Enterprise Financial Investment Risk and Control Path Based on New Normal

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Abstract: Chinese economic level is showing a stable growth trend, and the ability of enterprises to create economic benefits is constantly increasing. In order to obtain more investment returns and economic benefits, some enterprises have chosen to invest idle funds in the financial market. However, during the development of specific financial investment activities, the existence of many factors makes investment risks widespread. If enterprises ignore the control of investment risks, it is bound to affect the results of financial investment and cause serious economic losses. In view of this, scientific application of risk assessment technology is needed to provide basis for enterprise financial investment risk control and realize effective acquisition of enterprise economic returns.

1. Introduction

Thanks to the increasingly close international exchanges, our economic development has made remarkable achievements, the financial industry has also entered a new stage of development, and the development of financial investment activities has injected new vitality due to the impact of the CSRC's plan to restart IPO, etc. However, the investment risks associated with financial investment activities are also showing an increasing trend. Enterprises need to use the effective application of risk assessment technology to correctly recognize the value of risk assessment technology, further control the occurrence of financial investment risks and help enterprises create greater economic benefits.

2. Analysis on the Significance of Financial Risk Control

Since Chinese accession to the International Trade Organization, the economic level has shown a trend of gradual improvement. Under this situation, the profitability of enterprises has increased significantly, while some enterprises have chosen to further increase their economic strength through financial investment. However, the development of financial markets is often accompanied by opportunities and crises. If enterprises neglect risk assessment and control during their financial investment activities, it will seriously affect the economic benefits of enterprises. Therefore, it reflects the importance of risk management in financial activities, and the implementation of risk assessment technology plays a vital role in controlling financial investment risks. As a crucial link in the process of financial investment risk control, risk assessment plays a decisive role in the management effect and safety of enterprise financial investment. Work to carry out high-quality and high-efficiency financial investment risk assessment can help enterprises to correctly understand the seriousness and harmfulness of investment risks, effectively avoid and control risks for the development of financial investment activities of enterprises, and improve the return on capital of enterprises. The so-called risk assessment refers to the analysis and assessment of the risks existing during the activities and the possible impacts of risk events on the financial investment activities of enterprises by means of relevant methods and technologies before or during the financial investment. Reasonable application of risk assessment technology can help enterprises to specifically assess the risk value during financial activities and clearly measure the loss and impact of enterprise investment funds during financial activities. Therefore, for enterprises, the application of risk assessment technology plays a vital role and value in ensuring the economic benefits of enterprises and maintaining a stable and long-term development trend.

3. Analysis on Risk Control Path of Financial Investment

3.1 Pay Attention to the Application of Risk Assessment Technology

3.1.1 Mean Value-Variance Measurement

The size of uncertain factors directly affects the size of investment risk, and for the determination of the size of uncertain factors, it can be calculated according to the expected deviation of the loss distance, i.e. risk degree. However, the calculation and measurement of the current investment risk degree can be guaranteed with the help of indexes such as coefficient of variation, room difference and standard deviation [1]. According to the different economic conditions of the enterprise, the differential estimation of the future income of the asset is carried out, and each time the income estimation is carried out, there is a unique probability. At this time, the weighting of different estimation probabilities is the mathematical expectation, namely:

$$E(x) = \sum_{i=1}^{n} x_i p_i$$

The expected return variance formula is:

$$\sigma^2 = \frac{1}{n} \sum_{i=1}^{n} [X_i - E(X)]^2$$

The standard deviation is: $\sigma = \sqrt{\dfrac{1}{n} \sum_{i=1}^{n} [X_i - E(X)]^2}$

The standard deviation can be used to measure the deviation degree between the average value and the measured value. The larger the deviation, the larger the standard deviation will be, which means the greater the risk probability during the financial investment of the enterprise. Therefore, based on the premise of equal mean value, the investment risk can be measured by standard deviation [2].

If the mean values are similar, the comparison of data can be directly and visually compared by standard deviation. If there is a big difference between the data generated during the two groups of investment activities, the comparison of data dispersion degree needs to be calculated by means of coefficient of variation, and the standard deviation divided by the expected return efficiency is equal to the coefficient of variation. Under normal circumstances, the index reflected by the coefficient of variation is the risk of financial investment activities. If the coefficient of variation is larger, it means that the risk of financial investment of enterprises is lower. Therefore, during the period of investment activities, enterprises need to deeply analyze the coefficient of variation of each investment target, and the smaller the coefficient of variation is, the lower the probability of investment risks will be, helping enterprises to strengthen the risk control effect.

For non-systematic risks, the diversification of investment risks can be realized by means of investment portfolio, and the relationship between investment targets in the portfolio process directly affects the effectiveness of enterprise investment risk diversification. If the investment portfolio of an enterprise has a negative correlation, it means that this investment form can offset the investment risks to a certain extent and achieve the purpose of reducing risks. If the form of enterprise investment portfolio is positive correlation, it means that the fluctuation of enterprise investment will increase, which will increase the risk of investment [4]. For different forms of investment portfolios, the existence of financial risks is reflected in the covariance differences among various portfolio forms. The covariance is used to measure and evaluate the financial investment activities carried out by enterprises. The covariance formula is:

$$\text{cov}(X,Y) = E[X - E(X)][Y - E(Y)]$$

The application of covariance is mainly used to describe the correlation between investment targets, including zero correlation, negative correlation and positive correlation. The plan of the degree of connection between investment targets can be reflected by the correlation coefficient, and

the correlation coefficient formula is:

$$\rho_{xy} = \frac{\text{cov}(x, y)}{\sigma_x \sigma_y}$$

If an enterprise chooses n investment criteria for combination during the financial activities, the formula of variance and expected return rate is:

$$E(X) = \sum_{i=1}^{n} x_i p_i$$

$$\sigma_i^2 = \sum_{i=1}^{n} X_i^2 \sigma_i^2 + \sum_{i=1}^{n} \sum_{j=1}^{n} X_i X_j \text{cov}(X_i, X_j) \ \ (i \neq j)$$

Under normal circumstances, the investment target of an enterprise during its financial investment is selected as securities, so the expected return rate of its investment target can be based on the average of the previous return rate of the investment target. The expected return rate of the investment target is determined by estimation. By estimating the standard deviation, we can clearly grasp the risk of the enterprise itself.

3.1.2 β Coefficient Measurement Method

For the development of financial investment activities of enterprises, whether there is systematic risk in the relatively selected investment target is measured. The risk description can be reflected by the β coefficient between the market return rate and the expected return rate. If the β value is greater than 0, the change direction of the investment target and the change of the market return rate show the same trend. If β value is less than 0, it indicates that the change of investment target and the overall market return rate show a change trend in the opposite direction. If β value is greater than 1, it indicates that the investment target shows a larger development fluctuation compared with the overall market yield. If the β value is less than 1, it indicates that the development trend of the investment target shows great fluctuation. If β is equal to 0 after calculation, indicating that there is no systematic risk in the investment standard, the calculation formula of β_i for the investment standard is as follows:

$$\beta_i = \frac{\text{cov}(R_i, R_m)}{\sigma_m^2} = \frac{\rho_{im} \sigma_i}{\sigma_m}$$

In the specific calculation process, the calculation of β value needs to use the formula $R_i = R_i + \beta(R_m - R_f)$ (Rm-Rf), where R_i represents the expected rate of return, including combined bidding and single bidding; R_m represents the average market return rate; R_f stands for risk-free interest rate, which is usually expressed by short-term treasury bond interest rate.

3.1.3 VaR Measurement

VaR (also known as the value at risk) method mainly refers to the fact that the value at risk is the largest loss if the investment portfolio selected by the enterprise suffers from loss on the premise that there is no abnormality in market changes. In other words, the VaR method refers to a certain investment portfolio chosen by an enterprise based on the confidence level α, which is likely to incur losses within a certain period of time, of which the value at risk is the maximum amount of losses. For the application of VaR method, the probability distribution of the value of the financial investment bid portfolio is the core, while the main idea of this method is to make in-depth analysis based on the past changes of the bid portfolio value, and to judge the future change trend based on this. For the application of VaR measurement method in enterprises at present, the calculation

formula is as follows:

$$P(\Delta P > VaR) = 1 - \alpha$$

Among them, P represents the probability that the value of the investment assets of the enterprise exceeds the standard limit; ΔP represents the losses that may occur during the investment asset holding period in the future; α represents the confidence level given; VaR is based on The value of an asset at risk given a confidence level. There are different calculation methods for investment portfolio and single investment portfolio, and in order to ensure the accuracy of the calculation results, the conditions are set: the market ratio will obey the normal distribution in a very short time. ① VaR measurement shall be applied to single investment standard. If an enterprise chooses a single investment standard, assume that V_0 is the initial value of the investment standard, and r is the return rate of this investment standard during the holding period. at this time, the return rate is subject to normal distribution, meaning $V_1 = V_0(1+r)$. However, this investment is marked in the final stage. The lowest value is expressed as $V_t^* = V_0(1+r^*)$, and the lowest rate of return is r^*. ②Portfolio application VaR. If the investment standard portfolio selected during the financial investment activities of the enterprise includes n kinds of assets. Where r_i represents the return rate of the i-type asset, ω_i represents the full red of the i-type asset, ω_t represents the weight vector, and covariance matrix represents Σ, then the formula for applying VaR to the investment portfolio is:

$$VaR = V_0 Z_\alpha \sqrt{\omega_T \omega}$$

3.1.4 Risk Map Evaluation Method

For the application of risk map evaluation method, it is mainly a measurement method based on risk severity and risk occurrence probability. The development of related economic business of enterprises is directly affected by serious risks. The so-called probability of occurrence refers to the probability of occurrence of risks during the financial investment activities of enterprises, and analyzes the development of financial investment activities of enterprises at the present stage, in which the risk factors specifically include natural, political, economic and other factors. However, the application of risk map evaluation method is mainly to carefully count the severity and possibility of risks and draw scientific risk maps based on this. For the drawing of risk map, four quadrants of specific first possibility, high possibility, low severity risk and high severity risk [5]. If an enterprise's financial activities fall into the high-risk and high-severity risk quadrants after analysis, it will seriously affect the return on capital of the enterprise. It is necessary to take reasonable measures to avoid risks in combination with specific situations, or to directly implement exit strategies to reduce the losses and impacts caused by the risks of enterprise's financial investment activities.

3.2 Reasonable Choice of Risk Assessment Technology

According to the assessment and analysis of investment risks in different industries and industries, the above assessment techniques can be reasonably selected in combination with specific conditions. If the same industry, the same industry investment standard risk assessment, at the same time, the application of the above several assessment techniques, it is very likely to obtain different assessment results, need to be combined with the actual situation to further deepen the risk assessment. Enterprises need to make it clear that for the application of β coefficient evaluation technology, its emphasis is on the evaluation of the overall risk of the market, focusing on the evaluation of the systematic risk existing in the investment standard of enterprises. In view of this, if an enterprise puts its eyes on the overall market fluctuation and single investment target during

the financial activities, it is suggested to use β coefficient evaluation technology to help the enterprise clearly grasp the risks and effectively control the investment risks.

3.3 Combination of Qualitative and Quantitative Analysis

In view of the development of enterprise investment bid risk assessment, it is suggested to apply quantitative and qualitative analysis methods during the specific assessment period. In the actual investment analysis, firstly, the risk in the investment standard is measured by quantitative analysis method, and then the comprehensive analysis of the investment standard risk is carried out by qualitative analysis tools. For the application of qualitative analysis methods, it specifically includes risk graph, risk management score, risk degree evaluation and other methods. The application of risk graph analysis method is relatively common, and enterprises can reasonably apply this analysis method in combination with specific conditions.

4. Conclusion

To sum up, the efficiency of corporate financial investment is directly affected by the application of investment risk assessment technology, which is related to the safety and performance of corporate investment assets. In view of this, enterprises need to correctly recognize the application value and significance of risk assessment technology, and reasonably apply risk assessment technology in combination with the follow-up to matters needing attention, so as to help enterprises reduce and avoid financial investment risks and realize the acquisition of enterprise investment returns and economic benefits.

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