Is There Political Risk Preference in China's OFDI under the "Belt and Road Initiative"?—A Difference in Differences Test Based on Investment Motives

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Abstract—**Based on the country-specific data of Chinese Outward Foreign Direct Investment (OFDI) and political risk data from the International Country Risk Guide (ICRG), this paper uses a difference-in-differences approach to examine impacts of the "Belt and Road Initiative" on political risk preference of Chinese OFDI. The paper also conducts heterogeneity analysis based on different investment motives. The findings are as follows: a) The "Belt and Road Initiative" significantly lowers the political risk of Chinese OFDI flowing to the "Belt and Road" countries, which reduces the subjective consciousness of political risk prevention. b) There is "political risk preference" of China's OFDI along the "Belt and Road" countries and China's OFDI is positively correlated with political risk in those countries. c) China's resource-seeking OFDI along the "Belt and Road" countries is more likely to have "political risk preference." d) Policy effects of the "Belt and Road Initiative" have diminished over time.**

Keywords—**the "Belt and Road Initiative", Outward Foreign Direct Investment (OFDI), Difference-in-Differences (DID), political risk preference**

I. INTRODUCTION

China's Outward Foreign Direct Investment (OFDI) along the "Belt and Road" countries has grown quickly since the "Belt and Road Initiative" was proposed. International direct investment suffered greatly from the COVID-19, while China's OFDI flows to countries along the Belt and Road has kept on increasing. According to the Statistical Bulletin of China's OFDI, at the end of 2021, Chinese domestic investors had set up more than 11 thousand overseas enterprises along the belt and road involving 18 industry categories of national economy amounting to $24.15 billion which has doubled compared with 2012. There is a 7.1% year on year increase according for 13.5% of China's OFDI flows in the same period.

Each country has their own legal systems, corruption and political environment, which make up their own political environment (DePoyster, 2017). The COVID-19 increased geopolitical concerns and exacerbated the crisis of confidence and tensions between countries. Regional conflicts, border confrontations and local wars have increased political risks faced by Chinese enterprises. Political risk will be a significant obstacle to China's enterprises in the post-epidemic era.

Political risks of countries along the "Belt and Road" vary greatly. It is important to pay attention to the phenomenon that a significant portion of China's OFDI has gone to countries which have a high level of political risks, especially in countries along the "Belt and Road". According to classical international investment theories, transnational corporations prefer to invest in countries which have fewer political risks. Why do Chinese enterprises invest in countries with high political risk? This paper investigates the impact of the "Belt and Road Initiative" on political risk attitude of China's OFDI and its dynamic changes through using a difference-in-differences model. This paper studied on policy effects of the "Belt and Road Initiative" and promote high-quality development of the Initiative.

II. LITERATURE REVIEW

Political risk is the unpredictability of economic interests of foreign investment firms, which caused by changes of political climate or political ties of the host country with other countries (Bai and Wang, 2022). Government stability and political security risk are complicated. Effectiveness and the difference of corruption of the host government showed largest effect on OFDI (Yuan and Ji, 2019). Political risk evolves over time and will change with occurrence of international, national, regional, and individual events (Clark, 2018; Hu and Wang, 2021). There were fewer countries with high level of political risk from 2001 to 2016 (Liu *et al.*, 2019).

There are some studies on effects of political risk on China's OFDI. Some scholars agree that there is not a preference for political risk of China's OFDI. However, China's OFDI prefer to go to countries with better legal system and government governance. The higher the political risk of the host country, the more unfavorable it is for Chinese OFDI (Gao, 2011; Fu and Zhang, 2019; Gao, 2021; Zu and Liu, 2018). Studies on impact of political risk on China's OFDI along Belt and Road countries came to the same conclusion. There is not preference for political risk, when it comes to China's OFDI flowing to the Belt and Road countries (Luo and Bi, 2018; Yang and Gao, 2017; Liu *et al.*, 2019).

However, there are studies which have drawn different conclusions. China's OFDI went to countries with significant political risk, contrary to the risk-averse investment strategy. Higher political risk has not impeded China's OFDI (Quer *et al.*, 2012). China's OFDI has a predilection for political risk, favoring countries with unreliable governments and deficient legal systems. It is different from conventional cross-border investment experience (Luo and Liu, 2021; Qi and Rao, 2021; Buckley *et al.*, 2007; Cao and Hu, 2021; Kolstad and Wiig, 2012). The higher is the political risk of the host country, the

more China's OFDI flows to that country. China's OFDI is attracted to countries with higher political risk (Zalke, 2020).

Different conclusions have been drawn by other studies on political risk preference of Chinese OFDI. This is related to the different research time periods and research samples selected by scholars. In addition to political risk factors, enterprises should also consider economic factors such as market size, labor resource, economic and trade relations between home and host countries, openness and resource endowment of host countries, and cultural factors such as cultural differences between host and home countries. OFDI is also impacted by invest motivation. For example, some countries in West Asia have suffered from perennial wars due to resource and religious problems, and their political situation is unstable. However, these countries are rich in mineral resources (Ren and Qiu, 2021). China's OFDI tends to invest in countries which are rich in natural resources. It's motivation is to obtain higher investment returns and cheaper resources (Liu *et al.,* 2017; Yang *et al.,* 2018). Therefore, if the political environment of the host country is relatively poor and the risk of political default is high, but the host country has rich natural resources, it will attract OFDI inflows. Therefore, OFDI may have political risk preference (Yang *et al.,* 2017; Li and Hua, 2020).

Additionally, some scholars pointed out that when the bilateral relationship between the host country and China are friendly, enterprises does not pay attention to the political risks of the host country. However, when the host country is unfriendly to China, China's enterprises show an obvious tendency to avoid political risks (Meng and Dong, 2015). Many countries along the "the Belt and Road" have been fighting against terrorist attacks, crime, war and corruption for a long time. Political risks pose important challenges to infrastructure projects and transnational investment (Zhang *et al.*, 2019). The "Belt and Road" Initiative has, to some extent, improved international friendly relationship between China and the "Belt and Road" countries. It has also decreased political risk faced by China's enterprises and increased China's OFDI flowing to these countries. The "Belt and Road Initiative" significantly reduced the subjective risk awareness of Chinese enterprises investing to host countries along the route (Cao and Hu, 2021). China's OFDI along the "Belt and Road" countries greatly decreased business risks and improved the stability of corporate earnings (Fang and Song, 2021).

In summary, there are differences in the conclusions drawn from studies on the impact of political risks in the host country on China's OFDI. In order to study this issue, this paper intends to make an attempt in the following aspects: First, most studies on policy effects of the "the Belt and Road" initiative on political risk of China's OFDI only select 65 countries along the "the Belt and Road" as the research sample. They neglected countries which are not along the "the Belt and Road", but have signed cooperation document with China. We intend to expand the research sample, not only including 65 countries along the "the Belt and Road", but also including 149 countries that have signed the "the Belt and Road" cooperation document with China. Secondly, the differences of political risk attitudes of China's OFDI with different investment motives are studied in this paper. Finally, through the "quasi natural experiment"

characteristics of the "the Belt and Road Initiative", this paper studies the impact of the "the Belt and Road Initiative" on political risk attitude of China's OFDI and its dynamic changes through using the method of propensity matching score and difference-in-differences test.

III. STUDY DESIGN

A. Model Setting

In order to examine the impact of the "Belt and Road Initiative" on the political risks faced by Chinese enterprises' OFDI, this paper adopts the PSM-DID method to construct an empirical model. Whether enterprises invest directly in countries or regions along the "Belt and Road" is not a random event, enterprises may consider their business conditions. Therefore, there may be sample selection bias and endogeneity problems. To ensure the accuracy and robustness of the empirical results, this paper adopts the Propensity Score Matching-based Difference-in-difference method (PSM-DID) to conduct the empirical test. First, the control group is selected from the enterprises that have not invested in foreign direct investment (OFDI) and the treatment group (enterprises that have invested in countries or regions along the Belt and Road) by using the propensity score matching method, making the operating conditions of treatment group companies similar to those of control group companies, differing only in whether they make direct investments in Belt and Road countries. Then, the DID method was used to test the impact of enterprises' direct investment in countries or regions along the "Belt and Road" on their political risks.

Model (1) is constructed to investigate whether the "Belt and Road Initiative" has reduced the political risk of China's OFDI. In order to study the impact of political risk on China's OFDI and whether the change of political risk attitude caused by the "the Belt and Road Initiative" will affect China's OFDI, model (2) and model (3) are constructed.

$$prisk_{it} = a_0 + a_1 treat_i * post_t + a_2 lngdp_{it} + a_3 lnpop_{it} \\ + a_4 lnres_{it} + a_5 lnwef_{it} + a_6 lntec_{it} + \varepsilon_{it} \quad (1)$$

$$lnstock_{it} = a_0 + a_1 treat_i * prisk_{it} + a_2 treat_i + a_3 post_t \\ + a_4 prisk_{it} + a_5 lngdp_{it} + a_6 lncgdp_t + a_7 lnpop_{it} \\ + a_8 lnres_{it} + a_9 lnwef_{it} + a_{10} lntec_{it} + \varepsilon_{it} \quad (2)$$

$$lnflow_{it} = a_0 + a_1 treat_i * prisk_{it} + a_2 treat_i + a_3 post_t \\ + a_4 prisk_{it} + a_5 lngdp_{it} + a_6 lncgdp_t + a_7 lnpop_{it} \\ + a_8 lnres_{it} + a_9 lnwef_{it} + a_{10} lntec_{it} + \varepsilon_{it} \quad (3)$$

B. Variable Selection and Data Sources

1) Explained variables

Model (1) selects the political risk ($prisk_{it}$) of host country i in year t as the explained variable. This indicator measures a country's political risk by assessing government stability, socio-economic conditions, investment profile, internal conflicts, external conflicts, corruption, the role of the military in politics, religious tensions, law and order, etc. The political risk rating range is 0–100, where 0 represents the highest risk and 100 represents the lowest risk. The data comes from the political risk indicator data of the Political

Risk Service Group (PRS).

In model (2) and model (3), China's OFDI flow and OFDI stock are selected as the explained variables respectively. The data comes from the Statistical Bulletin of China's Foreign Direct Investment over the years. lnstockit represents the stock of China's OFDI in host country i in year t. lnflowit represents the flow of China's OFDI to the host country i in year t.

2) Explanatory variables

In model (1), the core explanatory variable is the interaction term (treati*postt) of the dummy variable (treati) and the policy shock variable (postt) of the "Belt and Road" countries. When the country has signed the "the Belt and Road" cooperation document with China, the value of treatment is 1, otherwise the value of treatment is 0.

Considering that the "the Belt and Road Initiative" was put forward as the top-level design in the second half of 2013, and the first "the Belt and Road" cooperation document signed after the implementation of the initiative was completed in 2014, 2014 was chosen as the year of policy shock. If the year is between 2014 and 2019, post is 1; otherwise, post is 0. The "Belt and Road Initiative" has reduced the political risk of China's OFDI if the coefficient of treati*postt is negative.

In model (2) and model (3), we introduce the interaction term (treati*priskit) of political risk and the "the Belt and Road" country dummy variable to verify whether China's OFDI will favor the "the Belt and Road" countries with higher political risk due to the "the Belt and Road Initiative".

If the coefficient α1 of treati*priskit is negative, it means that China's OFDI prefers countries with higher political risk due to the "Belt and Road Initiative", i.e., China's OFDI has political risk preference after the "the Belt and Road Initiative" was proposed.

3) Control variables

According to different investment motives, OFDI can be divided into market seeking OFDI, resource seeking OFDI and technology seeking OFDI. In order to better control the model to reduce estimation bias, this paper takes market, resource, technology as control variables to avoid the impact of different investment motives on China's OFDI political risk appetite. The data of control variables are all from World Development Indicators (WDI) of the World Bank

(1) GDP (2010 constant dollars)(GDP) and total population (pop) of the host country, which represent the market size of the host country.

(2) China's GDP (cgdp), which is used to measure the level of China's economic development. The economic development level of the home country inevitably has an impact on OFDI. Therefore, China's GDP (cgdp) is introduced into the control variables.

(3) Total natural resource rent as a percentage of GDP (res), which measures a nation's wealth in natural resources. If the host country has more abundant natural resources and a relatively unfavorable political climate, it may attract China's OFDI, that is, OFDI may have political risk preference characteristics (Qi and Rao, 2021).

(4) The quality of port infrastructure (wef), which measures the state of infrastructure in the host country. Infrastructure is a key area for Chinese enterprises to invest directly in "One Belt, One Road" countries. The state of

infrastructure in the host country is an important factor affecting China's OFDI. According to international standards, the aggregate score range of this indicator is 1–7. Among them, 1 represents very underdeveloped, and 7 denotes highly developed.

(5) The proportion of high-tech exports to manufactured exports (tec), which measures the technological level of the host country. The greater the proportion, the higher the technical level of the country.

C. Sample Selection

In terms of sample selection of countries along the "Belt and Road", it is no longer limited to 65 countries along the "the Belt and Road", but combines 65 countries along the "Belt and Road" and 149 countries that have signed "the Belt and Road" cooperation documents with China, Then, based on the availability of data, 92 countries were chosen as the research sample. The sample include China's major investment destinations under the "Belt and Road Initiative", which is representative. Using the "quasi-natural experiment" feature of the "Belt and Road Initiative", 92 "Belt and Road Initiative" countries were selected as the treatment group, and 28 countries[1] that have not signed the "Belt and Road" cooperation documents with China are selected as the control group. The "Belt and Road" countries selected in this paper are shown in Table 1.

Table 1. A sample of "Belt and Road" countries

Continents	Countries
28 Countries in Africa	Ghana, Zambia, Mozambique, Gabon, Namibia, Angola, Kenya, Nigeria, Congo (Brazzaville), Zimbabwe, Algeria, Tanzania, Uganda, Gambia, Togo, Morocco, Madagascar, Tunisia, Egypt, Sudan, South Africa, Senegal, Sierra Leone, Cameroon, Guinea, Ethiopia, Libya, Liberia
29 Countries in Asia	Korea, Mongolia, Singapore, Malaysia, Myanmar, Thailand, Vietnam, Brunei, Indonesia, Philippines, Pakistan, Sri Lanka, Bangladesh, UAE, Kuwait, Turkey, Qatar, Oman, Bahrain, Iran, Iraq, Syria, Jordan, Israel, Yemen, Azerbaijan, Armenia, Kazakhstan, Lebanon
20 Countries in Europe	Austria, Greece, Poland, Serbia, Czech Republic, Bulgaria, Slovakia, Albania, Croatia, Estonia, Hungary, Romania, Latvia, Ukraine, Belarus, Moldova, Portugal, Russia, Italy, Luxembourg
2 Countries in Oceania	New Zealand, Papua New Guinea
13 Countries in the Americas	Chile, Bolivia, Uruguay, Venezuela, Suriname, Ecuador, Costa Rica, Panama, Guyana, Peru, Cuba, Jamaica, Dominica

D. Statistical Description of Variables and Correlation Coefficients

The statistical description of the variables is shown in Table 2. In order to eliminate heteroscedasticity and narrow the range of data values, this paper takes logarithms for variables other than political risks. It can be seen from Table

[1] The 28 countries that have not signed the "Belt and Road" cooperation document with China include: Australia, Japan, Belgium, Switzerland, Germany, Denmark, Spain, Finland, France, Ireland, the Netherlands, Norway, Sweden, India, Sri Lanka, Canada, the Bahamas, Argentina, Brazil, Colombia, Mexico, Botswana, Mali, Malawi, Niger, the Democratic Republic of the Congo (DRC), Iceland, and Paraguay.

2 that the standard deviation is controlled within a small range. There is a large gap between the political risk indexes of various countries, with a minimum value of 33.21 and a maximum value of 94.5. The correlation coefficients between variables is shown in Table 3. There is no multicollinearity among the explanatory variables, and the correlation coefficients of all the explanatory variables are lower than the empirical value of 0.5.

The correlation coefficient of each explanatory variable is less than the empirical value of 0.5, and there is no multicollinearity among explanatory variables.

Table 2. Descriptive statistics of the variables

Variables	Number of observations	Mean	Standard deviation	Minimum value	Maximum value
lnstock	1,981	9.252	2.661	0	15.48
lnflow	1,536	7.755	2.557	0	14.11
prisk	2,037	65.85	12.54	33.21	94.50
lntec	1,766	1.589	1.639	−9.210	4.500
lngdp	2,023	25.08	1.841	19.81	29.45
lncgdp	2,040	29.46	0.426	28.70	30.08
lnpop	2,040	16.34	1.591	11.16	21.04
lnres	2,009	0.663	2.390	−8.517	4.218
lnwef	1,215	1.360	0.524	−3.631	3.519

Table 3. Correlation coefficients between variables

	prisk	lngdp	lnpop	lnres	lnwef	lntec
prisk	1					
lngdp	0.333	1				
lnpop	−0.340	0.632	1			
lnres	−0.441	−0.245	0.156	1		
lnwef	0.324	0.292	0.0068	−0.255	1	
lntec	0.351	0.419	0.153	−0.307	0.397	1

IV. EMPIRICAL TESTS AND ANALYSIS OF RESULTS

A. Propensity Score Matching

The basic idea of the propensity score matching method is to construct a group of non-OFDI firms (i.e., the control group) with similar key characteristics to those firms that have made direct investments in countries or regions along the Belt and Road (i.e., the treatment group) before making OFDI, and then match the firms in the treatment group with those in the control group so that After matching, the matched enterprises in the two sample groups differ only in whether they make OFDI in countries or regions along the Belt and Road, and are otherwise the same or similar. The matched control group can be an approximate substitute for the "counterfactual" of the treatment group, based on which we can compare the differences in political risks faced by enterprises before and after direct investment in countries along the Belt and Road. The impact of direct investment in countries or regions along the "Belt and Road" on political risk can be obtained.

To reduce the systematic disparities in the trends of OFDI risk changes between the treatment and control group firms and to increase the validity of the difference-in-differences model estimation, the treatment group is matched with a suitable control group using the propensity score matching approach. Five measurable factors are used as covariates for matching: gross domestic product (lngdp), resource abundance (lnres), total population (lnpop), port infrastructure (lnwef), and technological level (lntec) of the host nation. After matching, all of the standardized mean deviations of the matched variables in Table 4 have absolute values that are less than 20%, making the match valid. After matching, there is no longer a substantial difference between the matched variables of the two groups of enterprises, which supports the equilibrium hypothesis.

The method of propensity matching score is used to match the treatment group with the appropriate control group, so as to alleviate the systematic difference between the treatment group enterprises and the control group enterprises in the trend of OFDI risk changes, and improve the effectiveness of the difference-in-differences model estimation. During matching, five measurable variables including gross domestic product (lngdp), natural resource abundance (lnres), total population (lnpop), port infrastructure (lnwef) and technology level (lntec) of the host country are selected as covariates. The absolute value of the standardized mean deviation of the matching variables in Table 4 after matching is less than 20%, which can be considered that the matching is effective. The matching variables of the two groups of enterprises no longer have significant differences after matching, meeting the balance assumption.

Table 4. Results of the balance test of observable variables before and after matching

Variables	Type	Treatment group mean	Control group mean	Standardized deviation change/%	P>|t|
lngdp	Before matching	24.905	26.187	97.6	0.000
	After matching	25.01	25.041		0.699
lnpop	Before matching	16.349	16.778	73.5	0.000
	After matching	16.389	16.503		0.134
lnres	Before matching	0.96615	−0.22461	92.2	0.000
	After matching	0.92071	1.013		0.377
lnwef	Before matching	1.2969	1.4924	79.9	0.000
	After matching	1.3764	1.3372		0.025
lntec	Before matching	1.4455	1.9286	55.2	0.000
	After matching	1.5239	1.3074		0.006

B. Baseline Regression

Table 5 shows the results of model (1), column 1 shows the regression result without control variables, and column 2 shows the regression result with control variables. The coefficients of the interaction term (treat*post) of the "Belt

and Road" country dummy variables and the policy shock variables are negative and significant at the level of 1%. Therefore, the "Belt and Road Initiative" has reduced the political risk of China's OFDI, which in turn reduces the subjective political risk awareness of Chinese enterprises investing in "Belt and Road" countries. The coefficient of the host country's GDP (lngdp) is positive and significant at the level of 1%, i.e., the higher the host country's GDP is, the lower its political risk is. The coefficient of the host country's population (lnpop) is negative and significant at the level of 1%, which means that the higher the host country's population is, the higher the political risk of the country is. The coefficient of the host country's port infrastructure (lnwef) is positive and significant at the level of 10%, i.e., the higher the quality of the host country's port infrastructure is, the lower the political risk of the country is. The coefficient of the host country's technology level is positive and significant at the level of 1%, i.e., the higher the host country's technology level is, the lower the country's political risk is. The coefficient of the host country's natural resource abundance (lnres) is positive but not statistically significant.

Table 5. Baseline regression results for model (1)

Variables	(1)	(2)
treat*post	−5.066***	−2.885***
	(0.615)	(0.467)
lngdp		5.249***
		(0.182)
lnpop		−6.583***
		(0.194)
lnwef		0.814*
		(0.428)
lntec		1.234***
		(0.162)
lnres		0.0886
		(0.105)
Constant	67.22***	39.90***
	(0.320)	(3.250)
Observations	2,037	1,101
R-squared	0.032	0.667

Note: "*" "**" "***" "***" indicate coefficient estimates are significant at the 10%, 5%, and 1% levels, respectively; standard errors are in parentheses

Columns 1 and 2 in Table 6 show the results of model (2); column 1 shows the regression results without control variables, and column 2 shows the regression results with control variables. The coefficient of the interaction term (treat*prisk) of political risk and the dummy variable of the "Belt and Road" countries is negative and significant at the level of 1%, indicating that the lower the political risk rating of the host country, the higher the political risk of the host country, the higher the stock of China's OFDI in the host country. The "Belt and Road Initiative" makes China's OFDI more favorable to countries with higher political risk. This also verifies the political risk preference of China's OFDI after the "Belt and Road Initiative" was put forward. There is a significant positive correlation between the host country's GDP (lngdp), total population (lnpop), resource abundance (lnres), and China's OFDI stock. At the same time, the increase of China's GDP (lncgdp) will also promote China's OFDI to the host country. The estimation results of model (3) are shown in columns 3 and 4, and it can be observed that the estimated results of model (3) are basically consistent with

model (2).

Table 6. Baseline regression results for models (2) and (3)

Variables	(1) lnstock	(2) lnstock	(3) lnflow	(4) lnflow
treat*prisk	−0.0429***	−0.0408***	−0.0347***	−0.0392***
	(0.00951)	(0.0106)	(0.0107)	(0.0136)
treat	2.110***	2.919***	1.845**	3.067***
	(0.678)	(0.767)	(0.758)	(0.988)
post	2.334***	−0.0525	1.930***	-0.156
	(0.111)	(0.176)	(0.127)	(0.228)
prisk	0.00539	0.0493***	0.0184**	0.0278*
	(0.00776)	(0.0110)	(0.00859)	(0.0142)
lngdp		0.373***		0.469***
		(0.0623)		(0.0810)
lncgdp		4.007***		3.630***
		(0.322)		(0.422)
lnpop		0.526***		0.233**
		(0.0709)		(0.0934)
lntec		0.0301		0.0547
		(0.0416)		(0.0562)
lnwef		−0.223**		−0.0684
		(0.107)		(0.135)
lnres		0.162***		0.0834**
		(0.0270)		(0.0372)
Constant	8.523***	−130.2***	6.125***	−117.3***
	(0.581)	(9.559)	(0.644)	(12.59)
Observations	1,981	1,094	1,536	884
R-squared	0.216	0.511	0.145	0.328

Note: "*" "**" "***" indicate coefficient estimates are significant at the 10%, 5%, and 1% levels, respectively; standard errors are in parentheses

C. Dynamic Effects

Model (4) is constructed to study the dynamic effect of the "Belt and Road Initiative" on political risks (Yin *et al.*, 2021).

$$prisk_{it} = a_0 + \sum_{j=1}^{6} a_j treat_i * post_j + a_7 lngdp_{it} + a_8 lncgdp_t \quad (4)$$
$$+ a_9 lnpop_{it} + a_{10} lnres_{it} + a_{11} lnwef_{it} + a_{12} lntec_{it} + \varepsilon_{it}$$

Postj denotes the dummy variable of year j, and the value of j is from 2014 to 2019. Post1 denotes the dummy variable of 2014, if year=2014 then post1=1, otherwise post1=0, introducing treati*post1 as the policy impact in 2014; post2 denotes the dummy variable of 2015, if year=2015 then post2=1, otherwise post2=0, introducing treati*post2 as the policy impact in 2015, and so on. Post6 denotes the dummy variable for 2019, if year=2019 then post6=1, otherwise post6=0, introduce treati*post6 as the policy impact in 2019. The gross domestic product (lngdp), natural resource abundance (lnres), total population (lnpop), port infrastructure (lnwef), and technology level (lntec) of the host country were selected as control variables.

The results of the dynamic effects are shown in Table 7. The coefficients of treati*post1, treati*post2, treati*post3, and treati*post4 are negative and significant at the level of 1%. Therefore, the political risk faced by China's OFDI from 2014 to 2017 has significantly reduced with the implement of the "Belt and Road Initiative", and the policy effect of the "Belt and Road Initiative" is more obvious. However, the coefficients of treati*post5 and treati*post6 do not pass the significance test. It can be seen that the policy effect of the "Belt and Road Initiative" has weakened over time.

Table 7. Dynamic effects of the "Belt and Road Initiative" on the impact of OFDI political risk

Variables	(4) prisk	Variables	(4) prisk
treati*post1	−3.543*** (0.837)	lngdp	5.264*** (0.183)
treati *post2	−3.012*** (0.832)	lnpop	−6.600*** (0.195)
treati*post3	−2.476*** (0.837)	lnres	0.0933 (0.105)
treati*post4	−2.735*** (0.847)	lnwef	0.843* (0.431)
treati*post5	0.368 (3.101)	lntec	1.232*** (0.162)
treati *post6	−1.388 (4.906)	Constant	39.75*** (3.260)
Observations	1,101	R-squared	0.667

Note: "*" "**" "***" indicate coefficient estimates are significant at the 10%, 5%, and 1% levels, respectively; standard errors are in parentheses

D. Robustness Test

1) Replacement of variables

The labor force population of the host country is substituted for the host country's total population (lpop) as the control variable, and the amount of tariff (tariff) and startup costs (cos) are included as additional control variables. The control variables are taken logarithmically to obtain ln(lpop), ln(tariff), and ln(cos). The results are shown in Table 8. In model (1), the coefficient of the interaction term (treat*post) between the dummy variable and the policy shock variable is still negative and significant at the level of 1%. It can be seen that after replacing the variables, the "Belt and Road Initiative" still significantly reduces awareness of the political risk of China's OFDI in the "Belt and Road" countries. The coefficients of the interaction term (treat*prisk) between political risk and the dummy variable of the Belt and Road countries in models (2) and (3) are both negative and significant at the level of 1% , which further explains that the "Belt and Road Initiative" has increased China's OFDI in countries with higher political risk, and the measurement results are still robust.

Table 8. Results of robustness tests after replacing variables

Variables	(1)	(2) lnstock	(3) lnflow
treat*post	−4.114*** (0.527)		
treat*prisk		−0.0408*** (0.0106)	−0.0392*** (0.0136)
treat		2.919*** (0.767)	3.067*** (0.988)
post		−0.0525 (0.176)	−0.156 (0.228)
prisk		0.0493*** (0.0110)	0.0278* (0.0142)
Control variables	yes	yes	yes
Constant	53.39*** (3.955)	−130.2*** (9.559)	−117.3*** (12.59)
Observations	954	1,094	884
R-squared	0.662	0.511	0.328

Note: "*" "**" "***" indicate coefficient estimates are significant at the 10%, 5%, and 1% levels, respectively; standard errors are in parentheses

2) Adjustment of sample size

There are many enterprises that register in tax haven countries or regions and set up shell companies as a transit station of OFDI in other countries for the purpose of tax avoidance. Considering that tax haven countries are included in the observation sample and their foreign direct investment inflow and outflow data are special, most related studies exclude tax havens (Luo and Liu, 2021). 11 tax haven nations[2], including Bahamas, Singapore, Panama, and Brunei, are eliminated. The test results are shown in Table IX and Table 10.

Table 9 shows the test results after removing tax havens in model (1). The coefficient of the interaction term (treat*post) of the "Belt and Road" countries dummy variable and the policy shock variable is still negative and significant at the level of 1%, indicating that the "Belt and Road Initiative" has significantly reduced the awareness of the political risk of China's OFDI in the "Belt and Road" countries.

Table 9. Robustness test results of model (1) after removing tax havens

Variables	(1)	(2)
treat*post	−4.569*** (0.616)	−2.857*** (0.498)
Control variables	no	yes
Constant	65.73*** (0.323)	38.36*** (3.460)
Observations	1,850	1,003
R-squared	0.029	0.618

Note: "*" "**" "***" indicate coefficient estimates are significant at the 10%, 5%, and 1% levels, respectively; standard errors are in parentheses

Table 10 shows the test results of model (2) and model (3) after removing tax havens. The coefficients of the interaction term (treat*prisk) of political risk and the dummy variable of the "Belt and Road" countries in models (2) and (3) are both negative and significant at the level of 1%. It further indicates that the "Belt and Road Initiative" has increased China's OFDI in countries with higher political risk, and the measurement results remain robust.

Table 10. Robustness test results of model (2) and model (3) after removing tax havens

Variables	(1) lnstock	(2) lnstock	(3) lnflow	(4) lnflow
treat*prisk	−0.0772*** (0.00982)	−0.0801*** (0.00963)	−0.0661*** (0.0111)	−0.0812*** (0.0131)
treat	4.079*** (0.682)	5.152*** (0.684)	3.683*** (0.771)	5.458*** (0.934)
post	2.257*** (0.111)	0.00755 (0.156)	1.879*** (0.128)	−0.204 (0.214)
prisk	0.0169** (0.00798)	0.0591*** (0.00982)	0.0253*** (0.00886)	0.0444*** (0.0133)
Control variables	no	yes	no	yes
Constant	7.891*** (0.580)	−130.0*** (8.391)	5.726*** (0.648)	−127.3*** (11.73)
Observations	1,804	998	1,389	796
R-squared	0.254	0.646	0.170	0.442

Note: "*" "**" "***" indicate coefficient estimates are significant at the 10%, 5%, and 1% levels, respectively; standard errors are in parentheses

V. HETEROGENEITY ANALYSIS

According to the motives of OFDI, it is divided into market-seeking OFDI, natural resource-seeking OFDI, and technology-seeking OFDI. The GDP of the host country is used to measure the market size of the host country. The

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[2] The tax haven countries covered in this study include: Singapore, Panama, Brunei, the Bahamas, the Netherlands, Switzerland, Luxembourg, Costa Rica, the UAE, Ireland, and Madagascar.

percentage of the total rent of natural resources in GDP (%) is used to measure the abundance of natural resources in the host country, and the percentage of high-tech exports in the exports of manufactured goods is used to measure the technology level of the host country. The "Belt and Road" countries were ranked according to their average GDP, average share of total natural resource rents in GDP, and average share of high-tech exports in manufactured exports over the period 2003 to 2019. Among the 92 sample countries, the countries with the top 50% of the average GDP ranking were selected as the countries with a larger market size and the bottom 50% were selected as the countries with a smaller market size. The countries ranking in the top 50% of the average share of total natural resource rent to GDP were selected as the countries with more abundant natural resources, and the countries ranking in the bottom 50% as the countries with fewer natural resources. The top 50% countries in terms of the average proportion of high-tech exports in the exports of manufactured goods are regarded as countries with high technology level, and the bottom 50% countries are regarded as countries with low technology level. The grouping results are shown in Table 11.

Table 11. Sample grouping results

"One Belt One Road" countries	
46 countries with a larger market size	Italy, Russia, Korea, Turkey, Indonesia, Poland, Iran, Austria, South Africa, Nigeria, Thailand, UAE, Venezuela, Malaysia, Greece, Singapore, Israel, Portugal, Philippines, Chile, Egypt, Czech Republic, Pakistan, Romania, Algeria, New Zealand, Iraq, Kazakhstan, Peru, Hungary, Ukraine, Bangladesh, Vietnam, Kuwait, Qatar, Morocco, Slovakia, Angola, Ecuador, Sudan, Cuba, Sri Lanka, Croatia, Oman, Myanmar, Luxembourg
46 countries with a smaller market size	Libya, Belarus, Bulgaria, Azerbaijan, Kenya, Tunisia, Serbia, Uruguay, Costa Rica, Ghana, Ethiopia, Lebanon, Tanzania, Panama, Cameroon, Uganda, Latvia, Jordan, Bahrain, Yemen, Estonia, Bolivia, Zambia, Senegal, Gabon, Papua New Guinea, Zimbabwe, Jamaica, Brunei Republic of Congo, Mozambique, Namibia, Albania, Madagascar, Armenia, Mongolia, Syria, Guinea, Moldova, Suriname, Togo, Guyana, Sierra Leone, Liberia, Gambia, Dominica
46 countries with more abundant natural resources	Libya, Kuwait, Iraq, Republic of Congo, Oman, Angola, Qatar, Azerbaijan, Gabon, Brunei, Algeria, Iran, Kazakhstan, Liberia, UAE, Mongolia, Yemen, Papua New Guinea, Ethiopia, Suriname, Guinea, Venezuela, Russia, Zambia, Nigeria, Guyana, Uganda, Mozambique, Sudan, Ecuador, Togo, Ghana, Sierra Leone, Malaysia, Egypt, Chile, Bolivia, Myanmar, Vietnam, Peru, Zimbabwe, Cameroon, Syria, Indonesia, Madagascar, Bahrain
46 countries with scarce natural resources	Tanzania, South Africa, Tunisia, Ukraine, Gambia, Kenya, Senegal, Thailand, Morocco, Cuba, Namibia, Pakistan, Serbia, Albania, Romania, Belarus, Jamaica, New Zealand, Jordan, Uruguay, Estonia, Philippines, Costa Rica, Poland, Bulgaria, Latvia, Bangladesh, Croatia, Armenia, Czech Republic, Hungary, Turkey, Slovakia, Moldova, Israel, Austria, Greece, Portugal, Panama, Sri Lanka, Italy, Luxembourg, Dominica, South Korea, Lebanon, Singapore
45 countries with a high level of technology	Philippines, Singapore, Malaysia, Costa Rica, Korea, Kazakhstan, Thailand, Hungary, Vietnam, Israel, Czech Republic, Estonia, Austria, Brunei, Latvia, Suriname, Greece, Russia, Indonesia, Croatia, New Zealand,
technology 3	Luxembourg, Mozambique, Slovakia, Romania, Italy, Bolivia, Uganda, Bulgaria, Papua New Guinea, Poland, Uruguay, Morocco, Gabon, Chile, Tunisia, Panama, Portugal, Ecuador, South Africa, Mongolia, Ukraine, Ethiopia, Cuba, Moldova
45 countries with a low level of technology	Lebanon, Peru, Azerbaijan, Zimbabwe, Senegal, Ghana, Kenya, Zambia, Angola, Armenia, Belarus, Cameroon, Tanzania, Namibia, Jamaica, Nigeria, United Arab Emirates, Turkey, Republic of Congo, Sudan, Jordan, Oman, Iran, Pakistan, Venezuela, Albania, Madagascar, Gambia, Myanmar, Sri Lanka, Yemen, Serbia, Kuwait, Algeria, Egypt, Syria, Guinea, Bahrain, Qatar, Bangladesh, Togo, Guyana, Sierra Leone, Iraq, Dominica

Model (5) is constructed to study whether OFDI with different investment motives have political risk preferences after the "Belt and Road Initiative" was proposed. The interaction term of political risk and the "Belt and Road" country dummy variable (treat*prisk) is selected as the core explanatory variable. If the coefficient before treat*prisk is negative, it means that this kind of OFDI has political risk preference.

$$lnflow = a_0 + a_1 treat * prisk + a_2 treat + a_3 post$$
$$+ a_4 prisk + a_5 lngdp + a_6 lncgdp + a_7 lnpop \qquad (5)$$
$$+ a_8 lnres + a_9 lnwef + a_{10} lntec + \varepsilon$$

Table 12. Impact of the "Belt and Road Initiative" on the political risk of OFDI with different investment motives

Projects	(1) Larger market size	(2) Smaller market size	(3) More abundant natural resources	(4) Scarce natural resources	(5) High level of technology	(6) Low level of technology
treat*prisk	−0.0189	−0.0686***	−0.044***	−0.003	−0.0201	−0.070***
	(0.017)	(0.016)	(0.014)	(0.018)	(0.0174)	(0.016)
treat	1.710	4.551***	3.779***	−0.004	1.552	4.832***
	(1.202)	(1.073)	(0.904)	(1.264)	(1.268)	(1.017)
post	−0.0149	−0.474*	−0.684***	0.132	0.0483	−0.449*
	(0.300)	(0.260)	(0.225)	(0.325)	(0.308)	(0.252)
prisk	−0.0013	0.0624***	0.042***	0.032*	0.0195	0.056***
	(0.0186)	(0.015)	(0.013)	(0.018)	(0.0180)	(0.014)
Control variables	yes	yes	yes	yes	yes	yes
Constant	−114.3***	−139.7***	−147.4***	−106.6***	−115.1***	−137.4***
	(17.60)	(13.67)	(12.12)	(18.64)	(17.05)	(14.07)
Observations	594	524	559	559	576	531
R-squared	0.283	0.437	0.490	0.323	0.316	0.449

Note: "*" "**" "***" indicate coefficient estimates are significant at the 10%, 5%, and 1% levels, respectively; standard errors are in parentheses

The results of the grouping regression are shown in Table 12. When the natural resources of the host country are abundant, the coefficient of treat*prisk is negative and significant at the level of 1%, indicating that China has political risk preference for resource-seeking OFDI in Belt and Road countries. When the market size of the host country

[3] Note: There are missing data on the share of high-tech exports in manufactured exports for Libya and Liberia, so Libya and Liberia are excluded from the grouping of countries' technology levels. The number of countries with a high level of technology is 45, and the number of countries with a low level of technology is 45.

is larger, the coefficient of treat*prisk is negative, but it does not pass the significance test. When the technology level of the host country is high, the coefficient of treat*prisk is negative, but it still failed the significance test. It can be seen that China has a political risk preference for resource-seeking OFDI in the "Belt and Road" countries, while the political risk preference for market- seeking and technology-seeking OFDI is not significant.

VI. CONCLUSIONS AND POLICY RECOMMENDATIONS

A. Conclusions

The "Belt and Road Initiative" has improved bilateral ties between China and countries along the Belt and Road, decreased political risks in those countries, thus increased China's OFDI in countries with higher political risks along the Belt and Road. China's resource-seeking OFDI to "Belt and Road" countries has a clear preference for political risk. The introduction of the "Belt and Road Initiative" has significantly promoted China's OFDI in countries with abundant natural resources along the route. However, the policy effect of the "Belt and Road Initiative" have diminished over time. This is partly related to the deterioration of international political and economic environment in recent years. Therefore, cooperation between the government and enterprises is necessary to promote the high-quality development of the "Belt and Road Initiative".

B. Policy Recommendations

China's opening-up and development toward both "coming in" and "going out" has become significantly supported and fueled by the rapid growth of OFDI under the "Belt and Road Initiative" (Dai and Wang, 2022). However, in recent years, the international situation has changed due to the outbreak of COVID-19. Although the implementation of the "Belt and Road Initiative" has reduced the political risk of countries along the "Belt and Road", it is still necessary to be alert to the possibility of new political risks arising from geopolitical evolution. Based on the above analysis, the following policy recommendations are proposed:

1) Increase awareness of the political risks of OFDI and establish political risk assessment system

Although the "Belt and Road Initiative" has improved international friendly relations between China and countries along the "Belt and Road", and thus reduced political risks of China's OFDI, Chinese enterprises should still enhance awareness of political risks. Advanced political risk assessment, warning, and prevention are imperative. Moreover, according to the research results, policy effect of the "Belt and Road Initiative" has weakened over time. As COVID-19 is still spreading around the world, international political and economic environment is deteriorating. Chinese enterprises should pay more attention to political risks of OFDI. Although developed countries have mastered effective methods to assess political risks, PRS Group releases dynamic political risk data for more than 140 countries worldwide every year. However, PRS Group's data only can be used as a reference. Chinese enterprises cannot totally rely on them for OFDI political risk assessment and prevention. An assessment system consistent with China's OFDI should be adopted to make timely political risk warnings.

2) Improve laws, regulations and insurance system of OFDI

Prevention of political risks of OFDI is a systematic project involving bilateral corporation of international investment regulation, investment insurance and dispute settlement. It requires not only perfect systems and mechanisms, but also focus on articulation of systems and mechanism coordination (Wang, 2018). China has not yet established perfect laws on OFDI, which can not meet the needs of legal system guarantee for transnational operation of enterprises. China also lacks an effective restriction and supervision system required by transnational enterprises. Potential political risks of cross-border operations are inevitable. A solid insurance system can help enterprises to reduce potential loss from political risks. Therefore, establishing insurance mechanism is an effective way to prevent political risks of OFDI.

3) Promote localization of Chinese enterprises in host countries

At first, in order to avoid political risks in the host country, Chinese enterprises should learn economic policies and local culture. Furthermore, Chinese enterprises should try to adapt to local environment and adopt local business model. Recruit more local employees and integrate them into the sales, processing, production, and procurement. Secondly, Chinese enterprises should attach importance to cooperation with counterparts in the host nation and strive to gain the trust of local governments. Chinese enterprises can try to cooperate with host enterprises or establish joint ventures with host enterprises. Both parties share the profits and losses and risks through cooperation or joint venture. Finally, Chinese enterprises should take the initiative to assume corporate social responsibility, actively participate in public welfare, and cultivate a positive corporate reputation.

4) Implementation diversified multinational business strategy

In order to reduce the political risk of OFDI, Chinese enterprises should implement diversified transnational operation strategies. First of all, implement the industry distribution strategy to avoid excessive concentration of OFDI in a certain industry. Expand the scope of OFDI industries so as to control the political risk of OFDI. Secondly, implementing diverse OFDI location distribution. Try to avoid depending on the resources of a certain region. Political risks usually increase if OFDI is too concentrated in some countries. Finally, Chinese enterprises should try to implement diversified OFDI financing plan. Overseas subsidiaries should actively expand financing channels through financing institutions of the host country to alleviate capital pressure and reduce political risks, such as national expropriation and nationalization.

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