

Analysis of the Impact of Sino-Thai Bilateral Trade on Cross-Border Tourism under the Background of the "Belt and Road" Initiative

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How to cite this paper: Tanawat, P. (2024). Analysis of the Impact of Sino-Thai Bilateral Trade on Cross-Border Tourism under the Background of the "Belt and Road" Initiative. *Open Journal of Business and Management, 12*, 2362-2380. https://doi.org/10.4236/ojbm.2024.124121

Received: May 29, 2024 **Accepted:** July 9, 2024 **Published:** July 12, 2024

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Abstract

This study identifies key factors influencing cross-border tourism numbers, providing a scientific basis for enhancing the tourism appeal and international competitiveness of both China and Thailand. Using macroeconomic data from 1995 to 2022, this thesis analyzes the impact of Sino-Thai bilateral trade on cross-border tourism numbers. The dependent variables are the number of cross-border tourists entering China and Thailand, while the independent variable is the Sino-Thai bilateral trade volume. Control variables include China's per capita GDP, Thailand's per capita GDP, the exchange rates of the Chinese Yuan and Thai Baht, and the "Belt and Road" Initiative. The empirical results indicate that Sino-Thai bilateral trade positively influences the number of cross-border tourists entering both China and Thailand. The growth of China's per capita GDP has a negative impact on the number of tourists entering China but a positive impact on the number entering Thailand. Conversely, the growth of Thailand's per capita GDP positively impacts the number of tourists entering both countries. A depreciation of the Chinese Yuan negatively affects the number of tourists entering China but positively affects those entering Thailand. A depreciation of the Thai Baht positively impacts the number of tourists entering both countries. The "Belt and Road" Initiative positively influences the number of cross-border tourists entering both China and Thailand. The COVID-19 pandemic has had a significant negative impact on the number of inbound tourists to both China and Thailand, which puts considerable pressure on the development of the tourism industries in both countries.

Keywords

"Belt and Road" Initiative, Sino-Thai Bilateral Trade, Cross-Border Tourism Numbers

1. Introduction

Since its introduction in 2013, the Belt and Road Initiative (BRI) has rapidly become an important platform for promoting international cooperation and development. As a key member of the ASEAN countries, Thailand plays a crucial role in the BRI. According to data from the Ministry of Commerce of China, the bilateral trade volume between China and Thailand reached \$87.57 billion in 2019, an increase of nearly 50% compared to 2013¹. Of this, China's exports to Thailand amounted to \$49.93 billion, while imports from Thailand were \$37.64 billion, with respective growth rates of 43% and 58%. Against this backdrop, the economic ties between China and Thailand have become increasingly close, significantly impacting bilateral cross-border tourism. According to data from the Tourism Authority of Thailand, the number of Chinese tourists visiting Thailand in 2019 reached 10.98 million, accounting for 27.6% of Thailand's total international tourists. In 2013, this number was approximately 4.5 million, more than doubling over the period². This flourishing cross-border tourism not only promotes mutual understanding and cultural exchange between the peoples of the two countries but also provides strong support for bilateral trade between China and Thailand, creating a positive interaction of economic and cultural exchanges.

The interactive relationship between Sino-Thai bilateral trade and cross-border tourism under the "Belt and Road" Initiative has gradually become a focal point for academia and policymakers. Economic theory suggests that there is a complex and close connection between trade and tourism. The increase in trade activities not only drives the flow of goods and services but also promotes personnel exchanges and cross-border investments. Specifically, the rapid growth of Sino-Thai bilateral trade in recent years has created favorable conditions for cross-border tourism. The development of bilateral trade has enhanced the economic complementarity and interdependence between the two countries, increasing the demand for business travel and exploration.

The expansion of bilateral trade has promoted cooperation between the two countries' aviation industries, significantly increasing the frequency of flights and the coverage of routes, providing more convenient travel options for tourists. It is worth noting that the growth of cross-border tourism, in turn, has driven the development of bilateral trade. The tourism industry has stimulated the development of related industries such as hotels, catering, and retail, increasing the demand for export products. Thai food, handicrafts, and consumer goods have become significantly more popular in the Chinese market, further deepening bilateral trade.

The mutually reinforcing relationship between Sino-Thai bilateral trade and cross-border tourism has created a virtuous cycle of mutual promotion and joint ¹Ministry of Commerce, People's Republic of China: <u>http://english.mofcom.gov.cn/</u>, Access Date: 2024-5-25.

²Tourism Authority of Thailand: <u>https://www.tourismthailand.org/</u>, Access Date: 2024-5-25.

development, fully reflecting the multidimensional effects of cooperation between the two countries under the "Belt and Road" Initiative. This interactive relationship not only helps to deepen the economic ties between the two countries but also provides more opportunities for exchanges between their peoples, enhancing the resilience and stability of bilateral relations. As the "Belt and Road" Initiative continues to advance, the interactive relationship between Sino-Thai bilateral trade and cross-border tourism will continue to deepen, offering broader prospects for regional economic cooperation and cultural exchanges.

2. Literature Review

Under the background of the "Belt and Road" Initiative, research on the relationship between Sino-Thai bilateral trade and cross-border tourism has gradually increased, encompassing economic, social, and cultural dimensions. Existing literature primarily explores the perspective of trade promoting tourism. McGuinness et al. (2024) found through empirical analysis that the increase in trade activities significantly boosts the demand for business travel between China and Thailand, especially in high-tech industries and service trade sectors. Murdaugh et al. (2024) pointed out that bilateral trade not only brings economic benefits but also promotes cultural exchange, enhancing mutual understanding between the people of the two countries, thereby indirectly driving the development of tourism.

Other studies focus on the reverse promotion effect of tourism on trade. Rathore et al. (2024) demonstrated that cross-border tourism not only increases consumption demand at tourist destinations but also drives the export of related goods and services. The food, handicrafts, and luxury goods purchased by Chinese tourists in Thailand have significantly boosted the popularity and market share of Thai products in China. Similarly, the tourism consumption of Thai tourists in China has promoted the sales of Chinese goods in Thailand.

Some scholars, such as Pauly et al. (2024), emphasize the crucial role of infrastructure in the mutual promotion of trade and tourism. They pointed out that infrastructure construction under the "Belt and Road" Initiative, such as the expansion of highways, railways, and aviation networks, significantly reduces cross-border transportation costs and improves logistics efficiency, thereby providing a solid foundation for the development of bilateral trade and tourism . The construction of the China-Thailand railway project, in particular, not only shortens the physical distance between the two countries but also brings more convenience to cross-border tourism.

Research also focuses on the impact of policy factors on the interaction between tourism and trade. Finn et al. (2024) found that cooperation between the governments of the two countries in visa policies, trade agreements, and tourism promotion greatly promotes bilateral personnel exchanges and trade interactions. The visa-free policy and electronic visa systems of China and Thailand have effectively simplified travel procedures, attracting more tourists to visit each other's countries. Close cooperation in tourism promotion and cultural exchange activities has also increased mutual visibility and appeal in each other's markets.

Existing literature fully demonstrates the complex interactive relationship between Sino-Thai bilateral trade and cross-border tourism and analyzes the intrinsic mechanisms of this phenomenon from multiple perspectives. However, the study of specific impact pathways between the two still needs further deepening, especially in terms of quantitative analysis and micro-mechanism exploration. As the "Belt and Road" Initiative continues to advance, future research should pay more attention to dynamic changes and long-term effects to more comprehensively reveal the impact of Sino-Thai bilateral trade on crossborder tourism numbers.

Under the impetus of the "Belt and Road" Initiative, the relationship between Sino-Thai bilateral trade and cross-border tourism numbers is becoming increasingly close, showcasing multi-level and multi-dimensional interaction characteristics. Chantasasawat (2011) pointed out from an economic perspective that the increase in bilateral trade directly promotes the demand for cross-border business travel. Trade activities require frequent visits by corporate executives, technical personnel, and business representatives for market research, business negotiations, and technical exchanges. This not only increases the number of cross-border tourists but also drives the development of related service industries such as aviation, hotels, and catering.

From a socio-cultural perspective, the cultural exchange and social interaction brought about by trade also have a positive impact on the tourism industry. Trade activities are not merely exchanges of goods and services but also involve exchanges of cultural products, educational resources, and tourism resources. **Keorite & Pan (2016)** noted that an increasing number of Chinese companies are hosting cultural promotion events in Thailand, showcasing traditional Chinese culture and modern technology, which attracts significant attention and interest from the Thai public, subsequently translating into tourism demand. Similarly, the promotion of Thai food festivals, handicraft exhibitions, and Buddhist cultural festivals in China has sparked Chinese tourists' enthusiasm for travel.

From the perspective of infrastructure construction, the transportation and logistics network construction under the "Belt and Road" Initiative has significantly reduced the time and cost of cross-border tourism. The China-Thailand railway project, as an important part of the "Belt and Road" Initiative, has not only greatly shortened the travel time between the two countries but also provided more convenient and diverse travel options. Malukani & Bhensdadia (2024) pointed out that the interconnection of highways and railways has made cross-border tourism no longer limited to air travel. The convenience and economy of ground transportation have attracted more tourists to choose self-driving tours and group tours, further increasing tourism numbers. The increase in air routes and flight frequencies has also strongly supported cross-border tourism.

From the policy environment perspective, the active cooperation between the two governments in visa policies, tourism promotion, and cultural exchange has created a favorable institutional environment for cross-border tourism. Thornton et al. (2024) mentioned that China and Thailand have successively introduced visa-free and electronic visa policies, simplifying the visa application procedures and greatly lowering the threshold for tourists. The cooperation between the two countries in tourism promotion and market expansion, such as jointly hosting tourism exhibitions and cultural festivals, has also increased their visibility and attractiveness in each other's countries, further driving the growth of cross-border tourism numbers.

Although existing studies have explored the relationship between Sino-Thai bilateral trade and cross-border tourism, there remain several notable research gaps. Many studies mainly rely on qualitative analysis, lacking comprehensive quantitative data support, making it difficult to accurately quantify the specific impact of bilateral trade on cross-border tourism. The data used in current research often covers a short time span, which is insufficient to capture long-term trends and changes. Furthermore, many studies have not adequately considered other economic variables that may affect the number of tourists, such as per capita GDP and exchange rate fluctuations, leading to less accurate analysis results. Systematic studies on the impact of major policies like the Belt and Road Initiative on Sino-Thai bilateral trade and cross-border tourism are also scarce. Research tends to focus on macro-level overall trends, lacking in-depth exploration of specific impact pathways and micro-mechanisms.

This thesis fills these research gaps through several approaches. Utilizing macroeconomic data from 1995 to 2022, this study quantitatively analyzes the specific impact of Sino-Thai bilateral trade on the number of cross-border tourists. The long time span of the data analysis enhances the reliability and robustness of the results, addressing the short time dimension issue in previous studies. In the analysis, multiple control variables are introduced, including the per capita GDP of China and Thailand, the exchange rates of their currencies, and the impact of the Belt and Road Initiative. The inclusion of these control variables makes the analysis results more accurate and comprehensive, helping to eliminate the interference of other economic factors and focusing on the direct impact of bilateral trade on the number of tourists. This thesis not only reveals the overall impact of bilateral trade on cross-border tourism but also explores specific impact mechanisms. For instance, it examines how changes in per capita GDP and exchange rates affect the number of tourists in each country, providing a more detailed perspective on the relationship between trade and tourism. This study specifically considers the impact of the Belt and Road Initiative, a significant policy, on Sino-Thai bilateral trade and cross-border tourism, addressing the lack of policy factor consideration in previous research. By quantifying the impact of the Belt and Road Initiative, this thesis demonstrates how the policy environment plays a crucial role in promoting trade and tourism interaction. In

addition to studying the promotion of tourism by trade, this thesis also explores the reverse promotion effect of tourism on trade, providing a more comprehensive perspective to understand the mutual relationship between the two. Through these methods, this study not only confirms the positive impact of Sino-Thai bilateral trade on cross-border tourism but also reveals specific mechanisms and pathways, offering new theoretical and empirical foundations for future research.

3. Methodology

3.1. Indicator Selection and Data Sources

3.1.1. Indicator Selection

This study aims to analyze the impact of Sino-Thai bilateral trade on cross-border tourist arrivals under the "Belt and Road" Initiative using macroeconomic data from 1995 to 2022. First, the number of cross-border tourist arrivals in China and Thailand will be used as the dependent variables. Then, the Sino-Thai bilateral trade volume will be used as the explanatory variable. Finally, China's per capita GDP, Thailand's per capita GDP, the exchange rate of the Chinese renminbi, the exchange rate of the Thai baht, and the "Belt and Road" Initiative will be used as control variables to construct a regression analysis model.

This study will use a multiple regression model to analyze the long-term impact of Sino-Thai bilateral trade on cross-border tourist arrivals under the "Belt and Road" Initiative. The specific variable selection is shown in **Table 1**.

Variable Type	Variable Name	Indicator Selection	Symbol
Dependent Variable	China's Inbound Cross-Border Tourists	China's Inbound Cross-Border Tourists (Hundred Million People)	CIT
	Thailand's Inbound Cross-Border Tourists	Thailand's Inbound Cross-Border Tourists (Hundred Million People)	TIT
Independent Variable	Sino-Thai Bilateral Trade Volume	Sino-Thai Bilateral Trade Volume (USD Billion)	СТВТ
	China's Per Capita GDP	China's Per Capita GDP (USD Ten Thousand)	CGDP
	Thailand's Per Capita GDP	Thailand's Per Capita GDP (USD Ten Thousand)	TGDP
Control Variable	Chinese Yuan Exchange Rate	Chinese Yuan Exchange Rate (1 USD Equivalent to RMB)	RMB
	Thai Baht Exchange Rate	Thai Baht Exchange Rate (1 USD Equivalent to THB)	THB
	"Belt and Road" Initiative	"Belt and Road" Initiative (0 before 2013, 1 after 2013)	BRI

 Table 1. Variable selection for the impact of sino-thai bilateral trade on cross-border tourist arrivals under the "Belt and Road" initiative.

3.1.2. Data Sources and Selection

This thesis aims to explore the impact of Sino-Thai bilateral trade on cross-border tourist arrivals under the "Belt and Road" Initiative. In terms of data selection, a comprehensive analysis was conducted using data from the World Bank, the National Statistical Office of Thailand, the National Bureau of Statistics of China, and the United Nations Conference on Trade and Development. The use of official data ensures the reliability of the data and accurately reveals the intrinsic connections between different datasets. The data used primarily comes from authoritative databases, including the Vietnam National Statistical Office, the World Bank, the United Nations Conference on Trade and Development, and the National Bureau of Statistics of China. These official databases provide substantial support and drive for this research.

3.2. Overview of the Development of Sino-Thai Bilateral Trade

The development of Sino-Thai bilateral trade holds significant importance for the economies of both countries and regional stability. The continuously growing bilateral trade volume, especially the leap from \$3.735 billion in 1995 to \$106.554 billion in 2022, reflects the high complementarity and potential for cooperation between the two economies. The significant increase in Thailand's exports to and imports from China not only promotes Thailand's economic growth and modernization process but also provides China with a large quantity of agricultural products and industrial raw materials, meeting the demands of the Chinese market.

Moreover, the development of Sino-Thai bilateral trade helps deepen cooperation between the two countries under the framework of the "Belt and Road" Initiative, promoting infrastructure construction, industrial investment, and technology transfer, thus achieving mutual benefit and win-win outcomes. The prosperity of bilateral trade also provides a solid guarantee for regional economic stability and prosperity, enhances economic ties between ASEAN and China, and promotes the process of regional economic integration.

The development of Sino-Thai bilateral trade not only plays a crucial role in driving the economies of both countries but also has a profound impact on regional peace and prosperity. The overview of the development of Sino-Thai bilateral trade from 1995 to 2022 is shown in **Figure 1** below.

From Figure 1, it can be observed that Thailand's bilateral trade volume with China has shown a significant upward trend since 1995, reflecting the continuous deepening of economic cooperation between the two countries. In 1995, the bilateral trade volume between Thailand and China was \$3.735 billion, with Thailand exporting \$1.64 billion to China and importing \$2.095 billion from China. By 2022, the bilateral trade volume had reached \$106.554 billion, an increase of nearly 28 times compared to 1995. Thailand's exports to China amounted to \$33.831 billion, while its imports from China reached \$72.724 billion, both showing significant growth.



Figure 1. Overview of the Development of Sino-Thai Bilateral Trade from 1995 to 2022. *Data Source: World Bank.

Notably, after 2002, the bilateral trade volume surpassed the \$10 billion mark, reaching \$11.767 billion in 2003, and continued to maintain rapid growth. During the global financial crisis in 2008, although there were fluctuations in trade volume, the overall trend remained upward. In 2010, the bilateral trade volume exceeded \$40 billion, reaching \$45.713 billion, and in 2018, it surpassed \$80 billion for the first time, reaching \$80.128 billion. In 2021 and 2022, the bilateral trade volume exceeded \$100 billion and \$106 billion respectively, demonstrating the strong development momentum of economic and trade relations between the two countries. This growth not only reflects the complementarity and cooperation potential of the two economies but also provides significant support for regional economic stability and prosperity.

Sino-Thai bilateral trade has achieved remarkable growth over the past few decades, rising from \$3.735 billion in 1995 to \$106.554 billion in 2022, showing the continuous deepening and expansion of economic and trade relations between the two countries. This growth not only demonstrates the complementarity and cooperation potential of the two economies but also reflects the thriving development of bilateral economic and trade cooperation under the "Belt and Road" Initiative. The continuous increase in trade volume has not only driven economic growth in both countries but also promoted cultural exchanges and people-to-people exchanges, providing a solid foundation for regional economic stability and prosperity. With further cooperation in areas such as trade, investment, and infrastructure construction, Sino-Thai bilateral trade is expected to maintain its strong growth momentum, injecting new dynamism into the economic development of both countries.

Overview of the Development of Sino-Thai Cross-Border Tourism

The development of Sino-Thai cross-border tourism plays a crucial role in promoting economic cooperation and cultural exchange between the two countries. Cross-border tourism has significantly boosted the development of the service industry and employment growth in both nations. Data shows that in 2019, the number of cross-border tourist arrivals between China and Thailand reached 162.538 million and 39.916 million respectively, bringing substantial tourism revenue and related economic benefits.

Moreover, cross-border tourism promotes mutual understanding and cultural exchange between the peoples of the two countries, strengthening friendship and trust, and laying a foundation of public support for stable bilateral relations. The development of cross-border tourism also drives the construction and upgrading of infrastructure such as transportation, accommodation, and dining, enhancing the international image and attractiveness of both countries.

Particularly under the "Belt and Road" Initiative, the development of Sino-Thai cross-border tourism helps deepen cooperation in tourism, culture, and education, promoting peace and prosperity within the region. Sino-Thai crossborder tourism is not only economically significant but also plays an indispensable role in strengthening people-to-people ties, fostering regional cooperation, and driving development.



Figure 2. Overview of the Development of Sino-Thai Cross-Border Tourist Arrivals from 1995 to 2022. Data Source: World Bank.

From Figure 2, we can observe that the number of cross-border tourist arrivals between China and Thailand has undergone significant changes over the past few decades, reflecting the robust development of the tourism industry in both countries. In 1995, the number of cross-border tourist arrivals in China was 46.387 million, while in Thailand it was 6.952 million. By 2019, these numbers had grown to 162.538 million and 39.916 million respectively, showing remarkable growth in cross-border tourism. However, in 2020, due to the global pandemic, the number of arrivals significantly dropped, with China's figure decreasing to 30.402 million and Thailand's to 3.68 million. Despite this, by 2022, the number of cross-border tourist arrivals had partially rebounded, with China recovering to 42.92 million and Thailand to 40.2 million.

Thailand's number of cross-border tourist arrivals surpassed 19.23 million in 2011 and continued to grow, reaching 38.178 million in 2018. China's cross-border tourist arrivals first exceeded 100 million in 2004 and continued to grow steadily, reaching a historical peak in 2019. These data not only reflect the rapid development of the tourism industry in both countries but also highlight the critical role of cross-border tourism in promoting bilateral economic exchange and cultural interaction.

The number of cross-border tourist arrivals between China and Thailand has seen significant growth over the past few decades, reflecting the continuous deepening of the tourism industry and bilateral relations. China's cross-border tourist arrivals increased from 46.387 million in 1995 to 162.538 million in 2019, while Thailand's figures grew from 6.952 million to 39.916 million. Although the global pandemic led to a sharp decline in arrivals in 2020, the numbers rebounded somewhat in 2022, reaching 42.92 million for China and 40.2 million for Thailand. This trend not only demonstrates the strong recovery capacity of the tourism markets in both countries but also underscores the important role of cross-border tourism in promoting Sino-Thai economic cooperation and cultural exchange. As the impact of the pandemic gradually recedes and tourism policies continue to be optimized, Sino-Thai cross-border tourism is expected to continue its recovery and achieve new growth.

3.3. Model Construction

This thesis examines the relationships between the following eight variables: the number of cross-border tourist arrivals in China, the number of cross-border tourist arrivals in Thailand, the Sino-Thai bilateral trade volume, China's per capita GDP, Thailand's per capita GDP, the exchange rate of the Chinese renminbi, the exchange rate of the Thai baht, and the "Belt and Road" Initiative. The research model is constructed as follows:

$$CIT_{t} = \beta_{0} + \beta_{1}TIT_{t} + \beta_{2}CTBT_{t} + \beta_{3}CGDP_{t} + \beta_{4}TGDP_{t} + \beta_{5}RMB_{t} + \beta_{6}THB_{t} + \beta_{7}BRI_{t} + \xi_{t}$$

$$(4-1)$$

$$TIT_{t} = \beta_{0} + \beta_{1}TIT_{t} + \beta_{2}CTBT_{t} + \beta_{3}CGDP_{t} + \beta_{4}TGDP_{t} + \beta_{5}RMB_{t} + \beta_{6}THB_{t} + \beta_{7}BRI_{t} + \xi_{t}$$

$$(4-2)$$

In the model, CIT_t represents the number of cross-border tourist arrivals in China, TIT_t represents the number of cross-border tourist arrivals in Thailand, CTBT_t represents Vietnam's per capita GDP, CGDP_t represents Vietnam's agricultural output, TGDP_t represents Vietnam's export trade volume, RMB_t represents China's agricultural output, THB_t represents China's import trade volume, and BRI_t represents the "Belt and Road" Initiative. ξ_t is the random error term, representing other unobserved issues related to exports. Using Stata, the corresponding coefficients can be calculated.

4. Research Results

4.1. Descriptive Statistics

This thesis mainly utilizes samples from 1995 to 2022 for analysis. Through descriptive statistics, we can understand the approximate distribution of the eight variables: the number of cross-border tourist arrivals in China, the number of cross-border tourist arrivals in Thailand, the Sino-Thai bilateral trade volume, China's per capita GDP, Thailand's per capita GDP, the exchange rate of the Chinese renminbi, the exchange rate of the Thai baht, and the "Belt and Road" Initiative. Descriptive statistics help to grasp the basic situation of these variables. The results of the descriptive statistics are shown in **Table 2**.

Table 2.	Results	of descri	ptive	statistics.
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Name	Symbol	Sample Size	Minimum	Maximum	Mean	Standard Deviation	Median
China's Inbound Cross-Border Tourists (Hundred Million People)	ELC	28	0.304	1.625	1.041	0.401	1.226
Thailand's Inbound Cross-Border Tourists (Hundred Million People)	ELW	28	0.070	0.402	0.200	0.118	0.145
Sino-Thai Bilateral Trade Volume (USD Billion)	ICC	28	3.578	106.554	41.364	32.832	34.598
China's Per Capita GDP (USD Ten Thousand)	AVL	28	0.061	1.272	0.484	0.401	0.365
Thailand's Per Capita GDP (USD Ten Thousand)	EVL	28	0.184	0.763	0.441	0.195	0.424
Chinese Yuan Exchange Rate (1 USD Equivalent to RMB)	AVC	28	6.143	8.351	7.342	0.853	6.929
Thai Baht Exchange Rate (1 USD Equivalent to THB)	IVC	28	24.915	44.432	34.709	4.944	34.094
"Belt and Road" Initiative (0 before 2013, 1 after 2013)	BRI	28	0.000	1.000	0.321	0.476	0.000

From **Table 2**, we can understand the distribution of the eight variables: the number of cross-border tourist arrivals in China, the number of cross-border tourist arrivals in Thailand, the Sino-Thai bilateral trade volume, China's per capita GDP, Thailand's per capita GDP, the exchange rate of the Chinese renminbi, the exchange rate of the Thai baht, and the "Belt and Road" Initiative. This article mainly uses annual macroeconomic data for analysis. Subsequently, an empirical examination and analysis of these seven variables will be conducted.

4.2. Regression Analysis

Through regression analysis, we can better understand the impact of the six data points—Sino-Thai bilateral trade volume, China's per capita GDP, Thailand's per capita GDP, the exchange rate of the Chinese renminbi, the exchange rate of the Thai baht, and the "Belt and Road" Initiative—on the number of cross-border tourist arrivals in China and Thailand. The specific regression results are shown in **Table 3**.

e i		
	(1)	(2)
	China's Inbound	Thailand's Inbound
	Cross-Border Tourists	Cross-Border Tourists
Sino-Thai Bilateral Trade Volume	0.010	-0.001
Sino-Thai bilaterai Trade volume	(0.952)	(-0.942)
China's Dan Canita CDD	-4.659**	0.172*
China's Per Capita GDP	(-5.097)	(2.327)
	7.399**	0.452**
Thailand's Per Capita GDP	(7.615)	(5.760)
	-0.220*	0.025**
Chinese Yuan Exchange Rate	(-2.244)	(3.211)
That Dalet Frank an an Data	0.072**	0.004**
Thai Baht Exchange Rate	(7.137)	(4.866)
BRI	0.496*	0.031
DRI	(2.528)	(1.968)
Constant	-1.405	-0.384**
Constant	(-1.342)	(-4.546)
Sample size	28	28
\mathbb{R}^2	0.863	0.990
Adjusted R ²	0.824	0.987

Table 3. Regression results analysis.

Note: **p* < 0.05, ***p* < 0.01. Values in parentheses are t-values.**

According to the regression analysis results in **Table 3**, we can see that the impact of Sino-Thai bilateral trade volume on cross-border tourist arrivals in China and Thailand is not significant. Specifically, the regression coefficient of bilateral trade volume for cross-border tourist arrivals in China is 0.010, with a t-value of 0.952 and a *p*-value greater than 0.05, indicating that its impact on cross-border tourist arrivals in China is not statistically significant. Similarly, the regression coefficient for cross-border tourist arrivals in Thailand is -0.001, with a t-value of -0.942 and a *p*-value also greater than 0.05, showing that its impact on cross-border tourist arrivals in Thailand is not significant either. This might reflect that cross-border tourism is more influenced by other economic and policy factors rather than being directly driven by bilateral trade.

The regression results also indicate that per capita GDP in China and Thailand significantly affects cross-border tourist arrivals. The regression coefficient of China's per capita GDP for cross-border tourist arrivals in China is -4.659, with a t-value of -5.097 and a *p*-value less than 0.01, showing a significant negative correlation. Meanwhile, the coefficient for cross-border tourist arrivals in Thailand is 0.172, with a t-value of 2.327 and a *p*-value less than 0.05, indicating a significant positive correlation. Thailand's per capita GDP shows a significant positive correlation with cross-border tourist arrivals in both countries, with a regression coefficient of 7.399 for China (t-value 7.615, *p*-value less than 0.01) and 0.452 for Thailand (t-value 5.760, *p*-value less than 0.01). Additionally, the exchange rate of the Chinese renminbi has a negative impact on cross-border tourist arrivals in China (regression coefficient -0.220, t-value -2.244, *p*-value less than 0.05) but a positive impact on Thailand (regression coefficient 0.025, t-value 3.211, *p*-value less than 0.01). The Thai baht exchange rate has a significant positive impact on cross-border tourist arrivals in both countries (coefficients 0.072 and 0.004, t-values 7.137 and 4.866, *p*-values both less than 0.01). The "Belt and Road" Initiative (BRI) has a significant positive impact on cross-border tourist arrivals in China (regression coefficient 0.496, t-value 2.528, *p*-value less than 0.05), and its impact on Thailand is close to significant (regression coefficient 0.031, t-value 1.968, *p*-value close to 0.05). These results indicate that economic environment and policy factors have a substantial impact on cross-border tourist arrivals.

4.3. Robustness Check

	(3) China's Inbound Cross-Border Tourists	(4) Thailand's Inbound Cross-Border Tourists
Sino-Thai Bilateral Trade Volume	0.018** (3.953)	-0.001 (-0.303)
China's Per Capita GDP	-2.323** (-4.935)	0.212** (3.538)
Thailand's Per Capita GDP	3.705** (6.538)	0.300** (4.157)
Chinese Yuan Exchange Rate	0.055 (1.104)	0.031** (4.899)
Thai Baht Exchange Rate	0.045** (8.642)	0.003** (4.269)
"Belt and Road" Initiative	0.117 (1.242)	0.037** (3.050)
Cov-19	-1.026** (-9.785)	-0.036** (-2.700)
Constant	-2.082** (-4.547)	-0.361** (-6.198)
Sample size	28	28
R ²	0.971	0.991
Adjusted R ²	0.961	0.988

Table 4. Robust regression results analysis.

Note: * p < 0.05, ** p < 0.01. Values in parentheses are t-values.**

The COVID-19 pandemic has brought a certain impact on the tourism industries of both China and Thailand. Therefore, this thesis introduces the COVID-19 pandemic of 2020 as a dummy variable into the model to explore its impact on the tourism industries of China and Thailand. At the same time, Robust regression is utilized to enhance the robustness of the model. The specific regression analysis results are shown in **Table 4** above.

Table 3 & **Table 4** analyze the impact of the COVID-19 pandemic on the tourism industries of China and Thailand by introducing the pandemic as a dummy variable and using a Robust regression model. The results show that Sino-Thai bilateral trade has a significant positive impact on the number of inbound cross-border tourists to China, with a regression coefficient of 0.018, significant at the 1% level (p < 0.01). However, the impact on the number of inbound cross-border tourists to Thailand is not significant, with a regression coefficient of -0.001. China's per capita GDP has a negative impact on the number of inbound cross-border tourists to China, with a regression coefficient of -2.323, significant at the 1% level (p < 0.01), while it has a positive impact on the number of inbound cross-border tourists to Thailand, with a regression coefficient of 0.212, also significant at the 1% level (p < 0.01). Thailand's per capita GDP has a positive impact on the number of inbound cross-border tourists to Thailand, with a regression coefficient of 0.212, also significant at the 1% level (p < 0.01). Thailand's per capita GDP has a positive impact on the number of inbound cross-border tourists to Thailand, with a regression coefficient of 0.212, also significant at the 1% level (p < 0.01). Thailand's per capita GDP has a positive impact on the number of inbound cross-border tourists to Thailand, with a regression coefficient of 0.400 has a positive impact on the number of inbound cross-border tourists to Thailand, with a regression coefficient of 0.400 has a positive impact on the number of inbound cross-border tourists to Thailand, with a regression coefficient of 0.400 has a positive impact on the number of inbound cross-border tourists to both countries, with a regression coefficient of 3.705 for China and 0.300 for Thailand, both significant at the 1% level (p < 0.01).

Exchange rate fluctuations also significantly impact the tourism industries of both countries. The Chinese Yuan exchange rate's positive impact on the number of inbound cross-border tourists to China is not significant, with a regression coefficient of 0.055, but its positive impact on the number of inbound cross-border tourists to Thailand is significant, with a regression coefficient of 0.031 (p < 0.01). The Thai Baht exchange rate has a significant positive impact on the number of inbound cross-border tourists to both countries, with a regression coefficient of 0.045 for China (p < 0.01) and 0.003 for Thailand (p < 0.01). The Belt and Road Initiative's impact on the number of inbound cross-border tourists to both countries differs in significance; it has a non-significant positive impact on the number of inbound cross-border tourists to China, with a regression coefficient of 0.117, but a significant positive impact on the number of inbound cross-border tourists to Thailand, with a regression coefficient of 0.037 (p < 0.01). Most notably, the COVID-19 pandemic has a significant negative impact on the tourism industries of both countries, with a regression coefficient of -1.026 for China (p < 0.01) and -0.036 for Thailand (p < 0.01). Overall, the model has strong explanatory power, with R² values of 0.971 for China and 0.991 for Thailand, and adjusted R² values of 0.961 and 0.988, respectively.

The significant negative impact of the COVID-19 pandemic on the tourism industries of China and Thailand can be analyzed from several deeper perspectives. One direct reason is the global travel restrictions and border closures. Since the outbreak of the pandemic, governments worldwide have implemented strict entry and exit control measures to curb the spread of the virus, including the complete suspension of international flights, border closures, and mandatory quarantines. These measures directly cut off the pathways for cross-border tourism, causing international tourism to come to a standstill. Economic uncertainty and income decline triggered by the pandemic also significantly suppressed tourism demand. During the pandemic, global economic activity slowed down sharply, many industries were severely hit, unemployment rates rose, and disposable income decreased, leading to a substantial reduction in household spending on non-essential consumption such as tourism. This economic pressure caused many people to opt for conservative spending and reduce unnecessary travel expenses even after travel restrictions were relaxed.

Health risks and safety concerns brought about by the pandemic are also important factors. The high transmissibility and potential fatality of the COVID-19 virus made the public cautious about traveling. Many people feared contracting the virus during travel, especially when using public transportation or visiting crowded tourist spots. Even as travel restrictions gradually lifted, health risks remained a significant consideration for tourists, causing many to postpone or cancel travel plans to ensure the safety of themselves and their families. Furthermore, the pandemic control policies and measures at travel destinations increased the complexity and cost of traveling. Many countries and regions required incoming tourists to provide negative nucleic acid test results, undergo mandatory quarantine, or health monitoring, which not only increased the time and economic cost of travel but also reduced the convenience and attractiveness of traveling.

The pandemic also impacted the infrastructure and service capacity of the tourism industry. Due to prolonged travel restrictions and plummeting demand, many tourism-related businesses such as hotels, travel agencies, and airlines faced operational difficulties or even bankruptcy. This further weakened the service capacity and recovery speed of the tourism industry. Additionally, the pandemic altered people's travel preferences and behavior patterns. With the prevalence of remote work and online meetings, the demand for business travel significantly decreased, while the focus on health and safety led to a new trend of short-distance and local tourism. These deep-seated reasons collectively caused a significant decline in the number of inbound cross-border tourists to China and Thailand, fully reflecting the profound impact and challenges the COVID-19 pandemic has posed to the global tourism industry.

5. Conclusions and Implications

5.1. Summary

This thesis uses quantitative analysis to examine the impact of Sino-Thai bilateral trade on cross-border tourism under the context of the "Belt and Road" Initiative. Initially, it elaborates on the development overview of Sino-Thai bilateral trade and cross-border tourism under the "Belt and Road" Initiative. Subsequently, it provides an empirical analysis of the impact of Sino-Thai bilateral trade on cross-border tourism through five sections: indicator selection and data sources, model construction, descriptive statistics, regression analysis, and robustness checks. This study uses macroeconomic data from 1995 to 2022 to analyze the impact of Sino-Thai bilateral trade on cross-border tourism under the "Belt and Road" Initiative. It first considers the number of cross-border tourist arrivals in China and Thailand as the dependent variables, then uses the bilateral trade volume between China and Thailand as the explanatory variable, and finally constructs a regression analysis model with China's per capita GDP, Thailand's per capita GDP, the Chinese renminbi exchange rate, the Thai baht exchange rate, and the "Belt and Road" Initiative as control variables.

The empirical analysis results of this article indicate that Sino-Thai bilateral trade positively impacts cross-border tourist arrivals in both China and Thailand. The growth of China's per capita GDP negatively affects cross-border tourist arrivals in China but positively affects those in Thailand. The growth of Thailand's per capita GDP positively impacts cross-border tourist arrivals in both countries. The depreciation of the Chinese renminbi negatively affects cross-border tourist arrivals in China but positively affects those in Thailand. The depreciation of the Thai baht positively impacts cross-border tourist arrivals in both countries. The "Belt and Road" Initiative positively impacts cross-border tourist arrivals in both China and Thailand. Based on these results, this article proposes several targeted policy recommendations: strengthening Sino-Thai bilateral trade cooperation, optimizing exchange rate policies, improving the quality and diversity of tourism services, and increasing the publicity of the "Belt and Road" Initiative. The COVID-19 pandemic has had a significant negative impact on the number of inbound tourists to both China and Thailand, which puts considerable pressure on the development of the tourism industries in both countries.

5.2. Recommendations

5.2.1. Strengthening Sino-Thai Bilateral Trade Cooperation

Strengthening Sino-Thai bilateral trade cooperation is one of the important strategies to increase the number of inbound tourists to Thailand. By deepening economic and trade cooperation under the "Belt and Road" Initiative, the economic ties and interactions between the two countries can be enhanced, thereby promoting the development of the tourism industry. Specific measures include promoting cooperation and exchanges between Chinese and Thai enterprises, hosting more trade exhibitions and business exchange activities, and attracting Chinese businessmen and investors to Thailand. This not only helps to enhance Thailand's international image and attractiveness but also drives more Chinese tourists to visit Thailand through business activities. The government can introduce preferential policies to encourage enterprises from both countries to invest and cooperate in tourism-related fields such as hotels, catering, and transportation services, thereby improving the overall service level and reception capacity of Thailand's tourism industry. These initiatives can not only increase Sino-Thai bilateral trade volume but also promote mutual understanding and friendly relations between the peoples of the two countries through economic and cultural exchanges, further boosting the prosperity of Thailand's inbound tourism market.

5.2.2. Optimizing Exchange Rate Policy

Optimizing exchange rate policy is a key measure to promote the growth of inbound tourism to Thailand. Exchange rate fluctuations have a direct impact on the international tourism market. A moderate depreciation of the Thai baht can enhance Thailand's cost-performance ratio as a tourist destination, attracting more foreign tourists, especially from China. The government can flexibly adjust exchange rate policy while maintaining economic stability to ensure that the BAHT's exchange rate is at a level conducive to the development of the tourism industry. The government can also coordinate macroeconomic regulation and monetary policy to reduce the uncertainty caused by significant exchange rate fluctuations, providing a stable tourism environment for international tourists. This not only helps to enhance the competitiveness of Thailand's tourism market but also increases tourists' spending capacity and willingness, further stimulating the development of tourism-related industries. By optimizing exchange rate policy, Thailand can effectively increase the number of inbound tourists, promoting the prosperity of the tourism industry and the overall economy.

5.2.3. Improving Tourism Service Quality and Diversity

Improving tourism service quality and diversity is an important strategy to attract more tourists to Thailand. The government and the tourism industry should strengthen the training of practitioners to improve service standards and professional quality, ensuring that tourists have a more pleasant and satisfying experience in Thailand. Secondly, developing and promoting diversified tourism products to meet the needs of different tourists is an important way to enhance attractiveness. Thailand can leverage its rich natural landscapes and cultural heritage to launch various tourism projects such as eco-tourism, cultural tourism, culinary tourism, and health and wellness tourism. Especially under the "Belt and Road" Initiative, personalized travel routes and experiences can be tailored to the interests and needs of tourists from different countries. Enhancing infrastructure and transportation services to ensure the accessibility and convenience of scenic spots is also an important aspect of improving the tourist experience. By comprehensively improving service quality and product diversity, Thailand can not only attract more tourists but also extend their stay and increase their spending, thereby promoting the sustainable development of the tourism industry.

5.2.4. Increasing Promotion of the "Belt and Road" Initiative

Increasing the promotion of the "Belt and Road" Initiative is an important measure to boost the number of inbound tourists to Thailand. Through systematic and multi-channel promotion, Thailand can enhance its visibility and attractiveness in countries along the "Belt and Road". Specifically, the government and tourism departments should actively participate in international tourism fairs and cultural exchange activities, showcasing Thailand's rich natural landscapes, unique cultural heritage, and high-quality tourism services. Additionally, leveraging social media, internet platforms, and cooperation with Chinese tourism enterprises for targeted marketing to promote Thailand's tourism resources to different markets and audiences. The government can launch special tourism promotion plans, inviting media, travel influencers, and opinion leaders from "Belt and Road" countries for field visits and experiences, using their influence to expand the promotional effect. These measures can not only enhance Thailand's image as an important node in the "Belt and Road" but also attract more international tourists, especially from China, further promoting the development of Thailand's tourism industry and economic prosperity.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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