DOI: 10.55643/fcaptp.2.49.2023.4000

Oleh Mozgovyy

D.Sc. in Economics, Professor, Head of the Department of International Finance, Kyiv National Economic University named after Vadym Hetman, Kyiv, Ukraine; ORCID: 0000-0002-6752-4816

Larysa Rudenko-Sudarieva

D.Sc. in Economics, Professor, Kyiv National Economic University named after Vadym Hetman, Kyiv, Ukraine; ORCID: <u>0000-0001-5992-4070</u>

Yuliia Shevchenko Candidate of Economy Sciences, Ltd "SEE", Kyiv, Ukraine; ORCID: 0000-0002-3602-1722

Olha Yatsenko

D.Sc. in Economics, Professor, Kyiv National Economic University named after Vadym Hetman, Kyiv, Ukraine; ORCID: <u>0000-0003-4399-2217</u>

Wenliang Zhou

PhD student, Kyiv National Economic University named after Vadym Hetman, Kyiv, Ukraine; e-mail: <u>991296414@qq.com</u> ORCID: <u>0000-0002-9043-6005</u> (Corresponding author)

Received: 01/03/2023 Accepted: 17/03/2023 Published: 30/04/2023

© Copyright 2023 by the author(s)

This is an Open Access article distributed under the terms of the Creative Commons. CC-BY 4.0

FACTORS FOR CHOOSING OF INVESTMENT MODELS BY ASIAN COMPANIES IN THE IMPLEMENTATION AREA OF GLOBAL BUSINESS INITIATIVES

ABSTRACT

The development of the community of the common destiny of mankind has great investment potential, the full disclosure of which depends on the effective cooperation not only of states but also of the corporate sector, especially in a cross-border format. The article argues for the need to develop the internal potential of Asian companies against the background of strengthening international economic ties and improving the investment climate of countries participating in investment processes. The example of China's investment activity in Asian countries shows that, despite global crisis phenomena and upheavals, a grandiose potential has been formed for the implementation of important global initiatives, the most powerful of which scientists, practitioners and even politicians rightly consider the "One Belt One Road" project. Large-scale foreign investments and the choice of appropriate methods of cross-border entry into markets of potential investment interest have a decisive influence on the success of large Chinese enterprises in the context of the development and implementation of this project. At the same time, the authors emphasize the choice of such methods of investment interaction as mergers and acquisitions (M&A) or greenfield investments. Based on the use of economic and mathematical modelling, the authors demonstrated the influence of internal and external factors on the choice of investment method by large Chinese companies in countries that are promising partners in the implementation of China's global initiative "One Belt One Road". The analysis of the potential for investment begins with the division of factors into two conditional groups, on the one hand, it is about the intracorporate potential in the composition of the factors of strategic assets, technical capabilities, international experience, capabilities of enterprise management and the scale of the enterprise. On the other hand, the external environment is taken into account, the analytical assessment of which is based on the index of infrastructure development of the host country, control over capital and the value of cultural distance. Considering the research interest, as part of the analysis of the investment potential for cross-border interaction, such countries as India, Indonesia, Pakistan, Kazakhstan and Vietnam along the route were selected. Through the quantitative analysis of 108 investment projects in 6 countries, a benchmark for the entry of foreign investment by Chinese large enterprises through mergers and acquisitions (M&A) or greenfield investment has been obtained.

Keywords: factors, investment potential, investment model, Asian companies, global business initiative, one belt - one road

JEL Classification: F21, F23, F30

INTRODUCTION

Large-scale foreign investment and the choice of appropriate methods of cross-border entry into markets of potential investment interest have a decisive influence on the success of large Asian companies.

Since the One Belt One Road (OBOR) initiative was proposed in 2013, 172 countries and international organizations have signed more than 200 joint construction coopera-

tion documents and more than 90 bilateral cooperation mechanisms have been established. In the time interval from 2013 to 2023, cooperation between individual Asian countries has deepened, the level of international corporate connectivity has continued to improve, and a large number of cooperation projects have taken root, showing enormous potential for further development [13].

Investment activity of the corporate sector and individual Asian countries continues to grow at an average annual rate of 6.7%. From 2013 to 2021, direct investment by Chinese enterprises in countries along the Belt and Road reached 15.622 billion US dollars.

The question of the method of entering foreign markets, the mechanisms of investment interaction, among which mergers and acquisitions and investments in so-called "projects from scratch" - greenfield, can be recognized as the most relevant remain important. Our research was based on the following assumptions that the model of cross-border investment of Asian enterprises is systematically influenced by internal corporate factors of the enterprise itself, as well as factors of the host country.

LITERATURE REVIEW

Analysis of Recent Research and Publications Compared to other topics, research on the One Belt One Road Initiative has received particular attention. However, there are few studies on the entry mode of Chinese large enterprises' cross-border investment for analysing the cross-border investment patterns of large Chinese companies, we studied that Hennart, J. F. and Park, Y, R. (1993) underlined that the Japanese companies which have weak and unattractive advantages invest in acquisition and spread monopoly on the United States markets. On the other hand, companies which invest and transfer their financial resources in greenfield investments and give opportunities for the USA and obtain profits in the same markets [7]. In turn, Bhaumik, S. K., & Gelb, S. (2005) determined that the main choice of entry mode for multinational companies is the access and availability of tangible and intangible assets in the host country but the business environment has a small impact on the strategic decision [1]. It is interesting findings of such researchers as Chiao, Y. C., Lo, F. Y., Yu, C. M (2010) and Balanovska T. et al. (2021) that show that during the making decision of investment allocation companies choose the most appropriate variant of investment comparing the advantages in the home and the host countries. The companies should learn and consider all factors in the host country [4; 32].

The comprehensive research on the main factors which influence the investment decision are made by Slangen A. and Hennart J. F. (2007), Kubalskyi O. (2022) and Yarmol L. et al. (2021) who revealed that when investors choose the entry mode, they consider the cultural distance which is moderated by the level of the subsidiary; product diversity is connected with companies' international experience [17; 28; 31]. But it should be noted that Galan, J. I., Gonzalez-Benito, J., Zuñiga-Vincente, J. A. (2007) and Rozin V. (2021) described that for developed economies the investment decisions are made in the conditions of strategic asset seeking theory [6; 29]. Yiu, D., Makino, S. (2002) in their study of foreign entry-mode choice underlined that transaction-cost theory is the basis for making investment decisions [7; 21]. On the other hand, interesting views on choosing entry mode are shown by scientists such as Chen Xiang and Zhou Hao (2016), Jiang Guanhong (2015), Slangen A. H. (2011), Qi Jianhong and Yang Li (2014), Liu Xiaoning (2019), Kotenko S. et al. (2020), Zhou jing and Cai Dongqing (2014), Petrychenko V. et al. (2022), Hill and Kim (1990), Sun Chenyao (2020), Osaulenko et al. (2020), Bortnik R. (2022), Liu Meixiang (2019), Yatsenko O. et al. (2018; 2019), Rahman M. et al. (2022), Li Shaokai, Zhang Guanglai, Zhang Yangxun (2018) who determined the main peculiarities of investment activity of Chinese large enterprises [2; 3; 8; 9; 10; 12; 15; 16; 18; 19; 23; 24; 25; 26; 27; 30].

Data from the Chinese Enterprise Global Investment Tracker (CGIT) were used to conduct economic and mathematical calculations and test the proposed hypotheses [5].

Unresolved aspects of the problem. A large number of scientists were engaged in researching the issue of investment models, who widely and professionally revealed the motives of companies entering international markets. However, the comparison of the most profitable and the least risky placement of own investment resources of large Chinese corporations, which factors and conditions are the most optimal criteria for investment placement, remains unexplored.

AIMS AND OBJECTIVES

The purpose of the article is to study the influence of internal and external factors on the choice of investment interaction of Asian companies through mergers and acquisitions (M&A) or through the greenfield method in the implementation of a global business initiative.

METHODS

For conducting the research, general scientific theoretical research methods have been used, namely, analysis, synthesis, systematization, explanation, economic and mathematical modelling (binary logistic regression model, constructed logit model) that help to describe the main aspects of investments in the different countries. Scientific articles of domestic and foreign scientists, analytical reports, and publications in the media for the analysis of factors that affect the method of investment of Chinese multinational enterprises.

RESULTS

Two grandiose concepts initiated in 2013 can be considered the newest turbo generator of growth not only in the Asian region but also in the entire world economy - the Silk Road Economic Belt and the Maritime Silk Road of the 21st century, which were called the "Belt and Road". Efforts to build a whole network of new land transport corridors, such as the China-Central Asia-Western Asia Economic Corridor (CCWAEC), the China-Mongolia-Russia Economic Corridor (CMREC), the China-Pakistan Economic Corridor (CPEC), New Eurasian Continental Bridge (NELB), Economic Corridor "Bangladesh - China - India - Myanmar" (BCIMEC), power grid, ports, oil pipelines, etc. requires the search for effective ways of investment cooperation between the countries and companies participating in the projects of this initiative.

1. Overview of investment processes of Asian companies: the example of China

An analytical assessment of the scale of foreign investment and the corresponding methods of cross-border entry into markets of potential investment interest demonstrate the presence of powerful potential and have a decisive impact on the success of large Asian companies. It is significant that from 2013 to 2021, the direct investment of Chinese enterprises in the partner countries of the Belt and Road project reached 15.622 billion US dollars, with an average annual growth rate of 6.7%, which is 2.9 percentage points higher than in the national average for the same period (Figure 1).

In 2021, amid the global COVID-19 epidemic and a decline in global foreign direct investment, Chinese inward investors made USD 2.03 billion in direct investment in 58 countries along the country's "One Belt One Road".

Investments were mainly made in Singapore, Indonesia, Malaysia, Vietnam, Bangladesh, United Arab Emirates, Laos, Thailand, Kazakhstan, and Cambodia.



Considering its geographical location, China invests most in East Asia. East Asian countries mainly adopt the method of investment entry through cross-border mergers and acquisitions (Figure 2).



oped by the authors based on [5])

In turn, due to the high level of consumption of natural resources and the annual need for a large amount of them, in particular oil imports, a large number of investments fall on West Asia, the Middle East and North Africa. All these regions have a common feature of rich resources. From 2013 to 2020, China's foreign investment volume and the number of investment projects tended to decrease (Figure 3). Figure 3 shows that the number of cross-border mergers and acquisitions decreased from 185 in 2013 to 143 in 2020, a decrease of 22.7%, and the number of Greenfield investments decreased from 1,256 in 2013 to 412 in 2020.



2. Hypotheses regarding the impact of key factors on investment methods

In the course of our research, we have identified the factors affecting the entry of investments of Chinese multinational enterprises into the markets of countries along the trajectory of the "One Belt and One Road" route. Studying the works of Hennart & Park (1993), Bhaumik & Gelb (2005), Chiao et al. (2010), Caves & Mehra (2007), Zhou Jing, Cai Dongqing (2014) made it possible to identify intra-corporate factors for investment interaction, in particular, it is about strategic assets, technical capabilities of the firm, international experience, enterprise management capabilities, enterprise-scale [1; 4; 7; 16].

The description and assessment of internal factors are given through the five hypotheses we identified (hypotheses H1 - H5), the basic characteristics of which are presented in Table 1.

Table 1. Hypotheses regarding the influence of internal factors on investment entry mode.				
Identification and display of characteristic features internal factors	The essence of the assumption	Notation for empirical re- search and interpretation of the magnitude		
	1. Strategical assets (SA1)			
Strategic assets refer to resources that are of stra- tegic importance for the long-term development of the enterprise, mainly including brands, franchises and marketing channels, and goodwill. They are characterized by long-term, complex structure, and specificity.	Companies with strategic asset advantages typically do not transfer strategic assets to the host country market through investment but use a target company with rich local strategic assets in the host country. <i>Hypothesis H1:</i> Other things being equal, the level of corporate strategic assets does not have a significant im- pact on the investment structure of large Chinese compa- nies.	(SA1) It is measured by the goodwill and intangible assets/total assets of the company's investment year. The larger the ratio, the richer the company's strategic assets.		
2	2. Technical capabilities of the enterprise (RD)			
The intensity of scientific and research work, the technology or the brand of the company have a significant impact on the choice of the company's foreign investment model. The most suitable model of foreign investment for enterprises with active research-intensive activities is investment through greenfields or through mergers and acquisitions (M&A).	Businesses can quickly capture the market using their own technical capabilities and marketing assistance from local businesses. <i>Hypothesis H2:</i> large Chinese enterprises with stronger technical capabilities are more inclined to choose cross- border M&A investment to enter the market of countries. On the contrary, Large Chinese enterprises with weak technical capabilities are more inclined to choose green- field investment to enter the market of countries.	(RD) It is measured by the R&D ex- penditure/total operating income of the company's investment in the year. The larger the proportion, the more R&D investment and the stronger the technical capability of the company.		
	3. International experience (EXP1)			
There is a positive relationship between the invest- ment experience of host country enterprises and the share of equity capital organized by the enter- prise, while inexperienced enterprises prefer to en- ter through joint ventures [3].	Hypothesis H3: The richer the international experience of enterprises, the more inclined to choose greenfield in- vestment to enter the market of countries. On the con- trary, the poorer the international experience of enter- prises, the more inclined to choose M&A investment to enter the market of countries.	(EXP1) It is represented by the dummy variable of whether the company has exported in the current year: "1" means it has exported, and "0" means it has never exported.		
	4. Enterprise management ability (ROA)			
Transnational corporations with a high level of management usually enter the host country through cross-border mergers and acquisitions. Thanks to this investment, they prefer the top management of the enterprise for the sake of management synergy and increasing the efficiency of the entire enterprise. Companies that tend to in- vest in greenfield investments avoid management problems and directly take advantage of other as- pects to capture the market through greenfield in- vestment.	Hypothesis H4: Asian enterprises with higher management level tend to choose the entry method of M&A investment to enter the market of countries along the "OBOR". On the contrary, large enterprises with lower management level tend to enter the market of countries through greenfield investment.	(ROA) It is measured by the net interest rate of total assets in the year of enterprise investment. The larger the value, the better the operation effect of the enterprise and the stronger the enterprise manage- ment ability.		
	5. Enterprise size (InAS)			
The larger the scale of the company, the more likely it is to choose mergers and acquisitions when choosing foreign investment models. In terms of transaction costs, cross-border mergers and acqui- sitions will put a lot of financial pressure on small enterprises, while larger enterprises have more re- sources that can provide strong financial support and have stronger competitiveness in mergers and acquisitions. Therefore, larger enterprises are more prone to cross-border mergers and acquisitions.	<i>Hypothesis H5:</i> Large-scale Asian enterprises tend to choose M&A investment to enter the market. On the contrary, Smaller-scale enterprises tend to enter the market through greenfield investment.	(InAS) It is measured by the logarithm of the total assets of the enterprise invested in the year. The larger the value, the more disposable assets and the larger the scale of the en- terprise.		

Study of a number of literary sources, in particular Tan and Vertynsky (2007), Cheng Shixiong and Liu Dan (2018), Chen Xiang, Zhou Hao (2016), Cheng Shixiong and Liu Dan (2018), Yiu & Makino (2002), Jiang Guanhong (2015), Xie Dongmei et al. (2016), Pi Jiancai et al. (2016), Liu Xiaoning (2019), Slangen (2011), Qi Jianhong, Yang Li (2014) made it possible to conclude that host countries have such predominant characteristics as infrastructure development, cultural distance, special control over capital [2; 6; 9; 12; 15; 16; 19]. Based on the empirical studies conducted by the mentioned authors, our work proposes the following additional hypotheses (hypotheses H6 - H8) regarding the choice of Chinese corporations' methods of entering the foreign markets of potential partner countries under the "One Belt One Way" project:

Hypothesis 6: The higher the infrastructure development index (BR) of the host country, the more Chinese large enterprises tend to choose greenfield investment to enter the market of countries along the "OBOR", and on the contrary, the lower the infrastructure development index of the host country, the more Chinese large enterprises enter the market of countries along the "One Belt One Road" through M&A.

In our research, we use the infrastructure Development Index of the host country, published by the National Infrastructure Index "One Belt, One Road", as an indicator of the infrastructure of the host country.

Hypothesis 7: The higher the host country's capital controls (EFI), the more likely large Chinese enterprises are to choose the entry method of cross-border M&A investment to enter the market of countries along the "OBOR". On the contrary, the lower the host country's capital controls, the more likely large Chinese enterprises are to choose the entry method of cross-border greenfield investment to enter the market of countries along the "OBOR".

In our further calculations, it will be measured by the economic freedom index of the host country. The higher the index, the more liberal the economic environment of the host country and the weaker the control over capital. The data is obtained from the official website of the American Heritage Foundation.

Hypothesis 8: The cultural distance (CD) from the host country has no significant impact on the cross-border investment patterns of large Chinese enterprises' outbound investments.

It is clarified that using Hofstede's method, according to the material on the site from Geerthofstede.com, countries have masculinity/femininity; avoidance of uncertainty (Uncertainty Avoidance); long-term/short-term orientation; leniency/restrictions regarding indicators of the cultural dimension [8].

3. Empirical research on the choice of direct investment method by large Chinese enterprises in key countries along the One Belt and One Road initiative

So, in the process of our research, two groups of external and internal factors that can influence the choice of investment entry mode were identified and analyzed, and eight theoretical hypotheses were put forward. Based on data from a sample of investments of 146 Chinese companies in six countries (India, Indonesia, Pakistan, Russia, Kazakhstan, and Vietnam) in the period from 2012 to 2020, it is intended to use a binary logistic regression model for empirical testing of hypotheses.

Empirical data on cross-border mergers and acquisitions and greenfield investments in this article are taken from the Chinese company Global Investment Tracker (CGIT) database, jointly released by the American Enterprise Institute and the American Heritage Foundation [5].

After researching the database, the final sample that can be used in this work is the investment projects of 108 Chinese enterprises in countries (India, Indonesia, Vietnam, Russia, Kazakhstan, Pakistan). Company financial data comes from Wind's financial database and each company's official annual report.

Note that for seven of the factors we selected, the raw data are provided by open access to web sources. While the factor of cultural distance (CD) between the host country and China requires the calculation of indicators, for which we will use the Hofstede method according to the following model [8]:

$$CD_{j=\sum_{i=1}^{6} \left[\frac{\left(I_{ij} - I_{iChina} \right)^2}{V_i} \right] / 6$$

(1)

where, CD_j represents the cultural distance between host country *j* and China; I_{ij} represents the *i*-th index of the cultural dimension of host country *j* in Hofstede; I_{iChina} is the index of China *p* where represents the *i*-th cultural dimension in Hofstede. V_i represents the *i*-th index of the cultural dimension in the sample.

After calculation, the cultural distance index between China and the six countries is shown in Table 2.

Table 2. Estima	ble 2. Estimated cultural distance index between China and countries along the One Belt and One Road.							
	Cultural distance between China and the six countries							
Country	Power Dis- tance	Individualism / Collectivism	Masculinity / Femininity	Uncertainty / Avoidance	Long Term Orientation	Indulgence / Restraint	Cultural distance	
China	80	20	66	30	87	24		
Vietnam	70	20	40	30	57	35	1.94	
Russia	93	39	36	95	81	20	3.03	
India	77	48	56	40	51	26	1.77	
Indonesia	78	14	46	48	62	38	1.39	
Kazakhstan	88	20	50	88	85	22	1.27	
Pakistan	55	14	50	70	50	0	3.00	

After calculating the additional variable - the factor of cultural distance - we will summarize all the probable factors influencing the choice of the method of cross-border investment by Chinese corporations in the implementation of the global business initiative "One Belt One Road", presenting them in Table 3.

Table 3. Summa	ary of Empirical model variables.			
Туре	Variable	Variable definitions	Data Sources	Expected outcome
Explained variable	Whether to adopt the greenfield investment model or MA	Virtual variable: "1" means greenfield investment, "0" means cross-border M&A	American Enterprise Institute and American Heritage Foun- dation, "China Global Invest- ment Tracker" database	
	strategic assets (SA1)	Goodwill and Intangible Assets / Total Assets	Wind financial database	+
	technical skills (RD)	R&D Expenditures / Total Operating Income	Wind financial database	-
Enterprise level	International experience (EXP1)	Virtual variable: "1" indicates international experience, "0" means no internationalization ex- perience	Wind financial database	+
	Enterprise size (InAS)	The logarithm of the total assets of the enterprise in the year of invest- ment	Wind financial database	-
	Enterprise management ability (ROA)	Net interest rate of total assets in the year of investment	Wind financial database	-
	State of infrastructure (BR)	"One Belt One Road" National Infra- structure Index	The One Belt One Road Infra- structure, Development Index Report 2021	+
Host country level	Host country capital controls (EFI)	host country economic freedom index	American Heritage Founda- tion's official website	-
	Cultural distance between the host country and China (CD)	Hofstede Cultural Distance Index	Hofstede Official website	+

The empirical data sample in this paper covers 108 greenfield investment and cross-border M&A projects made by large Chinese enterprises in important countries in the analysed countries [22]. The descriptive statistics of each variable in the sample data are shown in Table 4:

Fable 4. Descriptive statistics of variables.						
Variable	n	S.D.	Min	Mdn	Мах	
МА	108	0.490	0	1	1	
SA1	108	0.100	0	0.0500	0.580	
RD	108	0.0300	0	0.0200	0.140	
EXP1	108	0.500	0	1	1	
ROA	108	0.0600	-0.360	0.0300	0.230	
InAS	108	1.960	20.59	25.67	29.47	
BR	108	9.590	111	121	146	
EFI	108	4.870	50.50	55.60	69.10	
CD	108	0.720	1.260	1.770	3.030	

In our research the investment entry mode of the explained variable is a binomial choice variable, that is, the enterprise chooses one of the two models - greenfield investment or cross-border M&A, so it is suitable to use the binary choice model.

During studying the paper by Sun Chenyao (2020) we selected the more widely used binary Logit discrete model [3]. The model is constructed as follows:

$$P(Y=1|X) = \frac{1}{1+e^{-(\alpha+\beta iXi)}}$$

(2)

where *P* represents the probability that each influencing factor Xi takes a certain value Y=1, that is, the enterprise chooses greenfield investment to be 1, Xi represents each explanatory variable, a represents a constant term irrelevant to each influencing factor, and β i is the regression coefficient of each factor, indicating the degree of influence of various factors on the *P* value. If β i is positive, it means that the larger Xi is, the closer the *P* value is to 1, that is, the investment company will choose greenfield investment; otherwise, if β i is negative, it means that the investment company will choose crossborder mergers and acquisitions.

After learning from Sun Chenyao (2020), Liu Meixiang (2019) [11] we can obtain a concrete model:

 $Logit(d_{it}^{MA} = 1) = a + year_t + company_i + \beta_1 SA1_{it} + \beta_2 RD_{it} + \beta_3 BR_{it} + \beta_4 EXP1_{it} + \beta_5 ROA_{it} + \beta_6 \ln AS_{it} + \beta_7 EFI_{it} + \beta_8 CD_{it} + U_{it},$ (3)

where, *t* and *i* represent the event of the investment event and the region where the enterprise is located, respectively; d_{it}^{MA} indicates whether the enterprise is a greenfield investment, if so, it is 1, otherwise, it is 0; $year_t + company_i$ represent the effects of time and individuals, respectively, to control for the influence of time and region on the choice of corporate investment methods; U_{it} is the error term of the model [11]

Our paper uses the statistical software Stata 15 to analyse the model data. To eliminate the effect of heteroscedasticity, the logarithm of company size is taken, which is significantly different from other explanatory variables, and then the influencing factors are divided into firm and host country coefficients, that is, model 1 and model 2.

The test results are given in Table 5 which shows the matrix of correlation coefficients of each variable, and the correlation coefficient of each explanatory variable is below 0.5, which does not meet the significance requirement.

Table 5. Correl	ation of test resu	ilts.						
	SA1	RD	EXP1	ROA	InAS	BR	EFI	CD
SA1	1							
RD	0.201	1						
EXP1	-0.142	0.0604	1					
ROA	-0.113	0.360	-0.163	1				
InAS	0.0437	0.00570	-0.228	0.392	1			
BR	0.0106	-0.251	0.0183	-0.0522	0.0774	1		
EFI	0.0601	-0.0471	0.0673	0.0381	0.161	0.388	1	
CD	-0.143	-0.232	-0.0929	-0.202	-0.0952	-0.302	-0.619	1

Using Table 6 analysis of the heteroscedasticity test from BP. It can be found that all P values of the models are greater than 0.1, the rate model accepts the null hypothesis at the 1% level, and there is no heteroskedasticity.

Table 6. BP test.			
	P-Value	Null hypothesis	in conclusion
Model 1	0.3313	no heteroscedasticity	accept
Model 2	0.1413	no heteroscedasticity	accept
Model 3	0.7910	no heteroscedasticity	accept

Analysing Table 7, we see that the value of the VIF variance inflation factor of each model is equal to 10. Below, the collinearity problem representing the regression models is not obvious.

Table 7. VIF test.

Variables -	VIF-value				
	Model 1	Model 2	Model 3		
SA1	1.15		1.18		
RD	1.32		1.50		
EXP1	1.11		1.14		
ROA	1.53		1.57		
InAS	1.27		1.30		
BR		1.19	1.30		
EFI		1.75	1.85		
CD		1.63	1.96		

The results of the regression of the influence of the characteristics of the firm and the characteristics of the host country on the foreign investment model are presented in Table 8.

Standard errors in parentheses; **	* p<0.01, ** p<0.05, * p<0.1.	nost country characteristics	on foreign investment patterns. Note:
		-	-

	1	2	3
VARIABLES	МА	MA	МА
SA1	-0.480		1.084
	(2.692)		(2.803)
RD	-18.97**		-18.20*
	(8.802)		(10.67)
EXP1	1.124**		1.392**
	(0.489)		(0.562)
ROA	-2.141		-4.935
	(6.172)		(8.208)
InAS	-0.407***		-0.403***
	(0.139)		(0.148)
BR		0.220**	0.0564*
		(0.0946)	(0.0304)
FFT			
		-0.644***	-0.240***
		-0.644*** (0.241)	-0.240*** (0.0772)
CD		-0.644*** (0.241) 0.242	-0.240*** (0.0772) -0.219
CD		-0.644*** (0.241) 0.242 (1.321)	-0.240*** (0.0772) -0.219 (0.501)
CD Constant	10.96***	-0.644*** (0.241) 0.242 (1.321) 11.32	-0.240*** (0.0772) -0.219 (0.501) 18.01***
CD Constant	10.96*** (3.583)	-0.644*** (0.241) 0.242 (1.321) 11.32 (15.46)	-0.240*** (0.0772) -0.219 (0.501) 18.01*** (6.903)
CD Constant Year	10.96*** (3.583) Control	-0.644*** (0.241) 0.242 (1.321) 11.32 (15.46) Control	-0.240*** (0.0772) -0.219 (0.501) 18.01*** (6.903) Control
CD Constant Year Company	10.96*** (3.583) Control Control	-0.644*** (0.241) 0.242 (1.321) 11.32 (15.46) Control Control	-0.240*** (0.0772) -0.219 (0.501) 18.01*** (6.903) Control Control
CD Constant Year Company Observations	10.96*** (3.583) Control Control 108	-0.644*** (0.241) 0.242 (1.321) 11.32 (15.46) Control Control 108	-0.240*** (0.0772) -0.219 (0.501) 18.01*** (6.903) Control Control 108

After the analysis of the above-mentioned Table, the comprehensive analysis of Model 1 and Model 2 and Model 3 gives the following conclusions:

Strategic assets (SA1) changed from a negative estimation coefficient in Model 1 to a positive estimation coefficient in Model 3, indicating that the influence factors of foreign investment patterns in Model 3 have a greater impact on the model

than only the enterprise-level influence of factors in Model 1. At the same time, our hypothesis H1 is verified. Under the same conditions, the level of corporate strategic assets has no significant impact on the investment methods of chosen in our research large Chinese multinational companies.

The technical capability (RD) is a negative estimation coefficient and has a significant correlation in both model 1 and model 3, which means that there is a significant negative correlation between the research and development of enterprises and greenfield investment. It verifies our hypothesis of H2: Chinese large enterprises with stronger technical capabilities are more inclined to choose cross-border mergers and acquisitions, and vice versa, they are more inclined to enter the markets of countries along the "One Belt One Road" through greenfield investment.

The company's international experience (EXP1) is a positive estimation coefficient, and it has a significant correlation in both model 1 and model 3, which means that there is a significant positive correlation between the company's international experience and the choice of greenfield investment. Since most of the countries along the "One Belt One Road" are relatively backward, greenfield investment has relatively large policy and regulatory risks, market risks and government risks. Enterprises with international experience can identify various risks and overcome various difficulties in the process of foreign direct investment. After completing greenfield investment, companies without international experience will tend to cross-border mergers and acquisitions because of their lack of understanding of the host country, so as to achieve risk diversification. This verifies our hypothesis of H3: the richer the international experience of large Chinese enterprises, the more inclined they are to choose the entry method of greenfield investment. On the contrary, they are more inclined to enter the market of countries along the "One Belt One Road" through cross-border mergers and acquisitions.

Enterprise management ability (ROA) is a negative estimation coefficient, and there is no significant correlation in model 1 and model 3, which means that there is no significant negative correlation between enterprise management ability and greenfield investment. However, the negative estimation coefficient verifies our hypothesis of H4: Chinese large enterprises with higher management level tend to choose the entry method of cross-border mergers and acquisitions, and vice versa, the more inclined they are to enter the market of countries along the "One Belt One Road" through greenfield investment.

The enterprise scale (InAS) has a negative correlation coefficient, and there is a significant correlation in both model 1 and model 3, which means that there is a significant negative correlation between enterprise scale and greenfield investment, that is, the larger the enterprise scale, the more likely it is to choose a cross-border investment. This shows that large Chinese enterprises quickly enter the host country's market through cross-border mergers and acquisitions, and take advantage of the local advantages of the merger and acquisition enterprises to quickly occupy the market. This verifies Hypothesis H5: Large Chinese enterprises with larger scales tend to choose the entry method of cross-border mergers and acquisitions, and vice versa, they tend to enter the markets of countries along the "One Belt One Road" through greenfield investment.

The infrastructure development index (BR) has a positive correlation coefficient, and there is a significant correlation in both model 2 and model 3, indicating that the higher the infrastructure development index, the more inclined to greenfield investment. Good infrastructure construction conduces to reducing costs and attracting investment. This verifies H6: the higher the infrastructure development index of the host country, the more Chinese large enterprises tend to choose greenfield investment, and vice versa, the more they tend to enter the markets of countries along the "One Belt One Road" through cross-border mergers and acquisitions.

The capital control (EFI) has a negative correlation coefficient, and it has a significant correlation in both model 2 and model 3, which means that there is a significant negative correlation between capital control and greenfield investment, that is, the stricter the capital control, the more likely it is Choose to invest across borders. This verifies Hypothesis H7: the higher the host country's capital controls, the more likely large Chinese enterprises are to choose the entry method of cross-border mergers and acquisitions.

Cultural distance (CD), it is found that neither model 2 nor model 3 has a significant correlation, because the six countries in the selected sample are China's neighbours, and cultures influence each other, so the cross-border investment model impact is not obvious.

Therefore, it is verified that H8: the cultural distance from the host country has no significant impact on the cross-border investment model of Chinese large enterprises.

In order to test the robustness of the model, the panel probit model was used to perform the regression again, as shown in Table 9 below, in which the coefficient signs of the three models did not change. Compared with the logit model, the significance of RD in the probit model 1 occurred.

In model 2, the significance of BR has changed but is still significant; in model 3, the overall significance has decreased, especially RD has become insignificant, but others are still significant.

It is concluded that there are differences between the two methods, but the overall results are not very different, indicating that the empirical results are robust.

	(1)		(2)		(3)	
VARIABLES	Logit	Probit	Logit	Probit	Logit	Prob
SA1	-0.480	0.938			1.084	0.510
	(2.692)	(6.707)			(2.803)	(1.873
RD	-18.97**	-57.01*			-18.20*	-12.2
	(8.802)	(29.25)			(10.67)	(7.982
EXP1	1.124**	3.568**			1.392**	0.911
	(0.489)	(1.542)			(0.562)	(0.482
ROA	-2.141	-6.624			-4.935	-2.68
	(6.172)	(14.77)			(8.208)	(5.294
InAS	-0.407***	-1.140***			-0.403***	-0.257
	(0.139)	(0.390)			(0.148)	(0.130
BR			0.220**	0.193***	0.0564*	0.038
			(0.0946)	(0.0694)	(0.0304)	(0.023
EFI			-0.644***	-0.578***	-0.240***	-0.155
			(0.241)	(0.167)	(0.0772)	(0.072
CD			0.242	0.186	-0.219	-0.15
			(1.321)	(1.020)	(0.501)	(0.330
Constant	10.96***	30.74***	11.32	10.92	18.01***	11.23
	(3.583)	(9.985)	(15.46)	(13.44)	(6.903)	(5.879
Year	Control	Control	Control	Control	Control	Contro
Company	Control	Control	Control	Control	Control	Contro
Observations	108	108	108	108	108	108
Number ID1	107	107	107	107	107	107

DISCUSSION

Having analysed the general investment situation of Chinese enterprises located in countries along the "One Belt, One Road", we can conclude that foreign investments are at a stable level with some decline; the total amount of these investments consists of newly concluded contracts and already completed turnover of contract projects with countries along the route.

The total share of investments shows a steady upward trend. Chinese investment in the Belt and Road Initiative varies by region, but Asia accounts for the largest share of the investment flow. Investments are mainly made in such areas as infrastructure, the transport industry and energy. The energy sector, in turn, is focused on natural gas, oil and hydropower.

Analysis of the investment entry mode of large Chinese enterprises showed that from 2013 to 2021, the trend of new investment and cross-border M&A investment increased initially, and then decreased. However, in terms of the number of investment projects, new investments remained relatively stable, while cross-border mergers and acquisitions declined primarily. Among them, in terms of the geographical distribution of investment models, East Asia is the main investment area for large Chinese enterprises, and East Asian countries mainly use the model of cross-border mergers and acquisitions to attract investment. In terms of source regime industries (investments in markets or cross-border M&A), the bulk of new-type investments in cross-border M&A is mainly divided between the energy, transport, metals and real estate industries.

CONCLUSIONS

Based on the research assumptions made regarding the internal factors of Chinese companies and the external factors of potential investment countries, eight indicators were selected, including strategic assets, technological capabilities, international experience, enterprise management capabilities, investor enterprise size, host infrastructure development index countries, capital controls and cultural distance between the company investor and the host country.

The factors and the degree of influence of the FDI entry regime were obtained, which enabled the following conclusions:

- technical capabilities, enterprise size, and capital constraints were negatively correlated with the likelihood that enterprises would choose a greenfield investment decision;
- international experience and the index of infrastructure development are positively correlated with the probability of choosing greenfield investment solutions by enterprises;
- strategic assets, corporate governance capabilities, and cultural distance do not influence companies' decisions to choose greenfield investments.

REFERENCES

- Bhaumik, S. K., & Gelb, S. (2005). Determinants of entry mode choice of MNCs in emerging markets: Evidence from South Africa and Egypt. *Emerging Markets Finance and Trade*, 41(2), 5-24. URL: https://www.jstor.org/stable/27750436.
- Chen, X., & Zhou, H. (2016). Dongdaoguo Fubai Yu Zhongguo Duiwai Zhijie Touzi Quwei Xuanze—Jiyu Qiye Touzi Dongji de Shijiao. *Review of Industrial Economics*, 2, 70–88. URL: http://www.cqvip.com/qk/89844x/20162/678974805 04849544850484852.html
- Chenyao, S. (2020). Zhongguo qiye dui"yidai yilu"guojia OFDI jinru moshi xuanze de yanjiu. Master's Thesis. Shandong University.
- Chiao, Y. C., Lo, F. Y., & Yu, C. M. (2010). Choosing between wholly-owned subsidiaries and joint ventures of MNCs from an emerging market. *International Marketing Review, 27*(3), 338-365. https://doi.org/10.1108/02651331011047998
- 5. China global investment traker (2022). https://www.aei.org/china-global-investmenttracker/
- Galan, J. I., Gonzalez-Benito, J., & Zuñiga-Vincente, J. A. (2007). Factors determining the location decisions of Spanish MNEs: an analysis based on the investment development path. *Journal of International Business Studies*, *38*(6), 975-997. https://doi.org/10.1057/palgrave.jibs.8400304
- Hennart, J. F., & Park, Y. R. (1993). Greenfield vs. acquisition: The strategy of Japanese investors in the United States. *Management science*, 39(9), 1054-1070. DOI:10.1287/mnsc.39.9.1054
- 8. Charles W. L. Hill, Hwang, P., & Kim, W. C. (1990). An Eclectic Theory of the Choice of International

Entry Mode. *Strategic Management Journal*, 11(2), 117–128. http://www.jstor.org/stable/2486659

- Jiang, G. (2015). Zhidu Chayi, Wenhua Julli Yu Zhongguo Qiye Duiwai Zhijiē Touzi Fengxian. World Economy Studies, 8, 37–47. URL: http://www.cqvip.com/qk/91453x/201508/66570430 5.html
- Li, S., Zhang, G., & Zhang, Y. (2018). Dongdaoguo Touzi Fengxian, Guojia Juli Yu Woguo Ofdi Buju Xuanze—Jiyu\"yidai Yilu\"yanxian Guojia de Jingyan Zhengju. Shangye Yanjiu. *Commercial Research*, 12, 39–48. URL: http://www.cqvip.com/qk/96318x/201812/70009852 98.html
- 11. Liu, M. (2019). Zhongguo Qiye Dui Jin Zhuan Guojia Zhijie Touzi Jinru Moshi Xuanze Yanjiu . Master's Thesis. *Guangdong University of Technology*. URL: https://cdmd.cnki.com.cn/Article/CDMD-11845-1019890310.htm
- Liu Xiaoning (2019). Greenfield Investment Or Crossborder M & A: A Study on Mode Choice of Chinese Enterprise's OFDI. *South China Journal of Economics*, 38(2), 69-85. URL: http://html.rhhz.net/NFJJ/html/20190205.htm
- 13. People's Daily (2021). URL: <u>https://wap.peopleapp.c</u> om/article/6287440/6182050
- 14. People's Republic of China Ministry of Commerce. (2022). URL: http://hzs.mofcom.gov.cn/article/date/202201/20220 103239000.shtml
- 15. Qi, J., & Yang, L. (2014). Wenhua Juli Yu Woguo Qiye Ofdi de Jinru Moshi Xuanze—Jiyu Daxing Qiye de Weiguan Shuju Jianyan.Shijie Jingji Yanjiu. *World Economy Studies*, 6, 55–61.

URL: http://www.cqvip.com/qk/91453x/201406/499 34324.html

- Slangen, A. H. (2011). A communication-based theory of the choice between greenfield and acquisition entry. *Journal of Management Studies*, *48*(8), 1699-1726. <u>https://doi.org/10.1111/j.1467-6486.2011.01013.x</u>
- Slangen, A., & Hennart, J. F. (2007). Greenfield or acquisition entry: A review of the empirical foreign establishment mode literature. *Journal of international management*, *13*(4), 403-429. https://doi.org/10.1016/j.intman.2007.08.001
- Osaulenko, O., Yatsenko, O., Reznikova, N., Rusak, D., & Nitsenko, V. (2020). The Productive Capacity of Countries Through the Prism of Sustainable Development Goals: Challenges to International Economic Security and to Competitiveness. *Financial and credit activity: problems of theory and practice*, 2(33), 492-499. https://doi.org/10.18371/fcaptp.v2i33.207214
- Yatsenko, O., Nitsenko, V., Mardani, A., & Tananaiko, T. (2018). The impact of global risks on the world trade and economic environment. *Financial and credit activity: problems of theory and practice*, 4(27), 435-444.

https://doi.org/10.18371/fcaptp.v4i27.154279

- 20. The One Belt One Road Infrastructure Development Index Report 2021. URL: https://www.ipim.gov.mo/wpcontent/uploads/2021/07/EN_The-Belt-and-Road-Report-2021.pdf
- Yiu, D., & Makino, S. (2002). The choice between joint venture and wholly owned subsidiary: An institutional perspective. *Organization science*, 13(6), 667-683. URL: <u>https://www.jstor.org/stable/3086087</u>
- 22. World Investment Report (2022). URL: https://worldinvestmentreport.unctad.org/annextables/
- 23. Zhou, J., & Cai, D. (2014). Qiye Weigun Tezheng, Dongdaoguo Yinsu Yu Zhongguo Ofdi Moshi Xuanze. *Journal of International Trade*, 2, 124–134. DOI: http://www.cqvip.com/qk/96001x/201402/48816969 .html
- 24. Petrychenko, V., Petrychenko, O., Fedoryshyna, L., Kravchuk, O., Korniichuk, O., & Nitsenko, V. (2022). Agricultural Production in Ukraine: Ecological

Challenges and Impact on the Quality of Life. *Financial and Credit Activity Problems of Theory and Practice*, *4*(45), 374–384. https://doi.org/10.55643/fcaptp.4.45.2022.3782

https://doi.org/10.55643/fcaptp.4.45.2022.3782

- Yatsenko, O., Nitsenko, V., Mardani, A., Streimikiene, D., & Tananaiko, T. (2019). Global Risks of Trade and Economic Cooperation of Ukraine with Countries of the Northern American Region. *Montenegrin Journal of Economics*, *15*(3), 217-225. https://doi.org/10.14254/1800-5845/2019.15-3.16
- Rahman, M., Chowdhury, S., Mohammad Zayed, N., Ali Imran, M., Hanzhurenko, I., & Nitsenko, V. (2022). Does Globalization Trigger an Ecological Footprint? *Rocznik Ochrona Środowiska*, 24, 141-162. https://doi.org/10.54740/ros.2022.011
- Kotenko, S., Nitsenko, V., Hanzhurenko, I., & Havrysh, V. (2020). The Mathematical Modeling Stages of Combining the Carriage of Goods for Indefinite, Fuzzy and Stochastic Parameters. *International Journal of Integrated Engineering*, *12*(7), 173-180. https://doi.org/10.30880/ijie.2020.12.07.019
- Kubalskyi, O. (2022). Social Turbulence as the Scientific Phenomenon: Operational and Strategic Change. *Philosophy and Cosmology*, 29, 17-25. https://doi.org/10.29202/phil-cosm/29/2
- 29. Rozin, V. (2021). From Engineering and Technological Process to Post-Cultural Technology. *Future Human Image*, 15, 99-109. https://doi.org/10.29202/fhi/15/9
- Bortnik, R. (2022). On the Current Globalization and the Causes of the Russian-Ukrainian War. Ukrainian Policymaker, 11, 19-25. https://doi.org/10.29202/up/11/3
- Yarmol, L., Tsebenko, S., Andrusiak I., Kovalchuk, O., & Markovskyi, V. (2021). International and national guarantees of economic security. *Financial and Credit Activity Problems of Theory and Practice*, 3(38), 358–367. https://doi.org/10.18371/fcaptp.v3i38.237468
- Balanovska, T., Gogulya, O., Dramaretska, K., Voskolupov, V., & Holik, V. (2021). Using marketing management to ensure competitiveness of agricultural enterprises. *Agricultural and Resource Economics: International Scientific E-Journal*, 7(3), 142-161. https://doi.org/10.51599/are.2021.07.03.09

Мозговий О., Руденко-Сударєва Л., Шевченко Ю., Яценко О., Веньлян Ч.

ЧИННИКИ ВИБОРУ ІНВЕСТИЦІЙНИХ МОДЕЛЕЙ АЗІЙСЬКИХ КОМПАНІЙ У ПЛОЩИНІ РЕАЛІЗАЦІЇ ГЛОБАЛЬНИХ БІЗНЕС-ІНІЦІАТИВ

Розбудова спільноти єдиної долі людства має великий інвестиційний потенціал, повноцінне розкриття якого залежить від ефективної співпраці не лише держав, а й корпоративного сектора, особливо в транскордонному форматі. У статті аргументовано необхідність розвитку внутрішнього потенціалу азійських компаній на тлі зміцнення міжнародних економічних зв'язків та покращення інвестиційного клімату країн-учасниць інвестиційних процесів. На прикладі інвестиційної активності Китаю в країнах Азії показано, що, попри глобальні кризові явища та потрясіння, сформовано грандіозний потенціал для реалізації важливих глобальних ініціатив, найпотужнішою з яких науковці, практики й навіть політики справедливо вважають проєкт «Один пояс – один шлях». Масштабні іноземні інвестиції та вибір відповідних методів транскордонного входу на ринки потенційного інвестиційного інтересу мають вирішальний вплив на успіх великих китайських підприємств у контексті розвитку й реалізації цього проекту. При цьому автори акцентують увагу на виборі таких способів інвестиційної взаємодії як злиття та поглинання (M&A) або інвестиції типу гринфілд. На основі використання економіко-математичного моделювання авторами продемонстровано вплив інтернальних та екстернальних чинників на вибір способу інвестування великими китайськими компаніями в країни, що є перспективними партнерами в реалізації глобальної ініціативи Китаю «Один пояс – один шлях». Аналіз потенціалу для інвестування починається з розподілу факторів на дві умовні групи. З одного боку, ідеться про внутрішньо корпоративний потенціал у складі факторів стратегічних активів, технічних можливостей, міжнародного досвіду, можливостей управління підприємством та масштабу підприємства. З другого боку, до уваги взято зовнішнє середовище, аналітична оцінка якого базується на індексі розвитку інфраструктури країни-реципієнта, контролі над капіталом та величиною культурної дистанції. З огляду на дослідницький інтерес, у рамках аналізу інвестиційного потенціалу для транскордонної взаємодії обрано такі країни як Індія, Індонезія, Пакистан, Казахстан і В'єтнам уздовж маршруту. Завдяки кількісному аналізу 108 інвестиційних проєктів у 6 країнах, отримано орієнтир для входження іноземних інвестицій китайських великих підприємств шляхом злиття та поглинання (M&A) або інвестиції типу гринфілд.

Ключові слова: чинники, інвестиційний потенціал, інвестиційна модель, азійські компанії, глобальна бізнес-ініціатива, один пояс – один шлях

JEL Класифікація: F21, F23, F30