Risk Identification and Prevention of International Construction Project

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ABSTRACT: Risk has a decisive effect on the economic effect of the project. The identification and prevention of risk management that can reduce the loss of the project and improve the economic effect of the enterprise. With the implementation of the Belt the Road strategy, the international projects obtained by Chinese construction enterprises are increasing, and the uncertainty is increasing. In order to realize the target of enterprises, we should strengthen risk management, implement safety production responsibility and improve the enterprise management system. To analyze risk factors, take active prevention and avoid small risk events to bring huge losses to enterprises, the strategy of preventing and producing parallel enterprises should be implemented.

Key words: Risk management, International construction project, Economic effect, Enterprise strategy

1 INTRODUCTION

Under the guidance of general secretary of Xi Jinping, China is running a great project "the Belt the Road" which inherit and carry forward the spirit of the silk road, combine China development along with the national development, the Chinese dream along with the people all over the world dream together. That’s to say, our construction project engineering team will be in a foreign country to cast our ability, we should strive to do our best, to reveal the comprehensive national strength of our country. This requests us to minimize the risk of the international construction project construction well in advance. In the country to
speed up the implementation of the strategy of "the Belt the Road", against the background of Chinese foreign contracting engineering company will participate in more overseas large engineering projects, and identity will be gradually by the direction of the engineering construction investment shift, or to investors and by the dual role. This shift means that China's construction enterprises capital recovery not only comes from the construction project itself, but subject to the economic benefits of construction project is completed. Benefit evaluation phase of the construction project in extension, not sure of the construction project that must increase. Therefore, strengthening the risk management, improving project economic effect has become the international construction enterprise core issues of concern.

2 RISK ACCIDENTS AND REFLECTION OF DOMESTIC CONSTRUCTION ENTERPRISES

The general process of risk management is risk identification, risk assessment, risk response and control. Gerard Schoenberg (2006) argued that risk is a kind of deviation from the uncertainty of future expected results, the uncertainty can be subdivided into two kinds: one is the general uncertainty, which couldn't expect results, make any decision risk and quantify risk analysis. Secondly, the special uncertainty can be analyzed by objective analysis and the probability of the expected result can be calculated. To Gerard Schoenberg point of view, to be able to effectively avoid risk, we must grasp the risk of these two kinds of uncertainty, but in the process of risk management of international construction projects, there are also many factors that are easy to ignore, such uncertainty risks. If there is no evidence, then risk management is a no-talk.

2.1 ANALYSIS OF THE TARGET AND RISK ACCIDENTS OF CONSTRUCTION ENTERPRISES

Domestic construction enterprises refer to domestic enterprises that specialize in activities such as construction, construction, municipal public works, line piping and equipment installation and renovation works, such as new construction, expansion, alteration and demolition. Domestic construction enterprises in the domestic and international market economy environment should pay special attention to their own business activities, strengthen the construction management, to survive and develop. Construction business is not only a direct impact on the development of enterprises, but also may cause serious social consequences. For example, a blasting company in Jiangxi province contracted the project in October 2014 to the Xinggan expressway A7, and then handed the project to the subsidiary branch of the unexploded operation qualification. On October 3, 2015 branches without safety personnel and supervisors to be present at the scene, can't separate assignments from the practice of blasting demolition, no qualification illegal workers blasting operation, site management confusion, blasting fashion four players at the scene did not evacuate blast killed on the spot.
After the event, a demolition company in Jiangxi province was suspended, and the relevant personnel were banned and sentenced. The economic effect of construction enterprises depends not only on whether the construction enterprises win the bid and obtain the contracted projects, but also depend on the management level and professional level of the construction enterprises. The level of enterprise technology and enterprise management determines whether the enterprise can avoid risk and achieve the target. Therefore, construction enterprises should make full use of their technological advantages to avoid all kinds of risks and ensure that the project objectives are met on schedule.

2.2 CONSTRUCTION PROJECT RISK IDENTIFICATION

In the process of risk identification, some developed countries have also developed new theories and methods for new potential risks and risk identification. But in China there is no similar studies and reports so this is an urgent need for our own projects to have been completed or ongoing risk identification system, scientific and rational classification of risk category provided reference basis for project risk planning. In the Beijing-shanghai high-speed railway construction project, for example. For another example, in the process of the quality of the project risk identification task team through a lot of domestic and foreign literature. First of all, according to the construction of participants to list the quality of the high-speed railway construction management list of risk factors and risk accident experts’ discussion to select the key risk factors of 38 designed questionnaire way of questionnaire survey was conducted on various aspects the Beijing-shanghai high-speed railway construction. In the construction project risk management method, this step is the most tedious and necessary. In this process, because the project is different, the environment, the resources, the manpower will affect the risk management, the tedious work must be thorough and careful, otherwise would be small. To do a good job in risk management is to first data collection of data. This is the most fundamental work, which not only developers will need to actively participate in the survey, but also need the contractor's careful consideration, especially for the geographic factors such as geology, construction environment, natural environment. Pay attention to collect the most primitive, the most real, most reliable information. The results of risk identification form a list of risks that include a list of detailed uncertain events or conditions, each consisting of a project risk source table, a risk symptom, a risk type description, and other requirements.
3 RISK ANALYSIS OF INTERNATIONAL CONSTRUCTION PROJECTS

3.1 PROJECT COST RISK OF INTERNATIONAL CONSTRUCTION PROJECT

International construction project construction cost risk management is an important link of construction enterprises in the construction and management, only to effectively control construction cost of the construction project, reasonable to avoid the risk of cost, reduce the cost of the project, improve the construction enterprise and investment unit of economic fruit. In the international construction project contract within the time limit for a project implementation, due to the natural risk, social risk, economic risk, legal risk, political risk and so on factors, lead to rising cost of raw material, equipment, labor and other valuation, which can lead to cost overruns, and construction environment is bad weather, traffic inconvenience, leading to delay time limit and resources waste. This risk is covered by a wide range, but also because of the time, due to the different construction projects, according to field visits and social, economic, legal, political and other aspects of understanding, lists the risk list.

3.2 PROJECT QUALITY RISK OF INTERNATIONAL CONSTRUCTION PROJECTS

International construction project quality risk is due to project quality factors of life and property loss and material property loss creates uncertainty. The uncertainty for the owner, or the construction unit of the user is real. By the international construction project quality risk caused by the construction engineering accident is late in the process of construction or use. This kind of accident generally takes a relatively long time, once happened, cause economic losses to the project will cause unpredictable hazard to the society. The factors that lead to the occurrence of quality risk are divided into three categories: (1) raw materials, construction machinery and equipment failed. The quality of raw materials is not up to standard, construction machinery and equipment specifications do not meet the requirements, will bring quality risks, it should be in accordance with the standard configuration. (2) human factors. People are not saints, who can not have, have their own subjective view, but also because of negligence and lead to the details of the neglect. And these details often determine success or failure; there is because of people's greed, often the economic interests as a top priority, cut corners, shorten the duration and so on. (3) technical problems in construction. Technical requirements due to the different construction projects vary, in the event of quality problems, it may have even a great negative impact on the country and the country. (4) the lack of a comprehensive scientific management model, chaotic management procedures will lead to unreasonable staffing, construction organization is not in place, the
order can not be uploaded and issued, the departments are fragmented and other issues.

4 RISK RESPONSE MEASURES FOR INTERNATIONAL CONSTRUCTION PROJECTS

4.1 THE TREATMENT OF THE VARIOUS FACTORS CAUSING THE DIFFERENT RISK CONSEQUENCES

In recent years, due to the impact of the international financial crisis, the international market has sustained low speed and the growth of domestic demand has slowed down. The contradiction between the oversupply of some industries in China has become increasingly prominent. Traditional industries, such as engineering machinery, having a surplus capacity. Formulated by the state council on October 6, 2013 on resolving the contradiction of severe overcapacity guidance, we should actively expand foreign development space, consolidate to expand the international market, extend the field of international engineering contracting, improve the quality and efficiency of foreign contracted projects, actively undertake major infrastructure and large industrial, energy, communications, mineral resources development projects, such as technology, equipment, products, and domestic industries standards and services such as export, cultivating "China construction" international brand. China has spare capacity and foreign exchange assets. The countries involved in "the Belt the Road" are in urgent need of infrastructure construction and capital construction. The implementation of the Belt the Road strategy is a win-win interactive process. The implementation of this strategy is not only an opportunity but also a challenge for China's foreign projects. Most of the countries along the Belt the Road have great resistance to infrastructure and the risks are complex. The international contract project investment is huge, which requires a great deal of manpower, material resources and financial resources. Construction projects will encounter many risk factors both at home and abroad. Different risk factors will result in different consequences. Some can cause cash flow instability, such as technical risk. In general, any construction project begins with a profit-driven start, and if risks are prevented, the results are not known. Therefore, the implementation of construction projects must be controlled by risks and properly.

The main factors that cause the engineering risks of international construction projects include natural factors, legal factors and political factors.

Natural risk mainly refers to the project is located on the progress of the objective existence of bad natural environment, quality, and the risk of construction personnel composition, main influence on the construction cost risk is the natural disasters will result in changes of construction conditions, construction period, which may lead to a rise in the cost of engineering such as light rail project in Saudi Arabia mecca in the China railway construction contracting, because the project construction area in the high temperature heavy
sandstorm, the highest temperature in summer in 70 degrees, harsh natural
environments, where the project is located, water shortage situation is serious,
also direct management confusion.

4.2 RISK PREVENTION OF INTERNATIONAL CONSTRUCTION
PROJECTS
Through the analysis of the risk of international contracting project, we can see that due
to natural factors, political factors, legal factors, safety factors caused by the project cost
risk, quality risk, accident risk out of the poor. The root of the root has to rule the source.
Through the comparative analysis of the variance, the impact of various risk factors, so
the right medicine, reduce the unnecessary loss.

4.2.1 THOROUGHLY CARRY OUT THE LEGAL DUE DILIGENCE
INVESTIGATION
The first step in international investment risk management is due diligence. The traditional due diligence is mainly due to the due diligence of the
investment object. In order to better manage the risk of overseas investment, foreign contracted engineering enterprises should establish the "legal due
diligence investigation" concept, that is, enterprises should be targeted at the
host country investment industry legal environment, investment objects and
investment transactions itself to do a full due diligence. First of all, foreign
contracted engineering enterprises should entrust a professional law firm to
investigate the entire legal environment of the host country. Before the
investment, the enterprise should have a comprehensive understanding of the
relevant laws of the host country, and it should be clear how to invest
according to the laws of the host country, how to build the project, how to
operate and how to withdraw. Second, foreign contracted engineering
enterprises should deal with investment stakeholders due diligence. Including
the ownership structure of the investment party, the company's assets and
liabilities, the company's substantive contracts, the company's compliance, tax
situation. Through the due diligence of the investment stakeholders, to reduce
the legal risks of the target enterprises. Finally, the investment project itself
should conduct due diligence to comply with the legal requirements for the
construction of the project in the host country.

4.2.2 DIVERSIFY POLITICAL RISK BY USING OVERSEAS
INVESTMENT INSURANCE
The overseas investment insurance system, also known as the overseas investment
guarantee system, is provided by the government of the capital exporting country to
guarantee or insure the foreign investors who may encounter foreign political risks. After
the investor applies for insurance, if the political risk of the contract occurs, The loss
suffered by the domestic insurance institutions to compensate for the loss of the system.
At present, China's insurance investment insurance institutions are China's export credit
insurance company, its underwriting risks include exchange restrictions, levies, war and
political riots, additional political insurance (business interruption, breach of contract). Overseas investment insurance has the important functions of loss compensation, risk
prevention and control and convenient financing, which is the more common practice of
using external resource transfer risk in practice.

4.2.3 ESTABLISH A SOUND RISK MANAGEMENT CONTROL
SYSTEM
Enterprise scientific and reasonable management system is one of the basic guarantee for
the effective implementation of risk control. Within the enterprise, a set of international
project risk management and control system should be established. First of all, enterprises should establish the concept of international project risk management. To take a scientific and rational approach to establish a sound risk control system. Can set up a separate risk management department, a reasonable plan for the implementation of overseas projects, as far as possible to prevent the occurrence of risk accidents. Second, enterprises should strengthen the ability to identify risks and analyze risks, identify risks as different types, and decompose them, and adopt different countermeasures for different kinds of risks, so as to further improve the risk assessment system.

4.2.4 STRENGTHEN THE MANAGEMENT AND SUPERVISION OF THE CONSTRUCTION SITE

Accidents have occurred in the construction site to monitor the construction process is also important in construction project risk prevention, to sudden situation, can even found by site supervision and take corresponding measures. The first task is to examine carefully, including the inspection of the machine equipment and the specific operation of the construction. Once the operation is found to be inconsistent with the standard, it should be pointed out and corrected. If the facility is not functioning properly, it will be maintained even if it is maintained, and periodic inspections are required. The supervisor of the regulation must be strictly examined and cannot pass any small details.

5 CONCLUSION

Both domestic contracting projects and international contracting projects should be conducted in a reasonable and effective risk study. In order to ensure winning the stable profit of the project. There are many risks in construction projects, although some risks are objective and difficult to avoid, but more risks can be reduced by strengthening management and building models. International construction projects involving the relationship between countries, construction enterprises are facing more risk factors, which requires construction enterprises, do risk management, early detection of risk elements, to avoid the risk cell affect the performance of the project. This paper analyzes the risk identification and risk prevention of international construction projects. We will continue to study the form and path of the risk of the international construction project.

REFERENCES