NC STATE UNIVERSITY

College of Textiles, NC State University

JTATM Journal of Textile and Apparel, Technology and Management

Volume 8, Issue 4, Spring2014

How Does the Revision of EU's GSP Scheme Influence the Exports of Bangladesh?

Redwan Ahmed
Department of Economics
Pabna University of Science & Technology
Bangladesh

ABSTRACT

This paper is an attempt to analyze the potential benefits that Bangladesh can enjoy being a Least Developed Country (LDC) from its Ready Made Garments (RMG) export following the recent changes in the EU GSP scheme which is due to come into effect from January 01, 2014. The revised GSP Scheme is designed to restrict the entry of the export items from 90 countries' export to the EU market. It is expected that it will unfold into unprecedented opportunity to the remaining beneficiary countries. Using the revealed comparative advantage (RCA) and export similarity index (ESI), unit price of RMG and labor wage, it is found that Bangladesh is in advantageous position against all these indicators among the top apparel exporting nations to the EU market. Trend analysis approach has been used to analyze statistical information which was mostly collected from secondary sources, especially from ITC Trade Map, EPB Bangladesh and so on. Finally considering all the circumstances, a positive impact is expected and apparently it will give stimuli to regain the high export growth rate which has faced sluggishness mainly in the EU market largely due to debt crisis. The prospect may be capitalized, provided that Bangladesh pays due attention to the proper utilization of existing institutional capacities, effective implementation of compliance issues, reinforcement of supply side capacities, attachment to least lead time encompassing both external and internal trade and finally promotion and placement of its finest it has for its global customers.

Keywords: GSP, EBA, MFN, Petrobangla, Industrial Police Force and UNCTAD; JEL classifications: F13, F14, K33

Introduction

Since 1971, the GSP (Generalized System of Preference) scheme by EU countries has been put in place to allow advantageous treatment to exporting countries from the developing and least developed countries (LDCs). The scheme was designed to facilitate the growth of their economies along with fostering equitable share by providing privileged entry into global trade system. Though product coverage under standard GSP is 66% of tariff line, the preferential treatment is given for approximately 7200 products which are classified as being either "sensitive" or "non-sensitive. After forming European Union in 1993, the preferential treatment has been remained applicable to 179 developing and least developed countries (LDCs) with several round of revisions for several times. Lately, the (revised) GSP module has been adopted by the EU on October 31, 2012

which is expected to come into effect from January 01, 2014 to focus on those countries which are most in need of it. Only 89 out of 179 countries will be entitled to enjoy the revised GSP facilities under the new scheme. Since Bangladesh is one of the major apparel producers, its main concern is to look for how many apparel producers are still covered under the new scheme. Interestingly, Brazil-one of the major RMG producers has not been allowed to enjoy GSP facilities any further. So there is a real chance for other apparel producers to boost their RMG (Ready Made Garments) export.

In the context of the revised preferential treatment (EU revised GSP scheme 2003) for LDCs, Bhattacharya *et al* 2004 opined that LDCs would have now an opportunity to substantively increase their exports to the EU market now secured under more favorable terms. Moreover, regarding EU revised GSP scheme 2012, it is commonly said *that "Some limited drops in exports (typically in the 1% range) of a country are expected to raise export for many of those partners. Even marginal drops in exports by more advanced, bigger economies, can potentially provide significant opportunities for the poorest, whose exports are very small in comparison"* (EC 2012)[i]. Therefore, it is clear that the remaining apparel exporters would get an advantage to increase clothing export to the EU apparel market. Because of being an LDC, Bangladesh would be benefited from the opportunity. For now, how and to what extent the trade gain would be realized in terms of increased apparel export is not clear at all. There should be a critical analysis as well as comprehensive discussion about the possible impacts of the revised GSP scheme on Bangladesh apparel export. This paper intended to explain the potential impacts of this revised GSP scheme on the RMG export of Bangladesh to EU market.

Literature Review

In order to grant the developing countries' nonreciprocal preferential tariff rates that are lower than the MFN tariff rates for LDCs, the GSP was adopted following UNCTADs recommendations. By the end of 2003**,** 16 national GSP schemes were notified to the UNCTAD secretariat and these nations are mainly; Australia, Belarus, Bulgaria, Canada, the Czech Republic, the European Community, Hungary, Japan, New Zealand, Norway, Poland, the Russian Federation, the Slovak Republic, Switzerland, Turkey and the United States of America (Grossman et al 2005). At present, all of the EU members (e.g.28 countries) provide GSP facilities to the developing and the least developed countries (LDCs). The developing countries and the LDCs get benefits from main exports especially textile and clothing to those advanced countries. Currently, among the top ten global importers of apparel products, seven are from the EU. The GSP scheme in EU market can be classified into three categories- General GSP, GSP+ and EBA. To keep GSP effective and enhance the competitiveness of the developing and the least developed countries, several modifications have been brought in since the inception of EU's GSP scheme. Though there are a number of studies underscoring the effects of GSP on exports of the GSP beneficiaries like Bolivia, Brazil, China, Malaysia, Mexico, ASEAN and Latin American Countries, so far there is no adequate research works, especially on the possible impacts due to these recent changes in the revised GSP on exports from Bangladesh. However, the following discussion is mainly based on the available literature.

It is evident that the GSP was designed to facilitate the economic growth of developing and least developed countries. While measuring the effectiveness of EU GSP scheme, Zhou and Cuyvers (2012) argued that the scheme is less effective to promote the exports growth of the ASEAN countries. However by exploiting GSP preferences, few least developed ASEAN member states became successful to push up their exports to the European market. In order to examine the impact of EU GSP scheme on the beneficiaries' exports, Cuyvers and Soeng

(2013) conducted a study on China, ASEAN and Latin American Countries, and found heterogeneous impacts in different sectors. They found a negative impact on agricultural imports but a positive effect on industrial products except textile products. However, China plus ASEAN countries became benefited significantly from export of industrial and textile products than the Latin American countries. Furthermore, their estimation showed that the graduation mechanism in the EU GSP is working in favor of such countries for textile products. In their analysis, they considered that the ASEAN countries plus China as the Asian countries whereas Bangladesh, the second largest global apparel producer was not taken into the analysis.

While measuring the post MFA performance of Bangladesh apparel sector, Ahmed (2013) argued that in spite of abolition of MFA, RMG export from Bangladesh showed a huge jump because of the EU's GSP Scheme 2003 (considered as one of the driving forces). Vaince (1985) stated that a preferential treatment of imports from the least developed countries (LDCs) would promote the exports of manufactured and semi-manufactured goods from these countries. In order to evaluate the impact of policy reforms of advanced countries on African exports, Biggs et al (2001) conducted a study and argued that countries where policy reforms have been pursued, African exporting countries have experienced increased exports of standardized products, like garments and advantageous position in price competitiveness. Therefore, the prospect for Bangladesh can be analyzed by the African experience. In a study of Centre for Policy Dialogue (CPD) on Japanese GSP revised in 2003, Bhattacharya et al (2004) argued that Bangladesh can expect a positive impact from this modification, as Japan modified its GSP scheme by including more products to increase competitiveness of developing countries and LDCs. A unique momentum is in the offing for Bangladesh RMG sector and thus we got to tailor our action plans to ensure maximum benefit from that GSP modification. This helps us to conclude that the change in GSP scheme in any form affects apparel export significantly. For example, when Japan revised its GSP scheme back in April 2011, several trade researchers deduced that developing & least developed countries might be benefitted from it. The expectation was seemingly rational, yet it was not empirically validated.

At the beginning of 1990s, the USA was the main destination for Bangladeshi apparel products. After that RMG exports to the country experienced a sharp decline. Surprisingly it eventually plummeted to 28 percent in 2008. But why? Several explanations could be attributed to it, like global recession. However, while examining the trend, Joarder et al (2010) mentioned that the EU GSP scheme 2003 may be the factor for falling RMG export to USA in percentage amount (not absolute amount) as the export increased dramatically to the EU. While comparing the export performance between knitwear and woven wear, they added that Bangladeshi knitwear items were most successful in grabbing that opportunity as the sector had sufficient backward linkage to meet the rules of origin. While analyzing the impact of the GSP conceptually, Grossman et al (2005) opined the export growth of GSP advantageous countries reflects both trade creation and trade diversion. Moreover, Vaince (1985) mentioned that the increase in exports of tariff preference country is the result of trade (trade diversion and trade creation) effects which is supported by an earlier research finding as Sapir et al(1984) believes that conceptually, a preferential tariff reduction (like the GSP) is similar to the formation of a customs union. Though the above discussion may make a substantial understanding about the impact of GSP facilities on advantageous country's export from different perspectives, there are no acceptable estimates of the aggregate benefits that advantageous countries derive from GSP schemes. Rather only economic theory can predict a progress in the terms of

trade on eligible products (Grossman et al 2005).

Conceptual Framework to Analyze the Effect of GSP Scheme

Generally, manufacturers export an exportable item because of price differentials between local and international market or for enjoying advantageous position in producing a large volume. The developing countries (DCs) and the least developed countries (LDCs) are characterized as a group of countries that together constitute a small assortment in the sense that they cannot affect price of their tradable goods in the global market, as their exports collectively stand at an insignificant portion compared to the sheer size by the rest of the world. Under the general preferential treatment of WTO to DCs and other LDCs, they are privileged to export their commodities to GSP offering countries at MFN tariff rate. In order to remain competitive, they should export their commodity volume at price $p^*/(1+t_{MFN})$ if the price of goods in targeted market is p*.

Figure 1. Conceptual Framework to analyze the effect of GSP Scheme

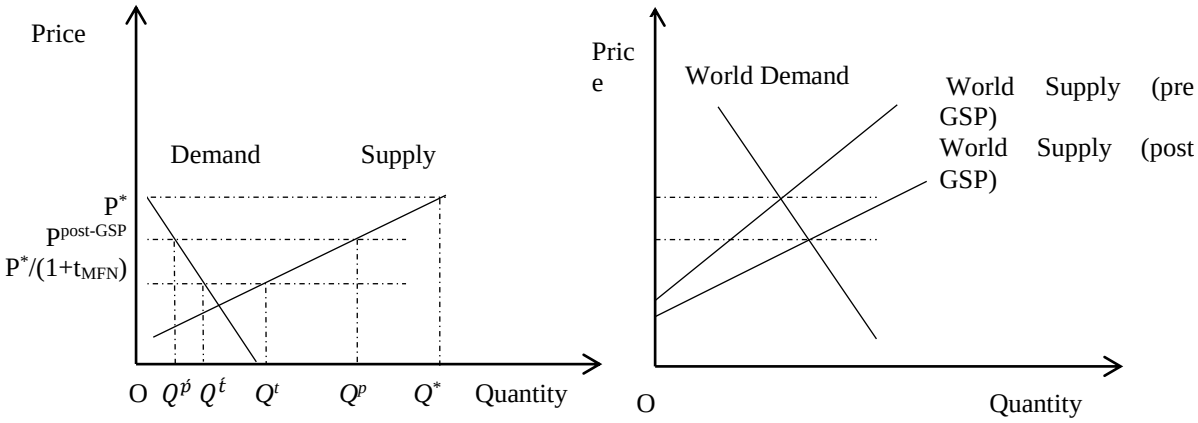


Fig 1a. Market in Preference- Accepting Country **Fig 1b. Market in Preference- Allowing**

The MFN tariff may have proved not to be enough for these counties to be competitive and that led to the enactment of allowing preferential favor (i.e GSP facilities) by the developed countries to enhance trade and development of the DCs & LDCs. The new preferential tariff favor eliminates either tariff barrier entirely or reduces it significantly. Figure-1 shows the situation in both domestic and global market after allowing GSP facilities to DCs & LDCs. Allowing GSP facilities increases domestic price from $p^*/(1+t_{MFN})$ to $P^{post\text{-}GSP}$ in the preference accepting country because of excess demand originated from additional exports, as shown on the left-hand panel. Simultaneously, on the right-hand panel, the total world supply to the GSP offering countries expands and tends to make supply curve more flatter that shows a reduction in market clearing price from p* to $P^{post\text{-}GSP}$. In spite of price falling after availing GSP, the preference-accepting country still enjoys trade gain in terms of welfare (value of export) as well as higher export (volume of export).The increased welfare (IW)can be measured by the price lines $p^*/(1+tMFN)$ and p* and by the demand and supply curves. Quantitatively the IW can be expressed as;

$$IW = Q^*P^* - \int_0^{Q^*} f_1(Q)dQ - Q^tP^t + \int_0^{Q^t} f_1(Q)dQ - \int_0^{Q^t} f_2(Q)dQ + Q^tP^t = Q^*P^* - Q^tP^t + Q^tP^t - \int_{Q^t}^{Q^*} f_1(Q)dQ - \int_0^{Q^t} f_2(Q)dQ$$

And total export (TE) are as; TE = OQ^p - $OQ^{\acute{p}}$ = $Q^{\acute{p}}Q^p$ = $Q^{\acute{p}}Q^{\acute{t}}$ +$Q^{\acute{t}}Q^t$+ Q^tQ^p = $Q^{\acute{t}}Q^t$ + ($Q^{\acute{p}}Q^{\acute{t}}$+ Q^tQ^p)

Therefore, the export is increased by $Q^{\acute{p}}Q^{\acute{t}}$+ Q^tQ^p because of getting preferential access to the market of preference granting countries.

Methodology

The arrangement of GSP scheme is conceptually similar to the formation of a customs union (Sapir et al 1984) and therefore, the EU revised GSP scheme 2012 will change apparel exports of existing exporters in the EU apparel market as a result of trade effects. The potential impact of the revised GSP scheme on clothing export of Bangladesh depends largely on Products' Matching (Davis at el 1995), which states that how many products in the export bundle of the newly revised GSP excluded countries are in common with Bangladeshi products that EU members import. In order to assess products' matching, the top ten RMG (top five items of both woven & knitwear) products of the excluded countries that EU imports might be considered as a basis of trade expansion for Bangladesh. In spite of having products' matching, Bangladesh may not realize expected trade gain if there are other potential competitors in the market. The potential competitors of Bangladesh in the EU apparel market can be identified through computing the Export Similarity Index (ESI) supported by Finger and Kreinin (1979) and defined as follows:

$$ESI = \sum Min\{S_a(BE), S_a(CE)\}$$

Where B is Bangladesh, C is the other selected competitors, E is the EU market and S_a is the share of apparel industry's exports in the exporting country's total exports to the targeted market. The ESI can vary from zero to unity measuring less to more similarity of export patterns among Bangladesh and other competitive countries in the market. In the paper, the values of the ESI for selected countries are estimated based on 6-digit level data (e.g. the top ten RMG products) on apparel exports for 2007 and 2011 respectively.

Identifying potential competitors, a measure is necessary to rank these countries based on comparative advantages in producing RMG products. The Revealed Comparative Advantage (RCA) index is considered as a complementary construct to measures the intrinsic advantage of selected competitive countries in clothing production. The index was used by Balassa's (1965), Aktaruzzaman et al (2012) and measured as:

$$RCA = (\frac{X_aB}{XB})/(\frac{X_aW}{XW})$$

Where X_aB= Total apparel export from Bangladesh, XB = Total exports from Bangladesh, X_aW = Total apparel export from all countries, XW = Total exports from all countries. The RCA may be greater than 1 that indicates the pertinent country is considered to have a comparative advantage in the product concerned and vice versa. In the paper, the values of the RCA for selected countries in apparel production are estimated for 2007 and 2011 respectively. Finally the trend analysis approach is followed to evaluate the expected impact of revised GSP application on RMG sector of Bangladesh.

Data Description

Statistical information from 2007 to 2011 used in the study is gathered mostly from secondary sources. The apparel export value, market share, apparel product's code for Products' matching, etc. are collected from ITC Trade Map (www.trademap.org), EPB Bangladesh (www.epb.gov.bd), Trade Nosis (www.trade.nosis.com). The ITC Market Access Map (www.macmap.org) is used to check preferential status of apparel producing country in the EU market as well as corresponding tariff and non-tariff barriers. Pricing Scenario of imported apparel products is collected from WITS (http://wits.worldbank.org/wits/) and Apparel Export Statistics of Bangladesh

(FY2010-11) (http://www.bkmea.com/images/media/iART-pdf/Apparel_Export_Statistics_2011-12.pdf). Finally, hourly minimum wage of garments worker in 2011 is compiled from the Institute for Global Labor and Human Rights (www.globallabourrights.org/alerts?id=0297).

Results & Discussion

Bilateral Apparel Trade between Bangladesh & EU

European Union is the main export destination of Bangladesh apparel sector. About 59.6% of total national apparel export earnings (73.04% of total knit wear export earnings) were solely from the more integrated economic region. Knitwear export from Bangladesh to EU market had started to realize a non-declining trend from the fiscal year 2002-03. After that the growth rate in this sector maintained a positive growth tendency, albeit the acceleration of the growth rate showed volatility in the past few years. In 2009 and 2011 the growth trend slowed down suddenly from two digits to one digit. The reasons behind this slowdown of growth rate are largely attributed to different external shocks like euro zone debt crisis, global financial crisis etc. These shocks have resulted in dropping of apparel import in EU market. Moreover, the export performance of woven wear & overall RMG sector of Bangladesh showed similar trend as like the knitwear sector. During the last five years from 2007 to 2011, the average growth rate of apparel (also knitwear and woven wear) export was 14.5% (11.7% and 13.5% respectively). Table-1 provides the recent scenario of apparel export of Bangladesh to the EU apparel market.

Table 1. Bangladesh's RMG export to EU market

Year	Knitwear			Woven Wear			RMG		
	Export Value (in million US$)	Growth rate (in %)	Average Growth rate (%)	Export Value (in million US$)	Growth rate (in %)	Average Growth rate (%)	Export Value (in million US$)	Growth rate (in %)	Average Growth rate (%)
2011	6629.21	2.55		3184.16	9.36		9813.36	4.67	
2010	6464.34	35.17		2911.5	24.72		9375.84	31.74	
2009	4782.22	2.37	14.48	2334.48	4.46	11.72	7116.7	3.05	13.51
2008	4671.28	17.85		2234.84	8.34		6906.12	14.59	
2007	3963.87	----		2062.83	----		6026.7	----	

Source: EPB Bangladesh, ITC Trade Map

Bangladesh has secured a dominant place in the EU apparel market with 5.6 percent market share in 2011. Interestingly Bangladesh is ranked as the second largest knitwear exporter in the EU knitwear market, but the country's market share is just below 1.5 percent in 2011. The major players in the knitwear market determined based on export value are mainly China, Bangladesh, Germany, Turkey, Italy, and Vietnam. Bangladesh's market share in the EU RMG market was rising from 2007 to 2011 with an exception in 2008 as stated in Table-2.

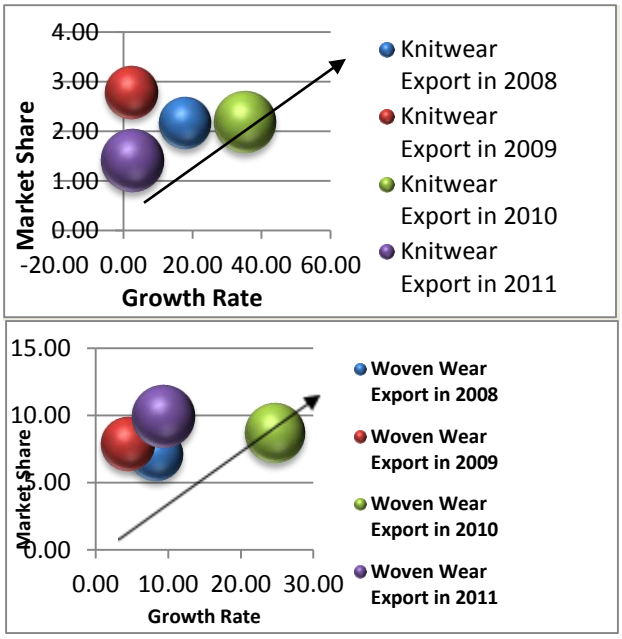
Table 2. Bangladesh apparel export's market share in the EU market

Year	Knitwear		Woven Wear		RMG	
	Market Share (in %)	Position in the Market	Market Share (in %)	Position in the Market	Market Share (in %)	Position in the Market
2011	1.41	2	9.95	5	5.6	3
2010	2.18	3	8.69	6	5.39	3
2009	2.79	3	7.91	7	5.25	5
2008	2.17	3	7.09	9	4.5	6
2007	3.07	4	6.37	10	4.62	6

Source: ITC Trade Map, EPB Bangladesh

Though Bangladesh's apparel export had a positive growth rate to EU market during this time period, the market share did not raise enough as the EU's import of apparel product grew at a higher rate than the export growth of Bangladeshi apparel products to EU market. Based on information provided by Table-1 and Table-2, two bubble diagrams are drawn in Figure-2 that indicate overtime progress in Bangladesh apparel export to EU market.

Figure 2. Bangladesh's RMG export to EU market



Source: Bubble diagrams are based on the data provided by Tables 1 & 2

The Bubble far away from the origin along the arrow line and the greater Bubble (Size of Bubble represents export value) over the period, the more progressive the country is in EU market. According to the diagrams, Bangladesh enjoyed progressive export earnings in 2010. However the direction of both knit & woven wear export competitiveness has downgraded in 2011.

Recent Apparel Trade Scenario of Excluded Countries with EU

The total knitwear export of excluded countries is about US$ 307.73 million, whereas the total woven wear export is

about US$ 246.29 million in 2011. Therefore, about US$ 554.02 million worth of clothing exports of the excluded countries are expected to be affected adversely. Some countries like Malaysia, Belarus, Brazil and UAE export a large volume of knitwear products to EU market and each of those countries has maintained a positive two digit export growth rate to EU market. Though some other countries do not export a large volume of products at present but their export growth rate is very high. For example Oman's knitwear export to EU market has an overwhelming growth rate of 560 percent, though the base value (of export) is very low. This statistics compiled in Table-3 implies these countries are emerging in the EU's apparel market. This exponential growth of these countries is expected to be affected by the new tariff structure of the revised GSP scheme.

Table 3. EU's RMG import from excluded countries in 2011

Year	Knitwear			Woven Wear			RMG		
	Export Value (in million US$)	Growth rate (in %)	Market Share (in %)	Export Value (in million US$)	Growth rate (in %)	Market Share (in %)	Export Value (in million US$)	Growth rate (in %)	Market Share (in %)
Argentina	2.62	-28.26	0.004	0.81	-23.37	0.002	3.43	-27.17	0.002
Brazil	0.43	-41.71	0.019	0.48	-36.52	0.001	0.91	-39.08	0.01
Cuba	0.005	-88.25	0.00	0.028	-93.92	0.0006	0.03	-93.47	0.00
Uruguay	0.93	4.38	0.001	0.297	25.85	0.0003	1.23	8.88	0.0007
Venezuela	0.11	-5.22	0.0002	0.05	-88.43	0.0006	0.16	-70.93	0.0002
Belarus	21.47	9.24	0.017	56.49	-14.61	0.08	77.96	-9.15	0.04
Russia	5.73	-42.84	0.004	57.69	9.03	0.07	63.42	0.76	0.01
Kazakhstan	0.21	524.24	0.0001	0.08	31.74	0.0001	0.29	201.04	0.00
Gabon	0.0007	238.34	0.0001	0.0002	-98.04	0.00	0.0009	-92.67	0.00
Libya	0.01	-60.00	0.00	0.13	2000.00	0.00	0.14	338.71	0.0001
Malaysia	178.73	14.89	0.22	63.015	24.96	0.08	241.74	17.36	0.14
Saudi Arabia	1.19	-15.09	0.002	1.24	-34.005	0.003	2.43	-25.95	0.002
Kuwait	0.52	-29.75	0.0001	4.759	-8.26	0.007	5.27	-10.93	0.0004
Bahrain	0.09	230.76	0.0004	0.09	650.00	0.00	0.17	363.15	0.0007
Qatar	0.14	-15.73	0.0004	0.308	-53.68	0.0009	0.45	-45.93	0.0005
UAE	74.50	9.65	0.09	37.61	-4.26	0.05	112.11	4.55	0.06
Oman	0.07	560.00	0.00	0.224	-20.00	0.0004	0.29	0.00	0.00
Brunei	1.15	18.59	0.002	0.62	624.56	0.0001	1.77	67.88	0.0008
Macao	4.85	-45.24	0.01	14.219	-57.66	0.044	19.07	-55.07	0.02

Source: ITC Trade map, http://trade.nosis.com

Products' matching: A basis of Trade Expansion

The expected benefits of Bangladesh apparel sector due to EU revised GSP scheme will depend on several factors. Among those, products' matching is considered as dominant one. Since apparel export from excluded countries to the EU will be reduced significantly, the remaining exporting countries will have a good opportunity to supply more if they have the capacity to produce these clothing items at lower cost (which were produced & exported usually by the omitted countries). The products (especially common products)

of excluded countries will be expensive because of new tariff line, if other things like – production cost, transportation cost, etc. are unchanged. The recent tariff structure will make these countries' products less competitive whereas Bangladesh can enjoy zero duty facilities in the said region. In order to make the analysis meaningful, the top ten apparel (top five items of both knit & woven wear) items have been taken into consideration while investing products matching. Though the top ten apparel items are mentioned here at H.S-6 digit code, a detailed product description is provided in Annex-1.

Table 4. Top Five Apparel Products of Bangladesh to EU

Country	Top Five Knitwear Products					Top Five Woven Wear Products				
Argentina	**'610910**	'610990	**'611020**	'611595	'610711	**'620520**	**'620462**	**'620342**	**'620630**	'621133
Bahrain	**'610910**	'610899	'610343	'610342	'610341	**'620462**	'620469	'620463	'620343	**'620342**
Bangladesh	**'610910**	**'611020**	**'611030**	**'610510**	**'610462**	**'620342**	**'620462**	**'620520**	**'620630**	**'620920**
Belarus	'611521	'611529	**'610910**	'610822	'611522	'621210	'620211	'620213	'620111	'620312
Brazil	**'610910**	'611241	'610990	'610463	'610822	'621290	'621210	**'620462**	**'620520**	**'620342**
Brunei	**'610910**	**'611020**	'610832	'610831	**'610462**	'620821	**'620630**	'620722	**'620462**	**'620342**
Cuba	'610891	'611090	**'610910**	'610443	'610449	**'620462**	**'620630**	'621600	'621230	'620690
Gabon	**'610910**	'610413	**'611020**	**'611030**	'610342	**'620342**	**'620462**	'621410	**'620630**	**'620920**
Kazakhstan	**'611020**	'611693	'611522	'611691	**'611030**	'620193	'620293	'620213	**'620520**	'621210
Kuwait	'610610	'610130	'610413	'610990	610322	'621710	'620411	'620449	**'620462**	'620111
Libya	**'611030**	**'610910**	'610349	'610990	'610432	'621050	'621040	**'620630**	'620193	**'620342**
Macao	**'610910**	**'610510**	**'611020**	**'611030**	**'610462**	'621210	**'620520**	**'620342**	'620332	'620111
Malaysia	'611610	**'611020**	**'610910**	'610990	**'611030**	**'620520**	**'620342**	'621210	'621142	'620463
Oman	**'610510**	'611130	'611120	**'610910**	'610520	**'620342**	'621111	**'620462**	'620341	'620432
Qatar	**'611020**	**'610910**	'610520	'611780	'610443	'621710	'620449	**'620342**	'620442	'620411
Russia	**'610910**	**'611030**	**'611020**	'610342	'610990	'620211	'620431	'621133	'620193	**'620462**
Saudi Arabia	'611420	'611090	**'610910**	'611430	**'611020**	'621490	'620469	'621010	'620829	'620443
UAE	**'610510**	**'610910**	'611595	'610990	'610443	**'620520**	**'620462**	**'620342**	'620343	'620341
Uruguay	**'611030**	'611011	'611241	'611710	'610712	'620213	'620211	'620311	'620111	'620113
Venezuela	'611300	'611090	'611241	'610349	'610690	'620329	**'620462**	'621210	'620469	'620442

(Source: ITC Trade Map)

The color marked product codes in the Table-4 indicate that these products are common which may make a basis of trade expansion. The top five knitwear export items of Bangladesh are mainly 610910, 611020, 611030, 610510 and 610462, whereas woven wear items are as 620342, 620462, 620520, 620630 and 620920. These ten products match with excluded country's top ten products uniquely. It indicates that Bangladesh will be able to fill up the gap of extra demand originated from the reduction of excluded country's' apparel export.

Potential Competitors in the EU Apparel Market

The similarity in export structure measured usually by the export similarity index (ESI) reflects more complementarity as well as competition (Bayoumi 2011). The higher value (closed to unity) of ESI for a pair of countries implies more similar shares of each product (6-digit) category in overall

exports and vice versa. Despite the presence of products' matching, it is important to investigate how many countries are exporting these ten clothing items to the EU apparel market currently. Table-5 provides a clear look of export similarity between Bangladesh and other competitive countries in 2007 and 2011.

Table 5. Overall Export Similarity Index, 2007 & 2011

2007			2011		
Rank	Country	ESI	Rank	Country	ESI
1	Germany	0.72	1	Netherlands	0.65
2	Belgium	0.72	2	Germany	0.61
3	Portugal	0.71	3	Portugal	0.61
4	United Kingdom	0.71	4	Turkey	0.60
5	Sri Lanka	0.71	5	Belgium	0.60
6	Netherlands	0.69	6	United Kingdom	0.57
7	Italy	0.68	7	Spain	0.56
8	Turkey	0.67	8	Sri Lanka	0.55
9	Spain	0.64	9	Italy	0.55
10	India	0.63	10	India	0.52
11	China	0.63	11	Indonesia	0.50
12	Viet Nam	0.62	12	Viet Nam	0.49
13	Indonesia	0.57	13	Hong Kong	0.46
14	Hong Kong	0.56	14	China	0.45
15	Cambodia	0.49	15	Cambodia	0.43

Source: Authors' estimation from ITC Trade Map, EPB Bangladesh.

The ESI value for both Germany and Belgium was about 0.72 in 2007 that implies about 72 percent of total apparel exports of Bangladesh are almost similar with that of both Germany and Belgium. However, Cambodia and Hong Kong with lower ESI value depicts that the clothing export bundle of both countries are less similar with that of Bangladesh. It is evident that the ESI values were higher in 2007 than in 2011. Therefore, apparel export similarity between Bangladesh and other European countries is found smaller in 2011 that implies European countries either reduced production of the ten clothing items (defined in products' matching section) or diverted manufacturing resources to produce other products. During the period, the ESI values are still higher for the Netherlands, Germany, Portugal, Turkey and Belgium compared to other countries like, Cambodia, China, Hong Kong and Viet Nam. Accordingly, the leading competitors of Bangladesh in the EU apparel market are the Netherlands, Germany, Portugal, Turkey and Belgium.

Comparative Advantage of Potential Competitors

The difference in factor endowment of two countries results in a significant difference in trade performance of these countries despite having a similarity in their export structure. The Reveal Comparative Advantage (RCA) index ranks selected competitors based on their respective export pattern which changes further if factor endowment changes. Table-6 provides ranking information of selected countries based on RCA index in 2007 and 2011.

Table 6. Revealed Comparative Advantage of Major Players in the EU Apparel Market

2007			2011		
Rank	Country	RCA	Rank	Country	RCA
1	Bangladesh	17.17	1	Bangladesh	20.6
2	Sri Lanka	7.49	2	Sri Lanka	8.84
3	Cambodia	6.45	3	Cambodia	7.65
4	Turkey	4.14	4	Turkey	3.6
5	Portugal	2.47	5	Portugal	2.27
6	India	1.23	6	Viet Nam	1.13
7	Viet Nam	1.2	7	Italy	0.98
8	Hong Kong	1.08	8	India	0.94
9	Italy	1.06	9	China	0.91
10	Belgium	0.71	10	Spain	0.88
11	Spain	0.65	11	Hong Kong	0.75
12	China	0.64	12	Belgium	0.74
13	Netherlands	0.42	13	Netherlands	0.64
14	United Kingdom	0.38	14	Germany	0.45
15	Germany	0.29	15	United Kingdom	0.44

Source: Authors' estimation from ITC Trade Map, EPB Bangladesh.

It is evident that the RCA values of majority of these countries were higher in 2011 than in 2007, but the degree of changes varies from country to country. Though the clothing items are widely recognized as labor intensive products, the comparative advantage in clothing production among even labor abundant countries vary significantly from each other in terms of price, quality, fashion, technology and type of major inputs embodied. According to the statistical information provided by Table-6, Bangladesh has a comparative advantage in clothing followed by Sri Lanka, Cambodia and Turkey in 2007, whereas United Kingdom, Germany and the Netherlands have a comparative disadvantage in clothing items in the same period. Most of the countries' RCA values increased steadily in 2011 but a rapid increase in the value of RCA for Bangladesh is observed despite the presence of global economic downturns in 2008-09 and Eurozone debt crisis in 2011-12.

Lower Product Price: A basis of Trade Creation

The GSP scheme - a well-known preferential tariff reduction is similar to the concept of a customs union as both give rise to the same static effects, described often as trade creation and trade diversion. Unlike examining the trade effects between domestic and partner countries in a customs union, the analysis is more focused on the effects between the existing leading competitors (i.e. selected countries) in the EU apparel market as well as Bangladesh. Since trade flow is redirected to lower cost producing country from higher cost producing one, the pricing information of the following countries may provide a better idea about the trade flow in coming days when the revised EU-GSP scheme will come into force. In this regard, the top ten apparel (top five of both knitwear and woven wear) items of the EU's imports could be considered as a basis of trade flow determining factor, because these products covered about 40 percent of total EU apparel imports (in 2011). In spite of having product heterogeneity even at H.S. 6 digit, the product price (in US$ per piece) calculated from value quantity ratio measures the comparative lower cost producing advantages in these producers.

Table 7. Pricing Scenario (in US$ per piece) **of Top Ten Imported Apparel Products of the EU in 2011**

Country	Price of Top Five Knit Items (at HS 6 digit)					Price of Top Five Woven Items (at HS 6 digit)				
	61103	61046	61051	61091	6110	620342	62046	62052	62063	62092
Bangladesh	5.21	2.65	3.2	1.9	4.49	5.96	4.99	4.75	4.23	6.86
Belgium	7.85	5.16	7.47	4.75	10.35	13.85	11.57	9.08	7.78	15.42
Cambodia	6.47	4.17	3.87	2.86	5.5	7.42	6.04	7.57	4.4	8.71
China	6.26	2.97	4.28	2.56	7.42	7.02	5.15	6.42	5.89	6.81
France	11.75	6.42	10.53	5.02	12.07	18.12	12.15	14.3	14.34	18.36
Germany	12.05	5.72	7.31	4.81	11.09	18.42	12.04	14.57	12.4	17.35
Hong Kong	6.24	2.45	5.2	2.15	6.61	8.76	6.97	5.73	6.32	7.17
India	5.42	3.02	5.17	2.9	6.36	9.32	6.4	7.12	5.72	8.88
Indonesia	7.26	4.33	6.93	3.27	7.18	11.23	6.75	7.67	7.46	9.2
Italy	15.84	8.29	12.95	7.14	14.77	23.69	15.5	13.3	19.72	20.72
Netherlands	14.76	7.97	9.8	6.87	13.63	21.46	13.98	14.5	19.29	19.15
Portugal	10.05	5.72	7.31	4.81	10.09	14.42	9.04	10.57	8.4	18.56
Spain	8.86	5.2	6.53	5.45	9.43	13.18	9.1	10.56	8.79	19.89
Sri Lanka	6.02	3.22	4.95	3.05	4.33	8.67	6.8	6.57	7.58	10.94
Turkey	6.88	4.02	5.95	3.95	6.18	9.12	4.01	5.86	8.88	10.05
UK	10.31	6.54	11.25	5.3	12.28	15.66	10.68	14.82	14.71	15.1
Viet Nam	5.05	2.72	4.31	2.81	6.09	9.07	7.14	5.22	7.45	6.88

(Source: Authors' compilation from Apparel Export Statistics of Bangladesh (FY2010-11), WITS, ITC Trade Map)

According to the Table-7, Bangladesh supplied six out of the top ten apparel items to the EU at lowest prices while China, Viet Nam, Cambodia, Hong Kong, Sri Lanka, India and Turkey were other suppliers at competitive price. Sri Lanka and Viet Nam were found in 2011 as supplier of 611030 and 611020 coded knitwear items at lowest price respectively. Moreover, in case of woven items, China and Turkey showed their ability to export 620920 and 620462 coded woven items at lowest price. However, product price of EU countries is much higher than that of the Asian competitors. The notable differences in product price of these countries urge to investigate wage rate as well as productivity of garment workers, as product price depends largely on labor wage and labor productivity. The labor productivity is measured here by the value of average labor productivity (VALP)[ii] and expressed in US$ per hour.

Table 8. Hourly Minimum Wage and Labor Productivity of Garments Worker in 2011

Country	Hourly Minimum Wage (in US$)	Hourly Labor Productivity (in US$ and measured by VALP)
Bangladesh	$ 0.21	$ 1.50
Belgium	$ 10.69	N/A
Cambodia	$ 0.24	$ 1.34
China	$ 0.93	$ 1.97
France	$9.11-10.94	$ 15.48
Germany	N/A	N/A
Hong Kong	$ 0.87	$ 1.39
India	$0.55-0.68	$ 1.41
Italy	N/A	N/A
Netherlands	$ 10.23	$ 16.18
Portugal	$ 4.31	N/A
Spain	$ 5.29	$ 9.94
Sri Lanka	$ 0.46	$ 1.09
Turkey	$ 2.89	N/A
United Kingdom	$7.58-9.11	$ 12.61
Vietnam	$ 0.52	$ 1.07

(Source: Institute for Global Labour and Human Rights, www.globallabourrights.org/alerts?id=0297, The Fashion United, www.fashionunited.com, BGMEA, MOC of Cambodia, MOLW of China, Statistical Yearbook of Vietnam 2011)

Information provided in Table-8 indicate that hourly minimum wage rate of garments worker is much lower in Bangladesh following Cambodia, Vietnam and Sri Lanka. The lower wage rate in Bangladesh could be attributed with over population, inadequacy of employment, low literacy rate, scarcity in natural resources and so on. The VALP of European Countries is much higher than that of Asian countries, as European apparel manufacturers not only adopt new technology to their apparel industries but also are much biased to produce high valued RMG products. However, Bangladeshi entrepreneurs have introduced recently "Lean Manufacturing System" to some of their factories that may result in higher labor productivity following Cambodia, Hong Kong, India, Sri Lanka, Vietnam and other Asian apparel producers except China. The information tabulated here as well as recent trade value of the top ten apparel items show that Bangladesh has the desired comparative advantages in producing apparel products at lower costs which usually the EU countries import. Therefore, it is expected that the apparel trade flow would be redirected to Bangladesh as it appears as a lower cost apparel producer.

RMG Industries' (also other relevant) Capacity against the Opportunities

The external opportunities are not enough to boost up RMG export. Rather it depends largely on internal micro factors. Lower wage and subsequent labor unrest, shortage of Gas supply, power cut problem, lack of wider transport networks, poor port facilities and most importantly lower worker productivity and inefficient production management marked the beginning era of Bangladesh apparel. The recent initiatives resulted in sweeping changes in the clothing industry. Labor wage was increased by at least 75% back in 2010 resulting in higher level of stability. Moreover, the government has formed "Industrial Police Force" to maintain security and stability in the industrial zones with the help of dedicated and disciplined force. In addition, government has setup new captive power

plants and encourages private entrepreneur to invest more in power sector to reduce frequent power cut problem. Since natural gas is the main source of energy in Bangladesh, Petrobangla expects to explore more new gas blocks in the EEZ (Exclusive Economic Zone) of the country in the Bay of Bengal. The most important road linking capital (Dhaka) city to commercial (Chittagong) city under project N1 is expanding stretch to four lanes, which is expected to be finished by December 2013. Moreover at the seaport, window berthing system was installed on August 6, 2007, which enabled the port to maintain the arrival and departure times of all ships. In order to ensure the service in any emergency, two berths are kept in reserve at the port terminal. While measuring the performance of Chittagong seaport, the CPA Traffic Department reported that about 1.5 million TEUs (twenty equivalent units) containers was handled in 2010-11, up from 1.21 million TEUs in the previous year(Chittagong Port news, 2011). In order to improve labor productivity and production management, entrepreneurs introduced "Lean Manufacturing System." The implementation of the new system brought tremendous success in the apparel sector. To measure the success, some Key Performance Indicators (KPI), e.g. Line Balancing (LB), Work in Process Inventory (WIP), Labour Productivity (LP), Alter, Reject and Spot were fixed to evaluate the outcome of the new system. It was found that LB and LP rose by about 11% and 24.5% respectively. Along with LB and LP, the WIP, Alter, Reject and Spot reduced by about 85.4%, 10.67%, 33.34% and 75% respectively (Ahmed 2013). Therefore, the apparel industry has become stronger in the area of productive capacity and more prospective after four decades. However, the economy (of Bangladesh) lags behind in achieving its efficient output as the production is at suboptimal stage. The recent research studies on Bangladesh garment sector estimated that at least 30% of manufacturing capacity is still unused.

Expected Impact on Bangladesh Apparel Sector

Bangladesh will be benefited both directly and indirectly by the reduction of beneficiary countries from GSP facilities in EU market as some of the excluded countries were in the list of Bangladesh's competitors e.g. Brazil etc. As mentioned earlier, the implementation of the revised GSP scheme will not allow excluded countries to export at zero or at lower tariff, so the price of their exported goods will certainly increase. It will restrict their competitiveness to those counties which will still be able to continue export under GSP. On the other hand, the importing countries will look out cheaper sources to import from. To exploit the opportunity, Bangladesh has got to act upon utilizing the dormant capacity of its industry.

The expected impact depends largely on probable supply shortage (or increased demand) in the EU apparel market as well as potential productive capacity of the supplying country's apparel industry. Using maximum of 70% of industrial capacity, Bangladesh exported US$ 19.09 billion in FY 2011-12 leaving a capacity to produce US$ 8.18 billion (which is equivalent to 30% of total capacity). On the other hand, the export of excluded countries is expected to decrease to EU market. Since total EU's RMG import from (top nineteen) excluded countries was about US$ 532 million in 2011, If it is decreased by 10 percent as a result of being excluded from the revised GSP scheme then the supply shortage(extra demand) of US$ 53.2 million will be created which could be met up by other countries. If Bangladesh can take advantage of this supply shortage (of US$ 53.2 million) then its total export to EU market will increase by about 0.47 percent. However, the impact of this revised GSP scheme may not be seen much significant to Bangladesh compared to its large export volume in percentage term, but in absolute term it is not negligible. Moreover, if Bangladesh fails to grab this opportunity then it will be like leaving a

space for its competitor to become more competitive.

New one stage Rules of Origin (RoO) will benefit Bangladesh clothing sector as the country's backward linkage in garments industry is not much strong. Generally, RoO requires the completeness of either the value added criterion or the specific process criteria so as to avoid trade deflection and confer the originating status. Significant changes in the RoO of the revised EU GSP scheme comprise value tolerance thresholds, and other various product-specific rule modifications. That is why, the revised GSP is more attractive for garments exporters.

Conclusions

Trade laws of importing country affect the export earnings of an exporting country as an external factor could appear as either a favorable or an adverse shock to the exporting economy. Analogously any domestic uncertainty in export destination (e.g. debt crisis in Euro zone) hampers sourcing countries export earnings significantly. The statement is being testified as Bangladesh's apparel export growth to EU market has been impeded in last few years because of euro zone debt crisis. The recent revision of EU GSP scheme may restrict price competitiveness of several apparel producing countries which have become developed or middle income country. Therefore, the revised EU GSP Scheme is being considered as positive aspect to Bangladesh and other LDCs, whereas it appears as undesirable to the excluded countries from the revised EU GSP beneficiary list. The elimination of several apparel exporters from the revised GSP scheme may spawn at least US$ 53.2 million export opportunity to existing exporters. However, the favorable external effect is not adequate to raise export earnings of Bangladesh. Rather it requires strengthening other internal factors.

Adequate initiatives should be taken to exploit the coming (additional) RMG export opportunities in EU market originated from the exclusion of several countries from revised GSP scheme. Most importantly, both policy makers and entrepreneurs will have to get started taking adequate preparation within the time frame. Manufacturers (and exporters) should find out which products the excluding countries used to export and then it can concentrate on producing those products before implementation of revised GSP so that importers can find the country as potential supplier right at the time of switching from excluded countries to lower cost supplier. They should focus on a perfect balance between dynamic style and comfort through inventing new products as well. In spite of several limitations, the study may provide a picture of the probable benefits that Bangladesh can enjoy from this revised GSP, but it is not enough. In order to take adequate policy, more in-depth quantitative analysis is required to specify the accurate expected demand and needed areas of intervention. Analysis of consumer choice (and other socio-economic factors), existing potentialities and trade barriers of targeted countries on one hand and productive (and innovative) capacity, fashion dynamism of products, pricing (and marketing) policy of Bangladesh on other hand should be concentrated in further in-depth research. Though the analysis is not enough it might help trade researcher to look forward.

Acknowledgements

We would like to thank Shahana Nasrin, K.M. Asad-Uz-Zaman, Fatima-Tuz-Zohora and Faruk Hossain, Jr. Research Executive of BKMEA (Bangladesh Knitwear Manufacturers and Exporters Association) for providing necessary information.

References

Ahmed, R. (2013). An Analysis of the Change and Volatility in the Apparel Industry of Bangladesh after MFA Era. *Journal of Textile and Apparel, Technology and Management, 8*(1).

Ahmed, R., Islam, M. T., & Al-Amin, M. (2013). The Effects of Market Diversification Activities on Bangladesh RMG Export. *International Journal of*

Economics and Financial Issues, *3*(4), 938-948.

Aktaruzzaman, M. & Hasanuzzaman, S. (2012). Exploring Prospect of the Clothing and Textile Industry: Is Bangladesh Following a Right Growth Strategy? *World Journal of Social Sciences*. Vol. 2 (4): 150 - 161.

Baldwin, R.E. and Murray, T. (1977). MFN Tariff Reduction and Developing Country Benefits under the GSP, *Economic Journal* 87 (March), pp 30-46.

Bangladesh Bank (BB) – *www.bangladesh-bank.org,* accessed during the period 2012.

Bangladesh Bureau of Statistics (BBS) – *www.bbs.gov.bd,* accessed during the period 2012.

Bangladesh Garment Manufacturers and Exporters Association (BGMEA) – www.bgmea.com, accessed during the period 2012.

Bangladesh Knitwear Manufacturers and Exporters Association (BKMEA) – www.bkmea.com, accessed during the period 2012.

Bayoumi, T. (2011). Changing Patterns of Global Trade. Policy Report of the Strategy, Policy, and Review Department, International Monetary Fund, June 15, 2011

Bhattacharya, D., Rahman, M., & Raihan, A. (2004). The New Japanese GSP Schemes for LDCs and Bangladesh's Export Opportunities. *Centre for Policy Dialogue, CPD Occasional Paper Series 44, October, 2004.*

Biggs, T., Miller, M., Otto, C. and Tyler, G. (2011). Africa Can Compete! Export Opportunities and Challenges in Garments and Home Products in the European Market. *Discussion Paper No.300, The World Bank; 1818 H Street, N.W. Washington, D.C. 20433, U.S.A.*

Chittagong Port news (2011). Chittagong newspaper, Chittagong port and history, Thursday, October 27, 2011 and available at http://chittagongnews.blogspot.com/

Cuyvers, L. and Soeng, R. (2013). The Impact of the EU Generalized System of Preferences on Exports and GSP Utilization by Asian and Latin American Countries. *Journal of International Trade Law and Policy*, Vol.12, No.1, pp.80-97.

Davis, S. Gerstner, E. and Hagerty, M. (1995). Money Back Guarantees in Retailing: Matching Product to Consumer Tastes. *Journal of Retailing*, Vol. 71, No. 1, 1995

European Commission (2012). More benefits from preferential trade tariffs for countries most in need: Reform of the EU Generalized Scheme of Preferences. *European Commission, Brussels, 31 October 2012.*

Export Promotion Bureau (EPB), Bangladesh – *www.epb.gov.bd*, accessed during the period 2012.

Freres, C. and Mold, A. (2004). European Union Trade Policy and the Poor: Towards Improving the Poverty Impact of the GSP in Latin America, *Working paper Series No. 02/04, DFID & EC-PREP*.

Grossman, G.M. and Sykes, A.O. (2005). A preference for development: the law and economics of GSP. *World Trade Review 2005*, 4:1, 41–67

Hoda, A. and Prakash, S. (2011). Is the US GSP scheme benefiting India's trade? *ICRIER Policy series No. 7, November 2011*

Joarder, M. A. M., Hossain, A.K.M. and Hakim, M. M. (2010). Post-MFA Performance of Bangladesh Apparel Sector. *International Review of Business Research Papers, Volume 6. Number 4. September 2010. PP. 134-144*

Khanal, D.R. (2011). Rules of origin in GSP schemes and their impact on Nepal's exports: a case study of tea, carpets, pashmina and handicrafts products. *Asia-Pacific Research and Training Network on Trade*, Working Paper Series, No. 98, April 2011.

Nguyen, J. (2008). The Generalized System of Preferences. *The George Washington University*, December 2008.

Ozden. Czaglar and Eric Reinhart. (2003). The Perversity of Preferences: GSP AND Developing Country Trade Policies, 1976-2000. World Bank Working Paper 2955. The World Bank.

Sapir, A. and Lundberg, L. (1984). The U.S. Generalized System of Preferences and Its Impacts, in A.O.Krueger and R.E.Baldwin (eds.), The Structure and Evolution of US Trade Policy, *NBER. Published in 1984, pp. 195 – 236*

Taslim, M.A. and Haque, M.S. (2011). Export Performance of Bangladesh Global Recession and After. *International Growth Centre*, Working Paper 11/0887, November 2011.

Vince, Z.A. (1985). Assessment of Trade Effects of the EEC-GSP Scheme on Pakistan and Projections. *Pakistan Economic & Social Review, Vol. XXIII No. 2 (Winter 1985) pp 113-134*

Zhou, W. and Cuyvers, L. (2012).The effectiveness of EU's Generalized System of Preferences: Evidence from ASEAN countries. *Journal of International Trade Law and Policy*, Vol.11, No.1, pp.65-81.

Annex 1.

Knitwear		Woven Wear	
Product Code (at HS 6 digit)	**Product Description**	**Product Code (at HS 6 digit)**	**Product Description**
610130	Mens/boys overcoats, anoraks etc, of mmf, knit	'620111	Mens/boys overcoats of wool/fine animal hair, not knit
610322	Mens/boys ensembles, of cotton, knitted	'620113	Mens/boys overcoats & similar articles of mmf, not knit
'610341	Mens/boys trousers of wool/fine animal hair, knit	'620193	Mens/boys anoraks & similar articles, of mmf, not knit
'610342	Mens/boys trousers and shorts, of cotton, knitted	'620211	Women's overcoats of wool/fine animal hair not knit
'610343	Mens/boys trousers of synthetic fibres, knitted	'620213	Women's overcoats of man-made fibres, not knitted
'610349	Mens trousers of other textile materials, knitted	'620293	Women's/girls anoraks of man-made fibres, not knitted
'610413	Womens/girls suits, of synthetic fibres, knitted	'620311	Mens suits, of wool or fine animal hair, not knitted
'610432	Womens/girls jackets, of cotton, knitted	'620312	Mens/boys suits, of synthetic fibres, not knitted
'610443	Womens/girls dresses, of synthetic fibres, knitted	'620329	Mens ensembles, of other textile materials, not knitted
'610449	Womens dresses, of other textile materials,knitted	'620332	Mens/boys jackets and blazers, of cotton, not knitted
'610462	Womens trousers and shorts, of cotton, knitted	'620341	Mens trousers & shorts,of wool or fah, nonknit
'610463	Womens trousers & shorts, of synthetic fibres, knit	'620342	Mens/boys trousers and shorts, of cotton, not knitted
'610510	Mens/boys shirts, of cotton, knitted	'620343	Mens trousers and shorts, of synthetic fibres, nonknit
'610520	Mens/boys shirts, of man-made fibres, knitted	'620411	Womens/girls suits, of wool or fine animal hair, nonknit
'610610	Womens/girls blouses and shirts, of cotton, knitted	'620431	Womens jackets, of wool or fine animal hair, nonknit
'610690	Womens blouses and shirts of other materials, knit	'620432	Womens/girls jackets, of cotton, not knitted
'610711	Mens underpants and briefs, of cotton, knitted	'620442	Womens/girls dresses, of cotton, not knitted
'610712	Mens underpants and briefs, of mmf, knitted	'620443	Womens/girls dresses, of synthetic fibres, not knitted
'610822	Womens/girls briefs and panties, of mmf, knitted	'620449	Womens dresses, of other textile materials, not knitted
'610831	Womens nightdresses and pyjamas, of cotton, knit	'620462	Womens trousers and shorts, of cotton, not knitted
'610832	Womens nightdresses and pyjamas, of mmf, knit	'620463	Womens trousers & shorts of synthetic fibres, nonknit
'610891	Womens bathrobes, dressing gowns, etc,	'620469	Womens trousers & shorts,of other textile materials
'610899	Women bathrobes,dressg gowns,etc,of oth textile	'620520	Mens/boys shirts, of cotton, not knitted
'610910	T-shirts, singlets and other vests, of cotton, knitted	'620630	Womens/girls blouses and shirts, of cotton, not knitted
'610990	T-shirts,singlets & oth vests,of oth txtl mtrials,knit	'620690	Womens blouses & shirts,of oth txtile materials,nonknit
'611011	Jerseys, pullovers, cardigans, waistcoats etcof wool	'620722	Mens/boys nightshirts and pyjamas, of mmf, not knit
'611020	Pullovers, cardigans etc. of cotton, knitted	'620821	Womens nightdresses & pyjamas, of cotton, not knitted
'611030	Pullovers, cardigans & similar articles of mmf, knit	'620829	Womens nightdresses&pyjamas,of othr textile material
'611090	Pullovers,cardigans etcof oth textile materials,knit	'620920	Babies garments & clothing accessories of ctn, nonknit

'611120	Babies garments & clothing accessories of ctn, knit	'621010	Garments made of txtl felts & of nonwoven txtl fabrics
'611130	Babies garments and clothing accessories, knitted	'621040	Mens/boys garments nes,made up of impreg,ctd,
'611241	Womens/girls swimwear, of synthetic fbr, knitted	'621050	Womens/girls garments nes,of impregnatd,ctd,cov,etc,
'611300	Garments made up of impreg, coatd, coverd etc.	'621111	Mens/boys swimwear, of textile materials not knitted
'611420	Garments nes, of cotton, knitted	'621133	Mens/boys garments nes, of mmf, not knitted
'611430	Garments nes, of man-made fibres, knitted	'621142	Womens/girls garments nes, of cotton, not knitted
'611521	Pantyhose and tights of synthetic fibres, knitted	'621210	Brassieres and parts thereof, of textile materials
'611522	Pantyhose and tights of synthetic fibres, knitted	'621230	Corselettes and parts thereof, of textile materials
'611529	Pantyhose and tights of textile materials, knitted	'621290	Corsets,braces & similar articles & parts of textile
'611595	Full or knee-length stocking & oth hosiery, incl. f	'621410	Shawls,scarves,veils etc. of silk or silk waste,not knitted
'611610	Gloves impreg,ctd,cov with plastics or rubber, knit	'621490	Shawls,scarves,veils etc of oth textile materials,nonknit
'611691	Gloves, mittens & mitts, nes, of wool or fah, knit	'621600	Gloves, mittens and mitts, of textile materials, non-knit
'611693	Gloves, mittens & mitts of synthetic fibres, knitted	'621710	Clothing accessories nes, of textile materials, non- knit

(Source: ITC Trade Map)

[i]More benefits from preferential trade tariffs for countries most in need: Reform of the EU Generalized Scheme of Preferences, European Commission, Brussels, 31 October 2012

[ii] $VALP = (\frac{X}{L*W*H})$ Where, X= Total export value, L= Total labor employed, W= Total week days in a year, H= Minimum working hour in a day