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Textile and Apparel Export from Bangladesh: Measure of Competitiveness

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Abstract: This paper aim at examining the export competitiveness of selected textile and apparel products using indicators like Revealed Comparative Advantage (RCA) and Constant Market Share (CMS) analysis. The selected four categories textile and seven categories apparel product are taken into account on the basis of three digit level Standard International Trade Classification (SITC) for the period between (1985 until 1999).The RCA calculation clearly indicates an increasing strength of comparative advantage of Bangladesh in the textile as well as apparel products. This is mainly due to the negligible import for these products. The CMS results suggest that export gain of Bangladesh for textile and apparel are largely attributed to the size of the market and also to her competitiveness effects. The CMS analysis also depicts that the competitiveness effect of apparel products are subsequently improved in general during the period I and III (1985-89 and 1995-99) as compared to those for period I and II (1985-89 and 1990-94) and period II and III (1990-94 and 1995-99).

Key words: Bangladesh, Textile and Apparel, Export Competitiveness, RCA

Introduction

Structural shift in the Bangladesh economy is observed the last decade from an agriculture commodity trading substitution-based economy to a highly diversified manufactured product export led economy. Export growth, led the textile and garments sectors, played a vital role in the recovery of the manufacturing sector during last decade. Since 1980s the textile and apparel industry has grown rapidly in terms of export and employment. The main stimulant of this rapid growth has been the trade reforms initiated since 1986 and the exploitation of Bangladeshi's comparative advantage as low wage producer. This is characterized by the fact that the proportion of export of textile and garment products to the total products exported from Bangladesh has increased from 49% in 1983 to 80% in 1988 (UN Trade Statistics, 1990). In fiscal year (1998-99), total export was over USD 4 billion, which is almost 70% of country's total export earnings. Contribution to the GDP, in 1990 the textile and apparel sector contributed only 3.3% to Bangladeshi's GDP (Economic Report, 1992). In 1998, the contribution to GDP substantially improved and accounted at 10.3%. Regarding employment, observed that the sector employs 0.58 million people in 1990 to more than 1.5 million people in 1998, of which 90% were women (Redwan; 1997, Bhattacharya and Rahman 2000).

The above statistics indicates that importance of textile and apparel sector in manufacturing industry of Bangladesh. In view of its impressive growth and highly competitive international market, this paper intends to examine the export competitiveness and its comparative advantage in international arena. This paper is organized as follows. Methodology and data sources are described in the next section. Followed by the discussions of the results of the analysis. Finally, provides the conclusions and implication and remark.

Methodology

The two methodologies are used for this study these are: Revealed Comparative Advantage and Constant Market Share. Brief descriptions of those methods are provided below.

Revealed Comparative Advantage (RCA): Revealed Comparative Advantage (RCA) measures the change in the comparative advantage of a country's exports. Two major indicators are used to capture the changes in the comparative advantage of textile and apparel product exports; these are: export performance ratios and net export/total trade ratio (Balassa, 1965, UNIDO 1982., Ariff and Hill 1985). These two indicators are interrelated and highlight different facts of the same phenomenon.

Export Performance Ratio (EPR): Export Performance Ratio (EPR) is used to measure Revealed Comparative Advantage of a country. Export performance ratio (ep_{ij}) measure expresses the share of country i's export of commodity j in total world export of commodity j, as a ratio of the share of country i's total export in the world total exports. If the export performance ratio is one, this indicates a normal export performance of commodity j relative to the size of country i's of commodity j exporter. If the export performance ratio is two, this suggests that the commodity j's share in country i's export is twice the corresponding world share and so forth. A ratio of more than one is taken as an indication of revealed comparative advantage. A rise in the ratio suggests a strengthening in terms of revealed comparative advantage (Balassa 1965, UNIDO 1982., Ariff and Hill 1985).

The measure yields a ratio ranging from zero to infinity but for certain reasons large numbers Will be unusual. An export performance ratio of more than unity is regarded as a revealed comparative advantage, while a rise in the ratio suggests a strengthening on the basis of Revealed

Comparative Advantage. Export performance ratio (ep_{ij}) exposes the share of the country i's export of commodity j, as a ratio of the share of country i's total exports in the world total exports. It is presented as:

$$ep_{ij} = \left[(X_{ij} / X_{wj}) / (X_{ie} / X_{we}) \right]$$

Where,
X_{ij} = country i's export of commodity j;
X_{wj} = world exports of commodity j;
X_{ie} = country i's total exports;
X_{we} = total world exports.

Net Export/Total Trade: A rough understanding of a country's shifting pattern of comparative advantage or disadvantage in an economic activity may be gathered from changes in the percentage ratio of net export to total trade. Net export of commodity j, as a percentage of total trade in commodity j, for country i, is explained by the measure (nx_{ij}). Net exports are usually expressed by a negative sign. It can be expressed as:

$$nx_{ij} = \left[(X_{ij} - M_{ij}) / (X_{ij} + M_{ij}) \right] * 100$$

Where,
X_{ij} = country i's exports of commodity j;
M_{ij} = country i's imports of commodity j.

The ratio for this measure ranged from +100 (suggesting a commodity is exported, but not imported) to -100 (implying a commodity is imported but not exported). A positive sign does not necessarily indicate revealed comparative advantage nor a negative sign indicates revealed comparative advantage. However, an increase in the ratio can be assumed to have some strengthening revealed comparative advantage.

Constant Market Share (CMS): Tyszynski (1951) first applied the constant market share (CMS) model as a methodological tool in an analysis of export growth of a country. The constant market share model decomposes actual gain or loss in country's exports into four components:

1. World Trade Effect
2. Commodity Composition Effect
3. Market Distribution Effect; and
4. Competitiveness Effect (which is essentially captured as a residual).

Thus, export growth either ascribes to structural or competitive factors. Based on Leamer ,1970., Richardson ,1971., Fegerburg and Soile ,1987., Bowen and Pelzman ,1984 and Marjit *et al.*, 1997) the generalized CMS method can be considerably improved in the critical consistency as well as in empirical applicability, if initial year weights are used throughout the calculations. Secondly, the economic interpretation of the residual terms is made explicit. Under this approach, the generalized CMS identifies an actual change in the focus country's export between two time periods. The CMS model is employed to describe a country's export growth. Here, the export performance of a particular country is compared with the 'world average. The specific CMS model used in this study can be written as:

$$\Delta q = \left[\sum_{i=1}^{n} r q_i^0 \right] + \left[\sum_{i=1}^{n} r_i q_i^0 - r q_i^0 \right] + \left[\sum_{i=1}^{n} \sum_{j=1}^{m} r_{ij} q_{ij}^0 - \sum_{i=1}^{n} r_i q_i^0 \right]$$

Where, i = 1, 2, ..., n, number of commodity; j = 1,2, ..., m, number of markets. The superscript 1 and 0 refer the terminal and initial time period respectively. q^0_{ij} = export by the focus country of i^{th} commodity, to the j^{th} market in the initial period; q^1_{ij} = export by the focus country of i^{th} commodity, to the j^{th} market in the terminal period; r = proportionate change in total world exports in aggregate from initial time period (0) to terminal time period (1); r_i = proportionate change in world exports of the i^{th} commodity in aggregate from initial period (0) to terminal period (1); r_{ij} = proportionate change in the world exports of i^{th} commodity to the j^{th} market in aggregate from initial time period (0) to terminal time period (1); The total change, Δq, in exports of the focus country is given by

$$\Delta q = \sum_{i=1}^{n} q_i^1 - q_i^0$$

Model Specification: There are four major components in CMS equation, which determines the actual gain or loss of focus country's export performance. The brief descriptions of the four components are as follows.

World Trade Effect: The first term on the right hand side of the identity is the world trade effect or size of market, and it measures the hypothetical increase in the focus country's export if its exports are to grow at the same rate as the world exports. It indicates that part of the export growth attributes to the general increase in world exports. Hence rq^0_i may alternatively be viewed as the increase or decrease in a country's exports due to expansion in world trade under the assumption that initial market share is maintained. Thus, given a constant overall market share in individual markets, a country's export volume may increase as a result of a general expansion in the total market size. In other words, a country may gain from share in world demand if it is able to maintain its market share.

Commodity Composition Effect: The second term is the commodity composition effect and it measures the extent to which the focus country's export composition is concentrated in commodities with high import demand. It is the weighted sum of values of export to different commodities. The weights are the deviations of the growth rates of individual commodity exports, from the growth rate of world exports in aggregate. The change in exports due to commodity composition depends mainly on the factor endowments of the country and the income and price elasticity for the products in which it specialises. The commodity composition effect would be negative if the focus country concentrates its export on commodities for which the world demand expanded slower than the average growth rate of world exports in general.

Market Distribution Effect: The market distribution effect measures the extent to which a country's export is concentrated in market where demand is growing either faster or slower than total world export demand in those markets. The term is the weight sum of the values of each class of exports going to each market. The weight is the deviation of the growth of a particular market for a particular commodity from the average growth rate of world exports for that commodity. The change in exports due to market

distribution depends on trade policies and income growth of foreign countries. The deviations in growth rates of exports to different directions may occur when, 1. the income elasticity of demand trends varies from commodity to commodity; 2. the income elasticity of demand for the same commodity tends to vary from one region (market) to another, and 3. the real income may not grow at the same rate in all the regions.

In other words, given two markets with unequal rate of expansion, the maintenance of a constant share in each market does not ensure that the overall market share will remain unchanged. This is because the less rapidly expanding market may not necessarily offset the change in the relative contribution of the more rapidly expanding market to overall market share. Distribution effect reflects the extent to which a country's exports are concentrated in markets where demand is faster or slower relative to total world demand. The positive distribution effect suggests that the market distribution indicate that the exports of focus country's are concentrated on the relatively expanding areas in world trade. If a negative sign is then indicated, distribution effect suggests that exports are concentrated in a market where demand is growing slower than world demand.

Competitiveness Effect: The fourth and final term is the competitiveness effect that measures the difference between actual increase in the focus country's actual exports and the increase that would have occurred if the focus country maintained its market share in those markets. Alternatively, it is the difference between the actual increase in a country's export and increase that would have happened if a country maintains its market share. This residual term indicates the improvement or deterioration in the competitiveness of exports depending whether the term has a positive or a negative sign. A negative sign of the term means that the country fails to maintain market share because of lack of competitiveness. It may be possible that the residual may provide a biased measure of general competitiveness due to interaction of the effects of commodity composition, market distribution and the residual effect. In fast growing markets, the country may experience a declining share in world market, if it cannot cope with the growth to that extent. The net effect is to be reflected in the negative sign of competitive effect because of favorable market and commodity growth. The interdependence among the three effects of market distribution, commodity composition and the residual become minor in most cases if the ratio of exports to total production become less.

Data Sources: This study is mainly based on secondary data or published data. The secondary data were collected mainly from the publications of various agencies, statistical booklets and annual reports of different institutions. Country specific data of import export figures for this study were compiled from different survey reports statistical pocket booklets of the Bangladesh Bureau of Statistics (BBS), Export Promotion Bureau (EPB), Bangladesh Garments Manufacturers and Exporters Association (BGMEA) and Directorate of Textile and Apparel Industries of Bangladesh. The world export data are collected mainly from United Nation International Trade Statistics Yearbook. The included of textile categories product such as SITC-651 (Textile Yarn), SITC-654 (Woven Textile Fabric), SITC-657 (Special Textile Fabric) and SITC-658 (Textile Articles NES). Selected categories of apparel products are SITC-842 (Men Outerwear Not Knit), SITC-843 (Women Outerwear Not Knit), SITC-844 (Outer Garments Not Knit), SITC-845 (Outerwear Knit Non Elastics), SITC-846 (Under Garments Knitted), SITC-847 (Textile Clothing Accessories NES) and SITC-848 (Articles of Apparel & Cloth Accessories Textile Fabric).

Results and Discussion

To study the changes in the comparative advantage of the selected textile and apparel products using the two indicators of Revealed Comparative Advantage (RCA). These two indicators of RCA are estimated from the export values of three defined periods. The results of the RCA indicators of the selected apparel products in accordance with SITC code are as follows.

Export Performance Ratio: The findings of export performance ratio of Bangladesh for selected textile products are also presented in Table 1. SITC-651 (Textile Yarn) and SITC-657 (Special Textile Fabric) show a rising comparative advantage in all the three defined periods as compared to other textile products. In period I, the ratios of those products show at 0.40% and 0.10%, and in period III are at 0.77% and 0.70% respectively. The export performance ratio of SITC-654 (Woven Textile Fabric) and SITC-658 (Textile Articles NES), products show a declining trend of RCA in three consecutive periods. In period I, the ratios are 9.45% and 7.11% and for period III 3.00% and 3.62% respectively.

The results of export performance ratio of Bangladesh for apparel products are presented in Table 1. SITC-844 (Outer Garments Not Knit) and SITC-847 (Textile Clothing Accessories NES) only show a decreasing trend of RCA in all the periods. These two products generate the EPR ratio of 7.17% and 0.32% in period I, and for period III 3.41% and 0.14% respectively. Men Outerwear Not Knit (SITC-842) show better performance for entire the study period. The ratios of this product Show a rising trend for all the defined periods, which are at 0.78%, 1.26% and 1.44% respectively (Table 1). For Women Outerwear Not Knit (SITC-843) show unstable performance for all the periods. In the case of SITC-845 (Outerwear Knit Non Elastics), SITC-846 (Under Garment Knitted) and SITC-848 (Article of Apparel and Cloth Accessories of Textile Fabric), Bangladesh attains a declining trend in period II. During this period, the ratios are at 0.30%, 0.86% and 0.22% respectively. In period III, the ratios increase to 0.52%, 1.29% and 0.33% respectively (Table 1).

Net Export/Total Trade: The findings of Net Export/Total Trade of Bangladesh register a negative NE/TT ratio only for the SITC-651 (Textile Yarn) product. The ratios are at -33.92%, -39.38% and -52.18% respectively for all the three periods. The reasons for negative ratios in all the periods are due to higher import of that particular product (Table 2). Among the other textile products, SITC-654 (Woven Textile Fabric) and SITC-657 (Special Textile Fabric) indicates strengthening ratios of RCA in all the three periods. This is because during the period there is no import value in favor of Bangladesh for these products. However, In period I, the NE/TT ratios of these products are 100%, period III the ratios decrease to 95.82% and 56.34% respectively. In the case of SITC-658 (Textile Articles NES), Bangladesh exhibits strong RCA in all the consecutive periods. This is because there is no record of any import of these products.

Table 1: Export Performance Ratio of Bangladesh Textile and Apparel Products for the Three Periods (USD Million)

TEXTILE				APPAREL			
Product SITC	Period I 1985-89	Period II 1990-94	Period III 1995-99	Product SITC	Period I 1985-89	Period II 1990-94	Period III 1995-99
651	0.40	0.39	0.77	842	0.78	1.26	1.44
654	9.45	3.95	3.00	843	0.68	0.81	0.77
657	0.10	0.23	0.70	844	7.17	3.82	3.41
658	7.11	4.80	3.62	845	0.57	0.30	0.52
				846	0.92	0.86	1.29
				847	0.32	0.14	0.14
				848	0.50	0.22	0.33

Table 2: Net Export/Total Trade Ratio of Bangladesh Textile and Apparel Products for the Three Periods (USD Million)

TEXTILE				APPAREL			
Product SITC	Period I 1985-89	Period II 1990-94	Period III 1995-99	Product SITC	Period I 1985-89	Period II 1990-94	Period III 1995-99
651	-33.92	-39.38	-52.18	842	100.00	95.69	97.86
654	100.00	83.21	95.82	843	100.00	100.0	100.0
657	100.00	60.15	56.34	844	100.00	100.0	100.0
658	100.00	100.00	100.00	845	100.00	86.25	96.72
				846	100.00	100.0	100.0
				847	100.00	100.0	100.0
				848	100.00	100.0	100.0

Table 3: Decomposition of Export Gain/Loss of Bangladesh Textile Products among the Three Periods (USD Million)

Effects	Period I and II 1985-89 and 1990-94		Period II and III 1990-94 and 1995-99		Period I and III 1985-89 and 1995-99	
SITC-651 (Textile Yarn)						
Change in Exports	8.4	100.00	20.9	100	29.3	100.00
World Trade Effect	18.8	(223.81)	14.9	(71.29)	38.4	(131.06)
Commodity Composition Effect	-3.2	(-38.10)	-5.2	(-24.88)	-11.1	(-37.88)
Market Distribution Effect	-4.0	(-47.62)	-0.4	(-1.91)	-7.0	(-23.89)
Competitiveness Effect	-3.2	(-38.10)	11.6	(55.50)	9.0	(30.72)
SITC-654 (Woven Textile Fabric)						
Change in Exports	-55.1	100.00	-41.3	100	-96.4	100.00
World Trade Effect	127.0	(-230.49)	50.7	(-122.76)	259.7	(-269.40)
Commodity Composition Effect	40.6	(-73.68)	6.5	(-15.74)	78.2	(-81.12)
Market Distribution Effect	-54.6	(99.09)	16.7	(-40.44)	-42.3	(43.88)
Competitiveness Effect	-168.1	(305.08)	-115.1	(278.69)	-391.9	(406.54)
Sitc-657 (Special Textile Fabric)						
Change in Exports	6.4	100.00	17.0	100	23.4	100.00
World Trade Effect	1.7	(26.56)	3.9	(22.94)	3.4	(14.53)
Commodity Composition Effect	0.5	(7.81)	1.4	(8.24)	1.4	(5.98)
Market Distribution Effect	1.4	(20.88)	4.2	(24.71)	2.6	(11.11)
Competitiveness Effect	2.9	(45.31)	7.5	(44.12)	16.0	(68.38)
SITC-658 (Textile Articles NES)						
Change in Exports	-8.8	100.00	-30.3	100	-39.1	100.00
World Trade Effect	108.9	(-1237.5)	60.8	(-200.66)	222.7	(-569.57)
Commodity Composition Effect	-1.3	(14.77)	35.4	(-116.83)	64.1	(-163.94)
Market Distribution Effect	5.4	(-61.37)	-5.7	(18.81)	-56.4	(144.25)
Competitiveness Effect	-121.8	(1384.09)	-120.7	(398.35)	-269.4	(689.0 0)

Note: Within bracket are indicated parentage change figures.

Table 4: Decomposition of Export Gain/Loss of Bangladesh Apparel Products among the Three Periods (USD Million)

Effects	Period I and II 1985-89 and 1990-94		Period II and III 1990-94 and 1995-99		Period I and III 1985-89 and 1995-99	
SITC-842 (Men Outerwear Not Knit)						
Change in Exports	148.7	100	270.4	100	419.2	100
World Trade Effect	19.8	(13.32)	129.3	(47.82)	48.0	(11.45)
Commodity Composition Effect	-3.7	(-2.49)	15.6	(5.8)	-3.5	(-0.83)
Market Distribution Effect	13.1	(8.81)	15.8	(5.84)	66.2	(15.79)
Competitiveness Effect	119.6	(80.43)	109.7	(40.57)	308.5	(73.59)
SITC-843 (Women Outerwear Not Knit)						
Change in Exports	139.9	100	176.0	100	315.9	100
World Trade Effect	23.8	(17.01)	125.0	(71.02)	57.8	(18.30)
Commodity Composition Effect	-1.7	(-1.22)	-0.4	(-0.23)	-3.1	(-0.98)
Market Distribution Effect	3.9	(2.79)	-19.5	(-11.08)	2.5	(0.79)
Competitiveness Effect	113.9	(81.42)	71.0	(40.34)	258.6	(81.86)
SITC-844 (Outer Garments Not Knit)						
Change in Exports	129.2	100	272.9	100	402.1	100
World Trade Effect	70.7	(54.72)	147.1	(53.90)	172.0	(42.78)
Commodity Composition Effect	1.8	(1.39)	67.1	(24.59)	50.1	(12.46)
Market Distribution Effect	28.7	(22.21)	33.1	(12.13)	133.9	(33.30)
Competitiveness Effect	28.0	(21.67)	25.6	(9.38)	46.1	(11.46)
SITC-845 (Outerwear Knit. Not Elastics)						
Change in Exports	35.2	100	124.5	100	159.7	100
World Trade Effect	21.8	(61.93)	41.7	(33.49)	53.0	(33.19)
Commodity Composition Effect	3.8	(10.80)	-9.0	(-7.23)	-0.6	(-0.38)
Market Distribution Effect	11.6	(32.95)	0.3	(0.24)	14.3	(8.95)
Competitiveness Effect	-1.9	(-5.40)	91.5	(73.49)	93.0	(58.23)
SITC-846 (Under Garments Knitted)						
Change in Exports	71.4	100	170.5	100	241.9	100
World Trade Effect	16.0	(22.41)	66.3	(38.89)	38.9	(16.08)
Commodity Composition Effect	2.3	(3.22)	33.0	(19.35)	16.3	(6.74)
Market Distribution Effect	9.8	(13.73)	-31.8	(-18.65)	21.2	(8.76)
Competitiveness Effect	43.4	(60.78)	103.0	(60.41)	165.5	(68.42)
SITC-847 (Textile Clothing Accessories NES):						
Change in Exports	2.8	100	4.3	100	7.1	100
World Trade Effect	2.2	(78.57)	3.6	(83.72)	5.3	(74.65)
Commodity Composition Effect	-0.02	(-0.71)	-1.8	(-18.60)	-0.8	(-11.27)
Market Distribution Effect	-0.3	(-10.71)	-0.7	(-16.28)	-1.3	(-18.31)
Competitiveness Effect	0.9	(32.14)	2.2	(51.16)	3.9	(54.93)
SITC-848 (Article of Apparel & Cloth Accessories):						
Change in Exports	10.6	100	26.7	100	37.3	100
World Trade Effect	8.4	(79.25)	13.8	(51.69)	20.5	(54.96)
Commodity Composition Effect	-0.1	(-0.94)	-5.8	(-21.72)	-5.2	(-13.94)
Market Distribution Effect	0.4	(3.77)	-1.2	(-4.49)	0.3	(0.80)
Competitiveness Effect	1.9	(17.92)	19.9	(75.53)	21.7	(58.18)

Note: Within bracket are indicated parentage change figures.

The NE/TT ratios of apparel products for Bangladesh are also presented in Table 2. Men Outerwear Not Knit (SITC-842) and Outerwear Not Knit (SITC-845) products indicate a strengthening NE/TT ratio of 100% in period I, because of zero level import during this period. In period II, the ratio slight decreases to 95.69% and 86.25% respectively. The ratio increases further to 97.86% and 96.72% in period III. The NE/TT ratio indicates strengthening RCA for the other selected apparel products of Bangladesh in general. In terms of ranking, SITC-846 (Under Garment Knitted), SITC-847 (Textile Clothing Accessories NES) and SITC-848 (Article of Apparel and Cloth Accessories NES) products show 100% of NE/TT ratios in all the three defined periods. It is because there is no any import value of those products entire the study period.

Constant Market Share: The constant market share (CMS) model has been used to examine export performance and an indicator of the direction of competitiveness. The results of the CMS analysis depict actual gain/loss in exports are decomposed into four structural components under the three defined periods.

World Trade Effect: The findings of textile product of Bangladesh are presented in Table 3. The positive exports change show all through for SITC-651 (Textile Yarn) and SITC-657 (Special Textile Fabric) products. Of which the world trade effect indicates positive contribution to all the three periods. Woven Textile Fabric (SITC-654) and Textile Article NES (SITC-658) products, Bangladesh exhibits negative change in export for all the three periods. The world trade effect plays positive contribution in favor of country's export growth of 230.49% and 1237.5% respectively in periods I and II. For periods I and III, the effect are at 269.4% and 569.57% respectively.

The results of CMS analysis of apparel products are presented in Table 4. Among the seven categories of apparel product, the change in export of Bangladesh shows rising trend for all the apparel products. In which, the world trade effect contributes the positive share for all the products under the three defined periods. It indicates the dominating role of the size of market in export growth.

Commodity Composition Effect: The results of CMS analysis of apparel products are presented in Tables 3 and 4, all the textile products show positive commodity composition effect for all the three periods, except SITC-651 (Textile Yarn) and SITC-658 (Textile Articles NES). The negative commodity composition effect of SITC-651 product exhibits in three periods, these are at -38.10%, -24.88% and -37.88% respectively (Table 3). SITC-658 (Textile Articles NES) only shows negative contribution in period I. In periods II and III the effects contribute positively, these are 116.83% and 163.94% respectively (Table 3).

In the case of apparel products of Bangladesh, SITC-844 (Outer Garments Not Knit) and SITC-846 (Under Garments Knitted) shows positive sign all through three defined periods and help to maintain positive change in export of the country (Table 4). Like Malaysia, SITC-842 (Men Outerwear Not Knit) and SITC-845 (Outerwear Knit Non Elastics) products only exhibit positive share of contribution in period I and II. Among the other apparel products, SITC-843 (Women Outerwear Not Knit), SITC-847 (Textile Clothing Accessories NES) and SITC-848 (Apparel and Cloth Accessories) products show negative commodity composition effect for all the three periods (Table 4).

Market Distribution Effect: Bangladesh attains positive distribution effect only for SITC-657 (Special Textile Fabric) in all the three periods, which are at 20.88%, 24.71% and 1.11% respectively (Table 3). SITC-654 (Woven Textile Fabric) and SITC-658 (Textile Articles NES) products contribute positive effect, except in comparison periods II and III for SITC-654 (Woven Textile Fabric) and in comparison periods I and II for SITC-658. For the SITC-651 (Textile Yarn) exhibit negative distribution effect all the three periods, which are at -47.62%, -1.91% and -23.89% respectively. Market distribution effect exhibits the positive growth of contribution to change in export of Bangladesh apparel products and indicate the contribution of export in the faster growing market for SITC-842 (Men Outerwear Not Knit), SITC-844 (Outer Garments Not Knit) and SITC-845 (Outerwear Knit Non Elastics) products (Table 4). Among the other apparel products, SITC-843 (Women Outerwear Not Knit), SITC-846 (Under Garments Knitted) and SITC-848 (Article of Apparel and Cloth Accessories) products only show negative contribution effect in comparison periods II and III. For periods I and III, distribution effect is substantially improved and help to keep positive change in export growth (Table 4). Textile Clothing Accessories (SITC-847) only the product, which exhibit negative contribution to change in export all through in three defined periods.

Competitiveness Effect: The role of competitiveness effect of Bangladesh performs better competitive performance only SITC-651 (Textile Yarn) and Special Textile Fabric (SITC-657) products. A substantial improvement is observed in the competitiveness effect of SITC-657 product from 45.3% between periods I and II to 68.38% in periods I and III. Woven Textile Fabric (SITC-654) and Textile Articles NES (SITC-658) products, show gradually decreasing trend of competitiveness effect and negatively contributes to change in export (Table 3).

There is a positive change in export of Bangladesh in all the three periods and having tremendous performance shows of competitiveness effect for all the apparel products (Table 4). The magnitude of this effect is better for Bangladesh, which shows the relative advantage in the world market. The competitiveness effect plays the dominating role in the change in export regarding the relative share for all the products.

Conclusion

The above discussion provides that the RCA calculations clearly show that for the export of textile as well as apparel products of Bangladesh attain a rising strength of comparative advantage. This is mainly due to the almost minimum level of import of these products. Hence, Bangladesh shows comparatively better comparative advantage in international arena. The results of the CMS analysis of both the textile and apparel sectors show that the world trade effect is the dominating factor to the expansion of export from Bangladesh. The commodity composition and market distribution effects of apparel products demonstrate the negative export performance in this respect. The CMS analysis also depicts that the competitiveness effect of apparel products are subsequently improved in general during the period I and III (1985-89 and 1995-99) as compared to those for period I and II (1985-89 and 1990-94) and period II and III (1990-94 and 1995-99).

This concluding section explores some of the real situations of textile and apparel export of Bangladesh is likely face in future. We believe this sector sustains the comparative advantage and its market share that growth is not too difficult. However, caution and appropriate planning is called for to meet the known and unknown challenges in the future. Once the policymakers come to appreciate that the growth of the textile and apparel export industry is perhaps the best thing that has happened to the economy of the country, and will work enthusiastically to preserve and to maximise the gains from this industry. This sector has the potential to user the economy of this country into the next stage of development in the coming century.

The garment and knitwear exports accounted for the bulk of these exports. The knitwear sector especially has been highly dynamic in recent years.

Bangladesh garment exports can now point to a proven track record of successfully competing in a non-protected global competitive environment. The excess dependence on foreign exchange earning and export growth on garments and knitwear calls for policy attempts to diversify the export base of Bangladesh. Now arise questions, what can be said about the future

performance of the garment export in Bangladesh? What is the downside risks for the garments from Bangladesh? There are several avenues by which negative economic shocks from these emerging economics have impacted Bangladesh. Several of the nations are also big garment exporters to the same markets where Bangladesh export its garment products. In 2005, under the Uruguay Round Agreement on textile and garment, the MFA quotas would be phase out. Bangladesh would lose its preferential access to compete with India, China, Vietnam and other garment exporters in a truly global competitive environment. Many garment entrepreneurs in Bangladesh are not ready for this change although the industry as whole probably would hold its own in the post MFA world.

The local garment industry must undertake several measures in order to remain competitive in the world market. The industry must be able to identify niche markets, set up its own marketing network and introduce its own indigenous brand names. Identifying market segments and tapping consumer demands are very significant towards the global expansion of the local industry. Manufacturers must be sensitive to customer needs and be able to react quickly to it by introducing the latest fashion and design. This needs improvement in skills at all levels (i, e. management, marketing and manufacturing) and information availability for better planning. Through the extensive marketing network, Bangladesh Garment Manufacturers and Exporters Association (BGMEA) and Export Promotion Bureau of Bangladesh (EPBB) should play a dynamic role in export marketing especially for apparel products in particular. To achieve the goal, BGMEA and EPBB should developed their linkage with well-established distribution agencies to attain strengthen the overseas publicity programme for establishing more brands and market reputation of textile as well as apparel product from this country.

Export of locally produced fabrics, hand fabrics including printed coloured and Grameen Check and other specialised textiles like silk, are entitled to this facility. To sustain in the global competition, a Fashion Institute should be set-up in the private sector in co-operation with the Export Promotion Bureau of Bangladesh for the improvement of quality and design of textile including readymade garments. The primary concern is the development of the primary textile sector in this country. The primary textile manufacturers should embark a programme to increase the production of industrial and home textiles to feed her apparel industry. This could be achieved through the encouragement of FDI's into this sector. Though, Bangladesh always welcomes Foreign Direct Investment (FDI) particularly in export oriented textile and apparel industry. Transparent investment protection law perhaps is the country's best attraction for investors in its open door investment policy. The country has a very liberal investment climate. For instance, it takes just three days for a foreign investment registration and there is no discrimination between foreign and local private investors. Hundred percent foreign investments are allowed as well as joint ventures with local partners. In spite of all these, Bangladesh has managed very small size of FDI till now. Probable major causes behind this are political instability, lack of social securities (in relation to other neibouring countries), bureaucratic nature of administration etc. To attract FDI, these obstructions should be removed.

Remarks

Two major limitations of the study are to be taken into consideration. Firstly, the study is constrained by non-availability of world export data which is publish by United Nations, and hence has been carried out fifteen years export data from 1985 to 1999 for the selected textile and apparel commodities. Secondly, In order to reflect both price and non-price aspects we used alternative indicators of competitiveness like market share, growth rate of exports of the sector. The CMS model used in this study and includes all the determining variables such as price and non-price aspects of competitiveness. Therefore, a study is called for which would be able to incorporate the result of the competitiveness with price and non-price factors in a time series frame. This would be useful and rewarding.

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