Trade Relation between Vietnam and China

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Abstract: The research studies the trade relation between Vietnam and China for the period 2001-present to identify its characteristics and trends as well as propose policy recommendations for a greater efficiency in the Vietnam-China trade relation. Based on the comparative advantage theory and the trade relation assessment models, the study concludes that China remains Vietnam's important trading partner. China's major exports to Vietnam are manufactured products and raw materials, while Vietnam mainly exports agricultural-forestry-fishery products to China. It is suggested that Vietnam continues integration to expand export market, promote production, export manufactured products with high added value and comparative advantage, and develop supporting industries to reduce imports from China.

Keywords: comparative advantage, trade relation, Vietnam and China.

JEL Classification: F13 . F15 . F41.

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1. Introduction

China and Vietnam have a longstanding economic relationship. Since the 1990s, there have been more than 50 agreements on or related to economy, many state-level and international trade agreements signed between two countries. China is one of Vietnam's biggest trade partners with increasing two-way trade turnover. If in the first 10 years after normalization of diplomatic relation (1991-2001), Vietnam's export turnover to China was much smaller than China's to Vietnam; since 2001, Vietnam's exports to China have seen a positive change with the annual export turnover growth rate at approximately 15% (Pham Thi Minh Ly & Le Tuan Loc, 2015). The two-way trade turnover between Vietnam and China is higher than any relations between Vietnam and other foreign partners. China is an important consumption market for Vietnam's exports as well as a raw material supply market for Vietnam and an essential element for Vietnam's industrialization and modernization. However, the formation of ASEAN Economic Community, TPP and global market liberalization trend has brought many opportunities to Vietnam's international trade, which leads to the significant changing position of China on Vietnam's international trade. Vietnam's dependence on China's market for imported raw materials will reduce due to the appearance of a direct investment wave to Vietnam or TPP members to take advantage of its commodity origin rules. Vietnam's exports will also be less dependent on China as TPP and ASEAN Economic Community expand more export markets for Vietnam. In the new context, it is necessary to research on the trade relation between Vietnam and China in order to propose policy recommendations for further development of the relation between two countries, as well as promote new trade relations to bring the highest efficiency for Vietnam.

2. Theoretical Background and Methodology

2.1. Theoretical Background

Adam Smith's theory of absolute advantage states countries should specialize in producing and exporting goods for which they have an absolute advantage and import goods without an absolute advantage from other countries, as a result, countries will be benefit from international trade (Bano & Scrimgeour, 2012).

Developing from the classical theory of absolute advantage, David Ricardo argued in his work "the Principles of Political Economy and Taxation" that countries should only specialize in producing and exporting goods for which they have a comparative advantage and imports goods without comparative advantage.

International trade based on the comparative advantage products will benefit the nations (Hassan, 2013).

The two political economists Heckscher and Ohlin continued improving the theory of comparative advantage by identifying elements determining a country's comparative advantage. Factor-price equalization theorem by Heckscher-Ohlin (Leamer, 1995) states comparative advantage occurs because of the Relative Factor Abundance, countries will produce goods for which the required factors of production are relatively abundant. Simply, a country where capital is abundant but labour is scarce will have comparative advantage in producing capital intensive goods and vice versa.

Since measuring abundant production factors for comparative advantage is difficult, and cannot be measured in many cases, scientists have developed different comparative advantage assessment models. Models measuring a country's comparative advantage at industry and product level by comparative advantage index were developed through the work of Liesner (1958), Balassa (1965), White (1987).

Comparative advantage index built by Balassa in 1965, reveals the international competitiveness of a nation's industry or products. RCA index (Revealed Comparative Advantage) shows the correlation between the proportion of the exports of a particular product in the country's exports and the proportion of the exports of that product in the world exports. If RCA>1, the goods has comparative advantage; if RCA is less than 1, the goods is said to have comparative disadvantage. The higher RCA is, the greater international competitiveness the goods has and vice versa (Balassa, 1965):

$$RCA_{ki} = \frac{X_{ki}/X_i}{X_{kw}/X_w} \quad (1)$$

Where: RCA(ki) - comparative advantage of country i for product k; X(ki) - country i's export value for product k; X(i) - country i's export value; X(kw) - world's export value for product k; X(w) - world's export value.

Subject to the theory of comparative advantage, a nation's international trade policy should focus on producing and exporting goods with comparative advantage and importing goods without comparative advantage. On the basis of this theory, implementing the international trade policy will benefit the nation in the era of globalization and international economic integration.

2.2. Trade Relation Assessment Models and Data

2.2.1. Trade Relation Assessment Models

2.2.1.1. Trade Intensity

Trade intensity estimates the extent of intensity of trade relation between two countries (Kojima, 1964). The trade intensity consists of export intensity (The Export Intensity Index – XII), import intensity index (The Import Intensity Index – MII) and general trade intensity (Trade Intensity Index – TII) which are demonstrated in following formulas 2, 3, and 4 (Kojima, 1964; Wadhva & Ahser, 1985).

The export intensity index reveals the correlation between the proportion of the country i's exports to country j in the total country i's exports and the proportion of the country j's imports in the outside country i's total imports (1). The higher the export intensity index is, the more importance of country j to country i's exports is. If XII >1, country j is an important export market for country i and vice versa (Bandara & Smith, 2002). In addition, XII index increasing over time reveals the increasing importance of country j's export market to country i and vice versa:

$$XII_{ij} = \frac{X_{ij} / X_i}{M_J / (M_w - M_i)} \quad (2)$$

Where: XII(ij) - export intensity of country i to country j; X(ij) - country i's export to country j; X(i) - country i's export; M(j) - country j's import; M(i) - country i's import; M(w) - the world's import

The import intensity reveals the correlation between the proportion of the country i's imports from country j in the country i's total imports and the proportion of the country j's exports in the outside country i's total exports. If MII >1, country j is an important import market for country i. In addition, MII index increasing over time reveals the increasing importance of country j's import market to country i and vice versa:

$$MII_{ij} = \frac{M_{ij} / M_i}{X_J / (X_w - X_i)} \quad (3)$$

Where: MII(ij) - import intensity of country i to country j; M(ij) - country

i's imports from country j; M(i) - country i's total imports; X(j) - country j's total exports; X(i) - country i's total exports; X(w) - world's total exports

The general trade intensity reveals the extent of trade relation between two countries and measured by trade intensity index (TII). If TII > 1, country j is an important trade partner to country i; if TII < 1, country j is an unimportant partner to country i. In addition, TII index increasing over time reveals the increasing importance of country j to country i and vice versa:

$$TII_{ij} = \frac{T_{ij} / T_{iw}}{T_{jw} / T_{ww}} \quad (4)$$

Where: TII(ij) - trade intensity between country i and country j; T(ij) - export and import value of country i to country j; T(iw) - total trade value of country i to the world; T(jw) - total trade value of country j to the world; T(ww) - world trade value.

2.2.1.2 Intra-Industry Trade

Intra-Industry trade index (GL index) was introduced by two scientists Grubel & Lloyd. GL index reveals the extent of international trade of a particular industry between two countries. GL index's value ranges from 0 to 1, if GL = 1 in another way X(kij) = M(kij), this means there is only intra-industry trade for product k between two countries; if GL = 0 in another way either X(kij) or M(kij) = 0, this means there is only inter-industry trade (Grubel & Lloyd, 1975):

$$GL_{ij} = 1 - \frac{|(X_{kij} - M_{kij})|}{(X_{kij} + M_{kij})} \quad (5)$$

Where: GL(ij) - intra-industry trade between country i and country j; X(kij) - export value of product k by country i to country j; M(kij) - import value of product k by country i from country j.

2.2.1.3 Regional Orientation (RO)

RCA Index (Model 1) reveals the comparative advantage of a particular product in the world market: the higher RCA is, the greater competitiveness that product has and vice versa. However, RCA index does not reveal the com-

petitiveness of the product in a specific market. For example, although Vietnam's rice exports have a very high RCA, they are not as competitive as Thailand's rice in Thailand market. The regional orientation index, together with RCA index, can determine the comparative advantage of a product in a specific national or regional market:

$$RO_{kij} = \frac{X_{kij} / X_{ki}}{X_{ki-j} / X_{i-j}} \quad (6)$$

Where: RO - regional orientation of product k by country i to region j; X(kij) - export value of product k by country i to region j; X(ki) - export value of product k by country i; X(ki - j) - export value of product k by country i to region j; X(i - j) - total export value of country i to region j.

If RCA > 1 and RO > 1, the product k has comparative advantage in market j; in other cases, it is either not given or the product has no comparative advantage in market j (Cheong, 2010).

2.2.2. Data

The research uses data from the International Trade Commission (ITC) and the United Nations Commodity Trade Statistics Database (UN Comtrade). Export goods are classified by Standard International Trade Classification (SITC) into 10 groups with 5 levels including different ten thousands products. In this paper, the author uses both the 1-digit SITC level and the 2-digit HS (Harmonized Commodity Description and Coding System) level to evaluate the comparative advantage of export products by two countries. The period 2001-2015 is chosen since the Vietnam's export activities with China started to flourish after 10 years (1991-2001).

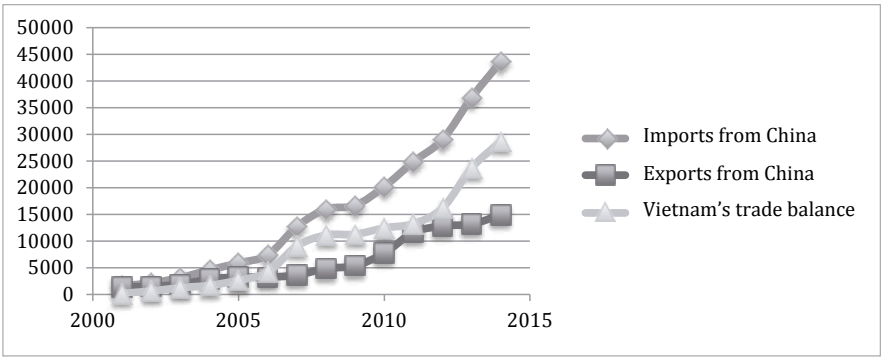
3. Results and Discussion

3.1. Trade Activities between Vietnam and China

China is Vietnam's top trade partner in the new era of international economic integration. In 2015, the two-way trade turnover between two countries reached over US $91 billion, two times compared to that between Vietnam and the second trade partner the United States with US $46 billion. The export growth rate of China to Vietnam is higher than that of Vietnam to China. If in 2001, the ratio

between China's exports to Vietnam and Vietnam's exports to China was 1.2; in 2015, this ratio increased approximately three times. Consequently, Vietnam's trade deficit with China steadily increased over times, from US $189 million in 2001 to US $29 billion in 2015, nearly two times higher than Vietnam's exports to China in 2015. Vietnam's total trade deficit with China was the highest among Vietnam's with other trade partners in the period 2001-2015, over US $140 billion.

Unit: Millions of USD



Source: Author's calculation based on data from the UN Comtrade.

Figure 1. Trade turnover between Vietnam and China in the period 2001-2015

3.2. Export Structure

Vietnam's export structure to China and vice versa is illustrated in Table 1. In the export structure of each country, Vietnam has a higher degree of dispersion than China's exports to Vietnam. Whereas, the proportion is distributed equally among commodity groups in Vietnam's export structure to China, China's export is converged to certain commodity groups. If Vietnam's export structure to China focuses on Machinery and Transport equipment (group 7); Manufactured goods (group 6); Food (group 0) accounting for 71%, Vietnam's imports from China are mainly two major commodity groups: Machinery and Transport equipment (group 7) and Manufactured goods (group 6) with over 83%. Vietnam's export quality has significantly improved; however, in the export structure, agricultural, preliminary and raw products still occupy a large ratio (over 40%) whereas these imported from China only account for 7.5% of the import turnover. Vietnam also imports a large amount of crude materials and accessories for domestic production such as footwear, textiles and other intermediate products.

Evaluating top ten exports of Vietnam and China, in more detail, Vietnam's

Table 1. Vietnam's exports and imports to China (2014)

No.	Commodity	Import turnover (Millions of USD)	Proportion (%)	Export turnover (Millions of USD)	Proportion (%)
1	Group 0: Food and live animals	630	1.4	2,907	19.5
2	Group 1: Beverages and tobacco	44	0.1	176	1.2
3	Group 2: Crude materials	447	1.0	1,157	7.8
4	Group 3: Mineral fuels	2,158	4.9	1,717	11.5
5	Group 4: Animal and vegetable oils	4	0.0	31	0.2
6	Group 5: Chemicals	3,876	8.9	1,206	8.1
7	Group 6: Manufactured goods	13,653	31.3	2,332	15.6
8	Group 7: Machinery and transport equipment	20,130	46.1	3,864	25.9
9	Group 8: Miscellaneous manufactured articles	2,690	6.2	1,535	10.3
10	Group 9: Unclassified commodities	9	0.0	0	0.0
		43,647	100.0	14,928	100.0

Source: Author's calculation based on data from the UN Comtrade in 2014.

key exports include crude materials, electronic circuits and agricultural products (Table 2, 3) while China's top exports to Vietnam are finished electronic and steel products, textiles and footwear. Among Vietnam and China's leading export groups, there are many similar items which show that the exports of Vietnam and China are both competitive and complementary.

Table 2. Vietnam's top export commodities to China (2014)

HS Code	Commodity	Turnover (Thousands of USD)
'85	Electrical machinery and equipment	2,677,489
'27	Mineral fuels, mineral oils and products of their distillation	1,717,426
'52	Cotton	1,178,361
'10	Cereals	895,182
'40	Rubber and articles thereof	831,900
'44	Wood and articles of wood	757,825
'84	Boilers, machinery and mechanical appliances	723,138
'08	Fruits and nuts, peel of citrus fruit or melon	693,073
'11	Products of the milling industry; starches	633,765
'64	Footwear and parts thereof	524,814

Table 3. China's top export commodities to Vietnam (2014)

HS Code	Commodity	Turnover (Thousands of USD)
'85	Electrical machinery and equipment	13,783,341
'84	Boilers, machinery and mechanical appliances	6,114,984
'72	Iron and steel	4,069,155
'27	Mineral fuels, mineral oils and products of their distillation	2,168,910
'39	Plastics and articles thereof	1,473,770
'60	Fabrics; knitted or crocheted	1,428,500
'55	Man-made Staple fibres	1,322,606
'52	Cotton	1,073,355
'73	Iron or steel articles	1,020,334
'87	Vehicles, parts and accessories thereof	926,484

Source: Author's calculation based on data from the ITC in 2014.

3.3. Trade Intensity

Trade intensity between Vietnam and China (Table 4) is calculated based on the data from the UN Comtrade. Trade intensity index was always greater than 1 in the period 2001-2014 which proves China is Vietnam's important partner in

Table 4. Trade intensity between Vietnam and China

No.	Trade intensity	2001	2005	2010	2014
1	Export intensity of Vietnam to China	2.44	1.60	1.17	0.78
2	Import intensity of Vietnam from China	2.67	2.17	2.26	2.00
3	Trade intensity between Vietnam and China	2.65	1.95	1.82	1.51

Source: Author's calculation based on data from UN Comtrade in the period 2001-2014.

the process of international economic integration. However, the trade intensity index had a tendency of falling, from 2.65 to 1.51 in that period, which reveals the decreasing role of China's market to Vietnam. Vietnam's deep integration into the world economy, expanding international trade link and increasing export activities with foreign countries, especially large markets such as the United States, EU and Japan have caused China's role in the development of Vietnam's international trade to decline. In particular, Vietnam's export intensity to China fell sharply from 2.44 in 2001 to 0.78 in 2014 which reveals the decreasing role of China compared to other markets. In another way, Vietnam's exports to China increase much more slowly than those to the world market. In addition, the continuous fall of IIT index shows that on one hand Vietnam has not taken full advantage of China's market; on the other hand, Vietnam is too focused on exporting to large markets such as the United States and EU. The import intensity tends to gradually fall with a slow speed but still remains relatively high at 2.0 in 2014 which means Vietnam's imports highly depend on China's market. In short term, it is difficult to adjust this trade flow.

China is Vietnam's biggest trade partner in recent years with a large proportion of Vietnam-China trade value in Vietnam's trade structure. Thanks to the high market demand, favorable location for export activities and trade agreements signed between Vietnam and China, China is an important import and export market to Vietnam. In particular, Vietnam's imports from China have sharply increased with high intensity due to the high demand of materials for producing and exporting such as textiles, footwear and steel billets. However, Vietnam's exports to China do not meet its potential as most Vietnam's comparative advantage products are less competitive than China's similar products like footwear and textiles. Vietnam's exports to China are mainly agricultural, forestry and fishery products with

low-level processing and value, crude or preliminary-processed materials, so the export intensity with China is not as high as that with other foreign countries.

3.4. Intra-industry Trade

Intra-industry trade index (GL) between Vietnam and China in the period 2001-2014 is illustrated in Table 5. The GL index of most commodity groups is proximate to 0, which means Vietnam-China trade is likely to be inter-industry trade. Among commodity groups, GL of group 3 is close to 1 during the study period, which reveals a tendency of intra-industry trade: Vietnam exports mineral fuels to China and imports them from China in return. The trend of inter-industry trade explains: (i) as the trade gap between China and Vietnam is extremely large, GL is likely close to 1; (ii) The export strategies of both Vietnam and China require a great source of imported materials for domestic production, therefore additional imports of materials create a trend of inter-industry trade between Vietnam and China.

Table 5. Intra-industry trade index (GL) between Vietnam and China in 2014

Commodity	2001	2005	2010	2014
Group 0: Food and live animals	0.53	0.70	0.63	0.36
Group 1: Beverages and tobacco	0.86	0.55	0.89	0.40
Group 2: Crude materials	0.57	0.34	0.36	0.56
Group 3: Mineral fuels	0.61	0.73	1.00	0.89
Group 4: Animal and vegetable oils, fats and waxes	0.53	0.94	0.65	0.25
Group 5: Chemicals	0.23	0.19	0.34	0.47
Group 6: Manufactured goods classified chiefly by materials	0.11	0.13	0.37	0.29
Group 7: Machinery and transport equipment	0.02	0.22	0.23	0.32
Group 8: Miscellaneous manufactured articles	0.39	0.39	0.47	0.73
Group 9: Unclassified commodities	0.82	0.93	0.68	0.11

Source: Author's calculation based on data from the UN Comtrade in the period 2001-2014.

3.5. Comparative Advantage

The RCA index illustrates the trade competitiveness of China and Vietnam in a certain commodity group in the world market and a particular market. Among ten groups of commodities, both China and Vietnam have 3 group commodities with comparative advantage. While China has comparative advantage in manufactured goods, machinery and transport equipment (group 6, 7); Vietnam has comparative advantage in food, crude materials and manufactured goods (group 0, 2 and 9).

However, in terms of regional orientation index (RO), China has comparative advantage in only manufactured goods classified chiefly by materials (group 6). Accompanied with the conditions of RCA and RO, Vietnam has comparative advantage in group 0 and group 2 in China's market (Table 6) which come from agricultural-forestry-fishery products and crude materials. While Vietnam has taken full advantage of its agricultural labour force, geography, weather and soil to produce and export agricultural goods to China, China has shown its advantage as

Table 6. RCA and RO index of commodities in Vietnam and China (2014)

No.	Commodity	RCA (China)	RO (China)	RCA (Vietnam)	RO (Vietnam)
1	Group 0: Food and live animals	0.41	1.60	2.31	1.00
2	Group 1: Beverages and tobacco	0.15	0.45	0.45	121.10
3	Group 2: Crude materials	0.18	1.42	1.54	28.50
4	Group 3: Mineral fuels	0.09	2.88	0.40	3.30
5	Group 4: Animal and vegetable oils, fats and waxes	0.06	0.34	0.35	68.20
6	Group 5: Chemicals	0.52	1.03	0.26	12.20
7	Group 6: Manufactured goods classified chiefly by materials	1.35	1.98	0.93	1.10
8	Group 7: Machinery and transport equipment	1.31	0.77	0.93	0.20
9	Group 8: Miscellaneous manufactured articles	2.27	0.63	2.49	0.10
10	Group 9: Unclassified commodities	0.03	0.01	0.11	0.20

Source: Author's calculation based on data from the UN Comtrade in 2014.

being the world's leading manufacturer of equipment, accessories, spare parts and production materials in Vietnam's market. In correlation with the balance of trade, Vietnam is in deficit because the export turnover of agricultural products is always less than the imports of industrial products

Considering two digit HS, the research identifies both general and specific commodities with comparative advantage of Vietnam and China in the world market, and commodities with comparative advantage in the single Vietnamese and Chinese markets. Of 100 commodity groups classified by 2-digit HS, Vietnam has 46 export products with comparative advantage to China (RCA > 1). However, in terms of the regional orientation index (RO>1), this number narrows down to 27 accounting for 27% of total Vietnam's exports to China (Table 7). The export

Table 7. Vietnam's comparative advantage commodities in China

No.	HS Code	Commodity	Turnover (Thousands of USD)	RCA	RO
1	'52	Cotton	1,178,361	3.05	273.74
2	'10	Cereals	895,182	3.12	19.67
3	'40	Rubber and articles thereof	831,900	1.79	21.31
4	'44	Wood and articles of wood	757,825	1.88	35.72
5	'08	Fruit and nuts; peel of citrus fruit or melon	693,073	3.08	19.45
6	'11	Products of the milling industry; starches,...	633,765	5.23	561.70
7	'03	Fish and crustaceans	459,400	6.45	2.03
8	'07	Vegetables	365,916	1.86	79.39
9	'94	Furniture	190,571	2.60	1.06
10	'42	Articles of leather	105,037	3.87	2.69
11	'54	Man-made filaments	100,361	2.05	22.15
12	'70	Glass and glassware	75,326	1.25	20.86
13	'41	Raw hides and skins and leather	60,446	1.21	80.08
14	'53	Vegetable textile fibres; paper yarn and woven fabrics of paper yarn	38,851	1.26	13642.80
15	'63	Textiles, worn clothing and rags	31,194	2.47	2.55
16	'59	Textile fabrics; impregnated, coated, covered or laminated	21,423	2.48	11.22

No.	HS Code	Commodity	Turnover (Thousands of USD)	RCA	RO
17	'25	Salt; sulphur; earths, stone	20,595	3.16	2.09
18	'60	Fabrics; knitted or crocheted	19,947	1.23	25.84
	'55	Man-made Staple fibers	9,292	1.59	4.47
19	'56	Wadding, felt and nonwovens, special yarns and cordage	9,059	1.21	21.23
20	'96	Miscellaneous manufactured articles	6,358	1.04	5.11
21	'78	Lead and articles thereof	5,262	1.12	168.75
22	'46	Manufactures of straw, esparto or other plaiting materials; basketware and wickerwork	3,971	9.95	14.60
23	'65	Headgear and parts thereof	2,938	3.69	5.64
24	'69	Ceramic products	2,116	1.16	1.09
25	'50	Silk	1,534	3.00	45.47
26	'14	Vegetable plaiting materials	1,523	2.84	560.19

Source: Author's calculation based on data from the ITC in 2014.

turnover of products with comparative advantage accounts for 44% of total Vietnam's export turnover to China. Agricultural, forestry and fishery products with comparative advantage occupy 90% of total export turnover, the remaining 10% belongs to textiles and other commodities. So, calculations based on 2-digit HS and 1-digit STIC give the same result: Vietnam has comparative advantage in agricultural-forestry-fishery products, crude materials and products with low-level of processing and technology such as garment, furniture and ceramics. These products all have low export value and added value in common.

Of 100 commodity groups classified by 2-digit HS code, China has comparative advantage in 46 items. However, in terms of the RO, this number drops to 26, accounting for 26% of the exports to Vietnam. Textiles and iron and steel are the top export products with comparative advantage which make up over 50% and 34% of total China's export turnover of comparative advantage products to Vietnam respectively. Manufactured goods classified chiefly by materials (group 6) are identified to have comparative advantage by both 2-digit HS code and 1-digit STIC. China's products with comparative advantage are mainly metals and textiles. Besides, other commodities such as fertilizers and explosives account for a small share.

Table 8. China's comparative advantage commodities in Vietnam

No.	HS Code	Commodity	Turnover (Thousands of USD)	RCA	RO
1	'72	Iron and steel	4,069,155	1.09	3.28
2	'60	Fabrics; knitted or crocheted	1,428,500	3.34	18.26
3	'55	Man-made staple fibres	1,322,606	2.44	20.63
4	'52	Cotton	1,073,355	2.05	9.93
5	'54	Man-made filaments	779,008	2.66	6.59
6	'31	Fertilizers	636,158	1.10	19.79
7	'59	Textile fabrics; impregnated, coated, covered or laminated	415,498	2.33	17.46
8	'58	Special woven fabrics	382,157	3.03	36.17
9	'76	Aluminium and articles thereof	334,704	1.06	1.53
10	'83	Metal; miscellaneous products of base metal	227,648	2.07	1.80
11	'96	Miscellaneous manufactured articles	225,762	2.29	2.60
12	'70	Glass and glassware	211,506	1.74	1.91
13	'56	Wadding; felt and nonwovens, special yarns; cordage and cables	200,962	1.46	22.85
14	'68	Stone, plaster, cement and articles thereof	135.79	1.71	2.57
15	'05	Animal originated products; not elsewhere specified or included	134,237	1.72	62.35
16	'43	Furskins and artificial fur; manufactures thereof	107.14	2.67	14.64
17	'51	Wool, fine or coarse animal hair	96.34	1.42	36.20
18	'50	Silk	52,799	4.26	54.66
19	'53	Vegetable textile fibres; paper yarn and woven fabrics of paper yarn	26.66	2.54	28.23
20	'67	Feathers and down; and articles made of feather or of down	21.14	6.11	1.14
21	'81	Metals; N.E.C., cermets and articles thereof	18.48	1.54	3.51
22	'57	Carpets and other textile floor coverings	16.38	1.32	5.27

No.	HS Code	Commodity	Turnover (Thousands of USD)	RCA	RO
23	'13	Lac, gums and other vegetable saps and extracts	10.25	1.21	13.92
24	'92	Musical instruments; parts and accessories of such articles	8,254	2.11	6.51
25	'36	Explosives; matches, pyrotechnic products and pyrophoric alloys	3,585	1.22	8.55
26	'46	Manufactures of straw, esparto or other plaiting materials	2,495	5.48	2.07

Source: Author's calculation based on data from the ITC in 2014.

4. Conclusion and Recommendation

4.1. Conclusion

The evaluation of Vietnam-China trade relation makes it possible to conclude: First, China is Vietnam's important partner in the era of economic integration. The trade turnover between two countries increased significantly from 2001 until 2015. However, the fact that Vietnam's imports from China are much higher than the Vietnam's exports leads to the increasing trade deficit of Vietnam to China. Second, the fall in trade intensity between Vietnam and China states the importance of China's market to Vietnam's trade activities has declined. Meanwhile, Vietnam's trade activities with the world market have been boosted more greatly than that with China. Third, Vietnam's major exports to China are electronic products, mineral fuels, crude materials and agricultural-forestry-fishery products whereas Vietnam's imports from China are mainly machinery and electronic equipment, metals and production materials. Fourth, the trade relation between Vietnam and China has a tendency of inter-industry trade, Vietnam exports goods which China's market is deficient from and imports materials from China to manufacture and export to the world market. Fifth, Vietnam has comparative advantage in 27 out of 100 commodity groups (2-digit HS code) in China which are concentrated on crude materials, minerals and agricultural-forestry-fishery products. China has 25 commodity groups with comparative advantage in Vietnam which mainly come from manufactured goods.

4.2. Recommendation

Based on the above analysis, the research suggests the following policy recommendations for international trade strategy with China: First, exporting crude fuels

and minerals reduces the export value and wastes the country's natural resources. Therefore, the government should take different measures for export restrictions on crude materials to foreign countries, including China.

Second, Vietnam should promote on exporting key products to China. In addition, Vietnam's companies need to exploit comparative advantage more efficiently by advancing the processing level of a product, especially agricultural-forestry-fishery products and restricting the export of crude materials and preliminary products. The government should focus on encouraging and supporting export manufacturing enterprises, especially small and medium enterprises.

Third, it is essential to develop own sources of materials to be less dependent on the imports from China and increase the export value, especially highly demanded materials for domestic production such as textiles, footwear, accessories and machinery parts. This policy is even more practical when the National Assembly of Vietnam officially approved Vietnam to be the TPP member. In the future, Vietnam needs to meet the requirements of regionalization to take full advantage of the TPP's incentives.

Fourth, Vietnam should advance on promoting exports to the world market to avoid its dependence on one or some markets, especially China's market to minimize export risks.

Fifth, Vietnam should foster the process of international economic integration and implement signed trade agreements with a view to expanding more foreign markets to make it easier for Vietnam's commodities to access.

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