Korea Trade Review (Korea Trade Rev. ; 무역학회지)
Vol. 44, No. 6, December 2019 (pp. 345-361)
https://data.doi.or.kr/10.22659/KTRA.2019.44.6.345

貿易學會誌
ISSN 1226-2765 (Print)

The Differences in the Selection of Outward FDI Locations between State- and Privately Owned Enterprises of China: Focusing on the Effects of Host Country Factors*

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중국 국유기업과 민간기업 간 해외직접투자 입지 차이 분석: 현지국 요인의 영향을 중심으로

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Received 08 December 2019, Revised 13 December 2019, Accepted 16 December 2019

Abstract

In recent years, Chinese firms have explosively increased outward foreign direct investment (oFDI). While state-owned enterprises (SOEs) are still dominant in Chinese oFDI, privately-owned enterprises (POEs) are also accelerating their internationalization. These two types of Chinese firms differ in their behavior regarding oFDI. The objective of this paper is to analyze the differences in the choice of oFDI locations between Chinese SOEs and POEs by considering host country factors. By integrating the literature on Chinese firms' oFDI and on FDI locations, we developed six hypotheses concerning how host country factors affect their choice of location. We tested our hypotheses by conducting multiple regression analysis with recent secondary data on 413 Chinese MNEs in 88 countries between 2005 and 2016. The results of the test show that in selecting oFDI locations, Chinese SOEs invest relatively more in countries with richer natural resources, more abundant strategic assets, less production efficiency, higher political risk, and lower institutional quality compared with Chinese POEs. It is our hope that the empirical results of this paper will contribute to research on Chinese oFDI.

Keywords: China, Outward Foreign Direct Investment (FDI) Location, Privately Owned Enterprises, State-Owned Enterprises
JEL Classifications: F21, M16, O53

* This paper was supported by the 2019 research fund of Hankuk University of Foreign Studies.
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Ⅰ. Introduction

Since the initiation of the 'open-door policy' in 1978, China has been increasingly integrated into the world economy partly by implementing timely relaxed Chinese governmental policies on foreign direct investment. As a result, China has accelerated the pace of its inward foreign direct investment (iFDI) since its accession to the World Trade Organization (WTO) in 2001, and outward foreign direct investment (oFDI) since the adoption of the 'going out' strategy in 2000. Since then, China's oFDI has increased explosively, reaching a peak of $196.1 billion in 2016. Along with the decrease in the worldwide FDI, however, China's oFDI decreased by 30% to $129.8 billion in 2018. Despite this decrease in the absolute value of FDI, however, the China's portion in the world oFDI has maintained almost the same level of 12.7% since 2016, indicating how significant Chinese oFDI is in the world economy.

In general, Chinese firms are categorized into state-owned enterprises (SOEs) and privately owned enterprises (POEs) according to their governance structure. Following the literature (e.g., Lin, 2008), we define SOEs as those with ownership of more than 50% by either central or provincial governments, and POEs as those with ownership of more than 50% by private investors.

Traditionally outward internationalization of Chinese firms was led and dominated by SOEs, but in China's total oFDI, which is still dominated by SOEs, POEs are increasingly occupying a higher portion in recent years, reaching approximately 30% according to the recent statistics of Chinese Ministry of Commerce. Between 2011 and 2018, 71.4% of China's oFDI totaling $879.9 billion was from SOEs, and 28.6% from POEs.

The two types of firms differ to a great extent in their oFDI behavior since they do in terms of owners, objectives, risk attitude and decision-making process, etc. (Lin, 2008). For example, the literature has pointed out that SOEs are less motivated by economic rationality and more risk taking because of their connections with state (Amighini, Rabellotti & Sanfilippo, 2013; Lin, 2008)

So far the rapid growth of China's oFDI has attracted widespread interest from the academia and industry in the world and a variety of topics on this phenomenon such as the motives, modes, and home and host country effects have been studied in much of the literature (Deng, 2013; Chen, Li & Hambright, 2016; Wang & Gao, 2019). However, the studies on China's oFDI to date have been limited in their scope: For example, the issue of oFDI location strategies of Chinese firms have been relatively insufficiently dealt with (Yao, Zhang, Wang & Luo, 2017) although the choice of foreign markets is an essential element comprising oFDI strategy (Dunning & Lundan, 1998).

The objective of this paper is to theoretically and empirically explore the differences in the oFDI location choice between Chinese SOEs and POEs. To this end, we combine the literature on oFDI location choices with studies on the differences of the two types of Chinese firms. In so doing, we will fully consider the characteristics and uniqueness of the Chinese economy and firms operating under the 'party-state system' or state capitalism which is led by the Chinese Communist government (Liao & Zhang, 2014).

We first develop the hypotheses on the effects of various factors of the host country on their choice of locations such as natural resources endowment, market size, strategic asset abundance, production efficiency,

political risk and institutional quality. To empirically test the hypotheses, we conduct multiple regression with secondary data on Chinese SOEs and POEs for the period from 2005 to 2016. In the empirical analysis, we specifically employ ratio indices as dependent variable, which is different from the approaches used in existing studies. For example, Amighini, Rabellotti and Sanfilippo (2013) use project count data without considering investment size, and Yao, Zhang, Wang and Luo (2017) use the absolute value of oFDI without considering the relative weight of SOEs' oFDI or POEs' oFDI.

The rest of the paper is organized as follows. Section II introduces a review of the literature and theoretical considerations of China's oFDI, the types of Chinese firms, i.e., SOEs and POEs, and their oFDI location choice. Section III presents six research hypotheses on the effects of host country factors on the differences on location choice between Chinese SOEs and POEs. Section IV provides the empirical model, the sample, data, measures, the results of the statistical analysis and discussion. Lastly, Section V present the summary of the study, contribution, limitations, the direction for further study and managerial and policy implications.

Ⅱ. Literature Review and Theoretical Background

1. The Theoretical approaches to explaining oFDI from emerging economies

Scholars have attempted to theoretically explain FDI particularly after World War II as multinational enterprises (MNEs) from developed countries expanded rapidly in the world. Since the introduction of monopolistic advantage theory by Hymer (1960), many strands of theories such as internalization theory (Buckley & Casson, 1976), and the eclectic paradigm of international production by Dunning (1977) have been put forth to explain the determinants of FDI, especially that conducted by MNEs from developed countries. In general, these traditional theories are based on the possession of ownership advantage by the investor.

As oFDI by MNEs from emerging economies including developing and transition countries has grown in recent years, researchers have attempted to explain this phenomenon, often using the existing theories. They have contended that firms in emerging economies can acquire their ownership advantages through technological accumulation, learning, and innovation. For example, the theory of small-scale technology by Wells (1983) holds that enterprises from developing countries, by absorbing and improving external technologies can create small-scale production technologies suitable for the needs of small markets, thereby acquiring competitive advantages. Similarly, the theory of localization of technical change (Lall, 1983) emphasized that firms from developing countries could acquire special advantages through their own peculiar technological activities. Next, Dunning's (1981) investment development path model is a dynamic version of his eclectic paradigm of international production, holding that the tendency of developing countries to invest abroad at different times depends on ownership, internalization, and locational advantages of the country at different stages of development.

More recently, studies such as Mathews (2006) and Luo and Tung (2007) have stressed

asset exploration and acquisition through foreign entry as the determinants of oFDI from emerging economies. Firms from emerging economies have conducted oFDI to gain advanced knowledge and technologies and to utilize their own ownership advantage through the support of external relations, systems, governments, etc. Interventions by home country governments also accelerated their foreign market entry often under national development strategy.

2. Explaining Chinese firms' oFDI and location choice

To gain a better understanding of Chinese firms' oFDI location strategy, we need to take a close look at the determinants and characteristics of their oFDI. In general, as seen above, oFDI can be explained in terms of the ownership advantage of the investing MNE. However, Chinese firms still have inherent weaknesses in production technology and management skill. Therefore, for these firms the possession of an ownership advantage is not the decisive factor in making oFDI. Rather, they often gain competitiveness via oFDI and reverse investment directed to developed countries often provides a strong evidence of this characteristic (Yao et al., 2017).

Chinese firms also tend to obtain competitive advantages through relationships with local firms, institutions, and governments when lacking in resources, brands and distribution channels. This kind of relationship can be a significant source of competitive advantage (Erdener & Sapiro, 2005). While traditional FDI theories focus less on the role at the national level which MNEs can play in making oFDI, Chinese MNEs are eager to promote the economic development of their home country, often explicitly helping their government to fulfill national economic policies (Li, 2012).

With the continuous growth of their oFDI in recent years, Chinese MNEs' behavior in entering into foreign markets also has changed in many aspects including the choice of oFDI locations.

China, as a developing economy, has some characteristics with respect to location choices of oFDI. According to the analyses of the location of Chinese oFDI, in general, the level of political risk and local market scale of the host country and the cultural similarity between home and host country greatly influenced location choice (Buckley et al., 2007; Cheng & Ma, 2010).

Chinese MNEs tend to access countries with poor systems quality or high political risk (Buckley et al., 2007) and to directly obtain resources and energy from a host country that has abundant natural resources (Kolstad & Wiig, 2012; Quer et al., 2012). Also, they gain strategic assets such as technology, brands and management skill by accessing countries or regions with an abundance of such strategic assets (Deng, 2007; Jiang & Sinton, 2011; Lyles et al., 2014).

Cheung and Qian (2009) found that Chinese oFDI in developed and developing countries was affected by different factors. Chinese firms invested in developing countries because of low costs and abundant resources while in developed countries they pursued market and strategic assets. Institutionally, the system environment and natural resources of a host country both influence the location choices of Chinese oFDI. Among the countries and regions with a poor system environment, those who are rich in natural resources attracted Chinese oFDI.

3. Ownership types of Chinese firms and the differences in oFDI locations between SOEs and POEs

SOEs have an absolute leading position in Chinese oFDI (Wang & Gao, 2019) although the Chinese government eased restrictions on POEs' foreign entry in recent years. As seen above, the general features regarding Chinese firms' oFDI locations can differ according to different forms of enterprise ownership - SOEs and POEs - as we categorized before. SOEs where firm assets are fully or dominantly owned by the government, have different properties of systems, objectives and management process. Thus, the business environment and economic conditions of SOEs and POEs are different in China.

Chinese SOEs create a unity of economic and administrative organizations. They possess the function of economic organization by maximizing profits or minimizing costs through their production and operation activities and additionally exercise the function of the government. Such dual nature of SOEs determines the dual motives in their oFDI: The economic ones of firm growth (e.g., improving production efficiency, acquiring high-technology, and gaining knowledge) and simultaneously, the political ones of guaranteeing the sustainable development of the national economy and realizing national strategic goals, often closely related to the former (Luo, Xue & Han, 2010). Thus, SOEs with political purposes, such as seeking resources for the state often conduct oFDI to gain from host countries resource advantages that are unavailable to POEs (Song, Yang & Zhang, 2011; Ramasamy, Yeung & Laforet, 2012).

In POEs, the firm ownership typically belongs to one or more private investors who have the advantages of a high degree of marketization, flexible management, light social burden, etc. in making oFDI. POEs differ from SOEs in many respects. While SOEs tend to have easier access to strategic resources and investment funds through government support, POEs started to go abroad relatively late and moreover, suffered from insufficient firm size and resources, and policy restrictions (Huang & Renyong, 2014). Therefore, POEs are even more subject to policy constraints at home (Lin, 2008) and in venturing abroad, for example, financing is also relatively difficult for POEs to obtain from the government (Sutherland & Ning, 2011). In sum, POEs are mainly driven by the market, whereas SOEs are driven by the government.

Such differences in oFDI behavior between them, in turn lead to the differences in the choice of oFDI locations. Existing empirical analyses prove these points. Using count data on the number of investment projects implemented by Chinese MNEs, Amighini, et al. (2013) and Ramasamy, et al. (2012) showed that SOEs invested more in locations with rich natural resources while they were less sensitive to political risk and that POEs invested more in locations with large markets and strategic assets while preferring less politically risky countries. Others used value data on Chines oFDI. For example, Fung and Garcia-Herrero (2008) found that Chinese SOEs gained support mostly from the government, which usually guides the location and distribution of Chinese oFDI. Ramasamy et al. (2012) also showed that SOEs were inclined to invest in countries and regions with abundant natural resources and high political risk, whereas POEs tended to invest in those with large market scale.

Ⅲ. Research Hypotheses

Natural resources are deemed an important factor for national development and thus countries often acquire foreign resources via oFDI. Buckley, et al. (2008) and Athreye and Kapur (2009) found that a shortage of national resources drove oFDI of Chinese domestic enterprises (especially SOEs). Since 2005, the prices of oil, energy and minerals have caused many emerging economies to seek a stable supply often via mergers and acquisitions and most of the investment projects have been carried out by SOEs (Rasiah, Gammeltoft & Jiang, 2010). Therefore, oFDI by MNEs from emerging economies supported by their home government often involve political and economic relations between their home and host governments. For example, many developing countries are often provided aid by the Chinese government and in such cases the host country government gives Chinese MNEs market access.

In China, the demand for resources and energy has increased in recent years and with the rapid economic development, the shortage of resources has threatened sustainable economic growth. Chinese SOEs tend to obtain their required resources through overseas markets according the Chinese governmental policies. Chen et al. (2009) found that one of the most important objectives of Chinese MNEs was to access the host country's natural resources. To ensure the sustainable development of China's economy, Chinese MNEs will invest more in countries abundant with oil, natural gas, and mineral resources.

China seeks sufficient resources and energy for sustainable economic development through oFDI. However, the search for resources and energy is accompanied not only by high requirements on corporate capital and scale, but also by the need for high resistance against risks from host countries. Thus, Chinese SOEs will be in a better position to conduct natural resource-seeking oFDI than POEs. Therefore, *ceteris paribus*,

H1: In locations with more abundant natural resources, Chinese SOEs will make relatively more oFDI than Chinese POEs.

Seeking overseas markets has always been the main reason for the oFDI of emerging economies in particular (Rasiah et al., 2010). Firms from emerging economies have the advantage of low costs and can expand overseas mainly through exports. However, they can be negatively affected by the rise of trade protection from foreign governments via various tariff and non-tariff barriers. Thus, they increasingly establish offshore operations to supply the original market. This is why Chinese MNEs prefer to invest more in Southeast Asia and other regions in recent years (Nikkei, 2019).

A larger market would bring higher economies of scale and thus the market size of the host country has a significant influence on firms' selection of oFDI location. Tatoglu's research (2012) found that the market attraction of the host country is the driving force for most firms to expand abroad. Government support including bank financing enables Chinese SOEs to obtain large amounts of capital (Dunning, Kim & Park, 2008).They can take advantage of this to actively develop new markets overseas and invest in global brand recognition in the long term.

As for POEs in China, unfavorable market competition and unfair government support for SOEs make them face many difficulties. Therefore, to get out of such negative influence from the domestic environment in

China, POEs often choose to invest in overseas markets to make up for their disadvantages and enhance their strength. Therefore, *ceteris paribus*,

H2: In locations with a larger market size, Chinese SOEs will make relatively less oFDI than Chinese POEs.

One of the important reasons for firms to engaging in oFDI is strengthening firm competitiveness. In particular, firms from emerging economies acquire strategic assets such as foreign technology, brands, human capital, and management skills through oFDI. According to Dunning (1998), firms have strong competitive advantages in market competition when they possess strategic assets such as research and development, design ability and brand. Also countries need created assets to improve their international competitiveness (Porter, 1990) as well as natural resources. If the firm or the country cannot develop such assets internally, it has to depend on external sources.

The Chinese government often leveraged its SOEs as carriers to execute a series of measures to obtain foreign competitive assets for national development. Along this line, a study by Ramasamy, et al. (2012) pointed out that SOEs had a clear preference for strategic assets. The fact that since 2005, in particular, Chinese SOEs have invested more, often through M&As, in developed countries in Europe and America is pertinent to this point (Wang & Gao, 2019). Therefore, *ceteris paribus*,

H3: In locations with more abundant strategic assets, Chinese SOEs will make relatively more oFDI than Chinese POEs.

Efficiency-seeking is an important motive of oFDI, but its prevalence varies considerably among firms, especially in terms of their country of origin and industry. Compared to firms from developed countries, the efficiency-seeking motive is more important to firms from emerging countries in labor-intensive industries such as garments, footwear and electronic assembly.

Most scholars agree that given the lower production costs in China, efficiency-seeking motivations do not play the prime role for Chinese MNEs going global because of relatively low costs at home (Buckley et. al., 2007). However, in some sectors where competitive pressure is very high in global markets, cost-reducing factors, including national and international policies have induced efficiency-seeking oFDI by Chinese firms. For example, China has become one of the three largest investors in six ASEAN countries including Cambodia, Indonesia and Myanmar in 2018 (Wang & Gao, 2019).

There are two general rationales for oFDI: One is to exploit the firm's competitive advantage and the other is to overcome its competitive disadvantage (Liang, Lu & Wang, 2012). Based on the latter, POEs need technology, knowledge, brand, and management resources in developed countries. However, the lack of actual competitive strength and problems such as financing difficulties can push them to choose countries with lower labor costs or easier transportation while SOEs do not have severe financing problems thanks to the government's support, and have diversified investment goals. Therefore, efficiency-seeking motivation has a less significant influence on SOEs' selection of oFDI location. Therefore, *ceteris paribus*,

H4: In locations with higher production efficiency, Chinese SOEs will make relatively less oFDI than Chines POEs.

Traditional FDI theories hold that the high political risk of the host country is not conducive to attracting inward FDI (Dunning, 1977; Kolstad & Wiig, 2012). High political risk in the host country causes foreign firms to incur increased costs, reducing the investment returns in the host country (Asiedu, 2002; Buckley et al., 2007; Busse & Hefeker, 2007).

On the contrary, Chinese firms are often attracted to countries that are politically risky. Buckley et al. (2007) claimed that since most Chinese oFDI was government-led, Chinese MNEs tend to be promoted by political affiliations and connections between Chinese and emerging economy governments. As a result, in making oFDI, Chinese MNEs tend to be less risk averse and moreover, feel more comfortable and familiar with the workings of governments that are not truly democratic (Cui, 2016).

Among Chinese MNEs, SOEs are generally considered more inclined to face higher political risks (Quer, Claver & Rienda, 2012), especially when their investment objective is to obtain the host country's natural resources and strategic assets (Sanfilippo, 2010). In particular, the cooperation between the host and home country is more conducive to SOEs for dealing with political risks (Ramamasy, et al., 2012). Therefore, *ceteris paribus*,

H5: In locations with higher political risk, Chinese SOEs will make relatively more oFDI than Chinese POEs.

The literature has long acknowledged that MNEs entering foreign markets face liabilities of foreignness due to lack of external legitimacy (Kostova & Zaheer, 1999; Zaheer, 1995). This is commonly associated with the incompatibility of institutional values and practices along the regulatory, normative and cultural-cognitive pillars between home and host countries (Scott, 2008). It may also be attributed to perceptions by host countries of possible conflicts of interests between countries (Henisz & Zelner, 2005; Lipsey, 2004).

The institutional environment of the host country affects foreign MNEs' location choice because the quality of the local institution determines how firms behave in the host country (Lu et al., 2014). Therefore, when firms engage in oFDI, they choose countries and regions with relatively good quality institutions. However, Chinese SOEs can be strengthened by the government's political exchanges with the host country. When SOEs especially are responsible for the national development strategy, they often invest in counties with lower institutional quality, which are rich in resources and energy (Ramasamy et al. 2012). Therefore, *ceteris paribus*,

H6: In locations with lower institutional quality, Chinese SOEs will make relatively more oFDI than Chinese POEs.

Ⅳ. Methodology

1. Model specification

This paper adopts the multiple regression analysis model described below.

$$Y = a0 + a1X1 + a2X2 + a3X3 + a4X4 + a5X5 + a6X6 + a7X7 + e$$

where Y is the dependent variable, defined as the ratio of the oFDI stock of Chinese SOEs to the sum of the oFDI stock of Chinese SOEs and POEs in a specific country. X1 through X6 are independent variables, representing the host country's natural resource abundance,

Table 1. Measures of variables

	Variable	Measure	Data source (2017)
Dependent variable	SOEs oFDI Ratio	SOEs oFDI / (SOEs oFDI + POEs oFDI)	Statistical Bulletin of China's oFDI
Independent variables	Natual resource abundance	Primary energy production	World Bank
	Market size	Per capita GDP	World Bank
	Strategic asset abundance	High-tech product export percentage	Knoema
	Production efficiency	Labor cost	Trading Economics
	Political risk	Political risk	ICGR
	Institutional quality	Legal institution quality	CROIC-IWEP
Control variable	oFDI value	Ln (SOEs oFDI + POEs oFDI)	Statistical Bulletin of China's oFDI

market size, strategic asset abundance, production efficiency, political risk and institutional quality, respectively and X7 is a control variable measured as Ln(SOEs' oFDI + POEs' oFDI).

2. Data

The data for empirical analysis is divided into two parts. First, all enterprises are based on sample data from the first half of 2017, using China's Ministry of Commerce list of oFDI operating during the period 2005-2016. Following Zeng (2012), we excluded three types of firms - those that invested only in tax avoidance areas (Bermuda, British Virgin Islands, and the Cayman Islands), those listed mainly by stock code, in which the code continued to exist but the actual enterprise no longer did and lastly financial enterprises. Second, sample data mainly came from the China Global Investment Tracker, 2016. A total of 88 countries were sorted out, excluding the countries and regions with a large number of missing data. The final sample included 413 firms from 2005 to 2016, covering 88 countries and regions. Among them were 270 SOEs and 143 POEs.

3. Measures

Unlike other studies using project count data such as Amighini et al. (2013) and Ramasamy et al. (2012) or Yao et al. (2017) using the absolute amount of oFDI as the measure for the dependent variable, we adopted the ratio of the SOEs' oFDI value to the sum of SOEs' oFDI and POEs' oFDI as discussed above. We interpret this ratio to test whether there is a difference between SOEs' and POEs' location selection.

For the independent variables we used the following measures for the host country that Chinese MNEs invested in. For natural resources, we adopted primary energy production, e.g., oil and gas, solid fuel, combustible renewable energy, etc. (Buckley, et al., 2007; Kolstad & Wiig, 2009). The variable for market size was measured as the per capita gross domestic product (GDP)

Table 2. Correlations among variables (N=88)

	Mean	Std. Dev.	1	2	3	4	5	7	6	8
1. SOEs oFDI/(SOEs+ POEs oFDI)	.837	.152	1							
2. Primary energy production	3.279	4.698	.466 **	1						
3. Ln (GDP per capita ($))	8.704	1.589	.510 **	.233 *	1					
4. High-technology exports(%)	8.828	8.777	.430 **	.100	.465 **	1				
5. Labor costs ($/Wk)	76.924	26.358	.408 **	.073	.536 **	.444 **	1			
6. Political risk	67.34	10.821	.417 **	.101	.341 **	.317 **	.217 *	1		
7. Legal institution	-.0119	.537	.418 **	.026	.570 **	.363 **	.414 **	.313 **	1	
8. Ln (SOEs+ POEs oFDI)	7.087	1.472	-.071	.073	.166	.217 *	.052	.267 *	.161	1

Note: * p <0.1, ** p<0.05, *** p<0.001.

(Root & Ahmed, 1979). The data for natural resources and per capital GDP came from the World Bank's statistical database.

The strategic asset abundance variable was measured as the percentage of the high-tech products of the total export of the host country, e.g., aerospace, computers, medicines, scientific instruments, and electronic machinery (Rugman & Li, 2007). These data came from Knoema's statistical database. Production efficiency is measured as the labor rates of the host country ($/week). Labor cost advantage of a host country is an important factor of oFDI: The lower the labor cost, the more attractive the investment. The labor cost data came from the statistical database of Trading Economics.

For the political risk variable, we adopted widely used national political risk indices from International Country Guide, using values from 0 to 100 between 2005 and 2016. The higher the value, the lower the location's political risk and the more stable the political environment. For the institutional quality variable, we used data from China's overseas investment national risk rating (CROIC-IWEP) from the Institute of World Economy and Politics and the Chinese Academy of Social Sciences from 2005 to 2016 as the legal index. By using multiple data sources, we could avoid various deviations caused by using a single sample source. The variables and their measures are shown in <Table 1>.

4. Statistical analysis and results

To conduct the empirical tests of our hypotheses, first, missing and outlier values in the original data were processed to eliminate the influence of missing and

Table 3. Model summary (N=88)

Model	R	R^2	Adjusted R^2	Std. Error of the Estimate
1	.761	.579	.561	.1005

Table 4. ANOVA table (N=88)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.165	7	.166	15.697	.000
Residual	.848	80	.011		
Total	2.013	87			

Table 5. Estimated coefficients (N=88)

Model	Unstandardized coefficients		Standardized coefficients	t	Sig.	Collinearity statistics:
	B	Std. Error	Beta			VIF
(Constant)	.615	.079		7.837	.000	
Primary energy production	.013	.002	.406	7.773	.000	1.085
Ln (GDP per capita($))	.010	.007	.101	1.414	.159	2.023
High-technology exports(%)	.003	.001	.197	3.253	.001	1.457
Labor costs ($)	.001	.000	.104	1.672	.096	1.558
Political risk	.003	.001	.226	4.108	.000	1.202
Legal institution	.067	.018	.235	3.650	.000	1.658
Ln (SOEs+POEs oFDI)	−.027	.005	−.265	−4.998	.000	1.120

extreme values on model estimation. For the sample outlier values, sample data were processed by means of tail reduction processing. Next, the unbalanced panel data of 88 countries from 2005 to 2016 were obtained. 〈Table 2〉 shows the mean value and standard deviation of the variable and Pearson correlations among variables.

We then needed to confirm that there was a systematic multicollinearity problem. As shown in 〈Table 2〉, the correlation coefficients among independent variables are all below 0.6, so no serious correlation is indicated (Anderson et al. 2016). Moreover, we could further confirm that there is no serious multicollinearity problem, since VIF (variance inflation factor) coefficients for all variables were lower than 10 (Allison, 1999), as later shown in 〈Table 5〉.

〈Table 4〉 shows the overall fit of the model. The F statistic (15.697, df=7, $p<0.01$) indicates the rejection of the null hypothesis that all the estimated coefficients equate with 0, showing a high fit with the model. The

adjusted R^2 turned out to be 0.561, revealing that the model's explanatory power is normal (〈Table 3〉).

〈Table 5〉 shows the results of coefficient estimation. For the first variable, natural resources, the estimated coefficient (B1) was + 0.406 and significant at the 1% level ($p<0.000$). Thus this result fully supports Hypothesis 1 proposing that Chinese SOEs will make relatively more oFDI in locations with more abundant natural resources.

The estimated coefficient for the market size variable (B2) turned out to be + 0.101 and insignificant ($p<0.159$), so Hypothesis 2 on the relationship between Chinese SOEs' oFDI in relative terms and the size of the local market was not supported. The estimated coefficient for strategic asset abundance (B3) was + 1.917 and significant at the 1% level ($p<0.01$) indicating that Chinese SOEs make relatively more oFDI in locations with abundant strategic assets. Thus Hypothesis 3 was fully supported. Hypothesis 4 proposing that Chinese SOEs will make relatively less oFDI in locations with higher production efficiency was weakly supported since the estimated coefficient for production efficiency (B4) was + 0.104 and only significant at the 10% level ($p<0.096$).

For the political risk and institutional quality variables, it was found that their estimated coefficients (B5 and B6) were + 0.226 and + 0.235, respectively, both significant at the 1% level ($p<0.01$). Thus, Hypotheses 5 and 6 were also fully supported, showing that Chinese SOEswill make relatively more oFDI in locations with higher political risk and in locations with lower institutional quality. Lastly, the estimated coefficient for the control, Ln(SOEs' oFDI + POEs' oFDI), turned out to be - .265 and significant at the 1% level ($p<0.01$), indicating that Chinese SOEs invested relatively more in countries in which the total of all Chinese oFDI was more.

5. Discussion

As has been discussed earlier, corporate ownership in China is divided into SOEs and POEs. We proposed six hypotheses on the effects of host country factors, i.e., natural resource abundance, market size, strategic asset abundance, production efficiency, political risk and institutional quality on the relative value of Chinese SOEs' oFDI, compared to Chinese POEs' oFDI. The results of empirical test showed that all five factors except for market size affect Chinese SOEs' choices of oFDI locations though one factor (production efficiency) obtained weak support.

First, in regard to the natural resources variable (Hypothesis 1), in recent years, the rapid development of China's economy, the growing demand for natural resources, and the responsibility of SOEs for their home economy have urged the Chinese government to consider the implementaton of economic policies and to obtain more sufficient and a stable resource supply through SOEs. As a result, Chinese SOEs have sought more natural resources, in turn, investing more in resource-rich countries and regions, relative to POEs.

Second, the market size of the host country (Hypothesis 2) did not have any effect on the SOEs' locational choice. In this regard, Lu, Liu, and Wang (2011) argued that Chinese POEs needed locations with a far larger market size than SOEs. However, Amighini, et al. (2013) pointed out that the role of the market size was limited by factors other than ownership type, echoing the empirical results of our study.

Third, in regard to the abundance of

strategic assets (Hypothesis 3), Chinese SOEs show a more pronounced preference for strategic resources than do POEs, especially when they are new high-tech production technologies that are less attractive to POEs. This point is consistent with the results of the past studies (e.g., Ramasamy et al. 2012)

Fourth, in regard to production efficiency (Hypothesis 4), the host country offering high production efficiency is relatively more attractive to Chinese POEs than Chines SOEs. The result confirms that compared to SOEs, as discussed earlier, Chinese POEs with a financial disadvantage at home prefer locations with higher production efficiency, e.g., based on lower labor costs.

We can discuss the last two factors, political risk and institution (Hypothesis 5 and 6) along the same logic. The impact of these two factors is clear: Chinese SOEs have a relatively higher preference for countries with higher political risk and lower institutional quality. These results can be also explained by the fact that the support and help from the Chinese government toward its SOEs make them more resistent to risks.

Ⅴ. Conclusions

In recent years Chinese firms have increased their outward foreign direct investment (oFDI). Chinese firms are divided into state-owned enterprises (SOEs) and privately owned enterprises (POEs) according to the type of ownership. These two types of firms differ in their behavior in oFDI in many respects and especially employ a different strategy for oFDI location choices. The objective of this paper had been to analyze the differences of oFDI locations between Chinese SOEs and POEs.

Based on the extant literature on Chinese firms' oFDI and OFDI location choice in general, we have established six hypotheses on the effects of host country factors on their choice of locations such as natural resource abundance, market size, strategic asset abundance, production efficiency, political risk and institutional quality. To empirically test the hypotheses, we conducted a multiple regression analysis with recent secondary data on 413 Chinese MNEs in 88 countries between 2005 and 2016.

The results show that in selecting oFDI locations, compared with Chinese POEs, Chinese SOEs invest relatively more in countries with richer natural resources, more abundant strategic assets, less production efficiency, higher political risk, and lower institutional quality.

The empirical results of this study are generally consistent with those of other studies and we believe that one of the contributions of this study is that in testing our hypotheses we used a relative measure at the country level, i.e., the ratio of oFDI by SOEs to the total oFDI by SOEs and POEs while many other studies used count data comprised of the number of investment projects implemented by Chinese MNEs (Amighini, et al., 2013; Ramasamy, et al., 2012) without considering the size of investment and avoiding the parent companies' influences by including all the projects in the same host country.

This study is not without limitations, however. In analyzing the differences in location choice strategy between SOEs and POEs, we only considered host country factors, holding other things being equal. In this sense, more diverse factors from different perspectives need to be included in the study. Also we did not consider POEs' oFDI which might have been made by entry into the market subsequent to the original SOEs' oFDI

in a certain country since we used country level aggregated data.

Further we did not pay attention to the different types of SOEs within the same category of SOEs. SOEs can be owned fully or dominantly by the central or local government. Different types of SOEs may show different location preferences. Further study can be implemented in this direction. Additionally study on the performance implication of the differences in the location choice between Chinese SOEs and POEs might be meaningful in that they pursue different financial or strategic objectives.

Despite these limitations, it is our hope that the theory and results of the present study will contribute to research in oFDI location choice by Chinese SOEs and POEs in academia. This study also is likely to be useful to managers of MNEs from foreign countries competing against SOEs supported by the Chinese government as well as POEs by providing a better understanding of their oFDI location strategies. Also this study can be useful to managers of Chinese POEs in selecting foreign markets for engaging in oFDI, and negotiating with the Chinese government over relevant policies and measures for regulating and supporting SOEs and POEs.

References

Allison, P. D. (1999), *Multiple Regression: A Primer*, Thousand Oaks, CA: Pine Forge Press.

Amighini, A. A, R. Rabellotti and M. Sanfilippo (2013), "Do Chinese State-owned and Private Enterprises Differ in their Internationalization Strategies", *China Economic Review*, 27, 312-325.

Anderson, D. R., D. J. Sweeney, T. A. Williams, J. D. Camm and J. J. Cochran (2016), *Statistics for Business and Economics* (13th ed.), Boston, MA: Cengage Learning.

Asiedu, E. (2002), "On the Determinants of Foreign Direct Investment to Developing Countries: Is Africa Different?", *World Development*, 30(1), 107-119.

Athreye, S. and S. Kapur (2009), "Introduction: The Internationalization of Chinese and Indian Firms - Trends, Motivations and Strategy", *Industrial and Corporate Change*, 18(2), 209-221.

Barney, J. (1991), "Firm Resources and Sustainable Competitive Advantage", *Journal of Management*, 17(1), 99-120.

Buckley, P. J., J. L. Clegg and A. Cross (2007), "The Determinants of Chinese Outward Foreign Direct Investment", *Journal of International Business Studies,* 38(4), 499-518.

Buckley, P., J. L. Clegg, A. R. Cross, M. Rhodes, P. Zheng and H. Voss (2008), "Explaining China's Outward FDI: An Institutional Perspective", In K. P. Sauvant (Ed.), *The Rise of Transnational Corporations from Emerging Markets: Threats and Opportunity?*, London: Edward Elgar, Chapter 7, 107-157.

Buckley, P. J. and M. C. Casson (1976), *The Future of the Multinational Enterprise*, London: Macmillan.

Busse, M. and C. Hefeker (2007), "Political Risk, Institutions and Foreign Direct Investment", *European Journal of Political Economy*, 23(2), 397-415.

Chen, V. Z., Y. Li and S. Hambright (2016), "Regulatory Institutions and Chinese Outward FDI: An Empirical Review", *Multinational Business Review*, 24(4), 302-333.

Chen, Y. R., C. Yang, S. M. Hsu and Y. D. Wang (2009), "Entry Mode Choice in China's Regional Distribution Markets: Institution vs. Transaction Costs Perspectives", *Industrial Marketing Management*, 38(7), 702-713.

Cheng, L. K. and Z. Ma (2010), *China's Outward FDI: Past and Future*, School of Economics, Renmin University of China Working Paper Series.

Cheung, Y. W. and X. W. Qian (2009), "The Empirics of China's Outward Direct Investment", *Pacific Economic Review*, 14(3), 312-341.

Child, J. and S. B. Rodriguez(2005), "The Internationalization of Chinese Firms: A Case for Theoretical Extension", *Management and Organization Review*, 1(3), 381-410.

Cui, L. (2016), "The Primacy of Institutional Explanation of Chinese Outward FDI: Is It Understated or Overstated", *Management and Organization Review*, 12(3), 457-467.

Cui, L. and F. M. Jiang (2012), "State Ownership Effect on Firms' FDI Ownership Decisions under Institutional Pressure: A Study of Chinese Outward-investing Firms", *Journal of International Business Studies*, 43(3), 264-284.

Deng, P. (2007), "Investment for Strategic Resources and Its Rationale: The Case of Outward FDI from Chinese Companies", *Business Horizons*, 50(1), 72-81.

Deng, P. (2013), "Chinese Outward Direct Investment Research: Theoretical Integration and Recommendations", *Management and Organization Review*, 9(3), 513-539.

Dunning, J. H. (1977), "Trade, Location of Economic Activity and the MNE: A Search for An Eclectic Approach". In B. Ohlin, P.-O. Hesselborn and P. M. Wijkman (Eds.), *International Allocation of Economic Activity*, London: Palgrave Macmillan, 395-418.

Dunning, J. H. (1981), "Explaining the International Direct Investment Position of Countries: Towards a Dynamic or Developmental Approach", *Weltwirtschaftliches Archiv*, 117(1), 30-64.

Dunning, J. H. (1998), "Location and the Multinational Enterprise: A Neglected Factor?", *Journal of International Business Studies*, 29(1), 45-66.

Dunning, J. H. (2006), "Comment on Dragon Multinationals: New Players in 21st Century Globalization", *Asia Pacific Journal of Management*, 23(1), 5-27.

Dunning, J. H., C. Kim and D. Park (2008), "Old Wine in New Bottles: A Comparison of Emerging-Market TNCs Today and Developed-Country TNCs Thirty Years Ago". In K. P. Sauvant (Ed.), *The Rise of Transnational Corporations from Emerging Markets: Threats and Opportunity?*, London: Edward Elgar, Chapter 8, 158-182.

Dunning, J. H. and S. M. Lundan (2008), *Multinational Enterprises and the Global Economy,* London: Edward Elgar.

Erdener, C. and D. M. Shapiro (2005), "The Internationalization of Chinese Family Enterprises and Dunning's Eclectic MNE Paradigm", *Management and Organization Review*, 1(3), 411-436.

Fung, K. C. and A. Garcia-Herrero (2008), *A Comparative Empirical Examination of Outward Direct Investment from Four Asian Economies: China, Japan, Republic of Korea and Taiwan* (Working Papers 0919), BBVA Bank, Economic Research Department.

Gaur, A. S., X. Ma and Z. Ding (2018), "Home Country Supportiveness/Unfavorableness and Outward Foreign Direct Investment from China", *Journal of International Business Studies*, 49(3), 324-345.

Henisz, W. J., and B. A. Zelner (2005), "Legitimacy, Interest Group Pressures, and Change in Emergent Institutions: The Case of Foreign Investors and Host Country Governments", *Academy of Management Review,* 30(2), 361-382.

Huang, X. and C. Renyong (2014), "Chinese Private Firms' Outward Foreign Direct Investment: Does Firm Ownership and Size Matter?", *Thunderbird International Business Review*, 56(5), 393-406.

Hymer, S. H. (1960), *The International Operations of National Firms: A Study of Direct Foreign Investment*, Cambridge, MA: MIT Press (Published 1976).

Jiang, J. and J. Sinton (2011), *Overseas Investments by Chinese National Oil Companies: Assessing the Drivers and Impacts* (IEA Energy Papers, 3), Paris: OECD Publishing.

Jiang, G., F. Zhang and P. Thakur (2007), *The Location Choice of Cross-Border Mergers & Acquisitions: The Case of Chinese Firms* (Conference paper), EIBA.

Kolstad, I. and A. Wiig (2009), "Is Transparency the Key to Reducing Corruption in Resource-Rich Countries?", *World Development*, 37(3), 521-532.

Kolstad, I. and A. Wiig (2012), "What Determines Chinese Outward FDI?", *Journal of World Business*, 47(1), 26-34.

Kostova, T. and S. Zaheer (1999), "Organizational Legitimacy under Conditions of Complexity: The Case of the Multinational Enterprise", *Academy of Management Review*, 24(1), 64-81.

Lall, S. (1983), *The New Multinationals: The Spread of Third World Enterprises*, Chichester, NH: John Wiley.

Li, Q. (2012), *Political Relations and Chinese Outbound Direct Investment: Evidence from Firm- and Dyadic-Level* (Working Paper, No. 19), Bloomington, IN: Research Center for Chinese Politics and Business.

Liang, X., W. Lu and L. Wang (2012), "Outward Internationalization of Private Enterprises in China: The Effect of Competitive Advantages and Disadvantages Compared to Home Market Rivals", *Journal of World Business*, 47(1), 134-144.

Liao, S. and Y. Zhang (2014), "A New Context for Managing Overseas Direct Investment by Chinese State-Owned Enterprises", *China Economic Journal*, 7(1), 126-140.

Lilia, M., M. Serguei and P. Fidel (2008), "Sovereign Risk, FDI Spillovers, and Growth", *Review of International Economics*, 16(3), 463-477.

Lin, X. (2008), "State versus Private MNCs from China: Initial Conceptualizations", *International Marketing Review*, 27(3), 366-380.

Lipsey, R. E. (2004), "Home-Country and Host-Country Effects of Foreign Direct Investment". In R. E. Baldwin and L. A. Winters (Eds.), *Challenges to Globalization: Analyzing the Economics*, Chicago: University of Chicago Press, Chapter 9, 333-382.

Lu, J., X. Liu, M. Wright and L. Filatotchev (2014), "International Experience and FDI Location Choices of Chinese Firms: The Moderating Effects of Home Country Government Support and Host Country Institutions", *Journal of International Business Studies*, 45(4), 428-449.

Lu, J., X. H. Liu and H. L. Wang (2011), "Motives for Outward FDI of Chinese Private Firms: Firm Resources, Industry Dynamics, and Government Policies", *Management and Organization Review*, 7(2), 223-248.

Luo, Y. and R. L. Tung (2007), "International Expansion of Emerging Market Enterprises", *Journal of International Business Studies*, 38(4), 481-498.

Luo, Y., Q. Xue and B. Han (2010), "How Emerging Market Governments Promote Outward FDI: Experience from China", *Journal of World Business*, 45(1), 68-79.

Lyles, M., D. Li and H. Yan (2014), "Chinese Outward Foreign Direct Investment Performance: The Role of Learning", *Management and Organization Review*, 10(3), 411-437.

Mathews, J. (2006), "Dragon Multinationals: New Players in 21st Century Globalization", *Asia Pacific Journal of Management*, 23(1), 5-27.

Morck, R. (2007), "Perspectives on China's Outward Foreign Direct Investment", *Journal of International Business Studies*, 39(3), 337-350.

Nikkei (2019), "Trade War Steers Chinese Investment Toward Southeast Asia", *Nikkei Asian Review*, June 2.

Porter, M. E. (1990), "The Competitive Advantage of Nations", *Harvard Business Review*, 68(2), 73-93.

Quer, D., E. Claver and L. Rienda (2012), "Political Risk, Cultural Distance, and Outward Foreign Direct Investment: Empirical Evidence from Large Chinese Firms", *Asia Pacific Journal of Management,* 29(4), 1089-1104.

Ramasamy, B., M. Yeung and S. Laforet (2012), "China's Outward Foreign Direct Investment: Location Choice and Firm Ownership", *Journal of World Business*, 47(1), 17-25.

Rasiah, R., P. Gammeltoft and Y. Jiang (2010), "Home Government Policies for Outward FDI from Emerging Economies: Lessons from Asia", *International Journal of Emerging Markets*, 5(3), 333-357.

Root, F. R. and A. A. Ahmed (1979), "Empirical Determinants of Manufacturing Direct Foreign Investment in Developing Countries", *Economic Development and Culture Change*, 27(4), 751-767.

Rugman, A. M. and J. Li (2007), "Will China's Multinationals Succeed Globally or Regionally?", *European Management Journal*, 25(5), 333-343.

Sanfilippo, M. (2010), "Chinese FDI to Africa: What Is the Nexus with Foreign Economic Cooperation?", *African Development Review*, 22(1), 599-614.

Scott, W. R. (2008), *Institutions and Organizations* (3rd Ed.), Thousand Oaks, CA: SAGE.

Song, L., J. Yang and Y. Zhang (2011), "State-owned Enterprises' Outward Investment and the Structural Reform in China", *China & World Economy*, 19(4), 38-53.

Sutherland, D. and L. Ning (2011), "Exploring 'Onward-journey' ODI Strategies in China's Private Sector Businesses", *Journal of Chinese Economic and Business Studies*, 9(1), 43-65.

Tatoglu, E. (2002), "Locational Determinants of Foreign Direct Investment in an Emerging Market Economy: Evidence From Turkey", *Multinational Business Review*, 10(1), 21-27.

Wang, B. J. and K. L. Gao (2019), "Forty Years Development of China's Outward Foreign Direct Investment: Retrospect and the Challenges Ahead", *China & World Economy*, 27(3), 1-24.

Wells, L.T. (1983), *Third World Multinationals*, Cambridge, MA: MIT Press.

Wernerfelt, B. (1984), "A Resource-based View of the Firm", *Strategic Management Journal*, 5(2), 171-180.

Yao, S., F. Zhang, P. Wang and D. Luo (2017), "Location Determinants of China's Outward Foreign Direct Investment", *China & World Economy*, 25(6), 1-27.

UNCTAD (various issues), *World Investment Report*, Geneva: UNCTAD.

Zaheer, S. (1995), "Overcoming the Liability of Foreignness", *Academy of Management Journal*, 38(2), 341-363.

Zeng, R. (2012), "What Motivates Firms from Emerging Economies to Go Internationalization?", *Technological and Economic Development of Economy*, 18(2), 280-298.