

THE INTERNATIONAL JOURNAL OF HUMANITIES & SOCIAL STUDIES

An Analysis of Vietnam's Textile and Garment Exports: Patterns and Trends

Pham Hoang Linh

Lecturer, Thai Nguyen University of Economics and Business Administration, Vietnam
MSc in International Economics, Vietnam University of Commerce, Vietnam

Pham Thuy Linh

Lecturer, Thai Nguyen University of Economics and Business Administration, Vietnam
MSc in International Economics, University of Essex, United Kingdom

Dam Thanh Huyen

Lecturer, Thai Nguyen University of Economics and Business Administration, Vietnam
MSc in International Business, Norwegian Business School, Norway

Abstract:

This study uses indices of revealed comparative advantage (RCA) and export intensity to examine the patterns and trends of Vietnam's textile and garment exports for the period 2000-2015. The results of the paper are summarized as follows: First, while RCA of Vietnam's finished garment products is the highest, the opposite is true of input textile fabrics. Second, export intensity between Vietnam and East Asian nations was the most intense whereas export intensity of Vietnam with Latin America and EU were the lowest, all the time averaging less than unity. Third, the findings reveal some intrinsic nature of Vietnam's outsourcing economy, when the nation mostly import materials from outside nations to produce and export finished products. The findings have implications for stimulating export incentives and beneficial measures to boost the nation's textile and garment exports to key markets. Moreover, Vietnam should concentrate on manufacturing finished garment products because of their high comparative advantage in the world's markets.

Keywords: Revealed comparative advantage index, export intensity, textile and garment, Vietnam, exports

1. Introduction

Since Vietnam's Economic Reforms in 1986, textile and garment industry has been recognized as a key export sector in Vietnamese economy, representing Vietnam's predominant manufacturing activity and serving as the principal source of foreign exchange earnings. In particular, textile and garment exports have contributed 10-15% to GDP and generated more than 1.3 million domestic jobs¹.

In recent years, Vietnam has become a major player in worldwide textile and garment exports, demonstrating substantial export growth thanks to its effective utilization of the inherent comparative advantage in cheap and abundant labor resources. Also, Vietnam's intensive international economic integration (such as the admission in WTO and implementation of bilateral and multilateral FTAs) has been instrumental in boosting exports in this field. However, Vietnam's textile and garment exports largely depend on big markets such as the United States and EU for consumption while relying mostly on China for input materials, which causes high vulnerability in this sector. Moreover, the competition in this sector is becoming greater when other developing nations such as Cambodia, Pakistan, Bangladesh, Sri Lanka and Myanmar have recorded lower labour costs (ILO, 2014), which may undermine FDI towards Vietnam's textile and garment sector and indirectly affect exports in this field.

Based on above mentioned arguments, a comprehensive analysis on patterns and trends of Vietnam textile and garment exports is necessary to orientate Vietnam in its export process of these commodities in the future ahead. The objective of this paper is two-fold. First, with Revealed Comparative Advantage (RCA) index, we are able to identify sub-sector commodities having high comparative advantage and being greatly competitive in the world's markets. Second, from the calculation of export intensity, we aim to explore potential export markets Vietnam can focus on to boost its textile and garment export value. Findings from these indices have far reaching implications for Vietnamese textile and garment exports and ultimately Vietnam's economic development.

The following sections are organized as follows. Section 2 presents measurements and meanings of revealed comparative advantage, and export intensity, followed by data description in section 3. Section 4 features empirical findings and discussions of Vietnam's garment and textile patterns of exports related to export markets and export commodities. The final section is conclusion where we propose some implications for Vietnamese policy makers as well as textile and garment enterprises.

¹ International Trade Administration – USA Department of commerce. (2016). *2016 Top markets report Technical textiles: Country case study*.

2. Research Methodology

2.1. Measurement of Revealed Comparative Advantage

Author uses Balassa coefficient of revealed comparative advantage to examine comparative advantage of Vietnam's textile and garment products. This coefficient is applied popularly in order to estimate comparative advantage structure of exporting products. According to Balassa (1965) comparative advantage could be revealed through structure of exporting and importing commodities between nations because this trade pattern reflects difference in availability level of production factors between the nations. Balassa coefficient (also known as RCA index) is calculated by following formula:

$$RCA_{ij} = \left(\frac{X_{ij}}{\sum_{i=1}^n X_{ij}} \right) \cdot \left(\frac{\sum_{j=1}^m X_{ij}}{\sum_{i=1}^n \sum_{j=1}^m X_{ij}} \right)^{-1}$$

Where X is export value, i is commodity I , j is country j , n is total number of commodities and m is total number of nations.

According to Hinloopen and van Marrewijk (2001), RCA index is classified into 4 groups as follows:

- When $0 < RCA \leq 1$: Product does not have comparative advantage
- When $1 < RCA \leq 2$: Product has low comparative advantage
- When $2 < RCA \leq 4$: Product has average comparative advantage
- When $RCA > 4$: Product has high comparative advantage

2.2. Measurement of Export Intensity

This paper employs the export intensity index to measure the degree of export intensity between Vietnam and trade partners. Following Roemer (1976), Drysdale and Garnaut (1982), export intensity index between Vietnam and country j is defined as follows:

$$EI_{ij} = \frac{X_{ij}}{X_i} / \frac{M_j}{M_w - M_i} \quad (1)$$

Where:

EI_{ij} denotes export intensity index of Vietnam and country j

X_{ij} denotes Vietnam's exports to country j

X_i denotes Vietnam's total exports

M_j denotes country j 's total imports

M_w denotes world's total imports

M_i denotes Vietnam's total imports

In formula (1), the numerator represents the share of Vietnam's exports to country j as a percentage of its total exports, whereas, the denominator represents the share of country j 's total imports as a percentage of world's total imports minus the imports of Vietnam.

The index ranges from zero to infinity. A greater than unity value of the index indicates the intense trade relationship between the two nations, which represents "the match between the specialization of the exporting country and the need of the importing country" (Bandara and Smith, 2002).

3. Data

This paper used trade data collected from UN Comtrade to analyse the patterns and trends of Vietnam's textile and garment exports. The reported period was 2000-2015. Because of the availability of data, it is noted that:

- *Firstly*, EU comprises of 24 member nations, excluding Croatia, Czech Republic, Luxembourg, and Matlta;
- *Secondly*, NAFTA comprises of 3 member nations, including the United States, Canada, and Mexico;
- *Thirdly*, ASEAN comprised of 6 member nations, excluding Laos, Myanmar, and Brunei;
- *Lastly*, East Asia comprised of 4 nations and regions, including China, Japan, Korea, and Hong Kong.

4. Findings

4.1. Overview of Vietnam's Textile and Garment Exports

The textile and garment products of Vietnam have been exported to 180 countries and territories around the world. On a global scale, in 2015, with about 27.58 billion USD in export revenue, Vietnam scored in top 5 exporters of textile and garment products, though its number was moderate compared to leading exporters' such as China's (284 billion), EU-27's (176 billion), India's (35 billion) (WTO, 2016).

Textile and garment products are the second most important sector for Vietnamese export, ranking after phone and mobile devices. Especially in 2014, textile and garment export volume accounted for about 14% of Vietnam's total exports².

² Authors' inference from UN Comtrade Statistics.

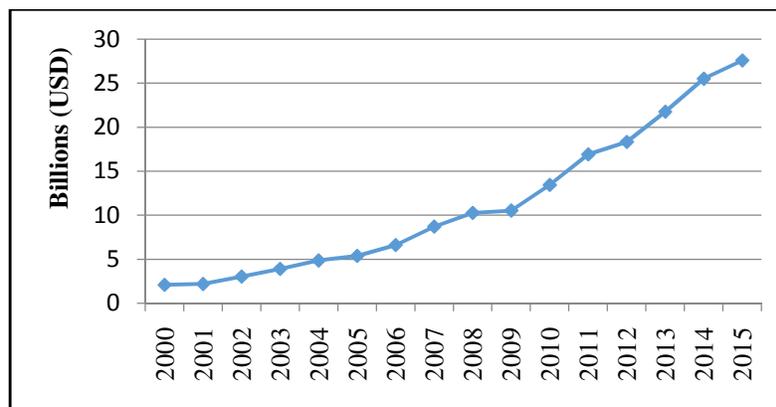


Figure 1: Vietnam's total textile and garment export turnover
Source: UN Comtrade

Since 2000, Vietnam's textile and garment exports was always on the increase. Specifically, while the period from 2001 to 2009 witnessed a gradual increase in Vietnamese textile and garment exports, the figures for the later period from 2009 to 2015 were significantly steep with the export value peaking at about 27.58 billion USD in 2015. On average, Vietnamese textile and garment exports achieved a growth rate of 19% per year. This is partly attributed to the fact that Vietnam had successfully integrated itself in the world economy, markedly illustrated by its joining WTO in 2007 and by its entering FTA with Japan in 2009.

In terms of export markets, U.S, EU, Japan and South Korea, in this order, were the 4 biggest importers of Vietnam's textile and garment products. In 2015, total textile and garment exports to these 4 markets reached about 23.4 billion USD, accounting for approximately 84.8% of total exports in this field. In particular, the US was the most important partner whose figure occupied the largest proportion of 48% in Vietnamese total textile and garment export value³.

In the past few years, key export products in this sector included articles of apparel such as men's and women's wear and women's woven clothing, which in 2015, in total, accounted for 70% of Vietnam's textile and garment exports compared to just 30% for export value of textile fabrics. Thus, garment exports were obviously superior to textile exports.

Finally, as regards modes of exports, 70% of Vietnam's textile and garment exports were carried under OEM (Original Equipment Manufacturer), entailing little value added in this industry. This is because export activities of Vietnam's apparel businesses currently depend on foreign traders mostly from Hong Kong, Taiwan and South Korea who act as intermediaries in the supply chain of the Vietnam textile and garment products in the world. In brief, Vietnam's textile and garment exports depend largely on outsourcing contract from these aforementioned traders.

In the years to come, Vietnam's exports of textile and garment are forecast to be growing, particularly when many favorable FTAs have just been or are due to be effective, such as VKFTA (Vietnam-Korea FTA, taking effect since 12/2015) and EVFTA (EU-Vietnam FTA, due in 2018)

4.2. Vietnam's Textile and Garment Comparative Advantage

Country \ Year	Year		
	2000-2001	2007-2008	2014-2015
China	3.48	3.17	3.08
India	4.44	2.93	2.63
Italia	1.81	1.83	1.75
German	0.55	0.55	0.56
Vietnam	2.48	4.01	4.03
Hongkong	3.16	2.69	1.43
Turkey	6.01	4.50	4.41
United States of America	0.42	0.32	0.30
Spain	0.77	1.00	2.50
France	0.68	0.77	0.72

Table 1: RCA of 10 Biggest Textile and Garment Exporters in the period of 2000-2015
Source: The author's computation

The findings show that RCA index of Vietnam's textile and garment increased rapidly compared to the beginning of the period when RCA index of other nations went down. The improvement in RCA index of Vietnam's textile and garment means Vietnam has

³ Authors' inference from UN Comtrade Statistics.

comparative advantage at high level in textile and garment products, it is due to constant growth of textile and garment export over the period. Besides that, although Vietnam occupies fifth position of the world biggest textile and garment exporters, Vietnam just ranks behind Turkey on RCA index of these items. It suggests that Vietnam has not yet exploited fully its comparative advantage in textile and garment items. In other words, Vietnam's textile and garment industry has many potentials to develop in the coming years.

SITC	Product description	2000-2001	2007-2008	2014-2015
651	Textile yarn	1.30	2.64	5.18
652	Cotton fabrics, woven (not including narrow or special fabrics)	0.48	0.18	0.21
653	Fabrics, woven, of man-made textile materials (not including narrow or special fabrics)	0.76	1.39	0.77
654	Other textile fabrics, woven	0.28	0.28	0.23
655	Knitted or crocheted fabrics (including tubular knit fabrics, n.e.s., pile fabrics and openwork fabrics), n.e.s.	0.06	0.99	1.40
656	Tulles, lace, embroidery, ribbons, trimmings and other small wares	0.35	0.63	0.74
657	Special yarns, special textile fabrics and related products	0.52	1.13	1.72
658	Made-up articles, wholly or chiefly of textile materials, n.e.s.	3.28	5.18	4.96
659	Floor coverings, etc.	0.67	0.42	0.25
841	Men's or boys' coats, capes, jackets, suits, blazers, trousers, shorts, shirts, underwear, nightwear and similar articles of textile fabrics, not knitted or crocheted (other than those of subgroup 845.2)	8.10	8.25	6.87
842	Women's or girls' coats, capes, jackets, suits, trousers, shorts, shirts, dresses and skirts, underwear, nightwear and similar articles of textile fabrics, not knitted or crocheted (other than those of subgroup 845.2)	3.71	6.83	5.34
843	Men's or boys' coats, capes, jackets, suits, blazers, trousers, shorts, shirts, underwear, nightwear and similar articles of textile fabrics, knitted or crocheted (other than those of subgroup 845.2)	1.90	6.29	5.91
844	Women's or girls' coats, capes, jackets, suits, trousers, shorts, shirts, dresses and skirts, underwear, nightwear and similar articles of textile fabrics, knitted or crocheted (other than those of subgroup 845.2)	1.54	6.53	5.43
845	Articles of apparel, of textile fabrics, whether or not knitted or crocheted, n.e.s.	3.23	4.98	4.90
846	Clothing accessories, of textile fabrics, whether or not knitted or crocheted (other than those for babies)	2.44	1.36	1.25
848	Articles of apparel and clothing accessories of other than textile fabrics; headgear of all materials	1.28	2.42	1.64

Table 2: RCA of Vietnam's Textile and Garment Products in the Period of 2000-2015

Source: The author's computation

Table 2 summaries RCA index of items classified by category SITC (Standard International Trade Classification) at level of 3 digits collected from International Trade Statistics Databases of UN. According to this table, Vietnam doesn't have comparative advantage in items such as textile yarn, fabrics and related products. It is easy to understand because Vietnam's textile and garment industry depends on imported inputs from foreign nations quite deeply. Vietnamese government was aware of this disadvantage and issued many policies to promote upstream textile industry. These efforts have brought positive results, production and export of textile yarn grew up strongly, this was presented in high RCA index of this item. Moreover, special yarns, special textile fabrics and related products also progressed considerably in RCA index (from no comparative advantage to low comparative advantage). Clothing accessories are also items owning average comparative advantage, it shows that these items are not strength of Vietnam's textile and apparel.

Finally, Vietnam has high comparative advantage in made-up articles and articles of apparel such as men's and women's clothing and other ready-made clothing. These items are mainly outputs of export proceeding activities that are popular in Vietnam's textile and garment export.

Generally, calculation results are suitable to reality of Vietnam's textile and garment export. Most of textile and garment products owning high comparative advantage in this study are traditional exported commodities since Vietnam's economics reform, at the same time these are made-up articles, while the Vietnam doesn't have or has low comparative advantage in production materials like yarn, fabric and accessories.

4.3. Export Intensity in Vietnam's Textile and Garment Exports

The changing pattern of export intensity in Vietnam's textile and garment exports is presented in Figure 2. Overall, export intensity between Vietnam and all regions (excluding East Asia) declined in 2008-2015. Among big partners by region (i.e., EU, NAFTA, Latin America, Latin America, East Asia, and ASEAN) export intensity between Vietnam and East Asian nations was the most intense. In fact, export intensity index of Vietnam with East Asia averaged 2.16, 1.17 and 2.22 in 2000, 2008, and 2015, respectively. An export intensity index of 2.22 indicates that the share of Vietnam's textile and garments exports to East Asia was 2.22 times higher than the

region’s share of textile and garment imports from the rest of the world. This figure may be explained by the intrinsic nature of Vietnam’s outsourcing economy. In fact, the nation received a big amount of investment from East Asia. It imported raw materials from and then exported finished products back to this region. It is also noted that the index with only this region improved in 2008-2015. ASEAN ranked the second with export intensity above unity, leaving NAFTA at the third place with export intensity above unity in 2008-2015. In contrast, export intensity of Vietnam with Latin America and EU ranked the lowest, all the time averaging less than unity.

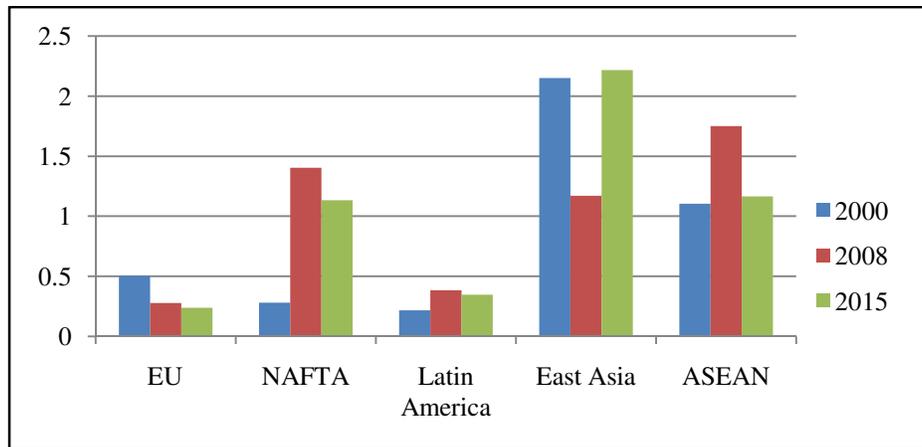


Figure 2: Export Intensity in Vietnam’s Textile and Garment Exports by Region
Source: The author’s computation

No	2000		2008		2015	
	Partner	EI	Partner	EI	Partner	EI
1	Japan	4.70	Philippines	2.87	Korea	4.36
2	Malaysia	3.80	United States	2.85	China	2.17
3	Korea	3.51	Malaysia	2.59	United States	2.16
4	Germany	1.58	Korea	2.25	Japan	2.01
5	Singapore	1.44	Cambodia	1.93	Philippines	1.87
6	Poland	1.39	Japan	1.72	Cambodia	1.75
7	Netherlands	1.12	Thailand	1.65	Thailand	1.05
8	Spain	1.11	Indonesia	0.92	Canada	0.99
9	France	0.79	Colombia	0.91	Malaysia	0.91
10	Slovakia Republic	0.75	Canada	0.87	Indonesia	0.86

Table 3: Top 10 Vietnam’s textile partners with highest export intensity index
Source: The author’s computation

10 partners with highest export intensity index in textile and garments were reported in Table 3. It can be seen that the order of the 10 partners changed over the period 2000-2015. In particular, in 2000, Vietnam had highest export intensity index with Japan, at 4.70. However, the index declines sharply, making the position of Japan fall to the sixth place in 2008 and the fourth place in 2015. Since 2008, the United States appeared in the list with relatively high indices (2.85 in 2008, and 2.16 in 2015, respectively). Another noteworthy point is that East Asia, ASEAN, and NAFTA nations occupied the list, which contribute to the high indices of these region. In 2000, many EU nations (6 nations) had high export intensity in textile and garments with Vietnam. However, these nations were moved out of the list in 2008, and in 2015.

5. Conclusion

As a critically important export sector in Vietnam’s economy, textile and garment exports have been given favorable chances to develop, especially under the context of strong international economic integration with other nations. In fact, Vietnam has registered impressive achievements in textile and garment exports in the period from 2009 to 2015 with dramatic increases in export value and its position as one of top 5 exporters of textile and garment products.

Relying on the two indices of export intensity and revealed comparative advantage, our paper generates these findings: (1) The second largest of Vietnam’s RCA in textile and garment products compared to the fifth position of Vietnam in worldwide exports of this sector implies its failure to fully exploit export capacity; (2) Vietnam has a great comparative advantage in garment sector including men’s and women’s wear and woven clothing while the sector of textile fabrics are relatively inferior. (3) United States, East Asia, and ASEAN with increasing and remarkable export intensity are core export markets of Vietnam’s textile and garment commodities, in which East Asian nations represent the largest export potentials; (4) The highest export intensity in the East Asian market also suggests Vietnam is a major outsourcing destination for these East Asian nations and truly reflects great product complementarity

between them and Vietnam (5) EU and Latin America whose export intensity decreased and remained the lowest in the research period means these markets are losing in importance and potentials for export growth are limited.

From these findings, our paper proposes some implications for Vietnam's textile and garment exports given radical changes in international economic integration. *Firstly*, we propose that the Vietnamese government implement export incentives and beneficial measures to reinforce textile and garment exports from Vietnam to the United States, East Asia and ASEAN. Especially, since Vietnam's enterprises depend largely on East Asia for their input fabric materials, there should be policies regarding FDI attraction, import costs and import process of these commodities from this region, which then translates into big gains when Vietnam exports finished products to different destinations. *Secondly*, Vietnam should concentrate on manufacturing finished garment products because their high comparative advantage in the world's markets will garner strong international competitive edges for Vietnam's textile and garment products. *Finally*, Vietnam's textile and garment enterprises should be actively in search of export opportunities in core markets and incessantly improve product quality in garment products to fully enjoy benefits from export activities.

6. References

- i. Balassa, B. (1965). Trade Liberalization and Revealed Comparative Advantage. *The Manchester School of Economics and Social Studies*, 2 (33), 99-123.
- ii. Bandara, J. S., & Smith, C. (2002). Trade Policy Reform in South Asia and Australia-South Asia Trade: Intensities. *South Asia Economic Journal*, 3 (2), 177-199.
- iii. Drysdale, P., & Garnaut, R. (1982). Trade Intensities and the Analysis of Bilateral Trade Flows in a Many-Country World: A survey. *Hitotsubashi Journal of Economics*, 22 (2), 62-84.
- iv. Hinloopen, J., & van Marrewijk, C. (2001). On the Empirical Distribution of the Balassa Index. *Review of World Economics*, 2 (116), 315-321.
- v. International Labour Organization. (2014). Wages and Working Hours in the Textiles, Clothing, Leather and Footwear Industries. Retrieved 7 18, 2017, from International Labour Organization: http://www.ilo.org/wcmsp5/groups/public/@ed_dialogue/@sector/documents/publication/wcms_300463.pdf
- vi. International Trade Administration – USA Department of commerce. (2016). 2016 Top markets report Technical textiles: Country case study. Retrieved 7 18, 2017, from International Trade Administration: http://www.trade.gov/topmarkets/pdf/Textiles_Vietnam.pdf
- vii. Roemer, J. (1976). Extension of the Concept of Trade Intensity. *Hitotsubashi Journal of Economics*, 17 (1), 29-35.
- viii. WTO. (2016). World Trade Statistical Review 2016. Retrieved 7 18, 2017, from World Trade Organization: https://www.wto.org/english/res_e/statis_e/wts2016_e/wts2016_e.pdf