Effect of Derivative Financial Instruments on the Financial Risk of Enterprises

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Abstract — With the rapid development of social economy and science and technology, the original derivative financial instruments have been unable to meet the needs and development of enterprises. At the same time, due to the impact of economic globalization, the financial market environment is becoming more and more complex and the competition between commodities is becoming increasingly fierce. Therefore, it is necessary to strengthen the financial management of enterprises, constantly update the derivative financial instruments, apply it effectively in the actual financial management of enterprises, and promote long-term and stable development of enterprises. This paper mainly expounds the concept and the risk of derivative financial instruments, and then studies the specific application of the financial management in enterprises and plays its role to maximize.

Keywords - derivative financial instruments; financial management; application research

I. INTRODUCTION

The derivative financial instrument is a financial term, which is characterized by leverage and credit transactions. Enterprises in the development of modernization can be derived from financial instruments to achieve their own business in the financial market development. The tool can realize the effective management of the financial situation of enterprises. The derivative financial instruments are developed in the developed countries, and then it is introduced into our country in the economic globalization. At present, its development is not very mature, but this is the development trend of modern enterprise, which is very important for the modern enterprise to carry out financial management [1].

Since 1970s, in the international financial market, the derivative financial instrument has been the focus of people's attention. As a tool to avoid risk and speculation, the derivative financial instruments are effective tools for financial institutions, non-financial companies, enterprises and investors to hedge management, risk management and asset portfolio management [2]. At the same time, its characteristics of throwing a sprat to catch a herring and the strong profitability of the market in the game to make it a part of the investors to speculate the best choice for profit. With the rapid expansion of derivative financial instruments trading volume in the world, the impact of the macro financial operation and the role of the micro financial management are increasingly reflected. With the development of Chinese financial market, the state of the derivative financial instruments is gradually liberalized, and the derivative financial instruments continue to develop. In the near future, it will become an important tool for the business of our country. The purpose of this research is to use the derivative financial instruments in the financial management of the company. Its significance lies in: On the one hand, it is helpful to exert the function of the derivative financial instruments in the company's financial management in a higher degree and a wider range. Its price is derived from the use of derivative financial instruments for the sale of securities derivatives, the derivative of the new financing instruments to the wide use of T space and flexible and diverse forms of transactions, to provide enterprises with more financing and investment. At the same time, the function of financial derivatives is to increase the diversification of financing instruments, increase the liquidity of the financial system, and reduce financing costs, so as to increase the transparency of the financial assets and financial liabilities, which is beneficial to the enterprise risk transfer and the redistribution of interests. Through the system, the paper analyzes the way and the function of the derivative financial instruments in the process of enterprise financial management. It is helpful for the enterprise to use the derivative financial instruments in a higher degree and a wider range. On the other hand, it is helpful for enterprises to manage the risk of financial derivatives in the process of financial management. The original intention of the design of derivative financial instruments is to create a tool to avoid financial risks, and to eliminate the uncertainty of economic activities by means of risk hedging. It has no value, therefore, derivative financial instruments contain a great risk. In this paper, we study the measurement method, management and control of various risks of derivative financial instruments. It is helpful for the enterprise to manage the risk of financial derivatives [3].

II. THE CONCEPT OF DERIVATIVE FINANCIAL INSTRUMENTS AND THE RISK OF EXISTENCE

Derivative financial instruments are also known as financial derivatives. Its and the basic financial products are mutually corresponding relationship, refers to the establishment in the foundation or the basic variable, the price will be influenced by the price of financial products, and the financial derivative products. Simultaneously, the derivative financial instruments are the, which is based on the original financial instruments such as money, bonds,
stocks, etc., the basic characteristic is the leverage principle and the credit transaction [4]. In the financial markets, there are four kinds of common derivative financial instruments, namely, futures contracts, option contracts, forward contracts, swaps contracts. The risk of derivative financial instruments mainly refers to the enterprise's business in the financial market and it will be influenced by many factors. For example: market changes, policy changes, changes in management, etc., will cause a certain degree of impact on the development of enterprises.

There are mainly three aspects of the risk, that is, the market risk, the market risk refers to the change of some factors and the expected market changes are not the same, it will cause economic losses of enterprises. Market risks generally include the risk of money, interest rates, and price two. For the development of enterprises, the market risk is not predictable. Therefore, enterprises need to continuously enhance their financial management, in order to avoid the impact of market risk on the development of enterprises, while the use of derivative financial instruments will also cause the emergence of market risk. Credit risk and credit transaction is one of the main characteristics of derivative financial instruments, that is, in the development of enterprises, enterprises or other enterprises will be their own credit as a guarantee of transactions. But in the actual business development, often encountered in the contract of a party in the specified time is unable to perform the contract, so the risk of default, including the principal and the replacement of the risk. Therefore, in the enterprise to carry out the actual business, the need to investigate the credit status of the contract, while the use of appropriate derivative financial instruments to avoid credit risk [5].

III. THE CLASSIFICATION OF DERIVATIVE FINANCIAL INSTRUMENTS

A variety of financial instruments can be divided into different categories according to different standards. For example, in accordance with the nature of the transaction can be divided into the forward trading of derivatives and the nature of the derivative financial instruments. In accordance with the transaction methods and features can be divided into the financial forward, financial futures, financial options and financial swaps, according to the basic tool can be divided into equity based derivatives, currency derivatives and interest rate derivatives. Among them, according to the way and characteristics of the transaction is currently the most common way of classification and the majority of the derivative of the research are based on it.

A. Forward Finance

Forward finance refers to the trading parties to buy or sell a financial asset in the future at a certain time in the future to buy or sell a financial asset. Financial forward contracts are usually signed between the two financial institutions or between the financial institutions and their customers. The trade is generally not within the standard exchange, the smaller, the transaction is flexible, and the two sides are easy to be in accordance with their wishes to negotiate the conditions of the contract. Therefore, financial forward contract is a non-standardized contract. Relative to the financial futures contracts, it owns poor circulation. At present, the most basic forward finance has forward foreign exchange contracts and long-term interest rate agreement two categories [6].

B. Financial Futures

Financial futures, the parties to the transaction in the exchange organization, in accordance with the provisions of the trading rules, reached by way of public bidding, in future provisions of delivery, buy or sell the standard of certain quantity and quality of financial instruments combine about. Unlike financial forward, financial futures are standardized about, the parties to the transaction is not affected by the credit, strength limit, as long as the payment of margin requirements can be equal to participate in the auction sale, with extensive and “throw a sprat to catch a herring” leverage effect. At present, the most basic financial futures are three kinds of foreign exchange futures, interest rate futures, and index futures [7].

C. Financial Options

Financial option is the right of the buyer to buy or sell a certain amount of certain financial instruments at a certain date or time in a specific date or time. It includes foreign currency options, interest rate options, stock options and stock index options [8].

D. Financial Swap

Financial swap is a financial transaction that the two parties shall exchange a series of payment for each other at a certain time in the future. Financial instruments used to exchange can be different currencies, also can be in the same currency different interest bearing manner, or in a different currency different interest bearing manner. The basic financial swaps include two categories of currency swaps and interest rate swaps [9].

Figure 1. Financial Derivatives
The risk of interest rate risk is mainly stage risk [11]. In our country, the current interest rate risk is accompanied by a permanent risk. In the current interest rate transition period, it is bound to be a combination of permanent risk, which has long and non-systematic. As long as the permanent risk is present, the interest rate risk is always a problem for enterprises.

A. Hedge to Avoid Risk

Enterprises may be able to damage the property of the insurance company, but the risk of the formation of the price changes cannot be insured. Using derivative financial instruments can hedge the risk of price fluctuation of interest rate, exchange rate, stock price and so on [10].

Hedge is the enterprise in the increasingly competitive market, in order to avoid the market risk caused by price fluctuations, due to the financial fluctuations arising from the financial risk, to avoid the loss of corporate value and shareholder's interests and development. The so-called hedging is to refer to the enterprise to avoid foreign exchange risk, interest rate risk, commodity price risk, stock price risk, credit risk, etc., to specify one or more hedging instruments, so that the fair value or cash flow changes, is expected to offset the whole or part of the fair value or cash flow changes. It can be seen that the main purpose is to avoid the risk of hedging, and in practice, the vast majority of the business is to operate through derivative financial instruments. Hedging refers to a risk management method of hedging the price risk of the net position by using the derivative instruments such as futures, forward agreements, swaps and other financial derivatives. The use of derivative financial instruments in the company's financial management is generally based on the use of different derivative financial instruments to hedge the various risks faced by enterprises. Here, this paper discusses the application of derivative financial instruments from the different risks of enterprises.

B. The Risk Aversion of Interest Rate

The risk of interest rate risk is the risk of the change of the market interest rate. The risk of interest is from the uncertainty of interest change. And the uncertainty of the interest rate change is mainly reflected in the uncertainty of the time dimension. Such as: the change of the economic form, the change of the international interest rate, the floating of the international exchange rate. Further, in accordance with the results of the study of gold, the interest rate risk can be divided into stages of risk and long-term risk. Stage risk refers to the initial interest rate liberalization, commercial banks and enterprises cannot adapt to the market interest rate environment generated by the financial risk, is the market transition period of interest rate risk, with the system and stage. The permanent risk is the interest rate risk, which is usually referred to in the western interest rate management theory, and is different from the stage risk. Permanent risk comes from the uncertainty of market interest rate, which is the inherent interest rate risk in commercial banks and enterprises' asset liability business, which has long and non-systematic. As long as the implementation of market interest rates, it is bound to be accompanied by a permanent risk. In the current interest rate market in our country, the current interest rate risk in our country is mainly stage risk [11].

C. The Risk Aversion of Foreign Exchange

Foreign currency risk is also known as exchange rate risk or currency risk. It is a major international financial risk faced by foreign enterprises. In particular, it is the exchange or conversion of different currencies in different currencies. Because the exchange rate in a certain period of time has unexpected changes, the company's expected future cash flow impact. At the same time, the company has an impact on the market competition conditions, resulting in the company's market value changes, and may change the company's operating cash flow, operating income and operating costs, thereby allowing the company to suffer economic losses [12].

Among them, transaction risk, also known as the exchange rate risk, refers to in the company or enterprise in the use of measure of foreign currency transactions because of fluctuations in the exchange rate and in the settlement caused by the loss or gain, including international trade, foreign currency borrowing, overseas subsidiaries in the local procurement and sales activities. Conversion risk refers to the change of the exchange rate of the currency, the book value of assets, liabilities and losses, etc. Any Multi-National Corporation in the preparation of the world wide unified financial statements, and we must first face the risk. This is a kind of foreign exchange risk according to the provisions of the accounting system, the establishment of a unified financial report of the company's business activities. When the company folded its assets, liabilities, income and expenses of foreign currency in a foreign currency, the exchange rate may cause a Book gain or loss to the company. Economic risk, also known as business risk, refers to the non - expected exchange rate fluctuations in the future of business enterprises to change the future cash flow of a potential risk. The size of the risk depends on the impact of exchange rate changes on the future price, sales and cost of enterprise products. For example, the devaluation of the importing country's currency will inevitably increase the cost of imports, reduce the capacity of the import and export, reduce the export price, or reduce the export volume, which will affect the export business benefits. The economic risk is very big impact on the enterprise.

For enterprises with more foreign exchange business, the use of forward foreign exchange contracts, foreign exchange futures, foreign currency options and currency swaps to avoid a variety of potential foreign exchange risk is undoubtedly the best choice for enterprises.

D. The Risk Aversion of Stock Investment

According to modern portfolio theory, the risk of stock market can be divided into systemic risk and non-systemic risk. Systemic risk is determined by the macro factors and the role of time is long, involving a wide range, it is difficult to circumvent through the method of decentralized investment, so that is not controllable risk. Non system risk is the risk of a specific individual stock (or the distribution of the shares of the stock of the listing Corporation), and the entire market has nothing to do. Investors usually can take
the way to avoid the risk of investment portfolio. Therefore, the non-system risk is also known as controllable risk. While the investment portfolio can largely reduce the risk of non-system, when the whole market environment or some global factors, that is, when the risk of the stock market price will move in the same direction, the stock market is clearly unable to avoid the risk of price changes [13].

V. THE MEANING AND CLASSIFICATION OF FINANCIAL RISK

A. The Meaning of Financial Risk

There are two kinds of knowledge about the financial risk of the enterprise. One is that the enterprise financial risk is due to the uncertain factors in the financial activities of the enterprise, so that the enterprise's financial results and the expected benefits of the deviation, which resulted in the loss of opportunity and potential; two is the financial risk of the enterprise with money to repay the debt maturity of uncertainty. In this paper, the former view of the financial risk referred to as generalized financial risk, the latter view refers to the financial risk referred to as the narrow financial risk. The difference between the two views is that they are different from the connotation and the extension of the financial risk. Financial risk from the perspective of financial risk, the financial risk, that the organization and management of enterprise financial activities of any link in the process of the emergence of the problem, it may bring the results of the financial activities and the expected return. This deviation is generally referring to the reduction of the results of the financial activities, even if the loss of the enterprise, the debt service capacity and profitability. That is to say, the broad financial risks cover the value of the human production and management process and the risk of dealing with the production relations, because the financial activities involved in the production and operation including financing activities, investment activities, capital recovery and income distribution, so the financial risk is also divided into four: financing risk, investment risk, capital recovery risk and income distribution risk. Japanese scholars Onii Limin believes that the whole process of risk throughout the campaign, not only refers to the loss of uncertainty, but also includes the uncertainty of earnings. This view is that the risk may pose a threat to the active body and it may also bring opportunities, belonging to the concept of generalized risk. In the narrow sense, the financial risk is that the financial risk of the enterprise is caused by the operation of the enterprise liability. The center of the risk is the movement of Monetary Fund, which are the starting point of Monetary Fund and the fund of money. Specific performance:

(1) Debt funds have a fixed interest rate and debt maturity, debt management to increase the likelihood of the enterprise cannot repay the debt principal and interest payments.

(2) Under certain conditions of the total funds, increasing the proportion of debt capital, may lead to the decline in corporate credit and capital costs rise.

(3) Before tax profit fell, due to the role of financial leverage, interest rate after tax profit will fall faster, so that the owners of the enterprise to bring adverse.

(4) Excessive debt may result in the bankruptcy of enterprises. Financial risk is caused directly by the liability of the company and the risk of the company's shareholders. The greater the proportion of capital in the capital structure of the company, the more likely that the company has no cash to pay the dividend. This view is a narrow sense of financial risk. Obviously, the financial risk is included in the broad sense of financial risk, which refers to the risk of financing. If all enterprises use equity capital, there is no financial risk.

The goal of enterprise financial management is to maximize the value of the enterprise. In the organization and management of enterprise financial activities, any one aspect and the link of the problem, may form a risk and eventually turn into a loss, resulting in a decline in corporate profitability and solvency. So taking the capital movement in the whole process of enterprise management as the research object, the scope of the financial risk is expanded, it is beneficial to study the risk in the financial operation in a wider field of vision, and it also helps to establish a clear system framework for the practical operation. So the concept of financial risk involved in this paper refers to the broad sense of financial risk.

B. The Classification of Enterprise Financial Risk

Financial risk in different financial environment and financial stage and for different business entities and financial projects has different manifestations and different risk types:

(1) According to the controllable degree of financial risk, it can be divided into controllable risk and uncontrollable risk;

(2) According to the way of diversification, it can be divided into non-dispersible risk and can disperse risk;

(3) According to the state of risk, it can be divided into static and dynamic risk;

(4) According to the level of risk involved, it can be divided into micro risk and macro risk;

(5) According to the main body of the financial management, it can be divided into the owner's risk and the risk of the operator;

(6) According to the sources of risk, it can be divided into external and internal risk;

(7) According to the movement of funds, it can be divided into the risk of financing, investment, and profit distribution.
VI.  THE APPLICATION OF DERIVATIVE FINANCIAL INSTRUMENTS IN THE FINANCIAL MANAGEMENT OF ENTERPRISES

The enterprise financial management mainly includes three parts, including financing, investment, fund and project payment and expenditure. The practical application of derivative financial instruments in the modern enterprise financial management is mainly from the three aspects of the content.

A. The Application of Derivative Financial Instruments in Financing Management

Enterprise financing behavior is to promote the effective development of enterprises, and through various channels to raise funds. The application of derivative financial instruments in the financing management is mainly reflected in the two kinds of tools for the enterprises to carry forward the forward contracts and futures contracts. Forward contract is a relatively easy operation of financial derivative instrument, the contract agreement between the two parties in the future at a certain time in accordance with the contract price of the contract provisions of the corresponding number of financial assets to buy. This kind of financial derivatives is mainly applicable to the listed companies, exists between domestic and foreign currency exchange and currency appreciation or depreciation, will have an impact on the development of enterprises. But through the use of derivative financial instruments, it can quickly focus on all kinds of risks, and effectively avoid all the risks in the investment of enterprises. For example, in the long-term contracts, the exchange rate and interest rates are likely to change with the changes in the international market environment, resulting in the loss of corporate funds, increasing the risk of investment in enterprises. However, after the use of long-term contract derivative financial instruments, the delivery of goods can be extended in the future a certain moment and can effectively avoid all the risks in the investment of enterprises. But through the use of derivative financial instruments, it can quickly focus on all kinds of risks, and effectively avoid all the risks in the investment of enterprises. For example, in the long-term contracts, the exchange rate and interest rates are likely to change with the changes in the international market environment, resulting in the loss of corporate funds, increasing the risk of investment in enterprises. However, after the use of long-term contract derivative financial instruments, the delivery of goods can be extended in the future a certain moment and you can prevent the risk of investment.

B. The Application of Derivative Financial Instruments in Investment Management

The application of derivative financial instruments in the investment management is same as enterprise financing. There are two kinds of tools, namely, forward contracts and futures contracts. In the actual development of enterprises, enterprises to carry out financial management generally use a variety of financial funds to reduce the risk of investment in the portfolio. This method can effectively reduce the investment risk, but cannot prevent the risk of the enterprise system. But through the use of derivative financial instruments, it can quickly focus on all kinds of risks, and effectively avoid all the risks in the investment of enterprises. For example, in the long-term contracts, the exchange rate and interest rates are likely to change with the changes in the international market environment, resulting in the loss of corporate funds, increasing the risk of investment in enterprises. However, after the use of long-term contract derivative financial instruments, the delivery of goods can be extended in the future a certain moment and you can prevent the risk of investment.

C. The Application of Derivative Financial Instruments in the Financial Management of the Project

The management of the fund project payment and expenditure is an important part of enterprise financial management. The application of derivative financial instruments in the financial settlement management mainly has two aspects, that is: the income of the fund project management and expenditure of funds for the project management. That is: the income of the fund project management and expenditure of funds for the project management. This can promote the normal development of the enterprise, but will have a certain degree of impact on the income and expenditure of the enterprise accounts receivable. Especially the international trade enterprises is often by the exchange rate changes, so as to cause adverse impact on the development of enterprises, Especially for the international trade enterprises, often by the exchange rate...
changes, so as to cause adverse impact on the development of enterprises. For example: when the exchange rate is expected to fall in the exchange rate, it can be through the long-term foreign exchange contracts to hedge the accounts receivable, in order to avoid exchange rate changes on the business risks.

VII. CONCLUSION

This paper mainly expounds the concept and the risk of the derivative financial instruments, and then studies the application of it in the development of enterprise financial management. The application of derivative financial instruments in enterprise financial management, can promote the development of enterprises in the financial market, but also to find a new way to use monetary funds, which is conducive to long-term and stable development of enterprises. The application of derivative financial instruments in the financial risk management of enterprises in our country has just started, whether the hardware market environment or software operation experience is relatively weak. However, in the era of rapid development of international financial integration, the application of derivative financial instruments will have considerable development. It is hoped that the application of the derivative financial instruments in the financial management of the enterprises in our country can be developed continuously. We also hope that the relevant research can be more in-depth, and make a greater contribution to the development of derivative financial instruments and derivatives market.

REFERENCES


