

Analysis of the Correlation between International Tourism and International Trade between China and Vietnam

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Abstract

This paper takes the number of inbound and outbound tourists between China and Vietnam from 2015 to 2024, as well as the total value of import and export of goods, as the research objects. Using the existing statistical data analysis method, it explores the correlation between the international tourism and international trade of the two countries. The research results show that there is a positive correlation between the international tourism and international trade of China and Vietnam, with synchronous increasing and decreasing trends in their development. Although they faced severe challenges brought by the global pandemic during this period, international tourism and international trade between the two countries still demonstrated strong resilience and good growth potential. Therefore, China and Vietnam should further strengthen trade relations and deepen tourism cooperation to achieve common development.

Keywords

Correlation; International Tourism; International Trade.

1. Introduction

Facing the turbulent global economic and trade environment, the multilateral trading system and regional trade arrangements serve as powerful driving forces for the development of economic globalization. China has consistently maintained an open attitude, fostering friendly trade relations with countries and regions worldwide. On January 1, 2025, the Regional Comprehensive Economic Partnership Agreement (RCEP) marked its third anniversary of implementation. This represents a significant achievement for Asian nations in seizing development opportunities. Over the past two years, RCEP member states have worked to reduce trade costs within the region, strengthened industrial linkages, and benefited an increasing number of people. The 2019 Global Trade Report identifies the service sector as the most dynamic segment globally, playing a crucial role in national growth. As a battleground for international competition, it is essential to seize opportunities to develop trade in services and enhance competitiveness, ensuring robust strength in the new economic environment. Trade in tourism services, as the most vital component of trade in services, bears the significant task of promoting international cultural exchanges, cross-border factor flows, and international cooperation. The implementation of RCEP will facilitate new pivots for international tourism cooperation, provide convenience for cross-border travel among RCEP member states, consolidate multilateral tourism cooperation mechanisms, and achieve shared development in tourism service trade among RCEP members.

Trade in tourism services is a critical component of international services. For many countries, it serves as a major source of foreign exchange earnings and an important driver of economic growth and job creation. In 2024, China's tourism industry demonstrated a robust recovery following the impact of the pandemic: according to statistics from the China Tourism Academy, domestic trips reached 5.68 billion, with total travel expenditures by domestic tourists amounting to 5.8 trillion yuan, making a substantial contribution to national economic growth.

Outbound tourism exceeded 220 million trips. Southeast Asian countries, as traditional popular destinations for outbound travel, witnessed a strong rebound in visitor numbers. According to the 2024 Travel & Tourism Competitiveness Report released by the World Economic Forum, China ranked 8th in the global tourism competitiveness index, rising by one spot compared to 2019, while Vietnam climbed to 59th, improving by four positions. In 2024, tourism exchanges between China and Vietnam saw significant growth in the number of international visitors traveling from China to Vietnam and vice versa. Data shows that Vietnam received nearly 17.5 million foreign tourists in 2024, including 3.7 million from China, a 214% year-on-year increase. The cooperation between China and Vietnam in tourism has achieved remarkable progress, which holds significant implications for the growth of foreign trade between the two countries. Studying the interactive relationship between tourism and trade between China and Vietnam is of great practical significance for the recovery of their tourism industries and trade growth in the post-pandemic era.

This paper collects and organizes existing statistical data, such as the number of inbound and outbound tourists between China and Vietnam and the total volume of import and export trade. It employs established statistical analysis methods to conduct in-depth exploration and analysis, examining the linkages and trends between international tourism and international trade between China and Vietnam. Subsequently, it investigates the impact of international tourism on international trade between the two countries and, based on these findings, proposes recommendations for expanding trade and attracting tourists in the future.

2. Literature Review

With the deepening of globalization, the international trade landscape has undergone significant transformations, with trade in services, particularly tourism services, experiencing rapid growth and occupying an increasingly substantial share of service trade. This trend has prompted scholars both domestically and internationally to focus more on the study of international tourism, gradually expanding the scope of research from purely international tourism to an in-depth exploration of the intrinsic connections between international tourism and international trade.

In terms of foreign research, N. Kulendran and Kenneth Wilson (2000) pioneered the use of time-series econometric methods to investigate the relationship between international trade and international tourism. By analyzing data from Australia and its four major tourism and trade partners—the United States, the United Kingdom, New Zealand, and Japan—they tested three hypotheses and, using cointegration tests and Granger causality tests, demonstrated a mutually reinforcing relationship between international tourism and international trade. Based on these findings, they argued that this field of study warranted further in-depth exploration [1]. Kenneth Wilson and Jordan Shan (2001) further examined China as a case study, employing a VAR model to reveal a bidirectional Granger causal relationship between international tourism and international trade. Specifically, international tourism creates more trade opportunities by increasing export revenue, thereby driving the development of international trade, while international trade also boosts tourism by facilitating international business exchanges [2]. Vikas Gautam and Suresh Kg (2012) similarly adopted Granger causality tests to explore the causal relationships between bilateral trade and tourist flows between India and several countries. Their results indicated a bidirectional causal relationship between trade and tourism in India's interactions with the United States, Italy, and Canada [3]. Stefania Lionetti and Oscar Gonzalez (2012) selected six countries—Argentina, the Dominican Republic, Mexico, Nicaragua, Chile, and Venezuela—as their research subjects, employing cointegration and vector autoregression techniques to analyze the short- and long-term relationships between tourism and trade in these nations. Their findings confirmed the significant contribution of tourism to

economic growth in Latin America and the Caribbean [4]. Banday and Ismail (2017), through an ARDL cointegration model analysis of BRICS data from 1995 to 2013, verified the positive role of rapid tourism development in promoting economic growth. Moreover, the study further elucidated that the economic effects of tourism growth exhibit a dual nature over time, featuring both positive incentives and potential negative impacts [5].

In domestic research, some scholars have focused on the interaction between international tourism and international trade between one country and multiple nations. Scholars such as Shi Zhangyu and Zhou Baohua (2015) employed Granger causality tests and regression analysis techniques to explore the relationship between inbound tourism to China and trade among nine Asian countries. Their study revealed significant variations in this interaction across different countries, leading to the identification of three typical interaction models: (1) tourism-driven trade growth, (2) trade-promoted tourism development, and (3) a mixed model where tourism and trade mutually reinforce each other. Jiang Jinbo and Guo Yi (2018) examined the interaction between inbound/outbound tourism and import/export trade using China and 45 countries along the "Belt and Road" as examples, applying cointegration tests, Granger causality tests, and regression analysis. The research found a long-term stable equilibrium relationship between tourism and trade, with notable differences in causality types. Some scholars have also studied the interaction between international tourism and trade between one country (or a specific region within it) and another. For example, Sun Gennian and An Jingmei (2014), based on statistical data from 1998 to 2011 and by analyzing four sets of related indicators across two different time periods, discovered a logarithmic-linear interaction pattern in tourism and trade activities between Inner Mongolia and Mongolia. Song Jianlin, Cheng Cheng, and Zhou Zeqi (2018) selected bilateral tourism and import/export trade data between China and Thailand from 1997 to 2016, employing Johansen cointegration tests, VECM models, and impulse response analysis. Their study found that Thailand's inbound tourist flow to China exhibited a positive long-term cointegration relationship with both imports and exports, while China's outbound tourist flow to Thailand showed a negative relationship with the trade deficit between the two countries.

In theoretical discussions on the interaction between tourism and trade, Kulendran (2000) proposed the "Marco Polo Hypothesis" and the "Interest and Attention Hypothesis," while Sun Gennian (2012) introduced the "Feedback Loop Hypothesis" and further constructed a three-stage evolutionary model of tourism-trade interaction from a dynamic perspective. Based on these theoretical frameworks, it can be concluded that there is a positive correlation between inbound/outbound tourism and international trade, manifesting as synchronized growth or decline trends. These two factors are interdependent and mutually reinforcing, forming a complex causal relationship. Notably, different forms of causality also vary in the intensity of their promotional or driving effects

3. Data Collection and Research Methodology

3.1. Data Collection

The core analytical data in this paper consists of two major categories, specifically defined as follows.

International tourist arrivals: This category comprises both inbound and outbound tourist numbers. Inbound tourist statistics measure the scale of foreign residents traveling to the country, while outbound tourist numbers reflect domestic residents' travel activities to other countries.

International trade data: Since narrow definitions of international trade primarily focus on goods trade, this study selects "total import and export value of goods" as the key indicator for analyzing international trade trends. Here, "import value" refers to the total amount of goods

China imports from specific countries or regions, while "export value" represents the total amount of goods China exports to those countries or regions.

All data in this study are sourced from authoritative statistical institutions, including National Bureau of Statistics of China, General Administration of Customs, P.R.China, Ministry of Culture and Tourism of China, and National Statistics Office of Vietnam, covering the period from 2015 to 2024.

It should be noted that the China-Vietnam inbound and outbound tourism market was significantly impacted by the global COVID-19 pandemic in 2020, leading to a notable decline in scale. This factor may interfere with the analysis results of this paper regarding the relationship between international tourism and international trade from 2020 to 2022.

3.2. Research Methodology

This paper adopts the method of analyzing existing statistical data from the field of literature research. By systematically collecting officially released historical data, a longitudinal analysis and comparison across years are conducted to deeply explore the development trends in international tourism and international trade between China and Vietnam, while also analyzing the correlation between these two areas.

4. Analysis of International Tourism Between China and Vietnam

4.1. Current Status of International Tourism Development in China

With the continuous development of China's tourism market, various sectors of the market are constantly changing due to multiple influencing factors. As shown in Figure 1, which illustrates the development and trends of inbound and outbound tourism in China over the past decade, during the period of 2015-2019, with economic growth and rising household incomes, the scale of outbound tourism expanded continuously, and domestic travel steadily increased. The inbound tourism market also remained stable, as China's rich cultural and tourism resources continued to attract a large number of overseas visitors.

In 2020, due to the impact of the COVID-19 pandemic, China's inbound and outbound tourism markets suffered a severe blow, nearly coming to a standstill. In the following years of 2021-2022, they largely remained at relatively low levels.

As the global pandemic situation eased and China optimized and adjusted its epidemic prevention and control policies, the country's inbound and outbound tourism markets began to gradually recover in 2023. In 2024, China received 131.9 million inbound tourists, recovering to over 90% of the 2019 level. The number of outbound trips by Chinese citizens reached 123 million, approaching 80% of the 2019 figure.

4.2. Current Status of International Tourism Development Between China and Vietnam

Over the past decade, international tourism between China and Vietnam has experienced fluctuating development, from rapid growth to pandemic impacts and then gradual recovery. As shown in Figure 2 regarding Chinese outbound tourists to Vietnam, during 2015-2019, the number of Chinese tourists visiting Vietnam showed a continuous growth trend, increasing from 1.78 million in 2015 to 5.8 million in 2019. Throughout this period, China remained Vietnam's largest source country for inbound tourism. Table 1 also indicates that Vietnam has long been China's second-largest source country for inbound tourism, demonstrating the highly prosperous tourism market and close tourism connections between the two nations during this phase.

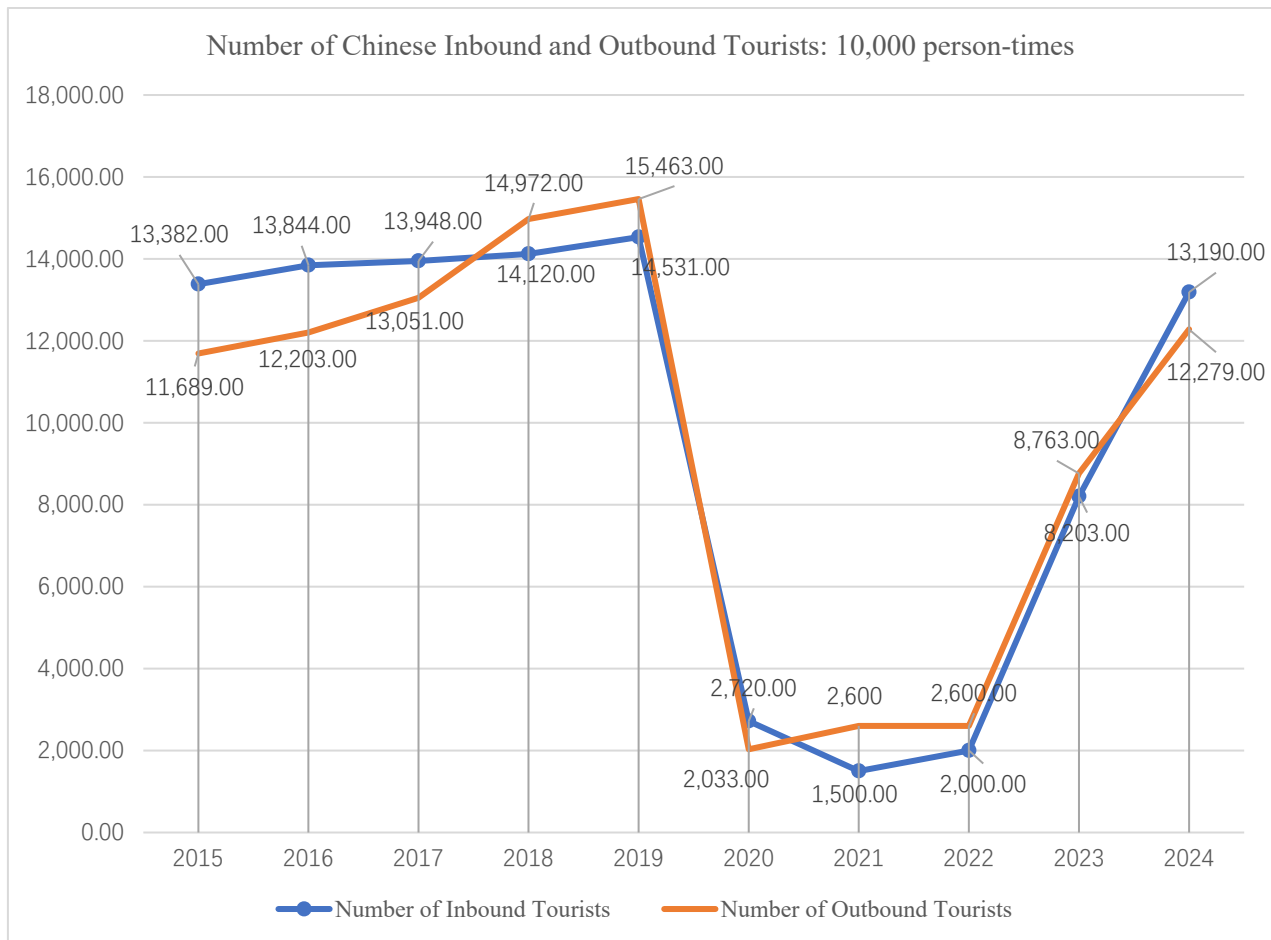


Figure 1. Number of Chinese Inbound and Outbound Tourists
(Data source: Statistical Bulletin on the Development of Culture and Tourism of China)

However, in 2020, due to the impact of the COVID-19 pandemic, the number of cross-border travelers between China and Vietnam experienced a dramatic decline from 2020 to 2022, bringing international tourism to a standstill. The flow of tourists between the two countries sharply decreased. Figure 2 shows that the number of Chinese tourists visiting Vietnam plummeted from 5.8 million before the pandemic to fewer than 60,000.

By 2022, as the global pandemic trends gradually slowed, Vietnam reopened its borders to international tourism in March 2022, leading to a slight increase in the number of Chinese outbound tourists to Vietnam, reaching 120,000. From 2023 to 2024, with changes in China's pandemic control policies, the growth rate of tourist exchanges between the two countries began to accelerate. In 2024, the number of Chinese tourists visiting Vietnam reached 3.7 million, demonstrating the strong recovery of international tourism between China and Vietnam.



Figure 2. Number of Chinese Outbound Tourists to Vietnam
(Data source: National Statistics Office of Vietnam)

Table 1. Top 10 Foreign Tourist Source Countries for China from 2016 to 2020
(Data source: Data Center of the Ministry of Culture and Tourism of China)

Ranking	2016	2017	2018	2019	2020
1	South Korea	Myanmar	Myanmar	Myanmar	Myanmar
2	Vietnam	Vietnam	Vietnam	Vietnam	Vietnam
3	Japan	South Korea	South Korea	South Korea	Philippines
4	Myanmar	Japan	Japan	Russia	Mongolia
5	United States	Russia	United States	Japan	South Korea
6	Russia	United States	Russia	United States	Russia
7	Mongolia	Mongolia	Mongolia	Mongolia	Japan
8	Malaysia	Malaysia	Malaysia	Malaysia	United States
9	Philippines	Philippines	Philippines	Philippines	India
10	Singapore	Singapore	Singapore	Singapore	Indonesia

5. Analysis of International Trade Between China and Vietnam

5.1. Current Development Status of China's International Trade

As shown in Figure 3, China's total import and export of goods from 2015 to 2024 exhibited a sustained growth trend, with fluctuations but an overall positive trajectory. During 2015-2016, influenced by factors such as sluggish global economic growth, weak international market demand, and slow economic recovery in major developed economies like Europe and the United States, external demand for Chinese goods declined. Simultaneously, the rise of trade protectionism, with some countries initiating trade investigations and erecting trade barriers against China, also impacted China's export situation. From 2017 to 2019, benefiting from the

moderate recovery of the global economy, external demand for Chinese goods improved. Meanwhile, China actively expanded its international market, with multilateral cooperation represented by the "Belt and Road" initiative advancing steadily, becoming a new growth driver for China's international trade and contributing to a stable overall growth in the total import and export of goods.

In 2020, facing the impact of the COVID-19 pandemic, China was the first to control the outbreak and orderly resumed work and production, becoming a crucial global supplier of essential goods and achieving rapid import growth. From 2021 to 2022, as the global economy gradually recovered from the pandemic, China maintained rapid growth in import and export volumes due to its manufacturing advantages. On January 1, 2022, the Regional Comprehensive Economic Partnership (RCEP) officially came into effect, boosting trade growth between China and Asia-Pacific countries. In 2023, affected by structural issues following adjustments to pandemic prevention policies, China's total import and export volume declined. However, in 2024, thanks to a series of policies and measures to stabilize foreign trade, as well as enterprises strengthening independent innovation and successfully achieving transformation and upgrading, China's total import and export of goods rebounded.

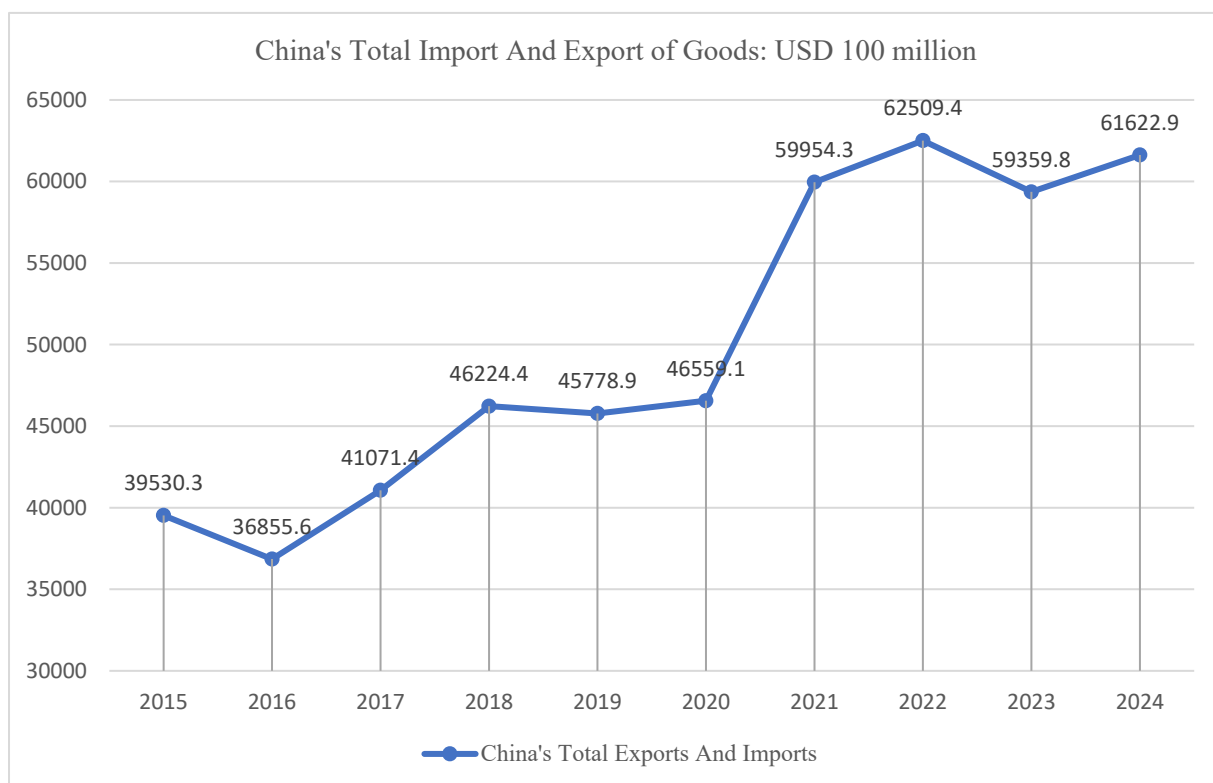


Figure 3. China's Total Import and Export of Goods
(Data source: National Bureau of Statistics of China)

5.2. Current Development Status of International Trade Between China and Vietnam

Figure 4 shows that over the past decade, international trade between China and Vietnam has evolved from a stable start to rapid growth, then from high-level stability to a new round of high-speed development. During 2015-2016, when global economic growth lacked momentum and international market demand was weak, China's foreign trade as a whole faced certain pressures. However, given the geographical proximity between China and Vietnam and the existing traditional foundation for bilateral trade, their trade volume still maintained a degree of growth despite the global economic downturn. In 2015, the full completion of the China-

ASEAN Free Trade Area provided a more favorable policy environment and broader market space for trade between China and Vietnam, as well as other ASEAN countries.

From 2017 to 2020, the global economy gradually recovered from its previous downturn, driving growth in the import and export of goods between China and Vietnam. In 2017, the two countries issued the "Joint Statement on Further Strengthening and Deepening the Comprehensive Strategic Cooperative Partnership Between China and Vietnam," further enhancing bilateral cooperation in trade, investment, and other fields. During this period, China faced challenges externally from certain countries raising trade barriers and internally from industrial upgrading. This prompted China to begin relocating some labor-intensive industries to Southeast Asian countries like Vietnam, leading to increased Chinese exports of machinery, equipment, intermediate products, and greater imports of labor-intensive goods from Vietnam. These developments significantly boosted bilateral trade growth.

The COVID-19 pandemic from 2021 to 2023 significantly impacted global trade, with various pandemic-related issues somewhat restricting the further rapid growth of China-Vietnam trade. However, through the joint efforts of both countries, China and Vietnam performed relatively well in pandemic prevention and economic recovery, with bilateral trade showing no significant decline and maintaining notable resilience. In 2022, the Regional Comprehensive Economic Partnership (RCEP) officially came into effect, with both China and Vietnam as member states, providing a new institutional framework and opportunities for future bilateral trade development.

In 2024, with the continuous expansion and deepening of cooperation between China and Vietnam in various fields, the total value of goods imported and exported between the two countries reached a new high. In the future, based on bilateral cooperation agreements, the China-ASEAN Free Trade Area, and multilateral trade agreements such as the Regional Comprehensive Economic Partnership (RCEP), there remains significant growth potential for trade between China and Vietnam.



Figure 4. The Total Import and Export Volume of Goods between China and Vietnam (Data source: National Bureau of Statistics of China)

6. Conclusion and Recommendations

6.1. Conclusion

This paper utilizes the existing statistical data analysis method to analyze the statistics of international inbound and outbound tourism numbers between China and Vietnam, as well as the total import and export value of goods between the two countries from 2015 to 2024. The aim is to explore the correlation between international tourism and international trade, and the conclusions are as follows:

(1) There is a positive correlation between the development of international tourism and international trade. Cross-border tourism services not only facilitate the movement of tourists between the two countries but also create more opportunities for bilateral trade. Therefore, the flourishing cross-border tourism between China and Vietnam has, to some extent, contributed to the increase in the total volume of goods imports and exports between the two nations. At the same time, the deepening of bilateral trade relations, particularly the increasing frequency of business exchanges, has further boosted cross-border tourism, especially the expansion of the business travel market.

(2) There is a certain convergence between international tourism and international trade, characterized by synchronous growth and decline. When the tourism market between China and Vietnam is thriving, bilateral trade often maintains rapid growth as well; during the COVID-19 pandemic, when tourism activities came to a standstill, trade growth was similarly significantly suppressed. As the tourism market gradually recovered post-pandemic, the total trade volume between China and Vietnam reached a new high in 2024, demonstrating a clear collaborative rebound.

(3) International tourism and trade between China and Vietnam are influenced by numerous factors. For instance, during the COVID-19 pandemic in 2021, when cross-border tourism between the two countries sharply declined due to the outbreak, the total import and export volume of goods between them conversely showed rapid growth during the same period, supported by policy measures from both sides and complementary demand. Such short-term divergences under exceptional circumstances do not negate the overall positive correlation between the two. Looking at the development trajectory over the past decade, international tourism and trade have largely maintained a trend of moving in the same direction.

6.2. Recommendations

Firstly, China and Vietnam should fully leverage multilateral agreement frameworks such as the Regional Comprehensive Economic Partnership (RCEP) and the China-ASEAN Free Trade Area to further simplify cross-border movement procedures and optimize visa policies, thereby reducing institutional and time costs for personnel exchanges. This will create a more efficient and convenient environment for tourism, business, and other forms of interaction.

Secondly, Vietnam should further deepen policy coordination and cooperation with China, particularly in the tourism sector. It should align precisely with the demands of the Chinese tourism market, intensify promotional efforts, and enhance tourism infrastructure and service quality to achieve in-depth development and long-term appeal in the Chinese tourism market.

Finally, China should continue to prioritize the cross-border tourism industry and deepen multi-level exchanges with Vietnam in cultural, tourism, and other fields. Leveraging the RCEP framework, both sides should jointly design more open tourism facilitation measures. Meanwhile, strengthen the coordinated promotion of tourism and trade by driving product showcases and business matching through tourism activities, thereby generating more inbound tourism and international trade opportunities. This will further facilitate the transformation of tourist flows into trade growth.

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