

Analysis Of the Impact of Anti-Globalization on China's OFDI

Xu Liu *, Yongjian Zong

School of Economics and Management, Nanjing University of Science and Technology, Nanjing, China

* Corresponding Author Email: 1565946174@qq.com

Abstract. Based on the KOF index of the Economic Research Institute of ETH Zurich, the degree of "anti-globalization" of countries around the world is derived, and China's OFDI data to 96 countries around the world from 2007 to 2019 are used to empirically test the effect of the degree of "anti-globalization" of host countries on China's OFDI. Using the data of China's OFDI to 96 countries from 2007 to 2019, we empirically test the impact of the degree of "reverse globalization" of host countries on China's OFDI. The study shows that: (1) the degree of host country's "anti-globalization" from three different perspectives, namely, economic globalization index, social globalization index and political globalization index, has a negative impact on China's OFDI. (2) The impact of the degree of "reverse globalization" on OFDI is different between developed countries and developing countries, with the former in the economic dimension and the latter more in the political dimension. (3) China's OFDI is more sensitive to the negative shocks caused by "reverse globalization" in developed countries, but resource endowment and labor capital in developing countries are important factors. Finally, from the empirical findings, policy suggestions are made to cope with the impact of "reverse globalization" and deepen China's opening-up strategy.

Keywords: Anti-globalization; OFDI; Fixed-effect model.

1. Introduction

"Reverse globalization" refers to the change in the openness of the world's countries to the outside world from the previous full openness to conditional openness, not excluding the return of individual countries to a state of "closed-door lockdown", which is regarded as a process of reducing economic interdependence and integration and is the result of the growing global inequality. It is seen as a process of reducing economic interdependence and integration, and as a result of growing global inequality. Developed market economies based on liberalism have shifted domestic industries that have lost their competitive advantages abroad in the process of globalization, which has resulted in the hollowing out of domestic industries as well as a decline in profits and an increase in unemployment in the traditional agricultural and traditional manufacturing sectors, despite the fact that they have also reaped excess capital gains [9]. These developed economies that had enjoyed the developmental dividends of globalization became the main body of concerns about globalization and became more inclined to trade protectionism. Some developing economies and latecomers, namely resource countries that rely on resource exports and other countries at the low end of the global value chain, have not received substantial dividends in the global division of labor, and therefore, in the face of developed countries' "anti-globalization" sanctions, the "anti-globalization" sanctions they receive will have a direct impact on these countries. Therefore, in the face of the "anti-globalization" sanctions imposed by developed countries, the "anti-globalization" sanctions imposed on them will have a direct impact on the open-door policy of these countries [8]. As a result, "anti-globalization" will bring about the readjustment of the global economic pattern, and bring about new conflicts and games, and this impact will certainly affect the direction of global capital and the international investment environment. In such a situation, Chinese enterprises can not stand alone, this paper is through the measurement of the "reverse globalization" indicator, empirical examination of the degree of its impact on China's OFDI.

2. Literature Review

Collating the relevant literature, it can be found that research on OFDI can be divided into two dimensions: from the perspective of the home country and from the perspective of the host country. From the perspective of the home country, scholars agree that the level of economic development of a country will have a positive impact on the volume of OFDI in that country. However, in the empirical research, they choose different variables to represent the level of economic development of the home country, for example, Dunning [3] chooses the growth rate of a country's GDP, while Andreff [1] chooses the home country's GDP and the growth rate of GDP as the variables, and many other scholars directly choose the current GDP to represent the current level of economic development or market size. Of course, in addition to the most important level of economic development, some scholars also believe that the size of the home country's foreign trade volume, the exchange rate and the level of interest rates, the amount of its own labor resources and natural resources endowment is also related to the flow of direct investment [5, 4]. From the host country's perspective, there are more influencing factors than from the home country's perspective, including the host country's level of economic development, the direct bilateral distance between the host country and the home country, the host country's high or low cost of labor resources and natural resource endowment, the host country's degree of scientific and technological development, and the host country's degree of infrastructural improvement.

3. Data description and modeling

3.1. Research hypothesis

It is hypothesized that the increase in trade barriers and the build-up of political risks triggered by the phenomenon of "reverse globalization" in host countries will raise the cost of Chinese goods and capital entering the host countries [7], thus leading to a decrease in China's OFDI:

Hypothesis 1: The degree of "anti-globalization" in the host country is negatively related to China's OFDI to that country in economic and political terms.

According to OFDI motivation research resource-seeking OFDI is mainly to compensate for the shortage of resources in the process of economic development of the investing country, and to obtain the rich natural resources of other countries by means of OFDI [6]. From this, the following hypotheses are proposed:

Hypothesis 2: China's OFDI is positively related to host country's natural resource endowment.

3.2. Data description

The sample of this paper is the panel data of 96 countries that China has outward investment relations with from 2007 to 2019, and the data of China's OFDI stock is taken from the CNRDS database. The anti-globalization index is derived from KOF, and the globalization composite index (KOFGI_{it}) and economic globalization index (KOFECGI_{it}) under the KOF index system reflect the degree of openness of each country to the outside world, which can reflect the current level of openness and attitudes towards globalization in a more comprehensive way. Other control variables such as GDP, labor force population, and other data are from the World Bank database, and in order to present post-inflation data, the base period for prices is chosen as 2015, in US dollars.

3.3. Modeling

Since the degree of "anti-globalization" is based on the measurement of trade volume, the degree of "anti-globalization" of the host country and China's OFDI may have the problem of endogeneity. In order to avoid the endogenous problem, this paper adopts the dynamic panel model with one period lag. In addition, in order to overcome the heteroskedasticity, the original data are logarithmically treated. The model is set up as follows:

$$OFDI_{i,t} = \beta_0 + \beta_1 OFDI_{i,t-1} + \beta_2 KOFECGI_{i,t} + \sum \beta_n control_{i,t} + \varepsilon_{i,t} \quad (1)$$

$$OFDI_{i,t} = \beta_0 + \beta_1 OFDI_{i,t-1} + \beta_2 KOFSOGIdj_{i,t} + \sum \beta_n control_{i,t} + \varepsilon_{i,t} \quad (2)$$

$$OFDI_{i,t} = \beta_0 + \beta_1 OFDI_{i,t-1} + \beta_2 KOFPoGIdj_{i,t} + \sum \beta_n control_{i,t} + \varepsilon_{i,t} \quad (3)$$

Explained variable: $OFDI_{i,t}$ is China's OFDI stock funds to country i at time t (except for investment host countries such as the British Virgin Islands, where there are tax avoidance purposes, and Hong Kong, China, where there is return investment). This paper selects the data from 2007 to 2019 of 96 countries to which China has outward investment relations as a sample, with the price level of 2015 as the base period.

Explanatory variables: ① $KOFECGIdj_{i,t}$, is the economic globalization index. ② $KOFSOGIdj_{i,t}$, is the social globalization index. ③ $KOFPoGIdj_{i,t}$, is the political globalization index.

Control variables $control_{i,t}$: ① host country natural resource endowment (resource), with oil and gas and mineral resources exports accounted for the proportion of total exports; ② host country labor force abundance (labor), with the population aged 15 to 64 years of age as a percentage of the total population, ③ host country strategic assets (hightech), host country high-tech exports and total exports of exports, the ratio of the value, the larger the value indicates that the higher the level of science and technology in the host country. The larger the value, the higher the level of science and technology of the host country. Host country market size ($lngdp$), using the host country's national GDP per capita level. All data are after inflation, and the price base period is chosen as 2015, in U.S. dollars.

4. Analysis of empirical results

4.1. Return to baseline.

Before conducting the benchmark regression, the P-value in the Hausman test shows 0.00, which rejects the original hypothesis of using a random effects model, so this paper establishes a fixed effects model in the experiment. The results of the effect of reverse globalization on China's OFDI are shown in Table 1. In Table 1, regressions (1) to (3) without control variables can be regarded as the control group, and regressions (4) to (6) with other control variables. The results show that the coefficients of first-order lagged OFDI are significant at the 1% level in all six models, indicating that the coefficients are plausible. The coefficients of economic globalization indicator and political globalization indicator are significant and positive at 10% and 5% levels respectively, which means that the lower the economic globalization indicator and political globalization indicator, i.e., the higher the degree of anti-globalization in both economic and political aspects, the more it inhibits China's OFDI; the coefficients of the anti-globalization indicator of the social dimension are positive, which means that anti-globalization inhibits but is not significant either in the control group or after the addition of the control variables. The coefficient of the social dimension of anti-globalization indicator is positive, indicating that anti-globalization is inhibiting, but it is not significant either in the control group or after adding control variables. In terms of other control variables, the host country's resource endowment has a positive impact on China's OFDI, while the labor resources and the level of scientific and technological development have a negative impact, neither of which is significant; the host country's GDP has a significant impact on China's OFDI, which means that the host country with a better level of economic development, a larger market size and development potential is more likely to attract outward investment. On the whole, it can be found that the host country's "reverse globalization" in both economic and political aspects will cause a negative impact on China's OFDI, and hypothesis 1 is proved.

Table 1. Benchmark regression results

Variant	(1)	(2)	(3)	(4)	(5)	(6)
L. OFDI	0.8357*** (66.53)	0.8395*** (62.36)	0.8279*** (60.57)	0.8191*** (58.06)	0.8212*** (55.49)	0.8138*** (55.16)
KOFecGIdj	0.0217*** (2.52)			0.0134* (1.66)		
KOFSoGIdj		0.0092 (1.51)			0.0040 (0.62)	
KOFPoGIdj			0.0272*** (2.85)			0.0194** (1.89)
resource				0.0001 (0.04)	0.0001 (0.03)	0.0005 (0.28)
labor				-0.0055 (-0.45)	-0.0067 (-0.55)	-0.0084 (-0.68)
Tech				-0.0021 (-0.77)	-0.0021 (-0.78)	-0.0019 (-0.71)
GDP				0.4533*** (2.80)	0.5018*** (3.14)	0.4233*** (2.60)
constant term (math.)	0.4747*** (1.90)	1.2923*** (3.81)	-0.1186 (-0.18)	-2.3514*** (-1.66)	-2.0765*** (-1.46)	-2.4885** (-1.75)
Year fixed effects	be	be	be	be	be	be
Country fixed effects	be	be	be	be	be	be
observed value	1152	1152	1152	1152	1152	1152
R ²	0.8534	0.8528	0.8536	0.8550	0.8543	0.8547

4.2. Heterogeneity analysis

Considering the dominance of developed countries in the last round of globalization and the high level of globalization in developed countries themselves, the impact of reverse globalization on China's OFDI in different countries may be heterogeneous. In this paper, 96 countries are divided into developed and developing countries and a sub-sample regression is conducted, with the results shown in Table 2. It can be seen that the economic and social level of reverse globalization has a significant inhibitory effect on China's OFDI to developed countries, and the political level of reverse globalization has a negative and significant effect on China's OFDI to developing countries, which may be due to the fact that developing countries have a relatively high political risk, and the economic level of developed countries may exacerbate the reverse globalization by means of trade barriers, thus affecting the impact of China's OFDI to developing countries. In addition, the coefficient of the degree of "anti-globalization" of developing countries is smaller than that of developed countries, indicating that China's OFDI is more sensitive to the "anti-globalization" of developed countries. The control variables also show that the coefficient of resource endowment of developing countries for OFDI is positive, in which the labor endowment and GDP have a significant promotion effect on China's OFDI at the level of 5%, and Hypothesis 2 is proved.

Table 2. Sub-sample regression results

Variant	developed country			developing country		
	(1)	(2)	(3)	(4)	(5)	(6)
L. OFDI	0.8411*** (22.45)	0.8199*** (18.3)	0.8431*** (23.74)	0.7861*** (41.79)	0.7856*** (33.94)	0.7778*** (38.71)
KOFecGIdj	0.0429* (1.65)			0.0115 (0.94)		
KOFSoGIdj		0.0668** (1.90)			0.0054 (0.52)	
KOFPoGIdj			0.0385 (1.37)			0.0197* (1.62)
resource	-0.0066 (-0.48)	-0.0109 (-0.81)	-0.0063 (-0.44)	0.0006 (0.35)	0.0006 (0.36)	0.0010 (0.63)
labor	-0.0023 (-0.07)	0.0079 (0.20)	-0.0120 (-0.33)	0.0365** (2.52)	0.0363** (2.46)	0.0335** (2.34)
Tech	-0.0134 (-0.51)	-0.0183 (-0.74)	-0.0118 (-0.47)	-0.0002 (-0.14)	-0.0003 (-0.17)	-0.0001 (-0.06)
GDP	0.9204 (1.35)	1.2690* (1.90)	0.8013 (1.27)	0.4067** (2.46)	0.4287*** (2.72)	0.3808** (2.22)
constant term (math.)	-10.7588 (-1.52)	-16.6845 (-1.70)	-8.7524 (-0.14)	-3.9000*** (-2.77)	-3.6775*** (-2.68)	-4.191*** (-2.81)
Year fixed effects	be	be	be	be	be	be
Country fixed effects	be	be	be	be	be	be
observed value	288	288	288	864	864	864
R ²	0.8677	0.8705	0.8676	0.8097	0.7990	0.8201

5. Conclusions and policy recommendations

5.1. Reach a verdict.

In recent years, the intensifying wave of "anti-globalization" has brought about non-negligible troubles and losses to the normal outward investment of Chinese enterprises. By exploring the relationship between the degree of "reverse globalization" of the host country and China's outward investment, this paper draws the following conclusions: First, the degree of "reverse globalization" of the host country measured from three different perspectives: economic globalization index, social globalization index and political globalization index, all have a negative impact on China's OFDI, with the economic and political dimensions having a negative impact on China's OFDI. First, the degree of host country's "anti-globalization" as measured by the economic globalization index, social globalization index and political globalization index all have negative impacts on China's OFDI, with significant negative correlation between economic and political dimensions. Second, the economic and social levels of anti-globalization have a significant inhibiting effect on China's OFDI to developed countries through trade barriers, while the political level of anti-globalization has a negative and significant effect on China's OFDI to developing countries due to political risks. Third, China's OFDI in general is more sensitive to the negative shocks of "anti-globalization" in developed countries, but the coefficient of resource endowment of developing countries on OFDI is positive, of which labor endowment and GDP have a significant role in promoting China's OFDI at the level of 5 percent.

5.2. Policy recommendations

5.2.1 Continuing to expand exports to promote "external" development in response to the wave of "reverse globalization."

The expansion of exports has contributed to China's rapid economic growth and rapid integration into the international division of labour since its accession to the WTO. However, in terms of the degree of integration into globalization and the quality of economic development, China still has a certain gap with developed countries. In the face of the escalating wave of "anti-globalization", China should participate in the process of globalization in a more active manner, continue to unswervingly promote a higher level of openness, actively integrate into the international cycle, and expand imports of high-tech and raw materials, in order to gradually alleviate the inter-country strife caused by trade surplus, and it will also have a positive impact on the upgrading of the status of China's enterprises in the global value chain and the maintenance of domestic supply stability. It will also have a positive impact on China's enterprises in upgrading their position in the global value chain and maintaining the stability of domestic supply.

5.2.2 Enhancement of mutually beneficial cooperation and win-win instead of "beggar-thy-neighbor"

The trend towards globalization in both developed and developing countries demonstrated that no one was immune to the impact of the economic crisis. Adopting "anti-globalization" measures will only further reduce the scale of international trade and impede the development of the world economy, and closing the door will not fundamentally solve the situation of "harmed interests" that some countries consider. China should carry out oriented exchanges and cooperation in response to the "pain points" of different countries' interests, keep close contact with developing countries, and at the same time strengthen in-depth exchanges with developed countries, so as to speed up the reconstruction of the global value chain, with a view to calming the wave of "anti-globalization" under the trend of globalization as soon as possible."

5.2.3 Implementing country-specific investment strategies that take into account the host country's resource endowment and economic development situation

The economic conditions of developed and developing countries are very different, especially developing countries have rich natural resource endowment and sufficient labor resources, while developed countries have perfect financial markets and large-scale industrial systems. At this stage, China is practicing a high level of opening up to the outside world, accompanied by complex differences in the national conditions of various countries. Before investing in a host country, it is all the more important to comprehensively consider the culture and system of each country, and attach great importance to factors such as economic stability and political risk [2], so as to be able to correctly assess the investment environment and tailor the investment to suit the local conditions.

References

- [1] Andreff, W. The new multinational corporations from transition countries. *Economic Systems*. 2002:37-43.
- [2] JIANG Guanhong, JIANG Dianchun. China's Investment in Developing Countries-Does the Host Country Regime Matter? [J]. *Management World*, 2012(11):45-56.
- [3] John H. Dunning. The Eclectic Paradigm of International Production: A Restatement and Some Possible Extensions [J]. *Journal of International Business Studies*, 1988, 19(1): 1-31.
- [4] Jason Lewis. Rodolfo and Nélide [J]. *Harvard Review*, 2007: 6-16.
- [5] JIANG Guanhong, JIANG Dianchun. Location choice of China's outward investment: A panel data test based on the investment gravity model [J]. *World Economy*, 2012, 35(09): 21-40.
- [6] Kogut B, Chang S J. Technological Capabilities and Japanese Foreign Direct Investment in the United States [J]. *The Review of Economics and Statistics*, 1991: 73.

- [7] Liu, Hongduo, Cao, Xiang and Li, Wenyu. Bilateral trade costs and outward foreign direct investment:inhibition or promotion? --Based on empirical evidence from China[J]. Industrial Economics Research,2016(02):96-108.
- [8] TONG Jiadong, XIE Danyang, BAO Qun, HUANG Qunhui, LI Xiangyang, LIU Zhibiao, JIN Beibei, YU Miaojie, WANG Xiaosong. "Anti-globalization" and real economy transformation and upgrading pen talk [J]. China Industrial Economy,2017(06):5-59.
- [9] Zhang Menan. The current trend of "reverse globalization" and the direction of the new round of globalization [J]. Macroeconomic Management,2017(05):33-37.