Analysis on Location Choice of China's OFDI in RCEP Countries

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Abstract. Based on the panel data of RCEP countries from 2007 to 2021, this article analyzes the location choice of China's outward foreign direct investment (OFDI) in RCEP countries. The results show that China's OFDI to RCEP countries is influenced by many factors. The market size and labor force of the host country significantly promote it, while the host country's tax burden and natural resource endowment significantly inhibit it. In order to better leverage the advantages of the RCEP, China should take a more active role in implementing the RCEP, improving labor market security system, optimizing its investment in RCEP countries, and actively integrating into the host society.

Keywords: OFDI, Labor force level, RCEP, Tax burden.

1. Introduction

In recent years, with the further strengthening of anti-globalization trend, the development of world economy and trade is experiencing challenges, and China's OFDI also suffers from many risks and uncertainties. Initiated by ASEAN in 2012, the Regional Comprehensive Economic Partnership (RCEP) was officially signed on Nov 15, 2020, and took effect on Jan 1, 2022. The RCEP provides a more transparent and stable investment environment for China's investment in RCEP countries. While further promoting China's outward investment, the RCEP has also helped cushion the global economic downturn to some extent. Most of RCEP member countries choose China as their first partner, and RCEP countries are playing an increasingly important role in the development process of China's outward investment. Therefore, this article studies the impact of RCEP factors on China's OFDI, which has important guiding significance for Chinese multinational enterprises to make reasonable investment in RCEP countries, improve the efficiency of outward investment and fully tap the investment potential of RCEP countries.

2. Literature review

Most studies show that FDI is often effected by political factors, market factors, social factors and natural resources factors of the host country. Kolstad and Wiig (2012) believed that variables such as natural resources and market size of host country have a important optimistic impact on China's OFDI [1]. He Wenbin (2019) found that the degree of openness of the host country is also related to OFDI, and higher foreign trade dependence will bring higher OFDI efficiency [2]. Kang et al. (2018) argued that China is more willing to invest in countries which have higher infrastructure level [3], while Dong Youde and Xia Wenhao (2021) argued that the infrastructure level of the host country would have an opposite effect on China's OFDI [4]. Ji Kaiwen and Zhou Ji (2018) found that the better the relationship between two countries, the more economic profits will be brought to China's OFDI [5].

There is not much literature on China's research on OFDI of RCEP countries. Nan Nan et al. (2021) believe that the level of government corruption in RCEP countries is closely related to China's OFDI [6]. Zhao Yijun and Deng Qian (2021) found that the market of RCEP countries has huge potential, and it is a very clear choice for China to invest in RCEP [7]. Xiang Xionghui (2018) pointed out that the main purpose of China's investment in RCEP is to seek resources and markets [8].

To sum up, there is huge potential for investment in RCEP countries. It is of great practical significance to study the location selection of OFDI in RCEP countries by China, make reasonable distribution and improve the efficiency of China's OFDI.

3. Analysis on the current situation of China's OFDI in RCEP countries

3.1. China's OFDI scale to RCEP countries

According to the Statistical Bulletin of China's OFDI, the flow and stock data of China's OFDI in RCEP countries from 2007 to 2021 are sorted out and the relevant trend chart is made, as shown in Figure 1. As can be seen from the figure, except for the decrease of OFDI flow in some years, the scale of China's outward investment in RCEP countries on the whole shows an upward trend.

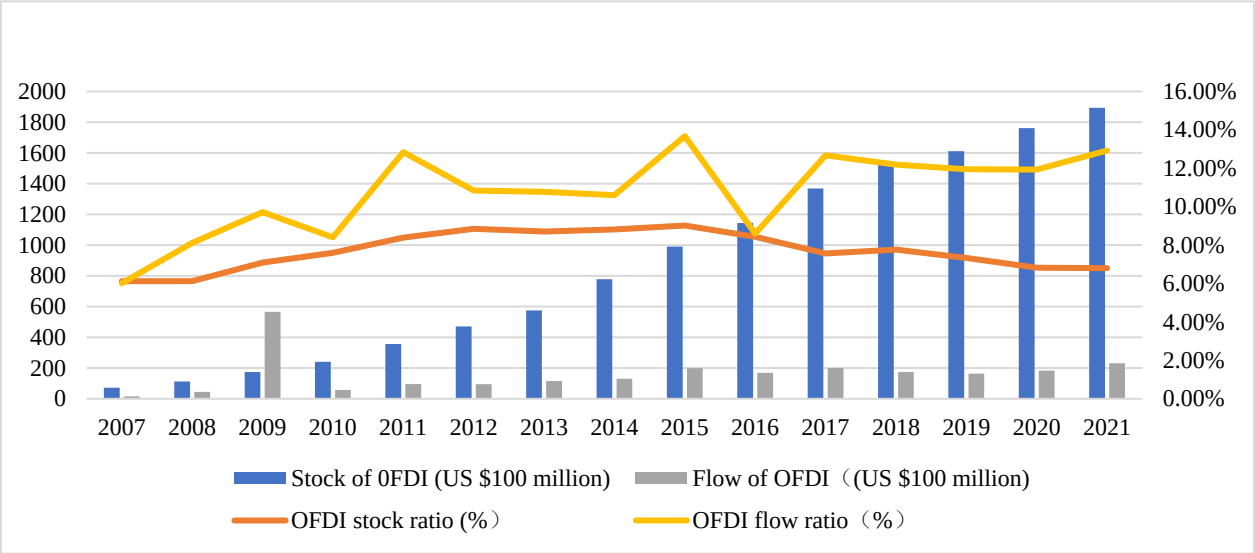


Figure 1. China’s OFDI Flow, Stock and Ratio in RCEP Countries

From the perspective of investment stock, China's investment in RCEP countries is increasing year by year. In 2007, China's OFDI stock in RCEP countries was 7.221 billion US dollars, and by 2021, it has reached 189.325 billion US dollars. However, it always maintained a low level. From 2007 to 2015, the stock ratio had a slow rising trend and in 2015 it arrived at the highest point of 9.02%. After that, the ratio began to decline again and fell below 7% in 2020.

From the perspective of investment flow, the scale of China's investment in RCEP countries is unstable. In the past decade, the amount of China's investment in some countries was even negative in some years. The ratio of RCEP countries in China's OFDI flow showed a wavy change characteristic, and reached a relative peak in 2011, 2015, 2017 and 2021, among which 2015 was the highest point in history, at 13.67%. All in all, there is still large potential and space for China to invest in RCEP.

3.2. The country distribution of China's OFDI to RCEP countries

In order to further study and analyze whether China's OFDI in RCEP countries has specific characteristics, RCEP countries are divided into ASEAN countries and non-ASEAN countries, and the variation trend of China's OFDI flow and stock is shown in Figure 2 and Figure 3.

As can be seen from Figure 2, the flow of China's direct investment in ASEAN countries shows an upward trend on the whole, especially after 2015, when China significantly increased its investment in ASEAN countries. The flow of China's OFDI in non-ASEAN countries is unstable, which peaked at US $6.96 billion in 2016.

As can be seen from Figure 3, China's OFDI stock in both ASEAN and non-ASEAN countries is on the rise, and the OFDI stock in ASEAN countries is growing rapidly, far exceeding that in non-ASEAN countries.

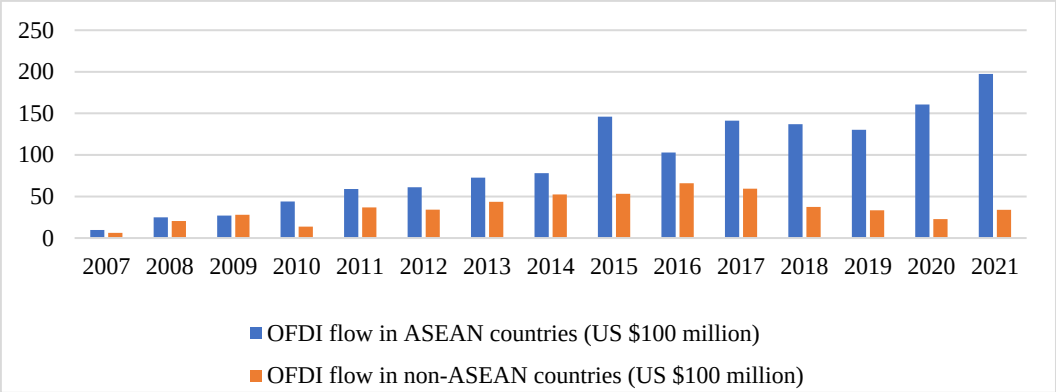


Figure 2. OFDI Flows in Different Countries

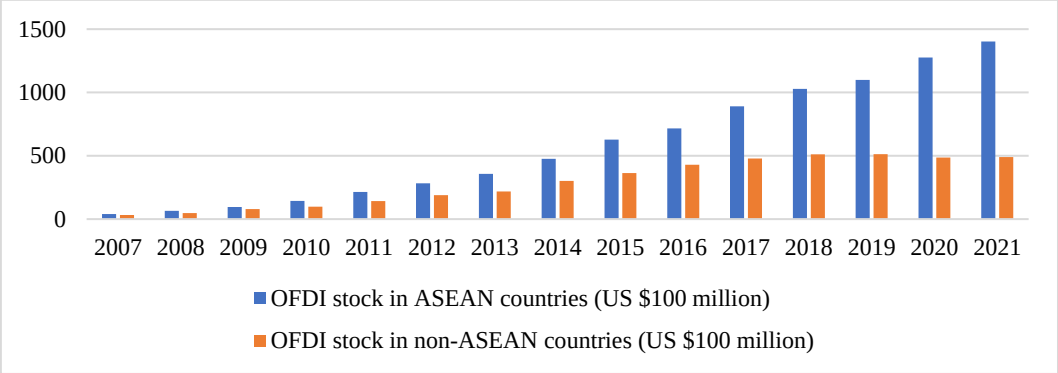


Figure 3. OFDI Stocks in Difference Countries

4. Research design

4.1. Variable selection

Explained variable: Since outward investment often has time lag and the flow data is unstable, this article chooses investment stock as explained variable to represent outward investment level, which is represented by OFDI.

Explanatory variables: Four explanatory variables were selected in this article. The first is the market size of the host country. The larger the market of a country, the greater the probability of absorbing more foreign investment, and there is more investment demand that can be expressed in GDP. The second is the labor force of the host country, which can be represented by Labor and can be measured by the quantity of labor force. It is generally believed that companies are more willing to invest in countries with richer labor and lower costs. The third is the tax burden (TX), and we can use the proportion of tax in the total GDP represent. The lower the tax burden of the host country, the more active China's investment in that country. The fourth is the degree of natural resource endowment (RS), which can be reflected by the share of natural resource rent in the host country's gross domestic product.It is widely believed that if the enterprise with the purpose of obtaining resources, it will invest in resource rich countries.

4.2. Model setting

This article selects relevant data between China and RCEP countries from 2007 to 2021 for panel data analysis. In order to make the experimental results more accurate, logarithms of OFDI, GDP and Labor are taken and the basic model is established as follows:

$$\ln OFDI_{it}=\beta_0+\beta_1 \ln GDP_{it}+\beta_2 \ln Labor_{it}+\beta_3 TX_{it}+\beta_4 RS_{it}+\varepsilon_{it}$$

In the above model, i represents the i th country, i= 1,2... , 14; t means year t, t=1,2... 15, ε_{it} is a random disturbance term.

4.3. Data source

The data of the explained variable came from the Statistical Bulletin of China's OFDI over the years, while the data of the explained variable GDP, Labor, TX and RS came from the World Bank. It should be pointed out that some countries have missing tax burden data for certain years. To avoid the impact of data loss on the results, this document uses adjacent two-year averages to compensate for lost data.In addition, partial data for some countries in 2021 have not been publicized, and this article uses the data of 2020 to supplement and replace.

5. Empirical results and analysis

5.1. Descriptive statistics

210 observation values were selected for descriptive statistics and the results in Table 1 were obtained. For RCEP countries, there are significant differences in their respective GDP and labor force quantity. Among the 14 countries, New Zealand had the highest tax burden in 2008, reaching 31.5%, while Brunei had the most abundant natural resources, and the highest rent for natural resources reached 30.1% of GDP.

Table 1. Descriptive Statistics of Variables

Variable	Obs	Mean	Std.Dev.	Min	Max
lnOFDI	210	12.219	1.719	6.082	15.721
lnGDP	210	7.652	1.805	3.742	11.046
lnLabor	210	16.354	1.652	12.120	18.730
TX	210	11.491	7.913	0	31.500
RS	210	4.954	6.235	0	30.100

5.2. Multicollinearity

To make the results more accurate, the variance inflation factor (VIF) of the explanatory variables was calculated, and the results are shown in Table 2. We can know that the data in the table that the VIF value of each explanatory variable is less than 5, and the average VIF value is 2.22, which indicates that each explanatory variable is independent of each other and there is no multicollinearity.

Table 2. VIF Test Results

Variable	VIF	1/VIF
lnLabor	2.570	0.389
lnGDP	2.420	0.413
RS	2.040	0.491
TX	1.850	0.541
Mean VIF	2.220	

5.3. Regression analysis

After calculation, this article selects a fixed effects model for regression analysis, and the results are shown in Figure 3 below.

Table 3. Results of Fixed Effect Regression Analysis

Variable	Coef.	Std.Err.	T	P>|t|
lnGDP	1.331	0.1675	7.960	0.000***
lnLabor	8.542	0.733	11.650	0.000***
TX	-0.117	0.0281	-4.180	0.000***
RS	-0.029	0.016	-1.780	0.077*
_cons	-136.163	11.175	-12.180	0.000***
R^2	0.814			

Note: *, ** and *** are significant at the level of 10%, 5% and 1% respectively.

The market size of host country (lnGDP) is positively correlated with China's outward investment, and the regression coefficient is 1.331, which is significant at the 1% level. When a country's economy becomes more developed, its potential demand is greater, and the opportunities for Chinese enterprises to invest in the country are greater. The number of labor force (lnLabor) in host country has a significant positive effect on China's OFDI, with a correlation coefficient of 8.542. The larger number of labor force in the host country means that there is employment demand in the country. If the enterprise invests in the country, it can directly recruit workers locally, saving the cost of bringing related workers from the home country. What's more, when the labor supply is insufficient, countries with relatively abundant labor can hire more workers at lower wages, saving labor costs.. The tax burden of the host country (TX) has a significant negative effect on China's OFDI of RCEP countries. The ultimate goal of enterprises' investment is to make profits. With a higher tax burden of the host country, enterprises will have to pay more income tax for every money they earn and get less income, so as for enterprise managers, they prefer to invest in countries with lower tax burden. The natural resources (RS) of host country is negatively correlated with China's OFDI, with a regression coefficient of -0.029, which is significant at the 10% level. Generally speaking, a country with abundant natural resources tends to appeal to foreign investment for the purpose of obtaining natural resources. RCEP countries, especially ASEAN countries, are quite rich in resources. However, the opposite result of the experiment means that China's OFDI of RCEP International is not mainly aimed at acquiring natural resources.

6. Conclusion and suggestion

6.1. Conclusion

China's investment in RCEP countries still has great room for improvement and promising investment prospects. China's investment in RCEP countries is still mainly concentrated in ASEAN countries and regions. Relatively adjacent geographical location provides more convenient conditions for China to trade with them. The RCEP is becoming more and more important role. Strengthening direct trade cooperation between China and RCEP countries is a trend of the times and an important measure for China to respond to trade sanctions.

The location choice of China's investment in RCEP countries is influenced by various factors. The market size and the number of labor force in the host country have a positive effect on it, while the tax burden and natural resource endowment of the host country have a negative effect on it. Therefore, when conducting OFDI for RCEP countries, China should first choose countries with large market size, sufficient labor force and low tax burden for foreign direct investment.

6.2. Suggestion

Actively implementing the RCEP Agreement. The RCEP agreement offers a more convenient economic environment to domestic investors and a broader stage for Chinese enterprises to "go global". Therefore, Chinese enterprises should proactively grab the opportunity and make reasonable location choices.

Improve the labor market security system. Nowadays, for labor-intensive industries, there is an urgent need to transform and upgrade their own industries, which requires China to strengthen labor cooperation with other countries and make investment fields suitable.

Optimize China's investment in RCEP countries. Empirical results show that natural resource endowments have a negative effect on China's OFDI, while most RCEP countries are rich in resources, which means that Chinese enterprises do not fully understand the advantages of each country before making reasonable location selection when carrying out OFDI. For example, Indonesia is rich in minerals, timber and other resources, and Chinese enterprises should make comprehensive use of them by combining their own advantages and those of the country when investing in the country.

Actively integrate into the host society. The political environment of RCEP countries is different. Most Chinese companies investing overseas are state-owned enterprises, but many countries hold a cautious attitude towards China's state-owned capital for their own interests. Chinese enterprises should actively integrate into the local society, work together with the local market, and systematically assess their political environment in order to seek better development.

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