

International Tourism Economic Cooperation Model under the Background of the Belt and Road Initiative

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Abstract: This study empirically investigates the interactive dynamics between the “flow of people” (international tourism) and the “flow of goods” (import-export trade) in China-Turkey relations from 2014 to 2024, utilizing existing statistical data analysis. The findings reveal that the relationship is context-dependent. While tourism flows and trade volumes exhibit short-term co-movement when confronted with major external shocks, they frequently diverge under normal circumstances due to distinct driving mechanisms. Furthermore, a time-lag effect is identified, suggesting that the facilitative impact of tourism on trade materializes over a longer term rather than instantaneously. Consequently, this paper proposes that China and Turkey should enhance policy coordination, deepen cultural and tourism integration, and optimize their trade structure to improve the synergy and resilience of bilateral economic and personnel exchanges.

Keywords: Turkey, Import and export trade, International tourism.

1. Introduction

With the deepening process of globalization, international tourism and import-export trade, as the two core carriers of transnational interaction, have increasingly attracted scholarly attention regarding their intrinsic correlations. Theoretically, tourism exchanges enhance cultural understanding, establish business trust, and reduce transaction costs, creating favorable conditions for trade cooperation; meanwhile, the deepening of trade activities can also drive demand for business travel, promote the improvement of tourism infrastructure, and form a virtuous cycle. However, the relationship between the two is not a simple linear promotion, as their interactive mechanisms are influenced by multiple factors such as economic cycles, policy environments, and external shocks.

Against the backdrop of profound transformations in the global economic and trade environment, the multilateral trading system and regional cooperation arrangements jointly serve as dual engines driving economic globalization. While adhering to multilateralism, China actively deepens economic and trade linkages with countries through frameworks such as the Belt and Road Initiative. Among them, Turkey, as a crucial node connecting Europe and Asia, has seen increasingly close alignment between its “Intermediate Corridor” plan and the Belt and Road Initiative. Bilateral cooperation in areas such as trade, infrastructure, and tourism has continued to deepen. By 2024, China had risen to become Turkey’s second-largest global trading partner, with bilateral trade volume reaching approximately \$42.88 billion. Meanwhile, tourism has gradually become a new growth point in bilateral relations.

Tourism service trade, as an important component of international service trade, drives the linkage of related industries through personnel mobility and has become a key means for many countries to balance their international payments and promote economic recovery. According to data from the World Tourism Organization, the number of global international tourists exceeded 1.4 billion before the pandemic, and the tourism industry’s overall contribution rate to global GDP exceeded 10%. This trend is also significant in Turkey: In 2023, its tourism revenue rebounded significantly,

and the number of inbound tourists throughout the year returned to the pre-pandemic level. It is worth noting that the number of Chinese tourists visiting Turkey reached 409,000 in 2024, an increase of 65.1% compared to the previous year, making China one of the fastest-growing tourist source markets for Turkey. Although the economic cooperation between China and Turkey has achieved remarkable results, the bilateral trade structure still shows a significant imbalance. In 2023, Turkey’s trade deficit with China was as high as 34.34 billion US dollars, with the main deficit goods concentrated in areas such as machinery and equipment. At the same time, the potential of tourism cooperation between the two countries has not been fully unleashed. Although Turkey has attracted Chinese tourists through measures such as launching “the Belt and Road-themed tourism routes” and increasing direct flight services, the proportion of Chinese tourists in the overall inbound market in Turkey is still less than 1%, indicating that there is still room for the improvement of the tourism linkage effect.

In light of this, this paper adopts the existing statistical data analysis method in literature research, conducting a detailed analysis of China-Turkey inbound and outbound tourism numbers and import and export trade data from 2014 to 2024, to thoroughly investigate the interactive relationship between China-Turkey international tourism and import and export trade during the period of 2014–2024. On one hand, this helps reveal the synergistic mechanism between “flow of people” and “flow of goods” under the Belt and Road framework; on the other hand, it provides policy references for optimizing trade structures and promoting balanced development of tourism and trade between the two countries.

2. Literature Review

Currently, research on the interactive relationship between international tourism and import and export trade has become a significant topic in the interdisciplinary field of international economics and tourism management. Domestic and international scholars have conducted multidimensional discussions on its mechanisms, empirical testing, and policy implications, presenting a research trend that emphasizes both theory and practice, as well as macro and micro perspectives.

In the international academic community, related research was systematically carried out earlier and gradually evolved from overall correlation testing to mechanism analysis and heterogeneity exploration. Early studies, such as Kulendran and Wilson (2000), used time series methods to reveal the convergence in development trends between international tourism and international investment [1]. Santana-Gallego et al. (2011) further identified a complementary relationship between tourism and trade in the short term and a significant promoting effect of trade on tourism development in the long-term using a dynamic heterogeneous panel model [2]. Subsequent research focused more on identifying specific transmission channels, for example, Santana-Gallego et al. (2016) confirmed through an extended gravity model that tourism can effectively promote the export of differentiated goods by reducing information asymmetry and contract fulfillment risks [3]. In recent years, research perspectives have become more refined, with Maria and Jordi (2022) focusing on the interaction between the tourism industry and immigration networks, enriching the research spectrum of population mobility and economic and trade exchanges [4]. Empirical studies on specific national cases have also continuously emerged, with Shan and Wilson (2001) on China discovering a bidirectional Granger causality between tourism and trade [5].

In contrast, Chinese research has closely integrated with China's process of opening up to the outside world, focusing on testing theories in the Chinese context and serving the optimization of policies. Liu Zhenzhen et al. (2009) earlier verified the correlation between inbound tourism and import and export trade in China, revealing a significant positive association. Shi Zhangyu et al. (2015) using China-Russia as a case, deepened the understanding of the interaction relationship between bilateral tourism and trade. Their subsequent research (Shi Zhangyu, 2015) further distinguished the influence of different trade types, finding that general trade has a faster promoting effect on inbound tourism than processing trade, which provides important inspiration for understanding the timeliness of the interaction relationship. With the deep integration of China with the global economy, the geographical scope of case studies has continuously expanded. Zhang Xiaoying (2018) analyzed the Sino-US relationship and verified the mechanism by which tourism creates platforms and opportunities for trade. In recent years, Gao Jiayong and Wang Ruyue (2022) focusing on the China-ASEAN relationship, pointed out that the deepening of economic and trade cooperation is an important force driving the rapid development of tourism.

According to data from China's General Administration of Customs and Turkey's Statistics Office, Turkey, as an important emerging economy spanning Europe and Asia, has achieved a leapfrog growth in trade volume with China from 27.74 billion to 42.88 billion US dollars over a decade (2014-2024), demonstrating strong development momentum. As a member of the G20 and an emerging market economy, Turkey is a key participant in the Belt and Road Initiative, and the alignment of its "Intermediate Corridor" plan with the Belt and Road Initiative has provided an important platform for economic and trade cooperation between the two countries. China has become Turkey's second-largest source of imports and ranks among its top export markets, reflecting Turkey's

hub role in Eurasian economic connectivity and China's advancement of high-level opening-up processes. However, research and analysis by domestic and international scholars on the interactive relationship between China-Turkey international tourism and economic and trade exchanges are relatively scarce. Therefore, this paper selects Turkey as the research subject, using existing statistical data analysis methods to systematically examine the correlation between China and Turkey's international tourism and import and export trade.

3. Data Collection and Research Methodology

3.1 Data Collection

The data for this paper primarily comes from China's National Bureau of Statistics, China's General Administration of Customs, China's Ministry of Culture and Tourism, Turkey's Ministry of Culture and Tourism, and Turkey's Statistics Office, covering the period from 2014 to 2024.

3.2 Research Methodology

This study primarily employs the existing statistical data analysis method within literature research, systematically collecting historical statistics released by official authoritative institutions for long-term diachronic analysis. This method aims to reveal the development trends and correlations between China and Turkey in two major fields: cross-border tourism and total import and export.

4. International Tourism

4.1 Analysis of the Development Trend of China's International Tourism (2014-2024)

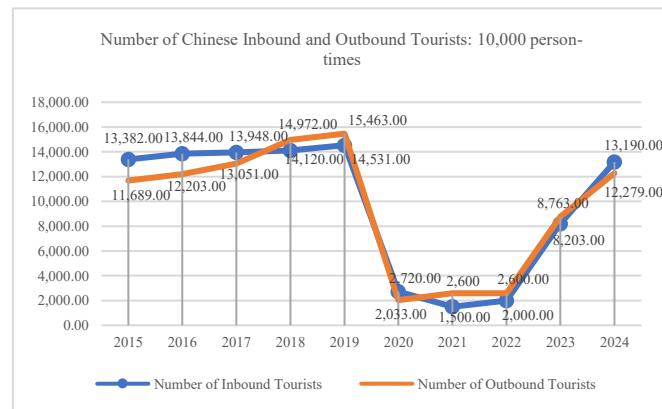


Figure 1: Number of Chinese Inbound and Outbound Tourists

Data source: Statistical Bulletin on the Development of Culture and Tourism of China.

As shown in Figure 1, the inbound and outbound tourism market in China has exhibited clear phased characteristics over the past decade, which can be generally divided into three stages: a steady growth period (2014-2019), a shock and adjustment period (2020-2022), and a recovery and rebound period (2023-2024).

Between 2014 and 2019, the market showed a continuous expansion trend, with outbound tourism growth being particularly significant. The number of outbound tourists

increased from 107 million to 155 million, a growth rate of approximately 44%, reflecting the rise in residents' consumption capacity and the effectiveness of reforms to facilitate travel. During the same period, although inbound tourism maintained growth, the rate was relatively slow, increasing from 129 million to 145 million, with an average annual growth rate of about 2.4%, indicating that there is still room for improvement in China's competitiveness in inbound tourism.

From 2020 to 2022, the global public health emergency had a severe impact on international tourism, causing a sharp decline in the number of people traveling in and out of China. The volume of outbound tourists dropped to around 15% of the 2019 level, and inbound tourism also saw a significant reduction, especially in traditional source markets like Europe and the United States, where the decline was particularly noticeable. The tourism industry entered a deep adjustment phase.

With the gradual lifting of domestic and international travel restrictions since 2023, the market has entered a phase of gradual recovery. By 2024, outbound tourism volume rebounded to 123 million trips, approximately 80% of the 2019 level; inbound tourism recovered to 132 million trips, exceeding the 2019 level by over 90%, showcasing a significant recovery trend. This rebound is attributed to a series of positive measures, including the relaxation of visa-free policies for transiting passengers and reforms to facilitate payment convenience, marking the Chinese tourism market's return to a high-quality development track.

4.2 Current Status of International Tourism Development between China and Turkey

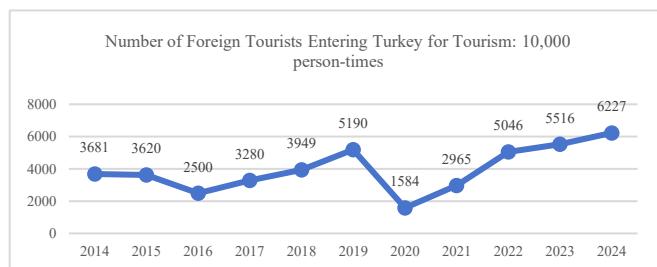


Figure 2: Number of Foreign Tourists Entering Turkey for Tourism

Data source: Ministry of Culture and Tourism of Turkey.

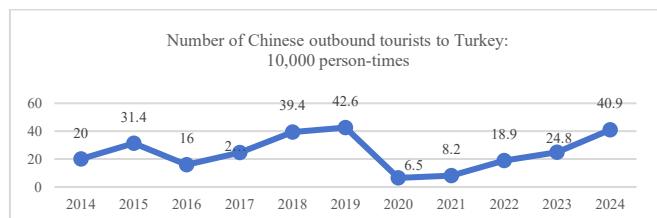


Figure 3: Number of Chinese outbound tourists to Turkey

Data source: Ministry of Culture and Tourism of Turkey.

Over the past decade, Turkey's inbound tourism market has shown a strong growth trend amid fluctuations, and Chinese tourists to Turkey, as a component of this market, have both common characteristics with the overall market and distinct features of their own.

As shown in Figures 2 and 3, the data from both countries

reveal a common fluctuation trend: Turkey's tourism market is deeply affected by the international environment. In 2016, the total number of inbound tourists to Turkey decreased by approximately 30.9% year-on-year, and the number of Chinese tourists to Turkey also dropped significantly by 49.0%. With the improvement of the international travel environment, the market gradually recovered, reaching a massive 107.6% increase from the 2016 low point by 2019, with a total of 51.9 million tourists; the number of Chinese tourists also grew by 166.3%, reaching 426,000. In 2020, global mobility restrictions severely impacted the market, causing the total number of tourists in Turkey to plummet by 69.5%, and the number of Chinese tourists to fall by 84.7%. Subsequently, as the international exchange order recovered, both experienced a rapid rebound. By 2024, the total number of tourists in Turkey had grown by 20.0% compared to 2019, reaching a historical high of 62.27 million; the number of Chinese tourists also recovered to 409,000, demonstrating strong market resilience.

The core difference lies in absolute scale and market share. Turkey attracts a massive base of global tourists, surpassing 62 million in 2024. In contrast, while the scale of Chinese tourists to Turkey has been growing continuously, reaching a historical peak of 409 thousand in 2024, its share in Turkey's overall inbound market remains relatively small (about 0.66%). This indicates that the Chinese market is still emerging for Turkey, while also suggesting its future holds significant growth potential and development space.

Despite similar trends, there are structural differences in their recovery strength and growth momentum. Turkey's global source market has recovered more rapidly, surpassing the 2019 level as early as 2022 and continuing to grow steadily. China's market recovery has been relatively steady, only basically returning to the 2019 peak in 2024. This difference suggests that Turkey's tourism attractiveness relies more heavily on its traditional source markets (such as Europe), while China's market growth is more dependent on the deepening of bilateral relations, the increase in direct flights, and targeted marketing and service improvements for Chinese tourists.

5. Import and Export Trade

5.1 Current Development Status of China's Import and Export Trade

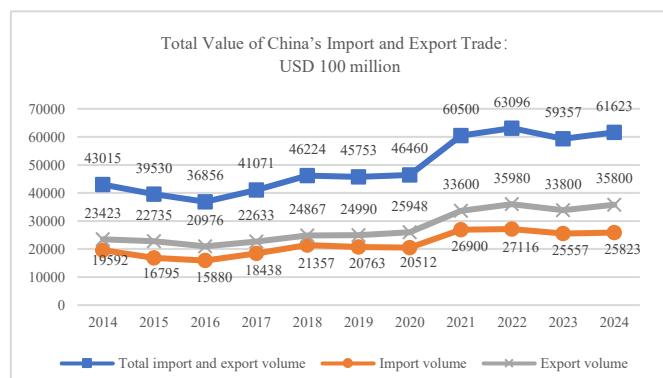


Figure 4: Total Value of China's Import and Export Trade

Data source: General Administration of Customs of China and National Bureau of Statistics.

Over the past decade, China's import and export trade has undergone profound changes in terms of scale, structure, and resilience. As shown in Figure 4, the development of China's total import and export trade over the past decade exhibits a clear "V-shaped" rebound and step-like rise. In 2014, the total value started at \$4.3015 trillion, then declined for two consecutive years due to the global trade environment and domestic structural adjustments, reaching a low point of \$3.6856 trillion in 2016. Subsequently, a recovery process began, returning to the \$4 trillion platform in 2017, and reached a peak of \$4.6460 trillion in 2020 amid fluctuations.

The real leap occurred between 2021 and 2022, with the total value continuously surpassing the \$6 trillion mark. In 2022, it hit a historical peak of \$6.3096 trillion, an increase of over 71% from the 2016 low point, marking a new scale for China's foreign trade. Although the total value fell to \$5.9357 trillion in 2023 due to factors such as weakened external demand, it rebounded to \$6.1623 trillion in 2024, demonstrating strong resilience and adaptability.

Overall, China surpassed the United States with a total import and export volume of \$4.16 trillion in 2013 to become the world's largest goods trading nation, and has continuously maintained this position through 2024. Trade development has shifted from a simple pursuit of scale growth to a new phase that places greater emphasis on high quality and security stability.

5.2 Current Status of China-Turkey Import and Export Trade Development

As shown in Table 1, the economic and trade relationship between the two countries exhibits the overall characteristics of continuous expansion in scale, high degree of complementary structure, and China maintaining a significant surplus for a long time. The total trade volume between China and Turkey increased from 27.74 billion US dollars in 2014 to 43.4 billion US dollars in 2023 (slightly declining to 42.88 billion US dollars in 2024), with an average annual growth rate of about 4.5%. China has firmly established its position as Turkey's second-largest trading partner and second-largest source of imports.

Table 1: China-Turkey Bilateral Trade Data (2014-2024): USD 100 million (Data sources: General Administration of Customs of China, Turkish Statistical Institute)

Year	Total import and export volume	China's exports to Turkey	China's imports from Turkey	Trade surplus
2014	277.4	248.8	28.6	220.2
2015	272.7	248.6	24.1	224.5
2016	194.6	166.8	27.8	139
2017	265.8	238.6	27.2	211.4
2018	215.5	177.9	37.6	140.3
2019	210.8	184.9	25.9	159
2020	240.8	203.6	37.2	166.4
2021	342.3	291.9	50.4	241.5
2022	385.5	340.3	45.2	295.1
2023	434	388.7	45.3	343.4
2024	428.8	381.1	47.7	333.4

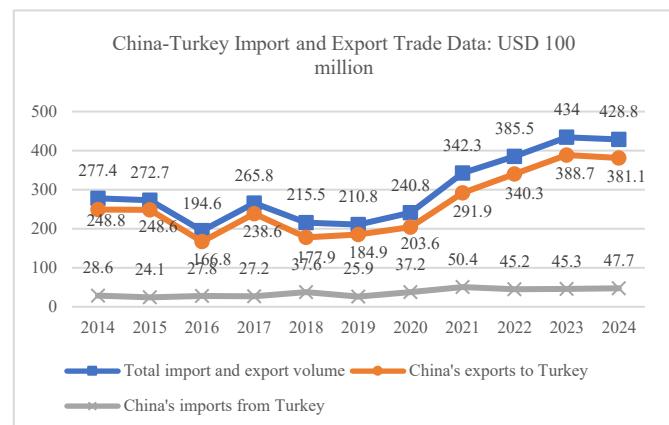


Figure 5: China-Turkey import and export trade data

Data source: General Administration of Customs of China, Turkish Statistics Institute.

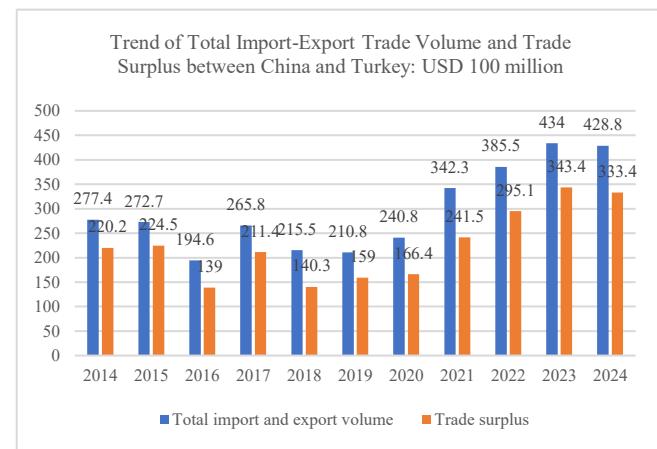


Figure 6: Trend of Total Import-Export Trade Volume and Trade Surplus between China and Turkey

As shown in Figures 5 and 6, the most significant feature of China-Turkey bilateral trade over the past decade is export-led growth and a rigid expansion of trade surplus. The fluctuation trajectory of the total trade volume closely aligns with China's export volume to Turkey, with a correlation coefficient close to 0.95. For example, the total volume increased from \$19.46 billion in 2016 to \$43.4 billion in 2023, with exports also growing in tandem (from \$16.68 billion to \$38.87 billion). This led to the trade surplus closely following export growth, expanding steadily from \$22.02 billion in 2014 to a peak of \$34.34 billion in 2023, representing a 56% increase over the decade.

In contrast, China's imports from Turkey have shown low-level resilience, fluctuating narrowly within the range of \$2.5 billion to \$5 billion over the long term, even failing to surpass \$5 billion during the record-high total volume in 2022-2024. This phenomenon reveals the deep structural reasons behind China-Turkey trade: Turkey's persistent and strong reliance on Chinese-made industrial goods, machinery, and consumer electronics, while its exports to China face bottlenecks due to a single product structure (mainly concentrated in specific agricultural products or raw materials) and insufficient market competitiveness.

In summary, the essence of China-Turkey trade relations is highly asymmetric complementarity. Exports are the sole engine driving both the total volume and the surplus, while the slow growth of imports has become the key constraint on

trade balance. The healthy development of bilateral trade in the future hinges on enhancing Turkey's export capacity to China.

6. Conclusion and Recommendations

6.1 Conclusion

This paper analyzes the data on the number of international tourists between China and Turkey and the total value of import and export trade from 2014 to 2024 based on existing statistical analysis methods, aiming to explore the correlation between international tourism and import and export trade. The conclusions are as follows:

(1) The interrelationship between tourism and trade in China and Turkey is context-dependent. When facing major external shocks together (such as the situation fluctuations in 2016 and the global public health events in 2020-2021), there will be short-term co-movement, which demonstrates the co-varying feature of the two under systemic risks.

(2) During normal development periods, the two diverge due to differences in driving mechanisms. Trade is dominated by macroeconomic factors, while tourism relies more on consumer willingness. Trade is more influenced by macroeconomic and industrial complementarity, whereas tourism depends more on individual consumer willingness and cross-border policy convenience. This is typified by the cumulative decline of trade volume by about 20% from 2017 to 2019, while the number of tourists visiting Turkey increased by 72%; in 2023-2024, the trade volume entered a high-level stabilization phase, yet the number of tourists continued to recover rapidly, with an increase of 65%.

(3) The driving effect of tourism on trade exhibits a lag effect. The growth of tourism often precedes trade expansion, and the effects it brings, such as market awareness and business connections, need a certain period to translate into trade results. Looking from 2014 to 2024, the number of Chinese tourists visiting Turkey doubled, while the total China-Turkey trade volume only achieved a significant increase after 2021, reaching its historical peak in 2023. This indicates that the promotion of "flow of people" to "flow of goods" is a gradual process.

6.2 Recommendations

Firstly, China and Turkey should promote the integrated model of "Business + Tourism," designing high-value-added thematic tourism routes leveraging platforms such as international exhibitions and investment promotions to foster deep integration of personnel exchanges and economic and trade interactions, enhancing the synergistic effect of "flow of people" driving "flow of goods".

Secondly, establish a China-Turkey government - to - government dialogue mechanism for economic and trade and tourism cooperation, jointly build a coordinated response system for emergencies, enhance the resilience of bilateral relations, and reduce the impact of sudden external environmental changes on economic and trade and cultural exchanges.

Finally, Turkey should expand the export of its competitive products, such as agricultural products and specialty industrial goods, to China through channels like the China International Import Expo, optimize the trade structure, gradually improve China's long-term substantial trade surplus situation, and promote balanced and sustainable bilateral trade development.

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