

# 제도적 거리와 해외직접투자의 관계에 관한 연구: 중국을 중심으로\*

## A Study on the Relationship Between Institutional Distance and Outward Foreign Direct Investment: the Case of China

림 아 신\*\* Ya-Xin Lin

유 천\*\*\* Cheon Yu

황 윤 섭\*\*\*\* Yun-Seop Hwang

I. Introduction	V. Conclusion
II. Literature Review	References
III. Research Methodology	Abstract
IV. Results	

### 국문초록

본 연구는 제도적 거리와 해외직접투자의 관계를 규명하기 위한 것으로 중국의 해외투자를 대상으로 수행한다. 중국과 투자 유치국 간의 제도적 거리는 세계은행에서 발표한 제도적 품질을 이용한다. 2008년부터 2019년까지 중국이 투자한 50개국의 패널 데이터를 수집하여 패널 GLS 방법론을 통해 해외직접투자에 영향을 미치는 요인을 제도적 관점에서 다음의 3가지를 검증한다. 첫째, 중국의 해외직접투자 전체 국가들을 대상으로 제도적 거리의 절대값이 중국의 OFDI에 미치는 영향이다. 두 번째는 중국과의 제도적 거리가 양(+)인 국가와 음(-)인 국가의 두 그룹으로 나눈 후 각 그룹에서의 제도적 거리와 OFDI의 관계이다. 마지막으로 제도적 거리와 중국의 OFDI 사이의 비선형 관계이다. 이를 위해 제도적 거리의 제곱항을 분석 모형에 추가한다. 분석 결과는 다음과 같다. 제도적 거리는 중국의 OFDI와 정(+)의 관계가 확인된다. 중국보다 상대적으로 제도 품질이 높은 진출국 그룹에서는 제도적 거리와 OFDI는 역 U자형 관계가 나타나지만, 낮은 진출국 그룹에서는 정

\* 이 논문은 2020년 대한민국 교육부와 한국연구재단의 인문사회분야 중견연구지원사업의 지원을 받아 수행된 연구임(NRF-2020S1A5A2A01044259)

\*\* 경희대학교 무역학과 무역연구소(주저자), E-mail: wj980224@naver.com

\*\*\* 국립목포대학교 무역학과 조교수(공동저자), E-mail: yu1000@mnu.ac.kr

\*\*\*\* 경희대학교 무역학과 교수(교신저자), E-mail: rusiahys@khu.ac.kr

(+)의 관계가 나타난다. 또한, 중국의 OFDI는 제도적 요인과 경제적 요인의 복합적인 영향을 받는 것으로 확인된다. 본 연구의 결과는 FDI 유치국뿐만 아니라 다국적 기업의 FDI 진출국 선택에 있어서 시사점을 제공할 것이다.

---

〈주제어〉 해외직접투자, 제도적 거리, 중국, 다국적 기업

## I. Introduction

With the increasing globalization of the economy, FDI has become an indispensable driving force of economic globalization as an important means of international business. The Chinese government's stance on the regulation of outward foreign direct investment (hereafter, OFDI) has also evolved from strict control to sponsorship and direct financing (Zhang, 2003). Since China launched its "Go Global" policy in 2001, Chinese MNEs have accelerated their internationalization process and caught up with MNEs from developed countries (Voss, Buckley, & Cross, 2009; Wang & Anwar, 2022). With the gradual spread of OFDI by Chinese enterprises, China has become an important capital exporter in the world. From 2002 to 2019, the scale of China's OFDI has grown from US\$2.7 billion to US\$136.91 billion, nearly 51 times that of the previous 17 years (UNCTAD, 2019).

Chinese firms may not act purely to maximize profits because of the government. Therefore, it can be seen that Chinese OFDI has different characteristics of FDI from that of developed countries. It means that not only economic factors but also institutional factors are needed to study the internationalization of emerging economies (Buckley et al., 2007; Mohsin et al., 2021).

Institutional theory provides the basis for explaining the trend of globalization of firms from emerging markets to emerging or developed markets (Wright et al., 2005; Zheng et al., 2022). Kostova (1996) studied institutions at the national level and first proposed the concept of "institutional distance", arguing that the gap between countries is actually a gap between the institutional environments of two different countries. The importance of institutional factors in OFDI has been highlighted in recent literature (Kolstad & Wiig, 2012; Li et al., 2020; James, Sawant, & Bendickson, 2020; Xie & Zhang, 2021).

However, most scholars have studied this from a single perspective of the host

or home country institution, and not enough attention has been paid to how the institutional distance between different countries affects OFDI (Wu et al, 2022). The failure to consider the impact of institutional differences between China and investment destinations undermines a number of meaningful attempts to explain the OFDI behavior of Chinese multinationals.

This paper is designed to explore the impact of institutional distance on OFDI. The purpose of this research is to analyze the determinants of Chinese OFDI, focusing on the institutional distance between China and host countries, and it is to explore the role of institutional distance in Chinese OFDI with different levels of institutions by classifying host countries into two categories based on the positive and negative directions of institutional distance. The differences in institutional distance are expected to have very different influences on Chinese OFDI. This study has significant implications for countries seeking to attract FDI.

## **II. Literature Review**

### **1. Determinants of Foreign Direct Investment**

There are various definitions of outward FDI from the statistical terms of the International Economic Organization. The IMF defines OFDI as an investment activity designed to obtain effective control and management of an enterprise located in a country other than the country of investment, thereby obtaining a sustainable return. UNCTAD defines OFDI as an investment in which the parent company establishes a long-term relationship with a foreign enterprise, derives ongoing benefits from it, and exercises control over it. The OECD defines the criterion for FDI that generates controlled profits as a foreign-invested enterprise holding 10% or more of the ordinary or voting shares of a foreign company.

Given that traditional theories of FDI, such as the monopoly advantage theory, the internalization theory, and the eclectic theory, have primarily approached OFDI from an economic perspective without considering political or social factors in developing countries, economists have developed a number of perspectives that are specific to developing countries.

Since the gravity model explains international trade problems well, it has

gradually been used in studies of FDI (Bénassy-Quéré, Coupet, & Mayer, 2007). FDI is similar to trade flows in that it is affected by the size of the economy. The larger the economy, the larger and more active the transactions and the higher the level of FDI. GDP, as a key factor of locational advantage representing market potential, has a positive impact on FDI decisions. The large size of a country's economy implies a high demand for foreign products and services, which is important for the investing country to consider establishing local production and distribution networks through FDI in order to respond to local demand. In fact, the local capital input requirement for FDI is higher than for exports and licensing, so it can be argued that the size of GDP, which is representative of market potential, has a significant impact on the entry decision (Dunning, 1980).

The geographical distance between the two countries can increase the cost of doing business abroad. That is, the geographical distance between two countries implies increased transportation costs. In addition, the greater the distance, the higher the information costs associated with communication difficulties and the more difficult it is to manage work due to the various cultural, living and customary differences between the different regions of the countries. Thus, the negative impact of geographical distance on OFDI has been confirmed in most studies using the gravity model (Bevan & Estrin, 2004). Using a gravity model to examine FDI in China, Cheng et al. (2004) analyze the relationship between FDI and economic variables by incorporating variables such as the size of the local country's economy and the geographic distance from China into the gravity model. An empirical study based on Chinese FDI data from 35 countries from 2003 to 2014 found that the market size of the host country, the volume of China's export trade to that country, and the openness of the host country to the outside world encourage Chinese OFDI, while the relative wage level of the host country discourages OFDI (Wang & Anwar, 2022).

## 2. Institutional Distance and Outward FDI

Recent studies have shown that formal and informal institutions, known as the "rules of the game," have a strong influence on OFDI from emerging economies (Hoskisson et al., 2000; Yi et al., 2020). In the last three decades, economists and

sociologists have proposed a new institutionalism that has strong explanatory power for the behavior of OFDI in developing countries and is one of the three pillars in the study of FDI in developing and emerging countries (Peng et al., 2008). Dunning and Lundan (2008) pointed out that it is essential to include institutional factors in the development of the paradigm. And other studies have further noted that institutions can influence the three components of the paradigm (Dunning & Lundan, 2008; Mohsin et al., 2021; Wu et al., 2022).

Institutional theory argues that firms face an uncertain and sometimes adversarially complex environment when entering foreign markets, and therefore their decisions are particularly influenced by institutional forces such as constraints and incentives (Francis, Zheng, & Mukherji, 2009; Nayyar, Mukherjee, & Varma, 2022). As a result, there is now a growing body of research that focuses on institutional factors and their impact on emerging market OFDI (Buckley et al., 2010; Ma & Ratcliff, 2020; Wang & Anwar, 2022; Wu et al., 2022).

Li, Luo, and De Vita (2020) examine the role of institutional differences on Chinese OFDI using panel data for 150 countries between 2003 and 2015. The results show that institutional differences between China and investment destinations in government efficiency and corruption control negatively affect China's OFDI. And Buckley et al. (2007) analyzed Chinese OFDI in 49 countries from 1984 to 2001 and found that there are also traditional determinants of Chinese OFDI and other unique factors. Based on Dunning's eclectic theory of international production, firms' OFDI behavior is influenced by their ownership, internalization, and location advantages, and institutional factors have an important impact on these advantages.

The existing research on the effects of institutional distance in OFDI research, it is mainly debated by three types of arguments: institutional proximity theory, institutional escape theory, and other comprehensive views. The "institutional proximity theory" refers to the fact that the closer the institutional distance, the more favorable the investment of multinational enterprises (Kostova, 1999), that is, the smaller the institutional distance, the more favorable the transfer of comparative advantage of enterprises. The "institutional escape theory" proposed by Witt & Lewin (2007) argues that the backward institutions in developing countries may make the cost of cross-border operations of local firms smaller than the cost of transactions in the home country so that firms choose to invest abroad

at an early stage of growth to avoid the constraints of backward institutions in the home country. Luo, Xue, and Han (2010) found that developing countries typically face local protection, higher tax burdens, more corruption, and a lack of intellectual property protection, which discourage firms from innovating and growing. The smaller the institutional distance between the investment country and the investment destination, the closer the regulatory and normative regimes of the two countries are to each other, and the more investment will be done (Globerman & Shapiro, 2003).

Institutional distance is not only a matter of size, but also includes directionality. Some scholars have incorporated the directionality attribute to explore the asymmetric impact of institutional distance on OFDI (Trapczyński & Banalieva, 2016). It is argued that when investing in local countries with a higher level of institutions than their own, firms will choose countries with greater institutional distance, and conversely, when investing in local countries with a lower level of institutions than their own, firms may be more willing to invest in countries with similar institutional quality (Aleksynska & Havrylchyk, 2013). Therefore, this study introduces institutional distance as a core independent variable into the model. The host countries are then divided into two groups based on the positive and negative aspects of institutional distance in an attempt to further analyze the influence of the direction of institutional distance on China's outward FDI.

### III. Research Methodology

#### 1. Research Model

This study is designed to explore the impact of the institutional distance between China and the investment destinations on the generation of OFDI in China, using the gravity model. Expressed in the model (I.1):

$$\ln OFDI_{jt} = \beta_0 + \beta_1 \ln GDP_{jt} + \beta_2 \ln Dist_{jt} + \beta_3 \ln PATENT_{jt} + \beta_4 \ln WAGE_{jt} + \beta_5 \ln OPEN_{jt} + \beta_6 \ln RATE_{jt} + \mu_j + \tau_t + \epsilon_{jt} \quad (I.1)$$

Next, on the basis of the above control variables, the core independent

variable, which is the institutional distance between the host country and China, is added to the model (I.1) to build the research model, as shown in the model (I.2):

$$\begin{aligned} \ln OFDI_{jt} = & \beta_0 + \beta_1 \ln GDP_{jt} + \beta_2 \ln Dist_{jt} + \beta_3 \ln PATENT_{jt} \\ & + \beta_4 \ln WAGE_{jt} + \beta_5 OPEN_{jt} + \beta_6 RATE_{jt} \\ & + \beta_7 INSDIS_{jt} + \mu_j + \tau_t + \epsilon_{jt} \end{aligned} \quad (I.2)$$

To further analyze the non-linear effect of institutional distance on Chinese OFDI, we add a quadratic term of institutional distance to model (I.2), as shown in model (I.3):

$$\begin{aligned} \ln OFDI_{jt} = & \beta_0 + \beta_1 \ln GDP_{jt} + \beta_2 \ln Dist_{jt} + \beta_3 \ln PATENT_{jt} \\ & + \beta_4 \ln WAGE_{jt} + \beta_5 OPEN_{jt} + \beta_6 RATE_{jt} \\ & + \beta_7 INSDIS_{jt} + \beta_7 (INSDIS_{jt})^2 + \mu_j + \tau_t + \epsilon_{jt} \end{aligned} \quad (I.3)$$

Model (I.1), (I.2), (I.3) where  $j$  denotes the 50 host countries. The study period is 2008 to 2019 and is denoted by  $t$ .  $\ln$  denotes a logarithmic transformation of the variable.  $\mu_j$  denotes the inherent characteristics that may affect OFDI without varying over time in host countries,  $\tau_j$  denotes the year stack controlling for the macro environment in a given year, and  $\epsilon_{jt}$  denotes the error term.

## 2. Variable definition and Measurement

The data are collected from different sources and detailed information about these sources is provided in (Table 1). The dependent variable is the stock of outward direct investment from China to country  $j$  in year  $t$  from China's Outward Foreign Direct Investment report.

A large market would provide investors with more opportunities to achieve cost-effectiveness and realize economies of scale. Recent studies suggest that market seeking is an important driver for Chinese enterprises (Deng, 2004). This study uses the size of the host country's economy as an independent variable, measured by the GDP of each country.

The distance cost between the host country and China measures the cost of distance in the process of Chinese OFDI. In this study, the cost of distance is

measured as the product of geographical distance and international oil prices, and a logarithmic transformation is used (Guanhong & Dianchun, 2012).

Patent applications held by investment destinations are used as a proxy for the level of proprietary technology and knowledge to account for the strategic asset-seeking motivation of investment firms, and data were obtained from the World Intellectual Property Organization (WIPO).

As China's economy develops, rising domestic labor costs and other production factor prices in China are also putting pressure on the costs of Chinese firms. Investment destinations with lower labor costs tend to attract more attention from foreign investors (Sethi et al., 2003). Unit labor costs reflect the efficiency-seeking motives of multinational firms and are measured in this study by the average annual wage level in the host country.

〈Table 1〉 Measurements and source of variables

Variable	Unit	Description	Source
OFDI	log	Amount of OFDI from China to country j at year t	China's Outward Foreign Direct Investment
INSDIS	Index	Institutional Distance between China and country j at year t calculated by the author	WORLD BANK
GDP	log	Gross domestic product value of country j at year t	WORLD BANK
Dist	log	The geographical distance between the capital of country j and Beijing* International oil prices at year t	CEPII / IMF
PATENT	log	Number of patents held by country j at year t	WIPO
WAGE	log	Average annual wage in country j at year t	ILO/OECD Statistics
OPEN	%	Ratio of inward FDI stock to country j at year t	UNCTAD Database
RATE		Yearly real exchange rate (local currency units per CNY) at year t by author's calculation	WDI/FRB

The more open a country is to international investment, the more likely it is to become an OFDI destination (Chakrabarti, 2001). Therefore, this study includes the degree of openness of the host country to foreign FDI, which is measured by



the FDI stock as a share of GDP, using data from the UNCTAD database.

A low or undervalued exchange rate encourages exports but discourages FDI (Logue & Willet, 1977). Cushman (1985) used a dynamic model to analyze the effect of exchange rate level on OFDI and found that when the host country's currency depreciates relative to the home country's currency, the relative cost of the home country's investment in the host country decreases and, all else equal, the decrease in cost increases OFDI to the host country. In this study, the real exchange rate is measured as the exchange rate adjusted for the consumer price index of the host and home countries.

The core independent variable in this study is institutional distance. The measurement method first measures the institutional quality of the host country using six indicators from the Worldwide Governance Indicators, and then measures the distance between the institutional quality of the host country and that of China as the institutional distance. This study uses absolute values as institutional distance for the full sample. And the quadratic term of institutional distance is added to the model. This is to test a non-linear relationship between institutional distance and China's outward FDI.

$$\text{Institutional Quality} = \frac{\sum_{k=1}^6 \text{Host}_k}{6} \quad (1)$$

$$\text{Institutional Distance} = \frac{\sum_{k=1}^6 (\text{Host}_k - \text{Home}_k)}{6} \quad (2)$$

This study includes 31 countries with positive institutional distance from China and 19 countries with negative institutional distance, a total of 50 countries. The study is first conducted with a total sample of 50 countries to analyze the effect of the size of institutional distance. The countries (regions) in the sample accounted for 91.27% of China's overseas direct investment stock at the end of 2019, and the sample can be considered reasonable and representative.

The host countries were divided into a group with higher institutional quality than China and a group with lower institutional level than China to further analyze the impact of the direction of institutional distance (Table 2).

〈Table 2〉 Grouping of host countries based on institutional distance signs

Divisions	Host Country Group	No.
Institutional Distance (+)	United States, Singapore, Australia, Netherlands, United Kingdom, Indonesia, Germany, Canada, Luxembourg, Sweden, Malaysia, United Arab Emirates, Thailand Vietnam, South Korea, South Africa, France, Switzerland, Brazil Japan, Israel, India, Mongolia, Zambia, Italy, Saudi Arabia, New Zealand, Turkey, Ghana, Argentina, Peru	31
Institutional Distance (-)	Russian Federation, Laos, Kazakhstan, Cambodia, Democratic Republic of Congo, Pakistan, Myanmar, Venezuela, Uzbekistan, Iran, Angola, Ethiopia, Nigeria, Tajikistan, Papua New Guinea, Algeria, Zimbabwe, Kenya, Kyrgyzstan	19

## IV. Results

### 1. Descriptive Statistics and Correlation Results

The descriptive statistics and correlation results are shown in Table 3. The descriptive results revealed that the mean values of logarithmically transformed Outward Foreign Direct Investment (lnOFDI), Gross Domestic Product (lnGDP), Distance (lnDist), Institutional Distance (INSDIS), Patents (lnPATENT), Wages (lnWAGE), and Rates (RATE) were found to be 7.749, 12.416, 13.019, 0.904, 7.885, 8.446, and 178.8, respectively. Furthermore, the mean value of openness to trade (OPEN) was reported as 48.813. The number of observations varied between variables, ranging from 523 to 600.

The correlation analysis demonstrated a series of significant relationships between the variables. There was a significant positive correlation between lnOFDI and lnGDP ( $r=0.309$ ,  $p<0.01$ ), INSDIS ( $r=0.192$ ,  $p<0.01$ ), lnPATENT ( $r=0.238$ ,  $p<0.01$ ), lnWAGE ( $r=0.307$ ,  $p<0.01$ ), and OPEN ( $r=0.329$ ,  $p<0.01$ ). A negative significant relationship was found between lnOFDI and lnDist ( $r=-0.229$ ,  $p<0.01$ ). INSDIS showed a significant positive correlation with lnPATENT ( $r=0.375$ ,  $p<0.01$ ), lnWAGE ( $r=0.782$ ,  $p<0.01$ ), and OPEN ( $r=0.377$ ,  $p<0.01$ ), but was negatively correlated with RATE ( $r=-0.282$ ,  $p<0.01$ ). From the VIF test, all VIF values are smaller than 10, which presents that it isn't multicollinearity in the regression model.

〈Table 3〉 Descriptive statistics

Variable	Obs	Mean	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)lnOFDI	600	7.749	1						
(2)lnGDP	600	12.416	0.309 ***	1					
(3)lnDist	595	13.019	-0.229 ***	0.140 ***	1				
(4)INSDIS	600	0.904	0.192 ***	0.409 ***	0.142 ***	1			
(5)lnPATENT	523	7.885	0.238 ***	0.893 ***	0.007	0.375 ***	1		
(6)lnWAGE	528	8.446	0.307 ***	0.731 ***	0.087 **	0.782 ***	0.648 ***	1	
(7)RATE	600	178.8	-0.055	-0.102 **	-0.296 ***	-0.282 ***	-0.030	-0.272 ***	1
(8)OPEN	558	48.813	0.329 ***	-0.141 ***	-0.129 **	0.377 ***	-0.130 ***	0.291 ***	-0.070 *

Note: \*p<0.1, \*\*p<0.05, \*\*\*p<0.01

## 2. Results of Full Sample

Before regression, a multicollinearity test was performed. The highest VIF value was 6,958 for lnWAGE and the average VIF value was 4,032, indicating no multicollinearity. As autocorrelation and heteroscedasticity were found to be present, panel GLS analysis was finally used 〈Table 4〉.

〈Table 4〉 Result of the model

	All countries	Institutional Distance (+)	Institutional Distance (-)
Autocorrelation test	86.387***	74.502***	39.465***
Heteroscedasticity test	126.41***	103.21***	51.15**
Mean VIF	4.032		

Note: \*p<0.1, \*\*p<0.05, \*\*\*p<0.01

〈Table 5〉 shows the results of the empirical analysis for the full sample of countries. Model 1 in 〈Table 5〉 shows the empirical results of the control variables only. It can be seen that the GDP of the host country, the level of

technology and the degree of FDI openness are consistent with the results of the previous study and all contribute to Chinese OFDI. The regression coefficient of the host country's GDP is positive at the 1% significance level, indicating that there is a significant market-seeking motive for China's OFDI (Buckley et al., 2007). The regression coefficient of the host country's technology level is positive at the 10% significance level, indicating that after the 2008 financial crisis, seeking strategic assets and obtaining reverse technology spillovers from OFDI gradually becomes one of the main driving forces of MNCs' OFDI.

The regression coefficient of the investment destination's openness to FDI is positive at the 1% significance level, which indicates that the higher the openness of the host country is, the more favorable it is for China to invest in it. The higher the degree of openness, the more tolerant the attitude towards foreign investors and the better the relevant regulations and policies, so the higher the degree of openness the more favorable the inflow of OFDI from China. Higher average wage levels in host countries discourage Chinese OFDI because higher wage levels represent higher labour costs, thus increasing the investment costs for MNEs and thus discouraging overseas investment activities. The result of geographical distance is not significant, indicating that the current pattern of Chinese OFDI has initially formed a global layout, and geographical distance, i.e., the iceberg cost of investment, is no longer a decisive factor hindering Chinese OFDI. The empirical result for the real exchange rate of the investment destination relative to China is insignificant.

〈Table 5〉 Results of the overall countries

Variables	Model 1	Model 2	Model 3
lnGDP	0.311*** (0.073)	0.317*** (0.073)	0.317*** (0.073)
lnDist	-0.096 (0.088)	-0.092 (0.087)	-0.094 (0.088)
lnPATENT	0.086* (0.047)	0.101** (0.047)	0.101** (0.047)
RATE	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
OPEN	0.009*** (0.001)	0.009*** (0.001)	0.009*** (0.001)

InWAGE	-0.216*** (0.048)	-0.346*** (0.070)	-0.346** (0.070)
INSDIS		0.314** (0.124)	0.275 (0.342)
(INSDIS)2			0.016 (0.133)
Cons	3.884*** (1.088)	4.461*** (1.104)	4.492*** (1.333)
Observations	600	600	600

Note: \*p<0.1, \*\*p<0.05, \*\*\*p<0.01

After adding the core independent variable institutional distance in the second column of Table 6, the results for the control variables are as significant as before and the coefficients do not differ significantly. The results of the empirical analysis based on the GLS of the overall sample countries show that institutional distance significantly affects China's OFDI in host countries. Specifically, the coefficient value of institutional distance, which is taken in absolute terms, is 0.314 at the 5% level of significance. In other words, as the institutional distance between the investment destination and China increases, Chinese OFDI increases accordingly. After adding the quadratic term of institutional distance, it is clear that the results of the quadratic term are not significant. Therefore, with institutional distance taken in absolute terms, an increase in institutional distance between all sample countries and China has a catalytic impact on Chinese OFDI. In general, Chinese OFDI is institutionally consistent with the "institutional escape theory", not so much to escape the institutional constraints of the home country, but because the host country has institutional advantages that China does not possess, and these institutional advantages tend to breed unique endowment advantages and therefore attract Chinese multinational enterprises to invest.

### 3. Results of Positive Institutional Distance Group

This study divides the sample according to the direction of institutional distance. Thus, the results for the group of countries with positive institutional distance and the group of countries with negative institutional distance are presented separately. The results of the empirical analysis of the GLS for the

group of countries with positive institutional distance are shown in (Table 6).

From the results of the analysis of Model 4 in Table 6 with only the control variables included, the coefficient of host country's GDP is 0.210, which promotes China's OFDI at the 5% significance level. The coefficients of technology level and FDI openness of the host country are 0.232 and 0.010, respectively, which play a facilitating role for China's OFDI at the 1% significance level. The coefficient of the average wage level of the host country is -0.202, which hinders Chinese OFDI at the 1% significance level. This is basically in line with the expected results.

Model 5 in Table 6 shows that the coefficient of institutional distance is 0.683, which promotes Chinese OFDI to countries with positive institutional distance at the 1% significance level. This result supports the view of Witt & Lewin (2007) that FDI from developing countries is an escape response to institutional constraints at home. Some scholars argue that due to imperfect institutions such as regional protection, high taxation, and corruption in developing countries, firms may seek more efficient institutions and go abroad (Luo, Xue, & Han, 2010).

(Table 6) Results of the group of countries with positive

Variables	Model 4	Model 5	Model 6
lnGDP	0.210** (0.012)	0.296*** (0.102)	0.345*** (0.103)
lnDist	0.179* (0.108)	0.119 (0.107)	0.150 (0.107)
lnPATENT	0.232*** (0.069)	0.186*** (0.068)	0.142** (0.070)
RATE	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
OPEN	0.010*** (0.001)	0.009*** (0.001)	0.010*** (0.001)
lnWAGE	-0.202*** (0.057)	-0.520*** (0.098)	-0.633*** (0.107)
INSDIS		0.683*** (.173)	2.024*** (0.556)
(INSDIS)2			-0.472** (0.186)
Cons	-1.147 (1.412)	2.107 (1.492)	1.840 (1.481)
Observations	316	316	316

Note: \*p<0.1, \*\*p<0.05, \*\*\*p<0.01

After adding the quadratic term for institutional distance in Model 6 in Table 6, the coefficient on institutional distance is 2.024, which is significant at the 1% level of significance. In contrast, the coefficient of the quadratic term of institutional distance is -0.472, which is significant at the 5% significance level. This indicates that when China invests in destinations with higher institutional quality than its own, there is a non-linear relationship between institutional distance and China's OFDI, with an inverted U-shape and an inflection point of  $(-2.024/2*-0.472 = 2.14)$ . Specifically, at the stage when the institutional distance does not exceed 2.14, as the institutional distance increases, China's OFDI also increases. However, when the institutional distance reaches or even exceeds 2.14, the increase in institutional distance will reduce China's OFDI. Therefore, it can be seen that a larger institutional distance is not better when investing in countries with positive institutional distance; too large an institutional distance may increase the entry cost of firms and the difficulty of gaining market legitimacy, and may also negatively affect the subsequent business performance of firms.

### 3. Results of Negative Institutional Distance Group

Model 7 in Table 7 includes only control variables and differs from the results of the positive institutional distance group. Host country GDP and FDI openness are consistent with the previous results in promoting Chinese OFDI. While the coefficient of geographical distance between the two countries is -0.981, which inhibits Chinese OFDI at the 1% significance level.

Model 8 shows that the value of the institutional distance coefficient for countries with negative institutional distance is 0.591 at the 5% significance level. Moreover, the institutional distance itself is negative, indicating that the greater the institutional distance between the investment destination and China, the lower the OFDI from China.

The quadratic term of institutional distance is then added in Model 9, and the results show that the institutional distance of countries with negative institutional distance is not nonlinearly related to China's OFDI. That is, the more the institutional quality of the investment destination is similar to that of China, the more favorable the OFDI of Chinese firms. Chinese MNEs are more likely to

succeed when they invest in countries with similar institutional environments and gain comparative advantages through learning by doing (Cuervo-Cazurra & Genc, 2008). When dealing with investment issues, Chinese MNEs have more experience in dealing with institutional environments similar to their home countries than developed countries, and they have advantages in controlling the market environment, business practices, and relationship networks, which makes it easier to develop a comparative advantage in dealing with issues correctly in complex institutional environments.

〈Table 7〉 Results of the group of countries with negative

Variables	Model 7	Model 8	Model 9
lnGDP	0.506*** (0.065)	0.556*** (0.067)	0.590*** (0.067)
lnDist	-0.981*** (0.135)	-0.999*** (0.132)	-1.048*** (0.117)
lnPATENT	-0.103*** (0.040)	-0.136*** (0.041)	-0.175*** (0.043)
RATE	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
OPEN	0.011*** (0.003)	0.008*** (0.003)	0.009*** (0.003)
lnWAGE	0.196** (0.084)	0.180** (0.083)	0.266*** (0.087)
INSDIS		0.591** (0.254)	-1.184 (0.721)
(INSDIS)2			-2.075*** (0.793)
Cons	12.133*** (1.684)	12.388*** (1.651)	12.006*** (1.612)
Observations	119	119	119

Note: \*p<0.1, \*\*p<0.05, \*\*\*p<0.01

It is well known that institutional distance is an important factor that cannot be circumvented by multinational firms engaging in OFDI. In turn, the impact of institutional distance on Chinese OFDI varies with the institutional quality of the host country. Institutional distance between China and countries with positive institutional distance becomes an investment advantage for Chinese firms; conversely, institutional distance with countries with negative institutional distance



becomes an investment barrier. This is consistent with the findings of Wu & Zhang (2021). However it also shows some differences with the findings of some studies, such as Shah et al. (2019), due to differences in variable measurement methods and research methods.

## V. Conclusion

This paper collects a panel data from 50 countries from 2008 to 2019, and uses the GLS method to analyze the factors influencing Chinese OFDI from the institutional perspective, with institutional distance as the core independent variable. This study investigates the following aspects. First, the impact of the absolute value of institutional distance on Chinese OFDI is analyzed in terms of the total sample of countries. Second, considering the directional nature of institutional distance, the sample countries are divided into two groups of countries according to the positive and negative signs of institutional distance from China. Finally, to further analyze whether there is a non-linear relationship between institutional distance and China's OFDI, a quadratic term of institutional distance is added to the study.

The results suggest that, first, Chinese investors are biased toward investing in destinations with greater institutional distance from China when the directionality of institutional distance is not considered. When group studies are conducted, the institutional distance between destinations with different levels of institutional quality and China has a differential impact on Chinese OFDI. When Chinese firms enter destinations with higher institutional quality, the influence of institutional distance on OFDI shows an inverted U-shape, i.e. it is first facilitated and then inhibited. Before the inflection point, the greater the institutional distance, the more attractive Chinese OFDI is, but after the inflection point is reached, the further increase in institutional distance discourages OFDI.

For example, the lack of intellectual property rights protection in China, local protection, and other institutional constraints have led to institutional avoidance and arbitrage through OFDI. Boisot and Meyer (2008) also find that institutional avoidance and institutional arbitrage are important motivations for OFDI by Chinese firms. However, institutional distance is not better; too large an

institutional gap can also increase firms' entry costs and difficulties in gaining market legitimacy and can have a negative impact on firms' subsequent business performance.

However, when Chinese investors enter a host country with lower institutional quality, there is no non-linear relationship as above, with institutional distance discouraging outward FDI, and the greater the institutional distance, the lower the outward FDI. From the results, it can be seen that there is an asymmetric impact of institutional distance on China's OFDI, with a significant institutional escape for OFDI in destinations with better institutional quality than China, while investment in countries with poorer institutional quality exhibits the characteristics of institutional proximity theory. MNEs face different uncertainties when entering countries that are institutionally the same, but in different directions. China tends to invest in OFDI in destinations with similar or higher levels of institutions than its own. The paper concludes with an analysis of the above empirical findings and policy recommendations.

And this study shows that Chinese OFDI activities are driven by a combination of institutional and economic factors, and therefore business operators should not consider these factors in isolation when considering OFDI decisions, but should try to consider both economic and institutional factors. To be more specific, first, in countries with high institutional quality, relevant authorities should guide Chinese FDI enterprises to improve their own learning and resilience, continuously learn and familiarize themselves with the local system, and promptly adjust their investment strategies, strive to adapt to the local institutional environment, and gradually enhance China's competitiveness in FDI. At the same time, Chinese investors should strive to regulate their own behavior in a good social normative environment and make full use of the sound local system of industry standards to ensure the smooth implementation of OFDI activities and improve the performance of OFDI.

Second, in countries with low institutional quality, the gap caused by institutional distance should be reduced. Relevant authorities should promptly identify the risks of institutional transitions and guide enterprises to effectively avoid them, and authorities should promptly identify the risks of institutional transitions and guide enterprises to effectively avoid them, and actively promote the process of signing bilateral investment protection agreements with host

countries to protect investors' interests as much as possible. At the same time, multinational enterprises should actively seek similarities with the host country's system, strengthen communication in foreign economic activities, reduce investment uncertainty, effectively reduce the adverse effects of institutional distance, and strive to establish mutually beneficial and win-win partnerships. In addition, relevant authorities should actively support and promote the establishment and improvement of informal communication mechanisms, so that investing enterprises can further integrate into the local society and reduce the friction caused by institutional distance.

This study provides a predictive approach to the influence of institutional distance in the face of a complex institutional environment for Chinese OFDI, which will grow faster in the future. However, this paper still has some limitations. From a macro perspective, this research examines the effects of institutional distance and some country-level factors on OFDI in China. From a micro perspective, MNEs are the main body of OFDI, and some firm-level factors also play a role in the process of MNEs' OFDI. Future research on the influence of institutional distance on MNEs' OFDI could be explored in depth using firm-level data. It is also a future research to consider political variables such as international diplomatic relations that may affect China's OFDI.

## References

- Aleksynska, M., & Havrylchyk, O. (2013). FDI from the south: The role of institutional distance and natural resources. *European Journal of Political Economy*, 29, 38-53.
- Bénassy-Quéré, A., Coupet, M., & Mayer, T. (2007). Institutional determinants of foreign direct investment. *World economy*, 30(5), 764-782.
- Bevan, A. A., & Estrin, S. (2004). The determinants of foreign direct investment into European transition economies. *Journal of comparative economics*, 32(4), 775-787.
- Boisot, M., & Meyer, M. W. (2008). Which way through the open door? Reflections on the internationalization of Chinese firms. *Management and Organization Review*, 4(3), 349-365.

- Buckley, P. J., Clegg, L. J., Cross, A. R., Liu, X., Voss, H., & Zheng, P. (2007). The determinants of Chinese outward foreign direct investment. *Journal of international business studies*, 38(4), 499-518.
- , Cross, A., Tan, H., Liu, X., & Voss, H. (2010). Historic and emergent trends in Chinese outward direct investment. In *Foreign direct investment, China and the world economy* (pp. 119-162). Palgrave Macmillan, London.
- Chakrabarti, A. (2001). The determinants of foreign direct investments: Sensitivity analyzes of cross-country regressions. *kyklos*, 54(1), 89-114.
- Cuervo-Cazurra, A., & Genc, M. (2008). Transforming disadvantages into advantages: Developing-country MNEs in the least developed countries. *Journal of international business studies*, 39(6), 957-979.
- Cushman, D. O. (1985). Real exchange rate risk, expectations, and the level of direct investment. *The Review of Economics and Statistics*, 67(2), 297-308.
- Deng, P. (2004). Outward investment by Chinese MNCs: Motivations and implications. *Business horizons*, 47(3), 8-16.
- Dunning, J. H. (1980). Toward an eclectic theory of international production: Some empirical tests. *Journal of international business studies*, 11(1), 9-31.
- & Lundan, S. M. (2008). Institutions and the OLI paradigm of the multinational enterprise. *Asia Pacific Journal of Management*, 25(4), 573-593.
- Francis, J., Zheng, C., & Mukherji, A. (2009). An institutional perspective on foreign direct investment. *Management International Review*, 49(5), 565-583.
- Globerman, S., & Shapiro, D. (2003). Governance infrastructure and US foreign direct investment. *Journal of international business studies*, 34(1), 19-39.
- Guanhong, J., & Dianchun, J. (2012). Chinese Investment in Developing Countries-Does the Host Country System Matter?. *Management World*, 11, 45-56.
- Hoskisson, R. E., Eden, L., Lau, C. M., & Wright, M. (2000). Strategy in emerging economies. *Academy of management journal*, 43(3), 249-267.
- James, B. E., Sawant, R. J., & Bendickson, J. S. (2020). Emerging market multinationals' firm-specific advantages, institutional distance, and foreign acquisition location choice. *International Business Review*, 29(5), 101702.
- Kostova, T. (1999). Transnational transfer of strategic organizational practices: A contextual perspective. *Academy of management review*, 24(2), 308-324.
- Li, C., Luo, Y., & De Vita, G. (2020). Institutional difference and outward FDI:

- Evidence from China. *Empirical Economics*, 58(4), 1837-1862.
- Logue, D. E., & Willet, T. D. (1977). The effects of exchange-rate adjustments on international investment. *The effects of exchange rate adjustments*, 137-50.
- Luo, Y., Xue, Q., & Han, B. (2010). How emerging market governments promote outward FDI: Experience from China. *Journal of world business*, 45(1), 68-79.
- Ma, A. C., & Ratcliff, R. D. (2020). Liability of foreignness: product distance, institutional distance and FDI. *International Journal of the Economics of Business*, 27(1), 93-110.
- Mohsin, A. K. M., Lei, H., Tushar, H., Hossain, S. F. A., Hossain, M. E., & Sume, A. H. (2021). Cultural and institutional distance of China's outward foreign direct investment toward the "Belt and Road" countries. *The Chinese Economy*, 54(3), 176-194.
- Nayyar, R., Mukherjee, J., & Varma, S. (2022). Institutional distance as a determinant of outward FDI from India. *International Journal of Emerging Markets*, 17(10), 2529-2557.
- Peng, M. W., Wang, D. Y., & Jiang, Y. (2008). An institution-based view of international business strategy: A focus on emerging economies. *Journal of international business studies*, 39(5), 920-936.
- Scott, W. R. (1995). *Institutions and organizations (Vol. 2)*: Sage Thousand Oaks.
- Sethi, D., Guisinger, S. E., Phelan, S. E., & Berg, D. M. (2003). Trends in foreign direct investment flows: A theoretical and empirical analysis. *Journal of international business studies*, 34(4), 315-326.
- Shah, S. H., Kamal, M. A., Hasnat, H., & Jiang, L. J. (2019). Does institutional difference affect Chinese outward foreign direct investment? Evidence from fuel and non-fuel natural resources. *Journal of the Asia Pacific Economy*, 24(4), 670-689.
- Trąpczyński, P., & Banalieva, E. R. (2016). Institutional difference, organizational experience, and foreign affiliate performance: Evidence from Polish firms. *Journal of World Business*, 51(5), 826-842.
- UNCTAD. (2019). *Special economic zones, World Investment Report 2019*.
- Voss, H., Buckley, P. J., & Cross, A. R. (2009). An assessment of the effects of institutional change on Chinese outward direct investment activity. In *China rules: Globalization and political transformation* (pp. 135-165). London:

Palgrave Macmillan UK.

- Wang, X., & Anwar, S. (2022). Institutional distance and China's horizontal outward foreign direct investment. *International Review of Economics & Finance*, 78, 1-22.
- Witt, M. A., & Lewin, A. Y. (2007). Outward foreign direct investment as escape response to home country institutional constraints. *Journal of International business studies*, 38(4), 579-594.
- Wright, M., Filatotchev, I., Hoskisson, R. E., & Peng, M. W. (2005). Strategy research in emerging economies: Challenging the conventional wisdom. *Journal of management studies*, 42(1), 1-33.
- Wu, J., Zhou, N., Park, S. H., Khan, Z., & Meyer, M. (2022). The role of FDI motives in the link between institutional distance and subsidiary ownership choice by emerging market multinational enterprises. *British Journal of Management*, 33(3), 1371-1394.
- Xie, F., & Zhang, B. (2021). Impact of China's outward foreign direct investment on green total factor productivity in "Belt and Road" participating countries: a perspective of institutional distance. *Environmental Science and Pollution Research*, 28, 4704-4715.
- Yi, C., Xu, X., Chen, C., & Wu, Y. J. (2020). Institutional distance, organizational learning, and innovation performance: outward foreign direct investment by Chinese multinational enterprises. *Emerging Markets Finance and Trade*, 56(2), 370-391.
- Zhang, Y. (2003). *China's emerging global businesses: Political economy and institutional investigations*. Basingstoke and New York: Palgrave Macmillan.
- Zheng, B., Wang, Y., Kamal, M. A., & Ullah, A. (2022). The influence of cultural and institutional distance on China's OFDI efficiency: fresh evidence from stochastic frontier gravity model. *International Journal of Emerging Markets*, 17(1), 98-119.

# A Study on the Relationship Between Institutional Distance and Outward Foreign Direct Investment: the Case of China

Ya-Xin Lin

Cheon Yu

Yun-Seop Hwang

## Abstract

This study aims to investigate the relationship between institutional distance and FDI and focuses on China's outward FDI. The institutional distance between China and the host country is measured using the institutional quality published by the World Bank. This study collects panel data from 50 countries in which China invested from 2008 to 2019 and use the panel GLS methodology to examine the factors affecting outward FDI through three models. First, this study examines the impact of the absolute value of institutional distance on China's OFDI across all countries in which China invests. Second, this study divides countries with positive and negative institutional distance to China into two groups and examine the relationship between institutional distance and OFDI in each group. Finally, this study examines the non-linear relationship between institutional distance and OFDI from China. To test this, this study adds the squared term of institutional distance to the model. The results of the analysis are as follows Institutional distance is positively related to China's OFDI. The relationship between institutional distance and OFDI is inverted U-shaped in the group of host countries with relatively higher institutional quality than China, but positive in the group of low-quality host countries. In addition, China's OFDI is affected by a combination of institutional and economic factors. The results of this study have implications not only for FDI host countries but also for MNCs' choice of FDI destinations.

---

(Key Words) Outward FDI, Institutional Distance, China, MNEs