

# Research on the Degree of Competition among Financial Leasing Institutions - Based on Regional Perspective

## Zhaoyu Yang

School of Economics and Management, North China University of Technology, Beijing, China

1150556110@gg.com

**Abstract.** Competition is ubiquitous in various industries. Of course, the financial leasing industry is no exception. This article uses the financing leasing data of listed companies from a regional perspective to calculate the original Herfindahl index to measure the level of competition among financing leasing institutions in various regions. By analyzing the statistical results, it can be concluded that the competition among regional financial leasing institutions is intense.

**Keywords:** Financial leasing institutions, Degree of competition, Regional perspective, Herfindahl index

#### 1 INTRODUCTION

China is one of the largest financial leasing markets in the world, and its huge market size has attracted numerous domestic and foreign enterprises to enter the Chinese market, intensifying competition within the industry. The participants in the industry include different roles such as large state-owned banks, financial institutions, and private enterprises. The diversity and differentiation of individuals also make the competitive situation more complex. Compared to other financial industries, the threshold for financing leasing industry is relatively low and the difficulty is relatively small. Therefore, more companies are constantly joining the industry, increasing the intensity of competition. The customer needs and financing scale vary in different regions, which also requires financial leasing institutions to provide diversified products and services to attract customers, further intensifying industry competition. [1] economic leasing has a constructive and important effect on sales profits in some subindustries.

#### 2 LITERATURE REVIEW

This article compares the competition between financial leasing institutions by reading five research papers on product market competition. Du Jinzhu and Hu Wenxiu studied the relationship between product market competition, risk taking, and company investment efficiency. Discovering that product market competition can effectively alleviate overinvestment and suppress underinvestment, thereby improving company investment

<sup>©</sup> The Author(s) 2024

efficiency; Product market competition can significantly improve a company's risk-taking level, thereby supporting the "governance effect" of product market competition; Risk taking also has a significant impact on improving the investment efficiency of a company. Meanwhile, risk-taking can play an important mediating role in the relationship between product market competition and company investment efficiency. Hu Ling and Wang Jingyu studied the impact of product market competition on the innovation efficiency of enterprises. The improvement of product market competition has a positive impact on the improvement of enterprise innovation efficiency. In terms of the action path, product market competition promotes the improvement of enterprise innovation efficiency by improving information transparency and incentive effectiveness. The degree of marketization and the nature of property rights have different impacts on the correlation between product market competition and innovation efficiency. Zhang He explores the impact of margin trading and securities lending on the competitive behavior of listed companies in the product market. The implementation of margin trading and short selling policies has promoted the market competition behavior of the target enterprise's products, but the potential excessive competition problems it brings may lead to a decline in the overall performance of the enterprise. It was also found that the policy effects of margin trading and short selling mainly focus on companies with high trading intensity or low sensitivity to stock price information. He pointed out that the asymmetry in the development of financing and short selling transactions in China amplifies the reward effect of the capital market on positive information of companies, which may promote excessive competition in the product market and reduce overall performance. The increase in sensitivity of individual stock price information can help alleviate the above problems. Liu Zheng proposed that the correct market service competition strategy is the key for enterprises to achieve their marketing goals. In the context of rapid socio-economic development, the value of commercial service competition strategies in the field of marketing management is gradually becoming prominent. In the face of a complex, ever-changing, and increasingly fierce market environment, the most important thing for enterprises to achieve healthy and healthy development is to focus on the perspective of consumers, and on this basis, deeply explore the purchasing needs and psychological standards of consumer groups, design product marketing activities and plans, and effectively improve the overall sales volume of products. Liu Qiren, Yuan Jin, Huang Jianzhong, and Feng Guimei proposed that cultivating core competitiveness of enterprises is an important part of supply side reform. They incorporated two competitive models, quality competition and price competition, into the multi product enterprise model, and analyzed the impact of tax adjustments on the core competitiveness of enterprises using export tax rebates as an example. Theoretical analysis shows that there are significant differences in product pricing and competitive models between enterprises producing homogeneous products and enterprises producing differentiated products. Differentiated product enterprises follow the pricing law of "the more core competitive product types, the higher the price". Therefore, there is a tendency to adopt a quality competition model when exporting; On the contrary, homogeneous product enterprises set low prices for products with core competitiveness and tend to adopt a price competition model when exporting.

#### 3 INNOVATION ANALYSIS

The existing HHI index refers to the sum of squares of the percentage of total industry revenue or total assets occupied by various market competitors in an industry, used to measure changes in market share, i.e. the dispersion of firm size in the market. It is a comprehensive index that mainly measures the concentration of product markets or banking institutions in the industry. This article draws inspiration from the HHI index for innovation, which is used to measure the level of competition among financial leasing institutions.

### 4 CORE INDICATOR

This article refers to the Herfindahl Index HHI, which measures the level of competition in the product market, and establishes the Herfindahl Index HHI, which measures the level of competition among regional financial leasing institutions. The formula is  $HHI=\sum_{i=1}^{N}(S_i/S)^2$ .

- N: Number of financing leasing institutions in the region
- $S_i$ :The amount of funds invested by the i-th financial leasing company
- S: The amount of funds invested by all financing leasing companies in this region

### 5 STATISTICAL RESULTS

	Percentiles Smallest		
1%	0.738031	0.738031	
5%	0.968768	0.738031	
10%	0.1436843	0.738031	
25%	0.1938695	0.738031	
50%	0.2931646		
		Largest	
75%	0.5022533	1	
90%	0.8600317	1	
95%	1	1	
99%	1	1	

**Table 1.** Percentiles from 1% to 99%

Table 2, statistical variables

Variable	Obs	Mean	Std.Dev	Min	Max
HHI	1081	0.3880968	0.265537	0.738031	1

The first variable is Mean which is average value of HHI. The second variable is STD which is standard deviation of HHI. The third variable is Min which is minimum of HHI. The fourth variable is Max which is maximum of HHI.

Table 3. HHI index by region

province_new	mean
Shanghai	0.41
Yunnan	0.44
Beijing	0.32
Jilin	0.46
Sichuan	0.30
Tianjin	0.46
Anhui	0.49
Shandong	0.37
Shanxi	0.32
Guangdong	0.23
Jiangsu	0.19
Jiangxi	0.59
Hebei	0.29
Henan	0.35
Zhejiang	0.40
Hainan	1.00
Hubei	0.39
Hunan	0.61
Gansu	0.71
Fujian	0.68
Guizhou	0.70
Liaoning	0.35
Chongqing	0.75
Shaanxi	0.42
Qinghai	0.47
Heilongjiang	0.67
Inner Mongolia Autonomous Region	0.31
Ningxia Hui Autonomous Region	0.78
Guangxi Zhuang Autonomous Region	0.55
Xinjiang Uygur Autonomous Region	0.81
Xizang Autonomous Region	0.55

#### 6 ANALYSIS

Table 1 presents the statistical results for quantiles ranging from 1% to 99%. Table 2 shows statistical variables such as mean, maximum, and minimum. Table 3 is the Herfindahl index that measures the level of competition among regional financial leasing institutions. There is both competition and cooperation among institutions in the financial leasing industry. Product market competition can effectively alleviate overinvestment and suppress underinvestment, thereby improving company investment efficiency. [2] At each stage of financing, venture capitalists evaluate the viability of

startups. [3] In large cities with lower HHI but more developed economies such as Beijing, Shanghai, and Guangdong, these areas have a larger market size and a larger number of customers, attracting more financial leasing institutions to enter the market for investment and intensifying competition. Product market competition promotes the efficiency of enterprise innovation by improving information transparency and incentive effectiveness. [4] But compared to competition, financial leasing institutions in these regions may be more inclined to cooperate and share resources, cooperate for mutual benefit, and improve overall market competitiveness.

In areas with high HHI such as Fujian, Gansu, and Chongqing, local governments may introduce supportive policies and preferential measures to attract financing leasing institutions to enter the market. There may also be a customer group with a high demand for financial leasing, resulting in a higher level of competition. The implementation of margin trading and short selling policies has promoted the market competition behavior of the target enterprise's products, but the potential problem of excessive competition brought about by this may lead to a decline in the overall performance of the enterprise. [5]

#### 7 CONCLUSION

The competitive behavior in the product market not only determines the performance of a single enterprise, but also directly affects the profit space of the industry, and even radiates the entire macroeconomy. [3] Due to factors such as regional market size, differences in participating entities, and customer demand, competition among financial leasing institutions within the region is relatively fierce. In the face of a complex, ever-changing, and increasingly fierce market environment, the most important thing for enterprises to achieve healthy and healthy development is to focus on the perspective of consumers, and on this basis, deeply explore the purchasing needs and psychological standards of consumer groups, design product marketing activities and plans, and effectively improve the overall sales volume of products. [6] But competition can also bring opportunities. For example, with the development of the economy and the upgrading of industrial structure, the financing leasing industry plays an important role in helping listed companies expand production scale and upgrade equipment, and the market potential is still significant. At the same time, industry competition is also driving institutions to strengthen their own capabilities and improve their service levels, providing customers with higher quality financing leasing services. The core competitiveness of an enterprise mainly refers to whether its core products have quality advantages or cost advantages. [7] Institutions need to enhance their market competitiveness by improving efficiency, innovating products, and improving service quality to compete for market share. [8] effectively leveraging problem-solving capabilities within organizational strategy and innovation processes can enhance competitiveness.

#### ACKNOWLEDGEMENTS

This work was supported by the research fund of National Natural Science Foundation of China under #72303004 (Research on the Effect of Credit Reporting System to

Smooth Credit Cycle for Financial Leasing: Based on the Perspective of Bank Information Transfer).

#### REFERENCES

- Zhu Chengke, Wang Junshan, Sanjuán Martínez Oscar, Fenza Giuseppe, Gonzalez Crespo Ruben, (2021) The fuzzy linear regression model for finding sales forcastion from financial leasing in China's equipment manufacturing industries, Journal of Intelligent & Fuzzy Systems. Volume 40. Issue 4:8477-8484. 10.3233/JIFS-189667
- Greenwood Jeremy, Han Pengfei, Sánchez Juan M,(2022) FINANCING VENTURES, International Economic Review. Volume 63, Issue 3: 1021-1053. 10.1111/IERE.12561
- Du Jinzhu, Hu Wenxiu. (2023) Product market competition, risk-taking, and company investment efficiency. Operations Research and Management, 03:171-176+239. 10.12005/orms. 2023.0097
- Hu Ling, Wang Jingyu. (2020) Product Market Competition and Enterprise Innovation Efficiency: A Study Based on Quasi Natural Experiments. Modern Economic Research, 09: 98-106. 10.13891/j.cnki.mer. 2020. 09. 012
- Zhang He.(2021)Financing and securities lending and competition in the enterprise product market .Economic Theory and Business Management, 10:81-96. http://jjill.ruc.edu.cn/CN/Y2021/V41/I10/81
- Liu Zheng. (2023) Research on Service Competition Strategies in Enterprise Marketing. Market Modernization, 24:57-59. 10.14013/j.cnki.scxdh.2023.24.060
- Liu Qiren, Yuan Jin, Huang Jianzhong, Feng Guimei. (2023) Product Competition Model, Tax Adjustment, and Core Competitiveness of Enterprises. World Economy, 02:159-182. 10.19985/j.cnki.cassiwe.2023.02.007
- 8. Catarina Veríssimo, Leandro Pereira, António Fernandes, Raquel Martinho,(2024) Complex problem solving as a source of competitive advantage. Journal of Open Innovation: Technology,Market,andComplexity,Volume10,Issue2:100258. 10.1016/J.JOITMC.2024.100258

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (http://creativecommons.org/licenses/by-nc/4.0/), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

