Proceedings of the 7th International Conference on Economic Management and Green Development
DOI: 10.54254/2754-1169/36/20231818

Research on Enterprise Using Futures to Hedge Operational Risks

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Abstract: Enterprises are faced with various business risks, such as market risk, credit risk, and raw material price fluctuation risk, and futures, as a kind of financial derivative with delayed settlement, can be used to hedge the risks faced by enterprises. This study aims to explore the methods and strategies for enterprises to use futures to hedge business risks, as well as the effect analysis, so as to provide references and suggestions for enterprises to carry out risk management. This study adopts the methods of literature research and case analysis. Firstly, the basic concepts and operation methods of the futures market are introduced, as are the basic principles and methods of enterprise risk management are introduced. Secondly, it discusses the methods and strategies for enterprises to use futures to hedge risks, and makes an empirical analysis of their effects. It is found that the methods and strategies of hedging risks by using futures can effectively reduce the risks faced by enterprises, especially the risk of raw material price fluctuations. However, there are certain costs and technical thresholds for hedging risks by using futures, so enterprises should use them carefully according to their own conditions.

Keywords: futures, hedging, operational risk, enterprise utilization, financial derivatives

1. Introduction

In today's commodity market, due to the influence of various factors, the price fluctuations are very large, which will cause huge risks to the operation of enterprises. One of the main functions of futures is risk management, and futures are an important part of the commodity market. At present, the main means of risk management in a commodity market is hedging in the futures and option markets.

Thanks to the highly integrated environment between China and the world economy, China's futures market has developed rapidly. However, due to its late development, China's futures market still has a lot of room for development. Therefore, on the premise of accelerating the development of China's futures market, reducing the risks faced by enterprises using futures hedging to hedge and enhancing the ability of commodity futures hedging risk management is the theme of this paper.

By using the literature research method and the case analysis method, this paper understands the principle of hedging business risks in the futures market and puts forward suggestions on improving the safety of avoiding business risks in the futures market.

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2. Basic Concepts and Operation Methods of the Futures Market

2.1. Definition and Characteristics of Futures Market

A futures market is an exchange-run marketplace for trading contracts that is standardized and deliverable. Its distinguishing feature is that the two participants in the futures market deal at future prices to reduce the risk posed by potential price swings. The characteristics of the futures market are mainly reflected in the following aspects.

Firstly, the futures market has a high degree of standardization and transparency. Secondly, the cost of trading in the futures market is low. Thirdly, futures market trading has the characteristics of flexibility and leverage. Finally, the futures market is a market-oriented trading market.

2.2. Types and Trading Procedures of Futures Contracts

A futures contract is the basic trading tool in the futures market, which is characterized by the subject matter represented by the futures contract, the delivery date and the delivery method determined in advance. In the futures market, there are mainly two types of contracts commodity futures and financial futures.

Commodity futures are futures contracts with physical commodities as the subject matter. Popular commoditities futures in the market include gold, silver, copper, aluminum, steel, oil, and so on.

Financial futures are futures contracts with interest rates, foreign exchange, stocks, indices and other financial instruments as the subject matter. The main financial futures contracts in the market include forward exchange rates, stock index futures, Treasury bond futures, and so on.

The process of futures trading is relatively simple. Investors can trade futures through an exchange, a futures broker or the Internet. Investors need to open a futures account, pay a margin and sign a trading agreement with a futures broker. In the process of trading, investors need to pay attention to the day's market and position changes, and timely close or adjust their positions [1] .

3. Basic Principles and Methods of Enterprise Risk Management

3.1. Concept and Importance of Risk Management

Risk management is a planned and organized management activity used to determine, assess, control, and monitor the risks associated with numerous aspects that businesses must deal with. The risk management of an enterprise is not only related to the survival of the enterprise itself, but is also related to the overall stability of the financial market and social economy. Therefore, it is necessary for enterprises to pay attention to risk management. Enterprises should take positive measures according to their own actual situation, combined with the basic principles and methods of risk management, so as to effectively resolve various risks and improve the risk control and profitability of enterprises.

3.2. Basic Principles and Methods of Risk Management

The correct management ideas and practices must be adopted in risk management. First and first, it's important to be aware of the dangers that businesses may encounter in their daily operations, including market risk, credit risk, liquidity risk, etc., and to develop appropriate remedies.

Secondly, for different types of risks, different countermeasures need to be taken to prevent and respond to them [2]. In addition, in order to ensure the effectiveness of risk management, it is necessary to establish a sound risk management system and system. Institutionalized risk management can help enterprises standardize business behavior, prevent and control risks, and enhance their overall ability to manage risks. At the same time, a risk monitoring and reporting

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mechanism should be established to detect and deal with various risks in real time and ensure the safety of enterprises [3].

Risk awareness, integrity, effectiveness, and sustainability are generally considered to be the fundamental principles and techniques of enterprise risk management. Enterprises may only successfully manage risks and successfully control operational hazards under the supervision of these fundamental principles, improving the stability and profitability of operations.

3.3. Practical Case Study of Risk Management

This section will take the risk management practice of a company as an example, introduce the specific process and method of using futures to hedge business risks, and conduct a case analysis. The company is an industrial enterprise. Its business involves many industries and varieties, and its capital and market risks are relatively complex and diversified [4].

First of all, the company has established a sound risk management system and mechanism, including the formulation of a risk management policies, the establishment of risk management department, the establishment of risk management committee and so on. Secondly, the company determined reasonable hedging strategies according to the risk characteristics of their respective businesses, selected appropriate futures varieties, formulated hedging plans and programs, and conducted simulations and tests to ensure the effectiveness and accuracy of hedging operations.

In this specific practice, the company adopts a variety of ways, such as risk diversification and market volatility avoidance, to carry out futures hedging operations. Among them, for the unavoidable price fluctuations in daily business operations such as material procurement, the company adopts technical means such as long order strength and stop profit and stop loss to effectively control the market risk. In addition, during periods of large market fluctuations caused by uncertain factors such as policies and market prices, the company will also dynamically adjust risk control indicators and timely adjust hedging strategies and schemes to achieve the purpose of maintaining and increasing value [5].

The use of futures to manage business risks has advantages and benefits, but it is also clear from the examination of the company's practice case that the organization must exercise extreme caution and accuracy in its risk management procedures. Therefore, enterprises need to scientifically formulate risk management strategies and plans according to their own conditions, adhere to the principle of controllable risks, and constantly improve the level and ability of risk management.

4. Methods and Strategies for Enterprises to Use Futures to Hedge Operational Risks

4.1. Basic Operation Methods of Enterprise Futures Trading

Enterprise futures trading is the use of futures contracts for financial derivatives trading. The main purpose is to hedge enterprise commodity price risk and reduce operational risk. Before trading futures, enterprises need to be familiar with the basic knowledge and operation methods of the futures market, so as to better achieve their risk hedging objectives.

First of all, enterprises need to understand the basic definition, characteristics and classification standards of futures. Futures are financial derivatives traded in the form of standardized contracts, involving a variety of commodities. The characteristics of futures contracts include standardization, a trading margin system and buyer and seller obligations. In addition, futures contracts can be divided into forward futures, spot futures, and securities futures according to delivery time and delivery method [6].

Second, businesses must comprehend the fundamental workings and trading guidelines of futures trading. The three primary phases of futures trading are account opening, placing orders, and delivery. Enterprises must choose futures firms and complete pertinent paperwork, such as the

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account opening application and risk disclosure letter, at the account opening stage. The business must select the futures variety, the trading direction, the opening/closing operation, and the required margin before making the order. According to the terms of the futures contract, businesses must deliver the required physical items or settlement money during the delivery stage.

4.2. Case Study of Hedging Risk in Futures Market

In reality, businesses may effectively manage risks by using the futures market. Consider agricultural planting businesses as an example. Due to the influence of season, weather, market demand, and other factors, their income is relatively uncertain. If the company has no hedging strategies in place, it will be under a lot of financial strain if it confronts risks like market deviation and price fluctuation. As a result, using the futures market as a hedge is a successful strategy to lower risks and guarantee the financial stability of businesses.

The case study of futures market hedging practice demonstrates that enterprises should adhere to three concepts, including the market planning principle, the risk exposure principle, and the trading principle, when conducting futures trading. The principle of market planning requires enterprises to comprehensively consider the macrotrend of the market and their own situation, and choose futures targets and trading varieties according to the future market demand, supply and expected price direction. The principle of risk exposure emphasizes that enterprises should determine the quantity, duration and price of trading contracts according to the risk points in their own industrial chain. While the trading principle points out that enterprises should pay attention to the flexibility and timeliness of transactions, rationally allocate assets and reduce transaction costs in specific operations [7].

Therefore, when hedging futures trading, enterprises should pay close attention to market sentiment and capital situation on the basis of considering market conditions, their own situation and following trading principles, and paying attention to the provisions of futures delivery rules, so as to minimize the risk.

4.3. Analysis of the Influencing Factors of Futures Trading on Enterprise Operating Risks

4.3.1. Market factors

The most significant element influencing price changes in the futures market is the interaction between supply and demand. When supply exceeds demand in the market, commodity prices fall. When market supply is less than demand, commodity prices rise. Therefore, when conducting futures trading, enterprises need to analyze the relationship between supply and demand in the futures market, so as to grasp the market trend in time and formulate reasonable futures trading strategies.

4.3.2. Policy factors

The impact of policy changes on futures markets is also important. Policy factors include monetary policy, trade policy, tax policy and so on. Futures prices increase when, for instance, monetary policy is tightened; when trade rules restrict exports, demand declines and futures prices rise. Therefore, when conducting futures trading, enterprises need to pay attention to the impact of policy changes on the futures market and adjust their futures trading strategies in time.

4.3.3. Supply chain factors

Supply chain variables may also have an impact on how companies trade futures. Futures hedging can be used to reduce the price risk of commodity procurement and sales, but the supply chain links involved also need to be considered comprehensively [8].

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5. Conclusion

Based on the research on enterprises' use of futures to hedge business risks, this study draws the following research conclusions.

First, firms' business risk is significantly impacted by futures market hedging. The hedging mechanism of futures can reduce the market and price risks of enterprises to a certain extent. Through hedging transactions, enterprises can effectively avoid the impact of market fluctuations on corporate profits.

Secondly, the transaction costs and capital costs in the futures market are relatively low, which can improve the efficiency and competitiveness of enterprises. The leverage effect in the futures market can enable enterprises to obtain high returns through small investments, and can better leverage the role of funds. This is of great significance for the management control of enterprises risks.

In addition, enterprises need to understand the trading rules and characteristics of the futures market, as well as market prospects and trends, to provide scientific and effective help for enterprises' hedging transactions.

Finally, it is necessary to strengthen the supervision of the futures market, establish a standardized market trading environment, and protect the interests of enterprises. At the same time, we should develop financial derivatives in the futures market, promote the diversified development of the futures market, and provide better hedging tools for enterprises.

To sum up, the use of futures by enterprises to hedge business risks has broad prospects and development space, but at the same time, it also needs to be constantly explored and improved in practice. It is believed that with the development and improvement of the futures market, the futures hedging mechanism will provide a more perfect guarantee for the management and control of enterprises risks.

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