

### INFLUENCE OF THE CONSTRUCTION OF CHINA-THAILAND RAILWAY ON LOGISTICS AND ECONOMIC TRADE BETWEEN CHINA-YUNNAN AND THAILAND

**HAO JUNYU** 

6117195404

# AN INDEPENDENT STUDY SUBMITTED IN PARTIAL ULFILLMENT OF THE REQUIREMENTS FOR THE MASTER'S DEGREE OF BUSINESS ADMINISTRATION GRADUATE SCHOOL OF BUSINESS SIAM UNIVERSITY



### INFLUENCE OF THE CONSTRUCTION OF CHINA-THAILAND RAILWAY ON LOGISTICS AND ECONOMIC TRADE BETWEEN CHINA-YUNNAN AND THAILAND

### Thematic Certificate To HAO JUNYU

This Independent Study has been Approved as a Partial Fulfillment of the Requirement of International Master of Business Administration in International

**Business Management** 

Advisor:			
	(Dr. Zhan	ig Li)	
Date:	5	71	202/
	If	4	
(Associate Profes	sor Dr. Jon	iphong Mo	ongkhonvanit)
Acting Dean, Gradu	ate School	of Busines	ss Administration
Date	09/6	7/	2021
Siam Ur	niversity, Ba	ngkok, Tha	ailand

#### **ABSTRACT**

P .	. 1		
	11	•	•
	u		

Influence of the Construction of China-Thailand Railway on Logistics and

Economic Trade Between China-Yunnan and Thailand

By:

HAO JUNYU

Degree:

Master of Business Administration

Major:

International Business Management

Adviser:

.....

(Dr. Zhang Li)

Date: 5.1.7.1.2021

China-Thailand's railway can help make Thailand, ASEAN countries, and China inter-operable and promote regional economic co-development. China-Thailand's railway cooperation is an excellent help for Thailand to be a better role as the central hub for land transportation and geographical advantages, accept more foreign tourist passengers, raise local employment, and capital income driven by tourism development. Moreover, to promote the country's economic development and improve people's living standards. This project can deepen international trade to Thailand, Laos, and China, Soas to drive the Thai economy.

With the continuous growth of international commerce due to China and surrounding countries, the transportation and train systems have become much more vital for improving international commerce. The train transportation of China has seen vast growth as a primary strategy of commerce.

With the completion of the Bang Sue Railway Station, the central hub of the Trans-Asian Railway, at the end of 2021, the central international corridor of the China-Thailand Railway will affect the development of trade between Yunnan and Thailand. By consulting information and data, this article analyzed the development of trade between Yunnan Province and Thailand in recent years; compared the situation and development of logistics infrastructure; and used SWOT analysis to analyze railways from advantages and disadvantages opportunities qualitatively and threats. After the opening, the impact on Yunnan Province and Thailand and results were analyzed, relevant suggestions were provided to promote the development of the China-Thailand railway logistics trade.

**Keywords:** Trans-Asian' Railway, China-Thailand' Railway, Commerce, Logistics Trade development



#### 摘要

题目: 中泰铁路建设对中滇泰物流与经贸的影响

作者: 郝俊宇

学位: 工商管理硕士

专业: 国际商务管理

导师:

(博士. 张力)

日期: 5 / 7 / 702/

中泰铁路使泰国、东盟国家与中国互通,促进区域经济共同发展。中泰铁路合作有利于泰国更好地发挥陆路交通的中心枢纽地理优势,能够接纳更多的外国游客,增加当地人民的就业和资本收入,带动旅游业的发展。此外,它不仅能促进国家的经济发展,而且能提高人民的生活水平。这可以加深对泰国、老挝和中国等国家国际贸易的深度,从而带动泰国经济。

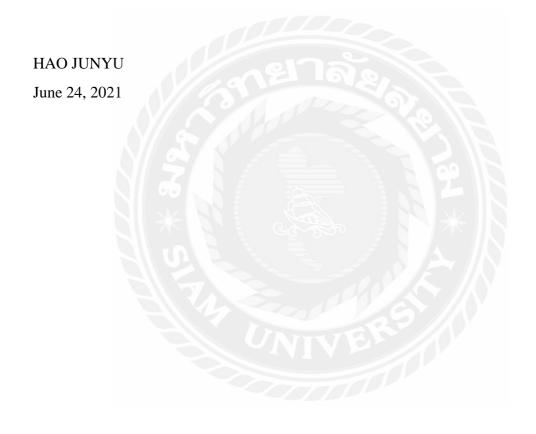
据国际海外贸易不断增多,中国及周边国家。交通对改善国际贸易很重要。 火车运输对改善国际贸易具有重要意义。作为我国商业的主要战略,我国的铁路 运输已趋于升级

随着邦苏火车站作为泛亚铁路中心枢纽的 2021 年底建成,中泰铁路的主要国际走廊必将影响云南与泰国贸易的发展。因此,本文通过查阅资料和数据,首先分析了云南省与泰国近年来贸易的发展情况: 比较物流基础设施的现状和发展情况, 其次运用 SWOT 分析,从优势、劣势、机遇、威胁等方面对铁路开放后的影响进行定性分析,分析对云南省和泰国的影响,分析结果,为推动中泰铁路物流贸易发展提出相关建议。

关键词: 泛亚铁路 中泰铁路 商贸 物流贸易发展

#### **ACKNOWLEDGEMENT**

In this section, I would like to express my gratitude to Dr. Zhang Li, advisor and Associate Professor Dr. Jomphong Mongkhonvanit, Dean, Graduate School of Business, Siam University, Bangkok, Thailand for them thoughtful and caring supervision by menas of his educational excellence. I am most grateful to them especially for them deep understanding of the Independent Study and his good communication skills.



#### Content

ABSTRACT	3
摘要	5
1. INTRODUCTION	7
1.1 Research Background	7
1.2 Research Objective	7
1.3 Research Significance	7
1.4 Research Problem	8
2. LITERATURES REVIEW	9
2.1 Overview of China-Thailand' Railway	9
2.2 Overview of China - Thailand trade	11
2.3 Overview of Yunnan and Thailand import and export	13
2.4 The main transportation mode of logistics between China and Thailand	15
3. RESEARCH METHODS	22
3.1 Qualitative analysis	
3.2 Literature research method	23
3.3 Observation method	23
4. DATA ANALYSIS	24
4.1 SWOT Analysis of Influence of construction of China-Thailand railway or	n
logistics and economic trade between China-Yunnan and Thailand	24
4.2 Advantages of The China-Thailand Railway	24
4.2.1 Advantages of supporting transportation infrastructure	
4.2.2 Price advantage	25
4.3 Disadvantages of The China-Thailand Railway	27
4.3.1 It is difficult to coordinate through the three countries	27
4.3.2 The ability to supply chain operations is a challenge	27
4.3.3 Lack of stable source of goods	28
4.4 Opportunities for The China-Thailand Railway	28
4.4.1The development strategies of various countries are integrated	28
4.4.2 Receive active help from all parties for the construction of the railway.	28
4.4.3 China's advanced high-speed rail technology and strong infrastructure	
construction capabilities	29
4.5 The threat of China-Thailand Railway	29
5. CONCLUTION AND RECOMMANDATION	31
REFERENCE	33
ACKNOWI EDGEMENT	34

#### 1. INTRODUCTION

#### 1.1 Research Background

The reconstruction of the Kunming-Yuxi railway line of the domestic section of the Central Line is completed, and the construction of the Yuxi-Mohan railway line is under construction. The foreign section of the China-Laos Railway was officially started at the end of 2016. The China-Thailand Railway also held a ceremony at the end of 2017. The Pan-Asian Railway is currently progressing the fastest with the construction of the mid-line section. It is expected that the entire line will be opened by 2026 and the Kunming-Bangkok railway line will be completed.

In 2013, Chinese President Xi Jinping responded to the needs of the times, proposed the "Belt and Road" initiative, building a multilateral cooperation mechanism, and built a community of destiny in economic, political, and cultural aspects by expanding its interconnection and cooperation with neighboring countries. Work together for the development of the country. At present, it has received responses from many countries. In the context of the "Belt and Road" initiative, the southeast section of the Trans-Asian Railway will promote China's ties with Indochina countries.

#### 1.2 Research Objective

The China-Thailand railway cooperation project is a hot topic, but no one has conducted in-depth and systematic research on it. On the contrary, various false words are flying all over the sky, and people lack a correct understanding of the construction of the China-Thailand Railway. Therefore, this article chooses this topic for analysis. This article comprehensively collects and organizes relevant materials, including news reports, meeting minutes, memorandums of cooperation and other materials, and analyzes various factors. It is hoped that through the analysis of the current situation of Thai railways, the development plan of Thai railways, the cooperation projects of China-Thailand railways and the "Belt and Road" The relationship conceived of along the way

#### 1.3 Research Significance

With the rapid development of the global economy, trade development between regions has become more closely linked. As the starting point of the Pan-Asian Railway, Kunming City, Yunnan Province and Thailand's trade development has maintained a year-on-year growth trend, and Yunnan's exports to Thailand have also the growth situation is maintained, but the proportion of import and export trade volume, less than 3%. The construction of the Pan-Asian Railway Central Section will help Yunnan Province and Thailand more Close trade cooperation.

Due to the Sino-Thai Railway is the fastest progressing and easiest to build among the three lines, it will bring us more convenience after completion. This article studies the Sino - Thai Railway to shorten the distance between China and Southeast Asia in time and space, which brings convenience to the countries along the line.

Good transportation facilities play an important role in the development of tourism. If the Sino-Thai Railway (Kunming-Bangkok) is opened, it will not only greatly promote the trade transportation between Yunnan Province and Thailand, but also promote the trade transportation between other provinces of China and Thailand. Explain the practical significance of the construction of the Sino-Thai Railway(Kunming-Bangkok)

#### 1.4 Research Problem

- 1. After the opening of the middle section of the Pan-Asia Railway (Bangkok-Kunming), logistics and trade links between China's Yunnan and other provinces and Thailand will be strengthened.
- 2. Will rail transport be greener, cheaper, safer and more reliable than air, water and land?
- 3. Will the completion of the Trans-Asia Railway improve the railway technology, management mode and promote the regional economy in East Asia?

#### 2. LITERATURES REVIEW

#### 2.1 Overview of China-Thailand' Railway

The idea of the Trans-Asian Railway first appeared in the 1990s, when several Asian countries planned to build an international railway that would pass through Asia, Europe, and Africa. The total length is estimated to be 14,000 kilometers, starting from Singapore and ending in Africa and Europe. Waiting for the country. However, due to the backward economic development and wars in Asian countries, this plan gradually fell silent. In 1995, at the ASEAN meeting, in order to strengthen the ties between the Indochina Peninsula countries and China, Malaysian Prime Minister Mahathir proposed to build an international railway that traverses the entire Indochina Peninsula, starting at Singapore, the southernmost tip of the Indochina Peninsula, and ending at China. Kunming City, Yunnan Province, this international railway line helps strengthen ties between various countries. This initiative has been recognized by the heads of China and ASEAN countries. This is the concept of the Trans-Asian Railway Line. After several years of preparations and investigations by the United Nations and various countries, feasibility studies have been conducted among various countries. In 2006, the "Trans-Asian Railway Intergovernmental Agreement" was approved by most countries at the 62nd session of the Asia-Pacific Economic and Social Commission and passed a resolution. The dream of the "Trans-Asian Railway" has taken a substantial step, confirming that the Trans-Asian Railway includes four routes in the north, south, north-south, and ASEAN. Liu Zhi (2002). The three railway lines connecting Kunming, China to Singapore constitute the Trans-Asian Railway ASEAN route.

This article studies the part of the Southeast Asian section of the Trans-Asian Railway from Kunming, China to Bangkok, Thailand. This part of the railway is divided into three parts, namely the Kun-Yu Railway and Yu-Mohan Railway in Yunnan, China, the China-Laos Railway, and Laos The construction of the three parts of the China-Thailand Railway in Thailand has started. From the current international situation, the third line of the Trans-Asian Railway ASEAN channel has the fastest progress and is most likely to be the first to breakthrough.

The middle section of the Pan-Asian Railway (Kunming-Bangkok) is an important part of the Pan-Asian Railway. The starting point is Kunming, China, and the endpoint is Bangkok, Thailand. The construction of this railway is a good project for China, Laos and Thailand. Even for the entire Indochina Peninsula, Thailand is located in the middle of the Indochina Peninsula and will play an international transportation hub role in the

future. Pawat Tangtongjit (2009). The construction of this railway will facilitate cooperation between Indochina Peninsula countries in the fields of trade and tourism.

For China and Thailand, the two countries at the beginning and the end, the significance is even greater. China's "Belt and Road" initiative is to promote global connectivity. Thailand has joined China's "Belt and Road" initiative and is at an important node in China's promotion of the "Belt and Road". Liu Zhi (2002). The construction of this railway will promote political, Economic and cultural communication. China is Thailand's most important trading partner. The construction of the Trans-Asian Railway's mid-line section will promote bilateral trade between China and Thailand and provide a faster transportation channel for trade transportation. At the same time, Thailand is a country with unique tourism resources. Its reputation is well-known throughout Southeast Asia. It has beaches of the same color as the sky and water, splendid Buddhist temples, and unique cultural customs, attracting countless tourists. The number of Chinese tourists traveling to Thailand has increased year by year, making Thailand the largest source country for overseas tourists. Due to the long distance and the chaotic domestic tourism traffic in Thailand, 95% of tourists to Thailand choose to travel by plane. After the completion of this railway, To break this situation, Chinese tourists can choose to travel to Thailand by high-speed rail. On the one hand, it can reduce travel costs. Tanin Saprungrot (2012). On the other hand, because of the convenience of the railway, tourists can browse the scenic spots along the railway. According to online news by Haiwairenju (2019), it is estimated that the fare from Yunnan to Bangkok is 700 yuan to 800 RMB, and it will take 10 to 12 hours to reduce travel costs.

China's pan-Asian rail vision

Kunming

CHINA

Boten

Laos
High-speed rail (417 km)

Vientiane
Nong Khai

Thailand
High-speed rail
(1.610 km)

Under construction
Construction temporarily halted
Discussion/planning stage

Padang Besar
Wakaf Bharu

Malaysia
Conventional rail (688 km)

Kuala Lumpur

Malaysia
High-speed rail (350 km)

Singapore

China's pan-Asian rail vision

#### 2.2 Overview of China - Thailand trade

The Pan-Asian Railway is not only conducive to linking the "Belt and Road" initiative with the development strategies of Southeast Asian and South Asian countries, and driving the economic development of the countries along the route Heerero, Xu (2017), it will also create favorable conditions for the deepening of economic and trade cooperation and closer cultural exchanges between Yunnan Province and the Indochina Peninsula. Wang Gengjie (2017), The Trans-Asian Railway is divided into three lines: the east, the middle and the west, and it passes through the eight regions of Yunnan Province, Myanmar, Thailand, Vietnam, Laos, Cambodia, Malaysia and Singapore. The three railway lines all intersect in Thailand and finally reach Singapore from Thailand. Since the Chinese and Thai governments signed a trade agreement in 1978, the two countries have increased trade exchanges. Yunnan Province uses its own geographical and resource advantages to continuously strengthen economic and trade cooperation with Thailand.

The development of China-Thailand trade once injected vitality into the economic development of Thailand and China. The long-term trade cooperation relationship of equality and mutual benefit between the two sides strengthened the political, cultural and other ties between the two countries, and consolidated the foundation for cooperation and development between the two countries. In 2018, the China-Thailand trade volume set a new record and increased to US\$79.93 billion. China has become Thailand's largest importer and second-largest exporter. Thailand's overall trade deficit with China has also continued to expand. With the continuous opening of China and the consolidation and improvement of the China- ASEAN Free Trade Area, China-Thailand trade will be strengthened.

In 2018, world merchandise exports totaled US\$19.475 trillion, world merchandise imports totaled approximately US\$19.867 trillion, and total trade volume was approximately US\$39.342 trillion. Among them, in 2018, Thailand's total foreign trade in goods was approximately US\$502 billion, and exports were approximately US\$252 billion, accounting for 1.3% of global export trade, ranking 24th in the world. Thailand's imports are about US\$250 billion, accounting for 1.3% of global export trade and import trade, ranking 21st in the world. In general, Thailand's trade volume ranks relatively high in the world, and it plays an important role in global foreign trade.

Thailand's top three export trading partners are the United States, China, and Japan. In 2018, Thailand's exports to these three countries were US\$8.8 billion, US\$6.7 billion, and US\$6.4 billion, but only exports to the US increased year-on-year. While it decreased by 7.7% and 2.1% for China and Japan, respectively. It is worth mentioning that in 2018, Thailand's export situation has deteriorated significantly. Among the top

15 countries in terms of export value, only 3 countries have increased year-on-year, while the remaining 12 countries have declined to vary degrees. According to Table 1. Wu Xiangzhou.(2019).

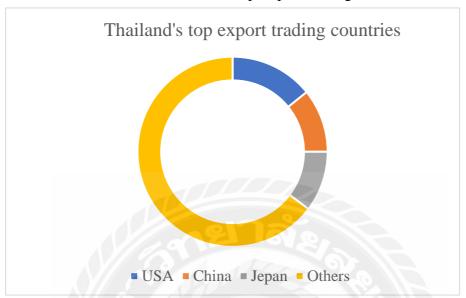


Table 1. Thailand's top import trading counties

In terms of country (region), Thailand's top three import trading partners are China, Japan, and the United States. In 2018, Thailand's imports from the three countries were US\$11.8 billion, US\$8.6 billion, and US\$5.8 billion, respectively, accounting for Thailand's total imports. 19.3%, 14.1%, and 9.6%, of which Thailand's imports to the United States increased by 48.3% year-on-year. In fact, Thailand's imports in 2018 were also relatively sluggish. Among the top 14 countries in terms of import volume, 9 countries saw their import volume decline year-on-year.



Table 2. Thailand's top import trading counties

#### 2.3 Overview of Yunnan and Thailand import and export

Due to its unique geographical advantages, Yunnan has a long history of economic and trade cooperation with Thailand. It started as early as the Silk Road era. Especially after the reform and opening up, China has opened more and more ports, and Yunnan has opened more and more ports to countries along the route (Than, 2005). As more, the scale, fields, and levels of cooperation between Yunnan and Thailand have been continuously improved. In 2000, the total trade volume between Yunnan and Thailand was less than US\$50 million. By 2013, the trade volume between Yunnan and Thailand exceeded US\$1 billion, reaching US\$1.05 billion. More than 20 times. At the same time, through the continuous efforts of both sides, Yunnan and Thailand have carried out extensive cooperation in investment, trade, and culture, and have achieved very rich results.

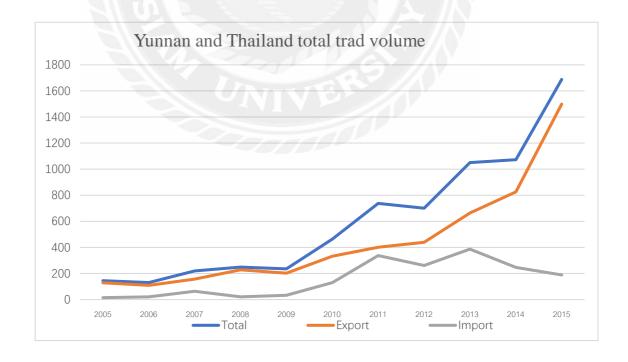
Since the establishment of diplomatic relations between China and Thailand in 1975, the development of trade between Yunnan and Thailand has undergone a continuous growth process.

Table 3. 2005 to 2015 Yunnan and Thailand import and export

Years	Total /(millions)	Export to Thailand /(millions)	Import from Thailand /(millions)	Exceeded /(millions)	Increase rate of last years Total rate
2005	144.46	129.52	14.94	114.58	11.66%
2006	130.69	109.19	21.50	87.69	-9.53
2007	220.21	156.80	63.41	93.39	68.50
2008	249.75	228.88	20.87	208.01	13.41
2009	235.85	202.65	33.20	169.45	-5.57
2010	463.43	332.68	130.75	201.93	96.49
2011	738.00	401.00	337.00	64.00	59.25
2012	701.00	439.00	262.00	177.00	-5.01
2013	1051.00	664.00	387.00	277.00	49.93
2014	1073.00	826.00	247.00	579.00	2.09
2015	1688.00	1499.00	189.00	1310.00	57.32

As shown in Table 3. The total trade volume between Yunnan and Thailand in 2005 reached 144.46 million U.S. dollars, of which Yunnan exported 129.52 million U.S. dollars to Thailand and imported 14.94 million U.S. dollars from Thailand. By 2010, the trade volume between Yunnan Province and Thailand exceeded US\$40 million, reaching US\$46.43 million, a year-on-year increase of 96.49%, and the trade growth rate reached a peak. Among them, Yunnan's imports from Thailand also increased the most in a year, with an increase of 293.83. %. The main reason is that the China-ASEAN Free Trade Area Agreement came into effect in 2010. Yunnan and Thailand have a large complementarity in product and market demand. Thailand's tropical fruits, vegetables, rice, and minerals have a broad market in Yunnan. Yunnan's mechanical and electrical products and daily consumer goods are also exported to Thailand in large quantities. Since 2010, the annual growth rate of the trade between Yunnan Province and Thailand has not been stable. The highest growth rate was 59.25%, but the lowest fell by 5.01%. However, Yunnan Province has always maintained a surplus with Thailand. The main reason is that there are more transactions of primary products in the import and export trade of both sides, but with the development of the country, such advantages will be gradually weakened (Yin & Wang, 2005).

Table 4. Yunnan and Thailand total trade volume



As shown in Table 4. The development of trade between Yunnan and Thailand has maintained a growth trend, while Yunnan's exports to Thailand have also maintained a growth trend, but Yunnan's imports to Thailand have shown a downward trend. Every year, Yunnan's exports to Thailand are greater than imports, so every year Both maintain a trade surplus, and the amount of surplus is increasing year by year, which shows that Yunnan is actively developing import and export trade with Thailand under its favorable geographical advantages and policy environment. However, the proportion of Yunnan Province's trade with Thailand in the proportion of China's trade with Thailand is still quite low, less than 3%.

#### 2.4 The main transportation mode of logistics between China and

#### **Thailand**

The governments of China and Thailand formally established diplomatic relations in 1975 and signed a trade agreement in 1978. In addition to setting up embassies in each other, the two countries also set up consulates-generals in some cities of various countries to maintain close exchanges between high-level officials. The two sides are engaged in economic and trade fields. A number of intergovernmental cooperation agreements have been signed successfully to jointly promote the development of trade between the two parties.

Yunnan and Thailand have good geographical advantages. The shortest distance between the two places is only 200 kilometers. In 2013, the Kunming-Bangkok Highway was opened across the board, realizing road interoperability; Yunnan and Thailand belong to the Lancang-Mekong River basin, realizing waterway interoperability; and air passenger and cargo dedicated lines have been established to realize air interoperability. Therefore, Yunnan Province and Thailand have incomparable advantages over other provinces in terms of transportation interconnection. Thailand has always been an important market for Yunnan's import and export products, and it ranks third in Yunnan's exports to Indochina countries. Thailand's imports of Yunnan products accounted for more than 10% of ASEAN countries' imports of Yunnan products. The transportation methods adopted by the two parties for trade mainly include the following: air transportation, river transportation, ocean transportation, railway transportation, and road transportation.

Table 5 Transportation between Yunnan and Thailand

Transportation	Transportation Routing	
methods		
Air	Kunming-Bangkok or Kunming-Chiang mai-Bangkok	
Transportation		
River	Kunming-Jinghong Port-Guanlei-Chiang saen port-	
Transportation	Bangkok	
	(The Lancang-Mekong Rive)	
Ocean	Kunming-Hongkong-Guangzhou-Kunming	
Transportation		
Road	Kunming-Jinghong-Daqili-Tachileik-Maesai-Bangkok	
Transportation	Kunming-Jinghong-Mohan-Huayxai-Chiangkhong-	
	Chiangrai-Chiangmai-Bangkok	
Railway	Kunming-Xiangyun-Jinghong-Mohan-Shanyong-	
Transportation	Vientiane-Bangkok	
\\\	Kunming-Yuxi-Jinghong-Mohan-Shanyong-Vientiane-	
	Bangkok	

River Transportation

Figure 1 The Lancang-Mekong Rive



In June 2001, the Lancang-Mekong International Channel was officially opened to navigation. In the following 10 years, China invested 200 million yuan to renovate the Lancang River Channel, and the navigation time has increased from the past six months to the basic navigation throughout the year. However, there is still a dry season. From March to April each year, the water depth is 1.5 to 2 meters. The transportation of goods is restricted. The Lancang-Mekong shipping mainly includes containers, refrigeration, and bulk transportation. The main goods are vegetables, fruits, rice, daily necessities, building materials and so on. The number of navigation vessels has grown from the original 8 to 114 in 2009, and 4 passenger ships. The main ship types are mainly 250-300 tons, 54 ships over 200 tons, and 16 ships over 300 tons. The Lancang River-Mekong International Waterway has become an important waterway connecting China to Indochina Peninsula countries. The transportation of goods from Yunnan Province to Thailand through the waters of the Lancang River and the Mekong River, in addition to transportation by ship, requires the cooperation of cars or trains to achieve combined transportatio.

Before the Kunming-Bangkok Highway was completed, the Lancang-Mekong International Waterway played an important role in the trade between Yunnan Province and Southeast Asian countries. More than 95% of the trade development between Yunnan and Thailand relied on this waterway. After the completion of the Kunming-Bangkok International Corridor in 2008, it has had a significant impact on the development of trade between Yunnan and Thailand and has a diversionary effect on the transportation of the Lancang-Mekong waters. The volume of waterway transport trade between Thailand and Yunnan has gradually decreased, and the total volume of trade has gradually decreased. In 2008, 6557.75 million baht decreased to 5178.14 million baht in 2011, and the volume of import and export trade has decreased.

#### **Road Transportation**

In 1992, in order to strengthen the economic ties of the countries of the Mekong River basin, promote the economic and social development of various countries. The Asian Development Bank initiated the Greater Mekong Subregional Economic Cooperation. The cooperative countries include China, Laos, Cambodia, Thailand, Myanmar, and Vietnam in the Lancang River-the Mekong River Basin. And at the first Lancang-Mekong Regional Economic Cooperation Conference held in the Philippines, the Yunnan representative of the Chinese delegation put forward the idea of constructing the "Kunming-Manchurian Highway", that is, constructing a highway

from Kunming to Bangkok. In November 2001, China, Laos, Thailand, and Asian Banks reached a three-country four-party agreement in Bangkok, Thailand. China, Laos, and Thailand jointly funded the construction of the Kunming-Bangkok Highway with a loan from Laos to the Asian Investment Bank. The Kunming-Bangkok Highway was officially opened to traffic in March 2008, and the whole line is basically passable. However, there is a Mekong River between Laos and Chiang Khong in Thailand, and a bridge needs to be built to connect it. In December 2013, the Chiang Khong-Hui Xai Bridge across the Mekong was officially completed, and the Kunming-Bangkok Highway was opened to traffic. From Kunming to Thailand in just a few hours.

The Kunming-Bangkok Highway is more than 1800 kilometers long. It starts at Kunming, Yunnan Province, and ends in Bangkok, Thailand. The whole line passes through the territory of Yunnan Province, Laos, and Thailand. As shown in Figure 4.2 by Jon Fernquest(2017).

TOURIST HAZARDS The 1,861-km Highway R3A, built in the hopes of boosting business and tourism, has led to a large influx of Chinese tourist vehicles to the north of Thailand, raising concerns Kunming about traffic accidents and wanton littering. CHINA Mojiano Mengxing dengla Mohan MYANMAR Viang Phoukha 0 Huay Xai Chiang LAOS Khong THAILAND POSTgraphics

Figure 2 The Kunming-Bangkok Highway

After the completion of the Kunming-Bangkok International Highway in 2008, the total import and export volume between Yunnan and Thailand has further increased. The Kunming-Bangkok Highway is playing an increasingly important role in the trade between Yunnan Province and Thailand. Since the opening of traffic in 2008, the total trade volume has increased from 2273.677 million baht to 15278.034 million baht in 2014, with a growth rate of 572% and an average annual growth rate of 37.37%. Both import trade and export trade have been achieved through the Kunming-Bangkok Highway. Double growth. The Kunming-Bangkok International Highway not only facilitates the trade exchanges between Yunnan Province, Laos, and Thailand but also facilitates trade exchanges between China and Southeast Asian countries using this international highway.

#### Air Transportation

Kunming Changshui International Airport is 24.5 kilometers northeast of Kunming, in Changshui Village, Guandu District, Kunming City, Yunnan Province. Construction started in 2008. In 2012, Kunming Changshui International Airport was completed, Kunming Changshui International Airport was officially opened, and Wujiaba Airport was suspended. Changshui International Airport has opened 222 domestic routes and 54 international routes (direct to Seoul, Osaka, Singapore, Bangkok, Chiang Mai, Chiang Rai, Phuket, Ho Chi Minh City, Vientiane, Phnom Penh, Yangon, Naypyidaw, etc.), there are 6 base airlines: China Eastern Airlines Yunnan., Yunnan Lucky Air, Sichuan Airlines Branch, Kunming Airlines, Ruili Airlines, and Hongtu Airlines. Kunming Changshui International Airport is one of the top 100 airports in the world. According to Figure. Matthew Hartzell. (2014)

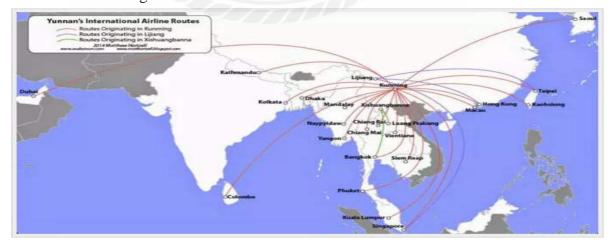


Figure 3. Yunnan's International Airline Routes

Thailand is located in the middle of the Indochina Peninsula and has a good location advantage. There are 38 airports in the country. There are 8 international airports. Bangkok is the capital of Thailand and one of the most important transportation hubs in Asia. From Bangkok, you can take a plane to any province in the country, and the flight time Only about 1 hour. Both Don Mueang Airport and Suvarnabhumi Airport in Bangkok have opened international routes, which can fly directly to more than 30 cities in Asia, Europe, the United States, and Oceania. There are also some international flights to popular tourist attractions such as Chiang Mai City and Phuket Island in Thailand.

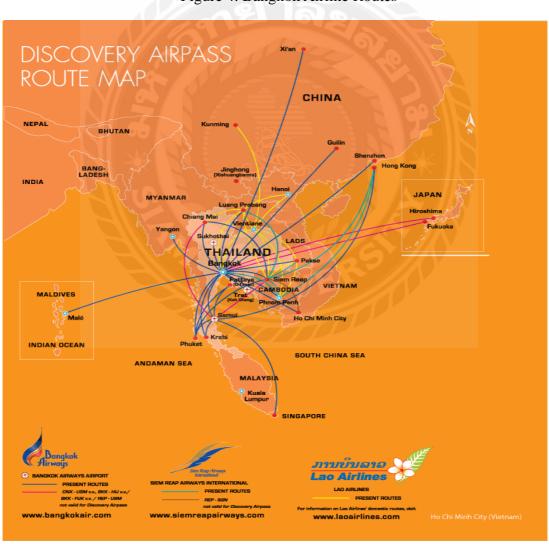


Figure 4. Bangkok Airline Routes

Jariya Tatirat (2010), through comparison, found that adding railway routes could save the time and cost of loading and unloading goods more quickly. And now Thailand's railways have more problems. Such as the train is too old, continue to rebuild and update, etc. Napatporn Ngentong (2011) studied the transportation costs of railway and road modes of logistics and transportation in Thailand. Rail transport costs are more stable, and rail pollution is less, All the construction of the China-Thailand railway can effectively improve the enthusiasm of the logistics and trade between China and Thailand.



#### 3. RESEARCH METHODS

#### 3.1 Qualitative analysis

In this paper, through qualitative research, a large number of materials and data related to the China-Thailand railway are collected, and the two-gap theory and economies of scale theory are used to explore new ideas, analyze and expatiate the prospective and feasibility study of the China-Thailand railway on the logistics and trade between China and Thailand.

The theory of economies of scale in trade was originally put forward by Krugman in the book "Market Structure and Foreign Trade" with Ai Hannan. This theory holds that: Before participating in international trade, when a country produces a product with its advantages, in the initial stage, with the increase in the number of products, the proportion of profits gained by enterprises is greater than the proportion of the increase in the number of products produced by enterprises. It is the stage of increasing scale, and at the same time, the long-term average cost of the products produced by the company decreases with the increase of output, but because of the limited domestic demand, the company will control the cost. If participating in international trade at this time, facing a wider market and increasing demand, enterprises can increase production and continue to expand their economies of scale until they reach their equilibrium point. Enterprises can benefit from the production and export of this product in international trade.

The theory of economies of scale is also applicable to the international railway transportation service industry. During the transportation of international railway lines, if the rate of increase in the revenue obtained in a country is greater than the rate of increase in the transportation of goods, when increasing scale returns are achieved, trade cooperation can be carried out. Increasing the number of goods transported on the line reduces the average transportation cost of goods and obtains cost advantages. Promote the development of international railway transportation service trade.

Two-gap theory is a theory or model for developing countries to use foreign capital to solve domestic capital shortages under open economic conditions. By American economists Channery and Straw It was formally proposed in the book "Foreign Aid and Economic Development" in 1966. The theory of two gaps refers to the fact that there are two gaps between the actual resource supply of developing countries and the amount of resources necessary to achieve economic development goals, the savings gap

and the foreign exchange gap. The expression of the two-gap model can be summarized as follows: From the perspective of supply under an open economy, the national income of a country can be expressed as (assuming T = G in the national income): Y = C + S + M (national income = consumption + savings + Import) and from the demand side, it can be expressed as: Y = C + I + X (national income = consumption + investment + exports). Since total demand is always equal to total supply (I + X = S + M).

The above two formulas organize available

I-S = M X. I-S is the difference between investment and savings, called the savings gap (I>S); M-X is the difference between imports and exports, called the foreign exchange gap (M<X).

Utilizing foreign capital is an effective means to make up for the two gaps: it can drive imports without increasing foreign exchange expenditures. Maintain a basic balance of international payments and make up for the foreign exchange gap; at the same time, it is possible to increase investment without using domestic savings, maintain a moderate investment scale, and make up for the savings gap. This is exactly the theoretical significance of the "two gaps" model. The "two gaps model" used to be the basic theoretical basis for all developing countries to utilize foreign capital. Thailand's introduction of Chinese capital to build railways can make up for Thailand's "two gaps"

#### 3.2 Literature research method

In the second chapter, a large number of published and official data are cited as the support in the literature review section, which provides a strong support for the study of this paper. In addition, combined with all the current literature, opinions are put forward for the development and favorable factors of China-Thailand railway construction.

#### 3.3 Observation method

Collect materials first, and learn as much as possible about relevant materials. Observation is a basic research method, which can expand the perceptual cognition of the research object, directly obtain real information, and lead to new discoveries. This paper will use swot analysis to observe the progress time and location of the China-Thailand Railway "Kunming-Bangkok" project, and fully grasp the possible routes of the railway cooperation project.

#### 4. DATA ANALYSIS

## 4.1 SWOT Analysis of Influence of construction of China-Thailand railway on logistics and economic trade between China-Yunnan and Thailand

A comprehensive analysis of the mid-line section of the China-Thailand Railway through the SWOT analysis method can more clearly discover the advantages, disadvantages, opportunities, and the China-Thailand Railway in the development of trade between Yunnan Province and Thailand, and find more feasible methods for future development to solve the problem.

#### 4.2 Advantages of The China-Thailand Railway

#### 4.2.1 Advantages of supporting transportation infrastructure

Yunnan Province is China's bridgehead facing Southeast Asia and South Asia. It has good transportation channels, developed rivers, and water systems, criss-cross road transportation, convenient air transportation, and extensive railway transportation channels. The convenience of transportation infrastructure is extensive. The advantages of the mid-line section of the Asian Railways and the good transportation infrastructure provide a good guarantee for the cargo transportation and passenger transportation of the China-Thailand Railway. From a geographical point of view, Yunnan Province is the most important transportation hub in southwest China. It is also the only way for provinces such as Sichuan, Chongqing, and Guizhou to go to Southeast Asia. The central section of the China-Thailand Railway can not only strengthen the connection between Yunnan and Thailand but also Strengthen communication between other provinces and Thailand. Bangkok is the capital of Thailand. It is the city with the most developed economy and the most convenient transportation in Thailand. It is a city integrating trade development and tourism and has a good transportation infrastructure. It is manifested in the following aspects:

In terms of railways, the starting point of the China-Thailand Railway is Kunming, which is the provincial capital of Yunnan Province. At present, Yunnan Province has built railway lines connecting the provinces including Cheng-Kun Line, Nei-Kun Railway, Gui-Kun Line, and Nan-Kun Railway, Shanghai-Kunming Passenger Dedicated Line, Yungui Passenger Dedicated Line, greatly facilitate the connection between Yunnan and other provinces. In 2016, Yunnan Province's annual cargo transportation volume was 1.219 billion tons, of which railway transportation was 118

million tons, and railway transportation only accounted for 9.68%. The opening of the China-Thailand Railway is conducive to the realization of cargo transportation between border areas and other areas. At the same time, it has greatly shortened the connection between Yunnan, Sichuan, Guizhou and Chongqing and the Indochina Peninsula countries, and facilitated the transportation of the provinces that have trade with the Indochina Peninsula countries. The China-Thailand Railway connects the entire Indochina Peninsula, attracting countries in the Indochina Peninsula to develop trade with China and choose the China-Thailand Railway.

In terms of river transport. Through continuous improvement of the Lancang River-Mekong River system, not only short-distance transportation within Yunnan Province can be realized, but also international shipping, especially with Laos, Myanmar, and Thailand. The main trade transportation between Yunnan and Thailand ends with water transportation. The opening of the China-Thailand Railway will add another major trade channel between China and Thailand.

In terms of aviation, there are 13 civil airports in Yunnan that have been opened to air navigation, and 3 international routes have been opened. Kunming is the center of the 5-hour aviation circle in Asia, and the opening of an air cargo terminal at Changshui International Airport has greatly promoted international and domestic cargo transportation. In 2017, the annual cargo and mail throughput reached 418600 tons, of which the international cargo throughput was 24524.6 Ton. After the completion of the China-Thailand Railway, joint freight transport can be realized and trade exchanges can be better facilitated.

#### 4.2.2 Price advantage

The advantages of railway cargo transportation: large transportation volume, low transportation cost, strong accuracy and continuity, safety, and reliability. Compared with road transportation, railway transportation can carry out long-distance transportation with large freight volume, with accurate delivery time, low cost, and not affected by too many factors. Compared with waterway transportation, railway transportation has shorter transportation time, convenient loading and unloading, accurate delivery time, and less affected by natural factors than waterway transportation. Compared with air transportation, railway transportation has a large volume, low freight, and a wide range of radiation.

Table: 5. Comparison of different transportation costs and time from Kunming to Bangkok

Table:5. Comparison of different transportation costs and time from Kunming			
to Bangkok			
Main transportation method	transportation costs	Transportation times	
Ocean shipping	460RMB/Tons	8-9 days	
Road transport	668RMB/Tons	2days	
River transport	630-760RMB/Tons	5-7 days	
Airfreight	5RMB/KG	2.5 hours	
Railage	300RMB/Tons	1day	

Time cost: The trade transportation between Yunnan and Thailand chooses water transportation, which takes a long time, followed by road transportation, which needs to overcome difficulties in the customs declaration. In addition to air transportation, railway transportation is the most time-saving, and it can be reached within 1 day. The main products that Yunnan imports from Thailand are fruits. If you choose the Lancang-Mekong waterway, it will take 5 to 7 days. If it encounters dry seasons, the time will be longer and it is not suitable for the transportation of seasonal products, fruits, and vegetables. If it is road transportation, it also takes 2 days, and there are still customs declaration, inspection, tax collection, and customs clearance, which takes longer. However, if it is transported by rail, it will be more convenient to guarantee time, especially for the transportation of fruits.

Freight: The data in Table 5.1.2 show that the transportation cost of trade transportation between Yunnan and Thailand is relatively high. The main reason is that the main trade transportation between Yunnan and Thailand is mainly by water, but water transportation requires road or rail transportation. With the cooperation of intermodal transportation, the freight rate will increase. If it is after the opening of the Trans-Asian Railway's central line, only railway transportation is required for the whole journey, which will reduce the cost and increase the transportation volume. Therefore, from the perspective of time cost and freight, if the Trans-Asian Railway is opened, it will be more attractive and competitive in terms of cargo transportation.

Good sustainability and high safety. Compared with road transportation, air transportation, and waterway transportation, railway transportation will not be congested during transportation. In the customs declaration and inspection process, dedicated personnel is responsible for it, which wastes less time and is affected by the weather. The degree is small, so the sustainability of railway transportation is good. In terms of safety, trains are a relatively safe mode of transportation, and the volume of transportation is large, and the influence factors are less. In terms of environmental protection, under the premise of the same transportation volume, railway transportation consumes less energy than other transportation, and the air pollution and noise interference caused by it are much smaller than other transportation methods. Development, energy-saving, and emission-reducing devices can be installed on trains, which can achieve environmentally friendly emissions.

#### 4.3 Disadvantages of The China-Thailand Railway

#### 4.3.1 It is difficult to coordinate through the three countries

The middle section of the Trans-Asian Railway passes through China, Laos, and Thailand. It is 595 kilometers in Yunnan Province, 427 kilometers in Laos, and about 800 kilometers in Thailand. China's domestic politics is stable and economic development, while Thailand and Laos have domestic politics. The problem of social unrest sometimes still occurs, and the economic foundations of the two countries are not very strong relative to China. This makes the two countries have a good understanding of the construction, maintenance, operation management, and new technology update of the Trans-Asian Railway mid-line section. Different considerations.

#### 4.3.2 The ability to supply chain operations is a challenge

Good supply chain management is a top-down and orderly management mode. On the one hand, it can greatly improve collaboration capabilities and ultimately ensure the implementation of work. On the other hand, it can implement effective resource allocation to reduce waste and prevent slack. Which greatly stimulates the enthusiasm for work. To obtain an overall competitive advantage. The entire railway line is more than 1,800 kilometers long. It passes through three countries. It has to pass through the national customs and enter the platforms along the way. Only when all the nodes on the entire railway are managed can the normal operation of this railway line be guaranteed.

#### 4.3.3 Lack of stable source of goods

From the perspective of the trade development between Yunnan and Thailand every year, the export value of Yunnan Province to Thailand is greater than the import value, and the gap is large. Therefore, depending on this railway, the possible result is that the source of goods for the return journey is more than the source of the outbound journey. The difficulty is great, this will create a situation of "there are railways, no trains" and lose the meaning of this railway.

#### 4.4 Opportunities for The China-Thailand Railway

#### 4.4.1The development strategies of various countries are integrated

China is advancing the "Belt and Road" initiative to connect with Thailand's "Eastern Economic Corridor" and other development strategies. The construction of the China-Thailand Railway is in line with the development of the development strategies of various countries and will improve the level of trade facilitation in China, Laos, and Thailand. Strengthen cooperation in the fields of economy, trade, science, and technology to better achieve mutual benefit and win-win results.

#### 4.4.2 Receive active help from all parties for the construction of the railway

The China-Laos Railway is composed of the China section and the Laos section. The Chinese section is from Yuxi City to Mohan Port, and the Laos section is from Boding to Vientiane, the capital of Laos. The China-Laos Railway is a connecting line connecting China to Laos and Thailand. . The China-Laos Railway has won the bids by China Railway Fifth Bureau, China Railway International, China Railway Eighth Bureau, Hydropower International, Power Construction Co., Ltd., and China Railway Second Bureau. All parties are currently in place and have achieved a full start stage. Among them, the Sichuan Branch of the Export-Import Bank of China customized a personalized financing plan for the Second Bureau of China Railway and the Eighth Bureau of China Railway to solve funding problems. Before the construction of the China-Laos Railway, we received the support of Dr. Gong, Minister of Transport of Laos, and the leaders of China. He personally went to the construction site to conduct on-site inspections on the construction route, the location of the site, and the land acquisition situation along the line, and solve the existing problems in time. The China-Thailand railway experienced twists and turns. As early as 2012, during the visit of Chinese Premier Li Keqiang to Thailand, he held talks with the then Prime Minister Yingluck of Thailand, expressing that China hopes to participate in the construction of Thailand's high-speed rail projects, and China will provide high-speed rail construction funds and high-speed rail technology. China exported rice to compensate for part of the construction cost. This is the "highspeed rail-for-rice" plan; in 2014, the Constitutional Court of Thailand ruled that the

"high-speed rail-for-rice" project was unconstitutional. Subsequently, Yingluck stepped down, causing the China-Thailand railway project to be stranded; subsequently, Premier Li Keqiang and the new Thai Prime Minister Prayut signed a Memorandum of Understanding on China-Thailand Railway Cooperation and Agricultural Products Trade, restarting the process of bilateral railway cooperation. Later, the two parties communicated on route planning, operation speed, investment methods, feasibility studies, project contracting, and financing plans; until 2016, the Thai government's cabinet approved the construction of the China-Thailand railway, indicating that it is under construction through self-financing The Thai railway project is operated by itself. The construction party is a Thai enterprise. The raw materials and labor for the construction of the railway will also come from Thailand. However, it is still hoped that China will provide high-speed railway technology and trains; until 2017, the Thai government approved the first phase of the China-Thailand railway cooperation project, namely the Bangkok-Nakhon Ratchasima section, has a total length of 253 kilometers and a designed speed of 250 kilometers per hour. On December 21 of the same year, the construction of the first phase of the China-Thailand Railway started. According to Mongkol Bangprapa. (2020)[11] Prime Minister Prayut Chan-o-cha will on 27 October 2020 preside over the signing of a key contract worth 50.6 billion baht on the Thai-Chinese high-speed rail project, There will be six stations along the 253km route from Bangkok to Nakhon Ratchasima: Bang Sue, Don Mueang, Ayutthaya, Saraburi, Pak Chong and Nakhon Ratchasima. In the long term, the Thai government hope to extend the line to Nong Khai.

#### 4.4.3 China's advanced high-speed rail technology and strong infrastructure construction capabilities

China Railway has grown from scratch, from introduction to independent research and development, and then gradually takes the lead in the world. It is not only technologically advanced but also has advanced experience in large-scale construction. Both the China-Laos Railway and the China-Thailand Railway rely on China's standards, trains, signal systems, and technology, all of which rely on China's strong high-speed rail technology support.

#### 4.5 The threat of China-Thailand Railway

Thailand has a constitutional monarchy. The king is the highest head of state, but this is just a symbol. Thailand implements a multi-party system. There are more than 60 political parties on the political stage. After the Second World War, party elections could not escape the negative effects of military pressure and party corruption. , So the political arena is unstable. Thailand's economy ranks second in Southeast Asia and is in the upper middle of the world economy. However, in the construction of the China-

Thailand Railway, only Thais are subcontractors, which may cause problems in the construction project to protect their own interests. 90% of Thailand believe in Buddhism. Other religions include Islam, Hinduism, and Christianity. The society is relatively stable, but it may also cause religious conflicts in some areas and affect the construction of the China-Thailand Railway. Laos is a socialist country, led by the Communist Party (Lao People's Revolutionary Party). Its domestic politics is relatively stable, but the political situation in Laos is easily affected by Vietnam. The dual nature of Vietnam's foreign policy will shake Laos. Due to the long-term exploitation of colonialism and the oppression of the feudal monarchy, Laos has a weak economic foundation and is basically one of the poorest countries in the world. The unstable political environment in Thailand and the relatively harsh economic environment in Laos threaten the construction of the Sino-Thailand Railway and the China-Laos Railway and may affect the construction of the China-Thailand Railway.

The China-Thailand Railway negotiated as early as 2014, but it was blocked by Thailand and has not been implemented for a long time. One of the main factors is that Japan participated in the China-Thailand railway battle to increase its economic influence in Southeast Asia. Japan is increasingly dependent on manufacturing output. Japan has paid great attention to ASEAN countries and is very eager to cooperate with ASEAN countries to reduce loans Interest rates and other methods hinder cooperation between Thailand and China. At the same time, under the influence of the United States and other capitalist countries, secretly supporting new political forces may also threaten the construction of the China-Thailand Railway (Kunming-Bangkok).

#### 5. CONCLUTION AND RECOMMANDATION

With the groundbreaking ceremony of the first phase of the China-Thailand Railway project at the end of 2017, it marked that the China-thailan Railway has entered the start-up phase. According to the expected completion time, Sino-Thai Railway project will be completed and open the Phase 1 line to traffic in 2023. Bang Sue Grand Station nears completion, it bring people unlimited reverie. After discussing the impact of the opening of the Trans-Asian Railway on the development of trade between Yunnan and Thailand, we come to the following conclusions:

- (1) After the opening of the central section of the Trans-Asian Railway, it will not only strengthen the trade links between Yunnan and Thailand but also strengthen trade links between other provinces and Thailand.
- (2) After the opening of the central section of the Trans-Asian Railway, compared with road transportation, water transportation, and air transportation, it has the characteristics of large transportation volume, low transportation cost, high accuracy and continuity, faster railway transportation, and safety and reliability.
- (3) After the opening of the Pan-Asian Railway, it will also face difficulties in railway coordination, different maintenance, operation management, and technical updates. An orderly management model is also needed to improve collaboration capabilities and more effective resource allocation. Improve the overall competitive advantage and contribute to the regional economy.

Political aspect: The China-Thailand Railway can enable Thailand and ASEAN countries to communicate with each other, promote the common development of the regional economy, and at the same time consolidate Thailand's status as a regional logistics and transportation center. Make full preparations for entering the ASEAN economic integration and provide a bridge for the development and exchange of economic and folk culture in various ASEAN countries.

Infrastructure: Transportation infrastructure is the basic condition for national development. China-Thailand railway cooperation helps Thailand to better play its role as a land transportation hub. The railway transportation system has high transportation efficiency, large transportation volume, low cost, and reduces logistics transportation costs. , And can form a railway network connecting all parts of the country.

Economic aspect: The China-Thailand Railway will promote the overall economic development, which can accept more foreign tourists, making Thailand a trade center

for retail markets (World Shopping Center), wholesale markets (World Premium Wholesale Center), and exhibitions (World Mice Center). To benefit the Thai people in various regions, especially the areas along the railway, to create more job opportunities for the local people, increase people's income, and drive the rapid development of tourism along the route not only to promote the economic development of ASEAN countries, but also to improve the living standards of neighboring people.

Cultural exchanges: deepen the international trade of Thailand, Laos and China, and make the development of international logistics and transportation better. The proportion of self-driving trips in intercity traffic will be reduced from 59% to 40%. In addition, the proportion of travel using rail transit will increase from 5% to 30%. Investment and financing: As more people come in, cities are developed, logistics and transportation are more convenient, and transportation costs are reduced, so many businessmen will also invest in various aspects. Such as shopping malls, factories, etc., thereby driving the growth of the Thai economy.

Further research direction, Thailand's political situation is not stable, and there will be many uncertainties in the process of cooperation. The railway loan agreement between China and Thailand has not yet been negotiated, and there is no specific implementation plan. With the substantial advancement of railway construction projects in the future, this paper will further track and study the practical problems in the process of railway construction

#### REFERENCE

- Copy Editor. (2019). Embassy of The People's Republic of China in The Kingdom of Thailand.
- Haiwairenju. (2019). Retrieved from https://zhuanlan.zhihu.com/p/60288791
- Herrero, A. G., & Xu, J. (2017). China's belt and road initiative: can Europe expect trade gains? China & World Economy, 25(6), 84-99.
- Jon Fernquest (2017). *China's impact on the Thai economy*. Retrieved from https://www.bangkokpost.com/learning/learning-news/880360/chinese-drivers-causing-alarm
- Liu Zhi. (2002). *The Origin and Construction of the Trans-Asian Railway*. Journal of Contemporary Asia-Pacific Studies. P,45-48
- Liu zhi. (2002). The origin and development of pan-Asian railway construction. Contemporary Asia-Pacific, 11.
- Matthew Hartzell. (2014). Retrieved from https://www.gokunming.com/en/blog/item/3226/mapping-yunnans-surprisingly-hectic-airspace
- Mongkol Bangprapa. (2020). *PM to chair Sino-Thai rail signing. Bangkok Post.* Retrieved from bangkokpost.com/business/2009451/pm-to-chair-sino-thai-rail-signing
- Than, M. (2005). Myanmar's Cross-Border Economic Relations and Cooperation with the People's Republic of China and Thailand in the Greater Mekong Subregion, Journal of GMS Development Studies, Vol. 2, pp. 37-54.
- Tian Youchun. (2010). The impact of the Trans-Asian Railway (East Line) on various ways to optimize and upgrade regional industries. Journal of Hooghe University.
- Wang Gengjie. (2017). Research on the Development Countermeasures of International Combined Transport Logistics of China-Laos Railway. Railway Transport and Economy. P,1-4
- Xiang Li. (2016). The history, current situation, and future of the Southeast Asia section of the Trans-Asian Railway (Master's thesis). Yunnan University, Yunnan.
- Xinhua News Agency. (2020). China Thailand Railway Agreement to be Signed in Oct. KHAOSOD ENGLISH Business
- YIN, M. Y., & WANG, S. J. (2005). *Research on Strategic Measures on Yunnan's Enterprises Entering Thailand* [J]. Journal of Kunming University of Science and Technology, 2.