Analysis of Enterprise Financial Risk in low Carbon Economy

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Abstract. Nowadays, human society is confronted with a series issues such as environmental pollution and global warming. Under such circumstances, all the countries in the world are intending to ease the crisis of global warming through cooperating with each other to prevent the negative impact of global warming on human survival and development. While, as a basic unit of social development, financial risks that enterprises face in the process of production and operation have shown new changes and characteristics, due to the impact and shock of the development of low carbon economy. This paper mainly analyzes the impact of low carbon economy on enterprise financial risk and on this basis, studies the characteristics of enterprise financial risks and the countermeasures in low carbon economy.

Introduction

After 30 years’ reform and opening up, China has accelerated the pace of economic construction and made remarkable achievements. Meanwhile, however, it has to be admitted: Compared with other countries in the world, China is of large energy consumption, especially the consumption of traditional energy such as coal, oil, and natural gas. In view of this, the Chinese government is gradually realizing that energy conservation and emission reduction must be given priority in order to achieve sustainable economic and social development. To build up the image of a responsible world power, the Chinese government has made a solemn promise to the international community on global warming: “Compared with 2005, China’s unit GDP emissions of greenhouse gases such as CO2 in China will have fallen by at least 50% by the year of 2020”. Following this, other countries have subsequently stated that corresponding commitments and contributions should be made for the early realization of the goal of energy conservation and emission reduction in the international community.

The Impact of Low Carbon Economy on Enterprise Financial Risk

Impact on Enterprise Financing Activities

The impact of low carbon economy on enterprises in the financing sector is mainly embodied in the following two aspects:

First, with the increasing financing difficulties, enough funds may not be able to be raised to improve the enterprise’s “high-carbon” production and operation model. This is because a green credit policy has been launched by the state in the background of low carbon economic development on the basis of appropriate supplements and improvements to the content of the original credit policy, thus constraining the financing behavior of the enterprise and changing its original financing environment.

Second, the increasing financing amount of enterprise in the context of low carbon economy leads to the increase of enterprise’s insolvency risk. Specifically, enterprises will increase investment in low carbon technologies and low carbon equipment so as to meet the requirements of low carbon economic development, which will inevitably lead to a rapid increase in the financing amount of enterprises, undoubtedly increasing their insolvency risk.
Impact on Enterprise Investment Activities

The impact of low carbon economy on enterprises is mainly reflected in the increase of the ROI risk. Enterprises are required to accomplish a transformation from “high-carbon” to “low-carbon” in the era of low carbon economy. In order to achieve this transformation, enterprises have to invest in low carbon technologies and equipment. As is known, return on investment is expected no matter what kind of investment the enterprise makes. However, while conducting research and analysis on the feasibility of low carbon investment, enterprises are likely to be involved in haphazard investment due to the lack of investment analysis, or information delays and distortions, which will directly affect the return on investment of enterprises and bring investment risks.

Impact on Enterprise Operating Activities

The impact of low carbon economy on enterprise capital operations is mainly embodied in two aspects:

First, the increasingly severe destruction of the ecological environment in current society contradicts the tolerance of the government and the residents for ecological pollution. To solve this contradiction, it is necessary for enterprises to increase expenditure on environmental governance, resulting in the increase of enterprises’ operating costs.

Second, the tax reforms carried out by the state in the low carbon era have, to a large extent, increased the operating costs of enterprises and reduced their profits, thus affecting the financial management of enterprises in an extremely negative way.

In view of the above impacts of the low carbon economy on enterprise financial risks, the types of financial risks in low carbon economy have undergone great changes compared with the previous types of financial risks.

Types of Enterprise Financial Risks from the Perspective of Low Carbon Economy

Financing Risk

Since the production and operation of the enterprise begins with financing activities, it can be seen that it is of vital importance to any enterprise whether the financing activities proceed smoothly or not.

The generalized funding risk refers to the possibility that the enterprise may suffer losses if there is no enough cash to pay off its debts at due date in the process of enterprise’s financing activities.

However, the financing risk in the context of low carbon economy is different from the generalized financing risk, mainly because: First, a green credit policy has been launched by the state which has increased the barriers for enterprise financing, making it difficult for enterprises to raise funds. Second, enterprises have to completely change the existing “high carbon” economic development model in order to adjust themselves to the development of the low carbon economy. Specifically, in order to accomplish the transformation of the economic development model, enterprises will increase investment in terms of low carbon technologies and low carbon equipment. However, liability financing method is often selected by the enterprise during the financing process in order to avoid dilution of control and reduce funding costs.

On this basis, the definition of financing risk in the low carbon economy can be understood as follows: Enterprises’ financing pressure and financial burden will be increased under the influence of the national green credit policy in order to adapt to the low carbon economic development model, which will lead to the possibility of enterprises’ financial risks.

Investment Risk

If a large amount of surplus funds are left in the production and operation process, enterprises will take full advantage of the value of these funds to conduct investment activities. Since enterprises decide to invest to obtain benefits and returns on investment, they may be exposed to investment risks if the surplus funds are improperly dealt with.
The generalized investment risk mainly refers to the possibility that the enterprise may suffer financial losses due to the uncertainty of future investment income in the process of enterprise investment activities. However, the definition of investment risk in the low carbon economy is different from the generalized investment risk, mainly because: First, in the context of low carbon economy, enterprises have to completely reform the traditional production model in order to achieve the “low carbon” production and operation mode. The amount of capital investment in low carbon production equipment and low carbon production technology must be increased to achieve energy conservation and emission reduction in the entire production process; Second, financial losses for the enterprise’s low carbon project investments may be caused if they are carried out in blindness due to the information asymmetry.

On this basis, the definition of investment risk in the low carbon economy can be understood as: The possibility of enterprise financial risks caused by the increase in low carbon capital investment and the blindness in the feasibility analysis of investment projects in the process of enterprise’s transformation to a “low carbon” business model.

Working Capital Risk

In order to make the entire process of production and operation smooth and ongoing, sufficient working capital is needed to provide support and guarantee for enterprises.

The generalized working capital risk mainly refers to the possibility of financial losses that the enterprise may suffer due to the insufficient capital provided by the broken capital chain which is caused by the lack of effective management of working capital as well as the waste and unreasonable use of working capital.

While the working capital risk in the low carbon economy that the author elaborates is different in the following aspects: First, they differ in raw material supply. In the era of low carbon economy, the price of raw materials will be on the rise due to the national policy, which will lead to the increase of operating costs of enterprises; Second, they differ in the carbon tax. Although the carbon tax collection makes up for the negative externality caused by environmental pollution to a certain extent, it will also increase the operating costs of enterprises.

On this basis, the definition of working capital risk from the perspective of low carbon economy can be understood as: the possibility of financial risks that the enterprise may suffer due to the increase of the operating cost under the influence of the state’s policy on raw material price adjustment and the imposition of carbon tax in the context of low carbon economy.

Countermeasures for Enterprise Financial Risks in Low Carbon Economy

Countermeasures for Financing Risks

In the context of low carbon economy, enterprises have to actively seek new financing channels and financing methods to reduce the difficulties in financing for enterprises in order to successfully respond to financing risks. Specifically speaking, the new financing channels and methods are as follows:

(1) It is necessary to actively seek financial aid from the International Fund, so as to reduce the pressure of funding costs to some extent, for the reason that the aid funds provided by the relevant departments can be obtained at a low interest rate level with the aid of the International Fund, which not only meets the capital needs of enterprises for the development of low carbon economy, but also reduces the financing costs for enterprises.

(2) If some surplus profits are still left after repaying debts and making up previous losses, the enterprise can accumulate the surplus of profits, and withdraw the corresponding provident fund from these accumulated surplus profits according to the proportion of accrual prescribed in the accounting policy. And these provident funds can be used when the enterprise pollutes the surrounding environment during the process of production and operation. The biggest advantage of this financing method for enterprises lies in that the proportion of the provident fund can be determined based on the enterprise’s operating conditions in the current year and the expected
investment demand for the next year. However, in order to ensure the proper use of these low carbon provident funds, it is required for the internal audit department of the enterprise to verify and supervise the use of the low carbon provident funds.

(3) In the context of low carbon economy, it is also a wise move for enterprises to issue low carbon stocks or low carbon bonds to the public. Through financing in this way, the image of the enterprise in the eyes of the public can be changed and a responsible corporate image of low carbon and environmental protection is established, thus creating a good reputation for the enterprise in the society. This reputation can keep the enterprise’s production and operation in a smooth way, and continuously improve the economic value and social value of the enterprise.

(4) In the context of low carbon economy, it is a necessity to take full advantage of leverage financing. In low carbon economy, leveraged financial lease not only enables enterprises to obtain waste disposal equipment and pollution prevention equipment at a lower cost, but also avoids the tension of the enterprise’s capital chain, which is helpful for the achievement of enterprise’s low carbon strategy goals.

Countermeasures for Investment Risks

In the context of low carbon economy, in order to effectively respond to and prevent investment risks, and carry out investment activities, enterprises should concentrate on the following aspects:

(1) In the context of low carbon economy, while undertaking all kinds of investment activities, the enterprise should abandon the wrong investment philosophy of blindly pursuing returns on investment, and never undertake the investment activities at the cost of pollution or destruction of the surrounding ecological environment.

(2) In the context of low carbon economy, enterprises should make out a scientific investment plan to achieve a rational and optimal allocation of waste resources. As is known, waste is a misplaced resource, a proper use of which can not only save the cost of waste disposal, but also reduce the investment cost of enterprises. In addition, it can bring considerable economic income to enterprises to a large extent.

(3) In the context of low carbon economy, while making the research and analysis of the uncertainty of investment strategy, enterprises should focus on whether the implementation of the investment plan will cause pollution and damage to the surrounding ecological environment. If it is found after the analysis and research that the investment plan goes against the maintenance of the balance and stability of the surrounding ecological environmental system, it should not be adopted and implemented, even if the investment project will bring the enterprise considerable returns on investment.

Working Capital

In the context of low carbon economy, the key of successful prevention of working capital risks for the enterprise is to achieve balance between income and expenditure of working capital and the rational and optimal allocation of resources. Therefore, enterprises should concentrate on the following:

Since a large amount of working capital needs to be spent on the prevention of environmental pollution as well as the achievement of energy conservation and emission reduction in the context of low carbon economy, it is necessary for enterprises to scientifically and reasonably budget and analyze the working capital that is required for the prevention of environmental pollution and the realization of energy conservation and emission reduction.

As current assets have strong liquidity, measures should be taken in terms of current assets in order to accelerate the liquidity of current assets and provide sufficient working capital for the operation of the enterprise.

Conclusion

This paper first analyzes and elaborates the impact of low carbon economy on the enterprise’s financing activities, investment activities, and operational activities. Through the analysis of the
impacts, the connection between low carbon economy and financial risks is clarified and the necessity of studying enterprise financial risk from the perspective of low carbon economy is advocated. Then the paper introduces the related concepts of financing risk, investment risk and working capital risk, which are correspondingly formed by the enterprise from the perspective of low carbon economy. Beside, these concepts in low carbon economy are compared with those of the traditional financing risk, investment risk and working capital risk, making the differences be identified more easily. In addition, the paper puts forward a corresponding risk response strategy for each type of risk to help enterprises more effectively deal with and prevent financial risks.

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