Original Research

The Review Analysis of China’s Economic Growth and the Correlations with Thailand’s Economy

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Abstract
This article was aimed to study the environment and the co-movement of China’s economic growth together with Thailand under economic and macro-finance dimensions by collecting information from academic literatures, global organization reports, and historical data from opened source database such as World Bank, United Nations, International Monetary Fund (IMF), and other relatives. The study found that China’s and Thailand’s economic activities are related particularly in term of trade but the low investment. In fact, services industry has replaced industrial manufacture to be the influential factor on gross domestic product (GDP) in both two countries. Moreover, enhancing to promote world-class capital markets and financial system development in China has drawn attraction from Thailand investors to invest more than a half of Thailand’s direct investment funds in financial firms and activities in China in 2017. In the conclusion, Thailand’s economic growth is still relied on China’s demand for raw materials according to goods and products they have exported to China. The suggestion for Thailand is to create their own technology like China’s development model in order to produce valuable goods and services productivity. And for both countries, China and Thailand should also have to focus on income distribution through other areas outside the city under the principal of economic development to improve the welfare of the population.

Keywords: Economy; China; Thailand; Growth.

1. Introduction

Since 1978, after Mao Zedong’s death, Deng Xiaoping, the former General Secretary of the Communist Party of China, pushed the policy towards bringing the message of social and economic transformation to bring China on a new level, using the guidelines of capitalism along with socialism or central planning. The important policies such as authorizing foreign direct investment to China, improving the infrastructure system, establishing special new economic zones along the coasts, as well as encouragement of improving the legal system particularly in taxes and incentives to encourage the expansion of investment and industry development, have so far driven China onto the path of growth.

In only three to four decades, China, later on under the governance of Xi Zhinping, has dramatically climbed up to be one of the top biggest in the size of economy and one of the most powerful countries in the world, helped raise an estimated 800 million of Chinese people out of poverty (Morrison, 2018). According to China’s fast-grow economy, the effects of its growth has rapidly been spreading through the world. China has become a big trade partner with many countries as well as being the main source of funds such as foreign direct investment (FDI) in overseas. One most of fascinating changes in China, is not only skyrocket rise of economy that relied on income from large amount of goods manufacture like in the first past decades, but also the new high innovation and technology that China can make, for example, electronic payment system, world class high speed and cheap public transportation, fast accurate artificial intelligence (AI) logistic services, huge scale construction, as well as spaceship projects and commercial jet aircraft made by Chinese.

The coin has two sides, even though China’s economy has dramatically exploded for a long time, there have been signs of a productivity and economic growth slowdown in China that would impact different regions of the world in different ways depending on their exposure. In countries that are dependent on commodity exports, like Australia, Brazil, Canada, and Indonesia, the slowdown could have a negative impact on their GDP growth as demand slows. However, the inevitable fall in commodity prices could be the beneficial impact for other countries that consume the commodities, such as the United States and countries across Europe. Moreover, not less important than trade flows, funds and capital flows among China and foreigners are obviously related to the international financial integration and domestic financial and economic stability that must be taken high concern in order to run the capital control policy for each country.

Thailand has a mixed economic system in which there is a variety of private freedom, combined with centralized economic planning and government regulations. Thailand is a member of the Asia-Pacific Economic Cooperation (APEC) and the 1, where the estimation outcomes showed that the trade creation effect in ASEAN-China

1 ASEAN consists of ten countries (Indonesia, Malaysia, Philippines, Singapore, Thailand, Brunei Darussalam, Viet Nam, Lao PDR, Myanmar, and Cambodia), signed a framework for regional economic growth and peace and stability in 1967, which was manifested in Bangkok Declaration. According to the World Bank (2000), the motivations for regional economic integration can be divided into political and economic perspectives. (http://asean.org/asean/about-asean/overview/)
FTA (ACFTA) is much larger than other in ASEAN-Korea FTA (AKFTA) and ASEAN-Japan FTA (AJFTA). Taguchi and Lee (2016). It is unavoidable for Thailand to be involved in economic activities and take the benefit from trade with China. With the economic freedom score (The Heritage Foundation, 2018) of 67.1, making Thailand’s economy to be the 53rd world freest in the 2018 index. Thailand seems to pursue capital flow from China by inviting Chinese investors in preparing attractive investment facilities, especially ready to be a big industrial manufacturing hub of Southeast Asia.

Linking Thailand with China, the Thai government is looking forward to connecting EEC to be a part of One Belt One Road Initiative (OBOR). Statement by Thailand’s Prime Minister Prayut Chan O-Cha addressed on May 12, 2017, Thailand needs to develop convenient infrastructure with China to facilitate connectivity. ASEAN Today (2018) The under-construction high-speed railway and train from Kunming-China to Thailand pass through Laos is using Chinese technology and co-funds between Thailand and China such as Public-Private Partnership (PPP), in order to boost the tourism and attract investment. Furthermore, Thailand also has the high intention to improve and encourage e-commerce system and cashless society inspired by china-model, Alipay.

By considering the direction of Thailand’s policies along with China’s growth, so this report was aimed to study the relationship between China and Thailand in the term of financial and economic development perspectives. The benefit of in-depth study and making good understanding in the economic structure in both countries is to bring proper analysis in order to determine the right policies or regulations, as well as effective strategies between Thailand and China.

2. Data and Experimental Methodology

This study used monthly statistic time series data from 2000 to 2018 that were pulled from open source databases such as World Bank, IMF, OECD, Census and Economic Information Center (CEIC), as well as relative local government organizations. Furthermore, descriptive analysis is considered to be used in this study in order to compare major macroeconomic indicators by plotting graphs and diagrams between Thailand and China which including nominal GDP, GDP per capita, GDP growth rate, inflation, percentage of GDP shares by classified industries, investment, currency exchange rate, trade, and investment particularly foreign direct investment (FDI) between the two countries.

3. Result and Discussion

3.1. China and Thailand Economic Growth

![Figure 1. Nominal GDP at Current Price (billion USD)](source: International Monetary Fund (2018))

In early 2000s, (see Figure 1) China’s nominal GDP at the current price was far behind the advance technology countries until 2009 that China became to the world second largest economy beating Japan, Germany, United Kingdom, Canada, and the rest of the world, only following the United States. However, China’s GDP based on purchasing power parity (PPP) has jumped to the top of the world and remain being on the first rank since 2013 (International Monetary Fund, 2018). This dramatic change in the scale of economy could lead China to be a very powerful country.

2 The Eastern Economic Corridor (EEC) Development Plan under scheme of Thailand 4.0 aiming to revitalize and enhancing of the well-known Eastern Seaboard Development Program that had supported Thailand as a powerhouse for industrial production in Thailand for over 30 years.
Even if Chinese can create their own high technology and China’s GDP is very huge, China was still classified in the level of developing country (United Nations, 2018) due to the large number of Chinese populations in divided of the total GDP. Considering GDP per capita (see Figure 2) in comparative with Thailand, Chinese income per capita used to be lower than Thai for decades since 2000, and climbed up to the higher level from 2011, remain richer, and increasing larger gap by 40 percent higher in 2017.

Figure 3 shows the annual growth rate of real GDP for China and Thailand are moving together in the same direction. It is obvious that China’s growth rate has been between 7% - 15% during the selected period of time, higher than Thailand’s where the growth rate of GDP has been around 0%-7% and faced unfortunate negative (-0.7%) in 2009. Consider only in China’s growth, it found that after increasing in growth rate from 2000 to the peak at 14.2% in 2007, China is currently facing the slow-down of economic growth to the low 6.7% - lower than the beginning of 2000. Even if China’s growth has been diminishing or facing the slow-down, however, seeing the movement of the lines, Thailand’s growth has seemingly more fluctuated.

The analysis of the relation between GDP and inflation rate implies purchasing power of money against the economic growth. The relationship between GDP growth and inflation, seem to be positive both in China and Thailand (Figure 4). However, the different between the two countries is that China is better to control consumer price than Thailand as seeing the inflation rate in these countries have been staying around 0% -7%, while China’s GDP growth rate is much higher than inflation. It is intuitively consistent with the IMF data that China is the first rank of the world in GDP based on purchasing power parity (PPP) which mean China has become wealthier aligning more purchasing power. Unlike in Thailand that inflation is rather aligned with the economic growth rate.
The pattern of main income for the GDP has been changed in the modern world that industry and manufacture, is no longer be the primary factor to take most part of the gross domestic product. The statistics in Figure 5 shows that services industry is the most important sector for China and Thailand as it took more than 50% of GDP in both countries in 2017, following with industry and manufacture, and agriculture and fisheries in respectively. The study of several international agencies found that the services sector is a new engine of the economy, especially in the middle-income countries, services sector enhances productivity, competitiveness, and the growth of the whole economy. Since many services such as telecommunications, energy, and financial services are the necessary intermediate inputs of all production, modern IT and innovation development will help efficient business in services sector to be a kind of rich product ready to be exported and support the expansion of the global value chain (GVCs), which drives the growth of many countries.

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3 According to the Three Industries Classification Regulations, the Three Industries are divided into Agriculture and Fisheries, Industry and Manufacture, and Services. Agriculture and Fisheries industry refers to agriculture, forestry, animal husbandry and fisheries (excluding services to agriculture, forestry, animal husbandry and fisheries); Industry and Manufacture industry refers to mining (excluding mining and support activities), manufacturing (excluding repair services of metal products, machinery and equipment), production and supply of electricity, heat, gas and water, and construction; Services industry is the service industry, and refers to all other industries not included in primary and secondary industries.
3.2. Interest Rate and Currencies

In this report, the real interest rate was presented in according to get the rate that has been adjusted to remove the effects of inflation reflects the real cost of funds to the borrower and the real yield to the lender or to an investor. Figure 6 shows that the real interest rate in China and Thailand since 2008 have been moving aligning together and almost be at the same rate by the end of 2016. There is nothing complicated to explain in positive interest between 0.5% – 4.6% in Thailand, but some period of times in China especially in 2008, 2010 and 2011, during the world financial crisis, the real interest rates were negative reflected less value of money in the accounts. This situation hurt people as well as businesses who rely on the banking or financial system as a source of savings and loans which related to the investment. However, the situation was improved after 2011, China’s real interest rate was turned to be over zero and the rate was maintained at around 3.5%.

The currencies exchange may reflect the price of goods and services for international trade. Since Chinese currency has been more acceptable among the markets, more Chinese and Thai entrepreneurs are likely to do business according to Chinese Yuan. Therefore, the exchange rate between Chinese Yuan Ren Min Bi (RMB) and Thai Baht (THB) will be focused on the graph in Figure 7 by the ratio THB per one RMB. The Chinese RMB against THB was appreciated from 4.70 THB/RMB in the mid of 2013 to the highest 5.65 THB/RMB by the end of 2015 and have been slightly depreciated (see Figure 7).
3.3. Trade and Investment between China and Thailand

China and Thailand have been the important partner for a long time based on history and official relationship. The diplomatic relations between the People’s Republic of China and the Kingdom of Thailand was officially established on July 1, 1975. The Thai-Chinese relation has been proceeded smoothly for all over the time, on the basis of equality, respect, and no-intervention to each other. Furthermore, China and Thailand have conducted the principal of mutual benefit in bilateral, multilateral, and region level frameworks, to maintain the peace and stability between two countries.\(^4\) In this part, the relation of economic activities – trade and investment between China and Thailand will be emphasized regarding their important role as a powerful engine with fuel to drive and boost up the economy.

3.3.1. Trade

International trade cooperation between China and Thailand has become an increasingly important component of the relationship between the two countries. In 2016, China was the top trade partner for Thailand with trade value at 75,715 million USD under the framework of ASEAN-China FTA, so tariffs on international trade between China and Thailand are implicitly mostly zero. The lower ranks from China are followed by Japan, USA, Malaysia, Vietnam, Singapore, Indonesia, Hing Kong, Australia, and South Korea (see Table1). In the same year, Thailand was ranked on the 9\(^{th}\) of trade value partner for China, followed Vietnam and Malaysia, two members of ASEAN countries.

| Rank | Country         | Trade Value | Rank | Country | Trade Value |
|------|-----------------|-------------|------|---------|-------------|
| 1    | United States   | 520,798     | China| 75,715  |
| 2    | Hong Kong       | 303,952     | Japan| 51,154  |
| 3    | Japan           | 274,939     | USA  | 36,541  |
| 4    | South Korea     | 252,682     | Malaysia| 20,418 |
| 5    | Germany         | 151,323     | Vietnam| 13,842 |
| 6    | Australia       | 108,178     | Singapore| 14,737 |
| 7    | Vietnam         | 98,266      | Indonesia| 14,503 |
| 8    | Malaysia        | 86,930      | Hong Kong| 13,071 |
| 9    | Thailand        | 75,715      | Australia| 13,727 |
| 10   | United Kingdom  | 74,346      | South Korea| 11,357 |

Source: World Bank (2018).

At the accounting of trade balance between Thailand and China in Figure8, it shows that China has gained positive balance over Thailand for all over a decade since 2007 to 2017. Although total trade value has double increased since 2007 to reach the highest value at 73,670.43 million USD by the end of 2017, there has been always trade-deficit on Thailand side which is related to Thailand’s demand to import, has been obviously increasing while export has slightly changed. In the other hand, China has remained the amount of value of import from Thailand and be able to elevate more export.

\(^4\) Royal Thai Embassy, Beijing.
Looking to the top eight products that Thailand imported from China in 2017 (Figure 9), Thailand spent on electrical machinery and parts for 14% out of total import value from China, followed by 10% on household appliances, 9% on machinery and parts, chemicals, 7% on parts and vehicle accessories, 7% on computer parts and accessories, 5% on iron, steel and products, 3% on other metal ores, metal waste scrap, and products, and other products for the rest 47%.

Rubber products, polymers of ethylene, propylene in primary forms, automatic data processing machines and parts thereof, chemical products, tapioca products, and woods as well as wood products, are the most of seven groups of products that China had demand to import from Thailand in 2017. In Figure 10, the percentage of rubber product was 10% is the highest share of total products that Thailand exported to China. However, the number of 4% motor cars together with parts and accessories is a very interesting because this product group had not been in the table of the most ten products that China imported from Thailand until the past four years.

Figure 9. Goods Import from China to Thailand in 2018

Source: Thailand’s Ministry of Commerce (2018).
Even if rubber and rubber products are the most two product groups that Thailand exports to China, however, the trend selling of these products to China during the past five years (2012 – 2017) is likely to decrease (see Figure 11), as well as decelerated export growth of primary form polymers such as plastic beads. Anyway, an increasing export trend of electronics integrated circuits including printed circuit board assembly (PCBA), is a hopeful prospect for Thailand to keep export to China.

Seeing China as an exporter of goods to Thailand (see Figure 12), electrical machinery and parts, the highest expenditure of goods that Thailand have imported from China, tend to be increasing. The highest growth rate is on vehicle parts and accessories, which reached about 142% from 2012. For plastic products, although the value is not as high as other goods on top ranks for China’s export, it has the interesting high growth rate around 60%, higher than electrical machinery and parts where growth rate is around 30%. However, while most of the products exported from China are likely to be increased, computer including parts and accessories is the group of products that it has decreased for 31% for the past five years.

Source: Thailand’s Ministry of Commerce (2018).
3.3.2. Investment

For investment part, foreign direct investment (FDI) will be emphasized because FDI reflects a powerful engine of economic growth as it is general source of funds in order to create development facilities, for example, FDI and GDP growth are usually growing together helping to integrate domestic economy with the international or global economy. China used to be the FDI receiver when it was firstly encouraged social and economic reform. According to the National Economic and Social Development Plan, Chinese government has promoted both public and private sectors to have more role in global society and gained economics benefit, as well as political interests, therefore, increasing pay role of FDI outward since 2005 had led China to be an FDI investor in 2016 (see Figure13). Nonetheless, China’s economic slow-down is another reason for Chinese investors to be looking for the new opportunity to invest overseas.
The number of Thailand’s FDI inward from China has been likely increased since 2008, but the flow in Figure 14 show that is the China’s direct investment in Thailand have moved like boom-bust cycle especially in 2014 that FDI net flow was negative. These can be related to the political instability in Thailand particularly coup d'etat by the military to take over government affairs that caused investor confidence, led sharply decreases FDI inflow, and increases outflow.

In Thailand, the manufacturing, real estate activities, motor vehicles including trailers and semi-trailers are the main sectors that FDI from China is allocated in 2017 with the investment value of 171, 156.59, and 122.36 million USD in respectively. The products such as rubber and polymer plastic beads are the main products in the manufacturing industry that most of investment fund was invested to produce.

Due to the real estate market in China was rather sluggish and faced to the over-supply situation, so Chinese investors have moved some funds to invest in real estate outside the country including Thailand where real estate activity was the second highest of all sectors that received FDI from China in 2017 (see Figure 15). However, negative net FDI from China occurred in Transportation and storage sector, and manufacture of coke and refined petroleum products for around 25.68 million USD.

Consider Thailand’s Direct Investment in China (see Figure 16), Thailand outward FDI in China are negative during 2005 – 2013, and 2016 – 2017. There was only two years in 2014 – 2015 that direct investment out flow from Thailand are positive. These reflect that Thailand rather be the receiver of investment of China due to negative outflow more inward FDI that the outward.

Figure 15. China’s Direct Investment Allocation by Sector in Thailand in 2018
China’s financial or capital markets are the key factor attracted Thai investors as today capital markets in China play a very important role in the global economy as well as the world financial activities. The Chinese government has emphasized the financial market development by relaxing capital flow and investment regulations to foreigners, especially in two important markets – Shanghai Stock Exchange and Shenzhen Stock Exchange where three types of capital assets, A-Shares, B-Shares, and H-Shares, were traded. Hudachek (2013) Therefore, from Figure17, in 2017 in China, Thailand invested 50% of total direct investment in financial and insurance activities sector basically via mutual funds for 461.42 million USD especially in Q1 of 2017 when the initial investment for this sector was 459.43 million USD. The following investment allocation by 21% in manufacturing, 16% food products manufacture, and 7% in wholesale and retail trade which including repair of motor vehicles and motorcycles.

4. Conclusions and Recommendations

China’s economic growth has a meaning to Thailand’s economic policymaker because of the relationship of economic activities between the two countries in both public and private relations. The plot of economic growth shows that China is really facing the slow-down situation from over-supply in the production of goods meanwhile, there is more fluctuation in Thailand with no pattern to forecast. To take the action to the economic slowdown, Chinese have to expand their investment abroad and attempting to add more value on their products at the same time. Surprisingly, income from services industry has been more important for both China and Thailand which takes more than a half of GDP replacing industrial manufacture.

The international trade value between Thailand and China have grown every year but the income is not that much distributed to the households. Regarding to the main products that China and Thailand have traded together, trade - deficit for Thailand happened because Thailand is the supplier of raw materials of goods production for China and import the final goods which are more valuable to consume. Even to gain trade balance from China is barely to be seen, Thailand should develop their own technology to be more on self-reliance rather rely on the amount of raw material trade to China in order to decline the trade-deficit.

China’s investment value in Thailand is low and still far behind the other countries. To draw the intention from Chinese investors, Thailand needs to prepare attractive facilities as well as encourage benefit or offer the rich...
privilege of investment according to investor needs. Merging China and Thailand on the initiative belt road project particularly using Chinese high-speed train technology linking the railway from China to Thailand is an opportunity to welcome Chinese investors, and also be a good opportunity receive technology transmission in the future.

Even if China and Thailand are classified to as a developing country which seeking for economic growth, but Thailand development pattern is different from China in many perspectives. Thailand technically does not have their own valued technology like China does, so the development is still relied on foreign technology and seems to be more relied on China. Seeking for economic growth is important for developing countries, however, to make sure that all people in all regions of the country are living without poverty is very challenges because the growth will be worthless if the income is only clumped in urban or cities as the key objective of economic growth is to improve population’s welfare.

4.1. List of Abbreviations

AI; Artificial Intelligence, IMF; International Monetary Fund, CRS; Congressional Research Services, APEC; Asia-Pacific Economic Cooperation, ASEAN; the Association of Southeast Asian Nations, ACFTA; ASEAN-China Free Trade Area (ACFTA), AKFTA; ASEAN-Korea Free Trade Area, AJFTA; ASEAN-Japan Free Trade Area, EEC; The Eastern Economic Corridor, UNCTAD; United Nations Conference on Trade and Development, UNSD; United Nations Statistical Division, PPP (Introduction P.2); Public-Private Partnership, PPP (in Results and Discussion, Page3 and Page 4); Purchasing Power Parity, FDI; Foreign Direct Investment, OBOR; One Belt One Road Initiative, GVC; Global Value Chain, TDI; Thailand’s Direct Investment, OECD; Organization for Economic Co-operation and Development, THB; Thai Baht, RMB; Chinese Ren Min Bi, HKD; Hong Kong Dollar, PCBA; Printed Circuited Board Assembly.

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