Research Article

An Analysis of the Influencing Factors in the Establishment of the Overseas Agricultural Cooperation Zones under the Belt and Road Initiative Based on Logit Model

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A total of 57 overseas agricultural cooperation zones have been selected from 68 countries along the Belt and Road and extended areas from 2006 to 2018 as samples, and the corresponding indexes of bilateral trade in agricultural products, agricultural resource endowments, labor resources, infrastructure, and economic freedom have been chosen for parameter estimation based on the maximum likelihood method under the Logit model for an empirical analysis of the main influencing factors in the establishment of the overseas agricultural cooperation zones. The empirical analysis results indicate that the total import and export trade volume of agricultural products, agricultural land area, and labor resources of the host country have a significant promoting effect on the establishment of overseas agricultural cooperation zones. The economic freedom index has a significant negative impact on the establishment of overseas agricultural cooperation zones, while the port throughput has no significant impact. China should consider several main factors when selecting a host country to establish overseas agricultural cooperation zones, including bilateral trade volume of agricultural products, agricultural resource endowments, labor resources, and economic freedom of the host country, which can provide reference for the spatial layout of the overseas agricultural cooperation zones.

1. Introduction

Overseas economic and trade cooperation zones (hereinafter referred to as overseas economic & trade cooperation zones) are a specific concept first proposed by the Ministry of Commerce of China. Fundamentally, an overseas economic & trade cooperation zone is established in a specific region of the host country on the basis of full consultation and negotiation with the host country with the support of the government, in which domestic enterprises are entities. Overseas economic & trade cooperation zones can be categorized into industrial parks, science and technology industrial parks, logistics and storage zones, bonded zones, and free port zones, providing comprehensive support for economy and trade. Operations are based on the model of "guidance by government policies + enterprises as investment entities + marketized operation." Relevant government

departments are responsible for signing the framework MOU, giving play to the role of political and economic consultation, and providing information and financial support for investment enterprises; The specific operation of the park is under the responsibility of an independent legal entity set up overseas by Chinese-controlled enterprises. Within the scope of overseas economic & trade cooperation zones, enterprises can enjoy preferential policies in the production and transaction of the host country and make use of the rich resources and market of the host country, thus embracing a good investment environment. Meanwhile, this is conducive to realizing technical cooperation and exchange with international enterprises and promoting the development of overseas industrial clusters. Therefore, the nature of the overseas economic & trade cooperation zones can be defined as the closer economic and trade cooperation between China and other countries within the specified region

[1]. Overseas agricultural cooperation zones refer to cooperation zones engaged in agricultural and forestry development, animal husbandry and fishery breeding, agricultural product processing trade, and other business types. Overseas agricultural cooperation zones can be categorized into five types, namely, processing and manufacturing, resource utilization, agricultural industry, trade and logistics, and comprehensive cooperation zones. By the end of 2018, China had established 113 overseas economic & trade cooperation zones, of which 58 were overseas agricultural cooperation zones and 43 were in countries along the Belt and Road. Overseas agricultural cooperation zones are an innovative mode for Chinese agriculture to "go global" and an important undertaking point for agricultural cooperation in the "Belt and Road" Initiative. They have played a positive role in promoting Chinese agricultural enterprises to "go overseas together," avoiding trade barriers, forming overseas industrial clusters, and safeguarding the legitimate rights and interests of enterprises. The overseas agricultural cooperation zone actually draws on China's experience in the construction of "special economic zones" and helps Chinese enterprises to go overseas, develop together, and avoid risks by means of "cluster investment, special zone protection and diplomatic relations escort." At the same time, the construction of overseas agricultural cooperation zones also promotes the optimization of agricultural industrial structure and infrastructure upgrading of the host country, provides many new employment opportunities and financial revenue channels for the host country, promotes the economic and livelihood development of the host country, and thus promotes bilateral and even multilateral economic and trade cooperation. Overseas agricultural cooperation zones are a new form of international agricultural cooperation guided by the government to give full play to the cluster effect of "going global," a full reflection of the development concept of promoting mutual benefit and win-win results in international cooperation, and one of the important forms of pushing the Chinese agricultural enterprises and capital to "go global."

2. Literature Review

The "going global" exploration of Chinese enterprises started in the 1990s. However, the enterprises were confronted with many obstacles, including corporate size, lack of policy support, and complex overseas investment environment, and no good results were produced. To encourage and support domestic enterprises to go abroad and invest overseas, the Ministry of Commerce of China put forward the overseas economic & trade cooperation zone strategy in 2005, providing a new opportunity for enterprises to "go global." A series of supporting policies were introduced successively to support the investment of private enterprises of China in developing countries in Asia, Africa, and Latin America, especially in the countries and regions along the Belt and Road. These policies were also intended to support the establishment of economic and trade cooperation zones and facilitate the development of

outward foreign direct investment (OFDI). In 2006, the Ministry of Commerce of China began to prepare for the construction of the overseas economic & trade cooperation zones and approved the construction of the first overseas economic & trade cooperation zone—the Pakistan Haier-Ruba Economic Zone. The domestic market has undergone tremendous changes since 2010, including production capacity shifts, increasing international trade frictions and trade barriers, and gradual disappearance of demographic dividends. In order to reduce or avoid trade barriers, more and more enterprises have come up with the idea of "going global" to establish overseas economic & trade cooperation zones [2]. According to the statistics of the Ministry of Commerce of China, as of September 2018, China had set up 113 cooperation zones in 46 countries, 82 of which were located in 24 countries along the Belt and Road, and 61 of which were overseas agricultural cooperation zones in 23 countries along the Belt and Road. The overseas economic & trade cooperation zones are a kind of "special zone" where enterprises can directly enjoy the preferential policies provided by the signatory countries and the Chinese government, which is more conducive to avoiding investment risks caused by institutional factors. The Belt and Road strategy has brought the importance of overseas economic & trade cooperation zones in promoting regional economic cooperation and alleviating China's overcapacity problem into play [3]. Jiu [4] studied the role and effect of economic and trade cooperation zones and believed that overseas economic & trade cooperation zones could promote the cluster development of enterprises' foreign investment, attract foreign capital, accelerate the industrialization development of host countries, improve the international competitiveness of Chinese enterprises, and provide a rapid growth platform for the overseas development of Chinese enterprises. At present, China's overseas economic & trade cooperation zones have formed a number of industrial chains and are bringing into play an industrial agglomeration effect and significant scale effect as expected. Jia et al. [5] studied overseas agricultural cooperation development zones and argued that overseas agricultural cooperation zones could serve as an important platform for Chinese enterprises to explore the international market, promote bilateral trade, introduce advanced technology, and drive industrial development. Taking the food development zone established by China and Singapore as a typical case, they further put forward suggestions on improving the livelihood development level of the host country, cultivating key enterprises, strengthening political guarantee, and strengthening policy support in the development process of the agricultural cooperation zones. Wang et al. [6] summarized the general situation of the construction and development of overseas agricultural parks and put forward suggestions such as strengthening the scientific layout of the parks, playing a demonstrative role, strengthening the construction of supporting facilities, and actively supporting the development of overseas agricultural parks, so as to make them a good platform for private enterprises to gather and develop, and reduce the risk of enterprises "going global." Guo [7] believed that

overseas agricultural cooperation demonstration zones are "key projects" of China implementing the Belt and Road Initiative in agriculture, building a new platform for Chinese agricultural enterprises to "go global together to resist risks"; preliminarily showed the influence and aggregation effect; and mapped out the outlook of future new directions in agricultural cooperation between China and the countries along the Belt and Road. Based on the information obtained from desk research and field surveys, Ru et al. [8] analyzed the characteristics and existing problems of the current development of overseas agricultural parks and put forward countermeasures and suggestions to promote the high-quality development of overseas agricultural parks. From the perspective of the formation of overseas economic & trade cooperation zones, there are many influencing factors in the establishment process. Scholars have mainly studied the influencing factors from the perspective of establishment location. Zhou et al. [9] analyzed the basis of location choice according to the location distribution and characteristics of overseas economic & trade cooperation zones and made a reasonable prediction of the distribution trend of China's overseas economic & trade cooperation zones, emphasizing the importance of analyzing the industrial structure and location choice of cooperation zones. According to the location choice equilibrium model, the trade gravity model, the location choice of foreign economic and trade cooperation zone building model, the four location selection principles, and the location factor selection method, Chen [10] identified the following factors: macroeconomic condition, political environment factors, resource endowments condition, infrastructure condition, market demand factors, labor costs, and social and cultural factors. Some scholars proposed that the establishment of overseas economic & trade cooperation zones should be based on countries with similar market demand, similar market development characteristics, and similar income levels to China. Xu and Geng [11] believed that it is very reasonable to establish overseas economic & trade cooperation zones in Eastern Europe, because it is more similar to China in terms of economic development level, per capita income, and market development in comparison to other developed countries. Due to the similar level of economic development, economic and trade cooperation zones can open up new overseas markets for Chinese enterprises; reduce the impact of trade frictions and trade barriers; increase the capital inflow of Eastern Europe; strengthen mutual communication between China and Eastern Europe in management, technology, and other aspects; and thus achieve the goal of mutual benefit and win-win results. Pan et al. [12] analyzed the influencing factors in location selection of China's overseas economic & trade cooperation zones based on location theory. In respect of empirical research, Li [13] established a corresponding index system according to location selection factors of overseas economic & trade cooperation zones and further analyzed the investment environment of China's economic and trade cooperation zones in some countries by the factor analysis method. Investment support, human resources, investment attraction, degree of industrialization, and consumption level were concluded as the most critical factors in the location selection of China's overseas economic & trade cooperation zone construction. While South Korea offers the best investment environment, Ethiopia provides the worst investment environment. Yan [14] selected 602 representative multinational companies as empirical cases to study the company data and found that preferential policies, market demand, economic development, opening-up, and natural resources of the host country are key factors in the construction of overseas economic & trade cooperation zones. Zeng [15] adopted the factor analysis method to study the development of China's overseas economic & trade cooperation zones. She concluded that the location choice of overseas economic & trade cooperation zones will be influenced by different factors, the main influencing factors of which are social culture, economic environment, public infrastructure, natural resources, and political law system in descending order. Wang [16] utilized the Logit analysis method and selected the data of infrastructure, labor resources, foreign trade, market environment, and government policies of 54 countries from 2007 to 2016 to study the factors influencing the location choice of economic & trade cooperation zones.

Overseas agricultural cooperation zones have provided effective support for Chinese enterprises, especially small- and medium-sized enterprises, to go global together, and have become important incubator bases for overseas investment and operation of small- and medium-sized enterprises, forming enterprise clusters and promoting industrial development. In essence, they are a new mode of agricultural OFDI. According to the basic theory of OFDI, natural resources, labor costs, productivity, and market size will have an impact on OFDI. The overseas agricultural cooperation zones are a platform for enterprises to "go global" and gather together for development. Are the influencing factors in establishment special? What are the response levels of various influencing factors? These are questions worthy of further study. Literature review shows that scholars have adopted different methods to study the basis and influencing factors in location selection of overseas economic & trade cooperation zones. From the five influencing factors of bilateral trade in agricultural products, agricultural resource endowments, labor resources, infrastructure, and economic freedom, this paper has selected corresponding indexes to conduct parameter estimation based on the maximum likelihood method under the Logit model, then analyzed the main influencing factors in the establishment of the overseas agricultural cooperation zones, and provided a reference basis of spatial arrangement for overseas agricultural cooperation zones.

3. Theoretical and Empirical Analysis of the Influencing Factors in the Establishment of Overseas Agricultural Cooperation Zones

3.1. The Theoretical Basis of Influencing Factor Selection. Overseas agricultural cooperation zone is a kind of cluster OFDI, and its location choice can be explained by the theory of location choice in OFDI theory.

3.1.1. Theory of Comparative Advantage. Japanese economist Kojima [17] applied the Heckscher–Ohlin comparative advantage principle to trade and OFDI and put forward the theory of comparative advantage, also known as the marginal industry transfer theory. According to the Theory of Comparative Advantage, the location factors such as raw materials, labor force, intermediate products, and resource endowment of the host country are the main reference factors for the location selection in foreign direct investment by multinational enterprises. Enterprises generally choose the host country with industrial gradient to invest according to their own industrial characteristics and location factors of the host country.

3.1.2. Eclectic Theory of International Production. British scholar Dunning [18] proposed the eclectic theory of international production, arguing that one of the advantages an enterprise must have when making international direct investment is location advantage, that is, the advantage of the host country or region in terms of investment environment. Location factors include language culture, custom preference, geographical location, population, production factor cost, infrastructure, market potential, resource endowment, trade barriers, and preferential government policies. These location factors have become sufficient conditions to drive enterprises to invest abroad. Only when the advantages in these location factors are obvious can enterprises be motivated to make foreign direct investment.

3.1.3. Industrial District Theory. Marshall [19], a British economist, began to pay attention to the issue of industrial agglomeration in the 1890s. He called the specific area where a large number of similar small- and medium-sized enterprises gather for production "industrial area." According to this theory, the purpose of small- and medium-sized enterprises gathering in industrial areas is to more conveniently obtain economic benefits and convenience from the outside world, such as realizing the sharing of market information, public facilities, and labor resources, which will greatly improve the efficiency of production.

Overseas agricultural cooperative zones are an important way for China to obtain cheap labor and sufficient natural resources in host countries and reduce the cost of enterprises. Although China is rich in materials, it has a large population and insufficient agricultural resources. It needs to obtain agricultural resources through foreign trade. In addition, with the rapid development of urbanization, forest resources and mineral resources are increasingly scarce, resulting in the supply crisis of resources and energy. If we solve the current problem of resource shortage only through resource import, we tend to rely on import trade, thus being controlled by other countries in economic development, which is not conducive to sustainable development in China. Through the establishment of overseas agricultural cooperation zones, China can take the initiative to participate in the allocation of international resources and realize the development and utilization of foreign resources and energy. In addition, China's labor price advantage is gradually

disappearing with the weakening of demographic dividend. The development of traditional industries often relies on cheap labor, so it is very important to seek cheaper labor abroad. Therefore, actively exploring overseas markets and seeking abundant resources and cheap labor force constitute the only way for China to achieve sustainable economic development at present, which has also become an important reason for the construction of overseas agricultural cooperation zones.

To sum up, it can be seen that when an enterprise makes foreign direct investment, the main factors for its location selection involve trade, resource endowment, infrastructure, labor force, market, government policies, social culture, etc. The research on location selection in the relevant theories for foreign direct investment provides theoretical references for the location selection of overseas agricultural cooperative zones.

3.2. Theoretical Analysis of Influencing Factors

3.2.1. Bilateral Trade in Agricultural Products. According to the initial scholarly research, there is a substitution relationship between a country's OFDI and its international trade. For instance, Buckley and Casson [20] believe that OFDI of the home country can be used to replace export trade for the purpose of evading tariffs or nontariff barriers. However, more attention has been paid to the relationship between international trade and OFDI since the 1970s, and the creative effect of OFDI on import and export trade has been effectively proved. For example, Kojima [21] proposed that if the home country has a comparative advantage in a marginal industry, the import amount of the home country's relevant products from the host country will increase when this industry makes an outward investment. If the home country invests production factors into the marginal industry to optimize the industrial structure and promote the development of relevant export trade, the international investment and trade between the home country and the host country complement each other to a certain extent. The bilateral trade volume of agricultural products is a reflection of the trade relationship between the two countries and a manifestation of the level of openness of the host country, especially to China. The agricultural trade between China and countries with overseas agricultural cooperation zones is usually close and highly complementary, so it is expected that bilateral agricultural trade will positively promote the establishment of overseas agricultural cooperation zones.

3.2.2. Agricultural Resource Endowments. According to the Cobb–Douglas production function, enterprise output is affected by capital, technology, land, entrepreneurial ability, and other production factor endowments. It is precisely because of the shortage of domestic agricultural resources and the prominent contradiction between people and land that Chinese enterprises choose to "go global" and make use of both domestic and international markets and resources. Therefore, the abundance of the host country's agricultural resource endowments is an important factor influencing

China's choice of establishing agricultural cooperation zones. The more abundant the agricultural resource endowments, the higher the input-output ratio, the higher the return on investment of enterprises, and the more favorable it is to attract investment. It is expected that the abundance of agricultural resources will positively promote the establishment of overseas agricultural cooperation zones.

3.2.3. Labor Resources.
China's abundant and cheap labor force is what has established its position as the "world factory." The cost advantage of the labor force is a very important factor in attracting foreign investment. Most overseas agricultural cooperation zones fall into labor-intensive industries. With the gradual disappearance of China's demographic dividend, however, labor costs grow. When selecting overseas agricultural cooperation zones, therefore, whether the host country is rich in labor resources becomes an important consideration. The more abundant the labor resources, the lower the labor costs. This is because most of the employees that enterprises need to invest in, in the host country, are hired locally. Therefore, enterprises will give priority to countries or regions with advantages in labor costs, so labor resources are expected to have a positive impact on the establishment of overseas agricultural cooperation zones.

3.2.4. Infrastructure.
The investment and operation of enterprises in overseas agricultural cooperation zones need the support of certain infrastructure. Sometimes, even if the cooperation zone is well constructed, the overall poor infrastructure of a country or a city will increase the operating cost of enterprises in the zone, resulting in the limited investment appeal of the cooperation zone. Therefore, the infrastructure environment of the country or the city where the overseas agricultural cooperation zone is located is also one of the factors attracting the entry of enterprises. Countries or regions with a favorable infrastructure environment and advantages in transportation, power equipment, and Internet communication are more attractive to enterprises, which will bring a lot of business convenience for enterprises to enter the cooperation zone, and correspondingly reduce the capital investment required for entry in the early stage. Therefore, the infrastructure environment is expected to have a positive impact on the establishment of overseas agricultural cooperation zones.

3.2.5. Economic Freedom.
Economic freedom reflects the degree of government interference in the economy. A higher degree of freedom indicates less government intervention and more marketization and thus the higher the amount, speed, and efficiency of resource aggregation. However, at the same time, the higher the degree of economic freedom of the country or the region, the more intense the market competition and the greater the pressure for survival faced by enterprises. Therefore, the market environment represented by economic freedom is also one of the factors influencing the establishment of overseas agricultural cooperation zones.

3.3. Regression Model Setting and Variant Notes.
With reference to the existing research results of scholars, considering that the establishment of overseas agricultural cooperation zones is based on the consultation between the governments of the two countries, the influence of policy factors is basically the same and difficult to quantify, so policy factors are not included in the econometric model. In combination with the research of this paper, the variable indexes of relevant influencing factors are selected as follows in the empirical analysis of the influencing factors in the establishment of overseas agricultural cooperation zones: in terms of bilateral trade, the total import and export trade volume of agricultural products between China and selected sample countries (XAT) is used to measure bilateral trade; the agricultural land area of the host country (XAL) is used to measure the abundance of agricultural resource endowments of the host country; in terms of the index of labor resources, the general total labor force (XLF) is selected; in terms of infrastructure measurement, considering the transport characteristics of agricultural trade and the availability of data, this paper chooses the terminal throughput of the host country (XTT) as an index; in respect of economic freedom measurement, the economic freedom index of a country (XEF) is selected; the index, published by the Heritage Foundation, comprehensively measures the development degree of economic liberalization in a country from various aspects, including trade, investment, and finance. All variables related to the above influencing factors were specifically used in the regression with a lag of one period. The dependent variable indicates whether to establish an overseas agricultural cooperation zone (Y). If the agreement on establishing an overseas agricultural cooperation zone is signed between China and country i in year $t-1$, then all subsequent years starting from year t $Y_{it}=1$; otherwise, $Y_{it}=0$.

The empirical research of this paper adopts the Logit model. If the country establishes overseas agricultural cooperation zones in year t, it will be presented as 1; if the country establishes no overseas agricultural cooperation zones in year t, it will be presented as 0. The explanatory variables are X_1 (XAT), X_2 (XAL), X_3 (XLF), X_4 (XTT), and X_5 (XEF), which represent the influencing factors from five aspects. The Logit model is a probability unit model, which can explain which countries or regions are more likely to establish overseas agricultural cooperation zones, so as to illustrate the main factors influencing the establishment of overseas agricultural cooperation zones. The formula of the Logit model is as follows:

$$\text{Logit}(P) = a_0 + a_1X_1 + a_2X_2 + a_3X_3 + a_4X_4 + a_5X_5. \tag{1}$$

According to the definition of Logit conversion, there is the following formula:

$$\text{Logit}(P) = \ln\left[\frac{p}{(1-p)}\right]. \tag{2}$$

$p/(1-p)$ is called the odds, which mean the probability that an event will occur divided by the probability that it will

not. In this paper, they refer to the ratio of China's establishment and non-establishment of overseas agricultural cooperation zones in a country or a region. Substitute (2) into (1) to obtain

$$p = \frac{\text{Exp}\left(a_0 + a_1 X_1 + a_2 X_2 + a_3 X_3 + a_4 X_4 + a_5 X_5\right)}{\left[1 + \text{Exp}\left(a_0 + a_1 X_1 + a_2 X_2 + a_3 X_3 + a_4 X_4 + a_5 X_5\right)\right]}. \tag{3}$$

In the Logit regression model, dependent variables are dichotomous variables, and error terms are naturally subject to binomial distribution. When estimating parameters, the maximum likelihood method should be selected. The computational formula of partial regression coefficient of independent variables is a_i ($i = 1 - 5$), meaning the change of natural log of the odds when X_i ($i = 1 - 5$) changes by 1 unit; the odds are calculated with Exp (a_i), meaning that the ratio of the probability of establishing and not establishing overseas agricultural cooperation zones is the multiple of the corresponding ratio before the change when X_i ($i = 1 - 5$) changes by 1 unit. Furthermore, the Logit model can also be used to understand the accuracy level of prediction outcomes.

3.4. Sample and Data Sources. As China has established overseas agricultural cooperation zones since 2006, data availability and effectiveness have been comprehensively taken into consideration. Therefore, the sample data from 2006 to 2018 from 68 countries along and extended from the Belt and Road, including the countries where 57 overseas agricultural cooperation zones are located, has been selected for quantitative analysis in this paper. The data of overseas agricultural cooperation zones was collected from the China Council for the Promotion of International Trade website, the Belt and Road website, and the websites of all overseas agricultural cooperation zones. The total import and export trade volume of agricultural products is extracted from the website of China's Ministry of Commerce; the area of agricultural land, total labor force, and terminal throughput from the World Bank database; and the index of economic freedom from the Heritage Foundation. Summary of data variables used in the model is provided in Table 1.

4. Empirical Results and Analysis

4.1. Empirical Results. As shown in Table 2, there may be significant differences in some variables due to differences in resource endowments and political and economic environment of host countries where overseas agricultural cooperation zones are located, as well as differences in degree of domestic resource mobility and trade facilitation.

The panel data of the empirical study in this paper has differences in dimension and order of magnitude. Before the empirical study, all variables should be standardized so as to eliminate the differences between variables. The formula is as follows:

$$Z = \frac{X - \text{mean}(X)}{\text{std}(X)}. \tag{4}$$

The standardized results of all variables are shown in Table 3.

Regression is conducted on the basis of the standardized results of variables, and the regression results are shown in Table 4.

At the significance level of 5%, the likelihood ratio test can reject the null hypothesis that the coefficients of all variables are 0, indicating that the model presented in this paper is reasonable. As can be seen from Table 4, except for the terminal throughput (XTT) variable which is not significant, the coefficients of other variables, such as total import and export trade volume of agricultural products (XAT), agricultural land area (XAL), total labor force (XLF), and economic freedom index (XEF), are statistically significant at the significance level of 5%.

The total import and export trade volume of agricultural products, agricultural land area, and total labor force between the two countries have a positive impact on the establishment of cooperation zones. That is, the higher the value of these indexes, the closer the probability of establishing overseas agricultural cooperation zones in the country to 1, which is consistent with China's establishment of overseas agricultural cooperation zones driven by advantages and costs. Most of China's overseas agricultural cooperation zones are established in Asian and African countries with abundant agricultural resources and cheap and rich labor resources, and they tend to be located in countries with close agricultural trade relations with China. The economic freedom index exerts a negative impact on the establishment of cooperation zones; that is, the greater the index value, the smaller the probability of establishing overseas agricultural cooperation zones in the country.

4.2. Analysis of Empirical Results. As can be seen from the above empirical results, the total import and export trade volume of agricultural products, agricultural land area, and total labor force have a significant positive correlation with the establishment of agricultural cooperative zones; the economic freedom index has significant negative correlation with the establishment of agricultural cooperative zones; the terminal throughput has a positive but not significant impact on the establishment of agricultural cooperative zones. The specific analysis is as follows:

The correlation coefficient of total import and export trade volume of agricultural products (XAT) is positive and passes the 1% significance test, indicating that the agricultural trade between China and the host countries in which agricultural cooperation zones have been established has a significant positive impact on the establishment of cooperation zones, which is an important influencing factor. This means that the Chinese government and companies tend to choose host countries that trade more agricultural products with China. After the enterprises enter the cooperation zone, the finished products can be sold locally or back to the home country, thus promoting the import trade between the home country and the host country. At the same time, the machinery and equipment and some relevant raw materials needed in the production process of the host country can be

TABLE 1: Summary of data variables used in the model.

Variable	Symbol	Explanation	Source
The total import and export trade volume of agricultural products between China and selected sample countries	XAT	Measuring bilateral trade	China's Ministry of Commerce
The agricultural land area of the host country	XAL	Measuring the abundance of agricultural resource endowments of the host country	World Bank
The general total labor force	XLF	Measuring the index of labor resources	World Bank
The terminal throughput of the host country	XTT	Measuring infrastructure	World Bank
The economic freedom index of a country	XEF	Measuring economic freedom	Heritage Foundation

TABLE 2: Descriptive statistics of relevant variables.

Variable	Obs.	Mean	Std. dev.	Min	Max
Y	816	0.164	0.371	0	1
$L1 \cdot XAT$	816	57516	138728	0	880504
$L1 \cdot XAL$	816	243802	476173	6.600	$2.177e + 06$
$L1 \cdot XLF$	816	2065	5910	24.620	50529
$L1 \cdot XTT$	485	$4.442e + 06$	$6.874e + 06$	33127	$3.470e + 07$
$L1 \cdot XEF$	805	60.330	8.967	36.710	89.400

TABLE 3: Standardized results of variables.

Variable	Obs.	Mean	Std. dev.	Min	Max
Y	816	0.164	0.371	0	1
$L1 \cdot XAT\_std$	816	−0.016	0.960	−0.414	5.679
$L1 \cdot XAL\_std$	816	−0.000	1.000	−0.512	4.059
$L1 \cdot XLF\_std$	816	−0.003	0.993	−0.346	8.141
$L1 \cdot XTT\_std$	485	−0.017	0.979	−0.645	4.292
$L1 \cdot XEF\_std$	805	−0.018	1.002	−2.656	3.229

TABLE 4: Logit regression results influencing China's establishment of overseas agricultural cooperation zones.

Variable	Coefficient	Standard error	z	$P > \lvert z \rvert$
$L1.XAT\_std$	0.364	0.122	2.970	0.003
$L1.XAL\_std$	0.611	0.121	5.050	0.000
$L1.XLF\_std$	0.517	0.092	5.600	0.000
$L1.XTT\_std$	0.281	0.187	1.500	0.133
$L1.XEF\_std$	−0.357	0.140	−2.540	0.011

LR chi2 (5) = 69.110 Prob > chi2 = 0.000

imported from the home country, which promotes the export trade of the home country, and the establishment of the cooperation zone boosts the growth of bilateral trade volume of agricultural products.

The correlation coefficient of agricultural land area (XAL) is positive and passes the 1% significance test, indicating that the abundance of agricultural resources in the host country has a significant positive impact on the establishment of cooperative zones. The abundance of the host country's agricultural resources is an important factor influencing China's establishment of overseas agricultural cooperation zones. Due to the shortage of agricultural resources in China, the establishment of overseas agricultural cooperation zones in the host country is motivated by the search for the abundant resources of the host country. For example, the establishment of many agricultural industrial overseas agricultural cooperation zones is simply taking advantage of the host country's rich agricultural resources

and gaining competitive advantages. Therefore, the agricultural land area has a significant positive impact on the establishment of overseas agricultural cooperation zones.

The correlation coefficient of total labor force (XLF) is positive and passes the 1% significance test, revealing that total labor force has a positive impact on the establishment of cooperative zones and is an important influencing factor. One reason for the establishment of overseas agricultural cooperation zones is cost drive. The gradual disappearance of China's demographic dividend leads to the rise of domestic production costs. Therefore, enterprises going global tend to focus on countries and regions with lower production costs to gain competitive advantages. Hence, the abundance of labor resources is an important factor for the host country to choose to establish an overseas agricultural cooperation zone.

The correlation coefficient of infrastructure (XTT) is positive but not significant, revealing that the infrastructure of the host country is not a main influencing factor in the establishment of cooperation zones. Although countries with good infrastructure can reduce the investment in infrastructure construction, shorten the cost recovery time, reduce the cost of enterprise entry, and achieve profits quickly for Chinese enterprises which move into the cooperation zone, the countries in which overseas agricultural cooperation zones are established are mostly developing countries with generally poor infrastructure conditions. This is also a key issue to be addressed in the connection of facilities among the Five Connections under the Belt and Road Initiative. Therefore, China is the one that improves the infrastructure conditions of the host country after establishing the overseas agricultural cooperation zones.

The correlation coefficient of economic freedom index (XEF) is negative and passes the 5% significance test, revealing that the economic freedom of the host country is also a main influencing factor in the establishment of cooperation zones. The higher the economic freedom index, the higher the economic freedom of a country or a region, meaning that the market competition will be more intense. Most of the enterprises in the zone are small- and medium-sized enterprises with relatively weak competitiveness and risk resistance. Small- and medium-sized enterprises new to the global market will prefer countries or regions with low economic freedom and less fierce market competition to accumulate experience and enhance competitiveness. On the other hand, in countries with low economic freedom, it is easier for enterprises in cooperation zones to obtain more preferential policies. Therefore, overseas agricultural cooperation zones tend to be established

in countries or regions with low economic freedom, and the economic freedom index has a negative impact on the establishment of cooperation zones.

5. Conclusions and Revelations

In summary, the results of empirical analysis indicate that in its selection of host countries for the establishment of overseas agricultural cooperation zones, China mainly considers such factors as agricultural trade with China, agricultural resource endowments, labor resources, and economic freedom. China tends to establish overseas agricultural cooperation zones with countries with a large trade volume of agricultural products, rich agricultural resources, rich labor resources, and low economic freedom. However, the infrastructure level of the host country is not the main factor that China considers when choosing countries to establish overseas agricultural cooperation zones.

Countries along the Belt and Road are different from China in terms of culture, beliefs, laws, policies, and customs. Such institutional heterogeneity brings about high risks and high costs to the investment and management of enterprises and restricts the development of the cooperation zone. Therefore, the policy factor is an important factor influencing the development of overseas agricultural cooperative zones. The establishment of overseas agricultural cooperation zones should be first based on the political relations between the two countries, and countries along the Belt and Road with long-term friendly relations and a strong willingness to cooperate with China should be selected as much as possible to build agricultural cooperation zones. The joint support of both governments is a necessary condition to ensure that the construction of overseas agricultural cooperation zones can effectively avoid investment risks and achieve sustainable development. The two sides should keep communication channels open at the governmental level. China should establish and improve the bilateral cooperation mechanism for the construction of overseas agricultural cooperation zones by entering into relevant bilateral agreements with the host government. For example, the joint master plan for the construction of China-Laos Mohan-Boten Economic cooperation zone, reached between the Chinese and Lao governments through consultation, provides strong support for the development of enterprises in the zone, including a series of preferential tax policies and favorable policies for products of origin. Such policy support and institutional guarantees will provide effective political assurance for the development of overseas agricultural cooperation zones and further clarify the legal positioning and investment rights and interests of the zones. Moreover, bilateral agricultural trade volume, agricultural resource endowments, labor resources, and economic freedom of the host country should be taken into account to realize the sound development of overseas agricultural cooperation zones.

Data Availability

Publicly available datasets were analyzed in this study and are provided in Table 1.

Conflicts of Interest

The authors declare that there are no conflicts of interest.

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