

COMPETITIVENESS OF JAPANESE SERVICE INDUSTRIES IN CHINA

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ABSTRACT

The service industry is one of the pillar industries of the Japanese national economy. Many Japanese scholars have used different perspectives in researching the service industry, but there are relatively few studies on the competitiveness of the service industry and overseas Japanese service companies. This study conducts an empirical study on Japanese service companies in China to understand the scale, attributes, and features of the Japanese service industries in the Chinese market. A questionnaire have been done among all of the Japanese service companies in China. Based on the data collected, studies on competitiveness are used as a theoretical basis, and statistical analysis is applied to conduct factor analysis for the empirical data, in order to grasp the main elements in competitiveness for the Japanese service industry in China. Finally, Pearson analysis is used to clarify the correlations among elements in competitiveness, in turn deducing the hierarchy among elements. Results show, among the competitiveness elements of the Japanese service industry in China, capability of operational strategies within the corporation is a core factor in promoting industrial competitiveness.

KEYWORDS

Japanese service industry, competitiveness, operational strategies, competitive strategies

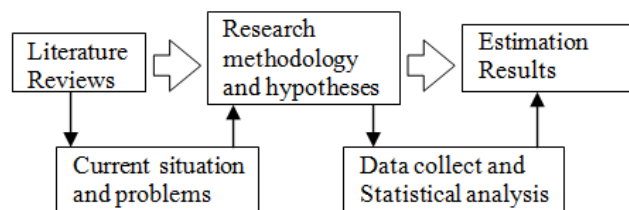
1. INTRODUCTION

With the integration of the global economy, more and more foreign companies begin to invest in China. As neighbors of China, Japan is famous for its services industry. Like all foreign companies in China, Japanese companies faced many problems since entering the Chinese market, but Japanese service industry enterprise's business scale expanding rapidly in China. More and more scholars are concern about the competitiveness of service industry just like Xiaoxi. Yan(2016), and the know-how of Japanese service industry should be studied more clearly.

Saito Shigeo (2001) points out that when Japan implemented its national census, it specifically divided its national industries into: primary industries including agriculture, forestry, and fishery; secondary industries including mining, construction, and manufacturing; tertiary industries including power/gas/water utilities, transportation/communications, wholesale and retail, finance, insurance, and real estate. Based on these divisions, the tertiary industries are also referred to as the service industry. His research showed that as early as the 1970s, 50% of domestic employees were in the service industry in Japan. In the 1990s, this ratio exceeded that of commerce and manufacturing, becoming the industry with the highest employment ratio in Japan. After the first oil crisis, Japan's bubble economy burst. This presented a major crisis to the rapidly growing service industry, and many visionaries began to turn their attention to the overseas market. This was the same time when the first group of Japanese service corporations appeared in China. The 21st Century came without Japanese economic recovery. In these two decades, the world economy constantly changed, and development of the service industry showed massive changes,

along with the elevation of quality of life. With the rapid development of the Chinese economy, China became a major world manufacturer. At the same time it was and continues to be a major consumer state with 1.3 billion people. If the development of manufacturing industries affects the standards of living, then it could be said that the service industry affects the quality of life and the extent of social harmony. As a state with a more developed service industry among advanced nations, it has a lot to teach the Chinese service industry.

Corporate competitiveness directly affects industrial competitiveness of a state, and industrial competitiveness directly influences national competitiveness. This study begins with an empirical examination of Japanese service corporations in China, focusing on factor analysis of competitiveness of the Japanese service industry in China, as well as the correlations among factors, to serve as a reference for the improvement of competitiveness in the operational processes of the Chinese service industry.



2. Literature Reviews

A. Theories relating to the service industry

The service industry provides intangible products to society. Shimizu Shigeru (1990) believes that the products in the industry have seven features that differ from the manufacturing industry. Nomura Kiyoshi (1989) pointed out that the main problems in development of corporations in the Japanese service industry were: (1) Participation of the demand side in the product creation process results in poor efficiency in the production plan, (2) the inability to interchange time and space, (3) difficulties in quality control, (4) difficulties in cost management, (5) high consumer costs and many complaints, and (6) high pressure on service personnel. Due to the lateness of development in the service industry, there are also problems such as (1) delayed mechanization, (2) diversity in price forms, (3) no legal protection for software and knowledge technology, (4) delay in social perceptions, (5) relatively late introduction of operational management theory, and (6) the industry has not received policy attention.

B. Theories on competitiveness

Gelinier. Octave/Hayashi Yujiro (1968) use the perspective of structural biology to point out that to be competitive, corporations should have three systems: the decision-making system, the assessment system, and the sanctions system. Poter, M.E. (1990) proposes the diamond model concept, pointing out that factors of competitive advantages for countries include: 1. Production elements; 2. Demand conditions; 3. Relevant and support provision industries; 4. Corporate strategies, structures, and competitive forms; 5. Government support; 6. Opportunities. Hu Dali (2001) provides clear definitions of the relationships among corporate competitiveness, industrial competitiveness, and international competitiveness. He points out that industries are categorized to satisfy social needs based on certain principles in the social division of labor in the national

economy, resulting in various sectors that produce and manage products and labor. Corporations are the fundamental drivers of the industrial and national economy, as well as the concrete participants in all economic activity. Corporate competitiveness determines industrial competitiveness, and in turn determines the level of international competitiveness (as in Figure 2).

In accordance with Porter, M.E's diamond model and the content of industrial competitiveness, Rui Mingjie(2004) constructed a new diamond model (see Figure 3). He believes that the present and future of Chinese industrial development requires cultivation of its own abilities in absorbing knowledge and in innovation, then further participate in the international industrial division of labor, seek a good position in the industrial chain and, in turn, maintain development of its industrial competitiveness in the global market. In addition, Rui Mingjie (2006) points out in Growth and Innovation of Knowledge Corporations that the formation of corporate competitive advantages primarily involves three dimensions, or the source of corporate competitive advantage, drive for stable competitive advantage, and orientation of competitive advantage. Different operational strategies are formed in dealing with these three different issues.

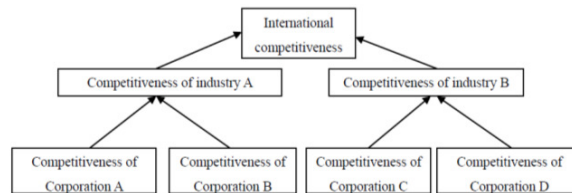


Fig. 2 Relationships among corporate competitiveness, industrial competitiveness, and international competitiveness

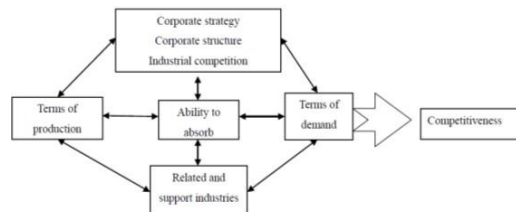


Fig.3 Rui Mingjie's competitiveness model

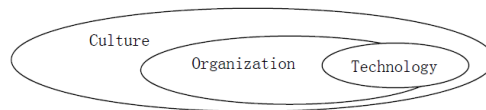


Fig.4 Elements of corporate competitiveness

Gui Zhaoming (2008) believes that core corporate competitiveness is comprised of three parts: the core is technology; the second level is organization, since only good systems and management can allow technology to become profitable products or services; the outermost layer is culture (as in Figure 4). Fan Lingen (2010) summarizes the developmental evolution of corporate competitiveness with three stages: the first stage has production or cost management as its core; the second stage is moving from production to marketing, which is the first strategic transfer of corporate competitiveness; the third stage is moving from marketing to

innovative value competition, which is the second strategic transfer of corporate competitiveness.

Based on the researches mentioned above, there is a question which want to be solve in this paper is that "What's the relationship within the competitive strategy, the competitors, the operational strategy, the corporate profitability, the corporate characteristics and the market strategy about the Japanese service industry in China? ".

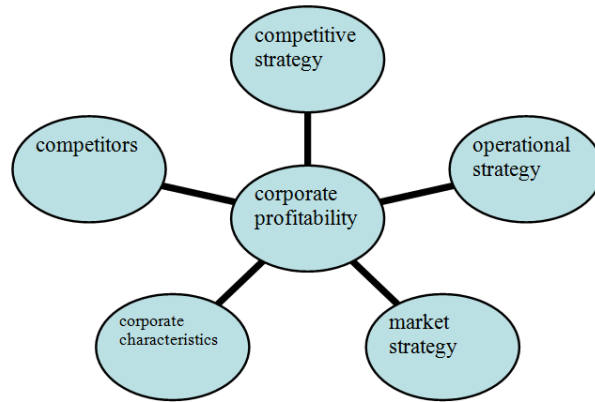


Fig. 5 The problem formulation of this study

3. RESEARCH METHODOLOGY AND HYPOTHESES

These theories show that corporate competitiveness guarantees of industrial competitiveness; corporate competitiveness affects and supports the development of industrial competitiveness. Many scholars have researched industrial competitiveness and its current state from the perspectives of human resources management and employment. For instance, Japanese scholars Tanaka Shigeru /Nomura Kiyoshi (1983) uses the perspectives of production and employment structure to conduct quantitative analysis on the Japanese service industry; in regards to the strategic research theory of overseas Japanese corporations, Okamoto Yasuo (1998) uses empirical research to confirm that Japanese corporations in East Asia have 3 basic strategies, which are globalized market strategy, on-site market strategy and overseas market strategy, and on-site market strategy; Takahashi Hideo (1992) points out that when corporations in the service industry establish strategic plans, they must undergo 4 stages. The first stage is to conduct general analysis of consumer and customer needs and to clarify the business scope and corporate mission of the corporation; the second stage is to orient service products to the market; the third stage is to further analyze consumer and customer needs, the competitive environment, and market opportunities; the fourth stage is to establish the strategic plan. Rui Mingjie, Tao Zhigang et al. (2004) use a macro and corporate perspective in a qualitative analysis of competitiveness in the automobile business, computer business, commercial banking business, telecommunications operation business, transportation and travel business, and biomedical business. Yoshimura Koji (2006) points out corporations seek to realize economic profits and construct their own competitive advantages in response to competition with competitors and, at the same time, he pointed out that there are close connections between operational strategies and competitive strategies. In addition, Fan Lingen (2010) and Gui Zhaoming (2008) research the assessment models and methods of corporate competitiveness. This study begins with corporate competitiveness in empirical research to understand the competitiveness factors in the Japanese service industry in China. After referring to Gui Zhaoming's (2008) corporate competitiveness assessment indicators and Fan Lingen's (2010) composite assessment indices, as well as the features of the service industry that are

distinct from the manufacturing industry, the study designs a questionnaire with 5 parts: 1. Basic corporate orientation, 2. Operational management ability, 3. Market adaptability, 4. Competitive advantages, and 5. Resource usage ability (TABLE 1).

Do the previously discussed theories relating to the service industry and competitiveness apply to the Japanese service industry? Does competitiveness in the Japanese service industry involve special factors? How are these factors related? These issues are answered by this study using empirical research and statistical analysis. The specific steps are to use these 5 categories and 23 items to conduct factor analysis of the data to derive the factors of the Japanese service industry, using correlation analysis to discover the correlation among factors of competitiveness in the Japanese service industry. The research model is shown in Figure 6.

Questionnaire project design	Category	Relevant studies
1.The industry to which your company belongs has an effect on the choice of operational strategies.	1	Tanaka Shigeru /Nomura Kiyoshi (1983)
2.The engagement method of your company has an effect on the choice of operational strategies.	1	Okamoto Yasuo (1998)
3.The business content of your company has an effect on the choice of operational strategies.	1	Takahashi Hideo (1992)
4. The operational strategy of your company has an effect on the on-site business strategy.	1	Yoshimura Koji (2006)
5.The on-site strategy of your company has an effect on competitive strategies.	1	Yoshimura Koji (2006)
6.The operational strategy of your company has an effect on the choice of competitive strategies.	2	Yoshimura Koji (2006)
7.The operational strategy of your company has an effect on the understanding of the competitive situation.	2	Yoshimura Koji (2006)
8.The operational strategy of your company has an effect on the main competitors.	2	Okamoto Yasuo (1998)
9. The operational strategy of your company is an on-site market intention strategy.	3	Okamoto Yasuo (1998)
10. The operational strategy of your company is on-site market and foreign market-based strategy.	3	Okamoto Yasuo (1998)
11. The operational strategy of your company is a global-based strategy.	3	Okamoto Yasuo (1998)
12. The main competitors of your company are non-Japanese	3	Okamoto Yasuo
13. The main competitors of your company are local businesses.	3	Okamoto Yasuo
14. The main competitors of your company are other Asian companies	3	Okamoto Yasuo
15. The basic strategy for competition at your company is a	4	Poter,M.E(1985)
16. The basic strategy for competition at your company is a	4	Poter,M.E(1985)
17. The basic strategy for competition at your company is a	4	Poter,M.E(1985)
18. The main competitive advantage of your company is service quality.	4	Haneda Masubumi(
19. The main competitive advantage of your company is price.	4	Haneda Masubumi(
20. The main competitive advantage of your company is sales technique	4	Haneda Masubumi(

21. Oppositional relationships in the same industry is the main factor	5	Poter,M.E(1985)
22. Buyer negotiation ability is the main factor determining the	5	Poter,M.E(1985)
23. Seller negotiation ability is the main factor determining the profitability of the	5	Poter,M.E(1985)

TABLE
1

Questionnaire project design

TABLE 4 Japanese service companies competitiveness factor analysis

Factor loading	Explanation of the difference	Accumulated explanation of difference
Factor 1--operational strategies	19.387%	19.387%
Factor 2--competitive strategies	11.039%	30.426%
Factor 3--corporation attributes	10.805%	41.231%
Factor 4--corporate profitability	10.468%	51.699%
Factor 5--competitors	10.175%	61.875%
	9.696%	71.571%
Deleted projects for missing the targets in factor analysis: Item 2, Project 11, Project 16, Item 17, Item 18, and Item 20.		

relation among competitiveness factors in the Japanese service industry

Fig.6 The

research model in this study

4. RESULTS

ESTIMATION

This study mails questionnaires to 384 Japanese service corporations in China listed in Summary of Corporations with Overseas Engagement published by Toyo Keizai Inc. in 2011. Other than 34 that were returned due to incorrect addresses, 350 successfully received their questionnaires. Among them, 114 are logistical companies at 33% of the total, 78 are consultancy companies at 22% of the total; 158 are other types of service companies (hospitality, finance, design, real estate agency) at 45% of the total. By November 2011, 67 questionnaires were retrieved, and 2 invalid questionnaires were discarded. Ultimately, 65 valid questionnaires were retrieved (see TABLE 2). Among them, 22 are logistical companies at 34% of the total, 7 consultancy companies at 11% of the total, and 36 are other types of service companies (hospitality, finance, design, real estate agency) at 55% of the total. Among these 65 Japanese service corporations, 2 are cooperating companies, 23 are joint ventures, and 40 are sole proprietorships.

TABLE 2 Questionnaire delivery and retrieval

Sent			Valid retrieval		
Type	Number (companies)	Ratio	Type	Number (companies)	Ratio
1*	114	33%	1*	22	34%
2*	78	22%	2*	7	11%
3*	158	45%	3*	36	55%
Total	350	100%	Total	65	100%

Source: compiled by this study.

Note:1*= logistical companies;2*= consultancy companies;3*= other types of service companies (hospitality, finance, design, real estate agency).

V. Empirical results and analysis

TABLE 3 Scale of reliability of competitiveness factor in Japanese service companies

	Internal consistency	Tested item	Bartlett test of sphericity	KMO value
Total items before analysis	0.725	17	Approx. Chi-Square=442.326 Sig.=0.000<0.001	0.699
Factor 1	0.892	4		
Factor 2	0.705	3		
Factor 3	0.691	3		
Factor 4	0.579	3		
Factor 5	0.855	2		
Factor 6	0.599	2		

Source: compiled by this study.

Note: Extraction method: Principal Components Analysis; rotation method: Varimax with Kaiser Normalization

TABLE 2 summarizes the corporate features of this survey. Among the retrieved questionnaires, 22 are logistical companies, 7 are consultancy companies, and 36 companies in other categories, for a total of 65 companies. With literature summary as a basis, when this study constructs competitiveness factors, it uses the basic orientation, operational management ability, market adaptability, competitive advantages, and resource usage ability scales as the main indicators for management. After summarizing the research literature, this study combines certain overlapping factors in the theories and synthesizes the portions outside of overlaps, summarizing 23 items for testing the influential factors of competitiveness in Japanese service companies. Among the 23 items, the side of the 5 indicators summarized from literature reflects the perceptions and assessments of Japanese service companies in the operational process in regards to the elements of competitiveness. In order to further compress and summarize these 23 items, this study uses statistical software SPSS19.0 to conduct factor analysis. Before factor analysis, Bartlett's test of sphericity and KMO test are conducted on the 23 evaluation items, and the result shows that the correlation matrix is not a unit matrix, and the factors show significant correlation (Approx. Chi-Square=442.326, Sig.=0.000<0.001), thus it is determined that the sample data is suitable for factor analysis.

Principal component analysis method is used to conduct rotation and to delete the items that have not reached the target, such as Item 2, Project 11, Project 16, Item 17, Item 18, and Item 20, then the remaining 17 items are combined into six factors, and the accumulated difference explanation is 71.571%. The factors are named based on the items within the factors, which are operational strategies, competitive strategies, corporation attributes, corporate profitability, competitors, and market strategies (see TABLE 4).

The six factors derived by factor analysis are used (factors: operational strategies, competitive strategies, corporation attributes, corporate profitability, competitors, and market strategies) for correlation analysis to derive the correlation coefficients among factors, as shown in TABLE 5. The correlation coefficients with greater significance are operational strategies and competitive strategies, operational strategies and corporation attributes, and operational strategies and competitors ($0.001 < P < 0.01$), the significance rates of correlation coefficients are second highest for operational strategies and corporate profitability, competitive strategies and corporate profitability, and competitive strategies and competitors ($0.01 < P < 0.05$).

Correlation is used to arrange the position of factors, as shown in Figure 7. Operational strategy is significantly correlated with four other factors; competitive strategy is significantly correlated with 2 other factors. Among all factors, only market strategy had no significant correlation with any other factor. This shows that operational strategies and competitive strategies occupy core positions among competitiveness factors.

TABLE 5 Correlation coefficients for competitiveness factors in Japanese service companies

		competi ve strat egies	corp orati on attri bute s	corpo rate profit ability	compet itors	market strategi es
operational strategies	Pearson correlation coefficient	.330*	.412*	.282*	.348**	.088
	p-value (two-tailed)	.008	.001	.025	.005	.493
competitive strategies	Pearson correlation coefficient		-.025	.257*	.297*	.083
	p-value (two-tailed)		.848	.038	.016	.510
corporation attributes	Pearson correlation coefficient			.053	-.057	-.151
	p-value (two-tailed)			.681	.658	.242
corporate profitability	Pearson correlation coefficient				.027	.148
	p-value (two-tailed)				.833	.240
competitors	Pearson correlation coefficient					-.048
	p-value (two-tailed)					.705
***. Refers to $0.001 < P < 0.01$, *. refers to correlation coefficients of $0.01 < P < 0.05$.						

Fig.7 Correlation of competitiveness factors in the Japanese service industry

Note: double-ended arrows mean correlation, “strong” means strong correlation, “weak” means weak correlation. Among them, market strategy has no significant correlation with other factors.

5. CONCLUSIONS

This study surveyed the competitiveness of the Japanese service industry. Questionnaires were designed based on Chinese and foreign theoretical bases, and questionnaires were mailed to 350 Japanese service corporations in China with correct addresses, which were statistically analyzed using the statistical software SPSS19.0. Ultimately, data from 65 corporations was successfully retrieved and validly incorporated into statistical analysis. Among them, 22 are logistical companies, 7 are consultancy companies, and 36 are other types of service companies. From the ways in which these 65 Japanese service corporations entered the Chinese market, we can see most are sole proprietorships, at 40, followed by those that are joint ventures, at 23, and the fewest were 2 cooperative companies. Factor analysis shows that the competitiveness factors of these corporations can be summarized as operational strategies, competitive strategies, corporation attributes, corporate profitability, competitors, and market strategies. These six factors have a guiding effect on the competitiveness of the Japanese service industry. Further correlation analysis is used to explore the relationships among these factors, showing that operational strategies has significant correlation with four other factors, while competitive strategies has significant correlation with two other factors. Among all factors, only market strategies did not show a significant correlation with any other factor. This results in the

conclusion that operational strategies and competitive strategies have a core position among competitiveness factors.

Results of this study can serve as a reference for theoretical researchers and a practical guide for the service industry. The emphasis and effective operation of corporations in operational strategies and competitive strategies can effectively elevate corporate competitiveness and, in turn, elevate the overall competitiveness of the industry. This study only covered 65 companies, and it is hoped that the data from these 65 companies can be used to deduce the overall situation. However, it is insufficient to represent all the data. Henceforth, the focus should be on the structure of the domestic service industry and competitiveness research, as well as of other foreign-capital service companies

REFERENCES

- [1] Gary Armstrong, Philip Kotler, Marketing: an introduction, Pearson Education Internationals, 2005.
- [2] Len Groves, Principles of international marketing research, Blackwell Business, 1994.
- [3] Philip Kotler, Gary Armstrong, Principles of marketing, Prentice Hall International, 1996.
- [4] Philip Kotler, Marketing management, Prentice Hall, 2000.
- [5] Philip Kotler, A framework for marketing management, Prentice Hall, 2001.
- [6] Philip Kotler, Kevin Lane Keller, Marketing management, Pearson Prentice Hall, 2006.
- [7] Susan P. Douglas, C. Samuel Craig, International marketing research, Prentice-Hall/Donald, 1983.
- [8] Seán de Búrca, Richard Fletcher, Linden Brown, International marketing : an SME perspective, Prentice Hall, 2004.
- [9] Tamer Cavusgil, Advances in international marketing : a research annual, JAI Press, 1996.
- [10] W. Scotton and Ronald L. Zallocco, Readings in market segmentation, American Marketing Association, 1980.
- [11] Gelinier. Octave, Hayashi Yujiro trans, The secret to corporate competitiveness: for the strengthening of international competitiveness, Japan Production Headquarters Press, 1968.
- [12] M.E.Poter and Toki Mamoru, The strategy of competitive advantage – how to continue and maintain high performance, Japan Diamond Press, 1985.
- [13] M.E.Poter and Hirotaka Takeuchi trans, Competitive strategy 1, Japan Diamond Press, 1999.
- [14] M.E.Poter, Hirotaka Takeuchi trans, Competitive strategy 2, Japan Diamond Press, 1999.
- [15] Isagai Nobuo, Heisei recession and the service industry, Japan Aoki Shoten Publishing Co, 1995.
- [16] Yachi Hiroyasu, Involvement in the Chinese market: parallel progress of production and sales in emerging markets, Japan Chikura Shobo, 1999.
- [17] Kameyama Naoyuki and Yokoyama Toru, The service industry, Japan Toyo Shinposha, 1980.
- [18] Okamoto Yasuo, Japanese corporations in Asia, Japan Yuhikaku Publishing Co., Ltd, 1998.
- [19] Okamoto Yasuo, Operations of Japanese corporations in North America, Japan Dobunkan, 2000.

- [20] Yoshimura Koji, Operational strategies: Strategies: corporate strategies and competitive strategies, Japan Gakubunsha, 2006.
- [21] Kimura Goro, Service industry in contemporary Japan, Japan Yuhikaku Publishing Co., Ltd, 1981.
- [22] Shimizu Shigeru, Knowledge of the modern service industry, Japan Yuhikaku Publishing Co., Ltd, 1990.
- [23] Oshima Yaichi and Kato Toshihiko, Competitive strategies, Japan Toyo Keizai Shiposha, 2003.
- [24] Digital Economic Center, The changing service industry map, Japan Ministry of the Treasury Press, 1988.
- [25] Digital Economic Center, The growth of service industry: from 5 keywords, Japan Diamond Press, 1991.
- [26] Ministry of Economy and Trade and Industry and Minister Office, Competitive society with multiple participation: from the perspective of 21st century economic and industrial policy, Japan Ministry of Economy, Trade and Industry Survey Association, 2007.
- [27] Haraguchi Toshimichi, Asian operational strategies and Japanese corporations, Japan Gakubunsha, 2006.
- [28] Haneda Masubumi, Service industry operational theory: Industry/operations in the 21st Century, Japan Tax Managers Association Press, 2002.
- [29] Ibuki Mutsushi, Overseas operational strategies for mid- and small-cap corporations, Japan Doyukan, 1994.
- [30] Nomura Kiyoshi, Initiation and strategy of the service industry: Transformation from product to service economy, Japan Telecommunications Press, 1983.
- [31] Nakano Yasushi and Akashi Yoshihiko, Economic service and industrial development, Japan University Press, 1991.
- [32] Nakagaki Masu, The East Asian strategy of Japanese corporations: Japanese corporations from interviews/literature, Japan Chukyo University Graduate Institute of Enterprise, 2004.
- [33] Saito Shigeo, Modern service economy, Japan Soufusha, 2001.
- [34] Gui Zhaoming, New theories on corporate competitiveness, Huazhong University of Science and Technology Press Co., Ltd, 2008.
- [35] Fan Lingen, Formation and elevation of corporate competitiveness, Shanghai University of Finance & Economic Press Co., Ltd, 2010.
- [36] Rui Mingjie and Tao Zhigang, Report on Chinese industrial competitiveness, Shanghai People's Publishing, 2004.
- [37] Rui Mingjie, Development and innovation of knowledge corporations, Shanghai People's Publishing, 2006.
- [38] Yan Xiaoxi, The competitiveness of Chinese service industry, China Academic Journal Electronic Publishing House, 2016.