

Research on the Regional Difference of the Performance of China's Outward Foreign Direct Investment

Weiwei WANG
School of Economics
University of Chinese Academy of Social Sciences
P.R. China, 102488
E-mail: weiwei3950@126.com

Luqing ZHANG
School of Management
Capital Normal University
P.R. China, 100089
E-mail: zhangluqing9966@163.com

Abstract—Under the background of rapid development of China's outward foreign direct investment (OFDI), there is big difference between the OFDI in China's different regions due to China's vast area. It is necessary to study the performance of OFDI in Chinese different regions. Using the OND, this paper analyzes the performance of OFDI in different regions and different provinces, and finds that the higher the level of economic development, the faster the development of OFDI. In order to promote the development of OFDI in different regions and different provinces, this paper puts forward some suggestions such as carrying out OFDI according to different conditions in different regions, pushing OFDI based on the strategy of 'the Belt and the Road' and improving the relevant laws and policies.

Keywords—outward foreign direct investment (OFDI); OND index; performance; regional difference

I. INTRODUCTION

Since reform and opening up, China is committed to integrating into the global economy. At the beginning of twenty-first Century, under the background of 'going global' strategy and China's entry into the world trade organization (WTO), outward foreign direct investment (OFDI) has developed rapidly as an important way to participate in the world economy. In 2003, the flow and stock of China's OFDI were \$2.9 billion and \$33.4 billion respectively, equivalent to 0.45% and 0.48% of the flow and stock of global OFDI. Although global OFDI fell since 2008 because of financial crisis, China's OFDI has emerged rising trend and exceeded \$50 billion in 2008 for the first time. In the case of challenges and opportunities in 2009, China's OFDI hit a record high, reaching \$56.5 billion. In 2012, China's OFDI reached \$87.8 billion, becoming the world's third largest foreign investor. As the Chinese government actively improves the policies of OFDI, the strength of transnational management of Chinese enterprises is increasing. In 2013, China's OFDI broke the first 100 billion dollars. Under the background of active promotion of the strategy of 'the Belt and Road' by Chinese government, China's OFDI achieved a historic breakthrough, reaching \$145.67 billion, ranked the second in the flow of world OFDI for the first time. Moreover, the OFDI exceeded the IFDI in 2015 and China became a net exporter of capital. The flow and

stock of China's OFDI accounted for 9.9% and 4.4% of the flow and stock of global OFDI respectively.

Although there is a rapid development of China's OFDI in recent years, with the change of Chinese economic growth model from quantity to quality improvement, we should not only pursue the rapid development of OFDI and the performance of OFDI should be investigated. Due to the differences of nature, geography and policy environment in China's vast area, the level of regional economic development is different, and OFDI in different regions and different provinces is also different. So it is necessary to study the performance of OFDI in Chinese different regions and different provinces so as to provide some suggestions for these regions and provinces.

II. LITERATURE REVIEW

Since 80s and 90s of twentieth century, emerging economies and developing countries began to invest abroad, and scholars began to pay attention to these countries' OFDI. As the largest developing country in the world, China's OFDI has developed rapidly, and a large number of domestic and foreign scholars have carried out the research on China's OFDI. The existing literature on the performance of China's OFDI is done at micro level and macro level respectively. The research at micro level is mainly focused on multinational corporations and analyzes the impact of OFDI on financial performance and non-financial performance of multinational corporations. Ban and Ren (2008)[1] used balanced scorecard and analyzed the performance of OFDI of China's enterprises from the perspective of financial performance and non-financial performance (customer, internal process, and learning and growth). Jiang and Jiang (2014)[2] showed that OFDI by Chinese enterprises was conducive to the improvement of production efficiency. Qiu and et al (2016)[3] thought that OFDI by China's enterprises increased the markup ratio of price-cost of the parent company, which was helpful to improve the performance of the parent company's OFDI. But this improvement of the performance of OFDI was obtained from OFDI of industries with low technology.

The research at macro level mainly investigates the impact of OFDI on home country's macro economic indicators. Yeung

and Liu (2008)[4] thought the investigation on the performance or China's OFDI should include the indicators of both home country and host country. Zheng (2008)[5] selected five indicators such as economic growth, import and export trade, technological progress, employment and industrial restructuring to reflect the performance of China's OFDI. Wu (2011)[6] used GDP, domestic fixed assets investment, export, foreign exchange reserves, exchange rate, FDI and other indicators to measure the performance of China's OFDI. There are small numbers of studies using OND to quantify the performance of China's OFDI. Li and Gao (2005)[7] found that the performance of China's OFDI was much lower than the world average through the calculation of OND. Zhang et al. (2012)[8] established an empirical model to explore the impact of OFDI on economic growth by using OND of each province in China. Chen (2015)[9] compared and evaluated the performance of OFDI of BRICs by using OND of 1993-2010. This paper especially discussed China's position in the BRIC countries.

From the existing literature, the study on the performance of OFDI is scattered and not systematic. There are two main reasons. One is that scholars have different opinions on the definition of performance. The other is that it is not easy to establish the indicators of performance. The current research on the performance of OFDI is carried out from micro, meso and macro aspects just because of different definitions of performance. Especially the research from macro aspect is more general. The existing literatures lack analyses of the performance of OFDI in different regions and provinces. This paper will analyze the performance of OFDI in different regions and provinces.

III. ANALYSIS OF THE PERFORMANCE OF CHINA'S OFDI IN DIFFERENT REGIONS AND PROVINCES

A. OND and Data Description

1) OND

In order to eliminate the influence of home economy scale on OFDI and facilitate to compare OFDI in different countries, the United Nations Conference on Trade and development (UNCTAD) developed OND in 2004. OND refers to a ratio which is that the percentage of one country's OFDI ($OFDI_i$) to global OFDI ($OFDI_w$) divided by the percentage of one country's GDP (GDP_i) to global GDP (GDP_w). The formula is $OND_i = \frac{OFDI_i / OFDI_w}{GDP_i / GDP_w}$. OND reflects the position of a country's OFDI in the world after excluding the impact of economic scale on OFDI. If OND is bigger than 1, it means that the level

of one certain country's OFDI is bigger than the average of global OFDI. If OND is smaller than 1, it means that the level of one certain country's OFDI is smaller than the average of global OFDI. If OND equals to 1, it means that the level of one certain country's OFDI equals to the average of global OFDI. So OND can be used to directly compare OFDI of countries with different economies in the world. This paper will use OND to compare and analyze the performance of China's OFDI in different regions and different provinces.

2) Data Description

According to the availability and authority of data, using the data of OFDI and regional GDP of 31 provinces and municipalities in 2003-2015, this paper calculates OND. All the data is from 'China Statistical Yearbook' and 'Statistical Bulletin of China's Outward Foreign Direct Investment'.

In the data of GDP and OFDI in different provinces and municipals, data of Xinjiang is different between 'China Statistical Yearbook' and 'Statistical Bulletin of China's Outward Foreign Direct Investment'. Xinjiang is divided into Xinjiang Uygur Autonomous Region and Xinjiang production and Construction Corps in 'Statistical Bulletin of China's Outward Foreign Direct Investment'. But Xinjiang is regarded as a whole in 'China Statistical Yearbook'. For the purposes of calculation and comparison, the data of Xinjiang Uygur Autonomous Region and Xinjiang production and Construction Corps is summed as the OFDI of Xinjiang.

Moreover, the data of OFDI of central and local enterprises is obtained respectively in 'Statistical Bulletin of China's Outward Foreign Direct Investment'. So the OFDI of individual province only refers to the OFDI of local enterprises of individual province, not including the OFDI of central enterprises of individual province. Because OND is just a ratio, using the data excluding the OFDI of central enterprises has little effect on calculation of OND.

B. Performance of OFDI in Different Regions

According to the division of three parts of eastern, central and western China, eastern China includes Beijing, Tianjin, Hebei, Liaoning, Shanghai, Jiangsu, Zhejiang, Fujian, Shandong, Guangdong and Hainan, 11 provinces and municipalities in total; central China includes Jilin, Heilongjiang, Shanxi, Anhui, Jiangxi, Henan, Hubei and Hunan, 8 provinces in total; western China includes Sichuan, Chongqing, Guizhou, Yunnan, Tibet, Shaanxi, Gansu, Qinghai, Ningxia, Xinjiang, Guangxi, and Inner Mongolia, 12 provinces and municipality in total. Table I gives OND of eastern, central and western China.

TABLE I. OND OF EASTERN, CENTRAL AND WESTERN CHINA

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
eastern	1.51	1.39	1.29	1.32	1.15	1.47	0.98	1.31	1.20	1.28	1.04	1.43	1.50
central	0.40	0.46	0.67	0.67	0.51	0.34	0.90	0.45	0.61	0.50	0.87	0.33	0.33
western	0.09	0.44	0.39	0.37	1.16	1.51	1.36	0.72	0.67	0.82	0.77	0.59	0.40

Data source: calculated by the author according to 'China Statistical Yearbook' and 'Statistical Bulletin of China's Outward Foreign Direct Investment'

From table I, there is only one OND of eastern China in 2009 which is smaller than 1 and OND in other year is bigger

than 1. It means that the performance of OFDI of eastern China is in the leading position in China. Eastern China is located in

the coastal area and early opened to the outside world. In this area, the export-oriented economy develops rapidly and the internationalization management level of enterprise is high. Therefore, the OFDI of this area performs outstandingly. 2009 is the second year when China experienced the world financial crisis. China's OFDI increased and not decreased in that year. Although OND of eastern China in 2009 is smaller than 1, the gap between the eastern, central and western regions is decreasing. From table I, the OND of central China over the years of 2003-2015 is less than 1. It means that OFDI of central China develops relatively slowly. Due to the geographical location of the central region, neither near the sea nor near other countries, OFDI lacks of advantages. OND of western China is bigger than 1 for three years and smaller than 1 for ten years over the years of 2003-2015. Although the area is vast and the resource is rich in western area, the economic scale and development speed of western China have been lagging behind the national average because of geography, history and the strategy of giving priority to eastern China. The level of export-oriented economic development is low and OFDI is small in this area. But most of the western provinces and municipality are near other countries and regions. There will be more opportunities for OFDI of western China under 'The Belt and Road Initial'. The performance of OFDI of western China is expected to improve.

C. Performance of OFDI in Different Provinces and Municipalities

In order to analyze the performance of China's OFDI in more detail, table II displays the OND of different provinces and municipalities. From table II, the OND of Beijing, Shanghai, Zhejiang and Guangdong is relatively high over the years. The economic development of these provinces and municipalities is leading over the country. So the higher the level of economic development, the faster the development of OFDI. The OND of Shandong, Jiangsu, Fujian and Liaoning follows. These provinces are located in coastal area. Because the level of economic development and export-oriented economy is relatively high, the OFDI of these provinces develops rapidly. OFDI of most of other provinces and municipalities is relatively low currently. But with the implementation of 'The Belt and Road Initial' and strategy of regional economic development, the OFDI of these provinces and municipalities will further develop. It is worth noting that the OFDI of Hainan and Xinjiang develops very fast in recent years and the OND is relatively higher. These two provinces can continue to promote the local economic development through the development of OFDI.

TABLE II. OND of different provinces and municipalities

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Beijing	11.00	4.47	1.56	0.69	0.86	3.17	2.55	1.34	1.60	1.59	5.58	4.26	4.12
Tianjin	0.39	0.97	0.48	0.62	0.83	0.91	1.81	0.91	0.80	0.88	2.08	3.30	1.18
Hebei	0.03	0.26	0.80	0.41	0.21	0.25	0.86	0.64	0.42	0.37	0.87	0.52	0.24
Shanxi	2.94	0.20	0.13	0.38	0.76	0.27	2.88	0.21	0.36	0.43	1.19	0.30	0.11
Inner Mongolia	0.17	0.38	0.53	0.50	0.36	0.54	1.06	0.17	0.20	0.55	0.65	0.78	0.18
Liaoning	0.26	1.07	0.36	1.01	0.61	0.58	3.27	2.58	1.14	1.87	1.27	0.65	0.57
Jilin	0.11	1.59	0.28	0.66	0.83	1.24	2.74	0.61	0.43	0.42	1.54	0.30	0.36
Heilongjiang	0.34	2.05	2.86	3.38	1.33	2.04	0.93	0.56	0.42	0.89	1.43	0.54	0.22
Shanghai	1.44	4.39	6.90	4.16	2.25	1.78	5.61	2.27	2.12	2.77	3.28	2.65	7.13
Jiangsu	0.37	0.66	0.56	0.55	1.06	1.19	1.64	0.82	1.02	0.98	1.35	0.78	0.80
Zhejiang	0.69	1.07	1.12	1.31	1.13	1.34	2.02	2.38	1.27	1.15	0.18	1.20	1.28
Anhui	0.09	0.22	0.34	0.54	0.36	0.51	0.37	1.62	0.77	0.70	1.27	0.23	0.73
Fujian	2.27	0.48	0.61	1.22	2.09	1.11	1.98	0.89	0.67	0.73	1.17	0.55	0.82
Jiangxi	0.21	0.05	0.15	0.01	0.15	0.28	0.19	0.25	0.36	0.49	0.71	0.59	0.46
Shandong	1.35	0.86	0.81	0.55	0.38	1.14	1.43	1.19	1.21	1.16	2.07	0.82	0.87
Henan	0.16	0.09	0.76	0.06	0.25	0.54	0.42	0.13	0.23	0.19	0.49	0.20	0.27
Hubei	0.07	0.04	0.07	0.04	0.05	0.02	0.21	0.12	0.80	0.38	0.56	0.31	0.17
Hunan	0.10	0.09	0.45	0.76	0.80	0.16	5.00	0.42	1.32	0.76	0.62	0.36	0.30
Guangdong	1.11	1.27	0.88	2.32	1.93	2.51	1.60	0.86	1.51	1.56	2.55	2.01	1.30
Guangxi	0.14	0.23	0.07	0.08	0.23	0.41	0.68	0.48	0.32	0.35	0.15	0.18	0.21
Hainan	0.00	0.00	0.01	0.32	0.05	0.04	2.34	2.65	10.70	1.89	6.88	3.17	2.50
Chongqing	0.00	0.63	0.18	0.47	1.11	1.34	0.48	1.12	0.89	0.78	0.73	0.67	0.74
Sichuan	0.05	0.14	0.34	0.32	1.45	0.48	0.50	0.99	0.59	0.42	0.59	0.61	0.31
Guizhou	0.00	0.00	0.00	0.00	0.01	0.01	0.09	0.02	0.08	0.05	0.69	0.12	0.05
Yunnan	0.18	0.27	0.57	0.70	1.51	3.72	2.98	1.75	0.62	1.70	1.88	1.23	0.54
Tibet	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.08	0.00	0.01	0.05	2.23
Shanxi	0.01	0.13	0.08	0.02	0.20	1.43	1.77	0.63	0.79	0.71	0.51	0.29	0.27
Gansu	0.11	0.32	1.85	0.88	2.98	8.41	0.36	0.61	2.86	4.12	1.83	0.50	0.14
Qinghai	0.48	0.00	0.17	0.12	0.07	0.15	0.12	0.03	0.02	0.11	0.45	0.09	0.25
Ningxia	0.00	0.44	0.17	2.46	0.34	0.31	0.71	0.10	0.14	0.46	0.90	1.54	2.89
Xinjiang	0.12	2.73	0.64	0.27	4.42	2.66	3.21	0.76	1.38	1.08	1.06	0.86	0.57

Data source: calculated by the author according to 'China Statistical Yearbook' and 'Statistical Bulletin of China's Outward Foreign Direct Investment'

IV. SUGGESTIONS ON DEVELOPMENT OF OFDI IN DIFFERENT REGIONS

Under the background of the rapid development of China's OFDI, this paper uses OND to analyze the performance of China's OFDI in different regions and different provinces (municipalities) in detail. In order to promote the development of China's OFDI and stimulate economic development in different regions and different provinces (municipalities), this paper puts forward the following suggestions.

A. Carry out OFDI According to Different Conditions in Different Regions

According to the conclusions of existing literature, it is found that OFDI is beneficial to obtain some domestic scarce natural resources, avoid trade barriers and open up foreign markets, allocate production factors globally so as to reduce the cost, and acquire foreign advanced technology. Moreover, OFDI helps to upgrade industrial structure so as to promote economic development of home country. Since OFDI can bring so many benefits to the economic development of home country, China vigorously promotes the strategy of 'going out' and encourages Chinese enterprises to carry out OFDI. All the China's provinces and municipalities should seize this opportunity and carry out OFDI according to the specific circumstances of individual province and municipality. They should not blindly push OFDI so as to avoid unnecessary loss. If the plan of OFDI is improper or the actual situation of the local is ignored, it is possible to cause the effect of crowding out and the hollowing out of local industries. Moreover, if the enterprise does not do a good early research, and ignores the risk of OFDI, it not only can not achieve the desired results, but also may bring huge financial losses to the enterprise. For example, before carrying out OFDI, the enterprises of eastern coastal provinces (municipalities) should give full consideration to the advantages and disadvantages of OFDI and investment in the central and western China and should not blindly invest overseas in order to obtain the benefits of the related policies. The central and western regions should carry out OFDI step by step in accordance with local advantages on the basis of cultivating the ability of international operation of enterprises so as to achieve a virtuous cycle of foreign direct investment and economic growth. All the provinces and municipalities can improve the performance of OFDI and promote the local economic development only when they carry out OFDI according to their actual situation.

B. Push OFDI Based on 'The Belt and Road Initial'

'The Belt and Road Initial' is pushed by China and aims to improve the common development of countries along 'the Belt and Road'. The implementation of 'the Belt and Road Initial' is beneficial to develop trade and investment between China and countries along 'the Belt and Road'. It makes China and these countries to complement each other's advantages and plays a very important role in improving the economic development of China and these countries. All the provinces and municipalities should seize the great opportunities of 'The Belt and Road Initial' and promote the development of local OFDI. In particular, Xinjiang has a unique location advantage. It is

adjacent to eight countries (Mongolia, Russian Federation, Kazakhstan, Kyrgyzstan, Tajikistan, Afghanistan, Pakistan and India) which are the countries along 'the Belt and Road'. Xinjiang should play an important role in opening up to the west, deepen cooperation with Central Asia, West Asia and South Asia through OFDI and become the core area of the Silk Road Economic zone. The eastern coastal regions has strong economic strength and high level of opening up. Now, it should make full use of the opportunity of 'twenty-first Century Maritime Silk Road' and strengthen OFDI in Southeast Asia, South Asia and other countries. It should make Fujian, Guangdong and other regions as the core area of 'Maritime Silk Road'. Moreover, China has introduced a number of measures to promote the implementation of 'the Belt and Road Initial'. For example, the establishment of the Asian Infrastructure Investment Bank (AIIB) and the Silk Road Fund will provide financial support for Chinese enterprises to go out.

C. Improve the laws and Policies Related to OFDI

In order to promote the development of OFDI, China has introduced some related policies and measures. But they are still not perfect and behind the actual situation of OFDI. So they need be timely revised and improved according to the international economic situation. Some new policies of OFDI should be timely made. China should consider the introduction of 'Law on Outward Foreign Direct Investment' at the appropriate time so that the enterprises can better plan their activities of OFDI in the long run. In addition to the basic law of OFDI, a variety of supporting policies should be developed and improved, such as the facilitation of finance, taxation, foreign exchange and so on. All Provinces (municipalities) can develop their own local preferential and support policies according to their actual situation within the country's permission. In the examination and approval of OFDI, the relevant government departments should improve their efficiency. Because the enterprises are facing a lot of uncertainty in the face of OFDI, some opportunities may be fleeting. So the optimization of approval process of OFDI is particularly important. In addition, because the enterprises are not familiar with the host country when they carry out OFDI, they will face a lot of risk. The related government departments or industry associations can warn risk to the enterprises. Professional consulting can help enterprises to analyze the risks faced in OFDI and establish a risk sharing mechanism, which can ease the worry of risk of the enterprises.

V. CONCLUSION

This paper analyzes the performance of OFDI in different regions and different provinces, and finds that the higher the level of economic development, the faster the development of OFDI. So, all the China's provinces and municipalities should seize the opportunity and carry out OFDI according to the specific circumstances of individual province and municipality. The specific measures are as follows:

1. Carry out OFDI according to different conditions in different regions.
2. Push OFDI based on the strategy of 'the Belt and the Road'.

3. Improving the relevant laws and policies.

REFERENCES

- [1] BAN Bo, and REN Huiguang, "A Study of the Performance Evaluation System of Foreign Direct Investment of Chinese Enterprises," *Journal of Shandong University (Philosophy and Social Science Edition)*, pp.104-109, February 2008. (In Chinese)
- [2] JIANG Guanhong, and JIANG Dianchun, "Outward Foreign Direct Investment of Chinese Industrial Enterprises and Enterprise Productivity Improvement," *The Journal of World Economy*, pp.53-76, September 2014. (In Chinese)
- [3] QIU Licheng, LIU Canlei, and SHENG Dan, "Outward Foreign Direct Investment of Chinese Companies and Operation Performance of Home Companies," *World Economic Papers*, pp.60-75, May 2016. (In Chinese)
- [4] Henry Wai-chung Yeung, and Weidong Liu, "Globalizing China: The Rise of Mainland Firms in the Global Economy," *Eurasian Geography & Economics*, vol.49, pp.57-86. January 2008
- [5] ZHENG Gang, "Motivations, Effects and Development Strategy of Chinese Outward Investment," Master Thesis of Lanzhou University, 2008. (In Chinese)
- [6] WU Haijun, "On the Status, Performance and Strategic Choice: An Analysis of Chinese FDI," Master Thesis of Southwestern University of Finance and Economics, 2011. (In Chinese)
- [7] LI Jingping, and GAO Minxue, "The Status, Gap and Potential of China's Outward Foreign Direct Investment," *Economic Theory and Business Management*, pp.16-20, July 2005. (In Chinese)
- [8] ZHANG Weiru, HAN Bin, and HU Bing, "China Outward Foreign Direct Investment Performance and Economic Growth: Empirical Analysis Based on Provincial Panel Data," *On Economic Problems*, pp.54-56, November 2012. (In Chinese)
- [9] CHEN Jianxun, and LUO Yan, "The Assessment Comparison and Implications of Outward FDI Performance in BRIC Countries," *Asia-pacific Economic Review*, pp.92-97, March 2015. (In Chinese)