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Risk Management and Different Financial Approaches to Reduce Business Risk

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Abstract: This article examines three different risk management methods: asset hedging by shorting stocks, cash flow hedging using forward contracts, and futures contracts. The article explains each method's rationale, application, advantages, and disadvantages. By presenting and explaining these methods, this study aims to help readers gain insights into their effectiveness in managing risk in different types of transactions. The content of the article supports the readers to have a better understanding and gives some strategies for risk management, and provides guidance for decision-makers to mitigate potential risks in their financial operations. Asset hedging by shorting stocks involves selling borrowed stocks in anticipation of a decline in their price, thereby offsetting the potential loss of a declining asset. This strategy allows an investor to profit from a decline in stock prices. Cash flow hedging through forward contracts involves entering into an agreement to buy or sell an asset at a pre-determined future price, thereby reducing the risk of adverse price movements and ensuring a stable cash flow. On the other hand, futures contracts are standardized agreements to buy or sell an asset at a future date, are traded on public markets, provide legal protection for both parties through financial intermediaries, and allow investors to lock in prices. While these risk management methods have obvious advantages, such as potential gains to offset the risk of asset depreciation during market downturns, protection against adverse price movements, and price stabilization, they also have inherent risks and limitations that need to be carefully considered.

Keywords: Risk management, Asset hedging, stock

1. Introduction

Risk is an inherent aspect of business operations, presenting both opportunities and challenges. Moreover, potential uncertainties in cash flows that affect the fair value of assets and liabilities or the value of cash flows associated with future transactions of the entity. [1]. Hedge accounting is an essential tool for enterprise risk management, enabling enterprises to mitigate the impact of market volatility and uncertainty [2] and to stabilize costs in the production and sales process, enterprises can effectively reduce financial risk and ensure more stable financial performance. The purpose of this paper is to explore the two main approaches to hedge accounting, asset hedging, and cash flow hedging, and to examine how these two approaches can be utilized to mitigate corporate risk.

Asset hedging is the practice of offsetting potential losses in asset values by implementing strategies such as shorting stocks. By shorting stocks, a company can hedge against unfavorable

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market conditions and protect its investment. For example, if the industry in which a company operates or the raw materials used to make its products are volatile, the company can short the raw material market to ensure that its raw material cost prices remain stable, and if there is a downturn in the industry and the market, the profits earned from shorting stocks can offset the downturn and thus minimize the risk of the investment. Cash flow hedging, on the other hand, focuses on managing risks associated with cash flows. This approach involves the use of financial instruments such as forward and futures contracts to lock in future cash flows and reduce uncertainty. For example, a company with international operations can hedge against market volatility by utilizing future contracts through the free market. By obtaining a fixed exchange rate in advance, the company can minimize the economic risks associated with currency fluctuations caused by market conditions. While asset hedging and cash flow hedging provide effective risk management strategies, it is important to recognize that these strategies have their risks and limitations. For example, hedges may not fully offset the associated risks and the costs associated with implementing and maintaining hedging positions. In addition, the effectiveness of hedge accounting relies on an accurate assessment and history of the hedging relationship, which requires careful monitoring and compliance with accounting standards.

2. Asset Hedging

Asset hedging is a risk management strategy used by businesses to mitigate the impact of market fluctuations on the present value of the commodities they invest in and the assets they already own. The main principle of asset hedging is to reduce potential losses by investing in products that move in the opposite direction of the asset to be protected, using financial instruments to create an offsetting counterbalance in the portfolio, thus providing a degree of protection against the cost risk of the asset.

A significant advantage of asset hedging is the ability to minimize the adverse effects of market volatility on a portfolio. By strategically building offsetting portfolios, companies can reduce the overall risk and potential losses associated with their assets. In this way, a company is able to fix the cost of investing in commodities or assets even in uncertain market conditions and often volatile market environments, thereby limiting the impact of unfavorable market fluctuations on its portfolio and, to a lesser extent, anticipating and protecting the value of its assets to maintain a more stable financial position and financial performance.

The most common method of asset hedging is shorting a stock. The process of shorting a stock involves four steps. First, the person wishing to short the stock removes the stock that he or she wishes to short from the personal account of the individual who currently holds the stock and places it in the person wishing to short the stock's own account through a market broker. This action creates a liability for the return of the stock. The second step is for the broker to sell the stock in the market and convert it to cash. Thus, the stock is removed from the account, and the cash is collected as a return. Finally, if the stock price does fall as expected, the short seller will buy back the stock at a lower price and return it to the original owner. The cash difference between selling the stock at a high price and buying back the stock at a low price is the profit earned from shorting the stock. In summary, shorting a stock involves removing the stock from the current holder's account and depositing it as a liability in the short seller's account. The broker then sells the stock and converts it to cash. The short seller hopes that the value of the stock will decrease so that he can buy back the stock at a lower price and return it, thus profiting from the decrease in the value of the stock.

To illustrate the application of the shorting stock approach to asset hedging, consider a multinational manufacturing company that relies heavily on steel as its primary raw material. The company is concerned that potential price volatility in the steel market could seriously affect its production costs and profitability. To mitigate this risk, the company decides to engage in asset hedging. The company shorted the same amount of steel quantities owned in the free market, and by

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doing so, the company hedged the risk of volatile steel prices due to market fluctuations. If the price of steel increases, the raw steel material owned by the company appreciates in value, offsetting the cost lost by shorting the steel. On the other hand, if steel prices fall, the company's existing assets may lose money, and the NPV may fall, but these losses are offset by profits from shorting the raw material stock. In this way, the asset hedging strategy helps the company protect its profit margins and asset values and maintain stability in its operations.

Asset hedging can provide a number of benefits to enterprises. The first is that by reducing the impact of market volatility, as explained earlier, enterprises can maintain more predictable and stable financial performance [3]. Secondly, firms can protect their profitability and cash flow and ensure business continuity. Next, asset hedging enables firms to make strategic decisions with greater confidence. With hedging, companies can focus on long-term planning and growth plans without being overly influenced by short-term market fluctuations.

However, it is important to note that asset hedging may not fully eliminate all the risks and limitations [4]. Companies need to carefully evaluate the effectiveness of hedging positions, as the hedge of shorting a stock may not fully offset the potential risk. For example, the lowest price of a stock can only go to zero instead of falling infinitely, but there is no upper limit to the value of the stock, so when the price of raw materials rises more than the lower limit of the fall of shorting raw material stocks, the profit of shorting will not be able to cover the loss from the rise in the cost of raw materials. In addition, there may be costs associated with implementing and maintaining hedging positions, such as transaction fees and margin requirements. In addition, asset hedging requires specialized knowledge and monitoring to ensure compliance with accounting standards and regulatory requirements, so firms may need to pay additional salaries and labor costs to hire professionals to perform asset hedging [5]. All of these additional costs contribute to varying degrees of risk.

3. Cash flow hedging

Another method that companies can use to manage risk is cash flow hedging, precisely a strategy to mitigate the potential impact of fluctuations in future cash flows. It involves the use of financial instruments to lock in expected cash flows, thereby reducing uncertainty and protecting the financial stability of the company. The purpose of cash flow hedging is to ensure a more predictable and stable cash flow position, thereby protecting the company from adverse market conditions.

The rationale behind cash flow hedging is to manage the risks associated with fluctuations in cash flows. Through the use of derivative instruments such as forward and futures contracts [6], companies can effectively hedge against potential fluctuations in interest rates, exchange rates, commodity prices, or other factors that may affect cash flows. This is done to offset the adverse effects of these fluctuations and to provide greater certainty in future cash flow projections.

Similar to asset hedging, one of the key advantages of cash flow hedging is the ability to reduce the risk of unanticipated changes in market conditions by hedging future cash flows, maintaining stable cash flows [3], and minimizing the potential impact of unfavorable market fluctuations on key financial metrics such as earnings and liquidity.

To explain the concept of cash flow hedging, let us consider a supermarket that earns a profit by purchasing vegetables and fruits and selling them. The supermarket is concerned that fluctuations in seasonal rainfall will have an impact on future vegetable yields and thus affect the cost price of the vegetables purchased by the supermarket. To minimize this risk, the supermarket decides to enter into a cash flow hedge.

By entering into a series of future contracts, it locks in the future prices of the fruits and vegetables that it needs to stock. In this way, regardless of the price at the time of the actual transaction, the company is assured of trading at the price determined by both parties in the contract at that time. In

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this case, this hedging strategy protects the supermarket from potential losses caused by unfavorable seasonal fluctuation movements. If production is reduced due to insufficient rainfall during the season, the supermarket is still able to purchase at the contractually negotiated lower price, avoiding losses at the point of purchasing at a higher price and providing greater certainty for its future cash flow forecasts. Losses and provide greater certainty in their future cash flow projections.

By implementing cash flow hedging, the company achieved several objectives. First, it minimized the impact of fluctuations in the external environment on the volatility of market prices and, consequently, on its financial performance. Regardless of market price movements, the company is insulated from potential adverse effects on its revenues. Second, cash flow hedging allows the company to accurately plan and forecast its cash flow requirements, ensuring that the company has sufficient funds to meet its financial obligations and day-to-day operational needs when the trade date arrives.

On the other hand, not all financial risks can be avoided by signing a future contract. Companies that use cash hedging to manage risk need to be aware of the following key points, which can have negative effects on the company if not used properly. First, futures contracts are publicly traded globally, with market intermediaries acting as watchdogs, and the contracts have recognized legal validity and can be easily tracked and monitored with the help of intermediaries. However, there are some products that are less popular and less utilized that may not have a future contract available. In this case, the buyer can only choose to sign a forward contract with a private supplier. The only difference is that a forward contract is a kind of private contract; there is no intermediary in the middle of the transaction process and supervision. There is no intermediary to monitor the transaction process and the supplier's creditworthiness. When market conditions are unfavorable for the supplier, the supplier may refuse to do the transaction even though the contract has been signed, and since the products may be sourced from all over the world and the legal systems of different countries are different, the cost of tracking down the supplier and demanding that the supplier perform the transaction duties may be very high [7].

Secondly, if they do not want to enter into a forward contract, which is a private contract, the buyer can also look for products that have similar price fluctuations to those of the product for which they need to manage the risk and for which there is a future contract to be entered into [8]. This method is called imperfect hedging. The risk of this method is not exactly the same as the original product fluctuations; although their price fluctuations are roughly the same, there are always exceptions to the rule, and when the exception occurs, the risk of loss under the purchaser will need to bear. Third, the fulfillment date of the future contracts is not arbitrarily set, and not every trading day can have the corresponding date of the future contract. The buyer can only choose the contract close to the date of the goods they need, and the price changes experienced in the intermediate time are the risk to be borne. Finally, even if a futures contract for the corresponding product is concluded, it does not mean that it is necessarily risk-free. It is possible that the expected price at the time of signing the contract is much higher than the market price at the time of performance, so in the event that the contract has to be fulfilled, the more significant the difference between the contract price and the price at that time, the greater the loss of cost borne by the buyer.

4. Conclusion

In conclusion, this article describes two different types of hedging, for a total of four different ways to reduce the risk of business operations procurement. On the asset hedging side, shorting stocks was introduced, a method whose core objective is to find stocks with a correlation of -1 [9]. On the cash hedging side, all three methods entail varying degrees of risk and rely on the accuracy of forecasts to make judgments, which, if incorrectly judged or if the historical basis captured is faulty, may lead to

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entering into a contract at an inflated price, which would instead is an increase in purchasing costs, which in turn increases the company's management risk.

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