Paper 3

Addressing the Bottlenecks: Towards an Effective Mechanism for Financing Infrastructure

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1. Introduction

Private-sector financing through public-private partnerships (PPP) has become increasingly popular around the world as a way of procuring and maintaining public-sector infrastructure, in sectors such as transportation (roads, bridges, tunnels, railways, ports, airports), social infrastructure (hospitals, schools, prisons, social housing), public utilities (water supply, waste water treatment, waste disposal), government offices and other accommodation, and other specialised services (communications networks or defense equipment).

Lack of infrastructure is a major 'bottleneck' in Vietnam today, while the government is experiencing difficulties in mobilizing resources to build infrastructure. These reasons urge the government to promote cooperation with the private sector. Vietnam has the BOT, BTO, and BT regulations (Decree No. 78/2007/ND-CP), but it is ineffective. Thus, there were no foreign BOT contracts made in Vietnam from 2001 to present because the investment environment is not really attractive and the investors have no faith in the state partnership.

In fact, the state budget and official development assistance (ODA) to invest in the infrastructure sector are limited. According to the Ministry of Planning and Investment, investment needs in infrastructure in Vietnam are estimated to be a very large number, accounting for US$ 25 billion a year. However, annual funds of both public and private sectors for infrastructure are available less than US$ 16 billion. This gap can be partially filled if the private sector participates more in providing infrastructure services as well as related services.

Objectives

This paper aims to design an effective mechanism for financing framework for PPP in infrastructure in order to minimize explicit costs and resulting contingent liabilities. It also attempts to make the discussion about markets for infrastructure services through pricing rules and regulations.

Methodologies

- Using SWOT (strengths, weaknesses, opportunities and threats) analysis of PPP.

- Evaluating PPP based on synthesis and comparative analysis methods.

- Using incremental capital-output ratio (ICOR) to analyse investment efficiency.

2. Scientific foundation of PPP

2.1. What is PPP?

Private enterprises contribute capital and share benefits and risks for state projects such as libraries, schools, museums, airports ... have been occurred in many countries. Previously, public services were invested directly by states. States also constructed, managed and used these. However, when there is the contribution of the private sector, the state only plays a role as monitoring, supporting and promulgating regulations on general management. This is a form of public private partnership (PPP).

The definition of PPP varies across sectors, organizations and across countries. IMF (2004) defines PPP as the reform which involves private sector supply of infrastructure assets and services that have traditionally been provided by the government. ILO (2008) defines it as the collaborative arrangements among government, private enterprises and educational institutions for the provision of a public service or the promotion of research and development. DFID (2008) brings the issues of benefits, range of partnerships including the introduction of private sector ownership into businesses that are currently state-owned, the Private Finance Initiative, and selling Government services into wider markets. According to ADB (2006), 'PPP project means a project based on a contract or concession agreement, between a Government or statutory entity on the one side and a private sector company on the other side, for delivering an infrastructure service on payment of user charges'.

The Canadian Council for Public-Private Partnerships terms it as a cooperative venture between the public and private sectors, built on the expertise of each partner, that best meets clearly defined public needs through the appropriate allocation of resources, risks and rewards. According to modalities and schemes IMF (2004) classifies it into various types and settings as in Box 1.

Box 1. PPP Schemes and Modalities	
Schemes	*Modalities*
Build-own-operate (BOO) Build-develop-operate (BDO) Design-construct-manage-finance (DCMF)	The private sector designs, builds, owns, develops, operates and manages an asset with no obligation to transfer ownership to the government. These are variants of design-build-finance-operate (DBFO) schemes.
Buy-build-operate (BBO) Lease-develop-operate (LDO) Wrap-around addition (WAA)	The private sector buys or leases an existing asset from the government, renovates, modernizes, and/or expands it, and then operates the asset, again with no obligation to transfer ownership back to the government.
Build-operate-transfer (BOT) Build-own-operate-transfer (BOOT) Build-rent-own-transfer (BROT) Build-lease-operate-transfer (BLOT) Build-transfer-operate (BTO)	The private sector designs and builds an asset, operates it, and then transfers it to the government when the operating contract ends, or at some other prespecified time. The private partner may subsequently rent or lease the asset from the government .

Source: IMF, 2004.

2.2. Benefits and challenges of PPP

Private participation in infrastructure provides significant benefits to governments, consumers, and economies. It:

- Expedites investments in infrastructure and frees governments from heavy administrative and fiscal burdens.
- Lowers the cost of public services by increasing efficiency and improves performance through output-based contracts and incentives.
- Transfers capital, managerial expertise, and technological innovations to a country or region, stimulating the growth of domestic private infrastructure industries and capital markets.
- Shifts risks to private investors and operators, who are often better at handling them.
- Supports social and economic policy objectives, including poverty alleviation.

On the challenges side, PPP can be complex deals with high transaction costs; hide public liabilities which should be accounted for; sometimes result in corrupt behaviour by the public and private parties involved; be the subject of undue political influence.

2.3. PPP in some countries: Lessons for Vietnam

2.3.1. China

In the past, China operated under a system of economic plan socialist. In this period, all companies were owned by the People's Government. Private companies and free markets were not occurred. Beginning in the early 1970s, China introduced an open economic policy in a few selected cities. A number of state enterprises in these cities have started their reforms by establishing structures and management systems of modern companies. Under the company laws, SOEs have been restructured into a limited liability company that may be owned by local and foreign investors. As stated a number of enterprises have become private companies, the government were no longer exclusive in provision of public facilities and services. There were more private companies established during the 1990s. Since 2000, PPP have become one of the government's strategies in the context of supplying public facilities and services (Paul H K Ho, 2006).

Preferred form of PPP application in China is a cooperation between the government and private through shareholding companies. In the recent years, many road projects have been made in this form of PPP. The contract includes the application of the independent contractor and different scales. Funding sources in the country can mobilize through issuing domestic and international bonds in a long-term. Many toll road projects in China based on loans and international bonds. In addition, stocks are also used as a way to finance the project. This just happens to companies with positive returns regularly for at least three years. This is the only way to re-funded projects. However, a risk of the project is the transportation costs in China are relatively high and equivalent to many developed countries in the world. This leads the economic benefits and financial calculations to attract investors, which do not achieve.

2.3.2. India

PPP in India has been well known because of its success. Based on Indian experience in the last decade, there are five major elements to make successful PPP projects, such as political support, transparency, flexibility, financing, and policy and regulation environments (see Box 2). Political support is one of the most important factors of PPP, particularly in infrastructure areas. Strong political is needed to obtain PPP achievements. Well-designed PPP with transparency in contracts is another vital factor that could minimize the corruption. Differential pricing may add to PPP success in infrastructure that can be seen in the power sector.

Box 2. PPP in Water Supply: What Worked and What Did Not

The Tirupur water project is the first large commercial BOOT project (which had its financial closure in 2002) covering a 30-year period. The Project's success is reflected in improved living standards for about 800,000 residents in Tirupur town and its periphery, which includes around 80,000 slum residents. It has met the water needs of 600 textile firms, increased water supply to domestic consumers and given the town its first sewerage system.

The project's success can be attributed to the support given to the PPP by industry, stakeholders and the donor community. The contract was based on reliable data; the project followed a consensus-building approach; tariffs in the concession agreement allowed for inflation-adjustments; there was appropriate allocation of risks; the financial health of local bodies was addressed; the government played a major role as project enabler; and suitable regulatory mechanisms were set up.

The management-contract-based PPP in the water sector of Sangli (2000-03), on the other hand, has not taken off. The main drawbacks were the absence of strong sustained political commitment for the PPP, and the lack of transparency in the process - such as a proposed five-fold increase in tariffs, without adequate supporting rationale. There were no institutional mechanisms that allowed consultations with users, to which was added the lack of involvement of lower-level local bodies' staff, and insecurity of the chief executive's tenure.

Source: From Presentation by S K Sarkar, TERI, 'Modes of PPP and Institutional Capacity Requirements,' and web-based information, cited in NCAER*, 2006.*

However, none of port, airport and railway sectors in India have independent regulators. Lacking independent regulators in those sectors cause problems for future deregulation, also not succeed to make comfortable to prospective investors in the context of predictability and stability (World Bank, 2006).

2.3.3. Korea

Korea started its PPP program since 1994 with the "Act on Promoting Private Capital into Social Overhead Capital Investment". The program aims to develop a consistent policy in different fields. Korea has promoted BTO projects, focusing mostly on economic infrastructure such as transportation facilities (roads, ports, sewage treatment facilities and complex cargo terminals). Under the BTO scheme, the private sector builds infrastructure facilities, then transfers the ownership to the government when completed, and operates the facilities to recover its investment by collecting user fees. Under this Act, approximately 100 infrastructure projects were implemented in the form of PPP. However, in the first 4 years only 42 projects were completed. Due to limited success, the Korean government had to promulgate a new PPPAct in February 1998. This law has improved the form of contracts, the way to handle individual projects, and required feasibility study, the system supports of various risks and establish a PPP central named PICKO. In addition, Korea also encourage the development of the PPP by the VAT exemptions. In many contracts, can negotiate, the government may guarantee revenue up 90%, this makes the private sector virtually no risk. The revenue risk is largely transferred to the government. Therefore, PPP projects have growing rapidly.

Through the revision of the PPP Act in 2005, the government introduced BTL (Build – Transfer – Lease) for the construction of social infrastructures. BTL projects principally involve infrastructure facilities in which the private sector finds it difficult to impose user fees a certain level. BTL schemes are schools, military housing, libraries, sewage pipes, and culture facilities. Railway projects whose large scale investment is difficult to recover from user fees are also considered as BTL projects. Among BTO, BOT, BOO and BTL projects, BTO and BTL schemes are mainly performed.

Box 3. Characteristics of BTO and BTL projects		
Items	BTO project	BTL projects
Investment recovery	Concessionaire collects user fee to recover investment and make profits	The government makes unitary payments covering construction costs, profits and operating costs during concession period.
Facility types	Roads, railways, ports, environmental facilities, etc.	Schools, military housing, sewage pipes, libraries, cultural facilities, etc.
Project risk and return	High risk and relatively high return (High demand risk)	Low risk and low return (Low or no demand risk)

BTL project has promoted by the Korean government because of the following reasons.

(i) Limited resources in the public sector have prompted use of private sector capital and efficiency. Timely provision of various social infrastructure facilities to enhance the life quality of the public is very difficult if the government sending is the sole financing resource.

(ii) BTL projects reduce time required for school renovation by decades. Depending on the government sending alone, it would take at least 20 years to renovate old school buildings that are 30 years old or older in the country. However, about 70% of these schools could be renovated within 2 to 3 years by the BTL scheme.

(i) Earlier implementation would decrease costs.

(ii) Construction is completed on time and within budget.

(iii) High quality services are given for users.

2.3.4. Lessons for Vietnam

The World Bank has given eleven reasons why many partnered infrastructure projects have been held up: (1) wide gaps between public and private sector expectations; (2) lack of clear government objectives and commitment; (3) complex decision making;

(4) poorly defined sector policies; (5) inadequate legal/ regulatory frameworks; (6) poor risk management; (7) low credibility of government policies; (8) inadequate domestic capital markets; (9) lack of mechanisms to attract long-term finance from private sources at affordable rates; (10) poor transparency; and (11) lack of competition (Asian Business, cited in Xueqing Zhang, 2005).

(i) Roles of governments

PPP do not mean that governments transfer all risks to the private sector. Thus, governments may guarantee revenue up 90% (Korean experience), especially in social infrastructures which are difficult to recover from user fees. In addition, the VAT exemptions are also the government support for BTO scheme. The government plays a major role as project enabler and issuing suitable regulatory mechanisms.

(ii) Need independent regulators

Each sector such as roads, ports, airports or railways has different benefits or risks, so that its independent regulators are needed to attract investors.

(iii) PPP in the country's strategy

PPP development should become one of the government's strategies in the context of supplying public facilities and services.

(iv) Learning from PPP's failures

A form of PPP is not a 'panacea'. The absence of strong sustained political commitment for PPP, the lack of transparency in the process, without adequate supporting rationale are the major factors leading a failure PPP project.

3. Infrastructure investment in Vietnam: situation and problems

After more than 20 years of innovation, Vietnam's infrastructure, from a poor one both in quality and quantity, has developed and obtained significant achievements. Vietnam's infrastructure has partially met the needs of the society – economy, ensuring the annual average growth rate of the transportation services at 9-11% that is higher than the general economic growth rate. In 2008, Vietnam obtained impressive results such as the volume of passenger traffic of 77.4 billion passengers/year, the volume of freight traffic of 160.3 billion tons-km, the urban water-supply capacity of 4.5 million m^3/day for nearly 80% urban population, the rate of collected urban solid waste of about 80%.

There have been significant changes in the mobilization of investment resources for infrastructure development with the state's support in creating the legal environment, encouraging private sectors' investments and attracting foreign direct investments (FDI) toward large scale infrastructure projects, such as seaports, international airports at first.

3.1. Overview of investment policies in Vietnam

3.1.1. General provisions on investment

Investment Law (2005) and Decree No. 108/2006/ND-CP (September 22nd 2006) are two important legal documents to adjust the procedures for granting investment certificates for various types of investment projects. Chapter IV, Section I, Article 45-49 of Investment Law provides regulations on application and the investigation contents of the registration procedures for investment projects of under the 300 billion and not on the list of conditional investments; and verification procedures for projects with investment capital of below 300 billion and on the list of conditional investment, and the project of over 300 billion. Decree 108/2006/ND-CP guiding the implementation of Investment Law specifies the jurisdiction for approval and certification for each investment project (Chapter V, Section I, Article 37-39) and agencies which receive dossiers of investment projects (Article 40). Thus, for projects

on private land or planned land, investors will apply respectively to a Department of Planning and Investment or the Management Board of land.

Also, in the case that investors must apply for approval of the investment policy by the Prime Minister (Article 37 of Decree 108/2006/ND-CP), a Department of Planning and Investment will only receive the application of the project approved by the Prime Minister. Thus, the regulations on investment only include the approval of investment policy already approved by the Prime Minister and do not provide for similar procedures at provincial level.

Investment Law provides estimated 15 days for the registration of investment projects and 25-37 days for the examination of investment projects granted the investment certificate by the provincial People's Committee.

Investment Law and documents guiding the implementation of five identified areas prohibited for all investors, nine conditional investment areas generally applicable to all investors and 14 conditional areas applied for foreign investors. These conditions may include specific requirements for establishing a company, scope of project activities, structure and foreign ownership in the project, and the legal form of organization permitted. Foreign investors can make unlimited investment in sectors other than those of prohibition and conditions. Under Article 4.1, investors are allowed to invest in all sectors and all areas not prohibited by law. This is defined as the approach of "exclusive list" strongly recommended by the OECD.

Article 31.1 provides that the Government may amend the list of prohibited investments and conditional investments based on "strategic planning and economic development in each period and the implementation of international treaties. Article 29.3 regulates that when a foreign-invested business has invested in a non-conditional sector which later becomes conditional, the investor is "allowed to continue investing in that industry".

Investment Law provides a large scope of autonomy for investors, such as the right to transfer capital and projects, right to independently manage the business. For example, in hiring labor, equitably managing and accessing to land, resources and credits,

domestic and foreign investment are not distinguished. Furthermore, Investment Law also prescribed more various forms of investment than before. Foreign investors may opt to establish a limited liability company, partnership, joint stock companies or private enterprises.

3.1.2. General provisions on investment under BOT, BTO and BT

Recently, on 27/11/2009, the Government issued Decree No. 108/2009/ND- CP on investment in the form of Building-Operating-Transferring (BOT), Building-Transferring-Operating (BTO), and Building - Transferring (BT). This is a very important document in creating a legal framework and mechanisms to operate projects this way and raise capital more efficiently from economic sectors. Accordingly, the government encourages the implementation of projects to construct, operate, and manage new infrastructure or projects to improve, expand, modernize, and operate and manage existing works in the following areas:

a) Roads, bridges, tunnels, ferries;

b) Railways, railway bridges, railway tunnels;

c) Airports, seaports, river ports;

d) Water supply systems, drainage systems, collection systems, waste water and waste treatments;

e) Power plants, transmission lines;

f) Other infrastructure as decided by the Prime Minister.

The important point of this Decree is to expressly state about mobilized funds to implement projects. For projects with total investment up to 1500 billion, the owner's equity ratio shall not be less than 15% of the total investment of the project. With over 1500 billion project, the rate is determined according to the principles: for capital up to 1500 billion, the owner's equity ratio is not lower than 15% of this capital, while with investment capital of over 1500 billion, this rate is not lower than 10%.

With the use of state funds for project implementation, the state capital should not exceed 49% of the total project. For the project to be undertaken to meet urgent needs, ministries, branches and provincial People's Committee shall decide the use of the State budget for the construction of auxiliary works, compensation, site clearance, resettlement or perform other tasks to support the project.

Decree 108/2009/ND- CP also specifies many other important issues with regard to investment projects of BOT, BTO and BT as: Building and announcing the list of projects.

In January annually, ministries, sectors and localities announce the list of projects on their own websites.

Depending on the nature and scale of a project, authorized State agencies organize the report of feasibility study or project proposal to establish a basis for documenting an auction offer and organizing negotiations with investors.

Decree also stipulates the Prime Minister is authorized to approve nationally important feasibility study reports and projects proposals under the Resolution of Congress, projects using 200 or more hectares of land, projects required to be guaranteed by the Government and projects of group A with total investment of 1,500 billion or more.

For projects on the list already announced registered by two or more investors, authorized state agencies shall organize a public auction domestically or internationally. The appointment of investors is only applicable when only an investor registers for the project or the project is approved under the authority of the Prime Minister....

Ministry of Planning and Investment shall grant investment certificates for projects of national importance; projects which authorized ministries or agencies or authorized bodies by ministries and state agencies sign the contract; projects implemented in many provinces and cities directly under the Central Government. The project shall be implemented only after the investor is granted the above mentioned certificate.

State agencies competent to sign the contract and the project is the ministries, ministerial-level agencies, Government agencies, the People's Committees of provinces and cities directly under the Central Government (hereinafter referred to as the ministries, provincial People's Committee).

3.1.3. Environmental regulations related to investment

Environmental Protection Law (2005), Decree 80/2006/ND-CP (09/08/2006), and Decree 21/2008/ND-CP (28/02/2008) provide a list of all 162 types of projects to make reports on environmental impact assessment (EIA). Projects outside this list must make registration to commit to protecting the environment (CPE). Section 2 and Section 3, Chapter III, Environmental Protection Law shall specify the objects, the preparation, appraisal and approval of EIA; and CPE registration. Thus, provincial People's Committee or a professional body of environmental assesses and approves of EIA[1] report and district People's Committee or commune-level People's Committee is the authorized body to certify the registration of investors' CPE[2].

About EIA and the time of making the evaluation and approval of EIA report, Environmental Protection Law stipulates that EIA report must be prepared and approved before granting investment licenses and construction permits[3]. Decree 21/2008/ND-CP again confirms that EIA report or CPE registration need not be filed before granting investment license but just before construction permits[4]. Pursuant to

[1] People's Committees of provinces and cities directly under the Central Government (hereinafter referred to as provincial People's Committee) organize a board examination or authorize professional bodies of the same level of environmental protection organizations to organize a board examination or select service organizations to report about environmental impact assessment of investment projects in the province, except those projects specified in points a and b of paragraph 7 of Article 21, Law on Environmental Protection (Item 3 Article 1 of Decree 21/2008/ND-CP amending Decree 80/2006/ND-CP)

[2] After receiving the complete valid dossier and in the time limit prescribed in Clause 2 of Article 26 of the Law on Environmental Protection, provincial People's Committee or commune-level People's Committees shall be authorized to issue certifications for objects subject to registration to commit to protecting the environment (Article 17 of Decree 80/2006/ND-CP)

[3] EIA must be made simultaneously with the feasibility study report of the project (paragraph 2 of Article 19); the projects specified in Article 18 of this Law are only approved, licensed for investment, construction and operation after environmental impact assessment reports have been approved (Item 4 of 22)

[4] Clause 2 of Section 5 of Article 1 of Decree 21/2008/ND-CP: "The time for evaluation and approval of EIA is defined as follows: i) Investors in mining project must submit an EIA to be processed and approved prior to the application for mining; ii) Projects of construction works or items must have EIA assessed and approved before the construction permit application except those defined at Point a of this paragraph; iii) Projects not being

the provisions on investment and construction, the decision to approve EIA or a certificate of registration to commit to protecting the environment is not part of investment certificate application (Article 44-46 of Decree 108/2006/ND-CP) and construction permit application (Article 20 of Decree 12/2009/ND-CP).

About EIA application, investors should consult the People's Committees of communes, wards, towns and communities representatives in constructing EIA report and will be replied within fifteen (15) working days after sending a written request consultation. If investors do not receive a written reply, they shall be regarded as agreed by communal People's Committees and community representatives.

Of time, the law stipulates an estimate by Department of Natural Resources and Environment for the approval of environmental impact assessment not to exceed 30 days, including five days to review the first submitted application, 15 days for the board meetings to evaluate held since the date of receipt, and 15 days to decide an approval after receiving the revised EIA report.

3.1.4. Regulations on Land-related investment

Land Law (2003), Decree 181/2004/ND-CP (29/10/2004) and Decree 69/2009/ND-CP are the important legal documents prescribed procedures related to land including Location introduction; Retrieval, traffic and leasing land and Land use right certificates.

For Land introduction procedures, Land Law stipulates that land management agencies have the responsibility to introduce investment location for investors (Item 3, Article 122). Decree 181/2004/ND-CP specifies more clearly that the agency tasked to negotiate about location by local Government introduces locations for investors (Item 1, Article 125). Meanwhile, Decree 69/2009/ND-CP stipulates that agencies receiving investment application shall consult agencies involved in investment projects to introduce sites according to their authorities or submit to the provincial People's Committee to consider introducing location for investors (Article 29). Though of the

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subjects defined at Points a and b of this paragraph must have EIA processed for assessment and approval before starting the project."

same provisions on land, the differences in understandings about agencies introducing investment location has led to different enforcement of laws in provinces across the country. From the provisions on land, more study on investment regulations shows no specific provisions regarding agencies that recommend investment location, but Law of planning stipulated that administration agencies of urban planning are responsible for introducing investment location for investors when requested (Clause 1, Article 70).

For Retrieval procedures, land assignment and lease, Land Law prescribes order, application and time to perform this procedure in cases with and without clearance (Article 122). Decree 181/2004/ND-CP details the implementation of these procedures at provincial level by Department of Natural Resources and Environment to process and coordinate with other relevant agencies (Article 125). The results of this procedure shall be the certificate of land use rights to investors. The law stipulates 20 days for accepting land allocation without clearance and 40 days with clearance, including 30 days for the approval of land allocation and 10 days for land lease, after the retrieval and clearance is completed. The period for retrieval of land and clearance actually lasts from 3 months to 12 months depending on the cooperation of parties related to the land, while the law stipulates that land users need to implement land allocation decisions to investors as soon as possible after the decision takes effect (Article 39). The law also provides that prior to the clearance compensation, a competent agency shall notify parties using land in at least 90 days (for agricultural land) and 180 days (for non-agricultural land) about purpose, plans and time and proposed compensation plan. Overall, it is difficult to give the number of days needed to complete investment procedures in the absence of clear guidelines on general procedures and steps involved.

3.1.5. Regulations on building related to investment

Construction Law (2003), Urban Planning Law (2009), Decree 12/2009/ND-CP (10/02/2009) and Decree 83/2009/ND-CP (10/15/2009) are other important legal

documents prescribing procedures related to construction, including land planning/planning certificate and license of construction.

For planning procedures, Planning Law regulates planning certificate is a document issued by competent authorities to define related data and information of an area or a plot of land according to the urban planning map approved (Clause 16, Article 3). According to Section II of Part VI Circular 07/2008/TT-BXD, providing information on construction planning is done through one of the three procedures: i) Provide information on construction planning[5], ii) Grant certificates of construction planning[6], or iii) Approve architectural planning[7]. Results of the procedure to provide planning information are documents on the planning information; results of the procedure to grant planning certificates are certificates granted but also information about land planning, area, coordinates of landmarks, red road and construction directions, building density, land use coefficient, maximum height, minimum height and other information about architecture, infrastructure, environmental protection....

For the procedure to grant building permits, Construction Law regulations require types of building to have construction permits, licensing profile, license content, license conditions, and licensing authorities (Article 62-66). Decree 12/2009/ND-CP and Decree 83/2009/ND-CP also provide more in detail the composition of an application and agencies for construction permits which is a provincial People's Committee for specially granted construction, Grade I, Grade II, religious works, historical works, culture works... and other works prescribed by provincial People's Committee. As a rule, the granting of construction permits shall be made in 20 days after application receipt.

3.2. Vietnam's infrastructure challenges

5 http://www.moc.gov.vn/site/moc/cms?cmd=4&portionId=79&articleId=33866&portalSiteId=6&language=vi_VN

6 http://www.moc.gov.vn/site/moc/cms?cmd=4&portionId=79&articleId=33868&portalSiteId=6&language=vi_VN

7 http://www.moc.gov.vn/site/moc/cms?cmd=4&portionId=79&articleId=33870&portalSiteId=6&language=vi_VN

(i) Low quality of infrastructure

After more than 20 years of innovation, Vietnam's infrastructure, from a poor one both in quality and quantity, has developed and obtained significant achievements in the following fields:

Table 1. Major indicators of infrastructure

Items	Unit	Volume
- Roads Of which: National highway	km	310,000 21,000
- Railroad	km	3,200
- Capacity of inland waterway ports	mil tons	96
- Capacity of seaports	mil tons	187
- Capacity of airports	mil tons	63
- Design capacity of urban water-supply systems	mil m^3/day	5.5
- Effective capacity of urban water-supply systems	mil m^3/day	4.5
- Percentage of transportation needs in two urban areas, especially public passenger transportations	%	20

Source: Infrastructure Department, Ministry of Planning and Investment

Although Vietnam's infrastructure has been improved, its quality remains a weakness. Most vital infrastructure, such as electricity and road have seen competitive disadvantages (Table 2). It is one of factors causing Vietnam's low position in the world. The poor infrastructure is not only a barrier to economic and social development of the country, but it also degrades the attractiveness and competitiveness of the investment environment of Vietnam.

Table 2: International Ranking of Vietnam Infrastructure

	2008-2009		2009-2010	
	International Ranking	Competitive Advantage (+) / Competitive Disadvantage (-)	International Ranking	Competitive Advantage (+) / Competitive Disadvantage (-)
Quality of overall infrastructure	97	-	111	-
Quality of port infrastructure	112	-	99	-
Quality of electricity supply	104	-	103	-
Quality of roads	102	-	102	-
Quality of air transport infrastructure	92	-	84	-
Quality of railroad infrastructure	66	-	58	-
Available seat kilometers	42	+	38	+
Telephone lines	37	+	36	+
Country Competitiveness Index Rank	70		75	

Source: World Economic Forum, Global Competitiveness Report 2008-2009; 2009-2010.

According to the latest survey by the Secretariat of Vietnam Business Forum 2009, 87.8% of foreign enterprises and 83% of domestic enterprises out of the total 291 enterprises evaluated the quality of infrastructure is poor and very poor. This result is similar to the global competitiveness report in 2009-2010 of World Economic Forum, in which infrastructure was ranked lowest in the competitiveness index of Vietnam. The infrastructure system is clearly weak in most major cities (Box 4), especially in Hanoi and Ho Chi Minh City where their population density is high.

Box 4. Hanoi's infrastructure

The infrastructure system of the city is still weak and inadequate, it also did not match the needs of the economy. The road network of the city has only about 1,000 km, of which approximately 350 km of urban roads. It is usually occurring traffic congestions

while belt roads have not been completed. Land transport only accounts for 7% (while in the modern city is about 20-25%). Parking places are lacking while the number of vehicles increases, especially cars and motorcycles. Major public transport by bus meets about 20% the needs of people traveling, there is no urban railway system. Water supply system supplies clean water for approximately 90% of urban population with 110-120 liters per person per day, some areas still have problems or not water supply. Parks and entertainment areas have been lacking and slow invested. It has no large centers of entertainment. Currently, waste water treatment system of the city has two pilot stations in Kim Lien and Truc Bach. There is no concentrated areas of waste water treatment, therefore waste water has not be thoroughly treated before being discharged into the canals and drainages causing serious pollution. Waste collection reached about 95% in urban districts and 70% in suburban districts. Approximately 96% of garbage collection is handled by the buried technology. Many regions and streets are still flooded with the heavy rain.

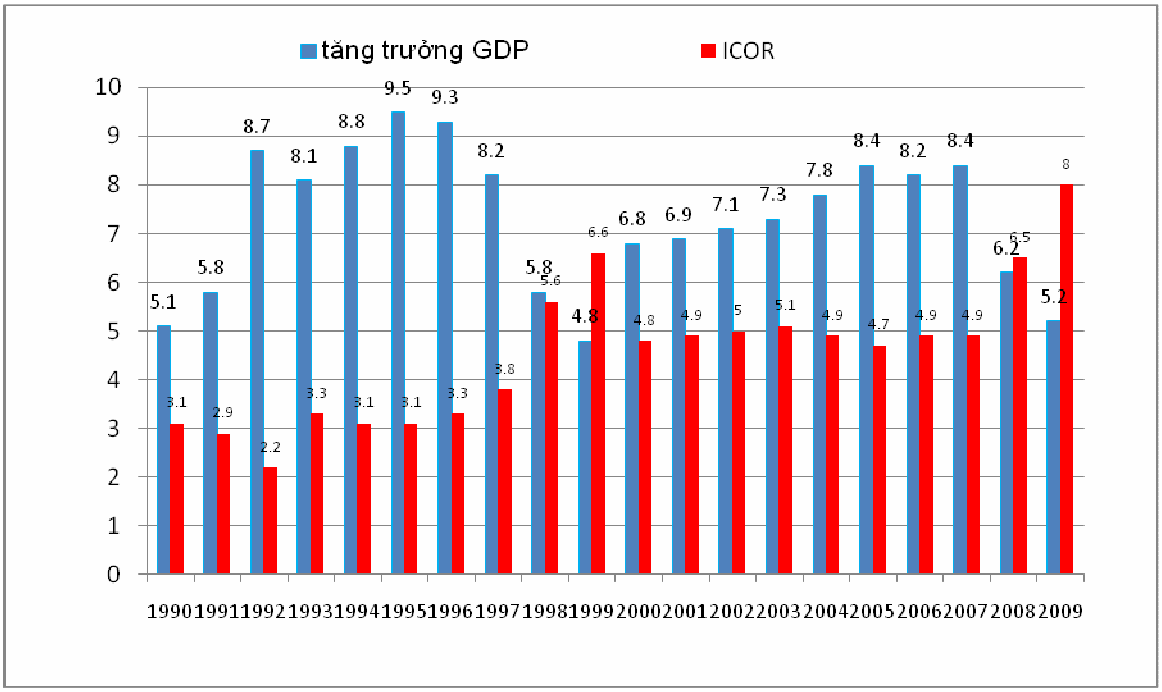
Source: Hanoi People's Committee, 2007, Investment efficiency of Hanoi infrastructure from the state budget.

http://www.vncold.vn/Web/Content.aspx?distid=495

(ii) Low investment efficiency

It is clear from Figure 1, the GDP growth rate of Vietnam's GDP has been remained a high level, although it was impacted by the financial crisis in the region as well as the global economic crisis. However, Vietnam's ICOR index has been increasing. This shows that investment efficiency is very low in Vietnam. Vietnam's economy has been mostly developed in width, yet transferred to develop in depth.

Figure 1. GDP growth rate and the ICOR index of Vietnam
from 1990 to 2009



Source: CIEM's calculation from GSO data.

(iii) Poor quality of plannings

All sectors have had their own plannings; however, due to the poor-quality forecast and inconsistent coordination in planning, then the plannings still are in low quality and are difficult to be timely modified. This combining with limited resources have created big gaps, causing failure in meeting the demands of the economy and the society, such as road traffic jams, overloads at seaports, limitations on transportation service quality, failure in facilitating the development of multimodal transport and logistics in order to improve the competitiveness, especially in the progress of international integration.

(iii) Slow development of urban transportation

The development of urban transportation can not keep pace with the urbanization speed; the urban transportation projects mostly are far behind the schedule with the main cause from the stages of resettlement, compensation and site clearance.

However, effective solutions have not been found and responsibilities toward serious wastes caused by the slow progress of these projects have not been specified for years.

Transport projects have not focused on the linkage between their inputs and outputs, especially seaports and airports, and then the investment effectiveness is limited.

The rapid growth of New Urban Areas, Industrial Zones and Services Centers in recent years has created big opportunities for water-supply projects to attract non-budget investments; however, there still are obstacles from consumers because the price of pure water has not followed the Prime Minister's guidance.

(iv) Poor management

In fact, there exists a paradox that the investment needs as well as the investment capital sources are available but the disbursement is slow. Apart from reasons caused by the economic inflation, there is a problem that has existed for a long time but becoming clearer now, that is poor management ability, financial ability, project organization, implementation and operation ability of management agencies, consulting contractors and construction contractors.

3.3. Constraints to infrastructure financing

The most important factor in investment is the capital source. Due to being a public service and since Vietnam in the past time still is an underdeveloped country then the infrastructure capital sources mainly come from ODA, the state budget and capital sources originated from the state budget such as government bonds, project bonds guaranteed by the government, capital of the state-owned enterprises (capital managed by the state)... This has limited the development speed of infrastructure significantly since these capital sources are so limited and some of them also burden the state budget due to long-term interest payment. Difficulties are in the slow mobilization of non-budget capital sources due to the dependence on the state budget, loose management in state budget, inadequacy in assigning financial autonomy to enterprises, low equitization of state-owned enterprises, etc.

Total investment budget for development in the period 2001-2010 is estimated about USD 60 billion, accounting for about 8.4% of GDP, of which infrastructure investment such as irrigation and transport, agriculture, forestry, fisheries accounts for approximately 50%. This shows the ability of the state budget is hard to meet all the needs for infrastructure investment. While the participation of private sector has not effectively encouraged in this area due to approval and licensing process are complex; the recovery of capital is low, roles and responsibilities of the state as well as the private are unclear.

3.4. Private sector perspectives

The infrastructure requirements of Vietnam are very large and are increasing rapidly because of strong economic growth. The public sector is unlikely to mobilize the required resources and the private sector must be brought in as a supplementary source of finance.

In 2000, state budget plays an important role in road transportation, water, and communication services , accounting for over 92% of those sectors. However, a big change was seen in 2008 while non-state/private sector and FDI contributed a large amount in infrastructure (Table 3).

Table 3: Infrastructure Investment in Vietnam (%)

	2000			2008		
	State	Non-state	FDI	State	Non-state	FDI
Road transportation	92.17	4.84	2.98	49.70	31.66	18.63
Electricity, gas	16.67	50.90	32.43	48.85	9.69	41.46
Water	96.60	0.56	2.84	15.51	25.18	59.32
Communication services	95.67	0.09	4.25	35.08	44.65	20.27

Source: GSO, 2009.

Private sector participation in infrastructure is desirable not only to ensure a larger flow of resources but also to introduce greater efficiency in the supply of these services. The explosion of global capital markets and the associated expansion of private capital flows to emerging market economies provide new opportunities to

finance infrastructure projects in Vietnam, if projects can be made commercially viable.

Despite the favorable circumstances, the experience in introducing private investment into infrastructure development in Vietnam is quite disappointed. Although the resources available are probably inadequate to meet all of the infrastructure needs of Vietnam, which are indeed enormous, very few private sector projects are currently being financed. In other words, the operative constraint is not the level of resource availability but the ability to structure projects in a manner suitable for private financing.

Difficulties in implementing private sector infrastructure projects associate with the fact that infrastructure projects are generally subject to regulations, which present special problems for private investment; the nature of the risks associated with infrastructure projects and the consequent need for complex risk mitigation arrangements to ensure finance ability; and the need to mobilize a suitable mix of finance, especially long-term finance, which is not easily obtained.

In addition, an important cause for the underdevelopment of infrastructure is the lack of an efficient and transparent mechanism to bridge the financial viability gap. Establishing a sound financing framework to meet developing countries' growing infrastructure needs remains a key challenge for policymakers.

4. Public private partnerships in infrastructure

Vietnam has done a great job in achieving a high level of investment in infrastructure in a long period. Over the past decade, total infrastructure investment has accounted for about 9-10 percent of GDP on average, putting Vietnam in the top list of East Asian economies maintaining a high level of infrastructure investment. This has led to a rapid expansion of infrastructure stocks and improved access.

Despite encouraging achievements, Viet Nam's infrastructure, however, remains in a poor condition, with transportation systems largely weak, small-scale and below technological standards. The country has not yet developed deepwater seaports or standard highways, and urban road systems in major cities have not been fully connected to the national highway system. Accordingly, infrastructure is considered to be the biggest constraint on Vietnam's national competitiveness. Among various sectors of infrastructure, Vietnam is ranked to be at the bottom in term of quality of ports, roads, and electricity, according to the 2008 Global Competitiveness Report. Over the past ten years, underdeveloped infrastructure has emerged as the most problematic factor affecting Vietnam's investment environment. Transport, along with electricity, are considered to be the weakest infrastructure sectors in Vietnam (Nguyen Xuan Thanh and Dapice, 2009) .

More than twenty years since Doi Moi, Vietnam is now entering a period of development that demands strategic investments in backbone transport infrastructure such as expressways, railways, seaports, and airports, and in energy with an efficient mixture of hydro, coal, and gas power plants. For successful integration to the world economy and ensuring targeted growth rates of 7.5-8% per annum, it is roughly estimated that Vietnam needs to increase its investment in infrastructure to the levels of 11-12% GDP instead of the current levels of 9-10%.

However, given its budget constraints and preferential financing sources coming to an end soon, the need to address the financing gap in investment in infrastructure with the amount of USD 2.5 billion a year from the private sector through consolidating the public – private partnership (PPP) seems to be the most promising option.

The following sections will put the emphasis on analyzing the transport sector with special attention on the current situation of as well as recommended actions to promote PPP models in infrastructure investment of Vietnam.

4.1. Major forms of PPP in the transport sector

Generally speaking, the participation of the private sector in road transport development projects in Vietnam occurs in the three major forms of BOT, BT and lease contracts.

BOT model

BOT model is the most popular form of road transport projects with three models (see Table 4), including: (i) BOT without government financial supports, in which projects are only financed by investors and loans from financial institutions; (ii) BOT with direct financial supports from the government through its share of investment fund. An example of this BOT model is the case of Rach Mieu bridge with 60% of total investment coming from the government; and (iii) BOT with direct or indirect supports from the government. The direct support from the government is done by permitting investors to collect toll at some sections. This BOT model can be seen in the by-road of Vinh city and is also recommended for the Trung Luong highway of Can Tho province. Indirect support can be seen in the form of giving investors the right of land development and usage as recommended in the Hanoi-Haiphong highway and the Hanoi-Son Tay provincial road.

The BOT model applied in road transport projects can be considered as a form of "capital expenditure recovery assurance contract", where the gap between revenues from traffic volume and capital expenditure is compensated through adjusting toll collection time accordingly . The mechanism for toll collection time adjustment is proposed by investor's experts.

The contract award with regard to a BOT model is theoretically implemented through competitive bidding or appointed investors . In the current context of Vietnam, just the later form of BOT contract award exists. For the time being, there is no considerable

attention of foreign companies to participate in BOT model; of course, Vietnam has not made considerable efforts to capture their attention to participate in this model.

BT model

BT model have been widely applied in the road transport sector of Vietnam. An example of this model is the Nguyen Van Linh highway project of Ho Chi Minh city . The road was built and then transferred to the city government. In exchange for road construction and allocation of 30% of project capital, the city government allowing the investor the right for development and usage of 600 ha of land alongside the road.

The Nguyen Tri Phuong road and bridge in Ho Chi Minh city was also built under the BT model . In this project, the compensation for the investor was made through allowing deferred payment for work completion. Another project made under the BT model is the connecting road to Phu My bridge in Ho Chi Minh city project, which is recently was awarded to a investor in charge of this bridge.

Lease contracts

In the road transport sector of Vietnam, the current sale of toll collection right (TCR) in a road sector or a bridge within a certain period of time can be considered as a type of leasing . This form is applied with regard to an operational projects with private sector participation in operation and financing, and its leasing value defined by the investor and the bank. In general, projects of this type have an operational time of 3-5 years then they are retransferred to the government. In the case of National Road No.51, the project time frame is 7.5 years. In nature, through this way, the government receives the present value of the cash flow from the private investors and use it to finance new projects.

Table 4. BOT models in PPP operational and on-going projects

Bridges and underground roads	**Types**
Yen Lenh bridge in National Road No. 38.	BOT + GG
Ong Thin bridge in National Road No. 50	BOT + GG
Binh Trieu II road and bridge project	BOT

Co May bridge in National Road No. 51	BOT
Nguyen Tri Phuong road and bridge project, HCMC	BT
Ngang pass road in National Road No. 1A	BOT
Operational expressway projects	
Toll collection right in Phap Van – Gie Bridge expressway	Lease
Operational National Road	
National Road No. 1A, An Suong – An Lac	BOT
National Road No. 13, HCMC – Thu Dau Mot	BOT
National Road No. 1K, HCMC- Bien Hoa, including Hoa An bridge	BOT
Operational byroad projects	
Byroad of Vinh city, National Road No. 1, Nghe An province	BOT + TCR
Operational provincial road projects	
Provincial expressway Nguyen Van Linh, HCMC	BT + LDR
BOT project of 15 roads	BOT
Extended Hung Vuong road and Dien Bien Phu road	Lease
On-going bridge projects	
Rach Mieu bridge	BOT + GG
Phu My bridge, HCMC	BOT
Phu My by-road	BT
On-going expressway projects	
Gie Bridge – Ninh Binh expressway	BOT
Lang – Hoa Lac expressway	BOT
Hanoi – Hai Phong expressway	BOT + LDR
HCMC- Trung Luong expressway	BOT
Trung Luong – My Thuan – Can Tho	BOT + TCR
My Phuoc – Tan Van expressway, Binh Duong province	BOT
Lien Khuong – Da Lat – Lam Dong expressway	BOT + GG
Ho Chi Minh – Long Thanh – Dau Giay expressway	BOT
Noi Bai – Lao Cai expressway	BOT
On-going National Road Projects	
National Road No. 13, Thu Dau Mot – Tham Rot bridge, Binh Duong province	BOT

National Road No. 13, Tham Rot – An Lac bridge, Binh Phuoc province	BOT
National Road No. Hoa Cam, Hoa Phuoc, Da Nang	BOT
National Road No. 2 (extended), Noi Bai – Vinh Yen, Vinh Phuc province	BOT + GG
TCR in National Road No. 5, Ha Noi, Hai Phong	Lease
TCR in National Road No. 51, Bien Hoa – Vung Tau	Lease

Source: MOT, 2009

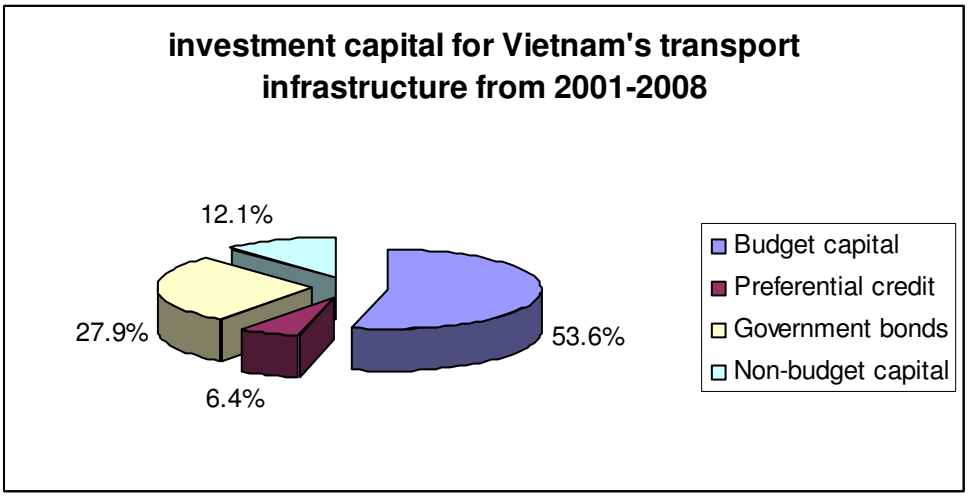
Note:

- *BOT = BOT without government financial support*
- *BOT + GG = BOT with government grant*
- *BOT + LDR = BOT with indirect government support in the form of land development right*
- *BOT + TCR = BOT with indirect government support in the form of toll collection right in the participating road section or in the bridge near participating road section*
- *BT + LDR = BT with indirect government support in the form of land development right*
- *Lease = the investor is assigned with toll collection right in a certain period in exchange for investment returned to the government.*

4.2. Current developments of PPP in the transport sector

According to the MOT, over the 2001-2008 period, the cumulative amount of investment capital for transport infrastructure was roughly VND 117,794 billion, in which the budget capital accounted for the largest share of 53.6% while the non-budget capital was very small at the level of 12.1% (see Figure 2.).

Figure 2. Investment capital for Vietnam's transport infrastructure from 2001 to 2008



Source: MOT, 2009

It can be seen that before 1994, PPP models were not available in Vietnam. Years after that time to 2005 witnessed private investment in infrastructure projects, mostly in the energy and telecommunication. WB's database estimated that investment in the transport sector just accounted for 3% of total USD 4 billion investing in PPP projects to the end of 2005.

Recent years have witnessed transport projects following PPP models, though still at a modest level. In this connection, it is noted that, given the controversial debate on PPP definition, for practical purposes, in our study the PPP concept also covers the Public-Business-Partnership (PSP) concept and thus we use these two concepts interchangeably. The current and future plans of PPP projects are presented in Table 5 and Table 6.

Table 5. PPP projects under implementation

Projects	Scope	Capital	Remarks
16 BOT projects	Small investment		Mostly in road, most of investors SOEs or JVEs with controlling state-owned capital
Gie bridge – Ninh Binh	56 km, 6 lanes	7692 billion VND	Facility bonds, equity contributed by SOEs

Hanoi – Lao Cai	264 km , 4 lanes (Phase I)	1249 million USD	ODA (200), OCR (896), facility bonds (153)
HCMC – Long Thanh – Dau Giay	54 km, 4-8 lanes (4 lanes in phase I)	938 million USD	Japan's ODA (516), OCR (410), and enterprise capital
Hanoi – Hai Phong	105 km, 6 lanes	1367 million USD	On-lending loan from EDCF (200), KfW (100), CDB and CTB (500), enterprise equity
Sai Gon – Trung Luong	40 km, 4-6 lanes	624 million USD	Budget capital, selling TCR upon completion
Lang – Hoa Lac	27,1 km, 6 lanes	430 million USD	Gov. (100), Hanoi (330), possible right transfer after completion
Hanoi – Thai Nguyen Hanoi – Soc Son Soc Son – Thai Nguyen	62 km 26 km, 2 lanes 4 lanes	324 million USD	JICA (238), budget (86), selling TCR upon completion
Bien Hoa – Vung Tau	69 km, 4 lanes	434 million USD	Capital mobilized by enterprise

Source: Authors' compilation from MOT, 2009.

Table 6. PPP projects under preparation and calling for investment capital

Projects	Scope	Capital	Remarks
Ninh Binh – Thanh Hoa	121 km , 6 lanes (Phase I)	1445 million USD	On-lending loan from IBRD, preferential ODA and enterprise equity
Da Nang – Quang Ngai	131 km, 4-6 lanes	1600 million USD	budget loan from JICA, preferential WB and IBRD), selling TCR upon completion
Dau Giay – Phan Thiet	98.3 km, 6 lanes	844 million USD	On-lending loan from IBRD, preferential ODA, enterprise equity
Trung Luong – My Thuan – Can Tho	82 km, 4-6 lanes	1000 million USD	JICA, on-lending loan from IBRD or OCR, budget and enterprise equity
Noi Bai – Ha Long	196 km, 4-6 lanes	940 million USD	on-lending loan from IBRD or OCR, preferential ODA and enterprise equity
Ha Long – Mong Cai	150 km, 4 lanes	850 million USD	on-lending loan from IBRD or OCR, preferential ODA, enterprise equity
Dau Giay – Da Lat	230 km, 4 lanes	1000 million USD	Capital mobilized by enterprise, preferential ODA, enterprise equity
Ben Luc – Long Thanh	58 km, 4 lanes	1000 million USD	JICA, on-lending loan from IBRD or OCR, budget support and enterprise equity

Source: Authors' compilation from MOT, 2009

Currently, WB has supported MPI in studying and developing a legal framework and financing mechanism of the Government to expand PPP models in infrastructure investment. Accordingly, 2 pilot PPP road transport projects are planned, namely Ninh Binh – Nghi Son expressway Dau Giay – Phan Thiet expressway. These pilot projects are expected to attract the foreign private sector with the participation of the international financial institutions.

In line with efforts to cooperate with donors to develop and improve regulations and institutions on PPP, the government has enacted Decree No. 108/2009/ND-CP on 27 November 2009 replacing Decree No. 78/2007/ND-CP on infrastructure projects built under build-operate-transfer (BOT), build-transfer-operate (BTO), build-transfer (BT) contracts. However, there is an absence of a circular to guide the implementation of this Decree.

4.3. Major achievements in implementing PPP projects

Implemented and on-going projects have helped to share the risks between enterprises and the governments, contributing to lessen pressures on state budget in infrastructure investment of the transport sector.

With regard to small-scaled and financially feasible projects, investors basically have met requirements in term of implementation progress, resulting in financial efficiency, such as Co May bridge, Deo Ngang tunnel.

During project implementation, the capacity of relevant bodies has been improved, particularly in terms of project management, financial management, contract negotiation in line with BOT model. At the same time, project implementation also helped to reveal inconsistencies and shortages of knowledge and understanding of cadres of government bodies in preparation, formulation, appraisal and surveillance of investment projects following new investment models.

4.4. Constraints and challenges facing PPP projects

(i) Implementation progress

Some projects have been lag behind schedule because of delayed land clearance such as projects Noi Bai – Vinh Yen, by-road route Thanh Hoa, by-road route Ha Tinh, byroad Dong Hoi; some faced with weak capacity of investors or troublesome occurred during the development of BOT enterprises, such as National Road No.5. The lessons leaned here is that the issue of land clearance needs government supports because these projects have direct relations to state policies, which is beyond the control of investors.

BOT highway projects have been slowly implemented because of their failures to generate financial efficiency inn the current context of Vietnam economy. In addition, investors (mainly SOEs and local commercial banks) are short of experience in implementing BOT projects and their financial capabilities are very limited. Consulting capabilities are weak, particularly with regard to relevant state manpower, thus the design, preparation and appraisal of BOT projects are lag behind standard, leading to a poor quality of BOT contracts that require subsequent repeated negotiations during contract implementation and increase risks to be taken by the government.

It is recommended that the government needs to have clear support policies through different forms , such as financial support for land clearance, financial contribution to cover a part of project investment, tax preferences, loan warranty, revenue warranty, toll collection and adjustment policies, assignment of land development for investors, to ensure that investors are able to cover investment costs as well as to generate profits in conducting PPP projects.

(ii) Institutions and policies

The government needs to have clear policies and commitments, and develop a legal framework to create a conductive environment to attract the participation of the private sector and foreign financial institutions.

It is necessary to issue a circular guiding the implementation of Decree 108/2009/ND-CP, with clear presentation of procedures of identification, appraisal and selection of projects and investors, particularly the supervision of competent state bodies in operation and maintenance.

The roles of examination and supervision of competent state bodies in organization of implementation, operation and maintenance of projects are far from adequate, failing to be able to provide on-time adjustments with regard to irrationalities in proposals of investors, failing to work out perfect contracts, resulting in highly repeated negotiation and adjustment of contracts.

There is an absence of a strong commitment of the government on levels of supports to and risk sharing with investors with regard to toll, government warranty (on loan, revenue, exchange rate), direct funding contribution, land clearance commitment, tax preferences, etc.

There exists unhealthy competition in the selection of investors, where a majority of investors are appointed, while appraisal capabilities of competent state bodies remain weak, contributing to significantly increase costs of BOT projects more than their actual levels.

There needs to allocate a separate and adequate budget for investment preparation activities with regard to BOT projects to ensure the careful economic and financial analysis of projects to be able to work out appropriate government supports as well as to guarantee the profitability for investors.

(iii) Capital mobilization

The selection of BOT projects has not been made carefully, particularly in term of financial feasibility, resulting in difficulties in attracting potential investors, especially foreign ones, in many projects

As the local financial market is still weak, it is necessary to create a conductive environment to attract the participation of international financial institutions to finance BOT projects

Currently, BOT projects are mainly participated by SOEs or Joint Stock Companies with dominant state ownership, so benefits are not clearly defined and a majority of risk are taken by the government and thus failing to encourage private sector participation.

With regard to projects with weak financial feasibility, state budget contributions should be available to improve their financial feasibility to be able to capture the interest of the private sector to participate in these projects.

(iv) Capacity of competent state bodies

There is an absence of clear regulations on assignment of tasks and power of among relevant state bodies in identification, appraisal and selection of projects and investors.

The capacity of cadres of competent state bodies and the inter-disciplinary working group remains weak, particularly in terms of supervision and consultancy. Furthermore, the absence of financial and legal experts in BOT contract preparation and negotiation has lowered efficiency of BOT contract negotiation; many BOT contracts have suffered renegotiation, leading to an increase of project costs as well as pushing major risks to the government.

4.5. Lessons learned from PPP projects

Experience through implementation of PPP projects in the transport sector of Vietnam has revealed 7 major lessons learned relating to the following: (i) Delayed implementation time; (ii) Project selection; (iii) Transparency of tender procedures and contract negotiation; (iv) Cost estimation and cost increase ; (v). Competition between SOEs and private enterprises; (vi) Public acceptance of toll; and (vii) Risk sharing

(i) Delayed implementation time

Delayed implementation is popular with regard to PBP projects, mainly because of the following: (i) slowed progress in land clearance for projects that make investors are unable to get access to land for project implementation. The failures of governments in helping investors to get access to land have resulted in considerable delays of many projects; (ii) delayed progress of capital mobilization of investors. This matter is much more serious with regard to lease contracts, where the tender of toll collection right is applied . In this case, without a "special mechanism" joint stock companies formed by investors with limited assets generally find difficult to get loans from the bank; (iii) cumbersome and time-consuming administrative procedures for negotiation and contract award; (iv) ambiguous concepts on scope of work in PPP contracts and time-consuming procedures to get approval for changes in design. .

(ii). Project selection

The selection of PBP projects seems to duplicate without reference to prioritized master plans . In this connection, economic and financial negative impacts of development of competitive infrastructure works within a corridor need to be paid with adequate attention. Typical examples of this duplication is the identification of 4 corridors, where PBP projects are proposed in parallel expressway and national roads:

- Hanoi – Vinh Yen National Road No.2, together with Vinh Yen by-road , is in parallel with the southern part of Hanoi – Lao Cai expressway.
- Mong Duong – Mong Cai National Road No.18 is proposed as a PPP project , which is also in the same corridor with Ha Long – Mong Cai expressway.
- National Road No.20 from Dau Giay (Dong Nai province) to Lien Khuong Airport to connect with Da Lat city is upgraded white a new expressway is also planned in the same corridor .
- National Road No.51 from HCMC to Vung Tay now undergoes the tender of toll collection right. The tender winner can have the right to improve the road. This corridor is also planned for expressway development.

These above-mentioned evidences highlight the need to tighten procedures, identify and prioritize projects to avoid duplicated investment, as well as to avoid implementation of competitive works if they cause negative impacts to toll revenues

(iii). Transparency of tender procedures and contract negotiation

Besides some exceptions on the tender of toll collection right with regard to expressway, there is no substantial competition among other PBP projects. The PBP contract negotiation procedures seems to be appropriate in the current context with the majority of investors being SOEs and they aim at public benefits . However, with increasing equitization of SOEs, the incentives of investors will likely change from construction projects for public benefits to construction project for profits. If this occurs, current contract negotiation will lead to the loss of value for the state and

relevant terms of reference will be less beneficial for the state than contracts experiencing competitive tender.

Another issue is that there is very little competition on the formulation of a specific project, so competitive bidding is not practical. One of the rare cases witnessing the competition in formulating a project is the case of an expressway project HCMC – Long Thanh – Dau Giay with the fierce competition between VEC and BIDV. Given the absence of a clear identification of project parameters and selection criteria before proposal formulation, structures of tender documents of the two above-mentioned competitors were vastly different. For example, VEC proposed to use ODA from ADB and JIBIC , while BIDV proposed to use local financing supported with land development right alongside the road. The final result is that the contract was awarded to VEC without any transparent and competitive bidding procedures .

(iv) Cost estimation and cost increase

A highly repeated feature of operational PBP projects is the considerable increase of costs of many projects. This is resulted from underestimated land value in the project feasibility study period, delayed compensation and land clearance as well as from inflation associated with slow construction progress. Land compensation policies and regulated prices generally do not reflect the true market value of land. This has contributed to increase conflicts relating to land compensation, thus delaying construction progress and pushing costs to a high level .

It is obvious that the current contractual structures failed to encourage investors to prepare close-to-accurate cost estimations before construction as well as failed to encourage investors to minimize construction costs during project implementation. Alternatively, in case of cost increase, operational time can be lengthened to compensate for this increase. Many projects also witness increased government contributions to compensate a part of construction cost increase.

Accordingly, it is necessary to review and adjust procedures of computing construction and land clearance costs to ensure that the estimated costs of the feasibility study and preliminary design reflect the actual costs more accurate .

Furthermore, risk sharing with regard to BOT contracts needs to be reviewed to encourage and/or apply sanction with regard to changes in construction costs.

(v). Competition between SOEs and private enterprises

Investors in PBP projects are mainly SOEs. This is not a surprise because there is a very limited number of private companies have strong enough to finance for road transport development. Currently the private sector cannot compete directly with SOEs. So there is just a small number of private companies to take part in the operational or on-going PBP projects and they are just minority stakeholders compared to SOEs as big stakeholders. However, private companies are likely more flexible and market-driven and thus they can benefit projects with business skills in service of project development and implementation, becoming useful partners of SOEs.

There currently emerges a concern about the dual roles of the Vietnam Expressway Corporation (VEC). VEC is the representative of the owner (the State) and also the investor of expressway projects. Given its dual position, VEC is in charge of developing the Vietnam expressway system and managing toll collection, doing business and services to repay debts and generate profits. With current tasks, VEC compete directly with the business communities in development of specific projects. With government warranty, VEC can get access to preferential loans such as ODA, proving its clear advantages compared to private companies as the later have to pay commercial interest rate for their borrowings.

(vi). Public acceptance of toll

Generally speaking, projects relating to toll collection have been accepted by users of motor vehicles. Nevertheless, it should be noted that the current fee of about 1.25 UScents / km is quite low and thus the toll needs to increase considerably to ensure the financial feasibility of future projects.

The inter-province road No.15 passing through HCMC is an example of a failed PBP project as a result of over public reaction on the applied toll while witnessing traffic jam in toll collection stations in the urban area.

(vii) Risk sharing

For PPP projects, there is no clear risk identification and allocation, thus the government takes a majority of project risks. As above mentioned, toll increases are not sufficient enough to encourage investors to maximize efficiency and minimization of costs. This status creates pressure on the government budget in road construction and contributes to delayed construction white awaiting for settlement of budget increase request. .

The current contractual structure and risk allocation can help mobilize more capital for the road transport sector but does not encourage efficiency for the private sector as well as does not ensure additional values compared to the common preparation process.

5. Preliminary recommended actions to promote PPP models

- PPP legal framework, supporting mechanism of the government for PPP projects together with guiding circulars should be finalized as soon as possible through joint collaboration efforts of MPI, MOF and relevant bodies in association with the Working Group of WB and other donors such as ADB and JICA to work out legal basis for implementation of PPP projects.
- To prepare circulars guiding the implementation of Decree 108/ND-CP/2009 to provide guidance on apparatus organization, implementation modality and operational expenditures for competent state bodies and relevant consulting services.
- To allocate a separate budget for investment preparation activities to be able to develop suitable requests, contract preparation and negotiation in line with international standards.

- To strengthen capacity for cadres of competent state bodies in relation to identification, appraisal, management and operation and maintenance of BOT projects.
- In order to attract investment in BOT projects, particularly investment from the foreign private sector, the government needs to consider a possibility of establishing a centrally-run body with sufficient competencies and capabilities to make decision on BOT as well as supporting bodies within managerial ministries and local governments to take care of BOT projects.
- There emerges a need to develop Decrees on BOT, BTO and BT into a Decree on PPP to facilitate a wider application of other PPP models, particularly in the initial stage of development of PPP models.
- Transparency of tender procedures and contract negotiation is needed. It should be fair between SOEs and private enterprises. PPP development should be in the form of biding instead of nominative contracts. Risk-sharing mechanisms also clearly defined.

Conclusion

Vietnam has witnessed successes in infrastructure investment with total infrastructure investment has accounted for about 9-10 percent of GDP on average. It leads the volume of people accessed infrastructure across the country have been rapidly increased. Vietnam's infrastructure, however, remains a poor condition is considered to be the biggest constraint on Vietnam's national competitiveness. Among various sectors of infrastructure, Vietnam is ranked to be at the bottom in term of quality of ports, roads, and electricity in the world. It is a main 'bottleneck' in Vietnam today. For successful integration to the world economy and ensuring targeted growth rates of 7.5-8% per annum, it is roughly estimated that Vietnam needs to increase its investment in infrastructure to the levels of 11-12% GDP instead of the current levels of 9-10%. While the state budget and ODA fund are limited, the contribution of private sector should be encouraged.

Private-sector financing through PPP has widely become popular in the world as a way of procuring and maintaining public-sector infrastructure, such as transportation, social infrastructure, public utilities, government offices, and other specialised services. PPP forms have shown fairly successes in many countries. It has led their infrastructure improvement. However, there have been some PPP fairlures because of the absence of strong sustained political commitment for PPPs, the lack of transparency in the process, without adequate supporting rationale, PPP legal framework, etc.

BOT, BTO, and BT are major PPP forms that have seen in Vietnam. Some PPP projects have obtained a certain success level. However, there are 7 issues that needed to be solved, such as: (i) Delayed implementation time; (ii) Project selection; (iii) Transparency of tender procedures and contract negotiation; (iv) Cost estimation and cost increase ; (v). Competition between SOEs and private enterprises; (vi) Public acceptance of toll; and (vii) Risk sharing

References

ADB, 2006, Facilitating Public–Private Partnership for Accelerated Infrastructure Development in India, Workshop Report.

Ha Khac Hao, 2009, Current situation and forms of capital mobilization for PPP transport projects in Vietnam, PowerPoint presentation in the international conference "Vietnam PPP program in infrastructure" on 24 Nov. 2009

IMF, 2004, Public-Private Partnerships, accessed on 24th Nov 2009 http://www.imf.org/external/np/fad/2004/pifp/eng/031204.pdf

in Infrastructure Development, Journal of Construction Engineering and Management, Vol. 131, No. 1.

Ministry of Planning and Investment, 2008, Report on implementation situation of BOT transport projects.

Ministry of Transport, 2009, Report on implementation progress of PPP projects.

Ministry of Transport, 2009, Summary Report on implementation progress of key projects in the transport sector.

National Council of Applied Economic Research (NCAER), 2006, Efficiency, Equity and Access in Indian Infrastructure: Blending Competition and Regulation, Quaterly Newsletter on N C A E R - C E P R - I D E I - E C A R E S E C C P Project, Vol.2, No. 3.

Nguyen Xuan Thanh and Dapice, D., 2009, Vietnam's Infrastructure Constraints, accessed on 23 November 2009 http://www.innovations.harvard.edu/cache/documents/6533/653317.pdf.

Paul H K Ho, 2006, Development of Public Private Partnerships (PPPs) in China.

Surveyors Times, Vol. 15, No. 10, Hong Kong.

World Bank, 2006, Vietnam's Infrastructure Challenge.

World Economic Forum, Global Competitiveness Report 2008-2009.

World Economic Forum, Global Competitiveness Report 2009-2010.

Xueqing Zhang, 2005, Critical Success Factors for Public–Private Partnerships.