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# DISSERTATION

## ORGANIZATION AND ECONOMICS ASPECTS TO FOREIGN ECONOMIC ACTIVITY AGRARIAN ENTERPRISES IN GLOBALIZATION

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Submitted for a scientific degree of Doctor of philosophy (PhD)

The dissertation contains the results of own research.
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## ABSTRACT

**Zhang Lei. Organization and economics aspects to foreign economic activity agrarian enterprises in globalization** - Manuscript.

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In the dissertation work, the theoretical and methodological foundations are confirmed, and practical suggestions for organization and economics aspects to foreign economic activity agrarian enterprises in globalization are formed.

The dissertation aims to demonstrate the organizational and economic activities of Chinese agricultural enterprises, analyze the theoretical basis of their external activities and establish effective mechanisms to ensure the sustainable development of Chinese agricultural enterprises.

The theoretical part reveals the basic characteristics of the globalization process on the external activities of Chinese agricultural enterprises, and studies and compares the different views of scholars on the external activities of Chinese agricultural enterprises. Many scholars study the organization and economic activities of Chinese agricultural enterprises, and find that Chinese agricultural enterprises choose to invest abroad to further promote the economic growth of Chinese agricultural enterprises.

Based on various industries, China's foreign investment in recent years has been rapid and long, both in terms of its total volume and in its flow. In agriculture, although the foreign investment is small, it is also on a rising trend. In order to meet the increasing demand of the world for food and other agricultural products and ensure national food security, China has increased foreign investment in agriculture year by year, from 281 million to $3.29 billion in 2016, and 1.2.8 times from $834 million to $14.89 billion in 2004.Entering 2015, China's agricultural enterprises have begun a wave of foreign investment, and Chinese agricultural enterprises have broader investment prospects for foreign countries.

Based on the conducted research, currently, some domestic agricultural firms boast robust capital and advanced technical capabilities. However, they face constraints due to the scarcity of land, water, and other natural resources resulting from population growth. In recent years, an overemphasis on rapid national income and GDP growth has led to the

inefficient use of natural resources, pollution, and an exacerbation of resource scarcity. The per capita farmland area is decreasing annually, leading to rising food supply issues and increasing agricultural product prices. These challenges hinder the progress of agricultural enterprises, forcing China to heavily depend on agricultural imports and placing significant strain on the domestic economy.

For domestic agricultural enterprises, the expansive foreign market presents an opportunity. By enhancing foreign investment, these enterprises can tap into foreign resources and play a pivotal role in fostering their development. Currently, Chinese agricultural enterprise foreign investment remains modest. The coverage of agricultural foreign investment in countries is only a third of that in all Chinese industries, contributing to just a fifth of the economic output value. Throughout foreign activities, agricultural enterprises encounter numerous challenges. Addressing these issues is crucial for ensuring the stable development and competitiveness of Chinese agricultural enterprises in the international market.

Unlike Chinese agricultural enterprises, foreign investment in western countries has a long and rapidly evolving history. Initially, Western enterprises invaded other countries, introducing industry and agriculture to colonies. Today, they implement systematic foreign investment cooperation strategies. Leveraging their strong financial and technical advantages, Western enterprises have gained absolute control over resource allocation. While China can draw insights from the rich foreign investment experience of Western enterprises, it's essential to recognize that these experiences are not entirely applicable. Chinese agricultural enterprises must develop their own foreign investment characteristics, considering the current strategic landscape and policy guidance. Meeting these challenges is imperative for China's agricultural enterprises to thrive in the international market.

With the development of Belt and Road, China's agricultural enterprises in China's agricultural mainly foreign investment, through agricultural cooperation with other developing countries to accumulate investment experience, lack in practice and theory, research is basically static, in the face of the current changing international market environment and investment environment, countries, especially developed countries to strengthen investment barriers, should introduce dynamic research strategy, adopt dynamic policy implementation. With the current situation and situation of Chinese agricultural enterprises, this paper studies the external activities of Chinese agricultural

enterprises and the dynamic policy orientation under the new situation. The foreign activities of Chinese agricultural enterprises is based on a new mode of foreign activities under the background of "Belt and Road" strategy. This work mainly focuses on the foreign investment situation, investment mode, risks, influencing factors of foreign investment and implemented policies, summarizes experience and absorbs the lessons of foreign investment from foreign developed countries, and puts forward the new foreign activities under the new situation, which can better promote the development of Chinese and Ukrainian agricultural enterprises.

The scientific novelty of the obtained results lies in the substantiation of theoretical foundations and the development of practical recommendations regarding the impact of China agrarian enterprises, the selection of research methods to determine more effective forms of China agrarian enterprises outbound investment activities.

The main provisions of this paper bring them to the level of scientific and applied development, and put forward relevant countermeasures and suggestions for the sustainable development of Chinese agricultural enterprises under the background of globalization. Their implementation will help to boost China's economic growth.

**Keywords:** organization, economics, agrarian economics, management, foreign economic activity, foreign economic relations, strategy, agrarian enterprises, agricultural production, agrarian sector, agriculture, globalization, sustainable development, factors, trade, integration, innovations, One belt – one road, economic belt, China

## АНОТАЦІЯ

***Чжан Лей.*** **Організаційно-економічні аспекти зовнішньоекономічної діяльності аграрних підприємств в умовах глобалізації -** Рукопис.

Дисертація на здобуття наукового ступеня доктора філософії за спеціальністю 073 - Менеджмент. – Сумський національний аграрний університет, Суми, 2023.

У дисертаційній роботі підтверджено теоретико-методологічні основи та сформовано практичні пропозиції щодо організаційно-економічних аспектів зовнішньоекономічної діяльності аграрних підприємств в умовах глобалізації.

Метою дисертації є демонстрація організаційно-господарської діяльності китайських сільськогосподарських підприємств, аналіз теоретичних основ їх

зовнішньої діяльності та встановлення ефективних механізмів забезпечення сталого розвитку китайських сільськогосподарських підприємств.

У теоретичній частині розкриваються основні характеристики процесу глобалізації щодо зовнішньої діяльності китайських сільськогосподарських підприємств, досліджуються та порівнюються різні погляди науковців на зовнішню діяльність китайських сільськогосподарських підприємств. Багато вчених вивчають організацію та економічну діяльність китайських сільськогосподарських підприємств і виявляють, що китайські сільськогосподарські підприємства вирішують інвестувати за кордоном для подальшого сприяння економічному зростанню китайських сільськогосподарських підприємств.

Враховуючи різні галузі промисловості, іноземні інвестиції Китаю в останні роки були швидкими та тривалими, як за загальним обсягом, так і за потоком. Хоча іноземні інвестиції в сільське господарство невеликі, вони також мають тенденцію до зростання. Щоб задовольнити зростаючий світовий попит на продукти харчування та іншу сільськогосподарську продукцію та забезпечити національну продовольчу безпеку, Китай з кожним роком збільшував іноземні інвестиції в сільське господарство з 281 млн до 3,29 млрд доларів у 2016 році та в 1,2,8 рази з 834 млн доларів. до 14,89 мільярдів доларів у 2004 році. На початку 2015 року сільськогосподарські підприємства Китаю розпочали хвилю іноземних інвестицій, і китайські сільськогосподарські підприємства мають ширші інвестиційні перспективи для іноземних країн.

На основі проведеного дослідження, на даний момент деякі вітчизняні сільськогосподарські підприємства мають потужний капітал і високий технічний рівень, але вони обмежені дилемою дефіциту земельних ресурсів, водних ресурсів та інших природних ресурсів, спричинених зростанням населення. В останні роки сліпо наголошується на швидкому зростанні національного доходу та ВВП, що призвело до марнотратства природних ресурсів і забруднення, посилення дефіциту ресурсів, площа сільськогосподарських угідь на душу населення зменшується з кожним роком, постачання продовольства, ціни на сільськогосподарську продукцію продовжують зростати, це перешкоджає розвитку сільськогосподарських

підприємств, змушує Китай довго покладатися на велику кількість сільськогосподарського імпорту, створює великий тиск на вітчизняну економіку. Для вітчизняних сільськогосподарських підприємств зовнішній ринок є величезним, багатим на ресурси, сільськогосподарським підприємствам, щоб збільшити іноземні інвестиції, скористатися можливістю використання іноземних ресурсів, відіграє важливу роль у стимулюванні розвитку сільськогосподарських підприємств. В даний час масштаби іноземних інвестицій китайського сільськогосподарського підприємства невеликі, охоплення країни іноземними інвестиціями в сільське господарство становить лише одну третину всієї китайської промисловості іноземними інвестиціями в країну, п’яту частину економічного обсягу виробництва, у процесі зовнішньої діяльності проблеми сільського господарства розвитку підприємництва багато, як вивести китайські сільськогосподарські підприємства на міжнародний ринок на стабільний розвиток і конкурентоспроможність, чи Китаю потрібно зіткнутися з важливими проблемами. Іноземні інвестиції в західних країнах мають давню історію і стрімко розвиваються. Від найдавніших вторгнень в інші країни, розвитку промисловості та сільського господарства в цих колоніях до поточної системної стратегії співробітництва іноземних інвестицій. Західні підприємства з сильною фінансовою потужністю та технічними перевагами мають абсолютний контроль над розподілом ресурсів, у процесі зовнішньої експансії накопичили багатий досвід іноземних інвестицій у сільське господарство, цей досвід певною мірою стосується іноземних інвестицій у сільське господарство Китаю, але він не застосовний на 100%. для китайських сільськогосподарських підприємств ми повинні мати власні характеристики іноземних інвестицій і поточну ситуацію стратегічного вибору та політичного керівництва.

З розвитком «Одного поясу, одного шляху» сільськогосподарські підприємства Китаю в основному здійснюють іноземні інвестиції в сільське господарство Китаю, через сільськогосподарську співпрацю з іншими країнами, що розвиваються, для накопичення інвестиційного досвіду, відсутність практики та теорії, дослідження в основному статичні, в умовах поточної зміни міжнародного ринку навколишнього середовища та інвестиційного середовища,

країни, особливо розвинені країни, щоб зміцнити інвестиційні бар'єри, повинні запровадити стратегію динамічних досліджень, прийняти динамічну реалізацію політики.

Ця робота в основному зосереджена на ситуації з іноземними інвестиціями, способі інвестування, ризиках, факторах впливу на іноземні інвестиції та реалізованій політиці, узагальнює досвід і вбирає уроки іноземних інвестицій з іноземних розвинутих країн, а також висуває нову зовнішню діяльність у новій ситуації, які можуть краще сприяти розвитку китайських та українських сільськогосподарських підприємств.

Наукова новизна отриманих результатів полягає в обґрунтуванні теоретичних засад та розробці практичних рекомендацій щодо впливу аграрних підприємств Китаю, виборі методів дослідження для визначення більш ефективних форм виїзної інвестиційної діяльності аграрних підприємств Китаю.

Основні положення цієї роботи виводять їх на рівень науково-прикладних розробок, висувають відповідні контрзаходи та пропозиції щодо сталого розвитку китайських сільськогосподарських підприємств в умовах глобалізації. Їх впровадження допоможе прискорити економічне зростання Китаю.

**Ключові слова**: організація, економіка, аграрна економіка, менеджмент, зовнішньоекономічна діяльність, зовнішньоекономічні зв'язки, стратегія, аграрні підприємства, сільськогосподарське виробництво, аграрний сектор, сільське господарство, глобалізація, сталий розвиток, фактори, торгівля, інтеграція, інновації, Один пояс – один шлях, економічний пояс, Китай

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TABLE OF CONTENTS

# INTRODUCTION

China has been a major agricultural country in the traditional sense since ancient times. Since the reform and opening up, its economic construction has developed rapidly, making China gradually transition from an agricultural country to an industrial country with strong competition in the world. With the rise of economic strength, China has begun to transform from a country that has mainly absorbed foreign investment to a major investment country that vigorously carries out foreign investment projects. Based on various industries, China's foreign investment in recent years has been rapid and long, both in terms of its total volume and in its flow. In agriculture, although the foreign investment is small, it is also on a rising trend. In order to meet the increasing demand of the world for food and other agricultural products and ensure national food security, China has increased foreign investment in agriculture year by year, from 281 million to $3.29 billion in 2016, and 1.2.8 times from $834 million to $14.89 billion in 2004.Entering 2015, China's agricultural enterprises have begun a wave of foreign investment, and Chinese agricultural enterprises have broader investment prospects for foreign countries.

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For domestic agricultural enterprises, the expansive foreign market presents an opportunity. By enhancing foreign investment, these enterprises can tap into foreign resources and play a pivotal role in fostering their development. Currently, Chinese agricultural enterprise foreign investment remains modest. The coverage of agricultural foreign investment in countries is only a third of that in all Chinese industries, contributing to just a fifth of the economic output value. Throughout foreign activities, agricultural enterprises encounter numerous challenges. Addressing these issues is crucial for ensuring

the stable development and competitiveness of Chinese agricultural enterprises in the international market.

Unlike Chinese agricultural enterprises, foreign investment in western countries has a long and rapidly evolving history. Initially, Western enterprises invaded other countries, introducing industry and agriculture to colonies. Today, they implement systematic foreign investment cooperation strategies. Leveraging their strong financial and technical advantages, Western enterprises have gained absolute control over resource allocation. While China can draw insights from the rich foreign investment experience of Western enterprises, it's essential to recognize that these experiences are not entirely applicable. Chinese agricultural enterprises must develop their own foreign investment characteristics, considering the current strategic landscape and policy guidance. Meeting these challenges is imperative for China's agricultural enterprises to thrive in the international market.

With the development of Belt and Road, China's agricultural enterprises in China's agricultural mainly foreign investment, through agricultural cooperation with other developing countries to accumulate investment experience, lack in practice and theory, research is basically static, in the face of the current changing international market environment and investment environment, countries, especially developed countries to strengthen investment barriers, should introduce dynamic research strategy, adopt dynamic policy implementation.With the current situation and situation of Chinese agricultural enterprises, this paper studies the external activities of Chinese agricultural enterprises and the dynamic policy orientation under the new situation.The foreign activities of Chinese agricultural enterprises is based on a new mode of foreign activities under the background of "Belt and Road" strategy. This article mainly focuses on the foreign investment situation, investment mode, risks, influencing factors of foreign investment and implemented policies, summarizes experience and absorbs the lessons of foreign investment from foreign developed countries, and puts forward the new foreign activities under the new situation, which can better promote the development of Chinese and Ukrainian agricultural enterprises.

**Connection of work with scientific programs, plans, topics.**The dissertation work was carried out in accordance with the research plan of the Sumy National Agrarian University on the topic: "Organization and economics aspects to foreign economic activity agrarian enterprises of One Belt And One Road ", within which the applicant investigated

the organizational and economic aspects of the functioning of integrated China agrarian enterprises.

**The purpose and tasks of the research.** The purpose of the dissertation research is to substantiate the theoretical foundations and develop practical recommendations regarding the impact of integration on the development of China agrarian enterprises, the selection of research methoDetermine the main economic and organizational activities of Chinese agricultural enterprises, and deeply analyze the development of foreign activities of Chinese agricultural enterprisesds to determine more effective forms of integrated structures. In accordance with the goal, the following tasks were set and solved:

- to investigate the essential characteristics of the concept of "foreign economic activity" and characterize its main types;

- study of diffusion as a process of Organization and economics aspects of China foreign economic activity;

- Determine the main economic and organizational activities of China agricultural enterprises, and deeply analyze the development of foreign activities of Chinese agricultural enterprises;

- to analyze and evaluate the trends of China agricultural enterprises development problems;

- to provide proposals for improving the formation of China agricultural enterprises sustainable development ;

- to better promote the foreign activities of Chinese agricultural enterprises, realize more trade cooperation between China and Ukraine, and promote the sustainable economic growth of the two countries.

The object of the study is the organizational and economic activity of China agricultural enterprises,summarize the relevant theories, development status and existing risks of the external activities of Chinese agricultural enterprises.

**Research methods.** The methodology of the dissertation research is based on generally accepted principles of complex scientific research. The theoretical and methodological basis of the dissertation work is the dialectical method of cognition, a systematic approach to the study of issues of the development of integration processes, the main scientific provisions of modern economic theory and the scientific works of domestic and foreign scientists. In the process of solving the tasks, the following scientific methods

and analysis techniques were used: systemic-structural and abstract-logical, in particular their techniques: generalization, analysis and synthesis, induction and deduction (for the formulation of theoretical research results, clarification of the conceptual apparatus, formulation of conclusions and proposals) ; statistical and economic-mathematical, in particular their techniques: Group research (to determine the causal relationship between the components and the foreign activities of Chinese agricultural enterprises), multi-factor correlation and regression analysis (to study the development status and influencing factors of the foreign economic activities of Chinese agricultural enterprises and the trade cooperation between China and Ukraine)； Sociology research-In investigating the foreign economic activities of Chinese agricultural enterprises, analyzing the development status and existing problems of their foreign investment. Graphical and tabular methods were used for visual presentation of the obtained results.

The information base of the dissertation research consists of primary information obtained as a result of own research and observations, publications of domestic and international scientists, monographic publications, internal documentation of enterprises in the agro-industrial sector, official materials of the State Statistics Service of China, data comes from China Statistical Yearbook, China Statistical Yearbook, agricultural enterprise database and so on.

**Scientific novelty of the obtained results.** The most important research results that reveal the content of the dissertation, characterize its scientific novelty and are presented for defense include the following:

The practical significance of the obtained results is that the theoretical provisions and methods proposed in the work deepen the research and practice of external activities of agricultural enterprises in China and provide the possibility of more effective management. The main theoretical provisions outlined in this work have reached the level of methodological developments and practical recommendations, are used and implemented in management practice. In particular:

- *For the first time:*

developed a system of risk assessment indices for foreign investment projects of Chinese agricultural enterprises in the context of globalization, which is aimed at a comprehensive dynamic assessment of existing risks in investment projects based on existing index systems and relevant research results, including the guidance of the

Ministry of Trade on cooperation with foreign investments in order to operational adjustment of the management strategy, as well as mitigation of potential investment risks.

*Improved:*

- theoretical and methodological foundations of the theory of empirical study of the behavior of direct investments of agricultural enterprises (Empirical study of direct foreign investments and their selection);

- applied principles of forming an organizational and economic mechanism for the realization of China's foreign economic potential against the background of the "Belt, One Road" through the strengthening of international cooperation, the location of the global chain of agricultural industry; creation of an information platform for agrarian investments, increasing the ability of enterprises to withstand risks; formulation of an ideal policy of support for Chinese agricultural enterprises;

- conceptual principles of building an organizational and economic mechanism for realizing the foreign economic potential of Chinese agricultural enterprises in accordance with the "One Belt One Road" policy

*Acquired further development:*

- Optimizing the foreign investment strategy of China's agricultural enterprises at the level of the government, industry and enterprises as part of the implementation of the "One Belt One Road" strategy opens a new path of development for Chinese agricultural enterprises.

- a model for the implementation of the state policy of regulation of foreign economic activity of agricultural enterprises based on the construction of an integrated institutional matrix of the systematization of the process of state regulation of economic activity, which is based on the effective consolidation of the efforts of different levels of management, a clear demarcation and consolidation of the functions of authorities with an analysis of the actions of responsible persons in order to achieve the set goal; creation of a protective mechanism to protect the legal rights and interests of enterprises, improvement of foreign investment approval policy and streamline the approval process, strengthening of bilateral cooperation with the government; provision of tax benefits for foreign investments in agriculture; increasing investments in research funds for key areas of agricultural foreign investment; external financial support of agriculture through the introduction of a fund of direct foreign investments in agriculture; implementation of the system of insurance of

foreign agricultural investments; strengthening the guarantor role of the state to prevent the risks of foreign investors to China's agricultural enterprises in the conditions of globalization.

**Personal contribution of the acquirer.** A dissertation is a completed scientific study. Scientific statements, conclusions and recommendations are the result of personal scientific research. Published scientific works are independent developments and reflect the main content of the dissertation.

**Publications.** Based on the results of the conducted research, the author has published 19 scientific works.

**Structure and scope of work.** The main part of the dissertation consists of an introduction, three chapters and conclusions, the volume of 190 pages of computer text and contains 31 tables, 5 figures.

# SECTION 1

# THEORETICAL BASIS OF RESEARCH ON THE FOREIGN ECONOMIC ACTIVITY OF AGRRARIAN ENTERPRISES

## 1.1 Theoretical basis for relevant foreign direct investment of agricultural enterprises: concept and basic principles

Foreign direct investment is the investment across national borders made by enterprises in other countries (regions) outside their own countries. FDI contains the control of property rights and the utilization of resources (Dunning,1993).According to the fifth edition of the International Monetary Fund (IMF) balance-of-payments bill of payments, foreign direct investment is an international investment method in producing and gaining sustained benefits elsewhere outside its parent country. Continuous interest means that the relationship between the direct investor and the business invested is long term and the investor has direct operational control. According to the United Nations Trade and Development Commission (UNCTAD,2002,2008), foreign direct investment is an investment act where enterprises establish corporate entities and engage in managed control from one economy to another. The Statistical System for Foreign Investment, issued by the Ministry of Commerce and the National Bureau of Statistics on January 1,2004, defines "foreign investment" as " means the investment in various ways made by legal persons and natural persons from abroad and Hong Kong, Macao and Taiwan in Chinese mainland areas with cash, physical objects and intangible assets. Among them, foreign direct investment refers to all the investment of foreign investors in non-listed companies and in listed companies with an equity proportion of no less than 10%, while the rest are other foreign investment. "From this definition, foreign direct investment in China refers to foreign enterprises, economic organizations or individuals (including overseas Chinese, Hong Kong, Macao and Taiwan), according to relevant policies and regulations, with wholly foreign enterprises in China, or foreign joint venture, cooperative enterprises or cooperative development resources investment (including foreign investment investment), and total project investment approved by the

relevant government departments of funds borrowed from abroad. Agricultural direct investment in this study refers to the investment in agriculture, forestry, grazing, fishing and agricultural processing industry, including food processing, tobacco processing, wood processing, bamboo, rattan and brown grass products, beverage processing, etc.

The IDI theory, as an independent theory, originated in the 19 60s.In 1960, American economist Heimer (Hymer) in his PhD of MIT thesis of domestic enterprise international management: direct investment research, took the lead in put forward the theory of monopoly advantage, demonstrated the foreign direct investment and the general sense of international financial asset investment (indirect investment), thus created the research of foreign direct investment theory. After that, theories on the location selection of foreign direct investment have emerged one after another. International economists try to analyze and explain the behavior and determinants of enterprises from various perspectives. They have developed various theories of foreign direct investment. Such as the theory of economic geography (Marshall, 1920; Krugman, 1991), Location theory (Greenhut, 1952; Losch, 1954), Monopoly-advantage theory (Hymer, 1960), The International Theory of the Product Production Cycle (Vernon, 1966), The Internalization Theory (Buckley & Casson, 1976; Hennart1982; Rugman, 1981) Marginal industrial expansion theory (Kojima, 1973), And International Production Eeclectic Theory (Dunning, 1981) et al.

International FDI Theory. After Hymer put forward the monopoly dominance theory in 1960 and established the theoretical analysis model of foreign direct investment, Vernon (1966) put forward the theory of international product life cycle, and then Aliber (1970) put forward the national market monopoly theory, and international economists made great contributions to the establishment of the theoretical analysis model and framework of foreign investment. Since the mid-1970s, the mainstream of FDI theory was mainly to analyze the motivation of multinational company investment and under what conditions can be invested on the basis of transaction cost theory, including internalization theory (Buckley & Casson,1976), marginal industry expansion theory (Kojima,1973), and Dunning eclectic theory trying to integrate these theories (1981).

The theory of foreign direct investment in developing countries. The theories of some research scholars are restricted by their research subjects, and often only have a

good explanation of the transnational investment behavior of large multinational corporations in Europe, the United States and other countries. The transnational investment behavior of small and medium-sized enterprises is completely different from that of large multinational corporations such as Coca-Cola and Nestle. Especially for small and medium-sized enterprises in developing countries, the factors affecting transnational investment behavior and their location choice are often many different from those of large enterprises. In addition, some scholars have proposed the theory of FDI with enterprises in developing countries or small and medium-sized enterprises. Such as the small-scale technology theory proposed by Wells, 1976 (US); technology localization theory proposed by British scholar Lall,1983 (Lall,1983); technology innovation industry upgrading theory proposed by Cantwell and Cantwell & Tolentino,1990 (Cantwell & Tolentino,1990), etc. Wells's small-scale technology theory believes that the traditional theory of foreign direct investment of multinational companies absolute the competitive advantage, while the advantage owned by multinational corporals in developing countries is the relative advantage. Therefore, although multinational corporations in developing countries cannot compete with large multinational corporations in developed countries in technology and other aspects, enterprises in developing countries have the low-cost advantages brought by small-scale production technology, and use this product to meet the differentiated needs of market segments. This also enables multinational companies in developing countries to have low management expenses and marketing expenses, thus having incomparable advantages to large multinational companies such as Europe and the United States to seize market share with good quality and low price. In addition, Wells believes that the "national ties" of developing countries enable the products produced by their multinational companies to use traditional famous brands to meet the expatriate demand for such products.

Rao proposed the theory of technical localization after an analysis of multinational companies in India. The theory holds that multinational corporations in developing countries can gain an advantage in market competition by locally improving mature technologies in developed countries and developing different differentiated products to meet the needs of different markets. Therefore, even if enterprises in developing countries are small and labor-intensive, they can also make foreign direct

investment. In addition, the technological localization of enterprises in developing countries is also a kind of innovation for enterprises in developed countries, and it is this innovation that brings those advantages. The competitive advantage of developing countries lies not only in that the innovative technology is more compatible with the local resource endowment conditions and technical conditions, but also in the close combination of their production process and the local demand conditions and supply conditions, thus having more advantages than the products of developed countries. Compared with Wells, Rao puts more emphasis on innovative changes of introduced technology. Cantwell and Tolantano (Cantwell & Tolentino,1990;Tolentino,1993) after the mid-19 80s emerging industrial countries and regions in developed countries, put forward the "technology innovation industry upgrading theory", pointed out that developing countries to absorb, digestion and innovation, and then bring new competitive advantages for their enterprises. They believe that the improvement in technical capacity in developing countries is directly related to the growth of foreign direct investment in the country, and affects the industrial distribution and geographical distribution of foreign direct investment in developing countries. And the change is predictable. In terms of industrial distribution, it shows the gradual transition from vertical integration of natural resources to the horizontal integration of import substitution and export orientation. In geographical distribution, follow the development order of neighboring countries - and - developed countries in other developing countries. These theories explain to some extent the motivation and inevitability of foreign direct investment of enterprises in developing countries. However, these theories only study the motivation of FDI in SMEs, but not how SMEs make the location choice of FDI.

Classical International Trade Theory. Early IDI theory based its research on the assumption of completely freely competitive element and product markets when examining international capital flows. Therefore, they believe that FDI is due to ROI differences between countries. The difference in ROI may be due to different foreign exchange rates, interest rates, national economic growth rate, real wage level, technological innovation level, etc. Heckschel (1949) and Olin (1933) focused on explaining differences in trade and production, especially the generation of trade between the two countries (regions).Based on this theory, they infer that the capital flow from one country to another was due to a different return on capital between the two

countries. Classical and neoclassical trade theories believe that the main reason for foreign direct investment is the pursuit of profit maximization. Since classical and neoclassical trade theories assume that factors of production cannot flow between countries and have the same production technology between countries, they do not explain the characteristics of FDI.

Location theory. Different from international economics emphasizing the ownership and internalization advantages of enterprises, the location theory focuses on explaining the impact of the unique location advantages of the host country on foreign direct investment. According to the international trade theory, the international flow of factors of production is due to the marginal product of one country exceeding the combined marginal product and movement costs of another country. Kojima(1973,1975,1985) and Ozawa(1979) believe that foreign direct investment is the result of the transfer of product production process overseas due to adverse factors such as rising domestic production factors prices and the appreciation of local currency. Similarly, Taiwanese and South Korea companies began to shift production to other countries and regions (Jeon,1992;Dunning,Hoesel & Narula,1997) for rising local wages since the 1980s.Location theory (Location Theory), to study why certain economic activities are carried out within a certain regional range, and why certain economic facilities are established within a certain regional range. Therefore, location theory plays a very important role when involving where enterprises should invest in specifically. Location theory assumes that the enterprise is a profit maximization person, and the investment subject will inevitably choose where it can achieve cost reduction (especially transportation cost) or maximize profit when investing. The cost depends on the cost of the input factors, the conversion cost in the production process, the transportation cost from the origin to the sales place, etc. The first author of location theory was the German agricultural economist (Von Thunen), where location theory has continuously developed and formed several schools. There are mainly the following three schools: Cost School, School of Market School and School of Behavior.

The basic view of the cost school is that the motivation of the enterprise location selection and economic activity layout is to pursue cost minimization. This basic view remains the core view of the modern theory of location selection. The representatives of this school were Dunne and Weber as well as Isaard. Danone (1826)

first found that the distance from the consumer market had a significant impact on the crop production layout. He believes that the profit of agricultural operation mainly depends on the difference between agricultural price and agricultural production cost and freight cost of agricultural products, so the nearest location to the market has the smallest freight cost, so it is the best location of agricultural production. His theory laid the foundation for Weber and Rish's theory of location. German economist Webb has created the theoretical basis of modern industrial location. He published in 1909 "Industrial Zone Theory", which established a complete theoretical system for industrial location theory. Weber saw the ideal corporate location as the lowest transportation mileage and cargo weight needed in the production and distribution process. He also increased labor costs and aggregation factors, and took the minimum cost determined by these three factors as the optimal location for enterprise location selection. He adopted the method of "location triangle" and "equal line" to choose the layout of industrial zone according to the principle of cost minimization. He divided this process into three stages: the first stage 1, by the first local location factor of freight freight cut out the location network (basic pattern of the regional basic industry). In stage 2, this network was modified with the labor fee factor to make it possible for the industry to lead from the lowest freight point to the labor fee minimum point. In stage 3, the basic network is modified with agglomeration or dispersion factors to allow the industry to be concentrated (dispersed) from the lowest freight points at other locations. But Weber's industrial theory is abstract and isolated factor analysis. Since then, the scholars of the cost school have continuously improved Weber's thought and expanded the location theory. Isard used comprehensive analysis methods including comparative cost analysis and input-output analysis. He pointed out that there are many factors affecting industrial development and layout, their different roles, and the role that these factors play in different regions varies greatly. Furthermore, among these factors affecting industrial development and layout, some factors are interdependent and mutually replaceable. For example, when the alternative relationship between capital and labor factors, investors consider capital to replace labor in places where capital is abundant and labor is lacking, which may adopt the state-of-the-art automation equipment; while in areas with abundant labor supply and insufficient capital, labor-intensive technology may be used to replace capital. However, the school did not consider the needs and ignored the

interdependence between enterprise locations, but the cost minimization idea is still a basic basis for the location selection of foreign direct investment.

Different from the cost school that location layout is cost minimization, the market school believes that the principle of location selection should be the maximum service market to maximize profits. August Losch (MS) and Christaller (MS) were representatives of the market school. Liao sh's location theory makes great corrections to Weber's industrial theory. He took monopoly instead of Weber's free competition with maximum profit, thus proposing a dynamic model of location selection. First, he argued that the market area of an enterprise is geographically a hexagonal that often tends to form honeycomb networks due to the overlap and extrusion of multiple hexagons. The decline of corporate power depends on the expansion and development of its hexagonal market circle. Secondly, he introduced the market demand factor into the location selection factor. He believes that goods have a maximum sales radius. As the sales radius increases and the freight rate increases, the commodity price also increases, thus making the sales volume of goods also reduced. Liao Shi also studied the number of consumption land and the maximum supply distance under the jurisdiction of different levels of market circles, and opened up new ways to study the theory of industrial layout from the consumption market, thus becoming known as the founder of the market school. Through a survey of southern German towns, Chrysler found that when the producer strives to obtain the largest market area as possible, and the consumer strives to obtain goods and services to the nearest place, the actual cost of purchasing goods to the nearest center and obtaining services is equal to the sales price and transportation fee. Christale believed that the nearest and most convenient location for goods and services should be located in the center of the circular Market area. If the circular market areas are cut up to each other, inadequate consumers will appear. Only when the circle overlaps with the circle, can we meet all the consumer needs. He also believed that the three principles of competition, transportation, or administration would deform the circular service market and produce different areas of control and influence. This theory is based on Weber's location theory, analyzed in static local equilibrium way, combining geography with comprehensiveness with geography theory, and laid the foundation for future analysis of dynamic general equilibrium theory. The theory is also known as the "central ground theory" by later generations.

The School of Behavior considers the operational decision makers of economic activities in enterprise location selection, representative of Smith (D.M.Smith,1971) for payative spatial boundary analysis and the behavioral matrix of Preder (Pred,1967).Smith combined Webber's spatial expense curve with Rish's spatial income curve, confirming the "best location", "near best location" or "inferior location", through the spatial boundary analysis of revenue. He believes that the spatial changes in total revenue and total expenses can form the best location with the largest profit, and can also form the spatial boundary of profit. If they do not aim to maximize profit, then enterprises can freely layout within the profit space boundary. Moreover, the spatial cost and income curve can also reflect the form of the industrial zone model, and the greater the cost curve, the more concentrated the industry, otherwise the tendency of dispersion. In addition, the different operating ability of entrepreneurs will also lead to changes in the boundary location of profit space. The profit space range of enterprises with strong operating ability is greater than that of other similar enterprises, and the scope of space selection is also larger. In addition, the government location subsidies and tax policies will also lead to the location of profit space boundaries. Smith also pointed out that while the location that seeks profit maximization is the place where the total revenue exceeds the total cost value, the location decision-making behavior of entrepreneurs is also influenced by other non-economic factors, such as the residence of the enterprise creator, the government and its policies, the imitation behavior of entrepreneurs, etc. When the maximum profit location cannot meet these preferences of entrepreneurs, entrepreneurs may give up the best location and choose to solve the best location and can meet their preferences (Wu Chuanqing, 2008).

Location theory not only has a significant impact on the global location, but also on the location of multinational corporations in a domestic department. Location advantage determines whether multinational companies adopt foreign direct investment or other means. The regional advantages of different regions determine whether international direct investment flows to the region. Location advantage is often closely related to the motivation of foreign direct investment of multinational corporations. The choice of export or to produce overseas depends not only on the cost of consideration, but also on the structure of the host country market and the ability to sell in an incomplete competitive market. Other factors affecting the location selection of

enterprises include: trade barriers, policies and preferential treatment of host countries, market size and growth potential of host countries, and social environment. Wheeler Mody (1992), Woodward (1992), Lucas (1993) analyzed the influence of the inflows of foreign direct investment. There are also empirical studies trying to measure which location advantages have a greater impact on FDI inflow, such as cost (Horst,1972), market size (Scaperlanda & Mauer,1969), etc. The agglomeration economic theory represented by Poter, Smith & Florida, Ellison & Glaeser is also based on the location theory. They believe that the agglomeration economy is a positive externality, economy of scale and scope formed by the regional concentration of economic activities and related production facilities. The spatial agglomeration of the industry will not only bring about the natural advantages of the industry, but also bring about the external advantages such as technology spillover, which is highly attractive to the direct investment of multinational corporations. Porter believes that a region is attractive to multinational direct investment because of its infrastructure, service facilities and skilled labor force, with a good regional image and a large number of industrial concentration. The influence of host location factors on foreign direct investment of multinational companies has become an important direction in the late 20th century, the theory to host labor cost, infrastructure, market scale, industrial structure and distribution, financial system and other political and cultural factors as change factors to test its correlation with multinational direct investment, has a strong interpretation for the geographical distribution of foreign direct investment. However, location theorists often pay attention to the location factors of the host country, and ignore the impact of the characteristics of investors themselves on their location selection of foreign direct investment.

Theory of comparative advantage. The British economist of David Ricardo's comparative advantage theory believes that countries may not necessarily specialize in producing goods with absolutely low labor costs, but only need to produce goods with relatively low labor costs for foreign trade, and can save social labor costs. Therefore, the principle of comparative advantage is "two superior take its heavy, two inferior take its light". If a country is at an absolute disadvantage in the production of both goods, but the disadvantage is different. In this case, the former should specialize in the most favorable goods, and the latter in the least unfavorable goods. Through foreign trade,

both sides can obtain more products than they can produce with equal amounts of labor. The comparative advantage theory shows that the production of international trade varies not only in absolute costs, but also in relative costs. Countries that clarify the development process of different degrees of development can all participate in international trade. This paper analyzes the bilateral trade and industrial structure between China and countries along the "Belt and Road" by using the theory of comparative advantage.

Element endowment theory. The theory of factor endowment is based on the relative differences between factors, so that countries can obtain the maximum profits in international trade. The principle is that a country should export products produced in intensive use and with relatively rich and abundant factors, and should import products produced by relatively scarce factors. That is, labor-rich countries export labor-intensive commodities and import capital-intensive commodities. Countries with rich capital export capital-intensive commodities and import labor-intensive commodities. In international trade, both sides of trade export commodities with their own relative advantages and import commodities with their own relative disadvantages, which is conducive to the rational and effective utilization of bilateral resources and complementary resources.

## 1.2 Empirical research theory of direct investment behavior of Agricultural enterprises

Empirical Study on FDI. Many scholars have studied the international location selection of FDI. Most scholars make an empirical analysis of the influencing factors of the location selection of foreign direct investment according to Deng Ning's OIL paradigm, while some scholars supplement or improve Deng Ning's theory from cultural, social, economic and other aspects. Some scholars believe that the main motivation for investors to invest in other countries is: seeking natural resources, seeking strategic assets, or seeking new markets. These motivations allow these investors to rely on the characteristics of the investment sites themselves when making their choice of investment sites. The characteristics of these investment sites can be

divided into five categories:

1. Cost factors;
2. Market factors;
3. Infrastructure and technical factors;
4. Political and legal factors;
5. Social and cultural factors.

The above factors are frequently present in empirical studies based on the analysis of Dunning's compromise theory.

The Scaperlanda and Mauer (1969) study is the first literature to statistically illustrate the importance of FDI determinants. He hypothesized that the FDI is affected by three important influencing factors: (1) market size; (2) economic growth, and (3) tariff discrimination. But the US FDI test of his EEC absorption from 1952 – 1966 showed that only the effects of market factors was significant. The Korbin (1976) study included more variables, including: social and political factors. The main factors include: social and economic development (including infrastructure construction, basic economic variables, basic social variables), market size, market growth, and political environmental factors (rebellion, instability, subversion).The return results show that in addition to the market size, the social or economic development of good market growth is also relatively significant.

Cost factors. Cost factors include ingredients, labor costs, transportation costs, land prices, etc. (Dunning 1988).The empirical results of Woodward and Rolfe (1993) indicate that the wage rate, inflation, transportation costs and profit repatriation restrictions have negative effects on foreign investment, as is supported by Wheeler and Mody (1992) and Buckley and Casson (1998) studies. Similar results appeared in studies by Hennart and Park (1994) and Tatoglu and Glaister (1998). The results of Christian Bellak et al. (2007) not only show that labor costs are inversely proportional to capital inflows, but also show that labor productivity is directly proportional to FDI and also inversely proportional to FDI inflows. The results of Friedman et al (1992) indicate that labor costs and rental tax burden (local taxes divided by state population) are locations considered by all multi-national enterprises. Fedderke, Romm (2006) has found low wages and lower corporate tax rates as effective measures to stimulate FDI inflows.

Market factors. Market factors include market size, market growth rate, market competition status, the type of consumers, etc. The results of Nguyen, Anh (1997) indicate that market size and access channels are the main factors influencing the inflow of FDI into the host country and are positively associated with the size of the market size. Oluyele Akinkugbe (2003) investigated the imbalance of FDI absorption in developing countries. Their analysis shows that the market development potential affects investors' location selection decisions significantly. The results of Friedman et al. (1992) suggest that proximity to the market is a location factor considered by all multinational companies. Fedderke, Romm (2006) found that expanding market size is an effective measure to stimulate FDI inflows. Wheeler, David, and Modwy (1992) found that the agglomeration economy and market size determine the location choice of U. S. companies in developing countries. Cluster economy is also an important location determinant for Japanese companies making direct investment in the US (Head etal. 1995,1999; Smith and Florida, 1994).

Infrastructure and technical factors. Infrastructure includes transportation status, communication facilities, water, electricity supply status; technical factors include human resources, technology research and development level, organization and management experience (Dunning 1988,1998).The findings of Nguyen, Anh (1997) indicate that the market size and access are the main factors affecting Japanese investment in the UK; others include language, infrastructure and the UK's status as an international financial centre. The same conclusion was reached in the Oluyele Akinkugbe (2003) study. The Wheeler, David, and Modwy (1992) research also identified infrastructure as a major factor affecting corporate external direct investment. Woodward (2000) and others selected a series of indicators represent agglomeration factors, with detailed data of Portuguese cities and regions new investment, shows that the agglomeration of service industry has a very strong impact on the location selection of manufacturers, the local industrial agglomeration level and external effect of urbanization also plays an important role. Noorbakhsh, Paloni (2001) conducted empirical studies on whether human capital in developing countries are factors influencing the location decision of FDI. Its findings suggest that human capital is one of the most important factors influencing the selection of FDI location, and that its importance increases over time. The results of Yui Kimura, Pugel (1995) show that the

ownership of intangible assets, especially technology, and the relations with local suppliers are significant factors affecting the regional investment decisions of Japanese companies.

Political and legal factors. Political and legal factors include policy stability, the signing of international trade agreements, tax reduction, environmental regulation, etc. Wheeler, David, and Modwy (1992) cited political risk as a major variable affecting foreign direct investment in American companies, although their study found no significant impact on direct investment. Fedderke, Romm (2006) conducted the study of FDI location selection factors in South Africa. They found that the risk that FDI in South Africa is mainly capital-intensive horizontal investment is the main factor considering FDI entering South Africa if the reduced political risk, the increased power to protect private property and the guarantee of South African economic unity are effective measures to stimulate FDI inflows. Yui Kimura, Pugel (1995) examined the influencing factors and patterns of entry in Japan's investments in the United States The results show that the policy of the host government is the most significant factor affecting the location investment decisions of Japanese companies.

Social and cultural factors include living standards and public services, community attitudes towards foreign-invested enterprises, and cultural distance. Zukin and DiMaggio (1990) showed that cultural factors can influence the location selection of multinational companies and the enterprise development strategy and objectives. Ning and Reed (1995), after examining US multinational direct investment in the food industry in six industrialized countries from 1983 – 1989, found that cultural ties had a significant and decisive impact on FDI. Galan, Benito (2006), based on a survey of 103 Spanish multinational, analyzed the most important drivers of their choice to make direct investment in Latin America. Keith (2002) found that the social and cultural factors in the host country will affect the transaction cost of multinational companies, thus affecting the choice of multinational companies' entry model.

Compared with the location selection between countries of FDI, the location choice of culture, language, exchange rate and other factors will no longer be the focus of consideration. The differences between regions and the influence of a specific factor will become the entry point for scholars to study. McConnell (1980) was the first scholar to study the spatial distribution of domestic FDI in the United States.

McConnell based on the market monopoly response model assumes that the localization of branches of foreign businesses is "strongly influenced by local forces and the industry model already implemented in this country". But this assumption is not empirically tested. Furthermore, McConnell also hypothesized that factors like high union, high wages, population reduction, lack of localization motivation would have effects on FDI absorption, but the results suggest that these factors related to FDI are also not statistically significant either. He also further examined the FDI's geographically dispersed status at the US state level, finding related to the size of the population and corporate R & D funding.

Bagchisen & Wheeler (1989) examining the distribution of FDI across US states showed that the growth properties of large cities are important determinants determining FDI aggregation in large cities (FDI has a preference for big cities) and that the spatial distribution of FDI is temporally discontinuous. The study also found that the FDI showed a trend of shifting from the northeast coast of the US to the major southern economic growth centers, and from manufacturing to services. Matthieu, Thierry & Mucchiellia (2004) have investigated the distribution of FDI in France. Central to their concern is the effect of aggregation effects on FDI location selection. They analyzed the FDI from 4,000 French investments. Its results demonstrate a significant technical spillover effect among enterprises, and therefore has a strong industrial aggregation effect. However, the impact of local government policies on FDI location selection is not significant.

Coughlin, Terza and Arromdee (1991) confirmed strong links between the density of existing manufacturing activities, population, infrastructure density, promotion costs and FDI inflows. Some of these factors have not appeared in previous studies, and others were not significant in previous studies. Their study has also validated a number of other factors, including taxes, labor costs. Note that these factors in the McConnell's study were the basis why he concluded that FDI acted differently from that of domestic enterprises. Moreover, they provide more evidence of temporal convergence in the location selection behavior of foreign companies with local companies, namely assimilation. Pusterla & Resmini (2007) considers the CEE countries in transition as a whole and analyzed the FDI absorbed by the transition countries in CEE. Unlike other studies, instead of utilizing macro data and enterprise-

level data, they second used a nested logit model constructed by McFadden (1974) 90 over a general linear regression model to analyze the location selection of FDI. Their research suggests that the competition for FDI between local governments strengthens the specific strengths of multinational Cs. Secondly, there are significant differences between high-tech industries and enterprises in traditional industries; again, multinational corporations pay more attention in transition countries on market factors than cost factors. Their research also has a very important inspiration for countries in transition that they find that multinational corporations are risk aversion and that they do not very value special economic zones that can offer preferential policies. Therefore, for countries in economic transition, it is not enough to attract FDI only to rely on preferential policies. Their analytical conclusion also has important implications for economically transformed countries like China. Qian Sun, Wilson Tong, Qiao Yu (2002) et al. investigated the distribution of FDI absorbed by 30 Chinese provinces, autonomous regions and municipalities from 1986 to 1998, trying to reveal the factors influencing the distribution of FDI in China at different periods. Their findings found that the aggregation of FDI during this period had a negative effect on new FDI entry, and that multinational companies tended to invest in regions with less FDI. This conclusion is contrary to the conclusions of many studies. Most studies believe that FDI has a significant industrial aggregation effect and tend to invest in areas that have originally absorbed a lot of FDI. Canfei He (2003) believes that the location selection of FDI in China will not only be affected by the location characteristics of various provinces and cities, but also by their choice of entry mode when they enter. Cooperative enterprises are mainly distributed in the Pearl River Delta region, while wholly foreign-owned enterprises are relatively widely distributed, and joint ventures are the most widely distributed.

### 1.3 Experience and lessons of foreign activities of agricultural enterprises under the background of One Belt And One Road. The impact of agricultural products trade on industrial development

Scholars use a variety of different research methods to study the different perspectives of agricultural products trade between China and a certain country or

region along the "Belt and Road". He Min et al (2016), by measuring the relevant trade index, found that the complementarity of agricultural products trade between China and "Belt and Road" countries is more obvious than that of competition. Zhao Yulin and Lin Guanghua (2008) used the traditional gravitational model to analyze the influencing factors of agricultural trade between China and 10 ASEAN countries, and believed that China and most ASEAN countries have a large growth space in agricultural trade. Zhou Shudong et al (2006) also studied the agricultural products trade between China and ASEAN, and believed that the completion of the China-ASEAN Free Trade Zone has significantly improved the trade level of agricultural products between China and ASEAN countries. Zhu Jing and Chen Xiaoyan (2006) studied the agricultural trade between China and India, and analyzed the comparative advantages and complementarity of the agricultural trade between China and India by calculating various trade indexes. Ding Cunzhen, Xiao Hai (2018) studied the agricultural trade between China and Central Asian countries, and believes that it can further explore the agricultural trade space between China and Central Asian countries. Tan Jingrong et al (2016) studied the agricultural trade between China and Central Asia with the help of the gravity model, and specifically put forward the corresponding policy suggestions for strengthening the agricultural trade cooperation between China and Central Asia according to the research results. Zhan Miaohua (2018) adopted the analysis method of social networks to study the interconnected trade of agricultural products among countries along the "Belt and Road" and the influence role of China in different relationship networks. Chen Jian et al. (2017) constructed the CMS model, discussed China's export trade of agricultural products to ASEAN, and put forward policy suggestions combined with the actual situation. With the help of various different trade indices, 2013) and Li analyzed the bilateral agricultural trade between China and India, believing that the positive impact of complementary effects in China's agricultural trade with China and India still needs to be improved. Gong Tongyao et al (2012) analyzed the impact of trade barriers in the agricultural trade between China and ASEAN, and concluded that for different regions of China, the trade barriers in the agricultural trade between different regions and ASEAN are different.

### 1.4 Trends, issues and challenges for foreign direct investment of

**agricultural enterprises**

China's agricultural development is faced with two "tight spells" of resources and environment, relying on domestic resources to ensure that the supply of agricultural products is not feasible. The intensification of Sino-US trade frictions has given us a wake-up call, and there is still a greater risk of ensuring the supply of products through trade means for agricultural products such as soybeans and cotton, which are more externally dependent and have relatively concentrated access channels. In this context, China's enterprises abroad through production, processing, warehousing logistics, trade and other investments to obtain some product sources, has become an effective way to ensure the supply of agricultural products in the country.

In 2013, the Ministry of Agriculture and Rural Affairs launched the collection of information on foreign agricultural investment by enterprises, covering the foreign investment of 29 provinces (municipalities and autonomous regions), Guangdong Agriculture and Reclamation, Heilongjiang Agricultural Reclamation, Xinjiang Corps enterprises and large-scale state-owned enterprises such as COFCO Group, which has been carried out for six consecutive years. The results of the 2018 survey show that by the end of 2017, 681 domestic enterprises had established 848 agricultural-related enterprises abroad, with an additional investment of US$2.24 billion in 2017, an 11-fold increase over 2010; The investment region is mainly in Asia and Europe, covering 99 countries and regions on six continents, and the investment industry is dominated by food crops and cash crops, covering more than 10 categories of grain, cotton, oil and sugar gum, livestock and fisheries, agricultural machinery, involving scientific and technological research and development, production, processing, circulation, trade and other industrial chain links. From the main structure, 763 foreign enterprises established by private enterprises, accounting for 90% of the total number of enterprises, has become the backbone of China's agricultural foreign investment cooperation. Agriculture has achieved remarkable results in foreign investment. In 2017, Chinese enterprises produced 18.558 million tons of agricultural products abroad, with foreign operating income reaching US$50.96 billion.

At present, the situation at home and abroad and the internal and external environment of agricultural development are undergoing profound changes. In general,

under the tide of economic globalization, under the background that the problem of food security and poverty is still facing the world today, the opportunities and challenges of agricultural foreign investment cooperation coexist, but the opportunities are greater than the challenges. From the domestic point of view, the opportunity is clearly oriented and has a solid foundation for foreign cooperation. China's opening-up orientation is clear. Building a new pattern of comprehensive opening-up is the main thought and action guide for China to carry out foreign cooperation in the coming period. Agriculture is an important area of opening up to the outside world, and speeding up cooperation in agricultural outward investment is a concrete measure and means to realize "two-way opening" in a wider scope, in a wider field and at a deeper level. It is a solid foundation for agricultural outward investment cooperation. From the angle of enterprise development, by domestic resources, environment, market constraints, more and more enterprises gradually open their minds, began to explore the pace of international development of agriculture, and after 40 years of reform and opening up, some enterprises have the ability to use global resources and market development business, which has laid a solid foundation for agricultural foreign investment cooperation. From an international perspective, the opportunity is the continuous release of the global demand for agricultural cooperation. Is the "Belt and Road" to build a strong platform. In the five years since the Belt and Road Initiative was launched, the agricultural sector has achieved remarkable results, strategic docking and policy communication have been strengthened, and the scale of investment cooperation has grown rapidly. Through sincere cooperation, countries strive to build a coordinated development pattern of free and orderly flow of factors, efficient allocation of resources and deep market integration, so as to create a closer, transparent and open cooperation environment for enterprise investment. It is the strong demand for global agricultural cooperation. Some countries in Africa are also plagued by inadequate food supply and malnutrition, agricultural development in Southeast Asia, Central Asia, Latin America and other countries and regions, there are still large short boards in terms of yield level, infrastructure construction, high-quality agricultural capital supply, the world agricultural industry chain and regional gaps and link gaps, which provide space and opportunities for global agricultural investment cooperation. From the domestic point of view, the internal and external constraints are to support

the policy system to be improved. In terms of the composition of the overall policy framework system, overall support remains relatively small. From the central level, internal and external constraints on the one hand, targeted, targeted policies are few, especially financing support, on the other hand, there is a fragmentation of policies between departments, fragmentation of the phenomenon, the lack of convergence between policies, it is difficult to form a stable and complete, mutual support of the policy system. It is the level of public service that needs to be improved. At present, the role of the inter-governmental multi-lateral cooperation mechanism is not enough. Some mechanisms are not well targeted and cannot directly serve agricultural outward investment cooperation. The level of information service ability needs to be improved, and enterprises lack the authoritative channels of system to obtain market information, laws and regulations, resource status, customs and customs. In particular, with overseas business management experience, familiar with international rules, familiar with the economic policies of various countries of the relative lack of experts and composite talents, has become an urgent problem to promote agricultural outbound investment cooperation.

From the international point of view, the internal and external constraints are against the tide of globalization, for agricultural outward investment cooperation has brought hidden dangers. Anti-globalization trends and the rise of trade protectionism in a few developed countries have maliciously created trade frictions, restricted normal investment by enterprises and hindered the pace of agricultural foreign investment cooperation. Second, the investment environment abroad is uneven, investment risk is frequent. Natural, social and political risks occur from time to time in the investment process, posing challenges to the in-depth development and sustainability of business operations and agricultural outward investment cooperation.

## Conclusions to section 1

This chapter describes the theory of foreign activities in China through four parts. The organization and economic activities at the main level of agricultural enterprises mainly include international direct investment theory, investment location theory and trade dynamics theory of foreign activities, along with the Belt and Road policy, new

opportunities, and new challenges.

1. Due to the different social nature of China and Ukraine, the relevant theories involved in this paper are all about Chinese history, national policies, etc. The theoretical basis of related foreign direct investment in agricultural enterprises mainly includes: international direct investment theory, location theory and trade dynamics theory|.

2. The foreign activities of Chinese agricultural enterprises can be shown as follows: the foreign investment of agricultural enterprises is further divided into the foreign direct investment and indirect investment of agricultural enterprises. Agricultural FDI is an enterprise that seeks the optimal allocation of resources in the world in which investors participate in the production and operation activities and have actual management rights and control; enterprise indirect investment by relying on dividends, interest, corporate bonds, government bonds and derivative securities. Therefore, this paper mainly discusses the foreign direct investment activities of Chinese agricultural enterprises.

3. Under the background of "Belt and Road", China's foreign agricultural investment activities are of important practical significance. It can not only enhance the international pricing power of agricultural products, improve the agricultural production efficiency, but also relieve the pressure on domestic resources and promote the agricultural supply-side structural reform. At present, the foreign investment activities of Chinese agricultural enterprises mainly face practical difficulties and challenges such as insufficient agricultural technology level, small agricultural foreign investment scale and large agricultural overseas investment risk. Chinese agricultural foreign economy and organization activities should vigorously learn from international advanced agricultural technology to enhance agricultural products competitiveness, strengthen international cooperation, layout of global agricultural industry chain; establish agricultural investment information service platform, enhance the ability of enterprises to resist risks; formulate perfect supporting policies to provide necessary support for Chinese agricultural enterprises.

4. The trend, problems and challenges of foreign direct investment in agricultural enterprises mainly include the diversification of decentralized production accounts for a large proportion, which is difficult to attract foreign investment. Low scale and

operation organization degree, relatively backward agricultural planting and production technology, plus large-scale agricultural investment, long cycle, greatly affected by conditions and changeable factors, it is difficult to effectively attract foreign investment. At the same time, China's relevant legislation is relatively lagging behind, and the agricultural field, especially the agricultural circulation service industry, lacks the corresponding regulations of foreign capital guidance. China's agricultural management system between agricultural production and marketing, between domestic and foreign trade, between disconnection, production and investment management, to a large extent constrained the production, circulation and import and export of agricultural products, at the same time for foreign investment into China's agricultural and agricultural products management field also constitute a big obstacle.

5. Specific scientific results reveal the authors' personal contributions to the development of the issues studied, and describe the scientific novelty of the work, as published in the publications.

# SECTION 2

# EMPIRICAL ANALYSIS OF THE FOREIGN ECONOMIC ACTIVITY OF AGRRARIAN ENTERPRISES

## 2.1 Research on the influencing factors of foreign investment of Chinese agricultural enterprises

With the deepening of economic globalization and the domestic reform and opening up process, deepening the international agricultural cooperation with countries along the "Belt and Road" has become a major opportunity and strategic choice for China's all-round development of international cooperation in agricultural science and technology under the new situation. China's economic strength, scientific and technological strength and comprehensive national strength rose to a new level. With the rapid growth of social economy and the continuous increase of population, domestic food demand shows a rigid growth. However, the decline of the quality of cultivated land in China and the lack of per capita cultivated land resources have placed increasingly prominent constraints on grain production, and there are still hidden dangers in China's food security guarantee. In this context, we should speed up the construction of a new development pattern with domestic cycle as the main body and domestic and international cycle mutually promoting, so as to provide important support and guarantee for China's food security. Agricultural enterprises are the main body of agricultural foreign investment in China. Leading enterprises in agricultural industrialization have promoted the rapid growth of the scale of agricultural foreign investment, but they are still facing obstacles such as the small overall scale of foreign investment, the lack of their own strength and the weak ability to resist risks. Central Asian countries are located in the hinterland of the Eurasian continent, adjacent to northwest China, with agricultural resource endowment and obvious advantages in agricultural production. To this end, it is the practical need of China's agricultural enterprises at the present stage to take advantage of the coordinated economic development of the two sides, build the "Belt and Road" and achieve extensive consultation, joint construction and shared benefits.

This paper selects the perspective of influencing factors of host countries, combines quantitative analysis and quantitative analysis, uses the advantages, disadvantages, opportunities and challenges of Chinese agricultural investment, and selects the macro data of Chinese foreign investment from 2003-2018 to analyze the panel data. The research results show that in addition to the macro factors such as the market, the host country absorbs the foreign investment level and the labor resource endowment to have the most significant impact on the enterprise foreign investment. In addition, the objective demand of enterprise investment and development is also one of the investment motivations for enterprises to carry out foreign investment, and the resource advantages of the host country and the strong support of the two countries policies have created good investment conditions for enterprise investment. This paper from macro and micro levels, the government promotes foreign investment to improve the foreign investment policy system, establish green channel, support policy tilt to agricultural foreign investment subjects, and establish the relevant legal system; to achieve foreign investment, enterprises should strengthen the construction of compound talent team, reasonably develop foreign investment strategies, and cultivate foreign investment consortium.

In 2013, President Xi Jinping successively put forward cooperation initiatives to jointly build the Silk Road Economic Belt and the 21st Century Maritime Silk Road, which has attracted high attention from the international community and academic circles. In recent years, the scale of agricultural foreign direct investment in China has grown rapidly. Many enterprises have invested in the international market, and leading enterprises in agricultural industrialization have promoted the rapid growth of the scale of agricultural foreign investment. Under the new development pattern, China is in a critical stage of promoting mutual use of its strong market and domestic economic cycle. It should base itself on the huge domestic market, continue to adhere to opening up and cooperation, form a pattern of internal cycle driven and external cycle boost, and make overall use of global resources and factors to promote economic development. To build a new pattern of development, we need to deeply participate in the international cycle, open wider to the outside world, and make better use of our resources in both domestic and international markets. This research in central Asian countries and Chinese agricultural enterprises as the investment cooperation, central

Asian countries natural resources advantages are obvious, but agricultural production technology, backward infrastructure is its common problem, this is the basis and agricultural cooperation between our country and central Asian countries advantages, plus the two governments provide a lot of policy, financial support, which provides a strong guarantee for the agricultural cooperation.

Therefore, the study of agricultural investment cooperation between domestic enterprises and Central Asia is in line with the strategic needs of the current international situation. Central Asian countries are located in the hinterland of the Eurasian continent and close adjacent to the western border area of China. They are a transportation fortress connecting Asia and Europe, the Pacific Ocean and the Atlantic Ocean. Their strategic position is very important. It has an endowment of agricultural resources, sufficient agricultural labor force, and has obvious advantages in agricultural production. However, the five Central Asian countries have extensive agricultural operation mode, and their agricultural production efficiency is relatively low.In addition, Central Asian countries bordering northwest China have similar ethnic culture and climate characteristics. Combined with China's existing capital advantages and technical advantages, China and China have a great demand for investment cooperation with Central Asian countries, and they have unique conditions for mutual cooperation. Based on the above background, this paper takes the foreign direct investment of domestic agricultural-related enterprises as the research object, analyzes the achievements and challenges of foreign direct investment activities of agricultural enterprises, and puts forward policy suggestions.

Literature review. Qin Na (2007) analyzed the foreign trade database of Chinese agricultural enterprises. Some scholars found that the purpose of foreign direct investment in Chinese agriculture is mainly to overcome the limitations of nature and man. On the one hand, it is to seek superior natural resources for developing agriculture, such as soil, water and climate; on the other hand, it is to seek advanced technology and diversified investment. Ashoka Mody (2005) by analyzing the differences between China and the western economic system and market characteristics believes that China can adopt transnational strategic alliances to conduct overseas investment and development. Yao Wang (2008) believes that because China is in the primary stage of economic transition.

Li Shibao (2008) according to the experience summary and wrong lessons of the foreign development of China's manufacturing industry in recent years, combined with the economic theory, put forward the overseas development model of “going global” of Chinese manufacturing enterprises, for the overseas development of China's agricultural enterprise. Zhai Xueling (2006) and Zhang Ling Ran (2010) focus on the impact of funds, tax policies, investment environment, government management and services for the overseas development of China's agricultural enterprises. Enterprises can seek high-quality agricultural bases or pastures overseas abroad. China support overseas direct investment in agriculture through fiscal, taxation, policies and laws to provide an all-round guarantee for overseas development.

Purpose of the article. This paper targets enterprises with agricultural investment cooperation with Central Asian countries, and has an in-depth understanding of domestic agricultural enterprises, on the basis of investment process and results, analyze and summarize from the perspective of the host country, empirical analyze the influencing factors of enterprises' foreign investment, and at the same time establish and improve the service system and relevant system for the government to help enterprises improve their market competitiveness and themselves strength provides a useful theoretical analysis. This article achieves the following purpose:

(1) On the basis of summarizing the current situation of domestic agricultural foreign direct investment, make SWOT points for foreign direct investment of agricultural enterprises analysis, to lay a foundation for the empirical inspection.

(2) Based on the theoretical analysis, the influence of five host countries on the external direct investment process of enterprise agriculture is selected analyze, understand the impact of various factors on the process of agricultural foreign direct investment, and put forward targeted strategic suggestions from the government and enterprises, so as to enrich the existing relevant documents in China and provide reference for the future direct investment of foreign enterprises.

Research methodology. This paper mainly adopts the literature research method and quantitative analysis method, literature research method is mainly manifested as the current situation of agricultural foreign direct investment, agricultural foreign investment influence factors of the literature, focusing on the theory and research methods, understand the domestic and foreign agricultural

investment research dynamics, analyze and summarize the theoretical basis and research status of clear research direction. The quantitative analysis method selects the relevant macro data of China and Central Asian countries from 2003 to 2017 with the help of Stata statistical software, and conducts regression analysis using panel data to empirically analyze the influencing factors of host countries in agricultural foreign investment.

Main results of the research.

SWOT Analysis of Foreign Investment in Chinese Agricultural Enterprises

1. Advantage: Policy Support. The Chinese government has been actively backing the foreign investment endeavors of domestic enterprises, particularly since the introduction of the "Belt and Road" initiative in the agricultural sector. This support is prominently evident in the form of favorable tax policies, preferential financing conditions, and bonded tax exemption policies for agricultural products. Notably, in 2004, the state established the "foreign investment special loan" to provide loan guarantees for enterprises engaged in foreign investment activities. The year 2006 saw the issuance of regulations easing foreign exchange control, eliminating the need for enterprises to declare foreign exchange funds invested, thereby hastening the pace of domestic enterprises' foreign investment initiatives. Furthermore, the "cultivating transnational agricultural operation enterprises" initiative introduced in 2008 and the ongoing international cooperation between various governments, both bilateral and multilateral, underscore the nation's continued support and encouragement for foreign direct investment in agriculture.

Technical advantages. Most of the "Belt and Road" routes are developing countries. By contrast, China has absolute advantages in agricultural technology and enterprise management, and has quite good development prospects and potential for its cooperation. Take northwest agricultural and forestry university, for example, many countries along the road are arid semi-arid climate, and northwest region has similar climate conditions and ecological environment, on this basis, Simon with Hungary, Israel undertook "China-United Nations Africa water action" development and demonstration project, also with Kazakhstan north ha national agricultural university, Severling University and other universities to build wheat experimental base and demonstration park, breeding good disease resistance, quality varieties of wheat

varieties in Kazakhstan, has achieved good results than local traditional wheat yield of 80%.

2. Weakness: Lack of talent. With the acceleration of the pace of agricultural foreign investment, the requirements for all aspects of the operation process of enterprises have been improved. The demand for talent is an example. The lack of strong talent support is a major obstacle factor for enterprises in foreign investment activities. At present, many enterprises with foreign investment lack insufficient scale and lack high-level talents familiar with international investment environment and foreign investment rules. In this case, many enterprises often flinch from the investment environment with uncertainty and high risk. FDI activities not only require the talents of enterprises to master the local language, legal play, policy environment and the general situation of social and economic development, but also to have a global strategic vision. At present, the demand of domestic enterprises for such compound talents cannot be met, which hinders the foreign direct investment activities of enterprises to some extent.

Scientific and technological innovation ability is insufficient. Although China has many leading agricultural technologies, this is far from enough for international cooperation in agriculture. By contrast, many developed countries are in dominant positions. In addition, China's agricultural investment started late, large-scale enterprises still accounted for a minority, the majority of enterprises are still in the initial stage of development and growth, and technology research and development ability is limited, which is also one of the reasons for the obvious gap between China and developed countries. On the other hand, the reason may be that the national investment in the agricultural scientific and technological innovation accounts for a low proportion of the whole agricultural expenditure, which cannot meet the current needs of the agricultural scientific and technological innovation, which to a large extent restricts the improvement of the agricultural scientific and technological innovation ability and the pace of foreign investment of enterprises.

3. Opportunity: Economic integration trend promotes international cooperation. Under the development background of ball economic integration, enterprises from all over the countries actively join the international market. In light of this trend, Chinese agricultural enterprises are encountering a more expansive market. As a significant agricultural nation, fostering extensive international agricultural

cooperation holds the potential not only to enhance enterprise profits but also to facilitate the expansion of their scale, thereby propelling the growth of domestic agricultural enterprises. This is especially noteworthy following China's accession to the World Trade Organization, as numerous domestic enterprises have aligned themselves with international standards, confronting an increasing array of options. The benefits of engaging in international competition are gradually becoming evident, prompting these enterprises to proactively pursue international agricultural cooperation in alignment with their own development needs. Infrastructure connectivity will help in global economic and trade cooperation. Infrastructure construction is the foundation of a country's economic development. The construction of Belt and Road "has promoted infrastructure connectivity among countries along the Belt and Road and driven the economic development of all countries. Take the China-Europe class as an example. After the implementation of the new railway train operation plan in 2020, the operation line of the China-Europe freight train has increased to 73. China-Europe freight trains have not stopped operating after COVID-19 swept the world. From January to November 2020, China-Europe freight trains ran for 10,180, exceeding the total operating volume of 2019.China-Europe freight trains have the advantages of fast customs clearance efficiency and low cost, which ensure smooth logistics and stable product supply in countries along the Belt and Road, and have become the first choice for more and more countries to carry out trade cooperation with China.

4. Threat: Domestic enterprises lack advanced investment experience and management experience. Although China is a major agricultural country, it still lacks the technology in the deep processing or production of agricultural products in developed countries. In China's agricultural investment cooperation, the primary processing, agricultural resources development and cooperative operation of agricultural products account for the majority, more labor-intensive products, the added value of agricultural products produced is not high and the technical content is low, which is due to the insufficient technical level and research and development ability of China's agricultural enterprises. In addition, China's agricultural enterprises are still in the initial stage, less foreign investment experience, relative management experience, the overall strength of large enterprise gap, and large enterprises in developed countries have advanced experience and management, in the international market competition in our

enterprises may be at a disadvantage, which to some extent poses a threat to China's agricultural enterprises foreign cooperation.

Political conflicts and multicultural in host countries are potential risks to investment. The political environment and cultural identity between countries are the primary factors affecting investment .In some developing countries, there are political instability and poor political continuity. The phenomenon of the government taking the lead in destroying contracts and changing its mind occurs from time to time. The diversified ethnic culture also makes investment face potential ethnic cultural conflicts and contradictory risks at any time. In Central Asian countries, for example, Central Asian countries ethnic diversity, its religious beliefs, local customs and domestic differences, investment at any time facing the potential danger of problems such as terrorist incidents, especially in the issue involving the distribution of interests or politics, easy to cause contradictions and conflicts within the people, which caused bilateral economic cooperation between China and Central Asia to a certain extent.

The presence of green barriers adds complexity to transnational investment endeavors. As the global economy advances and industrialization exacerbates environmental degradation, nations are placing greater emphasis on environmental protection. Green barriers primarily operate through two fundamental mechanisms: the price control mechanism and the quantity control mechanism. The price mechanism is implemented through green tariffs, elevating sales costs and reducing profits. Simultaneously, the quantity control mechanism regulates the volume of imported products through product quota indices. At present, there are still problems of excessive fertilizers and pesticides in China's agricultural production, and it is difficult to meet the environmental standards and technical standards of agricultural production in developed countries. Under the influence of the double mechanism of green barriers, the threshold of China to enter the host market has been significantly raised, leading to the increasing difficulty of China's agricultural enterprises' foreign investment activities.

An Empirical Analysis of the Impact Factors of Foreign Investment in Chinese Agricultural Enterprises.

Compared with developed countries, although China's agricultural foreign investment started late, it developed relatively rapidly. In recent years, the analysis factors on foreign investment have emerged from different perspectives of the host and

parent countries. This chapter mainly from the perspective of the host country, the Central Asian country, selects five factors: the inflow, opening of foreign direct investment to the host country, its labor resource endowment, labor level and the scientific and technology development level of the host country to carry out empirical test.

The factors affecting enterprise foreign investment are diversified. Five explanatory variables are selected to describe and analyze the foreign direct investment flow of the explained variables, China and five Central Asian countries. These variables are the inflow of foreign direct investment, the openness of the host country, the host country's market size, the labor resource endowment and the level of scientific and technological development of various countries. The main research object of this paper is domestic enterprises invested in Central Asian countries. Combined with the characteristics of Chinese agricultural enterprises, the foreign direct investment flow in the five Central Asian countries in 2003-2018 was selected as the explanatory variable to analyze the factors affecting domestic enterprises on foreign investment from the perspective of the host country.

The influencing factors of enterprise foreign investment involve the host and parent countries. This chapter mainly analyzes the impact of the host country influencing factors on enterprise foreign investment. Combined with the above content, this chapter selects the five sample countries of Central Asia panels from 2003-2018 to establish a linear regression model.

The econometric model is as follows:  represents the year, I - represents the host country, μ is the random disturbance term, invest is the foreign direct investment stock of China to the host country, fdi is the absorbed foreign investment level of the host country, export is the opening degree of the host country, labor is the labor resource endowment of the host country, cost is the labor cost of the host country, and tech is the science and technology development level of the host country.

To avoid the effect of heterovariance on the model results, logarithmically for both the dependent and independent variables to reduce the error.

**Table 2.1 - Interpretation of the main variables**

| Variable | Unit | Expected Impact |
|---|---|---|
| INVEST | billions of dollars | ? |
| FDI | billions of dollars | + |
| EXPORT | billions of dollars | + |
| EXPORT | thousands of people | + |
| COST | Dollar / person | - |
| TECH | 100 million | - |

2.2
2.3
2.4
2.5

Source: calculated by author

**Table 2.2 – Descriptive statistics**

| Variable | Sample | mean value | Standard deviation | minimum | maximal |
|---|---|---|---|---|---|
| INVEST | 71 | 12194.25 | 54899.25 | -251027 | 299599 |
| FDI | 75 | 26.19232 | 41.66275 | 0.316497 | 172.2096 |
| EXPORT | 75 | 55.2796 | 66.48979 | 0..39 | 285.96 |
| EXPORT | 75 | 555.8633 | 437.7062 | 177.2975 | 1437.039 |
| COST | 75 | 2856.667 | 3086.411 | 210 | 12090 |
| TECH | 75 | 209.0065 | 337.1718 | 1.58 | 1958.82 |

Source: calculated by author

**Table 2.3 - Model regression results**

| | Lninvest | Lninvest | Lninvest | Lninvest | Lninvest |
|---|---|---|---|---|---|
| Lnfdi | 1.068 （1.3） | 1.064 （1.27） | 1.062 （1.25） | 1.005 （1.16） | 0.975 （1.11） |
| lnexport | | 0.027 （0.04） | 0，024 （0.03） | 0.162 （0.19） | 0.203 （0.23） |
| lnlabor | | | 0.551 （0.03） | 4.701 （0.2） | 1.326 （0.05） |
| lncost | | | | -1.874 （-0.37） | -2.001 （-0.39） |
| lntech | | | | | -0.478 （-0.39） |
| _cons | 2.686 （1.75） | 2.662 （1.58） | -0.579 （-0.00） | -13.27 （-0.11） | 9.19 （0.07） |

Source: calculated by author

There is a positive correlation between the level of absorbed foreign investment and China's investment stock in the host countries. The coefficient of lnfdi is 1.068, indicating

that for every 1% increase in host countries 'absorbed foreign investment level, China's investment flow in host countries will increase by 1.068%.In other words, when the more foreign direct investment flows into the host country, the larger the market scale of the country, it can fully absorb foreign investment, and thus it will promote the growth of China's investment stock in the host country.

The degree of opening to host countries also has a significant positive impact on China's investment stock among host countries. The coefficient of lnexport is 0.027, which is significant at the 5% significance level, indicating that for every 1% increase in the host country, China's investment flow in the host country increases by 0.027%.In other words, the higher the host country opens up to the outside world, the easier it is for enterprises to carry out investment activities in the host country.

The agricultural labor endowment of the host country also has a significant positive correlation between China's investment stock among the host countries. The coefficient of lnlabor is 0.551, indicating that for every 1% increase in host countries 'agricultural labor force, China's investment flow in host countries will rise by 0.551%.

The labor costs of host countries also have a significant positive impact on China's investment stock between host countries. The coefficient of lncost was-1.874, significant at the 5% significance level, indicating that for every per 1% increase in host country labor costs, China's investment flows in host countries would decrease by 1.874%.This is the same as previously assumed, as well as Dunning's compromise theory of international production and the Adam Smith estates.

There is a positive correlation between the science and technology level of the host country and China's investment stock in the host capital. The coefficient of lntech is-0.478, indicating that for every 1% increase in the host country's science and technology level, China's investment flow to the host country will decrease by 0.478%.

Measures to accelerate the foreign investment of agricultural enterprises.

Areas of support for agricultural enterprises to improve their foreign investment and operation capabilities.

Embracing innovative approaches to enhance the productivity and efficiency of agribusiness value chains is crucial in the present context. Adding value to agricultural production in rural areas not only generates employment but also enhances producers' market access, reduces poverty, and contributes to the socio-economic improvement of

rural communities.

In the contemporary landscape, joint ventures are emerging as a prevalent form of business collaboration, contributing to the expansion of agricultural enterprises. Comparable to partnerships or corporations, a joint venture offers a more flexible option for groups aiming to collaborate without fully merging their operations. This flexibility allows for effective cooperation while maintaining distinct operational identities.

Considering the attention of the investing countries on agricultural land, the investment mode of joint venture with local enterprises can not only reduce the non-economic friction with the local government, but also make full use of various resources of local enterprises.

The active fulfillment of their social responsibilities by agricultural enterprises at the local level forms a good image of Chinese enterprises abroad. Attention should be paid to strengthen communication with the local government and residents, actively participate in social welfare undertakings and constant public reporting.

The support and service system for promoting foreign investment in agricultural enterprises provides:

– The establishment of government departments with clear functions and strong targeted nature to serve agricultural foreign investment;

– Increasing the role of scientific research institutions, trade associations and other social forces. At the same time, industry associations can not only become a platform for exchanges of the foreign investment and cooperation between agricultural enterprises, they can promote their “group to sea” by avoiding the international resistance that official institutions face;

– Cooperation with the UN Food and Agriculture Organization (FAO) and other international agricultural institutions to create favorable conditions for foreign investment in agriculture.

In general, foreign investment by Chinese agricultural enterprises is both an opportunity and a challenge. On the one hand, with abundant agricultural production resources, low-cost land and backward agricultural production technology, agricultural enterprises can obtain considerable income from introducing innovative technology, capital and other factors; on the other hand, agricultural investment still faces many problems due to policy environment conditions, national policies and system conditions

and disadvantages of social services.

### 2.2 Risk analysis and evaluation of foreign investment of Chinese agricultural enterprises

Do to the global trend in foreign direct investment, Chinese agricultural enterprises have intensified their foreign investment activities. Currently, these enterprises have extended their investments to over 30 countries, spanning regions such as Southeast Asia, Africa, and Latin America. Expansion into ocean fisheries development is underway across the high seas of the Pacific, Atlantic, and Indian Oceans, while planting and forestry bases have been established in the Russian Far East and Central Asian countries.

The advantages of China's agricultural enterprises venturing abroad are evident. This approach not only allows Chinese firms to leverage foreign resources, capital, and technology but also helps circumvent various barriers, ultimately boosting their share in the international market. Nevertheless, as we encourage the globalization of China's agricultural enterprises, it is imperative to recognize that their overseas direct investment is still in its early stages. The overall capacity of these enterprises remains relatively modest, and they face a spectrum of risks in foreign direct investment. Analyzing and understanding these risks is essential to enable Chinese agricultural enterprises to effectively anticipate and manage challenges in their global investments.

Considering the comprehensive and dynamic nature of the overseas direct investment environment, an index system for risk evaluation of foreign investment projects by Chinese agricultural enterprises has been formulated. The selection of representative risk factors was conducted through hierarchical analysis and the entropy weight coefficient method. The findings highlight significant risk elements, including international agricultural market risk, political and legal risks in host countries, domestic institutional barriers, and technical constraints specific to the enterprises themselves. To mitigate these investment risks, it is recommended that the government enhances policy support and establishes specialized institutions to assist agricultural overseas investments. Concurrently, enterprises should establish robust risk evaluation mechanisms to foster research and development efforts and promote advancements in agricultural technology.

Rapid advancements in science and technology, coupled with the widespread

integration of modern information technology across various sectors, characterize the current global landscape. Simultaneously, economic resources flow abundantly and are allocated worldwide, reinforcing the integrated economic operation model of multinational enterprises producing in one country and utilizing global factories. Within this context, foreign direct investment (FDI) emerges as a vital form of capital flow, playing an active role in global economic growth among nations.

While developed countries continue to dominate global foreign direct investment, developing nations, including China, have progressively gained significance. China, as the largest developing country, has embraced FDI as a crucial aspect of its enterprise models and growth since the late 1970s, aligning with the deepening of reform and opening-up policies and the implementation of an international strategy. The country's FDI landscape experienced accelerated growth after its official entry into the World Trade Organization (WTO) in 2002. The government's issuance of encouraging policies, combined with enterprises' high motivation and competition to engage in transnational operations, contributed to a notable surge in foreign direct investment. By the end of 2010, China ranked fifth globally in net foreign direct investment flow, surpassing traditional investors such as Japan and the United Kingdom.

Recognizing the importance of FDI, especially in the agricultural sector, it becomes crucial to prevent risks associated with Chinese agricultural enterprises' foreign direct investment projects. The identification and evaluation of these risks serve as fundamental prerequisites for effective risk prevention. Current research primarily focuses on analyzing investment risks in host countries, often using a single risk classification. Proposed measures are typically derived from these analyses, overlooking the comprehensive and dynamic nature of the overseas direct investment environment.

In response, this study constructs a comprehensive risk evaluation index system for foreign direct investment projects in agricultural enterprises, encompassing four dimensions: international environment, host country environment, investment country environment, and internal enterprise environment. Empirical research validates the effectiveness of this evaluation model in assessing the risks of agricultural overseas investment, providing valuable insights for risk prevention.

A general problem statement underscores that the overseas direct investment environment is the root cause of risks in agricultural overseas investment. This

environment encompasses various factors affecting the development of agricultural overseas investment projects, divided into the external international environment, host country environment, investment country environment, and internal enterprise environment. Weak risk management awareness and capability among enterprises, coupled with the complex and dynamic investment environment, often lead to challenges and disruptions in agricultural overseas investment projects. Against this backdrop, the "Belt and Road" foreign economic development model opens new avenues for agricultural development, supporting China's efforts to accelerate foreign investment in agricultural enterprises and maintain stability in the global agricultural market.

Recent research and publications have delved into the multifaceted aspects of risk associated with foreign enterprise investment, with scholars adopting diverse perspectives. Foreign scholars, including Beamish and others, categorize risks based on the risk level of the host country, distinguishing between situational risk and trading risk. Kent and colleagues introduce a three-part variable risk measurement model that considers the environment of overseas investment, industry specifics, and individual enterprises. Their model divides risks into macro environmental risk (social general environment), moderate environmental risk (industry competitive environment), and micro environmental risk (enterprise internal environment). Keith et al., grounded in enterprise strategic management theory, classify risks into management control risk and market complexity risk.

In terms of the content focus and importance of various risks, Liu Xiliang classifies risks into two broad categories: political risk (encompassing policy and legal risk) and economic risk (including macroeconomic risk, business risk, market risk, competition risk, and human resource risk). Shi Shurong breaks down macro environmental risks of overseas investment into political, macroeconomic, cultural, and legal risks. She employs artificial neural network methods to construct an early warning model for macro environmental risks in overseas investment, offering ratings and early warnings for China's overseas investment.

In the realm of agricultural overseas investment risk research, Chen Wei assesses the risks faced by Chinese agricultural enterprises on the international stage, encompassing political policy risk, economic policy risk, national legal risk, national debt crisis risk, and non-traditional risk. Ancient Guangdong and Mei Shiwen identify various risks, including

political, economic, agricultural project decision-making, natural disaster, agricultural technology, and human resource risks.

This study seeks to address the gaps in existing research by focusing on the specific risks faced by foreign direct investment in Chinese agricultural enterprises, particularly considering the unique characteristics of these enterprises. Notably, the paper emphasizes natural disaster risks, a facet often overlooked in previous foreign direct investment research. Given the inherent susceptibility of agricultural projects to natural disasters such as floods and droughts, this represents a crucial aspect of risk that requires attention. Additionally, the evolving social environment, increasing environmental protection standards in developed economies, and improving labor protection laws all contribute to the array of risks that enterprises need to navigate.

The purpose of this study is to shed light on the challenges faced by agricultural enterprises in China, which, despite their overall small scale and limited strength, are crucial players in the national agricultural industrialization landscape. The lack of prominent key enterprises, especially large-scale entities akin to aircraft carrier agricultural enterprises, is a notable weakness. Furthermore, the international competitiveness of Chinese agricultural enterprises is comparatively weak, with the majority being small to medium-sized enterprises. In foreign direct investment, enterprises undergo a learning process regarding the political, economic, cultural, and customary nuances of the host country. China's agricultural enterprises also face a shortage of international management talents, with disparities in the quality, communication skills, and decision-making proficiency of management personnel. The level of industrialization, information sources, and adherence to national policies by China's agricultural enterprises exhibit considerable gaps compared to their international counterparts. In the global competition scenario, where Chinese agricultural enterprises vie with Western international counterparts for market share, they inevitably confront various difficulties and risks.

Highlighting the scarcity of research on China's foreign direct investment in existing literature, this study aims to fill this gap and contribute to the theoretical understanding and policy guidance surrounding the analysis of foreign direct investment risks. The current body of research predominantly focuses on the fundamental movements of China's foreign direct investment, leaving room for deeper exploration and insights into the

specific challenges and risks faced by Chinese enterprises in their global ventures.

1. In terms of aircraft development strategy, industry characteristics, and regional distribution, the risk control associated with such transnational business activities has not received sufficient attention. This is particularly evident in the limited research on the risks and countermeasures faced by foreign direct investment of Chinese agricultural enterprises. Therefore, there is a compelling need to conduct an in-depth study on the substantial risks confronting foreign direct investment of Chinese agricultural enterprises and practically analyze the potential risk prevention measures.

The primary research materials for this study include: Construction of the evaluation index system: Drawing upon existing index systems and incorporating resources such as the Ministry of Commerce's guide on foreign investment cooperation countries (region) (2015 edition), the Ministry of Agriculture's China Foreign Agricultural Investment Cooperation Report (2014), and research findings on overseas investment, including Professor Chen's design principles for evaluating overseas investment project indices and an agricultural enterprise risk evaluation index system. The aim is to dynamically and comprehensively assess the existing risks of investment projects, enabling enterprises to identify strengths and weaknesses, make timely adjustments to their management strategies, and proactively prevent investment risks. The specific indicators are set as follows:

**Table 2.4 - Risk evaluation index system for foreign investment projects of Chinese agricultural enterprises**

| Standard | Sub-criteria | index |
|---|---|---|
| A1 International Environment | A11 The role of the United Nations Food and Agriculture Organization | |
| | A12 International Investment Law and the Investment Treaty | |
| | A13 International Agricultural Market Changes | |
| | A14 Financial market integration | |
| A2 Host Country Environment | A21 Political Environment | B1 Political stability |
| | | B2 Agricultural protectionism |
| | | B3 Agriculture nationalized |
| | | B4 Risk of War |
| | | B5 Legal Risk |
| | | B6 Agricultural Science and Technology Resources |
| | | B7 Macroeconomic development level |

Continuation of the Table 2.4

| Standard | Sub-criteria | index |
|---|---|---|
| | A22 Economic Environment | B8 Solvency |
| | | B9 Logistics development degree |
| | | B10 Inflation rate |
| | | B11 Exchange rate status |
| | | B6 Agricultural Science and Technology Resources |
| | A23 Natural Environment | B12 Climate conditions |
| | | B13 Natural disaster risk |
| | | B14 Agricultural Resource Conditions |
| | A24 Social Environment | B15 Degree of cultural conflict |
| | | B16 Workforce quality |
| | | B17 Labour Market Regulation |
| | | B18 Environmental protection importance |
| A3 Investment Country Environment | A31 Political Environment | B19 Agricultural Overseas Investment Policy |
| | A32 Economic Environment | B20 Agricultural Products Market Size |
| | | B21 Bank Financing Environment |
| A4 Internal enterprise environment | A41 Profitability | B22 Total assets |
| | | B23 Return on net equity |
| | | B24 Operating margin |
| | A42 Solvency | B25 The speed-moving ratio |
| | | B26 Asset-liability ratio |
| | A43 Operating capability | B27 Inventory turnover rate |
| | | B28 Total assets turnover rate |
| | | B29 Accounts receivable turnover rate |
| | | B30 Management |
| | A44 Basic quality of enterprise | B31 Enterprise Competition Strategy |
| | | B32 Agricultural Science and Technology Assets |
| | | B33 Agricultural Science and Technology Talent |

Source: developed by author

The indicators' characteristics are manifested in two dimensions. Firstly, they encapsulate the comprehensiveness and dynamism of the investment environment, encompassing the international environment, the environment of the investment country, and the internal environment of the enterprise.

2. The identification of the risk level evaluation rating is conducted. Viewed through the lens of risk, overseas investment risks of agricultural enterprises are

categorized into five evaluation levels: excellent, normal, concern, risk, and high risk. The enterprise's risk level is inversely proportional to the score, indicating that a higher score corresponds to lower risk and stronger market competitiveness, and vice versa. The defined risk levels are outlined in Table 2.5.

**Table 2.5 - Standards for risk level classification of overseas investment in Chinese Agricultural Enterprises**

| Risk level | Evaluation score interval |
|---|---|
| Excellent | (80,100) |
| Normal | (60,80) |
| Focus on | (40,60) |
| Risk | (20,40) |
| High risk | (0,20) |

Source: calculated by author

3. Evaluation of Risks in Chinese Agricultural Enterprises' Overseas Investment Projects.

To validate the practicality and efficacy of the agricultural overseas investment risk evaluation model established in this research, an empirical study was conducted on the overseas investment projects undertaken by Chinese agricultural enterprises. For the purpose of operability and data accessibility, the research focuses on the investment projects of five listed enterprises, encompassing both state-owned and private enterprises, ensuring a representative sample. The specific investment projects are detailed in Table 2.6.

**Table 2.6 - Investment projects of the listed enterprises**

| Enterprise name | Investment projects |
|---|---|
| Shuanghui Group | Buy the largest U. S. producer of pork and live pigs |
| New Hope Group | Acquisition Australia's fourth largest beef processors |
| Cofco Group | Acquisition famous Dutch agricultural and commodity trade groups |
| Bright Dairy Co., Ltd | Buy Israel's largest food company |
| Changyu Grape Brewing Co., Ltd | Buy the French Honey flower Agriculture Company |

Source: summarized by author with data Juchao Information Network

The financial data for the listed enterprises in 2014, as presented in Table 2.6, is sourced from the Juchao Information Network. The original financial data of major listed Chinese agricultural companies is intricate, with various indicators utilizing non-uniform value units. To facilitate calculations, the original financial data underwent pre-processing using the interpolation method.

This method involves finding substitution values, inserting a value between two existing values, and utilizing the properties of a linear function to derive an equivalent substitution value. The total interval was designated as 0-100, divided into five categories: excellent, good, medium, low, and difference, each representing the ranges 0-20, 20-40, 40-60, 60-80, and 80-100, respectively. The converted values of the raw financial data for the five enterprises are detailed in Table 2.7.

**Table 2.7 - Conversion value of enterprise raw financial data**

| Financial indicators | Shuanghui Group | New Hope Group | COFCO | Bright Dairy Co., Ltd | Changyu Grape Brewing Co., Ltd |
|---|---|---|---|---|---|
| B22 total assets | 100.00 | 84.47 | 39.65 | 72.40 | 100 |
| B23 return on net equity | 100.00 | 100 | 31.49 | 100 | 100 |
| B24 operating margin | 58.47 | .00 | 28.52 | 100 | 100 |
| B25 speed-moving ratio | 70.71 | 38.46 | 58.61 | 36.78 | 76.57 |
| B26 asset-liability ratio | 100 | 44.47 | 85.08 | 53.99 | 100 |
| B27 inventory turnover rate | 100 | 100 | 87.20 | 81.44 | 0.00 |
| B28 total assets turnover rate | 100.00 | 100 | 79.50 | 100.00 | 39.33 |
| B29 accounts receivable turnover rate | 100.00 | 100.00 | 95.04 | 100.00 | 91.47 |

Source: Financial statements of listed enterprises

Fifteen experts were selected to score and the average, all 60~80 and the risk assessment was normal.

**Table 2.8 - Comprehensive risk assessment score of the overseas investment projects of the 5 selected agricultural enterprises**

| Enterprise | International environment | The host country Domestic environment | Domestic environment of the investment country | Internal environment of the enterprise | Comprehensive score |
|---|---|---|---|---|---|
| Shuanghui Group | 15.18 | 15.18 | 15.18 | 15.18 | 15.18 |
| New Hope Group | 16.08 | 16.08 | 16.08 | 16.08 | 16.08 |
| Cofco Group | 14.88 | 14.88 | 14.88 | 14.88 | 14.88 |
| Bright Dairy Co., Ltd | 15.16 | 15.16 | 15.16 | 15.16 | 15.16 |
| Changyu Grape Brewing Co., Ltd | 15.75 | 15.75 | 15.75 | 15.75 | 15.75 |

Source: Financial statements of listed enterprises

Based on the score outcomes of both financial and non-financial indicators, along with the assigned weights for each index, the weighted score values for each indicator are computed. Ultimately, the comprehensive risk assessment scores for the overseas investment projects of the five listed agricultural enterprises fall within the range of 60 to 80, indicating a normal risk assessment.

Against the backdrop of China's implementation of the "One Belt - One Road" strategy, with a strong emphasis on promoting foreign investment in agricultural enterprises and fostering innovation in agricultural science and technology, this study integrates insights from both domestic and international investment risk evaluation theories and practices. It takes into account the foreign investment landscape of Chinese agricultural enterprises and constructs a comprehensive risk evaluation index system for overseas investment projects in the agricultural sector. Further analysis reveals numerous risks and challenges in the projects, including significant fluctuations in the international agricultural market, notable legal and environmental protection risks in host countries, insufficient domestic policy support for overseas agricultural investment, high thresholds for bank financing, and a shortage of agricultural science and technological talent within enterprises. These aspects demand attention from both the government and enterprises, emphasizing the need for proactive risk prevention measures during the overseas investment process.

## 2.3 Research on Foreign Trade of Agricultural Enterprises under the background of One Belt And One Road

Under the new background of "Belt and Road", China has had deeper bilateral trade cooperation with countries along the "Belt and Road", and expanding the trade scale is the focus of China's economic development at the present stage. As the second GDP country in the world and the largest developing country in the world, China has also undergone great foreign trade changes before and after the proposal of the "Belt and Road" initiative, and in order to play a responsible major country in order to plan the establishment of many regional economic cooperative organizations. The Asian Pacific Economic Cooperation Organization, the Shanghai Cooperation Organization and the Asian Investment Bank are all actively organized and participated by China. Agribusiness makes foreign investment under the Belt and Road strategy, Agricultural foreign investment is an important part of the national foreign investment strategy and an important manifestation of the implementation of the "Belt and Road" initiative. In general, China agricultural enterprises are increasingly extensive and concentrated in Central Asia; investment subjects are increasingly diverse and private enterprises develop rapidly; increasingly diversified investment fields, prominent processing trade advantages; increasingly standardized investment operation and obvious localization characteristics; from agricultural processing trade mode to agricultural technology transfer mode. But facing the foreign policy environment of resources, technical difficulties, talent, domestic policy and system of investment approval, germplasm resources, agricultural products inspection and quarantine restrictions, enterprise management market competition environment, not strong enterprise internationalization ability, enterprise brand value is not high, weak social responsibility shaping ability, social service system industry information service is not in place, government foreign service is not in place. In this regard, it is suggested that government departments establish and improve the support service system for promoting the foreign investment of agricultural enterprises, and also guide and support the ability of the foreign investment and operation of agricultural enterprises.

In the past ten years, China has made remarkable achievements in agriculture-

related foreign investment, and its investment scale is firmly at the top in the world. Agriculture-related enterprises are the main force of China's agricultural development and the main body of foreign investment. Leading enterprises in agricultural industrialization have promoted the rapid growth of the scale of agricultural foreign investment, but they are still facing obstacles such as the small overall scale of foreign investment, the lack of their own strength and the weak ability to resist risks. Central Asian countries are located in the hinterland of the Eurasian continent, adjacent to northwest China, with agricultural resource endowment and obvious advantages in agricultural production. To this end, it is the practical need of China's agricultural enterprises at the present stage to take advantage of the coordinated economic development of the two sides, build the "Belt and Road" and achieve extensive consultation, joint construction and shared benefits.

Introduction. In 2013, President Xi Jinping proposed to build the Silk Road Economic Belt and the 21st Century Maritime Silk Road, providing broader prospects for development and space for cooperation in agricultural investment. In May 2017, China National Development and Reform Commission, Ministry of Agriculture, Ministry of Commerce, the Ministry of Foreign Affairs four ministries jointly issued the “jointly promote” Belt and Road “agricultural cooperation vision and action”, 2018 central document clearly put forward “actively support agricultural investment, cultivate internationally competitive agricultural enterprise group”, build a new pattern of agricultural opening to the outside world, foster new momentum of rural development. According to the survey, from 2010 to 2015, the total trade of agricultural products between countries along the “Belt and Road” and China always accounted for more than 22% of China's total agricultural products. In 2015, the total trade of $751.058 billion accounted for 24.05%, imports accounted for 19.79%, and exports accounted for 31.08%. Since the implementation of the “Belt and Road” initiative, China's foreign agricultural foreign investment has ushered in new opportunities.

This study with the investment cooperation between countries along the Belt and Road and Chinese agricultural enterprises, obvious natural resources advantages, but underdeveloped agricultural production technology, backward infrastructure is its common problem, this is also the basis and advantages of agricultural cooperation between China and countries along the Belt and Road, plus the two governments

provide a lot of policy and financial support for bilateral cooperation, which provides a strong guarantee for agricultural cooperation.

Review of related studies. Qin Na (2007) analyzed the foreign trade database of Chinese agricultural enterprises, some scholars found that the purpose of foreign direct investment in Chinese agriculture is mainly to overcome the limitations of nature and man. On the one hand, it is to seek superior natural resources for developing agriculture, such as soil, water and climate; on the other hand, it is to seek advanced technology and diversified investment. Ashoka Mody (2005) By analyzing the differences between China and the western economic system and market characteristics, it believes that China can adopt transnational strategic alliances to conduct overseas investment and development ".Yao Wang (2008) believes that because China is in the primary stage of economic transition, Meanwhile, the equity mode, management mode and economic legal system of enterprises in market economy learn from the West and endow Chinese characteristics with Chinese characteristics, Therefore, we can consider the following ways: small and medium-sized enterprises are small, Limited competitiveness, Generally in the international and overseas development in the way of commodity export, Therefore, the trade style should be adopted; When the enterprise develops and becomes mature, Generally, in the "going global" strategy, technology and capital are adopted for overseas development, At this stage, transnational investment and operation; In the overseas development path, The general way is according to the level of productivity and market competitiveness gradually from trade to competitive.

Li Shibao (2008) according to the experience summary and wrong lessons of the foreign development of China's manufacturing industry in recent years, combined with the economic theory, put forward the overseas development model of "going global" of Chinese manufacturing enterprises, for the overseas development of China's agricultural enterprise. Zhai Xueling (2006) and Zhang LingRan (2010) focus on the impact of funds, tax policies, investment environment, government management and services for the overseas development of China's agricultural enterprises. Enterprises can go abroad according to their superior factors and seek high-quality agricultural bases or pastures overseas. We support overseas direct investment in agriculture through fiscal, taxation, policies and laws to provide an all-round guarantee for overseas development.

Purpose of the article. In order to actively address the call for economic

globalization and expand the field of economic opening up, China is committed to achieving mutual benefit and win-win cooperation with other countries around the world, especially neighboring countries in Asia. However, with the changes of the international and domestic situation, the progress of science and technology, the world economy shows a state of volatility. China's traditional economic development model and economic development structure can no longer fully meet the needs of the world economic development. With the rapid development of China's economy, economic structural contradictions have become increasingly prominent. The 2008 financial crisis also impacted the economies of other countries in the world, and the speed of global trade development has slowed down significantly. After the passage of the financial crisis in 2008, its impact on various countries also continued for a long time, bringing a significant impact on Asia and even the world, leading to a relative slowdown in economic development around the world. In terms of China's foreign export trade, the foreign exchange reserves of Chinese listed companies shrank significantly after the financial crisis. Less consumer demand has led to the greater difficulty of import and export trade. Trade in import and export commodities decreased, and import and export trade decreased. China's share of foreign exports to GDP plunged from 37% in 2007 to that in 2008, or 4.7% in 2008.As China's second largest export market country, its economic recession has reduced bilateral trade volume between China and the US, bringing a heavy blow to China's export companies. China's economic growth fell to 11.9% in 2007 to 10% in 2008, and fell to 9.5% in 2009.Therefore, to alleviate the negative impact of the financial crisis, China proposed the "Belt and Road" initiative in 2013.The "Belt and Road" initiative is a long-term layout for China to actively implement major-country diplomacy and neighboring neighbors.

In the new era and new background, the proposal of "Belt and Road" is conducive to the improvement of China's open economic system and the healthy and sustainable development of China's economy. This is a new economic cycle model. China and other countries achieve equality, sharing and win-win results. At present, the world economy is generally slowing down. To create cooperation opportunities without impetus for economic growth is to establish a bilateral cooperation mechanism with less friction as the world hinders multilateral cooperation. Building a "Belt and Road" is not only a strategic measure conducive to the country, but also a form of cooperation with vested

interests. It is a new model of active exploration of international economic and trade cooperation and global governance, and will add new vitality to the peaceful development of the world economy new opportunities and vitality.

Research methodology. By searching a large number of research literature at home and abroad, the existing research content, research assumptions and research methods are sorted out related to reading. The deficiencies in the research were combined with the current popular "Belt and Road" background to analyze the agricultural trade of China with countries along the "Belt and Road". Then refer to a large number of literature to find out the factors affecting the development of "Belt and Road" trade, laying the foundation for the model setting. Literature search focuses on grasp the "Belt and Road" initiative since China agricultural import and export trade faces new opportunities, new problems and possible new countermeasures, as well as the gravity model in the commodity trade of the application of conclusions and limitations, for the subsequent China and "Belt and Road" along the agricultural trade influence factors to lay the realistic basis and establish a solid theoretical basis.

Research contents. The current situation analysis of foreign investment in agricultural enterprises.

Analysis of investment status quo. The investment area is increasingly extensive, concentrated in Central Asia. The investigated agricultural enterprises have built five grain, vegetables, forage planting bases, beef cattle and breeding bases, and equipment research and breeding bases, and agricultural science and technology development and promotion parks in Central Asia, Russia, Africa, Australia and Southeast Asia. Xinkang Food, invested in Almaty, Kazakhstan, has a planting area of 125,000 square meters and all its products for export. The market share in Central Asia has reached about 35%, and its annual output and sales volume have maintained a steady growth trend of 8% to 10%.At the same time, the regional investment flow concentration of Chinese agricultural enterprises is high. More than half of the enterprise investment area concentrated in central Asia, which may be adjacent to xinjiang, agricultural resource endowment, natural environmental conditions, social and culture and northwest China arid region, agricultural technology promotion and application is more convenient, effectively shows the advantages of Chinese agricultural varieties and advanced planting technology.

Investment entities are becoming increasingly diversified, and private enterprises are developing rapidly. Early agricultural foreign investment was mainly dominated by the government, and the investment subject was relatively single.

**Table 2.9 - External activities of agricultural enterprises**

| N# | Name | Investment countries | Investment form | Industry |
|---|---|---|---|---|
| 1 | Horgos Kingbillion International Trade Group Ltd | Five Central Asian countries and Russia | To the agricultural and sideline products, vegetables, fruits of the acquisition, preservation, sales as the leading export | Fruit and vegetable planting and cultivation, purchase and transportation, preservation, storage, deep processing and export sales |
| 2 | COFCO Tunhe Co., Ltd | The United States, Europe, Southeast Asia,Japan and South Korea | Establish partnerships with Heinz, Unilever and Nestle | Tomato powder outlet |
| 3 | Yangling Kuske Agricultural Science and Technology Co., Ltd | Kursk Oblast, Russia | Yangling Kursk Agricultural Science and Technology Cooperation Park | Agricultural science and technology research and development and promotion |
| 4 | Shaanxi Qinchuan Cattle Industry is limited Company | Melbourne, Australia | Shaanxi Qinchuan Cattle Industry Australian Ranch | Open large farms, breeding bases, forage production and processing bases; introduce foreign quality beef cattle varieties for pure breeding |
| 5 | Yangling Jinghui Agricultural Co., Ltd | Tadzhikistan ; Tajikistan | Yangling Agricultural Science and Technology Cooperation Park | Water-saving irrigation, greenhouse cultivation, fine seed cultivation and other agricultural science and technology research and development, agricultural machinery, agricultural materials trade Easy to communicate and display |

Source: compiled by author

Large state-owned agricultural enterprises such as China Agricultural Reclamation Group Corporation have played the main role. With the in-depth implementation of the "Belt and Road" initiative, agricultural foreign investment subjects

are becoming increasingly diversified. In addition to some large state-owned enterprises and agricultural research institutes, more and more private enterprises and individuals in China are also speeding up foreign investment.

Investment fields are becoming increasingly diversified, and processing trade has outstanding advantages. The investment field of agricultural enterprises involves grain, vegetable and forage grass planting, beef cattle breeding, agricultural science and technology and equipment research and development and promotion, agricultural products processing trade, etc., showing the increasingly diversified forms of investment. At the same time, agricultural enterprises engaged in agricultural products processing trade, better benefits, market advantages are more obvious.

Investment and operation are becoming increasingly standardized, and the localization characteristics are obvious. In order to cope with the investment restrictions of the agricultural field in the target countries, the local investment and operation of agricultural enterprises are becoming increasingly standardized and showing obvious localization characteristics. Take Xinkang Food as an example, in response to the laws and regulations of Kazakhstan for foreign enterprises, actively train local employees, train a large number of technical and senior managers for local society, realize management localization; in product development, absorb excellent talents from local food industry, study the consumption habits of local residents by visiting local families, and to realize product development series.

Difficulties of foreign investment in agricultural enterprises

Foreign policies aspects. The resource dilemma formed by the industrial protection policy. Rich local agricultural resources are the way for agricultural enterprises to invest abroad, and some countries strictly control the scale and way of foreign enterprises using agricultural resources to protect local industries, which increases the difficulty of agricultural enterprises to invest and operate abroad, and makes them face more severe resource difficulties. For example, countries such as Kazakhstan have passed legislation to restrict agricultural land, and strictly control the lease term. Foreigners were allowed to lease agricultural land for only five years and had no right to purchase any land, before the country previously actively encouraged individuals or businesses to reclaim uncultivated land by giving incentives.

Talent dilemma caused by the work visa policy. Agricultural production is a

long-term and sustainable operation work, which makes the smooth implementation of foreign investment projects in agricultural enterprises rely on sufficient operation and management personnel and professional and technical personnel. When the main investment countries or regions cannot provide sufficient technical personnel, it is inevitable for agricultural enterprises to send relevant staff from abroad. However, from the situation of the investigated enterprises, some countries strictly control the work visas, so that they often face the talent dilemma, which has affected the daily operation of the enterprises. Take Kazakhstan as an example. The work visa application is long and expensive, which makes it extremely difficult for relevant technical experts to enter, affecting personnel and technical exchanges. The lack of effective communication and field research prevents enterprises from understanding market changes in time, and hinders the research, development, innovation and application of agricultural technology.

Domestic policy aspects

(1) Procedure restrictions for investment approval. Although the State Council has made special documents clear that enterprises do not use government-invested projects for construction .The examination and approval system will no longer be implemented, and the approval system and the record system will be implemented under different circumstances. However, in the actual operation process, for a large-scale overseas investment, still need the approval of the relevant departments. According to the investigated enterprises, the examination and approval of foreign agricultural investment projects is complex. Some projects require the approval of multiple provincial departments, and large-scale projects also need the approval of the National Development and Reform Commission and the Ministry of Commerce and other departments, with long approval time and energy, which affects the implementation of the project.

(2) Administrative restrictions on the inspection and quarantine of agricultural products. The Regulations on the Implementation of China's Import and Exit Animal and Plant Quarantine promulgated and implemented by China in 1996 stipulate that the relevant bilateral quarantine agreements (including quarantine agreements, memorandum, etc.) can only be signed by China and the export countries or regions. In terms of department agricultural products, China and some countries did not signed a bilateral quarantine agreement, making Chinese agricultural enterprises in Russia and Southeast Asia rice planting enterprises cannot pass the production of rice back to domestic sales

and processing, can only choose local sales, greatly affected the economic benefits of Chinese agricultural enterprises in foreign investment.

Enterprise operation and management aspects

(1) The market competition environment is relatively fierce. Agricultural investment in developed countries has lasted a long time and has rich experience, and has obvious market competitive advantages. Foreign multinationals now control 80% of the global grain trade and 70% of the oilseed trade, the data show. These enterprises with their own leading advantages in business scale, industrial chain and business experience, these enterprises bring obvious market competition pressure to domestic agricultural enterprises' foreign investment.

(2) The brand value of enterprises is not high. Brand value is an important symbol to measure the product recognition of enterprises, while the product brand value of most agricultural foreign investment enterprises is not high. Comprehensive by the situation of research enterprises, agricultural enterprises investment in agricultural products and domestic export agricultural products are mainly primary products, the industrial chain is short, even if there are some agricultural products processing, is also given priority to with simple packaging initial processing, lead to insufficient deep processing of agricultural products, product value link is limited, low added value, enterprise market competitiveness, risk resistance ability is weak. At the same time, some agricultural enterprises lack brand awareness, do not pay attention to enterprise brand building, cannot form a brand agglomeration effect.

Social service system aspects

Industry information services are not in place. According to the comprehensive situation of the investigated enterprises, it is generally reflected that enterprises cannot get agricultural foreign investment in time effective information required by the capital. Since the proposal of the “Belt and Road” initiative, domestic research institutions have invested a lot of energy and resources in relevant research on countries and industries along the Belt and Road. However, some research results have a low quality, which cannot meet neither the national decision-making needs nor the market needs of enterprises. This further makes it difficult for enterprises to collect enough effective information and give up foreign agricultural investment.

Foreign-related government services are not in place. In the process of foreign

investment, agricultural enterprises need necessary support to government departments. Foreign departments do not have special agricultural service departments, so that enterprises cannot get timely help when inspecting foreign investment; and even enterprises have business disputes in the investment target country. At the same time, the differences in trade terms between the two countries hinder the unimpeded export of agricultural products.

Countermeasures to accelerate the foreign investment of agricultural enterprises

Areas of support for agricultural enterprises to improve their foreign investment and operation capabilities. First, encourage agricultural enterprises to expand to the industrial chain prenatal and postpartum links, extend the industrial chain, expand the value chain. At present, the foreign investment in agricultural enterprises is mainly focused on the planting and breeding link, while expanding to the prenatal link can reduce the restrictions of the investment target countries on agricultural land investment and improve the investment environment; on the other hand, it can play the industrial chain consumption guidance and industrial enhancement function, enhance the market competitiveness of enterprises, and obtain new profit points. Second, we will support enterprise joint ventures and cooperation with local enterprises. Considering the attention of the investment target countries on agricultural land, the investment mode of joint venture with local enterprises can not only reduce the non-economic friction with the local government, but also make full use of various resources of local enterprises. Third, guide agricultural enterprises to actively fulfill their social responsibilities in the local area, and shape a good overseas investment image of Chinese enterprises. Attention should be paid to strengthen communication with the local government and residents, actively participate in social welfare undertakings, and constantly publicize and promote them, so that local residents can understand the efforts of enterprises for the sustainable development of the local economy and society, and establish and maintain a good corporate image.

The support and service system for promoting foreign investment in agricultural enterprises. First, the establishment of government departments with clear functions and strong targeted nature to serve agricultural foreign investment. Second, give full play to the role of scientific research institutions, trade associations and other social forces. At the same time, industry associations can not only become a platform for exchanges and

cooperation between agricultural foreign investment enterprises, promote their "group to sea", but also avoid the international resistance faced by official institutions. Third, making full use of the role of the UN Food and Agriculture Organization (FAO) and other international agricultural institutions, through active cooperation with these multilateral institutions in the international agricultural field, can effectively create a good international public opinion environment for their international agricultural investment.

In general, foreign investment by Chinese agricultural enterprises is both an opportunity and a challenge. On the one hand, with abundant agricultural production resources, cost of low land and backward agricultural production technology, it can obtain considerable income from introducing domestic technology, capital and other factors; on the other hand, agricultural investment still faces many problems due to policy environment conditions, national policies and system conditions, self-construction and disadvantages of social services.

### 2.4 Research on agricultural trade in China based on the theory of factor endowment

As the global economy becomes increasingly interconnected and regional integration develops, the economic and trade interactions between countries and regions are intensifying. Agricultural trade, as a vital component of the world economy, experiences profound impacts on the development of agriculture and foreign trade in various countries and regions due to changes in the international market. The contemporary trend in agriculture worldwide is internationalization, which encompasses the entire process of agricultural industry reproduction, involving the production, exchange, distribution, and consumption of agricultural products. This process has expanded from a national scope to a global one, facilitating the transnational flow of factors of production and agricultural products, global resource allocation, and reinforcing the integration of agricultural investment and trade with the world market.

The factor endowment theory, serving as the foundation and cornerstone of modern comparative advantage theory, focuses on the examination of changes in the comparative advantage of various elements. These elements include:

Natural Resource Endowment: Natural resources, such as land area, geographical location, water power, and mineral deposits, represent exogenous determinants of comparative advantage. These innate determinants do not change with shifts in social eras and economic development. Geographical location significantly influences international trade's market dynamics, supply, and transportation costs.

Labor Force: The endowment of the labor force is determined by the natural growth rate of a country or region's population, specifically the birth rate. In trade reality, the labor force becomes a source of comparative advantage, particularly in export products formed by the low labor cost of low-wage countries or regions.

Capital Element: Capital, divided into material capital and human capital, is another critical source of comparative advantage. Capital is considered an exogenous variable in terms of changes in comparative advantage. However, it accumulates gradually over time due to its nature as an amount that can be produced and recycled for investment.

With the ongoing globalization of economic activities guided by liberal economic development thought, the economic systems of various countries are converging, and the internationalization of world agricultural development is an irreversible trend. China, as a transition country, experienced a historic transformation from closed doors to open since 1978, culminating in its accession to the WTO. The depth and breadth of China's external agricultural expansion have increased during the process of agricultural internationalization, providing opportunities to leverage both domestic and international resources and markets while simultaneously facing challenges from the global market.

The theory of "factor endowment" considers the different natural environments and historical development of countries and regions, impacting the structure of national trade. The theory establishes a 222 model, analyzes differences in national product supply capacity based on the density of national elements, and draws conclusions about countries exporting products that are intensive in abundant elements and importing products that are intensive in scarce elements. Specifically, under complete competition conditions, the production possibility boundary for two countries, A and B, with different factor endowments is represented by AA and BB'. The relative demand and supply curves determine the relative price levels (PA, PB).

Under the condition of idleness, the diagram illustrates that the equilibrium point for Country A under a closed condition is EA, PB < PA at this time. Since opening up,

the relative price of Product X in Country B has become relatively high. Consequently, Country A begins exporting Product X to Country B while importing Product Y. This results in a reduction of domestic supply for X products in Country A, causing their relative prices to rise. Similarly, Country B adjusts until equilibrium is reached.

The aim of the work is to address the increasingly prominent issues in agricultural trade due to rapid economic development. Specific problems include:

Increased demand for agricultural products due to population growth, particularly in developing countries where demand is growing faster, leading to potential growth in China's agricultural exports.

The market prospect for organic agricultural products, which has been gaining popularity in North America and Europe. There is a global shortage of organic agricultural products, providing a broad market space, and China's abundant organic land contributes to its advantage in production and trade of organic agricultural products.

Rapid development of bilateral trade agreements, with China signing agreements and engaging in negotiations with various countries. Bilateral free trade agreements play a crucial role in promoting China's agricultural product import and export growth, improving the trade environment, and reducing trade costs.

Non-tariff barriers restricting the growth of labor-intensive agricultural exports. As the export market, mainly composed of developed countries, poses obstacles to the export of labor-intensive agricultural products, non-tariff barriers such as technical standards, environmental standards, health standards, and certification procedures are becoming more diverse and extensive, hindering China's agricultural exports.

The theory of comparative advantage stands as a crucial achievement in international trade research, with its significance evident in three key aspects. Firstly, it expands from examining the relationship between factor abundance, factor intensity, and trade structure to addressing the problem of resource allocation under open conditions within the general equilibrium framework. This involves delving into the connection between factor prices, product prices, and income distribution in open microeconomics. Secondly, within the realm of general equilibrium analysis, the "structural general equilibrium analysis framework" serves as the theoretical benchmark, providing the foundation for rich and classical research results. Thirdly,

the theory exhibits strong explanatory power and guidance for understanding the realities of international trade and division of labor.

The evolution of comparative advantage theory has occurred in different periods. The classical comparative advantage theory, rooted in the period before the marginal revolution, marks the early stages of the theory's development. The theory of absolute advantage, proposed by the ancestor of Western economics, played a catalytic role in the birth of comparative advantage theory, providing valuable insights.

The early neoclassical comparative advantage theory, influenced by economists like Marshall and Echvos, further developed the theory. It incorporated ideas from factor endowment theory, introduced general equilibrium analysis methods into international trade theory, and posited that differences in factor endowments lead to trade among countries. Each country exports products that utilize its abundant factors intensively and imports products that use its scarce factors intensively, establishing its comparative advantage and trade mode in international trade based on the cost advantage of their respective export products.

In discussing the comparative advantage of agricultural products in the world market, it is primarily manifested in price advantages, determined by production costs, circulation costs, and additional costs across the entire production and sales market link. The factor endowment theory asserts that products with an export-intensive use of high-margin factors of production gain a comparative advantage in the international market due to lower production costs, leading to lower prices compared to products from other exporting countries.

Analyzing the importance of various elements in agricultural production, the production function is employed to explore the internal relationship between factor input and agricultural production costs. The assumption is made that agricultural factors of production include natural resources, capital, and labor, with land representing all natural resources. When output is constant, and there are no economies of scale, the production cost of agricultural products can be expressed in the following function:

$$C(L,K,A)=PLL+PKK+PAA, \quad (2.1)$$

where L,K,A denote labor input, capital input and land input respectively,

while PL,PK,PA denote labor price, capital price and land rent respectively.

Assuming that the production function is a Cobb Douglas function and the technology remains the same

Q=μLα KβAγ, α+β+γ=1 is constant. (2.2)

The minimum value can be obtained.

Take the Lagrange function, order:

$$C(L,K,A)=c(L,K,A)+\lambda(Q-\mu L^{\alpha}K^{\beta}A^{\gamma}) \tag{2.3}$$

where, ƛ - is the undetermined constant. Defined L, K, A.

$$\begin{cases}\dfrac{\partial C(L,K,A)}{\partial L}=P_L-\lambda\alpha\mu A^{\alpha-1}K^{\beta}L^{\gamma}=0\\ \dfrac{\partial C(L,K,A)}{\partial K}=P_K-\lambda\beta\mu A^{\alpha}K^{\beta-1}L^{\gamma}=0\\ \dfrac{\partial C(L,K,A)}{\partial A}=P_A-\lambda\gamma\mu A^{\alpha}K^{\beta}L^{\gamma-1}=0\\ \dfrac{\partial C(L,K,A)}{\partial \lambda}=Q-\mu A^{\alpha}K^{\beta}L^{\gamma}=0\end{cases}\Rightarrow\begin{cases}P_AA=P_KK\\ P_LL=P_KK\end{cases}\Rightarrow\begin{cases}A=\dfrac{P_K}{P_A}K\\ L=\dfrac{P_K}{P_L}K\end{cases},$$

$$Q=\mu L^{\alpha}K^{\beta}A^{\gamma}=\mu\left(\frac{P_K}{P_L}K\right)^{\alpha}K^{\beta}\left(\frac{P_K}{P_A}K\right)^{\gamma}=\mu\frac{P_K{}^{\alpha+\gamma}}{P_L{}^{\alpha}P_A{}^{\gamma}}K\Rightarrow K=\frac{QP_L{}^{\alpha}P_A{}^{\gamma}}{\mu P_K{}^{\alpha+\gamma}},$$

$$\min C(L,K,A)=\frac{3QP_L{}^{\alpha}P_K{}^{\beta}P_A{}^{\gamma}}{\mu} \tag{2.4}$$

The lowest cost of agricultural products is influenced by the prices of production factors (PL, PK, PA) and the ratio Q of factor combinations. When Q remains constant, the production cost is uniquely defined by factor prices. Consequently, countries can establish a comparative advantage in international markets by specializing in the export of products that utilize lower-priced factors of production.

Utilizing the Cobb Douglas production function model and taking into account the economic significance of the data, a linear model is derived by applying logarithms to both sides of the equation simultaneously.

InY= Inθ+InAϒ+InLα+InKβ (2.5)

α,β and ϒ respectively represent the contribution rate of each factor to the total

assets, and bring in the related variables further.[17] We get the final measurement model as follows:

$$InY=\beta 0+\beta 1InA+\beta 2InL+\beta 3InK+\mu \quad (2.6)$$

$In\theta=\beta 0$,Y is agricultural trade annual total income, β1,β,β3as regression coefficient, μ as residual term.

Capital endowment: Capital is a fundamental element in all production activities. While agricultural products are generally not capital-intensive, suitable capital inputs enhance the productive efficiency of factors like land and labor. The capital stock and its growth rate reflect a country's (region's) capital factor margin, impacting the comparative advantage in production and trade.

Labour endowment: Agricultural production involves deploying labor into natural resources to generate products. The abundance of labor resources directly influences the comparative advantage of agricultural products, with countries (regions) rich in labor resources more likely to establish a comparative advantage in labor-intensive agricultural products. Given China's large rural population, it is consistently viewed as having a labor endowment advantage in agricultural production and a comparative advantage in labor-intensive agricultural products.

Land endowment: In the realm of agricultural products, the decisive role of land is paramount among all factors. Land endowment encompasses both the absolute size of a country's (region's) land area and the quality of the land elements within it. The former refers to the sheer extent of land owned, highlighting its limited and non-renewable nature. Therefore, it is a scarce factor for any country or region. Additionally, the fertility, light, temperature, air, water, and other conditions within the land area directly impact the natural productivity of agricultural products. Countries (regions) blessed with fertile soil, favorable climates, and other positive environmental conditions enjoy a land endowment advantage in agricultural production.

Based on the above variables we derive the following data:

**Table 2 .10 – Results of calculation: K,L,A,Y data from 2011-2018**

| Year | Y (million) | K (ten thousand) | L (thousands) | A (thousands of hectares) |
|---|---|---|---|---|
| 2011 | 452284 | 693198000 | 26594 | 61681 |
| 2012 | 463428 | 894213473 | 25773 | 62490 |
| 2013 | 491316 | 923425430 | 24171 | 63473 |
| 2014 | 518238 | 985343682 | 22790 | 64539 |
| 2015 | 504889 | 1070563648 | 21919 | 65872 |
| 2016 | 519939 | 1093878680 | 21496 | 67140 |
| 2017 | 531860 | 1101240339 | 20944 | 67815 |
| 2018 | 551876 | 1379900000 | 20258 | 68271 |

Source: calculated by author

Q data are from WTO website, K data are from the website of China Bureau of Statistics, L and A data are from the website of China Ministry of Rural Agriculture. Stata and Eviews software were further used for regression analysis, and the results were as follows:

**Table 2.11 - Variable regression results**

| Source | SS | df | MS | Number of obs | = | 8 |
|---|---|---|---|---|---|---|
| | | | | F( 3, 4) | = | 30.97 |
| Model | .030941834 | 3 | .010313945 | Prob > F | = | 0.0032 |
| Residual | .001332182 | 4 | .000333045 | R-squared | = | 0.9587 |
| | | | | Adj R-squared | = | 0.9278 |
| Total | .032274016 | 7 | .004610574 | Root MSE | = | .01825 |

| lnY | Coef. | Std. Err. | t | P>\|t\| | [95% Conf. | Interval] |
|---|---|---|---|---|---|---|
| lnL | -1.028626 | .4779514 | -2.15 | 0.098 | -2.355632 | .2983795 |
| lnA | -1.151775 | 1.103353 | -1.04 | 0.355 | -4.215174 | 1.911623 |
| lnK | .0434306 | .0977056 | 0.44 | 0.680 | -.2278436 | .3147048 |
| _cons | 35.32099 | 17.18626 | 2.06 | 0.109 | -12.39573 | 83.03771 |

Source: calculated by author

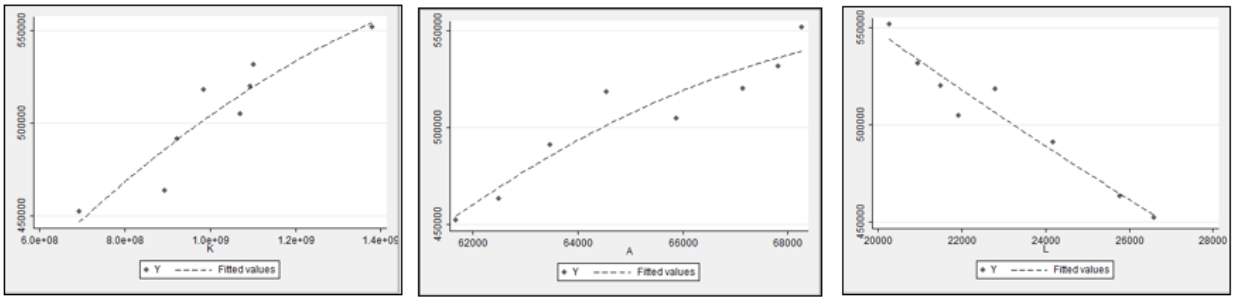


**Figure 2.1 - Trends in fit between K,L,A and Y**

Source: developed by author

$$InY=35.32099-1.151775InA-1.028626InL+0.0434306InK+\mu$$

Test: The primary regression model, with F(3,4) = 30.97, indicates high significance, and the critical F-value of 30.97 at 5% significance level suggests that the overall model is statistically significant.

1. The results reveal that the regression of panel data underscores the pivotal role of national finance in supporting agricultural products, exerting a significant impact on agricultural trade.

2. China faces evident constraints in land factor endowment for agricultural production, with abundant labor factor endowment but also grappling with rising costs and a gradual decline in the labor force. In this context, technological progress becomes crucial for cultivating and maintaining the comparative advantage of agricultural products. Technological progress is not a spontaneous outcome of scientific and technological development; rather, it is a dynamic response driven by changes in resource factor endowment. It results from the pursuit of maximum benefit and is intricately tied to the operation of the economic system. Specific responses to facilitate technological progress include:

3. Government Guidance: Directing the course of technological change in alignment with the actual resource endowment situation, without entirely relying on factor prices to guide technological development through market mechanisms.

4. Technical Support: Providing financial backing for technological innovation in the production, processing, and service sectors of target industries. Encouraging independent innovation by enterprises and strengthening intellectual property protection. Adjusting the structure of foreign capital introduction, prioritizing technology transfer, and narrowing the gap with international advanced technology through technology spillover and learning effects. Vigorously promoting agricultural technology extension.

5. Capital (Material Capital and Human Capital) Support: Boosting material capital accumulation in the industry by increasing financial input to the target industry. Enhancing the service and function of policy finance and encouraging moderate foreign capital entry. Improving the adaptability of human resources to industrial demand and enhancing human capital accumulation through rural basic education, farmers' professional and technical education, and skills training.

## 2.5 Analysis of the current situation of agricultural foreign direct investment in China

As economic globalization progresses and domestic reform and opening up deepen, alongside the rapid acceleration of industrialization and urbanization, a range of national security issues has come to the forefront. These include ecological and environmental protection pressures, a scarcity of cultivated land resources, and challenges related to food supply. In this context, the foreign investment activities of China's agricultural enterprises become crucial. A micro-level analysis reveals a preference among state-owned agricultural enterprises for developing countries, while private enterprises lean towards developed countries. This analysis sheds light on existing issues in the current process of foreign direct investment by agricultural enterprises and proposes relevant recommendations.

Introduction:

Amid the continuous expansion of China's global engagement and the active pursuit of agricultural foreign investment strategies, there has been notable progress in agricultural foreign direct investment. While still lagging behind traditional manufacturing and mining industries, China's agricultural foreign direct investment holds substantial development potential in this new historical phase.

Significance of the Study:

The swift expansion of foreign investment by Western agricultural enterprises, leveraging their robust financial capabilities and technical expertise, has granted them significant control over resource allocation. Drawing from their rich experiences in foreign expansion, this study explores the current state of foreign investment in China's agricultural enterprises. By applying foreign investment theory, the analysis aims to provide valuable insights and recommendations for the improvement of Chinese agricultural enterprises' foreign investment strategies.

Review of Related Studies:

The implementation of China's agricultural investment strategy underscores the importance of overseas investment for agricultural enterprises. However, the level of investment remains relatively low. Existing research on agricultural enterprises' foreign investment primarily focuses on internal motivations, external drivers, investment areas,

fields, environments, subjects, and forms. Scholars such as Ni Guohua, Zhang Jing, and Zheng Fengtian (2014) emphasize the internal conditions driving the global strategy of Chinese agricultural enterprises, including the continuous growth of agricultural demand and the shortage of agricultural resources. Chen Wei (2012) examines the characteristics, restrictive factors, existing difficulties, and solution strategies of China's foreign agricultural investment, covering aspects such as investment subjects, flows, and fields. Qiu Huanguang and Chen Ruijian (2013) assess the current agricultural investment development situation, highlighting problems like a lack of enterprise capacity, institutional barriers, and host environment constraints. Liu Ming (2017) explores new challenges in agricultural investment development, emphasizing the need for foreign investment from the perspective of national food security, the national economy, and strategy.

The scale of agricultural investment has shown steady growth, with significant fluctuations in the target market. Although China's net agricultural foreign direct investment has been on the rise, its proportion in total foreign direct investment remains below 2%, indicating substantial development potential. From 2005 to 2018, 67% of agricultural investment went to developed countries, totaling $75.9 billion, while the remaining 33%, amounting to $36.56 billion, targeted developing countries. Notably, in 2017, state-owned agricultural enterprises invested $43.06 billion in Switzerland. Despite a preference for developed countries, Chinese agricultural enterprises, influenced by political and economic relations, tend to invest more in developed countries.

State-owned enterprises take the lead, and private enterprises exhibit significant growth. The subjects of agricultural foreign direct investment can be categorized into state-owned and private enterprises. State-owned enterprises, with greater investment strength, accounted for 66% of total agricultural investment from 2005 to 2018, totaling $74.66 billion. In contrast, private agricultural enterprises comprised 34%, amounting to $37.8 billion. Although the amount of foreign direct investment by private enterprises is lower, it surpasses that of state-owned enterprises when excluding the substantial investment in Switzerland in 2017. This suggests that, in the realm of agricultural foreign direct investment, private enterprises are more active and can drive better foreign investment in China's agriculture.

Factors influencing agricultural direct investment include both internal enterprise issues and host country restrictions. The agricultural industry faces challenges such as weak quality constraints, low industrial income, and susceptibility to natural disasters. State-owned agricultural enterprises are constrained by host policies in developing countries, and both state-owned and private enterprises encounter challenges associated with the industry's characteristics.

To address these challenges, agricultural enterprises can consider the following measures:

Enhancing technological levels: Learning from developed countries with advanced agricultural production technology can improve research capabilities, promote technology suitable for China's agriculture, and achieve economies of scale.

Attracting talents: Recruiting professionals can provide essential knowledge for production, sales, and foreign direct investment activities, fostering enterprise development.

Diverse fund collection: Facing financial difficulties, agricultural enterprises can leverage government support to address financial challenges.

In the process of foreign direct investment, Chinese agricultural enterprises are likely to increase investments in countries with economic cooperation with China. Active communication with host countries and specific economic cooperation related to agriculture can reduce information costs, minimize investment risks, and increase the likelihood of foreign direct investment activities.

China's agricultural direct investment abroad is expanding rapidly, with both increased numbers of enterprises and enhanced investment strength. While state-owned agricultural enterprises face host policy restrictions, their stronger investment capabilities and resilience to risks position them as key players. Hence, private agricultural enterprises should be the primary drivers of China's agricultural foreign direct investment, collaborating with state-owned enterprises. Attention should be paid to internal enterprise challenges, including capital, information, and talent resource shortages, as well as low technological levels. Addressing these issues will enhance enterprise competitiveness and fill existing gaps in agricultural enterprises.

To navigate policy restrictions in host countries, enterprises should collaborate with local entities and people. Moreover, China needs to strengthen cooperation with

host countries to reduce obstacles faced by agricultural enterprises in foreign direct investment. Seizing investment opportunities, actively engaging in foreign direct investment, and addressing internal challenges will bolster the competitiveness of Chinese agricultural enterprises. Aligning with relevant policies to reduce operating costs and business risks will further promote successful foreign investment by Chinese agricultural enterprises.

Since the emergence and development of the trend of thought of sustainable development, the awakening and strengthening of environmental awareness has begun to have a direct or indirect impact on the development strategies of various countries. People's mode of thinking, values, consumption concepts have also changed, green consumption boom began to emerge. Some regions and communities in the world, especially people in developed countries, have entered the mature stage of pursuing the quality of life, and consumers' environmental awareness and environmental orientation of products are becoming stronger and stronger. Therefore, international economic and trade relations have been greatly affected, green barriers have become an important factor to hinder the development of international trade. Especially after entering WTO, this situation becomes more and more prominent.

In this context, how to make Ukraine's economic development and environmental protection and co-advance, to connect with the world, to promote the growth of Ukraine's export trade, to occupy a place in the world market, has become a serious problem we should face. Ukraine has a unique advantage, rich in agricultural products resources, for the machine food industry for the export of agricultural products and environmental protection for the harmonious development of a train of thought. From the current situation, in recent years, Ukraine's green organic agricultural products rapid development, the market continues to expand, facing the growing demand for green organic consumption abroad, the use of marketing and international trade-related theories to speed up. It is of great practical significance to analyze the international marketing of Ukraine's green and organic food to promote the local economy and development of organic and green agricultural products.

This paper uses the knowledge of international agricultural marketing strategy, on the basis of careful analysis of the basic situation of agricultural enterprises, the use of international marketing products, prices, channels, promotions, services and other

combination elements; Through collecting relevant data over the years and using PEST,ABC,SWOT,BCG,GE/Mckinsey matrix and other analytical methods to analyze the basic situation of international marketing of Sumy green and organic food, this paper discusses the current economics situation and situation of international market development of Sumy green food. On this basis, the paper focuses on the analysis of local green food international marketing factors. The ideas and emphases of international marketing of local green food were determined, and the countermeasures to promote Ukraine's green and organic food to enter the international market were put forward.

This paper summarizes the status and function of Sumy regional green、 organic food international marketing, defines the related concepts of green food international marketing, and analyzes the theoretical basis of international trade of green food. The current situation of international organic food production, international marketing situation, marketing potential, channel characteristics, as well as the impact of Sumy regional green, organic food export were studied. Since the development of Ukraine's import and export trade, Sumy regional green, organic food international marketing status and existing problems, to clarify the Sumy regional green, organic food development strategy direction, under its guidance, determine Sumy regional green, organic food international marketing focus.

From the angle of sustainable development and promoting the international trade of green and organic food, this paper is guided by the systematic thought and method, stands at the height of the international market, and combines the empirical research with the normative research. By combining qualitative research with quantitative research, the international organic food management system, standards and foreign distribution were investigated by extensive investigation and typical examples. Combined with Sumy green, organic food development reality, adapt to the new situation of international trade, put forward the principle of international marketing of green food, put forward the countermeasures of speeding up the international marketing of Sumy green and organic food.

The problems to be solved in this paper are as follows:

1) to investigate the supply and demand situation of international organic food market and analyze the marketing characteristics of organic food;

2) summarize the influential factors of Sumy regional green, organic food international marketing;

3) put forward the countermeasures to accelerate the development of Sumy regional green, organic food international marketing.

The analysis of agricultural enterprise

Since the state attached importance to the development of agriculture, the weak position of agricultural enterprises has been gradually improved, agricultural enterprises began to further expand the new international market, cross-border marketing activities. It is great practical significance for agricultural enterprises to carry out transnational marketing: through analyzing the present situation of domestic division of labor, considering the changes of international trade market environment at the present stage, the agribusiness enterprises formulate the corresponding transnational marketing strategy. The implementation of the corresponding international marketing strategy can help agricultural enterprises expand their own development space in the broad international market.

At present, Ukraine is in a critical period of economic transformation, and in this market environment, the agricultural enterprises of Ukraine must seize the opportunity period of economic transformation. The choice of appropriate international marketing combination strategy can increase the competitiveness of enterprises in the international competitive environment and expand the market share of agricultural enterprises. In addition, agricultural enterprises take greater risks than ordinary enterprises in carrying out transnational marketing activities, because, on the one hand, agricultural enterprises need to meet the requirements of domestic market rules when conducting transnational marketing activities. It is also necessary to meet the rules and conditions of the foreign market; On the other hand, the production of agricultural enterprises has a strong regional and seasonal fluctuations. Compared with other enterprises in the process of cross-border marketing, the investment scale is smaller, the investment field is narrower, and the trade is concentrated. In addition, agricultural enterprises to carry out cross-border marketing activities still have a narrow geographical scope, profit level is also lower than the developed countries of agricultural enterprises and other problems. These risks and problems have become a gentestone hindering the further development of agribusiness in international market competition. Therefore, only by having a more

mature operation system and choosing a more suitable market entry mode, can the agricultural enterprises better adapt to the needs of their own development and promote their continuous development and expansion. Ukraine has a superior geographical position and the development of agriculture has the following advantages:

Natural conditions: located in central Europe, temperate continental climate, sunshine time is long, the temperature difference between day and night is large, which is conducive to the high and stable yield of food crops; the vast plains of Central Europe are conducive to the development of planting industry; the soil is fertile and the cultivated land area is wide.

Socio-economic conditions: located at the border between East and West Europe, there is a broad market; convenient transportation; adequate labor force; long history of agricultural development. Therefore, the development of agricultural enterprises has relative advantages, can better promote the economic development of the country.

C&U Agricultural products Development Co., Ltd., founded in February 2019 with registered capital of US $2000, currently employs 10 people in Sumy region, Ukraine, including 1 general manager, 3 senior agricultural technicians, 4 agricultural technicians of various types, and 1 economist. One accountant. At present, there are 5 planting bases for organic agricultural products and 3 for livestock farms.

Company's main business scope: primary agricultural products, wheat, soybeans, sunflowers and other planting and product animal husbandry sales. Since the establishment of the company, the corporate governance structure has been established, the management system has been formulated and perfected, the post responsibility has been clarified, the reward and punishment system has been implemented, the enthusiasm of the employees to start a business has been fully mobilized, and the institutionalized, standardized and scientific management has been realized.

Since its establishment, the company has successively hired a number of experts and scholars from Chinese colleges and universities, continuously developed, experimented with new varieties, trained, and improved the level of planting technology and management of organic products among its employees, thus creating an organic one. Green farming professional technical team and marketing team. The company always adhere to the "people-oriented, scientific and technological innovation, green environmental protection, integrity, benefit to the people" enterprise purpose, has

achieved better social and economic benefits.

**Table 2.12 - Dynamics and structure of net income from the sale of products (goods, works, services) of the agricultural enterprise**

| Product | Years | | | | | | In average for last 3 years | |
|---|---|---|---|---|---|---|---|---|
| | 2016 | | 2017 | | 2018 | | | |
| | Sum, thousand UAH | Share, % | Sum, thousand UAH | Share, % | Sum, thousand UAH | Share, % | Sum, thousand UAH | Share, % |
| Wheat | 509 | 17.33 | 732 | 17.87 | 1234 | 26.19 | 825 | 20.46 |
| Corn | 9 | 0.31 | 955 | 23.32 | 965 | 20.48 | 643 | 14.7 |
| Buckwheat | 73 | 2.49 | 92 | 2.25 | 10 | 0.21 | 58.33 | 4.95 |
| Legumes | 246 | 8.38 | 108 | 2.64 | 0 | 0 | 118 | 11.02 |
| Soybean | 707 | 24.07 | 773 | 18.87 | 951 | 21.18 | 810.33 | 21.37 |
| Sunflower seeds | 1393 | 47.43 | 1436 | 35.05 | 1552 | 32.94 | 1460.33 | 38.47 |
| Crop production (total) | 2937 | 21.07 | 4096 | 24.51 | 4712 | 23.44 | 3915 | 23.01 |
| Cattle | 2251 | 20.46 | 2175 | 17.24 | 2055 | 13.36 | 2160.33 | 17.02 |
| Pigs | 3503 | 31.84 | 2263 | 17.94 | 3338 | 21.69 | 3034.67 | 23.82 |
| Milk | 5247 | 47.70 | 8176 | 64.82 | 9994 | 49.72 | 7805.67 | 54.08 |
| Livestock production | 11001 | 78.93 | 12614 | 75.49 | 15387 | 76.56 | 13000.67 | 76.99 |
| Total | 13938 | 100,0 | 16710 | 100,0 | 20099 | 100,0 | 16915.67 | 100,0 |

Source: calculated by author

From the table above, we can see that the main products of the agribusiness are Crop production and Livestock production, in which the planting industry is more. The sales status of agricultural products in the near three years shows that the sales income of animal husbandry products is more, which further explains that with the improvement of people's income level, there is a greater demand for high-nutrition food.

Furthermore, we can see from the above table that the sales output of Livestock production is more than that of Crop production, indicating that with the improvement of economic level, people's demand for meat products increases; among them, in Crop production, the demand for sunflower is the largest, at the same time, the demand for corn is relatively small, and the demand for Legumes is the least; In Livestock production, the demand for milk is the most.

**Table 2.13 - The availability of funds and the effectiveness of their use**

| Indicators | 2016 y. | 2017 y. | 2018 y. | 2018y. to 2016y. | |
|---|---|---|---|---|---|
| | | | | thousand UAH | % |
| Average cost of fixed assets, thousand UAH. | 7152 | 8984 | 9528 | 2376 | 133 |
| Capital-labor ratio, thousand UAH. | 56.76 | 69.11 | 70.06 | 13.3 | 123 |
| Capital productivity, UAH. | 2.72 | 3.41 | 3.55 | 0.83 | 131 |
| Capital intensity, UAH. | 0.37 | 0.29 | 0.28 | -0.09 | 76 |
| Commodity products (Volume of sales), thousand UAH. | 19432 | 30598 | 33859 | 14427 | 174 |

Source: calculated by author

From the Table 2.13, we can see the investment data of agribusiness, and the annual index increases year by year, which means that the market competitiveness of agribusiness is greater. First of all, we can see that Average cost of fixed assets is on the rise year by year from 2016 to 2018, indicating that the costs invested by enterprises in investment and operation are constantly rising, and secondly, we can see that Capital-labor ratio and Capital productivity are also rising. It means that enterprises invest more labor force;

Finally, we can see that Commodity products is in an upward trend. When the input cost of the enterprise is increasing, the quantity of goods exported by the enterprise is also in the ascendant trend, there will be more. The availability of funds and the effectiveness of their use, negative growth in Capital intensity from mid-2018 to 2016 means less capital-intensive investment by agribusiness.

Table 2.14 mainly reflects the state of operation and income and expenditure of agricultural enterprises. From the financial and economic indexes and profitability of enterprises in the last three years, it can be seen that the development of enterprises has a good prospect, and the net profit of enterprises is on the trend of increasing year by year, which further promotes the healthy development of enterprises. First of all, we can see that Total agricultural land is a fixed value, and the labor life invested by enterprises is rising year by year, while the labor income obtained by workers is on the upward trend; Secondly, we can see that the net profit of enterprises increased from 673thousand UAH in 2016 to 1392thousand UAH, in 2018. Finally, we can see that the growth rate of total profit is in the trend of rising first and then decreasing.

**Table 2.14 - The dynamics of the main financial and economic indicators and profitability of the agricultural enterprise**

| Indicators | Years | | | Deviation 2018 to 2016 (+, -) |
|---|---|---|---|---|
| | 2016 | 2017 | 2018 | |
| Total agricultural land, ha | 1641 | 1641 | 1641 | 0 |
| The amount of workers, persons | 126 | 130 | 136 | 10 |
| Labor Fund, thousand UAH | 4205 | 4118 | 7219 | 3014 |
| Commodity products (Volume of sales), thousand UAH | 19432 | 30598 | 33859 | 14427 |
| Cost of sold products, thousand UAH | 13043 | 18865 | 22144 | 9101 |
| Gross profit, thousand UAH | 6389 | 11733 | 11715 | 5326 |
| Total cost, thousand UAH | 20098 | 30502 | 63699 | 43601 |
| Balance currency, thousand UAH | 18695 | 20037 | 87279 | 68584 |
| Equity, thousand UAH | 7947 | 6710 | 6585 | -1362 |
| Working capital, thousand UAH | 9164 | 8432 | 9531 | 367 |
| Net profit, thousand UAH | 673 | 1341 | 1392 | 719 |
| Profitability of activity,% | 0.035 | 0.044 | 0.041 | 0.006 |
| Profitability of sales,% | 49 | 62 | 53 | 4 |
| Total profitability, % | 3.3 | 4.4 | 4.2 | 0.9 |
| Return on assets,% | 3.5 | 1.2 | 1.6 | -1.9 |
| Return on equity, % | 5.3 | 2.8 | 1.7 | -3.6 |

Source: calculated by author

## 2.6 The analysis of marketing activity of agricultural enterprise in Ukraine

As we all know, with the rapid development of market economy, international marketing activities become more and more obvious, then in the international market how to market positioning for their own agricultural enterprises? This requires us to combine the relevant knowledge of international marketing to analyze the market activities of our agribusiness. We mainly use the following analytical methods:

First of all, we need to understand the "4P" in the marketing mix., 4P marketing theory refers to the combination of four basic strategies: product, price, channel and promotion. For the 4p core marketing portfolio approach, Philip. Kotler made a clear

definition and definition in 1967, namely:

Products: the products and services of an enterprise need to have a unique selling point, and the functional demands of its target consumer group must be given priority.

Price: the pricing of products and services needs to be based on their market positioning and price strategy, and pricing is also one of the important links of the brand strategy of enterprises.

Place: enterprises not directly face consumers, but through the dealer this medium, for channel cultivation and the establishment of sales network, for the implementation of enterprise strategy and brand construction has a vital role.

Promotion: through short-term sales behavior to stimulate consumers' consumer desire, take the way of giving profit, buy one get one free or create a scene atmosphere to promote sales growth.

Secondly, we can need know STP theory is the positioning theory of products and services, which is used to segment the market, determine the target market, and then position the product or service to the appropriate market, and then formulate the strategic plan and strategy.

Market segmentation refers to the process of dividing the market into many different regions according to different subdivision variables.

The target market is to combine the segmented market with the development goal of the enterprise and the characteristics of the product or service, and select a specific market to break through and enter the market.

Market positioning refers to positioning the products or services of an enterprise in the market in an accurate and appropriate position, which represents the choice of competitive position for products or services, so it is also known as "competitive positioning," or "competitive positioning." '. lastly, we can analyze the products of our agribusiness through 4p and STP theories.

In order to ensure the quality and quality of our products, from planting to selling, we are equipped with professional team members to manage the distribution channel of agricultural products in our company is: Channels and Transport, which has a complete industrial chain.

**Table 2.16 - Marketing mix of agricultural enterprise**

| Product | Price(UAH/center) | Place | Promotion |
|---|---|---|---|
| Wheat | 537.67 | Channels | Advertising |
| Corn | 357.74 | | Branding |
| Buckwheat | 885.71 | Transport | Direct |
| Legumes | 0 | | Marketing |
| Soybean | 886.02 | | |
| Sunflower seeds | 817.01 | | |
| Cattle | 1818.30 | | |
| Pigs | 3576.13 | | |
| Milk | 747.27 | | |

Source: compiled by author

For marketing strategy, what our enterprise adopts is advertisement, brand and direct market; We choose advertising as a promotion of our products in the local market, thereby gaining local consumers' recognition, and adopting a brand strategy in order to open up the international market and expand consumer demand. Our enterprises employ Chinese experts and agricultural scholars, and understand that China is a country with a large population, rapid economic development, high demand for organic food, and all of us directly adopt a direct market strategy. Direct our agricultural products into the Chinese market.

We can see from Table 4 that Marketing mix of agricultural enterprise, has nine kinds of agricultural products, among which the price of Cattle is the highest, and for the place of sale of the products, we can provide them to large supermarkets to form a complete supply chain. At the same time, the enterprise also uses advertising, price reduction activities to sell agricultural products, but also to establish a good brand utility, determine the direct market demand, thereby increasing the revenue of the enterprise**.**

**Table 2.16 - Product assortment**

| Product groups | Subgroups |
|---|---|
| 1.Crop production | 1.1Wheat |
| | 1.2Corn |
| | 1.3Buckwheat 1.4Soybean |
| | 1.5Legumes 1.6Sunflower seeds |
| 2.Livestock production | 2.1Cattle |
| | 2.2Pigs |
| | 2.3Milk |

Source: compiled by author

- Length: It’s have two products in a particular product chain or line.

- Depth: we have Crop production and Livestock production, and the Crop production have six kinds of different products, the Livestock production have three kinds of products.

ABC Analysis is a comprehensive way of segmenting your customers or products to make sure that you get the most out of your time and your resources when you’re servicing them by breaking the items down into three easily distinguishable categories. The main use of ABC analysis is to improve your ability to deal with large and complex data sets by breaking them down into three segments. The specific analysis is shown in the Table 2.17.

**Table 2.17 - The ABC- Analysis of international trade for agricultural enterprise (Ukraine case)**

| Product | Volume of sales, thousand UAH | Specific Weight, % | Cumulative share, % | Group of priority |
|---|---|---|---|---|
| Wheat | 1234 | 6.14 | 90.41 | C |
| Corn | 965 | 4.76 | 95.17 | C |
| Buckwheat | 10 | 0.05 | 100 | C |
| Legumes | 0 | 0 | 0 | - |
| Soybean | 951 | 4.73 | 99.9 | C |
| Sunflower seeds | 1552 | 7.72 | 84.27 | C |
| Cattle | 2055 | 10.22 | 76.55 | B |
| Pigs | 3338 | 16.61 | 66.33 | B |
| Milk | 9994 | 49.72 | 49.72 | A |
| Total | 20099 | 100 | - | - |

Source: developed by author

Table 2.17 mainly uses ABC- Analysis of 9 products of agribusiness to further divide A, B, C into three different groups. Only Milk belongs to group A, Cattle and Pigs belongs to group B and others belong to group C.

For group A, the products in group B are mostly Livestock production, which means that the market share is low. Therefore, enterprises should strengthen the research and development, production, management of Livestock production, and further enhance the market share.

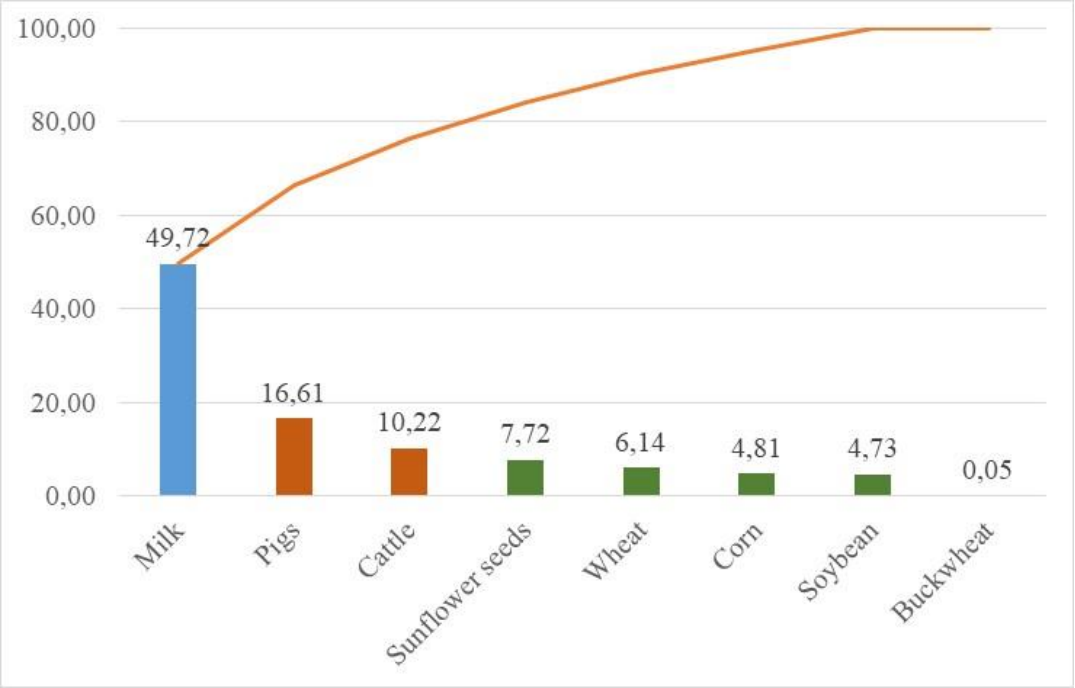


**Figure 2.2 - Pareto chart for international trade of agricultural enterprises (Ukraine case)**

Source: developed by author

The macro-environmental impact analysis of agribusiness is as follows: The agricultural enterprise macro component of the marketing environment is also known as the broad environment. It constitutes the external factors and forces which affect the industry as a whole but don't have a direct effect on the business.

1. Demographic Environment

Analysed agricultural products are mainly suitable for all people, whether the elderly or the children, will have the demand for our products, and the milk products are more suitable for children and the elderly.

2. Economic Environment

For economic indicators, when a country has a good level of economic development, people's demand will become larger, but when the economy is depressed, consumer demand will decrease, which will have an impact on the development of our enterprises.

3. Political-Legal Environment

For the political and legal environment, when the government issues a series of relevant agricultural policies and helps the development of agricultural enterprises, it will lead to the increase of the number of agricultural enterprises, thereby making the market

more competitive.

The agricultural enterprise micro component of the external environment is also known as the task environment. It comprises of external forces and factors that are directly related to the business.

1) Suppliers include all the parties which provide resources needed by the organization. If there are more suppliers of agricultural products in the market, it will cause the market to oversupply and affect the income of agribusiness.

2) Competitors: Sumy region with abundant agricultural resources, there will be more agricultural enterprises. With the rapid development of economy, the market competition is more and more fierce, the agricultural product market also appears competition, the competition will appear the survival of the fittest, so that we can find better quality products.

3) Customers: For consumers, if the price is too low, the income of the enterprise will be reduced; if the price is too high, the demand of the market will be reduced, thus affecting the development of agricultural enterprises.

PEST analysis involves the macro-economic aspects of the enterprise, mainly including Political, Economic, Social, and Technological. It's use to identifying PEST influences is a useful way of summarizing the external environment in which a business operates.

However, it must be followed up by consideration of how a business should respond to these influences. The specific analysis is as follows in the table Table 2.18.

Table 2.19 shows the PEST analysis of agribusiness. Analysis of the significance of the factors. And it is concluded that the influence of Threats is greater than that of Opportunities.

This method of analysis presents a comprehensive examination of the firm's internal strengths, weaknesses, as well as external opportunities and threats within its environment. Strengths encompass the internal capabilities that a company must possess, while weaknesses represent the areas where the company lacks competencies.

**Table 2.18 - The PEST matrix for agricultural enterprise (Ukraine case)**

| Factors | Opportunities | Threats |
|---|---|---|
| Political / Legal | 5.Competition regulation<br>5.Employment<br>3.Government organization<br>4.Environment regulation and protection | 4.Consumer protect<br>2.International trade regulation |
| Economic | 5.Economic growth<br>5.Government support<br>3.Stage of the business cycle | 5.Monetary policy<br>3.Policy towards unemployment<br>5.Taxation<br>4.Exchange rates<br>5.Inflation |
| Social | 5.Education<br>4.Fashion fades<br>5.Distribution<br>6.Health and welfare<br>3.Attitudes to work income | 5.Social mobility<br>4.Life change<br>3.Economic mood<br>3.Living conditional |
| Technological | 5.Government spending<br>4.Government and industry focus on<br>5.new discoveries and technological effort<br>3.Impact of changes in information-tech development | 2. Speed of technology transfer<br>4.Energy and cost<br>4.Changes in material sciences |

Source: developed by author

It is essential to define these strengths and weaknesses from the customer's perspective; if a customer does not perceive something as a strength, its significance in the SWOT analysis is diminished, regardless of the company's pride in it. Table 2.20 provides a detailed breakdown of this specific analysis.

**Table 2.19 - Analysis of the significance of the factors**

| Factors | Weight | Score | Weighted score |
|---|---|---|---|
| Threats | | | |
| Consumer protect | 0.05 | 4 | 0.2 |
| International trade regulation | 0.05 | 2 | 0.1 |
| Monetary policy | 0.1 | 5 | 0.5 |
| Policy towards unemployment | 0.02 | 3 | 0.06 |
| Taxation | 0.08 | 5 | 0.4 |
| Exchange rates | 0.15 | 4 | 0.6 |
| Inflation | 0.06 | 5 | 0.3 |
| Social mobility | 0.04 | 5 | 0.2 |
| Life change | 0.15 | 4 | 0.6 |
| .Economic mood | 0.3 | 3 | 0.9 |

Continuation of the Table 2.19

| Factors | Weight | Score | Weighted score |
|---|---|---|---|
| Living conditional | 0.7 | 3 | 2.1 |
| speed of technology transfer | 0.1 | 2 | 0.2 |
| Energy and cost | 0.5 | 4 | 0.2 |
| Changes in material sciences | 0.5 | 4 | 0.2 |
| Total | 1 | 50 | 6.56 |
| Opportunities | | | |
| Competition regulation | 0.1 | 5 | 0.5 |
| Employment | 0.04 | 5 | 0.2 |
| Government organization | 0.06 | 3 | 0.18 |
| Environment regulation and protection | 0.05 | 4 | 0.2 |
| Economic growth | 0.05 | 4 | 0.2 |
| Government support | 0.05 | 5 | 0.25 |
| Stage of the business cycle | 0.05 | 3 | 0.15 |
| Education | 0.1 | 5 | 0.5 |
| Fashion fades | 0.02 | 5 | 0.1 |
| Distribution | 0.04 | 6 | 0.24 |
| Health and welfare | 0.04 | 3 | 0.12 |
| Attitudes to work income | 0.04 | 5 | 0.2 |
| Government spending | 0.06 | 5 | 0.3 |
| Government and industry focus on | 0.05 | 4 | 0.2 |
| new discoveries and technological effort | 0.1 | 5 | 0.5 |
| Impact of changes in information-tech development | 0.05 | 3 | 0.15 |
| Total | 1 | 70 | 3.98 |

Source: developed by author

Tables 2.20 and 2.21 are the results of the analysis of agribusiness by SWOT analysis. We find out the Strengths, Weaknesses, Opportunities, Threats, of agribusiness.

**Table 2.20 - The SWOT matrix for agricultural enterprise**

| Strengths (17) | Opportunities (16) |
|---|---|
| 4.High quality<br>4.good price<br>5.State enterprise<br>4.not very far away Sumy | 4.To go to the international market<br>4.Government support<br>4.Investment<br>4.Inquire of new technology |
| Weaknesses (15) | Threats (17) |
| 5. Not very big assortment<br>5.Poor technology<br>3.Poor salary<br>4. Poor management | 5. High taxes 5.High cost<br>3.Exchange rate<br>4.High lever of the competition |

Source: developed by author

**Table 2.21 - Enhanced SWOT matrix for agricultural enterprise**

| Strengths-Opportunities(29) | Strengths-Threats |
|---|---|
| State enterprise can go to international marketing<br>Good quality and price make good investment<br>Good quality require new technology | State enterprise don't have high taxes<br>High quality and good price can obtain competition<br>Not very far away Sumy can save cost |
| Weaknesses-Opportunities(-3) | Weaknesses-Threats(-29) |
| Not very big assortment require government support<br>Poor salary and management need government support<br>Poor technology require the new technology innovation | High taxes make salary lower<br>The poor technology and management make high cost<br>Not very big assortment make high lever of the competition |

Source: developed by author

The BCG matrix helps the company allocate resources and is used as an analytical tool in brand marketing, product management, strategic management, and portfolio analysis. The specific analysis is presented in the Table 2.22.

**Table 2.22 - The BCG matrix for agricultural enterprise**

| Product | Volume of Sales (thousand UAH) | | | | | | Business Growth Rate (%) |
|---|---|---|---|---|---|---|---|
| | Enterprise A | Enterprise B | Enterprise C | Enterprise D | Enterprise E | My Enterprise | |
| Wheat | 130 | 111 | 58 | 49 | 59 | 1234 | 25 |
| Corn | 255 | 245 | 220 | 210 | 230 | 965 | 48 |
| Buckwheat | 125 | 120 | 108 | 105 | 113 | 10 | 17 |
| Legumes | 265 | 245 | 210 | 183 | 209 | 0 | 28 |
| Soybean | 115 | 111 | 81 | 65 | 44 | 951 | 40 |
| Sunflower seeds | 250 | 117 | 123 | 154 | 98 | 1552 | 50 |
| Cattle | 98 | 63 | 25 | 47 | 18 | 2055 | 15 |
| Pigs | 12 | 17 | 16 | 25 | 11 | 3338 | 17 |
| Milk | 178 | 257 | 147 | 130 | 126 | 9994 | 50 |

Source: developed by author

**Table 2.23 - The BCG matrix for agricultural enterprise**

| Product | Market Capacity, thousand UAH | Market Share of the Strongest Competitor,% | Market Share of Enterprise, % | Relative position (market share), % |
|---|---|---|---|---|
| Wheat | 1641 | 79.2 | 75.1 | 94.95 |
| Corn | 2125 | 72.4 | 45.4 | 62.71 |
| Buckwheat | 581 | 10.5 | 1.71 | 16.28 |
| Legumes | 1112 | 0 | 0 | 0 |
| Soybean | 1367 | 70.7 | 69.57 | 98.4 |
| Sunflower seeds | 2294 | 72 | 67.65 | 93.96 |
| Cattle | 2306 | 92.3 | 89.12 | 96.55 |
| Pigs | 3419 | 98 | 97.63 | 99.62 |
| Milk | 10832 | 95 | 92.26 | 97.12 |

Source: developed by author

**Table 2.24 - Data for the BCG matrix**

| Product | Volume of sales (million UAH) | Specific Weight, % |
|---|---|---|
| Wheat | 1234 | 6.14 |
| Corn | 965 | 4.8 |
| Buckwheat | 10 | 0.05 |
| Soybean | 951 | 4.73 |
| Sunflower seeds | 1552 | 7.72 |
| Cattle | 2055 | 10.22 |
| Pigs | 3338 | 16.61 |
| Milk | 9994 | 49.7 |
| Total | 20099 | 100 |

Source: developed by author

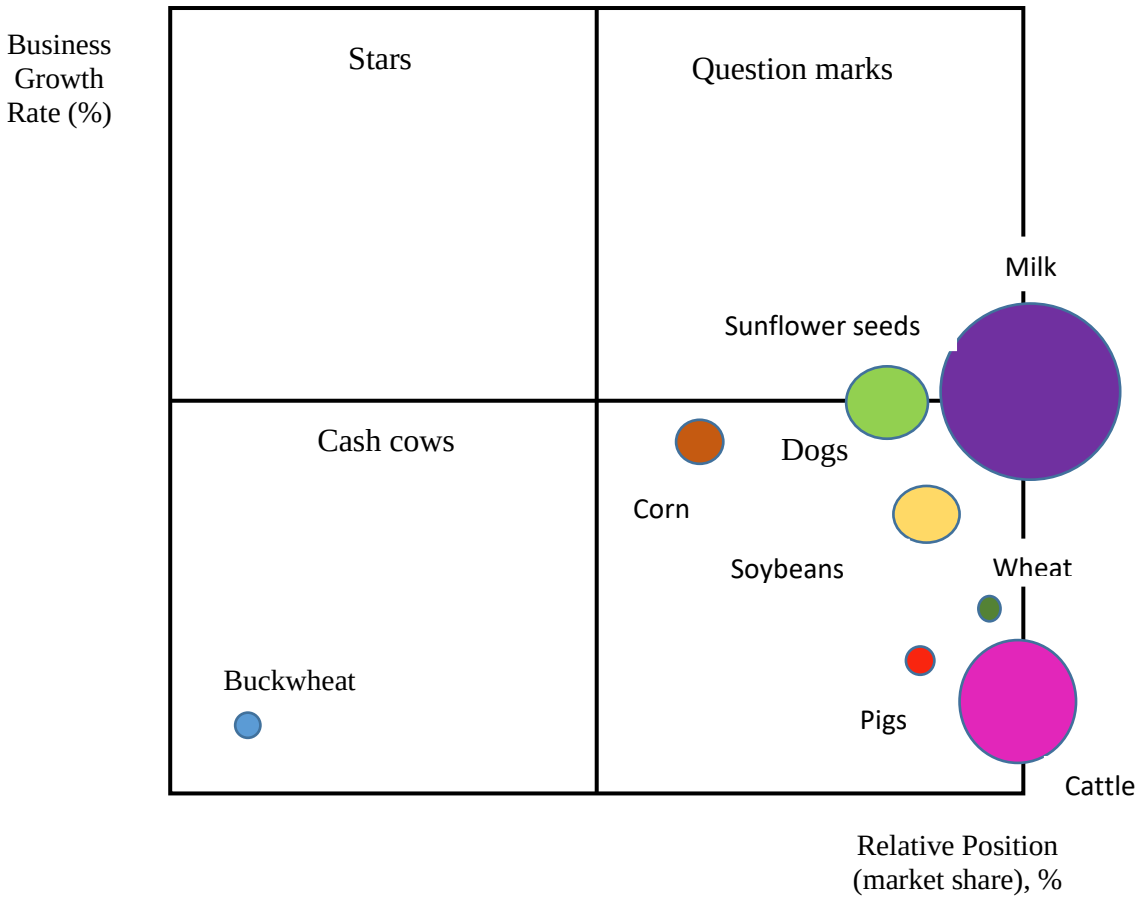


**Figure 2.3 - BCG matrix of the agribusiness (Ukraine case, Sumy region)**
Source: developed by author

These are the results obtained by BCG analysis. We can see that most agricultural products are in the range of low Business Growth Rate and high Relative Position, and Sunflower seeds and Milk are in the middle of question marks and dog products. So we need to improve the quality of products and brands, and build them into star products.

The McKinsey/GE Matrix addresses several drawbacks of the BCG Box.

Firstly, it replaces market growth with market attractiveness as the dimension for industry attractiveness, encompassing a more extensive range of factors beyond just the market growth rate.

Secondly, it substitutes market share with competitive strength as the dimension for evaluating the competitive position of each Strategic Business Unit (SBU). The detailed analysis is outlined below.

**Table 2.25 - Market Attractiveness**

| Factor (What we want?) | Wheat market | | | Corn market | | | Milk market | | |
|---|---|---|---|---|---|---|---|---|---|
| | Weight | Rate | W*R | Weight | Rate | W*R | Weight | Rate | W*R |
| Economics growth | 5 | 0.5 | 2.5 | 10 | 0.7 | 7 | 15 | 0.5 | 7.5 |
| Profit | 25 | 0.1 | 2.5 | 25 | 0.35 | 8.75 | 20 | 0.4 | 6 |
| Low cost | 25 | 0.25 | 6.25 | 15 | 0.5 | 7.5 | 20 | 0.2 | 4 |
| Low risk | 10 | 0.8 | 8 | 20 | 0.8 | 16 | 10 | 0.75 | 7.5 |
| Low competition | 20 | 0.6 | 12 | 15 | 0.55 | 8.25 | 25 | 0.6 | 15 |
| Big market share | 15 | 0.7 | 10.5 | 15 | 0.6 | 9 | 10 | 0.8 | 8 |
| Total | 100 | 2.95 | 41.75 | 100 | 12.95 | 56.5 | 100 | 3.25 | 48 |

Source: developed by author

**Table 2.26 - Business position**

| C. S. Factor (What we have?) | Our enterprise | | |
|---|---|---|---|
| | Weight | Rate | W*R |
| Good quality | 30 | 1 | 30 |
| services | 10 | 0.5 | 5 |
| Low prices | 15 | 1 | 15 |
| Career opportunity | 5 | 0.6 | 3 |
| Good locations | 20 | 0.3 | 6 |
| Technology | 20 | 0.4 | 8 |
| Total | 100 | 3.8 | 67 |

Source: developed by author

From Table 2.25-2.26 we use McKinsey matrix for agricultural enterprise. It is concluded that the Sunflower seeds, Corn, Wheat products are in the middle position, which indicates that the three kinds of products belong to maintain, and the agricultural enterprises should continue to keep the production of the three products.

On the basis of maintain, we also need to strengthen the application of science and technology, and learn from the experience of developed countries, such as the United States, and strive to build products into high Market Attractiveness and high Relative Position.

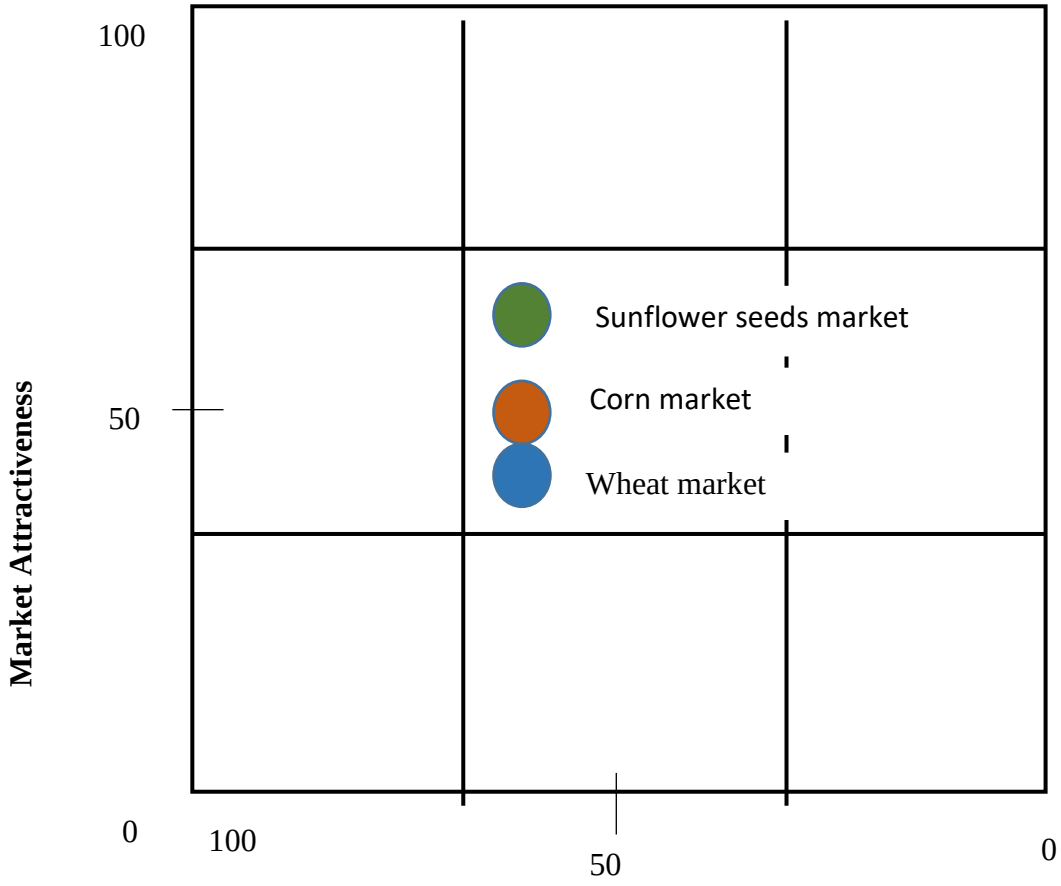


**Figure 2.4 - Relative Position (market share), % (Ukraine case, Sumy region)**

Source: developed by author

Ansoff's product/market growth matrix proposes that a business's growth endeavors hinge on whether it introduces new or existing products to new or existing markets, as depicted in figure eighteen. The Ansoff product/market matrix generates a set of recommended growth strategies that guide the business strategy. The detailed analysis is outlined below.

**Table 2.27 - The Ansoff's product/market growth matrix for agricultural enterprise**

| | Existing products | New products |
|---|---|---|
| Existing markets | Low prices<br>Discounts<br>Make a good reputation | Produce rice<br>Products of recycling oil |
| New markets | Selling soybeans for vegetarian<br>Selling milk with lows price for families with babies | Sell products in new package for students<br>Sell rice for students from china who live in Sumy |

Source: developed by author

Table 2.27 shows that if Ansoff's product/market growth matrix for agricultural enterprise, companies want to gain more revenue, they must innovate their products and look for new markets. These are comments on the development of existing agricultural products.

The international strategy of the agricultural enterprise

With the continuous improvement of the level of economy, science and technology, and the increasing competitiveness of the market, if agricultural enterprises want to be invincible in the fierce competition, they need to formulate some international marketing strategies. For the present situation of our enterprises, our marketing strategy is as follows:

1) Orientation of the international market for agricultural products

Most of the Eastern European countries from the European Economic area, including the European Economic area, are also key exporters of organic and green agricultural products, and the establishment of the European Economic area has also greatly reduced the cost of trade between the two sides. So that the export of Sumy region agricultural products to these areas with geographical location and tariffs and other trade costs convenience.

There is still plenty of room for expansion in the agricultural consumer market. We can take the developing markets in Asia as the main target markets, such as China, Korea, etc. On the one hand, these countries have the potential for development, and with the development of their economies, the markets of this part of the country can be greatly expanded, with these regions as the main target markets being able to occupy that part of the market for a long time, thus laying the foundation for the expansion of exports in the coming years, On the other hand, these countries have lower labor and cost, suitable for the establishment of processing enterprises in these countries.

At present, the international trade of agricultural products in the world is very competitive. The developed countries, such as North America and Northern Europe, have adopted measures such as technical barriers and tariff barriers to restrict imports of agricultural products. Agricultural products exported to some European and American countries must meet the corresponding international standards, and consumers in developed countries have more choices for agricultural products, so agricultural products should be exported to this region with a certain reputation or brand advantage. Attract local consumers through quality or characteristics.

2) Export price strategy for agricultural products

1. From the Government's perspective, there are mainly the following strategies:

(1) increase the investment in the construction of traffic network, and realize the three-dimensional traffic network of sea, road, railway, aviation and road. This provides a solid transportation network support for promoting the trade of agricultural products in the European Economic area, effectively reduces the transportation time, reduces the transportation cost, effectively reduces the export cost of agricultural products, and makes the exported agricultural products have the price competitiveness. With the help of China's "Belt and Road Initiative" policy, we can more easily enter the Asian market with organic agricultural products.

(2) to make use of the advantages of China's "Belt and Road Initiative" policy cooperation to reduce the cost of agricultural products with advantages in the export of European countries, such as Wheat, Corn, Buckwheat, Legumes, Soybean, Sunflower seeds, Cattle, Pigs, Milk and other agricultural products. Make this kind of agricultural products follow the good policy of "Belt and Road Initiative", can enter China international market with lower cost.

(3) focus on international trade cooperation with countries mainly importing agricultural products from Africa (e.g. Morocco). Tariff barriers and non-tariff barriers can reduce the cost of agricultural exports to African countries and meet the needs of low-consumption people in Africa. In these African countries, the agricultural production capacity is weak, but due to the underdevelopment of the economy, the primary agricultural products in high demand for, Sumy region are exported to these countries with a strong advantage.

From the point of view of enterprises, the international price strategy of, Sumy region agricultural exports should be based on the diversified and differentiated market strategy, which can be grasped from the following aspects:

(1) According to the differentiation market strategy, we know that the export of Sumy region agricultural products must not adopt a uniform and constant pricing strategy, and the prices of different target markets should take into account the local economic situation and the strategy to the target market. Comprehensive consideration of earnings and market share, short-term interests and long-term interests to determine a reasonable price. First of all, for developed countries, high-price pricing strategy can be adopted. The

market of developed countries in Europe and America has a low sensitivity to price, and consumers can and are willing to pay a higher price in order to obtain the value of agricultural products, when the agricultural products exported to these developed countries are new and of high quality, at the same time, there is no such thing .In the case of too many competitors in their region, prices can be set higher in competitive market areas, one is to expand profits faster, and the other is to increase product brands through high prices.

(2) High price pricing strategies will soon attract competitors from other regions, so that price competition will appear. When the agricultural product has the obvious market monopoly advantage, or has the superior quality and the brand advantage as the guarantee, carries on the distinction with the common similar product through the higher price, enhances the product grade, attracts the attention of the high-level consumer. Therefore, the use of high-price pricing strategies also requires Sumy region to export agricultural products to developed countries with unique varieties, good quality, high added value and good reputation, so that it can effectively prevent competitors from other regions from entering. Prevent product differentiation Price competition.

(3) Firstly, for developing countries, a large number of pricing strategies can be adopted at low prices. Prices of agricultural products exported to developing countries in Asia should not be overpriced, and consumers are sensitive to the prices of agricultural products subject to the constraints of local consumption levels. They should adopt a large number of price strategies at low prices. First, the increase in revenue brought about by the sales conference. The second is to effectively occupy the market through a larger sales volume to reduce costs.

According to the diversified market strategy, the agricultural export market should be diversified, single, centralized market will increase the export risk of agricultural products, and make the price set limited. Conversely, through the diversification of the market strategy, can enhance the flexibility of Sumy region agricultural products pricing.

Developing areas with great potential for development, such as Africa, require large quantities of agricultural products, supply unsaturated, have fewer competitors, and have relatively small market share of agricultural products in Europe. These regions do not have stricter anti-dumping laws than developed countries in Europe and the United States, nor do they impose higher tariffs on exports to North America and other developed countries. If agricultural products are exported to these countries, they can quickly occupy the market

by adopting a large number of low-price pricing strategies, and can rapidly expand profits by setting up a high-quality brand image of European agricultural products and adopting high-price pricing strategies. There are also scarce agricultural products that are in high demand in the local market, but with relatively little supply. The adoption of high price pricing strategy can not only expand profits rapidly, but also make supply and demand tend to balance. Secondly, by defining different strategic positions for Sumy region agricultural products export diversification market, we can make different pricing strategies.

3) Strategy for the export of agricultural products

According to the market strategy of agricultural products export, according to the demand and specific situation of different international regional markets, different kinds of agricultural products are introduced, diversified product services are carried out, and different product market strategies are formulated. The following aspects are introduced from the following aspects: product selection strategy, product quality strategy, product brand culture strategy:

(1) Product selection strategy: the product selection of agricultural products export must combine the strategic planning of the market and the demand condition of the target market to select the products with market competitiveness. Because developed country markets tend to have higher requirements for product consumption and broader quality considerations, they need not only the utility of agricultural products themselves, but also attention to service, quality, perception, and safety. Health concept and other added value. Developed countries, lack of agricultural products are relatively fixed, and high quality requirements, so we should choose stable quality, high value-added processed agricultural products. There is a large demand for fresh agricultural products in this area. The choice of products should tend to be fresh, good quality, high price but safe and healthy types of products. At the same time, in order to avoid similar competition with the agricultural products of other countries, it is necessary to avoid the similar product structure and choose the dominant and differentiated agricultural products for export when selecting the types of export agricultural products.

(2) Cost-effective product selection strategy. The target market, which is backward in agriculture, underdeveloped in economy but stable in import growth, can choose low-cost agricultural products with high price for export. These importing countries are not self-

sufficient because of their backward agriculture, and the import demand for agricultural products is stable for a long time. Choosing cost-effective products to export to these countries can quickly open up the market and build a good reputation so that local consumers can establish the habit of duplicate purchases before other competitors enter the market and effectively prevent other competitors from seizing the market. At the same time, attention should also be paid to constantly enriching the varieties, specifications, quality and products of exported agricultural products.The promotion of added value, strengthen the advantage of "cost-effective", can effectively maintain the habit of local consumers buying repeatedly.

(3) Brand product selection strategy. To build brand agricultural products, according to the analysis of SWOT and PEST, we can know that the export of, Sumy region agricultural products to China, South Korea, Japan and other developed countries is facing fierce competition, so we should build branded agricultural products. Through the differentiation of brand products to open the international market, firmly occupied the market share.

Therefore, we should choose agricultural products to go abroad, directly into the international market, enhance the international brand of agricultural products; at the same time, we also adopt the optimal price strategy to win the demand of consumers.

4) Brand Strategy for Product

(1) Promote product brand image. Agricultural products in the international market due to lack of sufficient marketing means, has not yet established a clear brand image. Therefore, Sumy region agricultural products in the export, packaging should be clear and fixed logo to strengthen the brand image, and highlight the advantages and characteristics of products. Through packaging, brand image and advantages will be linked to create brand reputation and recognition. Delivery for the development of quality-oriented developed country markets is particularly important.

(2) Pay attention to the appearance of agricultural products. No matter which country's consumers, when buying agricultural products, in addition to safety. In addition to delicious, the first look often comes from the appearance of the product. Therefore, export of agricultural products shape, color needs to give people beautiful and dependable sense, send samples to stimulate consumers to buy also.

(3) Opening up the local market with the help of importing country brand. Importing

countries own brands, more familiar with local culture, life habits, tastes and so on. Local markets can be quickly opened by acquiring established local brands, taking advantage of the advantages that these established brands can take more quickly to local consumers, redesigning, packaging brands, and listing in the local market.

Therefore, combined with the latest science and technology, constantly improve their brand image, first to open up the local market, secondly to use a good brand image to open up the European market, finally, we can use a good reputation, open the international market.

Sumy regional have a good agricultural basics, it has the geographical advantages of foreign trade and physical and geographical conditions, although the export of agricultural products has been in a long-term state, but the export of agricultural products has been facing the problem of low added value. Based on the analysis of agricultural products export in agricultural enterprises, the main exporting countries and product categories of agricultural products are studied. In this paper, the advantages, disadvantages, opportunities and threats of agricultural products export in agricultural enterprises are analyzed, and according to the PEST and SWOT analysis, other analytical methods are adopted at the same time, and the suggestion of strategic planning of agricultural products in agricultural enterprises out of the international market is put forward. On this basis, after subdivision of the export market of agricultural products, this paper puts forward the market orientation of the export of agricultural products, and guides the pricing and products of agricultural exports from the following five directions. The channel and the promotion four aspects formulate the concrete market strategy.

The main directions include:

To solve the problems of agricultural products in agricultural enterprises through the strategy of agricultural products differentiation;

To cultivate the nuclear competitiveness of agricultural products, enhance the added value of exported agricultural products, and enhance the export competitiveness of the international market;

Optimize the structure and technology of agricultural industry, improve the overall level of industry, promote the development of agricultural industrialization, and deal with the technical trade barriers of developed countries in North America. Agricultural product market diversification strategy, can solve the agricultural product export market

centralization problem;

Establish characteristic agricultural base and circulation transfer base, improve agricultural enterprise production efficiency, improve circulation efficiency, reduce circulation cost;

Create characteristics Agricultural brand, promote the international influence of agricultural products. At the same time, aiming at the implementation of the export market strategy of Sumy regional agricultural products, this paper proposes to cultivate the core competitiveness of agricultural products, optimize the industrial structure and technology, establish the characteristic agricultural base, and build the characteristic agricultural brand. Better Sumy regional agricultural products to the international market, increase local income.

## 2.7 Analysis of current situation of agricultural trade development between China and Ukraine

As a European granary, Ukraine boasts abundant agricultural resources, while China, with its large population, has a substantial demand for food. Despite this, agricultural trade between the two countries has only recently seen significant growth and lacks close connections in related trade areas. This study delves into the current state of agricultural trade between China and Ukraine, analyzing trade data to identify issues and offer recommendations for fostering further trade cooperation.

To categorize agricultural trade statistics, the study employs categories 1, 2, 3, and 4 under the HS Code of the General Merchandise Trade Statistics Database of the People's Republic of China, covering the period from 2014 to 2019. The analysis of trade data sheds light on the prevailing conditions of trade exchanges between the two nations, revealing challenges and factors influencing their trade development.

According to the statistics, from 2014 to 2019, China's imports of agricultural products from Ukraine constituted 67.05% of the total import trade. Notably, cereals and related products comprised 95.69% of the total imported plant products. Ukraine, recognized as the European grain silo, has become a major food supplier to China, overtaking India in 2019 as the largest food importer. Conversely, China's agricultural

exports to Ukraine constituted only 5.96% of the total export trade, indicating a relatively smaller share. This implies a strong complementarity between China and Ukraine in terms of overall trade volume and agricultural product trade.

Despite geographical distance and historical factors limiting economic and trade exchanges between China and Ukraine, their diplomatic relations, established in 1992 and elevated to a strategic partnership in 2011, have facilitated continued trade cooperation. The agricultural sector, in particular, has witnessed significant growth, with total agricultural trade doubling in recent years. In 2019, China became Ukraine's largest agricultural product importer, accounting for 8.7% of Ukrainian agricultural exports, showcasing the positive impact of the "Belt and Road" initiative on trade dynamics.

Given the mutual complementarity and increasing trade ties, the article emphasizes the importance of furthering cooperation in the field of agricultural trade. The study's innovation lies in its empirical analysis using statistical data to illustrate the current state of trade and offer recommendations for deepening bilateral cooperation. The geographical and historical challenges are acknowledged, and the article highlights the need for a more balanced agricultural policy to ensure development opportunities, ecological balance, and social stability.

**Table 2.28 - China's agricultural products trade and total trade from Ukraine from 2014 to 2019**

| Years | Imported agricultural products, thsd. USD | Total imports, thsd. USD | Ratio of imported agricultural products to total imports, % | Imports of agricultural products increased sequentially, % |
|---|---|---|---|---|
| 2014 | 762045 | 3486016 | 21.86 | 1.00 |
| 2015 | 1060612 | 2199279 | 48.23 | 39.18 |
| 2016 | 1268980 | 2487605 | 51.01 | 19.64 |
| 2017 | 1131278 | 2335614 | 48.44 | -10.85 |
| 2018 | 1373898 | 2648477 | 51.88 | 21.45 |
| 2019 | 2439980 | 4513702 | 54.06 | 77.60 |
| Total | 8036793 | 11985398 | 67.05 | - |

Source*:* Commodity Trade Statistics Database of the General Administration of Customs of the People's Republic of China.

The literature review provides a comprehensive background on global agricultural trade issues, showcasing various perspectives from scholars around the world. The article concludes with a summary of its purpose, methodology, and key findings, emphasizing the

significance of promoting bilateral agricultural product trade cooperation between China and Ukraine (Table 2.28).

China's trade with Ukraine is primarily centered around agricultural and mineral products. Looking at China's import volume from Ukraine over the statistical period, agricultural and mineral products emerge as the dominant categories. From 2014 to 2019, imported agricultural products constituted 67.05% of the total import trade, while mineral products accounted for 21.53%. Conversely, China's export trade leans heavily on raw material resources. Although Ukraine's range of Chinese goods is relatively limited, its export advantages are evident.

Examining China's agricultural imports from Ukraine based on trade scale, category 2 plant products and category 3 animal and vegetable oils, refined edible oils, and fats stand out. From 2014 to 2019, the total value of imported plant products amounted to $402.34 million, with refined edible fats and oils totaling $332.82 million. These figures represented 50.06% and 41.41% of the total imported agricultural products, respectively. Cereals were the predominant plant products, constituting 95.69% of the total. China has become a key importer of Ukrainian food products, especially cereals.

Shifting focus to China's total export trade with Ukraine and its agricultural exports during the statistical period, there is a discernible trend of initial decline followed by subsequent increase. The total exports to Ukraine, as well as agricultural product exports, experienced a significant drop in 2015 compared to 2014. In 2015, the total value of China's export trade to Ukraine was $35.156 million, reflecting a 31.15% decrease from the $5,107.96 million recorded in 2014. Agricultural product exports also saw a decline of 43.63% in 2015 compared to 2014. This dip can be attributed to the profound changes in Ukraine's political landscape in 2014, which had a substantial impact on foreign trade policies, directly resulting in a decrease in trade volume.

Following the stabilization of Ukraine's political situation in 2015, China's overall export trade to Ukraine and agricultural products trade have consistently grown each year. Between 2015 and 2019, China's total export trade to Ukraine reached $73.9984 million, marking a 44.87% increase from 2015. The export volume of agricultural products in 2019 amounted to $201.1 million, reflecting a substantial growth of 138.33% compared to 2015.

**Table 2.29 - Classification of China's agricultural imports from Ukraine from 2014 to 2019, thsd. USD**

| Coding | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|---|---|
| 1. Animal products | 1748 | 456 | 3793 | 17088 | 31128 | 46981 |
| 02 Meat and edible offal | - | - | - | 130 | - | 1265 |
| 03 Fish, Aquatic animals | 59 | 16 | - | - | - | 821 |
| 04 Milk, eggs, honey, etc. | - | 336 | 2319 | 12789 | 20000 | 31014 |
| 05 Other animal products | 1689 | 105 | 1474 | 4169 | 11128 | 13881 |
| 2. Plant products | 301987 | 658918 | 575192 | 554855 | 772268 | 1160160 |
| 01 Living plant | - | - | - | - | - | 2 |
| 03 Edible fruits and nuts | 1552 | 239 | 399 | 1641 | 2786 | 10010 |
| 04 Coffee and tea | - | 9 | - | - | 13 | 9 |
| 05 Cereals | 290672 | 653099 | 570256 | 518263 | 731964 | 1085913 |
| 06 Malt, starch, etc. | 5845 | 1820 | 399 | 22659 | 34094 | 52179 |
| 07 Oilseeds, kernels, feed | 3918 | 3751 | 4138 | 12258 | 3220 | 12046 |
| 08 Gum, resin, etc. | - | - | - | - | - | 1 |
| 09 Knitting plant material | - | - | - | 35 | 190 | - |
| 3. Animal and vegetable oils, edible oils and fats | 450863 | 396445 | 681154 | 548749 | 444402 | 806588 |
| 4. Food, Beverages, wine and tobacco | 7447 | 4793 | 8840 | 10586 | 126100 | 426251 |
| 01Meat and aquatic products | 81 | - | - | - | 368 | 2478 |
| 02 Sugar confectionery | 2250 | 1438 | 2853 | 3523 | 5127 | 5373 |
| 03 Cocoa products | 2504 | 2012 | 2077 | 2106 | 2059 | 3560 |
| 04 Cereal flour, starch | 470 | 322 | 1196 | 1074 | 2118 | 3698 |
| 05Vegetable and fruit products | 82 | 158 | 131 | 397 | 283 | 514 |
| 06 Miscellaneous food | 10 | 23 | 11 | 80 | 395 | 862 |
| 07 Drinks, wine and vinegar | 2051 | 840 | 2573 | 2067 | 4457 | 3807 |
| 08 Food industry residues and waste | - | - | - | 1340 | 111293 | 403748 |
| 09 Tobacco and tobacco products | - | - | - | - | - | 2211 |

Source: Commodity Trade Statistics Database of the General Administration of Customs of the People's Republic of China. (“ – ” indicates that no import trade has taken place).

Although agricultural products trade constituted only a small fraction of China's total export trade to Ukraine from 2014 to 2019, for instance, in 2019, the most substantial agricultural product export accounted for just 2.72% of the total export trade. This indicates that China and Ukraine don't compete significantly in agricultural trade but rather exhibit greater complementarity. (Table 2.30).

China's export trade to Ukraine primarily consists of mechanical and electrical products, base metals and products, and light industrial goods. Throughout the statistical period, China's exports to Ukraine were dominated by mechanical and electrical products, base metals and products, chemicals, as well as light industrial items such as shoes, hats, and umbrellas.

**Table 2.30 - China's agricultural exports to Ukraine and total trade from 2014 to 2019**

| Years | Exported agricultural products, thsd. USD | Total exports, thsd. USD | Ratio of exported agricultural products to total exports, % | Exports of agricultural products increased sequentially, % |
|---|---|---|---|---|
| 2014 | 149678 | 5107956 | 2.93 | 1.00 |
| 2015 | 84383 | 3516584 | 2.40 | -18.09 |
| 2016 | 109503 | 4216822 | 2.60 | 8.33 |
| 2017 | 133415 | 5041077 | 2.65 | 1.92 |
| 2018 | 177893 | 7019004 | 2.53 | -4.53 |
| 2019 | 201103 | 7399836 | 2.72 | 7.51 |
| Total | 855975 | 14365855 | 5.96 | |

Source*:* Commodity Trade Statistics Database of the General Administration of Customs of the People's Republic of China.

From 2014 to 2019, the exports of mechanical and electrical products to Ukraine represented 42.36% of the total export trade, while base metals and products comprised 20.27% of the overall trade. Presently, China serves as Ukraine's primary source for mechanical and electrical products, base metals and products, as well as light industrial products like textiles, ceramics, glass products, shoes, hats, and umbrellas.

Regarding China's agricultural exports to Ukraine, these are primarily classified into meat, aquatic animal products (Category 4), vegetables, fruit products, and fish (Category 1 aquatic animals). From 2014 to 2019, the respective export values were $223.09 million, $111.87 million, and $97.87 million, constituting 26.06%, 13.07%, and 11.43% of China's total agricultural exports to Ukraine. A statistical analysis reveals that China's agricultural products exported to Ukraine focus on meat, fish, and other aquatic animals, as well as vegetables and fruit products. In comparison to China's main agricultural imports from Ukraine, such as cereals, animals, and vegetable oils, there are significant category differences in the two countries' agricultural trade, indicating a high level of complementarity and offering ample opportunities for further expansion of agricultural trade between them (Table 2.31).

**Table 2.31 - Classification of China's agricultural exports to Ukraine from 2014 to 2019**

| Coding | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|---|---|
| 1. Animal products | 13138 | 10246 | 18591 | 23301 | 34197 | 29990 |
| 01 Live animals | - | 1 | 2 | 3 | - | 1 |
| 02 Meat and edible offal | 53 | - | - | 170 | - | 27 |
| 03 Fish, Aquatic animals | 12031 | 7740 | 13832 | 17215 | 25436 | 21619 |
| 04 Milk, eggs, honey, etc. | 1 | - | 5 | 4 | 3 | 2 |
| 05 Other animal products | 1053 | 2505 | 4752 | 5910 | 8758 | 8340 |
| 2. Plant products | 19263 | 24823 | 25422 | 27766 | 36532 | 42646 |
| 01 Living plant | 19 | 18 | 9 | 7 | 42 | 9 |
| 02 Edible vegetables | 2564 | 5775 | 6867 | 5116 | 3846 | 6749 |
| 03 Edible fruits and nuts | 2396 | 2320 | 2839 | 4608 | 6261 | 11110 |
| 04 Coffee and tea | 6238 | 6279 | 7399 | 7647 | 8509 | 8299 |
| 05 Cereals | - | - | - | - | 4545 | 2725 |
| 06 Malt, starch, etc. | 274 | 392 | 576 | 32 | 33 | 38 |
| 07 Oilseeds, kernels, feed | 1340 | 1172 | 937 | 1126 | 803 | 966 |
| 08 Gum, resin, etc. | 6211 | 8688 | 6516 | 9014 | 12247 | 12624 |
| 09 Knitting plant material | 219 | 179 | 280 | 217 | 245 | 125 |
| 3. Animal and vegetable oils, edible oils and fats | 59 | 111 | 229 | 368 | 209 | 243 |
| 4. Food, Beverages, wine and tobacco | 59452 | 49203 | 65261 | 81980 | 106955 | 128224 |
| 01Meat and aquatic products | 28006 | 15312 | 29169 | 33549 | 48410 | 68653 |
| 02 Sugar confectionery | 2969 | 3552 | 3290 | 3107 | 4723 | 4018 |
| 03 Cocoa products | 58 | 44 | 68 | 58 | 261 | 422 |
| 04 Cereal flour, starch | 690 | 515 | 891 | 507 | 863 | 1231 |
| 05Vegetable and fruit products | 16297 | 10101 | 12349 | 25410 | 22506 | 25209 |
| 06 Miscellaneous food | 5390 | 5928 | 5368 | 4512 | 9438 | 8336 |
| 07 Drinks, wine and vinegar | 78 | 50 | 26 | 561 | 2349 | 3176 |
| 08 Food industry residues and waste | 5426 | 8679 | 9050 | 11152 | 16811 | 15686 |
| 09 Tobacco and tobacco products | 538 | 5022 | 5050 | 3124 | 1594 | 1493 |

Source: Commodity Trade Statistics Database of the General Administration of Customs of the People's Republic of China. (“——” indicates that no export trade has taken place).

With the burgeoning bilateral trade between China and Ukraine, China has emerged as Ukraine's sixth-largest export market and the second-largest source of imports, trailing only behind Russia. Responding to China's "Belt and Road" initiative, Ukraine stands among the initial countries identified along this initiative, paving the way for expanded bilateral trade in the future. As outlined in Ukraine's "Ukraine 2017-2021 Trade Strategy Development Roadmap," China is poised to become the primary market for Ukrainian trade exports. The trade dynamics between China and Ukraine,

encompassing total import-export values and agricultural product trade from 2014 to 2019, underscore a high level of complementarity, indicating vast untapped potential for future trade development. To propel the continued growth of China-Ukraine trade, the following measures are recommended:

Accelerate the Development of Inter-Industry Trade:

Despite the current acceleration in bilateral trade, the predominant trade pattern is inter-industry, leveraging comparative advantages arising from natural factor disparities. Notably, China exports electromechanical products and various aquatic products to Ukraine. Future trade should continue to capitalize on the economic and industrial complementarities between the two nations, thereby expanding trade volumes.

Continuously Optimize the Structure of Trade Products:

Ongoing optimization of the trade product structure is crucial for expanding trade scale. Recent years have witnessed a rapid increase in China's export trade to Ukraine, particularly in transportation equipment. However, there has been a decline in certain light industrial products. On the import side, diversification is observed, with a shift from traditional base metals to goods like steam turbines and ship propulsion systems. This structural optimization has propelled China to become Ukraine's leading exporter and second-largest source of imported products in Asia.

Maintain Focus on the Development of China-Ukraine Agricultural Trade:

Given Ukraine's status as a significant agricultural nation with abundant resources, particularly the world's largest black land, and China's substantial demand for food due to its large population, there is significant potential for agricultural trade. China holds advantages in agriculture-related aspects such as labor force, capital, technical processing of agricultural products, and logistics operations. The mutual complementarity in agricultural product types calls for continued emphasis on this sector, including strengthened agricultural technology exchanges, enhanced cooperation, and a focus on increasing the added value of agricultural products.

Future Research Recommendations on Agricultural Trade between China and Ukraine:

In light of China becoming Ukraine's largest agricultural product importer in 2019, future research should focus on strengthening agricultural trade between the two nations. Recommendations include active Chinese investment in the Ukrainian agricultural

industry within the "Belt and Road" framework, providing agricultural technology support. Ukraine is encouraged to implement preferential tariff measures to improve the investment environment and consider initiatives like establishing agricultural cooperation parks to foster sustainable development in agricultural trade between the two countries.

## Conclusions to section 2

This chapter extensively examines the empirical analysis of the external activities undertaken by Chinese agricultural enterprises, delineated into six key parts. The primary focus is on the overseas investment initiatives of these enterprises, while concurrently delving into the evolution of Ukrainian agricultural enterprises and conducting a detailed analysis of agricultural trade dynamics between China and Ukraine. The specific components are outlined as follows:

1. Factors Influencing Foreign Activities of Chinese Agricultural Enterprises:

The chapter explores the influencing factors of the foreign activities of Chinese agricultural enterprises. Employing the SWOT analysis method, it primarily scrutinizes the external activities, emphasizing the factors influencing foreign investments by Chinese agricultural enterprises. Key variables considered include additional value of agriculture, forestry, animal husbandry, and fishery, arable land area, foreign exchange reserves, exchange rates, agricultural technology capability, agricultural utilization of foreign investment, total agricultural exports, and agricultural fiscal expenditure. A measurement model analysis is conducted to validate the findings.

2. Regression Analysis Results:

Out of the eight selected explanations, only the exchange rate and overseas foreign direct investment (OFDI) in agriculture exhibit a significantly negative correlation, while the others demonstrate positive correlations. This aligns with the original hypothesis, and the results of the principal component analysis method, based on the sample data, are deemed reasonable. Notably, with the exception of the negative correlation between the RMB-US dollar exchange rate (X4) and the scale of China's agricultural enterprise OFDI, all other explanatory variables show a positive correlation relationship with China's agricultural enterprise OFDI.

3. Construction of Risk Evaluation Index System:

Considering the holistic nature and dynamics of the overseas direct investment environment, the chapter constructs a risk evaluation index system for foreign investment projects of Chinese agricultural enterprises. This system aims to comprehensively evaluate existing risks in investment projects dynamically. Drawing from existing index systems and relevant research results, including the Ministry of Commerce foreign investment cooperation guide and professor Chen's design principles for overseas investment project evaluation indices, the goal is to assist enterprises in assessing risks, understanding advantages and disadvantages, promptly adjusting management strategies, and mitigating potential investment risks.

4. Impact of "Belt and Road" Policy on Chinese Agricultural Enterprises:

Since the Chinese government introduced the "Belt and Road" policy, new opportunities have emerged for the foreign activities of Chinese agricultural enterprises. This policy presents both opportunities and challenges. On one hand, with abundant agricultural production resources, low land costs, and backward agricultural production technology, considerable income can be obtained from introducing domestic technology and capital. On the other hand, challenges exist due to policy environments, national policies, system conditions, self-construction, and deficiencies in social services.

5. Development of China-Ukraine Trade:

The chapter underscores the swift development of bilateral trade between China and Ukraine, with China emerging as Ukraine's sixth-largest export market and the second-largest source of imports after Russia. Ukraine, responding to China's "Belt and Road" initiative, is identified among the first batch of countries along this initiative, suggesting potential for expanded trade. The "Ukraine 2017-2021 Trade Strategy Development Roadmap" anticipates China becoming the main market for Ukrainian trade exports. The trade structure between China and Ukraine is identified as highly complementary, indicating substantial untapped potential for future development.

In order to perpetuate the advancement of China-Ukraine trade, the chapter recommends specific measures, highlighting the enormous trade development potential between the two countries. These proposed measures encompass accelerating inter-industry trade, optimizing trade product structures, and maintaining a focus on the development of China-Ukraine agricultural trade. Furthermore, the chapter concludes

with the presentation of specific scientific results that demonstrate the author's personal contributions to the addressed problem and characterize the scientific novelty of the work, as evidenced in the publications.

## SECTION 3

## OUNTERMEASURES TO PROMOTE SUSTAINABLE DEVELOPMENT OF AGRRARIAN ENTERPRISES IN CHINA AND UKRAINE

### 3.1 Optimize the foreign investment strategy of China's agricultural enterprises.(Government, industry, business）

Agricultural science and technology enterprises are the main body of the foreign investment activities strategy, at the same time, the government should play a full role in its services. Therefore, the role of the government cannot be underestimated. In implementing the "going out" strategy, the government should fully absorb and learn from the experience of dealing with relations between foreign multinational companies and home countries, as well as the experience of other countries, create a favorable environment for enterprises to successfully "go out" and continuously promote the reform of the international operation of agricultural science and technology enterprises in China.

3.1.1 Establish a systematic and perfect safeguard mechanism to safeguard the legitimate rights and interests of enterprises

At present, many agricultural science and technology enterprises make full use of the various conveniences brought about by China's accession to the WTO, and actively go abroad to carry out cross-border business. At present, China has issued a lot of laws and regulations on foreign investment, but most of them only involve the approval and management before going abroad, for enterprises to go abroad after the relevant behavior has not made clear. In order to enable the overseas direct investment of China's agricultural science and technology enterprises to be in accordance with the rules, the government should actively and properly establish and improve the relevant laws and regulations, such as the Foreign Investment Law, the Overseas Enterprises Law, the China Transnational Corporations Law and the implementation rules, to form a sound overseas investment-related legal and policy system. In addition, we should make full use of China's rights as a member of the World Trade Organization, continuously strengthen bilateral and multilateral economic and trade consultations, remove trade barriers for trade and investment, sign intergovernmental agreements such as investment protection

agreements, and create a favorable international environment for enterprises to implement the "going out" strategy. To raise the "going out" of agriculture as a national strategic focus, and to give full consideration to the particularity of foreign investment in agriculture, formulate policies and measures with a needle, improve cooperation mechanisms, make full use of the existing "inter-ministerial working mechanism for foreign agricultural cooperation" platform, strengthen practical cooperation among government departments, and better solve the problems faced by agricultural "going out", while strengthening the management of foreign investment, we should further strengthen the function of public information services, study overseas agricultural investment and establish agricultural "going out" The data and information of enterprises provide guidance and guidance, information services, early warning mechanism and communication platform for agricultural "going out" enterprises.

3.1.2 Improve the foreign investment approval policy and streamline the approval process

Facing the international environment of competition incentive, China's agricultural enterprises to invest overseas must be able to seize all the fleeting business opportunities in time, carry out transnational business activities, in order to win in the incentive competition, which requires enterprise decision makers to make accurate decisions quickly. However, the policies promulgated by the Chinese government determine that enterprises must go through the complicated approval process, the whole approval process takes a long time, often make enterprises miss the best investment opportunities. Therefore, the government should follow the trend of the international environment, comprehensively deepen the reform of the overseas investment approval system, divide the relevant departments based on the legal and efficient original, simplify and compress the procedures and links to be gone through in the approval process, reduce the approval content, and play a good service role. In addition, we should actively implement the principle of supervision and responsibility, not only attach importance to the approval of overseas investment projects, but also to the procedures and conditions for the approval of overseas direct investment, conduct open, fair and transparent examination and approval, strengthen the supervision of the approval process, create a good domestic environment for China's agricultural enterprises to implement the "going out" strategy, and clear the way for enterprises to enter the international market.

3.1.3 Strengthen bilateral cooperation with the Government. Strengthen communication and coordination at the level of the two governments, and strive for more preferential policies for foreign agricultural cooperation projects, from taxation, import and export of goods, capital exchanges, personnel exchanges, residence and other aspects to the host government of the project. In view of the huge upfront investment in agricultural projects and the characteristics of the long payback period, it is hoped that through intergovernmental consultations, the tax exemption period will be extended appropriately. In order to encourage domestic enterprises to "go global", developed countries continue to seek international protection of OFDI on the basis of their own incentive policies, and the signing of bilateral agreements is an effective means to ensure that the host country provides national treatment and investment protection for foreign investors, so a large number of bilateral, regional and multilateral investment protection agreements have been signed. Developed countries, as major exporters of investment, are particularly keen on bilateral investment agreements. According to statistics, as of the first half of 1995, more than 900 BITs had been signed worldwide, of which 674 were signed by OECD countries. With the continuous development of the global economy, developing countries realize that overseas investment is an important way for them to integrate into the world economy, and it is an indispensable link for them to achieve great development, and have studied and learned from the experience of overseas investment in developed countries, paying more and more attention to the effectiveness of bilateral investment agreements. As a result, various investment agreements have also been signed among developing countries, and the number has steadily increased, with a total of 59 BITs signed in the 1960s and 1980s, but by the 1990s that number had risen rapidly to 154.

In addition, many countries have signed bilateral double taxation avoidance agreements to provide shelter for their TNCs to invest and operate abroad. According to statistics, developed countries have signed more than 1200 bilateral double taxation agreements, and developing countries have signed such agreements in order to support their enterprises to invest abroad. For investment in countries with bilateral tax agreements, some developed countries such as Australia, Germany and so on also provide tax-free concessions. Relevant data show that by the end of 2013, China has signed bilateral investment protection agreements with 130 countries in the world, and by May 2015, China has signed double taxation avoidance agreements with 99 countries in the world,

indicating that our government has been committed to implementing the "going out" strategy. In addition, investment agreements at the regional level are increasing. The Rome Convention, for example, requires all member states to provide information services and develop policies to promote and protect investment, to ensure that foreign investors investing in the EU can enjoy public treatment and promote their OFDI. Nafta, which is made up of the United States, Canada and Trisico, and which began in 1994, is different in nature from the European Union in nature and is not an agreement between national governments and the law, which improves effective dispute resolution mechanisms, facilitates fair competition for cross-border investors, and protects intellectual property rights. Therefore, China can also sign investment agreements at the regional level with Ukraine, South Africa and other countries to promote regional cooperation and development. In general, the signing of various conventions or agreements between governments is a combination of the enjoyment of rights and performance of obligations, the government part of the timely disclosure to the public of the signing of the conventions or agreements, content and entry into force time, to ensure that enterprises can timely and appropriate use of these conventions and agreements, to solve the day-to-day management of the various problems and obstacles encountered, to safeguard their own interests.

3.1.4 The establishment of an OFDI insurance system.Since 2014, the level of overseas direct investment in China has been continuously improved, and at the same time, many enterprises have been "going out" on a large scale. However, these enterprises are also faced with many risks, frequent OFDI accidents, resulting in frequent accidents not only for our own reasons, but also from the host country and international environment threats, such as: economic policy politicization, "national security" and "neocolonialism" denigration. In order to avoid the above risks, The countries of Europe and the United States have continuously established and improved overseas investment insurance systems in order to avoid the above risks and establish and improve overseas investment insurance systems, such as the establishment of a relatively sound overseas investment insurance legislative system and the establishment of relevant specialized agencies to provide risk guarantee and protection services. Compared with Europe and the United States, China's insurance review is too strict, insurance costs are too high, so that many enterprises give up overseas insurance, resulting in a low proportion of overseas insurance, in addition, China has not established a better overseas investment legislation system. Therefore, first,

perfecting the overseas investment insurance system has become the first issue to encourage enterprises to invest overseas, starting from the legislation, perfecting the compensation system for losses of foreign direct investment and the subsidy system for the cost of foreign investment investigation, simplifying the insurance process and reducing the cost of insurance; It should also undertake the task of promoting the implementation of the "going out" strategy, strengthen the confidence of Chinese enterprises to actively "go out", increase the services of foreign direct investment in political and non-commercial insurance, and provide a strong guarantee for Chinese enterprises to carry out overseas direct investment.

3.1.5 Financing policies.The agricultural administration department shall, in accordance with the overall situation of the national policy financial institutions' business support for agriculture "going out", study the scope, region, industry and objectives of financial support, formulate a master plan for financial support for foreign agricultural investment cooperation, so as to make more rational and effective use of existing policies, support agricultural investment by key enterprises in key areas, and achieve the strategic objectives of the "going out" of national agriculture; Strengthen support for the relaxation of credit products, such as the relaxation of credit products, for domestic enterprises to "go out" of the environment, regions and projects, financial institutions should strengthen cooperation to provide corresponding financial support for overseas investment in the industry; To provide technical support for enterprises to effectively judge the risk of overseas investment, promote the development of insurance system, set up foreign agricultural investment number j'-j preferential insurance system.

3.2.1 Trade cooperation in the industrial sector.Among the cooperation projects between China and Ukraine, in addition to the above-mentioned military cooperation projects, there are industrial cooperation projects, in 2010 Hunan Xiangtan Hongxin Company invested 100 million U.S. dollars on the basis of research on Ukrainian mammoth mines, the Ukrainian side gave Wuwan tons of development rights, which is very beneficial to both sides, but also the current Cooperation between China and Ukraine in the industrial field more successful projects. Among the Cooperation projects in Ukraine, China Machinery and Equipment Engineering Co., Ltd. is the first large state-owned enterprises to enter the Ukranian state to invest in cooperation enterprises. The company has established strong cooperative relations with Ukraine, and its cooperation

projects in Ukraine include the Ukrainian Airport Rail Transit Line Project and the Ukrainian Modern Food Bank Project, with investments of US$350 million and US$3 billion respectively, and its Ukranian Airport Rail Link Project is a key project of the Ministry of Transport of Ukraine, which needs mature Chinese technology to upgrade the overall traffic level of Ukraine. The Ukraine Modern Food Bank Project is a key project of the Ukrainian State, jointly carried out by the Ministry of Finance of Ukraine, the State Food and Food Group of Ukraine and the China International Development Bank. Chinese car manufacturers are in a series of talks with Ukraine's locomotive group. The automotive industry sells cars. Great Wall Motor Company has also signed sales agreements with Ukrainian companies. Chinese companies are starting to sell and assemble cars in Ukraine. Chinese car brands account for a large share of Ukraine’s car sales market. Companies working with Chinese auto companies include Ukraine's economy car manufacturers and passenger car manufacturers, as well as truck manufacturers, and the cooperation in automobiles is multi-layered. At the project investment promotion meeting between the two sides, the Ukrainian side has said that it will strengthen management efforts in attracting investment and foreign-funded enterprises, and strive to provide a good and open investment environment for foreign investors, provide loose space for development, and vigorously promote cooperation and development in the automobile manufacturing industry.

3.3.1 Suggested to provinces to avoid excessive competition.Learn from the overseas competition lessons of Chinese engineering enterprises, the current is mainly competition between Chinese enterprises, enterprises competing for prices, competition each other led to huge losses of enterprise interests, national interests, so that the host country's fishermen profit; In view of some enterprises just go out, poor efficiency, more difficulties, less enterprise participation, less competition, and agriculture involves a large number of households, not generally irresponsible enterprises can do, and China's provinces of comprehensive agricultural supporting strength is very strong, especially our Shandong Province is China's agricultural province, economic province, strength, our enterprise is a strong capital, strong sense of responsibility, dare to participate in overseas agricultural investment of large enterprises, we have reason to believe that the company as a leading enterprise. Joint Shandong and other domestic advantages of enterprise advantages complement each other, strong joint efforts to jointly develop the international market, so

as to achieve the strategic objectives of enterprises.

3.3.2 To do a good job of market research.Former Nigerian President Obasanjo once said that people have the same characteristics, but each country has its own personality because of its culture, values, religion, history and so on. Each country's national conditions are different, history and culture, traditional customs and resource endowments are also very different. Therefore, before making investment decisions for multinational agricultural investment enterprises, we should first examine the local consumption habits, policy environment and competitors and many other factors. In addition, it is advisable to conduct field research to understand factors such as the current environment and consumer needs in Ukraine, as this provides direct access to first-hand information and facilitates the integrity and accuracy of the information. Second, a comprehensive assessment of the risks is needed. From a macro perspective, through a comprehensive risk assessment of Ukraine, we should understand Ukraine's "values" and, from a micro perspective, analyze the possibility of risks against cross-border agricultural investment in Ukraine and take risk responses.

3.3.3 Establish a good social image.An important way for companies to succeed in their overseas direct investment is to create a good social image locally. It is necessary to create a good corporate image in the local area, take the initiative to assume social responsibility, actively participate in local infrastructure construction, pay attention to local people's livelihood, actively carry out public relations activities, increase their own publicity efforts, only in this way will not lead to local government and residents resistance.

(1) Take the initiative to assume the social responsibility of the food industry

Corporate social responsibility includes many aspects, such as adhering to sustainable development, protecting the environment, developing philanthropy, and participating in cultural construction. Enterprises should achieve considerable and healthy development in Ukraine, should do the following two points. First of all, we should go to the countryside, respect local values and cultural customs, be honest and operate in good faith, provide jobs, make due efforts to promote local employment, devote ourselves to the public welfare of Ukraine, build public welfare projects, and strive to return to the local community. Secondly, in line with the principle of sustainable development, sustainable agricultural management strategies should be adopted, combining resource cultivation and

resource development and utilization, which not only contributes to the full utilization of agricultural land, avoid waste of resources, but also has a cumulative impact on local social and economic development. In this way, enterprises and the local to achieve a win-win situation, the formation of a "mutual profit and benefit" relationship, the local government and people recognized, conducive to the long-term development of enterprises.

(2) Actively participate in the construction of infrastructure in Ukraine

In recent years, Ukraine's economy has developed rapidly, but infrastructure construction is a bit "pulled back", in order to clear the obstacles to economic development, Ukraine has developed a variety of policies and regulations to attract overseas investment. Moreover, China has undertaken various large-scale construction projects to help Ukraine improve its infrastructure. Chinese companies have not only brought capital, technology, development and progress to Ukraine, but more importantly, hundreds of Chinese companies have cooperated fully with the Ukrainian government in the fields of oil, water conservancy, construction, metallurgy, agriculture and medical care. These enterprises and Ukraine's friendly cooperation for the follow-up enterprises to enter the Ukrainian market has laid a good reputation foundation, therefore, the follow-up enterprises should follow the trend, in the process of ensuring the normal operation of enterprises, seize the opportunity to participate in ukraine's infrastructure construction, for the local residents to create a good living and working environment, so as to help them occupy a larger market in the future lay a solid foundation.

3.3.4 Mode pilot aspects.Select a mature country, to the provincial package country model, the province supporting part of the funds, the establishment of overseas Sino-foreign agricultural cooperation development zone or industrial park, to have a certain basis and influence in the local Chinese agricultural enterprises or projects as the center, according to the plan step by step radiation and diffusion, a park multi-area, gradually expand the development park in the local impact, drive local technology and water level promotion, employment and attract domestic surplus industry transfer, strong joint, forming overseas groups, play a multi-directional, multi-disciplinary local agricultural production. Achieve win-win.

## 3.2 Risk control of the foreign investment activities of agricultural enterprises (Government, industry）

3.2.1 At the national level.

China's agricultural enterprises due to weak strength and so on, foreign direct investment cannot be separated from the government's strong support. At present, China's foreign direct investment in agricultural enterprises is not enough, the government should take an active role in strengthening functions, strengthen cooperation and efficient operation. By improving the level of management and service, we will enhance the cohesion and combat effectiveness of ofward direct investment by agricultural enterprises.

3.2.1.1 Management oversight

(1) The government should strengthen the guidance on overseas investment in agricultural enterprises and plan the strategy of overseas agricultural investment in an integrated manner. Ministry of Commerce, Ministry of Agriculture and other departments have formed a multi-sectoral working mechanism, for the overall planning of overseas investment in agriculture has laid a foundation. However, various departments and local governments have different authority over of OFDI management of agricultural enterprises, and some management functions are more decentralized, the approval cycle is longer, and the efficiency needs to be further improved. Therefore, it is necessary to divide and adjust the functions of various departments reasonably, reduce procedures and links, and avoid cross-examination as much as possible. At the same time, according to the overall strategic deployment and related policies of the state, we will do a good job in the overall planning of of OFDI by agricultural enterprises, make clear and regular announcements on development goals, key projects and key areas, formulate policies and measures conducive to the implementation of outward investment by agricultural enterprises, and provide guidance for of OFDI by agricultural enterprises. Risk research could also be set up Institutions to investigate the global international political and economic situation, national governance capacity, laws and regulations and policies, relations with the Chinese government, etc., to do a good job of country investment environment assessment, analysis and prediction of the risk of foreign direct investment. In the embassy stationed in foreign agricultural counsellors, for the host country's preferential policies, for China's agricultural enterprises to build a platform for investment.

(2) To further improve the policies and laws on OFDI by agricultural enterprises. In recent years, our government has established the of OFDI policy system, which mainly

includes three aspects: approval, encouragement and supervision and service. With the further development of foreign investment in China's agricultural enterprises, we must establish and perfect relevant policies and increase policy support on the basis of the existing system. At the same time, we should further improve the legal system of foreign direct investment of agricultural enterprises in China, strengthen legal supervision and legal construction, and protect the rights and interests of overseas investment of agricultural enterprises in China. For example, the provisions on the management of crop seed resources, the list of crop and aquatic seed resources, etc. on the management of technology output, the provisions of the personal foreign exchange management measures on individual OFDI need to be further revised and improved. At present, some private agricultural enterprises in China have gradually increased the intensity of foreign investment, but there is still a lack of relevant clear policy provisions, should step up the regulation of private agricultural enterprises foreign investment policies and systems.

(3) Choose to cultivate leading multinational agricultural enterprises. Due to institutional, technical and other reasons, China's agricultural industry has less international competitiveness of transnational groups, and other countries have a large gap. Most of the agricultural enterprises in China's foreign investment are small and medium-sized state-owned enterprises, small in scale and weak in strength, and have limited ability to resist the risks of international competition. In order to enhance the investment scale and anti-risk ability of agricultural enterprises, we should consciously and systematically cultivate a number of large-scale agricultural enterprises, select a group of competitive leading enterprises to give priority support, fully support the independent merger and joint enterprises, encourage enterprises to build strategic alliances, promote the effective integration of agricultural organization resources, and strengthen the competitiveness of agricultural enterprises.

(4) We attach great importance to cooperation in large-scale agricultural projects. The government can include major overseas agricultural integrated development projects such as natural rubber bases, grain bases, bioenergy bases and alternative cultivation within the intergovernmental cooperation framework. According to China's agricultural technology, market, intellectual property rights and other realities, the use of Southeast Asia, Africa, South America's rich resources, and actively establish overseas investment base for agriculture. Establish a mechanism for the transfer of major projects for overseas

investment, focus on a number of large projects, and guide domestic agricultural enterprises to jointly invest. Through the implementation of cluster investment, agricultural enterprises in the foreign investment plays a key role in driving. At the same time, the agricultural projects of China's foreign aid as the focus, encourage domestic agricultural enterprises to invest in China's foreign aid has been built old farm projects, promote the development of China's agricultural enterprises of foreign direct investment.

(5) We should strengthen the supervision of agricultural enterprises investing abroad. Strengthening the supervision of foreign direct investment by agricultural enterprises can urge enterprises to improve their governance and decision-making mechanisms, effectively guard against risks and safeguard the legitimate rights and interests of the state and enterprises. Some agricultural enterprises that invest abroad do not go through the relevant formalities and make outbound investments, which makes it impossible for the state to accurately count the data on foreign investment. And some domestic capital to flee, investment immigration, illegal operations abroad, the government can not grasp. Therefore, government departments should use the Interim Measures for Joint Annual Inspection of Foreign Investment and other systems to grasp the capital and financial situation of foreign direct investment of Agricultural Enterprises in China, and study and adopt effective measures to improve the authenticity of the annual inspection data. If conditions permit, you can also go abroad to conduct on-site inspections to understand the real situation first-hand, to ensure effective management.

3.2.1.2 Financial support

(1) Increase financial support for of ofward direct investment by agricultural enterprises. China has issued a number of policies to support and encourage enterprises to invest abroad, such as small and medium-sized enterprises to open up funds in the international market, can give early financial subsidies for overseas investment of small and medium-sized enterprises; The State formulates relevant financial support policies in a timely manner, strengthens the government's financial support for foreign investment by agricultural enterprises, and enables agricultural enterprises to obtain sufficient funds to develop overseas markets. At the same time, provinces and cities should also establish and improve the financial support policies to encourage foreign direct investment by agricultural enterprises. In light of the actual situation, we should gradually increase the special fund support for foreign direct investment of agricultural enterprises to ensure the

capital demand of foreign investment of agricultural enterprises. In addition, we can also refer to Japan's overseas investment loss insurance system, according to China's agricultural enterprises in the loss or loss of foreign investment projects, to give enterprise subsidies.

(2) Increase financial support for of ofward direct investment by agricultural enterprises. Domestic financial institutions shall provide preferential loans for overseas investment by agricultural enterprises, relax the loan conditions for agricultural enterprises, reduce interest rates appropriately, and grant credit lines. According to the characteristics of agricultural investment enterprises, the formulation of differentiated financing policies, design business varieties and models, and actively provide new financial services. Agricultural enterprises may also take into account key projects of overseas investment, enjoy special loans for overseas investment and preferential interest rates, make foreign investment more convenient, and promote the rapid development of China's agricultural enterprises direct investment abroad. At the same time, in view of the characteristics of foreign direct investment of agricultural enterprises, further improve the relevant guarantee standards, improve the form of guarantees, so that the financing difficulties of foreign-related agricultural enterprises have been effectively resolved. In this way, China can provide strong financial support for the of agricultural enterprises' OFDI, and the bottleneck of the fund of agricultural enterprises' OFDI can be effectively solved.

(3) Establish and improve the insurance system. At present, China's OFDI insurance business still has a small scale, narrow scope, high premiums phenomenon. If the premium is too high, it will inevitably increase the operating costs of enterprises, the product loses the price advantage, resulting in less competitiveness. As a result, the risk of enterprises increases, profits decrease, and the incentive to engage in OFDI decreases. We should give more accurate policy orientation, expand the insurance coverage of capital increased foreign investment, lower credit insurance rates, further give full play to the role of export credit insurance, and increase support for foreign direct investment by agricultural enterprises. By increasing premium subsidies and other means, insurance companies are encouraged to increase the types of insurance related to outward investment by agricultural enterprises, and reduce the investment risk of agricultural enterprises.

(4) Standardize foreign exchange management. Combined with the actual of foreign direct investment by agricultural enterprises in China, we will further improve the foreign

exchange management policy, streamline the examination and approval procedures as far as possible, and delegate the approval authority to make the foreign direct investment in agriculture more convenient. We should keep abreast of the latest information, strengthen the publicity of foreign exchange policies, help enterprises solve problems, and make foreign exchange policies come true. Improve the filing system, the situation of overseas investment should be timely grasp of the judgment, for the formulation of overseas investment policy to provide a scientific and accurate basis.

(5) The implementation of tax incentives. Agricultural enterprises with of OFDI should apply appropriate preferential tax treatment. China has no double taxation avoidance agreement with some countries and regions, but some domestic agricultural enterprises still invest in these countries. Where income tax has been paid in these host countries, the deduction of the tax paid at the domestic level may be considered. For strategic and resource-intensive agricultural products produced and sold abroad, such as domestic urgent needs, preferential policies for tax relief and reduction may be considered, and domestic agricultural products shall be treated on an equal footing.

3.2.1.3 Service Guarantee

(1) Strengthen the training of multinational management personnel. Foreign direct investment in agricultural enterprises can not be separated from high-end transnational management personnel and professional and technical personnel. China's agricultural enterprises to implement international management time is not long, international management personnel seriously inadequate. As a government, we should plan and implement the training of talents in general, make use of agricultural education resources and bases, train international professionals through universities, enterprises and trade associations, and provide talent support for foreign direct investment in agricultural enterprises. At the same time, we can also make use of the government's own advantages, recruit and introduce a number of composite multinational management personnel and professional and technical personnel, to build an international professional talent pool, to meet the needs of agricultural enterprises, enhance their transnational business capacity. At the same time, the establishment of a special fund for the training of overseas personnel, to meet the standards of agricultural enterprises to provide financial support, or special training by the state. Strengthening the skills training of domestic labor export personnel through various means, improving the overall quality of domestic labor export personnel,

is conducive to improving the production efficiency of agricultural enterprises.

(2) Improve the foreign investment information advisory service system. On the basis of the Ministry of Commerce providing enterprises with various foreign investment information services each year, the government should establish and improve information dissemination institutions and channels. Innovate in service mode and build interactive public information platform. Use a variety of media to provide information on host country policies and regulations, risk information, investment opportunities, joint venture hotspots, etc. in more forms. Establish a database of overseas investment agricultural enterprises, recommend suitable investment projects to agricultural enterprises, and provide guidance and services to agricultural enterprises. We should give full play to the role of government agencies abroad, pay close attention to foreign preferential policies to attract foreign investment in agriculture, grasp the information of agricultural markets, and study the situation of the host country's markets. To provide domestic agricultural foreign investment enterprises with foreign laws and regulations, investment environment, industry dynamics, market demand and other reliable information to help agricultural enterprises choose the right investment target district.

(3) The use of bilateral agreements to provide policy protection and preferences. Our country has signed bilateral investment protection agreements with more than 100 countries, but only a few do so in its home country. In view of the wave of foreign direct investment of Chinese enterprises, it is urgent to sign bilateral protection agreements as the home country of investment to protect the interests and security of foreign investment of Chinese agricultural enterprises. At the same time, using diplomatic means, the foreign direct investment of agricultural enterprises as an important part of bilateral negotiations, in taxation, visas, labor export, etc., to carry out effective consultations and solutions to create a good international environment for foreign investment enterprises. Provincial and municipal governments can also establish communication and coordination mechanisms with relevant countries and regions to use bilateral investment protection agreements to avoid unfair treatment and properly deal with trade barriers. Our foreign-based institutions should pay great attention to and actively help solve the unfair treatment encountered by China's agricultural enterprises abroad and safeguard the safety and legitimate rights and interests of the assets and personnel of overseas agricultural enterprises.

(4) The establishment of industrial investment funds. There is a lot of uncertainty

about overseas agricultural investment. The China Development Bank, in cooperation with domestic and foreign institutions, has established industrial investment funds such as the China-Swiss Cooperation Fund to help Chinese enterprises invest directly in foreign direct investment. Overseas industrial investment funds have many functions in financing and investment, which is very beneficial to the of ofward direct investment of Chinese agricultural enterprises. Therefore, according to the actual of the foreign direct investment of agricultural enterprises, we should actively encourage the establishment of a special fund for foreign direct investment in agriculture, provide subsidies, discount and emergency assistance for agricultural enterprises to make use of overseas resources, processing and production abroad, and enhance the global competitiveness of agricultural enterprises in China.

3.2.2 Corporate aspects

3.2.2.1 Improve the enterprise's own risk prevention and control capabilities

(1) Conduct a feasibility study on investment projects and select suitable international market targets. The first thing for agricultural enterprises to invest in foreign direct investment is to do a good job in the feasibility study of investment projects. The feasibility analysis should be made on the investment environment, national policies, industry market, social culture and so on in the target countries of outbound investment projects. In particular, in the light of the characteristics of investment projects, we should pay attention to the objective situation of investment risk in the target country, such as the objective situation of nationalization risk, the content and scope of bilateral investment protection agreement, undertake relevant international law obligations and guarantee responsibilities, correctly make investment risk assessment, and keep investment risk to a minimum.

(2) Establish a sound decision-making management mechanism and formulate a clear internationalization strategy. On the basis of feasibility analysis, agricultural enterprises should take full account of project cost and profit margin according to their competitive strength, make investment decisions scientifically, and choose projects suitable for enterprise development. We should pay attention to the choice of agricultural enterprises have their own comparative advantages of investment projects, careful selection of enterprises are not familiar with the project, can effectively avoid enterprise risks. Through mergers and acquisitions, alliances, financing and other ways, focus on agricultural

cultivation, forestry development and offshore fisheries and other aspects of foreign investment, the implementation of value chain management, to maximize investment profits. Reorganization of domestic and foreign resources, the acquisition of enterprises and the enterprise's operating system organic integration, invigorating resources, do large-scale, strong enterprises. We should formulate an international development strategy scientifically, take economic benefits as the core, determine the direction, choose the industrial chain, reduce costs, open up the market, and realize the unification of the foreign direct investment strategy of agricultural enterprises with the overall development strategy of agricultural enterprises themselves. At the same time, agricultural enterprises in investment decision-making, management, risk aversion and so on, there must be a scientific transnational management system, optimize the allocation of enterprise resources, so that the development of enterprises into a virtuous circle.

(3) Strengthen the use of personnel training, improve the international perspective of agricultural business operators. Not only should the government train the management personnel of multinational agricultural enterprises, but also attach importance to the training of high-quality composite talents. Once an enterprise determines the of foreign direct investment, it should focus on training a group of international management personnel. In view of the fact that the national management personnel of agricultural enterprises are insufficient, we can send domestic personnel to study advanced management experience abroad and train them to serve as overseas managers of enterprises, adopt localization strategy, introduce foreign talents to serve enterprises through preferential treatment, and take the form of "agent system" to cooperate with foreign trade companies, cooperate with other enterprises and listed companies, etc., to provide talent support for agricultural enterprises in China in the development of overseas agricultural and forestry resources, agricultural products processing, etc. Considering that agricultural enterprises are generally weak, the cost of talent introduction is relatively high, so we should base on the enterprise, make effective use of the company's human resources, and cultivate a group of competent multinational talents.

(4) Cultivate world-class brands of agricultural enterprises and enhance their international competitiveness. China's agricultural of foreign direct investment enterprises should make full use of the advantages of labor, resources, processing, to plant, production, technology for cross-border investment. Optimize and adjust the industrial structure, pay

attention to the development of high value-added industries, and strive to enhance the technical content of products. Strengthen research and development, segment and extend the industrial chain, and continuously improve their own technical level, the creation of independent intellectual property rights and private brands. Through careful publicity and cultivation, enhance the brand's international influence, enhance the brand's core competitiveness.

3.2.2.2 Actively seek the help of our Government to avoid risks

(1) Learn more about the political and legal systems of the host country. As mentioned earlier, our government has formulated many policies to support of OFDI by agricultural enterprises and has done a lot of useful work. If agricultural enterprises want to make direct investment abroad, they should take the initiative to understand the laws and regulations of our government in the field of of foreign direct investment, keep abreast of all kinds of information provided by the government, and strive to win the support of government departments. At present, through the Relevant Information of the Ministry of Commerce, Ministry of Agriculture, Foreign Economic and Trade Commission and other departments, agricultural enterprises can understand the competition rules, operation mode and trading mechanism of the international market. In formulating the strategy of overseas investment and operation of enterprises, we should take sound risk assessment and risk prevention as an important content, effectively identify and assess risks, control and avoid all kinds of risks that enterprises may encounter when operating transnationally, and strive to ensure the safety of enterprises' outbound investment and try their best to reduce the losses of enterprises.

(2) Make full use of all kinds of overseas investment policies formulated by the government. In order to support the of foreign direct investment of agricultural enterprises, our government has introduced a lot of support and encouragement policies. For example, the special fund support policy for overseas investment shall be supported by direct subsidies or discount interest on foreign direct investment of enterprises, special loans for overseas investment shall enjoy preferential interest rates on export credit, financing external guarantees shall be changed from the original report to SAFE for approval and balance control, and the preferential tax policies for overseas investment of Chinese enterprises shall be changed. Enterprises can also, through insurance, pass on political risks encountered in the host country to insurance institutions, in an effort to avoid

potentially significant losses and to protect the safety of agricultural enterprises' investments abroad.

(3) The use of intermediaries and trade associations to prevent and control risks. Intermediary is the bridge and link between government and enterprise, which plays an important role in the implementation of OFDI strategy. Many times, countries rely on intermediaries to complete policies to support foreign investment. At present, the number of domestic intermediaries is small, so that the construction of intermediaries should be further strengthened, so that intermediaries play an active role in the of outward direct investment in agricultural enterprises. At the same time, we can consider setting up China's agricultural foreign investment industry association and overseas agricultural enterprises industry association, etc., to play the role of industry associations, strengthen industry self-discipline, jointly coordinate prices, handle disputes, resist risks, for agricultural enterprises to protect foreign direct investment escort. It is also available through social organizations such as the Chamber of Commerce and accounting and auditing institutions in the host country to help agricultural enterprises to grasp the information of the host country, strengthen corporate governance and integrate organically with the local community.

3.2.2.3 Actively respond to risks in the host country

(1) Enhance the adaptability of the enterprise environment. This paper analyzes the legal policies of the host country in terms of safe production, environmental governance standards, human resource management and so on, and adopts the strategy of localization. Improve the environmental adaptability of domestic agricultural enterprises in the host country through people's homes and villages. The implementation of localization strategies can lower the barriers for agricultural enterprises to invest in host countries and reduce trade sanctions and barriers to trade. In some countries and regions, national treatment can also be enjoyed, reducing political sensitivity and reducing political risk. Use the resources of the host country to the extent possible and hire local management personnel locally. Actively integrate into the local social culture, establish a good corporate image and reputation. In view of the reality of the host country market, develop and produce products that are popular with local consumers, occupy the local market and achieve the goal of OFDI by agricultural enterprises. For example, most of the land in African countries is held by farmers and yields are very low. If domestic Agricultural enterprises to buy out

land, send domestic workers to cultivate, there is no doubt that the risk is great. Contracts could be signed with African farmers, with domestic agribusilations responsible for the supply of seeds, chemicals and pesticides, credit funds for local farmers to purchase production materials, technical training and the financing of roads and infrastructure. In this way, domestic companies can achieve their investment objectives and avoid attacks by local nationalists.

(2) Adjust the investment strategy in due course. In the of of foreign direct investment of agricultural enterprises in China, according to the situation and changes of international and domestic and host countries, the investment and management strategy should be adjusted in a timely manner to ensure the survival and development of enterprises abroad. If the strength of domestic agricultural enterprises is not strong, when seeking partners, you can consider co-investment with the host government or enterprises to carry out project development. A multinational joint venture is a joint venture between local governments, enterprises and domestic enterprises. In this way, the risk of OFDI is spread to local joint ventures, which prevents the host Government from implementing policies that are detrimental to the enterprise. At the same time, the investment projects of agricultural enterprises can be diversified, so that the investment risk is dispersed. If there is a conflict between enterprises and the host government, we should adopt a policy of active cooperation and properly handle disputes. Sometimes for the overall, long-term interests, you can make certain concessions, temporarily at the expense of local, immediate interests. In the event of a conflict that seriously endangers the survival of the enterprise and cannot be resolved, the investment can only be withdrawn from the host country. Of course, this will certainly bring serious losses to the enterprise. Therefore, not to be forced to take a win-win attitude of cooperation, to avoid economic losses to both sides.

(3) Respect local customs and culture. Some countries are very different in politics, law, religion, culture, customs and so on, and special attention should be paid to the customs of the people, with respect to deal with. We should attach great importance to local social customs and customs, strengthen the understanding of local culture, as far as possible effective integration of both cultures. To the existing customs and cultural differences, we should adopt a respectful attitude, establish a good image of enterprises in the public mind. In the enterprise, we should cultivate and optimize the corporate culture,

strengthen cultural communication and communication with local employees, avoid cultural conflicts and crisis of trust between employees as far as possible, achieve harmony in the internal cultural environment, and further improve the productivity of enterprises.

### 3.3 Strategic planning of trade development along the One Belt And One Road.

3.3.1 China should speed up the implementation of the free trade area strategy

Free trade zone plays an important role in China's foreign trade, China should speed up the implementation of free trade zone strategy, work with countries along the line to actively carry out free trade zone negotiations, build a free trade zone network, promote the development of world trade in a free, convenient and win-win direction; And strengthen cooperation and exchanges with the customs of countries along the route, simplify customs clearance processes and procedures, improve the standards and transparency of agricultural product inspection and quarantine, so that inspection and quarantine more rapid and efficient, so as to facilitate customs clearance, at the same time, China should strengthen with the "Belt and Road" countries along the agricultural product regulatory standards and agricultural products related technical barriers to trade, and so on, and effectively reduce the technical barriers to China's agricultural exports, We will promote extensive exchanges and moderate integration between China and the countries along the route in the field of agricultural products supervision system and procedural standards, and continuously improve the efficiency of China's agricultural exports to countries along the route.

3.3.2 China needs to continue to vigorously promote infrastructure construction with countries along the route

Since the "Belt and Road" initiative was put forward, China and the countries along the route have made remarkable progress in infrastructure construction cooperation, with six corridors and six multi-national multi-port as the key implementation projects of infrastructure construction in an orderly manner, railway, with China-Old Railway, China-Thai Railway, Yawan high-speed railway projects as the representative of the port construction including Gwadar Port, Hanhan Bantota Port, Khalifa Port and other projects, aviation air Silk Road construction rapid development, while in the energy sector, China

and Russia crude oil pipeline, China and Central Asia Tianya gas pipeline in Myanmar oil and gas pipeline, it can be seen that China and the country along the infrastructure construction has made significant construction achievements in various aspects, on this basis, China should continue to vigorously promote cooperation and docking with countries along the railway, ports, roads and cross-border bridges, to achieve the interconnection of basic facilities, for China's agricultural exports to countries along the line to provide a good facility guarantee, will further reduce China's agricultural exports to countries along the cost of trade, Moreover, it is more convenient for China's high-quality agricultural products to be exported to various countries along the route, which makes the level of convenience of China's agricultural exports further improved.

3.3.3 Improve the quality and international competitiveness of China's export agricultural products

To improve the quality and international competitiveness of China's agricultural exports is the fundamental guarantee for China's agricultural products to expand the international market, so as to continuously tap the export trade potential of China's agricultural products to countries along the route. In order to improve the quality and international competitiveness of China's export agricultural products and enhance the international influence of China's agricultural products, first of all, we should continue to deepen the structural reform of agricultural supply side, with the output of green and high-quality agricultural products as the ultimate goal, solidly implement the strategy of quality and agricultural development, improve the level of standardized output of agricultural products; In addition, strengthen the technical research and development of agricultural products-related production links, and combine with modern information technology, constantly enrich the types of agricultural products with export advantages, so that more and more kinds of agricultural products in China are recognized in the international market; Thus, to further improve China's "Belt and Road" along the line of agricultural exports market share.

3.3.4 China and the countries along the route should constantly consolidate and improve the bilateral trade promotion financial mechanism

Most of the developing economies along the Belt and Road are developing economies with relatively limited levels of financial development, and good financial services and financial facilities help to improve the efficiency of China's agricultural

exports to countries along the route. On this basis, we should continue to expand the cross-border use of RMB, reduce the exchange rate risk brought about by the difference between settlement currency and reduce the related costs in trade, and further improve the construction of financial services infrastructure such as RMB cross-border payment system in countries along the route, promote the development of financial services trade between China and countries along the route, and innovate financial products and services suitable for the characteristics of agricultural trade The bilateral trade promotion financial mechanism brings high security and efficient financial service guarantee to China's agricultural export trade to the countries along the route.

3.3.5 Give full play to the active role of international organizations and create favorable conditions for agricultural exports

Since the outbreak of the global financial crisis in 2008, trade protectionism has undermined the trend of global liberalization of trade, and various tariff barriers have adversely affected the orderly development of trade activities around the world. Against this background, since international organizations are an important assistance force in promoting economic and trade reform and development worldwide, China should give full play to the positive role of multilateral systems such as the World Trade Organization, APEC, the Shanghai Cooperation Organization and the BRICS Cooperation Organization, promote the development of the multilateral trading system in an equal, just, inclusive and win-win direction, further reduce and eliminate trade barriers to agricultural exports to countries along the route, and improve the efficiency of agricultural exports At the same time, as an important platform for trade cooperation between China and the international market in the field of agricultural products, while carrying out extensive exchanges and cooperation with the countries along the line in the field of agricultural technology research and development, using the international organization as an important platform to push China's high-quality agricultural products to the international market, so that China's export agricultural products are more and more countries along the line to accept and recognize, and constantly enhance the influence of China's agricultural products in the countries along the route, thus creating favorable conditions for China's agricultural exports to countries along the route.

3.3.6 Encourage innovation and increase the added value of China's export products

According to the results of the return, China's GDP and bilateral trade with the

trading countries along the route are positively correlated. As far as China itself is concerned, adjusting the mode of trade growth requires China to increase the added value of its export products and increase the content of science and technology. China's economy is in a new stage of structural adjustment and reform, labor advantage is weakening, and the competitiveness of labor-intensive products is declining. Therefore, China must adjust its industrial structure and optimize its industrial structure. We will vigorously develop capital-intensive products and high-tech products, and strengthen innovation capabilities to encourage scientific and technological innovation.

3.3.7 Improve the structure of import and export of goods and enhance the complementarity of commodities

Through the study of the structural characteristics of China's imports and exports along the Belt and Road in recent years, the product structure of China's commodity trade has not changed much. In recent years, China has maintained a trade surplus with countries along the route. Although there are slight fluctuations, but it has stabilized. China's bilateral trade structure with countries along the route is relatively stable, but there are still problems of unreasonable structure. China's trade with the Belt and Road countries accounts for about 40% of global trade, and many countries along the way are not developed countries, or many countries are not China's big trading partners. However, the status and importance of countries along China's trading partners, in today's rapid development of globalization, "one." The Belt and Road Initiative is in line with the trend of the times and a great strategy in the interests of the world. This paper adds the accession of the Shanghai Cooperation Organization and the Asian Investment Bank as the influencing factors of bilateral trade. According to the results of the return, the establishment of the Shanghai Cooperation Organization and the preparation of the Asian Investment Bank have had a positive impact on bilateral trade between China and countries along the Belt and Road. This is conducive to the complementarity of trade goods among member Countries and to the expansion of various trade products. It facilitates the simplification of customs procedures, reduces trade frictions and facilitates unrestricted movement of products and factors of production among countries in order to minimize trade barriers between trading partners. This enables manufacturers to innovate old products, increase productivity and improve technology. Alternatively, in order to cope with the fierce market competition, unite the implementation of economies of scale, etc.,

through various channels to promote the economic growth of member countries. China should actively promote economic cooperation and achieve mutual benefit and win-win results with other countries.

3.3.8 Increase the training of high-tech industries, establish a brand image

The government should increase its support for innovative enterprises, build innovative industrial clusters and promote the development of regional innovation systems. The introduction of high-quality personnel, the cultivation of science and technology-based enterprises. We will speed up the construction of institutional mechanisms driven by innovation and innovation, increase the cultivation of innovative enterprises and high-tech industries, guide state-owned enterprises to take the lead, and encourage private enterprises to carry out simultaneously. Strengthening the innovation of enterprises is a key step in the development of China's national industry. Innovating the soul of a nation's progress. Strengthen the leading role of advanced manufacturing industry, play the leading role of high-tech industries, play a supporting role in modern service industry. Encouraging technological innovation, independent research and development of new products, to build national brands, which can not only enhance China's high-tech products exports, but also enhance the image of China's major countries the best performance. Talent investment is the most effective investment, talent introduction is the most valuable introduction.

3.3.9 Speed up the construction of transportation facilities between China and countries along the Belt and Road and enhance cross-border exchanges

According to the results of the return, the geographical distance between the trading countries is negatively correlated with the bilateral trade volume between the two countries. Geographical distance from trade between the two countries is an obstacle. Along the Belt and Road, it includes many resource-rich countries, middle-east oil, Central Asian gas and Australian dairy products. These goods need convenient transportation for rapid transportation, the freshest and best quality goods to other countries. Therefore, the construction of transportation facilities is very important. Improving infrastructure construction is conducive to strengthening real-time communication, reducing transportation difficulties and transportation costs, promoting economic and trade exchanges and realizing industrial transfer. There is an old Chinese saying, "To get rich and build roads first", which shows that transportation plays a very important role in a

country's economic development. Improving the construction of transportation infrastructure is a strong guarantee for the sustainable development of the Belt and Road. Strengthening cross-border exchanges is not only about land-based exchanges, but also about cultural exchanges. Central Asia, Central and Eastern Europe are rich in religious beliefs and customs are very different from those in China. To a certain extent, it has created ideological barriers and obstacles to trust in economic and trade exchanges. The importance of connectivity lies not only in the integration of land-based infrastructure, but also in the connection and integration of people, connections and cultures. The China-ASEAN Year of Cultural Exchange, china-Russia Cultural and Artistic Exchange Week, the Australian Chinese Culture Festival, the China-Poland "100 Chinese Characters To Know China" cooperation agreement, and other forms of communication have helped the two peoples better understand each other's culture and understand each other's origins and share exciting results. In cultural exchanges, the sense of distance caused by differences is eliminated, the bias caused by distance is eliminated, mutual appreciation caused by resonance is promoted, and mutual tolerance resulting from appreciation is promoted.

3.3.10 Broaden the field of economic development and promote the construction of the Asian Investment Bank

The AIIB is not only The first multilateral financial institution established by China, but also a successful example of establishing developing countries and absorbing developed countries to become high-standard international financial institutions. It has multiple meanings, first of all, it serves the cause of Asian revitalization. The establishment of the Asian Investment Bank would allow the flow of funds among member countries. This will enable developing countries to use their own infrastructure and personnel training to help them achieve faster economic growth, while enhancing the positive interaction between beneficiary countries and China and injecting new impetus into The Economic Development of Asia. Secondly, the Asian Investment Bank has broadened the economic development of member countries, promoted regional connectivity and economic integration, increased employment opportunities for member countries, tapned trade potential, strengthened exchanges to increase foreign investment, and enhanced the medium- and long-term development potential of member countries. The Ai Investment Bank is also committed to South-South and North-South cooperation. Most developing countries had a large voice, giving them a space for free expression. This is not

only in line with the development and changes of the international economic structure, but also reflects the confidence and determination of developing countries to jointly promote the development of the Asian region.

## Conclusions to section 3

In order to well promote the foreign activities of Chinese agricultural enterprises, this paper proposes to optimize the foreign activities of Chinese agricultural enterprises from the level of government, industry and enterprises. Chinese agricultural enterprises will face the risk of foreign investment activities, and propose the risk control of the foreign activities of Chinese agricultural enterprises. The implementation of "Belt and Road" strategy provides a new development path for Chinese agricultural enterprises.

1.China agricultural enterprises are the main body of the foreign investment activities strategy, at the same time, the government should play a full role in its services. Therefore, the role of the government cannot be underestimated. In implementing the foreign investment strategy, the government should fully absorb and learn from the experience of dealing with relations between foreign multinational companies and home countries, as well as the experience of other countries, create a favorable environment for enterprises to successfully foreign investment activities and continuously promote the reform of the international operation of agricultural science and technology enterprises in China. The first establish a systematic and perfect safeguard mechanism to safeguard the legitimate rights and interests of enterprises, secondly improve the foreign investment approval policy and streamline the approval process, and Strengthen bilateral cooperation with the government.

2. Provide Tax Incentives for Overseas Agricultural Investment:

To stimulate overseas agricultural investment, China can adopt tax incentives, mirroring practices employed by developed countries. This includes subsidizing income tax and tariff returns on agricultural products. Implementing tax-related subsidies such as deferred payments, tax credits, and exemptions can further encourage agricultural enterprises to invest abroad. Notably, facilitating the export of production means and equipment by reducing unnecessary taxes and fees, avoiding double taxation for those who have paid income tax, and exempting import taxes and fees for agricultural products with

high demand-supply gaps returning to China are crucial strategies. Additionally, multinational agricultural enterprises complying with tax agreements should benefit from reduced taxes in China based on their legal person tax and income tax payments.

3. Increase Investment in Science and Technology for Key Areas:

Elevating the competitiveness of China's agricultural enterprises in overseas investment can be achieved through increased investment in scientific research funds for key areas of agricultural foreign investment. Emphasis should be placed on deepening scientific and technological exchanges, enhancing collaboration between research institutions and agricultural departments, and establishing a robust platform for agricultural science and technology cooperation. Efforts to improve the technology output management system, enhance the practical application of China's agriculture in overseas investment, and actively export mature emerging technologies should be prioritized. Simultaneously, creating world-class brands and independent intellectual property rights is essential to augment the international influence of agricultural brands and boost the core competitiveness of the brand.

4. Strengthen External Financial Support for Agriculture:

To alleviate the high market development costs associated with overseas investment, China should establish a financial support and policy subsidy system for agricultural foreign-related projects. This involves the creation of export banks and overseas investment companies to provide equity financing and loans for Chinese agricultural enterprises. The introduction of an agricultural foreign direct investment and construction fund can support feasibility investigations, cover losses from outbound investment, address early market development expenses, and fund return freight charges for agricultural product resources. Special fund subsidy policies should encourage agricultural enterprises to explore the international market, and subsidies can be allocated for external development, supply chain construction, and product promotion system construction. Learning from U.S. agricultural subsidies, such as disaster subsidies, payment balance subsidies, direct income subsidies, counter-cyclical subsidies, resource conservation subsidies, and agricultural trade subsidies, can inform the development of a comprehensive subsidy system in China.

5. Establish an Insurance System for Overseas Agricultural Investment:

Given the heightened pressures and risks associated with agricultural overseas

investment, China should establish a sound insurance system to align with national conditions. Policy-based financial departments should strengthen the state's guarantee role, enhance the ability of agricultural enterprises to prevent risks in foreign investment, and promote insurance treatment subsidies. Commercial insurance companies should actively set up special risks related to overseas investment, covering natural disaster loss, political turmoil, crisis risk, property confiscation risk, foreign exchange currency unconvertibility risk, and war events risk. Encouraging increased insurance coverage through premium subsidies will help reduce the risk of overseas investment. Additionally, establishing an agricultural outbound investment early warning system, a loss evaluation system, a risk defense fund, and an overseas investment guarantee institution is vital. Tailored insurance for different investment methods and areas should be developed to enhance the risk early warning and compensation mechanism of agricultural overseas investment projects.

Publication of Scientific Results:

The chapter concludes by presenting specific scientific results that highlight the author's individual contributions to the investigated problem and underscore the scientific novelty of the work. These results are detailed in the provided publications.

## CONCLUSIONS

Through this paper, we can see that the scale of foreign direct investment of Agricultural Enterprises in China is not very large at present, and the enterprises in China directly invest in foreign countries The proportion of capital is still small, but our government actively encourages and supports the foreign direct investment of agricultural enterprises, the prospects for foreign direct investment of agricultural enterprises are good, the experience of agricultural enterprises in foreign direct investment in China is not rich, in the international operation capacity of enterprises, There is still a shortage of talent reserves, overseas investment is faced with political, economic, decision-making and other risks, from the state and enterprise level, for agricultural enterprises to provide foreign direct investment, policy, capital, technology, personnel and other support, effectively prevent and control risks, to avoid losses to enterprises.

However, with the continuous development of political relations between Ukraine and China, especially as Ukraine has become a strategic partner of China, Ukraine should make full use of its good cooperative relations with China, deepen economic and trade cooperation with China, and bring sustained and stable development to the Ukrainian economy. On the one hand, economic and trade cooperation with China plays an important role in promoting the economic development of Ukraine, promoting the development of Ukraine's domestic industrial institutions, on the other hand, it can establish more stable trade relations with China, so that China attaches great importance to the development of the political situation in Ukraine, and in the course of world political mediation, china is conducive to considering the political situation that will maintain more stability in Ukraine. Based on the analysis of the current situation of economic and trade development and industrial structure, this paper studies the factors affecting the development of Ukraine-China economic and trade cooperation in Ukraine, and draws the following suggestions from the existing problems in the economic and trade development between Ukraine and China:

1. The current situation of economic and trade development cooperation between Ukraine and China

Exploration of Trade Development Between Ukraine and China:

Commencing with an examination of the current state of trade in services and extending to the broader category of goods, the total volume and structure of commodity trade in the collaborative trade relationship between Ukraine and China are emphasized.

The objective is to identify innovative approaches that can contribute to the advancement of their trade development. As China continuously enhances its scientific and technological innovation capabilities, fosters the development of intellectual property rights, and endeavors to transition from a major producer to a leading scientific and technological power, the insights gained from its evolving relations with Ukraine play a crucial role.

2. Economic Implications of Ukraine-China Economic and Trade Ties on Ukraine:

An analysis of the economic impact of Ukraine-China economic and trade relations on Ukraine's development is presented, encompassing aspects such as GDP growth, fiscal revenue, and more. Through correlation analysis and trade integration examination, certain challenges are identified, including a relatively low level of trade integration and an increasing trade deficit in Ukraine-China commerce. The analysis attributes these issues to insufficient utilization of comparative advantage in the economic and trade cooperation between Ukraine and China. The trade deficit negatively affects Ukraine's per capita income, ultimately stemming from an unfavorable trade environment in Ukraine, impacting the overall economic and trade development of both nations. Despite these challenges, economic and trade collaboration with China holds significant positive implications for Ukraine, particularly in the current economic climate, where Ukraine faces a potential crisis and declining international trade. Strengthening economic ties with China has the potential to rejuvenate Ukraine's economic situation and spur overall economic development.

3. Recommendations for Ukraine-China Economic and Trade Development Strategy:

Strategic recommendations are outlined for the economic and trade development between Ukraine and China. On Ukraine's part, there is a call for improvements in the domestic environment for foreign investment, with specific management measures targeted at industries related to China's trade. Proposals include the implementation of preferential tariff measures for China's trade imports and the expansion of comprehensive cooperation with China in trade products. From the Chinese perspective, active efforts to expand investments in Ukrainian industrial capital and increased support for Ukrainian capital and agricultural technology are encouraged. The overall proposal emphasizes the optimization of the trade structure between Ukraine and China and advocates for the liberalization of trade markets. Leveraging Ukraine's geographical and linguistic

advantages is recommended to enhance trade development, fostering economic and trade cooperation between Ukraine and China. In conclusion, the economic and trade cooperation between the two nations is deemed highly significant for Ukraine's development, impacting areas such as state economic development, government revenue, and industrial restructuring. The study acknowledges the need for further in-depth exploration, particularly in understanding the nuanced effects on the Ukrainian state, and suggests that this avenue be explored in future research.

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