

A Domestic and Foreign Literature Review on the Risk Prevention and Control of Logistics Project Management

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Abstract: Many risks emerge in logistics projects. These risks pose a direct or indirect threat to the results of these projects. In China, project management has only recently been introduced to the logistics industry, so little research has been conducted on the risk management of logistics projects. Studying domestic and overseas logistics project management, risk prevention and the control of projects, risk prevention and the control of logistics project management provides very helpful references for the design and introduction of risk control mechanisms for logistics project management. At present, the study of risk prevention and control of logistics projects entails risk prevention and the control of third-party logistics projects, as well as logistics park construction projects, among others. Summarizing risk prevention and control systems helps the future study of the risk control mechanisms of logistics project management. This article concentrates on the content, methods and conclusions of domestic and overseas risk prevention research and the control of logistics project management, and examines the latest research situation.

Keywords: Logistics Project, Risk Management, Risk Prevention and Control, Third-party Logistics Project, Logistics Park Construction Project

1. Introduction and research method

With the increasing market competition and continuous development of economic globalization, there is a growing demand for logistics services. As a further management model, project management has been introduced into the logistics industry, which can reach the individual with diversified requirements. As a relatively high-risk service industry, the implementation of project management in the logistics industry can not only effectively prevent and control risks and improve the level of logistics management, but can also promote the smooth and healthy development of logistics enterprises. In this paper the local context mainly refers to China and the foreign or abroad environment mainly addresses regions outside of China.

Risk management, as an indispensable technology in the modern project management process, originated in Germany. It began to emerge in the United States in the 1930s and became a separate discipline in the 1950s. It developed rapidly in China in the mid-1980s and was applied to project management. Every project has some uncertain risks. With the introduction of project management technology into the logistics industry, the importance of logistics project risk prevention and control is becoming more prominent. Because of the particularity of the logistics industry, the effective prevention and control of the risk of logistics projects to achieve the goal of logistics projects has become a hot issue in modern society.

The research method followed in this paper is largely exploratory and essentially presents the results of an exploratory literature review on domestic and overseas risk prevention research as well as the control of logistics project management. The research aim for this paper was then also to compare aspects of logistics project management research in the Chinese and non Chinese environments. The rest of the paper is presented along the lines of some aspects of logistics project management in the local Chinese context. This is followed by a section where similar aspects from a more international or Western context are addressed. Finally some conclusions and comparisons in terms of logistics project and risk management for these two contexts, as far as can be gleaned from the current literature

review, are presented.

2. Research review abroad: aspects of project and risk management- Western and non-Chinese view

The theory of project management originated in Western countries in the 1950s. After the 1980s, information technology developed rapidly. The application areas of project management extended from national defence, aerospace and construction to the financial, pharmaceutical, electronics and information industry, government departments and other management areas.

Logistics project management

In the late 1990s, foreign scholars outside of China began to apply project management theory to the logistics industry. Caron and Marchet, for example, introduced a stochastic approach to project planning in the transportation planning of logistics enterprises. Poppendieck also suggested that if logistics design projects, logistics projects and project management are researched in conjunction with each other, project management will become an innovative mode of logistics management.

Western research and the analysis of logistics project management and control seem to be more comprehensive. The following reflects this to some extent: Yukl discussed the importance of economic project leadership from the perspective of project leadership. Rand put forward project key points of control based on the basic project management theory. Ravi and Tiwari studied the method of logistics project goal realization together with network analysis (ANP) and zero programming (ZOGP). Williams and Heins, Mobey and Parker and other authors put forward the corresponding risk prevention and control methods. Budd and Cooper applied the theory to put forward the corresponding risk prevention and control methods. Budd and Cooper [programming (ZOGP). Williams and Heins [ISTICS management. and Wang used fuzzy mathematics theory to select and evaluate logistics supply chain projects, and divided supply chain management into three stages: strategic objective analysis, system analysis and group decision making. Boyce discussed the necessity of project performance verification from the project performance level.

Foreign scholars outside of China have conducted in-depth research on third-party logistics project management, especially on cost management: In terms of the content, Lieb, Randall, Murphy and Poist and Richard F Poist Knemyere, Corsi and Murphy studied third-party logistics. They focused on service contents, the main functions and development requirements, development direction, the success factor and how to increase customer satisfaction. They pointed out that the integration of transportation, packaging, warehousing, inventory and circulation declaration is the future development direction of third-party logistics projects. Logistics project development gradually presents the "project" features. Huiskonen and Pirttila studied the coordination mechanism between enterprises and logistics service providers, pointing out that enterprises need to establish cooperative relations with third-party logistics services, and recommended that both sides need to establish a project team to lay the foundation for the introduction of project management. Papadopoulou and Macbeth divided the evolution of third-party logistics projects into different phases: introduction, awareness, demand, integration and differentiation. Binshan and Linetal studied the cost of a logistics project with the activity-based costing method. Sanjuan and Froese argued that it is possible to achieve a multiplier effect by analyzing project cases that have already been implemented, summarizing project evaluation indicators and introducing third-party logistics project management.

Project management risk prevention and control aspects

Since the 1970s, project management has realized the development of globalization and diversification, and has carried out rich research with regard to project management risk prevention and control aspects.

Foreign scholars again seemed to study project risk management from both qualitative and quantitative perspectives. Tyebjee and Bruno were the first researchers to use factor analysis and the questionnaire approach to study investment projects in the USA, and to establish a risk assessment model. Tah explored the source-to-consequences of the entire risk and classified the risks by combining the principles of the risk-decomposition structure. Wirba summarized the findings of Tah, Cooper and Chapman, and classified risks by means of the risk decomposition hierarchy (HRB). Kaming, Olomolaiye, Holt and Harris conducted research on cost risk from the starting point of high-rise construction projects in Indonesia, and then pointed out that the impact of project costs was the most important factor in material price volatility. Jaafari pointed out that risk analysis and management should not be separated from the project. Throughout the project process, the risk assessment goal should not only be scheduled delivery and a reasonable budget, but also meeting or exceeding the business objectives of the parties. Wideman studied the environmental risks of the project and the nature of project risk, and proposed a risk mitigation method.

More advanced risk analysis models and methods have been introduced to quantitative analysis as indicated here: Tummala and Burchett used the Risk Management Procedure to analyze cost risk. Jovanovic studied the uncertainty of the environment under investment project analysis, combined with the sensitivity analysis method, which led to good results in the practical application. Dey combined analysis and decision tree methods to analyze project risks and to quantitatively analyze the probability and consequences of each risk factor, and suggested practical ways to reduce the impact of risk factors. Nilsen and Aven studied the differences and correlations between risk and model uncertainty, and concluded that model uncertainty will lead to a rise in risks, and that each model should be treated as an uncertainty factor. Perkgoz, Azaron, Katagiri, Kato and Sakawa proposed the use of genetic algorithms for project management risk analysis, and demonstrated the efficiency of genetic algorithms. Kraupl and Wieckert examined how project management risk can be analyzed by using Monte Carlo simulation.

Foreign scholars also have different understandings of the project risk prevention and stages of control: Charette and Boehm divided the project risk management process into three parts: risk analysis, risk regulation and risk identification. Risk management refers to risk management, detection and correction. Fairley analyzed the phases of risk control and divided them into six stages: identifying risk factors, assessing risk effects, studying risk avoidance strategies, monitoring risk factors, applying contingency plans and managing crises. Tammala, Nkasu and Chuah studied project risk management from the operational level, and obtained the logical relationship between the various parts of project risk identification, which can be a reference to further research. Kliem and Ludin divided the project risk management process into four parts, which included the identification, analysis, regulation and reporting of risks. Chapman divided the risk control process into four aspects: risk definition, identification, assessment and management. Raz and Michael pointed out that the project risk prevention and control mechanism should run through the entire project process. Project planning, project implementation and project control should be applied to risk prevention and control.

Logistics project management risk prevention and control aspects

The application of project management to logistics projects in foreign countries has been found to take place relatively early in the process. Some research studies have been conducted on the prevention and control of logistics project management risk.

Scholars have analyzed the risk of third-party logistics projects from different perspectives. Cavinato and other scholars conducted research on the risk of supply chain logistics. Caron, Marchet and Perego argued that project logistics risk is mainly due to the lack of coherence between the material procurement and construction processes, and introduced a parametric model to solve this problem. Hobbs, Fearne and Spriggs explored the issue of risk management from the view of a food supply chain logistics project. Wang and Regan explored the outsourcing risk of logistics projects, and divided the risks of outsourcing projects into four categories: finance, market, management and conflict. Reeves, Caliskan and Ozcan conducted research into automotive logistics project management.

Foreign scholars outside of China have also conducted research on risk prevention and control issues in the development of logistics park construction projects from different levels. Giaglis discussed the operational risk of a logistics park construction project by using the analytic hierarchy process, and divided it into five categories of risk: market competition, economic change, technological development, nature and management. Dubois and Pmde studied the problem of project localization by using the two-level fuzzy comprehensive evaluation model, and mitigated the risk of its location inaccuracy. Barkuizen et al also used the fuzzy method in their systems approach to risk management. Waters, Ballou, Eiichi, Michihiko, Tadashi and Toru, Chen, Aboolian and Huang, Batta and Nagi investigated risk prevention and control from the perspective of the location, selection and planning of logistics park construction projects. Jang, Jayaraman and Klose and Drexel studied the risk associated with a logistics park construction project from a network design and optimization perspective. Lia, Nagya, Homberger, Brandao and Eseun, Milln and Larrod studied project construction risk from the perspective of the distribution route.

3. A domestic research review: aspects of project and risk management- Chinese view

In China, project management as a discipline only developed much later, and was not studied until the 1980s. After the establishment of the World Project Management Association in 1991, project management developed rapidly in China. The introduction of project management in the logistics industry only took place around ten years ago, and its development is in the initial stage. Aspects of this Chinese view are discussed from some literature in the next sub sections:

Logistics project management

The introduction of project management to logistics enterprises also in the Chinese context, has a certain significance. Xiaoxian and Lingyun pointed out that the introduction of project management theory into logistics companies not only reduces the company's operating costs and improves customers' satisfaction, but also reconstructs and flattens the organizational structure; it also reduces the communication costs between different levels. Guojun and Junjie pointed out that information management, full supervision and customer satisfaction are the keys to the successful implementation of logistics projects. Logistics enterprises need to form a complete management system to enhance the corporate image in

the whole logistics project implementation process. Xinfeng elaborated on the fact that the introduction of project management theory to the logistics industry not only promotes the steady development of enterprises and improves the utilization rate of external resources, but also arouses the enthusiasm of workers and enhances the corporate image. Image is also an important aspect in the Chinese culture.

Heping and Xiandong put forward a unique proposal on the structure of the logistics organization from their point of view by using the idea of project management. They considered the structure of “hub-radiation” to be more suitable to business management than “linear function”. Lingyun and Congheng summarized the theoretical significance and strategic thinking of logistics project management. They systematically gathered the methods and general procedures of project management to introduce to logistics enterprises. Huiting and Wei combined the basic ideas, tools and methods of project management to study the core issues of supply chain management and put forward the “matrix-based” organizational structure and tools and methods of project management. Wuzhou pointed out that, in the logistics project management process, the parties should ensure the smooth progress of project control based on learning from the perspectives of knowledge, the characteristics of each project and the uniqueness of the project. Yanmei analyzed the basic application of project management thinking in the process of a logistics project, elaborated on the development status of project management thinking in the latest field of logistics supply chain management, and analyzed three aspects: the logistics enterprise, the virtual supply chain and the dynamic logistics alliance. He also discussed the future development direction of logistics project management.

Applying project management in the logistics industry, Xun started with the freight-forwarding enterprises to study the current status of modern logistics enterprises, and summarized the significance of introducing project management to freight-forwarding enterprises. Neng-ye, Shan-zhi and Mei-ling applied the idea of project management to logistics park construction projects, and proposed the rolling correction of construction management. Ye and Hou-cai analyzed the cost structure of logistics enterprises and control from the perspective of supply chain management, and used the idea of project management to establish the enterprise logistics cost control model. Xiaoyan and Xingong discussed the project-oriented exhibition logistics system from the perspective of exhibition logistics. Wenfeng analyzed the characteristics of the third-party logistics service project, and the feasibility of this model. It also puts forward the “listening-checking-shipping” model and combines it with project management theory to study the project characteristics of third-party logistics. Xinfeng discussed the value of the project from the perspective of the project management level of logistics enterprises in China by considering two aspects: essence and actual development. Yunlong and Xiaoli combined logistics management technology with the research of railway construction projects, which demonstrated the feasibility of applying modern logistics management ideas to the railway construction enterprise. Xianhua briefly discussed logistics supply chain services as they apply to the success of pregnant mothers from a customer service and third-party logistics project management point of view. Ming combined the theory of project management with the basic logistics theory, and carried out isocyanate polymethylenepolyphenylene ester chemical logistics transportation project development and design, finally realizing the transport demand of chemical products.

Project management risk prevention and control aspects

Domestic scholars in China performed a qualitative analysis of project management risk from different perspectives. Yilin, Tong and Bin studied project risk management, and were

of the first to perform a theoretical review. Jianping and Duanfu combined project management with the integrated approach to explore project risk prevention and control issues. Zhe systematically analyzed and summarized the project risk prevention and control system. Weidong, Jian and Chunjun introduced the idea of risk transmission to the project risk prevention and control aspects. Xiao-Ju and Yue formally put forward the risk transfer algorithm. Liping systematically analyzed the risk prevention and control problems of supply chain projects from qualitative analysis to the quantitative model, and established a project optimization model for the risk prevention and control mechanism in the process of project implementation. Yuanming introduced the dynamic rule of supply chain project risk transmission from aspects of supply chain management and project characteristics, and proposed the optimal allocation based on the risk reserve idea, modularized management idea and incentive monitoring mechanism. Ying, Feifei and HuaYin analyzed the different stages of the project from the perspective of the whole life cycle of a project. The research associated with this case concluded that a bank can control the financial risks related to supply chain management during the mature stage of the project.

Domestic scholars also performed a more mature analysis of project risk prevention and control in the supply chain environment. Zhi-jun, Li-wen, Shuang-zheng and Chunsheng discussed project risk prevention and the control system by using quantitative methods. Bao and Yijun combined project management with supply chain theory and conducted research on project risk prevention and control, which lead to the establishment of the project risk value-based risk prevention and control chain method. Xu put forward four suggestions for risks: adopt incentive measures to promote supply chain coordination, take effective counter-measures against possible risks, adopt information sharing and avoid information distortion.

Logistics project management risk prevention and control

Ligong put forward the corresponding risk prevention and control measures by studying the risk in each of the following five stages: starting, planning, implementing, controlling and ending. Chunju studied the process of project risk control to explore the mechanism of reducing risks from the perspective of a logistics real estate project. Xiaojiao and Zhongwei studied the risk prevention and control of logistics projects and put forward mitigation suggestions based on the modern project management theory. Bo analyzed logistics project risk identification, assessment, processing and monitoring, combined with modern project management theory. Xiaowan analyzed the causes of risk in logistics projects, and explored risk control measures. Yinghuan analyzed possible risks in logistics project bidding, and discussed its specific genesis and elements, logistics bidding strategy and a logistics bidding analysis method based on the knowledge of risk and risk management. Dongshi studied and evaluated the risk based on the project logistics plan, and established the risk decision model by making use of decision network planning technology. Yitian analyzed risk factors in the process of investment, construction and operation, and formulated the index system of project risk evaluation in combination with the analytic hierarchy process to study the overall risk of the project. Ligong, Liting and Xideng used Back Propagation neural network technology to establish a risk assessment model to evaluate the risk of logistics projects and to validate its practicability through data tests. Jian introduced project management to the finished product in a direct delivery logistics project and used the progress management method and the risk Monte Carlo analysis method to carry out the analysis of risks. Changjiang developed logistics project risk analysis and established the corresponding fuzzy comprehensive evaluation model.

Domestic scholars furthermore conducted research on risk prevention and the control of

third-party logistics projects. Yulan, and Song, Jun and Ming conducted research on third-party logistics risk prevention, and put forward corresponding counter-measures. Fengping and Zhengping studied third-party logistics project risk prevention and control issues from the perspective of moral risks. Zhixue and Guojun conducted an in-depth analysis of the risks of logistics outsourcing projects from the perspectives of strategy, market, transaction, management, finance and credit, and put forward the risk control strategy. Chonggang and Yunxiao discussed the research methods and contents of risk prevention and the control of grain logistics projects, and put forward risk response measures for practical projects. Shunquan and Dawei and Huiping developed a comprehensive risk evaluation index system by referring to the characteristics of third-party logistics, and discussed the overall risk of the third-party logistics project by means of the fuzzy comprehensive evaluation method.

Scholars from different levels explored logistics park construction project risk prevention and control. Qiusheng and Ruhe analyzed the risk of logistics park construction projects based on the relationship between city logistics and the city, and the use of logistics parks in an urban logistics system. Mingfei and Xianmin discussed the operational risk of the logistics park construction project from three perspectives: environment, process and supervision, and put forward the counter-measures of risk prevention and control. Pan, Tao and Bofeng discussed system risk prevention and control in logistics park construction projects, and analyzed it from both qualitative and quantitative perspectives. Daqin put forward ideas and measures to avoid the problems associated with logistics park planning and construction project risk. Weiwei studied large-scale logistics construction projects with the risk-reward rate method. Liangtao and Dali introduced the fuzzy comprehensive evaluation method in virtual logistics organization risk assessment. Xiaoting studied the risk of the port logistics park construction project, formulated the risk evaluation index system, and discussed the selection of evaluation indices from qualitative and quantitative perspectives. Qing-kui, Zewei and Xiangyang analyzed the risk of the logistics park construction project under the public-private partnership mode, and set up the evaluation index system to evaluate the risk of the logistics park construction project using the fuzzy comprehensive evaluation method.

4. Some recent research in logistics project risk prevention and control

The risk prevention and control of logistics park projects

In terms of theory or practice, foreign logistics park construction project risk prevention and control have a number of results. At the theoretical level, foreign non-Chinese scholars pay more attention to the analysis of network optimization and logistics park site selection, but there seems to be a lack of literature analyzing risk in logistics park construction projects. On a practical level, foreign countries pay attention to the risks associated with logistics park construction before the project starts. Before planning commences, a demand analysis is carried out to plan the process and rules of the system. In terms of the risk prevention and control of logistics park construction, Germany and Japan performed better. German logistics development is in a leading position in Europe or even in the world when it comes to the development of logistics park construction project management. This is largely due to its emphasis on the risk prevention and control issues associated with logistics park construction projects. Firstly, the German government conducts the project planning, which includes the overall planning, transportation, site selection, evaluation of the local logistics enterprises,

efficiency and other systematic research. Secondly, a benefit analysis is undertaken from a social point of view. Thirdly, government departments offer key financial support during the project construction period. Rimu Logistics Park Project adopted a model “on the macro level control, micro level free”, efficiency and other systematic research. Secondly, a benefit analysis is undertaken from a social point of view.

Logistics park construction project research is not that mature in China. There are still many deficiencies. On one hand, the existing theories mostly focus on the unilateral risk analysis of logistics park construction projects, and the lack of analysis in the whole project cycle. Most of the existing theories are for qualitative research. There are fewer theories for quantitative analysis. Most of them focus on traditional fuzzy comprehensive evaluation, while they ignore the fuzzy and non-quantitative characteristics of the construction project risk in the logistics park. Experts' assessments are subjective and the emphasis on the weight coefficient focuses on subjective information. Research on risk prevention and control methods does not consider the special properties of the coexistence of public welfare and the enterprise in a logistics park project, which cannot be studied from a macroscopic or microcosmic perspective. On the other hand, Logistics development depends too much on Government in practice. In 2011, the General Office of the State Council promulgated regulations to promote the steady development of the logistics industry. In June 2011, the General Office of the State Council issued a press release to boost the steady development of the logistics industry and put forward “eight national development rules”. In August 2011, the twelfth five-year plan emphasized the development of the logistics industry and proposed to promote the steady development of the logistics industry. In June 2011, the General Office of the State Council issued a press release to boost the steady development of the logistics industry and put forward “eight national development rules”. It can be seen that most of the construction risks of a logistics park rely on government support, which puts greater pressure on the government. Risk sharing between the government and the market will contribute to risk prevention and control projects in the construction of logistics parks.

Third-party logistics project risk prevention and control

The third-party logistics industry has a high degree of dependence on the economy, which is also heavily affected by the government, economy, climate and institutional factors. The value of third-party logistics enterprises is reflected in the process of serving customers. The effectiveness of its services and customers is greater than that of other enterprises, as are its responsibilities.

Domestic and foreign studies on third-party logistics project risk prevention and control are mainly concentrated on the enterprise body and the project service process. Some scholars point out that a logistics risk index system can be constructed by using a fuzzy comprehensive evaluation method. In the construction of the index system, some scholars start from the key factors of their own operation, including financial, information, physics, change and other aspects of risk system construction. Some scholars focus on the enterprise business development of key factors, including the internal and external environment, management methods, information transmission and other aspects of building risk systems. Other scholars combine this with the practical situation and suggest the establishment of a reasonable and operational risk management system based on the analysis of specific cases.

Foreign scholars not only focus on the theoretical aspects, but also on the applied engineering logistics, food supply chain logistics, automotive logistics and other aspects to

conduct the practical research of third-party logistics project risks, which detailed analyses of logistics project risk prevention measures. Domestic scholars pay more attention to third-party logistics project risk prevention and control theory research. Most entail a qualitative analysis, which leads to a lack of quantitative analysis and practice experience.

5. Conclusion and comparison

In conclusion, the following can be said taking into account most of the aspects discussed in the previous sections when comparing aspects of logistics project management for the Chinese and Western contexts, specific content is shown in Table 5-1.

Table 5-1. Comparison of domestic and international logistics project management risk prevention and control

Contrast level	Classification	Foreign country	China
Theoretical level	Qualitative research	1.Process study 2.Risk evaluation 3.Risk prevention and control	1.Modern project management theory 2.Phase study 3.Cause study 4.Case study
	Quantitative study	1.Two stage fuzzy comprehensive evaluation model 2.Risk decomposition structure hierarchy method 3.Risk management procedure law 4.Sensitivity analysis 5.Decision tree 6.Genetic algorithm 7.Monte Carlo simulation	1.System integration principle 2.Risk transfer algorithm 3.Optimal allocation method 4.Life cycle method 5.Decision network planning technique 6.BP neural network technology 7.Schedule management 8.Monte Carlo simulation 9.Fuzzy evaluation method 10.Risk return method
	Targeted risk assessment model	Nothing	Nothing
Practice level	Third-party logistics project risk prevention and control	1.Supply chain logistics 2.Project Logistics 3.Food supply chain logistics 4.Logistics outsourcing	1.Logistics real estate project 2.Project Logistics 3.Direct delivery logistics project 4.Enterprise logistics outsourcing project 5.Grain logistics project
	The risk prevention and control of logistics park projects	1.Planning and site selection 2.Network design 3.Network optimization 4.Distribution vehicle routing	1.Contact 2.Logistics park use 3.Project environment 4.Project flow 5.Government regulation

Brief review for the Western or foreign context

Project management was introduced in Western countries at an early stage. It is developing rapidly and maintains a leading role, whether it is in terms of concept design or system improvement. It has already played a very important role in many practical projects. Research by foreign non-Chinese scholars on project management risk prevention and control systems is more systematic. This is not only because they have different levels of qualitative risk analysis, but also because the models that have been established use a variety of analytical methods. After the introduction of project management in the logistics industry, the

management of foreign logistics projects has developed rapidly, and the risk management of logistics project management has also been studied. The risk of third-party logistics projects and the risk of construction projects in logistics parks are emphasized in these research studies, which reduces the probability of risk to a large extent.

As the logistics industry and project management belong to different areas, foreign scholars have conducted more in-depth studies on single logistics projects or project management, but studies on the integration of these two are still inadequate. It is because of the particularity of logistics projects and the lack of analysis of logistics project management risk prevention and control that many project management risk prevention and control experiences and theories cannot be applied to the logistics project.

Brief review for the Chinese context

In China, the research related to project management risk control is relatively far behind in comparison to foreign countries. It was only in the mid-1990s that research on project management risk prevention and control was focused on engineering projects, and the development of this is still in the initial stage. At present, there are many qualitative analyses of project risk prevention and control. Because of the characteristics of being “non-replicable” and the lack of historical data, some high-precision quantitative methods are still applicable to a single project. There is no targeted approach to ensure project risk control under certain contexts.

At present, domestic Chinese scholars in logistics project risk prevention and control research are still limited to qualitative aspects. Quantitative research is rare, and most studies are based on tools, methods, and the introduction and improvement of a project risk management system. With regard to the project management content system in the traditional logistics project, research is mainly conducted in project management planning and implementation aspects. Evaluation after the implementation of project and inspection research is relatively small. Research studies on logistics park construction projects and their risk prevention and control, third-party logistics projects, risk control and other similar issues are more abundant.

Brief final summary

This paper summarizes the domestic and foreign logistics project risk management theory and draws some conclusions as follows: at present, the research results have been involved in the field of risk identification, risk evaluation, risk countermeasures and so on from the angle of theory and Practice; however, the research field is mainly confined to logistics park construction projects and the third party logistics project and many literature references basically pay attention to a certain subject of logistics project risk although a complete risk management theory system of logistics project has not been constructed yet, and there seems to be a lack of systematic research on the subject, content, form and method of logistics project risk management. Identification of risk factors is based solely on experience and lacking of appropriate methods. In the respect of risk assessment, although a number of studies have been conducted, the establishment of logistics project risk index system is too arbitrary; there is a lack of strong mapping relationship between risk source and risk consequence. The general evaluation method cannot reflect the particularity of logistics project risk. At present, most of the studies are carried out at the operational level, the theoretical depth is not necessarily enough, risk control measures are often only for a certain

aspect and lacking of more complete system solutions.

In this paper, the following suggestions are put forward for the prevention and control mechanism of logistics project risk management in the future:

Firstly, risk management theory and project management theory have been developed at home in China and abroad; the study of logistics project risk prevention and control can be combined with the above two mature theories and sort out a set of risk prevention and control programs in respect of logistics project management.

Secondly, there are a lot of empirical research methods that are applicable for risk management, and should be suitable for applied logistics project risk as well.

Finally, the research of logistics project risk control cannot be confined in one aspect. At present, the research direction of logistics project risk management are focused on the respect of logistics park construction project and the third party logistics projecting the future, logistics project risk prevention and control should expand the scope of research, emphasize the research on respect of the fourth party logistics, proprietary projects and logistics consulting projects and so on.

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