

A study on collaboration between government and enterprises in building and operation of highways in China

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Background Of Reform:

At the beginning of 1980s, UK and US have carried out a **bold privatization reform**, which encouraged the private sector to participate in traditional areas of public goods provided by the government, thus triggered a worldwide wave of public-private partnership mode.

Advantages:

Eases lack of public finance resources , helps the public sector to provide more public goods;

Encourages competitions in the public infrastructure sector, thus the efficiency of public goods supply is enhanced.

But, There are some questions in the public infrastructure sector :

What is the relationship between the two sectors?

How to provide ?

What role the government and market should play ?

How the public sector provides protection ?

How the private sector provides public goods more efficiently?

How cooperation mechanism solves the contradiction?

How the public sector provides effective supervision measures?

Method:

Sets PPP mode in China expressway construction and operations as an example to explore above-mentioned issues .

Goal:

Expound the cooperation and supervision between government and the market on theory and practices in public infrastructure.

CONTENTS



PPP mode and its application



Evolutions of toll highway system as well as introduction and development of PPP mode



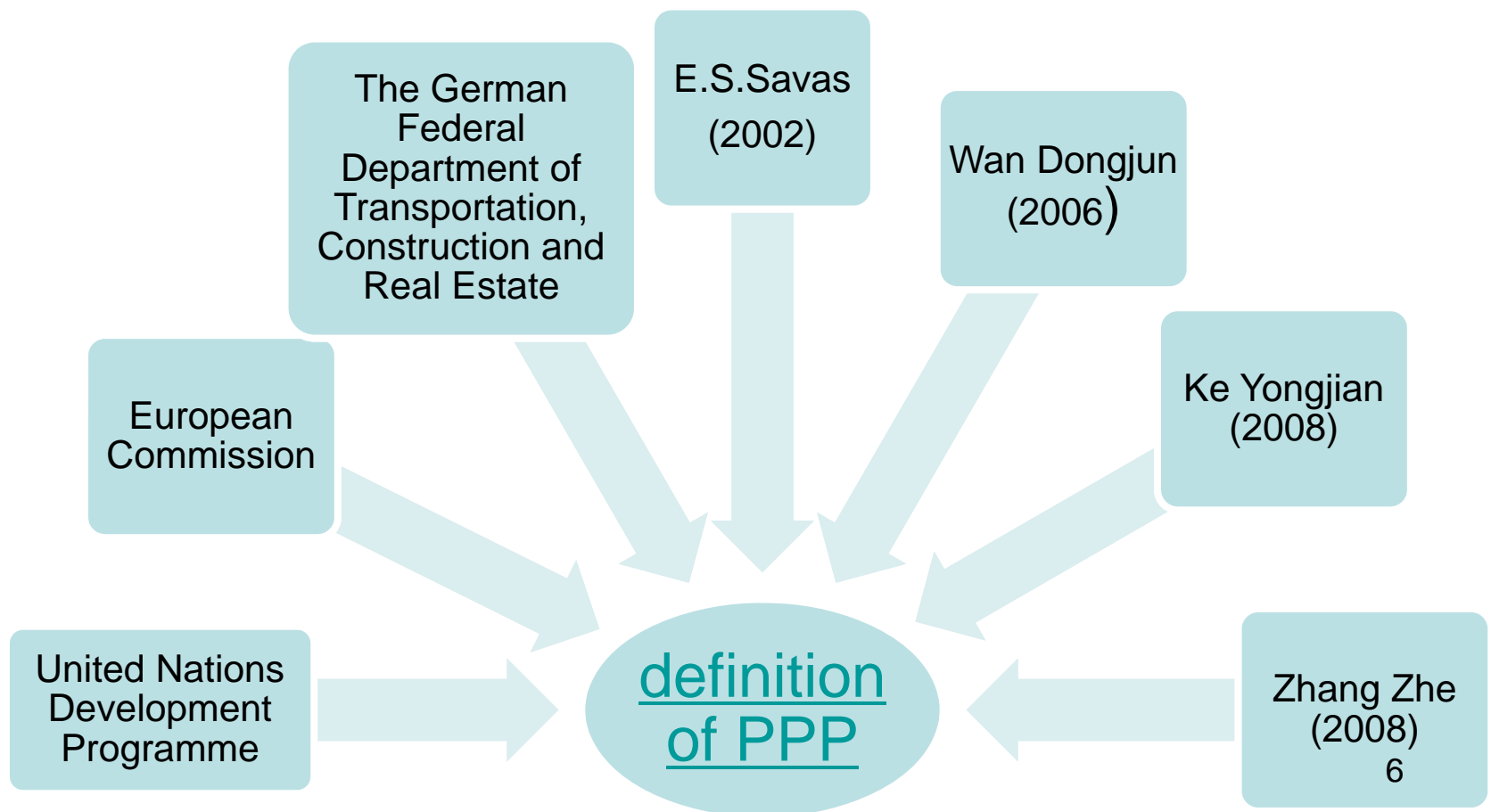
Cooperative mechanism of PPP mode



Regulations mechanism of PPP mode

Part 1 PPP mode

PPP mode—Public-Private Partnership, was first proposed by Reymont (1992).



To sum up , this paper argues that PPP mode is:

A kind of cooperation mode between public sector and private sector so as to form partnership and jointly build and operate public infrastructure.

The implementation of PPP projects in China consists of **4** elements,

first of all ,it is the separation of ownership and operating license;

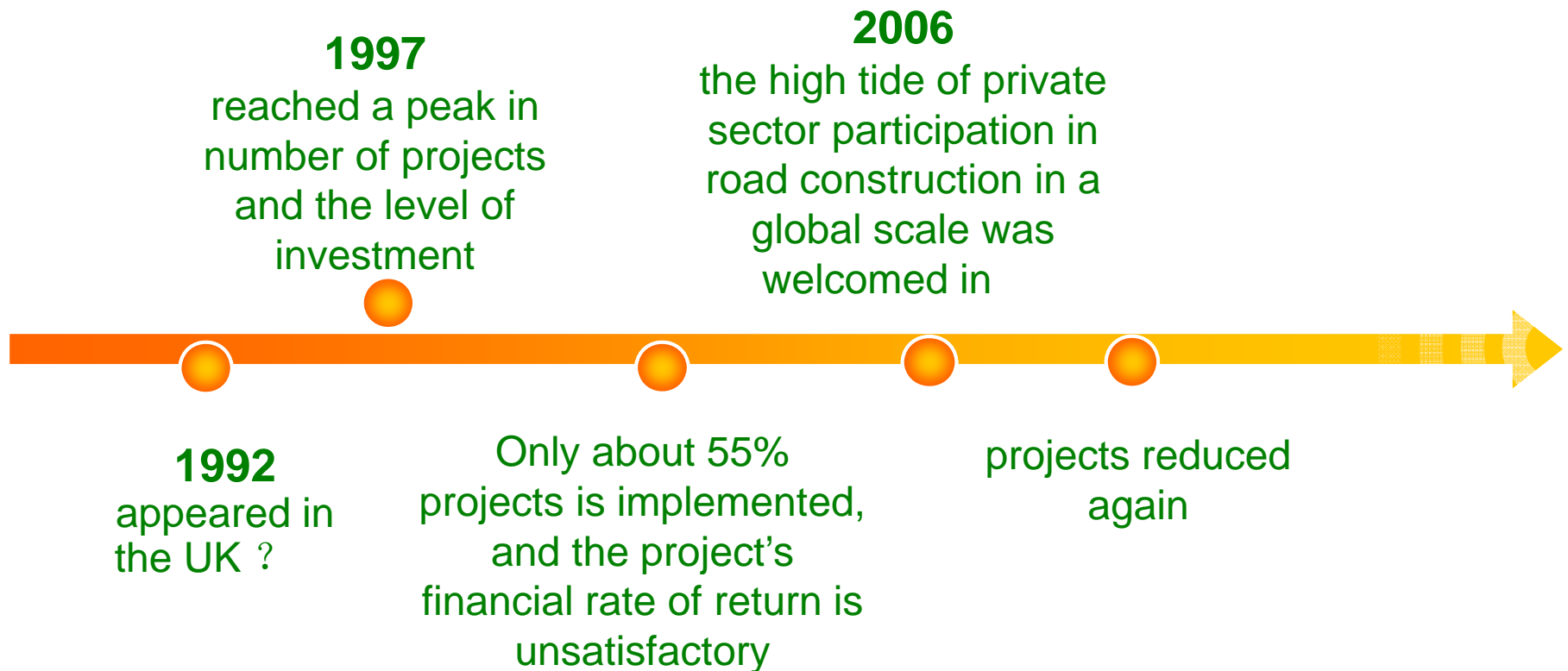
secondly , it is the cooperation cycle of public sector with private sector;

thirdly , the public and private sectors share the benefits and risks of infrastructure construction projects;

fourthly , the private sector includes private enterprises, state- owned or mixed-ownership enterprises

Therefore, the social capital or private capital is usually cited in Chinese official documents, rather than the private sector or private capital. The diverse nature of PPP contracts includes SC, OMC, CBO, BTO, TOT, BOT, WA, BBO, BOOT and other forms.

The application of PPP

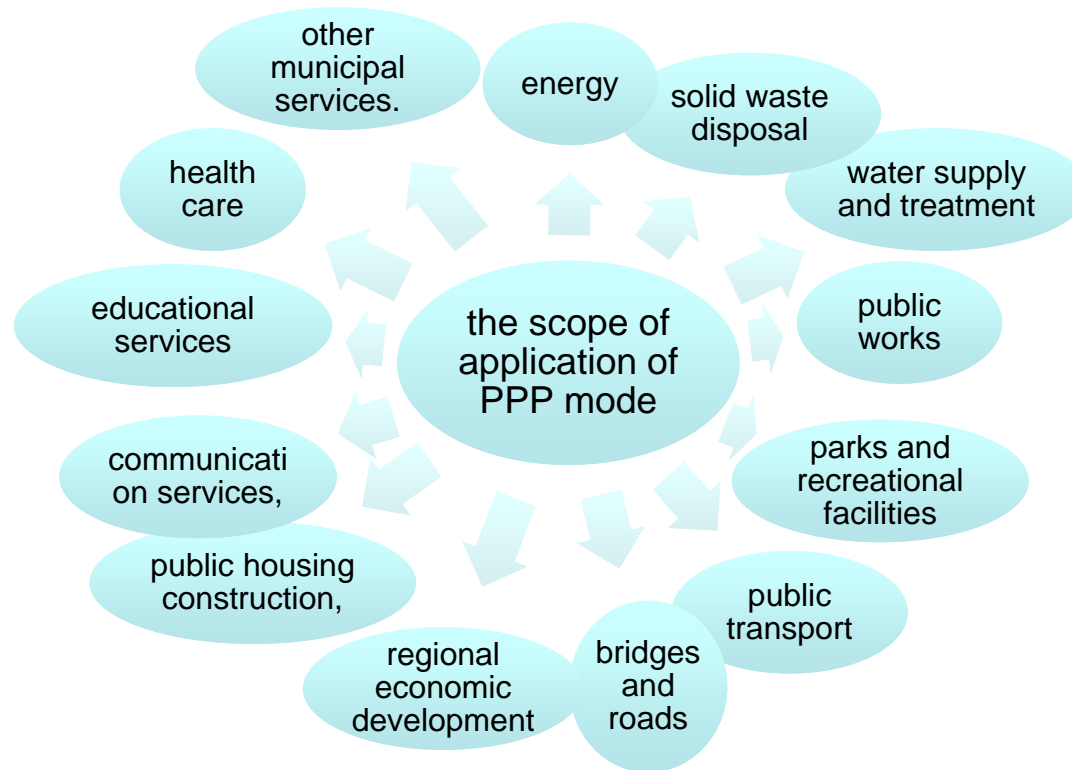


The application of PPP

According to the Asian Development Bank statistics, from 1990 to 2011, the number of countries or economies involving in road construction participated by private sector reached 32, and the regional distribution were mainly concentrated in Latin America, Caribbean area, South Africa, East Asia and Pacific region.

The fields of PPP mode application vary from countries or regions according to specific situations.

UNDP makes classification:



Part 2 development of PPP mode

The introduction of PPP mode into the field of highway is closely related to **highway toll system**.

Highway is legally entitled to enjoy fee interests, and private sector is willing to participate in public-private partnership projects, undertake the risk of project construction and operation, as well as enjoy the revenue of highway projects.

In early 1980s, Guangdong Province first introduces highway toll system .

purpose in order to solve difficulties such as slow road transportation and serious shortage of funds for construction, which achieved good results and created a precedent for mainland China to charge tolls on the highway and bridge.

approach adopted loans or self-financing mode in Guangzhou-Zhuhai Highway, Guangzhou-Shenzhen highway and built six bridges, and the implemented the practice of collecting tolls.

result achieved good results and created a precedent for mainland China to charge tolls on the highway and bridge.

After that, Chinese government implemented “loans-lent for construction, charging-tolls for repaying” in part of the construction and operation of highways, and on this basis, high-grade highways including highways and secondary roads throughout the country gradually began to adopt this mode for construction .

1

In October 1987

State Council issued "**Highway Management Regulations of the People's Republic of China**", indicates that China has legally established the toll system.

2

In January 1988

Provisions on loans to the construction of high-grade highways, large bridges, and tunnels as well as on charging tolls was issued to standardize charges.

On the whole,

In late 1980s, due to the limitations of traditional planned economic system,

The reform on highway investment and financing system as well as construction of toll highways were still **in the exploratory stage.**

The main form taken is **government loan highways**, which are funded by government and traffic authorities or domestic and foreign loans, and the loans are repaid by government through charging tolls.

In the 1990s,

highway investment and financing system gradually speed up and toll roads have a new form in the development course, which is the so-called **commercial highway**——with investment of domestic and international economic organizations to construct highway and through tolls the costs are compensated and reasonable profits are received.

In 1992,
the establishment of Jiangsu Shanghai-Nanjing Expressway co. LTD making the commercial highways come into being.

After that, a lot of companies are set up around China whose main business is to operate highways.

Currently,
there is a total of 23 road listed companies on China's domestic and foreign securities markets, among which 19 companies are in Shanghai and Shenzhen markets.

Highway Law of the PRC was passed to better adapt to the development and improvement requirements of socialist market economic system, and manage roads by law.

"Highway Law" stipulates that the state allows the establishment of toll roads in accordance with law, and at the same time to control the number of toll roads.

Toll roads can be divided into **two kinds**,

one is the government loan roads, which use loans or raise capital from businesses, individuals by local governments above the county level or traffic authorities;

the other is commercial highway which includes **two types**,

one is toll roads with loans to be repaid by government imposed by domestic and foreign economic organizations in accordance with laws,

the other is roads built by domestic and foreign economic organizations in accordance with laws.

Highway law brings the concept of commercial highway toll collection period, and defines that the toll collection period is determined by provinces, autonomous regions and municipalities in accordance with the requirements of Ministry of Transportation.

In order to standardize the franchising activities of municipal public utilities and strengthen the supervision of municipal public utilities.

In May 1,
2004

the Ministry of Housing and Construction began to implement ***municipal utilities franchise management approaches.***

On
February
24, 2005

Several Opinions of State Council on Encouraging, Supporting and Guiding the development of non-public economy was issued, and it allows non-public capital to participate in various municipal infrastructure.

Since then, a large number of PPP projects emerged,
such as :



Guangzhou-Shenzhen-Zhuhai Expressway.

opened to use in 1999, with the highway mileage of 122.8 kilometers and the total investment of 3.8 billion *yuan*, as well as a concession period of 30 years .



Jiangmen-Zhujiang Expressway (Jiangmen)

built in 2005, with a total investment of 994.5 million yuan, highway mileage of 20.6 kilometers, as well as the concession period of 25 years.



Beijing-Chengde expressway (Gaosha)

completed in 2006, with the highway mileage of 6.7 km, project investment of 3.92 billion *yuan*, as well as the concession period of 30 years .

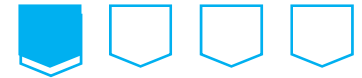
Jingping Expressway, Guilin-BELT Expressway, Guilin-Yangshuo highway, Xiang Jing Expressway, Jiangxi-Hubei Expressway, Shanghai-Nanzhu highway.

200
5

2010

Lok Yi Expressway, Qionglai-Ya'an Expressway, Qionglai-Ya'an Expressway, Leshan-Yibin Expressway, Wuyishan-Shaowu Expressway, with a maximum concession period of 30 years.

Although PPP toll expressways in China have always been firmly supported, the number and size of investment in projects have declined since 2011.



1

On November 1, 2004 State Council implemented ***Management Regulations of PRC Toll Road*** which **first** explicitly provides the longest charging period for two types of toll roads.

2

In August 2008, ***Measures on Assignment of Interests of Toll Roads was issued***, it made clear specification on toll roads assignment.

3

On January 1, 2009, officially implemented **tax reform program on refined oil prices**, and abolished road toll and six other charges, and decided to phase out government secondary roads repayment charges.

2009 -----,


19 provinces have completely abolished government secondary roads repayment fees, with a total revocation of 2072 highway toll stations and toll road mileage of 107,000 km. Reducing 182 items of toll charges and charging mileage of 3706 km to some extent reduces economic burdens of road users .

In order to further reflect public welfares of highways,

Ministry of Transport issued **Embodiment Notification of State Council on Waiving the Toll of Small Passenger Car on Major Festivals** (Spring Festival, Tomb Sweeping Day, Labor Day, National Day and consecutive holidays.)

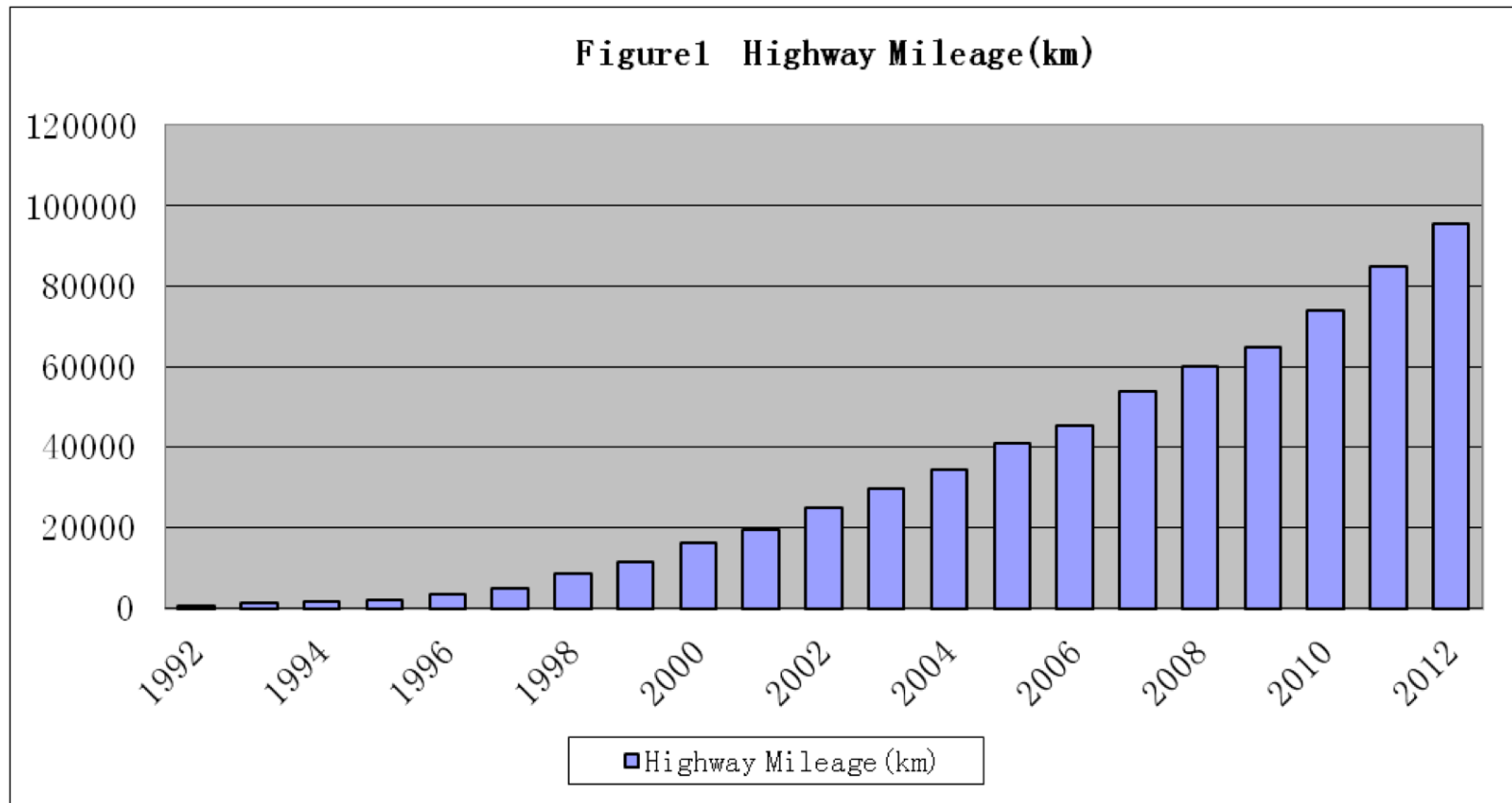
The policy of benefiting people was first implemented in 2012 National Day, and achieved good social effects.

The construction of **commercial highways** and **PPP mode in the field of highway** greatly promotes highway construction.



<p>Before 1988, there is no highway in mainland China.</p> <p>As of the end of 2012, China's highway mileage reaches 95,600 km.</p>	<p>compared with ordinary roads,</p> <p>highway transportation can save about 50% of time</p> <p>unit cost of transportation will be lowered by about 30%.</p>
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“No other country can largely increase its highway assets in such a short time.” —*China's expressway : connect the community with market, achieve equitable development* by World Bank .





Data sources :1992-2011 from the China Statistical Yearbook :1992-2012, 2012 data from the website of Ministry of Transport of the People's Republic of China.


Part 3 Cooperative mechanism of PPP mode

The reason why public and private sectors can work together and participate in the PPP highway projects is there are basis for their **cooperation**.

The basis of public-private partnerships

 the expansion of public expenditure responsibilities and limited public financial resources.

 companies providing public goods will be beneficial to improve efficiency, create competition, save costs of projects construction and operation

 highway is a club with congestion point, thus appropriate fees should be charged.

Cooperative mechanism

complete highways as much as possible
maintain the smooth flow of highways
make reasonable regulations of highway tolls
control highway toll chargeable time
maximize social welfare
solve the problem of traffic congestion.

public sector

low-level target :realize the maximum of profits
higher-level goal :create a good corporate image
maintain close contacts with the public sector
maximize the long-term profits and
more projects opportunities

private sector

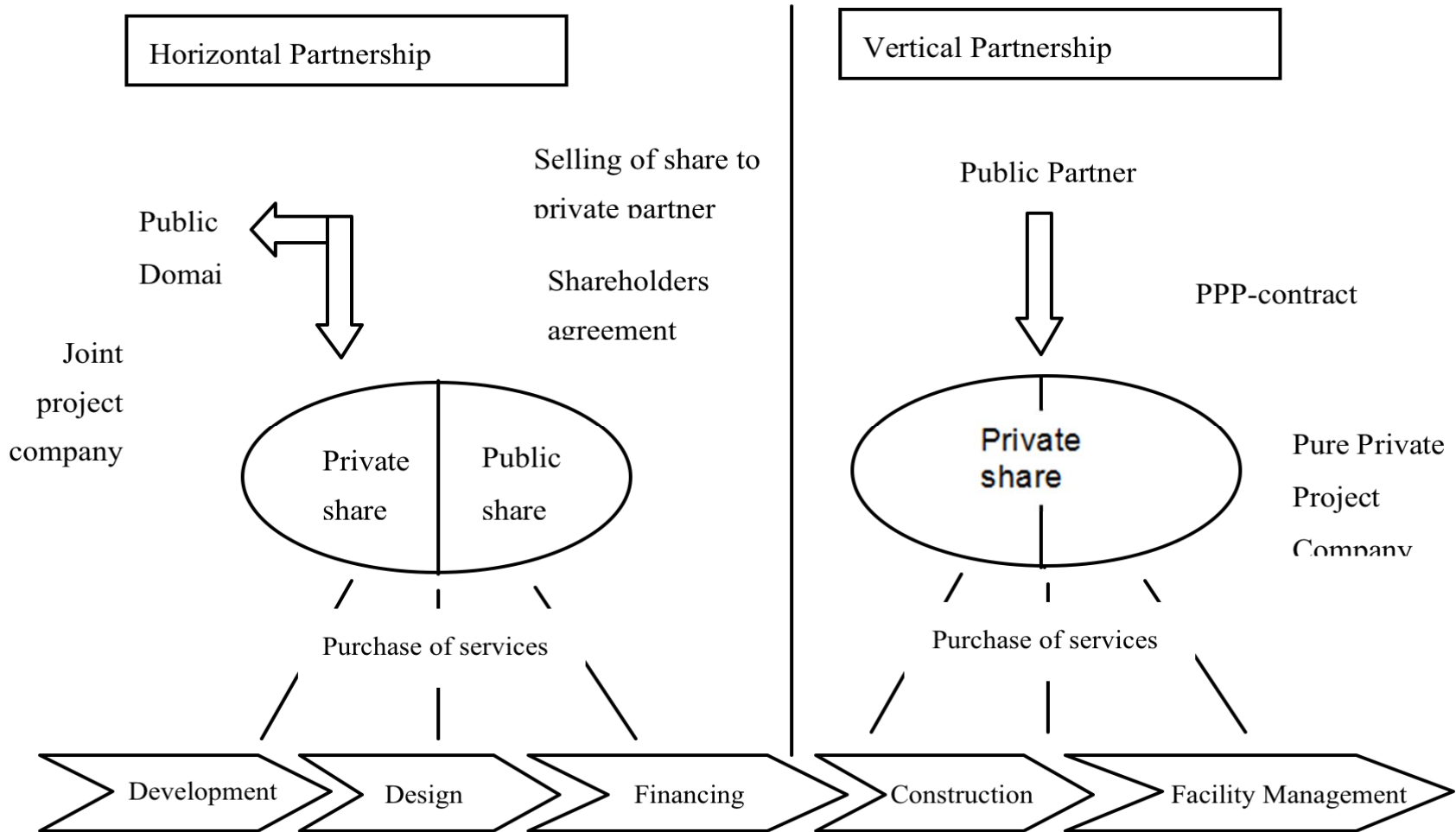


Figure 2 Horizontal and vertical Partnerships

Quoted from: EU-Asia PPP Network, Public-Private Partnership in Infrastructure Development: Case Studies for Asia and Europe, "Federal Report on PPP in Public Real Estate", 2003, Part I (Guideline), p14.

1

【Prerequisite for cooperation】

the market access mechanism

2

【Mechanisms of cooperation】

risk-sharing mechanism & government mechanism

3

【The smooth implementation】

explicit support of government & protection of laws

Part **Regulatory mechanism of PPP** mode

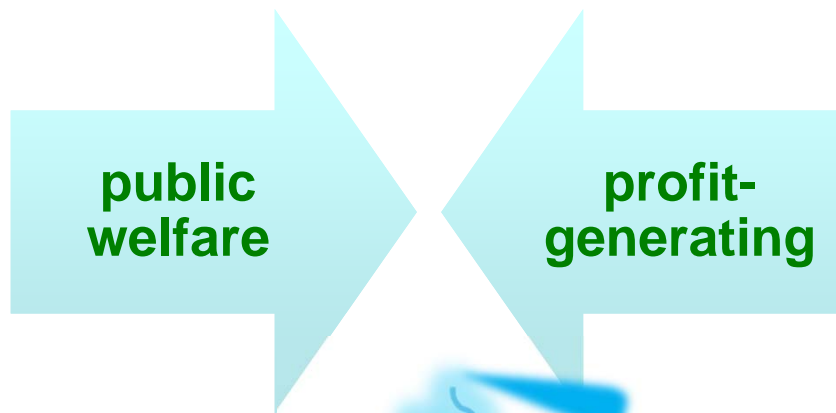
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The necessity for regulation

Project objectives differ from public and private sectors.

The pricing level and the length of charging duration of PPP projects will be manipulated by private sectors through way of rent-seeking.

lack of effective supervision



in the field of highway, the main problems are **high toll rates and long charging period.**

Local governments at all levels have become accustomed to use the mode of "**loans-lent for construction, charging tolls for repaying**", and formed a relatively fixed pattern of interests and behaviors; it would be difficult to take the initiative to change.

In 2008, the National Audit Office **audited the operation and management of toll roads** in 18 provinces and cities, check randomly with 35 commercial highways in Shandong and other 12 provinces and cities,

Results: toll revenue in these roads **are many times higher or even ten times higher** than costs of investment.



High toll rates need to be public interests-oriented

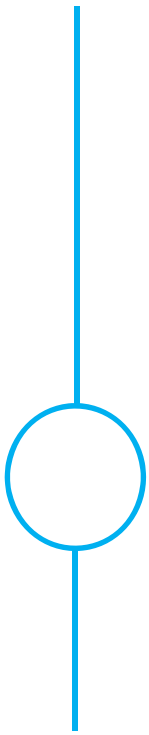
Example : During the period after 1990s, due to the excessive emphasis on the use of market mechanisms in highway construction, more than 20 Co., Ltd. was set up whose main business was to operate highway financing through stock market

[Advantages]

- 1.help to quickly raise funds for highway construction
2. enhance the management efficiency

[Disadvantages]

In order to give shareholders a higher return on investment, it will from the internal driving force to formulate and adjust charges as well as improve the level of charges, which tend to ignore the public welfare of highways.



To ensure the rationalization of the level of charges, the main body of highway construction and operation should be state-owned enterprises or state-holding enterprises.

If taken the way of franchising, effective supervision and restraint mechanisms should be established.

CONCLUSION

1

highway projects should also have characteristics of information transparency, which is highway project information provided should be comprehensive, relevance and timeliness, reliability, comparability and materiality

2

adhering to public welfare-oriented is specifically expressed in the profit level of toll roads

3

form reasonable toll standard, which must examine and verify costs of the operation and management of toll roads

4

public and other stakeholders paying attention and supervision on PPP projects PPP projects will also achieve an important guarantee of realizing public welfare and profit-generating

Supervision mechanism



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THANK YOU !