A Study on

Prospect of Textile & Garments sector in Bangladesh

Textile & Garments

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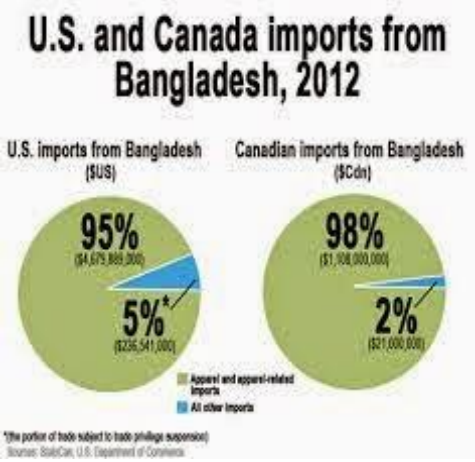
Prospects of Garments in Bangladesh:

The phase-out of the quota is likely to have particular significance for the export of Bangladesh apparels to the US market. MFA's impacts are not much related to a question of our $2 billion exports to the USA; or the $5 billion worth of exports made by Bangladesh globally. Rather, it is a question of how Bangladesh's entire economy will be affected by the issue of quota phase out. RMG exports constitute about 75% of Bangladesh's annual export and provide direct employment to 1.5 million females and indirectly an additional 8 to 10 million people. The global clothing trade is evolving on a continuous basis and that the phase out of quota restrictions and forming of trade blocs has become a reality. Moreover Bangladesh is convulsed by fierce class struggles, centered on the country's garment industry. Many tens of thousands of workers have gone on strike, blocked roads, attacked factories and other buildings, demonstrated, fought the police and rioted in the streets. Every day comes news of fresh strikes in a variety of industries —mainly the ready-made garment (RMG) sector, but also mill workers, river transport workers, rail workers, journalists, lecturers and teachers. The revolt began on 20 May2006 with garment workers' strikes in the Bangladeshi capital Dhaka — beginning in a small number of factories over issues including the arrest of worker activists and non-payment of wages. By 23 May2006 this struggle had been generalized, with action at a much larger number of factories and demonstrations across the city. A massive army and police presence around garment factories, in some cases completely blockading and creating check points for entry to Export Processing Zones, temporarily calmed things; but strikes continued to take place at numerous factories, leading to solidarity strikes from nearby workplaces and semi-spontaneous demonstrations.



INTRODUCTION

The tremendous success of readymade garment exports from Bangladesh over the last two decades has surpassed the most optimistic expectations. Today the apparel export

sector is a multi-billion-dollar manufacturing and export industry in the country. The overall impact of the readymade garment exports is certainly one of the most significant social and economic developments in contemporary Bangladesh. With over one and a half million women workers employed in semi-skilled and skilled jobs producing clothing for exports, the development of the apparel export industry has had far-reaching implications for the society and economy of Bangladesh.

LITERATURE REVIEW

Several authors have analyzed aspects of the garment industry in Bangladesh. Of the various aspects of the industry, the problems and the working conditions of female workers have received the greatest attention. There are several studies including the Bangladesh Institute of Development Studies (BIDS) study by Salma

Chowdhury and Protima Mazumdar (1991) and the Bangladesh Unnayan Parisad (1990) study on this topic. Both of these studies use accepted survey and research methodology to analyze a wealth of data on the social and economic background, problems and prospects of female workers in the RMG sector. Professor Muzaffar Ahmad looks at the industrial organization of the sector and discusses robustness and long-term viability of apparel manufacturing in Bangladesh. Wiigton (2000) provides a good overview of this industry, especially the developments in the early years. One of the few studies on the Bangladesh apparel industry to be published in a reputed journal in the U.S. is that of Yung Whee Rhee (2003) who presents what he calls a “catalyst model” of development. The Bangladesh Planning Commission under the Trade and Industrial Policy (TIP) project also commissioned several studies on the industry. Hossain and Brar (2004) consider some labor-related issues in the garment industry. Quddus (2006) presents a profile of the apparel sector in Bangladesh and discusses some other aspects of the industry. Quddus (2006) presents results from a survey of apparel entrepreneurs and evaluates the performance of entrepreneurs and their contribution to the success of this industry. Islam and Quddus (2006) present an overall analysis of the industry to evaluate its potential as a catalyst for the development of the rest of the Bangladesh economy.

DATA COLLECTION

For the assessment, both primary and secondary data was collected. For this we interviewed 5 garments company through using a structured questionnaire. Personal interview technique was applied while fill up the questionnaire on respondents. The sample garments companies who are interviewed are given:

Name of the Garments Company
Millenium Garments Limited
RAHAN GARMENTS (PVT) LTD
ALAM FIBER IMPEX Ltd.
FABRICS AND COMMODITIES EXCHANGE LTD.
TOKIO MODEL LIMITED.

Sampling plan

Garments Company of Dhaka are constitutes as the study area, because of convenience of the field work and easy communication. For the crisis condition of Bangladesh it was difficult for us to collect data form more samples. Above it, we go for different garments company and the company who intended to talk with us is taken as a sample. I tried to get rid of any kind of personal biasness and taking true information.

Data analysis

We analyzed the data by averaging the response of the sample. Most of the analysis and discussions of this study have been made on the basis of the information obtained from the interview with the questionnaires. Besides, observation of the interviewers has also been an important component of analysis and discussion.

Scope of the Study

This study has focused upon the various problems regarding with the garments company and the prospect of these industries. We have taken 5 garments company to gather data on the present situation of the garments industries as well as problem regarding and the future of the industries.

Contribution of the RMG Industry

RMG business started in the late 70s as a negligible non-traditional sector with a narrow export base and by the year 1983 it emerged as a promising export earning sector; presently it contributes around 75 percent of the total export earnings. Over the past one and half decade, RMG export earnings have increased by more than 8 times with an exceptional growth rate of 16.5 percent per annum. In FY06, earnings reached about 8 billion USD, which was only less than a billion USD in FY91. Excepting FY02, the industry registered significant positive growth throughout this period

In terms of GDP, RMG's contribution is highly remarkable; it reaches 13 percent of GDP which was only about 3 percent in FY91. This is a clear indication of the industry's contribution to the overall economy. It also plays a pivotal role to promote the development of other key sectors of the economy like banking, insurance, shipping, hotel, tourism, road transportation, railway container services, etc.

A 1999 study found the industry supporting approximately USD 2.0 billion worth of economic activities (Bhattacharya and Rahman), when the value of exports stood at a little over USD 4.0 billion.

One of the key advantages of the RMG industry is its cheap labor force, which provides a competitive edge over its competitors. The sector has created jobs for about two million people of which 70 percent are women who mostly come from rural areas. The sector opened up employment opportunities for many more individuals through direct and indirect economic activities, which eventually helps the country's social development, woman empowerment and poverty alleviation.

Exporting Condition of Garments Industry

The Ready-Made Garments (RMG) industry occupies a unique position in the Bangladesh economy. It is the largest exporting industry in Bangladesh, which experienced phenomenal growth during the last 20 years. By taking advantage of an insulated market under the provision of Multi Fibre Agreement (MFA) of

GATT, it attained a high profile in terms of foreign exchange earnings, exports, industrialization and contribution to GDP within a short span of time. The industry plays a key role in employment generation and in the provision of income to the poor. Nearly two million workers are directly and more than ten million inhabitants are indirectly associated with the industry. Over the past twenty years, the number of manufacturing units has grown from 180 to over 3600. The sector has also played a significant role in the socio-economic development of the country.

The Agreement on Textile and Clothing (ATC) introduced in 1994, aimed at bringing textiles and clothing within the domain of WTO rules by abolishing all quotas by the end of 2004. It provides an adjustment period of 10 years, so that countries affected by the MFA could take the necessary steps to adjust to the new trading environment. Liberalization of trade following the Uruguay Round agreement presents opportunities as well as challenges for a developing country like Bangladesh in RMG sector. In the Post-Uruguay Round period, traditional instruments of trade policy such as tariffs, quotas, and subsidies will become less feasible and less relevant. In a liberalized trade regime, competition among textiles and clothing exporting countries is likely to become intense. The objective of this paper is to identify the prospects of RMG industry after the MFA phase out by analyzing the current scenario along with different policy measures and the available options in order to be more competitive in the new regime.

The export made by Garments Industries of Bangladesh is improving year after year except some of the year. Strike, layout, shutdown of company, political problem, economic problem, inflation etc. are the prime cause of decreasing export in this important sector. But above it, Readymade Garments Industries is the leading sector in export sector.

LEADING EXPORTER

RAHAN GARMENTS (PVT) LTD

It was founded in 1993. Rahan started manufacturing and exporting from 1995. Manufacturer and exporter of all type of apparels, specialized in under garments, sportswear and knit & woven garments. The total working area comprises of 29,000 square feet in one floor. Their plant and office is located in the central part of the city. This give security and convenience for the transportation of goods and all kinds of supports needed for daily production and financial facility.

TOKIO MODEL LIMITED.

The company was established in 1990 as a Public Limited Company. The company authorized capital was in US $ 12.7 Million. Its production capacity is 29,000 Doz/ Month Approx. Oven & Knitwear Items. More than 750 employees participate here in the manufacturing activities. It is another leading Garment Company of our country.

Fabrics & Commodities Exchange Ltd

Fabrics & Commodities Exchange Ltd's a well reputed Garments Exporters in Bangladesh. Accordingly as a first step of their customer familiarization process, they would like to brief with their business process and how this could be of any interest to their organization. Based in Dhaka, Bangladesh they manufacture over 200,000 units a month including Knit, Woven and Sweater. A highly qualified team of QA foresees the manufacturing process. Reliability and cost effectiveness are on the utmost priority while we provide value added services to our vast growing client list.

ALAM FIBER IMPEX LIMITED

Alam Fiber Impex is one of the leading Exporter and Manufacturer's agents in Bangladesh. It was established in 1988. It basically works with the product of-RAWJUTE (JUTE FIBER) JUTE YARN / JUTE TWINE JUTE CLOTH (HESSIAN / CBC) JUTE BAG / JUTE SACKS HANDICRAFTS READY-MADE GARMENTS. They demand they offer reasonable price for their products. There stay some motto with which Alam Fiber Impex willing to run- We maintain quality properly, we never compromise with quality, Timely shipment is our business ethics, and Customer's satisfaction is our motto.

PROSPECTS OF THE RMG INDUSTRY

Despite many difficulties faced by the RMG industry over the past years, it continued to show its robust performance and competitive strength. The resilience and bold trend in this MFA phase-out period partly reflects the imposition of 'safeguard quotas' by US and similar restrictions by EU administration on China up to 2008, which has been the largest supplier of textiles and apparel to USA. Other factors like price competitiveness, enhanced GSP facility, market and product diversification, cheap labor, increased backward integration, high level of investment, and government support are among the key factors that helped the country to continue the momentum in export earnings in the apparel sector. Some of these elements are reviewed below.

Market Diversification

Bangladeshi RMG products are mainly destined to the US and EU. Back in 1996-97, Bangladesh was the 7th and 5th largest apparel exporter to the USA and European Union respectively. The industry was successful in exploring the opportunities in markets away from EU and US. In FY07, a successful turnaround was observed in exports to third countries, which having a negative growth in FY06 rose three-fold in FY07, which helped to record 23.1 percent overall export growth in the RMG sector. It is anticipated that the trend of market diversification will continue and this will help to maintain the growth momentum of export earnings. At the same time a recent WTO review points out that Bangladesh has not been able to exploit fully the duty free access to EU that it enjoys. While this is pointed out to be due to stringent rules of origin (ROO) criteria, the relative stagnation in exports to EU requires further analysis.

Product Diversification

The growth pattern of RMG exports can be categorized into two distinct phases. During the initial phase it was the woven category, which contributed the most. Second phase is the emergence of knitwear products that powered the recent double digit (year-on-year) growth starting in FY04. In the globalized economy and ever-changing fashion world, product diversification is the key to continuous business success. Starting with a few items, the entrepreneurs of the RMG sector have also been able to diversify the product base ranging from ordinary shirts, T-shirts, trousers, shorts, pajamas, ladies and children's wear to sophisticated high value items like quality suits, branded jeans, jackets, sweaters, embroidered wear etc. It is clear that value addition accrues mostly in the designer items, and the sooner local entrepreneurs can catch on to this trend the brighter be the RMG future.

Backward Integration

RMG industry in Bangladesh has already proved itself to be a resilient industry and can be a catalyst for further industrialization in the country. However, this vital industry still depends heavily on imported fabrics. After the liberalization of the quota regime some of the major textile suppliers Thailand, India, China, Hong Kong, Indonesia and Taiwan increased their own RMG exports.

If Bangladesh wants to enjoy increased market access created by the global open

market economy it has no alternative but to produce textile items competitively at home through the establishment of backward linkage with the RMG industry. To some extent the industry has foreseen the need and has embarked on its own capacity building.

Flow of Investment

It is plausible that domestic entrepreneurs alone may not be able to develop the textile industry by establishing modern mills with adequate capacity to meet the growing RMG demand. It is important to have significant flow of investment both in terms of finance and technology. Figure 3 indicates that the investment outlook in this sector is encouraging, although the uncertainties before the MFA phase-out period caused a sluggish investment scenario. In part the momentum in the post-MFA phase-out period is indicative of the efforts underway towards capacity building through backward integration. This is evident in the pace of lending to the RMG sector and in the rising import share of RMG related machinery. However further progress would be necessary to improve and sustain competitiveness on a global scale.

Policy Regime of Government

Government of Bangladesh has played an active role in designing policy support to the RMG sector that includes back-to-back L/C, bonded warehouse, cash incentives, export credit guarantee scheme, tax holiday and related facilities. At present government operates a cash compensation scheme through which domestic suppliers to export-oriented RMG units receive a cash payment equivalent to 5 percent of the net FOB value of exported garments. At the same time, income tax rate for textile manufacturers were reduced to 15 percent from its earlier level for the period up to June 30, 2008. The reduced tax rates and other facilities are likely to have a positive impact on the RMG sector.

Infrastructural Impediments

The existence of sound infrastructural facilities is a prerequisite for economic development. In Bangladesh, continuing growth of the RMG sector is dependent on the development of a strong backward linkage in order to reduce the lead time. However,

other factors constraining competitiveness of Bangladesh's RMG exports included the absence of adequate physical infrastructure and utilities.

Labor Productivity

The productive efficiency of labor is more important determinant for gaining comparative advantage than the physical abundance of labor. In Bangladesh, the garment workers are mostly women with little education and training. The employment of an uneven number of unskilled labors by the garment factories results in low productivity and comparatively more expensive apparels. Bangladesh labor productivity is known to be lower when it compared with of Sri Lanka, South Korea and Hong Kong. Bangladesh must look for ways to improve the productivity of its labor force if it wants to compete regionally if not globally. Because of cheap labor if our country makes the labor productivity in the apex position, then we think the future of this sector is highly optimistic.

Research and Training

The country has no dedicated research institute related to the apparel sector. RMG is highly fashion oriented and constant market research is necessary to become successful in the business. BGMEA has already established an institute which offers bachelor's degree in fashion designing and BKMEA is planning on setting up a research and training institute. These and related initiatives need encouragement possibly intermediated by donor-assisted technology and knowledge transfer. A facilitating public sector role can be very relevant here.

Supportive Government Policy

In contrast to the public sector-led import-substituting industrialization strategy pursued during the first few years after independence, the industrialization philosophy of the government changed rather dramatically from the late 1970s when the emphasis was on export-oriented growth to be spearheaded by the private sector. Towards this end, various policy reforms were implemented in the 1980s and 1990s. Some of these reformed policies contributed considerably to the growth of the RMG industry in Bangladesh.

During the 1980s, a number of incentives were introduced to encourage export

activities. Some of them were new like the Bonded Warehouse Facility (BWF), while others like the Export Performance License (XPL) Scheme 37 were already in operation and were improved upon. Also, rebates were given on import duties and indirect taxes, there were tax reductions on export income, and export financing was arranged. Under the XPL scheme, exporters of non-traditional products received import licenses for specific products over and above their normal percentage allotment based on the f.o.b. value of their exports. Under the Duty Drawback System, exporters of manufactured goods were entitled to get refund of duties and taxes paid on imported inputs used in export production, and also all excise duties paid on exported finished goods. For certain fast-moving items such as RMG, a notional system of duty payments was adopted in 1982-83. Under this system, exporters were exempted from paying duties and taxes on imports used in export production at the time of importation, but were required to keep records of raw and 21packaging materials imported. The duties and taxes payable on the imports were kept in a suspense account. Liabilities to pay the amounts in suspense were removed on proof of exports.

The discussion in this section clearly points to the positive contribution made by policy reforms to the growth of the RMG industry in Bangladesh. In particular, two policies– the SBW facility and the back-to-back L/C system- led to significant reduction in cost of producing garments and enhanced competitiveness of Bangladesh's garments exports. It also allowed garment manufacturers to earn more profit which, when necessary, could be used to overcome difficulties arising from weak governance. Furthermore, poor governance, reflected in the leakage of duty-free imported fabrics in the domestic market, paradoxically enough also helped the garment manufacturers to earn extra 'profit' and thereby enabled them to absorb the 'high cost of doing businesses – a fall out of bad governance.

Prospects of Textile in Bangladesh:

Introduction

Export led growth strategy is not paying off equally to all developing countries and the hypothesis of a 'fallacy of composition' is getting more acknowledgement now a days

(UNCTAD, 2002; Razmi & Blecker, 2004). Addressing the East Asian (Korea, Hong Kong, Singapore, and Taiwan) rapid growth, Cline (1982) opined against a sure success of similar model in other developing countries stating that "generalization of the

East Asian model of export-led growth across all developing countries would result in untenable market penetration into industrial countries." Kaplinsky (1999, p. 2) also supported the view inserting that most of the East Asian economies "locked themselves into a growth trajectory in which specialization in factor and product markets associated with low barriers to entry led to high rates of competition." Though empirical finding like Kwan and Kwok (1996) supported China's growth as being "export-led" type, Boltho (1996) found that Japan's economic growth was mainly due to the domestic forces rather than foreign demand. The possibility of demand-side constraints on export-led growth is more vivid when we concentrate in a single industry like clothing and textile (CT, hereafter). In fact, impact analysis of apparel export on developing countries gives us a better picture of the fallacy, as it is a manufacturing product involving modern technology. Consistency of demand, market separation for heterogeneous CT items, and a healthy share of world export earnings captured by CT industry have attracted us to examining its contribution to economic growth of major Asian CT exporting countries, focusing Bangladesh.

Literature Review

~~Walmsley and Hertel (~~2001) analyzed the effects of China's accession to the WTO over the periods of 1995 to 2020 using the dynamic GTAP model applied to 19 regions and 22 commodities. They showed while the world as a whole would benefit from China's accession, its competitors (such as South Asian countries) in the labor-intensive apparel industry will definitely be the losers. The relationship between foreign trade and economic growth, in the contrary, is getting more attention now a days. Specially, dependency of developing countries on imported raw materials along with capital goods and intermediate inputs builds an inner cyclical relationship between exports, imports and economic growth (Hossain et.al. 2009). From the classical and neo-classical schools to new trade theories, the positive impact of foreign trade on economic growth has been supported for its constructive rule in enhancing resource efficiency, productivity, capacity

utilization, scale economies, capital accumulation, techonlogy diffusion, income and substitution effect etc. (Krueger, 1978; Kavoussi, 1984;Chen, 2009). Thus, apart from the questionable existence of export led growth, there are scopes to be curious more about the relationship between foreign trade and economic growth in developing countries. A handful of studies such as Baharumshah and Rashid, 1999; Ramos, 2001; have established the export led growth hypothesis backed by supportive import growth.

Trade liberalisation was an welcoming policy for Bangladesh after decades of slow growth, contractionary fiscal policy, inefficient financial management, and a weak industrial base etc. initiated by inward looking import substituion policy in her early days. The outward looking trade strategy incorporated in the early eighties, mainly by relaxation of tariff and non-tariff barriers and capital market liberalization in the early ninties are marked with a strong upward trend of growth rate, thereafter along with higher trade, higher capital inflow and a stronger manufacturing base led by the CT industry. Along with tariff and non-tariff liberalization, measures have also been taken to enhance exports mainly to facilitate the CT industry. In addition to duty free import facilities for inputs, tax exemption, cash incentives, income tax rebate, and back-to-back L/Cs, there are more intensive measures like bonded warehouse facility, tax holidays, export credits, repatriation of profits of foreign investors specially designed for CT industry. The benefit of such policies is realized straight way. In the period 1992-2008 the compound trade growth rate was raised to 9.38 with an export growth rate of 10.33 and an import growth rate of 8.78 (Hossain et. al. 2009, BBS and Bangladesh Export

Promotion Bureau). The CT exports contributed about 80 percent of Bangladesh's total manufacturing exports. But with services accounting for about 52 percent of our GDP compared to 19 percent by agriculture and 29 percent by industry (WDI 2011) it is obvious that exports are only a part of the growth dynamics in Bangladesh. Also in addition to a narrow export base, we are lacking market diversification of our export items and imports are also sourced from a few countries (Hossain et. al. 2009, BBS, 2009; EPB, 2009).Table 1(see appendix) shows the dynamics of three decades averaged growth rates of GDP per capita and its three major sectors (agriculturen, industry and service) and it compares manufacturing sectors contribution to industry and in turn to GDP per capita growth. It is evident from table 1 that industry growth rate is the driving force of the per capita GDP grwoth. It is also noteable that industrial growth rate is driven by the manufacturing growth rates and CT value added share in manufacturing is almost 50 percent (WDI 2011). The share of CT exports in merchandise trade is almost 80 percent (Table 1). This indicates an excessive dependency of Bangladesh's industrial sector on manufacturing sector at the same time
an excessive dependency of exports earning on CT. This also led us to investigating the sustainability of this relationship empirically.

Despite this enormous contribution of CT industry, few studies have been conducted in examining RCA of Bangladesh. Joarder and Hasanuzzaman (2006) used own country RCA index and measured RCA of traded (two digit SITC code) commodities of Bangladesh. They showed that Bangladesh has comparative advantage in fish, vegetables, jute, tea, leather, textile yarn, made up articles and clothing. To the best of our knowledge, there is lack of studies in the literature exploring competitiveness of this industry of Bangladesh among the leading CT exporters in Asia. Our research interest is to explore the growth contribution and competitiveness of Bangladesh's CT industry among the leading CT exporters in Asia. The paper is organized as follows. Section 3 gives an overall review showing Bangladesh's position in world CT market, dynamics of RCA and pair-wise correlation of RCA of Bangladesh economy with Asian competitors and beyond Asia. Section 4 describes methodology to examine the fallacy in the CT industry among the leading Asian CT exporters. Major findings are discussed in section 5. Section 6 concludes.

Top Asian CT Exporters in Global Context

The global trade CT was US$ 852 billion in 2010, which was only US$ 150 billion in 1980 (WTO 2011). One third of this total sales was occured in Western Europe, one third in North America and a quarter in Asia. CT also constituted about seven percent of world total exports at that period generating more than 26.5 million employment worldwide (Euratex 2011). In the late eighties, developing countries took the lead in CT industries and currently they captured 50% of world exports of textile and 70% of clothing. Another salient feature of this potential industry is the rise of Asian countries in the last couple of decades regarding the production and export of CT. Table (2) shows the compartive scenarios of of world's top CT exporters and its dynamics over recent three decades.

It is evident from the Table 2 that world clothing export is now led by China. In 1980, this leading position was secured by the EU. Currenly, the top clothing exporters in the world market after China, according to the order, are EU (27), Hong Kong (China), Turkey, India, Bangladesh, Vietnam, Indonesia, USA, Mexico, Thailand and Pakistan. This postulates the growing strength in clothing exports of a number of Asian countries including Bangladesh.China constitutes almost 31 percent of total world clothing exports where this figure was only 4 percent in 1980. Bangldesh is now the *6th largest* clothing exporter in the world market contributing almost 3.4 percent of the total world exports, a dramatic rise from a meagre no contribution situation in 1980. Among the Asian top clothing exporters, Bangladesh is only lagged by three Asian giants China, Hong kong and India. However, Bangldesh's share in world clothing export is continuously increasing from 0.6 percent in 1990 to 3.4 percent in 2009 (Table 2).

Table 2: World's Leading Clothing and Textile (CT) Exports

Leading Clothing Exporters	Share in World Export (%)				Leading Textile Exporters	Share in World Export (%)			
	1980	**1990**	**2000**	**2009**		**1980**	**1990**	**2000**	**2009**
China	4.0	8.9	18.2	34	EU (27)	49.4	48.7	36.0	29.5
EU (27)	42.0	37.0	26.9	30.7	China	4.6	6.9	10.3	28.3
Hong Kong, China	12.3	14.2	12.2	10.2	Hong Kong China	3.3	7.9	8.5	6.4
Turkey	0.3	3.1	3.3	3.8	United States	6.8	4.8	7.0	4.7
India	1.7	2.3	3.1	3.6	Korea Republic	4.0	5.8	8.1	4.3
Bangladesh	0	0.6	2.6	3.4	India	2.4	2.1	3.5	4.3
Vietnam	-	-	0.9	2.7	Taipei, Chinese	3.2	5.9	7.6	3.7
Indonesia	0.2	1.5	2.4	1.9	Turkey	0.6	1.4	2.3	3.7
United States	3.1	2.4	4.4	1.3	Pakistan	1.6	2.6	2.9	3.1
Mexico	0	0.5	4.4	1.3	Japan	9.3	5.6	4.5	2.9
Thailand	0.7	2.6	1.9	1.2	Indonesia	0.1	1.2	2.2	1.5
Pakistan	0.3	0.9	1.1	1.1	Thailand	0.6	0.9	1.2	1.4

Source: Authors Calculation from WTO 2011

Table 2 also shows that the world's leading exporter of textile is EU followed by China,

Hong Kong, USA, Korea and India. China has successfully captured the second position in the world textile export uplifting its textile export share from a 4.6 percent in 1980 to a 28.3 percent in 2009. Other leading Asian economies in textile exports are Hong Kong, Korea Republic, India, Taipe, Pakistan, Indonesia and Thailand, while Bangladesh stays nowhere close. The revealed comparative advantage (RCA)[i] indices indicating the movements in comparative advantages of major Asian clothing and textile exporting countries are reported in Table 3.

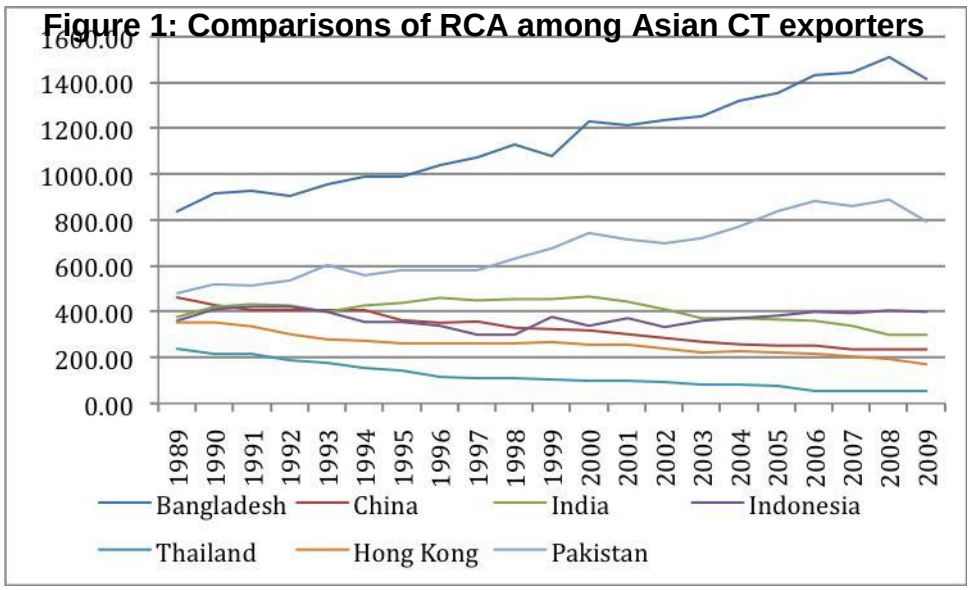
Changes in factor endowment along with changes in trade policies may have provided necessary stimulation to boost up Bangladesh's clothing industry. Despite the global recession, demand for Bangladeshi cheap clothing did not fall. Bangladesh is obviously in a better position regarding the price competitiveness of clothing sector compared to other major Asian clothing exporters. The RCA of Bangladesh's clothing (see Table 3) maintains its increasing trend even though there were global economic downturns in years 1999, 2008-09 etc. and even after the removal of quota restrictions in 2005. However, countries like China and India show a decreasing trend in their respective RCA indices, specially, in the later years probably due to the global economic recession. Comparing RCAs among the top Asian clothing exporters, it can be clearly indicated that export based RCA of Bangladesh is continuously increasing compared to the other Asian competitors

(Figure 1).

Table 3: Revealed Comparative Advantage among the Asian Competitors

Year	Bangladesh	China	India	Hong Kong	Indonesia	Pakistan	Vietnam	Thailand
1989	837.81	462.39	379.30	353.27	361.39	480.70	355.10	238.24
1990	919.69	428.90	423.17	351.39	409.89	519.28	365.32	217.47
1991	927.98	408.08	430.81	333.88	418.97	513.02	354.73	215.27
1992	903.95	405.41	426.06	301.56	421.75	536.34	347.44	185.98
1993	955.53	404.92	397.73	281.59	396.89	603.42	357.59	174.27
1994	991.22	406.15	428.39	274.35	352.59	560.81	369.13	156.69
1995	990.75	363.56	436.83	261.44	352.11	578.58	452.98	145.43
1996	1042.65	352.72	458.44	261.56	339.67	578.89	454.28	113.59
1997	1073.89	353.94	450.49	261.30	312.25	583.35	438.77	108.09
1998	1129.57	328.21	454.88	265.30	299.66	632.82	421.39	110.49
1999	1081.30	322.71	454.30	270.83	379.05	673.41	419.73	103.06
2000	1230.65	314.55	466.19	259.14	339.54	743.28	489.68	96.39
2001	1212.71	298.74	443.66	258.17	373.36	716.61	488.26	97.85
2002	1236.06	280.53	412.25	240.45	333.51	697.77	468.99	89.90
2003	1253.35	268.56	370.32	227.06	357.69	721.56	451.17	81.21
2004	1318.14	254.93	372.43	228.54	373.03	770.54	472.56	79.32
2005	1354.07	248.81	362.74	222.19	380.62	836.87	498.98	73.30
2006	1432.16	250.85	359.51	216.43	401.55	884.59	470.01	67.36
2007	1445.29	244.53	335.66	206.29	394.15	863.04	458.44	56.64
2008	1511.03	236.24	299.08	195.39	403.84	888.85	549.65	56.47
2009	1415.68	235.65	303.94	170.62	401.22	792.39	513.28	54.01

Source: Authors' calculation from WTO 2011



It is also good to check whether RCA of clothing industry of Bangladesh is complementary or competing[ii] with her major trade partners. For Bangladesh's major

Asian competitors- China, India, Indonesia and Thailand, the correlation coefficients are positive and in most of the cases are close to unity as predicted (Table 4a). The highest correlation coefficient value of Pakistan, Indonesia and India indicates their strong rivalry towards our CT in world market. Relatively lower values of the correlation coefficient with China and Thailand postulate a gradual declining competitiveness with Bangladesh.

Table 4: (a) Correlation with Asian contesting countries

	Bangladesh	China	India	Indonesia	Thailand	Hong Kong	Pakistan
Bangladesh	1.00						
China	0.32	1.00					
India	0.77	0.75	1.00				
Indonesia	0.87	0.69	0.88	1.00			
Thailand	0.01	0.88	0.50	0.44	1.00		
Hong Kong	-0.90	0.92	0.58	.04	0.95	1.00	
Pakistan	0.97	-.94	-0.64	0.15	-0.89	-0.87	1.00

Table 4: (b) Correlation with major trade partners beyond Asia

	Bangladesh	USA	EU27	Germany	Belgium	France	UK	Netherland	Italy
Bangladesh	1.00								
USA	-0.92	1.00							
EU27	0.93	-0.85	1.00						
Germany	-0.10	0.15	-0.14	1.00					
Belgium	0.96	-0.91	0.82	-0.08	1.00				
France	0.84	-0.72	0.65	0.02	0.86	1.00			
UK	0.56	-0.38	0.41	0.62	0.57	0.71	1.00		
Netherland	0.32	-0.15	0.15	0.69	0.34	0.60	0.95	1.00	
Italy	0.77	-0.66	0.59	0.46	0.79	0.81	0.93	0.81	1.00

Table 4(b) shows correlation coefficients of clothing with major trading partners: USA and EU. Because we have different trade relationships with different countries included in EU, we have separated the correlation coefficients for EU27 (aggregate effect) and some major trade partners in the EU27 (bilateral effect). The correlation coefficent value for the USA is highly negative, as expected (Table 4b), because USA has long been providing great support or complementary force to our clothing export through various trade facilities. Interestingly correlation coefficient with the EU27 is positive, setting them as our competetors in clothing exports. But a detailed investigation of bilateral correlation coefficients with some individual countries shows that Germany is the only country among our leading trading partners in EU which boosts up our clothing export. That is, Germany is the solitary country in EU serving as a complementary force for our clothing export and all others are competitng with us in this sector. Positive and high correlation exist between

Bangladesh and several EU countries. This is because lots of EU countries like Belgium, Italy, UK etc. are veteran producer and exporter of clothing to the global market, which possesses higher value compared to our low value adding clothing products. Such countries host most of the reputed fashion brands and fashion houses, and they lead the global trend in fashion and design in all sorts of clothing. Thus our lower valued clothing products are not always become close substitutes to such products and can even enter the markets of

This is also supported by the fact that the RCA of our clothing manufacturing is still growing defying the adverse effect of recent global recession, while it decreases for many of our competing economies. With economic downturn demand for cheaper products like our clothing product usually increases everywhere. This finding suggests that in the long run, many countries could be pure competetors of Bangladesh if we want to enter the market for high valued clothing items. In addition to this, countries like Romania, Poland, Slovakia, Slovenia, Hungary, Greece etc., which have lower trade relationship with Bangladesh, are also competing hard regarding clothing exports.

Methodology

Competitiveness of CT exporting countries will counter effect country's growth. Since Solow, the analysis of growth incorporates detection of a proper production function and thereby identification of input efficiency in major studies. In the present case we are dealing with possible impacts on the growth of an economy by a combination of positive and negative forces that are enhancing or constraining growth. The CT is a source of export led growth to these economies. Again a possibility of competition among these countries about capturing similar markets may provide a negative blow towards this particular industry driven growth. Such ambiguity in the extent and direction of the impact is absent in less export-oriented sectors like agriculture and service. We can divert our analysis of growth from a deterministic one to a relative influence determining one following Levine, Loayza and Beck (2000), Nasrudin (2004) and others, who analyzed the impact of financial assets on real per capita GDP growth. The benchmark growth equation is as follows:

$$g_{ti} = \alpha + \beta(CT)_{ti} + \gamma_1 ag_{it} + \gamma_2 sg_{it} + \gamma_3 m_{it} + \varepsilon_{ti}$$

Where,

g_{ti} = Per capita GDP growth
= Clothing and textile export growth in real terms
=Growth rates of agriculture value added
= Growth rate of service value added
= Growth rate of import value added

Econometric Technique

Cross country relative efficiency of a competing sector can be examined by checking its relative contribution on respective economic growth context. With the usual assumptions of factor specialization, non-saturated markets and continuous technological change the sector specific influences on economic growth should not be correlated to each other across different countries unless they are competiting each other to capture greater share of the global market. Thus the system of equations explaining country specific growth are likely to be correlated across equations, given the nature of the clothing and textile export in this region. Seemingly Unrelated Regression (SUR) is the appropriate model to estimate such a system of equations as proposed by Zellner (1962). Thus it can be checked whether multiple panel of country specific growth functions bear statistically different results. Seemingly unrelated regression (SUR) can be approached as a method of estimations to indentify if error components are correlated in such growth model following Baltagi (2001). Following Wooldridge (2002), the fixed effect for such models can be estimated with dummy varaible regression technique, while the coefficients of constant terms are restricted across the panels in their equations as suggested by Judge et al.(1988). The countries chosen based on
leading average performance in CT exports averaged of last five years in Asia.The SUR matrix specifications of our sample of seven countries can be presented as follows:

$$y = \begin{bmatrix} x_1 & 0 & & 0 \\ 0 & x_2 & & 0 \\ & & & \\ 0 & 0 & & x_7 \end{bmatrix} \begin{bmatrix} \beta 1 \\ \\ \beta 7 \end{bmatrix} + \varepsilon$$

Where,

$y = \{y_{11}\text{-----}y_1N_1;\text{----}y_{71}\text{----}y_7N_7\}^{/}$ $x_1 = \{c_1; ctgr1, agr_1, sg_1, mg_1\}$
$x_2 = \{c_2; ctgr2, agr2, sg_2, mg_2\}$
.

$x_7 = \{c_7; ctgr_7, agr_7, sg_7, mg_7\}$

and where error structures are assumed to be characterized by panel heteroskedasticity, panel autocorrelation and contemporaneous correlation (HPAC).

Results and Findings

Table 5: SUR Regression Output

Correlates	**Bangladesh**	China	India	Indonesia	Thailand	Hong Kong	Pakistan
Clothing &Textile	**0.03*** **	**0.05***	**0.23*** **	**.05**	**-0.03****	**0.00**	**0.07**
Agriculture growth	**0.21*** **	0.30***	0.23***	-0.26	0.28***	0.03	-0.04
Service growth	**0.80*** **	0.80***	1.27***	0.23*	0.89***	1.02***	1.19***
Import growth	**0.00**	0.04**	-019***	0.00	0.10***	0.07	-0.02
Constant	**-1.53****	-1.86**	-4.1	3.54**	-1.5***	-1.38***	-3.76***

Note: ***, **, *, indicate 1%, 5%, 10% significance levels respectively

The seemingly unrelated regression (SUR) results are shown in Table 5. Breusch Pegan test results (Table 6) reject the independence among the panel countries and indicate that CT exports and other growth determinants of one country in the sample depend on the performance of those indicators on other countries. For example, a higher volume of exports of CT from India reduces the export of that from Bangladesh. This validates the 'Fallacy of decompositions' among the sample countries.

CT industry has a positive and a high statistically significant impact on per capita GDP growth in case of Bangladesh and India. A 1 percent point increase in export growth of CT of Bangladesh is predicted to increase GDP per capita growth by 0.03 percent point, ceteris paribus. In case of India, 1 percent point increase in export growth of CT is predicted to increase GDP per capita growth by o.23 percent point. Larger value of the coefficient of India suggests the bigger size of the industry compared to Bangladesh. Among the other Asian CT exporters, China shows less dependency on CT for per capita GDP growth, while China has already developed a diversified manufacturing industries compared to the countries in the sample. For Bangladesh, agricultural contribution to per capita GDP growth is higher while service sector's contribution to GDP growth is the highest. The stronger and statistically significant coefficient of service growth implies the dominance of informal activities of Bangladesh economy.

Differences between countries each other is tested and results are shown in Table 7. The null hypothesis is that there is no difference in structure between countries. The structural difference in production and difference in the use of

technology exists between Bangladesh and China, India, and Hong Kong while there is a similarity in technology use between Bangladesh, Thailand, Indonesia and Pakistan. This structural difference suggests that the skill of labor force and technology used in CT industry in China and India might be better than that of Bangladesh. However labor skill and technology used in CT industry of Thailand, Indonesia and Pakistan are more or less similar.

Table 6: Correlation matrix of residuals of SUR Regression

	Bangladesh	China	India	Indonesia	Thailand	Hong Kong	Pakistan
Bangladesh	**1.00**						
China	**-0.04**	1.00					
India	**-0.28**	-0.45	1.00				
Indonesia	**-0.03**	0.01	-0.07	1.00			
Thailand	**0.15**	0.76	-0.33	0.14	1.00		
HongKong	**-0.45**	0.02	0.22	0.49	-0.33	1.00	
Pakistan	**0.07**	-0.63	0.63	-0.18	-0.18	-0.15	1.00

Breusch-Pagan test of independence: χ^2**(21) = 20.428, Pr =0.4943**

	China	India	Indonesia	Thailand	HongKong	Pakistan
Bangladesh	**1.77 (0.41)**	**3.49 (0.17)**	**10.66 (0.00)**	**20.06 (0.00)**	**2.90 (0.23)**	**5.74 (0.05)**
China	-	1.33 (0.51)	8.01 (0.01)	1.25 (0.53)	0.28 (0.86)	3.66 (0.16)
India	-	-	6.19 (0.04)	0.81 (0.66)	1.90 (0.38)	3.72 (0.15)
Indonesia	-	-	-	9.27 (0.00)	10 (0.00)	15.84 (0.00)
Thailand	-	-	-	-	1.58 (0.45)	16.6 (0.00)
HongKong	-	-	-	-	-	8.70 (0.01)

Note: p-values are in the brackets

Table 7: Chi-square value: Country differences test

Conclusion

This study has investigated growth strategies of CT based export of top Asian CT exporters mainly focusing Bangladesh. Export based RCA has been used to calculate the revealed comparative advantage of Bangladesh economy over the other Asian CT exporters. RCA measurements indicate that Bangladesh

has distinctively better RCA among the top Asian CT exporters. Pair-wise correlation coefficients presented in Table
4a and 4b show Bangladesh's complementarily and rivalry relationships among the
Asian CT exporters economy as well as with western trade partners. Regression analysis of SUR suggests that CT positively contributes to per capita GDP growth and this finding is highly statistically significant. However, major growth contribution results from the performance growth in service sector. Agriculture also positively and significantly influences the per capita GDP growth. We found a strong dependency in export performances of the countries in the sample. From the Chi-square test (Table 7), we found that the level of skill of labor force and advancement of technology differs between Bangladesh, China, India, Hong Kong. This reflects a weak prospect of CT for Bangladesh as she is competing with comparatively advanced countries like China, India and Hong Kong. The relatively higher RCA (Table 3), in the midst of global recession, is merely a result of higher world demand for Bangladesh's cheap CT products. On the other hand, a very narrow export base along with lack of market diversification makes it difficult for Bangladesh to rely simply on CT based export led growth strategies. Though the import growth shows an insignificant impact on Bangladesh's growth, it has strong relationship with the growth of informal sector, which in turn, has the strongest positive effects on growth (Table 5).

From the policy point of view, Bangladesh could rely on trade liberalization policy but need to put more effort to diversify her export items as well as finding new trade partners. Secondly, Bangladesh needs to take strategic plan to acquire advanced technology as well as uplift labor efficiency to meet challenges that is likely to emerge from her competitors in CT exports. Last but not least, Bangladesh needs to put more emphasis on import substitution strategies along with establishment of backward linkages.

Table 1: Three Decades of Growth Dynamics: Bangladesh

Decades	GDP Grwoth Rate	Agricultural Growth rate	Industry		Manufacturing		Service Growth rate	Clothing & Textile Export growth
			Value added (% of GDP)	Growth	Value added (% of GDP)	Growth		
1980-1989	0.66	1.61	4.56	13.76	4.37	3.79	-1.48	4.56
1990-1999	2.69	3.27	7.03	14.87	7.19	4.25	14.29	7.03
2000-2009	4.06	3.76	7.57	16.59	7.33	6.24	5.96	7.57

Source: Authors' calculation from WDI 2011 oline database

Textile & Garments

Textile & Garments

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