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GRADUATION THESIS

on

Comparative analysis of export competitiveness between China and Thailand

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Department of Sociology, Economic Theory and International Processes
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Master's degree programme International Economics and Business

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ASSIGNMENT
FOR THE GRADUATION THESIS OF

Master's degree student LiJin Fan, group 23ЭЭВам1, full-time mode of study

1The topic of the graduation thesis: "Comparative analysis of export competitiveness between China and Thailand"

was approved by the university order
dated «___» _____ 20__ no. _____

2The deadline for the Master's degree student to complete the graduation thesis is 11.06.2025.

3The input data for the graduation thesis is the regulatory and legal framework, scientific literature and reference books, and Internet data.

4The list of issues to be studied includes Introduction

5The list of visuals contains tables and figures.

6The date of setting the assignment is 7.09.2023.

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The assignment was accepted by Master's degree student _____ / LiJin Fan/
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Schedule for completing the graduation thesis

№ п/п	Content of the thesis	Deadline for completion	Due date, signature of the academic adviser
First year of study			
1	Substantiating of the research topic and methodology, subject and object of research	1.09.2023 – 31.10.2023	
2	Framing the scientific concept of research	1.11.2023 – 18.12.2023	
3	Collection of scientific literature for the thesis	19.12.2023 – 15.01.2024	
4	Substantiating the relevance, concept, and novelty of the research	16.01.2024 – 19.02.2024	
5	Framing of a detailed plan and layout of the research	20.02.2024 – 12.03.2024	
6	Studying new literature sources within the topic of the thesis	13.03.2024 – 26.03.2024	
7	Conducting theoretical research within the first chapter of the thesis	27.03.2024 – 30.04.2024	
8	Preparing the first chapter of the thesis	1.05.2024 – 30.06.2024	
Second year of study			
9	Conducting analytical research within the second chapter of the thesis	1.09.2024 – 22.10.2024	
10	Preparing the second chapter of the thesis	23.10.2024 – 24.12.2024	
11	Conducting analytical research within the third chapter of the thesis	25.12.2024 – 25.02.2025	
12	Preparing the third chapter of the thesis	26.02.2025 – 21.04.2025	
13	Preparing the introduction and conclusion	22.04.2025 – 12.05.2025	
14	Completing the graduation thesis	13.05.2025 – 26.05.2025	
15	Handing in the thesis for compliance control and antiplagiat	27.05.2025 – 9.06.2025	
16	Getting acquainted with the feedback and review	10.06.2025	
17	Presenting the written thesis	11.06.2025	

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Summary

The graduation thesis comprises 67 pages, 3 chapters, 13 figures, 6 tables, 62 sources.
CHINA, THAILAND, EXPORT COMPETITIVENESS, ECONOMIC, OVERVIEW

The target of research is the export competitiveness of China and Thailand.

The goal of work is to study the current status, challenges, and optimization strategies for their export development.

The methodological framework of the paper is formed by the complex of theoretical and practical methods such as literature review, data analysis, comparative analysis, and case studies.

The results of research include: Identification of key competitive advantages in major export products. Analysis of overlapping and complementary export markets. Identification of challenges such as trade friction, supply chain risks, and market dependence.

The recommendations on disseminating and applying the results are as follows: Enhance technological integration and market diversification. Strengthen regional cooperation. Promote sustainable and green trade practices.

The theoretical relevance of the thesis is established by expanding international trade theory, value chain analysis, and the "competition-complementarity" dynamic model.

The target of research can be further explored through deeper studies on digital trade, green economy policies, and geopolitical impacts on export resilience.

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Introduction

In the context of global economic integration, export trade plays a crucial role in a country's economic growth. As two of Asia's major economies, China and Thailand leverage their respective comparative advantages to hold significant positions in international trade. China, as the world's second-largest economy, is transitioning its export structure from labour-intensive products to high-tech, high-value-added products such as new energy vehicles, photovoltaic products, and lithium batteries (the “new three pillars”), while expanding into diversified markets through the Belt and Road Initiative. Thailand, on the other hand, relies on agriculture (such as tropical fruits and rice) and manufacturing (such as automotive parts and electronics) as its export pillars, while actively promoting the development of emerging sectors like the digital economy and electric vehicles.

However, both countries face external and internal challenges. China needs to address trade frictions, supply chain security, and industrial upgrading pressures, while Thailand is constrained by its dependence on the Chinese market, the impact of climate change on agriculture, and rising labour costs [35, p. 192]. Against this backdrop, analysing the export competitiveness, market distribution, and development trends of China and Thailand is of great significance for promoting bilateral trade cooperation and optimizing industrial structures.

The theoretical basis of the study is the importance of Chinese scientists. the following should be pointed out: Zheng Guofu, Ding Yong., Huang Peixi, Le Thu Mai, Bai Bo., Wang Sicheng, Bai Yuanqi, Xu Ming., Zhao Yanli., Bai Ziwei.

The object of research is the export competitiveness of country. The subject of the study

is the export competitiveness of China and Thailand.

The goal of the research is to analyze the export competitiveness of China and Thailand, to reveal the current status of the export development of the two countries as well as the existing problems and put forward corresponding optimization strategies to provide reference for the export development of the two countries.

The present study is based on data and information collected from a variety of sources. The major source of data is international trade statistics from statistical data published in Chinese research literature, international trade map, journals, reference materials, Internet sources.

During the research the complex of theoretical and practical methods was employed such as literature survey method, data analysis method, comparative method and case study method.

The novelty of the work is trends and prospects for the development of agricultural trade cooperation of China and measures to strengthen China's relationship with trading partners are revealed.

The innovation of this study lies in its dual-dimensional analytical framework, which encompasses product competitiveness (fruits, rice, high-tech products, etc.) and market competitiveness (the United States, the European Union, ASEAN, etc.). It systematically compares the strengths and weaknesses of Chinese and Thai exports, addressing the shortcomings of existing research that often focuses on single products or markets.

The theoretical significance of this study lies in expanding the application scenarios of international trade theory, deepening value chain theory, and constructing a dynamic model of “competition – complementarity” between China and Thailand. Its practical

significance lies in providing strategic guidance for enterprises and reference for policy-making.

The work structure is determined by the purpose and tasks decided in the work. The research paper consists of introduction, three chapters, conclusion and references. The first chapter of this thesis is Analysis of China and Thailand export profile. In this chapter, based on an analysis of the economic conditions of China and Thailand, this paper examines the characteristics of exports from China and Thailand, as well as the factors influencing exports from both countries. The second chapter is Comparative analysis of export competitiveness. The second chapter provides a comparative analysis of the main export products and export markets of China and Thailand. Firstly, a comparative study of the competitiveness of the main export products of China and Thailand is of great significance in promoting the sustainable development of China-Thailand product trade. Secondly, starting from the main export markets such as the United States, the European Union, ASEAN, and Japan, combined with the current situation of the main exports of China and Thailand, the competitiveness of the main export markets of China and Thailand is comparatively analyzed in the hope that it will help in the development of the exports of China and Thailand and the enhancement of the international competitiveness of the respective countries. The last chapter is Problems and prospects of China and Thai export. The third section analyzes the export development trend, main export problems and export optimization strategies of China and Thailand. In exploring the evolution of export trends in the two countries, the focus is on technological progress, market diversification, sustainable development and regional integration. Then focusing on regional development imbalance, commodity dependence and geopolitical risks, it explores the key issues in the export areas of the two

countries. Finally, it explores the export optimization strategies of China and Thailand from the dimensions of technological integration, logistics optimization, market diversification and sustainable development. The study aims to provide reference for deepening economic and trade cooperation between China and Thailand and achieving complementary and mutually beneficial results.

Chapter 1 Analysis of China and Thailand export profile

1.1 Analysis of China and Thailand economies

As the world's second largest economy, China's economic growth rate has been relatively stable, remaining at around 6% in recent years [1, p. 15]. 2023 China's economy is generally on the upswing. GDP exceeded 126 trillion yuan, up 5.2 % [19, p.1], a growth rate that ranked among the world's major economies. Interviewed Chinese and foreign experts believe that China remains an important engine of global economic growth and will continue to contribute to global economic recovery and stability. The Research Center for Forecasting Science of the Chinese Academy of Sciences (RCFS) released "China's Economic Forecast and Prospects 2024", predicting that China's economy will run smoothly in 2024, with an annual gross domestic product (GDP) growth rate of about 5.3 % [22, p. 3]. According to Li Daokui, director of the Institute for Chinese Economic Thought and Practice at Tsinghua University, China's economy is still a growing economy at the moment, and in 2024, China's economy is expected to reverse the declining growth rate of the past decade or so, and continue to realize growth of about 5 % (Figure 1.1).

In terms of potential supply, China's national savings rate remains at a high level of over 40%, providing a basis for the resolution of historical bad and doubtful debts and sustainable capital investment. China has huge potential for scientific and technological innovation, with the world's largest number of international patent applications [28, p.58], and an education system that has produced a large number of scientific and technological

talents, with 40% of ordinary undergraduate and graduate graduates in science and technology, exceeding that of developed count.

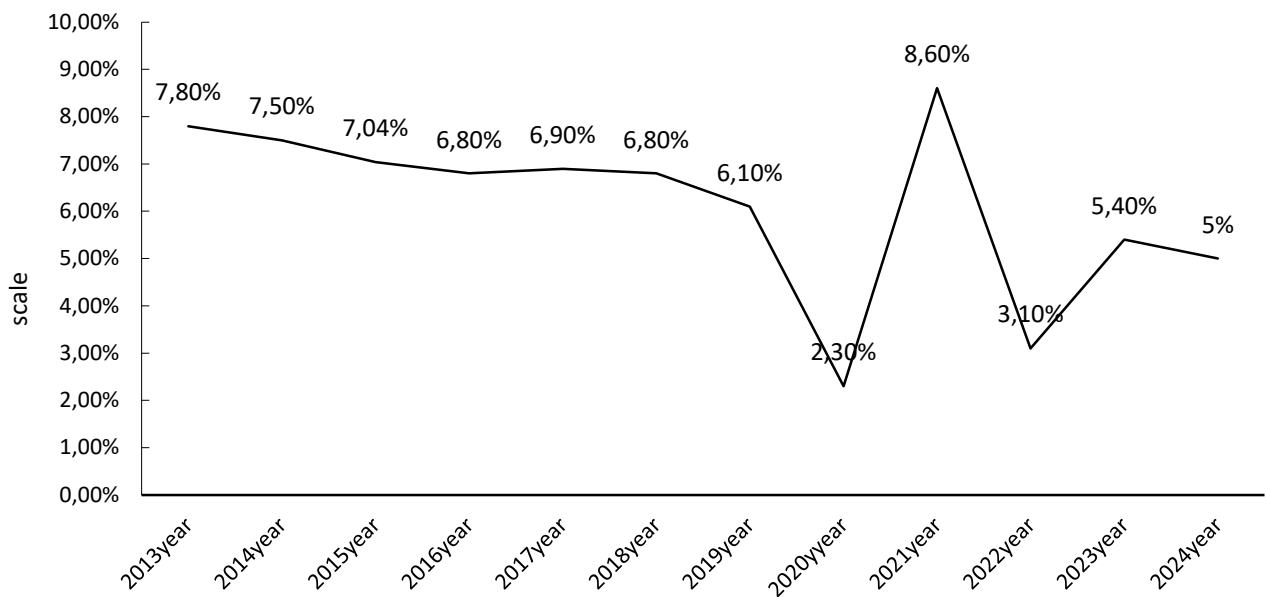


Figure 1.1 – China's economic growth rate from 2020 to 2025 [1, p. 15].

Although China's total population has peaked, its total human resources are still in the process of rising. China's per capita life expectancy has reached 78 years, and there are about 140 million healthy and active elderly people between the ages of 60 and 70; the gross enrolment rates at the high school level and at the tertiary level have reached 91.4 per cent and 57.8 %, respectively. Of course, as China is the most populous country, it is also facing the challenges of economic restructuring and population ageing. Tries such as the United States. China's economic growth rate continues to be a leader among the world's major economies. The average annual growth rate of China's economy from 2013–2023 reached 6.1 %, higher than the average annual growth rates of the world, developed economies, emerging markets and developing economies by 3.1, 4.4 and 2.1 percentage points, respectively. Since 2024, China's economy has continued to outperform expectations and

has shown a trend of stabilization. China's economy has continued to perform better than expected since 2024, showing a stabilizing trend. According to the National Bureau of Statistics (NBS), China's gross domestic product (GDP) grew by 5.3% year-on-year in the first quarter, and by 1.6% year-on-year from the fourth quarter of the previous year (Figure 1.2).

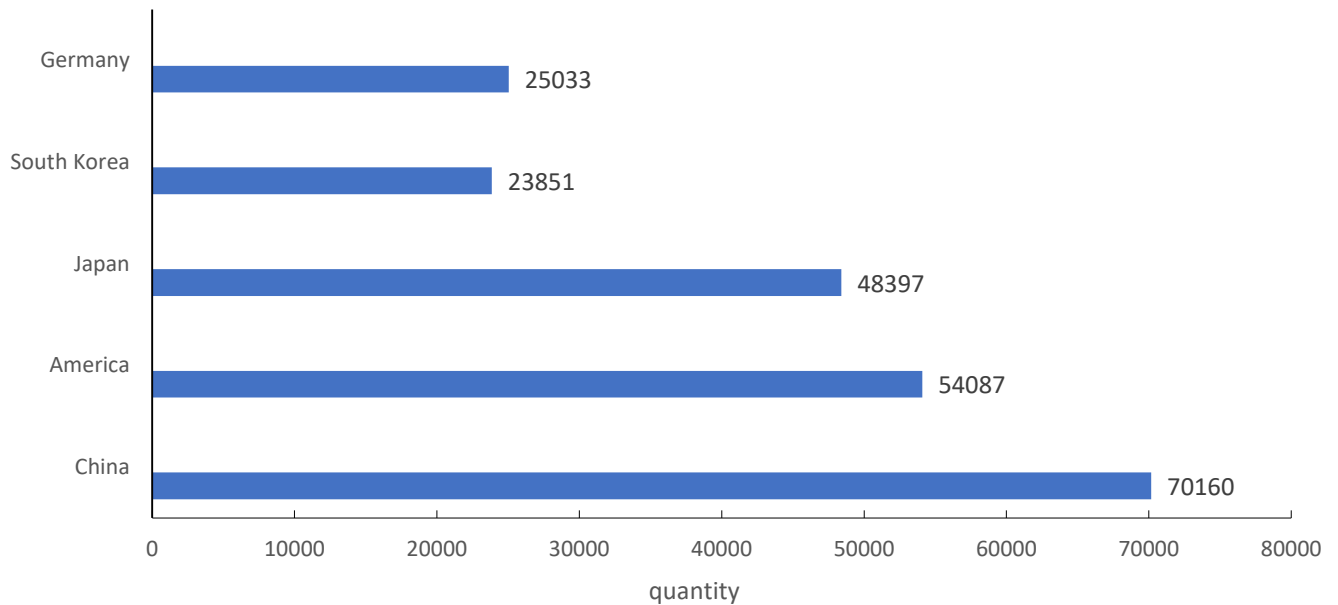


Figure 1.2 – Comparison of international patent applications by country [4, p. 45].

In recent years, China's economy has maintained steady growth and is full of resilience and vitality, and its contribution to global economic growth has remained at around 30 per cent. Even in the face of external shocks, such as geopolitical conflicts and the fragile recovery of the global economy, the Chinese economy has been able to stabilize its own momentum of development and continue to provide inexhaustible power for global economic growth. China has contributed more than 30 per cent to world economic growth for many consecutive years, and has been an important engine of stable growth for the world economy. China's steady economic growth has not only benefited the country, but also

provided important support for global supply chains, trade and investment, and market confidence. In the future, with the optimization of economic structure and industrial upgrading, China will continue to contribute strong impetus to the recovery and prosperity of the world economy.

Relevant statistics show that Thailand's GDP grew by 1.5 % year-on-year in the third quarter of 2023 [5, p. 77], and Thailand's exports grew by 2.6 % year-on-year in August, a higher-than-expected rate of growth for the first time in 11 months. Boosted by a series of economic policies, the Thai economy has shown a steady recovery momentum (Figure 1.3).

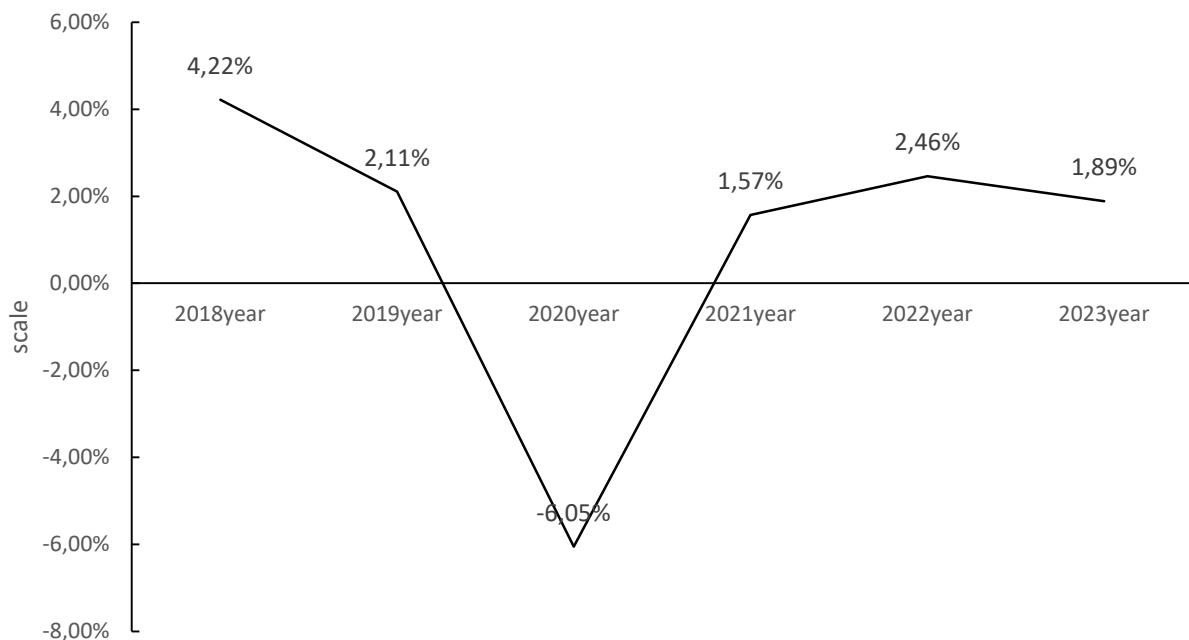


Figure 1.3 – Thailand's economic growth rate from 2018 to 2023 [5, p. 55].

According to the latest data released by the Thai Ministry of Commerce, in the first quarter of 2024, the number of newly registered businesses in Thailand reached 25,000, with a registered capital of over 68 billion baht [24, p. 18]. In January this year, Thailand attracted a total of 7.17 billion baht in foreign investment, an increase of 39.8% over the same period

last year; Thailand added 54 new large-scale foreign enterprises, most of which are located in the Eastern Economic Corridor. China is one of Thailand's top sources of foreign investment [13, p. 23].

The Thai government has said that it will make full use of the advantages of location, labor force and infrastructure to further tap the development potential of tourism, healthcare, aviation, logistics, electric vehicles, food, digital economy, finance and other areas to promote sustainable economic growth.

1.2 Analysis of export characteristics of China and Thailand

China's export trade plays an important role in the national economy. Over the past 40 years of reform and opening up, China's export trade has realized rapid growth and has become the world's largest exporter of goods [17, p. 34]. The rapid development of China's export trade has played an important role in optimizing the industrial structure, boosting employment, earning foreign exchange and promoting economic growth. From the point of view of the composition of goods in China's export trade, electromechanical products have always been in a dominant position. In the early stage of reform and opening up, China's export trade is mainly composed of labor-intensive products, and in recent years, it has gradually transformed into capital- and technology-intensive products. At present, the main products of China's export trade include electromechanical products, textiles and garments, plastic products, furniture, toys and so on [10, p. 8]. From the regional composition of China's export trade, developed economies are the largest trading partners. The European Union, the United States, ASEAN and Japan have been the four major markets for China's

exports. The promotion of the "Belt and Road" Initiative has also boosted China's export trade with related countries and regions [6, p. 36].

Analysis of the characteristics of China's export trade data:

1 The rapid growth of export volume, the pulling effect on economic development is obvious. Since the reform and opening up, China's export trade has maintained the momentum of rapid growth. 1978, China's export trade volume of only 10.2 billion U.S. dollars, to 2021 has amounted to 3.36 trillion U.S. dollars, the average annual growth rate of 15.5 %. The rapid growth of China's export trade has played a significant positive role in optimizing industrial structure, driving employment, earning foreign exchange and promoting economic growth.

2 Continuous optimization and upgrading of product structure. The product structure of China's export trade is constantly optimized and upgraded, and the proportion of electromechanical products with high technology content has increased significantly. 1978, the proportion of raw materials and labor-intensive products in China's export trade accounted for nearly 70 %, and the proportion will drop to about 20 % in 2021 [20, p. 135]. During the same period, the proportion of electromechanical products has risen from 20 % to nearly 60 % [15, p. 85]. This structural change in China's export trade products signifies that the technological content and value-added of China's foreign trade products are increasing significantly.

3 Wider and more balanced market distribution. The dependence of China's export trade on major economies and emerging markets has been reduced. 2021, exports to the United States, the European Union, ASEAN and Japan accounted for 15.9 %, 15.4 %, 13.7 % and 5.7 % respectively of China's total export trade, which is in a relatively reasonable range.

At the same time, China's export trade and trade ties with countries along the "Belt and Road" have been strengthening, which is conducive to the creation of a broader and more balanced trade pattern [18, p. 115].

Thailand's exports are dominated by agricultural and food products such as agricultural products, fruits and seafood. Among them, Thai fruits such as durian and mango are well-known in the international market. Besides agricultural products, Thailand also exports a certain number of electronic products and automobile parts [43, p. 67]. Some industrial parks in Thailand have attracted investments from multinational corporations and become production bases for electronic products and automobile parts. Thailand also focuses on the production of light industrial products, such as textiles, garments and furniture, which are competitive in the international market. Thailand mainly exports its products to Southeast Asia, such as China, Japan and Singapore, and also to Europe and the United States.

Thailand's export market has shown a trend of diversification and dynamic change, with major export products including automobiles and spare parts, computers and spare parts, integrated circuit boards, electrical appliances, primary plastics, chemicals, petrochemicals, jewelry, ready-made garments, shoes, rubber, furniture, processed seafood and canned goods, rice, and cassava. Thailand's exports have grown year-on-year for seven consecutive months, and the total value of exports is expected to grow by 2.0% in 2024 [23, p. 165]. Major export markets include the United States and the Eurozone, with the U.S. market being particularly important for Thai exports. However, Thailand's exports are subject to a number of potential risks, including a slowdown in the economies of its trading partners, particularly the European Union, the potential impact of climate variability on agricultural production, the potential impact of interest rate and exchange rate pressures on consumer

spending and the productive sector, and the potential for uncertainty over the direction of trade policies of major trading partners.

The growth of Thailand's export market is attributable to a number of factors, including the implementation of proactive and comprehensive policies by the Government aimed at preserving existing markets and exploring new ones, which have provided opportunities for Thai exporters. In addition, the Federal Reserve's pause in interest rate hikes has helped to ease pressure on consumer spending and investment, and the drought in some countries may create opportunities for Thai agricultural exports [26, p. 195]. Despite the challenges, the Ministry of Commerce sees positive factors for exports, including year-on-year growth in agricultural exports and growth in exports of industrial products, mainly computers, equipment and parts, steel, rubber products and jewelry.

1.3 Analysis of factors affecting China and Thailand export

The dynamics of Thailand's export markets reflected the diversity and adaptability of its economic structure. Despite the challenges of the global economic slowdown and trade protectionism, Thailand had endeavored to maintain export growth by actively adjusting its export strategy and diversifying its markets. In the future, Thailand would continue to seek new export opportunities, particularly in the areas of the digital economy, green economy and smart electronics, in order to promote sustainable economic development.

The factors affecting China's exports can be categorized into internal and external factors.

Internal factors:

1 Domestic production capacity: The production capacity and technological level of domestic enterprises directly affect the quality and competitiveness of export products [7, p. 103]. If the production capacity and technology level of domestic enterprises are higher, the quality of export products will be better and more competitive.

2 Labor cost: China's labor cost is relatively low, which gives Chinese enterprises a competitive advantage in the global market [16, p. 105]. Lower labor costs can reduce production costs, thus lower the price of export products and improve market competitiveness.

3 Participation of multinational enterprises: China has attracted a large number of multinational enterprises to invest in the country, and these enterprises have introduced advanced technology and management experience into China. Through cooperation with multinational enterprises, Chinese enterprises can improve their production capacity and technology level and further enhance the quality and competitiveness of their export products.

External factors: Global market demand: The demand for China's export products is influenced by the global market [32, p. 112]. Factors such as economic growth, rising consumption levels and changes in demand for different products in different countries will have an impact on the impact of China's exports [30, p. 235].

Foreign exchange rate: the exchange rate change of China's RMB will directly affect the export price and competitiveness. If the RMB exchange rate decreases, the price of export products is more competitive, thus increasing the export volume [14, p. 86]. Trade policies and trade barriers: the trade policies and trade barriers of countries have a certain impact on China's exports. For example, trade protectionist policies, trade barriers, etc. may reduce

China's export volume.

Changes in international trade rules: Changes in international trade rules also have an important impact on China's exports. For example, the signing of trade agreements, changes in tariffs and non-tariff barriers, etc. will have an impact on China's exports.

Thailand's exports are affected by a number of factors, including the following:

External demand and markets: The primary factors for Thailand's exports are the global economic environment and demand from major trading partner countries [40, p. 192]. Global economic growth, demand for Thai products from other countries, and price fluctuations in the international market all have a direct impact on Thailand's export performance.

Exchange rates and exchange rate fluctuations: Thailand's exports are affected by the exchange rate of the national currency relative to other currencies [42, p. 212]. If the baht appreciates, Thai products may become less competitive in the international market and vice versa. Exchange rate fluctuations also affect the costs and revenues of Thai firms.

Trade Policy and International Trade Agreements: The Thai government's trade policy and the international trade agreements it has entered into are critical to exports. Trade agreements can reduce tariffs and other trade barriers and increase export opportunities, while changes in trade policy can have a positive or negative impact on exports [46, p. 250].

Production costs and competitiveness: Thailand's production costs, including labor costs, energy costs, and raw material prices, also have a significant impact on its exports. Changes in costs can affect the price competitiveness of products and thus export market share.

Technology and innovation capacity: The technology level and innovation capacity of

Thai enterprises determine the quality and added value of their products, which directly affects the market acceptance and price of export products in the international market.

Domestic economic and political stability: Thailand's domestic economic and political stability is also an important factor affecting exports. A stable political environment and good economic performance are conducive to investment and export growth. About 70 percent of Thailand's population is directly or indirectly engaged in agricultural production, and agricultural development is crucial to the economy and livelihoods. In order to promote agricultural production, the Thai government plans to expand the area covered by farmland irrigation to 40 million rai (1 rai is about 1,600 square meters) and promote precision farming and poultry breeding to increase the added value of agriculture. The Thai government has set a goal to help Thai farmers triple their income in four years from 2024.

To improve transportation infrastructure and promote connectivity, the Government of Thailand plans to further expand investment to increase the capacity of existing airports and expand road and rail networks and ports, in particular to continue to upgrade the road network in the capital city of Bangkok and the Eastern Economic Corridor region, with the total mileage projected to increase by a factor of 2.5. The Thai government also plans to step up efforts to promote the use of cloud computing, artificial intelligence and other high-tech applications in the country, to promote digital transformation, and to support more future industries to land in Thailand.

Since March 1 this year, Thailand has implemented a permanent visa-free policy for Chinese citizens. The Thai government said it will continue to vigorously develop the tourism industry and attract global tourists, including Chinese tourists, to visit Thailand. Thailand's tourism department said it will focus on publicizing and promoting Thailand's

culture, art and cuisine, further exploring the tourism potential of second-tier cities, and promoting the deep integration of nature, history, culture and tourism.

The deepening economic and trade cooperation between China and Thailand has provided an important boost to Thailand's economic recovery. China has been Thailand's top trading partner for 10 consecutive years, the largest export market for Thai agricultural products, and an important source of foreign investment and foreign tourists. Thailand needs high-quality investment from China for the development of tourism, electric vehicles, digital economy and other fields, said Chua Wee Choi, senior vice president of Kasikorn Bank. Under the framework of "One Belt, One Road", the active participation of Chinese enterprises will help Thailand's economy realize sustainable growth.

Chapter 2 Comparative analysis of export competitiveness

2.1 Comparison of the competitiveness of major export products of China and Thailand

China and Thailand have trade overlap in export products such as fruits, rice, shrimp products and high-tech products, and therefore there is some competition between the two sides in these export products. A comparative study on the competitiveness of major export products of China and Thailand is of great significance in promoting the sustainable development of China–Thailand trade.

In terms of the competitiveness of fruit exports between China and Thailand, China has a vast land and abundant resources, with a total of 327,442,800 tons of fruit output in 2024 and a planting area of 190 million mu, and the fruit industry occupies an important position in the agricultural economy. China is the world's largest exporter of fruits, mainly temperate fruits [9, p. 216]. There is a strong complementarity between China and Thailand in fruit trade, and China and Thailand should give full play to their respective natural factor endowments in trade to strengthen the complementary advantages of fruit products. As can be seen from Figure 2.1, China's fruit exports will reach US \$ 7.21 billion in 2024. Thailand is rich in products and has a climate suitable for the cultivation of tropical fruits, with fruit exports reaching US \$ 8.6 billion in 2024[8, p.48]. Despite the impact of the new crown epidemic, Thailand's fruit exports to China still increased significantly in 2020, reaching US\$2.9 billion, a year-on-year increase of 39.43% (Figure 2.1).

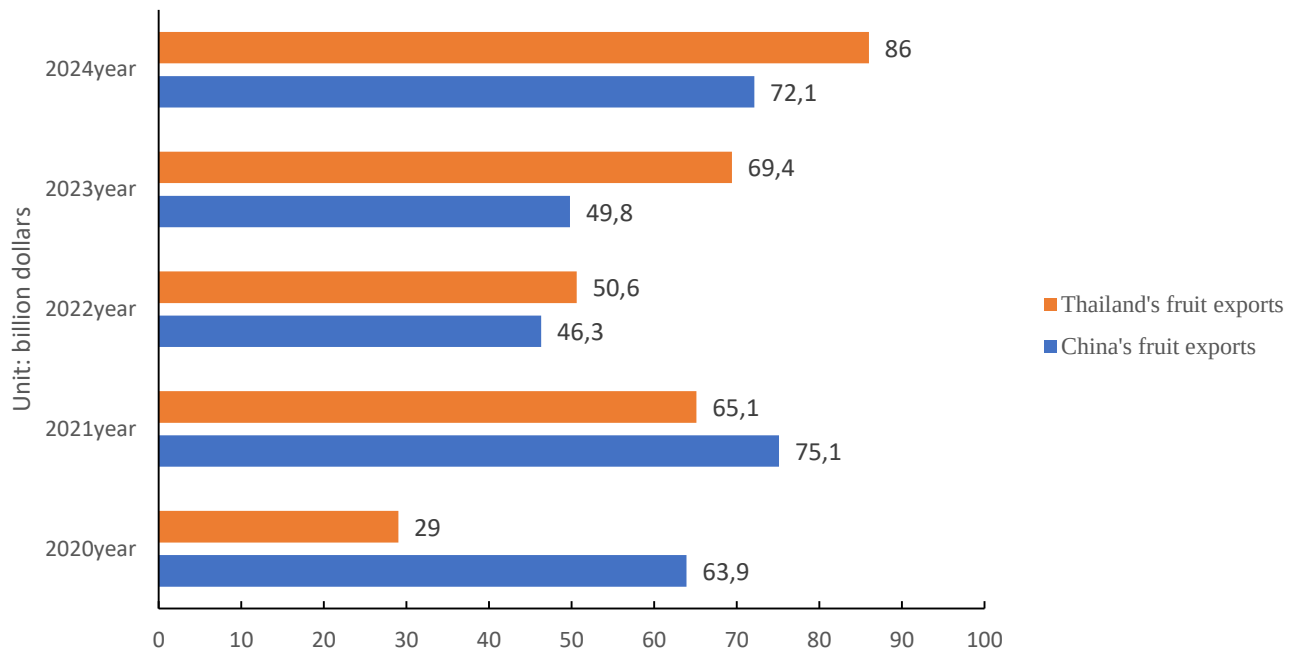


Figure 2.1 – Comparison of fruit exports from China and Thailand from 2020 to 2024
[23, p. 312].

Both China and Thailand have strong comparative advantages in exporting fruits in grapefruit, guava, mango, mangosteen and other tropical fruits (lychee, longan, rambutan, lotus seed, dragon fruit), and exports of other tropical fruits are mainly oriented to Asian countries, suggesting that there is a competitive overlap in China and Thailand's trade in fruits. Among the fruits traded out of China, temperate fruits have a comparative advantage, and tropical fruits, although not dominant, are widely grown in southern China, such as bananas, pineapples and melons, and China is one of the main producers of bananas and pineapples. Thailand has a favorable climate for the production of tropical fruits, especially bananas and pineapples which are produced in huge quantities, and occupies a dominant comparative advantage in the export of tropical fruits such as bananas and pineapples, thus competing with China's tropical fruits.

Table 2.1 and Table 2.2 were obtained from the comparison of the main export markets of Chinese and Thai fruits, and found that China and Thailand are each other's fruit trading partners, but there is also an overlap in the export markets of Chinese and Thai fruits. In 2018, the main markets for fruit exports from China and Thailand overlapped were: Vietnam, Indonesia, Malaysia, Myanmar, the United States, Japan and Hong Kong, China (Table 2.1).

Table 2.1– China's main fruit export markets and their export value in 2016 – 2018 [32, p. 120]

Exporting countries and objects	China					
	2016 year		2017 year		2018 year	
	Exports (US \$ bill.)	market share (%)	Exports (US \$ billi.)	market share (%)	Exports (US \$ bill.)	market share (%)
Vietnam	8.80	16.04	10.50	19.67	9.99	18.9
Thailand	9.54	17.39	8.03	15.04	6.76	12.8
Indonesia	2.52	4.59	3.90	7.32	4.91	9.3
Russia	4.02	7.33	3.77	7.07	4.28	8.1
Malaysia	3.97	7.23	2.28	4.26	2.60	4.9
Bengali	1.53	2.79	1.38	2.59	1.71	3.2
Myanmar	1.45	2.65	1.63	3.06	1.68	3.2
USA	1.64	2.98	1.43	2.67	1.63	3.2
Japan	1.49	2.71	1.52	2.84	1.50	3.1

In 2018, China's exports to these countries and regions accounted for 48.7 % of China's total exports, and Thailand's exports to these countries accounted for 54.29 % of Thailand's total exports. Among them, Chinese mainland's exports to Vietnam and Hong Kong, China

accounted for 27 %.

Table 2.2 – Thailand's main fruit export markets and their export value in 2016 – 2018
[38, p. 51].

Thailand						
Exporting countries and objects	2016year		2017year		2018year	
	Exports (US \$ bill.)	market share (%)	Exports (US \$ bill.)	market share (%)	Exports (US \$ bill.)	market share (%)
China	5.25	32.45	6.60	28.34	10.08	36.77
Vietnam	5.08	31.41	10.39	44.63	9.90	36.13
United States	0.72	4.43	0.78	3.37	0.93	3.40
Indonesia	0.59	3.66	0.87	3.75	0.66	2.40
Myanmar	0.35	2.18	0.36	1.53	0.56	2.06
Korea	0.33	2.02	0.37	1.58	0.45	1.63
Japan	0.19	1.18	0.22	0.92	0.26	0.97
Malaysia	0.11	0.65	0.16	0.70	0.18	0.67
UAE	0.18	1.10	0.17	0.73	0.16	0.59
Chinese	0.13	0.80	0.20	0.85	0.16	0.59
Canada	0.08	0.52	0.10	0.45	0.15	0.55

For the study of the competitiveness of Chinese and Thai rice exports, in the international market, there is an overlap between the export markets of Chinese rice and Thailand [20, p.30], and the export markets of Chinese rice are mainly the neighboring Asian countries and African countries. Among them, African countries account for half of

China's rice export market, and Asian countries account for about 35 %. Thai rice and Chinese rice export market distribution is similar, also concentrated in neighboring Asian countries and African countries. Thai rice because of its good quality and low price, in the international market occupies an important position, many countries choose to import rice from Thailand. Since the export markets of Chinese and Thai rice are similar, it is inevitable that there is competition between the two countries in the international market (Figure 2.2).

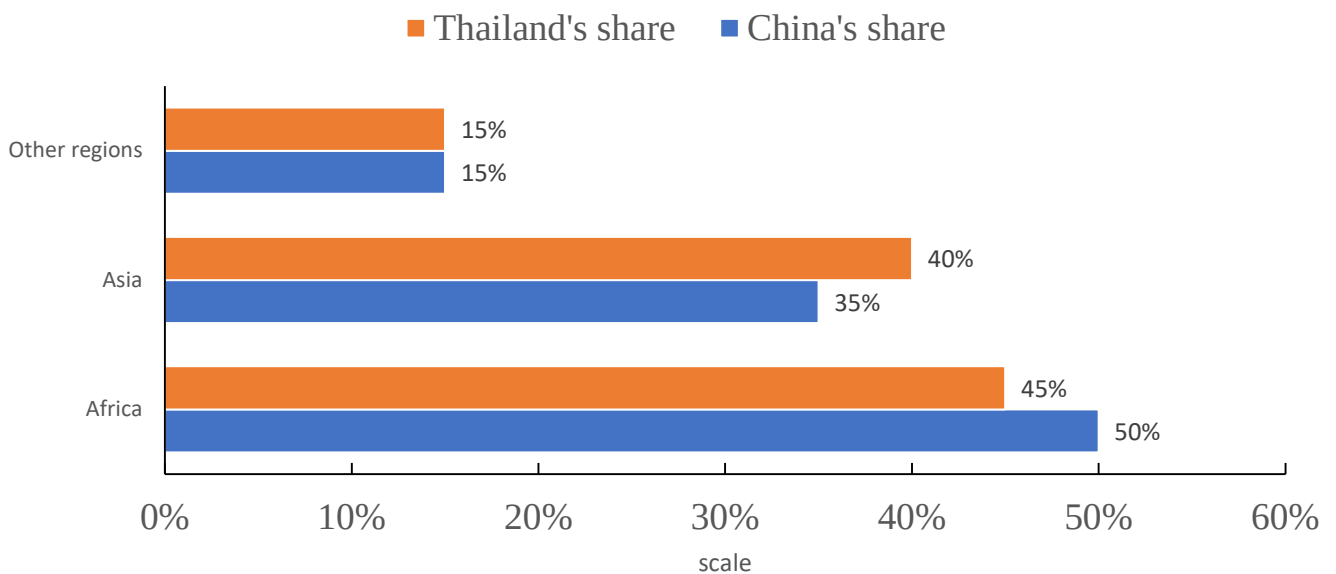


Figure 2.2 –Distribution of Rice Export Markets in China and Thailand (2022) [20, p. 52].

The development of the total rice production of China and Thailand is relatively stable, showing an overall upward trend. Thailand is one of the major rice-growing countries in the world, and its rice export volume occupies an important position in the world's total rice export volume. Since 2000, the proportion of Thailand's rice export volume in the world's total rice export volume has basically remained at 20 % – 30 %, showing strong international competitiveness. China's rice production and harvested area is far more than

Thailand's; China's rice unit yield is relatively high; China has an advantage in rice production capacity. According to the "2024 – 2029 China Rice Industry Market In-depth Research and Investment Strategy Forecast Report" released by the China Research Institute of Puhua Industry Research Institute, China's rice output reached 110.445 million tons in 2021, a year-on-year increase of 0.55 % compared with the previous year. This achievement demonstrates the steady development of China's agricultural production. Entering 2022, China's rice production has ushered in a significant jump. According to statistics, China's rice output in 2024 will reach 208 million tons [36, p. 198], which not only refreshes the historical record, but also fully demonstrates the strong momentum and great potential of China's agricultural development (Figure 2.3).

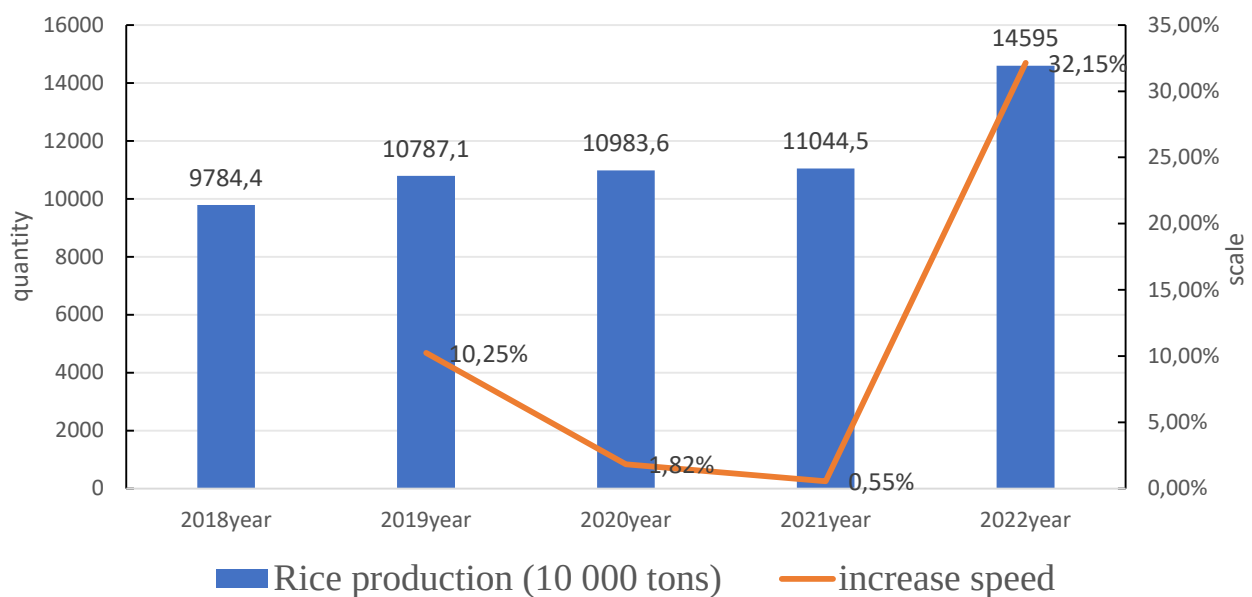


Figure 2.3 – China's rice production and growth rate from 2018 to 2022 [25, p. 147].

In terms of world rice trade, China's total rice production is relatively high, but its export value is much lower than that of Thailand. According to statistics, China's rice output in 2024 will reach 208 million tons, and China's rice and rice exports in 2024 will be 1.11

million tons, a decrease of 490,000 tons compared with 2023, a year-on-year decrease of 30.8 %. But Thailand's output in 2024 is only 30.23 million tons, but Thai rice is only grown at \$ 1,000 per ton of jasmine rice, which is more than twice the price of ordinary rice. Therefore, Thailand's rice export volume has rushed to 8.76 million tons, ranking second in the world, and Thailand's rice export volume far exceeds China's quality by relying on quality (Figure 2.4).

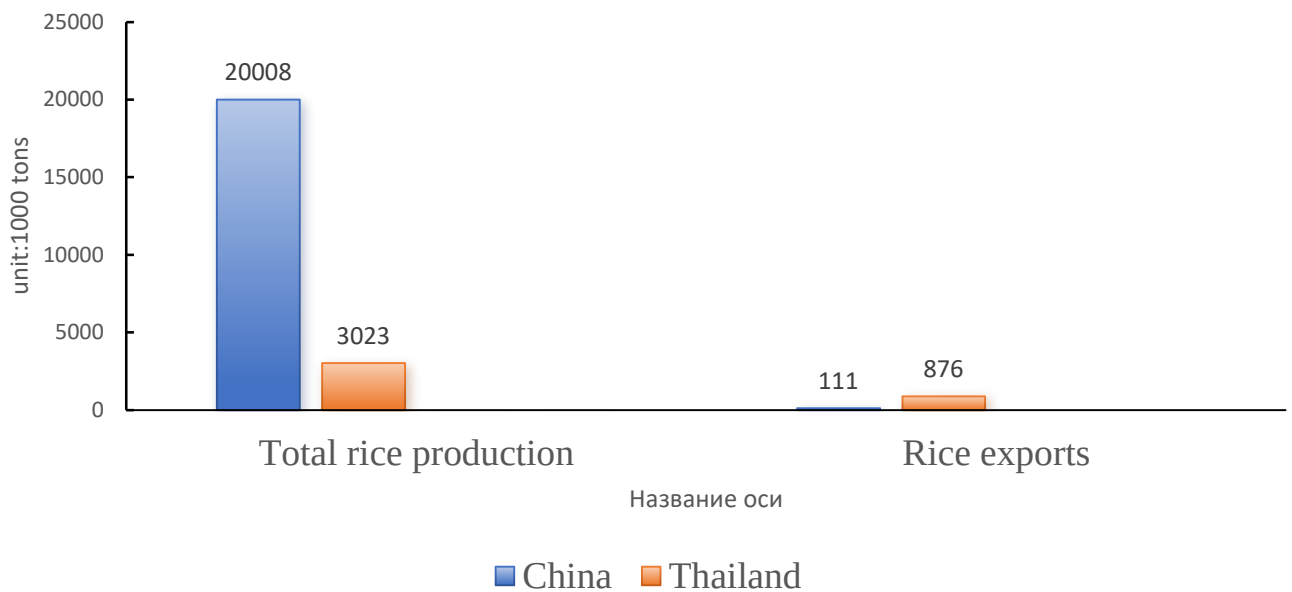


Figure 2.4—Comparison of rice production and export volume between China and Thailand in 2024 [36, p. 40].

By comparing the international market share of rice in China and Thailand, it can be found that the international market share of the two countries fluctuates significantly year by year, which reflects the more diversified world rice market, with the increase in the number of rice exports from India, Vietnam and other countries, the competition in the international rice export market has intensified. Thai rice is more competitive in the international market and has a strong trade advantage. The international competitiveness of

Chinese rice is weaker (Figure 2.5)

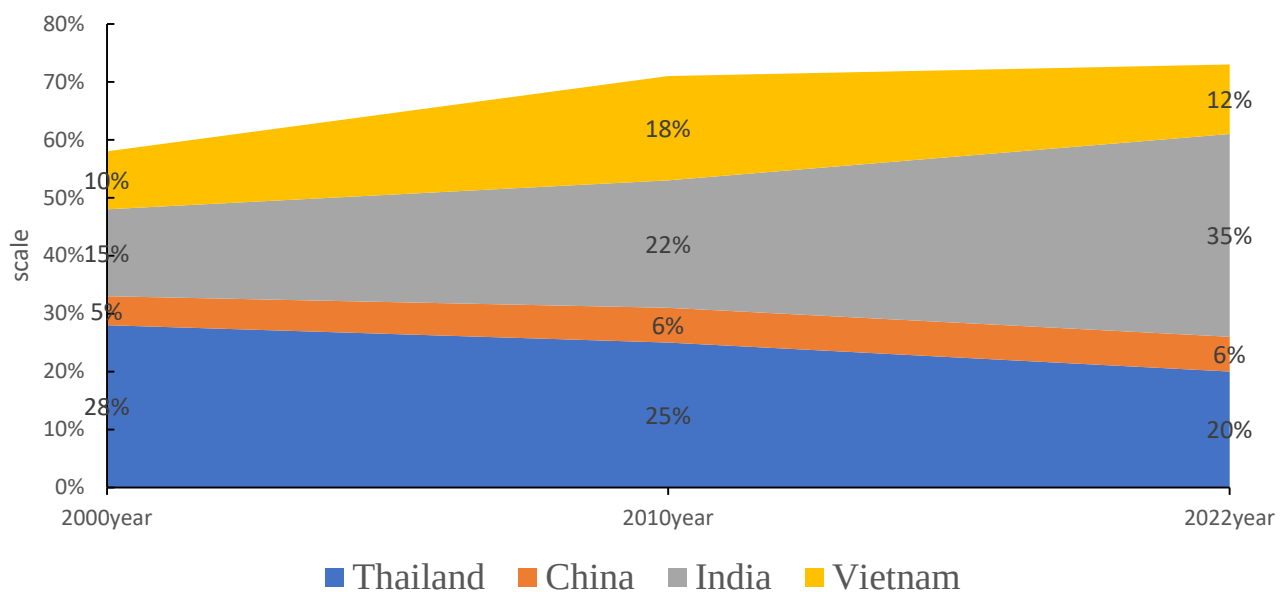


Figure 2.5 – Changes in the export market share of rice from China, Thailand, India and Vietnam [59, p. 107].

The quality of rice is an important factor in international competition. China's southern subtropical tropical output of rice is mostly hybrid rice, high yields, but the taste is slightly poor. Thailand's rice varieties are mostly Thai fragrant rice, the varieties after years of seed selection and improvement, strong flavor, soft and sticky taste, excellent quality, by the consumer's favorite, so the export volume is larger. Rice product differentiation can be analyzed from two aspects of varieties and processing technology. Thailand through the selection and breeding of excellent varieties, strengthen the quality of grading management to improve the quality of rice. In Thailand, in addition to agricultural colleges and universities, there are relevant rice seed research institutes and other specialized research institutes, which mainly study the introduction of rice varieties, demonstration and improvement. In addition, Thailand adopts scientific processing technology and strict quality control. The quality control of Thai rice processing starts from rice harvesting,

strictly controlling the maturity rate of rice and stipulating that the storage time should not exceed half a year. In terms of processing technology, Thailand adds new technology and manages the processing process to ensure the quality and taste of rice. China's rice varieties structural contradiction is prominent, general quality varieties, but less high-grade quality varieties, varieties of application and layout development is not balanced. China's rapid development of the seed market in recent years, fierce competition in the industry, the market is booming, the number of seed business institutions, the corresponding business subjects diversified, but cannot be centralized, too decentralized, small-scale, not strong competitiveness. In the processing technology cannot do standardization, integration, industrialization level is low, the land is more fragmented, cannot plant high-quality rice, affecting the quality of Chinese rice (Table 2.3).

Table 2.3–Comparison of rice quality and processing between China and Thailand [30, p. 165].

Dimension	China	Thailand
The main variety	Hybrid rice	Jasmine rice
Average yield	6.8 t/ha	3.1 t/ha
Number of international certifications	12 items	48 items
Level of processing standardization	medium	High standardization
Average export price	550 US dollars/ton	800 US dollars/ton

In terms of export competitiveness of shrimp products between China and Thailand, both China and Thailand are located in Asia, with long coastlines and rich fishery resources. Both countries are major farmers and exporters of shrimp products. Shrimp exports to the United States account for a large proportion of domestic shrimp product exports [25, p.

151], but in the first five months of 2024, China's shrimp product exports to the United States have declined, China and Thailand export products mainly include unfrozen shrimp and shrimp, frozen shrimp and shrimp and shrimp products three categories, Thai shrimp products have greater competitiveness in the international market, the United States, Japan and the European Union are its important export markets (Table 2.4).

Table 2.4 – Changes in Chinese and Thai shrimp exports to the United States [27, p. 20].

Country	Proportion of exports to the United States in 2023	Exports to the U.S. from January to May 2024 are year-on-year
China	35 %	↓15 %
Thailand	40 %	↓8 %

But in recent years, the total export volume of Thai shrimp products has shown a downward trend, followed by the export structure of Thai shrimp products, exports of frozen shrimp and shrimp and shrimp products are evenly divided. According to the data of the 2024 China Fishery Statistical Yearbook, China's shrimp aquaculture output in 2023 will be about 2.6 million to 2.8 million tons, and China's shrimp products are widely exported to the world, mainly to North America, East and Southeast Asia, Oceania and Europe. In recent years, China's total export of shrimp products has shown an increasing trend. Therefore, compared with Thailand, Chinese shrimp products are more competitive in the international market (Figure 2.6).

In terms of analyzing the export competitiveness of high-tech products between China and Thailand, at present, most of the high-tech products produced in China are exported to

the United States, Hong Kong and the European Union.

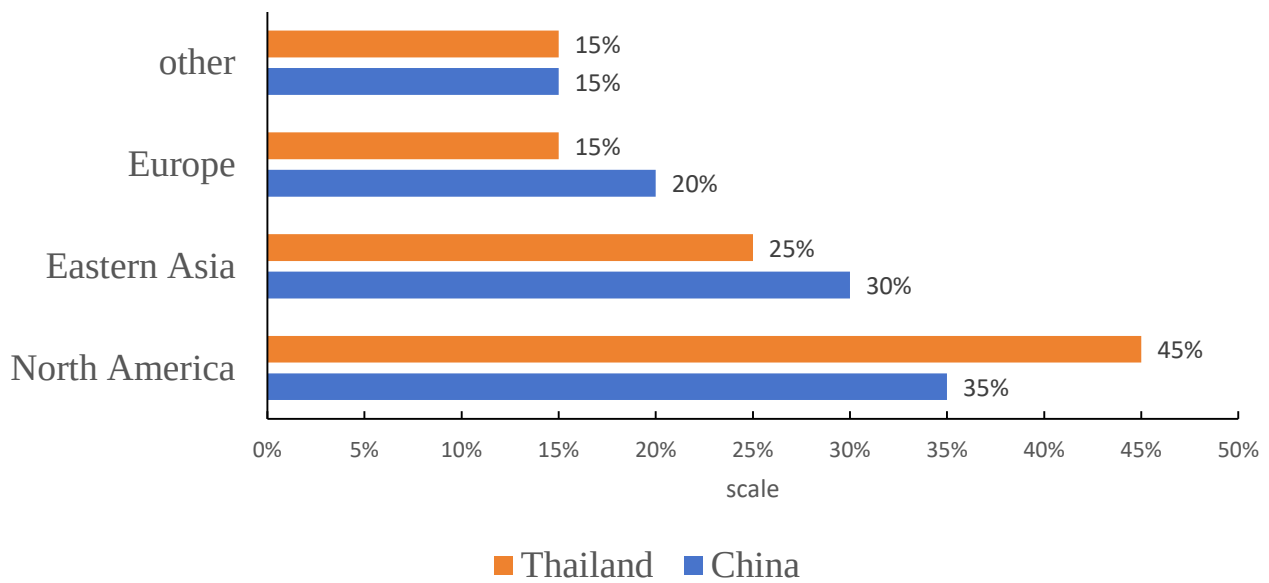


Figure 2.6 – Distribution of export markets for shrimp products from China and Thailand [49, p. 45].

Some statistics show that in recent years, China's high-tech product exports show a growing trend [2, p. 25]. China's high-tech products exported to the United States, Hong Kong and the European Union and other places in the value of more than 100 billion U.S. dollars, from the current development trend to analyze, Mexico, and India and other countries will become China's high-tech products exports to the main market. In the entire high-tech products export market. The largest export volume of electronic products and computer products. Thailand's high-tech products to the world's top three export countries are China, Japan, the United States. Mainland China ranks first in Thailand's high-tech products export market (Figure 2.7).

As far as the analysis of the export competitiveness of high-tech products between China and Thailand is concerned, the export competitiveness of China's high-tech products

has improved significantly in 2024 [12, p. 72]. According to the General Administration of Customs, from January to August 2024, China's high-tech product exports totaled 397.23 billion yuan, up 7.3 % year-on-year [47, p. 242].

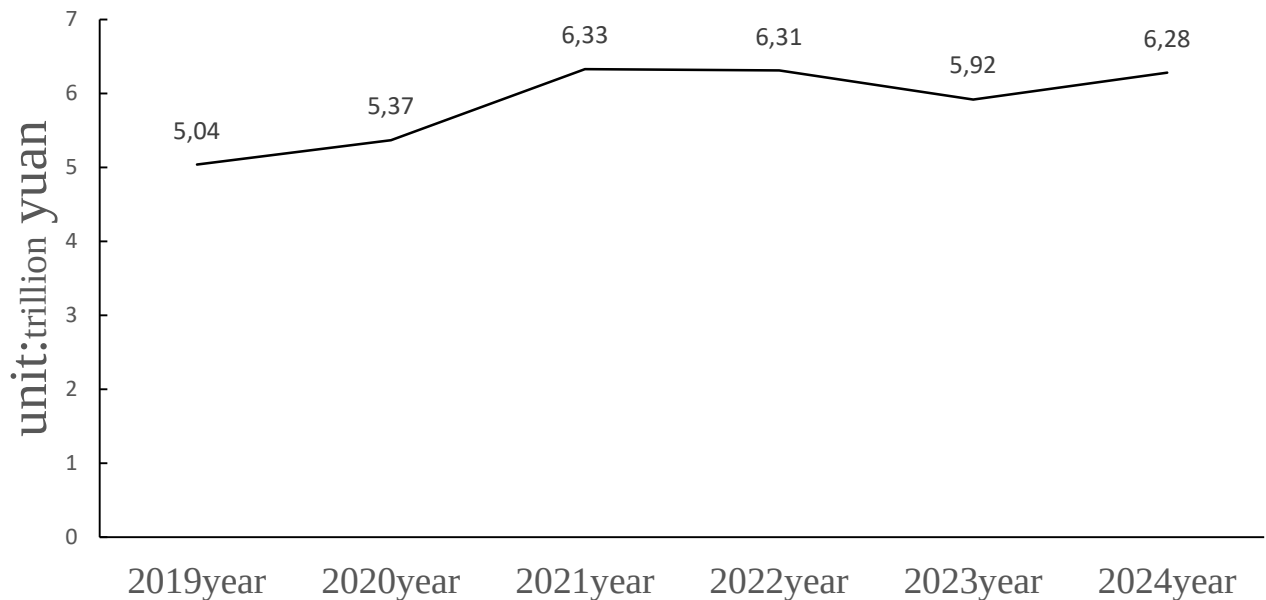


Figure 2.7 – China's exports of high-tech products [53, p. 94]

It has strong export strength in a number of high-tech fields such as 5G technology, smartphones, new energy vehicles, solar energy, photovoltaics, extra-high voltage, high-speed rail and shipbuilding. In the field of smartphones, brands such as Huawei and Xiaomi have a high share in the global market; in terms of new energy vehicles, companies such as BYD and Tesla have also performed well in the international market. Thailand's exports of high-tech products, on the other hand, are relatively small in scale, but also have a certain market share in some areas such as electronic parts and components. According to the forecast of Thailand's Economic and Business Research Center (SCB-EIC), the export value of the electronics industry will grow by 2.8 % year-on-year in 2025 [51, p. 262], of

which the electronic parts industry is expected to grow by 3 % year-on-year, supported by the recovery of global demand for electronic products [38, p. 212]. In terms of the overall product level of Thailand's high-tech products, the export value of Thailand's high-tech products from 2001 to 2023 shows a continuous increase in fluctuations. The overall trade size has seen faster growth and the competitiveness of its high-tech products in the international market has improved.

Unlike China, Thailand is relatively weak in technological innovation, with R&D investment accounting for a relatively low proportion of GDP, and Thailand's industrial supporting capacity is also relatively weak, with some raw materials and components relying on imports [4, p. 45]. China, on the other hand, has invested heavily in technological innovation, with increasing R&D expenditures and breakthroughs in some key technological fields. At the same time, China possesses a large team of scientific research talents and perfect scientific research infrastructures, which provide strong support for technological innovation and have formed a perfect industrial supporting system, covering all aspects from raw material supply, parts processing to machine manufacturing. Therefore, in the international market, China's high-tech products exports are more competitive than Thailand.

Based on a comparative analysis of the competitiveness of major export products of China and Thailand, such as fruits, rice, shrimp products, and high-tech products, it is found that China is more competitive when it comes to shrimp products and high-tech products exports, while Thailand occupies a competitive advantage in fruit and rice exports. Overall, China and Thailand have excellent performance in their respective areas of strength and have strong complementarities. A comparative study of the competitiveness

of the two countries' major export products may lead to closer trade relations, deeper industrial cooperation and the development of broader export markets.

2.2 Comparison of the competitiveness of major export market of China and Thailand

First, in terms of specific markets, Thailand's major export markets include China, ASEAN, Japan and Korea. The Chinese market accounts for 31 % of Thailand's total agricultural exports, ASEAN 15 %, Japan 11 % and Korea 3 % [29, p. 132]. Markets with significant growth include ASEAN, India, Australia, Singapore, South Korea and Japan. For example, Thailand's exports to FTA countries in August amounted to US \$ 1.65 billion, up 9 % from a year earlier, with China and Japan up 11 % [44, p. 230], India up 24 %, New Zealand up 34 % and ASEAN up 4 %. Specific market analysis: China is one of the major export markets for Thai agricultural products, accounting for 31 % of Thailand's total agricultural exports. In recent years, the Chinese market has grown significantly, and the ASEAN market has grown the fastest at 39 %; India has grown 34 %; Australia has grown 23 %; Singapore has grown 10 %; South Korea has grown 9 %; and Japan has grown 7 %. ASEAN countries are important export markets for Thai agricultural products, accounting for 15 % of Thailand's total agricultural exports. The ASEAN market saw the fastest growth at 39 percent. Japan is another important market for Thai agricultural products, accounting for 11 % of Thailand's total agricultural exports. In recent years, the growth of the Japanese market was 7 %. The Korean market, which accounts for 3% of Thailand's total agricultural exports, has grown by 9 % in recent years (Figure 2.8).

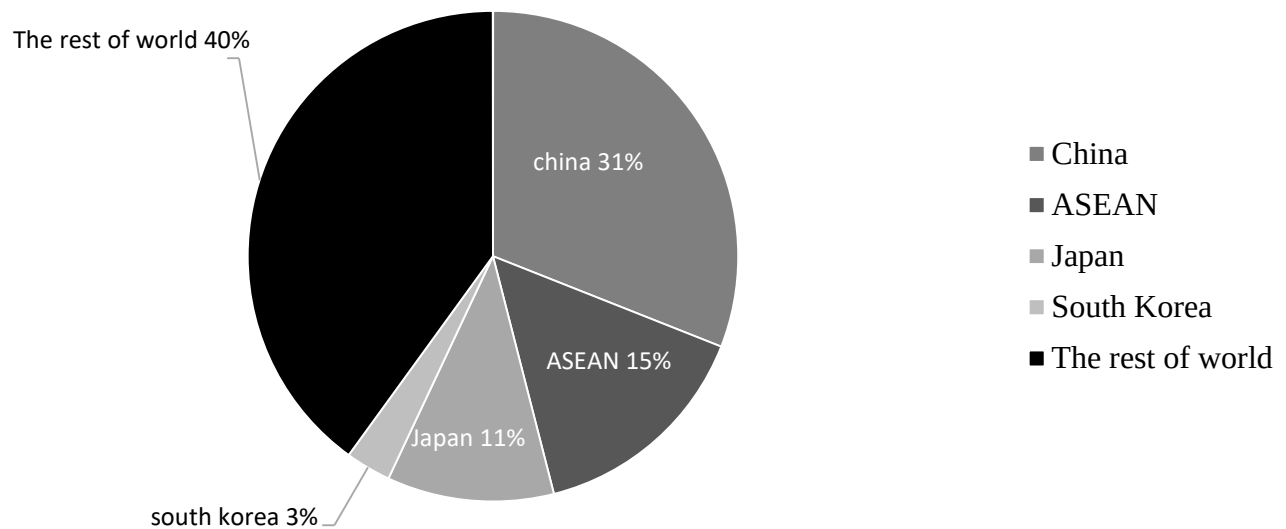


Figure 2.8 – Thailand's Agricultural Export Market Share in 2024 [27, p. 46]

China's major export markets include the US, EU, ASEAN and South Korea. The U.S., a key trading partner of China, has been one of China's largest export markets [48, p. 271]. in 2024, China's exports to the U.S. amounted to US \$ 2.4 trillion, accounting for 32 % of the total value of its exports, an increase of 5.3 % year-on-year. The European Union is another major export market for China. in 2024, China's imports from the EU amounted to US \$ 1.4 trillion, accounting for 26.4 % of the total value of imports, an increase of 4.5 % year-on-year [11, p. 32]. With the deepening construction of the China–ASEAN Free Trade Area (FTA), ASEAN has become an important trading partner for China [52, p. 310]. in 2024, China's bilateral trade with ASEAN amounted to US \$ 2.2 trillion, accounting for 17.2 % of the total value of imports and exports, an increase of 7.1% year-on-year [39, p. 222]. The trade relationship between China and South Korea is also very close. In 2024, the bilateral trade volume between China, Japan and South Korea reaches 1.6 trillion U.S. dollars, accounting for 12.5 % of the total value of imports and exports, an increase of 4.8 %

year-on-year. In addition, emerging markets and countries along the “Belt and Road” are gradually increasing their position in China's export market. Emerging markets such as Africa and Latin America are experiencing rapid economic growth, with increasing demand for Chinese products, especially in areas such as infrastructure construction and consumer goods, where Chinese products have a greater competitive advantage.

In addition, China and Thailand have different export market distribution priorities. China's export markets are widely distributed and diversified. Traditional developed markets such as the U.S. and the EU remain important components, while the ASEAN market has developed rapidly in recent years and has become an important trading partner for China, with bilateral trade reaching \$ 2.2 trillion in 2024, accounting for 17.2 percent of China's total imports and exports. In addition, emerging markets such as Africa, Latin America, and countries along the Belt and Road are gaining prominence in the export market. For Thailand, the United States is an extremely important export market, topping the list for the first six months of 2024 with 920 billion baht in exports. The EU is also one of Thailand's major export destinations. In addition, the intra-ASEAN market is also more important for Thailand, and Thailand has certain natural advantages in the ASEAN market as one of the ASEAN member countries (Figure 2.9)

Finally, China and Thailand have different levels of market dependence. China has diversified its export markets and is relatively less dependent on a single market. Although markets such as the United States and the European Union are important, China is also actively expanding into other markets to reduce trade risks.

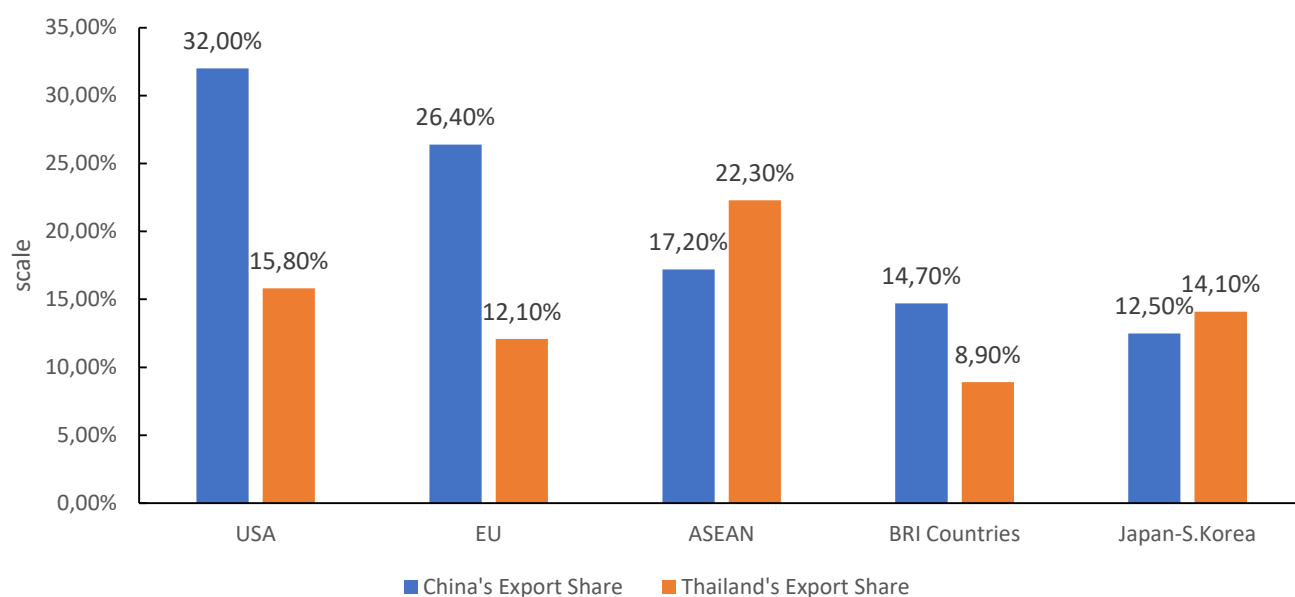


Figure 2.9 – Comparison of the share of major export markets of China and Thailand in 2024 [42, p. 12]

Even in the face of unfavorable circumstances such as trade friction in the United States, it is still able to maintain export stability through growth in other markets. Thailand's dependence on traditional markets such as the U.S. and the EU, on the other hand, is high, especially in the U.S. market. U.S. economic fluctuations and trade policy changes have a greater impact on Thailand's exports, such as the U.S. election, trade policy adjustments, etc. may have a significant impact on Thailand's exports.

It can be seen that China and Thailand have their own strengths and weaknesses in terms of competitiveness in major export markets, and there is also overlap in the major export markets of China and Thailand, such as the U.S., EU, ASEAN, and Japan.

From this, it can be seen that China and Thailand have their own strengths and weaknesses in terms of competitiveness in key export markets, and there is also overlap between China and Thailand's key export markets, such as the United States, the European

Union, ASEAN, and Japan.

U.S. market: China's exports to the U.S. are huge, totaling \$ 2.4 trillion in 2024, accounting for 32 % of total exports, Increase of 5.3 % over the previous year, with a wide range of export products. China has traditional advantages in labor-intensive products such as garments and furniture, while its competitiveness in electromechanical products and high-tech products is also increasing [3, p. 25]. China's complete industrial chain, strong manufacturing capacity, and cost advantages brought about by mass production enable it to provide diversified products at lower prices to meet U.S. market demand [53, p. 272]. Thailand's exports to the U.S. are also of a certain scale, with the U.S. being its highest export market in the first half of 2024. Thailand's strengths in the U.S. market are focused on agricultural products, automobiles and accessories, and jewelry [59, p. 302]. For example, Thai seafood and processed products, canned fruits, and other agricultural and sideline products are more popular in the U.S. market. With large scale, low cost and multiple categories, China has taken the initiative in many fields such as electromechanical and apparel; Thailand relies on specialty agricultural products, specific industrial manufactured products such as canned seafood and automobile parts to gain a firm foothold in niche areas, with a unique market share but vulnerable to fluctuations in the trade relationship between China and the United States.

EU market: The EU is one of China's important export destinations, and China's exports to the EU are diversified, including machinery and equipment, electronic products, automobiles and parts, textiles and garments. China has obvious advantages in new energy vehicles, photovoltaic and other emerging fields, and the product technology is constantly advancing and the price is competitive. At the same time, China and some EU countries

have strong industrial complementarity, such as in the field of infrastructure construction, China's construction machinery products have a broad market. Thailand's exports to the EU mainly rely on agricultural products, computers and their components, air conditioners and their components and other products. In recent years, Thailand has been actively expanding the EU market, taking advantage of FTAs and other policies to increase the share of its products in the EU market. However, compared with China, Thailand's overall competitiveness in the EU market is slightly weaker. Although Thailand has taken advantage of the FTA to promote its exports, it has limited competitiveness in agricultural products and low- and medium-end computer parts and components due to its industrial structure, making it difficult to compete with China.

ASEAN market: With the deepening of cooperation between China and the ASEAN Free Trade Area, ASEAN has become an important trading partner of China. China's exports to ASEAN mainly include motors, electrical equipment and their parts, mechanical equipment and parts, vehicles and their parts. China utilizes its technological and financial advantages to provide ASEAN with a large number of medium and high-end equipment, mechanical and electrical products. As one of the ASEAN member countries, Thailand has certain geographic advantages and trade convenience in the ASEAN market. Thailand's exports to the ASEAN market are mainly agricultural products and industrial manufactured products [31, p. 152]. Thailand's agricultural products such as rice, rubber, fruits, etc. have high reputation and market share in ASEAN market. Therefore, China and Thailand each take what they need and compete in some areas, such as basic mechanical and electrical products.

Japanese market: China is one of Japan's important trading partners, and its exports to Japan cover a wide range of fields, such as electromechanical products, textiles and

garments, and chemical products. China has cost advantages in labor-intensive products, and is also gradually becoming competitive in some high-end manufacturing areas, such as auto parts and electronic products. Thailand's exports to Japan are mainly concentrated in agricultural products, seafood, automobiles and accessories. Thailand's agricultural and seafood products have a certain demand in the Japanese market, such as Thailand is the largest market for bonito and the second largest market for mackerel in Japan.

Starting from the major export markets of the United States, the European Union, ASEAN, and Japan, and combining the current situation of the major exports of China and Thailand, the competitiveness of the major export markets of China and Thailand is comparatively analyzed in the hope that it will be helpful to the development of the exports of China and Thailand and the enhancement of their respective international competitiveness.

Chapter 3 Problems and prospects of China and Thai export

3.1 Trends in China –Thailand export development

In the globalized economy, export development is pivotal for national growth, particularly for China and Thailand, whose economic landscapes have been shaped by dynamic export strategies. While China dominates as a manufacturing titan, Thailand carves niches in agriculture and automotive sectors. This chapter explores their evolving export trends, highlighting technological advancements, market diversification, sustainability efforts, and regional integration, while contrasting their unique challenges and adaptations.

China's export trajectory has transformed from labor-intensive manufacturing to high-tech innovation. Historically the "world's factory," it exported textiles and electronics, but now leads in semiconductors, electric vehicles (EVs), and renewable energy technology. Initiatives like "Made in China 2025" propel this shift, emphasizing AI, robotics, and green energy. The Belt and Road Initiative (BRI) expands trade corridors [50, p. 292], linking China to Africa, Europe, and ASEAN, reducing reliance on Western markets amid U.S.–China trade tensions [34, p. 182].

Despite tariffs, China's exports remain robust, diversifying into ASEAN and the EU. Sustainability is now integral, with investments in green manufacturing and carbon neutrality goals by 2060. Challenges persist: aging demographics, trade wars, and environmental regulations pressure industries to innovate further.

The development trend of China's exports is characterized by the following three aspects:

1 Accelerated transformation of the export structure: from “traditional manufacturing” to

the “new three” dominant.

Rise of high value-added products.

China's exports are shifting from traditional labor-intensive products (clothing, furniture, home appliances) to the “new three” represented by new energy vehicles, lithium batteries and photovoltaic products. 2024 home appliance exports grew by 15.4 %, with smart home appliances (e.g., AI washing machines, smart cooking machines) becoming a new growth point. New energy vehicle exports are especially bright, BYD and other companies set up factories in Southeast Asia, promoting the integration of regional industrial chain.

Technology-driven and green transformation.

China's manufacturing industry is upgrading its competitiveness through digitalization, intelligence and greening. For example, the export volume of photovoltaic modules grew but prices fell, reflecting the acceleration of technology iteration and capacity release. In the future, semiconductor and artificial intelligence equipment may become the next generation of “new three”.

Traditional export products (such as photovoltaic modules) due to overcapacity and competition from emerging countries into a price war, the export unit price fell sharply, forcing enterprises to break out through technological innovation and branding.

2 Market diversification layout: emerging markets into new growth poles.

Europe and the United States market resilience remains but the risk of rising.

Despite the possible escalation of U.S. tariff policy on China (e.g., Trump proposes 60 % tariffs), China's exports to the U.S. are still growing, with a 22% increase in 2024 compared to 2017, showing product competitiveness. The EU market, on the other hand, maintains strong ties with the green economy through technological cooperation.

Accelerated Expansion of Emerging Markets.

Southeast Asia, the Middle East, Latin America and other “Belt and Road” countries have become a new blue ocean for exports. These regions have a weak industrial base but high consumption potential, and China has deepened cooperation through infrastructure investment (e.g. China–Thailand railroad) and localized production (e.g. Rayong Industrial Park in Thailand).

3 Policy and industry chain support: stable share and anti–risk ability.

Continuous release of policy dividends.

The government has deepened regional supply chain integration through RCEP. 2024 Q4 foreign trade hit a quarterly record high (11.51 trillion yuan), and the scale of import and export in December exceeded 4 trillion yuan for the first time. Specialized bonds, ultra–long–term treasury bonds and other tools to support infrastructure and manufacturing upgrades, hedge against external risks.

Industry chain synergy and surge in overseas investment.

China's overseas greenfield investment will reach \$160 billion in 2023 (11.6 % of the world's total), and enterprises will circumvent trade barriers by setting up factories overseas, such as BYD's new energy car base in Thailand. Domestic industrial chain integrity and technological innovation (e.g. AI open–source technology) support export resilience.

On the one hand, strengthening internal circulation (e.g. tapping the potential of the consumer market), and on the other hand, consolidating global share through technology export (e.g. smart home appliance standards) and international cooperation (e.g. China–EU Green Partnership).

China's exports are undergoing a triple transformation of “structural upgrading, market

diversification and policy escort”. In the short term, we need to cope with global economic fluctuations and trade protectionism, but in the long term, technology-driven high value-added products, emerging market expansion and green economy deployment will become the core growth drivers. Enterprises need to accelerate digital transformation, optimize global supply chains, and leverage policy dividends to achieve sustainable development.

Thailand's exports blend tradition and modernity. As a top rice and rubber exporter, it now adds value through processed foods and organic products. The automotive sector, contributing 10% of GDP, pivots toward EVs, supported by government incentives like tax breaks for OEMs [41, p. 212]. Regional integration via ASEAN and the Regional Comprehensive Economic Partnership (RCEP) enhances market access, while Thailand 4.0 fosters tech-driven sectors like smart agriculture and digital services [55, p. 322].

However, Thailand faces competition from Vietnam in manufacturing and internal issues like political instability and labor shortages. Sustainable practices emerge in eco-tourism and circular agriculture, aligning with global environmental trends. Yet, reliance on imported energy and skilled labor gaps poses hurdles.

Thailand's export development trend is characterized by the following four aspects:

Overall growth rate slows down, but structural highlights stand out. Comparison of growth rates in 2024 and 2025. Thailand's exports grow by 5.2 % in 2024, but the growth rate is expected to slow to 2 % – 3 % in 2025, mainly due to global economic uncertainty, U.S. trade policy risks and weak domestic consumption. Regional Market Fragmentation

Exports to the U.S. account for 18.3% of Thailand's total exports (\$ 54.96 billion in 2024), but potentially high tariff policies in the U.S. (e.g., the “Trump 2.0” plan) could hit Thailand's trade surplus with the U.S. (\$ 35.4 billion in 2024). Meanwhile, market recovery

in CLMV countries (Cambodia, Laos, Myanmar, Vietnam) offers new opportunities for exports of non-alcoholic beverages, agricultural products, etc.

Agricultural exports: fruit and beverages are double-driven. Fruit exports continue to lead. In 2025, Thailand's fresh and processed fruit exports are targeted to exceed 4 million tons, valued at more than 300 billion baht (up 2 % year-on-year), with exports of durian, longan and mangosteen to China accounting for 90 % of its total fruit exports, and the Chinese market remains the core growth engine.

Non-alcoholic beverage export potential release. Exports of non-alcoholic beverages are expected to increase to \$ 1.705 billion in 2025 (up 2.1 %), with CLMV countries contributing 67 % of the market share. Functional drinks are growing the fastest (7 %), but rising production costs and sweetening tax policies may inhibit profit margins. Manufacturing and high-tech products: electronics and automotive industry chain upgrade.

Electronics industry recovery. Thailand's electronics industry exports are expected to grow by 2.8 % in 2025, of which exports of power electronic equipment (such as transformers and cables) may increase by 4.3 %, benefiting from the global demand for electric vehicles and AI; hard disk and consumer electronics will grow by 2.4 % and 2.7 % respectively.

Rise of new energy automobile industry. Chinese car companies (such as BYD, SAIC) invested in Thailand to set up factories, promoting Thailand as a new energy vehicle manufacturing center in Southeast Asia. Electronic components, auto parts and components export demand growth is significant, but need to deal with the global value chain restructuring and green technology transition pressure [61, p. 362].

Coexistence of external dependence and internal challenges. Increased external risks.

U.S. trade policy uncertainty, geopolitical conflicts and global economic slowdown (WTO forecasts global trade growth of 3 % in 2025) may inhibit export momentum.

Internal structural pressures. High household debt: accounting for more than 90 % of GDP, weakening consumption capacity and indirectly affecting the capital circulation of export-oriented industries.

Slow recovery of small and medium-sized enterprises (SMEs): competition in the manufacturing sector has intensified, with a decline in the number of enterprises in the automotive and electronics sectors, and increased pressure on employment.

Thailand's exports show a complex pattern of “steady growth in agricultural products, upgrading of the manufacturing industry, and coexisting risks”. In the short term, we need to cope with external market volatility and internal debt pressure, but in the long term, we can explore growth potential through technological upgrading, green transformation and regional cooperation. Enterprises need to flexibly adjust their supply chain strategies, and policymakers need to balance short-term stimulus with long-term structural reforms.

Comparative Analysis of Export Development Trends between China and Thailand: Both nations ascend the value chain but differ in focus: China targets high-tech industries, while Thailand excels in agro-processing and automotive niches. Regional agreements like RCEP benefit both, yet China's BRI contrasts with Thailand's ASEAN-centric approach. Sustainability unites their strategies, though China's scale dwarfs Thailand's niche adaptations. Geopolitical shifts, like nearshoring, see firms relocating to Southeast Asia, offering Thailand opportunities but challenging China's dominance.

China and Thailand exemplify adaptive export models driven by innovation and diversification. China leverages technology and infrastructure to sustain global influence,

while Thailand harnesses regional integration and niche markets. Both face sustainability imperatives and external pressures, yet their strategic responses underscore the evolving dynamics of global trade. As they navigate challenges, their export strategies will remain critical to economic resilience and growth.

3.2 Problems of China and Thailand export

China and Thailand, two pivotal economies in Asia, have long relied on exports to drive growth. However, both nations face structural and external challenges that threaten their export sustainability. This chapter examines key issues in their export sectors, emphasizing regional imbalances, commodity dependencies, and geopolitical pressures.

1 Structural Imbalances in China's Export Economy.

Regional Disparities.

China's export success has disproportionately benefited coastal regions like the Pearl River Delta and Yangtze River Delta, exacerbating economic inequality with inland provinces. This imbalance stems from decades of prioritizing infrastructure and foreign investment in coastal zones, leaving domestic regions underdeveloped.

Overreliance on Low-Value Commodities.

Despite being the "world's factory," China's export portfolio remains dominated by labor-intensive, low-tech goods such as textiles, toys, and basic machinery. Processing trade—where foreign firms outsource manufacturing—accounts for a significant share, yielding minimal profits for domestic enterprises. This model traps China in a "comparative advantage trap," discouraging innovation and upskilling.

Trade Barriers and Currency Pressures.

China's growing trade surplus and foreign reserves have triggered protectionist measures from trading partners, including anti-dumping lawsuits and tariffs. Concurrently, RMB appreciation has eroded price competitiveness, particularly for low-margin exports.

2 Core issues for China's exports

Trade frictions and geopolitical tensions.

The U.S.–China trade war has led to an escalation of tariff barriers against China, directly affecting core export categories such as electronics and machinery. For example, the U.S. imposed tariffs on about \$ 360 billions of Chinese goods, forcing part of the industrial chain to relocate to places such as Vietnam and Mexico.

The technical embargo and international resistance to the “Made in China 2025” program have limited the pace of China's transformation into a high-end manufacturing industry.

Rising costs and loss of competitiveness

Labor costs have increased by more than 60 % over the past decade, coupled with tightened environmental regulations (such as the “dual-carbon” target), low value-added industries (such as textiles and toys) face low-cost competition from Southeast Asian countries.

RMB exchange rate fluctuations have weakened the price advantage, especially for small and medium-sized export enterprises.

Supply chain vulnerability and market dependence

The new crown epidemic exposed the risk of over-reliance on the European and American markets. 2020, China's exports to the U.S. and Europe accounted for more than 35 %, the global economic slowdown directly dragged down the export growth rate.

Semiconductors and other key components import restrictions, threatening the sustainability of high-tech product exports.

3 Thailand's Export Vulnerabilities.

Dependency on China's Market.

Thailand's agricultural exports, notably cassava, are heavily reliant on Chinese demand. In 2020, China imported \$ 708 million worth of Thai cassava, primarily for ethanol and starch production [33, p. 178]. However, shifts in Chinese policies—such as subsidizing maize over cassava—have destabilized this trade, forcing Thai producers to adapt abruptly .

External Shocks and Competition.

Thailand's cassava sector is vulnerable to natural disasters (e.g., droughts) and rising production costs [45, p. 236]. Meanwhile, Vietnam and Cambodia have emerged as competitors, leveraging lower labor costs and proximity to China [37, p. 198]. Although Thailand maintains a competitive edge (RCA index >1), its market share faces erosion [21, p. 118].

Free Trade Agreement (FTA) Pitfalls.

The 2003 China–Thailand FTA, while boosting agricultural trade, has harmed small-scale farmers. Tariff reductions under the agreement flooded markets with cheaper goods, undermining local producers and exacerbating rural poverty.

The double-edged sword of free trade agreements (FTAs)

The 2003 China–Thailand FTA, while boosting agricultural trade, has been detrimental to smallholder farmers. Tariff cuts flooded the market with cheap goods, hitting local producers and increasing rural poverty.

Agricultural dependence and climate risk

Agricultural products (e.g. rubber, rice, cassava) account for 15 percent of total exports, but extreme weather (e.g. El Niño–induced drought in 2023) has led to a 10 percent reduction in rubber production and increased price volatility for cassava [27, p. 146].

Increased international competition: Vietnam's rice export price is 15 % lower than Thailand's, crowding out market share.

Geo–economic dependence

Thailand is dependent on the Chinese market for 25 % of its exports, especially for fruits (e.g. durian) 60 % of which go to China [49, p. 282]. Fluctuations in Chinese demand (e.g., suspension of some fruit imports in 2022 due to epidemics) directly impact Thai fruit farmers.

While the China–Thailand FTA has boosted trade, Thailand's deficit with China continues to widen (to \$ 23 billion in 2023), reflecting an imbalance in the position of the industrial chain.

Currency and labor challenges

The Thai baht's volatile exchange rate, which will appreciate by 5 percent against the U.S. dollar in 2023, undermines export price competitiveness.

Agriculture and manufacturing face labor shortages, with the aging rate (14 %) pushing up labor costs.

4 Bilateral Trade Dynamics and Risks.

The symbiotic relationship between China and Thailand is fraught with asymmetry. China's dominance as Thailand's largest export market (e.g., cassava, rubber) creates dependency risks. For instance, Thailand's cassava exports plummeted by 24 % between 2014–2017 due to China's policy shifts and domestic environmental regulations. Conversely,

Thailand's reliance on Chinese machinery and electronics imports perpetuates a trade deficit, straining economic resilience.

5 Rising global protectionism: Although RCEP reduces regional tariffs, European and American “friendly outsourcing” policies (e.g., the U.S. Inflation Reduction Act) divert orders to India and Mexico.

Green trade barriers: The EU's carbon border tax (CBAM) is forcing Chinese and Thai exporters to upgrade production technology and increase compliance costs.

Logistics bottlenecks: The Red Sea crisis has pushed up freight rates on the Asia–Europe route by 300 %, increasing the risk of delays in the export of Chinese and Thai electronic products and auto parts.

6 Pathways to Mitigation.

Diversification of Markets:

Both nations must reduce dependency on a few regions. China could incentivize inland industrialization, while Thailand should explore markets in Africa and South Asia.

Technological Upgrading:

China's shift toward high–tech exports (e.g., semiconductors) and Thailand's investment in agro–processing could enhance value–added competitiveness.

Policy Reforms:

Addressing trade barriers through multilateral agreements and stabilizing currency fluctuations would alleviate external pressures.

China and Thailand's export challenges underscore the fragility of overreliance on low–value commodities and singular markets. While China grapples with structural inequities and trade wars, Thailand faces agricultural volatility and competition. Strategic

diversification, innovation, and equitable trade policies are critical to ensuring long-term resilience in an increasingly protectionist global economy.

3.3 Optimization strategies for China and Thailand export

China and Thailand are pivotal players in global trade, each with unique export profiles and challenges. To maintain competitiveness in an evolving economic landscape, both nations must adopt innovative strategies to optimize their export frameworks. This chapter explores key approaches to enhance export efficiency, drawing insights from technological integration, logistics optimization, market diversification, and sustainable practices.

Leveraging Advanced Technologies for Supply Chain Efficiency.

The integration of cutting-edge technologies like the Internet of Things (IoT), artificial intelligence (AI), and big data analytics can revolutionize export logistics. For instance, real-time monitoring of goods transportation reduces delays and minimizes loss risks, as highlighted in strategies for optimizing international cargo systems. China's export data for specialized products, such as transmission apparatus (reaching 709,300 USD th in November 2024) and pharmaceuticals like tetracyclines derivatives (1,067,465 kg in November 2024), underscores the need for precision in handling high-value goods . Thailand, a major exporter of electronics and agricultural products, could similarly adopt IoT-enabled tracking to ensure quality control and timely delivery.

Diversifying Transportation Modes and Trade Routes.

Geopolitical tensions, such as the Russia-Ukraine conflict, have disrupted global shipping routes, emphasizing the importance of diversified logistics networks. China's

reliance on sea and air freight can be complemented with rail and road alternatives to mitigate delays [54, p. 332]. Thailand, which faces congestion in maritime routes like the Malacca Strait, could invest in regional rail corridors and air cargo hubs to bypass bottlenecks. Both nations should also collaborate on cross-border infrastructure projects, such as the China–Thailand Railway, to streamline intra–Asian trade.

Enhancing Digital Marketing and Global Visibility.

Digital transformation is critical for reaching international buyers. China's emphasis on SEO and social media optimization (SMO) to boost online visibility offers a blueprint for Thai exporters [56, p. 352]. For example, Thailand's agricultural and tourism sectors could leverage platforms like YouTube and Instagram to showcase products, as seen in China's factory promotion campaigns [57, p. 361]. Additionally, adopting TUNE developer tools for app-based marketing could help Thai SMEs engage tech-savvy consumers.

Strengthening Risk Management and Sustainability.

Global supply chains are vulnerable to disruptions, from cyberattacks to environmental regulations. China's focus on network security solutions and cargo insurance models provides a framework for mitigating risks [62, p. 372]. Thailand, a leader in sustainable agriculture, could align with green logistics practices, such as using low-emission transport and eco-friendly packaging, to meet EU and U.S. regulatory standards [60, p. 390]. Both nations must also address geopolitical risks, such as SWIFT sanctions impacting Russian trade, by diversifying financial partnerships.

Investing in Workforce Training and Export Diversification.

A skilled workforce is vital for innovation. China's employee training programs, linked to a 24 % increase in profit margins, highlight the value of upskilling. Thailand could

replicate this by training workers in advanced manufacturing and digital marketing. Export diversification is equally crucial: while China dominates in electronics and pharmaceuticals, Thailand should expand beyond traditional sectors like rice and rubber into niche markets such as medical tourism and organic products.

By adopting these optimization strategies — technological integration, logistics diversification, digital marketing, risk resilience, and workforce development—China and Thailand can strengthen their export economies. China's data-driven approach to high-value exports and Thailand's potential in sustainable goods offer complementary pathways for growth. Collaborative efforts, such as joint trade agreements and infrastructure projects, will further amplify their global trade influence, ensuring long-term competitiveness in an interconnected world.

Deepening industrial complementarities and supply chain synergies.

Strengthening complementarity between manufacturing and agriculture. China can increase exports of high value-added products such as electronic components and mechanical equipment to Thailand, while expanding imports of Thai natural rubber, tropical fruits, rice and other agricultural products to balance the trade structure.

Promote China–Thailand automotive industry chain cooperation (e.g., new energy vehicles), with China exporting battery and motor technology and Thailand providing local assembly and regional distribution networks.

Building a regional supply chain hub. Take advantage of Thailand's position as an ASEAN logistics node to set up a regional distribution center for Chinese enterprises in Thailand to radiate the Southeast Asian market.

Promote infrastructure projects such as the China–Thailand railroad to reduce cross-

border logistics costs and improve transportation efficiency [58, p. 342].

Layout of green economy and sustainable development

New Energy and Environmental Technology Cooperation China can export photovoltaic modules and energy storage equipment to Thailand to support the country's energy transition, while Thailand can provide Chinese enterprises with investment opportunities in renewable energy projects (e.g. biomass power generation).

Jointly develop standards for green agricultural products and promote mutual recognition of certifications such as organic food and low-carbon rubber.

Circular Economy and ESG Investment. Encourage Chinese companies to set up green factories in Thailand to comply with international ESG standards and enhance the competitiveness of export products.

Conclusion

Firstly, this study analyzes the export characteristics of China and Thailand, as well as the factors influencing their exports, by combining the economic conditions of both countries. It reveals the significant differences and complementarities between the two economies in terms of export structure, market distribution, and development trends. The results indicate that as the world's second-largest economy, China has successfully transitioned its export trade from labor-intensive to capital- and technology-intensive sectors, with machinery and electrical products and high-tech products becoming the mainstays of exports, demonstrating strong technological innovation capabilities and a complete industrial chain advantage. Thailand, on the other hand, leverages its unique natural resource endowments to maintain a significant competitive advantage in the agricultural products and food processing sectors.

Secondly, by comparing the competitiveness of major export products between China and Thailand (such as fruits, rice, and high-tech products), we explore the similarities and differences in their export markets. It is found that China holds a significant advantage in the export of high-tech products (such as 5G equipment and new energy vehicles) and shrimp products, with its core competitiveness stemming from technological innovation, a complete industrial chain, and economies of scale. Thailand, on the other hand, holds an irreplaceable position in the export of tropical fruits (such as durians and mangoes) and high-quality rice, with its advantages stemming from natural resource endowments and refined agricultural management. Therefore, optimization strategies are proposed to address current issues, including technological upgrading, market diversification, and green

economic cooperation, to enhance the resilience and sustainable growth potential of both countries in global trade. This holds significant importance for promoting the sustainable development of China–Thailand product trade. At the same time, taking major export markets such as the United States, the European Union, ASEAN, and Japan as entry points, and combining the current export situations of China and Thailand, a comparative analysis of the competitiveness of the two countries' major export markets was conducted. The results indicate that China's export markets are highly diversified (Europe, the United States, ASEAN, Africa, etc.) and have strong risk–resistance capabilities; whereas Thailand has a high degree of dependence on the United States and Chinese markets, making it susceptible to geopolitical policies and demand fluctuations. In overlapping markets (such as ASEAN), China focuses on mid–to–high–end manufacturing products, while Thailand excels in agricultural and primary industrial goods, creating a differentiated competitive landscape. This study conducts a comparative analysis of the main export markets of China and Thailand, aiming to provide references for promoting the development of exports and enhancing the international competitiveness of both countries.

Finally, the export trends, major export issues, and export optimization strategies of China and Thailand were analyzed. When discussing the evolution of export trends in both countries, the focus was on technological progress, market diversification, sustainable development, and regional integration. Subsequently, the key issues in the export sectors of both countries were explored, focusing on regional development imbalances, commodity dependence, and geopolitical risks. From the dimensions of technological integration, logistics optimization, market diversification, and sustainable development, the export optimization strategies of China and Thailand were discussed.

This study indicates that while China and Thailand compete in the export sector, their complementary nature far outweighs their competitive nature. By deepening industrial collaboration, sharing technological innovation outcomes, and jointly building regional supply chains, the two countries can collectively enhance their resilience within the global trade system. For China, it is essential to balance the “domestic circulation” strategy with further opening-up; for Thailand, accelerating industrial structure upgrading is necessary to address the restructuring of the value chain. Future research could further quantify the long-term impact of green trade policies on the two countries' exports or explore the disruptive role of the digital economy on traditional export models.

In summary, China – Thailand economic and trade cooperation is not only the cornerstone of bilateral relations, but also a model for regional economic integration. Amidst the tide of deglobalization, the two countries are expected to explore a sustainable path for export growth for developing countries through strategic coordination and complementary advantages.

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