

## The Build of the Framework of Financial Risk Evaluation System in International Engineering Contracting

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**Abstract.** International engineering contracting is a comprehensive international economic exchange activity and an international cooperative approach of economy and technology, the projects of which always have complicated and a wide range of contents, a long cycle, and a great amount of involved investment that mean great risks. The essay has further been clear about the build of the framework of financial risk evaluation in international engineering contracting by researching the characteristics of financial risk in international engineering contracting and relevant requirements to the financial activity main body.

International engineering contracting is a comprehensive economic exchange activity. Via international tender, bid, negotiation and so on, the contractor provide their own technology, capital, labor, management, equipment, materials, and even permission right and finish the engineering projects or work on other economic activities according to the requirements of the project owners abroad and make an offer following the agreed contract conditions in advance. Because its projects always have complicated and a wide range of contents, a long cycle, and a great amount of involved investment, it has great risks.

**In order to avoid the financial risk in international engineering contracting, we must know its characteristics and relevant requirements to the financial activity main bodies.**

a. Objectivity.

Under the condition of market economy, the law of value plays a leading role, which determines that financial risks exist in every corner of social production and life. So it's required that the financial activity main bodies pay attention to the financial risks and make a transformation from the pressure from the risks to the motivation of creation.

b. Randomness.

In international engineering contracting, there always exists the asymmetry of information acquisition, most of the people possess speculative psychology, and the movements of the market have a rapid change, which get various risk factors to produce and accumulate constantly and show in a sudden form in the final. That requires every financial activity main bodies pay close attention to all kinds of the change of the market environment. Once discovering the sign of the risks, they're supposed to take actions right away and make good preparations to cope with risks.

c. Duality.

The duality means that there're two possibilities in financial risks, earnings or losses. In other words, financial risks mean an uncertainty of bringing earnings and losses. High earnings are always along with high risks. Consequently, the financial activity main bodies are required to assess the risks they are faced with objectively according to their own development conditions and the surrounding market environment and realize the potential earnings and losses.

d. Correlation.

The corruption and influence of the financial risks have correlation. From the financing and investment to the production in the corporation, the risks happening in one of the stages and links will always influence the stability of the following stages and links. And financial risks often lead to social crisis, such as Asia Financial Crisis in 1997, which caused social unrest in Indonesia. As a

result, when guarding against the financial risks, attention is supposed to fix on every stage and link.

e. Strong destructiveness.

Financial activity is a strategic work concerning human, material and financial resources, occupying and using more money than other social activities. Once the financial crisis happens, the destructive effects will be great, endangering every aspect from the capital market to the real economy. So, every financial activity main body is supposed to take positive actions to avoid the risks and reduce the impact once the financial crisis happens.

f. Controllability.

The controllability of financial risks means that with the improvement of the ability to realize and resist the financial risks, they can be controlled to some degree. For example, when a smart investor is faced with an investment project with high risks, he may give up investing money considering the high risks. But there are always people fond of taking risks. After careful investigation and argumentation, they formulate series of strategies to guard against and avoid the risks, invest boldly, and obtain huge rewards at last.

### **The build of the framework of financial risk evaluation system**

a. The comprehensive analysis of information in financial risks

The department of financial supervision and management can obtain a quantity of information concerning the operation and management, the quality of asset, the adequacy level and liquidity of the capital and the financial situation in international engineering contracting by off-site supervision, on-site inspection, audition of intermediaries and other approaches. The quantitative information can be tidied up, analyzed and transferred to the relevant risk monitoring indicators. On the base of comprehensive analysis and comparison of these indicators, the overall evaluation will be made about the financial risks in the international engineering contracting.

b. The comprehensive evaluation of the financial risks

The comprehensive evaluation of the financial risks is an important link in the whole process of supervision and management. On the base of comprehensive analysis of the information from the results of off-site and on-site supervision and management and other intermediaries, the financial regulators divide the financial institutions into four types, including fundamentally normal institutions, institutions in need of attention, institutions with problems and institutions facing danger.

1) The basic elements of risk evaluation

With reference to American CAMELS ranking evaluation system, and considering the actual financial supervision and management, the basic elements of risk evaluation include the following aspects:

① The safety of asset

The safety of asset will influence the flow ability and profitability in international engineering contracting directly. So, when evaluating the financial risks, it is supposed to evaluate the quality of asset at first containing the level of non-performing loans, loan concentration and other non-performing asset.

② Flow of suitability

Flow ability is the base and premise of the survival to a financial institution, and also an important indicator to judge its risks. Evaluating its flow ability is mainly according to the scale of operation, the structure of assets and liabilities, the quality of assets, the cash flow and market environment. Keeping adequate flow ability doesn't mean the higher the level of the flow ability is, the better it will be. Keeping extra flow ability will influence its profitability in contrary and cause a waste of resources.

③ The adequacy of assets

The degree of asset adequacy determines the ability to repay the debt in the final and resist the risks of the financial institutions. So, judging and evaluating its risks must consider its level of asset adequacy at the same time, which is mainly in accordance with the Basel capital accord and prudent

accounting principles. There are several aspects that should be evaluated: Whether the rate of asset adequacy is real or not, whether the bad debt reserves are adequate or not, and whether the non-performing loans are cancelled after verification or not.

④ The rationality of earnings

The results and risks of operation of the financial institutions will always be reflected on earnings. The reasonable profits are the basis of accumulation increase, the improvement of ability to resist the risks and further development to a financial institution. So, when evaluating the risks of financial institutions, we must evaluate the reality of its capital level.

⑤ The health of management

Healthy risk management and internal control system is the basis of healthy development of financial institution and an important guarantee to realize the maximum of profits and minimum of risks. The judgement and evaluation of risk management and internal control system include whether the governing body is of the specification or not, whether the risk management is suitable or not, internal control system is comprehensive or not and whether the internal audit is effective or not.

⑥ Business Compliance

The operation that breaks the laws must bring management risks, law risks , reputation risks, asset quality risks and payment risks. So the operation that obeys the laws should be regarded as a crucial factor in evaluation of financial risks.

2)The basic methods of financial risk evaluation

According to the above fundamental elements of risk evaluation, there are two main methods to evaluate the financial risk category and levels.

①Weighted assessment method

According to the level of threat that various risks bring to the financial institutions, different risk weights will be given in evaluation system so as to be clear about the severity of the risks.

②Feature evaluation method

According to the characteristics and level of the risks the financial institutions perform, they're divided into fundamentally normal institutions, institutions in need of attention, institutions with problems and institutions facing danger.

### **A risk early warnings in time**

After the department of supervision and management judge and evaluate the risks of financial institutions, they're supposed to warn the risks early according to the specific nature, characteristics and severity of them. The earlier the actions are taken to control, the earlier the risks will be dissolved.

In conclusion, the environment of international engineering contracting projects is in a changeable condition. The risk factors they are faced with also change rapidly. As a result, when building the framework of international engineering contracting, it requires continuous update , supplement and perfect.

The build of the framework of the financial risk evaluation system in the essay offer reference and basis to the project decision making and risk management and control in the international engineering contracting. During the process of project construction, it is required to track and evaluate the financial risks duly, discover new risk factors, and correct and perfect the system of financial risk management.

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