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A Study on the Transnational Performance of China's Enterprises

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Abstract

Purpose – Currently, the economic globalization has become a common channel for China's enterprise to perform the international economic activities. Due to this background, this paper tries to analyze the influence of internationalization level on operation performance of enterprises.
Research design, data, and Methodology – This paper aims at 296 companies going listed in Shanghai Stock Exchange and Shenzhen Stock Exchange. The data about the listed companies during the 12 years from 2005 to 2016 have been collected. Relevant theories, including the theory of comparative advantage, monopolistic advantage and product life cycle in developed countries as well as the small scale technology and state on localized technological capacities in developing countries, have been summarized to provide theoretical basis for the influence of international operation on operation performance of the enterprises. Moreover, the current status of international operation of China's enterprises, including the dynamic cause of the internationalization of China's enterprises, its competitive advantage and disadvantage as well as the interest and potential risk of the internationalization, have been also analyzed.
Results – Via adopting the panel data to conduct an empirical analysis, It can be found that the relationship between international operation level and operation performance of China's enterprises can be expressed as the S-curve of declining, rising and declining again.
Conclusions – This paper has taken the lead in using Ohlson corporate value model to fill the gap in the relevant researches in China. It can also provide guidance for the international operation of China's enterprises. Meanwhile, the two systems for international operation and performance evaluation index have been put forward. The performance of international operation can be classified as financial performance or corporate value so that the operation effect of those China's enterprises going abroad can be better evaluated.

Keywords: Internationalization Level, Operation Performance of Enterprises, S-curve.

1. Introduction

The study of China's scholars on the internationalization of enterprises is still in the exploratory stage, which is mainly concentrated in three aspects. The first is that the necessity and influence of Chinese enterprises in international operations. The second is to analyze the difficulties and limitations experienced by China's companies in the process of implementing international operations. The third is to put forward the opinions and Enlightenments of the problems experienced by Chinese enterprises in the process of internationalization.

As a result of the analysis of international management and research achievements over the past few decades, scholars at home and abroad have conducted many studies on the international operation of enterprises. Through a

lot of research, the theory of enterprise internationalization has been established and systematized. As a result, scholars have obtained valuable theories through empirical research on the relationship between internationalization and entrepreneurship. In the first stage, international operations have played a positive role in promoting corporate value. In 1985, 188 large international enterprises in Britain used 1979 data to find that there was a correlation between overseas production and sales, but the results were not significant. Tallman and Li (1996) argue that only international operations can increase the sales revenue. The second stage is that international operations have a negative impact on corporate outcomes. In the study of King (2000), the degree of internationalization is expressed by the proportion of overseas income to total income. His findings show that there is a negative correlation between overseas income and total income. The third stage is the curvilinear relationship between internationalization and enterprise benefit. With the change of empirical research, scholars believe that the impact of internationalization on enterprise outcomes is not only linear. On the one hand, internationalization can provide enterprises with a large number of markets and opportunities. On the other hand, internationalization can bring higher management costs and transaction costs, more uncertainty and so on. Therefore, many scholars believe that there exists a non-linear relationship between enterprises and international operations.

At the initial stage of internationalization, the performance of most enterprises tends to decline with the improvement of internationalization. However, with the improvement of internationalization, the increase of operating costs and benefits of enterprises gradually offset. At this time, the performance of enterprises is on the rise with the improvement of internationalization. Therefore, many scholars believe that the relationship between the degree of globalization and enterprise performance has the best value. That is, there is an inverted U-shaped relationship between the degree of globalization and enterprise performance. Hitt (1997) uses the average data of 295 American manufacturing enterprises in COMPUSTAT database from 1988 to 1990, and analyzes the relationship between internationalization and enterprise performance by using strategic management, operation theory, enterprise and transaction cost, resource theory, organization theory and other management theories. His result shows that there is an inverted U-shaped relationship between internationalization and enterprise performance.

In 1999, when China implements the "going out" policy, the total amount of transnational operations (overseas direct investment or joint investment) of China's enterprises is only 132. 900 million dollars. However, according to the "China Enterprise Global Reporting 'Guo Cha Cha Enterprise Full Report (2017)'" by 2016, China's overseas direct investment by enterprises is 183 billion US dollars, namely, an increase of 44% over the previous year. This behavior makes China become the second largest foreign investor and net asset exporter in the world. For the first time in 2015, it exceeds US investment in China. According to CCG statistics, the total investment of China's enterprises in 2016 is 85.016 billion US dollars, namely, an increase of 76% over the previous year. In 2016, China's GDP reaches 74.4 trillion yuan, namely, an increase of 6.7% over 2015. And its economic growth returns to the world's top again. In this context, I believe that it is very meaningful to study the relationship between corporate transnationality and performance.

2. China's Multinational Representative Enterprises

2.1. Lenovo

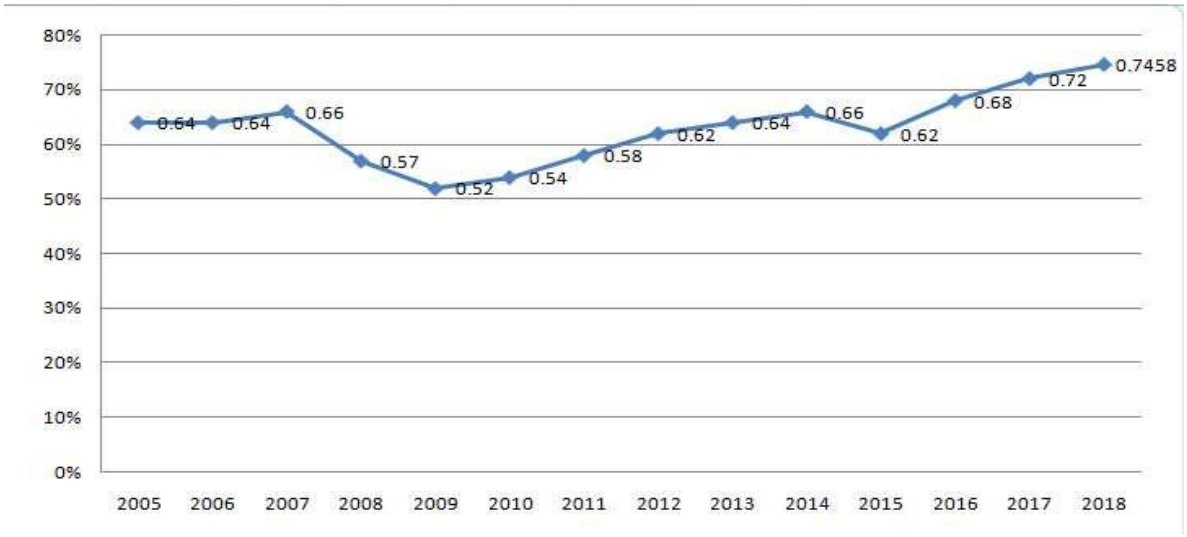
Lenovo starts its business in 1984, is founded in Hong Kong in 1988, and becomes a self-created brand seller in the 1990s. In 1994, Lenovo successfully lists on the Hong Kong Stock Exchange and begins the process of internationalization. During the 10 years from 1994 to 2004, Lenovo experiences the internationalization of technical services, and realizes the regional internationalization of commodities, the comprehensive internationalization of commodities as well as the multi-aspect internationalization of commodities. Through the brand internationalization, the internationalization of resource allocation is gradually realized so that a new leap in Lenovo's transnational operation is come true. In 1997, Lenovo signs an intellectual property contract with Microsoft, which marks the transnationalization of Lenovo's technical services. In 1999, Lenovo becomes the highest level of computer makers in the Asia-Pacific market, which marks Lenovo's regional diversification of its products. In 2000, Lenovo becomes the world's top ten computer manufacturers, which marks Lenovo's comprehensive product diversification. In 2002, Lenovo establishes a mobile phone business partnership, announcing its involvement in the mobile phone industry. Lenovo launches a multifaceted multinationalization of goods. In 2003, Lenovo announces the use of the new logo "Lenovo" to achieve the transnational brand of Lenovo.

In 2004, Lenovo announces that it has reached an agreement with IBM and takes over the global personal computer business IBM, which marks Lenovo's move towards a diversified resource allocation. Lenovo's internationalization is moving towards a new goal. The international allocation of Lenovo's innovative resources has brought Lenovo into a new historical stage of development. In overseas operations, from 1988 to 1993, Lenovo starts its business in the early days of cross-border business operations, achieving a ratio of 20% to 30% of its overseas operations. Overseas business accounts for more than 60% in the next five years after the creation of multi-nationalization of resource allocation is completed in 2004. At the 2006 Winter Olympics in Turin, Lenovo becomes the first China's company to be a global partner of the International Olympic Committee. In 2008, Lenovo monopolizes the technical equipment, as well as financial and technical support for desktop computers, notebook computers, communication networks, printers, etc. at the Beijing Olympics. At present, Lenovo has developed into an international enterprise, headquartered in Raleigh, USA, with branches in 66 countries and business expansion in 166 countries as well as more than 25,000 employees worldwide and annual turnover of 14.6 billion US dollars. Meanwhile, Lenovo has built three R&D bases in Beijing, China, Tokyo, Japan and Laurie, USA.

The development process of Lenovo internationalization can be divided into three stages. The first stage is to vigorously develop the initial stage of transnational operations (1988 ~ 1994), and Lenovo (founded as "the New Technology Development Corporation of the Institute of Computer Science of the Chinese Academy of Sciences") is established in 1984 to provide business services for foreign companies and accumulate market channels. In April 1988, Lenovo establishes a joint venture "Hong Kong Lenovo Science Co., Ltd." in Hong Kong, which initially engages in computer and parts trading. In August of that year, Hong Kong Lenovo acquires a production-oriented Quantum company. it establishes a research and development center, and successfully develops the Q286I personal computer mainframe in March 1989. In June 1989, Hong Kong Lenovo establishes "Shenzhen Lenovo" in Shenzhen, which has a 70% stake and builds a low-budget production base. Since then, Hong Kong Lenovo has begun mass production and export of motherboards. By 1994, Lenovo motherboard had exported 500 sets, accounting for 10% of the world market, entering the top five largest producers. The second stage is to focus on both domestic and overseas markets (1994 - 2003). After 1994, Lenovo's business development focuses on domestic markets and overseas markets. 1993, Lenovo launches the first 586 computers in China. In 1996, Lenovo surpasses foreign brands for the first time. Its market share occupies the domestic market for the first time. It even stays at the top for six consecutive years. In 1999, it jumps in the Asia-Pacific market with an market share of 8.5%. PC sales first. In that year, Lenovo clearly proposes the second line of the strategic line: comparing the domestic market with the international market, it decides to focus on the domestic market and the domestic market. By the year 2000, Lenovo accounts for 29% of the computer market share. Since April 2001, Lenovo has gradually expanded its original single PC business, consumer information technology equipment, commercialized information technology equipment, small equipment, information operations, IT services. Although Lenovo announces the implementation of a diversification strategy in six major areas, including assembly manufacturing contracts, the implementation of the diversification strategy does not achieve the expected results. In the end, in July 2004, Lenovo adopts a strategy to reduce Lenovo's six major areas of diversity except for PCs and mobile phones. The third stage is to vigorously promote the process of internationalization (2003-present). In 2003, Lenovo changes its 15-year logo from Legend to Lenovo and registers globally. This is an important step to actively promote internationalization. In 2004, Lenovo decides to implement the PC business policy. On December 8, 2004, Lenovo announces the acquisition of IBM World PC business for US$1.25 billion, which is an important step in the multinationalization process. In 2005, a new multinational Lenovo is officially born. After the acquisition of IBM's global PC business, Lenovo has operations in 160 countries around the world, and its overseas revenue exceeds 60% of its turnover, making it a worldwide company. From the perspective of business scale, Lenovo achieves a major goal of the company through mergers and acquisitions. In addition, from the perspective of the company's profitability, Lenovo's operating profit has been slightly increased before the implementation of the internationalization strategy. The cost of the first year of the merger of IBM's PC business increases, so the profit margin decreases somewhat, and then begins to rise again. However, the 2008 financial crisis leads to a sharp decline in profitability. After entering 2011, the situation begins to improve, and Lenovo's profit margin surges from a brief depression in the past to 12.64%. But Lenovo Group is facing huge challenges. Mergers and acquisitions can quickly grow a business, and the risk of such a swallowing merger is enormous.

According to the Lenovo Group's overseas operating profit rate chart, after the acquisition, Lenovo's overseas operating profit margin has increased significantly, and has remained above 50% so far, up to 68%. In other words,

nearly 60% of Lenovo's operating profit is realized overseas. Therefore, Lenovo's internationalization goal has been basically achieved.



<Figure 1> Lenovo Group's Overseas Sales Rate

2.1.1. SWOT Analysis of Internationalization Process of Lenovo

(1) Advantages: Lenovo companies have mature control capabilities in China and have an absolute advantage in the China's market. Since the acquisition of IBM's global PC business, Lenovo has leveraged its advanced technology and marketing management experience, and has experienced sales channels and distribution channels around the world, resulting in rapid development experience. This excellent resource has become a springboard for Lenovo Group to enter multinational companies. Brand is one of the intangible assets of a company and an important part of the core competitiveness of the company. Lenovo's acquisition of IBM's global computer project has had a major international impact. This also enhances the international reputation of the Lenovo brand. Through five years of brand use rights, Lenovo Group has upgraded from a Chinese brand to a well-known brand and has rapidly grown into an international brand with international influence.

(2) Disadvantages: Lenovo, which has just stepped out of the international road, still lacks experience in multinational operations and international market operations. The international management talents are in serious shortage and can not adapt to the internationalization strategy. More trials need to be endured. Due to insufficient experience in overseas markets, the share in overseas markets is significantly lower. However, the cost in overseas markets is quite large.

(3) Opportunities: The M&A business has accelerated the transnationalization process of Lenovo Group. For a long time, Lenovo has not achieved the desired results in terms of diversified development strategies. The goal of diversification is achieved after Lenovo acquired a global business. Lenovo has received worldwide attention through mergers and acquisitions and has gained considerable reputation. After that, Lenovo enters the Fortune 500 companies and its market share in the Korean market exceeds 30%. The new company will become the world's three largest producers. Therefore, the merger is not purchasing, but strategic Lenovo cooperation. Lenovo will occupy a huge brand power. "Best and good quality products, advanced technology" enters the world market. This is the opportunity for a new Lenovo.

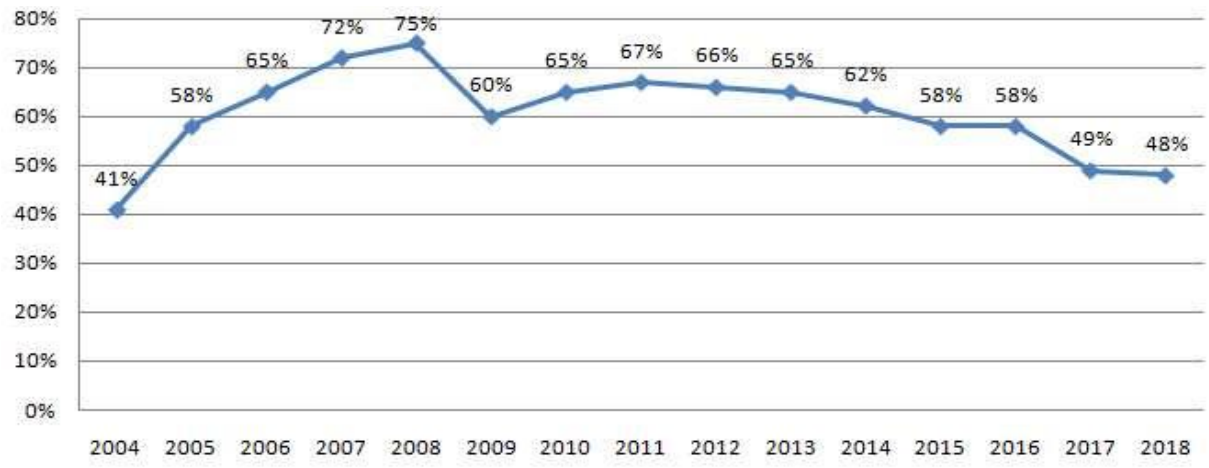
(4) Threat: In the market, desktop computers have a tendency to be replaced by laptops, and Lenovo's notebook technology devices are different from desktop computers. In emerging markets, although Lenovo's product share has risen linearly, its market share has been low. Moreover, most are advantages gained through low-cost strategies. In a mature market, Lenovo's market competitiveness is obviously weak, its market share is not high, and its circulation rate is low. For example, in the US and Japanese markets, due to the control of the supply chain, it gives competitors

an opportunity to attack themselves compared to Dell's direct sales model. Moreover, Dell and HP have more successful experiences, while Lenovo lacks experience.

(5) Inspiration: Strategic breakthroughs are the way companies must choose at a certain stage. After the success of the China's market, Lenovo strategically breaks through the international market and implements an international strategy. Transnationalization of enterprises is a complex strategic issue. Lenovo's international strategy is based on developing greater market capacity. We will work hard to keep companies from being tied to technology and products. "Only the ability of a company can meet international standards. It can develop an international strategy and achieve success. But not all companies can achieve". Enterprises should objectively understand the actual situation of their production capacity and management level, and need to have the ability to supply resources and scientific research and development, and expand the market in a specific.

2.2. Huawei

Huawei Technologies Co., Ltd. is established in 1987 as a private enterprise. In 2016, Fortune magazine announces the world's top 500 companies, Huawei ranks 129, ranks 27th among the top 500 in China, ranks first among China's private enterprises. Huawei is a company devoted to the development of global market. In 2003, Huawei sold 500 high-end products overseas. More than 100 million C&C08 ports are deployed around the world, and cooperates with World Com. The revenue of overseas market begins to change substantially, and its proportion in total sales revenue continues to increase. With the expansion of overseas markets, Huawei's sales revenue has increased steadily, and its imports in overseas markets have also increased year by year. The proportion of Huawei's sales revenue in the past 10 years is more than 50%. This shows that Huawei's transnational development is deepening. The proportion of Huawei's imports in overseas markets is shown in the figure below.



<Figure 2> Huawei's Overseas Business Share

2.2.1. Huawei's Multinationalization Process

Huawei's strategy of "surrounding the city from the countryside" determines Huawei's gradual realization of leapfrogging. This process can be divided into four stages. The first stage is to enter Hong Kong: Huawei gains experience in international market operation, and Hutchison Telecom's stringent requirements on product quality and service make Huawei's products and services closer to international standards. The second stage is to develop the markets of developing countries. The focus is on Russia and South America, which have large markets. In 1997, Huawei establishes a joint venture company in Russia to open up markets in a localized model. In 2003, sales exceeded $300 million, ranking first. In 1997, Huawei establishes a joint venture in Brazil. However, due to the continued deterioration of the economic environment in South America and the stable market position of North American Communications Group, as of 2003, Huawei's sales in South America are less than US$100 million. The third stage is the comprehensive development of other areas. In Thailand, Huawei has received orders for larger mobile smart networks. In addition, Huawei has achieved good sales in relatively developed regions such as Saudi

Arabia and South America. The fourth stage is to open up markets in developed countries. In the Western European market, since 2001, through cooperation with well-known local agents, Huawei products have successfully entered Germany, France, Spain, the United Kingdom and other developed regions and countries. The North American market is not only the world's largest communications equipment market, but also the most difficult market for Huawei. Huawei is the first to go into the market with low-end products, and then sell alcohol products. In order to adapt to the market leapfrogging process, Huawei has continuously promoted the leapfrogging of product R&D. The Indian Institute is established in 1999. Since 2000, Huawei has established research institutes in the United States, Sweden and Russia. Through these frontier technologies, advanced international talents and technologies have been introduced, providing support and services for the development of headquarters products.

2.2.2. SWOT Analysis of Huawei's Internationalization Strategy

(1) Strength: A. The leading position of telecommunication manufacturing enterprises: The technical level and price/performance ratio of Huawei network products have the ability to develop into the international market and will create the most overseas markets. B. low cost: Huawei's success largely leverages China's labor cost advantage, providing a more cost-effective telecommunications solution for the telecommunications market, challenging the cost limit. C. Technological innovation capability: Huawei has a group of independent intellectual property rights technology and the patent technology developed for the second time after digestion and absorption, so that the price of its export products has a large room for fluctuation, and it has the strength of low-cost competition. D. Successful marketing: In the international market, operating companies in developed countries in Europe and the United States pay more attention to product quality and service. Huawei has more than 100 branches around the world, and its marketing and service network is spread all over the world to provide customers with fast and quality services. At present, Huawei's products and solutions have been applied to more than 100 countries around the world.

(2) Weakness: A. Multi-national management talent shortage: These talents include international financial talents, managers with multicultural management experience, legal talents who are familiar with global legal operations, and those with experience in international management. B. Internal management norms: Although Huawei's internal management has a comparative advantage over domestic enterprises, it lacks a board of directors suitable for multinational companies. Huawei's technical policies, market policies, and management policies are not balanced. Human resources management has many defects, which leads to competition in international markets. The cost is much higher than the competition.

(3) Opportunity and Threat: A. The continuous development of the world communication market, the rapid growth of China's economy and the recovery of the international market will have a favorable impact on the Chinese communications. The network upgrading brought about by China's telecommunication restructuring will bring huge investment opportunities for industry. At the same time, the huge scale of China's market and the support of government industrial policies have made the global telecommunications equipment industry shift to China, and brought trendy investment opportunities to the industry. B. The international market entry threshold is reduced, and sales can be increased through the international market. Compared with China, the level of telecommunications networks in most overseas markets is still relatively backward, with opportunities for participation and large profit margins. C. Multi-nationalization can realize the optimal allocation of global talent resources on a global scale, and establish strategic cooperation and joint ventures with other related enterprises, which will help overcome the obstacles for enterprises to enter foreign markets and further enhance their competitive advantages. D. Industry competition is more intense. As China's growth rate slows, the profit growth of the traditional product market has been difficult. The vicious price war and product homogenization of Chinese equipment manufacturers have seriously damaged the market order. E. Differential trade, technical standards and other risks should be taken into account. Chinese companies' cross-border investment is almost concentrated in developing countries. These countries still have many uncertainties in terms of law, market, credit, etc., and they are at great risk. China's current overseas investment risk protection system is imperfect and basically in a blank state. Huawei is still not firmly established in the North American market. In the face of the global economic downturn, Huawei's internationalization strategy, especially the North American market, is still facing serious challenges.

(4) Inspiration: After 30 years of hard work, Huawei has transformed from a sales agency company to a transnational third-largest communication private enterprise. Its spirit of research and development has laid the foundation for Huawei's hardware technology. Ren Zhengfei's private entrepreneurship and Huawei's global

philanthropy strategy far exceed the development strategy of all traditional operations. With the advent of the era of big data, Huawei has begun to focus on developing enterprise cloud services and social infrastructure services in the future development strategy. Huawei's strategic thinking will also evolve from "traditional suppliers" to "open social infrastructure", Network service company", to join the new market competition with more powerful strength.

3. Empirical Analysis

3.1. Variable Description

The proportion of overseas assets in total assets, the number of overseas subsidiaries, the number of globalized countries and regions, and the proportion of overseas employees in the total staff also become the common sense to measure the level of enterprise globalization in some studies. In this paper, FSTS (Overseas Sales/Total Sales) is used as a variable to evaluate the diversification level of enterprises.

3.2. Basic Statistics

The basic statistics of variables will be shown in <Table 1>. The survey shows that the average values of share price (P), net asset per share (BPS), net profit per share (EPS) and degree of multinationalization (FSTS) are 13.61, 3.68, 0.31 and 0.24, respectively. Therefore, the internationalization of Chinese enterprises is still in its infancy.

<Table 1> Basic Statistics

Variable / Statistics	Mean	Median	Maximum	Minimum	Std. Dev.
P	13.61	10.00	334.15	1.67	15.61
BPS	3.68	3.22	50.88	-3.20	2.71
EPS	0.31	0.19	14.58	-7.07	0.78
FSTS	0.24	0.16	0.99	3.51E-05	0.22

From the relationship of variables as <Table 2> shows, the correlations among stock price (P), net asset per share (BPS), net profit per share (EPS) and degree of internationalization (FSTS) are proportional.

<Table 2> Correlation

Variable	P	BPS	EPS	FSTS
P	1.00			
BPS	0.55	1.00		
EPS	0.59	0.75	1.00	
FSTS	-0.04	-0.06	-0.01	1.00

3.3. Ohlson Model

According to the findings based on Japanese companies of Contractor (2003), there is a S-type relationship between multinational companies and corporate values. We will try to assume that there will be a functional relationship between transnationalization and performance for Chinese listed companies.

Hypothesis 1: There is a S-shaped relationship between the degree of transnationalization and corporate performance.

$$P_t = \beta_0 + \beta_1 BPS_t + \beta_2 FSTS_t + \beta_3 FSTS_t^2 + \beta_4 FSTS_t^3 + \upsilon_t \quad (1)$$

Where β_0 indicates the constant; $\beta_i (i = 1,2,3,4)$ indicates the parameters. υ indicates the white noise.

<Table 3> shows the result of corporate performance and transnationality at the same period.

<Table 3> S-shaped Relationship Test between Internationalization and Corporate Values

Variable	Model 1	Model 2	Model 3	Model 4
β1 *BPS*	2.049*** (21.45)	2.047*** (21.39)	2.048*** (21.36)	2.048*** (21.36)
β2 *EPS*	7.186*** (20.96)	7.192*** (20.96)	7.190*** (20.94)	7.179*** (20.89)
β3 *FSTS*		-0.313 (-0.45)	-0.205 (-0.23)	-2.209 (-0.85)
β4 $FSTS^2$			-0.050 (-0.19)	2.870 (0.80)
β5 $FSTS^3$				-0.370 (-0.82)
R^2	0.513	0.513	0.513	0.513

Note: *, ** and *** indicate 10%, 5% and 1% significant levels respectively.

<Table 3> indicates that transnationality has a close relationship with stock prices. The result of adding "model 4" to the second and third items of the transnational index shows unexpected results. Then the next model is used to make the regression analysis again.

<Table 4> shows the result of the transnational degree of enterprises in the previous period and the current performance of enterprises.

Hypothesis 2: There is an S-shaped relationship between the degree of transnational and firm performance in the previous period.

$$P_{t+1} = \beta_0 + \beta_1 BPS_t + \beta_2 FSTS_t + \beta_3 FSTS_t^2 + \beta_4 FSTS_t^3 + \upsilon_t \quad (2)$$

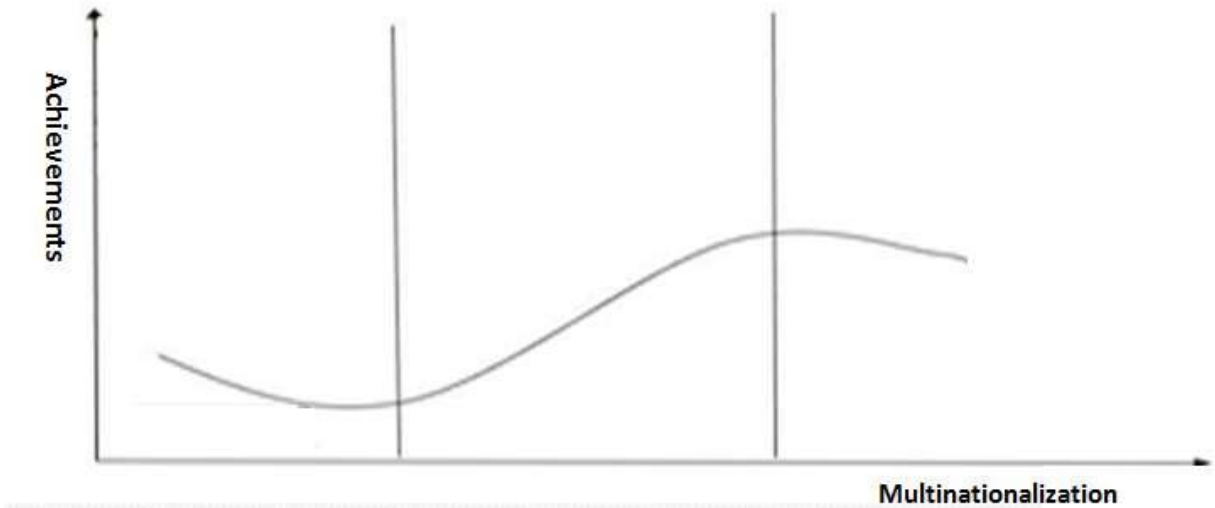
Where all notations are the same as that of equation (1). Using equation (2) to conduct an empirical analysis, the results show in <Table 4>.

<Table 4> Results of Enterprise Value and Transnational at period t+1

Variable	Model 1	Model 2	Model 3	Model 4
β1 BPS	1.407***	1.390***	1.388***	1.385***
	(11.59)	(11.42)	(11.41)	(11.39)
β2 EPS	8.193***	8.232***	8.201***	8.182***
	(19.53)	(19.61)	(19.52)	(19.49)
β3 $FSTS$		-1.718*	-6.778**	-19.166***
		(-1.82)	(-2.29)	(-3.09)
β4 $FSTS^2$			6.557*	45.930***
			(1.81)	(2.59)
β5 $FSTS^3$				-30.669**
				(-2.27)
R^2	0.381	0.382	0.383	0.384

Note: *, ** and *** indicate 10%, 5% and 1% significant levels respectively.

It can be seen from this that all variables are positively related to the stock price. From the model (4), we can see that in the low level of transnational, $\beta 3$ coefficient is - 19.166, but with the increase of transnational, $\beta 4$ number is 45.93. That is to say, in the low-level cross-border sector, the increase in overseas expenses has had a negative impact on corporate value, but after transnationalization has reached a certain level, it has had a positive impact. $\beta 5$ 30.669 is valid. with the development of internationalization, performance will not increase, but decrease. The results are the same as those of Contractor (2003).



<Figure 3> S-word Relationship between Degree of Multinationalization and Achievements

<Table 5> Types and Results

Type	Results
β5 > 0, significance	The relationship between enterprise performance and internationalization degree is S-shaped.
β5 < 0, significance	There is an inverse S-shaped relationship between the performance of Chinese enterprises and the degree of internationalization
β5 non-significance β4 > 0, significance	There is a U-shaped relationship between the performance of Chinese enterprises and the degree of internationalization
β5 non-significance β4 < 0, significance	There is a reverse relationship between Chinese enterprises' internationalization performance and internationalization degree
β5,β4non-significance β3significance	There is a linear relationship between the performance of Chinese enterprises and the degree of internationalization
β3,β4,β5 non-significance	There is no relationship between the performance of Chinese enterprises and the degree of internationalization.

3.4. Third-Term-Model of Enterprise Achievements

To verify the above results, a variable return on assets is introduced and a regression analysis is conducted. Referring to the existing research, we set the empirical model as linear regression, take financial indicators as explanatory variables, and internationalization degree indicators as explanatory variables to form the following regression model.

3.4.1. Independent Variable

Because enterprises pursue the maximization of profits, the most concerned data of listed companies is the return on assets. The higher the return on assets, the better the operating performance. Therefore, this paper will refer to the methods commonly used by scholars to evaluate the business performance of enterprises via the return on assets (ROA).

ROA = net profit / total assets (3)

3.4.2. Basic Statistics

The survey results show that the average level of internationalization and business performance are 0.2437 and 0.035, respectively. From the correlation between the degree of internationalization and firm performance of the study, the internationalization degree (FSTS) and business performance (ROA) of the variables are 0.05 ($p<0.10$).

<Table 6> Basic Statistic

Statistics	FSTS	ROA
Mean	0.243781	0.035694
Median	0.166421	0.031130
Maximum	7.174602	1.756415

Minimum	3.51E-05	-1.680610
Std. Dev.	0.255077	0.082288
Skewness	6.478770	-0.987786
Kurtosis	154.9380	119.9437
Jarque-Bera	3464703.	2038281
Probability	0.000000	0.000000
Sum	871.4331	127.6402
Sum Sq. Dev.	232.6046	24.20751
Observations	3576	3576

<Table 7> Correlation

Variable	FSTS	ROA
FSTS	1.0000	
ROA	0.0508*	1.0000

Note: *p<0.10, two-tailed coefficient test(N=3576)

The level of globalization of the firm is a correlation coefficient with ROA of 0.05. In other words, the level of globalization of the firm and the ROA show a weak positive relationship. Moreover, the relationship between variables also shows a proportional relationship. Based on the S-shaped theory of enterprise globalization, the panel data model for establishing the transnational level and performance of Chinese listed companies is as follows.

Hypothesis 3: The S-shaped relationship between international level and business performance exists or not.

$$ROA_t = \beta_0 + \beta_1 FStTS_t + \beta_2 FSTS_t^2 + \beta_3 FSTS_t^3 + \upsilon_t \quad (4)$$

Where ROA refers to the total net assets profit of each enterprise; FSTS refers to the transnational level of the enterprise; FSTS2 refers to the square of the proportion of the enterprise's overseas sales in the total sales, and FSTS3 refers to the third proportion of the enterprise's overseas sales in the total sales.

<Table 8> Results of Enterprise Value and Transnational

	Model 1	Model 2	Model 3
β1	0.02***	0.02***	-0.03
β2		-0.00	0.07*
β3			-0.01***
β0	0.003	0.003	0.005

Note: *, ** and *** indicate 10%, 5% and 1% significant levels respectively.

Hypothesis 4: There is an S-shaped relationship between degree of internationalization and firm performance in the previous period or not.

$$ROA_{t+1} = \beta_0 + \beta_1 FStTS_t + \beta_2 FSTS_t^2 + \beta_3 FSTS_t^3 + \upsilon_t \quad (5)$$

<Table 9> Results of Enterprise Value and Transnational at period t+1

	Model 1	Model 2	Model 3
β1	0.02***	0.03***	-0.01
β2		-0.01**	0.05*
β3			-0.01**
β0	0.002	0.004	0.005

Note: *, ** and *** indicate 10%, 5% and 1% significant levels respectively.

From model 1 to model 3, in the case of low transnational degree, β1=-0.013, but with the increase of transnational degree, we can see β2=0.053. That is to say, in low-level transnational regions, the increase in the cost of going overseas has had a negative impact on entrepreneurs. So there is a negative correlation between two variables. However, after a certain stage of transnational operation, the two variables show a positive correlation. β3=-0.007 In the third stage, with the increase of transnational level, the market tends to saturate, while the performance of enterprises decreases with the increase of internationalization level. The conclusion here is the same as that of the "S" font.

4. Conclusion

References for this paper include Quanbei University Library, Google Academy, China HowNet and other websites. This paper studies the leapfrog development process of Chinese enterprises, and then based on Chinese A-share listed enterprises, the target enterprises which meet certain conditions for empirical research are selected. The time period is from January 2005 to December 2016 for a total of 12 years. Is there a certain relationship between degree of cross-border enterprise and business performance? Will the deepening of transnationality increase or weaken the performance of enterprises? Does the theory apply to China? This paper attempts to find the answer to these questions. The implementation of the "going out" strategy by Chinese enterprises has become an objective need for the development of the international economy. Overseas, a complete, reasonable and comprehensive theory of transnational business (including the theory of internationalization stage, monopoly advantage theory, etc.) has been developed. It is not clear whether this theory is applicable to the transnational operation of Chinese enterprises. This paper proposes relevant hypotheses for Chinese listed companies, adopts scientific research methods, discusses the impact of corporate internationalization on corporate performance, and verifies whether Chinese enterprises' international operations conform to existing theoretical conclusions. This has developed a theoretical system concerning the international operation of enterprises, which is importantly significant in theory. The four hypotheses have been verified and the conclusion that there is a S-shaped relationship between degree of internationalization and firmness is obtained. The conclusion shows that the relationship between degree of internationalization and outcome of China is in the early stage of the internationalization of cubic equation (S-shaped). In the initial stage of enterprise internationalization, due to unfamiliarity with the market conditions or cultural environment of the new country, many research costs are required. At this stage, the investment cost is relatively large, the operating expenses will be higher, the return on income will be slower, and the performance of the company will show a downward curve.

In the intermediate stage of S-shaped internationalization, the larger the scale of internationalization is, the smaller the cost burden of enterprises will be, but the higher the efficiency will also be. Therefore, with the development of the international community, the performance of enterprises will increase in the intermediate stage. The growth of investment cost is less than that of performance. In the third stage, with the development of

internationalization, corporate performance will decrease. Firstly, if the degree of internationalization is relatively high, the degree of internationalization of major markets will be relatively saturated. In this case, the promotion of internationalization will lead to the situation that the performance of enterprises can not be improved, but decline. Secondly, with the entry of enterprises from other countries, competition among enterprises becomes fierce, and the complexity of global operation will increase the cost of enterprises, which will offset the benefits of international production. Therefore, these two factors form the opposite relationship between final stage of internationalization and enterprise performance. According to the substantive research results, Chinese listed companies show a S-shaped structure with the rise of transnational level and the decline of corporate performance followed by an upward curve, which means that the transnational trend of China's non-financial industry is consistent with the internationalization of developed countries such as the United States. In the early stage of global operation, as enterprises begin to adjust their management structures, the performance of enterprises is in the downward trend at first. However, after a certain degree of progress in internationalization, the performance of enterprises is improved by gaining more opportunities and resources. Later, the complexity of global operations will be adjusted by cost. On the contrary, the increase of control costs will offset the benefits of international production and reduce the performance of enterprises. This paper puts forward the following proposals: (1) A leapfrog management model at the enterprise level should be established; a strategic collaboration among enterprises should be strengthened; the image and brand strategy should be strengthened. (2) The legal awareness should be strengthened; the importance to supervisory information and relevant legal policies should be attached; the correct investment concepts should be established. (3) The supply chain system should be continuously improved; A/S and user experience should be improved; the recognition and supervision ability of businesses should be enhanced. (4) Investment models and establishing a "world brand" strategy should be innovated. (5) Local national development strategies should be adopted; more funds and importance to personnel training should be attracted; the corporate responsibility and respect local customs should be established. (6) Financing channels should be expanded; loan quotas and building enterprises with high credit standing should be increased. (7) Overall investment plans from the government level should be made; the level of internationalization of enterprises should be improved; a good job in risk monitoring and response should be done; the financial service system should be improved. (8) Legislation on overseas investment should be strengthened; political mutual trust among countries should be enhanced. In addition, "go out" policy from the level of law firms and industry associations should be carried out; international teams and relevant special committees should be actively set up; the domestic and international exchanges should be expanded; the ability of overseas legal services should be improved. (9) The cross-border electronic settlement system should be improved; the construction of credit system should be strengthened; the formulation of international economic and trade rules for cross-border electronic commerce should be accelerated. In addition, the General Administration of Customs and other relevant departments should unite to open up a green channel for cross-border e-commerce. (10) Overseas cooperation should be guided; the national manufacture innovation center should be established, the educational structure should be improved; the high-level talents should be attracted. (11) A working group on industrial parks should be set up; the service system should be established, the strategic demonstration parks should be improved; the personnel training should be strengthened. (12) Overseas development of financial institutions, exchanges and cooperation with international financial institutions should be planned; the role of financing services should be strengthened. In addition, relevant financial institutions also need to innovate financial instruments and financing methods, and build a platform for diversified financial institutions.

4.1. Creativity and limitation

Creativity: This paper uses 12 consecutive years of data from Chinese listed companies to analyze the relationship between internationalization of Chinese enterprises and their performance. The finding indicates that there is a S-shaped relationship between internationalization of Chinese enterprises and their performance. This paper analyzes the effective transnational business performance of enterprises, using double index test. And finally stable results have been achieved.

Limitation: In this paper, the relationship between transnational degree and corporate performance of listed companies in China is analyzed. There are some shortcomings. From the data point of view, this paper only selects Shanghai listed companies as the research object, neglecting the non-listed companies. According to the availability of data, the formal study uses "FSTS" to evaluate the degree of multinationalization, which is somewhat single, which may affect the validity of the research results. There is no assessment of the two-way impact of transnational degree and performance, only the analysis of the impact of transnational degree on performance, and no analysis of the reverse impact of corporate performance on transnational degree. In the relationship of achievements made by

enterprises through transnational strategy, the factors affecting the side of enterprises are neglected. For example, due to the neglect of corporate commodity diversification strategy, intangible assets investment and other variables, I hope that the future research can be more thorough.

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