



China Trade Expansion: A Case Study of Vietnam

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ABSTRACT

Vietnam encountered the unexpected trade deficit with China in the recent years. Upon establishment of the ASEAN Economic Community on December 31st, 2015, the import tax rates of the regional countries have been reduced significantly. This facilitates the quality goods from the ASEAN countries overflowing into Vietnam. Nevertheless, a few research and analysis on the challenge of importing goods from China under the regional economic integration. To settle these issues, this paper analyzes the China's market expansion into Vietnam. In addition, it also compares the Vietnam's import structure from China and other countries in ASEAN. The results showed that China is always the top export partner of Vietnam, particularly, machinery and raw materials.

Keywords: Economics, Import Structure, China, Vietnam

JEL Classifications: A1, D5, F1

1. INTRODUCTION

Vietnam has been dependent significantly on the raw materials, goods, and inputs products imported from China (Gaulier et al., 2007). As a result, Vietnam has to increase its export to other markets to offset the trade deficit with China. During the 2000-2012 period, while the goods export turnover of Vietnam increased eight times, from approximately \$14.5 billion in 2000 to \$114.5 billion in 2012, the import value of Vietnam from China soared to 21 times (Beresford and Phong, 2000). The value of goods imported from China was averagely of 2.5 times higher than those of expectation. If an import is considered as a trade dependence on China; what's its nature? Whether it has revealed the weakness or risk of the Vietnam's economy?

To answer these questions, firstly, this study explores the China's pervasive export in Vietnam. In addition, this paper also analyzes the hierarchical structure of Vietnam's import from China in terms of technology-intensive comparable to that of other countries in the ASEAN. The four countries are selected for this research including Malaysia, Indonesia, The Philippines, and Thailand given their similar development pattern compared to Vietnam.

2. RESEARCH BACKGROUND AND METHODOLOGY

2.1. Market Expansion of Chinese Goods in Vietnam

An entropy indicator is the diversification level of goods category to be exported by the country *a* to the country *b* (Katsikeas and Leonidou, 1996). This index implies two meanings; firstly, the country *b* shall depend more or less on the goods categories of the country *a*; and second, the country *b* shall be less or more competitive with the country *a* for the imported goods.

To simplify the calculations, the items of goods imported from China are categorized into two main groups (Amiti and Freund, 2010). The first group is the traditional goods and the second group is the new goods. Traditional goods are those presented from 2000, while new goods were only available in 2012, and disappeared in 2000. Moreover, the import growth rate was also based on both groups, i.e., the old and new groups.

A growth of total import value of a country at the time "*t*" compared to the time prior to the "*t-1*" is subject to the two factors, which are the contributions of traditional imported

goods group (intensive margin) and new goods group (extensive margin). This index allows us to distinguish the growth of import values in the “*t*” compared to the previous year “*t*-1” in terms of how much percentage was contributed by the traditional products and those by new products (Goldberg et al., 2008). The index is used by the formula below (Cottet et al., 2012).

$$A=B+C \tag{1}$$

$$A = \frac{M_t - M_{t-1}}{M_{t-1}} \tag{2}$$

$$B = \frac{T_t - T_{t-1}}{M_{t-1}} \tag{3}$$

$$C = \frac{N_t - D_{t-1}}{M_{t-1}} \tag{4}$$

$$\frac{M_t - M_{t-1}}{M_{t-1}} = \frac{T_t - T_{t-1}}{M_{t-1}} + \frac{N_t - D_{t-1}}{M_{t-1}} \tag{5}$$

Where,

t: Export time;

M_t: Total value of import at the time *t*;

M_{t-1}: Total value of import at the time *t*-1;

T_t: Total value of import of traditional goods at the time *t*;

T_{t-1}: Total value of import of traditional goods at the time *t*-1;

N_t: Total value of import of new goods at the time *t*;

D_{t-1}: Total value of import of disappeared goods at the time *t*-1;

A: Growth of total import;

B: Contribution level into the growth of traditional imported goods;

C: Contribution level into the growth of new goods (less the old goods).

2.2. Hierarchy of Import Structure by Technology-intensive Level

Technology shows the development standards of a country (Suttmeier, 2005). Categorization of imported goods groups by the technology-intensive structure enables us to know more details about the structure of the Vietnam’s import from China. Determination of import dependence structure is very essential because it determines the industrialized strategy of a country. In this paper, the import growth by the goods groups categorized by International Trade Statistics Database (UN Comtrade, 2012) based on the technology-intensive levels as follows: E (high-tech product), D (medium-tech product), C (low-tech product), A (agricultural products), B (resource-intensive products), and F (mineral product).

Meanwhile, a growth rate of total import value of a country at the time “*t*” compared with the “*t*-1” is subject to the import growth factors of Group *E, D, C, A, B,* and *F*. And the import growth index of each goods group is used to differentiate the growth value of year “*t*” compared to the previous year “*t*-1” with contribution of percentage from the goods group. This import growth index is used by the following formula:

$$\begin{aligned} \frac{M_t - M_{t-1}}{M_{t-1}} &= \frac{E_t - E_{t-1}}{M_{t-1}} + \frac{D_t - D_{t-1}}{M_{t-1}} + \frac{C_t - C_{t-1}}{M_{t-1}} \\ &+ \frac{A_t - A_{t-1}}{M_{t-1}} + \frac{B_t - B_{t-1}}{M_{t-1}} + \frac{F_t - F_{t-1}}{M_{t-1}} \end{aligned} \tag{6a}$$

or,

$$A=e+d+c+a+b+f \tag{6b}$$

Where,

t: Import time;

M_t: Total value of import at the time *t*;

X_{t-1}: Total value of import at the time *t*-1;

E_t, D_t, C_t, A_t, B_t, and F_t: Import values of the goods groups of *E, D, C, A, B,* and *F*, respectively at the time *t*;

E_{t-1}, D_{t-1}, C_{t-1}, A_{t-1}, B_{t-1}, and F_{t-1}: Import values of the goods groups of *E, D, C, A, B,* and *F* respectively at the time *t*-1;

T: Import growth rate;

e, d, c, a, b, and *f*: Contribution rate in import growths of the goods groups of *E, D, C, A, B,* and *F*, respectively.

3. RESULTS

The structural calculation results of the traditional and new goods groups imported from China of the countries are shown in Table 1.

Table 1 showed the significant increase in Chinese imported goods in 2012 compared to 2000. The number of imported items by Vietnam from China rose from 492 in 2000 up to 1800 in 2012. This proved that China has succeeded in diversifying categories of goods in Vietnam market. It also indicated the challenge faced by Vietnam in competing with China, not only the traditional products but also many new items.

Moreover, this competition seems to focus on the cheap goods. In fact, the statistics showed the increase of total import value of Vietnam from China in 2012 of 21 times compared to those of the year 2000 (Li, 2012). However, the value of imported new goods group only increased four times, while the value of imported traditional goods increased by 17 times. Also, new goods rose significantly (588 items), but the proportion in the growth rate of this group value is relatively low, only 15% of the total growth rate of import value.

In comparison to other Southeast Asian countries like Malaysia, Indonesia, the Philippines and Thailand, the number of types of goods imported from China by Vietnam has much more increased. It is shown partially the “weakness” of the Vietnam’s economy in facing to the expansion of China’s market (Schoenberger and Turner, 2008). What special characteristics does such expansion have? To answer this question, we analyze the structure of Vietnam’s imported goods from China regarding technology-intensive hierarchy.

Based on the International Trade Statistics Database (UN Comtrade, 2012), the total import growth rate and proportion in growth rate categorized by technology-intensive structure in 2012 compared to 2000 are presented in Table 2.

The results showed that Vietnam has had an import structural change: Increasing of high-tech goods, and reducing of low-tech goods. This was reflected in the imported value of high-tech items from 3% in 2000 soared to 33% in 2012. Meanwhile, the total Group of *C, A, B,* and *F* accounted for 72% in year 2000 and dropped more than 40% in year 2012 (Figure 1). In addition, the import growth rate of Group *E* in year 2012 compared to year 2000 at a maximum of 675%, accounting for 34% of total growth rate. Whereas the overall growth rate of all goods of Groups *A, B,* and *F* (low-tech group) of 776%, accounting for only 38% of total growth rate (Table 2).

The change in the import structure as mentioned above may be explained by the following tendencies. Firstly, Vietnam's

trade dependence status on China seems to be more improved, that means, Vietnam shifted from primarily imported low-tech into high-tech items, showing the upgrading of its consumption level. Secondly, structural changes seemed to be the type of "less developed countries depending on a developed country," that means the dependence on high-tech items (Gaulier et al., 2007).

In addition, the total import growth rate and proportion in the growth rate of imported high-tech group (Group *E*) always share the highest position (Table 2). In addition, this increase is still higher than other countries in the region like Malaysia, Indonesia, Philippines, and Thailand. In general, our research based on the data of International Trade Statistics Database (UN Comtrade)

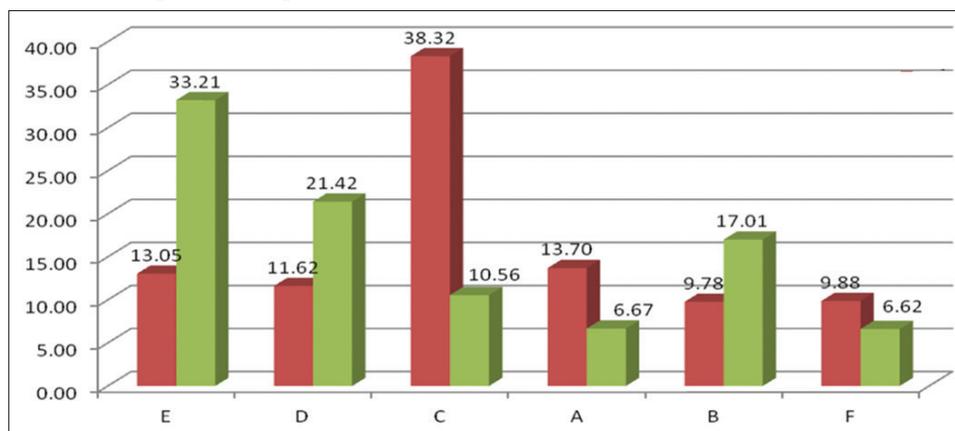
Table 1: Structure of traditional and new goods groups imported from China of countries in the ASEAN region (Comtrade, 2012)

Imported from China	Vietnam	Malaysia	Indonesia	Philippine	Thailand
Number of items					
Year 2000	492	993	1059	900	981
Year 2012	1080	1125	1098	1059	1131
Proportion of imported goods value/total import value					
Traditional goods (%)	86	96	98	98	97
New goods (%)	14	4	2	2	3
Growth rate 2012 in comparison to 2000 (%)	1972	817	1353	715	997
Traditional goods (%)	684	781	695	695	967
New goods (%)	288	36	20	20	30
Proportion in growth rate (%)					
Traditional goods	85	96	98	97	97
New goods	15	4	2	3	3

Table 2: Total import growth rate and proportion in growth rate by technology-intensive structure in 2012 compared to 2000

Imported from China	Group	Vietnam (%)	Malaysia (%)	Indonesia (%)	Philippine (%)	Thailand (%)
Import growth rate	<i>E</i>	34	44	33	33	38
Proportion in growth rate		675	360	450	236	383
Import growth rate	<i>D</i>	22	25	29	18	27
Proportion in growth rate		432	203	396	131	273
Import growth rate	<i>C</i>	9	12	13	12	14
Proportion in growth rate		181	95	180	88	140
Import growth rate	<i>A</i>	6	8	7	11	7
Proportion in growth rate		125	69	99	79	71
Import growth rate	<i>B</i>	17	10	14	16	11
Proportion in growth rate		343	80	194	113	108
Import growth rate	<i>F</i>	6	1	1	9	0.24
Proportion in growth rate		127	7	11	61	2
Total import growth rate		1972	817	1353	715	997

Figure 1: Proportion of import categorized by intensive technology level of Vietnam from China



proved the evidence of similar import structure from China between Vietnam and the four regional countries. However, the four countries are always maintaining their export of competitive advantage goods to China. Meanwhile, Vietnam fails to export its competitive items such as farming products, handicrafts, and so forth (Cook, 2014). In general, the structure of import and export goods of Vietnam is slow in the reformation and failing to meet the sustainable development (Huang et al., 2016). To overcome this problem, the government of Vietnam should promote the research and development, make the positive attraction of direct investment from abroad, development of supporting industries and participate more strongly in the regional and global production networks.

4. CONCLUSIONS

In 12 years from 2000 to 2012, China succeeded in expanding and covering Vietnam market in the number of categories of goods. In this expansion, skill-intensive goods play an important position. Structural analysis and conversion rate of the structure of Vietnam's import from China in terms of the hierarchical level of technology-intensive showed that the high-tech group of China seemed somewhat is cheap goods. Thus, the competition with China in this category is cruel, and Vietnam could face many difficulties in economic development under the direction of skills intensive without a clear strategy and a strong determination. Therefore, the government of Vietnam should focus on the market diversification measures to minimize the risks of dependence on China.

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