

## A STUDY OF RISK CONTROL OF NEW ENERGY VEHICLE RENTAL BUSINESS - A CASE STUDY OF BEIJING HENGYU NEW ENERGY VEHICLE RENTAL CO., LTD

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This Independent Study has been approved as a Partial Fulfillment of the Requirements for the Degree of Master of Business Administration

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#### ABSTRACT

As an important mode of transportation for people's travel, cars have become an indispensable part of people's lives. Due to the diverse travel needs of people and the government's need to alleviate urban traffic pressure and save resources, the rental business of new energy vehicles has developed rapidly in China, and new energy vehicles have also received strong support from the government. However, China's new energy vehicle rental industry is still in the development stage, accompanied by a series of problems, and rental companies face various risks in their daily operations. Therefore, the aim of this study was to examine the impact of industry development, policies and regulations, business nature, financial situation on the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd.

Based on the risk management theory, this study adopted the quantitative research method to investigate the influencing factors of the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd.. A total of 200 questionnaires were distributed in this survey, and 180 valid questionnaires were collected. The final conclusions were: 1) Industry development has a positive impact on the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd.; 2) Policies and regulations have a positive impact on the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd.; 3) Business nature has a positive impact on the risk control of Beijing Hengyu Vehicle Rental Co., Ltd.; 4) Financial situation has a positive impact on the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd.; Consequently, organizations can enhance their financial management practices by augmenting their investment levels. The government can refine the policy and regulatory milieu, and industry bodies can establish pertinent standards to guarantee that the business risks of car leasing companies are effectively mitigated.

**Keywords:** new energy vehicles, vehicle rental business, risk control, Beijing Hengyu New Energy Vehicle Rental Co., Ltd



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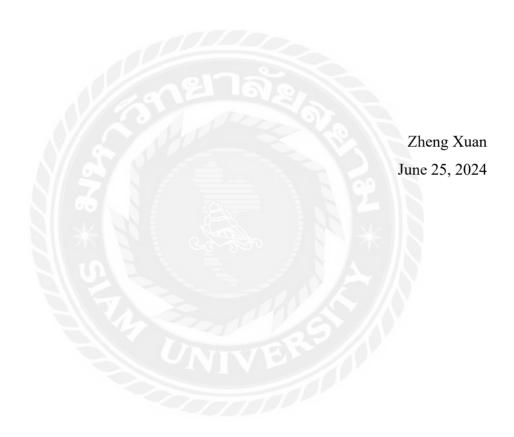
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> Zheng Xuan June 25, 2024

# Declaration

I, Xuan Zheng, hereby certify that the work embodied in this independent study entitled "A Study of Risk Control of New Energy Vehicle Rental Business - A Case Study of Beijing Hengyu New Energy Vehicle Rental Co., Ltd" is result of original research and has not been submitted for a higher degree to any other university or institution.



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## **Chapter 1 Introduction**

#### **1.1 Background of the Study**

In today's society, cars are becoming more and more important to people's lives. They bring a lot of convenience to people's life, and people rely more and more on cars to travel. While cars bring convenience to people's travel, the emission of vehicle exhaust also pollutes people's living environment. Therefore, in order to reduce the pollution caused by vehicle exhaust emissions to the environment, the government has introduced a series of policies: limiting traffic and limiting license plates (You & Hsieh, 2014). Therefore, the car rental business came into being. The international car rental industry originated in the United States and has a history of more than 100 years. The domestic car rental market originated from the Beijing Asian Games in the early 1990s, and has only 30 years of history.

The emergence of the car rental industry not only meets the diversified travel needs of people, but also meets the needs of corporate business activities. At the same time, it has played a leading role in tourism and traditional transportation. Therefore, the car rental industry is called "sunrise industry ". With the development of economy, the change of consumption power and consumption concept, people's demand for cars is also increasing. Residents not only increased demand for office vehicles, but also increased demand for leisure vehicles (Lazov, 2017). At the same time, the number of domestic car rentals is much lower than the number of people with driver's licenses. These factors determine the domestic car rental industry has a large market.

According to the statistical data of the Ministry of Public Security on the number of car drivers and car ownership (as shown in Figure 1.1), it can be seen that in 2018, the number of cars in the country was 240 million, and in 2019, the number of cars in the country reached 260 million, an increase of 20 million over 2018, an increase of 8.33%. However, the growth rate of car ownership is far less than the growth rate of car drivers, and the number of people holding car driving licenses in 2019 reached 435 million, an increase of 66 million over 2018, and a year-on-year increase of 17.89%. There is a matching gap of 175 million between the two, and this part of the licensed non-car population will be the main potential user group of the car rental market (Shen & Zhou, 2022). In addition, due to vehicle purchase restrictions in most areas, resulting in residents' demand for vehicles is more difficult to meet, rental car travel will become a new choice for residents.

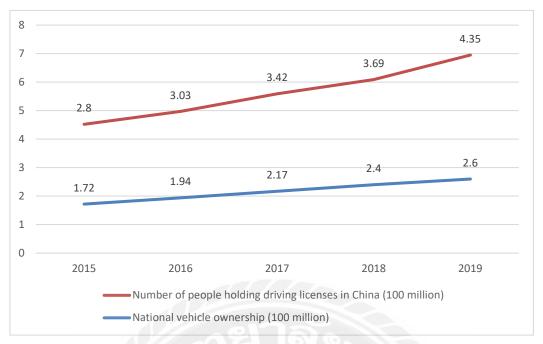


Figure 1.1 Car Drivers and Car Ownership in 2015-2019

Car leasing brings many benefits to the lessee, such as: the lessee does not need to apply for insurance for the leased vehicle; There is no need for annual inspection and maintenance of leased vehicles; Replacing purchased vehicles with leased ones to save costs is becoming increasingly popular among companies and individuals. Their office vehicles adopt the vehicle management mode of "renting and purchasing" to strengthen the management of official vehicles. It is not difficult to see that the state is building official vehicle platforms and social supporting construction of official vehicles, releasing pressure on car rental companies and helping them increase their operating volume (Yin, 2015). In 2012, the market size of China's car rental industry was only 24.8 billion yuan, but the market size is constantly growing. By 2016, the market size of China's car rental industry exceeded 50 billion yuan. As of 2017, the market size of China's car rental industry has expanded to 67.9 billion yuan, an increase of 32.6% over 2016. At the end of 2018, the market size of China's car rental industry exceeded 80 billion yuan, an increase of 18.1%. With the continuous development of the car rental market, it is expected that the market size of China's car rental industry is expected to reach more than 200 billion yuan in the future (as shown in Figure 1.2).

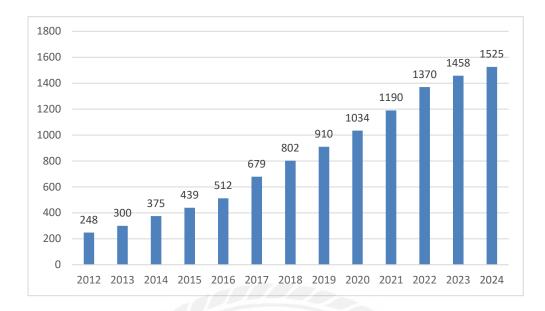


Figure 1.2 Market Size and Forecast of China's Car Rental Industry from 2012 to 2024 (Unit: RMB 100 million Yuan)

In recent years, the government has paid more attention to the development of new energy vehicles and given policy support to new energy vehicles. Therefore, the application penetration rate of new energy vehicles is rising significantly (Zhang& Liu, 2021). At the same time, most car rental companies take new energy vehicles as rental objects and advocate "green travel" with practical actions. The rapid development of China's car rental industry has benefited from the improvement of mobile Internet technology and the promotion of new energy vehicles, but the car rental market is currently in a highly fragmented state. According to the Ministry of Transport, there are currently about 7,000 car rental companies in China, the largest of which are long-term car rental companies. About 69% of car rental companies are long-term car rental problems in sex operations.

Therefore, it is particularly important for Beijing Hengyu New Energy Vehicle Rental Co., Ltd. to do a good job in the risk control of long-term rental of new energy vehicles. Due to the late start of car rental business, and the lack of car rental experience for Beijing Hengyu New Energy Vehicle Rental Co., Ltd., which is unable to reach rental customers in order to compete with other car rental companies. A viable solution that can increase the credit risk. Therefore, various measures must be taken to reduce the possibility of risk as much as possible, or reduce the loss caused by the occurrence of risk, so that Beijing Hengyu New Energy Vehicle Rental Co., Ltd. can bear the loss caused by the risk.

#### **1.2 Problems of the Study**

With the increasing global attention to environmental protection and sustainable development, new energy vehicles are gradually replacing traditional fuel vehicles around the world. In this context, Beijing Hengyu New Energy Vehicle Rental Co., Ltd. actively carries out the new energy car rental business to meet the market's demand for green and environmentally friendly travel. However, the new energy vehicle rental business faces many risks in the process of operation. Therefore, this study raises the following research questions:

(1) Is there a positive impact of industry development on the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd?

(2) Is there a positive impact of policies and regulations on the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd?

(3) Is there a positive impact of business nature on the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd?

(4) Is there a positive impact of financial situation on the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd?

## **1.3 Objectives of the Study**

In the current environment, with the development of social economy and the improvement of people's awareness of environmental protection, the new energy car rental business, as an emerging business model, has been rapidly developed. However, as in any other industry, the new energy car rental business also faces various risk challenges. Therefore, this study analyses the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd, in order to better deal with various risks and challenges in the business development. The main objectives of this study are as follows:

(1) To verify that industry development has a positive impact on the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd;

(2) To verify that policies and regulations have a positive impact on the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd;

(3) To verify that business nature has a positive impact on the risk control of

Beijing Hengyu New Energy Vehicle Rental Co., Ltd;

(4) To verify that financial situation has a positive impact on the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd;

#### **1.4 Scope of the Study**

This study focuses on the factors affecting the risk control of new energy vehicle rental business of Beijing Hengyu New Energy Vehicle Rental Co., Ltd. Based on the theories related to risk management, more than 40 major studies were reviewed, and the development background, main influencing factors and optimization strategies of risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd. Were analyzed, providing an effective theoretical basis for further exploration.

## 1.5 Significance of the Study

#### 1. Theoretical significance

The research on the risk control of the new energy vehicle rental business of Beijing Hengyu New Energy Vehicle Rental Co., Ltd. is helpful to deeply explore the risk management of the new energy vehicle rental business, and further enrich and improve the relevant theories. Through the research on the risk identification, assessment and monitoring of the company's business, the theoretical system of risk control of new energy vehicle rental business can be continuously improved and developed, providing guidance and reference for the risk management of other similar enterprises(Wang et al 2018). At the same time, this study can also provide theoretical support for the healthy development of the new energy car rental industry and promote the sustainable development of the industry.

#### 2. Practical significance

The research on the risk control of new energy vehicle rental business of Beijing Hengyu New Energy Vehicle Rental Co., Ltd. has some important practical significance. First of all, through the risk control research of the company's business, it is helpful to improve the company's risk management level and ensure the steady development of the business. By identifying and analyzing the potential risks in the business, the company can take effective measures to avoid, reduce and transfer the risks to ensure the stability and sustainability of the business. Secondly, the practical significance of this study is also reflected in providing reference and reference for other similar enterprises in risk management. The experience and practice of Beijing Hengyu New Energy Vehicle Rental Co., Ltd. in the risk control of new energy vehicle rental business can provide reference and reference for other enterprises to help them better carry out new energy vehicle rental business and control risks. Finally, from the perspective of the industry, this study helps guide the new energy vehicle rental industry to pay more attention to risk management and promote the sustainable development of the industry(Li et al 2019). Through the analysis of the development trend and competition pattern of the industry, it can provide guidance for enterprises to formulate reasonable business strategies and promote the healthy and orderly development of the whole industry.

## 1.6 Limitations of the Study

Due to the confidentiality of new energy vehicle rental business data, this study encountered problems in data acquisition and accuracy. The accuracy and completeness of this data and information were limited. This may have some impact on the accuracy and reliability of the research results.

Due to the limitation of research time and resources, we were not able to conduct in-depth and comprehensive research on all aspects of the risk control in Beijing Hengyu New Energy Vehicle Rental Co., Ltd.. This may lead to some limitations in the results. The study may need to prioritize some key factors and business scenarios while ignoring others and details. This may affect the completeness and comprehensiveness of the findings.

The new energy vehicle rental industry is in constant change and development, and factors such as policies and regulations, market environment and technological progress may have an impact on business risk control. As a result, the situation may have changed over time. In addition, the research may not be able to cover the latest industry developments and changes, so risk control strategies and methods need to be constantly updated and adapted to the new environment.

## **Chapter 2 Literature Review**

#### **2.1 Introduction**

This chapter explores the risk control theory, and the influencing factors of the risk control of new energy vehicle rental business, their action mechanisms and effects through the sorting and analysis of the existing literature, so as to provide theoretical support for the subsequent empirical research.

## 2.2 Literature Review

#### 2.2.1 Risk Control Theory

The risk control theory is a systematic and comprehensive theoretical system aimed at helping organizations or individuals identify, evaluate, manage, and monitor potential risks to reduce losses and protect their interests. This theory emphasizes how to take effective measures and methods to avoid, transfer, reduce or accept risks in uncertain environments, and ensure stable development (Wang, 2021).

The core objective of risk control is to protect the interests of organizations or individuals. Whether it is enterprises, government agencies, or individuals, when facing risks, the primary task is to ensure that their core and long-term interests are not harmed (Shao, 2022). This includes various aspects such as economic interests, reputation interests, legal interests, etc To achieve this goal, risk control theory provides a set of scientific methods and tools to assist decision-makers in rational analysis and judgment.

The process of risk control includes identifying, evaluating, managing, and monitoring risks (Cao,2020). Identifying risks is the process of identifying and categorizing potential risks faced by organizations or individuals. This requires decision-makers to have sharp market insight and risk awareness, and be able to timely detect and identify risk factors that may have a negative impact on the business. Risk assessment is the process of quantifying and analyzing identified risks to determine their impact on the business and potential losses. This requires decision-makers to master the techniques and methods of risk assessment, and be able to accurately quantify and assess risks.

Risk management is the process of taking corresponding measures to reduce or

control risks based on the results of risk assessment. This includes developing risk management strategies, establishing risk management mechanisms, and allocating risk management resources in multiple aspects (Zhang, 2022). Monitoring risk is a continuous process throughout the entire risk control process, which involves regularly or in real-time monitoring and evaluating changes in risk factors, promptly identifying new or existing risks, and taking timely response measures.

Risk control theory emphasizes the importance of robust development in uncertain environments. The market environment in modern society is full of uncertainty and variability, and organizations or individuals face a variety of risk challenges. Only through scientific risk control can we maintain a stable development trend and achieve long-term success in such an environment. Therefore, risk control theory is one of the essential theoretical tools for modern organizations and individuals, which can help people face risks more rationally, formulate scientific risk management strategies, and ensure stable development.

According to Moeller (2007) "Enterprise Risk Management - Integrated Framework", enterprise risk management is an organic process, including the identification, assessment, response and supervision of risks, and enables enterprises to choose the best risk tolerance and risk treatment strategies within the scope of their strategic objectives. This process should be continuous and require all parts of the organization to work together to ensure flexibility and resilience in an ever-changing environment, while protecting the value and interests of the business. Enterprise risk management should be carried out on a company-wide basis, covering all the risks in the development strategy of the enterprise's industry, internal business operations, financial and policy and legal aspects. The specific analysis is as follows:

#### **2.2.2 Industry Development**

The new energy car rental industry is one of the industries that has developed rapidly in recent years. With the improvement of environmental awareness and the government's support for new energy vehicles, the new energy vehicle rental business has received more and more attention and investment. In the process of industry development, it is also facing many challenges, such as market acceptance, charging facility construction, vehicle technology research and development and other issues. However, with the continuous progress of technology and the support of government policies, the new energy vehicle rental industry still has broad prospects for development. The scholars' research provides a wealth of perspectives and insights to help us fully understand the current and future trends of this industry.

First of all, Guo & Xu (2007) conducted a detailed study on the risk management of China's car rental industry. Their work highlights the importance of risk identification, assessment and management, providing valuable advice for the robust development of the industry. In their research, risks are divided into several categories, including market risk, credit risk, operational risk, etc. This classification method provides an important reference for subsequent research. Kim et al. (2014) conducted a comprehensive analysis of the risk factors in the car rental industry and proposed corresponding management strategies. They emphasized the systematic and scientific nature of risk management and believed that only through comprehensive risk assessment and appropriate management strategies can risks be effectively controlled and sustainable development of the industry be achieved. Amardeep et al. (2016) evaluated the Indian car rental industry using the fuzzy TOPSIS method. Their research not only considers the internal factors of the industry, but also fully considers the influence of the external environment, providing a new perspective and method for the risk management of the industry. In terms of the development status of the industry, Huo & Dong (2014) discussed the development status of China's car rental industry. Their detailed analysis of the industry's development history, market size, competitive landscape and future trends provides a comprehensive perspective for us to understand the industry. Tian & Yu (2016) discussed the relationship among industry regulation, equity incentive and risk taking of listed companies. Their research, from the perspective of corporate governance, provides a new perspective for us to understand the risks in the industry. Zhang & Zhang (2011) studied the credit risk management model of the car rental industry. They emphasized the importance of credit risk management and believed that only by establishing a sound credit risk management system can risks be effectively reduced and the steady development of the industry be achieved. Wang (2016) conducted an in-depth exploration of the development status and risks of the financial leasing industry. His research considers issues of risk and development from the industry as a whole, providing a broader perspective for our understanding of the car rental industry.

Finally, Llopis-Albert et al (2021) analyzed the impact of digital transformation on the automotive industry. They highlighted the opportunities and challenges that digital transformation brings to the industry, believing that only through active innovation and adaptation can the opportunities of digital transformation be seized and the industry be developed and leapfrog.

Taken together, these documents provide a rich perspective and in-depth insight

for the study of the car rental industry. Whether from the perspective of risk management, development status or credit risk management, these literatures provide valuable references for this study.

#### 2.2.3 Policies and Regulations

Policies and regulations have played an important role in promoting the development of the new energy car rental industry. Governments have introduced a series of policies and regulations, including financial subsidies, tax incentives, car purchase indicators, etc., to encourage the research and development and promotion of new energy vehicles. In addition, the government has also put forward requirements for the standardized development of the new energy car rental industry, such as strengthening vehicle safety supervision and standardizing contract terms. Changes in policies and regulations have an important impact on the operation and risk control of new energy vehicle rental business.

Wei (2011) mainly analyzed the current situation and existing legal risks of China's car rental industry, pointed out such problems as fierce competition within the industry and unstable service quality, and put forward corresponding preventive measures. He believed that car rental companies should strengthen vehicle management, improve service quality, improve contract terms, and strengthen vehicle safety and other aspects of management. At the same time, the government should strengthen supervision, standardize market order and crack down on unfair competition to improve the service quality of the entire industry. Li & Cui (2022) analyzed the tax-related risks of car rental companies and pointed out some matters that should be noted for tax risks. They believe that car rental companies should strengthen tax management and improve tax compliance awareness to reduce tax-related risks. At the same time, the government should strengthen the tax collection and management of the car rental industry and standardize the tax order. Li (2015) put forward relevant suggestions and measures to better regulate and promote the development of the car rental industry from the perspective of improving the legal system of car rental. She believed that the government should strengthen the legal construction of the car rental industry and improve relevant laws and regulations to protect the rights and interests of consumers and the healthy development of the industry. At the same time, car rental companies should strengthen internal management, improve the quality of service, improve the contract terms and other aspects of management. She & Pujo (2019) focused in particular on the inadequacies and implications of the legal system for vehicle rental and explores the possible impact of these provisions on emerging modes of transport.

Moon et al (2020) focused on the management and supervision of the car rental market in South Korea and analyzed the impact of policies and regulations on the market. Liu (2018) explored the policy effect of electric vehicle sharing and leasing in Shanghai, China, and discussed the impact of relevant policies and measures on the industry. Finally, Yang et al (2019) studied the policies, regulations and market behaviors of the new energy vehicle industry from the aspects of government supervision and market behaviors.

In general, these documents provide a more comprehensive and systematic analysis and research on the car rental industry, and provide certain reference value for practitioners and relevant institutions in the car rental industry in terms of management, taxation, policy and other aspects.

#### 2.2.4 Business Nature

The nature of the new energy vehicle rental business determines the risk characteristics it faces. First of all, vehicle technology risk is one of the important risks facing the new energy vehicle rental business. Due to the continuous development and update of new energy vehicle technology, problems such as vehicle technical failures and insufficient battery life occur from time to time, bringing losses to enterprises. Secondly, the risk of market competition is also the risk that the new energy vehicle rental business must face. There are many new energy vehicle rental enterprises in the market, fierce competition, price war and other competitive means easily lead to a decline in profits. Finally, financial risk is also one of the risks that enterprises must pay attention to. The financial situation of new energy vehicle rental enterprises is greatly affected by market fluctuations, policy changes and other factors, and financial risk management must be strengthened.

Han et al. (2014) discussed the operating model of new energy vehicle leasing and the risks it faces, and put forward suggestions to reduce the risks. They pointed out that new energy car rental, as a new mode of transportation, can reduce air pollution and reduce energy consumption, while also providing consumers with a convenient and economical way to travel. However, this model also faces some risks, such as vehicle damage, fraud and other problems, so they put forward suggestions to strengthen the management of rental vehicles and establish a risk assessment mechanism. Hu & Lu (2020) focused on the financial leasing and risk management of leasing enterprises. They discussed the application of financial leasing in enterprises through case analysis, and pointed out the advantages of financial leasing and the importance of risk management. They believed that financial leasing can provide enterprises with flexible financing methods, reduce initial investment costs, and also reduce risks through risk management. Cui et al (2019) discussed the business model optimization of new energy vehicle time-sharing leasing based on big data. They pointed out that with the development of Internet technology, the time-sharing leasing business model of new energy vehicles has gradually emerged, but it also faces some problems, such as vehicle scheduling and user management. They proposed that vehicle scheduling and user management can be optimized through big data analysis, improving the efficiency of the rental business and user satisfaction. Mohammadpour & Dastuorzadeh (2020) proposed an approach based on fuzzy multi-criteria decision making for supplier selection of new energy vehicle rental services. The research results show that this method can help enterprises find the most suitable partner from multiple suppliers and effectively reduce the potential supply chain risk. Zhang et al (2019) discussed the pricing strategies of new energy vehicle rental platforms under different circumstances, including one-time payment and installment payment. The research results have a certain reference role for the reasonable pricing and risk control of new energy vehicle rental enterprises.

#### 2.2.5 Financial Situation

The financial status of new energy vehicle rental enterprises has an important impact on their risk control. Financial indicators such as profitability, solvency and operational efficiency can reflect the risk status of an enterprise. The financial situation of new energy vehicle rental enterprises is generally good, but there are also some problems, such as capital turnover, loss and other problems. Therefore, enterprises need to strengthen financial management and improve the stability of financial status to reduce risks.

Yu et al(2019) evaluated the financial performance of electric vehicle rental companies in China. The research results show that financial indicators, including assetliability ratio, profit rate and debt repayment ability, have an important impact on the company's financial situation, which has important implications for the strategic planning and development of new energy car rental companies.

Hosseini & Ramezani (2020) analyzed the financial feasibility of the new energy vehicle rental system by considering the forecast demand uncertainty. The results show that factors affecting the profitability of the system include market demand, rental pricing strategy and system scale, which is of great significance for the financial risk management of new energy vehicle rental service providers.

Singh & Kumar (2019) analyzed the profitability of renewable energy based vehicles and conducted a risk assessment. The results show that factors such as energy costs, operating costs and market demand have an important impact on the financial status and sustainable development of renewable energy vehicles, which has implications for the financial management and risk control of new energy vehicle rental enterprises.

Demirkan & Gungor. (2018) assessed the financial sustainability of EV promotion projects, with a particular focus on the role of service companies. The results show that the key factors of financial sustainability include investment cost, operating cost, market demand and government support, etc., which is of great significance for the financial decision-making and sustainable development of new energy vehicle rental service providers.

Hu (2019) analyzed the financial situation of Hongxing Car Rental Company from the perspective of financial risk and put forward a series of risk countermeasures and suggestions. The results show that the main risks the company faces include capital risk, market risk and policy risk. In order to cope with these risks, the research suggests that the company should strengthen the fund management, expand the market channels, optimize the management structure and other aspects of work.

Wang et al. (2021) explored the impact of government subsidies in China's NEV industry on corporate financial performance. The results show that government subsidies have a positive impact on the current financial performance of enterprises, which is mainly attributed to the reduction of production costs and the improvement of sales revenue. However, the study also pointed out that government subsidies also have negative effects that may cause enterprises to lower the prices of products and services, so it is necessary for the government and enterprises to work together to ensure that subsidies are beneficial to the healthy development of the industry.

The above references mainly focus on the financial situation of the new energy vehicle leasing business, including financial performance evaluation, financial feasibility analysis, profit capacity and financial sustainability. These studies provide key factors related to financial management and risk assessment for new energy vehicle rental enterprises, and help enterprises to formulate reasonable financial strategies and sustainable development strategies. At the same time, these studies also provide an important reference and inspiration for the development and operation of the new energy vehicle rental industry worldwide.

#### 2.2.6 Risk Control

In the fast-changing business environment, enterprises are facing unprecedented complexity and uncertainty, which requires them to have efficient risk management capabilities to ensure sustainable development and competitive advantage. Risk control, as an important part of business management, has become increasingly important. By reviewing the recent related literature, we explore the application and development trend of risk control in different management fields.

Risk control plays a crucial role in the practice of business management and quality management. Song (2024) emphasized the critical role of risk control in ensuring the stability and sustainability of business activities, while Zhang (2023) further refined this concept into the practice of corporate quality management, pointing out that product quality and customer satisfaction can be significantly enhanced through effective risk control measures. Together, these study build a complete picture of risk control from the strategic level to the specific business operation level, demonstrating its wide application in enhancing the effectiveness of enterprise management.

Risk control plays a crucial role in the practice of business management and quality management. In the process of business operation, enterprises are faced with unprecedented challenges and risks, and how to effectively identify, assess and manage these risks becomes the key to determining whether an enterprise can develop soundly. Chen et al. (2023) introduced a new framework of ERM (Enterprise Risk Management), which provides strong support for the systematization and scientificization of enterprise risk management. They emphasized that risk management should be closely integrated with all aspects of corporate strategy, finance, and operation to form a closed-loop management system. The proposal of this framework not only provides enterprises with a comprehensive view of risk management, but also provides specific guidance for risk assessment, monitoring and response in actual operation. Meanwhile, the study by Akhmetshin et al. (2019) explored the interactions between different levels of the internal control system and their impact on management efficiency from the perspective of internal management functions, providing micro-level support for the implementation of the ERM framework. Through these studies, it is found that risk control is not only a management tool, but also a kind of strategic thinking, which helps enterprises to maintain competitiveness in the ever-changing market environment.

With the rapid development of big data and Internet of Things (IoT) technology, the internal control system of enterprises has also ushered in new changes. Zhou (2024) emphasized the role of big data technology in enhancing the efficiency of internal control and accurately identifying risk points, while Klius et al (2020) analyzed the

different practices of organizing corporate internal control systems internationally in the digital era. In addition, Chang et al.'s (2020) study focuses directly on corporate internal control risk factors under the governance of the Internet of Things (IoT), revealing new challenges and coping strategies brought by the application of new technologies through a qualitative research methodology. Together, these literatures demonstrate the new trend of corporate internal control in the context of digitization, emphasizing the key role of technological innovation in promoting the upgrading of internal control and optimizing the risk management process.

### 2.3 Background of Beijing Hengyu New Energy Vehicle Rental Co.,

#### Ltd.

Beijing Hengyu New Energy Vehicle Rental Co., Ltd. was established in June 2014, (https://baike.sogou.com/v138660597.htm), with a registered capital of 100 million yuan and a paid-in capital of 100 million yuan. It is an enterprise mainly engaged in leasing industry, jointly established by BAIC Group and Foxconn Group, and is a key demonstration operation unit of Beijing Municipal Government.

The company focuses on the field of new energy car rental, and has created the "GreenGo Green Dog rental car" brand. At present, the brand takes new energy vehicle leasing as its core business. In terms of intellectual property rights, the company has 68 pieces of trademark information and 1 piece of copyright information. In addition, the enterprise also has two administrative licenses. In addition, Beijing Hengyu New Energy Vehicle Rental Co., Ltd. has a wide range of business, including small and micro bus leasing services, car sales, auto parts retail, car decoration supplies sales, parking lot services, motor vehicle charging sales, advertising design, agency and technical services, technology development, technical consulting, technical exchange, technology transfer, technology promotion.

Beijing Hengyu New Energy Vehicle Rental Co., Ltd. is a company focusing on the field of new energy car rental, its strength, a wide range of business. The company provides car rental services including long-term rental and short-term rental to meet the different needs of customers. All rental vehicles are powered by new energy technologies, including pure electric vehicles and hybrid electric vehicles, to reduce environmental impact and improve energy efficiency.

Beijing Hengyu New Energy Vehicle Rental Co., Ltd. has a professional team,

including car rental professionals, technicians and customer service personnel. The company focuses on customer needs and provides a full range of leasing solutions, including vehicle selection, leasing contracts, vehicle distribution and other services. The company has been adhering to the "integrity-based, customer-centric" business philosophy, with quality service to win the trust and support of customers. We will continue to innovate and improve ourselves, the pursuit of excellence, to provide customers with the best rental experience.

#### 2.4 Conceptual Framework

New energy vehicles have become one of the important forces to promote green and low-carbon development. With the development of social economy, the new energy car rental business has also begun to rise gradually. However, the risk control of the new energy car rental business has become the focus of the industry. This study takes Beijing Hengyu New Energy Vehicle Rental Co., Ltd. as a study to examine the risk control of new energy car rental business, construct the risk evaluation scales, and discuss how to reduce the risk of new energy car rental business. The main theoretical framework is shown in Figure 2.1:

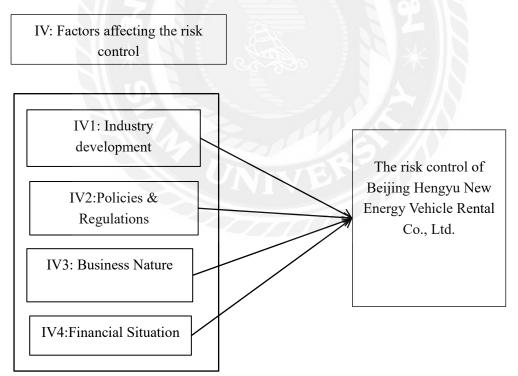


Figure 2.1 Conceptual Framework

## **Chapter 3 Research Methodology**

## **3.1 Introduction**

This study used a quantitative analysis to analyze the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd.. Firstly, the research design is introduced in detail, and the research objectives and scope are defined. Then, the number of samples involved in the study is explained, and the relevant data collection process are determined. Finally, the reliability and validity of the survey scale are strictly analyzed to ensure the accuracy and credibility of the study.

## 3.2 Research Design

## 3.2.1 Industry Development Scale

Li et al (2019) studied the impact of new energy vehicle policy on the sustainable development of vehicle rental industry in China from the perspective of life cycle assessment. The research results show that equipment renewal, technological innovation and policy support are the key factors to promote the application of new energy vehicles in the vehicle rental industry, and can also improve the sustainability of the vehicle rental industry. Therefore, this study puts forward the industry development indicators of the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd., and the distribution of specific indicators is shown in Table 3.1:

Primary index	Secondary index	Explain
	Equipment upgrading	I think the equipment upgrading of enterprises can reduce the technical risks they face in buying in enterprises
Industry development	Eliminate risk	I think technology, market, policy and other reasons will lead to the risk that enterprises will be unable to continue to operate or be eliminated by the market

Table 3.1 Industry Development Scale

#### 3.2.2 Policies and Regulations Scale

Based on practical investigation and research, Liu (2019) expounded that four reasons, namely laws and regulations, policy environment, market competition and internal control, led to the occurrence of financial leasing risks of vehicle rental companies. Therefore, this study puts forward the policy and regulation indicators for the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd., and the distribution of specific indicators is shown in Table 3.2:

Primary index	Secondary index	Explain
Policies &	Policy stability	I think a stable policy environment is conducive to long-term planning and development of enterprises
Regulations	Completeness of legal system	I think a complete legal system provides enterprises with a level playing field and the guarantee of legal operation.

Table 3.2 Policies and Regulation Scale

#### **3.2.3 Business Nature Scale**

Long et al (2020) evaluated the risk of new energy vehicle rental business through fuzzy analytic hierarchy process and entropy weight method, and concluded that residual risk and market competition risk are two important factors affecting new energy vehicle rental business. Xu et al (2020) studied the battery operation of electric vehicles under the closed-loop supply chain network, taking into account factors such as battery degradation and residual value, which helped to reduce the battery recycling cost and improve the battery utilization rate, and also reduced the operating risk of leasing companies. These studies have certain enlightenment for understanding the risks and advantages of the new energy vehicle rental business, and are helpful for leasing enterprises to choose the appropriate business model and formulate corresponding risk management strategies to achieve sustainable development. Therefore, this study puts forward the business nature indicators of the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd., and the specific indicators are distributed as shown in Table 3.3:

Primary	Secondary		
-		Explain	
index	index		
		I believe that the residual value risk of the new	
		energy vehicle leasing business, including the service	
	Residual risk	life of the vehicle, maintenance costs, second-hand	
		car market conditions and other factors, may affect	
		the company's asset value and profitability.	
		I believe the market competition of the new energy	
Business	Market	vehicle rental business includes the number of	
		competitors, market share, product differentiation	
Nature	competition	and other factors. May affect the company's market	
		share and profitability.	
		I believe that the market competition of the new	
	Operational	energy vehicle rental business, including the number	
	Operational	of competitors, market share, product differentiation	
	risk	and other factors, may affect the company's market	
		share and profitability.	

Table 3.3 Business Nature Scale

#### 3.2.4 Financial Situation Scale

Mehra & Pritam (2017) assessed the financial health of Indian leasing companies and adopted the Z-score model. Through the collection and analysis of financial data of 37 leasing companies, the author found that financial indicators such as asset-liability ratio, current ratio and total profit affect the financial health of leasing companies. Tang et al(2019) studied the decision-making model of new energy vehicle rental providers. The author considered various factors such as operational efficiency and environmental performance, aiming at improving the profitability and environmental protection of leasing enterprises. Through case analysis, the author finds that leasing companies using new energy vehicles can gain higher market share and better financial performance. However, the cost of new energy vehicles is high, so enterprises need to control the cost reasonably and pay attention to environmental protection. Therefore, this study puts forward the financial status indicators of the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd., and the specific indicators are distributed as shown in Table 3.4:

Primary	Secondary	Explain	
index	index		
	Debt paying	I believe that the solvency of an enterprise is	
	ability	related to the stability of its capital source.	
	Onemational	I believe that the age and salvage value rate of	
Financial Operational	leased vehicles will have an important impact on		
Situation	capability	the operating ability of enterprises.	
		I believe the profitability of an enterprise is related	
	Profitability	to its market positioning and product	
		competitiveness.	

Table 3.4 Financial Situation Scale

## 3.2.5 Risk Control Scale

With the intensification of market competition and the increasing uncertainty of the external environment, the risks faced by enterprises are increasingly complex. Therefore, it is particularly important to establish a set of scientific risk identification, assessment and response system. Zhang (2019) stressed that by building the comprehensive evaluation system, enterprises can systematically identify potential risks, scientific assessment of its impact, and accordingly formulate targeted strategy, thus improve the efficiency and accuracy of enterprise risk management, promote the steady implementation of enterprise strategy, provide a solid guarantee for the sustainable development of the enterprise. Therefore, this study puts forward the risk control indicators of Beijing Hengyu New Energy Vehicle Rental Co., Ltd., and the specific indicators are distributed as shown in Table 3.5:

Table	3.5	Risk	Control	Scale
Tuore	5.5	TUDE	Condior	Deale

Primary	Secondary	
index	index	Explain
	Risk	I believe that risk identification should provide
	Identification	comprehensive coverage of potential threats.
Risk	Risk	I believe that risk assessment needs to take into
Control	Assessment	account historical and future trends.
	Risk	I believe that risk management strategy should be
	Management	aligned with business strategy

### **3.3 Hypothesis**

H1: Industry development has a positive impact on the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd.;

H2: Policies and regulations have a positive impact on the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd.;

H3: Business nature has a positive impact on the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd.;

H4: Financial situation has a positive impact on the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd..

#### **3.4 Population and Sampling**

This study selected the internal staff of Beijing Hengyu vehicle Rental Co., Ltd. as sample, mainly involving human resources department, legal department, finance department, risk management department, sales operation department and other personnel, which were closely related to the risk control of new energy vehicle rental business. A total of 200 respondents were randomly selected in this survey, so as to gain an in-depth understanding of the risk control of new energy vehicle rental business.

## **3.5 Data Collection**

In this survey, 200 questionnaires were distributed, and 180 valid questionnaires were collected. The validity of the questionnaires was 90%. By sorting out and summarizing the collected data, the respondents' views and attitudes on risk control were obtained. By constructing an evaluation index system, the influence of different risk factors on the risk control of new energy vehicle rental business was quantified, and their understanding of the risks of new energy vehicle rental business and the implementation of control measures were examined.

#### 3.6 Data Analysis

In the questionnaire design, Likert five-point scale and SPSS analysis were used to systematically collect and analyze the respondents' views and opinions on the influencing factors of the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd.. The Likert five-point scale converted them into specific values for quantitative analysis, and the respondents made choices for each statement within the range of very different opinions for subsequent quantitative analysis.

Descriptive statistics were used to summarize and display the overall characteristics and distribution of the data, providing a preliminary understanding of the general viewpoints of the respondents.

Correlation analysis was used to explore the correlations between different risk control influencing factors.

Regression analysis was used to further quantify the specific roles of these influencing factors in risk control, providing strong support for us to predict and evaluate the risk control effects of Beijing Hengyu New Energy Automobile Rental Co., Ltd..

## 3.7 Reliability and Validity Analysis

#### 3.7.1 Reliability Analysis

Reliability analysis is used to measure the consistency, stability and reliability of the questionnaire. The most commonly used reliability index is Cronbach's Alpha. Generally speaking, the value of  $\alpha$  coefficient is between 0 and 1, and the higher the value, the higher the reliability. The specific analysis results are shown in Table 3.5:

		and the second se
Variables	N	Cronbach's Alpha
Industry development	2	0.720
Policies & Regulations	2	0.825
Business nature	3	0.838
Financial situation	33	0.717
Risk control	3	0.821

Table 3.6 Reliability Analysis

Table 3.5 shows the Cronbach's alpha values for the five key variables, which reflect the degree of consistency of the measurement items within each variable. As can be seen from the table, the reliability of all the variables is high, with the reliability of "Policies & Regulations" and "Business nature" standing out, reaching 0.825 and 0.838 respectively, indicating the stability and consistency of these two variables in measurement. 0.838, indicating that these two variables are very stable and reliable in measurement. The reliabilities of "Industry development" and "Financial situation" are also within the acceptable range (both greater than 0.7), indicating that the instrument is still able to reflect the situation effectively despite the relatively small number of items. This indicates that despite the small number of items, the measurement tool can still effectively reflect the real situation of these two variables. The reliability of "Risk

control" was close to 0.8, further emphasizing the importance of the assessment of risk control measures and its reliability in research. This high level of reliability provides a solid basis for exploring the impact of risk control on business operations.

#### 3.7.2 Validity Analysis

Validity analysis is used to test whether the research tool can accurately measure the studied object. KMO values measure the correlation between variables in the factor analysis model. KMO value ranges from 0 to 1, and the closer the value is to 1, the better the correlation between variables, and the collected data has high reliability, which can be used for further analysis and research. The reliability analysis results of this survey are shown in Table 3.6 below:

Tuble 5.7 Validity Test					
The KMO values and the Bartlett spheroid test					
Number of KMO sampling suitability quantities		0.841			
The sphericity test	Approximate chi- square	2023.419			
of the Bartlett	df	210			
	Sig.	0.000			

Table 3.7 Validity Test

KMO and Bartlett spherical test, which is used to test whether questionnaires or scales are suitable for factor analysis. FTable 3.6 shows the key results of the validity test conducted, including the KMO (Kaiser-Meyer-Olkin) value and the Bartlett's test of sphericity. The KMO value is 0.841, which is a high value indicating that there is a strong bias correlation between the five variables involved in the study (industry development, policies & regulations, business nature, financial situation, and risk control). Regulations, Business nature, Financial situation, Risk control) are strongly biased and suitable for factor analysis. The closer the KMO value is to 1, the more common factors there are among the variables and the more effective the factor analysis is.

The results of Bartlett's test of sphericity further support the applicability of factor analysis. The approximate chi-square value is 2023.419 and the corresponding significance level (Sig.) is 0.000, which is much less than the commonly used significance level of 0.05, which rejects the null hypothesis of sphericity and suggests that there is sufficient correlation between the variables and the data is suitable for factor analysis.

## **Chapter 4 Findings**

#### **4.1 Introduction**

This chapter explores the research results of the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd.. Through correlation and regression analysis results, this study determines the degree of correlation between risk factors and their influence on business risk control.

#### **4.2 Descriptive Statistical Analysis of Respondents**

According to Table 4.1, from the gender perspective, there are more male employees, accounting for 55.6%. This may mean that in this company, male employees are usually more likely to hold senior or management positions than female employees. This gender distribution may need to be taken into account when formulating operational and management policies. Secondly, in terms of age, employees of all ages are distributed. Among them, the proportion of employees under 30 years old is 25.0%, the proportion of employees between 30 and 40 years old is 35.0%, and the proportion of employees aged 40-50 and over 50 years old is 22.2% and 17.8% respectively. This shows that the number of employees of all ages in the company is relatively balanced, but the number of employees aged 30-40 is the largest. Thirdly, from the perspective of department distribution, the legal department has the largest number of employees, accounting for 30.0%, which may mean that legal work is very important in this company. Followed by the sales operation department and the risk management department, while the human resources department has the least number of employees. From the perspective of tenure, the number of employees with less than two years of work is the largest, accounting for 25.0%, which may mean that the company's employees are highly mobile, and it is necessary to consider formulating an effective employee retention policy. In addition, employees with more than 8 years of work accounted for the largest proportion, accounting for 31.1%, which may mean that the company needs to make better use of the skills and knowledge of these experienced employees.

Survey Items	Category	Number of people	Percentage (%)
Gender	Male	100	55.6
	Female	80	44.4
Age	Under 30 years old	45	25.0
	30-40 years old	63	35.0
	40-50 years old	40	22.2
	50 years old or above	32	17.8
Departmental distribution	Human Resources Department	27	15.0
	Legal Department	54	30.0
	Finance Department	34	18.9
	Risk Management Department	37	20.6
	Sales and Operation Department	28	15.5
Tenure	Less than 2 years	45	25.0
	3-5 years	40	22.2
	6-8 years	39	21.7
	More than 8 years	56	31.1

Table 4.1 Descriptive Statistics of Sample Data (N=180)

# 4.3 Impact of Industry Development on the Risk Control of Beijing

Hengyu New Energy Vehicle Rental Co., Ltd.

Table 4.2 Correlation Analysis of Industry Development and the Risk Control ofBeijing Hengyu New Energy Vehicle Rental Co., Ltd.

Dimension	Equipment upgrading	Eliminate risk	Risk Control
Equipment upgrading	1		
Eliminate risk	.819**	1	
Risk Control	.805*	.817**	1

As can be seen in Table 4.2, there is a significant positive correlation between these three dimensions, which reveals the internal relationship between the company in improving operational efficiency and risk management. As an important symbol of the company's technological progress and productivity improvement, equipment upgrading has a self-correlation of 1 (that is, perfect positive correlation), which indicates that equipment upgrading itself is an independent progress process. At the same time, equipment upgrading is highly positively correlated with risk elimination (.819\*\*) and risk control \*\*(.805\*), which means that with the continuous upgrading of equipment, the company can not only identify and eliminate potential risks more effectively, but also improve its risk control ability as a whole. This positive correlation emphasizes the important role of technological innovation in risk management. The correlation coefficient between risk elimination and risk control is as high as .817\*\*, which further proves that the company is comprehensive and systematic in risk management.

	Beij	ing Hengyu N	lew Energy ver	ncie Re	ental	C0.,	Lla.	
	Non-	standardized	Standardized			2		
	c	oefficient	coefficient	+		R <sup>2</sup>	Adjusting R <sup>2</sup>	F
	В	Standard Error	Beta	t	p	ĸ	R <sup>2</sup>	Г
(Constant)	.506	.104	<u> </u>	4.923	.000	1	$\Delta L^{2}$	
Industry development	.728	.052	.720	14.213	.000	.524	.520	204.260

Table 4.3 Regression Analysis of Industry Development on the Risk Control ofBeijing Hengyu New Energy Vehicle Rental Co., Ltd.

Dependent variable:Risk Control

In Table 4.3 above, the risk control index of Beijing Hengyu New Energy Vehicle Rental Co., Ltd. will increase by 0.720 standard deviation for every standard deviation of the industry development index, which indicates that the industry development has a significant positive impact on enterprise risk control. Considering other factors, the determinable coefficient ( $R^2$ ) of the model is 0.524, which indicates that the industry development can explain 52.4% of the risk control variation of Beijing Hengyu New Energy Vehicle Rental Co., Ltd. The adjusted  $R^2$  value is 0.520, which shows that the fitting effect of the model is relatively good, and it has certain reliability and stability. According to the results of t statistics, the estimated coefficient of industry development is 0.728, the t value is 14.213, and the p value is less than 0.001, which indicates that the estimated coefficient of industry development is statistically significant. The results of F statistics show that the F value is 204.260 and the P value is less than 0.001, which shows that the regression model is significant on the whole and can be used to predict and explain the changes of risk control in Beijing Hengyu New Energy Vehicle Rental Co., Ltd.

Therefore, hypothesis H1: "The industry development has a positive impact on the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd.." is established.

# 4.4 Impact of Policies and Regulations on the Risk Control of Beijing

Hengyu New Energy Vehicle Rental Co., Ltd.

Table 4.4 Correlation Analysis of Policies and Regulations and the Risk Control ofBeijing Hengyu New Energy Vehicle Rental Co., Ltd.

Dimension	Policy stability	Completeness of legal system	Risk Control
Policy stability	1		
Completeness of legal system	.826**		
Risk Control	.766**	.780**	1

As can be seen from Table 4.4, as the cornerstone of enterprise development, policy stability is highly positively correlated with the integrity of the legal system (.826\*\*), indicating that a stable policy environment promotes the perfection of the legal system. At the same time, the risk control ability is significantly related to both of them (.766\*\* and .780\*\* respectively), which reveals the importance of a sound legal system and a stable policy environment to enhance the company's risk control ability.

Table 4.5 Regression Analysis of Policies and Regulations and the Risk Control ofBeijing Hengyu New Energy Vehicle Rental Co., Ltd.

		n-standardized coefficient	Standardized coefficient	t	р	R <sup>2</sup>	Adjusting R <sup>2</sup>	F
	В	Standard Error	Beta				K	
(Constant)	.626	.112	-	5.834	.000	.506	.471	184.263

Policies and regulations .762 .063	.638	13.241.000		
---------------------------------------	------	------------	--	--

Dependent variable:Risk Control

As can be seen from the results in Table 4.5, policies and regulations have a significant positive impact on the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd.. The standardization coefficient of policies and regulations is 0.638, which means that the promotion of policies and regulations plays an important role in improving the risk control ability of enterprises. When considering other factors, the determinable coefficient ( $R^2$ ) of the model is 0.506, that is, policies and regulations can explain 50.6% of the variation of the risk control index of Beijing Hengyu New Energy Vehicle Rental Co., Ltd.. The adjusted  $R^2$  value is 0.471, which shows that the fitting effect of the model is relatively good and the reliability is high. According to the results of t statistics, the estimated coefficient of policies and regulations is 0.762, the t value is 13.241, and the p value is less than 0.001, which indicates that the estimated coefficient of policies and regulations is 184.263, and the p value is less than 0.001, which shows that the regression model is significant on the whole.

Therefore, hypothesis H2: "Policies and regulations have a positive impact on the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd.." is established...



4.5 Impact of Business Nature on the Risk Control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd.

Dimension	Residual risk	Market competition	Operational risk	Risk Control
Residual risk	1			
Market competition	.810**	1		
Operational risk	.821**	.825**	1	
Risk Control	.817**	.840**	.880**	1

Table 4.6 Correlation Analysis of Business Nature and the Risk Control of BeijingHengyu New Energy Vehicle Rental Co., Ltd.

From the analysis in Table 4.6, the correlation analysis of business nature and risk control of Beijing Hengyu New Energy Car Rental Co., Ltd. shows that the correlation coefficient between market competitiveness and risk control is 0.840, which indicates that the improvement of market competitiveness may enhance the company's risk control ability. The correlation coefficient between operational risk and risk control is 0.880, which shows that the risk management in the operation process of the company is closely related to the overall risk control and has a high positive correlation. The correlation coefficient between residual risk and risk control is 0.817, which shows that the reduction of residual risk is helpful to improve the effect of risk control.

Table 4.7 Regression Analysis of Business Nature and the Risk Control of BeijingHengyu New Energy Vehicle Rental Co., Ltd.

	Nor	n-standardized	Standardized				Adjusting		
		coefficient		coefficient	t	р	$\mathbb{R}^2$	R <sup>2</sup>	F
		В	Standard Error	Beta				K	
ſ	(Constant)	.613	.112	-	5.524	.000			
	Business	724	062	616	12.261	000	.510	.431	214.326
	Nature	.734	.062	.616	12.201	.000	000		

Dependent variable:Risk Control

In the regression analysis in Table 4.7, there is a significant positive relationship between the business nature and the risk control index, and its standardized coefficient is 0.616, indicating that the business nature has a great influence on the risk control of Hengyu New Energy vehicle rental business. When considering other factors, the determinable coefficient of the model is  $0.510 (R^2)$ , that is, the business nature can explain 51.0% of the variation of the risk control index of Hengyu New Energy vehicle rental business. The adjusted  $R^2$  value is 0.431, which shows that the fitting effect of the model is relatively good and the reliability is high. According to the results of t statistics, the estimated coefficient of business nature is 0.734, the t value is 12.261, and the p value is less than 0.001, which indicates that the estimated coefficient of business nature is statistically significant. The results of F statistics show that the F value is 214.326 and the P value is less than 0.001, which indicates that the regression model is significant as a whole. Therefore, the measurement index of business nature has a significant positive impact on the risk control of Hengyu new energy vehicle rental business nature can be used as an important index to evaluate the risk control ability of enterprises.

Therefore, hypothesis H3: "Business nature has a positive impact on the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd.." is established.

# 4.6 Impact of Financial Situation on the Risk Control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd.

	mengjarte	temeter		
Dimension	Debt paying ability	Operational capability	Profitability	Risk Control
Debt paying ability	1			
Operational capability	.819**	1		
Profitability	.729**	.831**	1	
Risk Control	.738**	.718**	.720**	1

Table 4.8 Correlation Analysis of Financial Situation and the Risk Control of BeijingHengyu New Energy Vehicle Rental Co., Ltd.

As can be seen from Table 4.8, The data analysis of Beijing Hengyu New Energy Car Rental Co., Ltd. shows that the positive correlation coefficient between solvency and risk control is 0.738, indicating that strong solvency is helpful to better control risks. The correlation coefficient between operational capacity and risk control is 0.718, which is slightly lower than that between solvency and risk control, but it still shows that efficient operational capacity has a positive impact on risk management. The correlation coefficient between profitability and risk control is 0.720, which further confirms the importance of good profitability for risk control. These correlations show that the optimization of the company's financial management and operational efficiency has a positive effect on improving its risk control ability.

Table 4.9 Regression Analysis of Financial Status and the Risk Control of Beijing
Hengyu New Energy Vehicle Rental Co., Ltd.

		Standardized coefficient	t	р	R <sup>2</sup>	Adjusting R <sup>2</sup>	F	
	В	Standard Error	Beta				K-	
(Constant)	.513	.098	91	4.924	.000	10		
Financial Situation	.764	.050	.740	14.221	.000	.519	.536	215.170

Dependent variable: Risk Control

From the data analysis in Table 4.9, it can be seen from the results of regression analysis that there is a significant positive relationship between financial status and risk control, and its standardized coefficient is 0.740, indicating that financial status is an important factor affecting the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd.. When considering other factors, the determinable coefficient (R2) of the model is 0.519, that is, the financial situation can explain 51.9% of the variation of the risk control index of Beijing Hengyu New Energy Vehicle Rental Co., Ltd.. The adjusted R2 value is 0.536, which shows that the fitting effect of the model is relatively good and the reliability is high. According to the results of t statistics, the estimated coefficient of financial situation is 0.764, the t value is 14.221, and the p value is less than 0.001, which indicates that the estimated coefficient of financial situation is statistically significant. The results of F statistics show that the F value is 215.170 and the P value is less than 0.001, which indicates that the regression model is significant as a whole. Therefore, the financial situation has a significant positive impact on the risk control of Hengyu new energy vehicle rental business, and the financial situation analysis can be used as an important indicator to evaluate the risk control ability of enterprises.

Therefore, hypothesis H4: "Financial situation has a positive impact on the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd.." is established.

### **Chapter 5 Conclusion and Recommendation**

#### 5.1 Introduction

This chapter summarizes and analyzes the research results, and puts forward more perfect risk monitoring mechanism and risk coping strategies to ensure the stability and sustainability of business operations.

#### 5.2 Conclusion

# 5.2.1 Industry Development has a Positive Impact on the Risk Control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd.

Through data analysis, we can draw the following conclusions: there is a strong correlation between equipment upgrading and itself, and with the advancement of equipment upgrading, the company's business ability and market competitiveness will also be improved; There is a strong positive correlation between elimination risk and equipment upgrading (the coefficient is .819\*\*), and with the acceleration of equipment upgrading, it may face the risk of increasing elimination risk; Industry development has a significant positive impact on enterprise risk control, and the adjusted regression model can be used to predict and explain the changes in the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd., in which industry development has a significant positive impact on the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd., that is, with the continuous development of the industry, the risk control ability of enterprises will increase accordingly.

The development of the industry has a positive impact on the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd.. According to the data analysis results, we can see that market competition and operational risk are closely related to business risk control. As a comprehensive factor, industry development has obvious influence on market competition and operational risk.

Market competition brought by industry development has a positive role in promoting enterprise risk control. With the rapid development of the new energy vehicle industry, the industry competition is becoming increasingly fierce. The existence of competition forces enterprises to constantly strengthen their own risk control ability to cope with the challenges of competitors. As a small and medium-sized enterprise in the industry, Hengyu new energy vehicle rental business is facing the competitive pressure from large enterprises. According to the data analysis, there is a high correlation coefficient between market competition and business risk control, which can be inferred that the development of the industry has had a positive impact on the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd..

The scale expansion and resource integration brought by the development of the industry have also played a positive role in controlling the operational risks of enterprises. With the expansion of industry scale, enterprises can increase revenue by increasing investment and expanding business scope, and gain more advantages in resource integration. In data analysis, there is a high correlation coefficient between operational risk and business risk control, which means that the ability of operational risk control can be enhanced through scale expansion and resource integration. These opportunities brought by industry development can enable Beijing Hengyu New Energy Vehicle Rental Co., Ltd. to better implement various risk management measures and reduce operational risks.

# 5.2.2 Policies and Regulations have a Positive Impact on the Risk Control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd.

From the above analysis results, it can be seen that policies and regulations are significantly positively related to the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd.. Policy stability is strongly related to itself, and the completeness of legal system is positively related to it, which shows that a stable policy and a complete legal system can reduce risks. The standardization coefficient of policies and regulations is 0.638\*\*, which shows its important role in risk control. The R2 value of the model is 0.506 and the adjusted R2 value is 0.471, which proves the reliability of the model. The estimated coefficients of policies and regulations are statistically significant. Therefore, the good degree of policies and regulations can improve the risk control ability of Beijing Hengyu New Energy Vehicle Rental Co., Ltd.. The policies and regulations have had a positive impact on the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd., and this impact is multifaceted.

Firstly, the regulations formulated by the government for the new energy vehicle industry provide clear market guidance and operational norms for enterprises such as Beijing Hengyu. These policies and regulations not only require enterprises to meet certain technical standards and security performance requirements, but also regulate their market behavior, preventing the occurrence of unfair competition and fraudulent behavior. This standardized market environment provides strong support for the development of enterprises.

Secondly, policies and regulations have set certain entry barriers for new energy vehicle leasing business to ensure its safety and service quality. Only new energy vehicles certified by the government can enter the rental market, which ensures the quality and safety of rental vehicles from the source. At the same time, policies and regulations also require enterprises to establish a comprehensive after-sales service system to ensure that users receive timely and effective services during the leasing process. This service guarantee measure reduces market risks and enhances user confidence in the new energy vehicle leasing business.

In addition, policies and regulations have strengthened the protection of consumer rights. The government has formulated strict consumer rights protection regulations, requiring enterprises to comply with relevant regulations when providing leasing services to protect the legitimate rights and interests of users. This regulatory environment has made Beijing Hengyu New Energy Vehicle Rental Co., Ltd. pay more attention to service quality and user experience when providing leasing services, thereby enhancing its brand reputation and user satisfaction.

In summary, a suitable and clear policy and regulatory environment has an undeniable positive impact on the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd.. These policies and regulations provide strong support for the stable development of enterprises and also guarantee the healthy development of the entire new energy vehicle industry. By continuously improving and optimizing the policy and regulatory environment, the government can further promote the development and popularization of the new energy vehicle industry, and contribute to the sustainable development of society.

#### 5.2.3 Business Nature has a Positive Impact on the Risk Control of Beijing Hengyu

#### New Energy Vehicle Rental Co., Ltd.

The business nature has a significant positive impact on the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd., and the standardized coefficient of its regression analysis is 0.616\*\*, indicating that the business nature has a great impact on risk control. There is a high correlation coefficient between residual risk and market competition and operation risk, which is 0.810\*\* and 0.821\*\* respectively, indicating

that there is a close relationship between them. The correlation coefficient between market competition and operational risk is also very high, which is 0.825\*\*, indicating that there is a close relationship between market competition and operational risk. There is a strong correlation between the business nature of different dimensions and business risk control. The adjusted model has good fitting effect and reliability, which shows that business nature analysis can be used as an important index to evaluate the risk control ability of enterprises. The nature of business has a great influence on the risk control of enterprises.

The nature of the business has a significant positive impact on the risk control of Beijing Hengyu's new energy vehicle leasing business.

The nature of new energy vehicle leasing business determines its social value in environmental protection and energy conservation. This type of business not only helps to reduce carbon emissions and air pollution, but also provides consumers with more economical and convenient modes of transportation. Therefore, the recognition of new energy vehicle leasing business by society is gradually increasing, which provides broad market space and good development prospects for enterprises such as Beijing Hengyu.

The nature of new energy vehicle leasing business also determines its high capital investment and technical requirements. In order to provide high-quality rental services, Beijing Hengyu needs to continuously invest funds in vehicle updates, maintenance, and research and development, as well as possess advanced technology and management capabilities. This business nature requires enterprises to have high financial strength and technological level, thereby reducing market risk to a certain extent.

The nature of the new energy vehicle leasing business also determines its need to maintain close cooperation with the government, industry associations, and other parties. The government's support policies for the new energy vehicle industry and the standardization and guidance of industry associations have had a positive impact on the risk control of enterprises such as Beijing Hengyu. For example, government subsidies and tax incentives have reduced the operating costs of enterprises and improved their market competitiveness; The standardization and guidance of industry associations can help enterprises improve service quality, strengthen industry self-discipline, and further reduce market risks.

## 5.2.4 Financial Situation has a Positive Impact on the Risk Control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd.

Based on the analysis results in Table 4.8 and Table 4.9, it can be concluded that the three financial dimensions of solvency, operational capacity and profitability have a significant positive impact on the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd.. There is a strong correlation between these financial indicators and risk control, which shows that they have important reference value for evaluating the risk control ability of enterprises. Specifically, the standardized coefficients of solvency, operating ability and profitability are 0.819\*\*, 0.729\*\* and 0.831\*\* respectively, which indicates that they have a high degree of influence on the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd.. The results of regression analysis show that there is a significant positive relationship between financial status and risk control, and financial status is an important factor affecting the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd..

The financial situation has a significant impact on risk control, and the company should strengthen financial management to ensure the accuracy and integrity of financial data. It is suggested to establish a sound financial system and internal control, and strengthen the monitoring and prevention of financial risks. Considering the important influence of solvency on risk control, the company should further enhance its solvency and ensure that it can repay its debts on time. This can be achieved by increasing cash flow, optimizing capital structure and avoiding high-risk debts. Strengthen operational capacity: Operational capacity also has an important impact on risk control, so the company should pay attention to improving operational efficiency and management level. This can be achieved by optimizing the operation process, improving the utilization rate of resources and reducing the operation cost. Profitability also has a strong impact on risk control, so companies should pay attention to improving profitability, increasing income sources, controlling costs and expenses, and improving profit margins. This can be achieved by developing new markets, expanding business scope and optimizing product lines. Although the financial situation plays an important role in risk control, risk management is an all-round work. Companies need to strengthen risk management capabilities, conduct comprehensive risk assessment, formulate scientific risk prevention and treatment measures, and deal with potential risks in advance.

#### **5.3 Recommendation**

Beijing Hengyu New Energy Vehicle Rental Co., Ltd needs to strictly evaluate and control all kinds of potential risks during its operation. Therefore, enterprises need to establish a complete set of management system and evaluation methods to ensure that the business can operate within a controllable range. Specifically, Beijing Hengyu New Energy Vehicle Rental Co., Ltd. needs to strengthen risk management and control from the following aspects:

1. Implement strict risk assessment and control measures. This includes a comprehensive, systematic and objective assessment of all potential risks, and taking corresponding risk control measures according to the assessment results. When evaluating risks, enterprises need to consider market, technology, finance, law and other risk factors, and adopt scientific and reasonable evaluation methods and tools to ensure the accuracy and reliability of the evaluation results.

2. Build a sound internal monitoring mechanism. This includes the establishment of a sound risk early warning mechanism, verification mechanism, risk assessment and risk prevention measures tracking mechanism. Through these mechanisms, enterprises can find and solve risk problems in time, and ensure the compliance and transparency of business. In addition, enterprises also need to establish corresponding internal control systems to ensure the standardization and effectiveness of various business operations.

3. Establish an effective financial management and budget planning system. By making a reasonable budget plan, we can ensure capital liquidity and financial health and reduce operational risks. Enterprises need to strengthen the analysis and monitoring of financial data, find and solve financial risks in time, and formulate corresponding countermeasures.

4. Develop a serious of perfect customer service system to improve customer satisfaction and corporate reputation. This includes pre-sales consultation, contract signing, service tracking, return, maintenance and other links to provide quality service experience. By strengthening customer service and management, enterprises can enhance customer stickiness and loyalty, thus reducing market risks.

5. Need to have a high-quality, professional management team and staff. By strengthening staff training and management, employees can have risk awareness and risk control knowledge, and improve their sensitivity and coping ability to risks. This will enable enterprises to respond quickly, effectively control risks and develop continuously when facing various risks and challenges.

To sum up, Beijing Hengyu New Energy Vehicle Rental Co., Ltd must strengthen risk management and control from many aspects. By implementing strict risk assessment and control measures, establishing a sound internal monitoring mechanism, establishing an effective financial management and budget planning system, providing high-quality customer service and having a professional management team and staff, enterprises can maintain a leading position in the highly competitive market environment and create sustained value.



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## Appendix

Questionnaire of the Risk Control of New Energy Vehicle Rental Business Of Beijing Hengyu New Energy Vehicle Rental Co., Ltd

Hello, sir/madam!

Thank you for taking the time to participate in this survey. First of all, thank you for taking time out of your busy schedule to fill in this questionnaire. The following table is set up to better understand the risk control of Beijing Hengyu New Energy Vehicle Rental Co., Ltd., so as to reduce the risk control in daily business activities. I hope to fill in this evaluation form objectively. The evaluation methods of the questionnaire are divided according to very different opinions (1) and very different opinions (5). Thank you for your participation!

Part I: Basic information

1. Your gender:  $\Box$  male  $\Box$  female.

2. Your age:  $\Box$  under 30 years old  $\Box$  30-40 years old  $\Box$  40-50 years old  $\Box$  50 years old or above.

3. Your occupation: □Human Resources Department □Legal Department □ Finance Department, □ Risk Management Department, □ Sales and Operation Department.

4. Your employment time:  $\Box$  Less than 2 years  $\Box$  3-5 years  $\Box$  6-8 years  $\Box$  More than 8 years.

	UNIVEY		C	ption	S	
Primary index	Secondary index	1	2	3	ons 4	5
	I think the equipment upgrading of					
	enterprises can reduce the technical risks					
The industry	they face in buying in enterprises					
development	I think technology, market, policy and					
development	other reasons will lead to the risk that					
	enterprises will be unable to continue to					
	operate or be eliminated by the market					
Policies &	I think a stable policy environment is					
Regulations	conducive to long-term planning and					
	development of enterprises					

Part II: The survey scale

	I think a complete legal system provides			
	enterprises with a level playing field and			
	the guarantee of legal operation.			
The business nature	I believe that the residual value risk of			
	the new energy vehicle leasing business,			
	including the service life of the vehicle,			
	maintenance costs, second-hand car			
	market conditions and other factors, may			
	affect the company's asset value and			
	profitability.			
	I believe the market competition of the			
	new energy vehicle rental business			
The husiness	includes the number of competitors,			
	market share, product differentiation			
	and other factors. May affect the			
	company's market share and			
	profitability.			
	I believe that the market competition of			
	the new energy vehicle rental business,			
	including the number of competitors,			
	market share, product differentiation			
	and other factors, may affect the	< 1		
	company's market share and			
	profitability.			
	I believe that the solvency of an		×	
	enterprise is related to the stability of its			
	capital source.			
The financial situation	I believe that the age and salvage value			
	rate of leased vehicles will have an			
	important impact on the operating			
	ability of enterprises.			
	I believe the profitability of an enterprise			
	is related to its market positioning and			
	product competitiveness.			

Thank you for your active participation in this questionnaire, and have a nice life.