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The Indian Textile Industry in Post Quota Era with Reference to Bangladesh

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Abstract--- *Textile industry has a prodigious presence in the Indian economy. In aspects of its contribution to GDP, job creation and export earnings, it plays a significant role in shaping the growth trend of the Indian economy. During 1970-2004, a very famous trade instrument that is known as MFA was imposed by European Union and other developed countries. Multi-Fiber Arrangement was to allow time for the adjustment of developed countries to competition from developing countries, which could manufacture far cheaper the same textile goods. It heavily regulated the textile industry. Since the complete limitation of the MFA, Many folds have risen in competition, with some developing countries like Vietnam & Bangladesh are strong, while some others, including Philippines & Mexico, struggle to face up to this challenge. This study will address the effect on Indian textile industry of this trade arrangement. It analyzes the dynamics that enhances industry's export performance in the post-MFA period. To review the impact of post quota era on Indian textile sector Trade Intensity Index was used to determine the bilateral trade flow between India and Bangladesh in post quota era. The results show that the most important factors that contributed to Competitiveness on exports of apparel over the period after the MFA includes cheap labor, size of company, prices, foreign ownership, local raw material available, the manufacture of new products, preferred working conditions & market access. Following observations offer policymakers and business managers fresh insights into designing and implementing suitable policies to make textiles exports competitive.*

Keywords--- *Multi-Fiber Arrangement, Textile Industry, Trade Intensity Index, Bilateral Trade.*

I. INTRODUCTION

The Indian textile industry, with an unmatched base of raw materials and a production strength across the whole value chain, is one of the world's largest. After China he is the world's second largest producer and exporter. Textiles and clothing accounted for a substantial 13 per cent share of total exports from India (2017-18). India has a 5% share of global apparel and clothing trade. Its strength is unique both in the manufacturing sector and in the capital-intensive sector. The industry is unique in terms of size. The second largest industry in the world is the mill market. In rural and semi urban areas, traditional industries, such as crafts and small-scale power loom units, represent the largest source of employment for millions of people and also contribute to more than 75% of overall textile output throughout the world. The Indian textile industry is inherent in agriculture and in country culture and traditions, making products suitable for the domestic as well as export markets flexible. In terms of value the textile industry contributes 7% of industry output, 2% of India's GDP and 15% of export earnings in the region. The textile industry has more than 45 million directly employed workers and another six crore employees in allied sectors, including a significant number of female and rural people. This sector is well associated with the main initiatives of government

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Make in India, Ability India, Women Empowerment and Rural Youth. The Government focuses on growing textile manufacturing by building the best in the world fabric infrastructure, upgrading technology, fostering innovation, improving capabilities and traditional strengths in textiles, Indian textile exports and clothing were priced (U.S.) $for 2018 in line with India's objective of making growth inclusive and participatory,. Textile and clothing sector of India employed 18.09% of the total employment in manufacturing sector. India has a competitive advantage in textile manufacturing – both cotton and synthetic fiber, because of the abundance of raw cotton, cheap labor and economies of scale, and has specialized in textile manufacturing. It stood at US$ 40 Billion in 2015.

In India's exports, Apparel is the largest exported segment with a leading 43% share. The exports from the group "other" are accompanied by home textile goods, manufactured objects, and crafts.

The group "Others" contributed 25 percent of India's overall textile and clothing exports. In India's textile and clothing exports, the Fibres / Filament segment has reported a high increase with 13% CAGR. However, since 2011–12, their exports have decreased.

Under the Multitier Arrangement (MFA), which was in effect from 1974 through 2004, most developing countries had had the privilege of using non-tariff barriers (quotas) until 2005. The agreement placed limits on the amount of clothing that could be exported to developed countries by developing countries. In comparison to the major existing exporters such as China and India, the introduction of The production of quotas is less competitive countries such as Bangladesh, Vietnam and Cambodia. That is because in to optimize the quota allocated to them nations, foreign consumers favoured new entrants to the textile industry.

Moreover, the new applicants also received a degree of exemptions from import tariffs in the United States and the European Union markets under the Generalized System of Preferences (GSP). As a result, weak developing countries such as Vietnam, Bangladesh & Cambodia became world's leading exporters of apparel during the 1974-2004 period of implementation of the MFA use of quotas and duty-free access, for example GSP. However, several analysts predicted that these poor countries would not survive after the abolition of MFA as they were losing their "competitiveness" and their share of the world apparel market was therefore dropping. For example, Nordås (2004). Abernathy, Volpe and Weil (2006) are predicting a substantial increase in their market share in the major export markets for vulnerable exporters, including Bangladesh, Cambodia and Vietnam, with China and India growing significantly. Nonetheless, there are conflicting findings from a post-MFA growth review of the main suppliers. In some developing countries, such as the Philippines and Bangladesh, growth was sustained and continued, The industry experienced negative export growth in Much like the Philippines and Mexico, among other nations. It is therefore important to recognize factors that have had The positive effect for investors, clothing exporters and policymakers on the success of clothing exports in countries like Bangladesh and Vietnam during MFA.

This paper contributes three primarily to the respective literature. First, it is one of the groundbreaking studies which looks from a historical perspective at the evolution and growth of the clothing industry. Secondly, This study discusses the economic aspects of global trade, and the creation of jobs for major exporters of clothing, using data from post-MFA period. Third: Our study analyzes factors that boost the export production of apparel for the post-MFA period using existing literature and explanations from World Bank Enterprise Surveys (several years) results.

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Pre-Quota Era

Each dress was made at home by women, tailors or their families up until the middle of the 18th century. The cutting, stitching and design were done by hand and the manufacture was entirely tailored Since mechanical support was little to no. In 1830 a French customer called Thimonnier invented the sewing machine, and in 1830 the manufacture of factory-owned garments began in France. After only three years, a similar sewing machine was invented in the United States by Walter Hunt. While one of the significant developments in the development of the textile industry was the invention of this sewing machine, it did not provide an opportunity to push customized garments into industrialisation. In the 1850s, the industrialization process was only carried out with a practical and commercially viable sewing machine invented by Issac Merit Singer of the U.S. (Rivoli, 2006). The invention of this sewing machine was not only a breakthrough for the industry but also for the society as the tailoring trade in the mass production of clothes was almost extinguished. Between 1850-1950, Both America and Europe's big cities, thousands of clothing factories were created. In the 1930s the development of clothing was transformed into sequential and separate jobs, Employ the scientific management principles of Taylor. Production efficiency therefore grew. In late 1950s and early 1960s, the trading of apparel products started. In 1960s, Europe was one of the largest exporters of clothing to Europe and the United States (Dickerson, 1999).3 Japan was a leading producer of industrial garments in the Asian countries in the 1960s and One of largest ten manufacturing firms of clothing (Dickerson, 1999). During late sixties & seventies, the factories began to migrate to the countries neighboring South-eastern and Eastern Europe, and to Asian nations where a great deal of cheap labor was available. During 1961-62, developed countries placed quantitative limits on exports of cotton products under the Short Term Agreement (STA). The Long-Term Agreement (LTA) preceded this from 1962 to 1972. Multi fiber arrangement-I (1974-77 MFA-I) once included wool, cotton and synthetic fiber textiles and applied apparel. Following MFA-, MFA- (1978-), MFA- (1982-) and MFA- (1986-) expanded their reach for vegetable fiber and silk mixtures. Since June 1991 until December 1992, MFA-IV expanded and eventually expanded.

During The Quota Era (1974-2004)

Multi-fibre Agreement was an expired international agreement that defined quotas for textiles and clothing for developing countries could be exported to developed countries. The MFA aimed at enabling the developed countries to adapt to competition from developing countries that could manufacture the same textile products much cheaper. Developing countries in developed countries have been thought to inundate markets with cheaper textiles that have a negative impact on the economies of the developed countries. This obstructed growth was recognized by the structure critics. From 1974 to late 2004 the agreement was in effect. A systematic mechanism for removing global apparel and clothing quotas has begun with the WTO's Uruguay Round Agreement on Textiles and Apparel. In four stages, the ATC has set a timetable for quotas liberalization. Growing move planned to include a certain percentage of textile categories according to 1990 values. In the final process of 1 January 2005, full integration was achieved.

Post Quota Era (Post 2005)

Under the Multi-Fiber Arrangements (MFAs), which had existed from 1974 to 2004, most of the developing countries had benefitted from nontariff barriers (quotas) up until 2005. The agreement imposed limits on the amount

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of clothing to be exported to developing and developed countries by the developing countries. In comparison to the major developed exporters such as India & China, the introduction of quotas favored less productive developing countries such as Bangladesh, Vietnam, and Cambodia. This is because international investors have been chosen to exploit the quota for these countries by the fashion industry over new entrants. Quotas have been abolished, resulting in economic conditions and a technological transition that, in effect, will lead to increases in productivity and the country will gain in comparison.

Throughout the Indian economy, the textile and apparel industries played an significant role. It is one of the biggest and largest economic markets, with respect to production, foreign exchange earners and employment, And is the second largest post-agricultural employer in the world. In India, it is one of the world's largest export markets.

II. DYNAMICS OF THE INDIAN TEXTILE INDUSTRY

Our analyzes in this section include the level at which a series of important factors are crucial in terms of increased clothing exports during The post-mFA period includes labour costs, sizes of firms, quality of product and international ownership of the land, local supply availability, consumer access preferences, production of new products and working conditions. The new World Bank Enterprise Surveys and current literature are mostly focused on the study of this segment. Data was used from the World Bank Business Surveys conducted for 2013, 2012 for China, 2014 in India, 2009 for Indonesia, 2010 for 2010, 2013 for Sri Lanka, 2012 for Turkey, 2009 for 2009 for the Philippines, and 2009 for Vietnam.

Table 1: Value of Textile export, Import and Net Export (USD Mn)

Country	Imports	Exports	Net Export
Bangladesh	6,778	2361	4717 (Imports)
Cambodia	2,999	--	--
China	20,248	111662	91414 (Exports)
India	3760	18340	14580 (Exports)
Indonesia	5814	4725	1089 (Imports)
Mexico	6408	2549	3859 (Imports)
Pakistan	1545	9077	7532 (Exports)
Philippines	87600	253	623 (Imports)
Sri Lanka	2232	267	1965 (Imports)
Turkey	7117	12522	5405 (Exports)
Vietnam	12020	5256	6764 (net Import)

Note: (--)Data Not Available

Source: WTO

Worker Price Tag

The clothing industry has historically been heavily dependent on low-cost labor. Based on the availability of Billig labour Business moved from one area to another during the first wave of industrialization. Cheap labor is even more relevant in the post-MFA era, as there are no quotas requirements in respect of importing countries and imports from all countries where cheaper goods of fair quality can be obtained. In order to gain an overview of the value of price tags, we must understand labor costs by dollar sales. The history of most of the successful and productive countries indicates that in contrast to unsuccessful / not as productive countries they have low labor

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costs. Labor is US$ 0.11 in Bangladesh, US$ 0.11 in India, for example, and $0.17 in Vietnam. For every dollar sold, this costs for labor. Countries like the Philippines (U.S.$0.30) or Mexico (U.S.$0.67) in the wrong direction have, on the other hand, fairly high labor costs. Cheap workers thus play an important role in improving the output of clothing exports during both the MFA and after MFA.

Businesses' Dimensions

In order to improve export efficiency, market dimensions play an significant role Based on three key reasons: scale economy, organizational capital and perception of risk. A big corporation requires a larger number of physical, human and administrative resources to save money and to take a higher chance of export (Wagner 1995). Singh (2009) maintains that larger businesses are more likely to export because they are able to manage and fund operating export-related costs, such as business knowledge and marketing strategies, international advertising campaigns and production of quality goods to foreign customers. Therefore, the scale of the company plays a key role in stimulating exports. In the case of clothes, there is also a very similar trend in the countries with large clothing companies in the post-MFA era (in terms of the numbers of workers) to export clothing most effectively. According to data from the World Bank's Enterprise Surveys, successful countries like the Philippines (169) and Mexico (103) have an average of 797 employees per company. Vietnam has 426, China 269, and India 240 employees. These statistics indicate that business size has a positive effect on clothing exports.

Manufactured Goods Quality

The quality of the product is an significant factor in a company's domestic and global growth. The focus of Japanese and German companies on product quality was greatly attributed in the late 20th century (Ahire, Golhar, & Waller, 1996). The same applies to the eight countries of Central and Eastern Europe (CEE-8) which, in view of their improved commodity quality, have gained competitive advantage in foreign markets, even after their exchange rate has highly valued (Mody, Igan, & Fabrizio, 2007). Foreign purchasers often tend to buy higher quality commodity from those countries with a good price in case of clothes export. However since the quality of a product is difficult to quantify, a lot of studies like Sun (2000) & Verhoogen (2007) say that the IQC guarantees high quality in a product. According to world banking enterprise surveys, IQC is more than the enterprises in the unsuccessful countries in most competitive apparel exporting countries. For eg, 62% of businesses in China, 47% in India, 31% in Bangladesh and 21% in Pakistan have IQC compared to just 6% and 9% in Mexico and the Philippines. These statistics thus indicate Managers should invest in innovation and quality of goods, thereby enhancing export output in the clothing industry.

External Ownership

In principle, a business with foreign ownership is more open to exporting its goods than a local company overseas. International companies appear to be more open to the market than international holders, as they have the opportunity to sell more foreign business ties, distribution, modern know-how and technology (Wignaraja 2008). In addition to domestic firms that help them manufacture better exportable products, More skills and experience (herited from international affiliates) are given to foreign owned companies (Blomström&Kokko, 1998; Greenaway & Kneller, 2007). Third, the large operating costs for exports can be afforded by foreign firms and enters

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international markets with internationally known brands easier Local businesses (Athukorala, Jayasuriya, & Oczkowski, 1995). By promoting development in domestic firms, FDI would also generate more competition and productivity in an industry. Such optimistic externalities contribute to improved production, leading to higher export output in effect (Gachino, 2014). With regard to the textile industry, a number of clothing companies in Vietnam, China and Indonesia, in particular or partially, are owned by foreign people from the World Bank Business Surveys. For instance, 23% of companies in Vietnam, 11% of companies in China and 8% of companies in Indonesia are partly or wholly owned by foreign citizens. Nevertheless, only 4% of foreign companies are owned by some very prosperous nations, such as bangladesh, India only has 3% and Pakistan and Sri Lanka have 2%. Two different factors may deter foreign investors from investing in these countries. Firstly, most of these countries are suffering from internal and international political unrest, corruption and poor infrastructure which restrict foreign investment inflows. Second, as a result of the industrial policy of the country, the prevalence of domestic companies in relation to foreign companies may be. Foreign investors, for example, were prevented from investing Export Manufacturing Area in Bangladesh (EPZ) until 2006 (Dunn, 2008). to invest in this industrial site with high potential, local businessmen were given priority. However, foreign investment strategy in 2006 has been revised, with substantial rises in foreign investment anticipated after 2006. In general, if foreign investment can be attracted by countries are as India, Bangladesh, Sri Lanka & Pakistan these countries can significantly boost their clothing exports.

Access to Local Input Materials

to increase clothing industry export output, the availability of domestical input materials such as cotton & yarn processing, tissues & knitting, dye & printing. In principle, the use of domestic raw materials can be related to the rise in clothing exports two main factors. Firstly, Clothing prices are highly susceptible to fluctuations in raw materials 'foreign market prices. Buyers and traders of international garments typically tend to import products from countries isolated by the distribution of raw materials. Second, the independence of a country on raw materials decreases lead times, positively affecting the clothing industry's export efficiency. The lead-time of China and India, compared with Bangladesh, is estimated to be lower (at least 15 days to 30 days) as they are self-sufficient in input production (Berg, Hedrich, Kempf, & Tochtermann, 2011). The share of raw materials used for the preparation of finished clothing in 10 countries are shown in Figure 4. Every successful country, with the exception of Bangladesh and Vietnam, uses at least 80% of the input content, respectively, which uses 55% and 41%. In Mexico and the Philippines respectively, 75% and 63% of raw materials come from domestic resources. The developing and improving the rearward relationship in the clothing industry should therefore be the focus of these countries.

Working Environments

International media have also reporting on industrial incidents in the garment industry, which challenge the health and working conditions of such workers. Ali Enterprises 'factory fires The world's top three work disasters are Pakistan, Tazreen Fashions in Bangladesh in 2012 and the collapse of Rana Plaza in Bangladesh in 2013. Those are some of the most significant industrial incidents in the history of industrialisation, resulting in the loss of thousands of workmen. Such tragedy have sparked concerns about the ethical trade of textile goods around the world, along with a range of other smaller stories and unreported events. While these incidents have exceeded any record of the

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past, dangerous working conditions of different severity for millions of clothing workers were part of daily life. Bad salaries, long hours of work, insufficient weekly breaks, job security and occupational health threats have put the workforce at risk of losing their lives (Mridula & Khan, 2009; Kamal, Billah & Hossain, 2010). In addition to rising pressures from local and global media, foreign buyers and traders are also increasingly aware of and are now more directly discussing the question of working conditions in supply factories. The chapters on India, Pakistan, Bangladesh and Vietnam at Acevedo and Robertson (2012) show that improved working conditions and low-cost and preferential market access have now become one of the main competitive factors. Work conditions are especially bad among the productive states in Vietnam, Bangladesh, Pakistan and India and the rapid rise in exports of equipment to them may be vulnerable unless appropriate steps are taken to improve quality of work (De Neve, 2009; Cox, 2015; Alam et al., 2017). Without the respective governments of these nations, however, they can not independently improve working conditions. In order to guarantee better working conditions in the textile industry, every major stakeholder in the industry should work together – including the owners of factories, Government, foreign buyers, and customers.

Table 1: Textiles Industry Share in India GDP & GDP (at basic price) (rs. in crore) Manufacturing Sector

Year	**% share of Textile Industry to GDP of manufacturing Sector**	**% share of Textile Industry to India's GDP**
2014-15	13.50	2.33
2015-16	12.43	2.22
2016-17	12.65	2.30

Source: National Accounts Statistics, 2018.

Objective of the study is to examine the export performance of India in textile and clothing sector during the period under study and to review the impact of post quota era (post 2005) preferential access by European Union and other developed countries to Bangladesh on Indian textile sector. It's an empirical study. The purpose of this study is to analyze India's textile and clothing sector's current position, especially in the post-quota era. Accordingly, the researcher is making an attempt to study the sector conveniently during the time before and after MFA.

III. LITERATURE REVIEW

Ramaswamy(2000), discovered that India's comparative advantage in the textile industry was successful only in meeting limited export orders, and suggested moving up the RMG value chain and building a product line to include all required and normal clothing and synthetic fibre. Through restoring the production base, the industry will improve quality, create niche markets abroad and increase the value added and supply chain, so that huge investment and access to imported inputs are needed**.** Banik and Bandopadhyay(2000)analyzes that the competitiveness of With the exception Certain woven textiles and knitted garments of cotton, Improved all other Indian textiles. Bhatia, 1997. Indicates that India's fashion exports have seen high growth rates since the beginning of the 1980s. The survey shows that competition and development both come under a more protective regime. The study indicates that India should make more trade for synthetic garments. It also indicates the need to diversify and move non-quota products from commodity. Elbehri (2004) claims that the US showed a significant Reduced imports of domestic products,

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however increased demand and significant welfare. The study uses the GTAP model to examine the effect of MFA exclusion on the cotton and textile industries.

IV. DATA SOURCE

The study is based on the data collected from secondary sources. The secondary data is collected from the website of world integrated trade solutions(WITS). The data is collected for the period 1992-2018.The empirical analyses for the research study have been made on the export performance of India after the abolition of MFA and also with reference to Bangladesh using the paired t test and trade intensity index.

V. RESEARCH METHODS

We used paired t tests to determine whether there is a significant difference between Indian exports in the quota era and post-quota periods. Trade Intensity Index is used for indicating the trade flow between India and Bangladesh in the post quota era(2005). That is the ratio of the share of a trading partner to the total exports in a country / region and the share of foreign exports. The ratio of a trading partner to total exports of a country / region and the share of world exports to the same trading partner. The estimate consists of:

$$XII_{ij} = \frac{x_{ij} / X_{iw}}{x_{wj} / X_{ww}}$$

Where x_{ij} is India I's export dollar value to Bangladesh (j),X_{iw} is the export dollar value of India and the world, x_{wj} is the dollar value of world exports to Bangladesh and X_w is the world's export dollar value of Bangladesh. An index of more than one indicates that, despite its significance in global trade, trade flows among nations and regions are larger than anticipated.

VI. ANALYSIS AND FINDINGS

Paired t-Test

To assess the changes in Indian textile industry's export output, we have implemented paired t-test. The results show that mean and standard deviation for the pre-MFA phase-out period are 10410838.74 (value in US$) and 2973127.592 (value in US$), respectively. Likewise, the mean and standard deviation for post-MFA phase-out period are 31030139.67 (US$ value) and 7600440.451 (US$ value) respectively. This means an increase in average exports and a greater variation was noticed after phase-out of MFA. There is a high degree of positive correlation (0.756) between the pre-and post-MFA phase out exports. Between the exports before and after MFA, there is a high degree of good contact (0,756). At 1 percentage point, the value obtained is (13.055). It shows that the Indian textiles and apparel industry's export output is improving considerably. Please be informed that the existing rates are these figures.

Table 2: Paired Samples Statistics

Quota Phase		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Prequota	10410838.7431	13	2973127.59182	824597.22929
	Postquota	31030139.6677	13	7600440.45120	2107982.90484

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Table 3: Paired Samples Correlations				
		N	**Correlation**	**Sig.**
Pair 1	Prequota & Postquota	13	.756	.003

Table 4: Paired Samples Test									
		Paired Differences					**t**	**df**	**Sig. (2-tailed)**
		Mean	**Std. Deviation**	**Std. Error Mean**	**95% Confidence Interval of the Difference**				
					Lower	**Upper**			
Pair 1	**Prequota – Postquota**	**-20619300.92462**	**5694715.27864**	**1579429.84125**	**-24060582.92630**	**-17178018.92293**	**-13.055**	**12**	**.000**

VII. TREND IN EXPORT OF TEXTILES AND CLOTHING FROM INDIA AND BANGLADESH

Figure 1shows the trends of exports of India from 1992-2018. The time series data is used for projecting the trends of India.

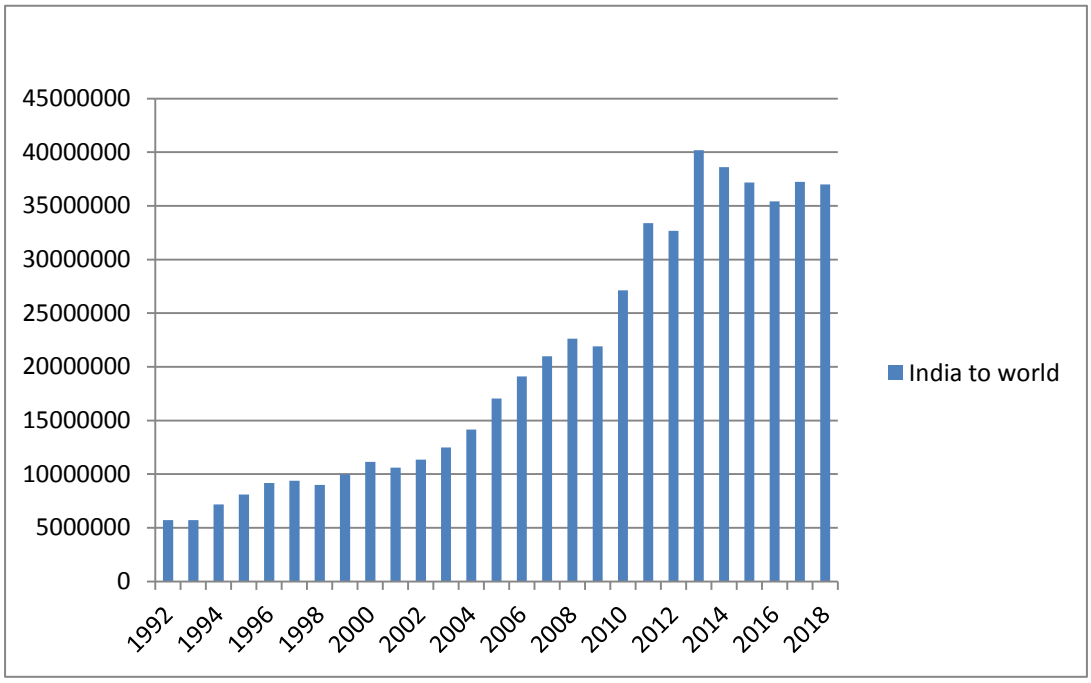

Figure 1: Exports from India to World during 1992-2018 (in USD)

The data has been analyzed for the period from 1992 to 2018for calculating the real projection based on values exported pre MFA and post MFA. Figure 1 shows that the exports value of India have steadily increased after abolition of quota era(after 2005).

Figure 2 shows the trends of exports of India from 1992-2015. The time series data is used for projecting the trends of Bangladesh.

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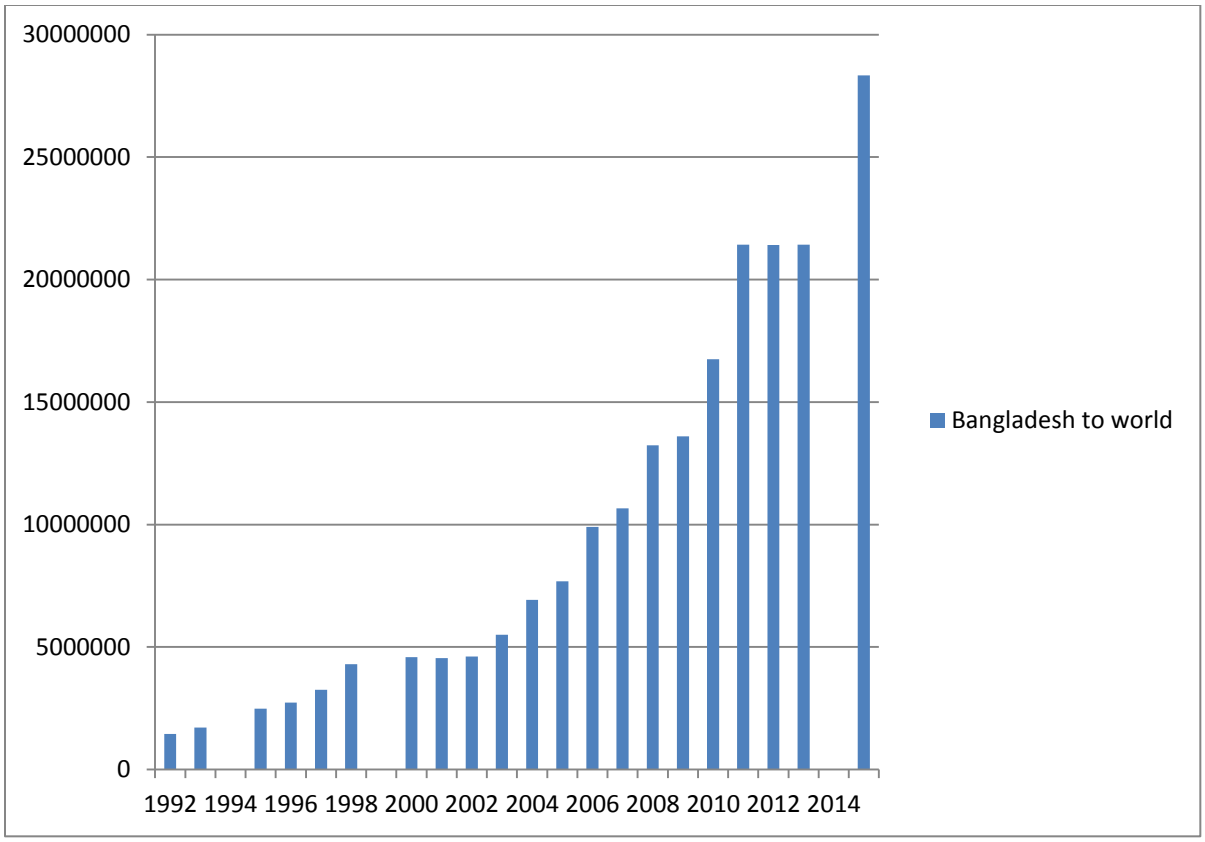

Figure 1: Exports of Bangladesh to world (value in US $)

In figure 2 the data has been analyzed for the period 1992to 2015 for the calculating the real projection based on values exported pre MFA and post MFA. The figure shows that the exports value of Bangladesh have increased after abolition of quota era(after 2005). On comparing both figures it has been found that exports of both the countries have increased after elimination of quota, also the figure1 and figure 2 shows that India has exported more than Bangladesh post quota era.

VIII. Analysis Of Tarde Flow Between India And Bangladesh From 1992-2018

The Multi-Fiber Arrangement was opposed to developing nations ' interests by limiting their exports to large markets such as the US and the EU. However, it also supported developing countries in supplying those niche markets for their goods with a limited quota. Since MFA was a bilateral agreement, a number of trade was given, irrespective of how competitive each country is against its competitors. Therefore, greater market access (with phase-out of MFA) would only be a positive for the most successful countries. Successful exports can be measured in several ways. Some of the indices include: market share, relative price ratio, relative productivity ratio and trade strength index. A product's competitiveness is defined as 'to compete under free market conditions.' To determine the following table, trade intensity index is calculated to show the bilateral trade flow between India and Bangladesh. To be evaluated, the table below calculates the trade intensity index for the bilateral trade flow between Bangladesh and India.

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Table 5: Textile Exports post quota era(post 2005)Trade Intensity Index (In US $)

Year	India to world	India to Bangladesh	World to Bangladesh	Total exports of world	Trade intensity index
2005	17034129.28	338591.69	2971637.27	541947000.7	3.625078175
2006	19102399.23	368493.18	3292482.7	595435106	3.488610406
2007	20969200.88	355696.55	3275156.24	659694782	3.416715352
2008	22610616.94	837516.42	4440580.05	690716886.6	5.761575911
2009	21912922.56	493456.91	3834246.7	592786753.7	3.481507771
2010	27127764.61	1099986.28	5962096.61	682779764.5	4.64360096
2011	33374090.75	1138508.88	7496802.69	803370956.1	3.655670347
2012	32682933.17	1652055.7	7946119.43	785578529.3	4.997331699
2013	40191440.82	2000308.71	9192751.8	843631505.8	4.567417445
2014	38597665.89	2085376.42	9733171.8	847945817.3	4.706923384
2015	37161710.92	2084275.19	10241397.42	812149405.5	4.447705976
2016	35429243.22	1919230.85	10448615.14	760874945.7	3.94475369
2017	37220870.46	2259789.32	11785147.07	793156180.4	4.086063696
2018	37010956.23	2493002.83	13197761.89	787803403.6	4.020777396

Table 5 shows that trade intensity index is greater than one for the period 2005-2018. It shows that the trade flow between Bangladesh and India is larger than expected. It can be concluded, after evaluating the trade volume between India and Bangladesh that India's trade with the Bangladesh is in good flow. India's trade strength never dropped below unity in the study period from 2005 to 2018 (post quota era), which means that both countries have a good trade relationship compared to global trade.

IX. CONCLUSION

This study first examined the growth of the global clothing industry by emphasizing its progress, economic value and performance post-MFA. It is evident from the study that this sector, as well as being the starter sector, is one of the oldest in the global industrialization cycle. In terms of foreign currency earnings and jobs generation, the industry is especially important from an economic perspective, especially for many developing countries. Under various trade agreements the industry was strictly regulated until 2004 by quantitative restrictions. Since 2005, however, there have been no quota limits on the industry and the world clothing market was free to all. The competition in exports of clothing increased considerably during the quota-free period, while certain developed nations, including Bangladesh, Vietnam and Cambodia, grew, with some of them struggling to absorb the demand shock, such as Mexico and the Philippines. Factor analysis that contributed to the growth of apparel sports Like MFA periods indicates that the potential contributors are low employment, size, quality of product, foreign ownership, local inputs availability, production of new products, preferential market access and working conditions. In order to successfully export in apparel during the aftermath of the MFA era the analyzes presented in this paper give new insights to policymakers as well as management of these exporting countries. A key policy issue is that the export of vessels for vulnerable suppliers, including India, Burma, Cambodia, Vietnam & Pakistan, is usually short-lived and highly sensitive to the global economic and political climate. Such countries 'policymakers therefore need to follow up on and enforce industrial upgrading policies in order to promote sustainable growth in their exports.

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Upgrading in and between industries can be performed as industrial upgrades, which are defined as movement to higher-value-added activities in global value chains (GVCs). The intra-industry change can be obtained by growing functional capabilities, including the growth of reversible connectivity, the manufacture of more sophisticated goods and the diversification of export markets. The inter-industry change can also be accomplished through the transformation from labor-intensive and value-added industries (e.g. apparel) to less labor-intensive and more value-added industries (e.g., electrical, electronic and automotive) and capital-intensive exports. In order to ensure economic modernization in those nations, technological innovation, infrastructure growth and skilled labor should be at the center of policy choices. This paper is making a major step towards understanding the development of the clothing industry during the post MFA period. Further quantitative economic analysis can be carried out, for example, as supplementary information becomes available, clothing export growth determinants in manufacturing countries are established. In addition, The working conditions of the textile industry in large countries producing garments are also extensively comparatively studied.

REFERENCES

[1] Banik N. and Bandopadhyay S. (2000), "Cotton Textile Industry in India, in the Wake of MFA Phase-Out", *RGICS Working Paper Series No. 9, Rajiv Gandhi Institute for Contemporary Studies, New Delhi.*

[2] Bhatia S. (1997), "Indian Garments Industry in the Post- MFA Period", *Occasional Paper No.7, Indian Institute of Foreign Trade, New Delhi*

[3] Bhattacharyya B. (1999), "Non-Tariff Measures on India's Exports- an Assessment", *Occasional Paper No.16, Indian Institute of Foreign Trade, New Delhi*

[4] Chatterjee S., Mohan R. (1993), "India's Garment Exports", *Economicand Political Weekly,* Volume No.28, Issue 35, 1993, pp.95-119

[5] Elbehri A. (2004), "MFA Quota Removal and Global Textile and Cotton Trade: Estimating Quota Trade Restrictiveness and Quantifying Post-MFA Trade Patterns", *Paper prepared for 7th Annual Conference on Economic Analysis, Washington D.C*

[6] Yunus M. and Yamagata T. (2012), "The garment industry in Bangladesh", *Chapter 6, Experience of Asia and Africa (Interim Report), Chousakenkyu Houkokusho, IDE-JETRO*

[7] Garga, Pawan Kumar (2002), "Export of India's Major Products- Problems and Prospects", *New Century Publications, New Delhi,* pp.88-115

[8] Manoj, G, Muraleedharan, S, (2016). Impact of Multi Fibre Agreement (MFA) Phase out on Indian Textile Exports. *Pacific Business Review International,* 8(8), 109-119.

[9] Bhagwati, J.N. and Srinivasan T.N. (1975), "Foreign Trade Regimes and Economic Development: India", *New York, Columbia University Press.*

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