



Research on Risk Prevention and Control Mechanism of Trade Barrier Evasion Type OFDI

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Abstract

The research of the trade barrier avoidance type OFDI risk prevention and control mechanism takes the case of ZTE Corporation as a sample, based on the comprehensive refinement review and reference of its related literature, using AHP, rough set model method and expert. Judging method, conducting empirical analysis, and proposing policy recommendations from the government and enterprise levels, trying to solve the problem of China's overseas investment risk prevention and control.

Key words: Trade barrier evasion OFDI; Risk prevention and control mechanism; Policy recommendations

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INTRODUCTION

According to statistics, between 2006 and 2016, China's foreign investment flows grew at an average annual rate of 35.8%. In 2017, the investment reached 810.75 billion RMB. In the first seven months of 2018, China's foreign investment reached US\$65.27 billion, up 14.10% year-on-year. In the same period, the investment along the "Belt and Road" countries exceeded US\$8.55 billion, up 11.80% year-on-year. At the same time, the failure of Chinese companies to invest overseas has also emerged in an endless stream, showing a trend of increasing year

by year. According to incomplete statistics, more than 200 cases of foreign investment failure occurred in 2005-2018, and the loss rate was as high as 70%. Among them, trade barrier circumvent OFDI cases account for about 45% of the total cases.

With the development of disputes between China and the United States on the "ZTE" case, how Chinese companies respond to overseas investment risks has become a focus of attention. Taking ZTE as an example, this paper conducts in-depth discussions on the trade barrier evasion OFDI risk prevention and control mechanism, and uses AHP and expert judgement to empirically analyze the trade barrier evasion OFDI risk prevention and control mechanism, and "going out" for Chinese enterprises. To build a scientific overseas investment risk prevention and control mechanism to provide decision-making ideas.

1. THE LITERATURE REVIEW AND REFERENCE

In the late 19th and early 20th centuries, Germany conducted FDI in the United States, Russia, and other European countries, FDI in the United States and other parts of Europe, and FDI in the United States in Canada and Europe. Among them, the investment based on circumventing trade barriers is called trade barrier circumvention type OFDI. This kind of investment is defined as a kind of enterprise behavior in order to avoid the tariff or non-tariff barrier of the host country and enjoy the relevant "green space" policy of the host country, and then adopt the investment in the host country. Obviously, the OFDI based on trade barrier circumvention is a kind of passive enterprise investment behavior caused by "external inducement", which is completely different from the general energy demand type, pure capital type and market expansion type. Horstman and Markusen are the authoritative research on this proposition. The main variables involved in the

Table 1
Chinese Top Ten Overseas Investment Failure Case Statistics (2008-2018)

Years	Company	Case	Amount of loss	Cause	Investment type	Country
2018	China railway engineering	Stop the construction of high-speed railway	140 billion	Government change	Trade type	Malaysia
		Return of high-speed train	48 carriages	Japanese intervention	Trade type	Philippines
2017	ZTE Corporation	slug	14 billion	Suspected violation	Trade type	America
	CEIBS sports	Acquisition of AC Milan	\$200 million	Group disintegration	Trade type	Italy
2016	State Grid Corporation of China	Acquisition of Ausgrid Inc.	\$3. 3 billion	Political intervention	Trade type	Australia
2015	Unisplendour Corporation	Acquisition of Western Digital, USA	6. 3 billion RMB	CFIUS intervention	Trade type	America
2014	China National offshore Oil	Acquisition of offshore companies	621 million	Insufficient early proof	Trade type	unknown
2013	Shandong Qixing Iron Tower Co. , Ltd	Acquisition of Stonewal Mining	\$110 million claimed	Break a contract	Energy type	South Africa
2012	SANY	Acquisition of wind power plants	More than \$20 million	Political intervention	Trade type	America
2011	China Power Investment Corporation	Misong Hydropower Station and other projects	7. 3 billion	Local residents protested	Energy type	Burma
	13 central enterprises	Over 50 large projects	\$20 billion	War	Market type	Libya
2010	China Overseas Construction Group Co. , Ltd.	Poland A2 Expressway	3. 5 billion claimed and 1. 725 billion fines	Insufficient early proof	Trade type	Poland
	CHALCO	Acquisition of Rio Tinto shares	75 billion RMB	Political intervention	Trade type	Spain
2009	China Aerospace Science and Technology Corporation	Investment in photovoltaic grid-connected power plants	Subsidies reduced by about 1/3	Misunderstand the types and amounts of subsidies	Energy type	Italy
2008	Ping An Insurance (Group) Company of China. , Ltd	Buy Shangfutong Group	the principal is less than 30%	Lack of predictive experience	Trade type	Belgium

Source: Organized according to relevant data published by the WTO and the Ministry of Commerce.

study focus on the quota (quota), tariff (tariff) and so on. Drake and Caves' research found that Japan's use of large-scale FDI to circumvent US trade protection just supported Helpman's theory. Blonigen adopted the method of

setting dummy variables, that is, taking 1 in the year when the anti-dumping investigation was initiated, and 0, and their research conclusions also supported the anti-dumping barriers to stimulate foreign investment. For the motivation of direct foreign investment behavior of Chinese enterprises, Du Kai (2010; 2012) and other people's research results also support the above theory. And Bhagwati (1987) proposed a new compensation investment theory; the theory of "trade protection" founded by Blonigen and Ohno (1998) proves that the foreign direct investment behavior of enterprises only belongs to the "endogenous" self-development extroverted market expansion and has little relationship with trade barriers.

In the research on the OFDI risk prevention

mechanism. Tyebjee and Bruno (1984) used questionnaires and factor analysis to divide the basic indicators into five categories: market attractiveness, product differentiation, management ability, and environmental threats. Ability and liquidity, to made a further study to to explore the interactive mechanism of variables affecting risk prevention mechanism. Fan Zhiping (1999) proposed a comprehensive evaluation system including environmental evaluation subsystem, risk evaluation subsystem and economic benefit evaluation subsystem based on foreign research results. Yin Shuya (1999) combined the actual situation of China to modify the decision model of Tyebjee and Bruno, added the "exit mechanism potential" factor in the original model, and used the combination of weight and probability to evaluate the evaluation criteria.

Quantitative analysis; Liu Dexue and Fan Zhixue (2002) made similar studies, and the same or similar conclusions have been drawn, which further deepen the study of the theory.

The above-mentioned trade barrier evasion OFDI research literature focuses on internal and external driving forces such as market-based, tariff, anti-dumping, and technology variables for general foreign investment, but for trades such as market access, government intervention, and heterogeneous culture. In the aspect of dealing with risk prevention mechanism, it only discusses the risk prevention mechanism of enterprise general foreign direct investment, but basically does not explore the risk prevention and control mechanism based on trade barrier evading type OFDI. For the risk prevention and control mechanism based on trade barrier evasion OFDI, it is basically not explored. Under the background of "One Belt, One Road", there are different motives in the investment process of China's overseas major infrastructure investment, and there are many obstacles and risks. Strengthening the research on the trade barrier evasion OFDI risk prevention mechanism not only further promotes the depth of the theory. Breadth research. Moreover, it also provides relevant policy recommendations for the risk prevention and control of China's major overseas infrastructure investment projects based on trade barriers, which has important practical significance.

2. TRADE BARRIERS EVASIVE OFDI RISK VARIABLES AND IDENTIFICATION

2.1 Confirmation and Identification of Risk Variables

Based on the risk variables of trade barrier evading type OFDI and taking ZTE as an example. This research selects 10 data of typical failure cases and establishes a risk identification system, and established a recognition system to lay the foundation for the next empirical study. We divide risk into: political risk; trade barrier risk; financial risk; cultural risk; technical risk five categories, and then divide its variables into indicators of different categories of the first, second and third levels.

2.1.1 Political Risk

Mainly in the international macro environment and the host country's micro-political environment. The international macro-environment is mainly reflected in the influence of international organizations and multilateral agreements on the policies of relevant countries; the micro-environment of the host country mainly reflects the change of political power and political system. Second, the host country's domestic ideology such as religious consciousness, nationalism, and xenophobia.

2.1.2 Trade Barrier Risks

It mainly involves variables in both tariffs and non-tariffs.

2.1.3 Financial Risk.

The security of capital, is the important variable of overseas investment concern. the influence of the change of the international exchange rate market environment is not analyzed enough or a series of management strategies, such as financial decision (financing), capital control and so on, are not good enough, all of which will bring the corresponding management risk.

2.1.4 Cultural Risks

It is mainly reflected in two variables of national culture and corporate culture. In the process of globalization and localization, these two variables have more and more influence on foreign enterprises. It often makes peace with political risk variables, which is more and more inductive to the increase of the probability of foreign enterprises undefined operating risks.

2.1.5 Technical Risks

The first is the conflict of technical standards. The industry or technical standards of Chinese companies are quite different from those of the host country, even the standard system. for example, overseas investment in the automotive industry, product technical indicators, such as engine standards or displacement standards applications, may be very different US or European standards system; Second, intellectual property protection system. Whether the enterprise technology itself is advanced, whether it is easy to be imitated and replaced, the cost and time of research and development are beyond the scope of the enterprise, and whether the research and development method meets the market demand for technology and products, etc., in the face of the host country's intellectual property protection. Strength and weakness will directly lead to technical risks.

2.2 Construction and Analysis of Risk Identification System

2.2.1 Identify Indicator Settings

Risk identification indicators generally consist of two parts. The first is the enterprises external market identification indicators, which are mainly formulated for various factors in the external environment and their changes and the risks that may be caused by foreign direct investment enterprises. Second, the enterprises internal risk monitoring indicators, mainly from the collection and analysis of environmental data and financial data of overseas investment enterprises. This indicator is mainly derived from the "balance sheet" and "Cash Flow Statement" published or collected by overseas investment companies in the statistical data sheets such as ZTE Corporation. data.

2.2.2 Risk Limit Setting

According to the characteristics and environmental characteristics of OFDI enterprises with trade barriers, especially based on the comprehensive consideration of

the risk bearing capacity and functional characteristics of various business departments, the representative indexes are selected and the risk warning interval is set up. Of course, it should also be considered that the risk level is a dynamic value and is not fixed, its probability reliability is based on the real information data provided by various business departments and early warning departments.

2.2.3 The Setting of the Risk Warning Level

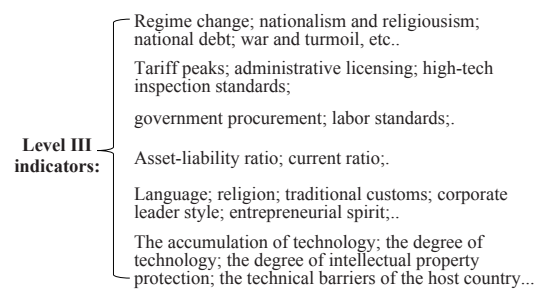
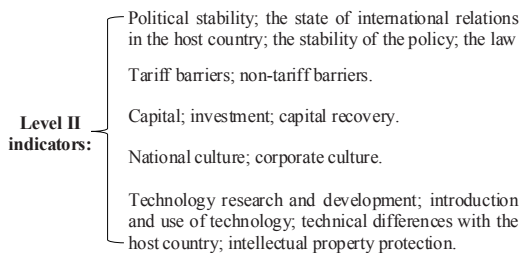
The early warning level of the enterprise's foreign direct investment risk is set to the following five levels: (a) Normal: It means that the political and economic environment of the host country is in good condition, the return on investment of the enterprise is stable and can be expected to be recovered; (b) Concern: the risk factors of the external environment of the foreign direct investment enterprise and the external environment of the investment are increased, and the characteristics of various risks are revealed, which has a certain effect on the business activities of the enterprise. The impact may pose a threat to the future investment and operation of the enterprise; (c) General: Refers to the increase of internal and external environmental risk factors and causes direct losses to the business activities of the enterprises. (d) Obstacles: Risks have emerged, and have caused major obstacles to corporate investment and business activities, which makes business operations more and more difficult. (e) High-risk: the degree of risk beyond control.

2.2.4 Construction of Risk Variable Indicator System

Using the tiered approach, the risk indicators of foreign direct investment of enterprises are set as: five major indicators: political risk, trade barrier risk, financial risk, Cultural risk and technical risk. Then divide the above indicators into several levels 2 and 3 (see the table below for evaluation indicators). This paper will use the combination of expert scoring method and rough set model comprehensive evaluation method to carry out experimental evaluation and test of risk.

Overseas investment risk variable indicator system

Level I indicators: F1 political risk; F2 trade barrier risk; F3 financial risk; F4 cultural risk; F5 technical risk.



According to the above three levels, the five main indicators are composed of a level I factor set:

$$F = \{f1, f2, f3, f4, f5\} \quad (1)$$

Level II indicators form a set of secondary factors. Such as:

$$F1 = \{f11, f12, f13, f14, f15\} \quad (2)$$

Level III indicators form a three-level factor set.

$$F11 = \{f111, f112, f113, f114, f115\} \quad (3)$$

3. AN EMPIRICAL ANALYSIS OF THE RISK PREVENTION AND CONTROL MECHANISM OF TRADE BARRIER AVOIDANCE OFDI

3.1 Set Evaluation Indicators and Risk Classification

3.1.1 Setting Judgment Index System

According to the analysis of the risk classification and identification of the typical cases of ZTE and China's top 10 overseas investment failures in 2008-2018, the stratification method was used to determine the risk evaluation index system.

The evaluation indicator set is set to three levels:

The first layer is:

$$F = \{f1, f2, f3, f4, f5\} \quad (4)$$

The second layer is:

$$f1 = \{f11, f12, f13\}, f2 = \{f21, f22, f23\}, f3 = \{f31, f32, \dots\}, f4 = \{f41, f42\}, f5 = \{f51, f52\} \quad (5)$$

The third layer is:

$$\begin{aligned} f1 &= \{f1, f12, f13, \dots\}, \\ f2 &= \{f21, f22, f23, \dots\}, \\ f3 &= \{f31, f32, \dots\}, \\ f4 &= \{f41, f42, \dots\}, \\ f5 &= \{f51, f52, \dots\} \end{aligned} \quad (6)$$

3.1.2 Determine Risk Level

According to the content studied in the previous article, the evaluation set is set, that is, the risk level is: $F = \{F1, F2, F3, F4, F5\} = 1, 2, 3, 4, 5$. Among them, 1, 2, 3, 4, 5, corresponding to the risk level: g1 = normal; g2 = attention; g3 = general; g4 = obstacle; g5 = high risk

3.2 Construction and Further Empirical Analysis Model

3.2.1 Evaluation Value and Indicator Weight

According to the principle of rough set model, the risk is divided into F1 political risk; F2 trade barrier risk; F3 financial risk; F4 cultural risk; F5 technical risk and other five categories, which are regarded as conditional attributes, and each attribute has a granularity; Use comprehensive evaluation as a decision attribute. Set the judgment value weight interval index 0. 01-1. 00, and simplify the condition attribute value to the corresponding g1 (normal); g2 (concern); g3 (general); g4 (obstacle); g5 (high risk), etc. risk level; monitoring decision value is set to general and good. Therefore, the five conditional attributes are the five major granularities. Set to $F1= \{f1\}$; $F2=\{f2\}$; $F3=\{f3\}$; $F4= \{f4\}$; $F5=\{f5\}$

3.2.2 Constructing a Risk Prevention Mechanism Model

In the course of the research, this paper conducted an expert questionnaire survey on how to conduct risk prevention and control of Chinese enterprises' overseas investment under the background of the Belt and Road. It has issued 200 questionnaires and successfully recovered 150 valid questionnaires. 150 questionnaires are divided into 5 object groups to form a decision information system, m_x is used to represent a group of objects, F_i is used to represent their respective attributes, and processed according to the corresponding procedures and calculation

methods. The following empirical model is obtained.

Table 2
Enterprises Avoid Trade Barriers Type OFDI Risk Prevention Rough Set Model

	F ₁	F ₂	F ₃	F ₄	F ₅	d
m ₁	g ₁	g ₂	g ₃	g ₄	g ₅	G
m ₂	g ₂	g ₃	g ₄	g ₅	g ₁	CO
m ₃	g ₃	g ₄	g ₅	g ₁	g ₂	CO
m ₄	g ₄	g ₅	g ₁	g ₂	g ₃	G
m ₅	g ₅	g ₁	g ₂	g ₃	g ₄	CO

3.2.3 Calculation and Determination of the Weights of the Second and Third Level Risk Values

According to international practice and expert assessment scoring method, the scores of overseas investment risks of five dimensions, namely, political, trade barriers, finance, culture and technology, are set to 0.25, 0.20, 0.15, 0.20, 0.20. Using the AHP (1-9 scale method) method, the three-level indicators covered by the five major risks are substituted into the relevant data of the questionnaire survey, and then the data of the judgment matrix is obtained, and then the summation method is used to calculate the characteristic root of the judgment matrix. Corresponding vectors are further tested for consistency, so as to obtain the weights and test results of each risk dimension indicator layer (see table below).

Table 3
Trade Barrier Avoidance Type OFDI Risk Indicator System and Weight Distribution List

Level I indicators(F ₁)	Level II indicators(F ₂)	Level III indicators(F ₃)	Weight	Consistency Check
Government risk F ₁	Regime stability f ₁₁	regime change f ₁₁₁	0. 50	$\lambda_{max}=3. 09$ CI=0. 045 RI=0. 52 CR=0. 087<0. 1
		public debt f ₁₁₂	0. 25	
		War and civil strife f ₁₁₃	0. 25	
	State of international relations in the host country f ₁₂	Relations between China and the Host country f ₁₂₁	0. 58	$\lambda_{max}=1. 708$ n<3, no consistency check required
		Relations between host and third party States f ₁₂₂	0. 42	
	Policy stability f ₁₃	Industry and monetary policy f ₁₃₁	0. 33	$\lambda_{max}=2$ n<3, no consistency check required
		Political corruption f ₁₃₂	0. 67	
	Law f ₁₄	Licensing and Safety Review f ₁₄₁	0. 33	$\lambda_{max}=3. 026$ CI=0. 013 RI=0. 52 CR=0. 026<0. 1
		National treatment legal provisions f ₁₄₂	0. 37	
		Relief measures for international trade f ₁₄₃	0. 29	

To be continued

Continued

Level I indicators(F ₁)	Level II indicators(F ₂)	Level III indicators(F ₃)	Weight	Consistency Check	
Trade barrier F2	Tariff f_{21}	Tariff peak f_{211}	0.16	$\lambda_{\max}=6.23$ CI =0.046 RI =1.26 CR =0.036<0.1	
		Tariff-Rate Quota f_{212}	0.17		
		Discriminatory domestic tax f_{213}	0.18		
		Investment access Restrictions f_{214}	0.17		
		Tax discrimination f_{215}	0.17		
	Non tariff f_{22}	foreign equity restriction f_{216}	0.16	$\lambda_{\max}=5.026$ CI =0.007 RI =1.12 CR =0.006<0.1	
		Import and export management restriction f_{221}	0.20		
		government procurement f_{222}	0.10		
		Improve the technical standard of product inspection f_{223}	0.28		
		Abuse of trade remedies f_{224}	0.17		
Financial risk F	Capital f_{31}	Labour standards f_{225}	0.25	$\lambda_{\max}=4.051$ CI =0.017 RI =0.89 CR =0.019<0.1	
		asset-liability ratio f_{311}	0.46		
		current ratio f_{312}	0.22		
		quick ratio f_{313}	0.15		
	Invest f_{32}	Cash flow liability ratio f_{314}	0.17		$\lambda_{\max}=4.238$ CI =0.079 RI =0.89 CR =0.089<0.1
		Cost profit rate f_{321}	0.19		
		Net selling interest rate f_{322}	0.30		
		Net interest rate on total assets f_{323}	0.11		
		Return on net assets f_{324}	0.42		
		turnover of total capital f_{331}	0.10		
Fund recovery f_{33}	inventory turnover ratio f_{332}	0.25	$\lambda_{\max}=4.114$ CI =0.038 RI =0.89 CR =0.042<0.1		
	turnover of current assets f_{333}	0.20			
	average accounts receivable turnover ratio f_{334}	0.45			
	Language f_{411}	0.23			
Cultural risk F4	Nation f_{41}	religion f_{412}	0.17	$\lambda_{\max}=4.217$ CI =0.072 RI =0.89 CR =0.081<0.1	
		social customs and habits f_{413}	0.30		
		Communication method f_{414}	0.30		
	Enterprise f_{42}	Leadership style f_{421}	0.23	$\lambda_{\max}=4.191$ CI =0.064 RI =0.89 CR =0.072<0.1	
		spirit of enterprise f_{422}	0.20		
Enterprise internationalization degree f_{423}		0.35			
		Trade union strength f_{424}	0.23		

To be continued

Continued

Level I indicators(F _i)	Level II indicators(F _j)	Level III indicators(F _k)	Weight	Consistency Check
Technology risk F5	Technology Research and Development f ₅₁	Technology accumulation f ₅₁₁	0.24	λ _{max} =4.051 CI=0.017 RI=0.89 CR=0.02<0.1
		Advanced technology f ₅₁₂	0.28	
		Technical collaboration capability f ₅₁₃	0.34	
		Technical transformation difficulty degree f ₅₁₄	0.14	
	Introduction and Application of Technology f ₅₂	Grasp the development of technology f ₅₂₁	0.65	λ _{max} =2 n<3, no consistency check required
		Industry technical level f ₅₂₂	0.35	
	Technical differences with host countries f ₅₃	Technology and equipment standardization system f ₅₃₁	0.50	λ _{max} =1 n<3, no consistency check required
		technology life cycle f ₅₃₂	0.50	
	Intellectual property protection f ₅₄	Law and Regulation of Protection f ₅₄₁	1.00	λ _{max} =1 n<3, no consistency check required

3.2.4 Further Verification and Analysis

According to the data given by the Chinese enterprise overseas investment risk prevention rough set model, the risk granularity is classified, and the results are as follows:

$$\begin{aligned} W/F_1 &= \{ \{M_1, M_{3f}\}, \{M_2, M_{4f}\}, \{M_3, M_{5f}\} \}; W/ \\ F_2 &= \{ \{M_1, M_{2f}\}, \{M_3, M_{4f}\}, \{M_5, M_{3f}\} \} \end{aligned} \quad (7)$$

$$\begin{aligned} W/F_3 &= \{ \{M_1, M_2, M_{3f}\}, \{M_3, M_{4f}\}, \{M_5, M_{3f}\} \}; W/ \\ F_4 &= \{ \{M_1, M_3, M_{4f}\}, \{M_2, M_{4f}\}, \{M_5, M_{3f}\} \} \end{aligned} \quad (8)$$

$$\begin{aligned} W/F_5 &= \{ \{M_{1f}\}, \{M_2, M_{3f}\}, \{M_3, M_{4f}\}, \{M_5, M_{3f}\} \}; W/ \\ d &= \{ \{M_2, M_{1f}\}, \{M_2, M_{1f}\}, \{M_2, M_{1f}\} \} \end{aligned} \quad (9)$$

Since we set the risk judgment value index interval to 0.01-1.00, the condition attribute value is simplified to the corresponding g1 (normal); g2 (concern); g3 (general); g4 (obstacle); g5 (High-risk) and other five levels. And to monitor the decision value, the reduction is set to: general and good to define. Then, the criticality of risk is 0.50 as a warning node. That is, the smaller the risk value below 0.50, the smaller the business risk; the greater the risk value above 0.50, the greater the risk.

When the information value y=0.60 (0.5<y≤1) is taken, the attribute subset of risk prevention can be simplified as {f1, f2, f3, f4, f5}. Then we can get the corresponding decision rules:

$$K1=(F_1, g_1) \wedge (F_2, g_2) \wedge (F_3, g_3) \wedge (F_4, g_4) \wedge (F_5, g_5) \rightarrow (d, G, [0.50, 1]) \quad (10)$$

$$K2=(F_1, g_2) \wedge (F_2, g_1) \wedge (F_3, g_3) \wedge (F_4, g_3) \wedge (F_5, g_4) \rightarrow (d, CO, [0.50, 1]) \quad (11)$$

$$K3=(F_1, g_3) \wedge (F_2, g_4) \wedge (F_3, g_5) \wedge (F_4, g_2) \wedge (F_5, g_4) \rightarrow (d, CO, [0.50, 1]) \quad (12)$$

$$K4=(F_1, g_2) \wedge (F_2, g_2) \wedge (F_3, g_3) \wedge (F_4, g_2) \wedge (F_5, g_1) \rightarrow (d, G, [0.50, 1]) \quad (13)$$

$$K5=(F_1, g_1) \wedge (F_2, g_2) \wedge (F_3, g_4) \wedge (F_4, g_1) \wedge (F_5, g_2) \rightarrow (d, G, [0.50, 1]) \quad (14)$$

When the information value y=0.50 (0.4<y≤0.5) is taken, the risk prevention attribute subset can be simplified as {f1, f2, f3, f5} and {f2, f3, f4, f5}. Then we can get the corresponding two decision rules:

In the case of {f1, f2, f3, f5}, we can calculate the following decision rules:

$$K1=(F_1, g_1) \wedge (F_2, g_1) \wedge (F_3, g_3) \wedge (F_5, g_3) \rightarrow (d, G, [0.40, 0.50]) \quad (15)$$

$$K2=(F_1, g_2) \wedge (F_2, g_1) \wedge (F_3, g_3) \wedge (F_5, g_4) \rightarrow (d, CO, [0.40, 0.50]) \quad (16)$$

$$K3=(F_1, g_3) \wedge (F_2, g_4) \wedge (F_3, g_5) \wedge (F_5, g_4) \rightarrow (d, CO, [0.40, 0.50]) \quad (17)$$

$$K4=(F_1, g_2) \wedge (F_2, g_2) \wedge (F_3, g_1) \wedge (F_5, g_1) \rightarrow (d, G, [0.40, 0.50]) \quad (18)$$

$$K5=(F_1, g_1) \wedge (F_2, g_2) \wedge (F_3, g_4) \wedge (F_5, g_2) \rightarrow (d, G, [0.40, 0.50]) \quad (19)$$

In the case of {f2, f3, f4, f5}, we can calculate the following decision rules:

$$K1=(F_2, g_1) \wedge (F_3, g_3) \wedge (F_4, g_2) \wedge (F_5, g_3) \rightarrow (d, G, [0.40, 0.50]) \quad (20)$$

$$K2=(F_2, g_1) \wedge (F_3, g_3) \wedge (F_3, g_3) \wedge (F_4, g_3) \wedge (F_5, g_4) \rightarrow (d, CO, [0.40, 0.50]) \quad (21)$$

$$K3=(F_2, g_3) \wedge (F_3, g_5) \wedge (F_3, g_5) \wedge (F_4, g_2) \wedge (F_5, g_4) \rightarrow (d, CO, [0.40, 0.50]) \quad (22)$$

$$K4=(F_2, g_2) \wedge (F_3, g_1) \wedge (F_3, g_1) \wedge (F_4, g_2) \wedge (F_5, g_1) \rightarrow (d, G, [0.40, 0.50]) \quad (23)$$

$$K5=(F_2, g_2) \wedge (F_3, g_4) \wedge (F_3, g_4) \wedge (F_4, g_1) \wedge (F_5, g_2) \rightarrow (d, G, [0.40, 0.50]) \quad (24)$$

Above, we use the rough set model to perform corresponding mathematical calculation and processing on the relevant data of the expert questionnaire, and explore 10 overseas investment risk decision rules under the condition attribute and decision attribute regulation. The rule precision is 1 and the decision accuracy is 1/5. Obviously, the accuracy of the rules is not much different. That is to say, when performing large-scale data verification, it is possible to omit cumbersome procedures and perform simplified rule checking. The accuracy of decision-making is inevitably reduced due to the interference and influence of the objective variable. In some cases, large deviations occur, distortions occur, and the probability of risk increases.

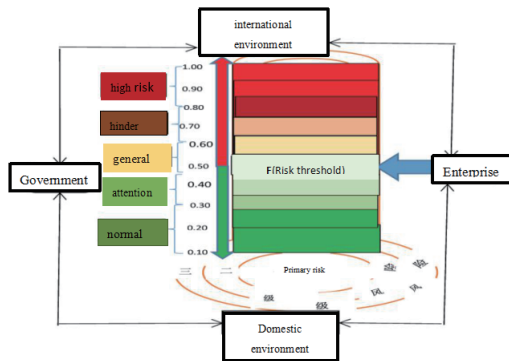


Figure 1 Schematic Diagram of Trade Barrier Avoidance Type OFDI Risk Prevention and Control Mechanism

4. CONCLUSIONS AND POLICY RECOMMENDATIONS

4.1 Conclusion

Based on the empirical study of the trade barrier avoidance type OFDI risk prevention and control mechanism, we draw the following conclusions: First, the main industry of overseas trade barrier type OFDI is concentrated in the manufacturing sector. Therefore, the risk is multifaceted, that is, the industries and products in which the investment company is located are highly vulnerable to the exclusion and impact of the triple market

such as the global market, the host country market and the home country market. Second and third risk variables by using the two dimensions of conditional attributes and decision attributes. We find that: (a) between three levels of risk, variables and variables there will be mutual influence and conversion. Cases such as ZTE have repeatedly shown that the occurrence of major risks is directly related to the second and third-level risk variables, and has a mixed effect and a chain reaction; (b) based on the above qualitative and quantitative analysis, the risk prevention and control rules are drawn: it should be preset in the risk prevention and control interval, that is, the wind control value interval is set to be between 0.01 and 1.0, and 0.5 is the risk critical point to move downward. That is, the smaller the risk coefficient, the smaller the business risk is; on the contrary, the greater the risk coefficient, the greater the operational risk; (c) the probability of occurrence of the risk is different due to the influence of different variables. In developed countries, it is mainly affected by laws and regulations, and the probability of occurrence is high. In developing countries and regions, it is greatly influenced by heterogeneous cultures (religion, traditional habits, etc.) and political variables, and the probability of occurrence is high.

4.2 Policy Suggestion

4.2.1 Government Level

(a) Formulate overseas investment strategy development plans and implement a large economic and trade strategy.

In the context of globalization, the world market has become an open, transparent, open integrated market. The market competition and change speed is extraordinary, the enterprise wants to enter the market, occupies the market, not only the enterprise matter, but also needs the government level macroscopic guidance and the support. Therefore, to carry out “one belt, one road” strategy in an all-round way, the overall strategic development plan for FDI development should be formulated at the national level.

The overall strategic plan should include the main body of investment, overall size, industry selection, location choice, and preferential policies for foreign direct investment. It is necessary to ensure that the scale and flow of OFDI meet the overall strategic requirements of the country undefineds foreign politics, economy, diplomacy and direct investment. To realize the strategic goal of “deproductivity”, “supply-side reform” of industrial upgrading and “going out”.

(b) Establish and improve the legal and regulatory system, and protect the legitimate rights and interests of enterprises overseas according to law.

In order to protect domestic enterprises and markets, host countries often suppress foreign enterprises under the pretext of national security, environmental protection and “double impede” survey. It brings great pressure and predicament to foreign enterprises. Therefore,

it is very important to use legal means to protect the legitimate rights and interests of Chinese enterprises in overseas operations, we should learn from the developed countries in Europe and America to formulate a series of relevant laws, such as the “Chinese Enterprises Overseas Investment Law”, the “Overseas Investment Enterprise Income Tax Law”. Through the formulation and operation of the above laws and regulations, China’s overseas investment enterprises could be under protection. It is necessary to fully study and use the WTO rules, and provide security guarantees to Chinese overseas investment companies in terms of laws and regulations, information and information, international talents and international relations.

(c) Deepen the reform of management system and mechanism and improve management efficiency.

First, learn from the practices of countries such as Japan and the United States, and establish a unified management institution for state-level foreign direct investment under the Ministry of Commerce. The national foreign-related chambers of commerce and related associations and research institutions will be coordinated to achieve “one window to the outside world” to improve efficiency; secondly, simplify the procedures for examination and approval of foreign direct investment and implement a filing system. We completely abandon the practice of “re-approval and light management” in China’s foreign direct investment management. For the overseas investment behavior of non-state-owned enterprises, except for special areas, enterprises should make independent decisions.

4.2.2 Enterprise Level

(a) First, prevent the occurrence of political risks.

The existence of national sovereignty objectively exists the difference of system arrangement and execution. In particular, political system performance is a direct protection of domestic enterprises and markets. Therefore, the political risk often becomes the first big risk of the foreign enterprise. In the process of management, enterprises should take the initiative to obtain the relevant political risk information of the host country through Chinese embassies and consulates stationed abroad, and use the fuzzy comprehensive evaluation method to carry on the comprehensive evaluation of the risk factors existing in the political environment of the host country from time to time. In order to determine the level of political risk and the actual degree of harm, in addition, foreign professional risk assessment agencies, such as S & P and Mood undefineds of the United States, can be used to evaluate the host country undefineds political risk, so as to enhance the scientific nature of prevention.

(b) Establish a scientific prevention system to prevent systemic risks from internal management.

To deal with risks, enterprises are the main body. Therefore, it is very important to improve the scientific

management level of the subject. First, strengthen internal control and external supervision. formulate a sound internal management and control system for overseas investment enterprises; effectively use internal information, relevant market information, and relevant laws and regulations to restrict and supervise overseas business operators. Irregular financial audits of overseas subsidiaries; immediate grasp and discovery of financial risks that may occur and exist in overseas operating companies. Second, establish a scientific human resources management mechanism. Focus on the introduction of excellent international talents combined with the company’s own training of specialized talents. formulate and implement an equity incentive system to enable employees to hold shares and enhance their sense of responsibility and innovation. Create a high-quality corporate culture, motivate employees’ sense of corporate honor and professionalism, and strengthen employees’ sense of belonging.

(c) Implement the Strategy of Technical Innovation.

It is a powerful tool for enterprises to break trade barriers by possessing high, precise and sharp scientific frontier monopoly technologies. The trade war between China and the United States, which started with the ZTE case, is on the surface a trade dispute, and its essence is that the American sword refers to China’s high-tech industry. Therefore, in order to break through, Chinese enterprises must unswervingly follow the path of technological innovation and attach great importance to the prevention and control of technological risks under the background of “made in China 2025” strategy. Such as in the Technical R & D consultation; Technology secrecy, Technical Exchange, etc. Contact with domestic and foreign technical advisory institutions to keep abreast of information on technical barriers in host countries; the closeness of contact with technical advisory bodies at home and abroad, and must follow the frontier status and development of technology development; To make full use of the favorable conditions of developing countries in the dispute settlement mechanism of WTO and the agreement of technical barriers, we should fight against the host countries that abuse the trade relief means in a rational and economical way, and safeguard the legitimate technical rights and interests of the enterprises themselves.

(d) Prevent heterogeneous cultural risks.

The failure cases of overseas investment in recent years have repeatedly shown that the risk of heterogeneous culture to the internationalization of foreign enterprises is increasing. Among them, the language, religion and traditional customs in the national culture have instinctive resistance and rejection to foreign enterprises, so and the entrepreneurial spirit and leadership of the corporate culture. For example, in Southeast Asia, Central Asia, Africa, and the Middle East, the failure of Chinese enterprises to invest has fully proved this point. Therefore,

Chinese companies must attach great importance to the integration of heterogeneous cultures in overseas investment.

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