The Study of Competitiveness of Thai Exports to the U.S. Market

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Abstract

This study primarily focuses on competitiveness measurement via revealed comparative advantage index (RCA) of Thai economic products being exported to the United States during 2007 – 2013. This is an original attempt to use this index to assess the competitiveness of important three Thai economic products exported to the United States. The dataset for the study has been provided by the Thai Ministry of Commerce and the World Bank. The study reveals that rubber exports to US market from Thailand have considerably comparative advantage and it is noticeably greater than those of other products. Conversely, the chemical and steel products exported to US market from Thailand have noticeably comparative dis-advantage in the US market. The findings of the study will contribute to knowledge of international competitiveness, especially in trade between Thailand, one of the spearhead countries of ASEAN, and the gigantic economy of a country like the United States. The volume and value of trade between these two countries is expected to grow rapidly and consistently with the arrival of the ASEAN economic community (AEC).

Keywords: Comparative Advantage, Competitiveness, Export, Thai Economy, ASEAN

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1. Introduction

World Bank (2014) reports that the Thai economy has been recovering more slowly from the Global Financial Crisis than such countries as Malaysia and Indonesia. Growth in 2013 is shown to be 3 percent, with performance slower than expected in all components of GDP – consumption, investment, net exports and government spending. While some of the weakness in exports can be explained by the structure of production: falling global PC sales relative to tablets may have reduced exports of hard disk drives, and sectors such as agro-products and metals have also performed poorly. The weakness in household consumption is partly explained by tax incentives for car purchases that expired at the end of 2012 and led to preponing of consumption. Fast growing levels of household debt, more rigorous macro-prudential measures by the Bank of Thailand, and arrears in payments on the Paddy Pledging Program have also been contributing factors. The slowdown was evident by the third quarter, before protests began. The protests are unlikely to have had a significant macroeconomic impact in 2013 (World Bank, 2014).

It can be seen that the Thai economy has decelerated considerably over the past a few years. A large number of economic reports indicate that export growth has decreased dramatically and continually since the early 2010s, in part due to erosion of Thailand's competitiveness. On average exports grew 13 percent per year from 2006 – 2011, before slowing to less than 1 percent from 2012 – 2014. Thailand's market share in world exports has declined correspondingly during the same period (World Bank, 2015). Hence, it is necessary to conduct a study to assess the competitiveness of Thai manufacturing exports in order to show the real situation, as well as to point out possible measures or make recommendations to stakeholders and policy makers to uplift this situation. These are the main purpose of this research. This paper is structured as follows: first, the literature review related to Thailand-US trade situation, comparative advantage, competitiveness, and competitiveness measurement are discussed. Then, the research methodology is presented, followed by the results, discussion, and policy implications, and empirical and theoretical contribution of the study. The final section is limitations of the study and future research agenda.

2. Literature Review

According to McKean, Toh, and Fisher (1994), by the late 1980s, Thailand had emerged as one of the fastest growing economies in the world. Although Thailand's growth rates averaged more than 7 percent in the 1960s and 1970s, its more recent growth is unprecedented. Between 1986 and 1989, real gross domestic product (GDP) increased by 10 percent annually. Thailand's economy is heavily export-dependent, with exports accounting for more than two-thirds of GDP. Exports as a percentage of GDP had risen from 17 percent in 1970 to 38 percent by 1988. Thai exports tripled in value between 1985 and 1990, with total exports in constant dollars rising from nearly 5.2 billion in 1985 to 15.5 billion in 1990 (McKean, Toh, and Fisher, 1994). According to the Ministry of Commerce (2015), exports in Thailand

averaged 9,348.86 USD million from 1991 until 2015, reaching an all-time high of 21,227.12 USD million in August of 2011.

Manufactured exports have led the export boom. Thailand's exports had been shifting from agriculture and primary commodities to manufacturing for more than 20 years. The overall structure of Thai exports has also changed. Manufacturing's contribution to the domestic economy has increased rapidly, whereas agriculture's contribution to GDP has declined. Manufactures rose from about 10 percent of total exports in 1971 to 66 percent in 1990, while agriculture, principally primary commodities, dropped from 63 to 27 percent in this same period (Narongchai, 1989). Textiles and apparel has been the lead sector in the export boom. Other sectors with outstanding gains since 1985 include jewelry, electronic components, integrated circuits, machinery parts, footwear, and processed and canned food. Traditional agricultural commodity exports (e.g., rice, maize, and tapioca) lost ground.

Thailand has developed an increasingly broad and diversified export base. In 1990, no sector represented more than 9 percent of total export earnings, with the exception of clothing and textiles, which accounted for nearly 15 percent of the total. Thailand has excelled in various niche markets and to date has been the world's largest tuna exporter and exporter of frozen prawns to such highly competitive markets as Japan. Food processing industries have encouraged the diversification of agriculture, leading to tremendous success in canned and frozen exports. At the present time, Thailand exports mainly manufactured goods (86 percent of total shipments), with electronics (14 percent), vehicles (13 percent), machinery and equipment (7.5 percent) and food processing products (7.5 percent). Agricultural goods, mainly rice and rubber, account for 8 percent of total shipments. Major export partners are China (12 percent), Japan (10 percent), the United States (10 percent) and the European Union (9.5 percent). Others include: Malaysia, Australia and Singapore (Ministry of Commerce, 2015). Thus it can be seen that, for Thailand, the United States is one of its major export markets.

2.1 The Overall Trade Situation between Thailand and the United States

Chanlett-Avery, Dolven, and Mackey (2015) point out that Thailand is the Southeast Asia's second largest economy. One of the region's more developed and open economies, it has been for many years one of the region's largest destinations for foreign direct investment. According to the World Bank (2015), Thailand became an upper middle income economy in 2011. In recent years, the Thai economy has performed strongly, despite the political turmoil. However, after the 2014 coup, the economy grew only 0.7%, the slowest rate in three years. In 2015, Thai economy has grown to 2.8% (Asian Development Bank, 2016).

According to the Office of U.S. Trade Representative (2015), Thailand is the 25th largest market for U.S. goods exports. Two-way trade with Thailand totaled $47.4 billion in 2014 and the overall U.S. trade deficit with Thailand was $15.3 billion. Major exports from the United States include integrated circuits, computer parts, semi-conductors, cotton, aircraft parts, electronics, soybeans, and oil. Major imports to the United States include electronics, jewelry, seafood, clothing, furniture, natural rubber, auto

parts, rice, chemicals, and steels. This can be seen that rubber, chemicals, and steels are among the important export products from Thailand to the US.

2.2 The Concept of Comparative Advantage and International Competitiveness

2.2.1 Comparative Advantage

According to Prasad (2004); Seyoum (2007); Jayawickraman and Thangavelu (2010); Wei and Chunming (2012); Kathuria (2013); Huo (2014); Erkan and Saricoban (2014), Suwannrat (2016; 2017), the concept of comparative advantage is widely used in economic and export competitiveness literature. This concept is originally created by Ricardo (1817) in order to explain trade specialisation patterns among countries as a function of a nation's resource endowments. Domestic natural resources and factors of production being fixed, a country which possessed them could produce a good more cheaply than a country which had to import them. Simply put, countries that have a comparative advantage in the production of a good should be found to export a higher proportion of that good relative to other countries (Addidon-Smyth, 2005). Thus, comparative advantage in essence became a cost-based notion of a country's economic competitiveness, based on the fixity of basic inputs into the production process.

Likewise, Leishman, Menkhaus and Whipple (1999); Cai and Leung (2007); Erkan and Saricoban (2014) argue that the concept of comparative advantage is largely derived from the propositions on opportunity cost and labor specialisation. The theory explains that the driving force behind international trade is not "absolute" but "comparative" advantage. That is, even if an autarky country has absolute advantage in all the goods (i.e., it can produce all the goods more efficiently than other countries), it can still benefit from international trade through increasing specialisation in the goods where its comparative advantage lies (Erkan and Saricoban (2014: 118). Correspondingly, Siggel (2007) points out that each country would produce and export products with obvious comparative advantage or weaker comparative disadvantage, and import products with obvious comparative disadvantage. So-called comparative advantage meant that one country had less comparative cost for a certain quality of the same product than another country.

In addition, Thornhill (1988); Siggel (2007); Erkan and Saricoban (2014) rationalise that the comparative advantage concept is a microeconomic level, focusing on industry-specific trade, explaining why one country might export labor-intensive products while another country might specialise in capital-intensive ones. In other words, each country has a comparative advantage in the production of some products for which it has a lower relative (opportunity) cost than its competitors. Comparative advantage is an equilibrium concept, predicting a pattern of trade when prices, trade flows and exchange rates are in equilibrium. Business decisions, in contrast, often explicitly consider short-term developments (Erkan and Saricoban, 2014).

2.2.2 International Competitiveness

According to Adams, Cangnes and Shachmurove (2004), international competitiveness has been defined as the ability under present conditions of a country's products to command world market, while OECD (1992) explained [international] competitiveness as the degree to which, under open market conditions, a country can produce goods and services that meet the test of foreign competition while simultaneously maintaining and expanding domestic real income. Assche, Hong and Slootmaekers (2007) argue that a country gains international competitiveness if it is able to export products and services at a relatively cheaper price and therefore grab a larger export market share. A country loses international competitiveness if it loses export market share. However, the concept of competitiveness is still evolving and controversial (Krugman, 1994; Siggel, 2007; Erkan and Saricoban, 2014).

A large number of researchers (e.g., Rugman, 1993; Jin and Moon, 2006; Chikan, 2008; Seyoum, 2007; Siggel, 2007; Welch and Lyford, 2007; Wei and Chunming, 2012; Kathuria, 2013; Huo, 2014) argue that the measurement of international competitiveness has been widely adopted from Balassa (1965). Balassa's competitiveness indicators are ex post concepts (Balassa, 1965). Many studies have determined a country's competitiveness via the paradigm of Balassa by comparing a commodity share in its exports to the commodity share in world exports, referred to as its revealed comparative advantage (RCA) (Balassa, 1965, 1967; Seyoum, 2007; Huo, 2014). If the RCA is greater than one it is taken as evidence of international competitiveness. It compares how well a country has done in export of some particular set of goods. Balassa (1965) claims that comparative advantage is revealed by observed trade patterns, i.e. high shares of export markets. RCA is grounded in conventional trade theory and measures a country's exports of a commodity relative to that of a set of countries (Seyoum, 2007).

Erkan and Saricoban (2014) argue that in empirical work, the concept of comparative advantage has been used extensively although the notion of comparative advantage faces a measurement problem because it is defined in terms of relative autarkic price relationship that are not observable in post-trade equilibria. This is because trade statistics reflect post-trade positions (Sharma and Dietrich, 2004). The linkage between comparative advantage and competitiveness (RCA) as follows (Ballance, Forstner and Murray, 1987): EC ⟶ CA ⟶ TPC ⟶ RCA. Economic condition (EC) in the various trading countries ultimately determine the international pattern of comparative advantage (CA). This pattern, in turn, governs the pattern of international trade, production and consumption (TPC) among countries. Indices constructed from TPC and, perhaps, other post-trade variables are normally used to indicate comparative advantage and referred to as indices of "revealed comparative advantage (RCA)".

The index of revealed comparative advantage was first introduced by Liesner (1958) and operationalised by Balassa (1965) in order to measure comparative advantages (Balassa, 1965). The export index of revealed comparative advantage (RCA) has been defined as the ratio of a country's exports in a particular commodity category to its share in total merchandise exports (Balassa and Noland, 1989). Benedictis and Tamberi, (2001) argue that this measurement was initially created in an attempt to

overcome obstacles in measuring Ricardo's index because of unobserved relative autarkic prices. This approach uses value of exports to measure a comparative advantage in production of each country. The index can be presented as:

$$RCA = (X_{ij}/X_j)/(X_{iw}/X_w)$$

Where X stands for exports, i, j and w refer to industry (product category), country and world respectively. The index neutralises the effect of the size of a country's economy or industry, thereby making it possible to make meaningful comparisons between countries and the international performance of different industries.

The value of index varies between zero to infinity, where zero indicates a country has no exports in the industry being considered, and infinity means that the industry is a major exporter relative to other industries of the economy. A sector with an RCA index of over one has a share in the world market share which exceeds the average share of the country in world exports. This means that it is relatively competitive, compared to the rest of its home economy. Such a sector has therefore a comparative advantage (Rivlin, 2000).

According to Hinloopen (2001); Erkan and Saricoban (2014), a more detailed analysis, in order to demonstrate the power of comparative advantage, the Balassa's RCA indices can be classified into four types (Hinloopen, 2001): Comparative disadvantage has been named as type 1, where $0< RCA \leq 1$. Type 2 is a weak comparative advantage ($1 < RCA \leq 2$), while the moderate comparative advantage has been categorised as type 3 ($2 < RCA \leq 4$). The RCA with scores are greater than 4 has been classified as type 4, the strong comparative advantage.

3. Research Methodology

The dataset of this study has been obtained from the Thai Ministry of Commerce and the World Bank. This research measures international competitiveness using the RCA Index. World Bank (2010) notes that RCA is the ratio of the export output of a product of a certain country to that product in the world market. The measure of competitiveness can be straightforwardly computed by the RCA Index, which can, to a certain extent, show the comparative advantages of the product: whether it is cost-effective to produce that product in a certain location compared to the opportunity cost of the resources in producing the product.

The measure of competitiveness by RCA index can be computed straightforwardly and it can show the comparative advantages of the product to a certain extent: whether a cost effective to produce that product in a certain location compared to opportunity cost of the resources in producing that product. In this study, the RCA index is calculated as follows.

$$RCA = (X_{ia}/X_{ta})/(X_{iw}/X_{tw})$$

Where X_{ia} = Total exports of goods (i) from Thailand to the United States

X_{ta} = Total exports from Thailand to the United States

X_{iw} = Total imports of goods (i) of the United States

X_{tw} = Total imports of the United States

The criteria determining the index of comparative advantage (RCA) are as follows. If the RCA> 1 means that the country has a comparative advantage in exporting goods (i) to the United States. If the RCA <1 means that the country has a comparative dis-advantage in exporting goods (i) to the United States.

4. Results, Discussion, and Policy Implications

Table 1 illustrates the value of total Thai rubber exports and total Thai exports to the world during 2007 – 2013. It can be seen that the total Thai rubber exports to the world market have the average increasing rate as 12.6 percent during the seven year period. In 2008, the rubber export increased considerably as 15 percent compared to the previous year, whilst the sharp drop was seen in 2009 as 19 percent of decreasing rate compared to 2008. The significant increasing rate of Thai rubber exports to the world market can be found in 2010 and 2011 with 51 percent and 42 percent respectively compared to the preceding year. However, the trend showed the substantial decrease of Thai rubber exports as 14 percent of decreasing growth rate in 2012 from that in 2011. The trend shows a slight increase as 0.89 percent from 2012 to 2013.

Table 1: The total value of rubber exports and total Thai exports to USA during 2007- 2013.
Value: Thousand USD

Year	Thailand	
	Rubber Exports	Total Exports
2007	17,146,990.2	153,571,126
2008	19,738,478	175,907,915
2009	15,831,316.4	152,497,203
2010	23,917,009.5	195,311,520
2011	34,185,683.7	228,823,973
2012	29,380,155.8	229,544,513
2013	29,642,015.2	228,527,440

Source: World Bank (2015).

Table 2 and Figure 1 shows the RCA index of rubber exported to the United States from Thailand. The data show that rubber exports to US market from Thailand have considerably comparative advantage and higher than other export products. The evidence shows that RCA index scores of rubber export from Thailand to the US market during the seven year period are more than 1 every year. This shows the strong comparative advantage of rubber exports from Thailand.

Table 2: The annual revealed comparative advantage index (RCA) of Thai rubber exports to US Market during 2007 - 2013

Products	Year						
Rubber	2007	2008	2009	2010	2011	2012	2013
Thailand	3.9886	4.0867	3.5886	4.0089	4.7696	4.0176	3.9986

Source: Authors' Calculation

However, according to the Thai Ministry of Commerce (2015), a number of potential problems or barriers to exporting rubber from Thailand to US are labor shortages, high operating cost, volatility of the rubber price, and a low rate of rubber product development. Thai government and related stakeholders urgently need to find measures to address these problems. The best way to strengthen this sector and boost rubber exports to the Chinese market could be as follows:

Firstly, according to Albarracin et al., (2006), the Thai government could support production by rubber planters directly and promote the use of new production technologies in order to increase yield per rai effectively and consistently. Secondly, the Thai government might seek new approaches and measures to solve the labor shortage in the agricultural sector. It might also accelerate development of agricultural machinery to reduce labor dependency. Planters might upgrade their machines or invest in new machines for more efficient use and cost reduction. Thirdly, Thai government officers may wish to encourage planters to change their production technology, by encouraging the use of organic fertilizers in order to reduce operating cost. Finally, Thai policymakers may wish to foster research and development from upstream industry to downstream industry by setting up joint research projects between the Thai rubber research center and other rubber research centers in other top rubber export countries: Malaysia and Indonesia in order to increase productivity, support the learning of planters, and develop the rubber industry as a whole (Doner and Abonyi, 2013).

Table 3 shows the value of Thai chemical exports and total Thai exports to the world during 2007 – 2013. The data show that the total Thai chemical exports to the world market have the average increasing rate as 14.7 percent during the seven year period. In 2008, the chemical export increased

considerably as 20 percent compared to the previous year, whilst the slight drop can be seen in 2009 as 4.2 percent of decreasing rate compared to 2008. The significant increasing rate of Thai chemical exports to the world market can be found in 2010 and 2011 with 30 percent and 33.7 percent correspondingly compared to the preceding year. The trend showed the slight increase of Thai chemical exports as 3.5 percent of increasing growth rate in 2012 from that in 2011. The trend continues to show the similar figures with a slight increase as 5.2 percent from 2012 to 2013.

Table 3: The total value of chemical exports and total Thai exports to USA during 2007- 2013.

YEAR	THAILAND	
	CHEMICALS	TOTAI EXPORTS
2007	5,826,674.45	153,751,126
2008	7,039,762.46	175,907,915
2009	6,741,376.39	152,497,203
2010	8,786,683.14	195,311,520
2011	11,750,472.8	228,823,973
2012	12,167,101.2	229,544,513
2013	12,167,101.2	228,527,440

Source: World Bank (2015).

Table 4 and Figure 1 shows the RCA index of chemicals exported to the US from Thailand. The data show that chemical exports to US market from Thailand has noticeably comparative dis-advantage. The evidence shows that RCA index scores of chemical exports from Thailand to the US market during the seven year period have lower than 1.

Table 4: The annual revealed comparative advantage index (RCA) of Thai chemicals exports to US Market during 2007 - 2013

Products	Year						
Chemical	2007	2008	2009	2010	2011	2012	2013
Thailand	0.5386	0.5332	0.5024	0.5524	0.6388	0.6983	0.7397

Source: Authors' Calculation.

Ministry of Industry (2015) argues that the trend of world chemicals industry depends on the improvement of the global economic situations: the solution of public debt of the EU countries, the recovery of Chinese economy, and the better situation of the United States fiscal problem. Also, Thai chemicals production has been affected by the rise of the minimum wage of 300 Baht nationwide. This could increase cost of production significantly; Thai government may subsidize or use other schemes and policies to help Thai chemicals producers to adjust their production structure for a period of time since this sector relates to a large number of exporting industries that use chemicals as raw material for manufacturing.

According to Ministry of Industry (2015), the index of industrial production of chemicals in 2013 illustrated the contracted figure, which the import volume grew with a faster pace than export, compared to the relatively high index in 2012. This results from the high domestic consumption by heavily importing from overseas producers for supplying for industrial and residential construction sectors. Hence, it can be seen that a number of construction projects of Thai government contribute to the rapid growth of chemical demand in 2013. As well, the other reasons could be the shrinking of the electrical appliances and electronics sector in Europe and Asia (the chemical industry is the upstream industry of these sectors) and the increased competitiveness in this sector from rival countries. For example, Malaysia has a relative cost advantage over Thailand (Ministry of Industry, 2015).

For this situation, Thai government may wish to enhance the competitiveness of manufacturers in this sector in a number ways. For instance, in terms of technology transfer, this has been shown to be an area where foreign firms have disappointed the hopes of the Thai government. The Thai government may wish to consider giving higher priority to targeted education policy in order to improve this situation, supporting links and collaboration between Thai higher education institutions and foreign manufacturers operating in Thailand in this sector. Such foreign and Thai companies might be encouraged to send specialists to teach and collaborate with Thai students and scholars, or to set up courses for, for example, final-year engineering students. These students, would then be of great value directly to their companies or as key players in this chemical sector. Thai universities could act as intermediaries in promoting such links among firms in the industry with the aim of expanding the supply of highly qualified and compatible managers and workers for the industry in the future and enhance competitiveness of this sector as a whole.

Table 5 illustrates the value of Thai steel exports and total Thai exports to the world during 2007 – 2013. It can be seen that the total Thai steel exports to the world market have the average increasing rate as 2.5 percent during the seven year period. In 2008, the steel exports decreased slightly as 4.6 percent compared to the previous year, whilst the considerable slump can be seen in 2009 as 15 percent of decreasing rate compared to 2008. The recovery of Thai steel exports to the world market can be found in 2010, 2011, and 2012 respectively.

Table 5: The total value of steel exports and total Thai exports to USA during 2007- 2013.

Value: Thousand USD

Year.	Thailand	
	Steel Exports	Total Exports
2007	9,497,653.54	153,571,126
2008	9,058,154.04	175,907,915
2009	7,765,062	152,497,203
2010	8,521,574.33	195311520
2011	9,633,898.87	228,823,973
2012	11,694,646.9	229,544,513
2013	11,197,712.5	228,527,440

Source: World Bank (2015).

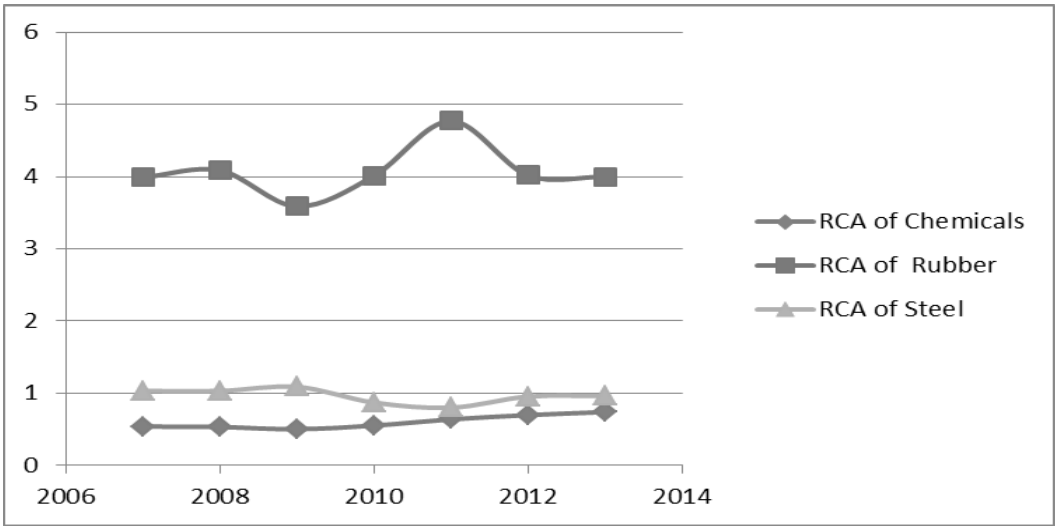
Table 6 and Figure 1 shows the RCA index of steels exported to the USA from Thailand. The data show that steel exports to US market from Thailand has comparative is-advantage in the US market. The evidence shows that RCA index scores of steel exports from Thailand to the US market during the seven year period have lower than 1, excepting in 2007 and 2009, which show RCA scores of 1.032, and 1.0889 respectively. According to the report of World Bank (2015), the data show the dramatic slump of the market growth of the US. Hence, Thai government may wish to establish a number of export promotions to support Thai exporters to expanding exports into new markets like South America and Africa. Also, Thai government could support the manufacturers especially SMEs to develop their products to improve the product standard internationally. Also, Thai government and related government institutions like EXIM Bank (Export Import Bank of Thailand), SME Bank, and so forth could promote the expansion of financial services to diverse international markets for facilitating overseas transaction and increasing export volumes.

Table 6: The annual revealed comparative advantage index (RCA) of Thai steel exports to US Market during 2007 - 2013

Products	Year						
Steel	2007	2008	2009	2010	2011	2012	2013
Thailand	1.0320	0.8609	1.0889	0.8711	0.8006	0.9545	0.9621

Source: Authors' Calculation.

Figure 1: The comparison of annual revealed comparative advantage index (RCA) of rubber, chemicals, and steel exports to US market during 2007 – 2013



Source: Authors' Calculation.

6. Limitations of the Study, and Future Research Agenda

We need to be aware of the weaknesses of the RCA Index, noted in the literature (e.g., Siggel, 2007; Suriya, 2001; Benedictis and Tamberi, 2001), since the data obtained from the previous period was computed. The Index gives no indication of the potential for change. It also fails to reflect other implicit costs to the country, such as trade barriers and transportation costs. Hence, the calculation and the interpretation of this index rest on an assumption that there will be no market distortion or market intervention by government or related stakeholders. Also, RCA Index does not indicate the source of comparative advantage. Because of these limitation, measuring with other sophisticated indices (e.g., DRC, CMS, MI, and CAI) could, however, provide even clearer results. Hence, assuming future availability of the database, a future project is encouraged to conduct this same type of research using the aforementioned indices for comparison with the results of this study. This would contribute significantly to the literature.

In addition, as can be seen that to date a large and growing part of trade has come from two-way trade in similar industries that could not be explained by comparative advantage. To explain intra-industry trade, a number of researchers put forth a new set of trade theories that relax the assumptions of perfect competition and constant economies of scale. A new trade theory could perhaps augment the understanding of trade competitiveness.

Further, future study of this issue could be conducted with other major trading partners of Thailand and ASEAN (e.g., Japan, China, and the EU) in order to understand the competitive position of Thailand and ASEAN countries in the world market. Last but not least, if a broader range of export products could be studied, this would provide a greater understanding of competitiveness for academicians, policymakers, and all stakeholders.

7. Conclusions

This study is the original attempt to assess the competitiveness of three important products (rubber, chemicals, and steels) from Thailand to the US market. It provides new data and empirical insights into the literature of export, trade, and competitiveness assessment. Also, it integrates the concept comparative advantage with competitiveness via the microeconomic level since these two terms are often used interchangeably. Comparative advantage refers to situations of unrestricted free markets of Ricardo, in which resources are allowed free flow to their most efficient and productive uses. Whilst competitiveness explains trade as it exists in the real world. This includes the influence of trade barriers, exchange rate variation, product differentiation, and other factors which Ricardian comparative advantage does not consider. Furthermore, the international trade situation has changed dramatically and continues to do so. Competitiveness assessment could be an important tool to enable all firms and nations to perceive their strengths and weaknesses, and then find strategies and measure to move ahead of their rivals in a sustainable manner. Accordingly, this study enhances the insights of trade situation between Thailand and the US especially in three important export products: rubber, chemical, and steel, which could be beneficial and valuable for all related stakeholders and policy makers in order to support the sustainable growth of the world trade.

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