Critical barriers for Chinese international construction companies under “One belt, One road” background: a case study

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Abstract. The strategy of “One Belt One Road” can not only promote common development and prosperity among countries, but also enhance mutual understanding and trust, strengthening all-round exchanges between countries. Based on the current situation that Chinese engineering enterprises lack experience in countries along the route, this paper mainly provides inspiration and conclusions for enterprises through the study and analysis of two cases.

1. Introduction
Under the background that the global economy is blossoming, strengthening regional cooperation is an extremely important strategy for China to promote the economic development. To follow the trend of world multipolarization, economic globalization, cultural diversity and social informatization, China has initiated an international strategy, namely “One belt One road”. “One belt One road” consists of two routes, which are “The Silk Road Economic Belt” and 21st-Century Maritime Silk Road”. Specifically, there are three main roads in the route “The Silk Road Economic Belt”. The First road originates from the northwest and northeast region of China through Central Asia and Russia to Europe and the Baltic Sea; the second road starts from the northwest region of China through Central Asia and Western Asia to the Persian Gulf and Mediterranean Sea; the third one is from the southwest region of China through Indochina Peninsula to the Indian Ocean. Meanwhile, two routes constitute “21st-Century Maritime Silk Road”. One is from Chinese coastal ports to the South China Sea and through the Strait of Malacca to the Indian Ocean and finally to Europe. The other is from Chinese coastal ports across the South China Sea to the South Pacific.

In summary, “One Belt One Road” connects the East and Southeast Asian economic circle. Along the route, the Middle East and Persian Gulf region Russia and Asia (China, Southeast Asia) are very rich in oil reserves, accounting for approximately 66% of global oil production. Moreover, the countries in the hinterland of Eurasia are rich in coal resources, but their economic development is relatively backward and has great potential. The route covers a population of about 4.5 billion and can provide an adequate workforce for the strategy. However, among the 65 member countries, only three are developed countries, which indicates that there are obvious deficiencies in most developing countries[1].

First of all, the strategy of "going out" of Chinese enterprises is the inevitable development of the strategy of "bringing in". Secondly, it can alleviate a series of problems such as restrictions of origin. Moreover, the domestic market is relatively saturated at the present stage, and more profits need to be realized through international projects. However, there are still some urgent problems in the "going out" strategy, the most important of which is the lack of awareness of strategic management and the weak point of view of strategic victory in Chinese enterprises. In addition, the formulation of strategic
management is limited to remote planning and lacks an effective implementation plan. In summary, the aim of this study is to analyze the critical barriers for Chinese international construction companies with two case studies.

The remainder of this paper is organized as follows. Section 2 reviews the relevant literature which summarizes critical successful factors for Chinese construction enterprises that have international operations. Section 3 introduces the background, implementation details, disputed issues and solutions of two cases. Section 4 briefly discusses the causes of failure of two cases and summarize the critical barriers for Chinese construction enterprises to break into the market of these countries. Section 5 concludes the paper.

2. Literature review

Under the aforementioned background, Chinese construction companies began to go abroad for international construction business. It has been widely discussed how critical factors affect the performance of international construction companies in China. For instance, Lu et al. (2013) find that procurement innovation is a competitive strategy, and unequal goodness and drawbacks also exist from several perspectives, including technical expertise, professional services, management skills and finance [2]. Deng et al. (2014) find that an appropriate emergency framework is an effective guarantee to ensure the operation efficiency of the project and can address the vulnerability of political risks [3]. In addition, Corkin (2012) believes that increased interaction with the government will promote the operation efficiency of the project [4]. Wu et al. (2015) believe that Chinese enterprises should pay more attention to labor protection, environmental protection and anti-corruption in order to fundamentally solve other problems [5]. Zhao et al. (2013) emphasize that enterprises should improve the capacity of risk management, which is the premise and guarantee of all work [6]. B. Ozorhon et al. (2007) believe that inter-firm collaboration has become a crucial component of the pursuit of international competitive advantage and alliances between multinational firms are becoming popular [7]. However, this kind of alliance company has obvious disadvantages in the process of development, that is, each country in which such organizations operate in can have a distinct economic, political, legal, cultural and competitive context in which businesses must respond to positively [8]. In addition, Kapila et al. (2001) stressed the issue of exchange risk management which results from fluctuations in the currency exchange rates or conversion restrictions beyond the control of an individual firm [9].

However, there is still a lack of analysis which relates the failure of foreign and local cases in the existing studies. A thorough and comprehensive analysis and summary of failure cases is of critical importance to the better development of international engineering enterprises. Therefore, the following analysis is based on the cases of Thailand in Southeast Asia and Hungary in Eastern Europe which can assist academia and practitioners to learn lessons and avoid the critical barriers.

Note that both cases that are analyzed in this study implement Public-Private Partnership (PPP) mode. However, they can still provide general implications for other procurement modes of international projects when preventing or dealing with disputes. Generally, there are three main modes, BOT, BT and BOOT. BOT, an acronym for Built-Operate-Transfer, is a way of financing, building and operating the public infrastructure with the private participation. On the premise of agreement between the government (i.e., the public sector) and the private sector, the government issues concessions to the private sector, allowing them to raise funds for the construction of an infrastructure project and to manage and operate the facility efficiently. Moreover, the private sector is also allowed to manage and operate its corresponding products and services within a certain period of time. BT is an acronym for Built-Transfer. It is a mode which means the government uses non-governmental funds to carry out basic non-profit construction projects. BOOT, Construction—operation—transfer, which is financed by a private partnership or an international consortium to build a basic industrial project. After the project is completed, it will have ownership and operation right within a specified period of time, which would be transferred to the government after the expiration of the period. In summary, the complexity of PPP scheme makes the international investment riskier.
3. Case study

3.1. The Bangkok viaduct project

The Bangkok viaduct project aims to develop the areas around the city and solve traffic congestion in the city. The project consists of two lines with a total length of 23.1km, also with an estimated investment of between US $1.3 billion and US $2 billion. The financing of the project is $650 million in equity capital, with the remaining debt financed by loans from the European Development Bank and the Bank of Thailand (approved in August 1996). A Thai project management company owns a stake in BTSC 69.3%, an international infrastructure development company owns 8.7 percentage points, several Thai companies each own less than 3 percentage points, and the rest of the BTSC plan is provided by the government, but has been delayed due to the impact of the Asian financial crisis.

In 1992, a BOT agreement with a concession for 30 years is reached between the government and the private sector and formed a project company, namely BTSC. The construction period of the project is six years. Due to the issues such as land expropriation, the operation period was postponed from 1997 to 1999.

There are three main reasons for the controversy between the private enterprises and the local government. First of all, the Asian financial crisis in 1997 caused a decline in passenger flow, which was still lower than expected level even if the passenger flow recovered later. Moreover, the devaluation of the Thai baht: from 25 baht to the dollar at the time of signing the contract to 40 baht in 2000. In addition, the initial location also led to large-scale public protests. Eventually, the initial selected location was changed, and the project company borne the cost of changing the address, but was not compensated. As of 2008, the project was nationalized by the government at an estimated price of $1.6 billion, with a major portion of the amount used to repay the debts of the project company.

3.2. The Hungary highway project

The investment amount of two highway projects in Hungary is approximately 320 million US dollars, which are from Gajagjork to the Austrian border(M1) and from M1 to the capital of Czechoslovakia(M15), respectively.

M1 and M15 were invited for tendering and bidding in 1992 and 1993 respectively and started construction in January 1994. Then M1 was opened in January 1996 while July 1998 for M15. Both are with a concession period of 35 years. The financing structure of the project is that 81% of the debt funds come from commercial loans provided by international and Hungarian commercial banks, AB loan structure, 19% of the funds come from shareholders, in addition, there are 50 million euros of standby loans with a maturity of 14-15 years.

Due to the diversion of a large amount of traffic from the free road next to M1 and fewer residents who need to go shopping abroad, resulting in the traffic growth in the first three years of the M1 project was lower than expected, and the actual value was only 46% of the predicted value. In addition, the high rates also led to lawsuits by public groups, which further worsened the financial affairs of the project company. In 1998, the new government came to power and claimed that highway vehicles only need to pay for the operation and maintenance of the highway.

In the end, the public initiated legal proceedings to reduce fees, which led to negotiations and debt restructuring proposals, but failed; In 1999, the project company was nationalized and its debt was converted into sovereign debt; the project company was replaced with the newly established state-owned Special Purpose Vehicle (SPV), and shareholders suffered losses of about 60 million euros; in August 1999, the project fee price was reduced by 50%, resulting in a 15-20% increase in traffic volume but a 45% reduction in total revenue.

3.3. Discussions

The similarity between the two projects is that the financing structure is clear and the project plan is reasonable, but both projects cannot be implemented in accordance with the original plan due to many reasons. This paper focuses on the analysis of the obstacles that hinder the good operation of the
project. First of all, in Hungary, the political situation of Eastern European countries has been unstable since the beginning of World War II, coupled with the pressure from the European Union and other world economies, which makes the domestic economic development face multiple obstacles. Secondly, in Thailand, the abnormal structure of domestic industrialization and the low education level of the labor force also make it difficult to run the project effectively and efficiently. In addition, there are religious beliefs differences between these countries and China (i.e., Christian in Hungary and Thai Buddhist in Thailand), which potentially results in some culture conflicts between the local government and labors and Chinese enterprises.

4. Conclusion
Through the comprehensive analysis of two cases, the viaduct project in Bangkok, Thailand and the Hungarian highway project, this paper draws some suggestions: under the background of Belt and Road Initiative, the implementation of the "going out" strategy of Chinese enterprises confront with many problems and challenges, including the political, economic and cultural differences. Therefore, if enterprises want to succeed, they should not only blindly formulate a relatively perfect plan, but also pay attention to the local culture, historical background and choose the appropriate financing and contracting scheme.

However, this study still has some limitations. Due to the lack of international cases, only the transportation projects are selected. Future studies can adopt more comprehensive case studies that cover different industries.

5. References
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