DOMESTIC PRIVATE FINANCE PROJECT DEVELOPMENT IN CHINA

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In the past two decades, hundreds cases of BOT projects achieved both public and private sectors’ expectations while many others were under-performance, or even said failure. Past researches suggest that despite of project self complexity and difficulty, its ecological factors play important roles in determining its implementation results. Many BOT project foreign investors in China complained loses in the mid of 1990s; the total number of BOT projects also reduce significantly at the same time. However, a new wave of private capital investing into infrastructure project occurred from the start of new century, though most of players are domestic privately-run company. Whether these flower buds will wither like those in 1990s? This article will explore the new development issues of politics, economics, and social in the China BOT environment. A toll bridge project, Citong of Quanzhou city will be studied according to its ecological aspects. Though it succeeded in the government policy “to input a small amount of public capital, to direct large sum of private money, to achieve the development of infrastructure and economic”, the toll bridge project indicated a series of risks and challenges, such as misaligning with highway because of two different responsible agencies.

Keywords: BOT, private finance, project ecology.

INTRODUCTION

Today, the term Public Private Partnerships (PPPs) has become a political and socially fashionable term, used to describe a vast range of contemporary social and economic functions, though it may not always be literal legal partnerships (Anderson and Thompson, 1999). Transfer of public services to the private sector is a world-wide movement, not specific to the stage of a country’s economic development or its public health or climate of environmental regulation (Kingdom, 1995). Under the open door policy, foreign investments emerged in the mainland China, after a low wave period, it investment amount recovered after Deng Xiaoping gave his South China speech in 1993. The private investors have been involved in developing power projects through three main methods: Joint ventures (JVs); Initial public offerings (IPOs) on stock exchange; and BOT agreements. This diversified approach has helped the whole investment programme to be successful because it allowed investors to adapt their corporate strategies to the particular problems and difficulties encountered in different parts of China and to choose the most appropriate risk mitigation methods (World Bank, 2000). Wang et al (1999) had reported about Laibin B as the first Chinese infrastructure project financed entirely with foreign capital, the first to be developed by a wholly owned foreign project company under a BOT framework, and the first
BOT project in China to be formally approved at the state level by the State Planning Commission (SPC). Despite Laibin B, numerous BOT projects were signed with foreign companies and provincial and city level governments. On the other hand, purely funded by domestic private capital is rarely in the 20th century, however, Quanzhou Citong Bridge received great appraise from the governments, enjoyed a good name as “a little governmental money leverage private capital to achieve public objectives in delivery transportation channel”

In the recent years, the whole China environment is making such a big jump. “The scale and pace of China's economic development and social transformation are unprecedented in human history”. China's GDP has jumped from 8.9404 trillion RMB Yuan or about US$1.08 trillion of year 2000, to 24.6619 trillion Yuan (3.43 trillion U.S. dollars) in the year of 2007. New laws or regulations had been set up as the old ones kept on modifying, as in the year of 2007, the legislature body --- National People Representative Congress passed 22 acts. In a pilot study of challenge factors of private domestic finance project, through the result of survey and interview, it is found that importance of those challenge factors to privately development had been changed. Therefore, the purpose of this paper is to explore the changes of the environment or ecology of private finance public project, to determine whether they are more encouraging to the private investors.

**PPP AND ITS ECOLOGICAL FACTORS**

Li (2003) had proposed a model for PPP and its ecology, the main four ecological factors influencing PPPs are from sociological, political, economic and technological. It may be useful to view public-private partnerships as part of a context in which they take root and continually interact. A fuller use of the term ecology refers to cultural, social, and economic factors that nourish institutions and channel their evolution. Ecology encompasses intangible as well as tangible relationships – from the historical pattern of national institutions and attitudes to the possession of hard resources, assets and money. These factors go into the creation of an ecology that forms, and continually shapes, all kinds of institutions. The relationship between PPP and ecological factors can be explained using a simple model, as shown in Figure 1. In some research, the word ‘ecology’ is used as another term for ‘environment’, with its subsidiaries being political, economic, sociological and technical. The environment and PPP internal organisation are the two forces influencing PPP performance (Alexandrou and Colpus, 2000).

**Impact of Political Variables on PPP Development**

Chinese governments have gone through a long historical journey to arrive at PPP as the core of modern public policy. In a short public private cooperation during early 1950s, the Government turned to nationalization and closed the door to foreign investment till 1978. China's investment reforms, rapid economic growth and social development have led to a surge in foreign direct investment (FDI), grew from $636 million in 1983 to $40.7 billion in 2000, making China, in recent years, the second largest destination of FDI in the world. As the Asian financial crisis accelerated, the then Premier Zhu Rongji outlined a number of major new economic initiatives and goals for reforming China's economy and maintaining healthy economic growth in March 1998, the effective results had developed as his planning:

(1) Expand domestic demand, especially through increasing spending on infrastructure.
(2) Reorganize the banking system to increase the regulatory and supervisory power of the central bank and make commercial banks operate independently.

![Figure 1: PPP and Its Ecology](image)

These resulted the structure of fix-asset capital had been changed to be dominated by non-public-budget funds as shown in Table 1.

<table>
<thead>
<tr>
<th>Grouped by Sources of Funds (100 million yuan)</th>
<th>2005</th>
<th>2006</th>
<th>Growth Rate in 2006 over 2005 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Budget</td>
<td>4154.3</td>
<td>4672.0</td>
<td>12.5</td>
</tr>
<tr>
<td>Domestic Loans</td>
<td>16319.0</td>
<td>19590.5</td>
<td>20.0</td>
</tr>
<tr>
<td>Foreign Investment</td>
<td>3978.8</td>
<td>4334.3</td>
<td>8.9</td>
</tr>
<tr>
<td>Self-raising Funds</td>
<td>55105.8</td>
<td>71076.5</td>
<td>29.0</td>
</tr>
<tr>
<td>Others</td>
<td>15033.0</td>
<td>19283.7</td>
<td>28.3</td>
</tr>
</tbody>
</table>

During this changing process, the central government and its functional departments had published a series of documents to encourage private investment into infrastructure. Some important documents are listed in Table 2 to show the private involvement journey. These several measures assured the political permission for private investment into wider areas of public facilities, and caused another wave of BOT projects. Hundreds of public projects were approved under the form of Build-Transfer, Build-Operate-Transfer, etc. Three more waste treatment projects were signed under concession agreement in Quanzhou city in the year 2006 (Zhen, 2008).

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Table 2: Important Documents in Promoting Private Investment

<table>
<thead>
<tr>
<th>Time</th>
<th>Publishing Body</th>
<th>Main content</th>
</tr>
</thead>
<tbody>
<tr>
<td>11th Dec 2001</td>
<td>National Planning Committee</td>
<td>Widening investment areas to foreign investors, and formally encourage domestic capitals into operating infrastructure facility in the forms of solely investment, joint ventures, cooperation, share holder, concession contract, etc.</td>
</tr>
<tr>
<td>Jan 2002</td>
<td></td>
<td>Lowering the market entry levels to the non-state enterprises in the areas of foreign trade, education, culture, public facility, travelling, telecommunication, finance, insurance, agency service, etc.</td>
</tr>
<tr>
<td>March 2002</td>
<td></td>
<td>A new “Foreign investment industry list”</td>
</tr>
<tr>
<td>Dec 2002</td>
<td>Construction Ministry</td>
<td>Permission of social capital, foreign capital can be involved in the municipal facilities development</td>
</tr>
<tr>
<td>March 2004,</td>
<td></td>
<td>Management regulation for concession municipal facilities</td>
</tr>
<tr>
<td>July 2004</td>
<td>State Council</td>
<td>Widening investment areas for social capital</td>
</tr>
<tr>
<td>March 2005</td>
<td></td>
<td>Supporting non-public capital involvement in water supply, gas supply, heating supply, public transportation, and waste treatment areas in investing, constructing and operating these kinds of municipal public facility and infrastructure.</td>
</tr>
<tr>
<td>7th November 2007</td>
<td>National Development and Innovation Committee, and Ministry of Business</td>
<td>A new list of foreign investment, encouraging sea water usage, industrial waste water treatment and recycling, as well as development and operation of municipal water supply plant.</td>
</tr>
<tr>
<td>28th November 2007</td>
<td>Standing Committee of State Council</td>
<td>New tax regulation: if the operation income are from hydraulic, waste treatment projects, the enterprises would receive “  exempt three year, half three year” discounts rate</td>
</tr>
</tbody>
</table>

Impact of Economic Variables on PPP Development

China is a country in which the government enjoys biggest power, with the state planning to decide what the country needs and what the country wants to develop. However, the greater accumulation of domestic private capital is so significant that it produces an opportunity for new PPP, even if the partnerships are controlled by the public sector. In the case of the involvement of international capital, the power in control depends on which is dominant between the capital and political powers, for example, the government guarantee in YD2nd Tunnel (Zhang et al., 1998) could be seen as a result of bargaining power shifting in the direction of the private sector. A recent statistics showed that over 12 trillion RMB individual deposit which is waiting for further investment, as well as a great amount in social security funds and housing benefits funds.

The renovation Chinese stock market had created a huge capital pool for fix-assets investment. China's stock market was established at the beginning of the 1990s. After fifteen years of struggling, the government launched a split share reform on April 29, 2005 to install investor confidence, encourage investment and strengthen the stock market's ability to accumulate capital. The result was significant as the benchmark Shanghai Composite Index had topped 2900 by mid-January 2007 from around 1000 in April 2005\(^3\). The total value of the Yuan-denominated A-share stock market had

\(^3\) SCI dropped from highest 6000 to current 3600 on 25\(^{th}\) March 31, 2008.
climbed to around 10 trillion Yuan. More blue-chip had been introduced under investment philosophy. It provides a major finance resource for project investment, in 2006 stock and debenture sales contributed 20 percent of the total funds that Chinese enterprises managed to round up, a big step forward compared to several years before, when almost all of the enterprises' financing came from bank loans.

**Impact of Sociological Variables on PPP Development**

The government has played a critical role in economic development over the past 20 years. However, when the market economy has developed to a certain stage, the government's role in providing public service will have to be intensified, the idea that China should aim at building a service-oriented government. On June 25, 2007, General Secretary of the Communist Party of China (CPC) and Chinese President Hu Jintao once again stressed the importance of implementing the scientific concept of development, promoting social harmony and building an overall well-off society, ahead of the 17th national congress of the Communist Party of China (CPC). His new idea shortly spread to the whole country, and formed an identical social understanding.

There are three main philosophies in current great social viewpoint, the first one is to insist on developing economics as a “hard” measure; the second one is namely "to base on people, to push people self develop in total aspects"; the third one is to fulfil economic society into a comprehensive, coordinative and sustainable development.

In the contents of building socialist harmony society, the first one is to establish a mutual-respective and mutual-trust social relationship; the second one is to encourage each people to contribute his capability to make a proper place, to live with other in harmony atmosphere; the third one is about building a harmony environment in developing country, developing business and managing country.

In a recent survey to identify the challenge factors in domestic project financing, the result shows that both the public sector and private prospectors have no differences of "project financial nature". The major social reflection from survey is that slogan invented by Mr Deng Xiaopin --- Black Cat and White Cat theory.

**CASE STUDY ON QUANZHOU CITONG BRIDGE**

Quanzhou, one of prosper cities in Southeast China, has a poor infrastructure record by its historical reasons. The National road G324 passes through the city centre from South to North. Both transit and domestic vehicles have to pass through the only 16-metre-wide Quanzhou bridges. The traffic congestion had become the most significant problem to the Municipal Government. At the beginning of 1994, the local government decided to develop another bridge at the east, bypass the city centre to provide transit route from the local communication.

Since the great shortage of government capital, five foreign companies had contacted the local transportation authority, but the result is disappointed, as the government stated that the contract condition is over restricting and too many obligations still rest on the public sector. It seemed that the project had to postpone for a long time. However, a local private holding company (Minliu) submitted a proposal to the government to develop this bridge without any public finance and any additional conditions, totally a free standalone project. After a series of negotiations, a joint public and private venture company, named Quanzhou Citong Bridge Investment and Development Company (QCBIDC), was franchised to develop the Citong Bridge. The stated owned enterprise Quanzhou Road and Bridge Building and Development
General Company (QRBBDGC) provided 240 million RMB and received 2/5 of the company share, as Minliu held 3/5 share by investing 360 million RMB. If the total investment is more than the legal register capital (600 million RMB), the shareholders have the duty to finance the shortage capital based on share proportion. The operation period is 30 years in the concession agreement, and the facility will be transferred to the government totally free. Citong Bridge started on 18th May 1995 and completed on 18th Nov 1996, and was put into official operation at 29th Dec 1996.

**Investment structure of Citong Bridge**

The joint venture, which is consisted by four company (one domestic private company and three state owned enterprises), was established on 28th May 1994 under the name of Quanzhou Citong Bridge Investment and Development Company (QCBIDC). The proposition of investment capital is shown in Figure 3.

![Investment Structure in Citong Project](image)

The joint venture basis of QCBIDLC is to establish a most simple and effective investment structure --- a limited liability company, and the financial structure of Citong bridges showed superiority as:

- **Limited liability:** The project risk is separated to the investors by the project company. Once the project failed, the losses of project investors are limited to the amount of proportional to their investment, and their liabilities are restricted within the project company.

- **Convenience and flexible in finance arrangement:** Firstly, it is convenient for the lending bank to control cash flow and conduct right of pledge. Secondly, corporation structure is easily accepted by capital market. If other condition established, the project company maybe able to directly enter into finance market by issuing public share, or public debt. This will establish a solid foundation for QCBIDLC future development.

**An analysis of financial model in Citong Bridge**

The financial structure of Quanzhou Citong Bridge project is composed by three parts as shown in Figure 3:
1 Concession contract from government
Quanzhou city government is the project sponsor and owner after the concession contract termination. The municipal government provided a 30 year concession contract for the developing and operating Citong Bridge, its main contents include:

- Approving Quanzhou Citong Bridge Development Limited Company in development and operation of bridge, and acquisition of land for construction.
- Licensing QCBDLC the rights of development and operation the connecting road to the Bridge, as well as the rights in acquisition of land.
- Licensing QCBDLC the rights of collecting fee from the bridge users based on the agreement with the municipal government.
- A guarantee letter from Quanzhou Finance Bureau “Payment Commitment of Quanzhou Citong Bridge Project”
- Concession for 30 years, including construction duration, and at the time of concession contract terminates, the Bridge and its associated road will return to the government for free. On the other hand, the QCBDLC must guarantee the Bridge are under excellent operation conditions and well maintaining in the transfer date.

2. Project investor and Operator as one
Investor and operator are the main body in BOT structure. The joint venture body is a real investment company of which 60% share from Minliu Business Limited Company (private enterprise) and 40% from three state-owned companies. The operational body is QCBDLC as well, who is responsible for the construction and operation management of the Bridge for the next 30 years.

3. Loan Arrangement
The finance structure of Citong Bridge is a limited recourse arrangement, because of strong credit support to the project. Among the 250 million RMB investments, the private investor Minliu input over 150 million RMB, of which 36 million self-owned capital and 120 million RMB loan, of which payback period from 5 years to 8 years. QCBDLC provide a completed insurance package against construction risk (including third party liability), transferring possible unforeseen loss and risk to the insurance company during construction period. This credit structure clearly indicated that the risk factors had been well allocated to the project stakeholders and achieved the objectives of risk sharing. Such credit arrangements are absolutely required conditions in structuring BOT project finance.
Figure 2: Finance Structure of Citong Bridge Project
COMMENTS ON CITONG BRIDGE FINANCE STRUCTURE

Reengineering BOT model with domestic private finance provides great benefits for the public sector, project investors and social users.

- From the government’s view point, the domestic private capital BOT model, can be used to solve the problem of traffic congestion, as well as saved some public money in descending into construction capital.
- From the view point of investors, the revenue from BOT is very significant, including
  - a stable income of around seventy or eighty thousand RMB per day. As recent financial data shows in Table 3 that the project has a positive NPV only after 8 year operation.
  - Equity joint venture company has self-finance capability: the QCBDLC’s goes to public share market, it is possible to refinance 200 million.
  - The Citong Bridge can be used for asset mortgage with a total value of 250 million RMB, great benefit for the mother company.

In BOT model, QCBDLC played two roles as developer and operator, and held responsibilities for operation and maintenance cost. Therefore, QCBDLC adopted higher standard in engineering quality control, including project tender, material procurement, quality supervisory.

Citong finance model breaks through the tradition line of public investment, firstly introducing domestic private capital into infrastructure development, while wins a good name of Domestic BOT, which provided a successful and multi-beneficial case.

However, the return rate is at pessimism line. During the project's planning stage, there is a possibility that the Qitong Bridge can be connected directly to a new highway, which will result in large traffic volume. But a government re-organisation action made the highway development rights went to the Provincial Highway Bureau instead of City authority. None of the developer nor highway authority gave such favourite to Citong Bridge.

<table>
<thead>
<tr>
<th>Year</th>
<th>Income</th>
<th>Cost</th>
<th>NPV</th>
<th>Accumulated NPV</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>-</td>
<td>-250</td>
<td>-250</td>
<td>-250</td>
</tr>
<tr>
<td>1996</td>
<td>-</td>
<td>-14</td>
<td>-14</td>
<td>-264</td>
</tr>
<tr>
<td>1997</td>
<td>23.75</td>
<td>-12</td>
<td>11.75</td>
<td>-252.25</td>
</tr>
<tr>
<td>1998</td>
<td>24.36</td>
<td>-10</td>
<td>14.36</td>
<td>-237.89</td>
</tr>
<tr>
<td>1999</td>
<td>29.63</td>
<td>-9</td>
<td>20.63</td>
<td>-217.26</td>
</tr>
<tr>
<td>2000</td>
<td>37.48</td>
<td>-8</td>
<td>29.48</td>
<td>-187.78</td>
</tr>
<tr>
<td>2001</td>
<td>47</td>
<td>-8</td>
<td>39</td>
<td>-148.78</td>
</tr>
<tr>
<td>2002</td>
<td>49.33</td>
<td>-7</td>
<td>42.33</td>
<td>-106.45</td>
</tr>
<tr>
<td>2003</td>
<td>51.6</td>
<td>-6</td>
<td>45.6</td>
<td>-60.85</td>
</tr>
<tr>
<td>2004</td>
<td>53.87</td>
<td>-4</td>
<td>49.87</td>
<td>-10.98</td>
</tr>
<tr>
<td>2005</td>
<td>56.14</td>
<td>-3</td>
<td>53.14</td>
<td>42.16</td>
</tr>
<tr>
<td>2006</td>
<td>58.41</td>
<td>-3</td>
<td>55.41</td>
<td>97.57</td>
</tr>
</tbody>
</table>
CONCLUSION

The paper has highlighted the current political, economical and social environment for the developing private finance projects in China. It shows that the public finance is far from enough for financing public facilities, and alternative routes must be adopted for promoting a nation-wide sustaining development policy. From the year of 2001, the government and its subsidies have published a series of documents to capture the private capital investing into facilities to push economic development. The significant change of project ecology is that the permission investment areas had been widened, and entrance level is lower to form a competitive market. From thirty years of open door policy, the society have change their views of investor nature, there is no much different opinion between public investor or public investor; as the more concerns are on project’s efficiency. So far, the Chinese governments have created a healthy but more competitive environment for private capital in the infrastructure provision.

REFERENCES


