

# *Study on Relationship between Degree of Internationalization and Business Performance of Resources Enterprise –*

*Based on Dynamic Panel Data of Chinese Listing Resources Enterprises*

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**Abstract**—Resources enterprises have played significant role in the strategy of ‘going out’ of internationalization of Chinese business. During the fast pace of internationalization of Chinese companies, there are plenty of successful cases. However, there are also some cases are absent of success with regarding to this, which indicate that there is significant disparity on performance of internationalization of Chinese business. This paper selected 40 listing resources enterprises samples which have continuous overseas sales revenue for 9 years and applied dynamic data analysis model for empirical study and analysis. The finding revealed that the relationship between the degree of internationalization of Chinese resources enterprise and business performance is the U-type relationship which is conductivity firstly decreased, and then increased with further internationalization.

**Keywords**—resources enterprise; internationalization; Business performance

## I. INTRODUCTION

There are many characteristics of resources enterprise. First, the core competitive advantage is occupying the resources and heavily dependent on resources. Second, this types of enterprises have strong geography feature and low additional value of products. The dominance of assesses and resources is very strong for these business. Hence, resources enterprise strongly rely on the consumption of the resources. Since the strategy of ‘going out’ issued by Chinese government, plenty of Chinese business have begun to conduct the process of international development under the rapport of policies of government. This leads to the effective and efficient arrangement on worldwide resource. According to the statistics, the net outward investment in 2014 reached 123.12billion US dollars, which was 14.2% higher than the previous year. This figure accounts for the 9.1% of the global flow in 2014. The accumulation of investment reached 882.64 billion US dollars which was accounted for 3.4% of the global stock in 2014. The flow has occupied the third position on the global ranking, which increase the 1.5% compared with the previous year. The amount of saving was positioned in from eleven to eighth from last year. On the basis of industrial distribution of foreign

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investment, mining industry is in the third position with 16.55 billion US dollars. The trade for the mining products are very active. According to the statistics from Chinese Land and Resources Department, the total imports and exports volume were 1090 billion US dollars and increased 5.7% compared with the previous year, the volume of import increased by and export rose by 5.7% and 0.9% respectively. The figure 1 illustrated that the total amount of mining products has grown steadily annually and degree of change has not considerable indicating the Chinese mining industry still has played an essential role in foreign trade activity.

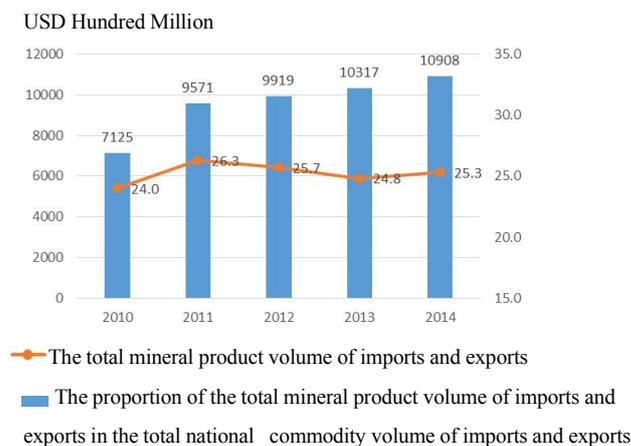


Fig. 1. The change of the mineral product volume of import and export trade between 2010-2014

Source: <http://www.askci.com/news/chanye/2015/04/25/13458qzc8.shtml>

During the wave of internationalization of Chinese resources enterprises, plenty of successful cases have existed. For instance, China National Offshore Oil Corporation purchased all the shares of Canada Nixon Co for 14.8 billion US dollars and this has been one of the most successful cases in terms of foreign purchases cases. Since 2005, China Petroleum Co purchased the Kazakhstan PK oil company and established the base for manufacture, refine, transport and sales. This is an international successful case. What is more, in 2009, Yanzhou Coal Industry purchased Australian Felix Coal

Company for 3.33 billion Australian dollars and the ‘transition period’ went smoothly as well. On the other hand, there are also some unsuccessful cases for internalization for Chinese businesses. For example, CNOOC failed to purchase the American Unocal Oil Company. Another example is in relation to the investment from Chinese Aluminium Organization to Rio Tinto and this caused 90 hundred million US dollars. The failure of this case is mainly because the three main reasons. Firstly, the risk for political investment is not accurate. Second, the negotiation was not mutual beneficial. Last but not at least, the communication with public, mass media and government officials were nor effectively and efficiently.

The above cases promote researchers to consider the following issues:

- Why some of resources enterprise are successful and some are failed to invest globally in the market?
- What is the relationship between the degree of internationalisation of resources enterprise and its business performance?
- What are significant influencing factors on the business performance in the process of internationalising of resources enterprises?

## II. LITERATURE REVIEW

Nitin Pangarkar calculated the entropy value index on the basis of 94 medium and small enterprises. The investigation employed the different weights to measure the level of internationalization of enterprises in America, Southeast Asia, European areas and evaluate the operating performance by using ROA and sales growth rate [1]. The study verified the positive relationship between the level of enterprise internationalization and operating performance.

In the similar vein, George Assaf. Et. Al selected the 43 large-sized retail supermarket among the different countries and analyzed the data for ten years on the basis of organizational learning theory [2]. The ratio of NCOS was used in addition to FSTS and FATA. The comprehensive index of internalization was evaluated by the average value of NCOS, FSTS and FATA, and operating performance was assessed by cost efficiency ratio. The model also includes four adaptable variables, namely, the economic consistency level among the host countries, the number of merge, the time if starting internalization and the capability of local market. The investigation uncovered the U relationship between the degree of internalization and operating business performance.

However, Lu and Beamish conducted a research exploring the continuous data of 11 Japanese organizations and measuring the degree of internalization by ratio of export and FDI. The study suggested that the horizontal s-shaped relationship well explained the inconsistencies results of the empirical research before, and coordinate the various theories on the internationalization performance on interpretation and disagreement, under the theoretical framework of the key research focuses on different levels of S-shaped curve shape, slope and inflection point position [3]. Nielsen studied 165 Swiss enterprises data from year 2002 to 2004 and further verified the research conclusion [4]. In addition, the latest

research of Chen et al. and Xiao has also showed that the relationship between international degree and business performance is S-shaped curve shape [5-6].

Ruigrok etc. argued that the relationship between international degree and business performance is obtained with the internationalization degree first rising after falling again N shape curve after studying with high degree of internationalization of the empirical study of 87 Swiss companies as samples [7]. In addition, such as Elango, Powell respectively in 207 and 102 U.S. companies as samples of the latest empirical research, also obtained the conclusion of the relationship between the N shape curve [8-9].

Yang and Yu chose the 150 listed companies and measured the level of internationalization by using the proportion of overseas sales, and the result found the similar S-line relationship between the internationalization of resources enterprise and business performance [10]. However, Wang et. al investigate A share listed 30 manufacturing organizations and found the positive association between the internalization and business performance [11].

According to the different empirical research, the association between internalization and business performance including U-type, inverted U-type, S type or linear correlation. However, the literature with regarding to the internalization resources enterprises are very limited, and the logical association between Chinese Resources Enterprises and business performance would be accurately analyzed and investigated for deep understanding.

## III. THEORETIC ANALYSIS AND ASSUMPTION ON THE RELATIONSHIP BETWEEN INTERNATIONAL DEGREE OF RESOURCES ENTERPRISES AND BUSINESS PERFORMANCES

Since joining the WTO in 2001, many enterprises in China began to gradually move towards globally, under the government encourages and policy actively explore overseas markets, to achieve the effective allocation of resources on a global scale. But compared with developed countries, the resource-based enterprises internationalization management starting later in China, is now developing at what stage is no related research to confirm. Therefore, this paper referenced Contractor through studies concluded that developed countries enterprises internationalization and performance relationship model of three phase of China's resource-based enterprises internationalization and performance relationship in stages were analyzed [12].

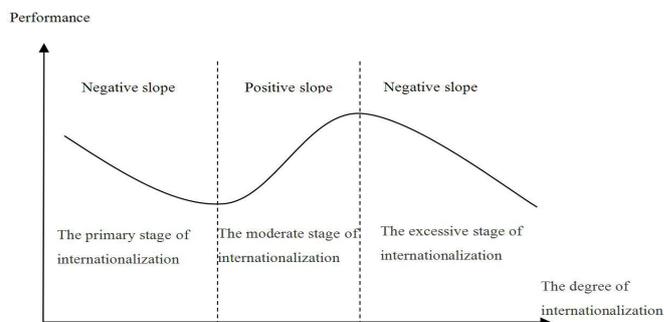


Fig. 2. The relationship between the degree of internationalization and organization performances [18].

- Early stage of internationalization

The relationship between international degree and business performance is negative correlation in the early stage of internationalization, as the enterprises are not familiar with the culture of the host country, market and environment; the cost to pay for study to entering the overseas market is very high. At the same time, the huge initial fixed investment cost and high management cost will be higher than that of earnings.

- Moderate stage of internationalization

Enterprises transnational operation after a period of time, gradually began to form the scale effect, the average production cost is reduced, at the same time can make use of factors of production cost differences, different countries around the world for rational allocation of resources, access to cheap labor force, improve production technology, improve the overseas market share. At this time the size of the economy makes enterprise income started more than cost, enterprise internationalization of business performance was positively to affect the relationship.

- Excessive internationalization stage

Full moon is deficient, there is no performance unlimited promotion enterprise. Tallman argued that when the enterprise internationalization degree reached a certain level, would face a threshold effect [13]. On the threshold, performance of enterprises reached a maximum, if further expansion, business performance will be reduced according to the degree of internationalization. The companies, though still can obtain the benefits of overseas subsidiaries, but the increase of the cost will be more and more high and more than revenue, internationalization of enterprises, and enterprise performance and a negative correlation relationship again.

The relationship between the degree of internationalization and business performance are different. According to the findings of study, the assumptions on the relationship are as follows:

**Hypothesis 1:** The relationship between international degree of resources enterprises and business performance is negative.

During the initial stage of internationalization, the policy, trade regulation, currency change, cultural differences, logistics ability may hinder the process of internationalization and this may have negative influence on business performance. In addition, the natural resources of enterprise have significant association with the choice between local operation and overseas investment. However, the difficulty of exploit of overseas resources, trade barriers of host countries and regional culture should be carefully considered because it may damage the performance of organization. In this way, the correlation between resources enterprises and business performance become negative.

**Hypothesis 2:** The relationship between international degree of resources enterprises and business performance is U-type with negative at the beginning and then shift to be positive.

At the initial stage of internationalization, the performance of companies would negatively have influenced by 'resources protectionism' of host countries and high fixed investment cost. However, as the process of internationalization, the business gradually performed well due to the increase of resources, participated profit, products of share and the improvement of ability of competitiveness. Thus, enterprises also gain experiences as well as opportunities and the economic scale is also expanded as well, which lead to the improvement of business performance. In this phase, the business performance is strengthened accordingly based on the internationalization of resources enterprises. In a word, the organizational performance reveal downward trend and shifted to upward trend-U type relationship.

**Hypothesis 3:** The relationship between international degree of resources enterprises and business performance is S-shaped curve shape with three stages: downward-upward-downward.

Chin-Chun Hsu indicated that enterprise performance was negatively affected by the process of internationalization and the performance would be improved then [14]. Finally, the performance would be undermined by the expansion of internationalization by investigating 255 multinational pharmaceutical companies.

During the two operational stages of resources enterprises, the performance of businesses will experience negative result and then improved gradually. Firstly, enterprises gain maximum profit from market in internationalization. Then, the market expansion may demand increasing administration and coordination cost and the profit cannot cover the cost. What is more, the profit for the remaining market would be shrinking. These factors would cause the bad enterprise performance. In a way, the excessive expansion of overseas market could become a negative influence for the business performance.

**Hypothesis 4a:** the increase on investment of R&D could improve business performance for resources enterprises.

The growth of resources enterprise largely depends on the consumption of resources. However, there are also plenty of challenges for these businesses. For the long-term development, technological innovation can be a good way to gain competitive edge. In other words, the accurate judge the competitive trend, the improvement on the market strain capacity and the growth stably in market was largely rely on innovative mechanism within the organization.

**Hypothesis 4b:** the investment on R&D positively adjust the relationship between the degree of internationalization and business performance. That is to say, under the same level of internationalization, the higher investment on R&D could lead to the better business performance.

Tang concluded that the input on R&D in organization can improve the enterprise performance, image and ability of international competitiveness [15]. The majorities of researches in China recommended that the businesses should increase the investment on R&D because it has huge effect on the improvement of international competitiveness despite of hysteresis of outcomes. Hence, the current study assumed that the investment input has positive impact on the association

between the degree of internationalization and business performance. In other words, the increasing input on R&D would lead to the good business performance.

#### IV. EMPIRICAL ANALYSIS

##### A. Selection of Variables

###### 1) Dependent Variables (business performance)

In the existed literature, the ROA was generally selected to indicate to the performance of business operation. Some researchers claimed that ROA is the sum of net asset and liability and it reflects the ability of profit-making. But it merely focusses on level of shareholders' equity. ROE (return on equity) only reflects the shareholders' equity returns level. Thus, compared with net assess profit, ROA could provide a comprehensive picture on the performance of businesses.

$$ROA = \text{Net profit} / \text{Total Assets} * 100\%$$

The higher ROA indicate the better business performance.

According to the study, the optimal operational situation is the coexist of improvement of management efficiency and decrease on coordinative cost. At the same time, the ability to cope with the complicated context is strengthened and productivity is also enhanced. In this way, this analysis employed the MFR as agent variables for enterprise operation.

$$MFR = \text{Administrative Cost} / \text{Sales Revenue} * 100\%$$

The lower MFR indicate the better business performance.

###### 2) Independent Variables (the degree of internationalization)

Plenty of literature suggested that most of mathematician used FRTR as a way to measure the degree of internationalization s. Some researchers conducted intensive research in relation to the measurement on the degree of internationalization. On one hand, the proportion on the overseas incomes of total incomes can reflect the degree of internationalization. On the other hand, the annual report of the listed Chinese resources enterprises would not provide the cost and profit in overseas operation except the total amount of overseas income and the proportion of overseas income. The formula of FRTR is as follow:

$$FRTR = \text{Overseas Income} / \text{Total Income} * 100\%$$

###### 3) Adjustment Variables

In essence, the adjustment variables are also intendent variables and it would affect the connection between dependent variables and another independent variable. That is to say. The relationship between independent variables and dependent variables can be changed because of the change of adjustment variables and this is called adjustment effect.

The increase input on D & R would reinforce the ability for international ability and improve the business performance. Tang found that the input of R&D would positively influence the performance of businesses together with the capacity of competitiveness on the basis of intensive investigation. In the current study, the intangible net assess is used to show the intensity of business R & D and it is represented by a proxy variable.

##### 4) Variable Controlling

The size of enterprise: generally speaking, the bigger size of the business implied the strong ability to funding, the good channel for R&D coupled with sales, the low production cost and high profit of the company. The size of the enterprise generally employed to measure the number of the branches, the number of employees, total assets and the annual sales in enterprise. The number of the employees are one of the most commonly used proxy variables to measure the size of the enterprise.

The SOE is the virtual variables of enterprise nature. Chen believed that the improvement on business performance of Chinese non-stated owned /collective holding resources enterprises are superior than listed state-owned or listed collective holding enterprises [16]. Chen claimed that there are significant differences between Chinese state-owned / collective holding enterprise and non-stated-owned / collective holding enterprise on international operation, market adaptability and business performance [17]. The paper introduces the SOE as virtual variable. In the formula of SOE stands for the private holding company, Hong Kong, Macao and Taiwan business holding enterprise, Foreign holding enterprise and other type of non-state owned/collective holding enterprise. 1 represent for the state-owned enterprise.

##### B. Sampling and formation of model

This study conducts the data from annual report of listed companies on Internet mining industry, electricity, heating, gas, and water. The information was recorded manually in Excel and proceed simple calculation. The data information includes:

- ROA (Net profit / Total Assets\*100%)
- FRTF (Overseas Income / Total Income\*100%)
- MFR (Administrative Cost / Sales Revenue\*100%)
- Intangible assets minus intangible assets amortization as R&D investment
- Take logarithm of enterprise employees as scale variable Size
- Whether the enterprise is state-owned enterprise

This paper selects the 40 Chinese listed resources enterprises as sample except ST share, ST share companies, businesses without full provided information and under-performed companies. The empirical analysis is on the basis of panel data of these selected 40 companies from 2006 to 2014.

The following illustrates the dynamic panel model:

Model 1 :

$$ROA_{it} = \eta_i + \theta_t + \beta_0 + \beta_1^- FRTR_{it} + \beta_2^+ Size_{it} + \beta_3^- SOE_{it} + \omega ROA_{i,t-1} + \delta R \& D_{it} + \varphi R \& D_{it} * FRTR_{it} + \mu_{it} \quad (1)$$

Model 2 :

$$ROA_{it} = \eta_i + \theta_t + \beta_0 + \beta_1^- FRTR_{it} + \beta_2^+ FRTR_{it}^2 + \beta_3^+ Size_{it} + \beta_4^- SOE_{it} + \omega ROA_{i,t-1} + \delta R \& D_{it} + \varphi R \& D_{it} * FRTR_{it} + \mu_{it} \quad (2)$$

Model 3 :

$$ROA_{it} = \eta_i + \theta_i + \beta_0 + \beta_1 FRTR_{it} + \beta_2 FRTR_{it}^2 + \beta_3 FRTR_{it}^3 + \beta_4 Size_{it} + \beta_5 SOE_{it} + \omega ROA_{i,t-1} + \delta R \& D_{it} + \varphi R \& D_{it} * FRTR_{it} + \mu_{it} \quad (3)$$

Model 4:

$$MFR_{it} = \delta_i + \theta_i + \varepsilon_0 + \alpha_1 FRTR_{it} + \alpha_2 Size_{it} + \alpha_3 SOE_{it} + \gamma MFR_{i,t-1} + \lambda R \& D_{it} + \sigma R \& D_{it} * FRTR_{it} + \varepsilon_{it} \quad (4)$$

Model 5 :

$$MFR_{it} = \delta_i + \theta_i + \varepsilon_0 + \alpha_1 FRTR_{it} + \alpha_2 FRTR_{it}^2 + \alpha_3 Size_{it} + \alpha_4 SOE_{it} + \gamma MFR_{i,t-1} + \lambda R \& D_{it} + \sigma R \& D_{it} * FRTR_{it} + \varepsilon_{it} \quad (5)$$

Model 6 :

$$MFR_{it} = \delta_i + \theta_i + \varepsilon_0 + \alpha_1 FRTR_{it} + \alpha_2 FRTR_{it}^2 + \alpha_3 FRTR_{it}^3 + \alpha_4 Size_{it} + \alpha_5 SOE_{it} + \gamma MFR_{i,t-1} + \lambda R \& D_{it} + \sigma R \& D_{it} * FRTR_{it} + \varepsilon_{it} \quad (6)$$

C. Model Assessment

The Stata 12.0 was employed to proceed systematic regression assessment on GMM and the result is as follows:

TABLE I. REGRESSION RESULT ON FINANCIAL PERFORMANCE AND BUSINESS PERFORMANCE

Explained variable	ROA			MFR		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
constant	-0.0060	0.3998** *	0.5192	-0.2104 *	0.0411 ***	0.5192 *
FRTR	0.2816	-0.2019** *	-0.2019 *	0.5345 **	0.0328 ***	0.0387 **
FRTR <sup>2</sup>		0.7981** *	0.7887 **		-0.1785 ***	-0.1716 ***
FRTR <sup>3</sup>			0.0395 *			-0.0014
R&D	0.5192	-0.0569	-0.0911 *	-0.1877 ***	0.0048 ***	0.0054 *
R&D*FRTR	-0.2337 *	0.0972	0.3426	-0.5145 ***	-0.0172 **	-0.0447 *
SIZE	-0.6193	0.0207	-0.5732	0.0105 ***	0.0090 ***	0.1815 ***
SOE	-0.265	-0.0027**	0.0090	0.0336 ***	0.0236 *	0.0193 **
Lag(1)	0.0580 **	0.6074** *	0.6887 ***	0.5195 **	0.5037 ***	0.4699 ***
Lag(2)	0.1542 **	0.0352** *	0.0328 **	0.4977 **	0.0504 ***	0.0431 **
Lag(3)	0.1501 *	0.1699** *	0.1687 *	0.0161 **	0.0181 ***	0.0181 *
Wald chi2	6734	7493	7739	0.431	0.427	0.346
R <sup>2</sup>	0.360	0.354	0.386	1701	1478	1452
AR (1) test	0.000	0.012	0.028	0.006	0.037	0.013
AR (2) test	0.176	0.634	0.714	0.313	0.527	0.253

Sargan test	0.1896	0.2077	0.1941	0.2130	0.1874	0.1990
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Source: Based on the results of the regression Stata12.0 finishing derived. \*\*\*, \*\*, \* represent at 1%, 5% and 10% significance level.

The purpose of Sargan test is to test whether instrumental variable has exogenous (whether it is related to disturbance). The original hypothesis is instrumental variable is not related with the disturbance. The AR (2) is to test whether the sequence is existence of the second order autocorrelation. As can be seen from table 1, adjoint probability of Sargan test and AR (2) test are greater than 0.1, shows that of endogenous problem of the model has been effectively controlled. At the same time model of random perturbation terms has no higher order autocorrelation. The test results prove the validity of the system GMM method.

In the model I, the coefficient of FRTR is negative indicating that the relationship of the degree of internationalization and business performance is negative. However, value P can show that this relationship is not significant. In the model 2, the coefficient FRTR is negative and the coefficient of FRTR2 is significantly positive indicating the level of internationalization and financial performance of Chinese resources enterprises are U type which is positive first and then negative.

In the similar vein, the association between R&D and FRTR is significant positive indicating the positive association between the input on R&D and business performance. In the model 3, the coefficient FRTR2 is significantly positive below 10%. However, the significance is less than model 2. Hence, it can be found that the relationship between the degree of internationalization and enterprise performance is U- type which decrease first and then increase. The regression equation is:

$$ROA_{it} = 0.3998 - 0.2019FRTR_{it} + 0.7981FRTR_{it}^2 - 0.0569R \& D_{it} + 0.0207SIZE_{it} - 0.0027SOE_{it} + 0.0972R \& D_{it} * FRTR_{it} + 0.6074ROA_{i,t-1} + 0.0352ROA_{i,t-2} + 0.1699ROA_{i,t-3} \quad (7)$$

Similarly, the regression formulation of operation performance is

$$MFR_{it} = 0.0411 + 0.0328FRTR_{it} - 0.1785FRTR_{it}^2 + 0.0048R \& D_{it} - 0.0090SIZE_{it} + 0.0236SOE_{it} - 0.0172R \& D_{it} * FRTR_{it} + 0.5037MFR_{i,t-1} + 0.0504MFR_{i,t-2} + 0.0181MFR_{i,t-3} \quad (8)$$

D. Comments on Regression Result

1) From the regression results of financial performance model and operating performance model, the relationship of internationalization degree of resource-based enterprises and business performance in China is a U-shaped relationship.

In advancing the process of internationalization, at the beginning of the internationalization, enterprises faced many difficulties and obstacles, performance would decline with internationalization process. While enterprises achieved certain levels of international through successful overseas operations, as the development of overseas resources as well as the accumulation of management experience, business performance would be increased. Hypothesis 2 was verified.

Taken the independent variable FRTR with first-order necessary condition from financial performance model and operating performance model, conclusions can be reached as follow: (1) On the degree of internationalization and financial performance on the U-shaped curve, the critical value internationalization is 25.3%. This means that when the internationalization degree level is less than 25.3%, the enterprise's financial performance is inversely proportional with internationalization; when the internationalization level is greater than 25.3%, the enterprise's financial performance is proportional to internationalization; when the internationalization level is 25.3%, the enterprise's financial performance is at the lowest point. (2) in terms of enterprise operating performance, the critical value the internationalization of is 18.4%, when the internationalization degree is less than 18.3%, the enterprise operating performance is inversely proportional with internationalization; when the degree of internationalization is more than 18.3%, the enterprise operating performance is proportional to internationalization level; when the internationalization degree is 18.4%, the operating performance is at the lowest point. These verified that, in advancing the process of internationalization, at the beginning of the internationalization, enterprises faced many difficulties and obstacles, performance would decline with internationalization process. While business performance reached the lowest point of U-shaped curve, along with enterprises achieved certain levels of international through successful overseas operations, as the development of overseas resources as well as the accumulation of management experience, business performance would be increased.

2) Research and development level has no significant impact on the listed resource based enterprise's financial performance. However, the research and development strength has a significant positive impact on operating performance, and also has significant positive adjustment to the relationship of enterprise internationalization and performance.

In the MFR model, the greater of research and development strength, the smaller of the MFR value, this shows that the enterprise operating performance is better. As can be seen from the regression model, every 1% increase of R&D would make the enterprise operating administrative expense rates fell by 0.48%, at the same time, would also make internationalization operation rate fell by 1.72%. Hypothesis 4a and hypothesis 4b are partly verified.

Irrefragable characteristics of natural resources determines the production factors of resource-based are limited. Therefore, resource-based enterprise must increase investment in technology innovation in order to achieve sustainable development, and also to offset the negative impact of non-renewable factors of production. At the beginning of the business enterprise growth, resource is enough to support the rapid growth of the resource-based enterprises. Along with the exploitation of strength increasing, resource-based enterprises can no longer rely on a simple resource consumption growth. In the technical and economic rapid development era, resource-based enterprises must enhance the capacity of technology innovation, increase investment in research and development,

and then be free from resource dependence, using innovative technology to improve its international competitiveness.

3) The smaller of measurement of operating performance (MFR), the higher enterprises operating performance is.

Combined with the regression analysis results, in terms of performance, the size of the enterprise is not significantly positive impact on financial performance, but has a significant negative impact on operating performance. The results show that there are still some significant problems existing in the process of international operation of resource-based enterprises, especially large state-owned enterprises. Under the support of all the preferential policies the government, there would be a blind expansion led to low efficiency of staff, staff as well as the competition between small phenomenon, is not conducive to enterprise performance improvement. Facing the vagaries of the international market, enterprises cannot simply rely on to expand to improve performance. Especially organization structure of the state-owned resources in China is complex, and the hierarchy is various. These would easily cause the low efficiency of management, then seriously hinder the development of enterprise itself. So enterprise scale is not the bigger the better, in the process of transnational operation, resource-based enterprises should focus on the efficient access to overseas resources and market, should not blindly expanding scale.

4) Equity ownership structure of resources-based listed companies has no significant negative correlation relationship to operating performance, and has significant negative impact on financial performance. This shows that internationalization performance of state-owned resource-based enterprises is lower than non-state-owned resource-based enterprises in China.

On the one hand, there is a low efficiency problem of administrative monopoly mode of the state-owned enterprises. On the other hand, in the process of internationalization to overseas market, resource-based state-owned enterprises are vulnerable to discouragement in democratization and high degree of marketization countries. This also leads to unsatisfied international business performance. Resource-based state-owned enterprises have abundant financial resources under the government's strong support, it happens to cause questions by some western countries. They would adjust that internationalization of state-owned resources enterprise is to achieve to goals of Chinese government not to effectively use of resources. Therefore, internationalization performance of state-owned resource-based enterprises is lower than non-state-owned resource-based enterprises. Although the government has provided the support of sufficient funding and the related policy in the process of internationalization of state-owned enterprises, strengthen the overseas competitiveness of state-owned enterprises. However, the empirical results show that internationalization performance of state-owned resource-based enterprises is lower than non-state-owned resource-based enterprises in China, also show that advantages of domestic policy support of state-owned enterprises have unsatisfactory impact on internationalization performance.

## V. CONCLUSION

The main research object of this paper is Chinese resource-based enterprises. Irrefragable of natural resources forced resource-based enterprises of China has accelerated towards the international market, actively strive for overseas resources to realize the sustainable development of themselves. In the tide of China's resource-based enterprises going globally, there are a number of successful cases and some failure cases at the same time. This shows that there are existing significant differences in Chinese resource-based enterprises "going out" performance.

Empirical study shows that the relationship between internationalization degree and financial performance and operating performance of Chinese resource-based enterprises is U-shaped curve relation with rise after falling. Namely in the beginning of internationalization operation, with the degree of internationalization, business performance is not immediately increased. Then when it reaches a certain degree, enterprise performance will start to rise. Empirical study also shows that the research and development strength has a significant positive impact on operating performance, the more investment to research and development, the higher of international operating performance. And also, research and development strength has significant positive adjustment to the relationship of enterprise internationalization and performance. At this stage, the size of resource-based enterprises is not significantly positive impact on financial performance, but has a significant negative impact on operating performance, namely the bigger enterprise size, the lower the internationalization of enterprises operating performance. Equity ownership structure of resources-based listed companies has no significant negative correlation relationship to operating performance, and has significant negative impact on financial performance.

## ACKNOWLEDGMENT

On the completion of this paper, I would like to express my deepest gratitude to my colleagues and students whose kindness and advice have made this work possible. Without their help, it would not be possible for me to complete this paper in such a short period of time. Their willingness to give me their time so generously has been much appreciated.

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