

ISSN: 2501 - 9988 ISSN-L: 2501 - 9988 Available on-line at: <u>http://www.oapub.org/soc</u>

doi: 10.5281/zenodo.2585617

Volume 3 | Issue 4 | 2019

COMPETITION AND EXPORT GROWTH OF READYMADE GARMENTS OF BANGLADESH IN THE UNITED STATES MARKET: AN EMPIRICAL ANALYSIS

Mohammad Ali^{1, 2i}, Wang Qun¹, Md Ekram Hossain¹ ¹Business School, Hohai University, Nanjing, China ²College of Business Administration, International University of Business Agriculture and Technology (IUBAT), Dhaka, Bangladesh

Abstract:

This paper attempts to investigate the export growth and competition of Bangladesh readymade garments in the United States market compared with other top competitors during the 2013-2017 period. From the analysis, the export growth indices exposed that out of 17 product categories of HS61, Bangladesh stated a positive export growth in 12 product categories and rest of the 5 product categories revealed a negative export growth in the United States market. On the other hand, out of 17 product categories of HS62, Bangladesh revealed a positive export growth in 9 product categories, while rest of the 8 product categories stated a negative export growth in the United States market. Furthermore, Spearman's rank correlation coefficient (rs) test for the mentioned top competitors in the United States market exposed that the 17 product categories of HS61 Bangladesh exhibited higher competition with Sri Lanka, India, Mexico, and Indonesia; modest competition Vietnam; lower competition with China, and Cambodia; trade complementariness with Italy, and Pakistan. Moreover, the 17 product categories of HS62 exhibited modest competition with Mexico, Pakistan, and Cambodia; low competition with China, Vietnam, and Italy; trade complementariness with India, Indonesia, and Sri Lanka. In addition, it is observed that all the countries for product group HS61 & HS62 face pretty high Equivalent Ad Valorem Tariff in the United States except Mexico. Furthermore, the findings are expected to contribute further development and policy-making in the readymade garments industry of the concern countries as well as for the concerned stakeholders of this industry.

ⁱ Correspondence: email <u>mohammadali@iubat.edu</u>

JEL: B17, F14, F17, F18, P45

Keywords: readymade garments (RMG), export growth, United States market, competition, Bangladesh

1. Introduction

Bangladesh readymade garments, the most promising and important sector of Bangladesh is now the second largest ready-made garment exporter in the world, has emerged as a key player since 1978. RMG accounts for about 85% of the total export of Bangladesh. Out of which 86% comes from the apparel sector (Hasan, Mia, Rahman, Ullah, & Ullah, 2016). European Union, North America and Emerging countries in Asia, South America and Africa are the main export partners of Bangladesh (Comtrade, 2018). Out of which European Union and North America account for a major export share of Bangladesh's RMG export. Only United States' accounts for 8% import of (61) and 21.5 % import of (62) Articles of apparel and clothing accessories product exported by Bangladesh in 2017 (Map, 2018) (Appendix 3, 4).

Export earnings from the United States witnessed 2.64% growth in the first 10 months of the fiscal year 2017-18, compared to the previous period of FY2016-17 (DhakaTribune, 2018). The total amount of Bangladesh export to the US was \$4923.65 million in July-April of FY2017-18, but the amount was \$4796.84 million in the same period in FY2016-17, and that is 16.179% of the country's total export earnings during that period. According to Export Promotion Bureau (EPB) data, the major exports to the US market during the July-April period were woven garment (\$3,254.31 million), knitwear (\$1133.40 million), home textiles (\$157.77 million) and cap (\$105.68 million) (Export Promotion Bureau, 2018). Even though Bangladesh is doing good in the US market for readymade garments export, top import partners of USA in readymade garments in 2017 were China (34%), followed by Vietnam (14%) and Bangladesh accounted for 6% of the USA's total import in readymade garments (Map, 2018) (appendix 1). So, the competition Bangladesh facing in US market is stringent. According to the report by Textile today, "with the current product mix of Bangladesh RMG industry, when major export markets are reaching to almost saturation point, growing in nontraditional market diversification has become even more important" (Today, 2018). It is inevitable to broadening of new export destinations due to the entry of new competitors in traditional markets where Bangladesh has been enjoying an edge over others for many years. On the contrary market growth in traditionally is being restricted due to the economic slowdown and Bangladesh's lack of product diversity (Today, 2018). To continue Bangladesh's RMG industry growth in the US market it is important to analyze the competition and export growth.

Therefore this study aims to analyze the competition and export growth of Bangladesh readymade garments in the United States market compared with other top competitors in that market. This study objective is to provide a picture of the relative position of the competition of Bangladesh readymade garments and their export growth in the United States market where few types of research have been conducted before that illustrate the value of this research.

However, the objectives of this research are as following;

- 1) To explore the overall status of the competition of the RMG industry in the United States market.
- 2) To investigate the export growth of Bangladesh's readymade garments industry in the US market compared with its top competitors.
- 3) To advise sustainable policies and actions for Bangladesh's readymade garments industry in the United States market.

2. Literature Review

The ability to develop superior export performance is considered to be very important for public policy makers and business managers (Katsikeas, Leonidou, & Morgan, 2000). Since last two decades, the RMG industry of Bangladesh has been the main source of the country's export growth (Ahmed, 2009). The competition of export causes economies of scale and acceleration of technological progress (Ramos, 2001). A nation could foster economic growth by promoting exports of goods and services. An extremely competitive world market of RMG has put pressures on Bangladesh to improve the export competitiveness of country's export (Berik & Rodgers, 2009). In over three decades, Bangladesh has witnessed substantial growth in its export of goods and services. To reduce higher dependency on the traditional market and seize new export markets, government and private sector need for market diversification (Today, 2018). Hall Jr & Lee (2008), have critically assessed the impact of export performance and its effect on diversification (Hall Jr & Lee, 2008). In the early studies, Michaely (1977), Balassa (1978),

Chow (1987), Darrat (1987) have provided evidence to support export-led growth in various developing countries (Balassa, 1978; Chow, 1987; Darrat, 1987; Michaely, 1977). Ramesh Kurpad, M. (2014) evaluated the challenges of the export growth of the ready-made garment (RMG) industry in Bangladesh, the economy's backbone, and suggested appropriate reform (Ramesh Kurpad, 2014). Bhattacharya (2002) stated that the growth of RMG exports of Bangladesh has undoubtedly positive effects on macroeconomic balances (Bhattacharya, Rahman, & Raihan, 2002). Bangladesh's export performance so far presents signs of strength in its export basket (Sattar, 2015). But the competitiveness issue needs to be addressed with special attention given to the long-term sustainability of the industry (Haider, 2007).

Begum & Shamsuddin (1998), This study investigates the effect of exports on economic growth in Bangladesh, based on a two-sector growth model (Begum & Shamsuddin, 1998). Mamun and Nath (2005) investigated the link between exports and

economic growth in Bangladesh by using time series evidence (<u>Al Mamun & Nath*,</u> <u>2005</u>).

Hossain, Dechun, Zhang, & Van (2017) examined the comparative advantage and competitiveness respectively for Textile and Apparel industry of Bangladesh and China by using Balassa revealed comparative advantage and Spearman Rank Correlation coefficient (r_s) (Hossain, Dechun, Zhang, & Van).

However, very few researches have been conducted on the Export Growth and Competition of Bangladesh's Readymade Garments industry in the United States market, which encouraged this research to be conducted.

3. Research Methods

This study objective is to provide a picture of the relative position of the competition of Bangladesh readymade garments and their export growth in the United States market. After the review of academic literatures, the authors have selected growth analysis formula to find out the export growth of Bangladesh readymade garments in United States market in respect with 9 other countries and Spearman's Rank Correlation Coefficient (r_s) to measure the relative position of the competition of Bangladesh in respect with other major competitors (Zar, 1972).

Since HS61 and HS62 product groups represent most of the products of readymade garments industry, 34 products of HS 4 digits level from these two product groups have been chosen to analyze in this research. Export growth was calculated for all 34 product categories of four digits level Harmonized System product group HS61 and HS62 (see appendix 2) (<u>UNSTATS, 2018</u>). Ad Valorem Equivalent (AVE) Tariff of product group HS 61 & HS 62 was taken into account to find out the relative advantages of the studied countries in the U.S market. For calculation, export data has been obtained from the ITC Trade Map and the United Nations Commodity Trade Database (<u>Comtrade, 2018</u>). Microsoft Excel program & SPSS was used for the calculation.

3.1 Growth Analysis

The computation formula of the growth rate over five years (2013-2017) is the following:

$$\left(\exp\left(\frac{\left(\sum_{i=1}^{5} i \cdot Ln(v_i)\right) - 3 \cdot \sum_{i=1}^{5} Ln(v_i)}{10}\right) - 1\right) * 100$$
(i)

Where V_i is the value of the i-th year in current US dollar. Indeed: n=5sum xi = 1 + 2 + 3 + 4 + 5=15 $\begin{aligned} Av &= LN(v_1) + 2*LN(v_2) + 3*LN(v_3) + 4*LN(v_4) + 5*LN(v_5) \\ sum ln yiv &= LN(v_1) + LN(v_2) + LN(v_3) + LN(v_4) + LN(v_5) \\ cv &= (sumxi / n)*sum ln yiv \\ bv &= (av-cv)/10 \\ trendv &= (exp(bv)-1)*100 \end{aligned}$

If an intermediate value (other than v1 or v5) is missing or equals 0 while the country has reported its data then this value is set to 1.

If the oldest year (v1) has not been reported by the country then a four-year growth rate is computed according to the same logic. If the most recent year (v5) has not been reported by the country then the five-year growth rate is computed based on mirror statistics (for the five years).

To calculate the five-year rate of growth for the world it is necessary that all countries have data for each of the five years under consideration. In the case of countries included in this aggregate that reported only the last four years, the data for that first year is calculated using the following formula:

$$V_1 = \frac{V_2}{1 + \frac{trendv}{100}}$$
 if trendv >/=0; v_1=v_2 otherwise

This assessment is also used for the computation of growth rates of trade with the entire world of countries which did not report the most recent year (<u>Bahmani-Oskooee, 1993</u>; <u>Ghosh, 1996</u>; <u>Xu, 1996</u>).

The five-year growth rate is not displayed if the country's data are not available (with direct or mirror data) for the last five years. The five-year growth rates of the world trade as a whole as well as the growth rates of the trade with the entire world of the countries which did not report the most recent year are computed based on the available five-year series only (with an assessment of the oldest year if necessary, see computation method above). These rates are displayed only if values of the most recent year retained for the computation of the five-year growth rate (see method above) represent at least 50% of the total value of the most recent year (i.e. all partner countries are taken together).

3.2 Ad Valorem Equivalent (AVE) Tariffs

Ad valorem equivalent (AVE) tariffs are calculated using the World Tariff Profile (WTP) methodology. At the HS4 level, tariffs aggregations are calculated using the country's Reference group imports as weights. Data is retrieved from the ITC Market Access Map database (<u>Map, 2018</u>).

Furthermore, in order to avoid the double counting of values, the computation of the five-year growth rate for the world as a whole does not include the trade with the "special categories" and the "Area not elsewhere specified".

An AVE is a tariff presented as a percentage of the value of goods cleared through customs. It is the equivalent of a corresponding specific tariff measure based on unit quantities such as weight, number or volume (Bouët, Decreux, Fontagné, Jean, & Laborde, 2004; Ghodsi, Gruebler, & Stehrer, 2016). There are several methodologies for calculating AVEs. The method chosen depends on the intended application of the data. Most important to the process of calculating an AVE is the way the Unit Value of the product is calculated. The unit value is the value of each unit quantity imported of a product. It is based on the total value of imports of that product divided by the number of imports (Babili, 2009; Feenstra, Romalis, & Schott, 2002; Orefice, 2017; Stawowy, 2001).

All non-ad valorem (NAV) applied tariffs are converted to <u>ad valorem</u> <u>equivalents (AVEs)</u> by dividing the specific element of the NAV tariff, expressed as an amount per unit, by the value of the product per unit. In order to achieve a percentage value, the result is multiplied by 100. Thus, the general formula to calculate AVEs is the following:

$$t_{AVE} = t_{NAV} / UV * 100 \tag{ii}$$

Where,

tAVE the ad valorem equivalent tariff per unit; tNAV the non-ad valorem equivalent tariff per unit UV the value of the product per unit, or <u>unit value (UV)</u>

In order to develop a meaningful result, this research used statistical techniques. A numerical approach is appropriate for this study to control biases, decrease errors, and conduct the analysis (<u>Schmidt & Hunter, 2014</u>).

However, the 2-letter codes of country names have been used according to the ISO (International Organization for Standardization) (worldatlas) e.g.; China (CN), Vietnam (VT), India (IN), Bangladesh (BD), Mexico (MX), Indonesia (ID), Pakistan (PK), Cambodia (KH), Italy (IT), and Sri Lanka (SL).

3.3 Spearman's Rank Correlation Coefficient (rs)

The Spearman's Rank Correlation Coefficient is a non-parametric technique for evaluating the degree of linear association of correlation between two independent variables (Fieller, Hartley, & Pearson, 1957; Hauke & Kossowski, 2011). There are advantages of using the Spearman's Rank Correlation Coefficient over the more common product moment correlation coefficient (Gauthier, 2001; Ramsey, 1989). It is a nonparametric technique so it is unaffected by the distribution of the population. Because of the technique operates on the rank of the data it is relatively intensive to outliers and there is no requirement that the data be collected over regularly spaced intervals (Hossain, Dechun, Zhang, & Van, 2017). It can be used with very small sample sizes and it is easy to apply. The disadvantages are that there is a loss of information when the data are converted to ranks and, if the data are normally distributed, it is less powerful. The idea the Spearman's Rank Correlation Coefficient is simple (Durbin &

Stuart, 1951; Ekström, 2011; Park & Lee, 2001). Each variable is ranked separately from lowest to highest (e.g. 1, 2, 3,...etc.) and the difference between ranks for each data pair is recorded. If the data are correlated, then the sum of the square of the difference between the ranks will be small. The magnitude of the sum is related to the significance of the correlation (Pinto da Costa & Soares, 2005).

$$r_{s} = 1 - 6\sum_{i=1}^{n} \frac{d_{i}^{2}}{n(n^{2} - 1)}$$
(iii)

Here,

 r_s = Spearman's Rank Value; Σ = the sum of; d = difference in rank of the values of each matched pair; n = number of ranked pairs

In this paper, we calculated the Spearman's Rank Correlation Coefficient from the generated value of export growth for Bangladesh with the selected competitors in the United States Market for Readymade Garments (RMG) industry.

4. Data Analysis, Result, and Discussion

Table 1 shows the export growth in the United States market during the period of (2013-2017) for the 17 product categories of four digits level Harmonized System (HS) product group 61 compared with 9 other countries.

Product Code	CN	VT	IN	BD	MX	ID	РК	KH	ĪT	SL
HS 6101	-6	9	9	-2	1	-2	7	-1	21	-46
HS 6102	10	5	-9	-3	6	-14	-6	-12	6	-34
HS 6103	1	19	13	15	-5	-2	-6	9	0	11
HS 6104	1	12	3	5	-4	2	5	-10	2	5
HS 6105	-10	5	3	-5	-3	-9	-7	-4	4	-4
HS 6106	-5	-2	-8	-3	0	-11	-9	-14	22	-3
HS 6107	8	4	9	1	0	-10	-8	0	0	9
HS 6108	5	9	-4	8	-39	-6	1	-6	-21	10
HS 6109	0	12	-3	2	-40	11	-12	-7	16	4
HS 6110	0	5	7	7	-3	0	-5	-7	3	12
HS 6111	-1	18	7	3	-2	22	-16	4	-1	15
HS 6112	13	25	-26	-16	-12	-6	13	-5	-15	-4
HS 6113	-8	9	4	13	33	-50	9	10	-15	33
HS 6114	11	-1	17	8	26	-14	-9	2	11	37
HS 6115	3	23	14	27	32	32	-1	-43	-11	8
HS 6116	4	19	26	6	25	-3	7	9	16	13
HS 6117	0	13	-11	33	9	11	-9	-21	6	n/a
Mean	1.53	10.82	3.00	5.82	1.41	-2.88	-2.71	-5.65	2.59	3.88
SD	6.58	7.92	12.34	11.70	20.66	17.49	8.30	12.86	12.64	20.09

Table 1: HS61 Export Growth in the United States Market (2013-2017)

Out of 17 product categories Bangladesh has a positive export growth in 12 product categories (HS 6103, HS 6104, HS 6107, HS 6108, HS 6109, HS 6110, HS 6111, HS 6113, HS 6114, HS 6115, HS 6116, HS 6117) and rest 5 product categories (HS 6101, HS 6102, HS 6105, HS 6106, HS 6112) have a negative export growth in the U.S market. HS 6117 (Made-up clothing accessories knitted or crocheted; knitted) has the highest positive export growth of 33% and HS 6112 (Track-suits, ski-suits, and swimwear, knitted or crocheted) has highest negative export growth -16% for Bangladesh in U.S market over the period of 2013-2017. The mean value shows that in the overall HS61 category Bangladesh has positive growths of 5.82 %. Vietnam has the highest mean value of 10.82 followed by Bangladesh (5.82 %) and Sri Lanka (3.88%).

-	on their export g	rowth value
Competitors	Value of (rs)	Consequence
BD and CN	0.02	Exhibit Low Competition
BD and VT	0.29	Exhibit Modest Competition
BD and IT	-0.27	Exhibit complementary
BD and IN	0.38	Exhibit Higher Competition
BD and MX	0.35	Exhibit Higher Competition
BD and ID	0.32	Exhibit Higher Competition
BD and PK	-0.01	Exhibit Complementary
BD and KH	0.04	Exhibit Low Competition
BD and SL	0.61	Exhibit Higher Competition

 $\label{eq:Table 2: The analyzed result of Spearman's rank correlation coefficient (r_s) of 17 product categories of HS61 between Bangladesh and 9 other countries based$

In Table 2, the degree and nature of competition between Bangladesh and 9 other countries based on market growth value by calculating the Spearman's Rank Correlation coefficients for Bangladesh and above-mentioned countries in the U.S market for the 17 product categories of HS61. As follows, the SRC value ranged from 0.30-1 reveals the higher competition, SRC value ranged from 0.10-0.29 reveals modest competition, value ranged from 0.01-0.09 low competition and SRC value = -1 reveals complementary between two nations for the 17 product categories of HS61.

The analyzed result of SRC (Table 2) of Bangladesh in respect with 9 other countries for 17 product categories of HS61 shows that higher competition exhibit with Sri Lanka, India, Mexico, and Indonesia. Relatively lower competition exhibits with China and Cambodia. On the contrary, there exhibits complementariness among the two remaining countries respectively Italy and Pakistan.

Table 5: H562 Export Growth in Onned States Market (2015-2017)										
Product Code	CN	VT	IN	BD	MX	ID	РК	KH	IT	SL
HS 6201	4	12	-24	-1	-2	12	-1	9	13	-20
HS 6202	7	7	22	2	-3	4	-21	2	11	2
HS 6203	3	7	-3	-1	1	6	13	-16	-8	-6
HS 6204	2	5	1	2	-4	0	-15	-1	-3	-5
HS 6205	-6	10	5	-3	10	-1	-12	11	-5	5

Table 3: HS62 Export Growth in United States Market (2013-2017)

European Journal of Management and Marketing Studies - Volume 3 | Issue 4 | 2019

HS 6206	-13	18	-3	5	15	2	-3	-12	12	2
HS 6207	-5	13	0	-9	-16	-2	-10	-22	0	1
HS 6208	0	21	-6	-16	-5	18	-13	-5	9	8
HS 6209	-5	-3	3	-7	1	-5	-4	15	4	2
HS 6210	-4	39	23	4	4	42	-32	29	-4	26
HS 6211	11	12	19	1	9	10	-15	-3	15	-3
HS 6212	3	97	1	11	-13	1	17	6	8	8
HS 6213	-6	3	37	3	-13	-56	n/a	n/a	-10	-49
HS 6214	-7	10	-20	10	-14	2	-9	-63	-3	n/a
HS 6215	-9	14	66	-17	-24	141	6	n/a	-13	-16
HS 6216	-1	3	9	69	0	-1	-1	14	4	-13
HS 6217	2	3	-5	-18	7	-17	-5	-35	9	13
Mean	-1.41	15.94	7.35	2.06	-2.76	9.18	-6.18	-4.18	2.29	-2.65
SD	6.21	22.90	21.44	19.33	10.50	38.97	12.01	21.39	8.73	16.18

Mohammad Ali, Wang Qun, Md Ekram Hossain COMPETITION AND EXPORT GROWTH OF READYMADE GARMENTS OF BANGLADESH IN THE UNITED STATES MARKET: AN EMPIRICAL ANALYSIS

Table 3 shows the export growth in the United States market during the period of (2013-2017) for the 17 product categories of four digits level Harmonized System (HS) product group 62 compared with 9 other countries. Out of 17 product categories Bangladesh has a positive export growth in 9 product categories (HS 6202, HS 6204, HS 6206, HS 6210, HS 6211, HS 6212, HS 6213, HS 6214, HS 6216) and rest 8 product categories (HS 6201, HS 6203, HS 6205, HS 6207, HS 6208, HS 6209, HS 6215, HS 6217) have a negative export growth in the U.S market. HS 6216 (Gloves, mittens, and mitts, of all types of textile materials) has the highest positive export growth of 69% and HS 6217 (Made-up clothing accessories and parts of garments or clothing accessories) has highest negative export growth -18% for Bangladesh in U.S market over the period of 2013-2017. The mean value shows that in the overall HS62 category Bangladesh has positive growths of 2.06 %. Vietnam has the highest mean value of 15.94 followed by Indonesia (9.18%) and India (7.35%).

Competitors	Value of (r _s)	Consequence
BD and CN	0.04	Exhibit Low Competition
BD and VT	0.05	Exhibit Low Competition
BD and IT	0.07	Exhibit Low Competition
BD and IN	-0.08	Exhibit complementary
BD and MX	0.10	Exhibit Modest Competition
BD and ID	-0.22	Exhibit complementary
BD and PK	0.10	Exhibit Modest Competition
BD and KH	0.23	Exhibit Modest Competition
BD and SL	-0.17	Exhibit complementary

Table 4: The analyzed result of Spearman's rank correlation coefficient (r_s) of 17 products of HS62 between Bangladesh and 9 other countries based on their export growth value

In Table 4, the degree and nature of competition between Bangladesh and 9 other countries based on market growth value by calculating the Spearman's Rank Correlation coefficients for Bangladesh and above-mentioned countries in the United States market for the 17 product categories of HS62. As follows, the SRC value ranged

from 0.30-1 reveals the higher competition, SRC value ranged from 0.01-0.29 reveals modest competition, value ranged from 0.01-0.09 low competition, and SRC value = -1 reveals complementary between two nations for the 17 product categories of HS62.

The analyzed result of SRC (Table 4) of Bangladesh in respect with 9 other countries for 17 product categories of HS61 shows that modest competition exhibit with Mexico, Pakistan, and Cambodia. On the other hand, comparatively lower competition exhibit with China, Vietnam, and Italy. On the contrary, there exhibits complementariness among the three remaining countries India, Indonesia, and Sri Lanka.

Equivalent Ad Valorem Tariff Faced by Individual Countries in U.S Market in HS61 & HS62 doesn't influence the competition and growth of the readymade garments of Bangladesh as except Mexico all the studied countries face same Equivalent Ad valorem Tariff. Only Mexico enjoys the "zero" Equivalent Ad valorem Tariff (Appendix 5, 6). So Mexico is in a relatively better position in the U.S market.

5. Conclusion and Policy Recommendations

In this research, the overall growth status and the competition of the RMG industry in the United States Market have been explored at a deeper level for the top 10 competitors. The analyzed Export growth indices show that out of 17 product categories of HS61, Bangladesh revealed a positive export growth in 12 product categories and rest of the 5 product categories revealed a negative export growth in U.S market. On the other hand, out of 17 product categories of HS62, Bangladesh showed a positive export growth in 9 product categories while 8 product categories showed a negative export growth in U.S market. Overall growth (mean) for both HS61 and HS62 shows a low positive growth but HS61 shows relatively better growth for Bangladesh readymade garments in U.S market. The general growth scenario of Bangladesh readymade garments in the U.S market is not highly promising and suggested significant attention by the concerned stakeholders of the industry.

However, the Spearman's rank correlation coefficient (r_s) test for Bangladesh and the other top 9 competitors in the U.S market for the 17 product categories of HS61 exhibited higher competition with Sri Lanka, India, Mexico, and Indonesia; modest competition with Vietnam; lower competition with China, and Cambodia; trade complementariness with Italy, and Pakistan. Moreover, the 17 product categories of HS62 exhibit modest competition with Mexico, Pakistan, and Cambodia; low competition with China, Vietnam, and Italy; trade complementariness with India, Indonesia, and Sri Lanka.

Even though Bangladesh's readymade garments don't have "zero" Equivalent Ad Valorem Tariff, still not in a worried position in the US market but the export growth should be a concern. Special policies to improve the export growth reduce political instability, transaction cost, skilled labor development, improvement of infrastructure to stay competitive in the readymade garments industry in United States market as well as in the whole world.

References

- Ahmed, N. (2009). Sustaining ready-made garment exports from Bangladesh. *Journal of Contemporary Asia*, 39(4), 597-618.
- Al Mamun, K. A., & Nath, H. K. (2005). Export-led growth in Bangladesh: a time series analysis. *Applied Economics Letters*, 12(6), 361-364.
- Babili, M. (2009). Ad Valorem equivalent in the WTO.
- Bahmani-Oskooee, M. (1993). Export growth and economic growth: An application of cointegration and error-correction modeling. *The Journal of Developing Areas*, 27(4), 535-542.
- Balassa, B. (1978). Export incentives and export performance in developing countries: A comparative analysis. *Review of World Economics*, 114(1), 24-61.
- Begum, S., & Shamsuddin, A. F. (1998). Exports and economic growth in Bangladesh. *The Journal of Development Studies*, 35(1), 89-114.
- Berik, G., & Rodgers, Y. (2009). Bangladesh's Ready-made Garments Sector: Exports, Employment and Working Conditions. *Journal of Bangladesh Studies*, *11*(2), 1-19.
- Bhattacharya, D., Rahman, M., & Raihan, A. (2002). Contribution of the RMG Sector to the Bangladesh Economy. *CPD Occasional Paper Series*, 50(6).
- Bouët, A., Decreux, Y., Fontagné, L., Jean, S., & Laborde, D. (2004). A consistent, advalorem equivalent measure of applied protection across the world: The MAcMap-HS6 database.
- Chow, P. C. (1987). Causality between export growth and industrial development: Empirical evidence from the NICs. *Journal of development economics*, 26(1), 55-63.
- Comtrade, U. (2018). UN Comtrade Database. from https://comtrade.un.org/
- Darrat, A. F. (1987). Are exports an engine of growth? Another look at the evidence. *Applied Economics*, 19(2), 277-283.
- Dhaka Tribune. (2018). Export to US sees 2.64% growth in July-April. Retrieved December, 2018, from <u>https://www.dhakatribune.com/business/2018/07/09/export-to-us-sees-2-64-growth-in-july-april</u>
- Durbin, J., & Stuart, A. (1951). Inversions and rank correlation coefficients. *Journal of the Royal Statistical Society: Series B (Methodological),* 13(2), 303-309.
- Ekström, J. (2011). On the relation between the polychoric correlation coefficient and Spearman's rank correlation coefficient.
- Export Promotion Bureau, E. (2018). Provisional data of the Export Promotion Bureau (EPB). Retrieved 2018, from EPB <u>http://www.epb.gov.bd/</u>
- Feenstra, R. C., Romalis, J., & Schott, P. K. (2002). US imports, exports, and tariff data, 1989-2001: National Bureau of Economic Research.

- Fieller, E. C., Hartley, H. O., & Pearson, E. S. (1957). Tests for rank correlation coefficients. I. *Biometrika*, 44(3/4), 470-481.
- Gauthier, T. D. (2001). Detecting trends using Spearman's rank correlation coefficient. *Environmental forensics*, 2(4), 359-362.
- Ghodsi, M., Gruebler, J., & Stehrer, R. (2016). *Estimating importer-specific ad valorem equivalents of non-tariff measures*: Verein" Wiener Institut für Internationale Wirtschaftsvergleiche"(wiiw).
- Ghosh, D. (1996). The export growth-economic growth nexus: a causality analysis. *The Journal of Developing Areas*, 30(2), 167-182.
- Haider, M. Z. (2007). Competitiveness of the Bangladesh ready-made garment industry in major international markets. *Asia-Pacific Trade and Investment Review*, 3(1), 3-27.
- Hall Jr, E. H., & Lee, J. (2008). Assessing the impact of export performance: A critical analysis of its effect on diversification. *Journal of Global Business Management*, 4(1), 56-65.
- Hasan, K. F., Mia, M. S., Rahman, M. M., Ullah, A. A., & Ullah, M. S. (2016). Role of textile and clothing industries in the growth and development of trade & business strategies of Bangladesh in the global economy. *International Journal of Textile Science*, 5(3), 39-48.
- Hauke, J., & Kossowski, T. (2011). Comparison of values of Pearson's and Spearman's correlation coefficients on the same sets of data. *Quaestiones geographicae*, 30(2), 87-93.
- Hossain, M. E., Dechun, H., Zhang, C., & Van, V. T. Dynamics of Comparative Advantage and Competitiveness of Textile and Apparel Industry: An Empirical Analysis for China and Bangladesh.
- Hossain, M. E., Dechun, H., Zhang, C., & Van, V. T. (2017). Dynamics of Comparative Advantage and Competitiveness of Textile and Apparel Industry: An Empirical Analysis for China and Bangladesh.
- Katsikeas, C. S., Leonidou, L. C., & Morgan, N. A. (2000). Firm-level export performance assessment: review, evaluation, and development. *Journal of the Academy of Marketing Science*, 28(4), 493-511.
- Map, I. T. (2018). ITC Trade Map. Retrieved December, 2018, from https://www.trademap.org/index.aspx
- Michaely, M. (1977). Exports and growth: an empirical investigation. *Journal of development economics*, 4(1), 49-53.
- Orefice, G. (2017). Non-Tariff Measures, Specific Trade Concerns and Tariff Reduction. *The World Economy*, 40(9), 1807-1835.
- Park, E., & Lee, Y. J. (2001). Estimates of standard deviation of Spearman's rank correlation coefficients with dependent observations. *Communications in Statistics-Simulation and Computation*, 30(1), 129-142.
- Pinto da Costa, J., & Soares, C. (2005). A weighted rank measure of correlation. *Australian & New Zealand Journal of Statistics*, 47(4), 515-529.

- Ramesh Kurpad, M. (2014). Made in Bangladesh: challenges to the ready-made garment industry. *Journal of International Trade Law and Policy*, 13(1), 80-96.
- Ramos, F. F. R. (2001). Exports, imports, and economic growth in Portugal: evidence from causality and cointegration analysis. *Economic Modelling*, *18*(4), 613-623.
- Ramsey, P. H. (1989). Critical values for Spearman's rank order correlation. *Journal of educational statistics*, 14(3), 245-253.
- Sattar, Z. (2015). Strategy for Export Diversification 2015-2020: Breaking into new markets with new Policy. *Research Institute of Bangladesh*.
- Schmidt, F. L., & Hunter, J. E. (2014). *Methods of meta-analysis: Correcting error and bias in research findings*: Sage publications.
- Stawowy, W. (2001). Calculation of Ad valorem Equivalents of Non-Ad Valorem Tariffs—Methodology Notes. *Division on International Trade in Goods and Services and Commodities, UNCTAD (October). Draft Paper.*
- Today, T. (2018). *Market diversification for further RMG export growth*. <u>https://www.textiletoday.com.bd/market-diversification-rmg-export-growth/</u>
- UNSTATS. (2018). Harmonized Commodity Description and Coding Systems (HS). 2019, from

https://unstats.un.org/unsd/tradekb/Knowledgebase/50018/Harmonized-Commodity-Description-and-Coding-Systems-HS

- Worldatlas. Complete List Of Country & Dialing Codes. Retrieved December, 2018, from <u>https://www.worldatlas.com/aatlas/ctycodes.htm</u>
- Xu, Z. (1996). On the causality between export growth and GDP growth: an empirical reinvestigation. *Review of International Economics*, 4(2), 172-184.
- Zar, J. H. (1972). Significance testing of the Spearman rank correlation coefficient. *Journal of the American Statistical Association, 67*(339), 578-580.

Appendix



Source: ITC Trade Map, compiled by the Authors in January 2019 (Map, 2018)

Appendix 2: Harmonized S	System (HS) coc	de and product label
--------------------------	-----------------	----------------------

CodeProduct LabelCodeProduct LabelHSMen's or boys' overcoats, car coats, capes, 6101cloaks, anoraks, ski jacket etc.6201cloaks, anoraks, ski jackets etc.HSWomen's or girls' overcoats, car coats, capes, 6102cloaks, anoraks, ski jackets etc.6202cloaks, anoraks, ski jackets etc.HSMen's or boys' suits, ensembles, jackets, 6103blazers, trousers, etc.6203trousers, bib etc.HSWomen's or girls' suits, ensembles, jackets, 6104blazers, trousers, etc.6204blazers, drousers, etc.6204HSWomen's or girls' suits, ensembles, jackets, 6104blazers, trousers, etc.6204blazers, drouse, divided skirts.HSWomen's or girls' blouses, skirts etc.6204blazers, drouse, divided skirts.HSMen's or boys' shirts, knitted or crocheted etc.6205crocheted, nightshirts.HSWomen's or girls' blouses, shirts and shirt-Blouses, knitted etc.6206HSMen's or boys' underpants, briefs, nightshirts, HSHSMen's or boys' singlet and other vests, underpants, briefs, nightshirts.HSWomen's or girls' slips, petticoats, briefs, pajamas, bathrobes etc.6209textile materials.HSJerseys, pullovers, cardigans, waistcoats and 6109rocheted6209textile materials.HSJerseys, pullovers, cardigans, waistcoats and 6110HSGarments made up of felt or nonwovens, whether 6110Gillshabies' garments and clothing accessories, 6112HSShawis, scarves, mufflers, mantillas, ve	HS		HS	
6101cloaks, anoraks, ski jacket etc.6201cloaks, anoraks, ski jackets etc.HSWomen's or girls' overcoats, car coats, capes,6202cloaks, anoraks, ski jackets etc.6102cloaks etc.6202cloaks, anoraks, etc.HSMen's or boys' suits, ensembles, jackets,HSWomen's or girls' overcoats, car coats, capes,6103blazers, trousers, etc.6203trousers, bib etc.HSWomen's or girls' suits, ensembles, jackets,HSWomen's or girls' suits, ensembles, jackets,6104blazers, dresses, skirts etc.6204blazers, dresses, divided skirts.HSMen's or boys' shirts, knitted or crocheted etc.6205crocheted, rightshirts.HSWomen's or girls' blouses, shirts and shirt-6106blouses, shirts and shirt-6105Men's or boys' underpants, briefs, nightshirts,HSMen's or boys' singlet and other vests,6107pajamas, bathrobes etc.6206blouses.HSMen's or girls' slips, peticoats, briefs,HSMen's or girls' singlet and other vests, slips,6108panties, nightdresses, etc.6209textile materials.HST-shirts, singlet and other vests, knitted or6210garments and clothing accessories of6110similar articles, knitted etc.6210or not impregnated, coated.HSBabies' garments and clothing accessories,HSBrassieres, girdles, corsets, braces, suspenders,6111similar articles, kisi sand swimwear, knitted orHSBrassieres, girdles, corset, braces, suspenders,	Code	Product Label	Code	Product Label
6101 cloaks, anoraks, ski jacket etc. 6201 cloaks, anoraks, ski jacket setc. HS Women's or girls' overcoats, car coats, capes, 6102 cloaks, anoraks, ski jacket setc. HS Men's or boys' suits, ensembles, jackets, HS Women's or girls' overcoats, car coats, capes, 6103 blazers, trousers, etc. 6203 trousers, bib etc. HS Women's or girls' suits, ensembles, jackets, HS Women's or girls' suits, ensembles, jackets, 6104 blazers, dresses, skirts etc. 6204 blazers, dresses, divided skirts. HS Men's or boys' shirts, knitted or crocheted etc. 6205 crocheted, nightshirts. HS Women's or girls' blouses, shirts and shirt- 6206 blouses. 6107 pajamas, bathrobes etc. 6207 underpants, briefs, nightshirts. HS Men's or girls' slips, peticoats, briefs, f208 peticoats, briefs. momen's or girls' singlet and other vests, slips, peticoats, briefs. 6108 panties, nightdresses, etc. 6209 textile materials. f111 HS Jerseys, pullovers, cardigans, waistcoats and HS Garments made up of felt or nonwovens, whether 6110 similar articles, knitted etc.	HS	Men's or boys' overcoats, car coats, capes,	HS	Men's or boys' overcoats, car coats, capes,
HSWomen's or girls' overcoats, car coats, capes, cloaks etc.HSWomen's or girls' overcoats, car coats, capes, cloaks, and cravats etc.HSMen's or boys' suits, ensembles, jackets, blazers, trousers, etc.HSMen's or boys' suits, ensembles, jackets, blazers, trousers, bib etc.HSWomen's or girls' suits, ensembles, jackets, blazers, dresses, skirts etc.HSWomen's or girls' suits, ensembles, jackets, blazers, dresses, divided skirts.HSWomen's or girls' suits, ensembles, jackets, blazers, dresses, divided skirts.HSMen's or boys' shirts, ensembles, jackets, blazers, dresses, divided skirts.HSMen's or boys' shirts, knitted or crocheted etc.6205crocheted, nightshirts.HSWomen's or girls' blouses, shirts and shirt- blouses, knitted etc.6206underpants, briefs, nightshirts.HSMen's or boys' underpants, briefs, nightshirts, HSHSWomen's or girls' singlet and other vests, stifts, nightdresses, etc.HSWomen's or girls' singlet and other vests, klited or folop crochetedHSBabies' garments and clothing accessories of textile materials.HSJerseys, pullovers, cardigans, waistcoats and folop crochetedHSHSGarments, swinwear and other folor nonwovens, whether folloHSTrack-suits, ski-suits and swimwear, knitted or folloHSBabies' garments.HSTrack-suits, ski-suits and swimwear, knitted or folloHSBabies' garments.HSTrack-suits, ski-suits and swimwear, whitted or folloHSShawls, scarves, mufflers, mantillas, veils and similar articles	6101		6201	
HSMen's or boys' suits, ensembles, jackets, 6103HSMen's or boys' suits, ensembles, jackets, 6203HSMen's or boys' suits, ensembles, jackets, 6204HSWomen's or girls' suits, ensembles, jackets, 6104blazers, dresses, skirts etc.6204blazers, dresses, divided skirts.HSHSWomen's or girls' shirts, knitted or crocheted etc.6205crocheted, nightshirts.HSWomen's or girls' blouses, shirts and shirt- 6106Blouses, knitted etc.6206blouses, shirts and shirt- 6206HSMen's or boys' underpants, briefs, nightshirts, HSHSMome's or girls' blouses, shirts and shirt- 6106Blouses, knitted etc.6107pajamas, bathrobes etc.6207underpants, briefs, nightshirts.HSWomen's or girls' slips, petticoats, briefs, filds panties, nightdresses, etc.6208petticoats, briefs.HST-shirts, singlet and other vests, knitted or folo96209textile materials.HSJerseys, pullovers, cardigans, waistcoats and fol10HSGarments made up of felt or nonwovens, whether fol110HSTrack-suits, ski-suits and swimwear, knitted or fol112Sala suits, ski suits, swimwear and other for not impregnated, coated.HSGarments, knitted or crocheted, rubberized or fol12HSBraseise, girdles, corset, braces, suspenders, fol114HSGarments, knitted or crocheted, rubberized or fol114HSBraseise, girdles, orset, shist, and sumwar, knitted or for not impregnated.HSGarments, knitted or crocheted, rubberized or fol112HS <td>HS</td> <td></td> <td>HS</td> <td></td>	HS		HS	
6103blazers, trousers, etc.6203trousers, bib etc.HSWomen's or girls' suits, ensembles, jackets, 6104blazers, dresses, skirts etc.6204blazers, dresses, divided skirts.HSMen's or boys' shirts, knitted or crocheted etc.6205crocheted, nightshirts.HSWomen's or girls' blouses, shirts and shirt- 6106blouses, knitted etc.6206blouses.HSMen's or boys' underpants, briefs, nightshirts, pajamas, bathrobes etc.HSMen's or boys' singlet and other vests, other, nightdresses, etc.6207HSWomen's or girls' slips, petticoats, briefs, pajamas, bathrobes etc.HSWomen's or girls' singlet and other vests, slips, folt07 pajamas, bathrobes etc.6208HST-shirts, singlet and other vests, knitted or folt09HSBabies' garments and clothing accessories of 6209HSJerseys, pullovers, cardigans, waistcoats and folt11 knitted etc.HSGarments made up of felt or nonwovens, whether 6210 or not impregnated, coated.HSBabies' garments and clothing accessories, 6112 crochetedHSBrassieres, girdles, corsets, braces, suspenders, 6212 garters.HSGarments, knitted or crocheted, rubberized or HSHSHandkerchiefs, of which no side exceeds 60 cmHSSpecial garments for professional, sporting or HSHSShawls, scarves, mufflers, mantillas, veils and similar articles.HSPantyhose, tights, stockings, socks and other HSHSGloves, mittens and mitts, of lextle materials.HSGarwents, knitted or crocheted <t< td=""><td>6102</td><td>cloaks etc.</td><td>6202</td><td>cloaks, anoraks etc.</td></t<>	6102	cloaks etc.	6202	cloaks, anoraks etc.
HSWomen's or girls' suits, ensembles, jackets, 6104HSWomen's or girls' suits, ensembles, jackets, 6204HSblazers, dresses, skirts etc.6204blazers, dresses, divided skirts.HSMen's or boys' shirts, knitted or crocheted etc.6205crocheted, nightshirts,6105Men's or girls' blouses, shirts and shirt-HSWomen's or girls' blouses, shirts and shirt-HSWomen's or girls' blouses, shirts and shirt-HSWomen's or girls' blouses, shirts and shirt-6106blouses, knitted etc.6206blouses.HSMen's or boys' underpants, briefs, nightshirts,HSMen's or boys' singlet and other vests, anties, nightdresses, etc.HSWomen's or girls' slips, petticoats, briefs, 6107HSWomen's or girls' singlet and other vests, slips, epticoats, briefs.HST-shirts, singlet and other vests, knitted or 6109HSBabies' garments and clothing accessories of textile materials.HSJerseys, pullovers, cardigans, waistcoats and 6110similar articles, knitted etc.6210or not impregnated, coated.HSBabies' garments and clothing accessories, 6112HSBracksuits, ski suits and swimwear, knitted or 6210HSBracksuits, swimwear and other garments.HSGarments, knitted or crocheted, rubberized or 6113HSBracksuits, of which no side exceeds 60 cmHSGarments, knitted or crocheted, rubberized or 6113HSShawls, scarves, mufflers, mantillas, veils and similar articles.HSPantyhose, tights, stockings, socks and other 6114 </td <td>HS</td> <td>Men's or boys' suits, ensembles, jackets,</td> <td>HS</td> <td>Men's or boys' suits, ensembles, jackets, blazers,</td>	HS	Men's or boys' suits, ensembles, jackets,	HS	Men's or boys' suits, ensembles, jackets, blazers,
6104blazers, dresses, skirts etc.6204blazers, dresses, divided skirts.HSHSMen's or boys' shirts, knitted or crocheted etc.6205crocheted, nightshirts.HSWomen's or girls' blouses, shirts and shirt-HSWomen's or girls' blouses, shirts and shirt-6106blouses, knitted etc.6206blouses.HSMen's or boys' underpants, briefs, nightshirts,HSMen's or boys' singlet and other vests,6107pajamas, bathrobes etc.6207underpants, briefs, nightshirts.HSWomen's or girls' slips, petticoats, briefs,HSWomen's or girls' singlet and other vests, slips,6108panties, nightdresses, etc.6208petticoats, briefs.HST-shirts, singlet and other vests, knitted orHSBabies' garments and clothing accessories of6109crocheted6209textile materials.HSJerseys, pullovers, cardigans, waistcoats andHSGarments made up of felt or nonwovens, whether6111similar articles, knitted etc.6210or not impregnated, coated.HSTrack-suits, ski-suits and swimwear, knitted orHSBrassieres, girdles, corsets, braces, suspenders,6112crocheted6212garters.HSGarments, knitted or crocheted, rubberized orHSShawls, scarves, mufflers, mantillas, veils and6113impregnated.6213Handkerchiefs, of which no side exceeds 60 cmHSPatyhose, tights, stockings, socks and otherHSShawls, scarves, mufflers, mantillas, veils and6114<	6103	blazers, trousers, etc.	6203	trousers, bib etc.
HSHSMen's or boys' shirts (excluding knitted or6105Men's or boys' shirts, knitted or crocheted etc.6205crocheted, nightshirts.HSWomen's or girls' blouses, shirts and shirt-HSWomen's or girls' blouses, shirts and shirt-6106blouses, knitted etc.6206blouses.HSMen's or boys' underpants, briefs, nightshirts,HSMen's or boys' singlet and other vests,6107pajamas, bathrobes etc.6207underpants, briefs, nightshirts.HSWomen's or girls' slips, petticoats, briefs,HSWomen's or girls' slips, petticoats, briefs,6108panties, nightdresses, etc.6208petticoats, briefs.HST-shirts, singlet and other vests, knitted orHSBabies' garments and clothing accessories of6109crocheted6209tettie materials.HSJerseys, pullovers, cardigans, waistcoats andHSGarments made up of felt or nonwovens, whether6111similar articles, knitted etc.6210or not impregnated, coated.HSTracksuits, ski-suits and swimwear, knitted orHSBrassieres, girdles, corsets, braces, suspenders,6112crocheted6213garters.HSGarments, knitted or crocheted, rubberized orHSShawls, scarves, mufflers, mantillas, veils and6113impregnated.6213Handkerchiefs, of which no side exceeds 60 cmHSSpecial garments for professional, sporting orHSShawls, scarves, mufflers, mantillas, veils and6114other purposes.6214S	HS	Women's or girls' suits, ensembles, jackets,	HS	
6105Men's or boys' shirts, knitted or crocheted etc.6205crocheted, nightshirts.HSWomen's or girls' blouses, shirts and shirt-6106blouses, knitted etc.6206blouses.HSMen's or boys' underpants, briefs, nightshirts,HSWomen's or girls' blouses, shirts and shirt-6107pajamas, bathrobes etc.6207underpants, briefs, nightshirts.HSWomen's or girls' slips, petticoats, briefs,HSWomen's or girls' singlet and other vests, slips,6108panties, nightdresses, etc.6208petticoats, briefs.HST-shirts, singlet and other vests, knitted orHSBabies' garments and clothing accessories of6109crocheted6209textile materials.HSJerseys, pullovers, cardigans, waistcoats andHSGarments made up of felt or nonwovens, whether6111similar articles, knitted etc.6210or not impregnated, coated.HSTrack-suits, ski-suits and swimwear, knitted orHSBrassieres, girdles, corsets, braces, suspenders,6112crocheted6212garters.HSGarments, knitted or crocheted, rubberized orHSShawls, scarves, mufflers, mantillas, veils and6113impregnated.6213Handkerchiefs, of which no side exceeds 60 cmHSPantyhose, tights, stockings, socks and otherHSShawls, scarves, mufflers, mantillas, veils and6114other purposes.6215Ties, bow ties and cravats of textile materialsHSPantyhose, tights, stockings, socks and otherHSGlove		blazers, dresses, skirts etc.		blazers, dresses, divided skirts.
HSWomen's or girls' blouses, shirts and shirt- 6106HSWomen's or girls' blouses, shirts and shirt- 62066107blouses, knitted etc.6206blouses.HSMen's or boys' underpants, briefs, nightshirts, pajamas, bathrobes etc.HSMen's or boys' singlet and other vests, underpants, briefs, nightshirts.HSWomen's or girls' slips, petticoats, briefs, anties, nightdresses, etc.HSMen's or boys' singlet and other vests, slips, opetticoats, briefs.HST-shirts, singlet and other vests, knitted or rochetedHSBabies' garments and clothing accessories of textile materials.HSJerseys, pullovers, cardigans, waistcoats and 6110HSGarments made up of felt or nonwovens, whether or not impregnated, coated.HSBabies' garments and clothing accessories, 6111HSTracksuits, ski suits, swimwear and other garments.HSTrack-suits, ski-suits and swimwear, knitted or 6112HSBrassieres, girdles, corsets, braces, suspenders, garters.HSGarments, knitted or crocheted, rubberized or 6113impregnated.6213HSGarments, knitted or crocheted, rubberized or 6114of ther purposes.HSPatiyhose, tights, stockings, socks and other 6115HSHSPatiyhose, tights, stockings, socks and other 6116HSHSGloves, mittens and mitts, knitted or crocheted6213HSGarnents, knitted or crocheted6214HSSpecial garments for professional, sporting or 6114HSHSPatyhose, tights, stockings, socks and o	HS		HS	Men's or boys' shirts (excluding knitted or
6106blouses, knitted etc.6206blouses.HSMen's or boys' underpants, briefs, nightshirts, pajamas, bathrobes etc.HSMen's or boys' singlet and other vests, ounderpants, briefs, nightshirts.HSWomen's or girls' slips, petticoats, briefs, panties, nightdresses, etc.HSWomen's or girls' singlet and other vests, slips, petticoats, briefs.HST-shirts, singlet and other vests, knitted or 6109HSBabies' garments and clothing accessories of 6209HSJerseys, pullovers, cardigans, waistcoats and 6110Similar articles, knitted etc.6210HSBabies' garments and clothing accessories, 6111knitted etc.6210HSTracksuits, ski-suits and swimwear, knitted or 6112HSBrassieres, girdles, corsets, braces, suspenders, garters.HSGarments, knitted or crocheted, rubberized or 6113impregnated.6213Handkerchiefs, of which no side exceeds 60 cmHSSpecial garments for professional, sporting or 6114HSShawls, scarves, mufflers, mantillas, veils and similar articles.HSPantyhose, tights, stockings, socks and otherHSHSSpecial garments or professional, sporting or 6114HSHSPantyhose, tights, stockings, socks and otherHSHSGloves, mittens and mitts, knitted or crocheted6215HSMade-up clothing accessories knitted orHSHSGloves, mittens and mitts, knitted or crochetedHSHSBarty, incl.6215Ties, bow ties and cravats of textile materialsHS <td></td> <td></td> <td>6205</td> <td></td>			6205	
HSMen's or boys' underpants, briefs, nightshirts, pajamas, bathrobes etc.HSMen's or boys' singlet and other vests, ounderpants, briefs, nightshirts.HSWomen's or girls' slips, petticoats, briefs, panties, nightdresses, etc.HSWomen's or girls' singlet and other vests, slips, of 208 petticoats, briefs.HST-shirts, singlet and other vests, knitted or 6109 crochetedHSBabies' garments and clothing accessories of 6209 textile materials.HSJerseys, pullovers, cardigans, waistcoats and similar articles, knitted etc.6210 6210or not impregnated, coated.HSBabies' garments and clothing accessories, 6111HSTracksuits, ski suits, swimwear and other 6211 garments.HSTrack-suits, ski-suits and swimwear, knitted or 6112 crochetedHSBrassieres, girdles, corsets, braces, suspenders, 6212 garters.HSGarments, knitted or crocheted, rubberized or 6113 impregnated.HSShawls, scarves, mufflers, mantillas, veils and similar articles.HSPantyhose, tights, stockings, socks and other 6113 impregnated.6215 6213Ties, bow ties and cravats of textile materialsHSPantyhose, tights, stockings, socks and other 6114 other purposes.6215 6215Ties, bow ties and cravats of textile materialsHSGloves, mittens and mitts, knitted or crocheted 6115 hosiery, incl.6216 6216Ties, bow ties and cravats of textile materialsHSGloves, mittens and mitts, knitted or crocheted 6216HSGloves, mittens and mitts, of all types of textile 6216HSG	HS	Women's or girls' blouses, shirts and shirt-	HS	Women's or girls' blouses, shirts and shirt-
6107pajamas, bathrobes etc.6207underpants, briefs, nightshirts.HSWomen's or girls' slips, petticoats, briefs, panties, nightdresses, etc.HSWomen's or girls' singlet and other vests, slips, 6208HST-shirts, singlet and other vests, knitted or 6109crochetedHSBabies' garments and clothing accessories of textile materials.HSJerseys, pullovers, cardigans, waistcoats and 6110HSGarments made up of felt or nonwovens, whether 6210HSBabies' garments and clothing accessories, 6111Knitted etc.6211 garments.Garments made up of felt or nonwovens, whether 6111HSBabies' garments and clothing accessories, 6112HSTracksuits, ski suits, swimwear and other garments.HSTrack-suits, ski-suits and swimwear, knitted or impregnated.HSBrassieres, girdles, corsets, braces, suspenders, 6212 garters.HSGarments, knitted or crocheted, rubberized or HSHSBrassieres, of which no side exceeds 60 cmHSSpecial garments for professional, sporting or 6114HSShawls, scarves, mufflers, mantillas, veils and similar articles.HSPantyhose, tights, stockings, socks and other 6115HSGloves, mittens and mitts, knitted or crocheted flasHSGloves, mittens and mitts, knitted or crochetedHSGloves, mittens and mitts, of all types of textile materials.HSMade-up clothing accessories knitted orHSGloves, mittens and mitts, of all types of textile materials.	6106	blouses, knitted etc.	6206	blouses.
HSWomen's or girls' slips, petticoats, briefs, panties, nightdresses, etc.HSWomen's or girls' singlet and other vests, slips, 6208HST-shirts, singlet and other vests, knitted or 6109crochetedHSBabies' garments and clothing accessories of 6209HSJerseys, pullovers, cardigans, waistcoats and 6110HSGarments made up of felt or nonwovens, whether 6210HSBabies' garments and clothing accessories, 6111knitted etc.6210HSBabies' garments and clothing accessories, 6111HSTracksuits, ski suits, swimwear and other garments.HSTrack-suits, ski-suits and swimwear, knitted or 6112HSBrassieres, girdles, corsets, braces, suspenders, 6212 garters.HSGarments, knitted or crocheted, rubberized or HSHSShawls, scarves, mufflers, mantillas, veils and similar articles.HSSpecial garments for professional, sporting or HSHSShawls, scarves, mufflers, mantillas, veils and similar articles.HSPantyhose, tights, stockings, socks and other HSHSGloves, mittens and mitts, of all types of textile materials.HSGloves, mittens and mitts, knitted or crocheted HSHSGloves, mittens and mitts, of all types of textile materials.HSMade-up clothing accessories knitted orHSMade-up clothing accessories and parts of	HS	Men's or boys' underpants, briefs, nightshirts,	HS	Men's or boys' singlet and other vests,
6108panties, nightdresses, etc.6208petticoats, briefs.HST-shirts, singlet and other vests, knitted or 6109HSBabies' garments and clothing accessories of 6209HSJerseys, pullovers, cardigans, waistcoats and 6110similar articles, knitted etc.6210HSBabies' garments and clothing accessories, 6111knitted etc.6211HSBabies' garments and clothing accessories, 6111KNTracksuits, ski suits, swimwear and other 6211HSTrack-suits, ski-suits and swimwear, knitted or 6112HSBrassieres, girdles, corsets, braces, suspenders, 6212HSGarments, knitted or crocheted, rubberized or 6113impregnated.6213Handkerchiefs, of which no side exceeds 60 cmHSSpecial garments for professional, sporting or 6114HSShawls, scarves, mufflers, mantillas, veils and similar articles.HSPantyhose, tights, stockings, socks and other 6115hosiery, incl.6215Ties, bow ties and cravats of textile materialsHSGloves, mittens and mitts, knitted or crocheted 6116(excluding for babies)6216materials.	6107		6207	
HST-shirts, singlet and other vests, knitted or crochetedHSBabies' garments and clothing accessories of textile materials.HSJerseys, pullovers, cardigans, waistcoats and similar articles, knitted etc.HSGarments made up of felt or nonwovens, whether or not impregnated, coated.HSBabies' garments and clothing accessories, 6111HSTracksuits, ski suits, swimwear and other garments.HSTrack-suits, ski-suits and swimwear, knitted or 6112HSBrassieres, girdles, corsets, braces, suspenders, garters.HSGarments, knitted or crocheted, rubberized or 6113HSBrassieres, of which no side exceeds 60 cmHSSpecial garments for professional, sporting or 6114HSShawls, scarves, mufflers, mantillas, veils and similar articles.HSPantyhose, tights, stockings, socks and other 6115HSGloves, mittens and mitts, knitted or crocheted 6215HSHSGloves, mittens and mitts, knitted or crocheted 6116HSGloves, mittens and mitts, of all types of textile materials.		Women's or girls' slips, petticoats, briefs,		Women's or girls' singlet and other vests, slips,
6109crocheted6209textile materials.HSJerseys, pullovers, cardigans, waistcoats andHSGarments made up of felt or nonwovens, whether6110similar articles, knitted etc.6210or not impregnated, coated.HSBabies' garments and clothing accessories,HSTracksuits, ski suits, swimwear and other6111knitted etc.6211garments.HSTrack-suits, ski-suits and swimwear, knitted orHSBrassieres, girdles, corsets, braces, suspenders,6112crocheted6212garters.HSGarments, knitted or crocheted, rubberized orHSHandkerchiefs, of which no side exceeds 60 cmHSSpecial garments for professional, sporting orHSShawls, scarves, mufflers, mantillas, veils and6114other purposes.6214similar articles.HSPantyhose, tights, stockings, socks and otherHS6115hosiery, incl.6215Ties, bow ties and cravats of textile materialsHSGloves, mittens and mitts, knitted or crochetedHSGloves, mittens and mitts, of all types of textile6116(excluding for babies)6216materials.HSMade-up clothing accessories knitted orHSMade-up clothing accessories and parts of			6208	
HSJerseys, pullovers, cardigans, waistcoats andHSGarments made up of felt or nonwovens, whether6110similar articles, knitted etc.6210or not impregnated, coated.HSBabies' garments and clothing accessories,HSTracksuits, ski suits, swimwear and other6111knitted etc.6211garments.HSTrack-suits, ski-suits and swimwear, knitted orHSBrassieres, girdles, corsets, braces, suspenders,6112crocheted6212garters.HSGarments, knitted or crocheted, rubberized orHSHandkerchiefs, of which no side exceeds 60 cmHSSpecial garments for professional, sporting orHSShawls, scarves, mufflers, mantillas, veils and6114other purposes.6214similar articles.HSPantyhose, tights, stockings, socks and otherHSGloves, mittens and mitts, knitted or crochetedHSGloves, mittens and mitts, knitted or crochetedHSGloves, mittens and mitts, of all types of textile6116(excluding for babies)6216materials.HSMade-up clothing accessories knitted orHSMade-up clothing accessories and parts of		T-shirts, singlet and other vests, knitted or		
6110similar articles, knitted etc.6210or not impregnated, coated.HSBabies' garments and clothing accessories, 6111HSTracksuits, ski suits, swimwear and other garments.HSTrack-suits, ski-suits and swimwear, knitted or 6112HSBrassieres, girdles, corsets, braces, suspenders, garters.HSGarments, knitted or crocheted, rubberized or 6113HSBrassieres, of which no side exceeds 60 cmHSSpecial garments for professional, sporting or 6114HSShawls, scarves, mufflers, mantillas, veils and similar articles.HSPantyhose, tights, stockings, socks and other 6115HSGloves, mittens and mitts, knitted or crocheted 6215Ties, bow ties and cravats of textile materialsHSGloves, mittens and mitts, knitted or crocheted 6116HSGloves, mittens and mitts, of all types of textile 6216HSMade-up clothing accessories knitted orHSMade-up clothing accessories and parts of			6209	
HS 6111Babies' garments and clothing accessories, hitted etc.HS 6211Tracksuits, ski suits, swimwear and other garments.HSTrack-suits, ski-suits and swimwear, knitted or crochetedHS 6212Brassieres, girdles, corsets, braces, suspenders, garters.HSGarments, knitted or crocheted, rubberized or 6113HS impregnated.G213Handkerchiefs, of which no side exceeds 60 cmHSSpecial garments for professional, sporting or 6114HS other purposes.Shawls, scarves, mufflers, mantillas, veils and similar articles.HSPantyhose, tights, stockings, socks and other 6115HS hosiery, incl.G215 6215Ties, bow ties and cravats of textile materialsHSGloves, mittens and mitts, knitted or crocheted 6116HS (excluding for babies)Gloves, mittens and parts of	HS	Jerseys, pullovers, cardigans, waistcoats and	HS	Garments made up of felt or nonwovens, whether
6111knitted etc.6211garments.HSTrack-suits, ski-suits and swimwear, knitted orHSBrassieres, girdles, corsets, braces, suspenders,6112crocheted6212garters.HSGarments, knitted or crocheted, rubberized orHS61136113impregnated.6213Handkerchiefs, of which no side exceeds 60 cmHSSpecial garments for professional, sporting orHSShawls, scarves, mufflers, mantillas, veils and6114other purposes.6214similar articles.HSPantyhose, tights, stockings, socks and otherHS6115hosiery, incl.6215Ties, bow ties and cravats of textile materialsHSGloves, mittens and mitts, knitted or crochetedHSGloves, mittens and mitts, of all types of textile6116(excluding for babies)6216materials.HSMade-up clothing accessories knitted orHSMade-up clothing accessories and parts of	6110	similar articles, knitted etc.	6210	
HSTrack-suits, ski-suits and swimwear, knitted orHSBrassieres, girdles, corsets, braces, suspenders,6112crocheted6212garters.HSGarments, knitted or crocheted, rubberized orHS62136113impregnated.6213Handkerchiefs, of which no side exceeds 60 cmHSSpecial garments for professional, sporting orHSShawls, scarves, mufflers, mantillas, veils and6114other purposes.6214similar articles.HSPantyhose, tights, stockings, socks and otherHS6115hosiery, incl.6215Ties, bow ties and cravats of textile materialsHSGloves, mittens and mitts, knitted or crochetedHSGloves, mittens and mitts, of all types of textile6116(excluding for babies)6216materials.HSMade-up clothing accessories knitted orHSMade-up clothing accessories and parts of				Tracksuits, ski suits, swimwear and other
6112crocheted6212garters.HSGarments, knitted or crocheted, rubberized orHS6113impregnated.6213HSSpecial garments for professional, sporting orHS6114other purposes.6214HSPantyhose, tights, stockings, socks and otherHS6115hosiery, incl.6215HSGloves, mittens and mitts, knitted or crochetedHS6116(excluding for babies)6216HSMade-up clothing accessories knitted orHSMade-up clothing accessories knitted orHS				garments.
HS 6113Garments, knitted or crocheted, rubberized or impregnated.HS 6213Handkerchiefs, of which no side exceeds 60 cmHSSpecial garments for professional, sporting or 6114HSShawls, scarves, mufflers, mantillas, veils and 6214HSPantyhose, tights, stockings, socks and other 6115HSShow ties and cravats of textile materialsHSGloves, mittens and mitts, knitted or crocheted 6116HSGloves, mittens and mitts, knitted or crocheted 6216HSHSMade-up clothing accessories knitted orHSMade-up clothing accessories and parts of		Track-suits, ski-suits and swimwear, knitted or	HS	Brassieres, girdles, corsets, braces, suspenders,
6113impregnated.6213Handkerchiefs, of which no side exceeds 60 cmHSSpecial garments for professional, sporting or other purposes.HSShawls, scarves, mufflers, mantillas, veils and similar articles.HSPantyhose, tights, stockings, socks and other 6115HS6214similar articles.HSGloves, mittens and mitts, knitted or crocheted 6116HSGloves, mittens and mitts, knitted or crocheted 6216HSGloves, mittens and mitts, of all types of textile materials.HSMade-up clothing accessories knitted orHSMade-up clothing accessories and parts of	-		6212	garters.
HSSpecial garments for professional, sporting or 6114 other purposes.HSShawls, scarves, mufflers, mantillas, veils and similar articles.HSPantyhose, tights, stockings, socks and other 6115 hosiery, incl.HS6214similar articles.HSGloves, mittens and mitts, knitted or crocheted 6116 (excluding for babies)HSGloves, mittens and mitts, of all types of textile materials.HSMade-up clothing accessories knitted orHSMade-up clothing accessories and parts of				
6114other purposes.6214similar articles.HSPantyhose, tights, stockings, socks and otherHS6115hosiery, incl.6215Ties, bow ties and cravats of textile materialsHSGloves, mittens and mitts, knitted or crochetedHSGloves, mittens and mitts, of all types of textile6116(excluding for babies)6216materials.HSMade-up clothing accessories knitted orHSMade-up clothing accessories and parts of				
HS 6115Pantyhose, tights, stockings, socks and other hosiery, incl.HS 6215Ties, bow ties and cravats of textile materialsHSGloves, mittens and mitts, knitted or crocheted 6116HSGloves, mittens and mitts, of all types of textile 6216HSMade-up clothing accessories knitted orHSMade-up clothing accessories and parts of				
6115hosiery, incl.6215Ties, bow ties and cravats of textile materialsHSGloves, mittens and mitts, knitted or crochetedHSGloves, mittens and mitts, of all types of textile6116(excluding for babies)6216materials.HSMade-up clothing accessories knitted orHSMade-up clothing accessories and parts of				similar articles.
HSGloves, mittens and mitts, knitted or crochetedHSGloves, mittens and mitts, of all types of textile6116(excluding for babies)6216materials.HSMade-up clothing accessories knitted orHSMade-up clothing accessories and parts of				
6116(excluding for babies)6216materials.HSMade-up clothing accessories knitted orHSMade-up clothing accessories and parts of	6115			
HS Made-up clothing accessories knitted or HS Made-up clothing accessories and parts of				
6117 crocheted; knitted. 6217 garments or clothing accessories.				
	6117	crocheted; knitted.	6217	garments or clothing accessories.

European Journal of Management and Marketing Studies - Volume 3 | Issue 4 | 2019



Source: ITC Trade Map (Map, 2018), compiled by the Authors in January 2019



Appendix 4: List of importing markets for (62) Articles of apparel and clothing accessories product exported by Bangladesh in 2017

Source: ITC Trade Map, compiled by the Authors in January 2019

Individual Countries in American Market in HS61 (2017)											
Product Code	CN	VT	IN	BD	MX	ID	PK	KH	IT	SL	
HS 6101	14	14	14	14	0	14	14	14	14	14	
HS 6102	16	16	16	16	0	16	16	16	16	16	
HS 6103	16	16	16	16	0	16	16	16	16	16	
HS 6104	13	13	13	13	0	13	12	13	13	13	
HS 6105	19	19	19	19	0	19	13	19	19	19	
HS 6106	20	20	20	20	0	20	19	20	20	20	
HS 6107	8	8	8	8	0	8	20	8	8	8	
HS 6108	10	10	10	10	0	10	8	10	10	10	
HS 6109	15	15	15	15	0	15	10	15	15	15	
HS 6110	12	12	12	12	0	12	15	12	12	12	
HS 6111	15	15	15	15	0	15	15	15	15	15	

Appendix 5: Equivalent Ad Valorem Tariff Faced by

Mohammad Ali, Wang Qun, Md Ekram Hossain COMPETITION AND EXPORT GROWTH OF READYMADE GARMENTS OF BANGLADESH IN THE UNITED STATES MARKET: AN EMPIRICAL ANALYSIS

HS 6112	23	23	23	23	0	23	23	23	23	23
HS 6113	5	5	5	5	0	5	5	5	5	5
HS 6114	19	19	19	19	0	19	19	19	19	19
HS 6115	12	12	12	12	0	12	12	12	12	12
HS 6116	10	10	9	10	0	9	9	9	10	9
HS 6117	7	7	7	7	0	7	7	7	7	7

Appendix 6: Equivalent Ad Valorem Tariff Faced by Individual Countries in American Market in HS62 (2017)

Product Code	CN	VT	IN	BD	MX	ID	РК	KH	IT	SL
HS 6201	13	13	13	13	0	13	13	13	13	13
HS 6202	13	13	13	13	0	13	13	13	13	13
HS 6203	10	10	10	10	0	10	10	10	10	10
HS 6204	9	9	9	9	0	9	9	9	9	9
HS 6205	14	14	14	14	0	14	14	14	14	14
HS 6206	10	10	10	10	0	10	10	10	10	10
HS 6207	7	7	7	7	0	7	7	7	7	7
HS 6208	10	10	10	10	0	10	10	10	10	10
HS 6209	14	14	14	14	0	14	14	14	14	14
HS 6210	5	5	5	5	0	5	5	5	5	5
HS 6211	12	12	12	12	0	12	12	12	12	12
HS 6212	10	10	10	10	0	10	10	10	10	10
HS 6213	8	8	8	8	0	8	8	8	8	8
HS 6214	6	6	6	6	0	6	6	6	6	6
HS 6215	8	8	8	8	0	8	8	8	8	8
HS 6216	9	9	8	9	0	8	8	8	9	8
HS 6217	9	9	6	9	0	6	6	6	9	6

Creative Commons licensing terms

Authors will retain copyright to their published articles agreeing that a Creative Commons Attribution 4.0 International License (CC BY 4.0) terms will be applied to their work. Under the terms of this license, no permission is required from the author(s) or publisher for members of the community to copy, distribute, transmit or adapt the article content, providing a proper, prominent and unambiguous attribution to the authors in a manner that makes clear that the materials are being reused under permission of a Creative Commons License. Views, opinions and conclusions expressed in this research article are views, opinions and conclusions of the author(s).Open Access Publishing Group and European Journal of Management and Marketing Studies shall not be responsible or answerable for any loss, damage or liability caused in relation to/arising out of conflict of interests, copyright violations and inappropriate or inaccurate use of any kind content related or integrated on the research work. All the published works are meeting the Open Access Publishing requirements and can be freely accessed, shared, modified, distributed and used in educational, commercial and non-commercial purposes under a <u>Creative Commons Attribution 4.0 International License (CC BY 4.0)</u>.