Research On the Theoretical Framework and Strategy of Enterprise Risk Management from The Perspective of Economic Management

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Abstract. From the perspective of economic management, the theoretical framework and strategy of enterprise risk management are deeply explored in this paper. As the global economic environment is increasingly complex and uncertain, the risks faced by enterprises are increasingly diversified and complex. Therefore, effective risk management is very critical to the survival and development of enterprises. This paper first sorts out the theoretical basis of enterprise risk management, including system theory, information asymmetry theory, value management theory and so on, and then constructs a comprehensive theoretical framework of risk management. Then we analyze the main types of risks faced by enterprises, such as market risk, credit risk, operational risk, strategic risk and so on, and discuss the potential impact of these risks on enterprise management. Then focus on exploring the strategies and methods of enterprise risk management, including risk identification, risk assessment, risk response, risk monitoring and other key links, and come up with a set of systematic risk management process. At the same time, it also discusses the relationship between enterprise risk management, corporate governance and internal control, and emphasizes the importance of establishing and improving the risk management culture. Finally, through the case study, we summarize the successful experience and best practice of domestic and foreign excellent enterprises in risk management, so that domestic enterprises can learn from the risk management strategies and methods. This study aims to provide theoretical guidance and practical reference for enterprises to build a scientific and effective risk management system, so as to help enterprises achieve sustainable development in the complex and changeable economic environment.

Keywords: Enterprise risk management; Theoretical framework; Risk strategy; Economic management; Sustainable development.

1. Introduction

The complex changeable global economic environment, the risks of enterprises continuously become more and more complex, so the enterprise survival and development to be effective, risk management has become the key. Stand in the perspective of economic management, this paper further to explore the theory of enterprise risk management framework and strategy, to build a scientific and effective risk management system for enterprises to provide the reference in the guidance of the theory and practice.

The global economic situation has become increasingly volatile in recent years and there are more and more uncertain factors. The 2023 Global Risks Report released by the World Economic Forum shows that the cost-of-living crisis, natural disasters and extreme weather events, geo-economic confrontation and so on will be the most serious global risks in the next two years, which will have a huge impact on the business environment of enterprises. In addition, with the deepening of digital transformation, enterprises also have to face new risks such as network security and data privacy. In such an environment, enterprises need to establish a comprehensive and systematic risk management system to deal with various potential threats.

There are many theoretical foundations of enterprise risk management, such as system theory, information asymmetry theory, value management theory, etc. This study takes the lead in sorting out them and constructing a comprehensive risk management theoretical framework. Then, this study analyzes the main risk types faced by enterprises, such as market risk, credit risk, operational risk, strategic risk and so on, and explores the potential impact of these risks on enterprise management.

In addition, this study focuses on exploring the strategies and methods of enterprise risk management, covering the key parts of risk identification, risk assessment, risk response and risk monitoring, and finally puts forward a set of systematic risk management process.

Large and medium-sized enterprises are the main focus of this paper, and these enterprises play an important role in the national economy. According to the data of the National Bureau of Statistics, the total profit of industrial enterprises above designated size in 2022 will reach 8.407.75 billion yuan, down 4% compared with the previous year. This data shows the challenges faced by enterprises in the current economic environment, and also highlights the necessity of strengthening risk management. Therefore, this paper aims to provide practical risk management methods for enterprises by systematically studying the theoretical framework and strategies of enterprise risk management, so that enterprises can develop sustainably in the complex and changeable economic environment.

2. Theoretical basis of enterprise risk management

2.1. Theoretical development of enterprise risk management

The development of enterprise risk management theory has gone through many stages. The earliest risk management focused on insurance and financial risk. In the 1960s, the modern portfolio theory was put forward, which laid the foundation for quantitative analysis of risk management.

Since the beginning of the 21st century, the theory of enterprise risk management has changed to the direction of comprehensive risk management. In 2004, the United States COSO (sponsor Committee under the Anti-False Financial Reporting Committee) issued the "Enterprise Risk Management - Integration Framework", which marked the maturity of enterprise risk management theory. This framework proposed eight elements of enterprise risk management: internal environment, goal setting, event identification, risk assessment, risk response, control activities, information and communication, and monitoring.

In recent years, with the development of big data, artificial intelligence and other technologies, the theory of enterprise risk management has further developed towards intelligence and digitalization, such as using machine learning algorithm to do risk prediction and assessment, and using blockchain technology to improve the transparency and traceability [16] of risk management.

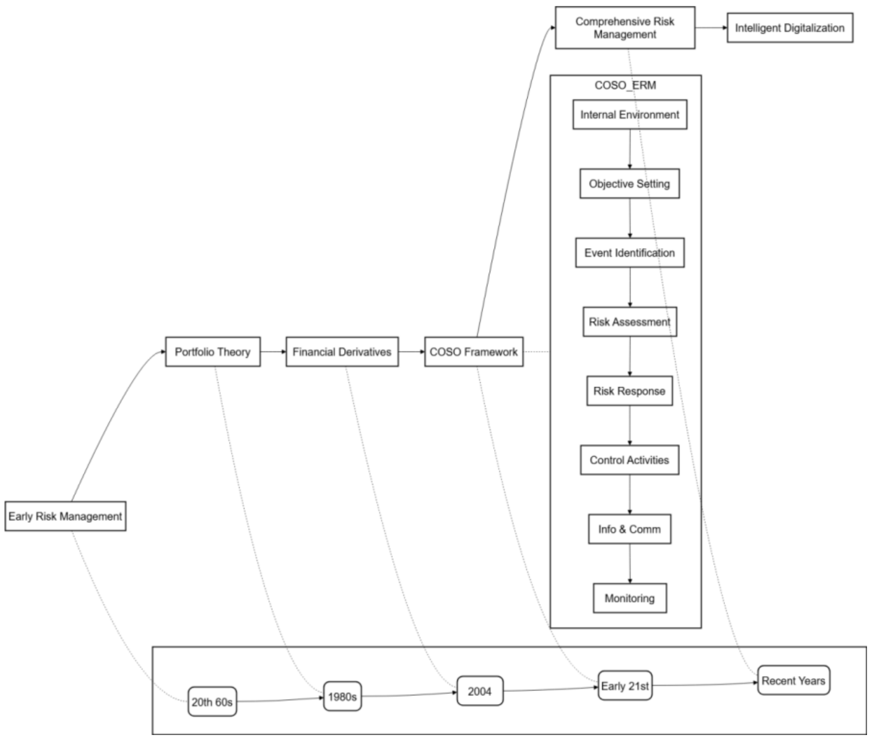

Figure 1 Development process of enterprise risk management theory

2.2. Enterprise risk management from the perspective of economic managements

From the perspective of economic management, enterprise management includes an important part of enterprise risk management and is closely related to enterprise strategic planning, resource allocation, performance evaluation, etc. From this perspective, enterprise risk management is not only a defensive measure but also a way [10] to create value.

From the perspective of economic management, enterprise risk management focuses on the following aspects: first, it is necessary to balance risk and return, that is, enterprises seek the best balance between risk taking and value creation. Second, the efficient allocation of resources, because of the risk management can make enterprise better allocate limited resources to improve resource utilization efficiency. Third, it should be combined with corporate governance. As risk management becomes an important part of corporate governance structure, it can improve the overall management level of enterprises. Fourth, it should have a strategic orientation, because risk management and corporate strategy are closely linked to support enterprises to achieve long-term development goals.

Standing in the economic management perspective, if enterprises can effectively carry out risk management, management efficiency will be enhanced, anti-risk ability also will enhance and the sustainable development goal can be achieved, so the risk management into the enterprise overall economic management system is inevitable in the development of modern enterprise management.

3. Theoretical framework of enterprise risk management

3.1. Enterprise risk identification

The first step of enterprise risk management is risk identification and the whole risk management process is based on this. It is necessary to identify and describe various internal and external risk factors that may affect the realization of enterprise goals. Such as market risk, credit risk, operational risk, strategic risk, legal risk and so on are all within the scope of consideration.

The main methods of risk identification include:

1. Historical data analysis: analyzing past risk events can predict future risks.
2. Expert survey method: invite internal and external experts for risk assessment and discussion.
3. Brainstorming: organize a collective discussion among relevant personnel to identify potential risks.
4. Process analysis: identify the risk points by analyzing each business process of the enterprise.

SWOT analysis: analyze the strengths, weaknesses, opportunities and threats of the enterprise, and identify potential risks.

In today's complex economic environment, enterprises need to pay special attention to emerging risks such as cybersecurity risks and climate change risks. PWC's 2023 Global Risk survey report shows that 67% of the surveyed enterprises feel that cybersecurity is one of the most critical risks in the next 12 months, and enterprises should be open to all sides when identifying risks to detect new risk signals [8] in time.

3.2. Enterprise risk assessmentg

The identified risks will be quantitatively or semi-quantitatively analyzed by risk assessment on the possibility and potential impact of the identified risks. This process aims to provide a basis for the formulation of risk response strategies and help enterprises determine the priority of risk management [12].

Risk assessment usually includes the following steps:

1. Determine assessment criteria: Assessment criteria that include the likelihood of the risk occurring and the degree of impact.
2. Risk analysis: conduct a qualitative or quantitative analysis of each identified risk.
3. Risk rating: according to the results of risk analysis, the risks are ranked.

Risk matrix method, scenario analysis method, Monte Carlo simulation and so on are commonly used risk assessment methods, among which the risk matrix method is relatively simple, it depends on the evaluation of risk occurrence probability and impact size of risk into different levels [1] of high and low.

The following is a simple example of a risk matrix:

Table 1 Sample risk matrix

Likelihood/Impact	Low impact	Medium impact	High impact
High probability	Medium risk	High risk	High risk
Medium chance	Low risk	Medium risk	High risk
Low likelihood	Low risk	Low risk	Medium risk

When assessing risks, enterprises should consider the interconnectiveness between risks, because the World Economic Forum report shows that one of the most obvious characteristics of global risks in 2023 is the high degree of interconnectiveness between risks. For example, climate change risks and economic and social risks affect each other, and enterprises should consider the chain reaction and comprehensive impact of risks in a systematic way when assessing risks.

3.3. Enterprise risk response

Based on the results of risk assessment, enterprises select appropriate strategies and methods to deal with risks, that is, risk response. Its purpose is to control risks within the acceptable range of enterprises and achieve a balance between risks and benefits. Common enterprise risk response strategies are as follows:

1. Risk aversion: simply avoid activities or situations that are risky. This strategy is very suitable for such situations with high risks and low returns.
2. Risk transfer: transferring risks to third parties, such as purchasing insurance, outsourcing, etc., which can be used by enterprises to spread risks [7].
3. Risk mitigation: reducing the probability of risk occurrence or reducing its impact through certain measures is one of the most common strategies in risk response, such as building internal control systems and implementing [2] emergency plans.
4. Risk acceptance: Some risks are unavoidable or too costly to avoid, so enterprises may choose to accept and bear these risks, which is more common in low-impact risks.
5. Risk utilization: innovating or adjusting strategies to turn risks into opportunities to gain competitive advantages.

When choosing a risk response strategy, an enterprise should consider the nature of the risk, its own risk tolerance, cost-benefit analysis and other factors, and formulate a detailed response plan, clarifying the responsible person, schedule and resource allocation.

According to Deloitte's 2023 Global Risk Management survey, 62% of the surveyed enterprises said that they have increased their investment in risk management due to the increasingly complex risk environment, which indicates that enterprises are paying more and more attention to risk response, and they need to continuously optimize and adjust their risk response strategies according to their own conditions and external environment changes to achieve a dynamic balance of risk management.

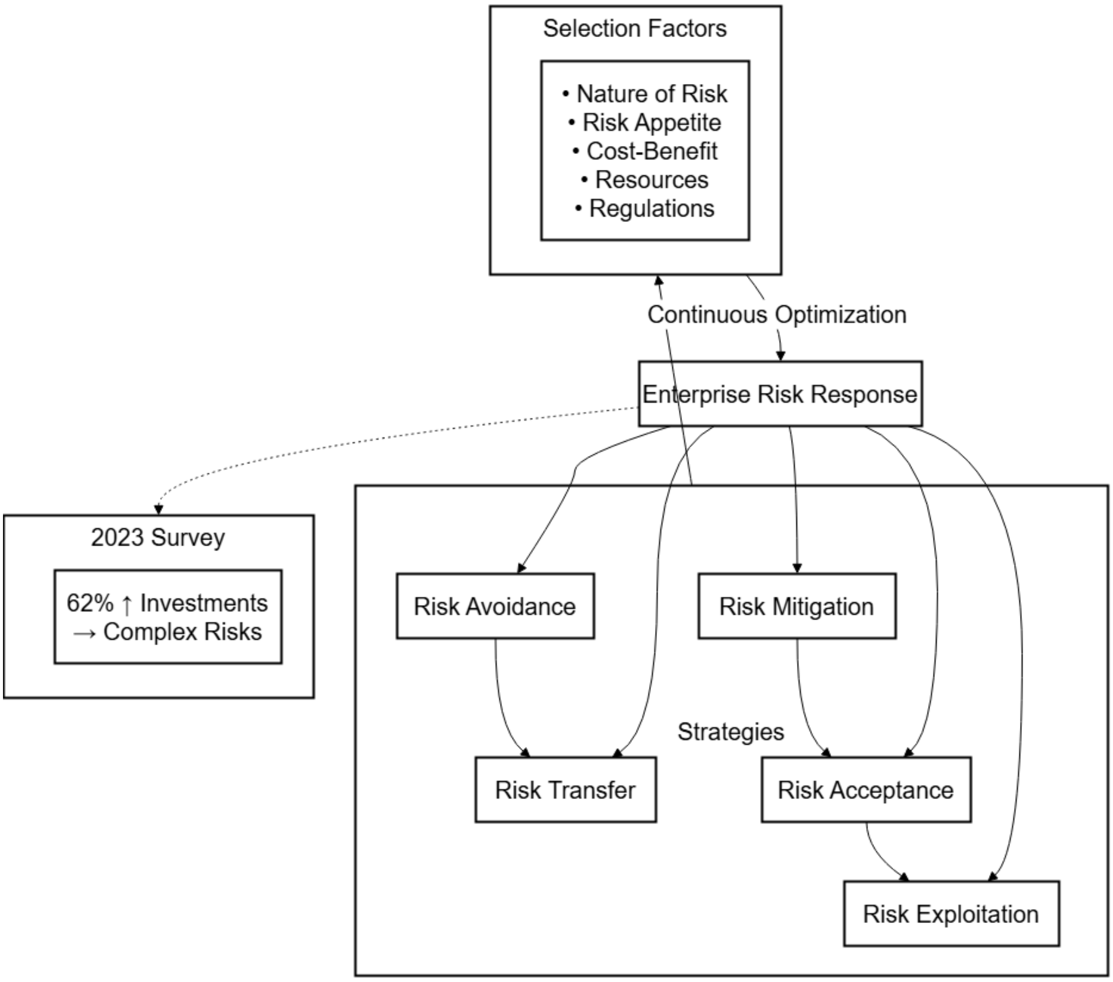

Figure 2 Enterprise risk response strategy framework

3.4. Enterprise risk monitoring

As the last link in the process of enterprise risk management, risk monitoring is a continuous process, which needs to continuously track and evaluate the identified risks, the risk response measures taken and the whole risk management process. If the risk monitoring is effective, it can help enterprises discover new risks in time and evaluate the effectiveness of risk response measures, and provide a basis [18] for the adjustment of risk management strategies.

The main contents of risk monitoring include:

1. Key risk indicator (KRI) monitoring: set and monitor indicators that can reflect the main risk status of the enterprise.

2. Risk reporting system: establish a regular risk reporting mechanism to report the risk status to the management and the board of directors.

3. Tracking of risk response measures: to evaluate the implementation and effect of the risk response measures taken.

4. Identification of emerging risks: continue to pay attention to changes in internal and external environment and timely identify new risks.

5. Assessment of risk management process: the effectiveness of the whole risk management process needs to be regularly evaluated and necessary adjustments made.

In order to achieve effective risk monitoring, enterprises can adopt the following methods:

1. Establish a risk dashboard: visualize the risk status and trends of the enterprise.

2. Big data and artificial intelligence technology are used to monitor and analyze risk data in real time, so as to improve the timeliness and accuracy [14] of risk warning.

3. Conduct internal audit: evaluate the effectiveness of risk management through independent internal audit.

4. Establish a risk culture: cultivate the risk awareness of all employees and encourage them to take the initiative to report risks.

KPMG's 2023 Global Risk Report shows that 73% of respondents plan to increase investment in risk monitoring technology in the next three years. This shows that enterprises are gradually realizing the importance of risk monitoring in the whole risk management process, because if risk monitoring can be carried out continuously and effectively, enterprises can achieve a closed loop of risk management and continuously improve the effectiveness of risk management. With continuous and effective risk monitoring, enterprises can achieve a closed loop of risk management and continuously improve the effectiveness of risk management.

4. Enterprise risk management strategy research

4.1. Establish a sound organizational structure for risk management

In the current complex and volatile economic environment, enterprises need to establish a sound risk management organizational structure if they want to develop sustainable development. Because data from the China Enterprise Confederation show that by 2022, few Chinese enterprises (less than 40%) have special risk management organizations, so enterprises need to build a top-down risk management organizational structure. First, set up a risk management committee in the board of directors to formulate the overall risk management strategy and policy of the enterprise, and then let the senior management have a chief risk officer (CRO) to fully manage the daily risk management of the enterprise, and then set up a special risk management department with professional risk management talents to do risk identification, assessment, monitoring and reporting and other specific affairs. Finally, we set up risk management posts in all business departments to form a comprehensive risk management network. Such a multi-level and all-round organizational structure can ensure the effective implementation of risk management and improve the ability of enterprises to deal with various risks.

4.2. Build a comprehensive risk management culture

An important foundation for enterprise risk management is to build a comprehensive risk management culture, which McKinsey's 2023 survey report shows that more than 75% of enterprises feel is critical to long-term success. If an enterprise wants to build a comprehensive risk management culture, it must start from the following aspects: first, senior managers must establish risk management awareness and integrate this concept into the strategic decision-making and daily operation of the enterprise. Secondly, it is necessary to strengthen the risk management training to enhance the risk awareness and management ability of all employees. Third, it is necessary to improve the risk management system and process and clarify the management responsibilities of each department and each position. In addition, enterprises also need to establish a risk management incentive mechanism, put risk management performance into the employee assessment system to stimulate employees to actively participate in risk affairs. Finally, by creating an open and transparent communication environment and encouraging employees to report and share risk information in a timely manner, a corporate culture of "everyone pays attention to risk, everyone manages risk" can be gradually formed in the enterprise and the overall risk management level will also be improved [11].

4.3. Optimize the risk management process

If enterprises want to improve the efficiency and effectiveness of risk management, the key is to optimize the risk management process. PWC 2022 research report shows that more than 60% of enterprises regard optimizing the risk management process as the top priority in the next three years, so enterprises need to build a set of systematic and standard risk management process. In the risk identification stage, enterprises should use a variety of methods such as brainstorming, Delphi method, scenario analysis and so on to comprehensively identify various potential risks. When entering the risk assessment stage, enterprises need to use qualitative and quantitative methods to scientifically evaluate the occurrence probability and potential impact of risks. In the risk response stage, enterprises formulate corresponding strategies such as risk avoidance, transfer, mitigation or acceptance according to the results of risk assessment. In the last stage of risk monitoring, enterprises should establish an effective risk monitoring mechanism, regularly evaluate the effect of risk management and timely adjust the strategy. In this way, the risk management process is constantly improved and optimized, and the enterprise's risk management can be more targeted and effective, so as to better cope with various risk challenges.

4.4. Use advanced technologies to improve risk management capabilities

In the digital era, an important trend of enterprise risk management is to use advanced technologies to improve risk management capabilities. Deloitte's 2023 survey report shows that more than 80% of enterprises plan to increase investment in risk management technologies in the next three years. Therefore, enterprises need to actively explore and apply a variety of advanced technologies to improve their risk management capabilities [17].

5. Conclusion

From the perspective of economic management, this study deeply explores the theoretical framework and strategy of enterprise risk management, which can provide theoretical guidance and practical reference for enterprises to build a scientific and effective risk management system. The research shows that in the current complex and changeable economic environment, enterprise risk management is an important factor related to the survival and development of enterprises. If enterprises improve the organizational structure of risk management, build a comprehensive risk management culture, optimize the risk management process and improve the risk management ability with the help of advanced technology, they can properly cope with various risk challenges and achieve sustainable development.

Enterprise risk management is dynamic and continuous, enterprises should constantly adjust and improve the risk management strategy according to the changes of internal and external environment, and in the future, enterprises should pay more attention to the combination of risk management and enterprise strategy, integrate risk management into the creation of enterprise core value, in addition, enterprises should broaden the international vision of risk management. Take the initiative to learn from international advanced experience to improve their risk management level. Only in this way can enterprises maintain their competitive advantage and achieve long-term steady development in the context of an increasingly complex global economic environment.

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