CHAPTER 3
STRUCTURE OF THEORETICAL MODEL

3.1 Factors Affecting Trade with China

3.1.1 Exchange Rate

Because each country USES a different currency, each currency has a different value, so the exchange rate is presented. The exchange rate between two currencies is the exchange rate between one currency and another. This indicates the relationship between a country's currency and other countries' monetary value. Generally speaking, exchange rate can be roughly divided into two categories, namely fixed exchange rate and floating exchange rate. A fixed exchange rate is a system in which a country's currency is fixed on a set of currencies, such as gold. According to the floating exchange rate, this means that the exchange rate is determined by the demand and supply mechanism of the foreign exchange market, while the foreign exchange market fluctuates. However, there is another exchange rate system, which can be divided into three systems: the exchange rate system, the fixed exchange rate system and the floating exchange rate system.

At present, countries in the unemployment rate, inflation rate, domestic interest rates, balance of payments, economic situation, such as economic growth continues to use different exchange rate system, including the development of the domestic money market. According to the International Monetary Fund (2006) annual report on foreign exchange arrangements and exchange restrictions, the exchange rate can be divided into four main categories: hard peg, soft hook, floating exchange rate system (market rate) and rest. According to the analysis by the IMF staff, this classification is based on the information provided by the members' DE facto arrangement, which may differ from the official announcement. The classification of these exchange rate systems is based on the level of flexibility and the current formal and informal commitment to the exchange rate path. Here is the exchange rate regime.

3.1.1.1 Hard Pegs Exchange Rate Regimes

(1) There is no exchange arrangement for separate legal tender. The first hard pegs refer to the use of other countries' currencies as their own currency. The other is a member of a monetary or monetary union. This means that union members will use the same currency and must strictly abide by the rules. Countries that use this regime will lose their power and freedom to determine their monetary policies. In addition, it cannot control the amount of money and the exchange rate used. If there is inflation or currency fluctuations, there is nothing the government can do.

(2) Currency board arrangements. Currency board according to the specific legislative commitments, to local currencies for the specified foreign currency at a fixed rate of monetary system, plus the limitation on the issuer, in order to ensure their legal obligations. This means that the domestic currency will only be issued for foreign exchange, and is fully backed by foreign assets, thereby eliminating the traditional central bank functions, such as monetary

control and the lender of last resort, and there is no room left for discretionary monetary policy. Some flexibility can also be provided, depending on the severity of the currency board system.

3.1.1.2 Soft Pegs Exchange Rate Regimes

(1) Other Conventional Fixed-Peg Arrangements. The first is a country that has pegged its currency to another. This regime is mainly found in the was once a colonial country, it will relate its currency and the country, the country has been settlement, for example by the British colonial country. The other group is the countries that peg their currencies to the basket (linked to many currencies), which will take the percentage of trade as a percentage of the basket, including services and investments. However, it can use SDRS as part of the ratio. Under the system, the exchange rate would be more stable than the first. In any case, the two types of regime are calculated as fixed exchange rates, allowing the value of the domestic currency to be reduced or increased only from one or less than 1% of the central exchange rate. It can also be done by allowing the exchange rate to remain at its highest and lowest rate for at least three months in a narrow range of 2 per cent. In addition, if necessary, the monetary authorities can direct means of currency intervention, such as through the sale/purchase of foreign exchange market, and indirect means, through the active use of interest rate policy, the implementation of foreign exchange regulations, exercise the moral suasion limit foreign exchange activities, or other public institutions through intervention. Usually, monetary authorities do not intervene in exchange rates because it can lead to a decline in credibility. The advantage of this system is that currency transactions between member states will be effortless. Domestic and foreign entrepreneurs have ignored concerns about currency fluctuations.

(2) Horizontal band pegged exchange rate. The system is similar to the previous system. The difference is that the difference between a fixed central interest rate or the highest and lowest exchange rate can be more than 1 per cent, or more than 2 per cent. The example of this system is the arrangement of the European monetary system (EMS) exchange rate mechanism replaced by ERM II on 1 January 1999. With this system, bandwidth is the discretionary power of monetary policy.

(3) Stabilized Arrangement. Stable exchange rates will not fluctuate more than 2 percent over a six-month period. When using statistical techniques to confirm the single currency of anchor COINS, the desired stability margin can be satisfied. To classify it as a stable arrangement, it would need to meet the statistical criteria, and the exchange rate would remain stable as a result of official actions, including the rigidity of the structural market. This classification does not imply a policy commitment by the national authorities.

(4) Using the system to link the country's crawling, the currency value will be gradually adjusted at a fixed exchange rate. In addition, monetary authorities can adjust the value of the currency to coincide with changes in selective quantitative indicators such as inflation. Crawling speed can be set to generate the inflation-adjusted exchange rate change, set in the forecast of

fixed interest rate and/or lower than expected inflation differences (prospective) in China, for example, have used the system group and Hong Kong for adjusting the two currencies exchange rate. By using a crawling peg, the power of government intervention is the same as speaking in a fixed peg system.

(5) Crawl-Like Arrangement. Classified as a reptilian arrangement, the exchange rate must remain within 2 per cent of the statistical trend of at least six months, and exchange rate arrangements cannot be considered floating. In general, the minimum rate of change must be greater than the stable (peg) arrangement. But if the exchange rate appreciates or devalues in a sufficiently monotonous and continuous manner, the arrangement is considered to be similar to climbing, with an annualized growth rate of at least 1%.

3.1.1.3 Floating Exchange Rate Regimes

(1) Floating. The system would allow exchange rates to adjust to market demand and money supply. However, if there is any intervention, its main purpose is to control the high volatility. Thailand used the system after the Tom Yum crisis in order to balance the payments problem and let the market decide the currency.

(2) Free Floating. The system is similar to the previous system. The difference is that the monetary authorities have intervened at most three times, not more than three working days at a time, in the past six months to adjust to disorderly market conditions. Failure to provide evidence of such evidence would result in a floating exchange rate.

3.1.1.4 Residual Exchange Rate Regimes

Other management arrangements. If the exchange rate system cannot fall into the above categories, it belongs to the remaining categories. Systems that change exchange systems tend to fall into this category.

3.1.1.5 Exchange Rate Regime in Thailand

The banking act of Thailand was promulgated in 1942 during the second world war. Under the bill, the bank of Thailand is responsible for the operations of the central bank and other roles, which will be listed by the royal decree governing Thai banking. Although the bill has not been clearly clarified on monetary policy, the Supreme Court has the right to set interest rates on Banks, which are the interest rates of lenders' last resort. In addition, the robot has the power to buy and sell tools and foreign exchange, make loans to financial institutions to counter qualified collateral. Thailand's monetary policy has been divided into three periods.

(1) Pegged Exchange Rate. The peg was announced between world war ii and June 1997. First, the currency is linked to gold and then to the basket. A basket of currencies was announced

from November 1984 to June 1997. Under the currency basket, the exchange equalization fund (EEF) is responsible for declaring and protecting the value of the Thai currency against the dollar. At the time, fixed exchange rates promoted sustainable economic growth.

(2) Monetary Targeting. The system's monetary target was between July 1997 and May 2000. Thailand was supported by the international monetary fund (IMF) and adopted a monetary target system after it was changed from a pegged exchange rate to a floating exchange rate on July 2, 1997. Under this system, the decision of domestic money supply is to adopt the financial planning method to ensure the consistency of macro-economy and achieve the ultimate goal of sustainable growth and price stability. Through the assessment of the economic situation, the bank can determine the daily and quarterly monetary base targets according to its daily liquidity management. Day-to-day liquidity management is designed to prevent the rise and fall of liquidity in interest rates and financial systems.

(3) Inflation Targeting. This target has been used since May 23, 2000. In the international monetary fund projects, the bank to review the domestic and external variables, the results showed that after the financial crisis, and the relationship between money supply and output growth is not so stable. So the goal now is money, not inflation. When Thailand pulled out of the international monetary fund, the bank needed to announce a new policy anchor, which would apply to Thailand. In late May 2000, the central bank adopted inflation targeting as a new policy anchor because it would help restore confidence and credibility in central Banks and currencies.

Under the framework of inflation targeting, the monetary policy committee (MPB) was first appointed on 5 April 2000 and has the power to decide monetary policy by the governor. The MPB, which has nine members, includes prominent external experts and senior bank executives. MPB has the power to set the direction of monetary policy, with price stability as the primary objective, and to improve the inflation target framework to adapt to the Thai economy. Currently, however, the seven-member monetary policy committee (composed of the bank of Thailand and four outside members) is responsible for determining the direction of monetary policy. The new banking law of Thailand, B.E. 2551(2008) was issued on 3 March 2008. The new BOT act clearly defines the central bank's objectives and responsibilities as the central bank to maintain monetary stability, the stability of the financial system and the stability of the payment system.

3.1.1.6 Exchange Rate Regime in China

In 1988, China set up a semi-official currency swap center, allowing companies to trade renminbi to better reflect market demand. In January 1994, China turned its economic development into a socialist market economy and put forward the central exchange rate of official and currency swaps, because the dual exchange rate was unified. The renminbi lost 33 percent overnight to $8.7. Later, in April, the China foreign exchange trade system (i.e., Shanghai first interbank money market), the yuan against the dollar of about 8.28 yuan, the central bank may intervene to keep the renminbi stable. According to the current account, China's renminbi could be fully exchanged in December 1996. Between 1994 and 1996, the renminbi fell from 8.7 to 8.28 against the dollar.

In 2001, China became a member of the world trade organization (WTO) and pledged to gradually implement the monetary system. Two years later, China's trade surplus with the rest of the world was large. As a result, other countries are pressing Beijing to let its currency appreciate in order to balance global trade. In December 2004, China decided to gradually adopt a flexible exchange rate system. Six months later, the yuan was revalued at 2.1% and revised the rules governing the yuan, adjusting the exchange rate to a managed floating exchange rate against a basket based on market supply and demand. The main currencies in the basket are the dollar, euro, yen and won. The rest are Singapore dollar, pound, Malaysian ringgit, Russian ruble, Australian dollar, Thai baht and Canadian dollar, but the weight of these currencies is hidden. In May 2007, China adjusted its daily trading range for the renminbi against the dollar from 0.3 to 0.5 per cent. When the global financial crisis was at its worst, the central bank set the exchange rate at 6.38 against the dollar in response. A year on, China has released a pilot program that allows selected Chinese regions to pay for renminbi transactions. As a result, the renminbi is closer to an international currency. In June 2010, China resumed its original plan to reform the yuan's exchange rate and let the yuan float freely. At that time, the yuan was no longer pegged to the dollar. As a result, the Yuan hit the high record at 6.2884 per dollar in February 2012. The same year, in March, the intention to internationalize the Yuan was raised by allowing all companies in China to pay for imports and exports in Yuan.

In addition, the Cross-Border Inter-Bank Payment System, or China international Payments System (2015), was launched. More than 50 countries and regions in the world have become CIPS partners, which can separate direct partners from China's commercial Banks and 176 indirect partners. CIPS stresses that this is an important step in building a modern payment system that supports both domestic and international payments. In addition, CIPS has standardized the principles of financial market infrastructure and other international regulatory requirements, and it will become an important part of promoting the internationalization of RMB. On October 1, 2016, the RMB was added to the SDR basket, including the us dollar, euro, renminbi, yen and pound, respectively 41.73, 30.93, 10.92, 8.33 and 8.09 respectively. This is one of the major initiatives of China's economic and global economic integration.

3.1.2 Trade Agreement

Trade agreements are a wide range of taxes, tariffs and trade treaties, usually including investment guarantees. A trade agreement is an agreement signed by two or more countries to reduce or eliminate tariffs, quotas and other trade restrictions, rather than a higher tariff. When trade agreements apply, member states will trade at a lower cost, not member states. With this contract, the trade agreement may increase the import and export tax rates of the signatories. If the ratio of imports and exports increases, there will be a variety of goods entering these countries, which will lead to fierce competition among suppliers. Therefore, people in these countries will have an advantage in buying these goods.

The China-ASEAN free trade area or China-ASEAN free trade area is a free trade area between the Association of Southeast Asian Nations (ASEAN) and the People's Republic of China. Initially, the agreement was signed by premier Zhu Rongji, who was then the premier of the People's Republic of China. He said the possibility of the China-ASEAN free trade agreement submitted by China and ASEAN on November 6, 2001. As a result, they have proposed the ASEAN-China Trade Negotiation Commission (TNC) to negotiate between China and ASEAN countries. On November 4, 2002, the ASEAN-China comprehensive economic cooperation framework agreement was signed in Phnom Penh, Cambodia.

On June 18, 2003, Thailand and China signed an accelerated tariff reduction agreement. The products included in this project are fruits and vegetables (HS 07-08). Effective date: 1 October 2003. This is the so-called the FTA (the kingdom of Thailand's government and the government of the People's Republic of China（PRC) in the framework agreement on comprehensive economic co-operation between ASEAN and China, speed up the elimination of tariff under the early harvest program agreement).

The framework is used as a guideline for free trade zones and cooperation among members. Moreover, the early harvest plan was put forward under this framework. The early harvest plan is an integral part of the agreement to eliminate or eliminate tariffs on certain product groups. Products covered by this project including 8/9 digits (coordinate system code: HS codes), including: live animals, meat and meat, fish, other animal products, dairy products, living trees, edible vegetables, edible fruit and nuts (HS 01-08). The early harvest scheme will take effect from 1 January 2004. Therefore, on January 1, 2004, the two sides began to lower the tariff rate, and by 1 January 2006, the tariff was reduced to zero. The ASEAN-China free trade agreement is divided into three parts: product, service and investment. Contracts are signed at different dates and are affected at different times. The product was signed on 29 November 2004 and has been affected since 20 July 2005. Services and investments were signed on 14 January 2007 and 15 August 2009; It was affected on 1 July 2007 and 15 February 2010. This study only focuses on the product part.

From the above, the product in this case means that other products are already included in the early harvest project. Therefore, the contract will cover agricultural and industrial products (HS 01-99) (normal track). However, member states can maintain tariff rates on sensitive and highly sensitive products. After the contract comes into effect, the tariff will be gradually reduced or cancelled. Finally, on January 1, 2010, ACFTA became the largest free trade zone, based on the population and the third place based on nominal gross domestic product.

To further explain, sensitive products are products that need time to eliminate tariffs. This is because the product itself is vulnerable to competition from suppliers in other countries. Thai rice, for example, is considered a sensitive product because it has long produced a lot of rice. The maximum number of sensitive products is 400(6 bits). Thailand has 251 products as sensitive products, while China has 178 products. In addition, the import value of sensitive products may not exceed 10% of the total value of imports. By January 1, 2012, tariff rates on sensitive products will reach or below 20%. By January 1, 2018, that proportion will reach or below 5%. For the new ASEAN members, time will be extended. Highly sensitive products are the same as sensitive products, but the number of products is limited to 100 or less than 40% of sensitive products. In addition, the tariff rate may be lower or equal to 50% by January 1, 2015.

The following are the objectives of the agreement:

(1) Strengthening and strengthening bilateral economic, trade and investment cooperation.

(2) Gradually open and promote trade in goods and services and establish a transparent, free and convenient investment mechanism.

(3) Explore new areas and develop appropriate measures for closer economic cooperation between the two sides.

(4) To promote more effective economic integration among the new ASEAN members and to bridge the development gap between the parties.

To establish a free trade agreement in 2010, member states agreed to negotiate quickly. They also use the following to strengthen and strengthen economic cooperation:

(1) Gradually eliminate tariffs and non-tariff barriers in virtually all merchandise trade;

(2) Gradually open trade in services and provide substantive sector coverage;

(3) To establish an open and competitive investment system to promote and promote investment in China-ASEAN free trade area;

(4) Providing special and differential treatment and flexibility to the new ASEAN members;

(5) Establish effective trade and investment facilitation measures, including but not limited to the simplification of customs procedures and development of mutual recognition arrangements;

(6) To expand economic cooperation within the agreed framework to supplement trade and investment linkages between the parties and to develop action plans and projects to implement the agreed sectors/areas of cooperation;

(7) Establish appropriate mechanisms for effective implementation of this agreement.

3.1.3 Tariff Barrier

Tariffs are defined by the world trade organization and are tariffs on goods. Tariffs provide a price advantage for locally produced goods, rather than imports of the same kind, and increase revenue for the government. There are three types of tariffs: MFN (most-favored-nation treatment), limited tariff (BND) and preferential tariff.

3.1.3.1 Most Favored Nation Tariff

The tariff is the standard for tariffs between WTO members unless they sign a trade agreement. In short, this rate must be the highest rate a member can charge to another member. This means that countries that do not join the WTO may charge higher rates, sometimes even lower than the MFN rate.

3.1.3.2 Preferential Tariff

Virtually every country has at least a preferential trade agreement to ensure that the tariff rate will be lower than the MFN. In general, preferential tariff rates for free trade zones, such as CAFTA, SAFTA, or customs union, such as the European Community, and the southern African customs union, are zero tariffs for each product. As a result, countries with this preferential agreement will pay lower tariff rates. In addition, the agreement is sometimes written, and it will deduct a percentage of the Most Favored Nation (MFN) tax rate, but it does not need to be zero.

3.1.3.3 Bound Tariff

The tariff restrictions are specific commitments made by individual WTO member governments. The binding tariff is the maximum tariff level for a given line of merchandise. When countries join WTO or WTO members negotiate tariff levels in trade rounds, they will agree on binding rates rather than actual application rates. Restrictive tariffs are not necessarily the exchange rate that WTO members apply to other WTO members in practice. Members have the flexibility to increase or reduce their tariffs (on a non-discriminatory basis) as long as they do not raise them to their limits. If a WTO member raises the applicable tariff ceiling, other WTO members can let the country settle the dispute. If the country does not lower its application tariffs below its limits, other countries can ask for compensation in the form of higher tariffs. In other words, the applicable tariff is lower than or equal to the actual tariff imposed on any particular product.

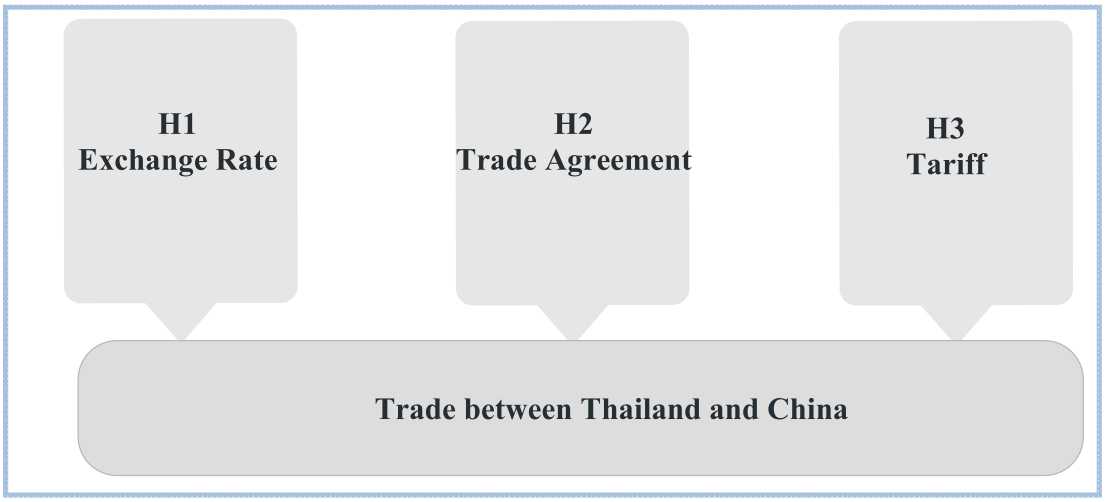
If the three tariff rates are compared, the tariff rate will be the top rate, while the preferential rate will be the lowest, and the MFN rate will be between these two rates.

If the product fails to comply with the country's rules of origin, the importer will adopt the MFN tariff. Therefore, both preferential and MFN rates are likely to apply effective tariff rates.

3.2 Hypothesis

The theoretical framework of this study is shown below.

Figure 1-1 Theoretical Framework



Previous studies have found that exchange rate misalignment does affect international trade flows. Exchange rate undervaluation is found to promote exports and restrict imports, while in the case of overvaluation, the opposite is true. Exchange rate volatility is positively correlated with trade. This merely indicates that the fluctuation of exchange rate increases the total trade of Sub-Saharan African countries.

H1 Exchange rate has a positive effect on trade between Thailand and China.

Many studies have referred to the factors of trade agreements. Tariff barriers fall. Lower import prices, leading to an increase in imports. Exports have also increased, which is true, whether the economy is fixed or flexible. Low trade can be attributed to high tariff barriers. One reflection of high tariff barriers is that the ratio of trade gross domestic product (GDP) to many such SAFTA countries is low.

H2 Trade agreements have had a positive impact on trade between Thailand and China.

High tariffs create a bigger income effect, while lower tariffs bring lower income effects. However, higher tariff rates show lower trade and lower tariff rates.

H3 Tariff barriers had a positive impact on trade between Thailand and China.

3.3 Research Model

(1) Identify the problem. The trade between Thailand and China has been going on for a long time, and every year there has been a marked increase. This is one of the signs of success in trade and economic development between the two countries. One of the most important questions is what drives this success. The study will lead to the promotion of bilateral trade. Both

economic and non-economic variables are likely to be considered trade drivers. However, the study covered only three economic variables: exchange rates, trade agreements and tariff barriers. These three variables are the basic economic factors that assume the impact on economic activity.

(2) Review of previous studies. The literature review includes more than 30 research and research on factors affecting the performance of trading. These are the economic variables discussed in the study. Currency and trade agreements are commonly used in the study. At the same time, trade barriers are rarely discussed. Three economic factors are basic variables in the economic field, but some studies show that they have little impact on trade.

(3) Data collection. The first step in analyzing these factors and their significance is to collect data. This process involves collecting historical data, the main data, from the sources of the Internet and books. There are several data needs to complete this study interest rates from Thailand to China import and export, Thailand to tariffs on Chinese products, tariff, China's products for Thailand, trade agreement between Thailand and China, CAFTA, and in the end, the average exchange rate between Thailand and China.

(4) The data processing. There are several models and software that can be used to perform data processing. STATA is used in this study in a dozen software applications. There are many models that can be used for analysis, but multiple linear regression models are used in this study to find out the significance of each factor. After that, collect the data and enter the data processing through the following steps:

I. Data in the data source is organized into tables and can be stored in CSV format or Excel extensions.

II. The excel file is imported into the STATA program.

III. The program runs and checks the complete case only through the complete case analysis method, which means that only rows that contain all the data are used for analysis.

IV. The data is processed and adapted to the linear regression model to make use of the important value test hypothesis.

(5) Results and analysis. The statistical results include but are not limited to the coefficients of the linear equations, p values, and the minimum mean square, and translate the results into an interpretable data table. The p value is used to counter the significance of each variable. If the p value is less than 0.05, it indicates that the variable is significant and is used to approve or reject these assumptions based on the statistical output of STATA software. The influence and influence of various factors on the trade between Thailand and China were analyzed.

(6) Conclusion. Finally, after analyzing and interpreting the results, the conclusion is reached at this stage. This paper summarizes how each variable in the work affects the trade between Thailand and China through a linear regression model. The three variables are then reduced to a clear, short and sharp term. The limitations of this study were clarified in order to overcome them in future work. Further research proposals will be listed to improve the study.

3.4 Conditions of study

Some conditions are needed to complete the study. Here is the list of requirements.

I. STATA Program
II. STATA material
III. Data and information from the Internet
IV. Collect data from government sources
V. Books and articles
VI. Microsoft Excel