

The Structure of Commodity Trade between Thailand and Vietnam (2004-2013)¹

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Abstract

By using several international commodity classification systems, as well as trade pattern indices, this study investigates trends and changes that have taken place in the structure of commodity trade between Thailand and Vietnam over the past decade (2004-2013). The principal findings of this study are as follows. First, along with the rapid growth in bilateral trade volume, trade composition between Thailand and Vietnam has positively changed towards an increasing share of traded manufactured goods. In particular, there has been a considerable rise in the share of high technology products exported to Thailand from Vietnam, although Vietnam is able to participate in the assembling and processing stages with low value added. Second, Vietnam's exports have been less diversified as compared with Thailand. Third, both countries have enjoyed a comparative advantage in primary products, but there have been more medium and high technology products with high RCA value in Thailand's exports than Vietnam's. This study, therefore, concludes that the trade

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structure between the two countries is a complementary competitive relationship. This suggests that strengthening economic, trade and investment cooperation relations between Thailand and Vietnam is expected to move the Thailand-Vietnam commodity trade structure to higher value added products and more products with technological improvements in the upcoming years.

Introduction

Thailand and Vietnam established official foreign relations in 1976, one year after the unification of Vietnam. From that time, the relationship between the two countries has developed in all fields.

Regarding trade relations, Thailand has become one of the major trading partners of Vietnam in ASEAN. Trade exchange volume between the two sides has significantly increased from nearly US\$1.2 billion in 2000 to over \$10 billion in 2013.³ In terms of foreign direct investment (FDI), Thailand has been among the top 10 investors (top three investors, along with Singapore and Malaysia, in ASEAN) in the Vietnam market with over 330 projects, accounting for \$6.5 billion in total accumulated FDI in 2013.⁴

Although there has been growth in trade volume between the two sides, Vietnam still has a significant trade deficit with Thailand, accounted for \$3 billion in 2013. In bilateral trade structure, Vietnam is said to export a large volume of commodities with low value added to Thailand. This trade pattern has changed in recent years, mainly due to the contribution of the FDI sector to total exports. Thus, it is of interest to examine the trade pattern between the two countries because most previous studies have only employed qualitative methods to analyze Thailand-Vietnam trade relations. Specifically, this study looks at trade patterns between the two nations in terms of stages of production and technological content. This study employs the Herfindahl index (HI)

³ Data collected from the UN COMTRADE Database.

⁴ Nam, *Thailand Market Profile*, 8-9.

and the revealed comparative advantage (RCA) index to explore the level of export diversification and comparative advantage of products between Thailand and Vietnam over the past ten years. Data used in this study was mainly collected from the UN COMTRADE database with different classification systems, such as Broad Economic Categories (BEC), Standard International Trade Classification (SITC) and Harmonized System (HS).

Overview of Thailand-Vietnam Bilateral Trade Relations

After Vietnam's unification, Vietnam entered into a period of reconstruction of the economy that had been severely devastated by the war. The new situation provided Vietnam with an opportunity to improve bilateral relations with Thailand. At the same time, the economic development and democratic process in Thailand were also factors that contributed to the normalization of diplomatic relations between the two sides in 1976.⁵ Since then, relations between the two nations, both in terms of bilateral and multilateral cooperation frameworks, have dramatically developed in all aspects, from economic, trade and investment fields to political, security and cultural areas.

The first economic agreement signed after the normalization of relations between Thailand and Vietnam was the Agreement on

⁵ In fact, the relationship between the two countries had existed for a long time before officially normalizing bilateral relations in 1976. For instance, K.N. Hoàng divided Thailand-Vietnam relations before 1976 into different stages as follows: *Before 1883* – The relationship between the two countries started to being formed and developed basing on people-people relations and state-state relations; *1883-1945* – This is the period that Thailand-Vietnam relations were maintained as seen by people-people relations and Thailand became the place for Vietnamese revolution forces coming back to the upcountry; *1945-1954* – The revolution in August 1945 lead to the establishment of the Democratic Republic of Vietnam. The relationship between Thailand and Vietnam entered into a new chapter. When French colonialism came back to Vietnam, the Pridi Panomyong government and Thai people had certain support for Vietnam's resistance. Thailand also became an important diplomatic bridge of Vietnam; *1954-1975* – This is the period of confrontation in Thailand-Vietnam relations represented through Thailand's advocacy to the Saigon regime and the US. See Hoàng, "History of the development of Vietnam-Thailand relations (1976-2000)".

Economic, Trade and Technical Cooperation in January 1978. Trade exchange between the two countries was about \$1.61 million and \$9.96 million in 1976 and 1977, respectively.⁶ When Vietnam deployed its armed forces in Cambodia between 1978 and 1979, the Thailand-Vietnam relationship became tense. From the Thai perspective, Vietnam's invasion and occupation of Cambodia threatened Thailand and Southeast Asia's security. This fact obstructed Thailand-Vietnam economic cooperation.

The collapse of the Soviet Union by the 1990s also ended the Cold War period between the socialist block and Western countries. During this time, difficulties in internal economic development forced the Vietnamese government to implement economic reforms. The country started to develop a market economy to allow the private sector to raise capital for business expansion through investment. Vietnam also began to promote exports to external markets (other than the traditionally socialist markets), firstly to Southeast Asian countries.⁷ By this time, Thai foreign policy regarding the Indochina region changed significantly. This change was captured by the Chatchai government's 1988 slogan "turning Indochina from a battlefield into a market place." Regarding economic development, Thailand achieved an impressive annual growth rate of gross domestic products (GDP), around 9% from 1985 to 1996 when the country efficiently implemented its export-oriented strategy. These events, along with Vietnam's withdraw from Cambodia by the end of 1989, remarkably improved the Thailand-Vietnam relationship.⁸

As for economic cooperation, during this period Thailand and Vietnam ratified several relevant agreements, such as the Agreement of Investment Promotion and Protection (1991) and the Agreement of Tourism Cooperation (1994). There were a number of Thai investors in Vietnam at that time. For example, five joint-venture companies between Thailand and Vietnam were established in Vietnam with total \$7.2 million registered capital during the period 1988-1989. From

⁶ Data collected from the Ministry of Planning and Investment, Vietnam.

⁷ This was marked by Vietnam's official participation in ASEAN in 1995.

⁸ Theerawit, "The development of Thai-Vietnamese political relations".

January to July 1991, 10 joint-venture companies were set up with total registered capital of \$23 million.⁹ Thailand-Vietnam trade volume grew dramatically as Vietnam became an ASEAN member in 1995, increasing from \$69 million in 1990 to \$508 million and \$1.2 billion in 1995 and 2000, respectively.¹⁰

Under the Thaksin government (2001-2006), the relationship between the two countries was given a high priority. Although Thaksin's 2001 visit to Vietnam was more symbolic than involving any business-like negotiations,¹¹ it did pave the way for closer Thai-Vietnamese economic cooperation. The Thailand-Vietnam relationship tightened as Vietnam joined the Ayeyawady - Chao Phraya - Mekong Economic Cooperation Strategy (ACMECS) in 2004.

Another event that perhaps significantly contributed to the development of trade between the two countries was Vietnam's participation in the World Trade Organization (WTO) in 2007. Being a member of WTO, Vietnam has to follow certain market principles, including trade liberalization, that has proved to be a main factor enhancing Vietnam's trade and investment activities with the world as the whole and with Thailand in particular.

On a boarder scope, Vietnam and Thailand have actively contributed to realizing commitments in the ASEAN Free Trade Agreement (AFTA) and later the ASEAN Economic Community (AEC), which have taken effect since 2010 and 2015, respectively. Such events mark the turning points to the integration process not only for Thailand-Vietnam economic relations, but also for all other ASEAN member states. The reason is that Thailand and Vietnam would have many more opportunities for trading and investing with each other because of the removal of taxes and other trade barriers in those countries according to commitments in AFTA and AEC. Other regional cooperation frameworks in which Thailand and Vietnam are core members include the East-West Economic Corridor (EWEC) and the Greater Mekong Sub-region (GMS).

⁹ Data reported from the Department of Asia-Pacific, Ministry of Industry and Commerce, Vietnam.

¹⁰ Data reported from the General Department of Vietnam Custom.

¹¹ Theerawit, "The development of Thai-Vietnamese political relations".

The latest development in economic and trade relations between Thailand and Vietnam has been that both sides agreed to boost diplomatic relation to a strategic partnership level during the visit of General Secretary of Communist Party Vietnam, Nguyen Phu Trong, to Thailand in June 2013.¹² Such a strategic partnership represents at least a great symbolic meaning for Thailand-Vietnam relations since they were the first two nations in ASEAN to establish this kind of relationship. In this regard, both sides have agreed to implement the Plan of Action Implementing the Thailand-Vietnam Strategic Partnership (2014-2018) through dynamic mechanisms, e.g., Joint Thai-Vietnamese Cabinet; Joint Working Group; Joint Committee on Bilateral Cooperation; Joint Trade Committee.

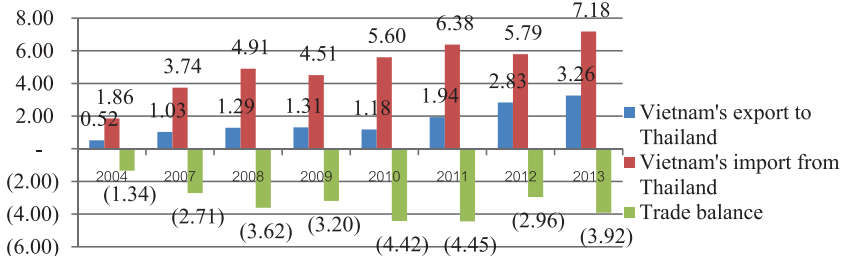
Overall, looking at Thailand-Vietnam trade relations, it is evident that this relationship went up and down with the political, security and diplomatic situation of the two countries. Nevertheless, the overall trend has been up, with the key achievements in Thailand-Vietnam bilateral economic, trade and investment relations since 1976 to the present including: 1) The signing of bilateral cooperation agreements to enhance technical, trade and investment cooperation between Thailand and Vietnam; 2) Changes in foreign policy towards Cambodia, Laos, Myanmar and Vietnam (CLMV countries) from the Thai government (1988) and the participation of Vietnam in ASEAN (1995); 3) The participation of both countries in multilateral economic integration and cooperation initiatives, such as ACMECS, AFTA, AEC, GMS and EWEC; 4) The participation of Vietnam in WTO (2007); and 5) The promotion of Thailand-Vietnam relation to the strategic partnership level. These are major elements that have helped the trade relations between the two countries flourish in recent years.

Specifically, trade exchange between Vietnam and Thailand reached over US\$ 10 billion in 2013, as compared with \$2.3 billion in 2004 (see Figure 1). As a result, Thailand has been on the top 10

¹² The strategic partnership between Thailand and Vietnam emphasizes five main pillars: political relations; defence and security cooperation; economic relations; social-cultural cooperation; and regional and international cooperation. Also, during this meeting the two countries committed to strive for annual 20 per cent increases in two-way trade to reach the goal of \$15 billion by 2020.

trading partners of Vietnam in the world, accounting for 3.7% of Vietnam's trade volume by 2013. Meanwhile, trading with Vietnam shared 2.1% in total trade volume of Thailand with the world in the same year. Yet, Vietnam has always maintained a trade deficit with Thailand, rising from \$1.3 billion in 2004 to \$3.9 billion in 2013. In comparison with other ASEAN countries, such as Indonesia, Malaysia and Singapore, data statistics collected from UN COMTRADE show that, except for 2011 and 2012 (trade surpluses with Indonesia and Malaysia, respectively), Vietnam also experienced chronic trade deficit with those nations. This tendency can be partly explained by the fact that Vietnam's manufacturing sector still lags behind the manufacturing sector of Thailand, while there are overlaps in comparative advantage products between Vietnam and Thailand.

Figure 1: Trade exchange between Thailand and Vietnam from 2004 to 2013 (unit: US\$ billion)



Source: Author's computation based on statistics of UN COMTRADE and General Department of Vietnam Custom

In terms of major export product groups, the value of the top 10 product groups (HS-2 digit) exported by Thailand to Vietnam has increased dramatically, reaching over \$4.6 billion in 2013 from about \$1.36 billion in 2004.¹³ Of which, mineral fuels, mineral oils and products derived from them, machinery and machine parts, plastic products, as well as electrical and electronics products, were among the most crucial product groups that Thailand has exported to Vietnam during the past decade.

¹³ Author's calculation based on UN COMTRADE Database.

With regard to Vietnam, electrical and electronic equipment and parts, iron and steel, mineral fuels and oils were in the top 10 export products to Thailand between 2004 and 2013. In particular, exports of electrical and electronic equipment have grown sharply from around \$210 million to \$1.3 billion, sharing 40% of Vietnam's exports to Thailand over the past decade.¹⁴ However, Vietnam's major export products to Thailand still include a significant proportion of natural resource-based products and labour intensive products during this time.

Generally speaking, there have been similarities in crucial export products between Thailand and Vietnam in the last decade. The next section will analyze in detail the situation of Thailand-Vietnam commodity trade structure between 2004 and 2013 as the stages of production, technological content, export diversification and revealed comparative advantage.

The Situation of the Commodity Trade Structure between Thailand and Vietnam (2004-2013)

Commodity Trade Structure as the Stages of Production

This study employs the classification of Gaulier, Lemoine and Kesenci to consider the changes in bilateral trade structure between Thailand and Vietnam as the stages of production. According to them, BEC items are grouped into stages of production as follows: primary goods; intermediate goods (including semi-finished goods and parts & components); and final goods (including capital goods and consumption goods).¹⁵

As can be seen in Table 1, there have been remarkable changes to the share of each stage of production in Thailand-Vietnam commodity trade during the past decade.

¹⁴ Author's calculation based on UN COMTRADE Database.

¹⁵ See details in Gaulier, "China's integration in East Asia: Production sharing, FDI & high-tech trade", 27-63.

Table 1: Changes in Thailand's exports to and imports from Vietnam as the stages of production

	Thailand's exports to Vietnam		Thailand's imports from Vietnam	
	2004	2013	2004	2013
Primary goods	3.38%	2.63%	15.39%	4.46%
Intermediate goods	78.63%	62.65%	62.49%	39.39%
<i>Semi-finished goods</i>	63.04%	44.24%	14.14%	27.42%
<i>Parts & components</i>	15.59%	18.4%	48.35%	11.96%
Final goods	17.99%	34.73%	22.12%	56.15%
<i>Capital goods</i>	8.16%	12.36%	8.51%	38.27%
<i>Consumption goods</i>	9.83%	22.37%	13.61%	17.88%
Total	100%	100%	100%	100%

Source: Author's calculation based on UN COMTRADE statistics.

With respect to Thailand, the share of primary goods in its exports to Vietnam has been small and nearly unchanged between 2004 and 2013. Although trade in intermediate goods still share the largest proportion, this has sharply dipped from 78% in 2004 to 62% in 2013. This was because of the rapid decline in the share of semi-finished goods despite the growth in the proportion of parts and components. On the contrary, Thailand's export share of final goods, especially consumption goods, to Vietnam surged considerably to nearly 35% in 2013.

With regard to Vietnam, the share of primary goods in its exports to Thailand dropped sharply, standing at 4.4% in 2013. Meanwhile, although intermediate goods shared the largest proportion (over 60%) of Vietnam's exports to Thailand in 2004, this share has rapidly fallen to about 40% after a decade. Conversely, there has been a remarkable upward trend in the proportion of final goods exported to Thailand over the past ten years. This growth was mainly attributed to the rising share in the export of capital goods, amounting to 40% of Vietnam's exports to Thailand in 2013. Compared with Indonesia and Malaysia, trade in intermediate goods between Thailand with those countries was much lower than that between Thailand with Vietnam. In particular,

Indonesia's exports to Thailand largely concentrated on primary goods, such as oil and gas, since Indonesia has rich natural resources; while with a developed manufacturing sector, half of Malaysia's exports to Thailand were capital goods.¹⁶

Overall, there has been a rapid decline in the share of primary goods and intermediate goods in Vietnam's exports to Thailand, with a significant increase in its export share of final goods to this market between 2004 and 2013. A similar trend can be drawn with Thailand's exports of intermediate goods and final goods to Vietnam. This possibly indicates that Vietnam has been in charge of the final process in the value chain of production in trading with Thailand. The increase in import value of consumption goods probably reflects the increasing demand for various and different goods between the two sides owing to the remarkable growth in income per capita of Thailand and Vietnam in recent years.¹⁷

Commodity Trade Structure as the Technological Content

Using the classification of Lall at SITC-3 digit, the structure of commodity trade by technological content between Thailand and Vietnam is examined according to five categories: primary products; resource-based manufacturing; low technology manufacturing; medium technology manufacturing; and high technology manufacturing.¹⁸

As for Thailand, Table 2 shows that most export products to Vietnam were manufactured products as its share has remained around 90% over the past decade. In manufactured products, medium technology products have always constituted the largest proportion, of which processing and engineering products accounted for approximately 40%.

¹⁶ Author's calculation based on UN COMTRADE Database.

¹⁷ According to the World Bank, income per capita increased from \$2,479 to \$5,647 between 2004 and 2013 in Thailand, while for Vietnam the increase was from \$603 to \$1,901 during the corresponding period. See details in World Bank, *World Development Indicators 2015*.

¹⁸ See Lall, "The technological structure and performance of developing country manufactured exports, 1985-98".

Table 2: Thailand's exports to Vietnam according to technological content (SITC-3 digit)

	2004	2008	2013
Primary products	12.71%	6.49%	8.75%
Manufactured products	87.29%	93.51%	91.26%
Resource-based manufacturing	28.11%	35.00%	27.01%
<i>Agro/forest-based</i>	7.22%	11.19%	14.53%
<i>Mineral-based</i>	20.89%	23.81%	12.47%
Low technology manufacturing	15.80%	12.26%	12.89%
<i>Textile/fashion cluster</i>	6.78%	4.15%	5.03%
<i>Other low technology</i>	9.02%	8.10%	7.86%
Medium technology manufacturing	37.57%	41.91%	44.82%
<i>Automotive</i>	5.15%	6.28%	6.29%
<i>Processing</i>	19.35%	17.66%	17.47%
<i>Engineering</i>	13.06%	17.98%	21.05%
High technology manufacturing	5.81%	4.34%	6.54%
<i>Electronic and electrical</i>	3.88%	3.07%	4.54%
<i>Other</i>	1.93%	1.27%	2.00%
Total	100%	100%	100%

Source: Author's calculation based on UN COMTRADE statistics.

On the other hand, there were insignificant changes in the proportion of exports of resource-based products and high technology products from Thailand to Vietnam. It, therefore, can be affirmed that Thailand, to some extent, could be having difficulties in upgrading the production of high technology manufacturing. Even so, medium and high technology products have still accounted for more than half of total export value from Thailand to Vietnam over the past decade.

Regarding Vietnam's exports, Table 3 demonstrates that the proportion of primary products in its export value to Thailand has declined to 10.9% in 2013, as compared with 20.7% in 2004. By contrast, there has been an upward trend in the share of manufacturing, growing from 79% to 89% during the same period.

Table 3: Thailand's imports from Vietnam according to technological content (SITC-3 digit)

	2004	2008	2013
Primary products	20.77%	26.33%	10.94%
Manufactured products	79.23%	73.67%	89.06%
<i>Resource-based manufacturing</i>	5.80%	6.01%	8.28%
<i>Agro/forest-based</i>	3.29%	3.20%	5.64%
<i>Mineral-based</i>	2.51%	2.81%	2.64%
<i>Low technology manufacturing</i>	10.01%	11.62%	16.86%
<i>Textile/fashion cluster</i>	3.43%	7.75%	5.64%
<i>Other low technology</i>	6.58%	3.87%	11.22%
<i>Medium technology manufacturing</i>	54.71%	20.30%	24.56%
<i>Automotive</i>	1.17%	3.20%	6.37%
<i>Processing</i>	5.26%	9.50%	7.34%
<i>Engineering</i>	48.29%	7.60%	10.84%
<i>High technology manufacturing</i>	8.71%	35.74%	39.36%
<i>Electronic and electrical</i>	8.66%	31.60%	38.58%
<i>Other</i>	0.16%	4.15%	0.77%
Total	100%	100%	100%

Source: Author's calculation based on UN COMTRADE statistics.

It is worth noting that Vietnam's share of exported high technology products rose dramatically from only 8.7% in 2004 to 35.7% and 39.6% in 2008 and 2013, respectively, with the major contribution coming from export of electronic and electrical products. This rise has been principally at the expense of primary goods and medium technology manufacturing, as well as reflecting the growth of FDI inflows into the production of high technology goods in Vietnam, especially during the last five years.¹⁹ More interestingly, in trading

¹⁹ Specifically, the manufacturing and processing sector has attracted a great share of Vietnam's total FDI over the past five years, amounting to around 70% of the country's total registered capital. See Dezan, "Using Vietnam to target the emerging ASEAN region".

with Thailand, the proportion of high technology products in Vietnam's exports was much higher than that of Indonesia's exports (around 7%), while it was similar to high technology exports of Malaysia (36%) as of the year 2013.²⁰

Nevertheless, the total share of primary products, resource-based and low technology products in Vietnam's exports to Thailand still remains high, at 35%. This implies that Vietnam's exports to Thailand still depend heavily on comparative advantage of natural resources and cheap labour.

Export Diversification between Thailand and Vietnam

Export diversification is important for developing countries such as Vietnam and Thailand to be able to minimize negative impact from external shocks. Thus, it is interesting to investigate the level of export diversification between the two nations. This study uses the Herfindahl Index (HI) at SITC-3 digit to examine the export diversification level between Thailand and Vietnam over the past ten years. The higher the HI of a country, the lower the export diversification of that country and vice versa, the lower the HI of a country, the higher export diversification of that country.²¹

Table 4 provides information on the export concentration level between the two sides over the past ten years. In 2004, the HI of Vietnam was relatively high, at 0.363, compared with 0.124 of Thailand. Put differently, Vietnam's exports to Thailand were much more concentrated on several products than Thailand's exports to Vietnam. As said before, this is because the manufacturing sector and agricultural sector in Thailand have been more diversified than in Vietnam. Yet, this trend has changed rapidly in recent years. Vietnam has started to diversify its exported goods to the Thailand market as its HI reduced to 0.180 in 2013, about 50% decline as compared with 2004. This concentration level of Vietnam was similar to that of Indonesia, but much higher than

²⁰ Author's calculation based on UN COMTRADE Database.

²¹ See details in Chandra, *Export Diversification and Competitiveness in Developing Countries*, 6.

Malaysia's export concentration level (0.159) to Thailand market.²² Since Thailand's exports were relatively diversified in 2004, its HI to the Vietnam market has not changed so much in the last decade, standing at 0.105 in 2013.

The increasing level of export diversification over the Thailand market indicates that Vietnam, relatively, has exported a variety of products, parts or components to Thailand market, especially high technology goods. This is likely because of the close geographical distance, better infrastructure and the large share of intermediate goods between the two sides despite the overlaps in the top 10 export groups of the two countries.

Table 4: HI of Thailand and Vietnam (2004-2013, SITC-3 digit)

Year	Vietnam's exports to Thailand	Thailand's exports to Vietnam
2004	0.363	0.124
2005	0.419	0.129
2006	0.385	0.108
2007	0.329	0.112
2008	0.267	0.159
2009	0.300	0.087
2010	0.285	0.106
2011	0.134	0.107
2012	0.184	0.111
2013	0.180	0.105

Source: Author's calculation from UN COMTRADE statistics.

Revealed Comparative Advantage between Thailand and Vietnam

Comparative advantage is a crucial concept for explaining the trade pattern between two countries in international trade. Balassa's index (or RCA index) reveals the ratio between the proportions of an export item in the total exports of a country and that of the world.²³

²² Author's calculation based on UN COMTRADE Database.

²³ See Balassa, "Trade liberalisation and "revealed" comparative advantage", 99-123; Balassa, "Revealed' comparative advantage in Japan and The United States", 8-9.

In regard to the top 10 RCA index, it can be seen from Table 5 that Thailand enjoyed a comparative advantage mostly in primary products (such as natural rubber, rice, natural abrasives and crustacean) and resource-based manufacturing (such as prepared or preserved fish and fruit, synthetic fibres or sugar) in 2004. By 2013, primary products and resource-based manufacturing still shared the top three RCA index, although their RCA index values in 2013 were not as high as those values in 2004.

Table 5: Top 10 export products with high RCA values in Thailand's exports (SITC-3 digit)

2004			2013		
Code	Commodity	RCA	Code	Commodity	RCA
231	Natural rubber, etc.	37.53	231	Natural rubber, etc.	24.90
042	Rice	28.92	042	Rice	13.44
277	Natural abrasives, nes	16.23	037	Fish etc. prepared, preserved, nes	13.34
037	Fish etc. prepared, preserved, nes	16.08	883	Cinematograph film	8.83
047	Other cereal meal, flours	8.48	621	Materials of rubber	8.54
017	Meat, prepared, preserved. Nes	6.75	017	Meat, prepared, preserved, nes	8.34
036	Crustaceans, mollusks, etc.	6.49	047	Other cereal meal, flours	7.14
058	Fruit, preserved, prepared	6.15	782	Goods, special transport vehicles	5.97
266	Synthetic fibres	6.07	061	Sugars, molasses, honey	5.78
061	Sugars, molasses, honey	5.79	762	Radio-broadcast receiver	5.59

Source: Author's calculation based on UN COMTRADE statistics.

Yet, more medium and high technology products appeared on this list, such as SITC codes 883, 782 and 762. In other words, to some extent Thailand has moved to higher stages of production that requires the participation of higher skilled labour and higher technological content. The calculations from UN COMTRADE also express the same situation when we look at Thailand's exports to other ASEAN countries. Thailand has always enjoyed comparative advantage

in transportation goods and food products over the Indonesia and Malaysia market.

Regarding Vietnam, Table 6 shows that the top 10 RCA index in Vietnam's exports remained mostly unchanged between 2004 and 2013. Specifically, Vietnam still had a strong comparative advantage over primary products (for example SITC codes 042, 036, 231, 075 and 071) and low technology manufacturing (such as SITC codes 841, 843 and 851) throughout 2004-2013. There was only one product – photograph apparatus (881) – that was in the top 10 RCA index in 2013. Meanwhile, the highest RCA values for Thailand market in exports of Indonesia included footwear and fuels, although Indonesia also enjoyed an advantage in transportation goods and chemical products. By contrast, Malaysia, with a developed manufacturing sector, primarily enjoyed comparative advantage in machine and electronics products, as well as miscellaneous goods.²⁴

Table 6: Top 10 export products with high RCA values in Vietnam's exports (SITC-3 digit)

2004			2013		
Code	Commodity	RCA	Code	Commodity	RCA
042	Rice	36.92	881	Photograph apparatus. etc. nes	27.80
036	Crustaceans, mollusks, etc.	29.58	246	Wood in chips, particles	21.81
231	Natural rubber, etc.	19.10	075	Spices	17.47
075	Spices	18.79	042	Rice	15.81
071	Coffee, coffee substitute	18.71	231	Natural rubber, etc.	12.78
851	Footwear	15.37	071	coffee, coffee substitute	11.35
841	Men, boys clothing, x-knit	9.03	036	Crustaceans, mollusks, etc.	10.02
843	Men, boys clothing, knit	8.79	851	Footwear	9.42
074	Tea and mate	8.64	841	Men, boys clothing, x-knit	7.96
844	Women, girl's clothing, knits	6.99	037	Fish etc. prepared, preserved nes	7.91

Source: Author's calculation based on UN COMTRADE statistics.

²⁴ Author's calculation based on UN COMTRADE Database.

Generally speaking, there have been similarities in the top 10 RCA index between Vietnam and Thailand in the past ten years. Both countries have principally enjoyed a comparative advantage in agricultural products and aquatic or primary products. This is understandable because Thailand and Vietnam have rich natural resources. However, Thailand nowadays has joined the higher stages of production, now having comparative advantage over capital intensive products as it became a newly industrialized economy. On the contrary, as noted earlier, Vietnam's exports still depends heavily on primary products and labour intensive products. Accordingly, it can be argued that the trade structure between Thailand and Vietnam over the past ten years has been a complementary competitive relationship.

From the above analyses, we can draw major characteristics in the Thailand-Vietnam trade structure over the past decade as follows. Firstly, Vietnam's export composition to Thailand after one decade has improved towards a decreasing share of exports of primary products and an increasing proportion of manufactured products, particularly exports of high technology goods, such as machinery, electronic and transportation equipment. This means to some extent Vietnam has also started to move to higher stages of production in trading with Thailand in recent years.

Secondly, the large share of intermediate goods between the two sides, to some degree, indicates the increasing integration of Thailand-Vietnam trade relations in the regional production network. In this regard, Vietnam has been in charge of the final process in the value chain of production when trading with Thailand.

Thirdly, with a more advanced economy, Thailand has a more diversified export sector than Vietnam's and the Thailand-Vietnam commodity trade structure, in general, and the degree of export diversification, in particular, have accurately revealed the economic development status of each country. However, Vietnam has also begun to diversify its exports to Thailand.

Fourthly, Vietnam's import composition in trading with Thailand remains reasonable. Import goods from Thailand, at a certain level, have satisfied Vietnam's input demand for production activities, as well as the increasing needs for consumption of goods by the over

90-million Vietnamese people. Imports of parts and components, as well as capital goods, are factors positively contributing to the development of Vietnam's manufacturing sector. The share of such categories accounted for one-third of Vietnam's import value from Thailand in 2013. As compared with several ASEAN countries (namely Indonesia and Malaysia), it can be argued that Vietnam has better improved trade patterns with Thailand as compared to Indonesia, whilst there is still a big gap for Vietnam to obtain a similar trade pattern with Malaysia as with Thailand.

So what are the factors determining the improvements in trade patterns between Thailand and Vietnam in the last decade? Firstly, the level of economic integration and trade liberalization in ASEAN over the past decade has been increasing as comparing with the 1990s. The reduction of taxes and trade barriers among ASEAN countries, with special concessions to less advanced ASEAN countries (CLMV countries) according to the commitments in AFTA and AEC, has facilitated the export activity between the two countries.²⁵

Secondly, the infrastructure system, especially the road system between the two nations, has been improved remarkably in the last decade. The two countries are also members of EWEC and the Master Plan of ASEAN Connectivity attracts numerous investment projects from relevant ASEAN countries, as well as from outside countries, especially Japan. Currently, land transport, especially the ASEAN Highway Network and the Singapore Kunming Rail Link, is being built. Clearly, these projects are contributing to the reduction of time for transporting goods that helps reduce the price of commodities exported to each side.

²⁵ For instance, in the Common Effective Preferential Tariff (CEPT) of AFTA, ASEAN-6 (old members) had to reduce the tariff rate to 0-5% by 2002 for the products in the inclusion list, while for new ASEAN members, the deadline was longer, by 2006 for Vietnam, 2008 for Laos and Myanmar, and 2010 for Cambodia. In sensitive list, old ASEAN members have had to reduce the tariffs to 0-5% by 2010, while the given time for new members has been longer, by 2013 for Vietnam, 2015 for Laos and Myanmar, and 2017 for Cambodia. See details in ASEAN Secretariat, "Agreement on the common effective preferential tariff scheme for the ASEAN Free Trade Area", 1-25.

Thirdly, over the past 20 years, FDI flows into Vietnam have dramatically expanded in terms of the proportion of investment, import-export turnover and GDP percentage. As noted earlier, two-third of Vietnam's exports are shared by this sector. Specifically, manufacturing and processing have attracted a great share of Vietnam's total FDI over the past five years, amounting to around 70% of the country's total registered capital.²⁶ Stated differently, the key players in shaping the pattern of Thailand-Vietnam commodity trade are FDI enterprises, at least from the Vietnamese side. On the side of Thailand, FDI enterprises probably play an important role in affecting trade patterns with Vietnam, but owing to its relatively high production capability, the role of Thai business in this is crucial too.²⁷

On the other hand, Thailand-Vietnam trade patterns between 2004 and 2013 have revealed significant drawbacks. For example, the value added of Vietnam's export products to Thailand remains low as compared with Thailand's exports to Vietnam. Except electric and electronic products, Vietnam's exports to Thailand shared a significant proportion of agricultural products and raw materials, especially crude oil, textile and footwear goods. Even with the manufacturing sector, Vietnam has taken part only in processing and assembling stages that belong to the lowest positions in the value chain of production, but it does not dominate crucial stages, such as design and marketing. According to the World Bank, value added by these stages in export of textile and garments, footwear, mobile phones and computers in Vietnam was only between 10% and 15%, while for seafood and

²⁶ Dezan, "Using Vietnam to target the emerging ASEAN region".

²⁷ This argument is strengthened if we look at Thai FDI in Vietnam. Data reported from the Ministry of Planning and Investment, Vietnam shows that Thailand had 333 FDI projects in Vietnam accounting for nearly \$6.5 billion in total cumulative registered capital as of 2013. With respect to fields of investment, the majority of Thai FDI in Vietnam concentrated on the processing and manufacturing sector, sharing 47.8% and 84.5% of total investment projects and investment value, respectively, while the remaining focused on agricultural sector, construction sector and services sector. Most of Thailand's FDI is located at the southern part of Vietnam where there are huge industrial zones and export processing zones. Thus, to some degree it can be said that FDI flows from Thailand have positively contributed to shifting the trade structure of Vietnam with Thailand to a more advanced pattern.

plastic products, machinery and equipment was higher, at around 20%.²⁸ As noted, this is because Vietnam's exports largely rely on advantage of cheap labour and natural resources; for instance, labour costs in Vietnam are 50% of those in China and around 40% of those reported in Thailand and the Philippines.²⁹

On the other side, Vietnam's import value and proportion of materials for production, especially processed oil and low technology products from Thailand, remained large, which could be seen as direct obstacles to improving value added in Vietnam's exports. Additionally, import of consumption goods, particularly luxury products, such as cars, motorcycles, wine and tobacco, shared a significantly growing percentage in Vietnam's imports from Thailand,³⁰ which somewhat resulted in Vietnam's huge trade deficit with Thailand. Furthermore, Vietnam annually imports a great volume of agricultural products, food, beverages and wood, textile and footwear from Thailand, while it enjoyed a strong comparative advantage in those products. This reflects differences in production capability between the two sides.

The drawbacks of Thailand-Vietnam commodity trade structure are mainly attributed to Vietnam's export-growth model based on utilizing capital, cheap labour and natural resources that exhibits numerous deficiencies, such as low value added and a polluted environment. Such resources are going to terminate in the near future. In this regard, the role of policy makers is significant. From the early 1980s, Thai policy makers have clearly determined which industries the economy should concentrate on developing, e.g., automobile and electronics industries. As they choose the key industries, Thai policy makers bring out clear development strategies for those sectors in specific stages, along with strictly implementing regulations relating to transfer of technology and production methods from foreign countries. Conversely, the policy making process in Vietnam, which depends

²⁸ World Bank, *Taking stock: an update on Vietnam's recent economic developments*.

²⁹ Dam, "An introduction to Vietnam's import and export industries".

³⁰ For example, data estimated from the Ministry of Commerce, Thailand show that the import value of motors cars, parts and accessories has increased from about \$310 million in 2011 to more than \$520 million in 2014, as the latest updated data. Source: Ministry of Commerce, Thailand.

on top leaders of the Party and State, is often complicated and slow to perform. It is said that they put the safety of the political (regime) as the highest priority and probably trade off short-term economic development targets against this. Thus, the country has still been able to maintain its export-growth model supported by advantage over cheap labour and natural resources, as well as avoid implementing radical economic reforms that could create big disorders in society. Definitely, the Vietnamese government has not yet determined what key industries it shall develop at present and in the future.

Another reason is that Vietnam is lacking strong related and supporting industries as it is still importing 70% to 80% of fuel and materials, such as 85% for petroleum, 80% for production of wood products, 65% for plastic, and 70% for breeding industry.³¹ The large share of Thailand's exports to Vietnam, as mentioned, is intermediate inputs, such as material, parts and components. Many Thai companies in Vietnam also have to import these inputs from Thailand or third countries, such as other ASEAN countries or China. Consequently, the value added in export products by Vietnam remains low as it is only able to take part in processing and assembling goods. Furthermore, the low competitiveness of Vietnamese enterprises can be seen in the big gap between domestic companies and FDI enterprises in capital, technology, production administrative methods, as well as the skill of labour. Apart from these causalities, the deficiencies in the Thailand-Vietnam trade pattern could be attributed to the weak infrastructure and logistic systems in Vietnam, as well as the overlapping comparative advantage products between the two countries.

Conclusion

In the study of Thailand-Vietnam commodity trade structure over the past ten years, it can be affirmed that the trade composition between the two sides has changed positively towards an increasing share of traded manufacturing. In addition, there has been a high share of trade in intermediate goods between the two countries, showing the

³¹ Thanh, "Some thoughts on Vietnam's huge trade deficit".

increasing integration level of Thailand-Vietnam trade relations into the regional production network.

It is also worth noting that thanks to the export growth of the FDI sector, Vietnam's exports of high technology products to Thailand has grown remarkably, but Vietnam has taken part only in assembling and processing stages with low value added. As well, its exports still depend heavily on comparative advantages of cheap labour and natural resources. In addition, being a less advanced country, it is understandable that despite improvements, Vietnam's exports have been less diversified as compared with Thailand. Finally, both countries enjoy a comparative advantage in a number of primary products, but there has been more medium and high technology products with high RCA values in Thailand's exports than those in Vietnam's exports. Therefore, it can be concluded that the trade structure between Thailand and Vietnam over the past decade is a complementary competitive relationship.

In order to improve the trade and trade patterns between Thailand and Vietnam in the upcoming years, on the Vietnamese side, its export structure to Thailand should be changed towards the production of more capital intensive products given that the comparative advantage over cheap labour is predicted to end in the coming years. Vietnam should also develop strong related and supporting industries partly through attracting more FDI from Thailand and other countries. Thus, there should be preferences in business income taxes for Thai FDI companies, as well as encouragement of the transfer of advanced technology and advanced management method from Thai to Vietnamese businesses.

In this regard, strengthening Thailand-Vietnam economic and trade cooperation relations will help to move the Thailand-Vietnam commodity trade structure to higher value added products and more products with technological improvements in the future. Thailand and Vietnam can reduce the time and costs of transportation, as well as improve the logistic system, through enhancing the implementation of various cooperation programs in the field of infrastructure development between the two countries or under regional cooperation frameworks, such as the ACMECS, GMS, EWEC, and the Master

Plan of ASEAN Connectivity. On the other hand, the two countries can attract the participation of the private sector under the norm of PPP (public-private-partner) and allow them to collect transport fees and maintain such projects. In addition, the assistance from outside countries should be encouraged and engaged with initiatives of the region. Also, both Vietnam and Thailand should negotiate to determine products or product groups that each country should concentrate on for production and export. For example, on the one side, Vietnam should negotiate with Thailand to import more original capital goods, such as machinery from Thailand. On the other side, Thailand can establish priorities to import high technology products, especially electronic products, from Vietnam. By doing this, the overlaps of export structure between the two sides can be lowered.

References

- ASEAN Secretariat. "Agreement on the common effective preferential tariff scheme for the ASEAN Free Trade Area." Jakarta: ASEAN Secretariat, 1992. 10 March 2015 <http://www.asean.org/storage/images/2012/Economic/AFTA/Common_Effective_Preferential_Tariff/Agreement%20on%20the%20Common%20Effective%20Preferential%20Tariff%20Scheme%20for%20the%20ASEAN%20Free%20Trade%20Area.pdf>.
- Balassa, B. "Trade liberalisation and "revealed" comparative advantage." *The Manchester School*, Vol. 33, No 2 (1965): 99-123.
- Balassa, B. and Noland, M. " 'Revealed' comparative advantage in Japan and The United States." *Journal of International Economic Integration*, Vol 4, No 2 (1989): 8-22.
- Chandra, V., J. Boccardo and I. Osorio. *Export Diversification and Competitiveness in Developing Countries*. Unpublished. World Bank, Washington, D.C., 2007.

- Dam, T. P. M., and Edward Barbour-Lacey. "An introduction to Vietnam's import and export industries." *Vietnam Briefing*. 3 March 2015 <www.vietnam-briefing.com/news/introduction-vietnams-export-import-industries.html>.
- Dezan Shira & Associates. "Using Vietnam to target the emerging ASEAN region." *Vietnam Briefing*. 3 March 2015 <<http://www.vietnam-briefing.com/news/using-vietnam-target-emerging-asean-region.html>>.
- Gaulier, G., F. Lemoine and D. Ünal-Kesenci. "China's integration in East Asia: Production sharing, FDI & high-tech trade." *Economic Change and Restructuring*, Vol 40, No 1 (2007): 27-63.
- Hirschman, A. O. "The paternity of an index." *The American Economic Review*, Vol 54, No 5 (1964): 761-762.
- Hoàng, K. N. "Quá trình phát triển quan hệ Việt Nam-Thái Lan (1976-2000) (History of the development of Vietnam - Thailand relations (1976-2000))." PhD Dissertation, University of Social and Human Sciences, Hanoi National University, 2005. [In Vietnamese].
- Lall, S. "The technological structure and performance of developing country manufactured exports, 1985-98." *Oxford development studies*. Vol 28, No 3 (2000): 337-369.
- Thanh, D., M. "Một số suy nghĩ về vấn đề nhập siêu của Việt Nam (Some thoughts on Vietnam's huge trade deficit)." *Communist Review*. 4 March 2015 <<http://www.tapchiconsan.org.vn/Home/Nghiencuu-Traodoi/2010/106/May-suy-nghi-ve-van-de-nhap-sieu-cua-Viet-Nam.aspx>>. [In Vietnamese].
- Theerawit, K. "The development of Thai-Vietnamese political relations." Paper presented at conference *Twenty-five years of Thai-Vietnamese Relationship*, Institute of Asian Studies, Chulalongkorn University, Bangkok, August 3-4, 2001.

- Nam, Nguyễn. *Hồ sơ Thị trường Thái Lan (Thailand Market Profile)*. Department of International Cooperation, Vietnam Chamber of Commerce and Industry, 2014. [In Vietnamese].
- World Bank. *Taking stock: an update on Vietnam's recent economic developments*. Unpublished. World Bank: Mid-year Consultative Group Meeting for Vietnam, Hanoi, Vietnam, December 3-4, 2009.
- World Bank, *World Development Indicators 2015*. World Bank Group, Washington D.C., 2015.