

Llanto, Gilberto M.; Zen, Fauziah

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For comments, suggestions or further inquiries please contact:

The Research Information Staff, Philippine Institute for Development Studies

5th Floor, NEDA sa Makati Building, 106 Amorsolo Street, Legaspi Village, Makati City, Philippines

Tel Nos: (63-2) 8942584 and 8935705; Fax No: (63-2) 8939589; E-mail: publications@pids.gov.ph

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GOVERNMENTAL FISCAL SUPPORT FOR FINANCING LONG TERM INFRASTRUCTURE PROJECTS IN ASEAN COUNTRIES

Gilberto M. Llanto and Fauziah Zen¹

Summary

This paper discusses governmental fiscal support for financing long term infrastructure projects in ASEAN countries. More specifically, it discusses the role of guarantees and subsidies in promoting PPP projects. It draws on case studies of Philippine and Indonesian PPPs, and information from secondary sources to highlight the critical role of such fiscal support in making feasible the financing of long term infrastructure projects that may be economically beneficial but commercially or financially unviable without such support. The paper points out the need for a strong fiscal position and analyses the implications of guarantees and subsidies on fiscal management. An important insight is the need to secure budgets for long term infrastructure projects, which may be done through a medium term expenditure framework. Based on the analysis of Philippine and Indonesian case studies, it provides specific recommendations to improve the implementation of PPP projects.

Key words: public-private partnerships, infrastructure, fiscal space, contingent liabilities, subsidy, government guarantee, affermage, concessions, turnkey contracts, medium term expenditure framework, fiscal risk

¹ Senior Research Fellow, Philippine Institute for Development Studies, and Researcher, Economic Research Institute for ASEAN and East Asia, respectively.

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Dr. Fauziah Zen wrote the sub-sections on the Indonesian government fiscal support to PPPs (Section 3.4), case studies for infrastructure projects in Indonesia (Section 3.5), and fiscal management policy in Indonesia (Section 4.3).

1. Introduction

Governments have traditionally relied on internally generated funds, e.g. tax revenues and borrowing from domestic and foreign capital markets to finance the provision of infrastructure. Public funds have been used for infrastructure provision but fiscal deficit problems and the problem of providing budgets to a host of public expenditure items constrain the availability of funds for infrastructure. The insufficiency of domestic capital and the difficulty and the higher cost of borrowing normally faced by developing countries have limited the ability to invest in infrastructure.

More recently, private capital, and managerial and technical expertise made available through various public-private partnership (PPP) schemes have played a significant role in addressing the infrastructure lack in a number of developing countries. In the last two decades, tapping PPP has produced much needed infrastructure in a few ASEAN countries. The Philippines relied on private sector participation to address a severe energy problem in the early nineties. Thailand's expressways and telecommunications sector were funded by private capital.

Thus, PPP presents itself as a feasible mechanism to address the infrastructure lack in developing countries, particularly those with inadequacy in financing and lack of technical expertise. Developing countries need foreign funding and expertise for their infrastructure projects partly because domestic financial markets cannot provide the long-term financing required for such projects, and also partly because the necessary expertise for project management, construction and operation can be more efficiently provided in cooperation with quality foreign private investors.

In the aftermath of the Asian Financial Crisis, PPPs have somewhat slowed down in ASEAN countries but now in trying to come back to a rapidly growing region with vast investment and profit opportunities, they face certain issues that have to be effectively addressed. Infrastructure projects are typically lumpy, long-term investments that require long-term financing and efficient implementation and management. Investors are aware of profitable opportunities in the infrastructure sector and may want to take a position in such long term investments. Realizing that it will take years to recover their investments and realize returns they are in search of ways to ensure that such investments will pay off in the long run.

It is noted that private investors, especially foreign investors, with the risk capital face challenges in the policy and regulatory frameworks of developing countries, and in general, weaknesses in the investment climate in some host countries. Working with governments concerned, they have crafted contractual arrangements that brought comfort to both domestic and foreign stakeholders in PPP projects. A review of PPP projects in the capital-intensive energy sector reveals some of those arrangements behind the successful financing of independent power producer (IPP) projects in very challenging business environments. They are the following: (i) off-take contracts on a take-or-pay basis wherein capacity charge covers a debt service amount, (ii) government guarantee against off-taker's payment risk, and (iii) a foreign exchange adjustment mechanism incorporated in a tariff formula. Such host government support for IPP projects has made certain project risks acceptable to private investors, resulting in successful financing of those projects.

Various types of fiscal support², e.g., acquisition of right-of-way, credit guarantees, have been used to improve the viability of PPP projects and these have given investors assurance of a fair return to their investments. More specifically, the different fiscal instruments used by ASEAN countries have succeeded in making viable certain projects that are economically beneficial but are financially unviable.

²In this paper, government fiscal support covers 'subsidy (direct fiscal support) and guarantee (indirect fiscal support).'

This paper discusses governmental fiscal support for financing long term infrastructure projects in ASEAN countries. More specifically, it discusses the role of guarantees and subsidies in promoting PPP projects. It draws on case studies of Philippine and Indonesian PPPs, and information from secondary sources to highlight the critical role of such fiscal support in making feasible the financing of long term infrastructure projects that may be economically beneficial but commercially or financially unviable without such support. The paper argues the need for a strong fiscal position and analyses the implications of guarantees and subsidies on fiscal management. An important insight is the need to secure budgets for long term infrastructure projects, which may be done through a medium term expenditure framework.

This paper is organized into five sections. After a brief Introduction, Section 2 provides a brief overview of PPP in the ASEAN region and its important role in the provision of much-needed infrastructure. Section 3 discusses government fiscal support, that is, guarantees and subsidies to PPPs in the Philippines and Indonesia. It presents case studies of PPP projects in the Philippines and Indonesia in order to draw lessons and implications on fiscal management policy. Section 4 discusses the provision of subsidies and guarantees and subsidies and fiscal management policy in the Philippines and Indonesia, respectively. The last section provides concluding remarks and recommendations to ASEAN countries.

2. PPPs in the ASEAN Region: Their Role and Importance

2.1 Definition, role, and importance of PPPs

There is no firm definition of public-private partnerships (PPPs) and different countries and international financing institutions have offered definitions depending on the applicable legal frameworks and financing practices. But from the different definitions, it can be deduced that PPPs specifically refer to partnerships in investment projects, mostly infrastructure projects, wherein the private partner is engaged to construct facilities that are traditionally constructed by the public sector or deliver public services usually provided by public entities, and is allowed to charge fees to public users or the government as compensation for such activity.

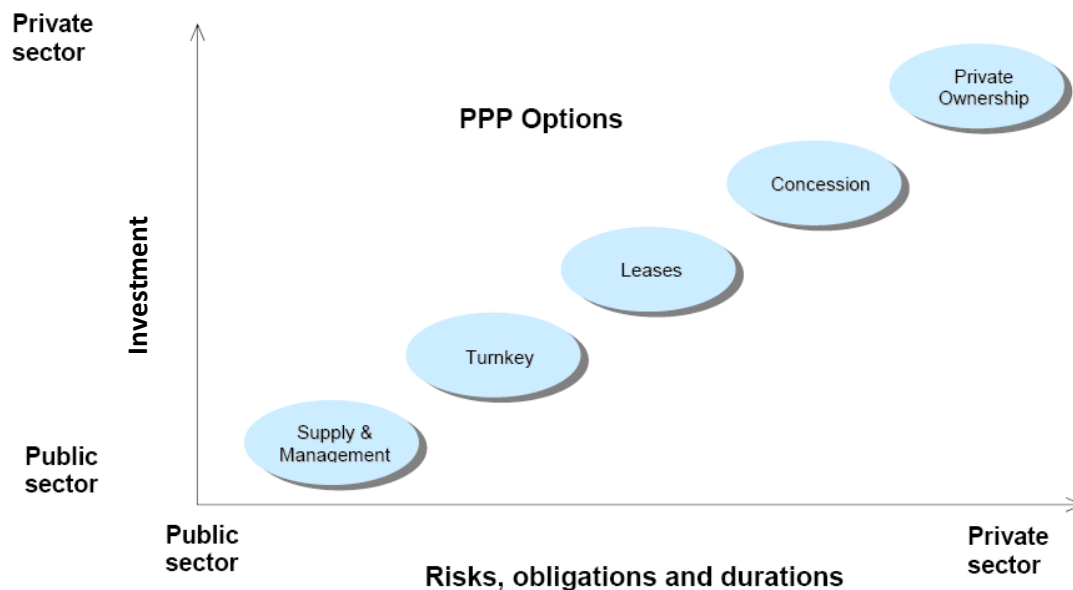
The European Commission (2003) specifically offers the following definition: “A public-private partnership (PPP) is a partnership between the public sector and the private sector for the purpose of delivering a project or a service traditionally provided by the public sector.” On the other hand, the Asian Development Bank (ADB 2008) defines PPPs by distinguishing it from private sector participation (PSP) and privatization. According to the ADB, the differences among the three arrangements are as follows: “PPPs present a framework that—while engaging the private sector—acknowledges and structures the role for government in ensuring that social obligations are met and successful sector reforms and public investments achieved.” On the other hand, PSP contracts transfer obligations to the private sector rather than emphasizing the opportunity for partnership. Privatization involves the sale of shares or ownership in a company or the sale of operating assets or services owned by the public sector (ADB 2008).

The concept of privatization is intuitively grasped but the distinction between PPPs and PSPs seems to be blurred especially since projects that were previously regarded as PSPs has now come to be regarded as PPPs. When international financing institutions and governments assess their experience in implementing PPPs, they look back to their PSP experience. This paper makes no distinction between PPP and PSP projects with the latter being considered within the ambit of the former.

Different countries have different categorizations for what constitute PPPs which usually depend on the enabling laws. Notwithstanding this, the emerging consensus is to group the types of PPPs in order of generally increased involvement and assumption of risks by the private sector, as the 2011 guideline by the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) did.

Under the UNESCAP guideline, the five broad categories of PPPs in order of generally increased private sector participation are: (i) supply and management contracts, (ii) turnkey contracts, (iii) affermage or lease, (iv) concessions (which include Build-Operate-Transfer models), and (v) private ownership (**Figure 1**).

Figure 1: Five Categories of PPP Options



Source: UNESCAP. 2011. *A Guidebook on Public-Private Partnership in Infrastructure*

Each of the PPP models shown in **Figure 1** may stand alone as individual options but they could also have several variants. **Table 1** below describes the UNESCAP enumeration of main variants under these five PPP models, with one modification included (i.e., the Build-Lease-Transfer (BLT) scheme added by the author). In this paper, the PPP infrastructure projects envisaged are those typically under a concession agreement, that is, BLT, BOT and various variants where the private sector takes a large role in sourcing long-term finance, usually from foreign capital and equity markets, and

in constructing and eventually managing or operating the project during the concession period.

Table1. Possible Variants of PPP Models

Broad category	Main variants	Ownership of capital assets	Responsibility of investment	Assumption of risk	Duration of contract (years)
Supply and management contract	Outsourcing	Public	Public	Public	1-3
	Maintenance management	Public	Public/Private	Private/Public	3-5
	Operational management	Public	Public	Public	3-5
Turnkey		Public	Public	Private/Public	1-3
Affermage/Lease	Affermage	Public	Public	Private/Public	5-20
	Lease [*]	Public	Public	Private/Public	5-20
Concessions	Franchise	Public/Private	Private/Public	Private/Public	3-10
	BOT ^{**}	Public/Public	Private/Public	Private/Public	15-30
Private ownership of assets and PFI type	BOO/DBFO	Private	Private	Private	Indefinite
	PFI ^{***}	Private/Public	Private	Private/Public	10-20
	Divestiture	Private	Private	Private	Indefinite

*Build-Lease Transfer (BLT) is a variant

**Build-Operate-Transfer (BOT) has many other variants such as Build-Transfer-Operate (BTO), Build-Own Operate-Transfer (BOOT) and Build-Rehabilitate-Operate-Transfer (BROT).

***The Private Finance Initiative (PFI) model has many other names. In some cases, asset ownership may be transferred to, or retained by the public sector

Source: UNESCAP. 2011. *A Guidebook on Public-Private Partnership in Infrastructure*.

For example, in the Philippines, the types of PPPs for which tender procedures are defined in the enabling law, Republic Act (RA) No. 7718, are as follows:

- i. Build-and-transfer (BT)
- ii. Build-lease-and-transfer (BLT)
- iii. Build-operate-and-transfer (BOT)
- iv. Build-own-and-operate (BOO)
- v. Build-transfer-and-operate (BTO)
- vi. Contract-add-and-operate (CAO)
- vii. Develop-operate-and-transfer (DOT)
- viii. Rehabilitate-operate-and-transfer (ROT)
- ix. Rehabilitate-own-and-operate (ROO)
- x. other variations as may be approved by the Philippine president

The definitions of these PPP variants are given in **Appendix 1**.

BOT-type schemes are contractual arrangements whereby the project proponent (private sector) builds or undertakes the construction, including financing, of a given infrastructure facility, and the operation and maintenance thereof. The project proponent operates the facility over a fixed term during which it is allowed to charge facility users appropriate tolls, fees, rentals and charges not exceeding those proposed in its bid or as negotiated and incorporated in the contract to enable the project proponent to recover its investment, and operating and maintenance expenses. The project proponent transfers the facility to the government agency or LGU concerned at the end of the fixed term which shall not exceed 50 years.

The importance of infrastructure is well-known. Infrastructure contributes to the achievement of sustainable growth and poverty reduction. Infrastructure not only contributes to the competitiveness of economies and enhancement of the investment climate but it is also a key factor to promote inclusive growth. For example, good roads and transport are significant correlates to poverty reduction as indicated in several studies. The connectivity provided by an efficient road and port network to an archipelagic country such as the Philippines translates into better market access and mobility between different regions separated by bodies of water.

The ASEAN infrastructure deficit is large. According to an estimate done at the Asian Development Bank around US\$8 trillion of infrastructure investments will be needed between 2010 and 2020 (Bhattacharyay 2010). Another estimate indicates that roughly US\$1 trillion of infrastructure investments per year between 2010 and 2010 will be needed with 40% coming from the private sector (Barrow 2010). ASEAN member countries have a huge demand for infrastructure but public sector resources are limited and face competing demands.

Countries constrained by narrow fiscal space would typically under-invest in infrastructure for lack of financing. Large fiscal deficits create upward pressure on public sector borrowing costs and tapping external capital markets to meet the huge financing requirements of infrastructure projects may create burdensome interest payment obligations. To such countries, PPPs offer an alternative way to provide infrastructure, which would otherwise have been financed by the public sector at great fiscal cost. On the other hand, PPPs are also useful even for countries with a fiscal surplus or a budget

balance³. In the latter situation, reliance on PPPs can free resources, which would otherwise have been used for lumpy, long-gestating investments in infrastructure, to meet other meritorious public sector needs. In the case of Malaysia, it was pointed out that the underlying motivation was not the presence of a financial gap but the desire to benefit from innovation that may be brought by PPPs, and the shifting of public costs from the national budget to the private sector⁴.

PPPs can help accelerate improvements in infrastructure in the ASEAN region, which in turn is expected to promote the competitiveness of the region as a whole. Investments in infrastructure take a far deeper significance in view of the projected growth of an economically integrated ASEAN region in the near future. A report from a recent survey conducted by PwC (2011) points out that the failure to effectively invest in infrastructure in Asia will lead to a reduction in the rate of growth, and eventual stagnation. This will happen because inadequate investments in infrastructure will make developing economies of the Asian region unable to cope with the needs of a growing economy: moving materials and goods efficiently, and of meeting the demand for better services of a more mobile and wealthier population.

Public-private partnerships (PPPs) are not new to the ASEAN region. In fact, in the 1990s, they have gained prominence as a mechanism for meeting infrastructure needs in the ASEAN region. Roger (1999) reports the following data: from about US\$16 billion in 1990, private investment flows to infrastructure projects rose to as much as US\$120 billion in 1997. On average in the period 1996-1998, private participation accounted for over 40% of total infrastructure investments in developing countries, indicating the growing significance of private activity in the infrastructure sector. Roger (1999) reports the following trends in developing countries, including the ASEAN region in the 1990s:

- Private activity has grown rapidly but the public sector still dominates.

³Their comfortable fiscal position allows them to raise financing from the capital markets at a lower cost.

⁴The information on Malaysia was from Fauziah Zen.

- Private activity declined in 1998 from a high in 1997 falling most in East Asia and in energy.
- Telecommunications and energy have been leading sectors in private participation, and Latin America and East Asia the leading regions.
- Almost all developing countries have some private activity in infrastructure.

Recent experience has shown that PPPs has helped mobilize significant managerial, technical and financial resources for infrastructure provision in the region. **Table 2** presents data on infrastructure projects with private participation in developing economies of East Asia and the Pacific in the period 1990-2008.

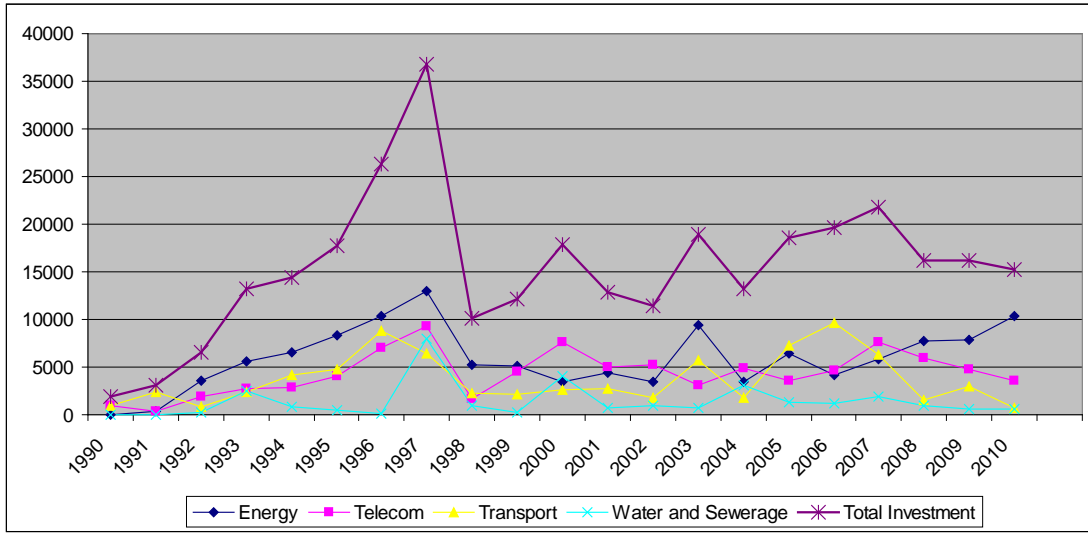
Table 2. Infrastructure projects with private participation in developing economies of East Asia and the Pacific, 1990-2009

Sector	Percentage	Number
Energy	42%	592
Telecom	5%	75
Transport	25%	349
Water and sewage	28%	387
Total	100%	1,403

Source: PwC (2011) and PPIAF Database, World Bank

In this light, PPP could be an effective procurement tool for the infrastructure investments required by a rapidly expanding ASEAN region. PPPs could fill the capital and expertise gap in the region. PwC (2011) observes that the use of private capital and resources for infrastructure investments is not new. In fact, the private sector has been playing an increasing role in supplying infrastructure that has been historically provided by governments. **Figure 2** shows World Bank data on investments in projects with private participation in East Asia and the Pacific.

**Figure 2. Investments in Projects with Private Participation in East Asia and the Pacific
(in US\$ million)**



Source: Private Participation in Infrastructure Database, World Bank

2.2 Slowdown in PPP Projects in ASEAN

As earlier noted, PPP was instrumental for infrastructure provision in the ASEAN region in the 1990s but toward the end of that decade PPP infrastructure investments slowed down. The 1997-1998 Asian financial crisis that originated from Thailand and spread to other ASEAN countries, was partly a reason behind the slowdown in PPPs infrastructure projects. Other factors such as the relative inexperience of ASEAN governments in dealing with such a complex and novel approach to infrastructure provision, inefficient allocation of risks, and weak capacity to manage contingent liabilities have also contributed to the slowdown in the use of PPP for infrastructure provision in the ASEAN region. As shown in **Figure 2** private participation in infrastructure in East Asia and the Pacific steadily increased in 1990 to 1997 and sharply dropped after the 1997 East Asian financial crisis. Investments generally showed an increasing trend in the 2000s but not in levels seen immediately before the financial crisis.

Another view points to the cancellation or postponement of high-profile projects in crisis countries as mainly responsible for the decline in private participation in infrastructure after the 1997 financial crisis (Izaguirre and Rao 2000). Unlike in other regions where divestitures accounted for the greater portion of private participation, East Asia engaged in rapid asset creation, thus, the growth of high-profile infrastructure projects. Given the high demand for infrastructure facilities and services in the region, the need to build infrastructure facilities quickly became a priority in the region and asset creation outpaced institutional and regulatory reforms and the ability of government agencies to structure good projects for tendering. Macroeconomic shocks also exacerbated the effects of the financial crisis on PPP project implementation.

Aside from the cancellation, a number of PPP contracts were renegotiated. PwC (2011) saw negotiation to have damaged confidence in the market and eroded perception of the strength of contracts signed by government bodies. PwC observed that total investment in infrastructure was severely affected, with long term trends of private sector investment also affected. In the 16 year period 1990-2006, total private sector investment in ASEAN was US\$163.6 billion, a fraction of the total infrastructure needs of the region.

Izaguirre and Rao (2000) report that greenfield projects accounted for more than half of investment commitments in the region during the period 1990-1999. In those infrastructure projects demand risk was borne by the government and the guarantees provided by the government created huge contingent liabilities. Other issues relate to shortcomings in the design, implementation, and governance of PPPs in infrastructure.

In the case of the Philippines, no cancellation of projects was experienced after the financial crisis but private sector appetite for PPP investments waned. Navarro (2005) reports that new PPP investment commitments or awarded PPP projects declined from US\$14.70 billion in 1999 to US\$1.74 billion in 2003. At present, it can be said that the Philippine PPP program has not yet recovered from its previous performance given that the projected total cost of projects awarded and under construction in 2012 is merely US\$0.75 billion.⁵

According to Nikomborirak (2004), most concessionaires who were severely affected by the financial crisis in Thailand had dollar-denominated debt. As the Thai baht devalued sharply against the dollar, those concessionaires saw their indebtedness suddenly ballooned. The economic downturn in Thailand also dampened local demand for infrastructure and this adversely affected the revenues of concessionaires. The transport sector also suffered low returns because of the slowdown of the Thai economy. The Bangkok Expressway's return on asset had been hovering around zero until 2002. The bursting of the property bubble also had a contagious effect on the infrastructure sector. The telecommunications sector went down with the real estate sector because empty and unused condominiums meant that thousands of installed fixed lines were left idle.

Susangarn (2007) highlights the issues and challenges affecting PPP implementation in Thailand, namely: (i) an unclear governing framework, (ii) fragmented authority, (iii) time consuming procedure, (iv) insufficient institutional support, and (v) the lack of rules and capacity with respect to risk allocation. With respect to rules on risk allocation, he explained that Thailand lacks a body that has the regulatory power and authority to provide assurance on pricing and other incentives needed to ensure viability.

⁵Department of Budget and Management - 2012 Budget of Expenditures and Sources of Financing

Thus, some projects were left unfinished or in need of debt restructuring to prop up their viability. The governing framework for infrastructure is unclear and fragmented. Some types of PPPs are deemed outside the main PPP law enacted in 1992 and are covered instead by other laws or regulations. There is an unclear institutional set up because an implementing agency submits project feasibility studies to two different bodies depending on whether the project involves new assets or existing assets. For new assets, the implementing agency submits feasibility studies to a central planning agency (i.e., the National Economic and Social Development Board) while for existing assets, the submission is done to the Ministry of Finance. Because of time consuming procurement procedure under the PPP law, the direct procurement method is seen as a much more convenient method to get projects implemented. Institutional support is seen as insufficient because methodologies for project valuation, risk sharing, bidding procedures and the like are unclear and not centralised in an agency that should have institutional knowledge of these methodologies. Moreover, since the PPP law does not provide any basis for risk allocation, the rules and the capacity of implementing agencies with respect to risk allocation have not developed.

In Malaysia, Singaravello (2010) explained that PPP used to be perceived as a derivative of the privatization policy. In Malaysia, there is a paucity of literature evaluating the outcomes of PPP implementation. Nevertheless, Ward and Sussman (2005) uncovered some of the problems at least for toll roads. The authors noted that for toll road projects, the shortcomings in implementation included lack of transparency and minimal public involvement. They perceived that the existing procurement process is fairly secretive. The perception is based on the practice of not making public the criteria for awarding projects and information submitted by bidders to satisfy the award criteria. They argued that this practice, in turn, engendered public belief that political connections influenced contract award. Thus, in some cases, public protests against toll rate increases arose. At times, the end-result was that taxpayers in general rather than the tollway users were made to shoulder additional payments or fees, which are deviations from the contractually agreed toll rates.

Indonesia, Malaysia, the Philippines, and Thailand were most severely affected by the impact of the financial crisis on PPP projects, especially in the power sector. Gray

and Schuster (1998) noted that these economies had major private investments in power generation at the time when their power industries were still vertically integrated and a public entity acted as a single buyer. The single buyer then had long-term power purchase agreements with private independent power producers (IPPs) at specified rates and for ten- to thirty-year periods. The huge depreciation of local currencies during the crisis increased the local currency costs of imported fuel for both public and private power. Moreover, given that the wholesale electricity take-off from IPPs was denominated in foreign currency, the local currency costs of the take-off ballooned. Governments which had assumed risks in the form of government guarantees backstopping the obligations of the public utilities suddenly found themselves burdened with contingent liabilities that had become real liabilities. One of the lessons in this experience is that government support can serve as an indicator of government commitment, but “excessive” contingent liabilities must be avoided as these are likely to come due when governments can least afford them (such as during a financial crisis). The risk of fiscal shock arising from huge contingent liabilities becoming actual liabilities has to be carefully monitored and managed by governments in the region. In this regard, the policy thrusts of the countries affected by the Asian financial crisis were also focused on strengthening their respective financial systems and improving debt management⁶, especially in view of their exposure to currency risks that may affect the viability of long-term projects.

There has been a smaller number of PPP projects that have been approved or implemented in the past few years in the region. **Table 3** shows the percentage of total PPP investments in selected countries that were either cancelled or distressed as of 2011.

India	1%
Thailand	2%
China	4%
Philippines	11%
Indonesia	16%
Malaysia	25%

Source: World Bank PPIAF

However, PPPs have not been discarded or disregarded as strategic mechanism to provide infrastructure and ASEAN countries continue to consider it as an effective instrument of infrastructure provision. ASEAN governments responded to the increasing demand for better infrastructure by improving their respective policy and regulatory frameworks, including establishing institutions or units within the bureaucracy, e.g., Philippine PPP Center, to help with making PPP as an effective strategy for the provision of infrastructure.

Thus, the financial, institutional and regulatory reforms embraced by the ASEAN governments in the past decade after the Asian financial crisis contributed to the resurgence. As a result of those reforms ASEAN countries have more elbow room for sovereign debt financing and more efficient utilization of ODA for infrastructure projects. As indicated in the case studies below, the Philippines combined private sector financing and ODA to fund toll ways⁷.

There is a resurgence of interest in PPPs as the ASEAN region continues to impress investors with its economic resiliency, vitality and growth prospects. The formation of an ASEAN Economic Community in 2015 will lead to a bigger demand for PPPs in infrastructure as the ASEAN economies seek closer integration and connectivity, and now is the right to work with the private sector to provide and improve infrastructure in the region.

In sum, the past experience of several ASEAN countries indicates that PPPs are effective mechanisms to provide infrastructure. However, the utilization of PPPs has stalled due to a variety of reasons. One of these was the waning of the risk appetite of private investors who retreated to safer investment havens in the aftermath of the Asian financial crisis. Weaknesses in the regulatory and institutional frameworks also deterred

⁷The downside of ODA would be the exchange risk because of its nature as a long term credit. This should motivate ASEAN governments that use significant amounts of ODA, e.g., Philippines, Indonesia to ensure that the projects funded by ODA are economically and financially viable projects.

risk-taking by private investors. Cancellation and renegotiation of PPP contracts have also somewhat dampened investor interest.

It is noted that despite the setbacks to PPPs in the aftermath of the Asian Financial Crisis, there seems to be a positive outlook for infrastructure investments in the ASEAN region. There was indeed a momentary slowdown in PPP projects in the region but they are coming back in response to the strong growth of member countries and the increased demand for infrastructure. The financial, institutional and regulatory reforms also contributed to the resurgence of PPPs in the ASEAN.

The infrastructure deficit has been estimated to be as high as \$8 trillion in the period 2010-2020 (**Box 1**).

The 2011 PwC Survey of Infrastructure affirms the tremendous potential for the infrastructure sector in Asia. The survey reported that 50% of the respondents believe that South-East Asia is good or excellent in terms of attracting investments in infrastructure. The ASEAN is therefore an “area of opportunity” (PwC, 2011 page 6). However, ASEAN governments have to be aware that there are lingering barriers to investments in infrastructure in the region, which they have to respectively address.

Box 1 provides a summary of the views of respondents to the 2011 PwC Infrastructure Survey on the infrastructure deficit and what investment barriers block the supply of private sector capital and skills in the Asian region.

Box 1, Infrastructure deficit and investment barriers in Asia	
Infrastructure deficit (in US\$ trillion), 2010-2020	
• Telecom	1.1
• Power	4.1
• Transport	2.5
-Rail	0.04
-Road	2.3
-Others	0.09
• Water/sanitation	0.04
Total	8.0
Investment barriers to private participation	
• Legal and regulatory framework	

- Poorly defined and unstructured procurement processes
- Haphazard pipeline management
- Risk allocation and commercial structure
- Lack of investment subsidy in certain jurisdictions

Source: PwC (2011)

There is a need to coax private capital back to the ASEAN infrastructure sector in view of the huge demand for infrastructure services especially in a region that is looking forward to economic integration by 2015. However, mobilizing debt and equity capital for long term infrastructure projects is a daunting task for PPPs. Addressing perceived risks through such instruments as guarantees and subsidies could help raise commercial debt and equity capital for infrastructure investments and motivate more PPP transactions in the region.

3. Government Fiscal Support: Guarantees and Subsidies

3.1 Overview of guarantees and subsidies scheme

This section describes two types of government fiscal support to PPP projects, which have been used to make those projects, which are economically beneficial but financially unviable, attractive to private investors. The fiscal support we discuss here are of two types: (a) guarantees (indirect fiscal support) and (b) subsidies (direct fiscal support). The bottom line is that the envisaged PPP project has been assessed as economically beneficial, meaning economic benefits exceed economic cost but faces difficulty in securing financing and eventual implementation because it is financially unviable. The expected (estimated) project revenues (fees) fall short of project capital and operating costs, which render it unattractive to private investors who have to recover their investments and generate normal profits. **Table 4** provides a simple policy decision matrix explaining why these types of direct and indirect fiscal support may be needed.

The policy decision matrix shows a simple starting framework for understanding the importance and use of guarantees and subsidies. The figure shows that projects can be both economically (economic benefits exceeding economic costs) and financially viable without need for fiscal support (guarantees and subsidies). In this case, investors whether this is the government or the private sector can gainfully recover their investments because the project has economic benefits greater than the economic costs and project revenues exceeding project costs.

Table 4. Policy decision matrix for providing fiscal support

PPP Project	Yes	No	Desired action
Do economic benefits exceed economic costs?	x		Pursue/do project
		x	Redesign/scrap project
Do project revenues of the economically beneficial project exceed project costs?	x		Pursue/do project
		x	Pursue project; provide fiscal support to make viable

There are cases where a project has been assessed as capable of producing net economic benefits but unfortunately is not financially viable. The project will confer benefits to society but may not find sufficient interest on the part of potential lenders or investors. There may be interested investors but the perceived risk of not being able to generate sufficient cost-recovering revenues from a long term project such as infrastructure may deter risk-averse private capital from investing. To the extent that such a project fails to materialize, society becomes worse-off, and social welfare is diminished. Because the project is contemplated to generate economic benefits exceeding economic costs, which are consistent and supportive of a government's policy thrusts, and which could raise the level of social welfare, some form of fiscal support to make the project financially viable may be warranted. The fiscal support may be in the form of guarantees or subsidies, or both depending on the merits of the concerned infrastructure project.

To be attractive to the private sector, a PPP infrastructure project has to be able to provide a reasonable rate of return to private investment. The BOT approach meets the objective of providing the public with infrastructure services through a project built, financed, and operated by a concessionaire (private investor). Llanto (2010)⁸ points out that the prospects of commercial returns arising from the application of 'user-pays' principle motivates private risk capital to consider investing in lumpy, long-lived infrastructure facilities, e.g., a toll road. To be able to realize a mutually agreed-upon rate of return to investment, the concessionaire relies mainly on a user charge that is regulated. Achieving the rate of return that would satisfy private investors rests on, among others, (i) the openness of the regulator on the matter of allowing cost-recovering user charges, (ii) a mutually acceptable allocation of risk between the government and the private investor, and (iii) access to fiscal instruments such as subsidies and guarantees to make viable an economically beneficial but financially unviable project. The extent of the fiscal support may be minimized to the extent that the concessionaire can recover

⁸A primary source of this argument is Canlas and Llanto (2006).

investments and realize the expected rate of return because cost-recovering user charges have been allowed by the regulator⁹.

Before we turn to the case studies, we note at this juncture an example of a successful subsidy mechanism for PPPs in India, the Viability Gap Fund, which was created in 2005 under the Scheme for Financial Support to Public Private Partnerships in Infrastructure. In 2005-2008, under India's Viability Gap Fund twenty three PPP projects with a total investment of US\$3.5 billion have received subsidies. An additional 43 projects are under review or have received in principle approval. A large number of projects have been state highways and road projects. The others are large ports and urban rail, one tourism project, and one power transmission project. Although the majority of projects have been financially viable and did not require subsidies, the large upswing in private investment has been associated with the establishment of the Viability Gap Fund (VGF) Program and the adoption of India's current PPP policies (World Bank Institute 2012a). One possible explanation behind the large upswing could be the confidence in investing in infrastructure that the VGF Program and India's current PPP policies have generated among investors.

The case studies that are discussed in the next part of this section show the experience of the Philippines and Indonesia in providing fiscal support to PPP projects. An example of a direct fiscal support, e.g., subsidy is the acquisition by government of right of way in infrastructure projects. On the other hand, an example of an indirect fiscal support is a government guarantee against off-taker's payment risk or concessional loans provided to infrastructure projects that find it difficult to get commercial financing.

With subsidy and guarantee instruments, private investors would be able to realize their desired rate of return on their long-term capital investments in projects that are economically beneficial but financially unattractive. As shown in **Box 2**, fiscal support in the form of subsidy and guarantee may be structured in several ways to serve a single purpose: to make financially viable a project that is economically and socially beneficial but faces financial viability problems. An example of an innovative use of a subsidy is shown in **Box 3**.

⁹ Tariff adjustments are reviewed and approved by regulators.

Box 2. Several ways of structuring subsidies to PPP projects

- As upfront contributions to pay for capital costs
- As regular payments to the private company based on the availability and quality of the service to be provided (once a project is constructed)
- As a fee per user, e.g., based on number of vehicles on a toll road
- As concessional loans (an implicit subsidy)
- As guarantees (an implicit subsidy)
- As payment for project preparation (as implicit subsidy)

Source: World Bank Institute (2012)

Box 3. Subsidies to off-grid electrification in the Philippines

Electricity generation in off-grid areas in the Philippines is not financially viable and has been traditionally provided by the National Power Corporation (NPC), a national government-owned utility. In 2001 the government passed a law that required NPC to transfer generation in off-grid areas to private providers. The law also introduced a subsidy to make investments in off-grid generation financially viable. The subsidy is set through a competitive process. Bidders are informed of the value of the socially acceptable generation rate that can be charged in a specific off-grid area, and the bidder requiring the least subsidy to top off the rate is awarded the contract. The subsidy is paid every month and is calculated by multiplying the electricity generated during the month by the subsidy set through the competitive selection process. The subsidy payments are funded through a surcharge that is applied to all electricity users in the Philippines, that is, it is a cross subsidy from all electricity users nationwide to electricity users in off-grid areas.

Source: Power Sector Assets and Liabilities Corporation and Castalia¹⁰

Turning to guarantee schemes, a summary of workable guarantee schemes and their relative merits based on a recent World Bank (2012b) study is presented at this point. There are several types of guarantees present in the market, e.g., full wrap guarantee, partial credit guarantee, minimum revenue guarantee, least present value of revenues, to name a few. The guarantee schemes facilitate project bankability, allowing access to long-term financing in the context of project finance, whose main repayment

¹⁰As quoted in World Bank Institute (2012a)

source is the cash flow that will be generated by the project itself. The financial structure of the project must be capable of paying the debt service even under stressful scenarios, and it is the role of guarantees to ensure that debt service is observed.

Based on several case studies done by the World Bank (2012b) in Latin America, there are two general types of guarantees: (a) financial and (b) non-financial guarantee. There are two categories of financial guarantees: (i) full wrap and (ii) partial credit guarantees. The full wrap covers 100% of the debt obligation of the issuer, and thus, all risks of the issuer. The partial credit guarantees covers only a specified percentage of the debt obligation.

The World Bank (2012b) finds that the financial guarantees are good instruments but they seem to have had limited application and success in Latin America. There was only one transaction partaking of a financial guarantee provided by the Fondo Garantidor de Parcerias Publico-Privadas of the Brazilian government since its establishment in 2005. To date, the US\$2 billion guarantee fund initially established has been reduced to US\$ 200 million. A similar situation of low utilization of financial guarantees (partial credit guarantees) has occurred in Mexico. Since 2007 until the time of the review (2012) conducted by the World Bank, BANOBRAS, the development bank of the Mexican Federal Government has only issued one partial credit guarantee in a refinancing transaction closed in May 2008 for the State of Mexico. In 2009, BANOBRAS issued a Contract Payment Enhancement Guarantee also for the State of Mexico. Under this type of financial guarantee, BANOBRAS guarantees full and timely payment committed by a government to the private sponsor under a PPP project.

On the other hand, it seems that non-financial guarantees or contractual guarantees have been a more effective tool to facilitate long-term financing. This is because investors may have seen contractual guarantees as more capable instruments for covering risks, e.g. revenue risk. The most effective and used of these has been the Minimum Revenue Guarantee. Concession contracts can carry a government guarantee of a minimum amount of revenue in the event that the project revenues are not sufficient to cover the concessionaire's debt service costs. Under the guarantee scheme, the

government is to pay the difference if the concession's effective revenues are lower than those pre-defined in the contract. This guarantee has been used in Chile, Colombia, Brazil and Peru. The minimum revenue guarantee scheme has been used to obtain long-term financing for transport projects with revenue risk. In the energy sector, take or pay contracts are the rough equivalent of Minimum Revenue Guarantees, which are mainly applied to the transport sector. A take or pay contract is a buyer-seller agreement where the buyer's obligation is unconditional whether or not the purchased goods or services are delivered or taken. Such arrangements are often used as indirect guarantees for project financing, and to protect the buyers from price increases and the sellers from price decreases¹¹.

The successful application of guarantee schemes depends on a range of factors: readiness of the country's institutions, e.g., bureaucracy, banks to implement the guarantee scheme, availability of a pipeline of projects that requires guarantees, administrative and legal procedures, etc.

The bottom line is that a good guarantee is any guarantee that allows total or partial long term financing, and that helps to develop a project in a timely, efficient and effective fashion with private participation¹². At this juncture, it should be pointed out that inefficient application of a guarantee scheme on infrastructure projects could lead to a huge fiscal burden when the contingent liability arising from the risk covered by the guarantee becomes an actual liability. Starting infrastructure projects in the ASEAN may require guarantees to attract PPP approaches. However, it is equally important to ensure that a significant fiscal burden arising from huge guarantee payments should not unduly burden the government by making proper assessment of those projects and having a close dialogue with the private sector to understand the various risks faced by the project and to assign the risk to the party best able to bear it¹³.

¹¹For the full treatment of these cases, see World Bank (2012b).

¹²World Bank (2012b)

¹³An example of an inefficiently assigned risk is the commercial risk in MRT3 project in the Philippines. Please see case studies in section 3.3.

3.2 Government fiscal support to PPPs in the Philippines

The PPP Program forms part of the Philippine Investment Plan 2011-2016. The 2012 PPP Program consists of 20 projects (4 road, 4 airports and 3 mass transit systems, 2 other transport systems, 3 water supply, 2 health and 2 agriculture). Projects are selected based on their readiness, preparation, responsiveness to the sector's needs and huge potential for implementation.

With the objective of fostering an investment climate conducive for private sector initiatives, the government has developed a policy environment that strongly supports PPPs in infrastructure. This policy environment has two fundamental cornerstones: first, economic policy that supports opening the economy to competition and levelling the playing field for various types of private enterprise; and second, a clear regulatory and institutional framework¹⁴ that permits and supports the unencumbered flow of private resources into the government's development program, especially for the infrastructure sector.¹⁵ Allowing private investors to earn a fair rate of return to investments is ensured under this policy environment.

Recognizing that there may be a need for the government to share in the risks and costs of a project to make it financially viable, the government has adopted a variety of undertakings under certain conditions. These include cost sharing, the grant of investment/fiscal incentives, and other types of government support. These undertakings are briefly described below:

Cost sharing. Cost sharing arrangements are allowed to augment the scarce funds that are with the implementing agency, which has limited budget resources. Projects faced with difficulty in sourcing funds may be partially financed from direct government appropriations (as provided for under the General Appropriations Act- GAA) and/or

¹⁴Part of the institutional framework is the PPP Center and a Project Development and Monitoring Facility as described in subsequent paragraphs of the paper.

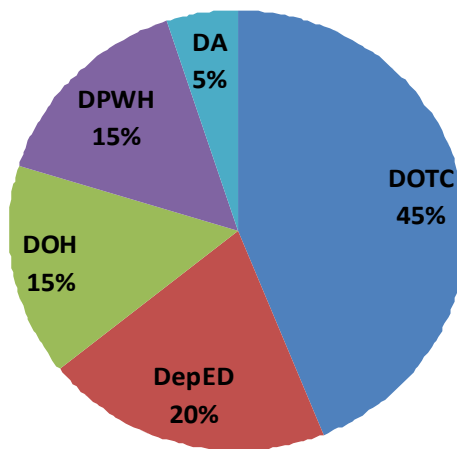
¹⁵ <http://www.dof.gov.ph>

official development assistance (ODA) funds. Under current cost sharing rules, the financing from either GAA or ODA, however, does not exceed 50% of project cost.

Figure 3 shows that in 2012, the national government has allocated Pesos 19.6 billion (around US\$ 447 million) in counterpart funds for the government's PPP program, a 56.8% increase from last year's Pesos 12.5 million (around US\$ 285 million) budget

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Figure 3. Breakdown of Philippine Government's PhP19.6 Billion Allocation for PPP in 2012



The Pesos 19.6-billion allocation is broken down as follows:

- Pesos 8.6 billion (US\$196.2 million) to the Department of Transportation and Communications (DOTC) for its PPP projects: Panglao Airport in Bohol, the Puerto Princesa Airport in Palawan, the New Legazpi Airport in Albay, the LRT Line 1 South Extension and Privatization, the MRT/LRT Common Ticketing Project;.

¹⁶ <http://www.mb.com.ph/articles/351398/government-allocates-p196-billion-as-counterpart-funding-for-ppp-projects>.

Throughout the paper the following exchange rate is used: 1 USD= Php43.84, the closing rate as of 12/29/11..http://www.bsp.gov.ph/dbank_reports/ExchangeRates_2_rpt.asp?freq=D&datefrom=12%2F31%2F2011 (Accessed June 12, 2012).

- Pesos 4 billion (US\$91.2 million) to the Department of Education for the construction of classrooms through contracts with the private sector;
- Peso 3 billion (US\$68.4 million) to the Department of Health as counterpart fund for the construction and maintenance of health centers and hospitals;
- Pesos 3 billion (US\$68.4 million) to the Department of Public Works and Highways (DPWH) to cover for right-of-way costs, feasibility studies, and independent consultations for the Tarlac-Pangasinan-La Union Toll Expressway (TPLEX), Daang-Hari-SLEX Link Road, NAIA Expressway, CALA Expressway Project (Cavite side), and Manila North Expressway projects; and
- Finally, Pesos 1 billion (US\$22.8 million) to the Department of Agriculture as counterpart funds for the Corn Bulk Handling and Trans-Shipments System Project, the establishment of rice centrals, processing and service centers, and the establishment of a cold chain system in strategic areas in the country.

In addition, each implementing agency will be given its own Strategic Support Fund (SSF), a lump sum appropriation lodged in the budget to fund the government share in PPP project costs. It is a special budget provision that is made available for the following purposes:

- Right of way acquisition and related costs (including resettlement), government counterpart to be used for the construction and other costs of a PPP project, provided these do not exceed 50% of total project cost, and other related costs for potential and actual PPP projects identified by the Department.
- Costs of designing, building, and otherwise delivering any part of a PPP project which government decides to retain responsibility for. This includes public infrastructure such as rural and access roads, utilities, and other support facilities required for a PPP project to be viable.

PPP-SSF funds may also be used for the following purposes under exceptional circumstances, subject to justification by the implementing agency and approval by the Department of Budget and Management (DBM):

- Feasibility studies, business case development, pre-investment studies, and other activities required to determine the feasibility and viability of potential PPP projects, and
- Preparation of various project documents as required for approval by the NEDA-Investment Coordination Committee and other approving bodies.

The hiring of consultants and advisors to assist the Departments in various aspects of the project preparation, tendering, and execution process, including the preparation of feasibility studies, transaction documents, and marketing materials is given a budget under the Implementing Agency's SSF.

Investment/fiscal incentives. Pertinent incentives are also provided to stimulate private resources for the purpose of financing the construction, operation and maintenance of infrastructure and development projects normally financed and undertaken by the Government. In particular for PPP projects, projects costing over Pesos 1 billion (US\$23.8 million) are automatically qualified to avail of the fiscal incentives under the Omnibus Investment Code (OIC) upon registration with the Board of Investments. Projects costing Pesos 1 billion and below can avail of fiscal incentives under OIC subject to inclusion in the current Investment Priorities Plan. Local governments may also provide additional tax incentives, exemptions, or reliefs, subject to the provisions of the Local Government Code and other pertinent I laws.¹⁷ The OIC outlines the basic guidelines and qualification requirements for enterprises to avail of the following fiscal incentives:

¹⁷ <http://www.investphilippines.org.uk/index.php/business-opportunities/infrastructure-a-ppp>

- a. income tax holiday
- b. tax and duty exemption on imported capital equipment
- c. tax credit on domestic capital equipment
- d. tax credit on domestic capital equipment
- e. exemption from contractor tax
- f. simplification of customs procedures
- g. unrestricted use of consigned equipment
- h. employment of foreign nationals
- i. tax and duty free importation of breeding stocks and genetic materials
- j. tax credit on domestic breeding stocks and genetic materials
- k. tax credit for taxes and duties on raw materials of export products
- l. exemption from taxes and duties on imported supplies and spare parts in a bonded manufacturing warehouse
- m. exemption from wharfage dues and export tax.

Other government undertakings. Government agencies may also provide specific undertakings like direct government subsidy, direct government equity, and performance undertaking, or credit enhancements such as take or pay arrangements, currency convertibility, and legal and/or security assistance. Take or pay refers to an arrangement in which the government assumes market risk by assuring the BOT proponent that whatever is produced will be bought by government even in conditions where there is a shortfall in the demand for the services/goods being provided by the proponent.¹⁸

Coordinating entity. As shown by countries such as India which has a successful PPP program, there is a need for a dedicated unit or agency in the governmental structure to manage the program.

¹⁸BOT Center. 2003. Locking Private Sector Participation Into Infrastructure Development in the Philippines. In Transport and Communications Bulletin for Asia and the Pacific No. 72, 2003. Available online at: http://www.unescap.org/ttdw/Publications/TPTS_pubs/bulletin72/bulletin72_ch2.pdf

The lead agency for coordinating PPP in the Philippines is the PPP Center¹⁹.

As the lead agency, the PPP Center is headed by an Executive Director who has the rank equivalent to an Assistant Secretary. The rank accorded to the Executive Director allows him/her to have the authority to directly deal with other high-ranking bureaucrats and chief executives of private companies.

The PPP Center is mandated to assist project implementers through advisory services, technical assistance and capacity development, monitor projects, and recommend related policies and guidelines. In particular, the PPP Center is tasked to do the following:

- *Project Development.* Provide advisory and technical assistance to Implementing agencies and local government units in the development and implementation of PPP projects both at national and local government levels.
- *Project Development and Monitoring Facility.* Manage and administer a revolving fund for pre-investment activities, i.e., preparation of business case, pre-feasibility and feasibility studies and tender documents, to ensure that PPP projects are properly structured.
- *Project Facilitation.* Conduct project facilitation and assistance to the implementing agencies (IAs), Government-owned and controlled corporations, State Universities and Colleges and local government units in addressing impediments or bottlenecks in the implementation of PPP programs and projects.
- *Project Monitoring.* Monitor and facilitate the implementation of the priority PPP Programs and Projects of the implementing national agencies (IAs), and of local government units (LGUs), which shall be formulated by respective IAs/LGUs in coordination with the NEDA Secretariat.
- *Policy Advocacy.* Participate in the formulation of PPP policy reforms for doing PPP in the Philippines.

¹⁹ The predecessor agencies of PPP Center were the Coordinating Council for Philippine Assistance Program (CCPAP) from 1989-1999, which was later turned into the Coordinating Council for Private Sector Participation (CCPSP) from 1999-2002 and finally to the BOT Center from 2002-2010. In 2010, the Philippine Government revitalized the BOT Center by renaming it as the PPP Center and attaching it to the National Economic and Development Authority (NEDA) by virtue of Executive Order No. 8, dated 09 September 2010.

- *Information Management.* Provide information on the PPP Program and PPP projects. A monitoring system was put in place to keep track of the status of PPP projects.
- *Capacity Building.* Conduct intensive training, seminars, and workshops through its institution building program to improve the capabilities IAs/LGUs in all phases of the PPP project development life cycle.

The lessons from past experiences with PPP coordination led to changes in the functions of the coordinating entity that intend to make it more responsive to the needs of PPP projects. **Table 5** shows the improvements made in the Philippine entity in charge of coordinating PPP projects.

Table 5. Coordinating entity: PPP Center and BOT Center

BOT Center	PPP Center
Responsible for PPP marketing and promotion functions	Marketing and promotion functions are to be undertaken by the Department of Trade and Industry pursuant to EO No. 8
Was previously attached to the Office of the President (OP) and then later the Department of Trade and Industry (DTI)	Attached to the National Economic and Development Authority to facilitate the coordination and monitoring of PPP programs and projects which are likewise overseen by NEDA.
Maintained a Project Development Facility (PDF) which was intended to assist in the development of BOT project proposals	PDF evolved to a Project Development and Monitoring Facility (PDMF); additional function of monitoring PPPs were given

Source: Executive Order No. 8 of 2010 and the BOT Law (RA 6957) as amended (RA 7718)

Pursuant to Sec. 8 of Executive Order No. 8, the PPP Center was given several sources of funding:

- PPP Center will assume the funds that were previously appropriated to its predecessor, the BOT Center.
- PPP Center may receive contributions, grants, and/or other funds from, other government agencies and corporations, local government units, local and foreign

donors, development partners and private sector/institutions subject to existing laws, rules and regulations.

- In addition, revolving funds were given to the Project Development and Monitoring Facility to ensure delivery of the PPP Center's mandate.

Project development and monitoring facility. Sec. 6 of Executive Order No. 10 provided an initial Pesos 300 million (US\$7.1 million) working fund to the PPP Center's Project Development and Monitoring Facility (PDMF). The facility provides funding and lends expertise for the preparation of timely pre-feasibility and feasibility studies for structuring efficient PPP projects.

Donor initiatives for PPP Center. Since 2007, the Australian Agency for International Development (AusAID) has worked with the Philippine government in enhancing the policy and regulatory framework for PPP. In particular, AusAID provided a technical assistance grant for developing a PPP framework for toll roads based on transparent and competitive bidding. AusAID is currently building on the results of this previous technical assistance to further support emerging key reform priorities of the government related to PPP, and to develop high priority PPP projects that are consistent with the Philippine Development Plan.

In addition, AusAID's "*Strengthening Public Private Partnership Program*" will provide US\$15 million in grant funding over 3 years to help package successful PPP projects and improve the government's capacity to prepare, competitively tender and implement PPP projects. It also makes available technical assistance to facilitate a more enabling policy, legal, regulatory, and institutional framework for PPP.²⁰

The Asian Development Bank (ADB) with co-financing from the Canadian International Development Agency (CIDA) supports AusAID's Strengthening Public

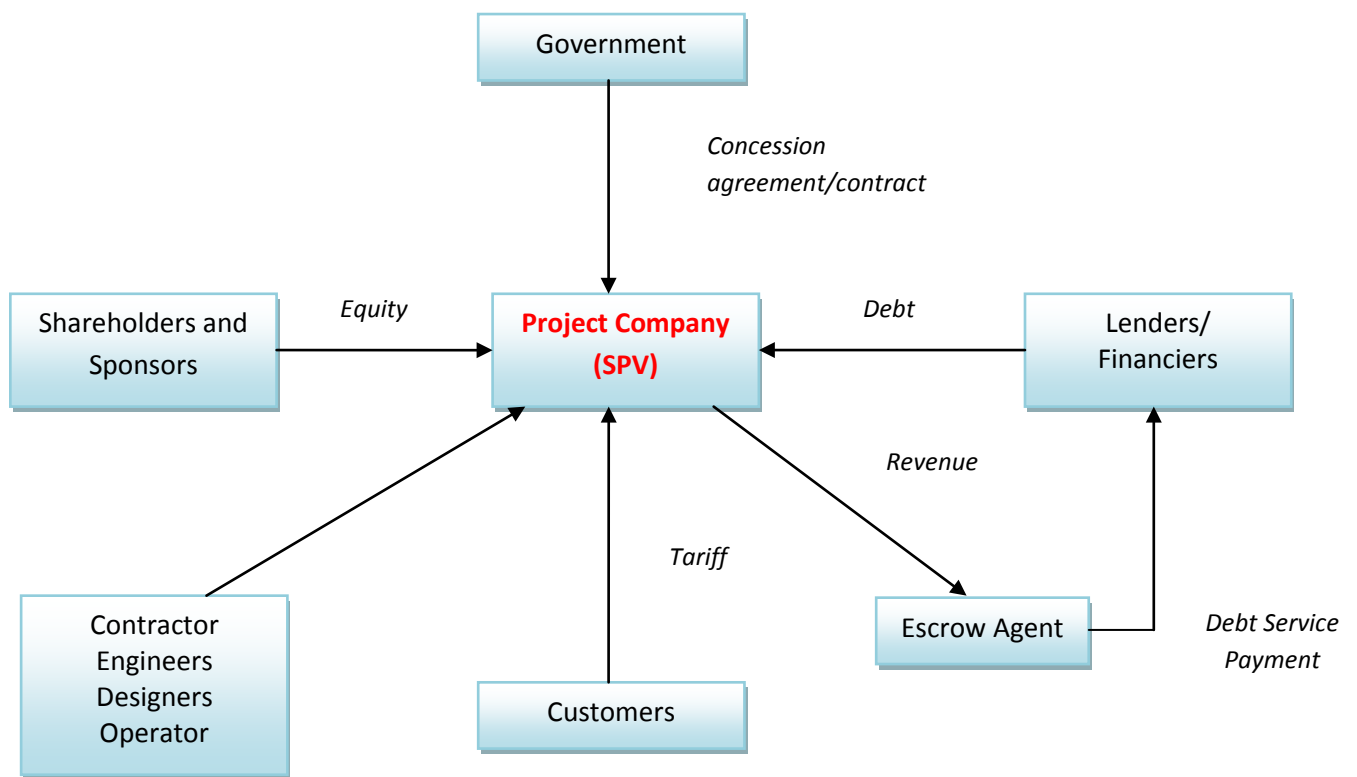
²⁰AusAID. Fact Sheet: Australia's Support to Strengthen Public-Private Partnerships (PPPs) in the Philippines. Available online at:
<http://www.usaid.gov/country/philippines/pdf/governance/strengthening-pub-priv-partnership/spppp-factsheet-usaid-support-ipm.pdf>

Private Partnership Program through capacity building for the PPP Center and augmentation of the funds at PDMF.

3.3 Case studies for infrastructure projects in the Philippines

Before we present the case studies, it is useful to recall the structure of a typical concession (one of several variants of the PPP approach) in order to have a framework for understanding the case studies in this section. **Figure 4** presents a basic project structure that is used to produce an infrastructure facility that serves the public (consumers), allows government to fulfil its mandate to provide public goods and services, and enables private stakeholders (shareholders, sponsors, lenders, financiers, contractors, etc.) to generate profits and fees.

Figure 4. Typical concession agreement structure



Source: Llanto (2010) adapted from Menheere and Pollalis (1996).

A concession agreement is a complex approach because of the presence of different actors with particular goals, functions, and interests. The challenge to the partnership between government and the private sector, that is, investors, financiers, contractors, etc., is to reconcile, harmonize, and translate these varying objectives into a concrete infrastructure facility that serves the needs of various stakeholders²¹.

Upon approval of the project the host government (principal) grants the private company a concession that may last from 10 to 25 years, or more to operate and earn profits from the envisaged facility that will be built with private capital and expertise. The government takes ownership of the facility and the assets at the end of the concession period. The shareholders of the private company that is granted the concession together with sponsors organize a special purpose vehicle that will take overall charge of collaborating with financiers/lenders on financing the project, and with contractors (designers, consultants, builders) on building and making operational the infrastructure facility, e.g., toll road. The services of an operator may be tapped to manage and operate the facility.

²¹ This section draws from Llanto (2010).

Philippine Case Study 1: Metro Rail Transit Line 3 (MRT 3)

Project Profile: A build-lease-transfer arrangement for a mass rail transit system in Metro Manila

Sponsor: Metro Rail Transit Corp

Project Cost: US\$655 million

DE Ratio: 29:71

Contracting Agency: DOTC

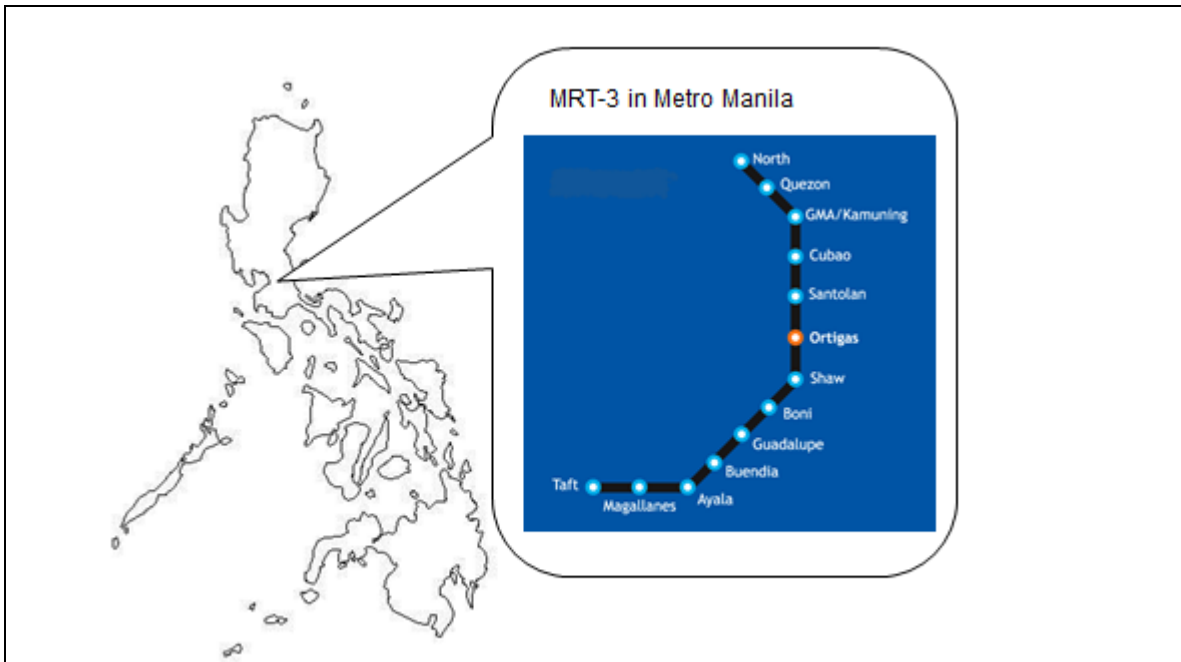
Concession Period: 25 years

EPC contractor: Sumitomo Corp

O&M operator: Unit of DOTC

Financiers: MRTC, JEXIM, foreign and local creditors

Government support: Government guarantees of the debt rental payments and equity rental payments of the project



The MRT 3 facility is a 17-kilometer mass rail transit system traversing 13 stations along the Epifanio de los Santos Avenue (EDSA) in Metro Manila. It is a north-to-south MRT line. The MRT 3 is under a Build-Lease-Transfer (BLT) arrangement. The Department of Transportation and Communications (DOTC), a government agency, leases the rail facility from the private Metro Rail Transit Corporation (MRTC), which financed and constructed the system. The government operates it through a unit under the DOTC and is paying contractually agreed rental payments to MRTC.

The MRT 3 project has been customarily categorized in project monitoring documents as an unsolicited project, although it did not follow the usual unsolicited mode wherein a private proponent submits an unsolicited proposal to the government, which is then subjected to a price challenge by other bidders. The categorization may be explained by its history.

The history of MRT 3 project can be traced as early as 1989 when the DOTC planned a light railway transit line along EDSA. Prequalification was initiated in 1991 in accordance with Republic Act (RA) 6957, the precursor to the current PPP law, RA 7718. The implementing rules at the time did not explicitly provide a role for the inter-agency committee which now approves major PPP investments (i.e., the Investment Coordination Committee of the National Economic and Development Authority Board, hereafter NEDA-ICC). The DOTC pursued direct negotiation with the private proponent, i.e., the EDSA LRT Consortium, Ltd. (ELCL, the predecessor of the

MRTC), which was the only one deemed qualified among the five firms that responded to the call for prequalification. In 1991 the DOTC signed the BLT Agreement with the ELCL, which became the subject of many hurdles until final approval and implementation years later.

The challenges to the validity of the BLT contract spanned nearly three and a half years and can be summarized as follows:

- March 1992: The Executive Secretary declined to have the BLT contract approved by the President, citing that RA 6957 authorizes public bidding as the only mode to award PPP contracts, and that the prequalification proceedings did not meet the requirement for public bidding contemplated under the law. (This position contradicted that of the Executive Secretary in 1991 who granted DOTC the clearance to proceed with direct negotiations.)
- April 1992: The NEDA ICC-Technical Board came into the picture following the evolution of the legislative framework for PPP projects requiring the ICC review and approval process. It questioned the full commercial risk-bearing by the government and recommended that the DOTC should undertake a public bidding rather than pursue the project (negotiated) with the current proponent.
- June 1992: The NEDA ICC-Cabinet Committee (CC) expressed concern that the government would shoulder any operating losses of the system, and that the DOTC had guaranteed the revenues of the private proponent firm in the form of lease payments. The lease payments in turn guaranteed the proponent's debt service and return on equity.
- August 1992: Computations made by the NEDA Secretariat that evaluated the project showed that the government would have to provide subsidies for at least the first four years of operation. The NEDA ICC-CC instructed the DOTC to renegotiate the contract in order to reduce the risks to be borne by the government, but during negotiations the ELCL refused to adopt the demand-based rental fees recommended by the ICC. Later, the DOTC conveyed to the ICC that the negotiations were unsuccessful.
- May 1993: The Philippine president approved a revised and restated BLT contract plus a

supplemental agreement but three senators petitioned the Supreme Court to prohibit the DOTC and ELCL from implementing the revised contract and the supplemental agreement. The petitioners argued that the agreements were grossly disadvantageous to the government and contract award on a negotiated basis violated RA 6957. (While the Supreme Court was studying the matter, the PPP legislative framework further evolved and the implementing rules called for explicit NEDA-ICC clearance of projects with substantial government undertakings.)

- April 1995 - The Supreme Court dismissed the petition, citing among other things, that although negotiated contracts are not explicitly mentioned in RA 6957, Presidential Decree (PD) No. 1594 allows negotiated award in exceptional cases and PD 1594 is the general law on government infrastructure contracts. The Supreme Court also dismissed the claim that the agreements were grossly disadvantageous to the government and took the petitioners to task for not presenting evidence on what constitute reasonable rentals.

Further amendments to the contract ensued and increases in project cost were negotiated for several reasons, e.g., price escalation and changes in technical design. The final BLT contract was signed in August 1997, with the cost capped at US\$ 655 million and the cooperation period (called the revenue period for the lease payments) set at 25 years. The final BLT agreement was executed between the DOTC and the Metro Rail Transit Corporation (MRTC), the successor to the ELCL. The engineering, procurement and construction (EPC) contractor was Sumitomo Corporation.

However, during contract implementation, the actual project cost increased to US\$ 675.5 million, of which US\$ 485.5 million were funded by lenders and US\$ 190 million were invested by MRTC, bringing the debt to equity ratio to 71%:29%. Syndicated loan financing came from the Japan Export and Import Credit facility, Bank of Tokyo-Mitsubishi, Czech Export-Import Credit facility, and local commercial banks. The US\$ 675.5 million project cost was about 3% higher than the cap, but the increase did not require a re-evaluation of the project because the applicable NEDA-ICC guidelines call for a re-evaluation when the increase in project cost is 10% or higher in the case of a proposed project (i.e., the project is already approved by the ICC but not yet implemented), or 20% or higher in the case of an on-going project. The rail facility became fully operational in 2000 and thus, the 25-year revenue period for the lease payments was adjusted up to 2025.

The rental payments associated with the MRT 3 has three parts (a) debt rental payments, (b) equity rental payments and (c) other lease payments. These are described as follows:

- Debt rental payments - These are drawn on the revolving letter of credit opened by the DOTC at a commercial bank and the payments go to an inter-creditor agent acting on behalf of the lenders. The MRTC is not directly involved in complying with the debt rental payments.
- Equity rental payments - These are made according to a schedule of fixed but not constant payments which are integral to the contract. The equity rentals are denominated in US dollars and the amounts set were designed to yield an equity internal rate of return of 15% for the MRTC²².
- Other lease payments - These are for the maintenance costs, cost of the consultant to MRTC, and staffing and administration costs, all of which are completely passed on to the DOTC.

Under the contract, the debt rental payments and equity rental payments are guaranteed by the government and this guarantee is supported by a Performance Undertaking (PU) letter issued by the Secretary of the Department of Finance. The PU provides that the full performance of DOTC's obligation under the BLT agreement is guaranteed by the Republic of the Philippines and such PU is effective throughout the life of the project.

The fiscal implications of the guaranteed payments were felt immediately after the facility started operating. The debt rental payments were treated as automatic appropriations by Congress, in much the same way as other debt obligations of the Philippines were treated, but the equity rental payments were not. The actual ridership fell below the proponent's projections and since the project was not generating enough revenues, the DOTC had to ask for budgetary support from the Department of Budget and Management (DBM). The subsidies for the equity rental payments had to compete with other contractual obligations of the government. Keeping the fares subsidized

²²The 15% EIRR is not stipulated in the concession agreement. The amounts of scheduled rental payments were specified and approved by the NEDA-ICC during the project approval stage. It was also during that stage that the 15% EIRR was approved.

because of popular concerns has resulted in a bigger subsidy burden on the government.

In 2002, the MRTC sold a substantial portion of its future share distributions (which are essentially receivable equity rental revenues) as asset-backed securities (bonds) to third party investors²³. This is legal as it is supported by the securitization law.

In 2008, the government bought a substantial block of those asset-backed securities and became majority holder²⁴. Two government-owned financial institutions were the vehicles used to buy those asset-backed securities. With this decision, the government expects to realize savings that could result from re-financing the equity rental obligations under the prevailing regime of lower interest rates²⁵. The plan is to eventually sell those securities to the public but this has not yet happened.

²³ The receivable equity rental payments were securitized. Securitization was conceived and implemented when the project was already operational and earning revenues.

²⁴ After the securitization, it appears that MRTC still holds a certain percentage of the equity stake in the project but the information has not been shared to the public.

²⁵ Based on pronouncements by government officials, another motivation is to have management control in order to expand the capacity of the mass transit system, which has been operating beyond its full capacity.

Philippine Case Study 2: Casecnan Multipurpose Irrigation and Power Project

Project Profile

Project:	A combined irrigation and hydroelectric power (150MW) BOTproject in the northern part of Luzon
Sponsor:	CE Casecnan (an affiliate of CalEnergy International), others
Project Cost:	US\$700 million
DE Ratio:	57:43
Offtaker (water):	NIA
Offtaker (electricity):	NPC, NIA
Contracting Agency:	NIA, NPC
Concession Period:	20 years
Operator:	CE Casecnan Water & Energy Co.
Government Support:	Government guarantees for the full performance of NIA's obligation under the BOT contract



The Casecnan Multi-Purpose Irrigation and Power Project is a combined irrigation and hydroelectric power project in the northern part of Luzon. The project involves collecting water from the Casecnan and Taan Rivers in Nueva Vizcaya (a province north of Metro Manila, Luzon), diverting it to two small diversion weirs and transporting it through a 26-kilometer trans-basin tunnel to the Pantabangan Reservoir (an existing facility before project implementation). The project's power component provides approximately 150 megawatts of hydroelectric capacity to the Luzon grid. As of 2009, the project is irrigating 16,879 hectares of farmlands in Central Luzon. It is expected to irrigate 50,000 hectares but was unable to do so because of the government's inability to sufficiently expand the irrigation infrastructure in that part of the country.

The project is an unsolicited Build-Operate-Transfer (BOT) project and was approved in June 1995 with a cost of US\$ 700 million. The implementing government agency and water purchaser is the National Irrigation Administration (NIA). The parties to the power purchase contract are both government entities—the NIA and the National Power Corporation (NPC), the electricity purchaser. Both the NIA and NPC are government-owned and -controlled corporations. The private partner, CE Casecnan Water and Energy Co., Inc. ("CE Casenan" hereafter), an affiliate of CalEnergy International, owns the facility and is authorized to operate the project for a period of 20 years, after which ownership will be transferred to the Philippine government at no cost. The 20-year cooperation period is from December 2001 to December 2021. The design life of the facility is 50 years.

The NEDA ICC-approved project cost in 1999 was US\$ 650 million but the actual cost upon completion in 2001 reached US\$ 657 million, a 3.8% increase from the approved cost. Debt-to-equity ratio is 57%:43%, with 70% of the equity contributed by CE Casecnan and 30% by various Filipino and foreign investors. Debt financing was through: (i) Floating Rate Notes, (ii) Series A Notes, and (iii) Series B Bonds.

The NIA purchases diverted water and generated electrical energy from CE Casecnan in exchange for the payment of (i) water delivery fees based on a schedule of fixed volume of water, (ii) guaranteed energy delivery fees, and (iii) variable energy delivery fees. CE Casecnan built the infrastructure to collect, divert and transport water up to the reservoir. The water delivery fee is for capital cost recovery and not payment for raw water. NIA then sells the water to farmers and cooperatives for minimal irrigation fees. It likewise sells to NPC the generated electricity purchased from CE Casecnan. The Performance Undertaking issued by the Secretary of Finance

in 1995 in behalf of the Republic of the Philippines guarantees the full performance of NIA's obligation under the BOT contract throughout the cooperation period.

It is noted that demand risk is borne by NIA since the water delivery fees are based on a fixed volume and are paid whether or not the volume of water delivered is used or not. Because the actual demand for irrigation water was less than expected and the irrigation fees have been set far below cost-recovery levels, the water delivery aspect is generating large shortfalls for NIA. As a result, the national government is currently providing subsidies to the NIA for the payment of the guaranteed water delivery fees. With the benefit of hindsight, one can say that a more careful analysis of demand risk during the project preparation stage and the allocation of some of it to the private partner, rather than purely to the government, could have resulted in a more realistic demand projection and downsizing of the water delivery volume.

It is likewise noted that the Casecnan project is an unsolicited project and the PPP law, RA 7718 disallows subsidies to unsolicited projects. However, during the NEDA-ICC review of the proposed project in 1995, the partner implementing agency (NIA) was able to secure a favorable opinion from the Department of Justice stating that the subsidies are for the benefit of the farmers and not going to the project per se. The Department of Budget and Management's 2012 report on budgetary support to government corporations shows that the 2012 subsidies to NIA, which are primarily due to the Casecnan project, are estimated to reach 2.06 billion pesos (US\$47 million).

Philippine Case Study 3: Southern Tagalog Arterial Road (STAR)

Project Profile: 41.9 kilometertollwayfrom Santo, Tomas Batangas to Batangas City, a city south of Manila

Project Type: Build-Operate-Transfer

Sponsor: STAR Infrastructure Development Corporation

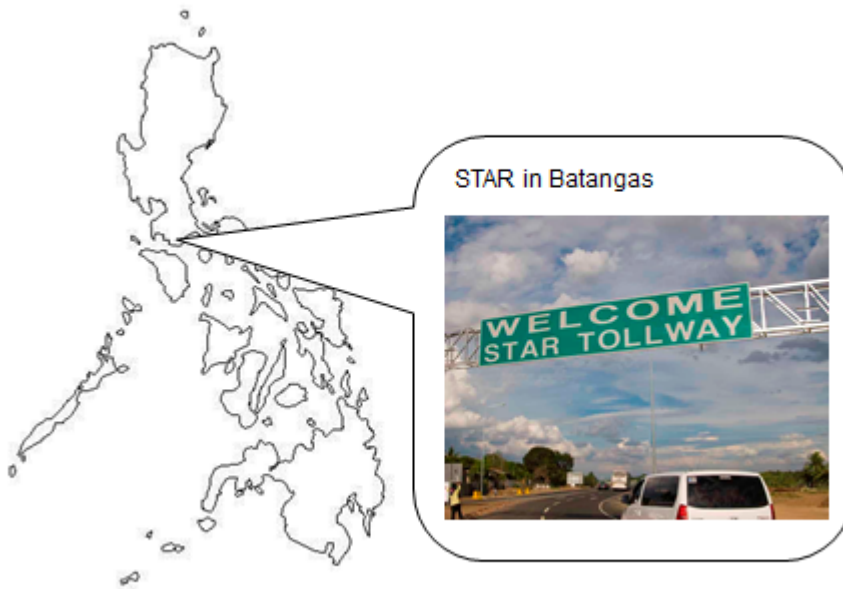
Project Cost: US\$38.8 million

Contracting Agencies: DPWH, Toll Regulatory Board

Concesssion Period: 30 years

Operator:STAR Infrastructure Development Corporation

Government support: Subsidy for the acquisition of right-of-way



The Southern Tagalog Arterial Road (STAR) project in Batangas province (south of Metro Manila) is a modified Build-Operate-Transfer (BOT) project. The 41.9 km STAR tollway was built to improve road linkage between Metro Manila and Batangas City, provide easy access to the Batangas International Port, and thereby accelerate industrial development in Batangas and nearby provinces. There are two stages in this PPP project.

Stage 1 involves the operation and maintenance of the portion of the STAR (22.16 kilometers of road) built by the government, and Stage 2 involves a BOT scheme for the additional length of toll road (19.74 kilometers). Stages 1 and 2 are covered by one contract, the Toll Concession Agreement, which was signed by three parties—the Department of Public Works and Highways (DPWH), the Toll Regulatory Board (TRB), and the STAR Infrastructure Development Corporation (SIDC)²⁶. The 30-year toll concession contract was awarded to SIDC through solicited bidding in 1995 but the contract became effective only in 1999.

Toll adjustments have to be approved by the Toll Regulatory Board²⁷. SIDC collects the toll fees for both Stage 1 and Stage 2 of this project.

The government-constructed portion is a 22.16 kilometer four-lane highway stretching from Santo Tomas, Batangas to Lipa City (Batangas province) built by the Department of Public Works and Highways (DPWH), a government agency using official development assistance from Japan. The four-lane stretch opened to traffic in 2001.

The SIDC-constructed portion is a 19.74 kilometer two-lane highway stretching from Lipa City to Batangas City. The NEDA ICC-approved cost of this BOT portion is Pesos 1.7 billion (US\$38.8 million) in 1995 but the actual cost reached Pesos 2.0 billion (US\$45.62 million) in 2006. The government support for the BOT portion came in the form of Pesos 0.5 billion (US\$11.4 million) right-of-way acquisition, which is in effect a subsidy for the project. STAR Stage 2 opened in 2008 as a two-lane highway.

It is noted that Stage 1 construction had been finished before Stage 2 construction was started.

Several factors contributed to the delay in completion of the STAR project: (a) SIDC's financial difficulties in the aftermath of the 1997 Asian financial crisis, (b) negotiation and purchase of

²⁶We were not able to get information on the identity of the shareholders of SIDC.

²⁷Usually contracts specify when tolls can be adjusted and by how much. The concessionaire proposes the toll adjustment to the TRB. The details of the concession agreement are not publicly available.

right-of-way from private landowners, and (c) the delay in the issuance of the Toll Operations Certificate.

On April 12, 2012, it was reported that the SIDC will expand the Lipa City-Batangas City stretch (under Stage 2) from two lanes to four lanes and spend at least Pesos 2 billion (US\$45.62 million) for the expansion and improvements like asphalt overlaying (currently, the whole STAR is concrete-paved), automatic toll collection system, installation of closed circuit television cameras, and lighting improvements.

Philippine Case Study 4: R-1 Expressway Extension (CAVITEX)

Project Profile: 6.6 kilometer extension of Manila-Cavite expressway from Bacoor municipality to Kawit municipality in Cavite province southwest of Metro Manila

Sponsor: UEM-MARA Corp, Public Estates Authority (PEA)

Project Type: Joint Venture

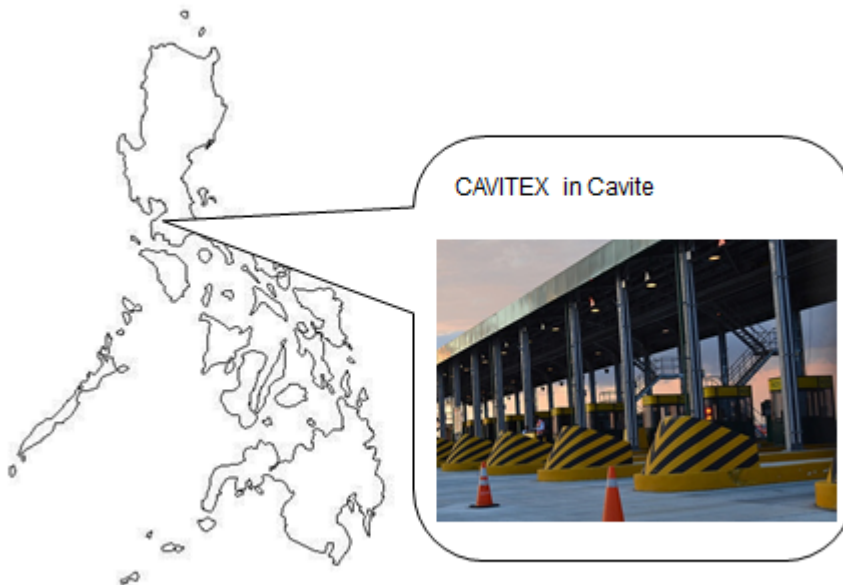
Government contracting agency: PEA

Concession Period: 35 years

O&M Operator: UEM-MARA

EPC Contractors: Sargasso Construction Development Corporation in a joint venture with Atom Development Corporation

Government Support: Subsidy for right-of-way acquisition



The R-1 (short for Radial Road 1) Expressway Extension, referred to as the Manila-Cavite Expressway Segment 4 is more popularly known to the public as simply “CAVITEX” or “the coastal road”. It is a 6.6 kilometer expressway along Bacoor Municipality to Kawit municipality in Cavite province southwest of Metro Manila. (From here onwards, we will use the name “CAVITEX”.) Its construction started in January 2007 and it opened to the public in May 2011. The project involved the upgrading of the then two-lane dual carriageway to a three-lane dual expressway.

CAVITEX is a continuation of the R-1 Expressway, which has been operating since 1998 and is a 6.475 kilometer expressway from the Ninoy Aquino International Airport junction in Paranaque City (western Metro Manila) to the main road in Bacoor municipality. It was constructed to further strengthen the commercial link between Metro Manila and the province of Cavite which hosts an export processing zone and industrial parks. It aims to enable a more efficient distribution of goods and reduce travel time between Kawit, Cavite to Metro Manila from one hour and 30 minutes to about 20 minutes. It also aims to improve access to the two key international gateways of the country, the Ninoy Aquino International Airport and the Port of Manila.

CAVITEX was implemented under a 1994 Joint Venture Agreement which covers three projects: the R-1 Expressway, the R-1 Expressway Extension (the CAVITEX) and the future, yet-to-be-constructed C-5 Link. The joint venture was originally between the Public Estates Authority (PEA), a Philippine government-owned and controlled corporation, and two Malaysian companies—MARA, a state-owned corporation, and Renong, a publicly listed company.

In the Philippines, joint ventures between public and private companies are not covered by the enabling law on PPPs, RA 7718. The guiding legal framework is the corporation code (Batas Pambansa Bilang 68) and augmented by the respective charters of government corporations. An executive issuance, the NEDA guidelines on joint ventures issued in 2008, also currently augment the legal framework. The NEDA "Guidelines and Procedures for Entering into Joint Venture (JV) Agreement Between Government and Private Entities" were formulated as instructed under Executive Order (EO) 423 series of 2005. This executive order set the rules and procedures on the review and approval of all government contracts presumably to conform to RA 9184 or the Government Procurement Reform Act.

The parties to the 1994 Joint Venture Agreement passed several transformations. Under a

novation agreement (i.e., legal instrument that formalizes the substitution of one party for another in a contract) in 1995, the Malaysian company Renong was replaced by the United Engineers Malaysia (UEM), which is a publicly listed company. Eventually, the two Malaysian companies established themselves as UEM-Mara Philippines Corp. (UMPC).

In 1996, the Toll Regulatory Board (TRB) entered into a Toll Operation Agreement with the PEA and the UMPC. The franchise period that was given for the three expressways (R-1, CAVITEX and C5 Link) is 35 years, calculated from the final operation commencement date, or from 01 October 1998, whichever was earlier. Thus, the concession runs for a term of 35 years from October 1998 to October 2033. Under the Toll Operation Agreement, the PEA was obligated to incorporate a subsidiary company, of which PEA would be the sole stockholder, and thus, in 1997, PEA incorporated a subsidiary, the PEA Tollway Corporation (PEATC).

In 1999, the Malaysian UEM divested its entire equity interest in UMPC to the Coastal Road Corporation (CRC), a Filipino-owned company, and officially relinquished to CRC all of its obligations and liabilities in the Joint Venture Agreement and Toll Operation Agreement. In 2004, Executive Order 380 transformed PEA into the Philippine Reclamation Authority (PRA) and transferred PEA's non-reclamation assets and liabilities to the Department of Finance.

In 2006, the PRA entered into a Voting Trust Agreement with the UMPC, which trust agreement amended the 1994 Joint Venture Agreement. At present, the recognized parties to the Joint Venture Agreement are the PEATC (public Filipino company) and the UMPC (private Filipino company).

The EPC contractor for CAVITEX was Sargasso Construction Development Corporation in a joint venture with Atom Development Corporation. Construction was from January 2007 to April 2011. In 2010, toll road bonds worth US\$160 million, maturing in 2022 and with a 12% yield, were issued by a special purpose vehicle company set up by UMPC to finance the remaining construction, repay existing project finance debt and fund transaction accounts. The Manila Cavite Toll Road Finance Company (MCTRFC), a special purpose vehicle which purchased the rights to future toll road collections from the UMPC, issued the bonds. It was reported upon tollway opening that the total investment cost for the construction reached Pesos 5.7 billion.

The government support to the project came in the form of subsidy for right-of-way acquisition. The right of way acquired by the government through the Department of Public Works and

Highways budget is estimated to be Pesos 2.352 billion (US\$53.7 million). In the amendments to the Joint Venture Agreement, the PRA shall receive 9% of gross toll revenue while UMPC shall absorb all operating and maintenance costs and receive 91% of the gross toll revenue.

At present, CAVITEX operation faces a challenging situation because the actual traffic was less than what was projected by the UMPC's consultants. The 2011 daily traffic volume averaged around 10,000 to 11,000 vehicles per day, which is significantly below the projected annual average daily traffic of 47,000 vehicles per day. One (temporary) factor that contributed to the low traffic volume is the travel delay due to the construction projects around the CAVITEX, particularly the Zapote interchange construction and the pipe laying project by Maynilad, a Metro Manila water supply concessionaire. Moreover, although using the tollway is the most efficient route for commuters going to and from Cavite, the high toll rate could also be affecting the slow growth in traffic. The rate per kilometer on the CAVITEX is approximately two and a half times higher than the rate in the adjoining R-1 Expressway.

The low traffic has affected the project's cash flow generation to the point that Moody's Investor Service downgraded to Caa1 from B2 the rating for the toll road bonds issued in 2010 to partly finance the project. Moody's also gave a rating outlook of negative to the bonds. On March 5, 2012, the UMPC offered to buy back the bonds held by foreign and local investors and to give an early tender premium. Cavitex Finance Corporation, the company set up by UMPC to buy back the bonds, announced on March 19, 2012 the interim results of the early tender which showed that approximately 72.5% of the aggregate amount of the debt securities outstanding had been validly tendered. It was reported on April 18, 2012 that the UMPC is now named Cavitex Infrastructure Corp. and its parent company, Coastal Road Corp., sold 30% of its (CRC's) stock to a group of foreign investors.

Philippine Case Study 5: Tarlac-Pangasinan-La Union Expressway (TPLEX)

Project Profile: 88.58 kilometer expressway connecting from the terminus of the Subic-Clark-Tarlac Expressway (SCTEX) to Rosario municipality in La Union, a province north of Metro Manila.

Project Type: Build-Transfer-Operate

Sponsor: Philippine Infrastructure Development Corporation

Project Cost: US\$ 385 million

DE Ratio: 60:40

Government Contracting Agency: DPWH

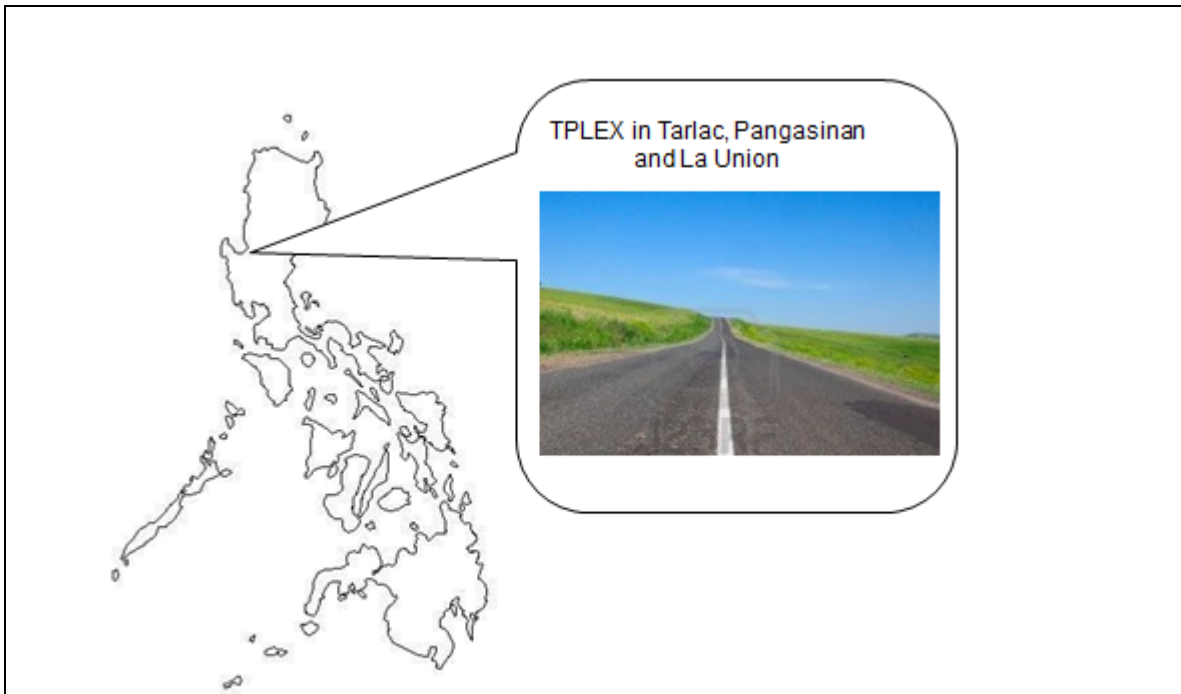
Concession Period: 35 years

O&M Operator: Private Infrastructure Development Corporation

EPC Contractors: R.D. Policarpio and Co. Inc., New Kanlaon Construction, Inc., D.M. Wenceslao and Associates Inc., D.M. Consunji Inc., C.M. Pancho Const. Inc., and J.E. Manalo & Company

Financiers: BDO Unibank, Inc., Development Bank of the Philippines and Land Bank of the Philippines

Government Support: Subsidy for the acquisition of right-of-way and civil works for a road segment



The Tarlac-Pangasinan-La Union Expressway (TPLEX) is an 88.58 kilometer expressway that is currently under construction and will connect to the terminus of the Subic-Clark-Tarlac Expressway (SCTEX) and end at Rosario municipality in La Union, a province north of Metro Manila. Connecting to the SCTEX, which is in turn connected to the North Luzon Expressway (NLEX) that is the northern gateway to Metro Manila, the TPLEX aims to support increasing socio-economic activities in Region I, Region III, the Cordillera Administrative Region and Metro Manila. It also aims to promote investments in the areas to be connected by the expressway.

The TPLEX project involves two phases: Phase 1 is the on-going construction of two lanes and Phase 2 will be the expansion of the expressway into four lanes once traffic volume reaches 25,000 vehicles per day. Phase 1 construction began in July 2010 and is expected to be completed in 2013.

The project is being implemented under the solicited Build-Transfer-Operate (BTO) mode and the competitively selected concessionaire is the Private Infrastructure Development Corporation (PIDC). The implementing government agency is the Department of Public Works and Highways (DPWH). The road asset will be transferred to the DPWH upon completion, after which the PIDC will be authorized to operate and maintain the expressway under a 35-year Operations and

Maintenance Agreement.

The total project cost during the 2007 approval by the NEDA-ICC is Pesos 16.88 billion (US\$385 million), inclusive of the Pesos 792.80 million (US\$18.1 million) right-of-way acquisition cost and Pesos 2.907 billion (US\$66.3 million) subsidy for civil works, both funded through the DPWH budget. The EPC contractors for the project are six Filipino firms, namely, R.D. Policarpio and Co. Inc., New Kanlaon Construction, Inc., D.M. Wenceslao and Associates Inc., D.M. Consunji Inc., C.M. Pancho Const. Inc., and J.E. Manalo & Co, which have respectively construction segment responsibilities in the TPLEX. In the original proposal, the debt-to-equity ratio for privately financing the construction cost is 60%: 40%. In July 2011, the PIDC acquired a ten-year term loan of Pesos 11.5 billion (US\$262.3 million) from a syndicate of banks led by BDO Unibank, Inc., Development Bank of the Philippines and Land Bank of the Philippines in order to finance the TPLEX.

The national government support for the project came in the form of the Pesos 793 million (US\$18.1 million) for the acquisition of right-of-way, and Pesos 2.907 billion (US\$66.3 million) cash subsidy for civil works, i.e., the Carmen-Urdaneta road segment.

It is interesting to note that the TPLEX (a BTO project) is deemed more financially viable than the ODA-funded SCTEX, which is already operational. The TPLEX has successfully attracted private sector interest because it will provide a significant link for seamlessly connecting northern Luzon to Metro Manila with enough traffic volume to make it commercially feasible. On the other hand, the SCTEX projected traffic volume was not enough to make commercial and short-term financing feasible. A seamless TPLEX-SCTEX-NLEX link will generate a high volume of traffic as it would reduce travel time between Baguio City (in the Mountain Province, north of Metro Manila) and Metro Manila to three hours from the current five to eight hours. Travel time between growing urban areas in Northern Luzon and Metro Manila will likewise be significantly reduced.

3.4 Government fiscal support to PPPs in Indonesia

3.4.1 Types of Support

In terms of partnership between government and private sector to provide public goods, various schemes have been applied at different levels of government in Indonesia. In some regions, Subnational Government (SNG) used the partnership to provide small infrastructures such as bus terminal and markets. At the central level, Ministry of Public Works gave concessions to some private companies to build and operate toll ways. All these partnerships were generally implemented, combining traditional contracts, such as Engineering Procurement Construction (EPC).

The concept of PPP as stipulated in the regulations, first came in President Regulation (PR) 67 issued in 2005, as a response to the 2005 Indonesia Infrastructure Summit. In the Summit, President Yudhoyono offered 91 infrastructure projects worth \$22.5 billion to the potential investors under PPP scheme. Unfortunately, the offered projects were not followed up for the execution; most blame it on the lacking proper regulations and unprepared government.

In the PR 67/2005 (as amended by PR 13/2010 and PR 56/2011), the PPP in Indonesia is defined as “the partnership between the government and the private sector in the provision of public sector especially in the infrastructure”. This wide and common definition calls for supporting regulations to outline the details so as to clarify that PPP is different with traditional procurement contracted by government. Following the pledge to adopt PPP, the GOI established some regulations, including PR 36/2005 on Land Acquisition (as amended in PR 65/2006 and Law 2/2012), PR 42/2005 on KKPPPI (National Committee for the Acceleration of Infrastructure Provision), and Finance Minister Regulation 38/2006 on Guidelines on Controlling and Managing Risks for Infrastructure Provision (amended by FMR 260/2010 as mandated in PR 78/2010 on Infrastructure Guarantee in Public Private Partnership Provided Through Infrastructure Guarantee Entity).

Bappenas (Development Planning Agency of Indonesia) further defines PPP as a form of business cooperation between the Government and business entity in the Provision of Infrastructure, comprising the construction work to develop or improve the infrastructure

capability and/or infrastructure management and/or infrastructure maintenance activity within the framework of improving the benefits gained from such infrastructure. The eligible institutions to act as Contracting Agency, or a responsible agency to undertake the partnership project, are Minister, Head of Institution, or Regional Head.

The objectives of embracing PPP scheme into infrastructure development plan in Indonesia are to:

- Sustainably meet the financing need to provide infrastructure through mobilization of private funds.
- Improve quantity, quality, and efficiency of services through healthy competition.
- Enhance the quality of management and maintenance of infrastructure provision.
- Promote using the principle of user charges, or in particular cases, consider the user's ability to pay.

Government support for PPP projects can be structured into following types (the amount of funds allocated for each type of support can be seen at the Table 7):

a. *Project Development Services (PDS)*

Government provides the support at the preparation stage of PPP project. The facility includes the support for: consultant assignment for constructing pre-FS as well as for transaction advisory, preparation of tender documents, technical assistance to the Government Contracting Agency (GCA) in the tendering process to get the financial close.

On the basis of Memorandum of Understanding between Finance Minister, Head of Investment Coordination Body (BKPM), and Minister of National Planning Agency (Bappenas) in 18 August 2010 concerning the Coordination of Facility and Support for Accelerating PPP Implementation in infrastructure provision, that PT SMI is tasked to support the preparation stage of PPP Project.

b. *Government Support*

The government has a few types of support for PPP, namely: land fund, infrastructure fund, guarantee fund, and some pre-financing funds. The support can be given both for national level and regional level PPP projects. Common examples are support for (partly or whole) land clearing in the toll highway projects. In 2011 National Budget, the government has allocated IDR315 billion (approx. USD34.74 million)²⁸ for toll highway Pandaan – Malang (East Java), Pasirkoja – Soreang (West Java), Serangan – Tanjung Benoa (Bali), and Pekanbaru – Kandis – Dumai (Riau). The land clearing support is planned to continue until FY2014.

c. *Government Guarantee for Infrastructure*

This type of support is to increase credit worthiness of PPP Projects by giving guarantee for the risks triggered by:

- a. Action or no action by GCA or GOI under which authority belongs to GCA/GOI.
- b. Policy of GCA or GOI.
- c. One-side decision by GCA or GOI.
- d. Incapability of GCA to perform its function as stipulated in the contract.

The guarantee also covers financial compensation for the risks under GCA responsibility according to the contract.

The PPP Project that enjoyed this guarantee is Independent Power Plant (IPP) Project in Batang, Central Java, which the Consortium consists of J-Power, Adaro, and Itochu. There are other potential projects waiting for the guarantee support.

²⁸Bank of Indonesia's rate as of 30 December 2011.

<http://www.bi.go.id/web/en/Moneter/Kurs+Bank+Indonesia/Kurs+Transaksi/>

d. Land Funds

- **Land Capping:**

is a provision of government support to compensate increasing price of the land used for toll road construction. It has been allocated to 28 toll highway projects with the amount of support of IDR4.89 trillion (USD539 million) during the period of 2008 to 2013.

- **Land Revolving Fund (LRF):**

is revolving fund for land clearing in toll highway projects. The government provides pre-financing fund for land acquisition, which later the Consortium repay the fund. LRF is managed by a Public Service Agency (BLU in Indonesian language) under the Ministry of Public Works. Currently, LRF fund is IDR2.3 trillion (approx. USD254 million).

- **Land Acquisition Fund:**

is fund for acquisition the land used for PPP projects subject to government approval and contract.

e. Other types of Fiscal Support:

- **Credit guarantee for Regional Water Supply Company (PDAM)**

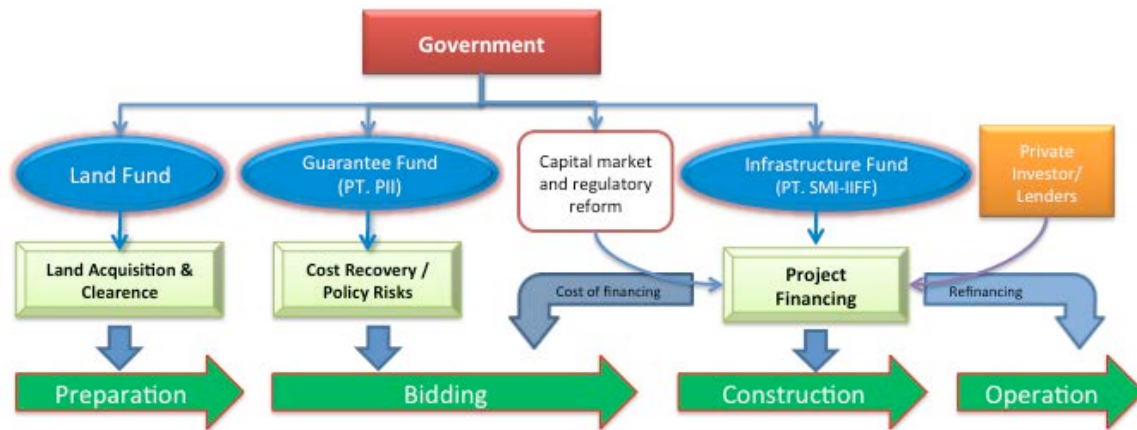
By referring to PR 29/2009 and FMR 29/2009 on Government Guarantee and Interest Subsidy to Support Acceleration of Water Supply, the government aims at helping PDAM access investment credits from national banks. Government can provide guarantee for debt repayment from PDAM to banks, and provide subsidy for interest rate payment to banks.

The guarantee covers 70% of debt repayment while 30% of the debt becomes bank's risk. Suppose PDAM fails to pay the debt repayment, while Local Government cannot provide the funds, then Central Government will bear 70% of total debt.

- **Revolving Fund for Geothermal PPP Projects**

As geothermal is considered environmental-friendly power source, the Government commits to give incentives for the projects. In Fiscal Year 2012, the National Budget allocated IDR 876 Billion (approx. USD97 billion) for Geothermal Power.

Figure 5. Forms of Government Support for PPP



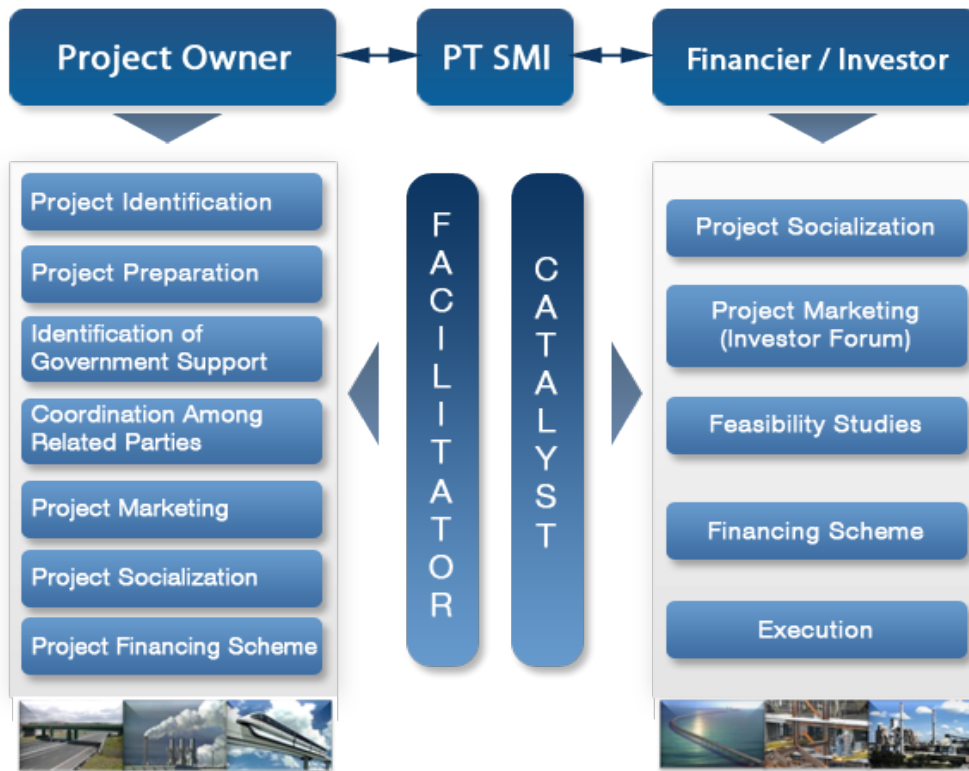
Source: MOF, 2012

3.4.2 Institutional Arrangement and Mechanism

As mentioned above, there are various kinds of government support for PPP. The institutionalized funds are guarantee funds and infrastructure funds. The guarantee funds are channelled through the establishment of PT Sarana Multi Infrastruktur (PT SMI) and PT Indonesia Infrastructure Financing (PT IIF), these are companies set up by the Government through Fiscal Policy Office of Ministry of Finance.

Established on February 2009, PT SMI is fully owned by the GOI. Initial capital is IDR 1 trillion in 2009 plus another IDR 1 trillion taken from State Budget on December 2010 (in total approx. USD 220 million). It has business license from Finance Minister to act as facilitator and catalyst through various actions as depicted in the following picture:

Figure 6. The Role of PT SMI



Source: PT SMI

PT Indonesia Infrastructure Finance (PT IIF), established in 2010, is a joint ventures company owned by the Government of Indonesia through PT Sarana Multi Infrastruktur (Persero) (PT SMI) which put IDR 600 billion (approx/ USD66 million) of equity, Asian Development Bank (ADB) and International Finance Corporation (IFC) which each contribute IDR400 billion, and DEG - Deutsche Investitions- und Entwicklungsgesellschaft GmbH with equity participation of IDR 400 billion (approx/ USD44 million).

Apart from that, The World Bank and ADB have also approved loans worth the equivalent of IDR 1 trillion (approx/ USD110 million) each to PT IIF, and grant support from the Australian Government at the preparation of the establishment.

Government Guarantee funds are deposited in PT Indonesia Infrastructure Guarantee Fund (PT IIGF). The government through Finance Minister Regulation No. 260/2010 has assigned IIGF as “single window processor” to manage provision of guarantee support for all infrastructure projects proposed by the responsible authority of partnership project. The regulation also provides two types of guarantee, namely guarantee provided by IIGF (IIGF Guarantee) and guarantee provided by the Government (Government Guarantee). A PPP Project can receive either: (a) IIGF Guarantee or (b) co-guarantee by IIGF and Government (IIGF+Government Guarantee). The form of co-guarantee is chosen based on appropriate risk allocation between IIGF and the Government (represented by MOF). To avoid long-term fiscal risk, it is prioritized to ask IIGF Guarantee at the first place and to utilize Government Guarantee only if needed. Consequently, the GOI has committed to increase capital of IIGF and allow it to arrange co-guarantee from multilateral financial agencies, including from the World Bank.

Table 6. Types and form of budget allocation as government support for PPP

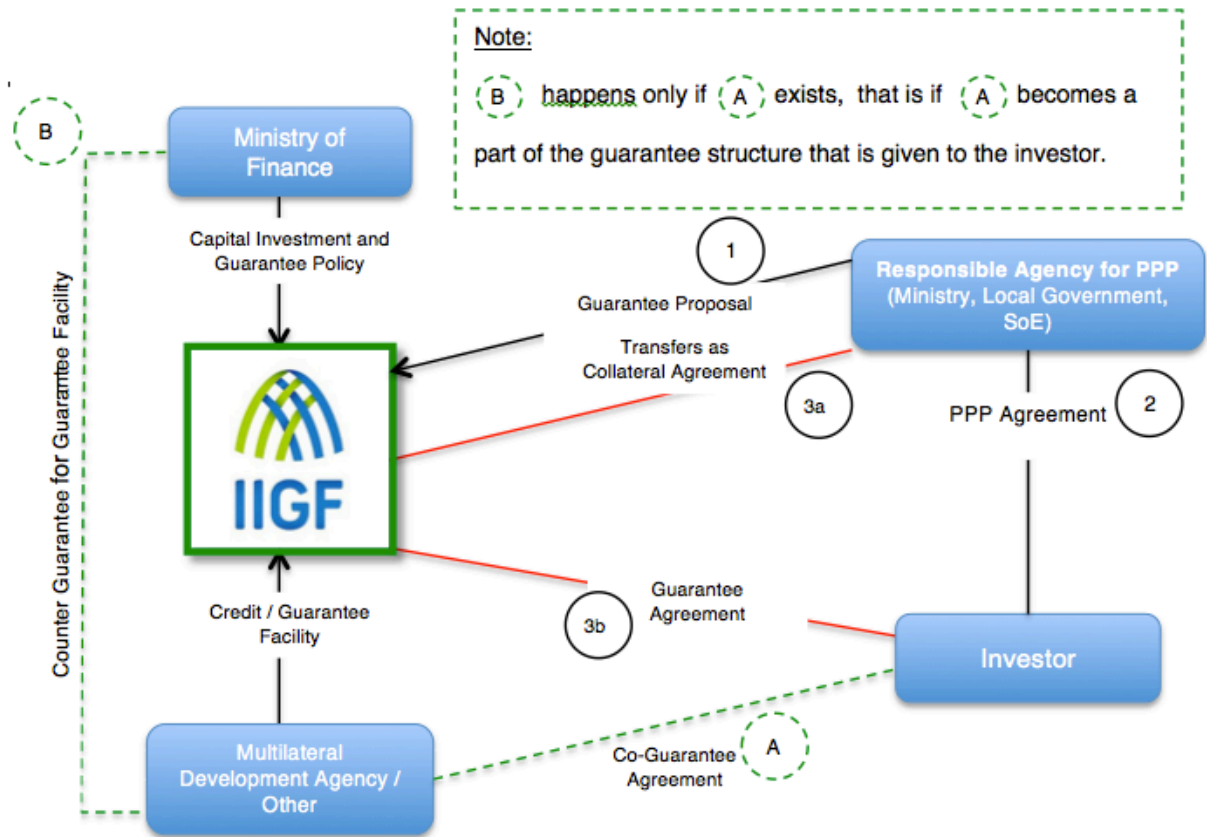
No	Government Support	Form	Budget Allocation	Budget Authority
1	Land Revolving Fund	Cash	State budget financing	Minister of Finance
2	Land Capping Fund	Cash	Other expenditures	Minister of Finance
3	Land Acquisition Fund	Land	Capital expenditures	Ministry/Agency
4	PT. Sarana Multi Infrastruktur (infrastructure fund)	Cash	State budget financing	Minister of Finance
5	PT. Indonesia Infrastruktur Financing (infrastructure fund)	Cash	State budget financing	Minister of Finance
6	PT. Penjaminan Infrastruktur Indonesia (guarantee fund)	Cash	State budget financing	Minister of Finance
7	Reserve fund for geothermal exploration	Cash	State budget financing	Minister of Finance

	(revolving fund)			
8	Facilitation of PPP Project Preparation by PT. SMI	Cash	Other expenditures	Minister of Finance
9	Guarantee to National Power Company and National Water Company	Cash	State budget financing	Minister of Finance

The IBRD Partial Risk Guarantee (IBRD PRG) is the facility provided by the World Bank to catalyze private sector interest through political risk mitigation by supporting debt financing in the form of commercial debt or shareholder loans or providing cash flow support (World Bank). It covers some critical sovereign risks related to Government commitments but not include commercial risks.

To arrive at co-guarantee decision, the following procedure is applied:

Figure 7. Procedure to get co-guarantee decision



Source: IIGF (2011)

Currently, IIGF has committed to support a coal fired IPP project in Central Java with PLN (National Power Company) as responsible authority and is reviewing the proposals for guarantee support come from nine projects. The nine projects are: (1) Tanah Ampo Port (Bali), (2) drinking water projects in Umbulan, East Java, (3) in Maros Sulawesi, (4) in Tukad Unda Bali, (5) in Bandar Lampung, as well as (6) Jakarta-Bekasi-Karawang-Jatiluhur, (7) Soekarno-Hatta airport railway project, (8) Kuala Namu toll road project (Medan, North Sumatra route), and (9) Coal Railway in Central Kalimantan.

Table 7. Fiscal Allocation to Support PPP (in thousands USD)

No	Item	2008		2009		2010		2011		2012	
		Revised Budget	Audited Budget	Revised Budget	Audited Budget	Revised Budget	Audited Budget	Revised Budget	Temp. Realization	Budget	Revision Budget Plan
1	National capital investment for PT. Sarana Multi Infrastruktur	-	103	-	-	110,077	110,077	-	-	-	-
2	National capital investment for PT. Penjaminan Infrastruktur Indonesia	-	-	96,169	96,169	110,077	110,077	170,853	170,853	111,111	111,111
3	Revolving Fund for Land Acquisition	-	-	-	-	253,177	253,177	438,522	438,522	100,000	100,000
4	Land Capping Fund	51,655	-	96,169	-	110,077	39,430	69,480	46,267	55,556	55,556
5	Land Acquisition Fund	-	-	-	-	-	-	-	-	85,033	85,033
	- Railway of SoekarnoHatta Airport-Manggarai	-	-	-	-	-	-	-	-	50,000	50,000
	- Toll road project	-	-	-	-	-	-	-	-	35,033	35,033
6	Reserve fund for geothermal exploration (revolving fund)	-	-	-	-	-	-	128,310	128,310	97,389	97,389
7	Facilitation of PPP Project Preparation by PT. SMI	-	-	-	-	-	-	15,115	456	44,156	44,156
8	Guarantee to National Power Company and National Water	-	-	96,169	-	115,581	-	102,967	-	70,367	70,367

Company										
Total	51,655	103	288,507	96,169	698,989	512,761	925,247	784,408	648,644	648,644

Source: MOF, 2012

* using average mid value of daily exchange rate from the Central Bank of respective year.

3.5 Case studies for infrastructure projects in Indonesia

Indonesian Case Study 1: Central Java IPP Project

The IPP Project in Indonesia has been evolving through 3 generation characterized by different risk sharing mechanism, as shown in the Table 8.

Table 8. The Evolution of IPP Risk-Sharing Mechanism in Indonesia

Risk	Risk-sharing Mechanism		
	Generation 1 (1992 – 1998)	Generation 2 (2005 – 2008)	Generation 3 (2009 onwards)
Fuel supply	IPP bears the risk of availability of fuel		
Fuel cost	PLN bears risk on the fuel cost		PLN shares the risk with the Government
Site selection	IPP and PLN share the risk		
Capacity and energy price risk	PLN bears the capacity and energy price risk		PLN shares the risk with the Government
Construction risk	IPP bears the construction risk		
Operational risk	IPP bears the operational risk		
Foreign exchange risk	PLN bears the foreign exchange risk		PLN shares the risk with the Government
Country/regulatory risk	IPP bears the country/regulatory risk		PLN shares the risk with the Government

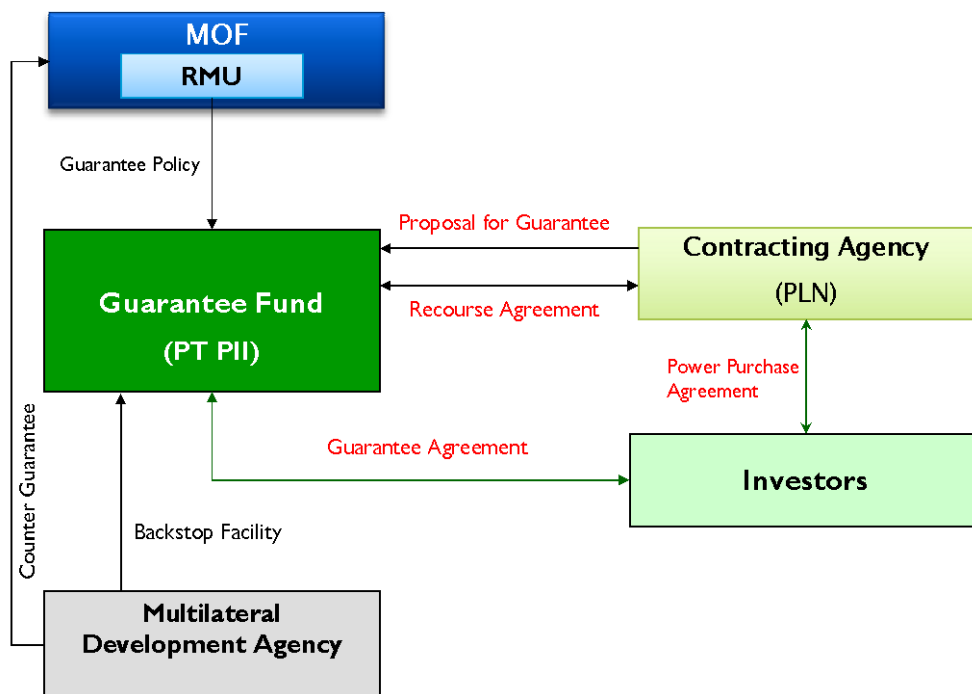
Source: Indonesian Electricity Policy and Outlook, 16 December 2009

The Central Java IPP project is the first large-scale PPP Showcase project with an investment of more than IDR 30 trillion (approx. USD3.3 billion), and become the first PPP project under current PPP regulatory framework (PR 67/2005 as amended later). The decision to adopt PPP scheme for this project has been made since 2006, but the documents signing on Power Purchase, Guarantee, Recourse and Sponsor Agreements were made by October 2011, while financial closing is planned to be

signed by October 2012. In addition, this project is also one of the projects included in the Master Plan of Acceleration and Expansion of Economic Development (MP3EI). It started when PT PLN (National Power Company) intended to involve private sector for the construction of Central Java Coal Fired IPP Project as a model of new scheme of PPP in power sector. PT PLN then appointed International Finance Corporation (IFC) as the transaction advisor. Bappenas has been supportive for this PPP project. The consortium consists of J-Power (34%), Itochu (32%) and Adaro (34%), established an SPV company PT Bhimasena Power Indonesia. The technology that will be used in the project is Ultra Super Critical (USC) coal-fired power generation, a state of the art technology in coal-fired power generation developed by Japan. The size of the project is 2x1,000 MW with estimated cost of about USD3-4 billion. The contracting system is BOOT for 25 years of operation, start to operate commercially by end of 2016.

The Government gives guarantee to back up sales contract made by PT Bhimasena Power Indonesia and PT PLN as GCA. Current reports indicate that the project runs on the track.

Figure 8. Central Java IPP Scheme



Source: PT PLN

Investor = PT Bhimasena Power Indonesia

Indonesian Case Study 2: Privatization of PAM Jaya

Milestones of PAM Jaya Privatization

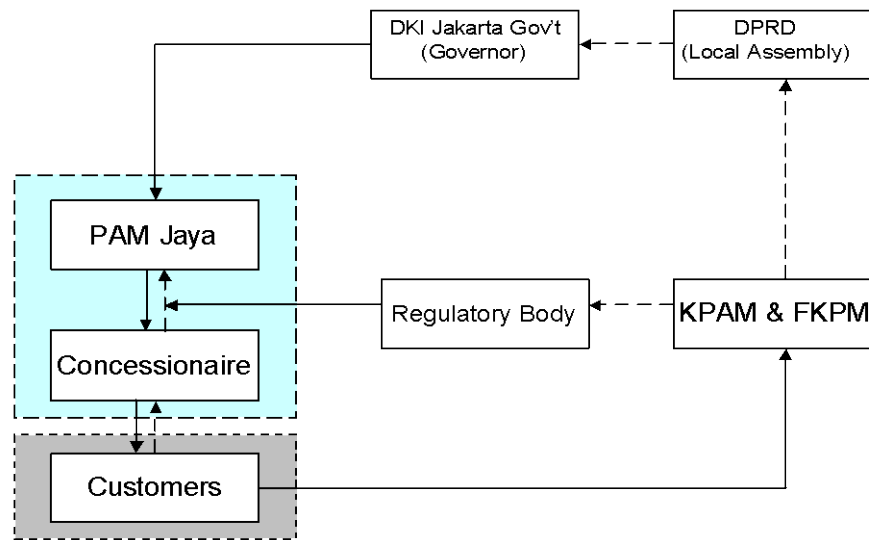
DKI Jakarta Local Water Works Enterprise (PAM Jaya) was a locally-owned enterprise of the DKI Jakarta, and was an institution most responsible for the operation of the drinking water service provision in Jakarta since 1922. In 1991, huge financings from World Bank—and Japan's Overseas Economic Cooperation Fund (OECF)—were allocated for the improvement of the network system and infrastructure development of PAM Jaya. In the financing terms, World Bank requested the Government agencies to implement cooperation scheme with the private sector on the argument of private efficiencies, accountability, and transparency.

Private sector collaboration initiative started in 1993 when the British firm Thames Water Overseas Ltd. listed itself in Indonesia, amid criticism on the involvement of President Soeharto's family member as shareholder. French firm Suez (now known as Lyonnaise des Eaux) a rival company that was threatened by Thames' privileged arrangement then formed partnership with influential conglomerate, Salim Group. As a politically-favorable scheme, Government then divided the concession area into two separate zones to be managed by the two companies in October 1995.²⁹

The Cooperation Agreement was signed on mid-1997, directly awarding Thames and Suez with full concession. Few months later in February 1998, the first operation of PPP-based service in clean water provision commenced, ill fatedly accompanied by the Asian Financial Crisis. The political situation became chaotic after Soeharto regime was toppled down in mid-1998. Struggling to make their ends meet and fearing the uncertain, and especially burdened by the fallen regime connection on their back, the two foreign firms was then forced to renegotiate the cooperation scheme to cope with the new political development. The renegotiation took three years to finish.

²⁹ In the events that preceded operation of the two contracted companies, President Soeharto had issued a guideline for PPP—particularly for the clean water service in DKI Jakarta—in June 1995, letter of invitation for bidders were circulated in late June and August, and a letter of appointment that made the service area division official and award the contracts was issues in October 1995. Government also had to amend the regulation to allow foreign firms to invest in and operate the clean water service. In the following years, the companies conducted feasibility studies and undergone tedious negotiations with Government over several issues such as exclusive financial management and payment currency.

Figure 9. Framework of PPP in PAM Jaya case



KPAM = Customer Water Committee, FKPM = Water Consumer Communication Forum

An agreement on the renegotiation was reached in October 22, 2001 as later known as the Restated Cooperation Agreement (RCA). The items that are substantial stated in the cooperation agreements could be seen in the Table 9:

Table 9. Comparison of Contracts

No	Item	Old Cooperation Agreement (June 6, 1997)	New Cooperation Agreement (October 22, 2001)
1	Effectiveness of agreement	11 Precedent Conditions prior to effectiveness	Effective immediately
2	Dispute settlement	Settlement through consensus, through expert mediation, arbitration through UNCITRAL, Singapore	Settlement based on consensus through expert mediation by the Regulatory Body or arbitration in Jakarta, or by UNCITRAL Singapore
3	Status of employee	2,803 employees seconded have dual status, the condition is not conducive	Transferred to become a single status through three option mechanisms
4	Raw water & treated water contract	Contract through PAM Jaya	Direct contract with the operator
5	Technical target	Based of Feasibility Study 1996	Revised because of monetary crisis

	and service standard		1998- 2000
6	Sanction and penalty	Objects of sanction and penalty are volume of water sold and water quality	Objects added: level of water loss, service coverage, timely report submission
7	Ground water pumping	Failure to close the deep well ground water pumping shall be compensated by PAM Jaya. As a consequence the technical target could change. Ground water charge (retribution) shall be shared between operators	In the case failure to close deep well ground water pumping, loss of revenue would not be compensated, PAM Jaya only as facilitator, not affecting the technical target, the Second Party has the right to receive ground water charge.
8	Finpro and water charge	Due to monetary crisis, Finpro 1997 could not be implemented and could not meet the reasonable water charge tariff (big deficit). To compensate the deficit, the Second Party could sell surplus asset, upon approval by PAM Jaya	Tariff increase of 35%, new Finpro agreed upon (as Appendix to the RCA), new water charge (indicative) reduced to 20%, previous deficit shall be audited, the evaluated new water charge after the transition period (January 2003) as a starting point for the remaining concession period.
9	Regulatory Body	Supervisory Body same as Regulatory Body, not effective/productive	An independent Regulatory Body was agreed upon instead of Supervisory Body
10	Asset management	At the end of concession period, remaining asset book value shall be compensated by PAM Jaya. At the end of concession period, there is no guarantee from the Second Party on the condition of asset of the First Party	Investment program shall be planned (scheduled)-no remaining book value at the end of the cooperation Guarantee performance bond on asset which shall be return at the end of concession period
11	Escrow account (E/A) mechanism	Money withdrawal mechanism from the E/A is based on one sided instruction of the Second Party	Money withdrawal mechanism from the E/A based upon agreement of both parties

From this agreement process Thames and Suez later formed two new companies in 2001: P.T. Thames PAM Jaya (TPJ) and P.T. PAM Lyonnaise Jaya (PALYJA). At that time 95% of their shares is owned by their holding companies in Reading, UK and Paris, France, respectively, and the remainder 5% owned by the local partners (i.e. previously local sub-contractors). In 2006, a part of PALYJA shares was sold to other firms, dismissing the old local partner. In 2007, TPJ sold all their shares to

Acuatico, effectively dismissing their partnership with PAM Jaya. In the previous year of 2005, the consortium mandated the formation of Jakarta Water Supply Regulatory Body (JWSRB) as the new Regulatory Body. However, little has been done to address those share sales issue by either the Regulatory Body or other Government agencies.

Impact of PAM Jaya privatization

PAM Jaya privatization, particularly under the old scheme of Cooperation Agreement, seemed to be not helping with the transparency and good performance of the operator. PAM Jaya has no access to data on operator financial business performance progress, and the operators failed to fulfill the promises of new infrastructure investment for the preference of more lucrative, inefficient spending.³⁰ Those issues can be accounted to the asymmetrical requirements for the operators and the weak sanction for under-performance. In determining a new price (price increase), PAM Jaya must obtain approval from the DPRD (Local Legislative Body), however they must pay shortfall that occurred due to delay in increasing the tariff, (e.g. postponement due to tediously long drawn debates in the DPRD). This arrangement proves to be disastrous, as PAM Jaya then owe considerable amount of money to the operators, as a consequence of the shortfalls that were not self-inflicted.

Post RCA, the consortium of Jakarta clean water set new targets: (i) determining the real and reasonable cost; (ii) developing mutual trust; (iii) strengthening understanding the role and function of respective Party. With respect to the service performance, in 2001 Suez claimed of accomplishing 50% total connection improvement to become almost 300,000 connections from its previous position in 1997 at 200,000 connections. Whereas Thames claimed the increase from 268,000 in 1998 to approximately 320,000 connections in 2001, the performance of both operators is the sum of 620,000 connections, still far below the target of 700,000 connections. Both concessionaires were considered unsuccessful in accomplishing the

³⁰In the first five years, operators are obliged to expand total connection up to 757,129 units, water volume almost twice, and the service coverage to reach 70% of total population. The operators promised in the first five years they would make investment of Rp. 732 billion or US\$ 318 million at the price level in 1997. Then the Asian Crisis struck.

investment target as stated in the contract, but Asian Crisis had been used as excuse for the failure.

Post RCA, Government also settled the PAM Jaya debt with the clause that the water tariff will be raised every 6 months (semester), up to 2007. The ATA which was implemented for three years was expected to cover the debt to the concessionaires, so that the concessionaires' business becomes healthy (viable). Outside the shortfall debt, PAM Jaya also had debt around Rp. 1.6 trillion to the Central Government, originated from the loan-funded development projects during 1980-1995. In the early period, there were 21 loans, where in 2006 all have been repaid.

However, despite intervention from the Government to repay the debts through ATA, there was no performance improvement from the concessionaires. The total connection only rose to 777,999 in 2008 from 708,913 in 2005. The Service Coverage Ratio only yields for 62.21% in 2007, far below the 70.18% target—adjusted by the actual demographic data, the SCR would actually be around 42.92%, means only half of the households in Jakarta were served by PAM Jaya.

At present, although PAM Jaya urged business entities, factories, and households to close its deep wells and shift to piped water system provided by the operators, it is identified more than 70 percent of the drinking water sources in Jakarta are originated from the water wells. This happens out of customer dissatisfactions to the service quality that private operators deliver. This is despite the high tariff, for in 2010, the water tariff in Jakarta was the most expensive among other ASEAN countries: 0.70 USD per m³ of potable water whereas in Singapore it only costs 0.55 USD.

**Table 10 – Comparison between Target and Realization of
Jakarta Water System**

	Number of Connection		Coverage		Non Revenue Water (NRW)		Water Sold (million m3)	
	Target	Realization	Target	Realization	Target	Realization	Target	Realization
1993	470.674	324.433	49%	38%	50%	53%	210	158
1994	571.776	349.849	57%	38%	47%	53%	244	168
1995	653.885	362.618	63%	39%	42%	57%	281	165
1996	597.174	393.746	50%	41%	47%	57%	236	176
1997	636.461	428.764	53%	42%	45%	57%	250	191
1998	675.534	487.978	54%	43%	43%	58%	258	181
1999	796.738	541.630	75%	43%	31%	54%	297	208
2000	847.774	562.255	89%	48%	26%	48%	322	228
2001	864.511	610.806	100%	51%	26%	49%	337	237
2002	879.511	649.429	100%	52%	26%	47%	353	255
2003		690.456		56%		45%		274
2007								

Source: Jakarta Water Supply Regulation Body, 2011

3.6 Lessons learned from the case studies

Following the policy decision matrix shown in **Table 4** above, the case studies illustrate the importance of fiscal support in making feasible an economically beneficial project which has financial viability problems. There are important lessons that can be learned from five Philippine and 2 Indonesian case studies of fiscal support to PPP projects.

The following are the lessons learned from the Philippine case studies:

Subsidies for acquisition of right of way. Too often infrastructure projects such as toll roads, airports face right-of-way (ROW) issues that can significantly delay project implementation. Right-of-way and land acquisition problems have been a major bottleneck due to (i) delayed judicial action on the titling of acquired properties; (ii) unresolved issues on land ownership; (iii) unavailability of a relocation site for affected informal settlers; and (iv) a change in leadership and priorities at the local government level³¹. It is important for government to resolutely act to address these issues and to create a budget for the ROW and land acquisition. In the case studies, the government acquired the right-of-way for the CAVITEX, TPLEX and STAR projects, which made it easier for private investors to complete these projects. Government subsidy to the PPP project was the acquisition of right-of-way from private landowners. It will be near impossible for the private investor to address the problem of right-of-way and land acquisition and firm government action on this issue is, therefore, warranted.

Appropriate risk sharing between government and private investor. Another lesson that can be learned is the need for better risk allocation between the government and private proponents, especially when it comes to commercial risk, e.g., demand risk. In the case of MRT3, the government agreed to guarantee the ridership of the mass transit system, a commercial demand risk, which ensured the returns to private investments that have been made. This has led to a huge fiscal burden on the government, which was compounded by the inefficient projection of ridership in MRT3. The government's decision to keep the fare at a relatively low in respond to

³¹These and other bottlenecks to the implementation of ODA-funded projects are discussed in the 2006 ODA Portfolio Review, a report submitted by NEDA to the Philippine Congress.

populist demand has contributed to the subsidy burden. Project investors have a better understanding of and better capacity to assess and manage commercial risks of a project. A general rule is that it is the private sector that can better absorb commercial risks and that assigning it to government will result in an inefficient allocation of risk, which creates an undue fiscal burden. However, depending on the policy objective of government, e.g., social objective of providing subsidized transport services to targeted areas or segments of the population to satisfy the goal of attaining more inclusive growth, fiscal support in the form of guarantees or subsidies may be provided but on a case to case basis and on the basis of transparent criteria. In this case, it will be important to consider in the grant of such fiscal support, among others, having a clear and effective targeting mechanism, transparency in the amount of subsidies or guarantees provided, which is allocated through a country's budgetary procedures. In the case of the Philippines, budgetary appropriation is undertaken by elected members of the legislative branch of government.

Joint venture as viable PPP approach. The CAVITEX experience indicates that a joint venture approach is a feasible and promising approach to the structuring of PPP projects. It seems able to solve the incentive problems and other constraints faced by the two parties in a PPP project, that is, the government and the private investor. However, the joint venture approach needs a deeper study³², which the NEDA guidelines for joint ventures (JV), among others, introduce a bidding process for selecting joint venture partners. It also allows submission of unsolicited proposals by joint ventures. Under the NEDA guidelines, unsolicited JV proposals can be directly negotiated, and subsequently, the negotiated terms shall be subject to a “competitive challenge” process.

Importance of transparent and supportive policy and regulatory environment. A supportive policy environment is a fundamental requirement for private risk capital to be channelled toward lumpy, long-gestating infrastructure projects. Adopting transparency as a policy in developing PPP projects help in firming up a lasting

³² A study of joint ventures as a feasible approach to PPPs is beyond the scope of this paper. Such a study will be instructive to policy makers and investors alike.

partnership between government and the private sector³³. A supportive policy and regulatory environment, which recognizes and balances the rights of private investors and the consuming public will be important. In the case of TPLEX, STAR, and CAVITEX toll ways operation, the private sector has been allowed to charge user charges that provide a fair return to the investor. In return, the public is entitled to an efficient operation and management of the toll ways.

Importance of credible commitment. The case studies show the critical importance of having credible commitment exhibited by the PPP parties, that is, the government and private proponents, including other stakeholders in shepherding the project from the drawing boards, to approval and award, to getting the required financing and technical support, to construction, and to implementation and management of the built facility. A credible commitment and the corresponding action on the part of each of the contracting parties, that is, government and the private sector are essential to a successful and long-lasting partnership. Openness to timely adjustments, e.g., tariff or toll rate adjustment, and the presence of a reliable and transparent legal and regulatory framework for PPP contracts are indispensable aspects of the commitment.

The lessons learned from the Indonesian case studies are as follows:

Improving regulation. Regulation should be viewed as dynamic state, and improving it is justified as long as it has strong and reasonable arguments and does not violate the principles of risk sharing allocation. The IPP project would not be materialized if no amendment to allow PLN act as GCA. Note that adjustment in regulation shall be allowed only if it does not walk out of the corridor of the risk-sharing principles.

Clear leadership. Before the establishment of IIGF, Indonesia has a committee called KKPPI, co-chaired by Coordinating Minister of Economic Affairs and Minister of Development Planning. The member of this committee consists of several Line Ministries and national institutions. The procedure to submit the application for the project to be considered as PPP was unclear and bureaucratic type, involving approval from KKPPI and other related institutions. The appointment of IIGF as single window

³³See Llanto (2010) for a discussion of the Philippine experience with BOT projects.

policy maker for PPP application is a breakthrough to cut red-tape procedure. Yet, it needs some time to see whether this policy really brings the change.

Transparency and accountability. The expensive lessons from privatization of water provision in Jakarta are the importance of good governance in doing PPP. From the beginning of the process, it has violated the norm by eliminating the elements of competition and transparency. Hence there was no obligation for the government to make clear objectives of privatization, the principles of risk-sharing, and to report the accountability of project progress.

Dispute resolution and exit door. Good regulation should cover the case of dispute and contingency. The absence of dispute resolution and exit door in the past regulations, as shown in the case of Jakarta water privatization, has prolonged the problem of unfair relationship. To bring all disputes to the court system is expensive therefore the arbitration system provides better way to resolve disputes. The alternatives should be covered in regulation and contract.

In sum, it is submitted that a combination of transparent and supportive policy and regulatory environment and government fiscal support can help strengthen and implement successful PPPs. It is also recognized that government fiscal support (composed of subsidies and guarantees) cannot be avoided to some extent to make projects commercially viable. However, the fiscal support could create a financial burden on the government, and thus, the grant of such support should be well managed and assessed. It is obvious that developing countries must strive to attain a strong fiscal position to enable it to continue providing the necessary fiscal support. They should also develop the capacity to manage such fiscal support consisting of subsidies and guarantees.

4. Provision of Subsidies and Guarantees and Fiscal Management

4.1 Need for strong fiscal position

Subsidies given as direct fiscal support, that is, as cash grants, payments or transfers create an immediate demand for budgetary allocation. On the other hand, the implicit subsidies such as guarantees (indirect fiscal support) create contingent liabilities, which may turn to actual payments to third parties upon the trigger of certain events under the guarantee contract. In either case, the government should be able to budget and manage the direct and indirect subsidies that it provides to PPP projects. This is not an easy task especially for fiscally-challenged governments but it can be managed.

Narrow fiscal space or in other words, a weak fiscal position can constrain efforts of the government to provide substantial fiscal support to economically beneficial but financially unviable PPP projects. Subsidies to PPPs have to compete with other subsidies that the government deemed meritorious, e.g., conditional cash transfers to poor households, subsidy to basic and general education. As earlier noted direct fiscal support, e.g. acquisition of right-of-way represents an immediate and actual demand on the budget. On the other hand, indirect fiscal support such as a guarantee creates contingent liabilities. In both cases, a strong fiscal position makes the subsidy mechanism for PPPs both credible and viable. Because of the lower availability of long-term finance and an increased risk aversion on the part of investors for long-term, long-gestating infrastructure projects, an effective PPP strategy may require increased fiscal support to qualified PPP projects, in terms of guarantees and subsidies.

Large fiscal deficits also constrain the ability of governments to tap the loan markets, whether domestic or foreign, because of higher borrowing costs and a large debt repayment burden. A strong fiscal position creates opportunities for more spending on public goods, and give confidence to domestic and foreign lenders to provide loans to the public sector.

4.2 Fiscal management policy in the Philippines

4.2.1. Present fiscal situation

During the past decade revenue effort peaked at 16.5% of GDP in 2007. The highest tax effort at 13.7% of GDP was achieved in 2006. In 2011 revenue effort and tax effort ratios were higher than those in the past two years (2009, 2010) and this augurs well for the future (**Table 6**). Current fiscal reforms seeking to increase the Philippine government's revenue and tax efforts have started to pay off. The government's initial strategy consisted of improving tax administration: (i) improving governance; (ii) substantially reducing tax evasion, smuggling and corruption; and (iii) increasing the efficiency of the tax collection machinery³⁴. Recently, the government has shifted to the introduction of additional tax measures through legislative bills that propose to reform excise taxation³⁵, and to broaden the tax base by rationalizing fiscal incentives and value-added tax (VAT).

Table 6. Revenue and Tax Effort (in %)

Year	Revenue Effort	Tax Effort	BIR Tax Effort	BOC Tax Effort
2000	14.4	12.8	10.1	2.7
2001	14.6	12.7	10.0	2.6
2002	13.8	12.1	9.6	2.4
2003	14.1	12.1	9.4	2.6
2004	13.8	11.8	9.2	2.5
2005	14.4	12.4	9.6	2.7
2006	15.6	13.7	10.4	3.2

³⁴Philippine Development Plan 2011-2016.

³⁵If passed, the proposed legislative bill on reforming the excises on alcohol and tobacco (called "sin taxes") will yield a substantial amount of revenue, estimated at ½% of GDP in 2012 and 1% of GDP in 2013. See IMF (2012).

2007	16.5	13.5	10.4	3.0
2008	15.6	13.6	10.1	3.4
2009	14.0	12.2	9.3	2.7
2010	13.4	12.1	9.1	2.9
2011	14.1	12.3	9.5	2.7

Note: This uses the 2000 rebased/revised GDP by the National Statistical Coordination Board.

BIR = Bureau of Internal Revenue, BOC = Bureau of Customs.

Source: Department of Finance

The government's fiscal consolidation plan seeks to reduce the fiscal deficit-to-GDP ratio from 3.7% to 2% by 2016³⁶. This will be mainly achieved through a significant rise in revenue to GDP ratio of 16.6% and tax revenue to GDP ratio of 15.6% by 2016, and a more efficient public expenditure management.

The consolidation is necessary to create more fiscal space for the government, which will enable it to provide more public goods as well as equip it to respond effectively to future shocks. The main elements of the government's fiscal consolidation plan are stronger tax administration, additional tax measures, reorientation of expenditure towards the social sector and infrastructure, and a public debt management strategy that reduces the share of external debt and lengthens the debt maturity structure.

In order to achieve fiscal consolidation and scale up social expenditure and public investment, it will be essential to raise the tax effort, e.g., raising "sin taxes," more effective taxation of incomes and real property, reforms in the VAT, reforms in fiscal incentives, and improving the tax collection machinery. The government's intention to focus initially on improving tax administration is appropriate and should help over time to enhance revenue collection. To realize substantive gains in revenue, there is a need to further broaden the tax base and simplify the tax system. Reforms in tax policy should complement the government's main strategy of focusing on measures to improve tax administration.

On the expenditure side, more efficient public spending will help the effort at fiscal consolidation. During the past decade, spending for the social sector and infrastructure has been constrained by limited fiscal space. With the current reforms

³⁶Philippine Development Plan 2011-2016

in tax and expenditure policy, the government expects to raise more revenues, thereby expanding the fiscal space, and to have more efficient spending for the social sector through well-targeted programs such as the conditional cash transfer program, and for the infrastructure through PPP.

An important part of fiscal management is the country's debt management policy. The Philippine Development Plan (2011-2016) targets the reduction in interest payments from 19.3% in 2010 to 13.1% in 2016 of the national government budget³⁷. The end result of prudent debt management will be an increase in fiscal space and the freeing of more resources for development expenditure.

Debt management policy is guided by the following strategies: more efficient utilization of official development assistance (ODA) loans, and an increase of the share of domestic financing sources to minimize interest costs and foreign exchange risk. Fiscal year 2010 was marked by significant progress in the national government debt management. Major debt indicators moved to more manageable levels. National government debt as a percentage of GDP declined to 52.4% from 54.8% in 2009. Reliance on domestic borrowing for the government's financing requirements resulted in a financing mix favouring domestic debt from 56.4% in 2009 to 66.3% in 2010³⁸. A long-running regime of low interest rates in the country has made the shift to domestic debt financing feasible without crowding-out effects on the private sector. This seems to be a good strategy. In the present situation of a low interest rate regime in the country, the spread in domestic financing could be much lower than those required by international lenders³⁹.

In 2010, the government was able to tap US\$1.4 billion from multilateral and bilateral sources which comprised 23.6 percent of total external borrowing for the year. The maximization of available ODA reduced the average interest rate on ODA loans from an initial 2.2 percent in 2009 to 2 percent by year-end of 2010⁴⁰.

³⁷The planning period is 2011-2016.

³⁸ This paragraph draws from the Department of Finance (2010). Annual Report 2010.

³⁹ However, in other cases, the overall interest rate (base rate + margin) of domestic financing might not always be lower than that of international lenders. The base rate for the Philippine Peso is likely to be higher than US\$ Libor rate, considering that the yield for 10 year government bond in the Philippines (4.965%) is much higher than one in the United States (1.457%) as of 23rd July 2012. This was pointed out by Shintaro Sugiyama.

⁴⁰Department of Finance (2010)

4.2.2. The Medium-Term Expenditure Framework (MTEF), the Organizational Performance Indicator Framework (OPIF), and Zero-Based Budgeting (ZBB)

Securing or protecting the budget for infrastructure projects has been a weak spot in public expenditure policy of developing economies faced with narrow fiscal space. When revenue intake is insufficient to meet growing expenditure programs, governments of developing countries would be inclined to impose budgetary cuts on less politically sensitive expenditure items, e.g., infrastructure, in order to leave resources for social expenditures, wages and entitlements of the bureaucracy and politicians. Thus, during episodes of a fiscal crunch, spending on infrastructure will typically be the first item facing budget cuts. Philippine experience shows the costly impact of indiscriminate budget cuts especially as applied to the social sector and infrastructure projects.

This leads to the idea of securing budgets for infrastructure. However, simply providing an annual budget for infrastructure projects, which take years to construct and finish will not work where government's budgetary commitment has to be long-term. There is a need to secure a multi-year budget for lumpy, long-gestating infrastructure projects.

In this regard, the Philippines has adopted three instruments for more efficient public expenditure management, namely, (i) the Medium-Term Expenditure Framework (MTEF), (ii) the Organizational Performance Indicator Framework (OPIF), and Zero-based Budgeting (ZBB). The main objective of these instruments is to institutionalize and strengthen the linkage between development planning and budgeting and to increase the likelihood of accomplishing development goals by considering resource availability⁴¹. These three instruments will also provide government agencies with the incentive to improve performance.

These instruments can be used to help secure or protect the budget for infrastructure investments, which as stated above, are multi-year and lumpy investments.

⁴¹Department of Budget and Management (2010), "Policy guidelines and procedures in the preparation of the FY 2012 budget proposals," National Budget Memorandum No. 107, December 30, 2010

MTEF

At the national level, the MTEF is a public expenditure reform that synchronizes a multi-year budget with multi-year spending and investment priorities as spelled out in the Philippine Development Plan. The MTEF facilitates a strategic and policy based approach to budget preparation by providing a medium-term (three years) perspective to development expenditure items. Through the MTEF, the national budget is aligned with the overall development and growth strategies, consistent with fiscal consolidation targets.⁴²

The MTEF helps the government to implement a multi-year budgeting system by mapping out systematically the requirements of baseline or on-going and new projects on a three-year rolling basis. Under this system, projects, activities, and programs (PAPs) in the National Expenditure Program contained in the budget document approved by Congress automatically carry over to the following year and become part of the baseline. Relying on the results of a Public Expenditure Management review, the MTEF (i) instils fiscal discipline by developing a consistent and realistic resource framework for programs, projects and activities of government, (ii) improves the allocation of resources towards strategic priorities between and within sectors, and (iii) enhances the predictability of resource flows so that departments and agencies can plan ahead and sustain implementation of high priority PAPs.

OPIF

The OPIF directs resources towards results or major final outputs and provides measures of agency performance through key quality and quantity indicators. The different government agencies are asked to align programs, projects, and activities with their major final outputs. Thus, proposals submitted for funding certain programs, projects or activities are made consistent with the agencies' output targets.⁴³

Under this approach the government scrutinizes and evaluates the different projects, activities, and programs (PAPs) proposed by various agencies in the bureaucracy to determine which PAPs are to be included and protected in the multi-

⁴²Department of Budget and Management (2010)

⁴³Department of Budget and Management (2010)

year budgetary plan. It is also used to gauge the performance and accountability of government agencies. Expenditure and performance reviews are undertaken to provide an incentive to well-performing agencies (e.g., budget flexibility and/or full budget releases) and to impose corrective measures to agencies whose performance is below expectations⁴⁴.

Thus, the multi-year budget under MTEF and OPIF becomes a powerful tool for driving national government agencies to perform according to set performance standards and indicators. For the infrastructure sector, this could be a way to ensure that the budget for fiscal support to critical PPP projects is in place and available when required.

ZBB

The government uses a Zero-based Budgeting (ZBB) approach to ensure that budgets given to various government agencies will be efficiently utilized in accordance with the priority thrusts as indicated in the Philippine Development Plan. Through ZBB, the Department of Budget and Management decides whether the resources for a program or project should be kept at its present level, increased, reduced or discontinued. The ZBB involves the periodic review and evaluation of major on-going programs and projects to determine the continuing relevance of the programs and projects. In particular, the Department of Budget and Management ascertains whether program objectives are being achieved and whether there are alternative and better ways of achieving the objectives⁴⁵.

Each project has to pass muster a technical review and has to be justified before it can be given a budgetary allocation. There are three pre-requisites that should be met by each government agency to convince the President and the Budget department to allocate a budget. The pre-requisites are the following: (i) the budgetary item should be aligned with the administration's goal; (ii) impact on the

⁴⁴To further strengthen OPIF, the following areas have to be improved: (i) methodology for attributing outcomes fully controllable by national government agencies and other instrumentalities; (ii) technical capacity of national government agencies to measure outcomes; (iii) organizational resources for DBM to monitor agency performance on top of its regular expenditure reviews; and (iv) integrity of agency performance reports arising from information asymmetry between national government agencies and DBM.

⁴⁵Department of Budget and Management (2010)

welfare of the people and the economy, and ability to meet the agency's mandate and core objectives; and (iii) relevant output to justify the expenditure. The government started applying the zero-based budgeting technique in 2011 by impounding funds previously allocated to departments and agencies but were not spent. Those funds were re-allocated to priority programs, activities, and projects consistent with zero-based budgeting principles and the MTEF.

Both OPIF and ZBB require agencies to focus on performance/results in allocating their budgets consistent with their respective organizational goals, with the status of major final outputs and performance indicators as the basic input. Hence, it is important that the agencies continuously improve their capacities for monitoring, evaluating and reporting their financial and physical performance using agreed upon performance indicators.

In addition to securing multi-year budgets for important projects, activities, and programs (PAPs), e.g., critical infrastructure, adherence to the MTEF, OPIF, and ZBB will produce the following:

Aggregate fiscal discipline. The factors that determine the sustainability of the budget level are the continuing improvement in revenue and borrowing capacities of the government, application of a hard budget constraint on government agencies, and efficient spending by those agencies.

Allocative efficiency. The budget's allocative efficiency will be improved enabling agencies to realign and reallocate the government's resources towards PAPs that deliver the envisaged social and economic outcomes. Under the MTEF government will not allocate budgets on the basis of incremental requirements of on-going programs but on the basis of the results of a continuing review of PAPs based on relevance and effectiveness in achieving the country's priorities.

Operational Efficiency. This means that oversight agencies (chiefly, the Department of Budget and Management) specify performance targets and monitor results, while operating agencies, e.g., Department of Transportation and Communication, are given the discretion and flexibility to optimize the use of budgeted resources to accomplish results. Such institutional arrangements as incentive structure under the civil service rules, norms and regulations; and the procurement rules, regulations and procedures, help in achieving operational efficiency. Under an operational efficiency framework, the manager of an envisaged

(fiscal support) mechanism for PPPs will be given the flexibility to optimize use of fiscal support for priority PPP projects.

The Fiscal Year 2013 Budget will uphold the fiscal policy framework of fiscal consolidation and the priority thrusts of the Philippine Development Plan (PDP), 2011-2016. The present administration has announced that PPP will be a major component of its infrastructure strategy and has reorganized the Build-Operate-Transfer (BOT) Center into a more pro-active PPP Center and has provided it with resources to do its job of promoting PPPs in the country.

4.2.4 Management framework for contingent liabilities⁴⁶

Guarantee schemes give rise to contingent liabilities which should be efficiently managed because they can create a huge fiscal shock to the government when they become actual liabilities. Toward this end, it will be advantageous to have a framework for the grant and management of guarantees⁴⁷ as part of fiscal management policy. That framework should account for the true cost of guarantees; otherwise, there could be an undue expansion of the grant of guarantee cover, which may happen when governments do not realistically provide reserves for future claims.

The new administration has adopted PPP as a major strategy to achieve its infrastructure targets, and in providing guarantees to PPP infrastructure projects, it knows that the government is exposed to contingent liabilities that may become real liabilities due to certain factors. Thus, the government is currently working on a system for managing contingent liabilities. **Box 4** reports current efforts at developing a contingent liabilities management system.

⁴⁶This part is drawn from Llanto (2007)

⁴⁷Lewis and Mody (1997), Brixl and Mody (2002), and Mody and Patro (1996), among others, provide an excellent discussion of contingent liabilities and their management, which is reflected in the recommendations given in Llanto (2007). The author drew from these sources in preparing his studies on contingent liabilities in the Philippines.

Box 4. Management of Contingent Liabilities Project of the Government of the Philippines

Current efforts are focused on determining the level of exposure by developing a policy on valuation and risk assessment and management. The task involves the establishment of a database of Government-Owned and –Controlled Corporations (GOCCs) to facilitate a centralized monitoring and management of guaranteed loans. The immediate output would be a complete list of contingent liabilities which will be useful for policymakers to identify and address concerns about legal limitations on government action to define or delimit the scope of certain types of contingent liabilities. The project also envisions the formulation of an integrative framework that can be implemented through an executive policy order or legislation to authorize the appropriate agencies to take the necessary measures.

For the medium-term, the project will get into comprehensively developing rules and regulations on the following:

- Setting accounting standards for full disclosure of contingent liabilities
- Assigning the sole authority for issuing policies on contingent liabilities to the Department of Finance (DOF)
- Clarifying and enforcing a consistent policy on when and how the National Government should assume liabilities incurred by GOCCs
- Reviewing charters of GOCCs and considering the need to propose a law to clarify and reiterate accountable and transparent incurrence of contingent liabilities.

Source: http://www.coffey.com/Uploads/Documents/PFM%20Reform%20Roadmap_20120213144115_20120323121616.p (date accessed June 12, 2012)

Llanto (2007) sketches an outline of how contingent liabilities can be efficiently managed. The suggested framework for government guarantee has the following elements:

- *Treatment of guarantee cover as a scarce resource that should be efficiently allocated.* The government should recognize that a guarantee cover is not a free resource that can be granted at will. It represents actual claims on government's fiscal resources once certain future events trigger a guarantee call. Without an efficient allocation of this resource, the government could face a fiscal shock once private investors make a claim on the guarantees.
- *Determination of the annual amount of guarantee cover that government can provide.* The amount of guarantee cover should include not only those granted to infrastructure projects but also to other guarantee programs implemented by various government agencies, especially those that have the nature of sovereign guarantees. In some instances, the national government gives only an indirect guarantee since the first recourse of the private investor is the balance sheet of the sponsoring government agency. However, this also exposes the government to contingent liabilities and thus, indirect guarantees should be considered in the overall appreciation of how much guarantee the government can give at any given time.
- *Pricing of a guarantee according to market conditions and relative risks.* The guarantee cover could be seen as a form of insurance made available by the government to the project proponent, which will be paid once a guarantee trigger brings about a call. Since the insurance cover constitutes an allocation of government resources to the project, the premium or guarantee fee should be based on the opportunity cost of the allocated resource. Additionally, the fee level should also be subject to creditworthiness of parties guaranteed by the government⁴⁸.
- *Proper risk sharing between project proponent and government.* There is a great advantage in calibrating the guarantee fee according to the relative risks in infrastructure projects. Thus, the government with the private proponent should identify all possible risks that can affect the project, rank them according to their weight and likelihood of occurrence, and determine what

⁴⁸ I thank Shintaro Sugiyama for this insight.

specific risks the government is willing to cover. Risk-adjusted and market-based guarantee fee will create the proper incentives for private demand for the guarantee cover, thereby ensuring allocation efficiency.

- *Exit strategy or fall-away clause in guarantee contracts.* The inclusion of a fall-away clause, that is, a termination of the guarantee cover upon attainment of a certain performance indicator for the project may be important for efficient management of guarantees. For example, a performance undertaking for availability fees in power generation projects could fall away once the Philippines achieves consecutively for two years an investment grade rating for Philippine peso debt from reputable credit rating agencies. An exit strategy will minimize government's risk exposure and potential burden on its fiscal position. However, this strategy is subject to acceptance of project sponsors as well as project lenders.
- *Monitoring and annual review of project performance and required guarantee cover.* Monitoring and annual review of the guarantee portfolio together with project performance will enable government to make appropriate plans and adjustments in its guarantee schemes. This is in recognition of the fact that the market is dynamic and circumstances affecting infrastructure projects change. Like the point above, this is also subject to acceptance of project sponsors as well as project lenders.

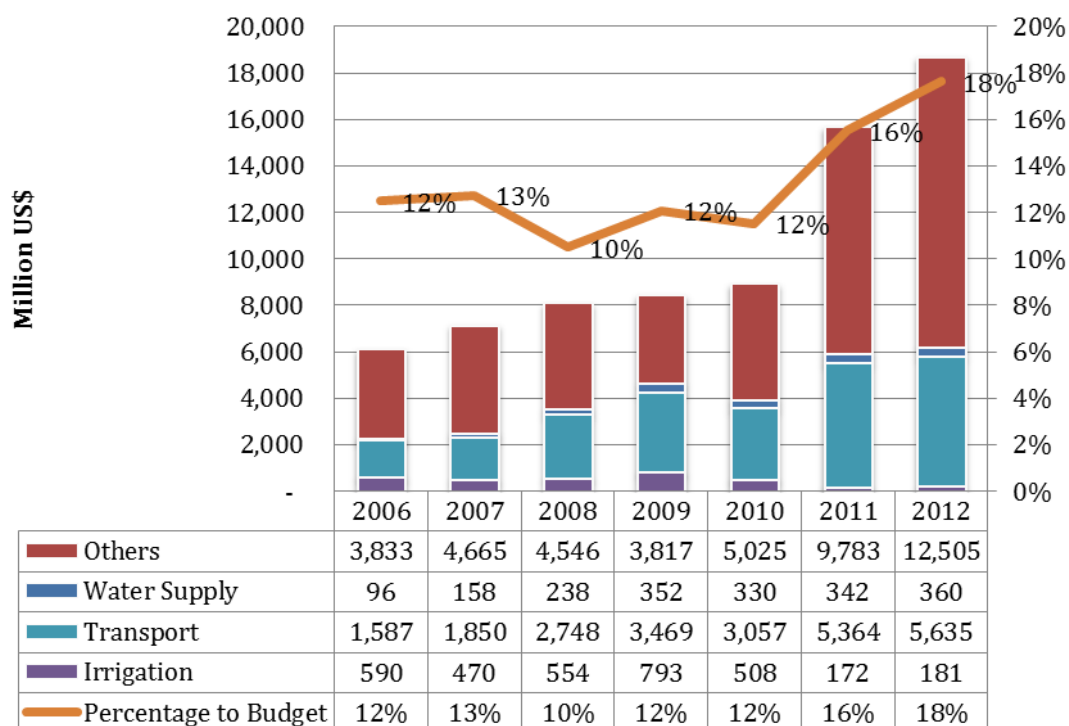
4.3 Fiscal management policy in Indonesia

Current Fiscal Position

The government estimated that Indonesia needs to invest IDR1,429 trillion (approx. US\$158 billion) in infrastructure to support annual growth target at 7% during the period 2010-2014. This amount cannot be supplied by the national budget alone. Apart from utilizing foreign grant and loans, the government opts for private participation through PPP scheme.

Large portion of Indonesia's budget has been devoted for non-discretion spending (i.e. obligatory spending) including public servants' salaries, interest payment, subsidies, and transfers to regions. After severely hit by Asian crisis in 1997-1998, Indonesian economy has gone through slow recovery process that consequently affected spending allocation. Due to worsened welfare, government spending had been devoted to various subsidies including social safety net or cash transfer, hence there was little room to spend for investment. The level of investment spending has just been increased recently, from 12% in 2009 and 2010 to 16% in 2011 and 18% in 2012.

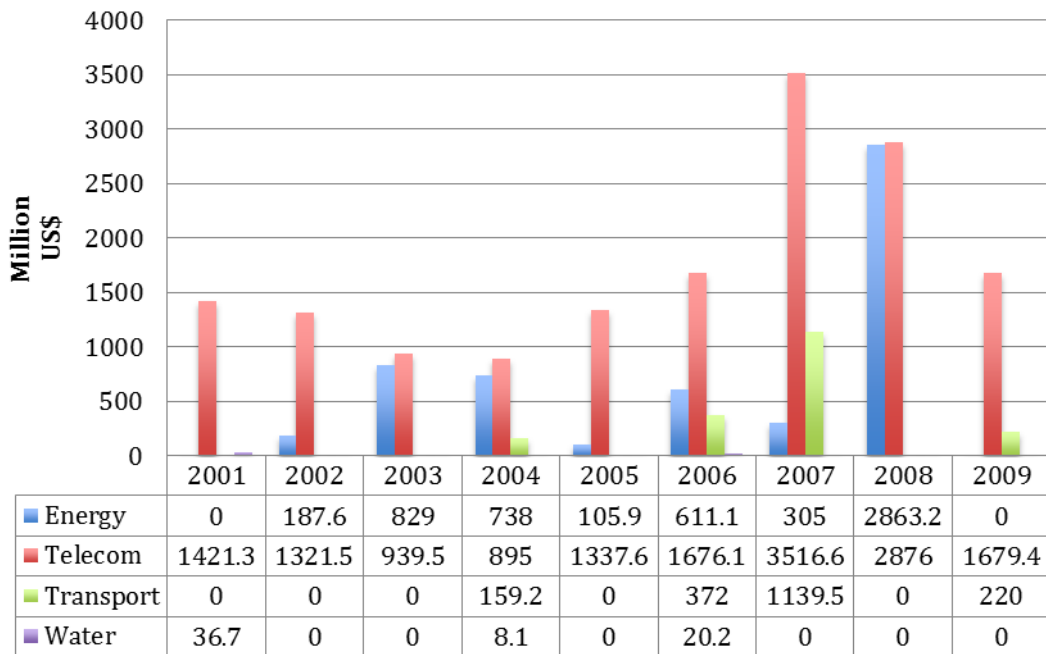
Figure 10. Capital Spending in the National Budget



Source: Budget Statistics 2006-2011, MOF (2012)

Of the capital investment spent by the central government, transportation is the dominant sector. However, the amount of funds needed to finance the development of infrastructure is far larger than the available funds. For example, to maintain about 400 km national road, in one year it needs IDR 20 Trillion (USD2.2 billion) or about 40% of the total budget for Ministry of Public Works, not alone for building new road. It is impossible for the Ministry to properly maintain the whole road, since she also has to build and maintain bridges, ports, water system, etc. Government welcomes private participation in infrastructure investment to fulfill the financing gap. As shown in the Figure 11, private participation mainly focuses on telecommunication and energy sectors.

Figure 11. Investment with Private Participation

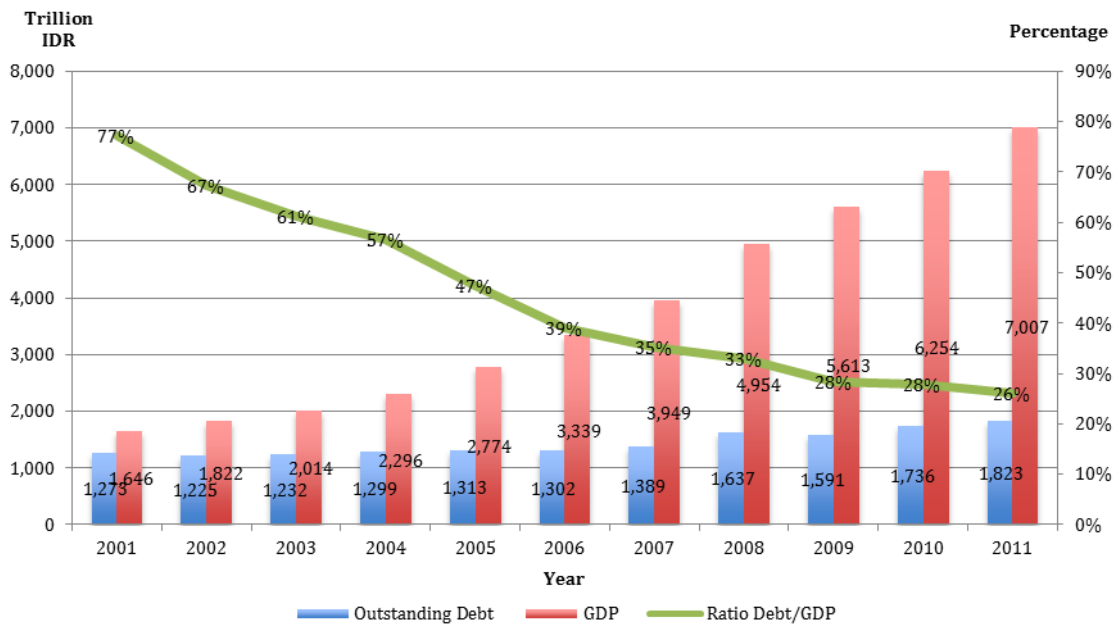


Source: World Development Indicator, Indonesia (World Bank, 2011)

At the macro level, fiscal policy is important instrument for the country to achieve development goals, by efficiently allocating the resources, redistributing endowments across economic agents, and providing stable macroeconomic condition. A country needs to adopt fiscal discipline so as to guarantee that the economy will not face budget failure.

As consequence from economic crisis in 1997-1998, Indonesia was facing huge fiscal problems, including high debt to GDP ratio (approx. 85% of GDP in 1998), changes in fiscal allocation between government tiers (fully embracing fiscal decentralization in 2001), declining tax revenue (the economy was contracted), in needs for high subsidies (poverty level raised), and high inflation. By embracing principles of fiscal discipline, Indonesia has successfully managed her fiscal stance, showed by better fiscal indicators: decreasing debt to GDP ratio, increasing tax revenue and decreasing proportion of non tax revenue, decreasing subsidy and interest payments.

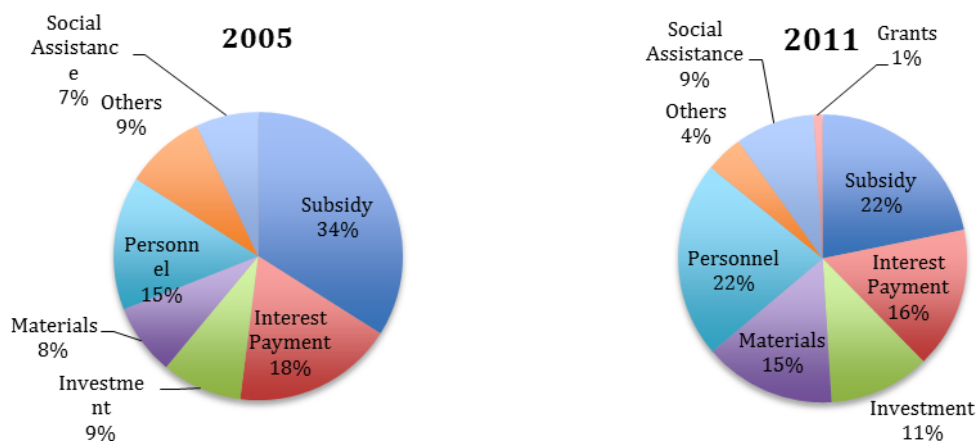
Figure 12. Indonesia's Debt Management



Source: MOF, 2012

The resources allocation was improved, as shown in the comparison chart below. Subsidy was decreased substantially as well as interest payments. Still, there is not enough big room for investment given the increasing demand to catch up deteriorated infrastructure and replacement, and build up new ones. The demand for infrastructures in transportation, energy, and water has rapidly increased due to increasing population and economic activity, beyond the supply of those infrastructures.

Figure 13. Composition of Central Government Spending 2005 and 2011



Source: MOF of Government of Indonesia, National Budget 2005 and 2011

Currently, Indonesia still spends quite amount of funds for energy subsidy, after the House rejected the proposal to decrease the subsidy for fuel price and shift it to infrastructure sector for FY2012. The data of budget summary in Table 11 shown that during the last three years, the government spent much more on energy subsidy than on capital investment. Increasing budget deficit did not compensate the economy with increasing infrastructure development, but more on consumption subsidy.

Even though the proposal to increase capital investment in infrastructure has become central issue recently, the solution from politicians seems more utopic yet unrealistic approach rather than rational ones. Subsidy for fuel price, which is enjoyed largely by middle-up class, also encourages over-consumption of fossil energy (and arbitrage/smuggling activity) and discourages efforts on shifting to environmental-friendly energy resources and the need to provide efficient mass transportation.

While Indonesia has proved that it is capable of managing overall fiscal policy, the recent case of politicking fuel price subsidy has exposed the country with critical vulnerabilities: high dependency on world oil price and threatening resistance from people towards subsidy reduction policy. In the mean time, the financing need to develop infrastructure cannot be postponed, as it is fundamental for achieving high economic growth. To deal with this problem, the government has to convince the politician with the proposal to restructure allocation efficiently and at the same time to find additional financing sources for infrastructure development, such as issuing government bonds, drawing development debt, and promoting PPP scheme.

Another feasible effort is to improve Local Government spending. One third of budget is directly transferred to regions, in which Central Government has very little influence on the local spending. Without violating the principles of decentralization, - the regions are autonomous entities-, the Central Government can give some incentives to influence local government spending behavior towards capital investments rather than consumption and personnel expenditures. In order to do so, Central Government should make strategic allocation in her development planning, towards concurrent infrastructure development or providing fiscal and non-fiscal incentives for regions to spend on infrastructures.

Table 11. Indonesia National Budget (in USD million, except stated otherwise)

	Description	2008*	2009*	2010*	2011*	2012
A.	Revenue and Grants	104.2	77.5	110.9	129.0	149.8
	Domestic Revenue	104.0	77.4	110.5	128.5	149.7
	Tax Revenue	69.9	56.6	80.6	96.9	112.1
	Non-tax Revenue	34.0	20.7	30.0	31.6	37.6
	Grants	0.2	0.2	0.3	0.5	0.1
B	Expenditures	104.7	85.6	116.1	145.7	170.7
	Central Government	73.6	57.4	77.7	100.2	117.9
	Capital	7.7	6.9	8.9	15.5	18.6
	Interest Payment	9.4	8.6	9.8	11.8	13.0
	Subsidy for Energy	23.7	8.6	15.6	21.5	22.3
	Subsidy for non-energy	5.6	4.0	5.9	4.6	4.7
	Others (personnel, materials, etc.)	68.1	53.5	71.8	95.5	59.3
	Transfers to Regions	31.0	28.2	38.4	45.5	52.8
C	Primary Balance	9.0	0.5	4.6	(4.9)	(8.0)
D	Surplus/Deficit (A-B)	(0.4)	(8.1)	(5.2)	(16.6)	(21.0)
	Ratio to GDP (%)	(0.1)	(1.6)	(0.7)	(2.1)	(2.2)
E	Financing	8.9	10.3	10.2	16.6	21.0
	Domestic	10.9	11.7	10.7	16.9	21.4
	Foreign	(2.0)	(1.4)	(0.5)	(0.3)	(0.5)
	Surplus/Deficit Financing	8.5	2.2	5.0	0	0

*audited report

2012: amended budget

Source: MOF, 2012

Budgeting System

One of main problems in planning the infrastructure development in Indonesia is dealing with time horizon within the budget cycle. Current practice in both national and local budgeting is applying annual budget approach. Short horizon in annual budget forces rigidity in planning horizon. Most medium and large infrastructure projects go beyond one year of planning and execution; additionally, good governance practice requires standardized process to be adopted, including tendering procedure which can take several months to be implemented.

Medium Term Expenditure Framework (MTEF) has been mandated in Law No. 17/2003 on State Finance, but unfortunately the application is somewhat slow. MTEF is adopted to provide longer horizon in budgeting within the context of medium-term national planning and development. Thus it requires relevant supporting system to be in line with the characteristics of MTEF, including National Planning System, Fiscal Relation between the levels of government, and Regional Government Administration. Each of those issues is regulated through Law and several supporting regulations, made it not easy to amend the regulation in concordance with MTEF. This is one of the reasons of slow progress in adopting comprehensive MTEF.

On the positive side, Indonesia has long been embracing Long-Term, Medium-Term, and Annual Development Planning system. The Long-Term Development Planning has 20 year time horizon, which broken-down to four five-year planning, namely Medium-Term Development Planning, and later itemized in annual planning document, namely Government Work Plan. In this context, MTEF fits the National Planning System, thus the administration does not need to start from the scratch.

To apply MTEF, it requires that budgeting approach should apply Performance Based Budgeting (PBB), Forward Estimates, and Unified Budget. The former two systems are in the process to be adopted in Indonesia, while the current budget is already a unified budget (combining on-budget and off-budget spending). Different with traditional budgeting that based on inputs and programs, PBB is based on outcome that would be transformed into output, programs, and input. Forward Estimates requires the government (and her all subordinates and agencies) to make estimation of the budget for three-year basis. After the budget is passed, the first year of the forward

estimates becomes the base for next year's Budget bid, and another out year is added to the forward estimates.

MTEF is aligned with Fiscal support to PPP because it helps to manage better fiscal risk and liabilities by using longer time horizon. Despite the difficulties and costs of changing the system the overall benefit will be larger. Current annual budgeting system has hampered planning and executing of investment program. Specific transfer to region fits only for one-year project execution, while the need for larger infrastructure development will require beyond one-year program. It also made budget harmonization between central and local government problematical since both tiers have same budget cycles while some concurrent tasks require sequential planning from central to local. In the context of PPP scheme operating at the local level, MTEF will help local government to better plan future spending and long-term fiscal capacity and burden, including the possibility to raise revenue through municipal bonds, or making debt. For Central Government, it helps to manage fiscal consolidation, risks, and efficient allocation of resources.

Challenges

Managing Fiscal Risks

In the past, several IPP projects had been guaranteed by the government through what so called "support letter" and "confirmation note". Support letter was issued for some IPPs during the period of 1990s to 2006, while Confirmation note was issued for the lender and insurer of IPPs during the period of 2006 to 2010. These policies are blanket support/guarantee that exposes the government to weak position while the budget becomes vulnerable due to immeasurable contingent liability posed to the government. To overcome those problems, the government established some institutions (IIGF, SMI, IIF) to deal with fiscal support and contingent liabilities, therefore the fiscal risks on the budget can be minimized.

Additionally, MOF is now preparing the framework to support Viability Gap Fund (VGF). The scheme will provide financial support from the Government for the potential PPP projects that are economically feasible but financially infeasible. The Government expects that the scheme will also provide transparent and consistent procedures for support decision.

The role of Sub-national Government (SNG) in adopting PPP scheme

Since the last decade, Indonesia has been embracing decentralization system, resulted in delegation on several sectors from central to subnational governments. The PPP scheme opens the opportunity for local government to participate as responsible authorities for PPP projects, as such are Ministries and SOEs. This arrangement widens the prospect of realizing the PPP but with additional complexities regarding the regulatory framework and institutional organization. To the date, a few subnational governments have engaged to participate in PPP scheme, including Central Kalimantan province for coal railway, Bandar Lampung Municipality for Drinking Water Supply System, and East Java for Water Supply. The IIGF has expressed its interest on reviewing the proposals but no single project initiated by local government has been closed yet.

The relevant issues regarding the SNG involvement in adopting PPP scheme is mainly on sectoral authority vs. SNG authority, coordination and regulation. The first issue deals with whether the specific authority handed to SNG is sufficient to make SNG as Contracting Agency or to form a SPC with the partners. According to Law 33/2004 concerning Regional Government, most (sub) sectors belong to SNG responsibility but it does not mean that they come with full authority. There are sector regulations, at the same level of regulation –i.e. Law, which cast higher authority such as ownership or operation, to central government bodies. Example is Law 17/2008 on Voyage that classifies the levels of port in Indonesia and defines the Port Authority for each class of port. The Provincial Government can only become Port Authority for the limited types of ports, including intra-province ports, feeder ports for international and national ports, with limited capacity of passengers and cargo. The lower level of authority is given to District/City Governments for lower type of port. The sector regulations limit the SNG to play role in developing the infrastructure in the regions, but in most cases require SNG to play supportive role for national infrastructure. This layout adds the complexity in managing infrastructure development particularly adopting PPP scheme. On one hand, there are many regulations to be reviewed and interpreted, while on the other hand, there is absent regulation or different interpretation to make clear arrangement of PPP between the government tiers. The current method to solve the problems is through case-by-case approach.

5. Conclusions and Policy Recommendations

With the recent decline and tough competition in the global supply of official development assistance (ODA), and fiscal constraints faced by developing countries, private capital through PPP schemes has assumed a much bigger role in financing infrastructure projects. The ASEAN countries, notably Thailand, Indonesia, and the Philippines, and Malaysia have used variants of PPP schemes to provide infrastructure. Despite the setback brought about by the Asian financial crisis and other factors, PPPs are starting to assume a bigger role in infrastructure provision in the ASEAN region.

In motivating a greater participation of the private sector in the infrastructure sector, there is scope for providing fiscal support in the form of either subsidies (direct fiscal support) or guarantees (indirect fiscal support) to projects that are economically beneficial but whose commercial viability is not assured without such fiscal support.

Through several case studies, the paper showed that adequate government involvement through various types of fiscal support has been an important factor for successful PPPs, especially at the early stages of implementation of those projects. In the context of developing countries with underdeveloped financial markets and weaknesses in institutions, there may even be a case for maintaining and continuing with the fiscal support until such time that the PPP markets have matured, which will make the private sector more confident in assuming project risks. In that future time, government involvement or fiscal support could be optimized to improve the efficiency and effectiveness of the scheme.. In this respect, the government should make a critical review of its guarantee policy and how and upon what type of risks it can be meritoriously applied. There has been a great deal of discussion about the appropriate allocation of risk between the public sector and private investors. It is well noted that excessive risk taking by governments is neither feasible in the long run considering their fiscal position, nor desirable in view of the need for fair risk sharing between the government and private sector. The experience in the ASEAN region shows that a balance has to be struck between the respective interests of the public and private sector, respectively.

An efficient fiscal management policy secures budgetary support to critical infrastructure projects that are responsive to the development thrusts of the government. Under a Medium Term Expenditure Framework (MTEF) and Organizational Performance Indicator Framework (OPIF), the Philippine government is able to maintain and secure a

multi-year budget for multi-year infrastructure projects. Securing a budget for fiscal support consisting of subsidies and guarantees will be expedited under the MTEF and OPIF.

From the Philippine experience with PPP, MTEF and OPIF, the following are recommended:

- Consider the establishment of a fiscal support fund that will be used for economically beneficial but financially unviable projects.
- Secure a multi-year budget for the fiscal support fund consistent with the country's multi-year infrastructure spending program. A project development and monitoring facility for PPPs and a fiscal support fund can work side by side to promote PPP projects.
- Strengthen the government's fiscal position by continuing with reforms in tax policy, e.g., broadening the tax base and introducing additional tax measures, and in tax administration, and judicious debt management policy. Maintain a sound fiscal position that creates a bigger elbow room for sovereign borrowing for infrastructure projects.
- Develop an appropriate risk sharing mechanism between government and the private proponents. Project investors/proponents have a better understanding of and better capacity to manage commercial risks of a project and should be made to assume this type of risk.
- Maintain a transparent and supportive legal and regulatory framework for PPPs. It is important to have a legal and regulatory framework that builds the confidence of private investors in taking risks and a long term position in the country's infrastructure development, e.g., allowing the setting of cost-recovering tariffs, stable policies, and reliable judiciary. Establish a coordinating entity for PPP projects like the Philippine PPP Center that will help government agencies and private proponents in structuring PPP projects.
- Collaborate with donors in building technical capacity for structuring of PPP projects and in setting up a fiscal support fund and project development and monitoring facility for such projects. Government should also secure a budget for strengthening its human resource capability for PPPs and infrastructure projects.
- Engage the private sector in a continuing dialogue on how to address various issues, e.g., tariff adjustment formula, political risk, etc., and how to strengthen PPPs.

From the Indonesian experience, the following are recommended:

Make a fiscal support planning to accelerate infrastructure development. The plan should include the fiscal support for PPP scheme and sector priority, within long-term period, e.g. 20 years. It will provide the estimation for annual allocation and forecast of fiscal burden and potential fiscal risk. By making this plan, the government will need to show her determination of supporting PPP and at the same time strengthening her fiscal discipline approach. Planning fiscal support for PPP in the long-term also requires adopting MTEF that is favorable for many reasons mentioned earlier in this paper.

Update and improve the guidelines of PPP procedure and provide PPP manuals for each party: private construction companies, government agencies, and lenders/capital sponsors. Therefore the participating parties will have clear understanding under current regulatory framework. Separate manuals provided for each party will recognize the different roles and hence, obligation and rights of each stakeholder.

Improve regulatory framework especially to clarify the rights and obligations of each stakeholder involved in PPP project, and to incorporate dispute resolution in the efficient way. Currently, some issues can be multi-interpreted or determined within weak legal framework, e.g. possible risk coverage in the guarantee guidelines produced by IIGF includes several types of guarantee that are not mentioned in Presidential Regulation 78/2010 or MOF Regulation 260/2010 hence it can be resulted in different interpretations.

Include the possibility of financial market products to become additional sources for financing PPP. The regulator can discuss with exchange market authority to explore the feasibility of raising fund from the market to finance long-term PPP projects. This is an alternative of funding sources besides financial support from government budget and multilateral agency.

Develop structured capacity building program for government officers in both central and local levels. It will also beneficial to establish small PPP unit in each line ministries to handle proposals coming to them and to work with IIGF and other relevant institutions such as Bappenas and Subnational governments.

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Appendix 1. PPP variants in the Philippines

The following definitions are from Republic Act No. 7718 of the Philippines.

- i. *“Build-operate-and-transfer.* - A contractual arrangement whereby the project proponent undertakes the construction, including financing, of a given infrastructure facility, and the operation and maintenance thereof. The project proponent operates the facility over a fixed term during which it is allowed to charge facility users appropriate tolls, fees, rentals, and charges not exceeding those proposed in its bid or as negotiated and incorporated in the contract to enable the project proponent to recover its investment, and operating and maintenance expenses in the project. The project proponent transfers the facility to the government agency or local government unit concerned at the end of the fixed term which shall not exceed fifty [50] years: *Provided,* That in case of an infrastructure or development facility whose operation requires a public utility franchise, the proponent must be Filipino or, if a corporation, must be duly registered with the Securities and Exchange Commission and owned up to at least sixty percent [60%] by Filipinos.

"The build-operate-and-transfer shall include a supply-and-operate situation which is a contractual arrangement whereby the supplier of equipment and machinery for a given infrastructure facility, if the interest of the Government so requires, operates the facility providing in the process technology transfer and training to Filipino nationals.

- ii. *"Build-and-transfer.* - A contractual arrangement whereby the project proponent undertakes the financing and construction of a given infrastructure or development facility and after its completion turns it over to the government agency or local government unit concerned, which shall pay the proponent on an agreed schedule its total investments expended on the project, plus a reasonable rate of return thereon. This arrangement may be employed in the construction of any infrastructure or development project, including critical facilities which, for security or strategic reasons, must be operated directly by the Government.
- iii. *"Build-own-and-operate.* - A contractual arrangement whereby a project proponent is authorized to finance, construct, own, operate and maintain an infrastructure or development facility from which the proponent is allowed to

recover its total investment, operating and maintenance costs plus a reasonable return thereon by collecting tolls, fees, rentals or other charges from facility users: Provided, That all such projects, upon recommendation of the Investment Coordination Committee [ICC] of the National Economic and Development Authority [NEDA], shall be approved by the President of the Philippines. Under this project, the proponent which owns the assets of the facility may assign its operation and maintenance to a facility operator.

- iv. "*Build-lease-and-transfer*. - A contractual arrangement whereby a project proponent is authorized to finance and construct an infrastructure or development facility and upon its completion turns it over to the government agency or local government unit concerned on a lease arrangement for a fixed period after which ownership of the facility is automatically transferred to the government agency or local government unit concerned.
- v. "*Build-transfer-and-operate*. - A contractual arrangement whereby the public sector contracts out the building of an infrastructure facility to a private entity such that the contractor builds the facility on a turn-key basis, assuming cost overrun, delay and specified performance risks.

"Once the facility is commissioned satisfactorily, title is transferred to the implementing agency. The private entity however, operates the facility on behalf of the implementing agency under an agreement.

- vi. "*Contract-add-and-operate*. - A contractual arrangement whereby the project proponent adds to an existing infrastructure facility which it is renting from the government. It operates the expanded project over an agreed franchise period. There may, or may not be, a transfer arrangement in regard to the facility.
- vii. "*Develop-operate-and-transfer*. - A contractual arrangement whereby favorable conditions external to a new infrastructure project which is to be built by a private project proponent are integrated into the arrangement by giving that entity the right to develop adjoining property, and thus, enjoy some of the benefits the investment creates such as higher property or rent values.
- viii. "*Rehabilitate-operate-and-transfer*. - A contractual arrangement whereby an existing facility is turned over to the private sector to refurbish, operate and maintain for a franchise period, at the expiry of which the legal title to the

facility is turned over to the government. The term is also used to describe the purchase of an existing facility from abroad, importing, refurbishing, erecting and consuming it within the host country.

- ix. "*Rehabilitate-own-and-operate.* - A contractual arrangement whereby an existing facility is turned over to the private sector to refurbish and operate with no time limitation imposed on ownership. As long as the operator is not in violation of its franchise, it can continue to operate the facility in perpetuity."