

# The impact of continuous and discontinuous host country risk on the location choice of Chinese enterprises' OFDI

**Daxiao Yang**

*Business School, University of Shanghai for Science and Technology, Shanghai, China  
jdtyang@foxmail.com*

**Abstract:** Research on outwards foreign direct investment (OFDI) has presented consistent evidence that Country risk has a significant impact on the choice of location for OFDI by firms. Using the overseas wholly-owned subsidiaries of Chinese listed enterprises between 2002 and 2020 as a sample, this study investigates the impact of different types of risk on the location choice of Chinese enterprises' OFDI, and the moderating effect of the state-owned status of enterprises on this impact. The empirical results show that both continuous and discontinuous risks in the host country have a suppression effect on Chinese enterprises' OFDI. This study also explores the moderating effect of internationalization experience and statehood on the suppression effect.

**Keywords:** Country risk, Continuous risk, Discontinuous risk, Internationalization experience, State-owned enterprise

## 1. Introduction

In the field of international business, there are various bases for classifying country risk in the host country. Host country risks can be classified into various types of host country risks, such as political risk, economic risk, cultural risk and legal risks, depending on the source of the risk itself<sup>[1]</sup>. Buckley classifies risks into endogenous and exogenous risks based on multinational firms' own ability to deal with various types of host country risks. Risks that can be dealt with by the company based on its own capabilities and experience are referred to as exogenous risks. In contrast, it is difficult for companies to take effective measures to avoid exogenous risks. Oh and Oetzel<sup>[2]</sup> argues that risks are classified as continuous or discontinuous depending on whether they are continuous, stable and predictable in the firm's operating environment. Continuous risks are easy to understand, such as corruption. And discontinuous and unpredictable intermittent events such as terrorist attacks, natural disasters and industrial disaster risks.

This paper classifies risks into continuous and discontinuous risks based on Oh and Oetzel<sup>[2]</sup>'s study. They focus on the study of significant discontinuous risks and location choice of OFDI by multinational enterprises. First, this paper compares the impact of continuous risk and discontinuous risk on the location choice of multinational enterprises, and then introduces State property right as moderators to explore the impact of different types of risk in the host country on the entry of OFDI and the moderating effect of internationalization experience and firm nature on this impact.

## 2. Theory and hypotheses

### 2.1 Host country continuous risk, discontinuous risk and OFDI

In this paper, risks in host countries are classified into continuous and discontinuous risks based on whether the risks are continuous or not, both of which have a significant impact on the business and its operating environment. The former are, for example, political risks, economic risks, legal risks and cultural risks. These risks are always present in the various economic activities of the company in the host country. The latter are, for example, induced risks such as industrial-technical disasters, terrorist attacks and natural disasters.

Political risk is selected as a representative of continuous risk in this study. There have been many studies on political risk as a continuous risk in the host country. Scholars consider political risks in host

countries as potential threats and destabilizing factors for multinational enterprises multinational enterprises<sup>[3, 4]</sup>. Dai, Eden and Beamish<sup>[3]</sup> studied 670 subsidiaries of Japanese multinational enterprises affected by conflicts in host countries and found that instability in the political environment would put the survival of their multinational enterprise subsidiaries. Tan<sup>[4]</sup> found through a large sample data empirical study that a stable host country political environment significantly enhances the overall survival performance of firms, while when the political environment is unstable, the business performance of firms decreases. Jiménez León<sup>[5]</sup> also finds that instability in the political environment triggered by elections affects the operating conditions of subsidiaries of multinational enterprises, and when political risk increases, the investment efficiency of firms is affected, total factor productivity decreases, and the survival of firms is in doubt.

Unlike continuous risks in the political or institutional environment of the host country, discontinuous risks such as terrorism, natural disasters and technology risks are inherently more difficult to predict and avoid. In addition, there is rarely a correlation between prior discontinuity risk and present discontinuity risk. When exposed to these discontinuous risks, significant discontinuous changes can occur in the host country. Large multinational corporations are vulnerable to terrorist attacks, natural disasters, and technological catastrophes, and the impact of these risks is not limited to the area affected by the disaster, but is often national in scope<sup>[6]</sup>. A discontinuous can mean damage to facilities, disconnection from the supply chain, business interruption, loss of revenue, and even the closure of a company. At the same time, companies increase their premiums to prevent unforeseen losses that may exist in the future.

There is consensus in the literature that both continuous risk and discontinuity in the host country reduce the likelihood of entry by foreign firms and thus hypothesise:

**Hypothesis 1a:** Continuous risks in the host country will be negatively associated with OFDI by Chinese multinational enterprises.

**Hypothesis 1b:** Discontinuous risks in the host country suppress OFDI by Chinese multinational enterprises.

## ***2.2 Internationalization experience, host country risk and OFDI***

Organizational learning theory suggests that experience is an important way to build competence. Repeated exposure to the same risks may convince managers that they can rely on mechanisms that address past coping risks to contain the effects of adversity and adjust behavior based on external information<sup>[7]</sup>. When faced with continuous risks such as political and legal risks, firms' capabilities and knowledge accumulated through internationalization experience to mitigate or avoid such risks, such as firms' prior experience in managing relationships with host governments, are often effective in reducing the risks associated with an unstable policy environment. Delios and Henisz<sup>[8]</sup> argue that experience is of great value for risk management because it allows firms to access to information about the political market for host country factors, and this information may help reduce the impact of host country risks on business operations.

However, when faced with discontinuous risks such as industrial-technical disasters, natural disasters, and terrorist attacks, firms will no longer have any practical advantage over other firms because they have experience. Discontinuous risks are unpredictable and can have a dramatic impact on a firms' performance and survival. Under these threats, companies can only develop some reactive strategies. It is difficult for firms to be able to learn something from these rare events and apply the knowledge to future unpredictable risks, especially for emerging multinational companies that have only recently started to invest internationally because these risks are so rare and specific. So, even if firms have such experience, when faced with the same kinds of risks again, the threats they face will not be materially different from those faced by inexperienced firms thus hypothesise:

**Hypothesis 2a:** Internationalization experience will weaken the disincentive to Chinese MNEs' OFDI from the host country's continuous risk.

**Hypothesis 2b:** Internationalization experience will not weaken the disincentive to Chinese MNEs' OFDI from the host country's discontinuous risk.

## ***2.3 State property right, host country risk and OFDI***

Chinese OFDI is mainly dominated by state-owned enterprises (SOEs), and this study continues to consider the responses of firms with different ownership identities when faced with different kinds of

risks. Unlike the profit maximization motive of private firms, many studies have shown that SOEs' OFDI often contains both commercial and political objectives<sup>[9]</sup>. Since the managers of SOEs is generally appointed by the government, the government can influence SOEs' OFDI decisions through direct or indirect shareholding, which makes the influence of host country risk weaker<sup>[10]</sup>. SOEs make more OFDI from a geopolitical and national strategic perspective and less from a firm-level perspective. The influence of the home country on the host country in economic, political, and security terms can lead to reduced host country restrictions on business entry. Moreover, firms can also take advantage of the relationship between the home and host governments to reduce political risk and increase their legitimacy. Since SOEs make OFDI with more consideration of national strategic intent than just the firm's own gains and losses. Therefore, whether facing continuous or discontinuous risks in the host country, State property right will weaken the disincentive of host country risks to the enterprises' OFDI entry and thus hypothesise:

**Hypothesis 3a:** State property right will weaken the disincentive to Chinese MNEs' OFDI from the host country's continuous risk.

**Hypothesis 3b:** State property right will weaken the disincentive to Chinese MNEs' OFDI from the host country's discontinuous risk.

### 3. Methodology

#### 3.1 Data Source and Sample

In order to conduct hypothesis testing on the influence of host country risk on Chinese enterprises' OFDI location choice, this paper obtains the events of Chinese listed enterprises setting up wholly-owned subsidiaries overseas from 2002 to 2020 from China Stock Market & Accounting Research Database (CSMAR) as the initial sample. The initial sample is screened according to the following criteria: delete the sample with incomplete information disclosure on the establishment of subsidiaries; delete the sample with subsidiaries registered in tax havens. There are 8634 observations included in the regression.

#### 3.2 Measures

*Dependent Variable.* Firms enter choice is a binary dependent variable (0/1), with 1 when a multinational enterprise establishes a wholly-owned multinational subsidiary in a host country in a given year and 0 otherwise.

*Independent Variables.* Using the opposite of “rule of law” from the World Governance Indicators (WGI) published by the World Bank as the measurement of the host country's continuous risk, and using the number of casualties per year caused by industrial disasters from the international disasters database (EM-DAT) as the measurement of host country's discontinuous risk.

*Control variables.* The measurement of internationalization experience is the sum of the number of wholly-owned subsidiaries set up overseas in the past. The state-owned holding is a dichotomous variable, and the state-owned holding of the enterprise is 1 and 0 otherwise. In addition to the two moderating variables, the control variables include: *Economic scale, Population, Economy growth, Land size, Unemployment, Trade openness, FDI openness, Adjacency, Geographic distance, Common language, Trade agreement.*

#### 3.3 Estimation methods

Because dependent variable is whether the enterprise enters or not, which is a binary variable, the study uses a conditional logit regression model to test the hypotheses, which is :  $f$

$$P_{i,j,t}(y_{i,j,t} = 1; X) = f(1) = \exp(X_{i,j,t}\beta) / \{1 + \exp(X_{i,j,t}\beta)\} \quad (1)$$

where  $y_{i,j,t}$  represents the observation of enterprise  $i$  in country  $j$ ,  $X_{i,j,t}$  is the vector of independent variable and control variable, and  $\beta$  is the coefficient vector.

*This paper uses STATA17 for estimation using maximum likelihood estimation (MLE). Before estimation, the variance inflation factor (VIF) of the main variables in the model is also calculated in this paper. The VIF values of the main variables are all below 10, so the regression model does not have*

severe multicollinearity.

Table 1: Statistical analysis of each variable

Variable	Mean	SD	Min	Median	Max
Continuous risk	0.02	0.99	-2.10	0.23	2.30
Discontinuous risk	61.86	125.00	0.00	28.00	2442.00
Int. experience	9.28	19.00	0.00	3.00	183.00
SOE	0.36	0.48	0.00	0.00	1.00
Economic scale	25.02	2.00	19.00	25.00	31.00
Population	16.30	1.70	10.00	16.00	21.00
Economy growth	1.42	0.65	-3.80	1.50	4.00
Land size	12.16	2.00	4.10	12.00	17.00
Unemployment	7.37	5.80	0.10	5.70	37.00
Trade openness	45.58	26.00	0.35	39.00	191.00
FDI openness	4.79	13.00	-58.00	2.80	280.00
Adjacency	0.10	0.30	0.00	0.00	1.00
Geographic distance	8635.32	3862.00	810.00	7878.00	19297.00
Common language	0.01	0.09	0.00	0.00	1.00
Trade agreement	0.13	0.34	0.00	0.00	1.00

### 3.4 Results

Table 2 shows the results of the main model regressions. Model (1) is the regression result of the baseline model including only the control variables. It shows that *Economic scale*, *Land size*, *Trade openness*, *FDI openness*, *Adjacency*, *Common language*, and *Trade agreement* are significant ( $p < 0.1$ ). This indicates that the larger the economic scale in the year of observation and land size of the host country, the higher the degree of trade openness and FDI openness, the easier it is for multinational enterprises to select and make OFDI to the country.

Model (2) examines the effect of *continuous risk* of the host country on Chinese MNEs' OFDI. The coefficient of *Continuous risk* is negative and significant ( $p < 0.01$ ), indicating that the continuous risk of the host country significantly inhibits Chinese MNEs' OFDI. The higher the level of continuous risk in the host country, the lower the likelihood of Chinese firms to make OFDI to that country, and hypothesis H1a is verified. Model (3) tests the effect of discontinuous risk of the host country on Chinese MNEs' OFDI. The coefficient of *Discontinuous risk* is negative and significant ( $p < 0.01$ ), indicating that discontinuous risk in the host country will significantly inhibit Chinese multinational enterprises' OFDI. The higher the level of discontinuous risk in the host country, the lower the likelihood of Chinese firms to make OFDI to that country, and hypothesis H1b is verified.

Model (4) tests the moderating effect of firms' internationalization experience on the relationship between different types of risk in the host country and Chinese MNEs' OFDI. The interaction effect between *Internationalization experience* and *Continuous risk* is positive and significant ( $p < 0.01$ ), indicating that the internationalization experience of firms weakens the inhibitory effect of continuous risk in the host country on Chinese MNEs' OFDI, i.e., the more internationalization experience Chinese MNEs have, the less likely they are to be negatively affected by continuous risk in the host country on OFDI, and hypothesis H2a is verified. The interaction effect between *Internationalization experience* and *Discontinuous risk* is not significant, indicating that firms' internationalization experience does not significantly affect the relationship between discontinuous risk in the host country and Chinese MNEs' OFDI, i.e., Chinese MNEs' possession of internationalization experience does not significantly affect the inhibitory effect of discontinuous risk in the host country on Chinese MNEs' OFDI, and hypothesis H2b is verified.

Model (5) tests the moderating effect of firms' state-owned property rights on the relationship between different types of risks in the host country and Chinese MNEs' OFDI. The interaction effect between *SOE* and *Continuous risk* is positive and significant ( $p < 0.01$ ), indicating that the state-controlled nature of the firm weakens the inhibitory effect of continuous risk in the host country on Chinese MNEs' OFDI, i.e., Chinese MNEs are less susceptible to the negative impact of continuous risk in the host country on OFDI if they are state-controlled, and hypothesis H3a is verified. The coefficients of the multiplicative terms of SOEs and discontinuous risk are positive and significant at the 5% level, indicating that the state-controlled nature of firms weakens the inhibitory effect of host country discontinuous risk on Chinese MNEs' OFDI, i.e., Chinese MNEs are less susceptible to the negative impact of host country

discontinuous risk on OFDI if they are state-controlled, and hypothesis H3 is verified.

Model (6) simultaneously tests the moderating effects of firms' internationalization experience and state-owned holding on the relationship between different types of host country risks and Chinese firms' OFDI. The regression results remain consistent with those of model (4) and model (5).

Table 2: Regression results

Variable	(1)	(2)	(3)	(4)	(5)	(6)
Economic scale	0.966*** (69.50)	0.690*** (27.16)	0.945*** (64.50)	0.664*** (24.87)	0.664*** (22.53)	0.672*** (22.55)
Population	- 0.069*** (-3.93)	0.178*** (6.72)	-0.025 (-1.29)	0.217*** (7.72)	0.200*** (6.45)	0.186*** (5.95)
Economy growth	-0.004 (-0.15)	-0.025 (-0.93)	0.026 (0.92)	0.003 (0.11)	0.007 (0.23)	0.011 (0.33)
Land size	0.199*** (17.52)	0.214*** (19.04)	0.194*** (16.50)	0.210*** (17.98)	0.196*** (15.17)	0.197*** (15.07)
Unemployment	- 0.018*** (-4.60)	- 0.020*** (-5.03)	- 0.013*** (-3.16)	- 0.015*** (-3.68)	-0.011** (-2.51)	- 0.012*** (-2.73)
Trade openness	0.025*** (31.21)	0.024*** (30.24)	0.022*** (25.43)	0.021*** (23.58)	0.021*** (20.21)	0.020*** (19.83)
FDI openness	0.007*** (5.74)	0.007*** (5.32)	0.008*** (5.10)	0.007*** (4.66)	0.007*** (4.16)	0.007*** (4.13)
Adjacency	-0.088 (-1.56)	-0.109* (-1.84)	0.032 (0.54)	0.024 (0.38)	-0.005 (-0.07)	-0.000 (-0.00)
Geographic distance	-0.000* (-1.74)	-0.000 (-1.32)	-0.000* (-1.85)	-0.000 (-1.45)	-0.000 (-0.35)	-0.000 (-0.18)
Common language	0.573*** (7.67)	0.621*** (8.22)	0.588*** (7.83)	0.657*** (8.56)	0.570*** (6.53)	0.578*** (6.55)
Trade agreement	0.472*** (13.21)	0.350*** (9.43)	0.536*** (14.43)	0.408*** (10.51)	0.467*** (11.01)	0.465*** (10.86)
Continuous risk		- 0.362*** (-12.68)		- 0.400*** (-13.03)	- 0.376*** (-10.72)	- 0.395*** (-10.87)
Discontinuous risk			- 0.001*** (-8.93)	- 0.001*** (-7.99)	- 0.001*** (-7.08)	- 0.001*** (-6.75)
Int. experience×Continuous risk				0.003*** (4.09)		0.003*** (3.32)
Int. experience×Discontinuo us risk				0.000 (0.78)		0.000 (0.81)
SOE×Continuous risk					0.091*** (2.74)	0.080** (2.39)
SOE×Discontinuous risk					0.001** (2.28)	0.001** (2.17)
N	992354	992354	806215	793042	631834	619872
chi2	22085.57 5	22251.94 2	20675.78 3	20519.40 5	15681.91 7	15385.08 6

\*p < 0.10; \*\*p < 0.05; \*\*\*p < 0.01 (two-tailed test)

### 3.5 Robustness tests

To test the robustness of the previous empirical results, this paper tested results in multiple ways. The results for all hypotheses are not significantly different and thus they strengthen the findings. For reasons of space, these results are not reported here, but will be available to interested readers upon request.

First, this paper refers to Oh and Oetzel [2]'s method and replaces the original model with unconditional logit model to retest all hypotheses. The previous empirical results have not changed significantly. Second, this paper selects "Corruption control" and "Government efficiency" as proxy variables for "Rule of law" and re-tests hypotheses H1a, H2a and H3a. The previous empirical results have not changed significantly. Third, this paper retests hypothesis H1b, H2b, and H3b using the number of industrial disaster events in the host country in that year instead of the number of casualties caused by industrial disasters in that year and the previous empirical results have not changed significantly.

#### 4. Discussion

This paper examines the impact of host country risk on the location choice of Chinese MNEs' OFDI by classifying country risk into continuous risk and discontinuous risk in a sample of Chinese listed firms that set up wholly-owned subsidiaries overseas from 2002 to 2020. The empirical results find that both continuous and discontinuous risks of host countries play a suppressive role in Chinese OFDI. Meanwhile, this paper introduces internationalization experience and state-owned equity as moderators of the impact of different risks on Chinese OFDI. The results show that firms' internationalization experience plays an important role when firms enter countries with high continuous risk, but not when they enter countries with high discontinuous risk; SOEs weaken the impact of both continuous and discontinuous risks on Chinese OFDI.

Although the empirical study in this paper has a strong stability, we still need to pay attention to the limitations of our study. First, our sample is the wholly owned subsidiaries of Chinese listed firms, and the results may be different when examining firms of the US, Japan, and the EU. Second, other forms of OFDI such as joint ventures and alliances may have different results from those of wholly owned subsidiaries. Third, using countries as the unit of study can ignore sub-national characteristics. When disasters occur in countries with larger land areas, such as the U.S., Canada, Russia, and India, the disaster can only affect part of a country.

#### References

- [1] Brown, C.L., Cavusgil, S.T., Lord, A.W. *Country-risk measurement and analysis: A new conceptualization and managerial tool* [J]. *International Business Review*, 2015, 24(2): 246-265.
- [2] Oh, C.H., Oetzel, J. *Once bitten twice shy? Experience managing violent conflict risk and MNC subsidiary-level investment and expansion* [J]. *Strategic Management Journal*, 2017, 38(3): 714-731.
- [3] Dai, L., Eden, L., Beamish, P.W. *Place, space, and geographical exposure: Foreign subsidiary survival in conflict zones* [J]. *Journal of International Business Studies*, 2013, 44(6): 554-578.
- [4] Tan, A.C. *From state entrepreneurs to political entrepreneurs: Democratization and the politics of financial liberalization in Taiwan* [M]. *Democratization in Taiwan*. Routledge. 2016: 171-184.
- [5] Jiménez, A., Delgado-García, J.B. *Proactive management of political risk and corporate performance: The case of Spanish multinational enterprises* [J]. *International Business Review*, 2012, 21(6): 1029-1040.
- [6] Clarke, D.M. *The Next Catastrophe: Reducing our vulnerabilities to natural, industrial, and terrorist disasters* [J]. *Risk Analysis*, 2007, 27(6): 1639-1640.
- [7] Oetzel, J.M., Oh, C.H. *Learning to carry the cat by the tail: Firm experience, disasters, and multinational subsidiary entry and expansion* [J]. *Organization Science*, 2014, 25(3): 732-756.
- [8] Delios, A., Henisz, W.J. *Political hazards, experience, and sequential entry strategies: The international expansion of Japanese firms, 1980–1998* [J]. *Strategic Management Journal*, 2003, 24(11): 1153-1164.
- [9] Wang, C., Hong, J., Kafourous, M., Wright, M. *Exploring the role of government involvement in outward FDI from emerging economies* [J]. *Journal of International Business Studies*, 2012, 43(7): 655-676.
- [10] Pan, Y., Teng, L., Supapol, A.B., Lu, X., Huang, D., Wang, Z. *Firms' FDI ownership: The influence of government ownership and legislative connections* [J]. *Journal of International Business Studies*, 2014, 45(8): 1029-1043.