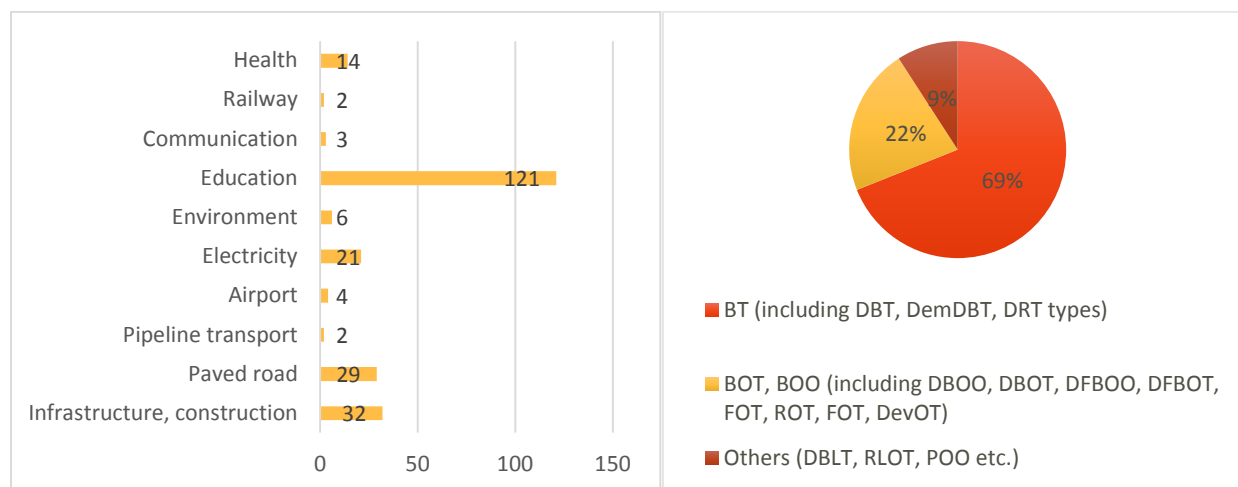
This part makes analyses of relevant government reports, documents, PPPs statistics, contracts and yellow news, in order to find out factors contributing to the failures of PPP practices in Mongolia.

Legal and policy framework

Lack of clearly-defined priority PPPs and too many types of PPPs

Resolution No. 317 of the GOM that approved the Concession List was adopted in 2010, and then amended in 2013 and 2015. The approved List of Concessions includes 234 projects consisting of 29 road and transportation, 121 education, 32 infrastructure, 21 energy, 6 environment, 14 health, 2 rail, 3 communications, 2 pipelines, and 4 airport projects. The GOM Resolution consists of two PPP procurement types; namely competitive tendering and direct agreement types. According to the Government Resolution, overall, 117 direct agreement (without competitive tendering) projects should be implemented. So far, 99 of these have been concluded without going through a competitive procurement process (Monitoring and Evaluation Report of Projects of Concessionaires, Tendering and Contract Implementation, Monitoring, Evaluation and Internal Audit Unit of National Development Agency of Mongolia, November, 2016 (hereinafter referred to as MER, 2016)).

Figure 4 Concessions in the Concession List of Mongolia by types and by sectors



Various PPP types are also used for various projects in the Concession List such as build transfer types of BT, DBT, DRT, DDBT projects which are over 151; build operate transfer type of BOT, BOO, DBOO, DBOT, DFBOO, DFBOT, FOT, DevOT and other projects which are over 48, and the rest which are lease and other types of projects such as DBLT, RLOT, POO and so on. It could be seen that there are too many types of PPPs which might create a confusion, especially when there is a lack of proper guidelines and limited specialized human capacity to handle them. Moreover, DFBOT, DBOT or BOT has been used by indicating the same obligations of

concessionaires notwithstanding their differing types of PPPs. The obligations to design, finance, operate and transfer were exactly same in DFBOT concession contract for the power station electricity transmission line at 'Uvs province' and the BOT concession contract for Telmen thermal power station (Power station electricity transmission line at Uvs province DFBOT, 2016; Telmen thermal power station BOT concession contract, 2013). In other words, concessionaires had the same responsibility to design and finance their own cost for building concession items in both BOT and DFBOT contracts. Importantly, it could be seen that there were no policies concerning priority PPP types depending on infrastructure types and public interest, based on the current application of PPP types and from the Concession Law which generally lists PPP types with simple definitions.

Lack of clarity of the best applicable PPP types and PPPs

The PPP Unit, line ministries and other relevant local governments had to conduct studies on necessary projects that could be implemented through PPPs arrangements and propose policy on the proper types of PPPs for the implementation. However, in practice, for any policy priorities and related projects on which government functions could be delegated and implemented by PPPs, the desirable and proper types of concessions have not yet been determined by the PPP Unit, line ministries, central and local governments. All in all, it is evidenced that the current integrated policy concerning PPPs, priority areas for PPPs implementation, and analysis how to better make use of the budget and relevant necessary research to do so, have been ignored since the implementation of PPP policy in Mongolia (ICL, 2015).

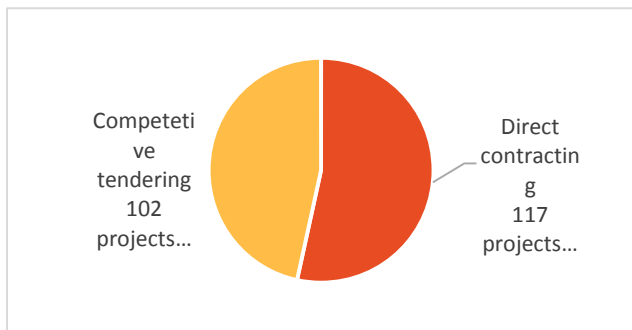
Procurement framework

A direct contracting and a lack of competition enhancing procurement process

Half of the concession projects included in the Resolution (117 out of 234) have been implemented without any competitive procurements process. According to the Concession Law of Mongolia, there are only a limited number of circumstances where a project could be implemented through the use of the direct contracting method such as: when it concerns national security; when one or several entities have a common interest with their own intellectual and related property; when no proposal was submitted in response to the tender

announcement; or when no proposals have met the requirements of the tender; in those cases the authorized entity would issue an opinion to conclude a direct agreement and submit it to the government or the respective Citizens' Representatives Assembly (Concession Law of Mongolia, Article 17, 2010) for approval. However, many of the direct contracting type of projects are roads, educational facilities and other constructions that do not seem to be part of the exceptional cases as listed in the Concession Law. Consequently, this massive application of direct contracting are mainly connected to the exception of no proposals at all or no proposals that meet the requirements of tenders. There might be various reasons for this, such as an immature socio-economic development, less developed private sector competitiveness and so on, but for purposes of this paper, policy issues related to the application of direct contracting would be focused upon.

Figure 5 Concessions in the Concession List of Mongolia by procurement types



In terms of the timeframe, the bulk of RFPs were announced in the same time period given to accept bids for RFPs, which is approximately 2 months. For instance, 2 projects for construction of substations, and high voltage power transmission air lines

between Baganuur-Choir (178 km) and Baganuur-Ulaanbaatar (130 km); 25 projects for construction of schools, kindergartens, sport complexes all around the country; again 9 huge education projects to build dormitories, kindergartens, schools, cultural centers; 8 projects to build agricultural production and technology parks were announced simultaneously in one announcement, all in 2016 (Invitation to participate in the tender process for the concessions of electricity projects, January, 2016; Invitation to participate in the tender process for the concessions for educational facilities, March, 2016; Invitation to participate in the tender process for the concessions for educational facilities, April, 2016; Invitation to participate in the tender process for the concessions for agricultural and technology parks, April, 2016). It is impossible to have a true and genuine competition in such a tight timeframe, given the level of private sector development in electricity, construction and other fields. Moreover, in most

cases powerful companies have to some extent, oligopolistic characteristics whose participation in one project restricts further participation in other projects, according to the requirements stipulated by the Concession Law of Mongolia. In other words, the tendering practice could not promote competition for projects properly.

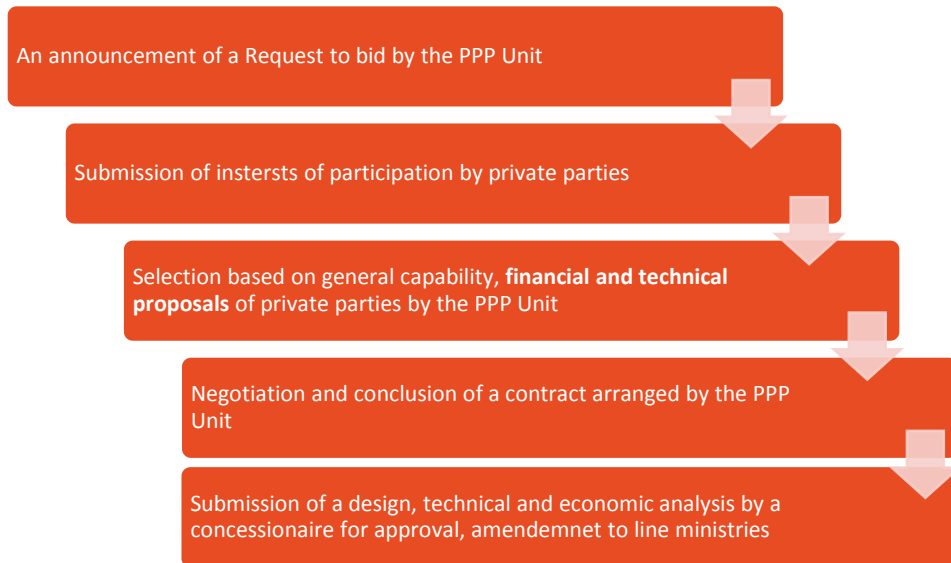
Furthermore, it has been established that, in general, there has been a very low level of participation of private parties in competitive bidding due to the unclear PPP procurement process that does not help the private sector to understand the benefits, the support from the government of Mongolia, guarantees, risks, costs, payments of each projects (The Assessment of the Implementation of Concession Law, Mongolian National Audit Office, 2015 (hereinafter referred to as ICL, 2015)). This is obviously linked to an absence of proper ex ante CBAs of concession projects by the public sector. Consequently, this lack of ex ante analysis further leads to overly-generalized RFPs that do not give clear information to private parties for their informed decision making and active participation in bidding processes. For instance, no private partner had expressed their interest in bidding for 5 projects and only one unqualified bidder expressed their interest for 1 project out of 16 projects that were announced RFPs in 2014 (ICL, 2015).

Lack of proper ex ante analysis

It is the practice of procurement in Mongolia that a private party submits its general capability information along with technical and financial proposals. Based on that, the public sector would simply choose the best proposal and conclude a concession contract with the winner, without necessarily knowing what is the best proposal due to the lack of their own CBAs.

Only after the conclusion of a concession contract, would the relevant council of line ministries approve the design and the detailed technical and economic analysis of a concessionaire.

Figure 6 PPPs procurement process of Mongolia



Consequently, it is clear that the public sector is poorly-equipped in choosing the best proposals due to the lack of their own analysis which could create information asymmetry and cause them a disadvantage in negotiations. It also could lead to biased decision-making that is based on a sole private party's proposal. Also, agreeing on the amount of investment or the concession cost in the concession contract beforehand with private parties, restricts the public sector party in having flexibility to make various changes and amendments to the design and technical and economic analysis. This is not effective and such an illogical procurement process might mean that the public sector does not really much care about the cost efficiencies and to increase added value except to merely proceed with projects. Indeed, the study of the Global Green Growth Institute says, (Global Green Growth Institute, 2015)

“While MDBs and donor agencies have provided technical support and capacity development for evaluating the suitability of proposed PPP projects, pre-feasibility studies have not been commonly used in these assessments. Instead, selection by way of political haggling followed by post-selection justifications for the chosen projects have been more the norm. Moreover, though cost benefit analyses are legally required, their implementation has been limited due to lack of capacity and resources.”

Finally, it is questionable whether it is desirable to predetermine the procurement types in an inflexible manner, according to the approved Concession List of 2013 and 2015 from the beginning. As of October 2017, there are many projects that have not even announced tendering but are listed as direct contracting procurement projects. This logic and perspective are not compatible with the fast-changing capability of business environment and mobility of

the private sector. So, it is very difficult to analyze the logic and intention of the inclusion of the procurement type in the Concession list. An inflexible predetermined way – with exception for national security purposes - would only impede competition and create rent seeking and private sector excess profit-seeking behaviors that are detrimental to the public interest.

Lack of contract validation and execution

As of 2016, a competitive tendering has been announced for 58 projects out of 102 competitive tendering projects, and in total 121 contracts have been concluded out of 234 projects (MER, 2016). Out of 121 contracts, only 26 contracts are currently in force, 15 contracts were not validated and 80 were cancelled (MER, 2016). That means 95 projects out of 121 projects did not go into force although 80 projects were concluded and finalized and 15 to some extent went through the procurement process. In other words, approximately 21-22% of the projects have been successfully concluded in practice, which is too low in comparison to the efforts made by the contracting parties. There could be many reasons behind that such as lack of proper study, research and evaluation of potential concessionaries, lack of accountability and transparency, lack of trust, conflicts of interest, lack of institutional and human capacity and so on. Probably, all of them to some extent, have contributed to the failures.

For instance, as mentioned before, many projects were announced at the same time, thus this fact has greatly influenced the workload of the PPP Unit, which has only 4 specialists in total. Therefore, due to the increased workload, concession documents were not registered properly, reports were not properly written by working groups and overall, the quality of the tendering process such as management of tendering, evaluation, contract drawing, negotiating and so on, were negatively affected by this tendering management (ICL, 2015). The risk assessment of the performance of PPP Unit was calculated as highly risky at 80.7%, according to the risk assessment based on 13 indicators (ICL, 2015). Consequently, it is clear that the workload of the PPP Unit is not proportional to its workforce.

Institutional framework

Lack of integrated registration database of PPPs due to constant institutional changes and lack of human resources

No integrated registration systems nor electronic databases about concessions have been created at the local or even central levels, which again, does not comply with the

Concession Law. Due to the lack of database information, some of the local and national projects have ended up coinciding (ICL, 2015). The PPP Unit was not able to archive all documents and materials related to the tenders and keep them in a database as required by the Law. The Monitoring report explains that this problem of poor documentation and achieving was directly linked to the mobility of the human resources of the PPP Unit caused by constant institutional changes (MER, 2016). The important thing here to highlight is, this small problem has a potential to create bigger problems such as fiscal instability, loss of accountability, transparency and the like.

Lack of proper planning of Concessions based on analyses and evaluations

So far, the Parliament has cancelled 15 projects that were approved, by themselves (MER, 2016). Although, 15 projects might not be impressive out of 234 projects, but still, it indicates that there are drawbacks related to the approval of the Concession List. According to the Assessment of the Implementation of Concession Law, the following drawbacks in terms of the approval of the concession list have been identified. The articles 6.2.5, 7.1.2 of the Concession Law require that the PPP Unit and the other relevant authorities have to make studies on concessions and formulate the list of concessions based on the studies conducted. However, in practice, the List of Concessions was developed without any proper studies and analysis. For instance, the list of concessions proposed by the line ministries were not accompanied with the relevant cost-benefit analyses as required by the Law and yet, formally approved by the Government (ICL, 2015). The line ministries and local authorities have not properly followed the obligation to conduct CBAs when developing lists of concessions for the approval of the Government. For instance, from 2010-2013 in the capital city, 75 out of a total of 83 projects were not accompanied with proper CBAs. Moreover, during that time the relevant authorities have not taken comments and suggestions from other government organizations for the preparation of their lists of concessions. That was again, in breach of the obligations stated in the Concession Law. In other words, this indicates that collaboration within the public sector is still not common practice in Mongolia.

Lack of methodological, expert assistances and human capacity building for PPPs

Furthermore, the PPP unit has not properly provided methodological and expert assistance to other relevant authorities on matters related to granting and implementing

concessions as required by the Concession Law (ICL, 2015). Moreover, the relevant specialists at local government levels have made poor efforts to increase their knowledge related to PPPs as required by the Concession Law. Thus, the relevant government staffs and authorities have not gained and developed the necessary knowledge and skills for the implementation of the Concession Law. As a result of this lack of capacity building process, within the public sector, namely the ministries, central and local governments, did not fulfill their obligations as stated in the Concession Law, such as providing definition of policy priorities and related projects on which government functions could be delegated and implemented by the PPPs, as well as the type of desirable and proper types of concessions, conducting of CBAs and so on, in practice.

The main reason was that the human resources capacity of the PPP Unit itself is not specialized and sufficiently prepared, meaning that it has limited capacity to educate others (ICL, 2015).

Lack of monitoring of quality of PPPs

There are 4 road projects that have already been completed. However, the State Commission has not accepted and approved 2 projects (ICL, 2015). Also, although one educational project has been completed, the State Commission has not approved it. The reason behind that might be connected with quality issues since there could be no other plausible reason to withhold the provision of highly demanded public services.

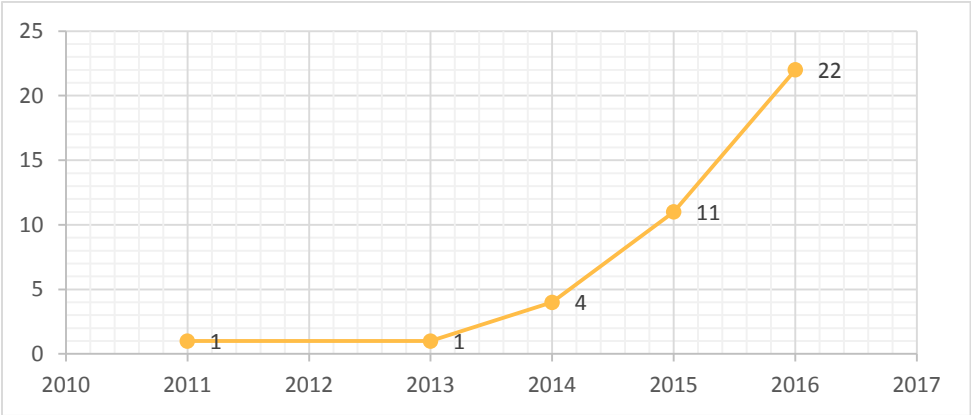
The public opinion concerning some road projects has been negative in terms of its quality. Mr. S.Bekhbat, an expert for PPPs, has claimed that problems in road projects are caused by the use of the BT type which does not ensure long-lasting quality. He claims further that the use of BT might not only burden the budget in the future, but also create a room for the construction of low quality roads (Dialogue with S.Bekhbat, Itoim, 2016). The Monitoring report emphasized that "...concessionaires reported their contract execution process as 10-95% without any evidences, and other proven documents. Thus, it is important to conduct quality inspection during the project progress and check the quality compliance of projects." (MER, 2016). Importantly, the Concession Law requires the PPP Unit to adopt specific regulations or rules on monitoring and evaluation of PPPs. Along with this, the Law requires a discussion of the implementation of the Concession Law at the Parliament based on M&E reports of the PPP

Unit annually. In the years 2014 and 2015, provisions related to M&E were added to the Concession Law, in order to address the abovementioned drawbacks. However, no detailed regulations on monitoring and evaluation of PPPs have been adopted so far. Consequently, it could be seen that a sophisticated quality monitoring method has not yet been established between private and public sectors and that the monitoring of quality and progress of projects still depends on unreliable subjective responses of concessionaires. This shows that there is no accountability mechanism, based on clearly defined performance indicators, in place since 2010.

The current practice of PPPs based on 39 signed concession contracts

The website of the National Development Agency of Mongolia, where the PPP Unit is located, contains overall 39³ signed concession agreements as of 2017. Out of 39 concession contracts, 1 was signed in 2011, 1 in 2013, 4 in 2014, 11 in 2015 and 22 in 2016. It should be mentioned that some of the contracts are not yet executed, some of them were cancelled, and some of them were completed. A further analysis of these 39 contracts would enable the understanding of the current PPP practices from an evidence-based way. The main points of these concession agreements are summarized below as follows.

Figure 7 Signed concession contracts as of 2017 of Mongolia



Mongolia started the use of PPPs with paved roads, and continued with various social infrastructure concessions in education, electricity, health and culture during the last two years. It was an interesting that the GOM did not invest any **real money** in any of the 39 projects.

³ Please refer to Annex I for detailed information.

Other nonmonetary grants were given in addition to the typical⁴ government support for the 6 specific projects as described below. Typical guarantees and supports were provided for the rest of the 33 projects (Annex I for detailed information).

Table 7 Projects that were given nonmonetary grants of Mongolia

№	Concessions	Guarantees
1	Mining, Metallurgy Complex	Mining licenses
2	-Human development complex center (BOT) -Telmen thermal power station (BOT)	Not to give permission to build similar function complexes and to provide similar services within the area to any state related organizations/companies
3	Railway base structure between Erdenet and Ovoot mine	Pre-emptive right to implement the Expansion of the Base Structure and other various privileges
4	Fifth combined heat and power plant	Guaranteed revenues, compensation amounts, other commitments
5	Building of an incomplete hospital /260 beds/	Incomplete building
6	Mongolian Nationality Museum	Transfer of all exhibitions

Consequently, it could be observed that the current trend of government burden-sharing for PPPs is the granting of nonmonetary privileges or grants that do not require outright payments from the GOM. Although, while a slight look at this policy could tell us that government guarantee policy is economically-beneficial for a developing country, on the other side, it is that there might a wide variety of hidden risks for the GOM and the public to bear. This is because the current GOM policy imposes financial, construction, maintenance, operation all risks i.e. too much risks to concessionaires. Moreover, a wide variety of social infrastructure

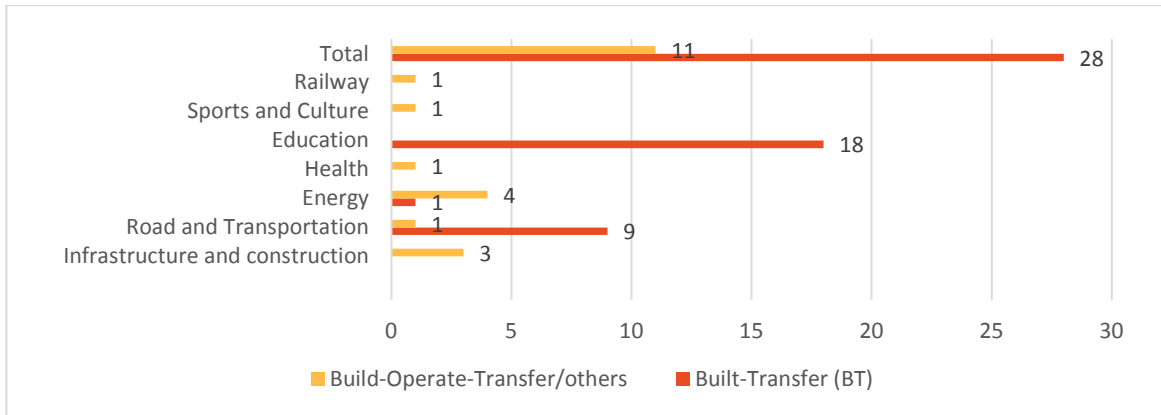
⁴ An import of equipment and materials support; a support for giving a work permission for foreign workforce; a support for giving various rights, permissions such as land use right, permissions/licenses to use water, electricity, heating, communication and all the necessary collaborations from government regulating authorities shall be provided in timely and promptly ways without any delays. In electricity, heating and vital public service PPPs, a product purchase agreement is concluded with the GOM in addition to the typical supports.

could not take place unless a project is considered very profitable for a concessionaire to bear these high risks.

Table 8 Signed concession contracts by types and sectors as of 2017 of Mongolia

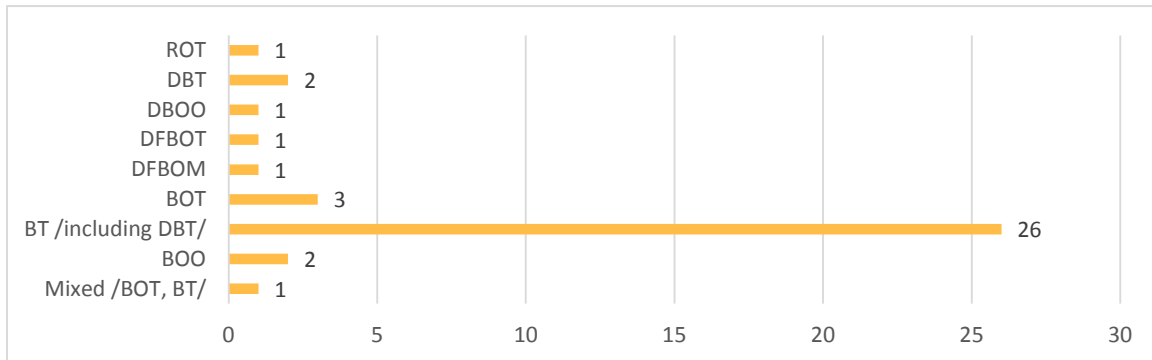
Sectors	Signed agreements	Built-Transfer (BT)	Build-Operate-Transfer/others
Infrastructure and	3	0	3 /BOT/
Road and Transportation	10	7 /BT/ 2/DBT/	1 /BOT/
Energy	5	1	4 /BOO, BOT, DFBOM, DFBOM/
Health	1	0	1 /ROT/
Education	18	18	0
Sports and Culture	1	0	1 /DBOO/
Railway	1	0	1 /DBOT/
Total	39	28	11

Figure 8 Signed contracts by sectors and types as of 2017 of Mongolia



In terms of types of concessions, 10 kinds of PPP types were used for 39 contracts.

Figure 9 PPPs types of 39 concession contracts



In April 2017, the Parliament prohibited the conclusion of BT-type agreements until the 2018 Budget Law is approved (Resolution 29, Parliament of Mongolia, 2017). Moreover, according to the Budget Amendment Law of Mongolia of 2017, its Annex II lists 12 BT type of projects that has to be repaid during 2015-2019 with the total investment of MNT 352,113.9 million, of that MNT 70,933.7 million which was repaid in 2017 (The Budget Amendment Law, Annex II, 2017). Certain protocols related to the adoption of the Amendment Law of Budget and Concession Laws mentioned that 1 km of paved road approximately cost MNT 600-800 million with the government procurement, whereas some concession contracts have been concluded as stating that 1 km cost MNT 3 billion (Protocol on the Amendment Law of the Concession Law, Protocol of the Economic Standing Committee of 2017 Spring Parliamentary Session, 2017). This neglects to take into account integrated cost or investment estimations. Thus, huge opportunistic behaviors might have taken place. In connection to that, the GOM has recently announced their decision to conduct an audit of PPPs amounting to MNT 11.1 trillion as required by the IMF (D.Khayankyarvaa, An audit would also have to be made for concession contracts, ikon.mn, 2017).

Figure 10 Procurement and PPP types of 39 concession contracts



Only 8 out of 39 projects have used the competitive tendering procurement. The procurement type of one PPP was unknown.

Summary of the PPPs failure factors in Mongolia

In summary, the whole section could be categorized by listing the failure factors of the PPP practices of Mongolia into conceptual/policy, procurement, institutional and fiscal frameworks:

Conceptual and policy

- Confusion about the PPP concept; confusion about the preferable types of PPPs due to application of too many PPP types, improper types of PPPs
- Confusion about the private sector is the best (No use of VfM) positioned to handle all infrastructure projects, thus lacking a policy concerning which government functions; infrastructures could be delegated and implemented by the PPPs
- Confusion about bundling and risk distribution; No government financial risk sharing policy for a balanced social and economic efficiency i.e. confusion about how to sustainably share risks and make PPPs efficient in the long-run
- No short and long-term PPPs integrated policies; planning that defines priority PPPs, preferable projects that should be implemented through PPPs, describing the proper PPPs types for different projects; that is compatible with the fiscal policy and development priorities; and that is adaptable to the changing socio-economic conditions. This unclear policy direction and maneuvering flexibility led to various problems such as the application of too many types of PPPs, disproportional implementation of PPPs to the budget sustainability, a political opportunism and similar.

Institutional

- The lack of creation of an integrated PPP database, and a high level of contracts invalidation and cancellation (79%) have occurred due to the constant institutional changes of the PPP Unit and the overloaded specialists working in the Unit.
- Poor collaboration within the public sector on the exchange of expertise and mutual consultations have taken place. Overall, various factors such as hierarchical structure, underdeveloped collaboration mechanism, overworked public servants and in general the current culture of collaboration of government organizations have had a great hindrance to the creation of inter-organizational, inter-personal collaboration in Mongolia.
- Too centralized with regards to both policy related and operational PPPs management in the PPPs Unit

Procurement

- A list of Concessions has been approved by the Parliament for concessions that have not been accompanied with proper CBAs. Consequently, although there are some formalities i.e. an approval by public authorities, in general a private party's technical and economic analysis, which is not a social evaluation-based, functions as a back-up rather than being used for up-front public-sector CBAs based PPPs evaluation.
- A lack of a competition enhancing procurement process that applies too much direct contracting. Namely, 59% of contracts in the Concession List, 79% of the signed contracts as of 2017 were the direct contracting type.
- The one time “shot” announcement policy of a RFP might have influenced the level of competition negatively, given the level of development of the private sector and its absorbing capacity. No clear information concerning risks, benefits, costs, guarantees and payments has been provided in detail in RFPs, which to a significant extent, has discouraged participation of private parties in competitive biddings. Consequently, almost competition discouraging procurement processes have become a practice in Mongolia.
- A lack of reliable, sophisticated monitoring of quality during construction and operation phases; no performance indicator based monitoring, evaluation and compliance mechanism

Financial and fiscal

- Around 69% of concessions in the Concession List of 2013 and around 72% of signed contracts as of 2017, that are available on the website of National Development Agency are **BT-type** of contracts. Namely, as of 2016, 28 out of 39 signed concession contracts were BT type which only guaranteed 3 years of quality after the completion of construction. More importantly, all BT types of contracts have to be paid back to private parties after the completion of constructions. That is 2-4 years at the latest, which might burden the budget and restrict policy flexibility of the GOM. Further, the majority of BT contracts were paved road and education contracts. Importantly, it is highly risky when the public and private opportunistic behaviors might influence negatively on the quality of roads and educational buildings, as it concerns the safety and health of the whole public.
- Although, there many types of government support listed in the Concession Law, in practice no cases of giving real monetary support for PPPs has been recorded

A comparative analysis of PPPs practice and policy of the Republic of Korea and Mongolia

In this part, a narrower comparative case, policy, legal, procurement, institutional and fiscal frameworks analyses of the South Korea and Mongolia are made, within the frameworks of identified failure factors in practice, in order to have a better understanding the causes of failures and gaps in the PPP policy in Mongolia.

Case analysis

In this part, more specific PPP issues are analyzed based on a comparative case basis.

The case study consists of two parts, namely

- BTL of the Republic of Korea and BT, DBT, etc. of Mongolia /for non-profit generating public goods/
- BTO of the Republic of Korea and BOT, BOO, DBOO etc. of Mongolia /for profit generating infrastructures/

Comparison of BTL of the Republic of Korea v. BT, DBT etc. of Mongolia

Anhwa High School of Gyeonggi-do, the Republic of Korea v. the School 73 of Ulaanbaatar, Mongolia

In this part, the BTL project of the Republic of Korea and BT, DBT and so on of Mongolia for educational facilities is compared, since BTL is now widely used for education facilities in the South Korea and, in Mongolia, 18 BT-type concessions in school construction were concluded in 2016. Moreover, 28 out of 39 signed contracts between 2011-2016 were BT-type. Importantly, no build and lease type of concession contracts have been found for social infrastructures from the available concession contracts on the website of the National Development Agency of Mongolia.

The Anhwa High School in Hwaseong in Gyeonggi-do, Korea, was built in 2007 and is considered one of the more successful BTL contracts. On the other hand, School 73 at the Bayangol district of Ulaanbaatar city is the one of the first runner education PPP projects in

Mongolia, and was opened in September 2017. Below are the specifics of the contracts with explanations as follows:

Table 9 A comparative snapshot and short analysis of Anhwa High School and 73th School concessions

Factors/Names	Anhwa High School	73 th School
PPP type	Build-transfer-lease	Demolish-build-transfer
Project type	New construction	New construction
Region/district	General residential district	General residential district
Scale	5 stories above ground	3 stories above ground
Number of students	1050	960
Construction cost	KW 15,536 million	USD 4,836,919.0
Duration of contracts	20 years Fixed price, output-based contract	3 years
Quality guarantee	During the contract term i.e. 20 years <u>Better ensures higher quality and improved performance.</u>	3 years <u>Quality of a school only has to meet the state norms and standards. Moreover, 3 years of quality guarantee could not incentivize a concessionaire to promote long-term quality guarantee.</u>
Performance monitoring	The concessionaire is responsible for the whole life maintenance of the project for a duration of 20 years. The operating shareholder is in charge of an integrated management system for buildings and performance monitoring. After the construction period, a multi-layer monitoring of operations has been at place (Table 11). In other words, 20 years of performance guarantee is provided through output based payment. <u>Consequently, a whole life cycle costing and performance based payments incentivize the concessionaire to promote quality and sophisticated performance monitoring. This mechanism seems compatible with the theoretical rationales of PPPs in terms of increased added value through shared burden, mutual monitoring based on</u>	After the completion of construction, the state commission inspects whether the quality meets the state standards and norms and gives permission to use by the public. Moreover, an inspection manager who shall be paid by a concessionaire of 2% of the total project cost has the authority and responsibility for monitoring of the quality of ongoing construction during the construction phase. It is a questionable mechanism since the inspection engineer is paid by a concessioner, thus it could create conflicts of interests. Also, it should be highlighted that no particular responsibility is mentioned for an inspection engineer in the case of any failures, quality defects and other problems. This unaccountable mechanism could create disincentives and free riding problems on the part of

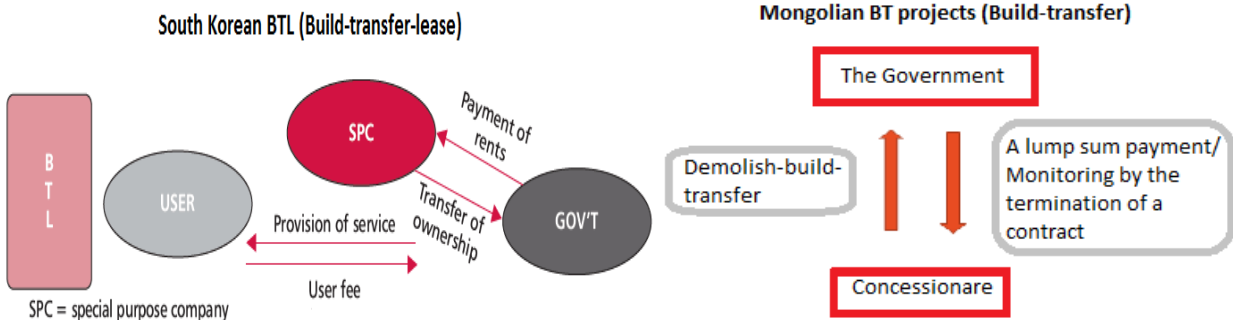
	<u>performance indicators.</u>	an inspection engineer. <u>Consequently, quality promotion and performance monitoring are not incentivized by BT.</u>
Government support/payment	The competent authority is responsible for land provision and lease payments over 20 years. <u>Consequently, BTL creates smooth and dispersed burdens on a budget over 20 years. But, a special regulation is applicable to BTL since they still creates the burden on a budget.</u>	A lump sum payment for two years after the completion of the project shall be made. <u>Consequently, it is clear that BT type creates a sudden and sharp burden on the Government budget. No specific regulation is implemented for BT, which could enable political opportunities and unplanned PPPs to take place.</u>
Risk sharing	Construction, financing and operation risks lie on the private partner, financing risk is on the public sector.	Construction risk is on the private partner, financing and operation risks are on the public sector.

Source: Jay-Hyung Kim et al., Volume 2, 2011 and the Concession contract between the Government of Mongolia and “Monkon Construction”, 2016

The following problems could be highlighted based on the comparison of two PPPs types of educational facility:

The BT type could negatively influence on the overall quality, performance, fiscal stability and it is also difficult to see if the BT-type would give a better VfM due to the absence of VfM analysis for PPPs in Mongolia. The issue of discount rate for BT, its suitability and efficiency is ambiguous and less clear too since no comparison has been made between PPPs and PSCs.

Figure 11 A comparison of BTL and BT



Source: Jay-Hyung Kim et al., Volume 2, 2011 and self-adopted.

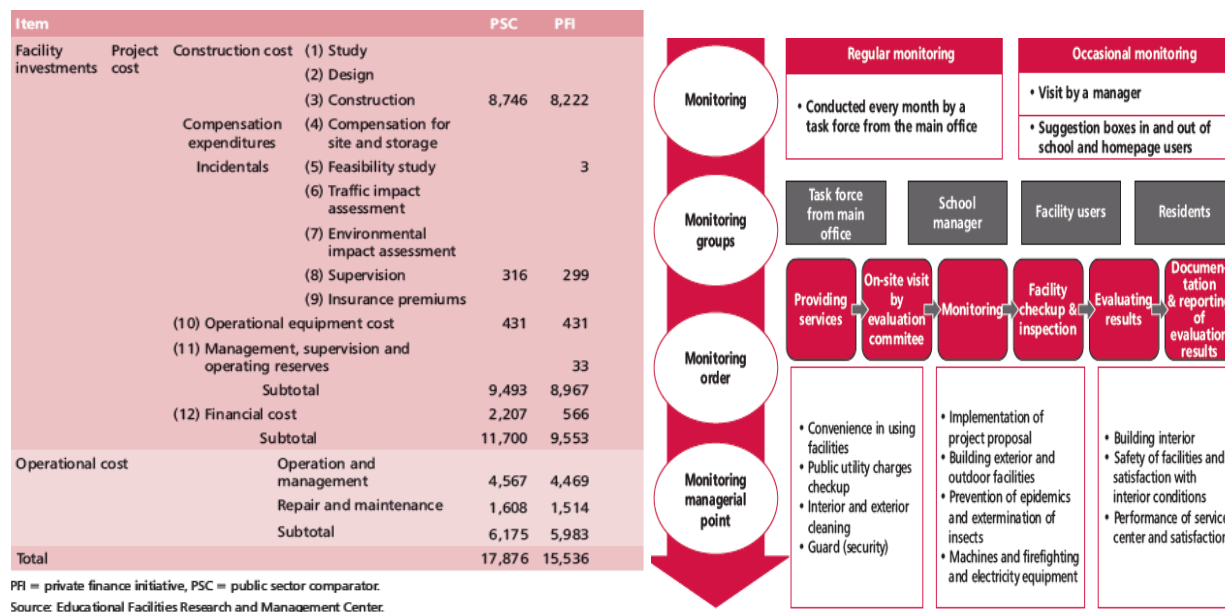
Table 10 Payment of investment of 73th School

No	Payment amount in USD	Years of Payment

1	3,385,843.3	2017
2	1,451,075.7	2018
Sum	4,836,919.0	-

No	Category	Costs in USD
1	Demolish	143,769.0
2	Build	3,904,793.0
3	Interest	788,358
Sum		4,836,919.0

Source: The Concession contract between the Government of Mongolia and “Monkon Construction”, 2016
 Table 11 Result of Value for Money Test and Monitoring of Operations at Anhwa High School



PFI = private finance initiative, PSC = public sector comparator.
 Source: Educational Facilities Research and Management Center.

Source: Jay-Hyung Kim et al., Volume 2, 2011

Summary of comparison of BTL of the Republic of Korea v. BT, DBT etc. of Mongolia

In general, it could be concluded that the BT-type project is highly contract driven and has too few elements of genuine partnership due to the limited financial burden and operational risk sharing for better quality and higher efficiency. But the good thing in connection to that is BT types trigger less transaction costs for negotiations and contracting since most of the BT contracts were barely over 10 pages and concessionaires get back their investment within 2-3 years plus interest. This benefit becomes more convincing, due to arguments of Vining and Boardman, who examined that PPPs contracting cost is complex and often very high (Graeme p 170). Therefore, BTL might require higher transaction costs and be more complex to implement in comparison to the BT-type projects of Mongolia, where the collaboration between the state and the private sector is still underdeveloped and whose human and material capitals could be greatly challenged for advanced PPP types such as BTL. It is evident that BTL type of PPPs is sustainable and guarantees higher level of efficiency and

quality guarantee compared to the BT-type. However, a through development of guidelines and rules concerning the proper implementation of BTL, capacity building of not only public but also private sectors for the proper implementation should be the prerequisites of application of BTL type in Mongolia. Otherwise, BTL also simply might not work as it has done so in a developed country such as the Republic of Korea, which has a high level of human and material capitals and a mature PPP market.

The Republic of Korea-BTL	Mongolia-BT, DBT etc.
<ul style="list-style-type: none"> - Promotion of a whole life costing approach for the increased added value and efficiency - Performance indicators with sophisticated back up monitoring over the whole cycle of PPPs for a high quality provision of public services - various kinds of risks are shared in a proportional way - Although, BTL might require higher transaction costs and specific contexts to be successful such as well educated human capital, institutions 	<ul style="list-style-type: none"> - Could not promote a whole life costing approach for increased quality, performance, innovation and efficiency -Quality, performance, fiscal stability, proper risk sharing are not well promoted - Not clear whether BT could promote an added value than PSC due to a lack of VfM evaluation and application of ambiguous discount rates - Although, BT can be simple to implement and less trigger higher transaction costs in less developed contexts

Comparison of BTO of the Republic of Korea v. BOT, BOO, DBOO, DBOT etc. of Mongolia
 There were 11 BOT, BOO, DBOO, DBOT and other similar types of signed contracts (except 28 BT types) in the website of the National Development Agency, in Mongolia as of 2017. All the relevant general details of these agreements could be found in the Annex table that summarizes all 39 signed concession contracts. 11 concession contracts of the build-operate type are summarized below, by dividing them in to two dimensions, namely:

Categories	Public infrastructure	Public infrastructure ?
State involved price setting	7	0
Market based tariff setting	3 - Worth discussing since a market based mechanism is applicable for public infrastructures	1 - Questionable to be implemented through PPPs arrangements since does not concern public infrastructures, but manufacturing of processed ore

Below is given the short description of 8 (7+1) projects, excluding 3 projects that apply market based pricing mechanism.

Table 12 A short description of 8 PPPs that apply the State involved price setting

1- Market based tariff setting /Only one project for manufacturing of processed ore/	7- Regulated tariffs and prices /All 7 projects are public infrastructures/
<p>Mining Metallurgy Complex (RBOT, BT for road) is a huge project that concerns renovating the old ore plant for increasing its capacity, mining ore site for inputs and building an electricity transmission line, the railway, and a paved road to connect the Complex to the nearest transportation channels. While leaving aside all the detailed duties, the main duties and rights of the concessionaire are the exclusive right to use the old plant and ore mining deposits at the same time, and expanding the old plant; producing and selling processed ore in the domestic and international markets. The price could be established freely according to the concessionaire's decisions as long as it complies general laws that regulate fair business practices.</p>	<ul style="list-style-type: none"> - The tariffs of concession items of 5 projects namely, Tuul Songino water reserve complex (BOO); Telmen thermal power station (BOT); The Fifth combined heat and power plant (DFBOM) and the state fuel reserve warehouse (BOO); and the Power station electricity transmission line at Uvs aimag (DFBOT), the tariffs/prices shall be determined by the agreement with the relevant authorities or in some cases with relevant SOEs. /back-up or ex post price setting/. Also, most of the contracts oblige the state to buy the electricity/services so that ensure the stable revenue for concessioners. - One health project of Building of an incomplete hospital (ROT) concession contract has to be continuously financed according to the same benchmark with State integrated medical hospitals by the State. The performance indicators are concerned about bed numbers such as 260 beds, also about the creation of the medical operating environment such as equipping, furnishing for the proper operation that shall be in compliance with the state norms in general. Other than that, there are no specific indicators backed up with continues monitoring was required. - Finally, the only BOT paved road project of Nariinsukhait-Shiveehuren, where the toll has to be established according to the agreement with the relevant authority and the concessionaire. And the concessionaire has the obligation to remain the toll fee constant during the concession term.

Overall, a state involved pricing policy was applicable to 7 projects, that were concerned with the public interest. The main drawback that could have effects later on the public interest is the application of an ex post price setting mechanism that is not based on a proper analysis.

An exception to this is that there is one project, which is concerned about the manufacturing of processed ore and selling it on the domestic and international markets and where ideally, a price should be established according to the market-based mechanism. However, it is not considered a public infrastructure project. Thus, the free pricing policy of this concession could be self-explanatory. On the other hand, it is really questionable that a project which is not a public infrastructure project could be implemented through the PPP arrangement. This is because in this example, industrial and PPP policy are mixed and a special one entity is given competitive privileges and monopoly rights. The further implications of this question is beyond this thesis content. However, at this point, the one thing that should be highlighted is that there is a problem of mixing industrial and PPP policies. This mixing might have some distortive outcomes in both industrial and infrastructure sectors, which caution that the PPP policy might be easily used opportunistically in other sectors.

Also, the reason given for applying not BTL or lease type, but instead ROT or operation-type of contract that is used for profit-generating projects, to the health project is not clear. Thus, this is again another distortion of a proper PPP type application.

Now, 3 other projects that use the free market pricing policy, although they are infrastructure projects that are concerned with the public interest to some extent, would be analyzed in detail. This is due to the fact that, the 3 projects, namely, a museum, a health complex and a railway, are services that are traditionally provided by the state. Currently, the provision of these services has various flexible market oriented PPPs arrangements. Also, these 3 projects would be compared with the South Korean Rail project in order to identify gaps and issues in their PPP practice.

Table 13 A comparative snapshot and short analysis of Korean BTO v. Mongolian BOT, DBOO, DBOT

	A Korean case	Mongolian cases		
Factors/names	Light Rail Transit of New Bundang Line /2007/	Mongolian Nationality Museum /2015/	Human Development Complex /2014/	Railway base structure between Erdenet and Ovoot mine /2015/
PPP type	BTO	DBOO	BOT	DBOT
Project type	New construction	New construction	New construction	New construction
Region/district	Seoul Metropolitan area	Residential area	Ulaanbaatar and Arkhangai province	The railway shall be the basis for the economic corridor between Europe and Asia, namely the Russian Federation and the People’s Republic of China. Also, it shall enable transportation of mines from Khuvsgul, Bulgan, Orkhon provinces to the borders of Mongolia.
Scale	12.7 km	Not specified in the concession contact	Not specified in the concession contact	542 km railway base structure
The demand forecast	Traditional 4-Step Model of Transportation Demand was used. Also, estimation of commuters by station using Emme/3, TransCAD, etc. Estimated traffic assignment result: Upbound 117/630 and downbound 32083/109372	Not specified in the concession contact	Not specified in the concession contact	Not specified in the concession contact

	trip/days			
Total investment cost	KRW 1,551.1 Billion	USD 125 million	Not specified in the contract	Not specified in the contract
Duration of contracts	30	20	30	30
Quality guarantee	30	20	30	30
Performance monitoring	Specified performance indicators through minimum operation intervals were required.	Concessionaire has to do the maintenance by their own cost and report to the relevant competent authority including financial reports annually. No specific performance indicators were mentioned in the contract.	Concessionaire has to report concerning the construction, operation and maintenance performances to the relevant competent authority annually. Otherwise, no specific PPPs performance indicators were reflected in the contract.	Concessionaire has to report regarding construction and operation, except financial reports to the relevant competent authority annually. Moreover, meeting the capacity of transportation of 22.2 million tons per year of cargo was stated in the contract.
Government support/payment	Financial aid of KRW 566 billion was granted during the construction period (i.e. 49.8% of total project cost); Support for Toll Fee Discount; Aid for other administrative costs, EX-risks were	Transfer of all exhibitions; and no financial aid except land and all other necessary permits for construction and operation were granted. <u>Neither sharing of risks for</u>	No financial aid except land and all other necessary permits for construction and operation were granted. Not to give permission to build similar function complexes and to provide similar services within the area to any state related	No financial aid from the GOM was granted but all necessary permits for construction and operation licenses were granted. Pre-emptive right to implement the Expansion of the Base Structure and monopoly right to possess, use and manage the Base structure and the Land Strip were granted. The right to use the Base Structure

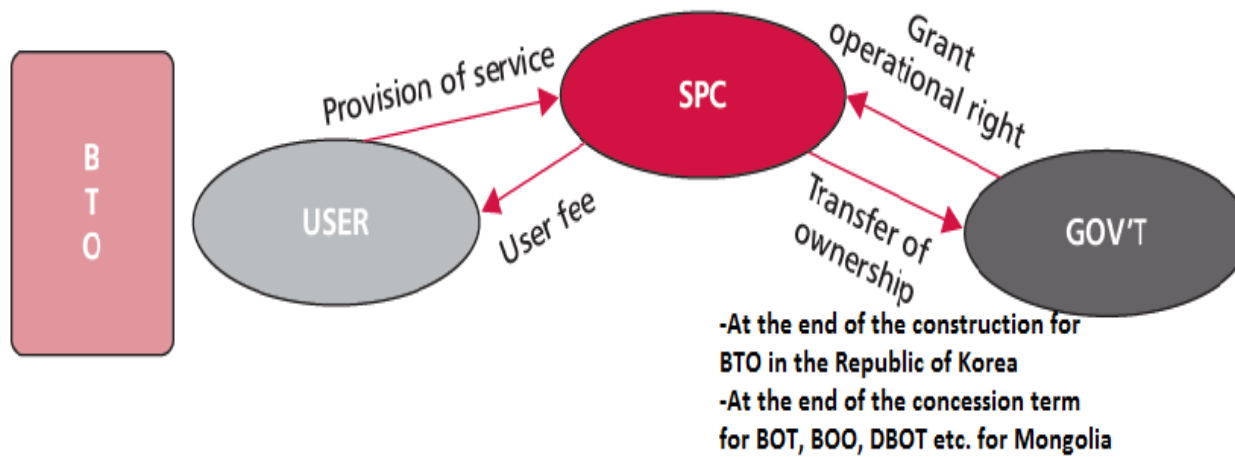
	granted.	<u>construction and operation phases, not sharing of excess profits nor losses are regulated.</u>	organizations/companies was ensured. <u>Neither sharing of risks for construction and operation phases, not sharing of excess profits nor losses are regulated.</u>	and to carry out solely railway transportation operation as well as various stability privileges such as law and tax were ensured.
Usage fee	The financial aid was used to retain the toll fee at the proper level. Moreover, the concessionaire requested the Government to support for toll fee discount through request for financial aid in case of free rides and passenger discounts excluding student discounts.	Market mechanism based principles are applicable.	Market mechanism based principles are applicable for tariffs except for people with disability, elderly people, low income people and people in need of rehabilitation treatment, whose specific tariffs shall be reflected in a separate contract which further shall be approved by the competent authority.	Concessionaire has the right to set and change the tariffs independently based on market principles within the scope of the Laws (such as Competition Law)
Responsibility for contracts	The SPC for the project is responsible for the concession contract. <u>This promotes a greater risk sharing and a single point responsibility, which promotes mutual monitoring between</u>	The Concessionaire is responsible for the concession contract. <u>This promotes a single point responsibility.</u>	The Concessionaire is responsible for the concession contract. <u>This promotes a single point responsibility.</u>	Three companies one from Australia and two from the Republic of China established a consortium for the sole purpose of the PPP contract execution. However, companies are not jointly or severally liable for any provisions as set out within the agreement. <u>A single point accountability, mutual risk sharing</u>

investors, executers
and managers.

and monitoring is not promoted
from a theoretical perspective.

Source: Kangsoo Kim, 2017; concession contracts.

Figure 12 Operational system of PPPs



Source: Jay-Hyung Kim et al., Volume 2, 2011

Summary of the comparison of BTO of the Republic of Korea v. 3 BOT, BOO, DBOO projects of Mongolia

In the Korean BTO project, the Korean Government greatly shared the financial risks through investments and MRGs based on demand estimation, in order to maintain the quality and appropriate user fees due to the nature of transportation for public use. However, in the Mongolian BOO, BOT, DBOO projects, the GOM did not share the financial burdens and concessionaires bore the full financial burden. In these cases, the GOM aimed more for creating an excellent business friendly environment for concessionaires such as promptly granting land use rights, all other necessary permits and licenses for construction and operation, favorable taxes, and monopoly rights over concession items. In line with that, PPPs performance indicators were not precisely dictated by the GOM, but generally stated that, the quality of concessions should satisfy the State standards and norms. Concerning the prices, the considered three Mongolian cases explicitly stated that the prices would be determined independently by concessionaires, according to the market economy principles.

This fact might also be connected with a lack of proper prior determined performance indicators through ex ante CBAs by relevant authorities. For instance, in the case of the Mongolian Human Development Centre, service conditions for the target group (elderly, disadvantaged, low income and people-in-need-of-rehabilitative-treatment) and the relevant user fees should be determined by an accompanying contract to the main concession contract. This ex post contracting mechanism also could be seen from this concession contract which states that, "...the GOM will decide to provide supports based on relevant competent authority's proposals if that is necessary for the execution of the concession contract successfully...". In other words, in the Mongolian Human Development Centre case, the concession contract set the framework of the concession, where detailed issues such as the GOM supports and details of fees and service conditions for the target group would be further determined by the accompanying contracts based on the level of necessity. That was the reverse condition in the Korean case, where the Government shared financial burdens, negotiated and determined all necessary performance indicators, level of government support and user fees with the concessionaire in concession contracts.

In infrastructure PPPs, governments usually retain various controls over quality and tariffs due to the nature of providing public services and due to natural monopoly characteristics of services provisions (World Bank, 2004). These interventions by governments are possible with the provision of guarantees that are enough to ensure the profitability and profit motives of private parties, which was the practice in the Republic of Korea. However, a new trend of non-interventionist price setting and other performance indicators that do not dictate PPP policy have been observed based on the analysis of the 3 cases of museum, health center (where the price was regulated only for the target group), and the railway in Mongolia. This marked a new trend which had created some doubts over its true purpose since monopoly rights were granted for just specific infrastructures that had some level of public interest.

Rui Sousa Monteiro claims that although PPPs are contractual in nature, they present special characteristics due to their link to public services, and there is a strong need to emphasize and reinforce mechanisms for the identification of the public interest (Graeme A Hodge et al., p.275, 2010). Importantly, the trend in developing countries, particularly in water PPPs, has revealed that larger parts of investments are funded by public money, and private operators are more involved in the service and operational phases in order to ensure better efficiency and public interest (World Bank, 2009). The Republic of Korea applies a VfM based PPPs policy, where costs, benefits, demand, public and private interests are altogether considered for the most optimal solution for the increased social welfare in contrast to Mongolian lazy faire approach.

It is difficult to say that Mongolian build-operate type concessions that transfer the huge risks namely design, construction, maintenance and operation risks to private parties while enabling concessionaires to freely manage prices and quality is a socio-economically balanced approach that is sustainable under different conditions.

Particularly, the following trends were observed for these 3 Mongolian PPPs:

The Republic of Korea-BTO

- Interventionist
- Efficiency and public interest based user fees, performance indicators and greater risk sharing of the Government with the private partner
- Public interest and efficiency based

Mongolia-BOT, BOO and DBOO

- Non-interventionist for price setting
- No financial burden sharing except creation of an excellent business environment and granting of a monopoly right
- The concessionaire has the right to independently decide on tariffs and performance indicators
- Market principles based and profit oriented

Conceptual and policy analysis

- **Confusion about the concept; confusion about the preferable types of PPPs due to application of too many types, improper types of PPPs (BT)**

The meaning and concept of PPP

Erik-Hans Klijn mentioned that there were three confusions around PPPs (Graeme A Hodge et al, p.68, 2010). First is the confusion about the meaning of PPPs. The second is the confusion about the argumentations and rationality of PPPs since it is still inconclusive in terms of whether PPPs do give value for money, efficiency, innovation and social welfare in general. The third is the confusion about what the preferable or best form is that PPPs should take. All of these three confusions have been not clarified at the PPP policy and practice level in Mongolia.

According to scholars, PPP is a rich, attractive and ambiguous concept that is, especially if it is not precisely defined in terms of its meaning and application, could be an advantageous mechanism for politicians. For instance, Erik-Hans Klijn claims that the PPP is a (political) brand (Graeme A Hodge et al, p.68, 2010). Also, Hodge and Greve suggest that “...the ‘PPP language game’ fits the modern public sector like a glove and has acquired higher political legitimacy that the culture of competition through contracting or coordination through bureaucratic arrangements.” Also, they claim that the richness in the meaning and concept simply signal its theoretical ineffectiveness (Graeme A Hodge et al, 2010).

The Concession Law of Mongolia flexibly defines the meaning of ‘concession’⁵ and applicable infrastructure types as ‘infrastructures and social services’. It not only lists more than 7 PPP types in technical and descriptive ways, but also approves the usage of any other types of PPPs depending on the context (Articles 3, 4, Concession Law of Mongolia, 2010). It is clear from the Law that the broadness and impreciseness of the PPP meaning, PPP types and applicable infrastructures have been generously created. As seen from the practices of Mongolia, too many types of PPPs have been used for not only public infrastructures but also for industrial complexes such as mining complexes. Paved road projects, as well, used various types of BT and BOT.

On the other hand, in the Republic of Korea, the conceptual ambiguity, PPP types and applicable infrastructures are clarified for greater accountability. The Korean Act on Public Private Partnership in Infrastructure (hereinafter referred to as the PPP Act) lists the precise infrastructures by sectors with the relevant laws that they belong to for a greater legal certainty. Also, the applicable types of PPPs for various projects are clearly defined, namely the BTO for user fee-type contracts and BTL for service-type of contracts. It should be emphasized that the BTL type for non-profit generating infrastructures was added only from 2005 where BTO (BOT, BOO) type that is for profit generating infrastructures has been in use for many years in Korea.

Table 14 Characteristics of procurement types of the Republic of Korea

	Build-Transfer-Operate (BTO)	Build-Transfer-Lease (BTL)
Investment Recovery	User fees Construction subsidy (former) MRG	Lease payment (Fixed Revenue)
Project risk	Demand risk on concessionaire	Little demand risk on concessionaire
Return	High risk, high return	Low risk, low return
Examples	Roads, seaports, railways, etc.	School, dormitory, military housing, etc.
Eligibility	Both solicited and unsolicited projects	Both solicited and unsolicited projects <i>(Accepting unsolicited projects initiated in 2016)</i>
Popularity	In developing countries	In developed countries

Source: Comprehensive National Basic Plan, 2011

⁵ A "concession" means an exclusive right to possess, operate, create and renovate state and local own property assets for the purposes of rendering basic social and infrastructure services to the public on the basis of an agreement on conditions and terms specified in this law (Concession Law, 2010).

In that way, the PPP concept, types and applicable infrastructures are clarified at the policy and application levels through the relevant legal acts by defining the infrastructures and applicable PPP types in detail.

PPP and Concession

The meanings of PPP and concessions are studied here, since these terminologies are interchangeably used in legal documents as well as in practices in Mongolia, which also creates another confusion (State Policy on PPP, Concession Law of Mongolia). The main reason of writing so much about the terminologies and definitions is connected with financial accounting and reporting obligations related to PPPs, where a gap and uncertainty could further create fiscal instability and political maneuvering spaces.

In general, common definitions for PPPs range from concession-based financing arrangements to institutional PPPs. Such institutional PPPs comprise mixed ownership structures involving public and private joint ownership (E.R. Yescombe, 2007; Graeme A Hodge et al., 2010). Other models involve a 'special purpose vehicle', straight project finance arrangements under long-term contractual arrangements between the public and private sectors to provide a service for the term of the contract. According to the experiences of developing countries, for instance Latin America initially focused on attracting private funding and therefore adopted more the concession scheme. However, many countries departed from this approach due to early termination of concessions which showed their inherent vulnerabilities in the volatile economic environment of developing countries (World Bank 2009). Many countries then opted for mixed-ownership companies approach or long-term PPPs that combined private operation with public investment and management contracts, and leases (World Bank, 2009). As such, there is a possibility that some of the Mongolian long-term concession contracts that do not provide various subsidies, public grants, and cross-subsidies might be vulnerable to early terminations due to economic volatilities.

This 'special purpose vehicle' type is used in Korea, where generally, construction companies, financial investors, and professional operators form an SPC for the respective PPP project (Jay-Hyung Kim et al., Volume 2, 2011; Article 14, PPP Act, 2005). The PPP Act uses 'concession agreement' and 'concessionaire' when indicating contracts concerning private

investment projects and corporations who conclude contracts and invest in infrastructure. Korea provides various grants, investments for lowering tariffs in order to balance the public interest aspects of PPPs. Although current Mongolian practice of using the terminology of ‘concession’ seems acceptable in its current use, the concession for ‘what kind of infrastructures, what types of concessions, what kind of policy for retaining the public interest in PPPs’ should be more clearly elaborated for better accountability and certainty in the Concession Law.

Could BT type be a concession type?

As said before, PPP is a general term which expresses long-term contracts where an owner purchases a stream of services over the concession period rather than simply upon the provision of an asset (E.R.Yescombe, 2007). In these projects, a government contracts with a one-party SPV and payments are based either on direct payment from consumers through toll or via payment system from government, based on performance. The main rationale of the PPP model is the belief that the inclusion of a SPV’s own finance motivates better efficiency. Concession contracts must run for a period equal to the time it takes for the private party to regain the investment. This is the main reason of long duration of PPPs (Graeme A Hodge et al., p.217, 2010). The public partner concentrates on defining the objectives to be attained in terms of public interest, quality of services provided and pricing policy, and it takes responsibility for monitoring compliance with these objectives. The PPP contract focuses on needs and functions, and it must be built on trust and transparency through open books and cooperation between parties (Graeme A Hodge et al., 2010).

Consequently, the Mongolian BT could not meet any of the characteristics of concessions and it did not create any of the benefits that are considered as the main rationales of PPPs. BT type of contracts are not necessarily implemented through the Concession Law. The study conducted by Global Green Growth Institute suggested removing BT type of projects from the Concession Law since it is not considered a PPP, neither does it involve the private sector in the operational phase and it creates a fiscal risk (Global Green Growth Institute, 2016). Therefore, while it is definitely important to change the BT type, it should be taken into consideration that in order to transfer from the current BT practices to a more complex and sophisticated PPP practices such

as BTL, a time for adaptability for institution, time is needed for capacity building and taking legal measures for prevention from fiscal risks.

- **Misperception that the private sector is the best (No use of VfM) position to handle all infrastructure projects; thus there is a lack of policy concerning what government functions, infrastructures could be delegated and implemented by PPPs**

It is obvious from the Mongolian practices and policy that the private sector is the most preferred for all infrastructure development. There is no requirement to conduct any analysis to check how best the private sector is in comparison to public procurement. Whereas, in Korea, the PPP Act not only lists all eligible infrastructures precisely, but also the procurement principle states that it is 'not only for PPP' (Kangsoo Kim, 2017). In line with this principle, a VfM analysis is used to compare the NPV of PSC and PFI for confirming the suitability of a PPP (Article 7, Enforcement Decree of the PPP Act). A VfM is a comparative assessment of PCS and PFI, where the PSC is used in Korea for the benchmark costs (Jungwook Kim, 2017). The PSC has multi purposes and it promotes whole life costing early on in the project's developments; assists in assessing the project affordability; and provides a means for demonstrating VfM; as well as encourages bidding competition (Jungwook Kim, 2017).

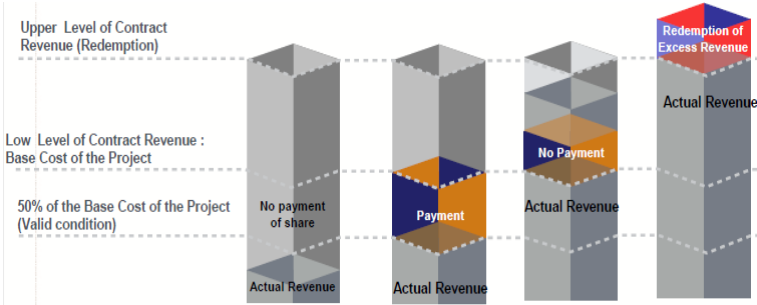
Consequently, it could be seen that after years of government failures in Mongolia, it might have been easier to promote and accept that the private sector would be the best to carry out PPPs in politics and the society without hesitation. On the other side of this is that policy that is too biased towards the private sector has been implemented by ignoring the private sector accountability measures that are at the heart of the NPL such as embeddedness, carrot-and-sticks and performance-based accountability mechanisms (Rodrik, 2004). In addition, this distorted view of the institutional transplantation of PPPs might have been not have been by chance or mistake. However, this could be a good opportunity for the Mongolian politicians and the private sector since they do not care about whole life costing, risk analysis, PFS and so on, that are vital for implementing a project that would give the best allocative efficiency.

- **Confusion about bundling and risk distribution; No government financial risk-sharing policy for balanced social and economic efficiency i.e. there is confusion about how to sustainably share risks and make PPPs more efficient in the long-run**

The KDI study suggested that in order to effectively facilitate the implementation of privately-financed infrastructure projects, the GOM needs to make more fiscal investment for infrastructure provisions since many socially important projects might not ensure profitability and thus, attract private sectors (KDI, 2011). However, although, the Concession Law of Mongolia reflects favorable financial supports from the government, the PPP practice of Mongolia has revealed that the GOM participation has been limited in financial risk-sharing with the private sector. Only one electricity project was an exception where minimum revenue was granted (Concession contract on the Fifth combined heat and power plant, 2014).

In contrast to Mongolian practice, the Basic Plan of Korea and its new risk-sharing mechanism are flexible to changing economic conditions. Basically, the idea is that the Government would share risks to the extent of protecting public interest if there are great public interest concerns. Including this, the Government would support a concessionaire in cases of financial difficulties with investments and share the excess profits in cases of excess profitability as stated in the contract (Basic Plan, 2011).

Figure 13 A new risk sharing mechanism of the Republic of Korea



Source: Comprehensive National Basic Plan, 2011

However, the case analysis of Mongolia shows the GOM implementing a hands-off approach, specifically for some build-operate types of PPPs. This situation might have resulted due to the lack of proper ex ante analysis of projects bankability. Also, with this policy, if a project is socially highly desirable, but not highly profitable then this project could not proceed. In that case, the meaning of PPPs, of punctual provision and on budget delivery of required public services by supporting each other (public-private) through partnering, would be lost. It is difficult to say that Mongolian build-operate type PPPs that transfer huge risks - namely in

design, construction, maintenance and operation risks to private parties while enabling concessionaires to freely manage prices and quality - is a socio-economically balanced approach that might be sustainable under different conditions. Consequently, a balanced risk sharing mechanism should be implemented for the increased involvement of private sectors to participate in not profitable though socially desirable projects.

- **No short and long-term PPPs integrated policies, planning that is compatible with the fiscal policy and development priorities and that is adaptable to the changing socio-economic conditions**

The PPP policy and practices of Korea are further elaborated through the PPP Act Enforcement Decrees, the Comprehensive National Basic Plan and various other guidelines and standard documents. According to the PPP Act, the Korean Government should formulate and announce a Basic Plan for private participation in infrastructure to accommodate greater public convenience, raise the competitiveness of Korean industry, and encourage a balanced development of the national territory (Article 7, PPP Act, 2005). The Basic Plan is annually updated, and it is adaptable to the changing socio-economic conditions within the general principles and frameworks of the main PPP law (Basic Plan, 2011). The Basic Plan provides PPP policy directions, details in PPP project implementation procedure, financing and re-financing directions, risk allocation mechanism, payment scheme of government subsidy, documentation direction and so on (Jongyeon Lee, 2017, Basic Plan, 2011). The Basic Plan is about 112 pages long, highly sophisticated policy document which provides detailed information for the clear, transparent, consistent and accountable implementation of PPPs.

As seen above, at the implementation level a VFM test is used for selecting suitable projects for PPPs. This test checks not only whether it is better to implement a project through PPPs or not, but also this test enables the selection of most efficiently allocated project that is compatible with the broader socio-economic policy of the country. A VFM test has the following phases (Jungwook Kim, 2017):

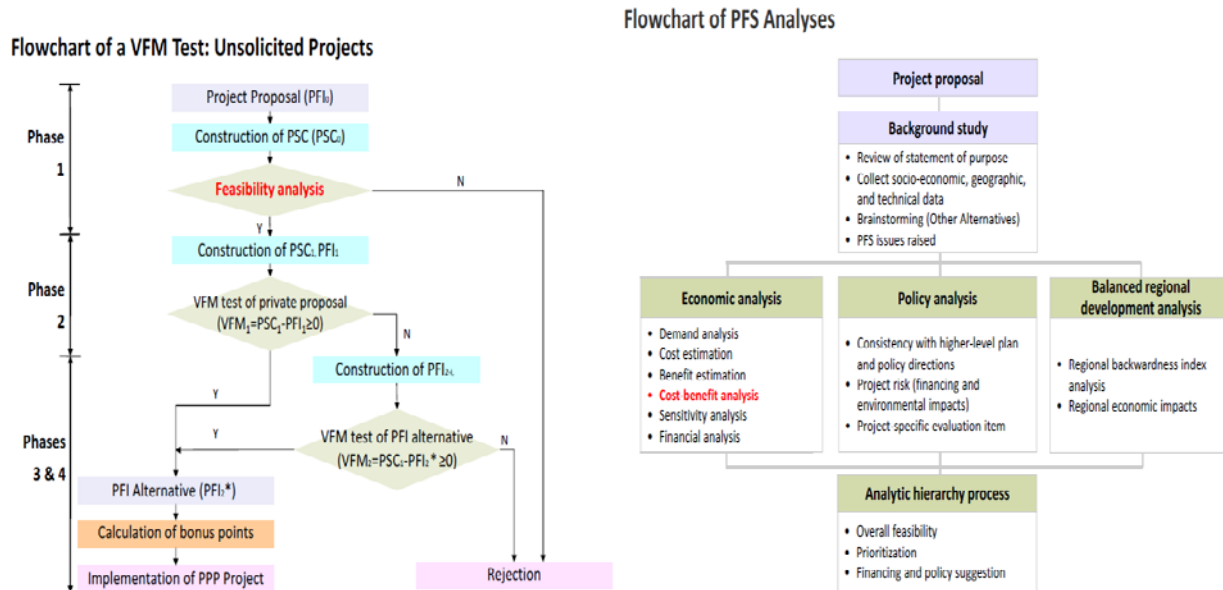
Phase 1: Feasibility study (Decision to invest-CBA is conducted from a national economy perspective)

Phase 2: VfM (Decision on PFI, where PSC and PFI are compared to assess whether the PFI achieves VfM)

Phase 3: Formulation of PFI alternatives (The level of project cost, user fee, subsidy scale, etc. are suggested from the government)

Phase 4: Award bonus points to the initial proponent

Figure 14 Flowcharts of a VfM Test and PFS Analyses



Source: Comprehensive National Basic Plan, 2011

A VfM is carried out by a multi-disciplinary research team up to 6 months with constant interim review meetings and it is carried out in accordance with 'Guidelines for implementation of VfM Test/Review of Proposal for unsolicited BTO projects' (Jungwook Kim, 2017). The first step PFS is the most important part where decision to proceed with the project is based on three analyses namely, economic analysis, policy analysis, balanced regional development analysis. It should be mentioned here that the PFS is a complex study and various well-developed guidelines and datasets are used, which are updated continuously through academic research. The economic analysis makes use of mainly CBA analysis. Here the rationale of conducting CBAs are to evaluate the attractiveness, economic feasibility and efficient allocation. Importantly, a CBA is not a pure technical tool, but thanks to that a project is able to become profitable by adjusting discount rates, duration and others. And, at the end all these three quantitative and qualitative

analyses are integrated by professionals and professors and analyzed through an overall evaluation method called Analytic Hierarchy Process (AHP).

VFM test of the Republic of Korea v. CBAs of Mongolia

In Korea, through project appraisals namely through the phases of a VFM test, PPPs are able to become consistent with broader social, fiscal and economic policy objectives of the country. That is why a CBA is vital, though still only one component of the whole project appraisal process.

In Mongolia, PPP projects that are compatible with the infrastructure development policies and priorities of Mongolia are included in the Concession List that is approved by the GOM. However, there is a need to prioritize and select the most efficiently allocative PPPs due to impossibility of implementing too many projects, with limited resources. On the contrary to Korea, the project selection process is unclear, not transparent and not accountable in Mongolia. For instance, many education projects were given to Huvsgul and Bayankhongor provinces, whereas many other provinces were not given a single project in 2016.. Thus, the current practice allows subjective decision making through the project appraisal and prioritization processes. The main point is that just using only a CBA is an insufficient estimation method for huge public infrastructure projects that have to be compatible with not only financial and economic but other broader social objectives.

Here, two important differences is highlighted between the two countries. The first one refers to the challenges as the VfM test itself is a highly complex analysis where not only well - established institutions, human resources, detailed guidelines are required but also reliable data for forecasting demand and revenues. These are all insufficiently developed in Mongolia. The second one refers to the beneficial aspect where by comparing the public or private project procurement options, the granting of PPPs legitimized as well as the public sector would better understand various ways (better design, financing solutions, risk sharing etc.) to negotiate project issues with the private sector and come up with more efficient options. Consequently, it could be said that a CBA is not solely enough to promote efficiently allocative decisions.

Institutional framework analysis

After the adoption of the Concession Law, the PPP Unit was established under the State Property Committee by the Prime Minister's Decree No. 31 of 7 April 2010. Responsibility over PPPs shifted from the State Property Committee to the Ministry of Economic Development in 2012, and then to the Ministry of Industry after the Ministry of Economic Development was dissolved in 2014. In 2016, the PPP Unit was transferred to the newly established National Development Agency (NDA). Consequently, the Global Green Growth Institute analyzed that, there have been three major politically-driven, institutional changes since 2012 (the Global Green Growth Institute, 2016).

It could be seen that because the PPP unit has never been independent from the political oversight, it has shifted in accordance with the political changes and with respective political interests. Here, the PPP concept itself enables flexibility for politicians to shift as they consider suitable or beneficial (since PPPs could be considered as state properties, economic policy tools, as investment related issue as well as a mechanism to foster development). Consequently, it is not difficult to make valid reasons for shifting the PPP Unit from place to place where it better suits more to the relevant political interests than the public interest. Otherwise, if public interest has been considered as more important than stability, capacity building, increasing efficiency and other similar issues should have been allocated more importance in consideration than the constant changes of the Unit and careless handling of the capacity of the Unit to their relative functions. Indeed, the constant institutional changes, the low capacity of the PPP Unit, and overly-broad functions of the PPP Unit were considered as one of the main reasons of inefficient implementation of the Concession Law (ICL, 2015). Consequently, the PPP Unit's instability is no doubt self-explanatory in the light of the political instability as well as the Unit's overly-broad functions in both managerial and policy related areas, might also be self-explanatory in light of the high political interests to hold control and the lack of political oversight in big infrastructure projects.

Table 15 Institutional changes driven by political changes

PPP policies	Institutional change	Political change
Centralized PPPs policy both	1. PPP Unit under the State Property Committee was established with the adoption of the Concession Law in 2010	

management and policy functions at the PPP Unit	2. PPP Unit under the Ministry of Economic Development	2012 Parliamentary Election
	3. PPP Unit under the Ministry of Industry	2014 Resignation/Establishment of a new Government
	4. PPP Unit under the newly established National Development Agency, which affiliates directly to the Office of the Prime Minister	2016 Parliamentary Election
PPPs Decentralization policy /ongoing/	5. PPPs Decentralization and Financial Centralization policy the Ministry of Finance shall control financial issues; otherwise all PPPs are now responsibility of each line ministries/local/central governments	2017 Resignation/Establishment of a new Government

Next is a critical analysis of the two PPPs policies since the same PPP Unit-based centralized policy was implemented from 2010-2016 and a significant policy shift from the centralized PPP policy to policy of decentralization and financial centralization is now ongoing.

Centralized PPPs policy under the National Development Agency

The NDA, where the PPP Unit belongs, is a Government Agency that affiliates directly to the Office of the Prime Minister. The reasons of resignation of the Prime Minister in 2017 have been connected to PPP-related issues. The PPP Unit is obviously not an independent and separate from the political oversight. The interconnection and political influences is as follow: the PPP Unit prepares the List of Concessions (although based on the proposals of line ministries and central/local governments) for the approval by the GOM; the PPP Unit organizes the procurement process and monitors the GOM's approved PPPs; the PPP Unit develops guidelines and tendering documents which are approved by the GOM and so on, making it quite obvious that independent check and balance mechanism has not been in place for PPPs.

The NDA aims to attract 70% of the whole investment from private capital for development related projects (Resolution of the Prime Minister №64, 2016). In that sense, the PPP Unit was established as a 'little' sub-division of the Integrated Investment Unit of the Agency in 2016. In the past, line ministries used to develop infrastructure policies, projects based on the development priorities of Mongolia as well as on their own demand. However, the current PPP Unit under the NDA was supposed to make a cross-sectoral coordination for the coherent infrastructure development in Mongolia and address the separated planning of infrastructure projects that used to be in practice before. For this, this main rationale of the PPP

Unit is that a centralized PPP policy should be implemented and management now has to be shifted to a PPP policy decentralization and financial centralization approach due to financial problems as explained before.

PPP Decentralization and Financial Centralization policy /ongoing/

Lately, various many solutions to address the previous failures, and fiscal risks have been discussed. In connection to that, the Draft Amendment Law of Concession Law was proposed to the Parliament of Mongolia. The Parliament approved the Amendment Law of Concession Law in 2017 (Media and Public Relations Department, Parliament of Mongolia, 2017). Consequently, centralized PPP policy development and concession management at the PPP Unit scheme now has to be changed according to the Amendment Law of the Concession Law. No mention was made concerning BT type, VFM at the Amendment Law of the Concession Law.

Now the line ministries and local and central governments are responsible for the development and procurement of their concessions, and conducting respective CBAs. Line ministries now have to prepare a financial analysis about the financial aspects of the best concession proposal according to the Debt Management Law. The MOF in its turn, based on Budget, Budget Sustainability and the Debt Management Laws, gives permission to line ministries to send their proposals to the GOM for including in the Concession List (Amendment Law of Concession Law, 2017).

Namely, the following two documents below are to be prepared and approved for a concession in order to be included in the Concession List for the GOM approval (the Amendment Law to the Concession Law):

1. Line ministries have to submit to the MOF CBAs and economic/financial analysis of PPP proposals according to the Debt Management Law
2. Permission from the MOF based on CBAs and economic/financial analysis of line ministries

Unsolicited projects as well as, now need to go through line ministries and then again, through the same procedures, the solicited projects would apply to get approval and to be included in the Concession List. Consequently, now the MOF has the main responsibility for concessions and would then decide whether to give permission based on the fiscal risks

reflected in the Budget and Debt Management laws for fiscal sustainability. The MOF is also responsible for developing and approving the methodology on CBAs.

The line ministries themselves are now responsible for procurement of concessions i.e. concluding concession contracts and monitoring their respective PPPs. Also, private parties have to submit monitoring reports every three months, according to the relevant Procedural rules to the line ministries and line ministries, to the MOF in order to obtain continued financing of their PPPs. In short, the financial aspects of PPPs are now centralized at the MOF for better fiscal stability and oversight and the PPP procurement and management are decentralized at line ministries and the respective government level for the efficient handling of PPP contracts and monitoring.

The main drawback of this Amendment Law is that the consistency, integrated policy and management of PPPs are lost. Previously, the PPP Unit has the obligation to implement the Concession Law, but now this responsibility has been decentralized and practically no one now, is in charge of integrated and consistent implementation of the Concession Law. This policy might lead to inefficient solutions due to an overly-generalized Concession Law and the lack of other PPP policy guiding documents. In other words, the PPP policy has shifted from over-centralization to over-decentralization for the solution of fiscal problems. Although, it should also be mentioned here that although the previous regulation obliged the PPP Unit to implement the Concession Law in integrated and coordinated way, the PPP Unit has not implemented the Concession Law as required.

To sum up, now the PPP policy tends to be overly-concerned with only financial aspects in a biased way, and ignores other vital aspects of PPP policy such as research and development, integrated policy development and implementation, training, capacity building, collaboration and so on.

Would fiscal discipline be reached through this policy and institutional change?

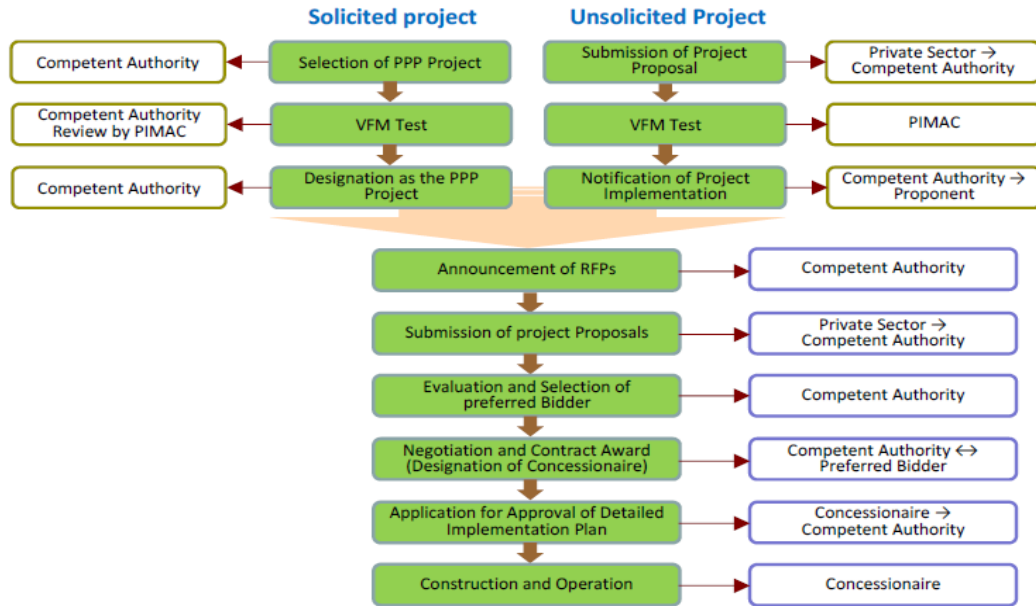
The institutional aspects of PPPs financial oversight in comparison to the Korean experience are studied. The KDI study based on their own experiences, suggested to Mongolia various estimation measures such as ex ante simplified PFS, Ex Officio Selection. These methods are used to prevent the overestimation of benefits and underestimation of the costs of line

ministries in Korea. In the past, line ministries' own PPP analysis resulted in various difficulties and challenges in Korea. Thus, a new checks-and-balances mechanism has been initiated by establishing an independent PPP Unit PIMAC in Korea for promoting a transparent and accountable checks-and-balances mechanism.

The MOSF is responsible for consistent project management, not only in terms of financing but also in terms of integrated PPP policy implementation. The MOSF develops and updates national PPP policies in accordance with higher-level national agenda and economic policy directions; coordinates sectoral PPP plans and establish comprehensive investment plans. It also importantly, coordinates sectoral PPP plans & establish comprehensive investment plans; acts as a Gatekeeper for big projects by approving major projects and monitoring their implementation process step by step (Jongyeon Lee, 2017). The PIMAC, an Independent PPP Unit conducts theoretical and policy research to help the MOSF to develop PPP policy; publishes detailed PPP implementation guidelines; and provides competent authorities with technical supports at every stage of project implementation. In addition, it provides capacity building programs for public and private sectors; and the most importantly the PIMAC conducts/reviews PFS of major projects that the MOSF is responsible for (Jongyeon Lee, 2017). In the past, line ministries have the ownership of PFS. However, due to this regulation, unfeasible projects could have proceeded, and the MOSF did used to change project budget without justification. Consequently, the PIMAC, an Independent unit reviews the PFS of line ministries and in the case of an unsolicited projects, conducts PFS for the MOSF for accountability, transparency and efficiency.

There is another Committee called Project Review Committee chaired by the MOSF. This Committee makes important decisions on PPP policies and major projects; for instance, a BTO(BTL) project that costs more than KRW 200(100) billion would be reviewed by the Committee; if necessary the Committee has an authority to postpone or block part of the expenditures for PPP projects (Kang Soo Kim, 2017). The Committee consists of members from procuring ministries and private sector experts. It could be seen that in Korea, there is a very layered, reliable and integrated PPP policy as well as a checks-and-balances mechanism.

Figure 15 Procurement steps of the Republic of Korea



Source: Comprehensive National Basic Plan, 2011

On the other hand, Mongolian PPP policy now lacks a checks-and-balances mechanism and an integrated and clear PPP policy like Korea has. It could be assumed that the Mongolian PPP policy is developed in such a way because the country lacks a capable and independent research institute to link PPP policy development with the review and control of the CBAs of the line ministries. But, there are various possible research institutes potentially that could be used for not only PPP policy development, but also for a check-and-control mechanism for the CBAs of line ministries and to help the MOF to negotiate and decide on costs of PPPs in a more informed way with line ministries. In general, a better solution must be found, otherwise the current overly-decentralized management of PPPs backed up by an unreliable, centralized financial control by the MOF not only fails to guarantee allocative efficiency but could also be easily used again for political opportunism.

Moreover, now line ministries lack the respective expertise related to PPPs and are used to utilize the traditional procurement system which is a totally different management style from the PPP system. For instance, Boardman and Vining, based on the analysis of North American experiences, suggested that more important than the need for supportive legislative frameworks, was the need for strong and professional capacity inside the government to take on PPP deals (Graeme A Hodge et al, 2010). However, in Mongolia, line ministries, central and local

governments still lack the relevant expertise. In addition to that, there is now no integrated policy, a detailed implementation guidelines, nor a responsible body for training and others.

In sum, it is highly doubtful that efficiently allocative PPPs would be reached through the current change in the PPP institution.

Procurement framework analysis

At the operational stage, policy and regulation should be directed to take measures that increase transparency, accountability, trust, clarity and decrease uncertainty, misunderstanding, asymmetry of information of the whole PPP and procurement process. Indeed, in the UK Heinecke'n report indicated *"...PFI projects were inefficient due to protracted negotiations, unrealistic risk allocations, restrictive documentation and insufficient administrative systems to finalize tendering process..."* (Graeme A Hodge et al., 2010). The PPPs operational stage not only shall be wholly rely on detailed guidelines but also it should increase competition, innovation for fulfilling the rationale of PPPs. However, if we look at guidelines and rules related to PPPs of Mongolia, it is easily understandable that these documents are the minimum that are required for the operation of PPPs. Even it could be easily seen that these documents are quite old and not properly updated to changing socio-economic circumstances.

These are:

1. A Temporary Methodology for Cost-benefit Analysis, adopted by the Resolution No. 153 2010 of the State Property Committee; - **9 pages including an example**
2. An Approval of the List of Concessions, adopted by the Resolution No 198 in 2010 and Resolution No. 317 in 2013 by the Government;
3. Tendering Regulation of Concessions /Procedures on the selection of PPPs/, adopted by the Resolution No. 103 in 2012 by the Government; - **12 pages**
4. The Model Prequalification Document on Granting Concessions, the Model Request for Proposal Documents for Tender and the Tender Evaluation Guidelines were adopted as Annexes to the Resolution of No. 103 in 2012.- **11 pages**
5. A model concession contract, but this model contract warns that this model contract is subject to change according to the concession types and sectors. – **56 pages**

Despite these documents, there are no other detailed guidelines for sector specific issues, technical estimations and so on. Many of the ground problems such as a lack of ex ante analysis, lack of conducting CBAs, a high level of cancellation of concession contracts, lack of monitoring and compliance, lack of competition from private parties due to uncertain requests to bid etc. which are all vitally important aspects of successful procurement and implementation of PPPs are connected with these not clear and insufficiently detailed guidelines, and competition enhancing procurement policy.

The Korean PPP Act is a special Act that precedes other Acts, which means PPP projects are exempted from strict regulation in national property management. The details of implementation of the PPP Act is further elaborated through the PPP Act Enforcement Decrees, the Comprehensive National Basic Plan and various many guidelines and standard documents. For instance, the Draft Standard Concession Agreement for BTO Projects: Road Projects is alone around **109 pages**, which means it is more voluminous than all the guidelines, documents and methodologies of Mongolia taken together. The following implementation Guidelines makes PPPs more foreseeable:

- Guidelines for Value for Money (VFM) test
- Guidelines for RFP (a Request for Proposal) preparation
- Guidelines for Standard Output Specification by facility
- Guidelines for Tender Evaluation
- Guidelines for Standard Concession Agreement
- Guidelines for Refinancing

Specifically, a RFP in Korea is announced in a detailed and clear manner including estimated investment amount, duration, location, plan of the potential project, potential proceeds for the concessionaire, such as user fees and supplementary projects, and central and local government subsidies, such as the amount and the method of financial support etc. in order to give a clear understanding about a project (PPP Act, 2005). In contrast, a RFP of Mongolia is restrictively unclear no information on approximate amount of investment, the GOM supports etc. which undoubtedly is connected with the lack of ex ante estimations by the public sector.

The Korean Government supports various monetary and other privileges such as granting of land expropriation rights to the concessionaire as well as selling national or public property in

designated areas to the concessionaire and allowing them to use it without charge or at lower prices for increasing the competition of the PPP market and reducing project costs. Also, Government may grant construction subsidy to the concessionaire, if it is necessary to maintain the *user fee* at a reasonable level (Jongyeon Lee, 2017). Former risk sharing scheme called Minimum Revenue Guarantee (MRG) was used at the beginning of the development of the PPPs market for attracting private parties extensively. However, due to criticisms about MRG, the Government abandoned it in 2008. Also, a very sophisticated mechanism for compensating the unsuccessful bidder for a certain portion of its cost is used for the purpose of promoting the competition. These are only some of the most important aspects of the Government supports and regulations. In sum, great many efforts at the policy, legal, institutional, operational and financial levels are devoted to make PPPs beneficial to all participants and to the society as a whole.

It is said, the public sector shall be highly competent for making PPPs successful, if they would lack necessary competencies and resources, then PPP solutions cannot be beneficial, rather PPPs even could lead to fiscal damages (Budina et al., 2007). Indeed, the World Bank discovered a high level of contract renegotiation for PPP contracts in low and middle-income economies, especially the transportation and water sectors have been prone to renegotiation and recontracting with rates of as high as 55-75% (Graeme A Hodge et al., p.533, 2010).

It is claimed that detailed standardized PPP models are important to reduce transaction costs and project risks. The Republic of Korea developed various sophisticated mechanisms and documents for eliminating transaction costs, project risks and increasing trusts. Also, for instance, Australia's Victoria has developed various framework materials, documents including in a series of policy statements, guidelines, technical notes and advisory notes (Graeme p.407). These PPPs supporting materials are technically comprehensive with total over **1208 pages** of guidelines (Graeme p.406). According to Jean-Etienne de Bettingnies and Thomas W. Ross if contracts are highly incomplete then that would trigger renegotiations at the later stages, thus, other solutions may offer better alternatives to avoid high bargaining costs such as if the tasks were allocated to the government (Graeme A Hodge et al., 2010).

In general, scholars claim that crafting PPP contracts that regulate concessionaire's behavior over several decades is an extremely complex one and such contracts are prone to incompleteness thus could be risky to all parties (Graeme A Hodge et al., p.135, 2010). PPPs typically involve the bundling of multiple tasks in a large contractual agreement, the efficiency of such a complex contract is observable only to the private sector but not to the government (Graeme A Hodge et al., p.135, 2010). Consequently, Mongolia shall carefully consider its background capacity and potential for the development of a proper mid and long-term PPP policy since PPPs are highly complex, requires a highly capable human capacity and institutions and rules for which much government effort shall be put in advance before implementing PPPs at the massive scales.

Fiscal framework analysis

Let us see the Korean experiences of fiscal management related to PPPs. The Republic of Korea controls PPP related fiscal risks by requiring a clear framework for PPPs appraisals and a specific budgetary procedure for full long-term budgetary appropriations. In 1999 a new Public Investment Management (hereinafter referred to as PIM) started due to the financial crises of 1997-1998. And, the Comprehensive Plan to Enhance Efficiency of Public Investment was formulated and intensified monitoring of project implementation process was introduced by the MOSF. A compulsory PFS was introduced for PPPs and the ownership of PFS was transferred to the MOSF from line ministries for an efficient financial management. Currently, a PFS is owned by the MOSF and managed by PIMAC at KDI. Although this is a short feasibility study of PPPs, it is so powerful starting point for better financial management that cannot be changed later (Jongyeon Lee, 2017). The MOSF does not review all projects of line ministries, but only certain projects that are financed from the Government.⁶ In that way, the MOSF is the main authority when it comes to huge infrastructure projects and no projects would be implemented out of the budget system. Mongolia currently tries to follow this mechanism of centralization of financial responsibility and authority at the ministry of finance, but in a distorted way. Moreover, various

⁶ All new large-scale projects with (1) TPC amounting to KRW 50 billion (about USD 50 million) or more and (2) central government subsidy greater than KRW 30 billion are subject to PFS. Local government and Public-Private Partnership (PPP) projects are also subject to PFS if central government subsidy exceeds KRW 30 billion.

other measures are used that further safeguard and prevent any possible fiscal problems due to PPPs in Korea. These are the following:

- 2% rule - Limits government expenditure on PPPs to 2% of total estimated government annual expenditure
- Aggregate ceiling on annual total amounts of PPP project (BTL) needs to be approved by the National Assembly.
- Also for BTO contracts user fee is used effectively to share financial burden of the private and public sectors.

The fiscal discipline for PPPs as a conventional procurement is the principle of budgeting of PPPs in Korea. Korea established a multistage and multi-party PPPs budget approval by promoting checks and balances between the National Assembly and the MOSF as well as by establishing the PRC review and approval at every important stage (Kangsoo Kim, 2017). Moreover, Chile's PPP unit estimates the cost and risk of revenue guarantee and publishes information on contingent and direct liabilities under PPPs in annual reports on public finance and contingent liabilities (Kangsoo Kim, 2017).

On the other hand, Mongolia faces fiscal risks, due to the inconsistency of PPPs planning with the budget since its implementation. The new Debt Management Law that was introduced in 2017 shall manage the Government debts, loans for the budget sustainability (Debt Management Law, 2017). It reflects the regulation of not only direct liabilities but also contingent liabilities that are reflected in the Concession Law such as MRG, currency risk related risks, government credit guarantees. Contingent liabilities shall be considered and shall be transparent to the public according to the Debt Management Law of Mongolia. The integrated debt database of the GOM debt and the GOM Debt Balance statement shall include information about contingent liabilities (Debt Management Law of Mongolia, 2017). The projects in the Concession List have to be accompanied with not only CBAs, but also with the financial/economic analysis that reflects risk assessment of contingent liabilities (Debt Management Law, Concession Law of Mongolia).

Moreover, the Development Bank of Mongolia gives to concessionaires government credit guarantees. The New version of the Law of Mongolia on Development Bank was adopted in 2017 due to various drawbacks such as the lack of independence of the Bank from political oversight, the investment decision of the Bank have been not consistent with the national

financial and economic capability and potential, the measures of the M&E of the Bank is insufficiently reflected in the Law, the unqualified credit exceeded 50% etc. reasons (Approval of the Discussion of the Renewed Law of Mongolia on the Development Bank of Mongolia, 2017). According to the New Law, guarantees reflected in the Concession Law shall be given to a concessionaire if contingent liabilities, economic, environment and social impacts and analyses are made according to the relevant methodologies (The Renewed Debt Management Law, 2017). Consequently, according to the new fiscal regulation both direct (through CBAs) and contingent liabilities (through risk estimation) of PPPs shall be considered. But, still for instance for BTL types of projects additional safeguarding measures have to be taken since the government financial statement does not provide future payments (Kangsoo Kim, 2017).

For instance, Korea has achieved to safeguard from the financial burden from BTL type of contracts at the National Assembly level and cumulative financial burdens of all PPPs through 2% Ceiling Rule. However, for Mongolia it might be better to implement financial safeguards that not rely on political discretions rather sophisticated PPPs accounting and reporting or a proper PPP expenditure ceiling might better suit. It is cautioned that definitional matters are extremely important for PPP accounting since enforcement of financial reporting and prevention from manipulation of PPP accounting depends on terminologies. It is suggested that, the PPP accounting shall follow the principle of 'substance over form' in order to penetrate behind the legal form to identify the economic substance of transactions (Graeme A Hodge et al., p.251, 2010). For instance, in Mongolia one health concession that concerns the operation of hospital (ROT) was concluded so far. Although, the type of concession is not BTL or lease type, the concessionaire has to be continuously financed according to the same benchmark with the State integrated medical hospitals by the State. Consequently, Mongolia needs to make sure that their level of development of PPP accounting, reporting and financial management be suitable for endless types of PPPs, various flexible guarantees that are reflected and not reflected in the Concession Law of Mongolia.

Conclusions and recommendations

A summary of context-specific causes of failures of PPPs in Mongolia

Three context-specific causes of failures could be highlighted based on previous sections, namely an ambiguous PPP concept, the unaccountable public sector, and uncompetitive private sector.

- ***The flexibility and ambiguity of the PPP concept is not balanced against its accountability and efficiency***

With regards to the PPP concept, types, applicable infrastructures and so on, the whole PPP concept has been manipulated in practice due to its flexibility and ambiguity and the nature of PPPs that makes them prone to rents. This distortion has enabled PPPs to be used in a socio-economically unbalanced way. In addition, the lack of short and long-term policies related to PPPs and lack of proper risk-sharing mechanisms have negatively influenced the promotion of PPPs in an efficiently allocative way.

Moreover, according to the political preferences, the flexibility of the PPP concept has enabled politicians to shift the base of PPP Unit, 5 times during the period from 2010 to 2017. Also, current measures to promote PPP policy decentralization and financial centralization policy, are likely to fail due to the lack of a checks-and-balances mechanism, other necessary PPPs accounting measures as well as insufficient expertise of the human resources in the line ministries and a lack of PPP-related guiding documents.

Furthermore, artificial procurement, management, economic analysis, competition, and in general, illegitimate partnerships and PPP implementation processes have been promoted in Mongolia. A lack of legal and policy clarity, as well as institutional stability have confirmed the formality rather than quality of PPP implementation. This distorted PPP implementation process would be deepened due to the new policy, which legally excludes integrated policy, capacity building, research concerning PPPs and so on.

Consequently, the Mongolian experience has shown evidence that just a little bit of maneuvering space in the PPP concept is enough to lead to massive political opportunism and fiscal instabilities. The flexible PPP concept has been manipulated at all stages i.e. policy, legal, institutional, financial and operational stages of the PPP system. In Mongolia, impreciseness and

a flexible PPP concept has helped to implement PPP projects in a distorted way, shift the PPP Unit as required according to political preferences, affect the budgeting system and result in artificial PPP processes.

Here, the role of the legal system is vital to promote preciseness and accountability that would clarify the concept and prevent it from possible abuses. Korea has successfully achieved PPP policy clarity through its sophisticated legal rules and multi-layer and multi-stakeholder mutual checking and balancing mechanism which has made it more accountable and transparent.

Many scholars have been expressing their skeptical viewpoints on PPPs, which have been based on unimpressive PPP experiences in developing countries. For instance, Paul Numba-Um says “...the World Bank and IMFs face a ‘PPP paradox’ in the sense that they need to strike a sensible balance between forceful advocacy for PPPs and effective management of client countries’ expectations of what can be achieved through PPPs” (Graeme A Hodge et al., p.456, 2010). As for Mongolia, the flexible PPP concept has been easily manipulated in an immature institutional, legal and social environment. Thus, it could be seen that the main cause of PPPs failures there is driven by the failure of balancing the ambiguity of the PPP concept against its efficiency and clarity.

- ***The lack of political will to nurture genuine partnership and lack of capability in the public sector***

The current practice of Mongolia is to train a few specialists for carrying out the PPP system. Subsequently, they have to further train staff of other public organizations who would then determine their respective preferred PPPs, types and prioritize their PPPs according to the national development policy. Everybody does work as they consider, given the wide discretion and no one is responsible for the outcomes of their decisions. If Mongolia still wishes to pursue PPPs on a massive scale, capacity-building for PPPs should be an important sub-policy of the overall PPP policy. Importantly, an accountability mechanism based on performance indicators backed up by enforcement measures should be an inseparable part of any responsibilities and performance of public sector staffs (Dani Rodrik, 2008). In Mongolia, there has been no accountability mechanism in place to make the public as well as the private sectors effectively

accountable for their insufficient performances. Mongolian experience shows that, if an accountability mechanism based on clear performance indicators followed by enforcement measures, could not be implemented, then PPPs might do more harm than benefit. Basically, that necessitates an in-depth reform of the public sector in Mongolia (Graeme A Hodge et al., 2010).

Indeed, Colin F. Duffield claims that it is critical to consider not only the strategy to procure assets but also the specific contextual, cultural, political and country variants that together influence the choice and style of procurement (Graeme A Hodge et al., 2010). For instance, the level of maturity that is necessary for PPP implementation has required substantial development, cultural reforms and up-skilling of both public and private sectors in East European countries. In addition to the maturing of the market, governments have also undertaken reforms and enhancement of policies, legal and legislative matters, taxation and their own project organizational structures (Graeme A Hodge et al., p.209, 2010). Therefore, a proper political will and proactive public sector reform and advancement are required from Mongolia to make PPPs there, properly workable.

- ***The uncompetitive private sector and immature environment***

As the Korean experience shows, an effective government support for private parties to participate and compete actively in the provision of public infrastructures, has been the key to nurturing the competitive PPP market with strong private players.

However, promoting the private sector has various problems in Mongolia. Not only is there the lack of financial resources, but also in many cases, beneficiaries would already be competitive MNCs or powerful foreign companies due to the globalized PPP market. Even if the domestic private sector does get supports, it does not guarantee the development of the competitive PPP market internally. Currently, the domestic private sector is not only not competitive, but also under-educated concerning PPPs and PPP-related business possibilities such as in coordinating and creating a SPV and participating in PPP tendering. In a globalized world, the PPP market in Mongolia might not develop in a balanced way due to underdeveloped Mongolian domestic companies and the high gaps in technology, knowledge and know-how of foreign companies and domestic companies. If Mongolia would mostly rely on foreign

companies for infrastructure development, then many public infrastructure might be provided by foreign companies. In Mongolia, two huge BOT concession contracts have been concluded with foreign companies with the duration of 30 years (except for short-term BT type contracts that involved foreign companies). One example is the biggest combined heat and power plant and the other is the 542-km railway base structure that would connect Mongolia with the Russian Federation and the Republic of China.

Thus, in certain cases, it is possible to link PPP policy to development and social policies, since in PPP terms, concession items concern public goods. These topics are beyond this thesis content, since these issues require more extensive empirical and normative analyses. One thing that needs to be highlighted here is that the PPP system is highly complex, uncertain and dynamic and concerns issues regarding equality, disparity, public interest, development and so on - so this field should be developed in a more specific, considerate manner, especially in Mongolia (OECD, 2009). However, currently, the pattern of PPP development in Mongolia is quite technical in terms of institution and rules 'copying' in a distorted way from developed countries and international standards with the main emphasis on reducing infrastructure gaps. Indeed, lately various literatures and court cases that touch upon the public interest aspects of PPPs have been growing and confirming the importance of reinforcing the mechanisms for protection of public interest aspects in the use of PPPs.

Also, many Latin American countries have abandoned concession type of PPPs to some extent due to public interest-related issues (OECD, 2009; World Bank, 2004, 2009). It has been suggested that, *"...PPP's have to have a specific public interest test that assesses factors including effectiveness, accountability, and transparency, equity, public access, consumer rights, security, privacy, and rights of representation of affected individuals and communities..."* (Graeme A Hodge et al, 2010).

On the other hand, the issue of promotion of competition in a developed country like Korea is totally different. With more competition from MNCs or outside, the domestic companies would become more and more competitive. In other words, competition at the PPP market in developed countries would only benefit the private, public sectors and the society as a whole through competition and innovation. Korea has successfully nurtured the capable public

sector, competitive private players and clear institutions and rules for PPP's implementation. The current sophistication of PPP policy directions are efficiently resolving the allocation of rules with SOEs and PPPs; reducing and resolving disputes between public and private sectors (developing general and specific guidelines, creation of a centralized disputes database, etc.); diversifying financing sources (expanding investment trusts etc.); expanding to overseas PPP markets and others (exporting PPP systems, linking ODA and PPPs, etc.) (Kangsoo Kim, 2017).

Consequently, the private sector promotion strategy in the field of PPP might need to be differently regulated specifically in Mongolia due to various context-specific social and economic considerations that might result in unintended outcomes, specifically since PPPs concern public infrastructures. Currently, Mongolia's procurement is 'against' competition and against the creation of competitive private parties and more importantly, the public interest aspect might be imbalanced against the economic aspects of PPPs. In such an environment, the rationale of a PPP policy of innovation and efficiency through competition for increased social welfare would not be reached yet in Mongolia.

The main implications of a clear and accountable institutional development, and competitive private and public sectors are to ensure the long-term completeness of contracts and to minimize uncertainty. PPP contracts are complex and the economic consequences of contractual incompleteness could be huge for Mongolia. Specifically, based on the current practice of Mongolia, it is highly possible that various disputes could arise due to highly possible incomplete contracts that do not reflect precise agreed prices, tolls, government payments and the like. Moreover, conflicts could concern many things such as ownership (local or central), total project costs (If changes occur), interpretation order of legal documents, financing through project finance, construction period delay, inflation and calculation of project costs, force majeure and other similar events. (Kangsoo Kim, 2017). Therefore, it is important to improve the dispute resolution mechanism. For example, the PIMAC of Korea provides capacity-building programs to public officials, develops standards concession contracts and other policy documents and guidelines to prevent and minimize possible disputes and uncertainties. Korea has also established the PPP Project Dispute Mediation Committee consisting of representatives from the government, project company, and representatives of public, under the direct

jurisdiction of the MOSF in 2011 (Kangsoo Kim, 2017). The decision of the Committee is binding for the government body, whereas the private party has the right to decide whether to use and accept the Committee’s decision (Kangsoo Kim, 2017). In Korea, it is considered necessary to develop specific and general dispute resolution guidelines, as well as establish centralized disputes databases, which could also be relevant for Mongolia’s use (Kangsoo Kim, 2017).

It was suggested that a PPP procurement strategy solely on the basis of economic pressure is unjustifiable since “...a lack of competition, a lack of technical innovation, poor transparency or inappropriate risk allocation may all lead to suboptimal contractual outcomes...” (Graeme A Hodge et al, p.98, 2010). In line with that, Duddied cautions that all PPPs have strengths and weaknesses and these may well apply to only a minority⁷ of projects (Graeme A Hodge et al., p.601, 2010).

The PPP policy of Mongolia has been transplanted from developed countries, who have created their rules that are suitable for their level of socio-economic contexts. So, Mongolia as a ‘rule copier’ needs to make PPPs rules suitable to their own level of socio-economic development. Three basic differences, namely the unaccountable public sector, uncompetitive private sector, and an ambiguous PPP concept need to be properly addressed in order to appropriately promote a proper PPPs system which is likely to be harder to achieve for a developing country like Mongolia where accountability and embeddedness are absent.

Conclusions and recommendations

The following table concludes and summarizes the main findings based on a comparative study. Following that, recommendations and action plans for a better PPPs policy are given.

Table 16 A summary table of the main findings

Factors/countries	Republic of Korea	Mongolia
Legal/policy frameworks		
Relevant laws/policies	Precise and stabile	Ambiguous and unstable
Eligible Infrastructure types	Positive listing that promotes clarity (Article 2, PPP Law)	Negative listing that enables flexibility for manipulation (Article3, Concession Law)
PPPs types	Clearly indicated PPPs types of BTO and BTL (Article 4, PPP Law)	No clearly preferred PPPs types and definition of a wide variety of PPPs types

⁷ Hart concludes that PPPs may be optimal when building quality can be well specified and ‘corner-cutting’ investments are relatively easy to monitor, because in that case both over-investment in corner-cutting and under-investment in building are relatively low (Graeme A Hodge et al., p.147, 2010).

		that create confusion and manipulation (Article 4, Concession Law)
Short and long-term PPPs planning	Sophisticated short and long- term PPPs coherent planning that promotes balanced development (Article 7, 8, PPP Act; Comprehensive National Basic Plan, 2011)	Lack of proper and coherent planning of PPPs that promotes allocative inefficiency (Concession List, 2013; Concession Law)
Risk sharing - Protection of public interest - Support of private sector	Government shares risks to the extent to protect the public interest and support the private sector (Article 47, PPP Act; Chapter Part II, V, Comprehensive National Basic Plan, 2011)	No balanced and clear risk sharing mechanism for the protection of public interest and the support of private sector (Concluded concession contracts in the Annex I, Concession Law)
Institutional framework		
Institutional clarity, stability and mutual check and balance mechanism	Clear designation of institutions in the PPP Law such as the MOSF, Project Review Committee, PIMAC, the National Assembly with respective responsibilities that are stable, that could make coherent and coordinated decisions and that mutually check and balance (Article 2, 5, 23, PPP Act).	Lack of clarity about the location and affiliation of the PPP Unit have combined to move around the Unit 5 times according to the political preferences during 2010-2017 (Article 6.2, Concession Law). The current institutional change, namely financial centralization at the MOF and management decentralization approach lacks to promote projects' reviews and an integrated PPPs policy (Amendment Law of Concession Law)
Procurement framework		
Competitive procurement	Various target policies are implemented for increasing competitive tendering and efficient procurement process	Competition discouraging tendering and artificially legitimized procurement practices
Special privileges to PPPs	Designation of the PPP Law as a Special Act that has a priority over other acts (Article 3, PPP Act)	No special status of the Concession Law; various privileges are reflected in the Concession Law and are given on a contract basis (Concluded concession contracts in the Annex I, Concession Law)
Government supports	Provision of various Government supports such as land acquisition costs, construction subsidy, exceptions from taxes, unitary payment for BTL and so on, in order to increase competition and decrease project costs, eventually the fees for the public (Articles 4, 17-20, 53, PPP Law; Chapter II, Comprehensive National Basic Plan, 2011)	Although, the Concession Law reflects various kinds of supports, to date no real monetary subsidies have been granted. Support has been directed to the creation of an excellent business environment through granting of monopoly rights, all the necessary permissions, grants, licenses, government credit guarantees, purchase of products and so on (Concluded concession contracts in the Annex I; Chapter 7, Concession Law)
Compensation of unsuccessful tenders	Compensation for unsuccessful tenders (Article 7, Enforcement Decree)	No applicable mechanism

Tendering and RFPs	Detailed and clear RFPs that increase participation and competition (Article 10, 11, PPP Act)	Unclear RFPs that discourage participation and competition (Article 13, Concession Law)
Guidelines and sample documents	Various many kinds of guidelines and documents have been developed and updated timely manner to increase transparency, accountability, trust, clarity and decrease uncertainty, asymmetry of information of the whole PPP procurement process (PPP Act, Enforcement Decree; Comprehensive National Basic Plan, 2011)	Insufficient, improper guidelines that have been not updated properly and that could not promote clarity and decrease asymmetry of information for the increased participation and competition of the private sector (Concession Law)
Fiscal framework		
Institutional check and balance	A multi-stage and multi-party PPPs budget approval by promoting checks and balances between the National Assembly, the MOSF, the PRC (for review and approval at every important stage), PIMAC (for review and evaluation of solicited/unsolicited projects) and line ministries have been created (Article 2, 5, 23, PPP Act; Articles 20 Enforcement Decree; Chapter V, Basic Plan)	Although a financial centralization policy at the MOF for better fiscal sustainability has been approved, no check and review mechanism has been created yet. No reviewing mechanism of the appropriateness of CBAs of line ministries/local governments as well as no check and balance mechanism of the MOF, GOM and the Parliament
Other safeguarding measures such as BTL aggregate ceiling, cumulative PPPs expenditure ceiling, ceiling of guarantees and so on	2% rule limits government expenditure on PPP to 2% of total estimated government annual expenditure; Aggregate ceiling on BTL needs to be approved by the National Assembly and ceiling of the credit Guarantees are also regulated (Articles 7-2, -3, PPP Act; Article 5-2, 29, Enforcement Decree of the PPP Act)	No proper, clear cut and reliable fiscal safeguarding mechanisms that are suitable for too many types of PPPs, and that are suitable to limit a wide discretion of the GOM and the Parliament of Mongolia (Article 6, Concession Law, Budget Law)

Recommendations

Conceptual, policy and legal frameworks

- Need to clarify all confusions that create opportunistic spaces for manipulation such as the PPP concept, PPP type, PPP applicable infrastructures, PPP risk sharing, the lack of clarity on the issue of public interest in PPPs, PPP analysis, the private sector is the best approach and so on. In general, reform the PPP legal environment and policies to address ambiguity
- The GOM needs to take responsibility and share PPP financing risks in order to retain the public interest aspects in PPPs and promote a socio-economically balanced PPPs
- Need to define both short and long-term PPP policies and integrated implementation of PPPs based on policy priorities and fiscal possibilities; Need to adopt integrated PPP policy, plan based on necessary researches

Institutional framework

- Need to create an arm's length independent, stable review mechanism that reviews CBAs of line ministries/local/central governments for better accountability. Need to create a multi-layered and multi-stakeholder check and balance mechanism for PPPs
- Need to create an efficient institution that conducts PPPs related researches and guidelines, standard documents; and that assists all government organizations for methodological and expert matters

Procurement framework

- Need to develop a sub policy for human capacity building for PPPs of the public sector
- Need to embed the accountability mechanism within public and private sectors, at all levels and aspects and based on clear performance indicators backed up proper enforcement measures
- Need to adopt clear competition enhancing procurement policy and need to educate the private sector for their active participation

Fiscal and financial framework

- Although many PPPs related fiscal and financial measures have been taken due to the current fiscal problems, these measures might be not easily implementable due to the complexity of measures and human resources issues. Thus, simpler, cross cut, and more safeguarding measures such as a general ceiling approach for PPPs and for lease type of contracts and so on, that are suitable to prevent the manipulation of the flexible PPP concept and a wide discretion of government authorities need to be developed
- Need to reform PPPs accounting, reporting, audits, transparency and disclosure mechanisms for better accountability

Action Plan for PPP policy reform

- Invalidate and cancel the Concession list that holds about 70% of BT type of contracts and 53% of direct contracting type of contracts. Readopt it based on reformulated policies that reflect the necessity and fiscal possibility without predefining the procurement type
- Reformulate the detailed PPP policy and regulatory framework all together based on countries needs and financial possibilities
- Adopt the transition policy that enable Mongolia to shift from the 'artificial PPP system' to 'correct PPP system' by properly developing rules, institutions, accountability mechanisms, procurement policies, guidelines, standard contracts, and by preparing the necessary human capacity
- Promote academics, scholars and the media to be the 'controllers' of PPPs through provision of on time and full PPPs related information
- The GOM should have an active communication strategy with the citizens due to possible incomplete contracts that might create negative public attitudes as well as with the private sector for promotion of accountability and competitiveness

- Need to develop a dispute settlement policy for efficiency and transparency
- Need to reflect contract renegotiation specifications to prevent risks and massive renegotiation occasions

If Mongolia is unable to implement at least these minimum measures for the establishment of a proper PPP system, opportunistic behaviors and inefficient PPPs would continue to be the practice in Mongolia. Eventually, if it is unable to, the PPP system of Mongolia might follow the experiences of many Latin American countries who have abandoned the concession system due to the lack of accountability, transparency, embeddedness and the sufficient consideration of the public interest in their concessions.

Limitations

This paper analyses the current PPP policy, mainly consideration of the public interest within PPPs of Mongolia from a developing country perspective. Thus, the paper basically describes policy, legal, institutional, operational and fiscal flaws and proposes a limited number of ‘must-have’ policy recommendations for a better PPP policy. This paper leaves many open and unanswered important questions such as other better options of provision of public infrastructures that better suit socio-economic development of Mongolia; the impact of mixing of industrial and PPP policy; a proper user fee policy and so on in Mongolia since these issues require more in-depth empirical and normative analyses. However, it is expected that with this paper, the most important key deficiencies of the PPP system of Mongolia could be amended and improved.

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ANNEX I A detailed list of signed agreements as of 2017, retrieved from the web page of the National Development Agency

№	Concession name	Year of contacts	Concession types			Duration	Guarantee duration	Government support	Procurement type ⁸
			BT	BOT	BOO/ others ⁹				
Infrastructure, Building									
1	Mining, Metallurgy Complex	2014	Renovate-BOT, BT			30	30	Typical ¹⁰ (mining licenses ¹¹ etc.)	DC
2	Human development complex center	2014	-	BOT	-	30	5 years after the contract completion	Not to give permission to build similar function complexes and to provide similar services within the area to any state related organizations/companies	DC
3	The State reserve /fuel/ warehouse at Rashaant	2015	-	-	BOO	30	30 years	Typical, lease of the warehouse	DC
Electricity									
4	Tuul Songino water reserve complex	2014	-	-	BOO	23	23 years	Typical	DC
5	Telmen thermal power station	2013	-	BOT	-	22	22 years	Typical, stabilization of coal prices	DC
6	Fifth combined heat and power plant	2014	-	-	DFBOM	25	25 years	Typical, guaranteed revenues, compensation amounts, other commitments	CT
7	Egiin river hydropower station	2015	BT			-	3 years	Typical, Pay back USD 98,316,328 /2 years/	DC
8	Power station, electricity transmission line at Uvs aimag	2016	-	-	DFBOT	30	30 years	Typical	DC
Paved roads and transportation									
9	Nariinsukhait-Shiveehuren-paved road	2011	-	BOT	-	17	17 years	Typical	-
10	Altai-Darvi 165 km paved road	2015	BT	-	-	-	3 years	Typical; Bay back CNY 569,049,587,0 /4 years/	CT
11	Altai-Darvi 98 km paved road	2015	BT	-	-	-	3 years	Typical; Bay back	CT

⁸ Direct contracting (DC); Competitive tendering (CT)

⁹ Design-financing-build-operation-maintenance (DFBOM); Design-build-own-operate DBOO; Design-builds-operate-transfer (DBOT) Design-Demolish-Build-Transfer (DDBT)

¹⁰ An import of equipment and materials support; a support for giving a work permission for foreign workforce; a support for giving various rights, permissions such as land use right, permissions/licenses to use water, electricity, heating, communication; also all other necessary collaborations from government regulating authorities shall be provided in timely and promptly ways without any delays. In the most electricity, heating i.e. vital public services contracts the GOM ensures buying agreed amounts of electricity/heating and so on from concessionaries.

¹¹ The right to mine Khust mountain, Tumor tolgoi, Tumortei mining sites for the mining and manufacturing of iron ore and iron ore concentrates.

								CNY 377,554,752.0 /4 years/	
12	To Mandal 15.8 km paved road	2015	BT	-	-	-	3 years	Typical; Pay back USD 6,473,735.0 /3 years/	CT
13	Bayankhongor-Altai 126.7 km paved road	2015	BT	-	-	-	3 years	Typical; Pay back USD 76,963,494.0 /3 years/	CT
14	To Aglag Buteeliin Monster 6.2 km paved road	2015	BT	-	-	-	3 years	Typical; Pay back 6,952,033.901.0 /one year/	DC
15	Dashinchilin to Murun 120 km paved road	2016	BT	-	-	-	3 years	Typical; Pay back USD 77,480,229.0 /2019-2022, 4 years/	CT
16	A Bridge construction at Selenge aimag	2016	-	-	DBT	-	3 years	Typical; Pay back MNT1,949,888,978.0 /2 years 2017, 2018/	CT
17	Galt soum of Khuvsgul aimag-Floating bridge	2016	-	-	DBT	-	3 years	Typical; Pay back MNT 787500000.0 /2 years 2017, 2018/	CT
18	To connect Altanbulag soum with clean water through pipelines	2015	BT	-	-	-	3 years	Typical Pay back MNT400,000,000.0 /within 4 months/	DC
Railway									
19	Railway base structure between Erdenet and Ovoot mine	2015	-	-	DBOT	30	30 years	Typical, assistances and supports related to financiers' requirements; a pre-emptive right to implement the Expansion of the Base Structure	DC
Health									
20	Building of an incomplete hospital /260 beds/	2015	-	-	ROT	25	25 years	Almost a built building	DC
Culture, sports and tourism									
21	Mongolian Nationality Museum	2015	-	-	DBOO	20	20 years	Transfer of all exhibitions	DC
Education /cumulative/									
+1 8	The rest of the 18 concessions concern building or extension of schools and kindergartens and one concern sport and cultural complex. All concessions were concluded in 2016. Below are given a few examples for reflecting the repayment condition.				All of them are BT types. However, in the capital city design, demolish and build, transfer type was used which is quite a same type with BT except demolishing.			Typical The GOM should pay back investments generally after two to three years of completion of projects /2016-2019/.	All are DC
-	Bayangol district-38 Secondary school	Design-Demolish-Build-Transfer			In total USD 6,705,790.0 or MNT 13,463,080,467.2 2017-USD 2,514,671.0; 2018-USD 4,191,119.0				
-	Bayanzurkh district 14 Secondary school	Design-Demolish-Build-Transfer			In total MNT 10,787,000,000.0 2016-MNT 2,900,000,000.0; 2017-MNT 7,887,000,000.0				
-	School, Tsagaan-Uul soum of Khuvsgul Aimag	BT			Pay back within two years after the completion of the project. The amount is not applicable in the contract.				