The Resurgence of Public-Private Partnerships in Asia: Cases of the Philippines and Indonesia

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Abstract

This paper examines the recent resurgence of public-private partnership (PPP) for developing infrastructure in Asia based on case studies on the Philippines and Indonesia. The paper demonstrates that there has been a resurgence of PPP infrastructure development in Asia including two countries, which are known to have inadequate infrastructure. The paper traces policy developments in PPP governance over several decades in these countries and finds PPP have played a complementary role in developing public infrastructure to respond to the pressures of fiscal shortfalls and public debt. Despite expectations for PPP to deliver quality and efficient infrastructure services, the PPP experiences suggest the mixed results. The paper argues that, based on discussions of decision-making processes for financing mode, public finance or PPP, in the Philippines, PPP governance should be strengthened by introducing finance option test in pre-investment stage including value-for–money approach to achieve the effectiveness of PPP.

Keyword: Infrastructure, Public-private partnership (PPP), Philippines, Indonesia
JEL Classification Codes: E22; H54; O18

Contents

1. Introduction

Infrastructure investment requires long-term and large upfront investments, and involves many public/private players and stakeholders, taking some 20 to 30 years to recover investment costs. Because public infrastructure is considered as a public good, it has been characterized as "non-rivalrous" [1] and "non-excludable" [2]. These two characteristics imply market failure, which may lead to inability, even failure, to achieve a socially desirable level of infrastructure services unless government intervenes.

Infrastructure development has traditionally been financed and procured by public spending. Due to the public goods nature of infrastructure, governments have played a major role in financing infrastructure through taxation and public debt. However, large fiscal deficits and concern with the growth of public debt have motivated governments, especially in developing countries, to mobilize private sector funds as alternative funding sources while at the same time tapping private sector efficiency for infrastructure development. With this background, there has been high expectations for Public-Private Partnership (PPP) to fill this gap globally.

This paper examines the recent resurgence of PPP for developing infrastructure in Asia based on case studies on the Philippines and Indonesia. Section 2 discusses overview of PPP in Asia while section 3 depicts PPP in the Philippines and Indonesia including transition of PPP policy in two countries. Then section 4 assesses PPP governance in the Philippines, and finally section 5 discusses policy recommendations and conclusions.

2. Overview of PPP in Asia

In this section, overview of PPP in Asia together with its definition will be discussed.

2.1 Definition of PPP

PPP is a mechanism for collaboration between the public sector and the private sector in the provision of public services such as infrastructure construction, operation, and maintenance. There is no universally accepted definition of PPP. This is because there are many schemes in PPP, from combination of traditional government procurement to complete privatization, in infrastructure asset design, construction, possession and operation. Delmon (2010) discusses that there are over 25 PPP schemes. Table 2.1 shows some of definition of PPP by multilateral agencies, country and academician.

Table 2.1 Some of definition of PPP

OECD	An agreement between the government and one or more private partners according to which the private partners deliver the service in such a manner that the service delivery objectives of the government are aligned with the profit objectives of the private partners and where the effectiveness of the alignment depends on a sufficient transfer of risk to the private partners (OECD 2008).
World Bank	A long-term contract between a private party and a government entity, for providing a public asset or services, in which the private party bears significant risk and management responsibility, and remuneration is liked to performance (World Bank 2017).
United Kingdom	Arrangements typified by joint working between the public and private sector. In their broadest sense they can cover all types of collaboration across the private-public sector

[1] Its consumption does not reduce its availability to others.
[2] It is available to everyone and cannot be withheld even from people who do not pay for the services.

	interface involving collaborative working together and risk sharing to deliver policies, services and infrastructure (HM Treasury 2008).
Delmon	Any contractual or legal relationship between public and private entities aimed at improving and/or expanding infrastructure services (Delmon 2017).
Engel et al	An arrangement by which the government contracts a private company to build or improve infrastructure works and to subsequently maintain and operate them for an extended period in exchange for a stream of revenue during the life of the contract (Engel et al 2014).

Source: created by the author

Critical elements for definition of PPP are the followings;
- Contract between public and private
- The contract is for the provision of public services
- Long term
- Often involving bundling of services such as planning, engineering, procurement, financial mobilization, construction, operation and maintenance
- Fees to private party is provided depending on performance of the private party
- Risks under the infrastructure project is shared by public and private

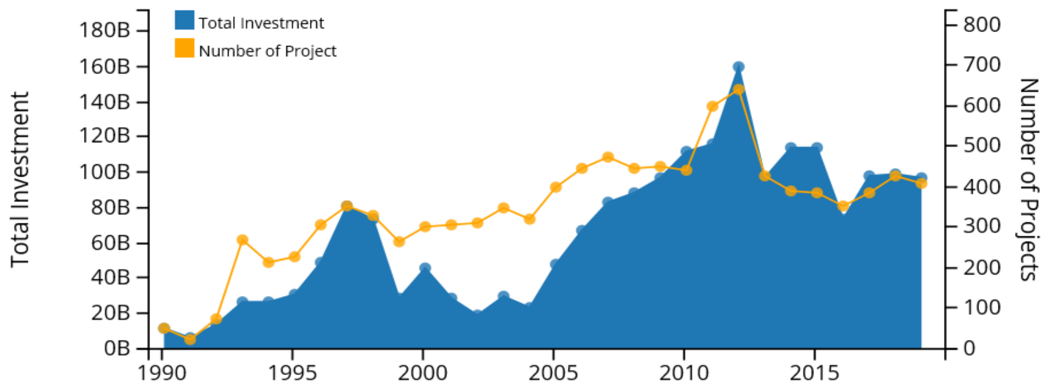
With these elements considered, PPP is defined as "A long-term contract between a public party and a private party for provision of public services, often involving bundling of some or all of services such as planning, engineering, procurement, financial mobilization, construction, operation and maintenance, in which risks during the contract is shared by both public and private while the fee to the private party is provided depending on performance of the private party".

Therefore, pure public infrastructure service and pure private infrastructure service under privatization are not PPP by definition. Privatization involves permanent transfer of ownership of infrastructure from public to private while ownership will be transferred to public sector after PPP contract expired under PPP arrangement.

2.2 PPP in Asia

According to the World Bank's Private Participation in Infrastructure (PPI) Project Database, which maintains PPP data in emerging and developing countries since 1990, with less than USD 20 billion in 1990, PPP investments in developing countries grew to over USD 160 billion in 2012. As of end of 2019, the total number of PPP projects implemented is 8,173 amounting and amount invested in developing countries accumulated to USD 1,959 billion in total. Investments in PPP have grown in absolute terms since 1991 with two notable periods of expansion, first before 1997 of the Asian financial crisis and second in 2012 as shown in Figure 2.1. However, the World Bank (2016) argues that investments in PPP as a percentage of GDP have remained low and flat in-between 0.2 to 0.6% in the last decade, without recovering the levels achieved prior to the Asian financial crisis, which is recorded as 1.1% in 1997.

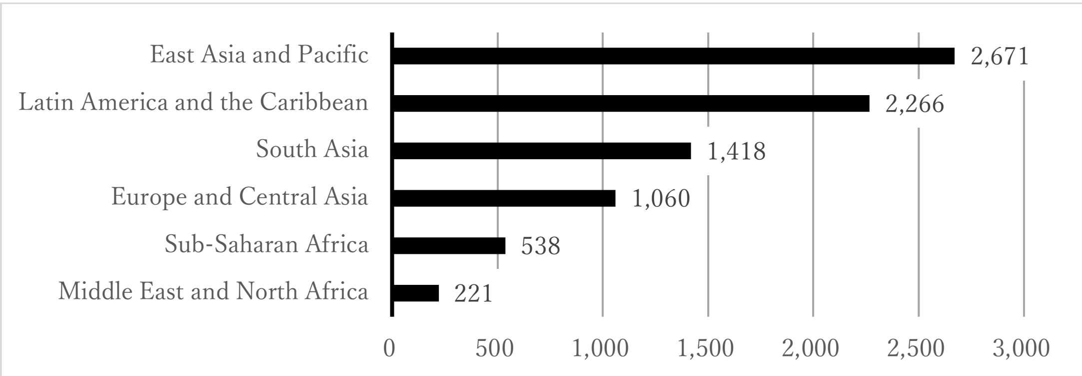
Figure 2.1 PPP Investment and number of projects in developing countries during 1990-2019 (unit: USD billion for total investment)



Source: PPI Database, the World Bank

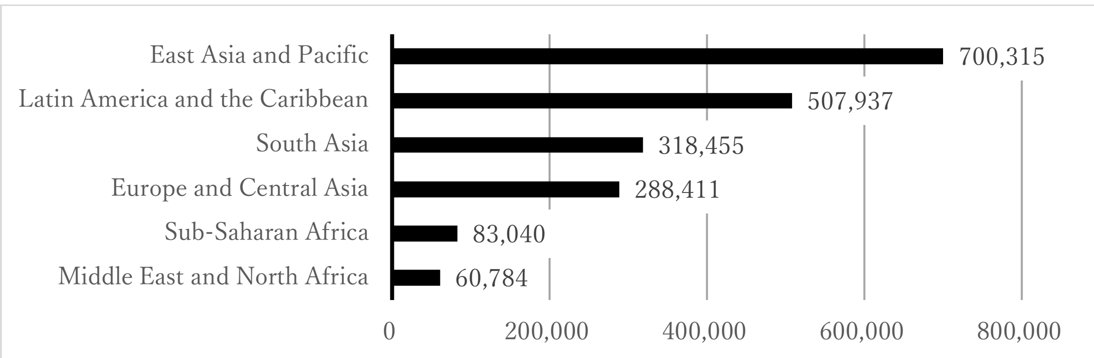
With regards to PPP investment trends in the various regions, figure 2.2 and 2.3 show regional distribution of PPP investment in developing countries for 1990-2019 both in terms of number of projects and investment. Figures show that East Asia and Pacific is the largest regions both in terms of number of projects and investment.

Figure 2.2 Regional distribution of PPP investment, 1990-2019 (in terms of number of projects)



Source: author using PPI Database, the World Bank

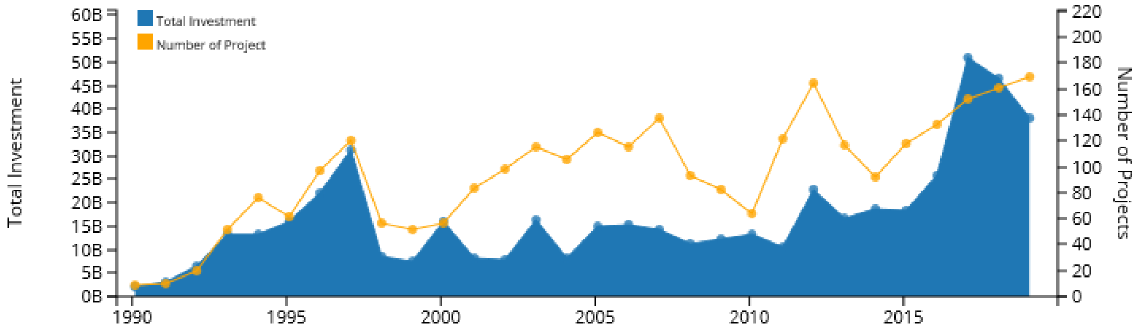
Figure 2.3 Regional distribution of PPP investment, 1990-2019 (in terms of investment in USD million)



Source: author using PPI Database, the World Bank

Figure 2.4 shows PPP Investment and number of projects during 1990-2019 for developing countries of East Asia and pacific. The figure shows that there is second peak, or resurgence, of PPP investment in recent years, which shows similar pattern for the whole developing countries as shown in figure 2.1.

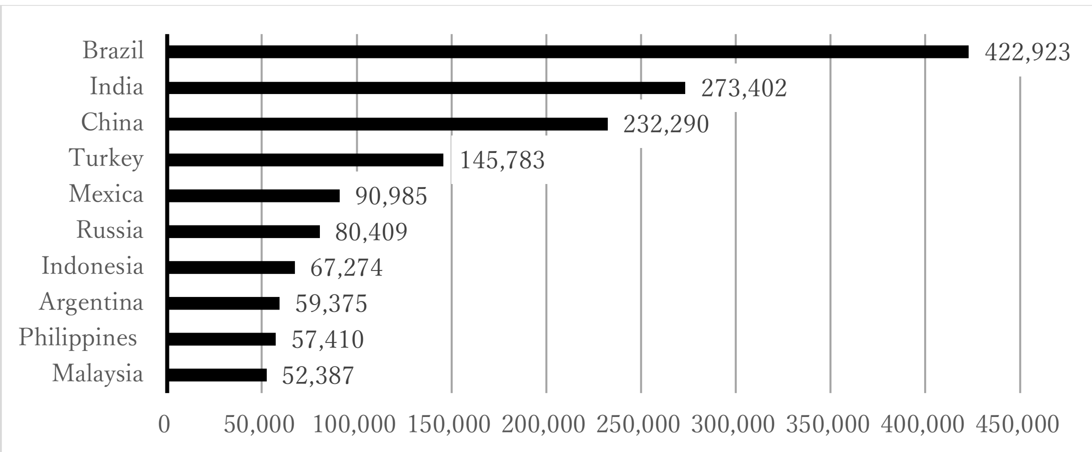
Figure 2.4 PPP Investment and number of projects during 1990-2019 for developing countries of East Asia and pacific



Source: PPI Database, the World Bank

However, China dominates PPP investment in East Asia and Pacific as USD 232,290 million, as Figure 2.5 shows, among total investments in East Asia and Pacific as USD 700,315 million, as Figure 2.3 shows, making share of China in the region as 33.2%. Second and third largest countries with PPP investments in the regions are Indonesia, USD 67,274 million, and the Philippines, USD 57,410 million (Figure 2.5)

Figure 2.5 Top 10 countries by investment, 1990 – 2019 (USD million)



Source: author using PPI Database, the World Bank

For the regions of Asia and the Pacific, the Asian Development Bank (ADB, 2017b) has reviewed the demand for infrastructure in these two regions, and adjusted for climate change adaptation and mitigation, ADB has estimated that there is a USD 1.7 trillion per year gap between 2016 and 2030. This infrastructure gap is estimated to be equivalent to

2.4% of GDP of the region, and when excluding China, the figure reaches to 5.0% of GDP. The ADB also argues that 2.0% of 5.0% of this gap may be financed by the public through future fiscal reform, however the remaining 3.0%, USD 250 billion per year, is clearly a significant financing gap for the infrastructure development in Asia and the Pacific to be filled by private finance including PPP.

3. PPP in the Philippines and Indonesia

This section depicts current status of infrastructure and PPP in the Philippines and Indonesia. The section also discusses background of recent resurgence of PPP in two countries by illustrating the transition of PPP Policy in the Philippines and Indonesia.

3.1 Infrastructure Gap in Two Countries

Regarding the current status of infrastructure development, rankings in the Global Competitiveness Index created by the World Economic Forum is often cited as an international comparison in recognized studies. Reviewing the Index, the ranking for infrastructure development for the Philippines, Indonesia and other ASEAN peer countries, Thailand, and Vietnam, are shown in Table 3.1. Philippine's ranking and the score are the lowest in comparison with other ASEAN peer countries listed. Meanwhile, both Indonesia and Vietnam have increased their ranking.

Table 3.1 Quality of overall infrastructure Ranking and Score[3] in ( )

	2010	2019
Philippines	104 (2.9)	96 (57.8)
Indonesia	82 (3.6)	72 (67.7)
Thailand	35 (4.8)	71 (67.8)
Vietnam	83 (3.6)	77 (65.9)

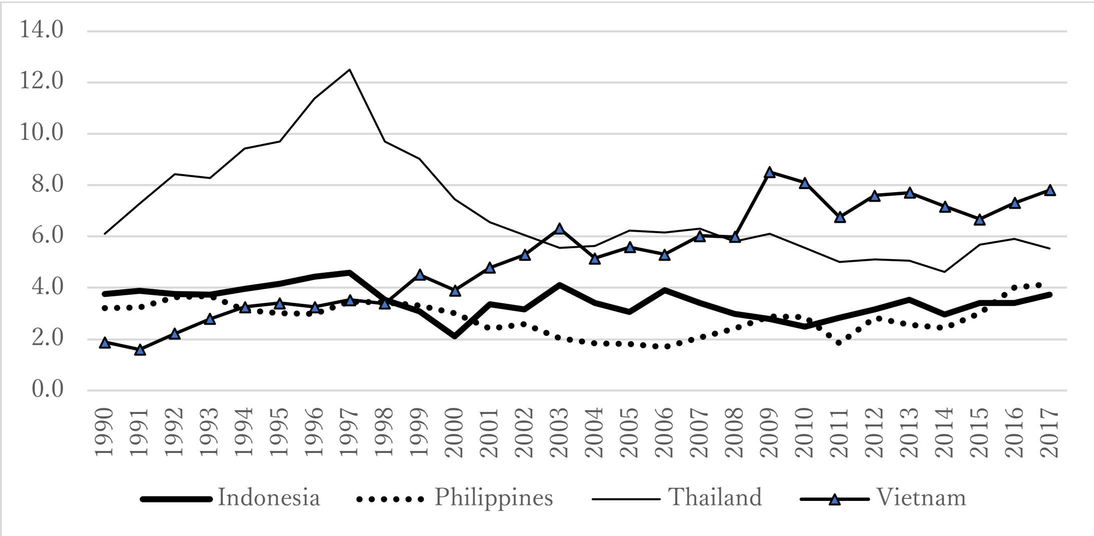
Source: author, World Economic Forum (2010), The Global Competitiveness Report 2010-2011 and World Economic Forum (2019) The Global Competitiveness Report 2019 data

One of the reasons behind this infrastructure development in the Philippines and Indonesia is the noticeably low level of public investment. Figure 3.1 shows general government investment[4] to GDP (%) in comparison with ASEAN peer countries. This explains that the public investment of both the Philippines and Indonesia had consistently been the lowest among ASEAN countries, averaging 2.8 %, for the Philippines, and 3.5%, for Indonesia, of GDP in 1990-2017, although the number is going up in recent years.

[3] Scale of score has changed from the 2018 report. Until 2017, the scale of score was 1-7, while since 2018, the scale of score has changed to 1-100. Therefore, the scores of 2010 and 2019 are not actually comparable.

[4] Although general government investment includes other investment than infrastructure, this data is often used as proxy of government infrastructure spending.

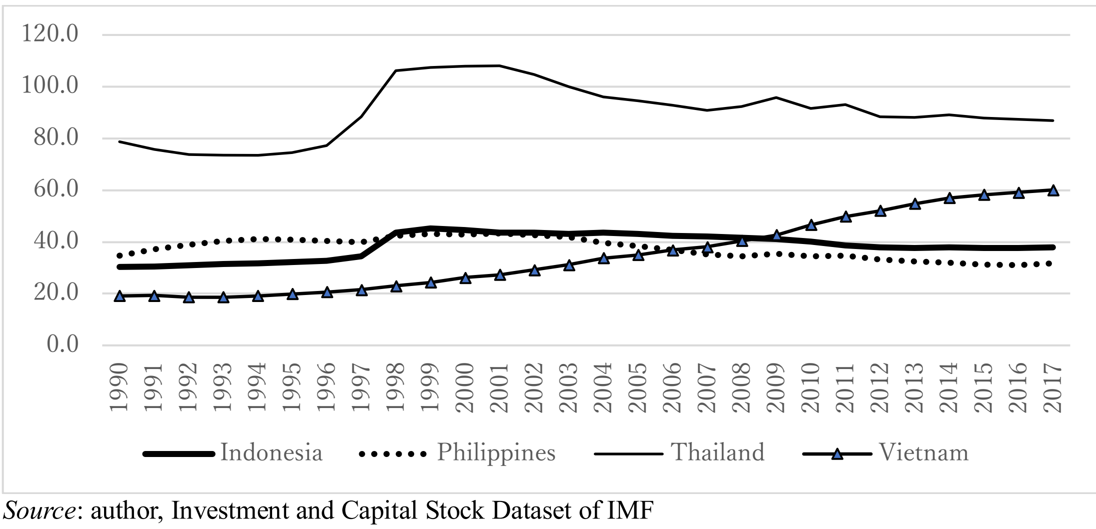
Figure 3.1 General government investment to GDP (%) in comparison with ASEAN peer countries



Source: author, Investment and Capital Stock Dataset of IMF

As a result, general government capital stock to GDP (%) for two countries is also the lowest among ASEAN peer countries as shown in in Figure 3.2. In addition to its low figures, the percentage is steadily decreasing in recent years which is alarming. IMF (2019b) argues that the difference of capital stock to GDP between the Philippines and that of ASEAN countries is more than 30 % while the average emerging economies' capital stock is 93% of GDP in 2015 which is almost three times as of the Philippines. However, we have to note that the government of the Philippines implemented privatization in power and water sector in the late 1990s and throughout 2000s. The decreasing trend of capital stock to GDP is partly due to transfer of assets from public sector to private sector under privatization in those sectors, especially in power in the Philippines.

Figure 3.2 General government capital stock to GDP (%) in comparison with ASEAN peer countries

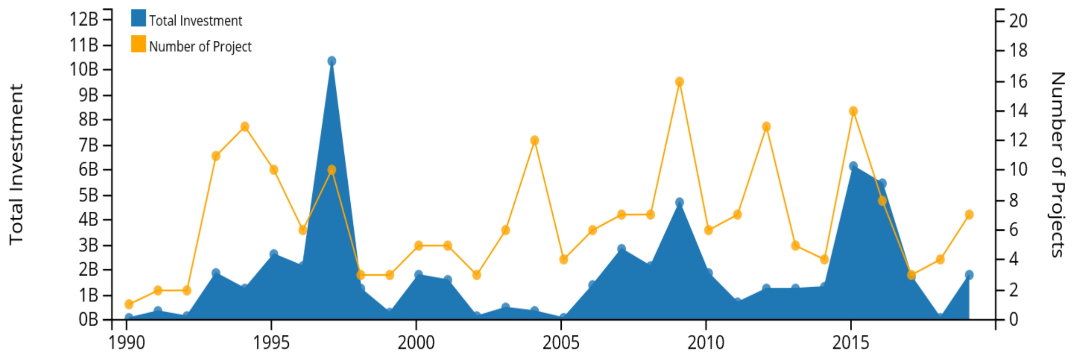


Source: author, Investment and Capital Stock Dataset of IMF

3.2 Overview of PPP Investment in the Philippines and Indonesia

According to the World Bank PPI Database, the PPP project in the Philippines accumulated USD 57,410 million totaling 166 projects from 1990 to 2019. Historical investments in PPP for the Philippines is shown in Figure 3.3. PPP investment peaked in 1997[5] but has been steadily contracting since 2002. This trend is similar with other developing countries as shown in Figure 2.1 and 2.4.

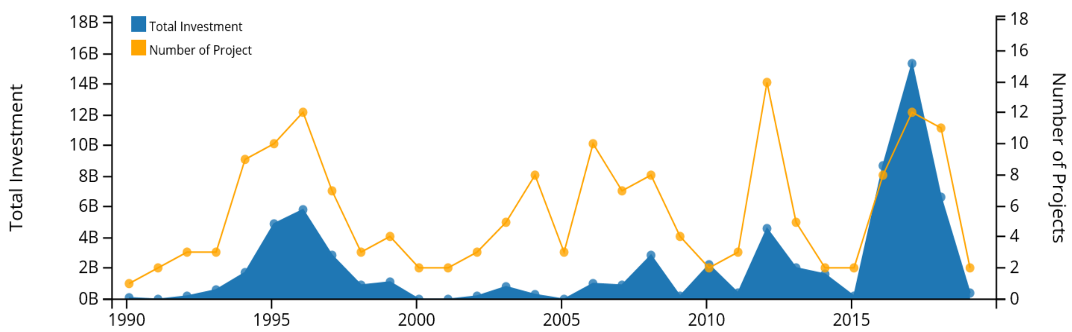
Figure 3.3 Investments in PPP infrastructure projects, 1990-2019 in the Philippines (unit: USD billion for total investment)



Source: World Bank PPI Database

On the other hand, PPP investments in Indonesia accumulated USD 67.2 billion totaling 140 projects from 1990 to 2019. In terms of investment value, Indonesia is the seventh largest country among the emerging countries. Historical investments in PPP for Indonesia is shown in Figure 3.4 with the first peak in 1996 as USD 5.8 billion and the second peak and largest ever in 2017 as USD 15.4 billion. The figure shows a recent huge investment increase in 2016 to 2018, making USD 31.0 billion USD for just these three years which accounts for about 46% of whole investments between 1990 and 2019. This is partly due to the outcome of recent improvements in the PPP framework in Indonesia which will be discussed later.

Figure 3.4 Investments in PPP infrastructure projects, 1990-2019 in Indonesia (unit: USD billion for total investment)



Source: World Bank PPI Database

[5] In 1997, investment was made in the two PPP projects in water sector which is the largest and third largest in the Philippines so far in the metropolitan area of Manila.

A comparison with other ASEAN neighboring countries is as shown in Table 3.2. This table also shows that two countries have a relatively good record of PPP both in terms of number of projects and investment volume.

Table 3.2 PPP projects for 1990-2019

	Number of Projects	**Investment (USD million)**
Philippines	166	57,410
Indonesia	140	67,274
Thailand	181	43,821
Vietnam	123	22,918

Source: author, World Bank PPI Database

Although PPP investments in these two countries are noticeable, the role of PPP in infrastructure development in the countries is minor and complementary. While figure 3.1 shows that general government investment to GDP ranges between about 2 to 4% for two countries, Zen (2018) argues that PPP investment contributes only less than 1% of GDP for selected Southeast Asian countries including two countries.

3.3 Transition of PPP Policy in the Philippines

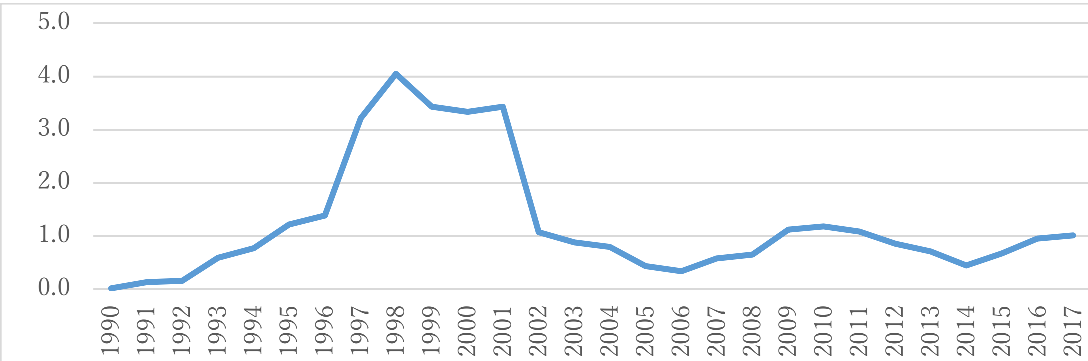
Addressing the issues of infrastructure deficit has been a top priority for every administration over the last five administrations[6] in three decades in the Philippines. In these decades, infrastructure development has been one of the core pillars of the Medium-Term Philippine Development Plan (MTPDP) of each administration. Canlas (2017) argues that the policy reforms in the government's infrastructure development program for the last three decades have been anchored on two major approaches: strengthen the tax policy and tax administration to enable the government to increase significantly its infrastructure spending and the strengthen of private provision of infrastructure. On the private sector participation in infrastructure development side, Llanto (2004) points out that the huge budget constraint faced by the government was instrumental in the shift in policy toward using private sector resources and expertise in infrastructure development. Apparently, policymakers viewed PPP as a more efficient and effective means to address certain types of infrastructure need of the country.

The Ramos administration (1992-1998) inherited the momentum for the importance of the role of the private sector in developing infrastructure in the Philippines from the Corazon Aquino administration (1986-1992). During the Corazon Aquino administration, the Republic Act No. 6957, BOT law of 1990, was enacted becoming the first BOT law in Asia. A BOT scheme is one of the modalities of PPP. Under the scheme, infrastructure is built and operated for a long term, usually between twenty and thirty years, by the private sponsor, then the said infrastructure is transferred to the public entity.

[6] The last five administrations since 1992 refer to the Ramos, Estrada, Arroyo, Aquino and Duterte administrations.

The Ramos administration also viewed the private sector participation, including privatization, as a key policy for infrastructure development. One of the most important developments during this administration was the enactment of RA 7718 in 1993 which amended the RA 6957 BOT law of 1990 to allow for various forms of PPP other than BOT. Through the amendments introduced by RA 7718 to the original BOT law, PPP including private financing represented a significant paradigm shift in infrastructure policy of the Philippines. As shown in Figure 3.3, PPP investments during the Ramos administration became very active and recorded the highest ever investment for a year, USD 9.5 billion in 1997. In 1998, PPP investment to the GDP ratio at 4% marked the highest ever in this administration, which is also very high by global standards (Figure 3.5). To help implement the new infrastructure policy and promote PPP, the Ramos administration established the BOT Center under the Office of the President[7].

Figure 3.5 PPP investments to GDP (%)



Source: author, the Investment and Capital Stock Dataset of IMF

Due to the failure of past administrations to increase investments in infrastructure, the Ramos administration had to face a debilitating electric power and water crisis, power being the most severe. Through the Electric Power Crisis Act (RA7648) of 1993, Congress granted President Ramos emergency powers to negotiate contracts for the construction, repair, rehabilitation, and maintenance of power plants and allowed the entry of private independent power producers. With these arrangements, total installed capacity of power increased by 73% from 6,949MW in 1992 to 12,067MW in 1998 (Llanto (2004)). This marked the beginning of the privatization of the power sector which continued into the Arroyo administration.

Water was another sector which experienced a major reform. The enactment of the National Water Crisis Act of 1995 (RA8041) paved the way for the privatization of water distribution in Metro Manila. The Metropolitan Waterworks and Sewerage System (MWSS), a national government agency retained ownership of the water infrastructure assets, but the operation and maintenance of the water system was handed over to two private corporations, namely the Manila Water Company Inc. and Maynilad Water Services Inc. through a water concessionaire agreement.

The telecommunication sector was the third sector which undertook a major reform

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[7] President Ramos issued Memorandum Order No166 directing the Coordinating Council of the Philippine Assistance Center (CCPAP) of the Office of the President to establish a BOT Center with the CCPAP Chairman as BOT Action Officer."(https://ppp.gov.ph/ppp-program/historical-background/)

during the Ramos era. The Public Telecommunications Policy Act of 1995 (RA7925) mandated the interconnection of all local telephone exchanges and the participation of several telecommunications service providers, which ended the telecommunication monopoly by the government. This law opened the sector to private players and improved service quality of telecommunication sector.

During the less than three years of the Estrada administration(1998-2001), there were no notable reforms nor policy developments regarding infrastructure development.

A very significant sectoral reform was implemented in the power sector at the beginning of the Arroyo administration (2001-2010). With the enactment of the Electric Power Industry Reform Act (RA9136) of 2001, the national power industry which had been monopolized by the National Power Corporation (NPC) up until then was opened up to private investments. The Act unbundled the electric power sector into generation, transmission and distribution. As a consequence, private firms invested in the generation and distribution systems while the operation and maintenance of transmission, which continued to be government-owned, was privatized. The Act also introduced the Wholesale Electricity Spot Market (WESM) where generating companies could sell their electricity to WESM and supply is then bid out to distribution companies.

The Aquino administration (2010-2016), which took office in 2010, reviewed the existing infrastructure development policies, which depended mainly on the government budget and ODA under the previous administration. As a result of the review, the administration prioritized infrastructure development and launched an aggressive PPP program in November 2010[8]. Ten priority projects were identified, targeting about USD 4 billion in private capital. PPP became the principal mechanism for infrastructure development. With this policy shift, PPP investment during the Aquino administration underwent a rapid increase as shown in Figure 3.3. The main achievements in PPP by the Aquino administration are the following;

1) establishment of a government agency, the PPP Center, for the promotion of PPP schemes and assistance in the formulation, implementation and monitoring of PPP projects,

2) the creation of the PPP Governing Board (PPPGB), which is chaired by the Director General of NEDA and composed of oversight departments including the Department of Finance (DOF) and Department of Budget and Management (DBM) for overall policy directions on PPP,

3) establishment of The Project Development and Monitoring Facility (PDMF) to support PPP project formation,

4) creation of PPP Fund called he Philippine Investment Alliance for Infrastructure Fund (PINAI Fund),

5) Relaxation of Single Borrowers' Limit.

In June 2016, the Duterte administration (2016-2022) announced the “0 to 10-point Socio-Economic Agenda”, which listed its most important socio-economic priorities. One of the agenda items was infrastructure and PPP. The Agenda states: “accelerating annual infrastructure spending to account for 5% of the gross domestic product (GDP), with public-private partnership playing a key role”. In April 2017, the administration announced a large-scale infrastructure investment program called the “Build, Build, Build”

[8] The Aquino administration focused on solicited PPP schemes, making unsolicited PPP schemes as an exception.

program, which the government promised to be the "golden age for infrastructure" in the Philippines. The Duterte administration announced a flagship infrastructure investment program called "Build, Build, Build" of 8.4 trillion pesos (about USD 168 billion) which includes 75 large-scale flagship infrastructure projects in 2017. It envisages to increase the infrastructure investment rate to 7.3% of GDP by 2022, with an average rate of 6.8% during this period, significantly higher than the average of 2.9% of GDP for the Aquino government and 1.9% of GDP for the Arroyo administration. As a financial source of such a large-scale infrastructure development plan, the Duterte administration made a drastic shift from PPP to financing through the government budget and ODA. Out of 75 flagship projects, there are only nine PPP projects, while the number of projects under ODA and public finance were 53 and 13, respectively. The then government believed that PPP cannot address the large demand for infrastructure projects based on actual experience.

The ambitious planned infrastructure investments will necessarily require commensurate funding. In this regard, the Duterte administration packaged a comprehensive tax reform package that is expected to raise revenues and improve the tax system in the country. The first component of the comprehensive tax reform package was the reform of personal income taxation under the Tax Reform for Acceleration and Inclusion (TRAIN) Act enacted in 2017[9]. The government has proposed legislation on the next component of the tax reform package which will review the fiscal incentives given to foreign direct investment and reduce the corporate income tax to make it at par with corporate taxation in other ASEAN countries.

As for ODA, the Philippine government has high expectations to receive financing from multilateral institutions such as the ADB, which seeks to provide more infrastructure loans relative to its former focus on program loans. As for bilateral donors, Japan, China and South Korea are high on the list of ODA partners especially Japan for "Quality Infrastructure Initiative" and China for "One Belt One Road Initiative". The government also expects the Chinese-led Asian Infrastructure Investment Bank (AIIB) to support its increase in infrastructure as well.

However, in November 2019, the administration revised the list of flagship infrastructure projects with more emphasis on PPP. The revised list, which has 100 projects instead of 75, has 29 in the PPP mode while the previous list only had 9 projects under such a mode although the majority of projects are still under public finance and ODA both in terms of number of projects and project cost (Table 3.3). Another notable development in this revision is the large share of the unsolicited mode under PPP, accounting for 73% of total PPP in terms of project cost.

Table 3.3 Summary of revised list of flagship infrastructure project

	Number of Projects	**Project Cost (Billion Peso)**	**% of Project Cost**
Public Finance	22	172	3.9
ODA	49	2,447	55.7

[9] Republic Act No. 10963 or the Tax Reform for Acceleration and Inclusion (TRAIN) Act was signed into law on December 19, 2017. It is the initial package of the Comprehensive Tax Reform Program (CTRP), a bold tax reform program envisaged by the Duterte administration.

PPP (solicited)	14	476	10.8
PPP (unsolicited)	15	1,297	29.6
Total	100	4,392	100.0

Source: author, NEDA data as of February 2020

Although this development to give a greater role to the PPP is welcome, there are two issues to note. First, on the issue of unsolicited PPP. One of the advantages of unsolicited proposals is that project preparation, including conducting a feasibility study, is done entirely by the private proponents. In this context, unsolicited proposals appear as mechanisms to supplement government's capacity, sometimes inadequate, for infrastructure project preparation including the mobilization of manpower and financial resources to implement the project. The basic issue against unsolicited proposals is weak or even the absent of competition. Allowing a competitive bid challenge is one way to introduce competition, Engel, Fischer, and Galetovic (2014) argue that unsolicited proposals lack competition, suffer from opaqueness and leaves room for corruption. In the case of the Philippines, this competitive bid challenge is called the "Swiss challenge". The time period for a Swiss challenge is 60 working days in the Philippines. The original proponent is allowed to match a lower-priced challenge within this period of time. Considering the large scale and complex nature of infrastructure projects, 60 working days may not be enough to prepare a competitive bid to match the original proponent. Therefore, original proponents generally have a decisive advantage over other potential bidders. In the past, only one matching proposal in 12 unsolicited projects in the Philippines submitted under the Swiss challenge was awarded the contract over the original proponent (Llanto 2010). Therefore, the issue of weak or absent competition under the unsolicited PPP should be carefully considered when implementing these unsolicited PPP projects.

Second, the administration is now not inclined to include such provision as: 1) automatic rate increases, 2) commitment of non-interference, and 3) non-compete clauses for the PPP project under the revised list as the administration deems that "the government has been tied to (these) provisions, which strip it of its ability to require concessionaires to improve services, all of which have been detrimental to the public interest"[10]. The impact of the non-inclusion of these provisions on the investors' sentiment should be further examined.

3.4 Transition of PPP Policy in Indonesia

Indonesia's PPP started with two sectors, electric power and road development based on Law 15/1985, Government Regulation 10/1989, and Presidential Decree 37/1992 for electric power and Law 13/1987 and Government Regulation 8/1990 for the road sector. Presidential Decree 55/1993 was also introduced for land acquisition. The first Indonesian PPP regulation which covers all sectors was Presidential Decree No.7 of 1998 with the

[10] The statement by Mr. Vivencio B. Dizon, the Presidential Adviser for Flagship Programs and Projects who also serves as the President and CEO of Bases Conversion and Development Authority (BCDA), on November 6, 2019 posted on the BCDA website. (https://bcda.gov.ph/neda-approves-revised-list-infra-flagship-projects)

assistance by the World Bank and USAID (United States Agency for International Development). The Decree stipulated a partnership between the government and the private sector in infrastructure development and management.

With the introduction of these laws and regulations, PPP investment increased especially in the electric power sector, mostly in the form of IPP (Independent Power Producer). However, after 1997, investment had steadily decreased both in terms of volume of investment and number of PPP projects as shown in Figure 3.4 partly due to the financial crisis of 1997. During this period (1997 to 2000), government infrastructure spending in terms of percentage of GDP had a sharp drop from 4.6% to 2.1% (Figure 3.1) which was also affected by the Asian financial crisis.

The Yudhoyono administration (2004-2014) introduced the Presidential Regulation No. 67 of 2005 to replace Presidential Decree No.7 of 1998 for the PPP framework. The regulation was strengthened by Presidential Regulation No. 13 of 2010, No. 56 of 2011, and No. 66 of 2013. These regulations stipulated the 1) eligibility of types of PPP projects and government agencies, 2) role of the private sector, and 3) responsibilities of the government including the Ministry of Finance in support and guarantee of the project framework.

Important government financial support mechanisms were also introduced in this period. First, the government guarantee. If a specific event stipulated in the PPP contract occurs, the government agency is obliged to pay the debt to the private sponsors according to the contract. If that government agency cannot pay the debt, it is expected that the government pays the contingent liabilities. In response to this, Indonesia Infrastructure Guarantee Fund (IIGF) was established as a state-owned company to appraise and guarantee infrastructure PPP projects in 2009 with assistance by the World Bank. IIGF guarantees political risk, performance risk[11], and demand risk. Those risks are evaluated by the Risk Management Unit of the Ministry of Finance. It should be noted that only risks which are shouldered by the government and state-owned enterprises are guaranteed. Also, payment from IIGF to private party are recovered from the concerned government agency later based on recourse agreement concluded from time to time between IIGF and the concerned government agency.

Second important development on the financial support by the government in PPP is the creation of PT Sarana Multi Infrastruktur (PT SMI) by Government Regulation 75 of 2008 which provides loans and equity investment to PPP projects. The state own enterprise (SOE) also provides advisory services and project preparation and development facilities for PPP projects.

Third, under the PT SMI, Indonesia Infrastructure Finance (IIF) was established in 2010 as a private institution which also provides financing for PPP projects. IIF's shares are held mainly by PT SMI, the International Finance Corporation (IFC), World Bank Group member, the ADB, the German Investment Corporation, and Sumitomo Mitsui Banking Corporation of Japan among others.

The fourth government financial support for PPP is the introduction of the Viability Gap Financing (VGF) scheme was set up in 2012 by Ministry of Finance Regulation No. 223/2012 which was later amended by the Ministry of Finance Regulation No. 170 of 2018. VGF is government support through the Ministry of Finance, in the form of a financial contribution given to PPP Projects with economic viability to improve its

[11] The risk of under-performance of the completed project

financial viability and effectivity. Government support is given to PPP projects to partially fund the construction costs of PPP projects, provided that such funding does not dominate the construction cost of the PPP project.

In 2014, with the Presidential Regulation No. 75 of 2014, the Committee for Acceleration of Priority Infrastructure Delivery (KPPIP) was established to act as the point of contact to facilitate coordination for national strategic projects and priority projects. With its vision of “Champion in Managing and Delivering the Strategic and Priority Infrastructure Projects in Indonesia”, KPPIP’s main objective is the coordination in decision-making processes to encourage settlement of issues arising from the lack of effective coordination between the various stakeholders. KPPIP is chaired by the Coordinating Minister of Economic Affairs with membership comprising of the Minister of the National Development Planning, the Minister of Finance, the Minister of Agrarian and Spatial Planning, the Coordinating Minister of Maritime Affairs and the Minister of Environment and Forestry. As of October 2019. KPPIP has identified 37 priority projects covering eight sectors.

Infrastructure development was one of center pieces of President Joko Widodo’s election campaign. With this back ground, infrastructure policy became a top concern for the key economic policy-makers of Joko Widodo administration which started in October 2014.

With this background, the “National Development Plan 2015-2019” of Indonesia was announced. The plan requires $409 billion to cover infrastructure investment which includes 1,000 km of highways, 2,650 km of roads, 3,258 km of railways, 15 new airports, 24 new seaports, and bus rapid transit in 29 cities, among others. The financing plan of this Development Plan is the national budget (50%), state-owned enterprises (SOEs) (19%), and private or PPP (31%), which clearly shows a high expectation by the administration for PPP program. Annual investment volume over this planned period is about USD 82 billion an equivalent to 9-10% of the nominal GDP. It should be noted that this investment volume is very challenging considering the historical trend shown in Figure 3.1. To fund USD 127 billion through PPP over a five-year period is also very challenging even for OECD countries with a mature PPP environment.

One of the developments to support the Development Plan was shifting the budget from energy subsidies to other prioritized area including infrastructure. Another and more important development are the introduction of Presidential Regulation No. 38 of 2015 which the covers the cross-sector PPP regulatory framework that replaces Presidential Regulation No. 76 of 2005 and supplemental regulations. The regulation includes expansion of coverage of the PPP in the social sector such as education, sports, health, and public housing. Allowing bundling of several PPP projects into one PPP project is another feature of the regulation.

However, the most significant item of the regulation is the introduction of the availability payment scheme[12] as a source of investment return in addition to the user fee payment scheme. The availability payment scheme is one of the popular schemes found in mature PPP markets that aims to attract private participation in PPP. This scheme is targeted for the sectors where the government is not an off-taker of the infrastructure services. It should be noted that the availability payment will not be provided for the PPP

[12] Availability of the payment scheme is an annuity payment scheme operational during the PPP contract period.

project supported by VGF in case the central government is the contracting agency[13].

4. Assessment of PPP Governance in the Philippines

As argued in the earlier sections, PPP have played a complementary role in developing public infrastructure in the Philippines and Indonesia to respond to the pressures of fiscal shortfalls and public debt. However, despite expectations for PPP to deliver quality and efficient infrastructure services, the PPP experiences in two countries suggest the mixed results.

In this section, assessment of PPP governance will be argued based on the discussions in the previous sections in the paper by focusing on the case of Philippines. PPP governance is defined as to the ways to govern and implement the government's PPP strategy and program. In this connection, the decision-making process whether a particular infrastructure project is formulated and implemented as a public finance project or as a PPP project by government is one of the most important issues in the PPP governance.

4.1 Assessment of Transition of PPP Policy in the Philippines

Although infrastructure development has always been one of center pillars of the socio-economic development agenda over the time with government's expressed commitment for development of infrastructure, the infrastructure gap in the Philippines has not substantially narrowed over the last five infrastructure regimes. Government spending on infrastructure has been low in comparison to other ASEAN peer countries as discussed in the Section 3.

This situation causes the general government capital stock low as well, discussed in Section 3. One of the reasons cited in the past by many authors and institutions was limited fiscal space for infrastructure development. Limited fiscal space has always been identified as the main constraint to infrastructure investments but, if past experience is a good basis for assessment, poor infrastructure planning, poor project preparation and execution are also serious factors that hinder greater infrastructure investments. Perhaps these factors are even the real reasons behind the poor investment performance.

Policy reforms and developments related to infrastructure have been carried out mainly in four different areas: regulation, institution, finance and specific sectors. With regards to infrastructure financing, there have been two main areas of reform: improving fiscal space and better utilization of private finance.

Faced with a high public debt and low revenues, each administration of the Philippines in the last three decades introduced major fiscal reforms to finance development priorities, including public infrastructure. Thus, fiscal space has expanded under the Aquino administration, and the Duterte administration has pushed for tax reforms to finance its ambitious Build-Build-Build program. It is noted that the Duterte administration has achieved the first stage of its comprehensive tax reform program. The country has also recently attained an investment grade rating on its public debt and this improved investment grade rating bodes well for mobilizing funds for infrastructure development. The Duterte administration policy reforms have paid off in terms of improvements in the fiscal situation, fiscal deficit and public debt to GDP.

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[13] In case the local government is the contracting agency, both VGF and availability payment can be provided.

PPP, of course, is one way to tap private finance. On utilization of private finance, PPP regulatory and institutional reforms have been introduced as well making the Philippines the best ASEAN environment for PPP. It seems that with these reforms in place, addressing the infrastructure gap is now more about effective project design, construction and implementation rather than financing per se.

One of the challenges of infrastructure development in the last three decades is the continuity of policy and priority. The tendency to shift policy without hard evidence favoring the shift further constrains infrastructure development and financing. Policymakers must remember that it takes more than one presidential term of six years to complete a large infrastructure, considering every step of plan, namely design, finance, procurement and construction. Some larger infrastructure projects may even require a master plan before undertaking a feasibility study. It has often been the case that the lack of a comprehensive and internally consistent master plan for spatial development and public transportation has resulted in failure to improve.

Although the international recognition of the PPP environment of the Philippines is relatively positive, results of some of PPP projects are mixed. OECD (2016) argues that the Philippine government tended to take excessive risks in past contracts, particularly foreign exchange and demand risks, to extend overly generous guarantees, and to shoulder heavy contingent liabilities. PPP succeeded in introducing electric power generation projects in the 1990s by mobilizing USD 8 billion, resulting in additional 8,000 MW of capacity. On the other hand, in a number of those PPP electric power projects, "take-or-pay"[14] mode was introduced. In this situation, private side were able to off load demand risk and, therefore, government took all the demand risk by either buying all the electricity generated by private power producer or paying a penalty to the power producer if the government is not able to purchase the electricity . This is part of the reason that the current Philippine electricity tariff is one of the highest in Asia.

Another example of the government taking a demand risk can be witnessed in the Metro Rail Transit Line 3 project (MRT 3) through a Build-Lease-Transfer (BLT) scheme which is perceived as a failed PPP project in the Philippines. This BLT scheme means that: 1) the rail system is built by the private proponent with its financing, 2) the system is leased to the Philippine government for 25 years for operation, and 3) the asset of rail system is transferred to the government by the private party after 25 years. In this BLT contract, it is agreed that private side is guaranteed to be paid a secured 15% Internal Rate of Return (IRR) on dollar basis which is a rather favorable arrangement for private proponent. The difference between lease fee to be paid to private proponent by the government of the Philippines and revenue from ride fare is subsidized by the Philippines government. Therefore, after completing the construction work, private proponent had little incentive to improve the asset of MRT 3.

To make the matters worse, ride fares were kept low even in comparison with bus fare along the same route. When MRT 3 started operation, the ride fare was almost double the fare of mini bus along the same line. After knowing that MRT 3 were running almost empty due to ride fare fee, the then President Estrada ordered Department of Transport and Communication, a government department responsible for this project, to reduce the fare by almost half. While with this fare reduction, ridership of MRT 3 improved, but the

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[14] With the "take-or-pay" contract, one contracting party either takes the product from the other party, supplier, or pays the supplier a penalty. For any products the party takes, they agree to pay the supplier a certain price.

Philippine government was heavily burdened by subsidizing the project. According to one of the reports, passengers of MRT 3 are charged an average of Philippine Peso 12.40 per trip while they should be charged Peso 53.96 per trip to recover the leasing fee, resulting in the government shouldering the remaining P41.56, which translates to 77% of the fare[15]. ADB (2016) estimates that subsidy by the Philippine government is USD 12.5 million per month during the 2014-2024 period while it was USD 3.3 million per month in 2008.

There are mainly two lessons from this failed PPP of the MRT 3. First, PPP is not "free money". The Philippine government expected to be receiving a critical infrastructure project free of charge, at least in the short term, since the construction and procurement was fully responsible under the private proponent. Agreeing to guarantee a 15% IRR and, moreover, on dollar basis although the fare is denominated in Philippine Peso is very much advantageous to the private side. Faced with the heavy traffic congestion along EDSA street, tight fiscal situation in the early 1990s and less experience with PPP, Philippine government at the time may not have much option but accept the unsolicited proposal for MRT 3.

LRT 1 and 2, another urban rail networks in Metro Manila, were both developed by public investment and managed by a government agency called Light Rail Transit Authority (LRTA). LRT 1 was inaugurated in 1984 by the Belgium export credit and capacity expansion was financed by ODA of Japan. LRT 2, which was inaugurated in 2003, was also financed by ODA of Japan. Considering that other urban rail systems in Metro Manila, namely LRT 1 and 2 were procured and financed publicly, one can argue that MRT 3 should not have been developed by PPP, but public investment.

4.2 Assessment of PPP Governance in the Philippines

In the Philippines, PPP are governed by the Amended BOT Law (Republic Act No. 7718) and its Implementing Rules and Regulations (IRR), which is distinct and separate from the Republic Act No. 9184, entitled "An Act Providing for the Modernization, Standardization and Regulation of the Procurement Activities of the Government and for other Purposes," otherwise known as the Government Procurement Reform Act, which governs non PPP options.

Implementing agencies of the infrastructure project, such as the Department of Public Works and the Department of Transport, are tasked to undertake the planning and programming of their projects aimed at specific agency targets and priorities. It is in this planning and programming process where identification of the finance option, whether funded by public finance or PPP is sorted out and determined. This process does not involve any type of test, stipulated in any of the government rules and regulations, whether which finance option, public finance or PPP is appropriate for the project being formulated by implementing agencies. In case of the unsolicited PPP projects, they are not defined at this stage as unsolicited projects at the initiated by the private sector.

During the review process of the implementing agencies, implementation analysis or viabilities of the said project will be the main agenda. Therefore, a finance option test is not undertaken independent on the budgets, financing and/or operational considerations

[15] "Messed-up mass transport system", The Manila Times, February 9, 2014. https://archive.is/20140423062613/http://www.manilatimes.net/messed-up-mass-transport-system/74431/#selection-423.0-423.17

in the current framework.

After project preparation by the implementation agencies, the next step is the review and approval by an inter-agency committee called Investment Coordination Committee (ICC).[16] However, the finance option of the projects has already been decided by the implementation agency by the time of ICC. Economic and financial evaluation are presented at the review and approving process at ICC on the basis of the finance option already decided by implementing agencies. Although the review process of ICC can question the finance option selected for the project, the concerned agency will then justify and establish why such is the appropriate option.

Rigorous decision-making process, including Value for Money (VfM) analysis, to determine the most suitable finance option for a particular infrastructure project is not stipulated in the existing guidelines and framework for the review and approval process of the Government of the Philippines. VfM means achieving the optimal combination of benefits and costs in delivering infrastructure services for users of infrastructure. In matured PPP countries including UK, PPP programs require an assessment of whether a PPP is expected to deliver better value for the public than public finance. This assessment is value for money analysis.

VfM analysis usually have two approaches: qualitative and quantitative approaches. Qualitative VFM analysis involves review of whether a proposed project is likely to be suitable for private financing, and whether the design of PPP structure to achieve value for money. Quantitative analysis of value for money involves comparing the PPP option against a Public Sector Comparator (or PSC), the project costs if implemented through traditional public finance.

Therefore, implementing agencies are not required to carry out a finance option test, including VfM analysis, before finally deciding to take the PPP option or not for each specific project. This is also the same in the review and approval of the ICC. If there is such a mechanism to validate the appropriate finance option of the project being review, failed PPP cases such as MRT 3 as discussed in Section 4.1 may have been avoided.

It is argued that in the history of public infrastructure development, public finance has been a mainstream option. In the Philippines, PPP is relatively new to many implementing agencies compared to their core competencies on the traditional public finance option, although there is a directive to have PPP units to improve their PPP readiness but it is up to each agency to follow this directive or not. PPP, therefore, is not yet fully integrated into the government process to the same degree as the public finance.

Against this backdrop, the Philippine government, through the PPP Center, has been facilitating the implementing agencies' decision-making process in choosing the PPP option at planning and programming stages in the forms of capacity building, including training and technical guidance. The Center also developed policy circulars such as multi-criteria analyses which look at the project's initial viability indicators and the agency's readiness to undertake the PPP procurement process.

In addition, the Project Development and Monitoring Facility (PDMF), discussed in Section 3, can be utilized to assist the line agencies for diligent PPP structuring and procurement by providing transaction advisory support.

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[16] The ICC consists of the Secretary of Finance, as chairman; the NEDA Director-General, as cochairman; and the Executive Secretary, the Secretaries of Agriculture, Trade and Industry, Budget and Management and the Governor of the Central Bank of the Philippines, as members.

5. Policy Recommendations and Conclusions

This section argues that, based on discussions of decision-making processes for financing mode, public finance or PPP, in the Philippines, PPP governance should be strengthened. As policy recommendations, the section discusses the introduction of finance option test in pre-investment stage including value-for–money approach to achieve the effectiveness of PPP.

Section 4 argued that the nonexistence of the finance option test during the implementing agencies' decision-making process as well as inter agency decision-making process for the investment project, ICC is problematic. Implementing agencies formulate and prepare a project on the assumption that the finance option is determined by the same agency, correctly. However, in reality in the Philippines and most of other developing countries including Indonesia, decision-making of the finance option by implementing agencies are influenced by not only the characteristics of the particular project but also budget allocation and other non-technical considerations, including political considerations. This may create a potential distortion in the decision-making on the choice of finance option.

Therefore, it is desirable for not only the implementing agencies but also the government as a whole to be very clear about the best finance option as early as the planning and programming stage. The explicit and diligent process of the finance option test at the entry point of the project formulation is a positive way of helping the concerned agency decide which finance option, public finance or PPP, is more appropriate for the project at hand.

The test to determine the most appropriate finance option should be diligently undertaken, similarly to the other critical viability tests, including financial, economic, and operational. The test should include the following elements: a) infrastructure services and outputs of the project and performance of the private proponent are to be specified and monitored clearly, b) the possibility of the proper allocation of risk between public and private, and c) the possibility of the private sector introducing innovation into the project that will enhance the project objectives.

Actually, these elements, especially the first one called contractibility, are major factors for delineating the role of public finance and PPP. If the quality of the services by infrastructure is relatively easy to be defined and monitored, such as a road project, PPP could be a better option. On the other hand, if the services itself is complex and difficult to translate the goals of the infrastructure into a quantifiable manner, such as education, PPP may not be the best option while public finance may. Although contractibility of quality is a fundamental factor in the decision-making process for the finance option, other factors should be considered. These factors include characteristics of a particular project including economic and financial viability, economic environment of the host country, capacity of the implementation agency for the PPP transaction, and possible interests of the private sector, domestic and international, for the PPP project in addition to the above mentioned elements as proper risk allocation and risk possibility with the introduction of the private sector's innovation into the project under review.

The test may also include conducting a market sounding exercise at the project planning and project structuring stages to gauge the appetite of the private sector for a possible PPP option. If the response is not positive, the implementation agency can either restructure the project as a more suitable PPP scheme or consider public finance option.

With the above consideration, the followings are procedures to be incorporated. First, economic and financial evaluation of the project should be carried out to validate its viability and the necessity of the project. Subsequently, the finance option test will be undertaken to determine the appropriate finance option explicitly. Third, after the appropriate finance option is determined, the implementing agency(s) will be involved with budgeting and other financing matters. Finally, the inter-agency committee, ICC, will review the project overall and make its recommendations (approve / disapproved; approve with suggested changes, etc.) on the project including the appropriateness of its proposed finance option.

According to NEDA's website[17], ICC has the following functions:

a. Evaluates the fiscal, monetary and balance of payments implications of major national projects, and recommends to the President the timetable of their implementation on a regular basis;

b. Advises the President on matters related to the domestic and foreign borrowings program; and

c. Submits a status of the fiscal, monetary and balance of payments implications of major national projects.

Discussion of the appropriateness of the finance option could be a part of the evaluation of "fiscal, monetary and balance of payments implications" of infrastructure project. Therefore, even within current framework, some improvements could be made without substantially changing procedures and guidelines.

However, if this finance option test is integrated into the government review and approval system, clearly and transparently, the review of the existing framework of the legal, budgeting and procurement guidelines and regulations is necessary to redesign this decision-making process in a very comprehensive manner. It is of critical importance to introduce a unified system of project formulation, review, and approval regardless of the financing mode such as public finance, ODA, or PPP. By doing so, the most appropriate finance option could be clearly recognized and employed.

In addition, although if investment decision are unified regardless of finance option, the current legal framework base of each finance option is different: the Amended BOT Law (Republic Act No. 7718) and its Implementing Rules and Regulations (IRR) for PPP and the Government Procurement Reform Act (Republic Act No. 9184) for public finance. Therefore, unifying the whole system which involves legislation action is a challenging task.

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[17] http://www.neda.gov.ph/investment-coordination-committee/ accessed on August 7, 2020.

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