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End of MFA Quotas

Key Issues and Strategic Options for Bangladesh Readymade Garment Industry

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ABBREVIATIONS AND ACRONYMS

AGOA	Africa Growth Opportunity Act	IMF	International Monetary Fund
ASEAN	Association for South East Asian Nations	LC	Letter of Credit
ATC	Agreement on Textile and Clothing	LDC	Least Developed Country
ATPDEA	Andean Trade Promotion and Drug Eradication Act	MDG	Millennium Development Goals
BDXDP	Bangladesh Export Diversification and Development Project	MFA	Multi-Fibre Arrangement
BGMEA	Bangladesh Garment Manufacturers and Exporters Association	MFN	Most Favored Nation
BIDS	Bangladesh Institute of Development Studies	MNC	Multi-National Corporation
BKMEA	Bangladesh Knitwear Manufacturers and Exporters Association	MOC	Ministry of Commerce
BTMA	Bangladesh Textile Manufacturers Association	MOF	Ministry of Finance
CBA	Collective Bargaining Agency	NAFTA	North America Free Trade Agreement
CBI	Caribbean Basin Initiative	NGO	Non-Government Organization
CBTPA	Caribbean Basin Trade Partnership Act	OECD	Organization for Economic Cooperation and Development
CBW	Central Bonded Warehouse	PMAP	Post-MFA Action Program
CGE	Computational General Equilibrium	PRSP	Poverty Reduction Strategy Paper
CM	Cutting and Making	PTA	Preferential Trade Area
CMT	Cutting, Making and Trimming	PTS	Primary Textile Sector
DEDO	Duty Exemption and Drawback Office	R & D	Research and Development
EBA	Everything But Arms	RMG	Readymade Garments
EC	European Council	RoO	Rules of Origin
EPB	Export Promotion Bureau	SAARC	South Asian Association for Regional Cooperation
EPZ	Export Processing Zone	SAD	Special Additional Duty
EU	European Union	SAFTA	South Asia Free Trade Agreement
FDI	Foreign Direct Investment	SAARC	Preferential Trading Arrangement
FOB	Free on Board	SEWA	Self Employed Women's Association
FTA	Free Trade Agreement	SME	Small and Medium Enterprises
GATT	General Agreement on Tariffs and Trade	SOE	State Owned Enterprise
GDP	Gross Domestic Product	T&C	Textile and Clothing
GSP	Generalized System of Preferences	TFP	Total Factor Productivity
GTAP	Global Trade Analysis Project	TRADE	Tariff Relief Assistance for Developing Economies
ILFTA	Indo-Lanka Free Trade Agreement	UNCTAD	United Nations Conference on Trade and Development
ILO	International Labor Organization	UNDP	United Nations Development Program
		USITC	United States International Trade Commission
		WTO	World Trade Organization

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End of MFA Quotas: Key Issues and Strategic Options for Bangladesh Readymade Garment Industry

Executive Summary

I. The Post-MFA Challenge

1. "With the removal of MFA quotas, there will be opportunities to expand market shares, but also tough competition for markets. The challenge is not to protect a special position, but to open up the markets and ensure that Bangladesh will be in a strong position to compete."¹
2. *This study addresses that challenge. It examines the factors that have brought Bangladesh such impressive success as a producer and exporter of ready-made garments (RMG) in a quota-based trading regime. It explores the likely threats to that success as the post-MFA trade regime becomes intensely competitive. And it sets out a number of strategic options for the sector to pursue, building on past achievements and inherent competitive advantages, in order to compete successfully in textile and apparel markets under new and very demanding conditions.*
3. The study suggests a dual approach to the challenge: a strategy to minimize the vulnerability that export concentration in readymade garments (RMG) creates for Bangladesh, and, secondly, a focused strategy for strengthening the competitiveness of the RMG industry. To address the first challenge of export diversification, the report takes on board the set of recommendations made in the World Bank's Growth and Export Competitiveness Study (World Bank 2005a) which argued the case for minimizing the remaining anti-export bias of Bangladesh's trade policy and removing behind-the-border constraints – including infrastructure weaknesses -- to overall export competitiveness. To address the post-MFA competitiveness challenge for the RMG industry, this study lays out a number of strategic options requiring, *inter alia*, policy reform, institutional change, and infrastructural investments.
4. The study finds that reducing lead time – turnaround time from receipt of orders to shipment of goods to market – for the woven garment sub-sector, if not for all RMG, is critical for survival. Success in global apparel trade is increasingly hinging on exporters' ability to react quickly to orders, to cut the lead time required to produce and ship apparel. To meet the competition from countries that either make their own grey fabric – a basic material in textile manufacturing -- or can import sufficient quantities on short notice, Bangladesh very much needs to raise RMG productivity, both through skills training and technology investments, especially foreign ones. FDI can be and regularly has been a powerful force behind improving productivity. Having only recently taken the first step toward easing the flow of FDI by dropping restrictions too long in place, Bangladesh needs actively to court foreign investment.
5. In response to the rising emphasis on rapid response, Bangladesh also needs to improve its ability to quickly access supplies of raw materials. In addition to urgent upgrading of Chittagong port facilities, one option is to establish Central Bonded Warehouse facilities in the Export Processing Zones (EPZ). Another – a policy choice too long deferred – is to lift the ban on importing yarn from India by land routes. Importation by sea from India adds to transport costs and often takes 10-20 days extra to reach Chittagong port. The prohibition hurts RMG industries by undermining their competitiveness. In the post-MFA era, the case for rescinding it appears compelling.

¹ "The Investment Climate, Governance, and Inclusion in Bangladesh," Nicholas H. Stern, Chief Economist and Senior Vice President, The World Bank, speech to Bangladesh Economic Association, 8 January 2002, p. 13

6. Within the South Asia region, Bangladesh can gain ground from a changing external policy environment by seizing opportunities for preferential market access, taking advantage of regional cumulation, and, if possible, negotiating free-trade agreements with India and other neighbors (SAFTA, BIMSTEC). At home, the government needs to work on building partnerships with the RMG industry to attract FDI and improve marketing abroad by burnishing the image of Bangladesh-made apparel and its association with leading RMG brand names. Recognizing that tougher competition and higher productivity will mean job losses in the sector, the government will also need to actively explore mitigating options for displaced garment workers.

What happened since January 2005?

7. **Model predictions versus actual performance.** MFA quotas were phased out at the end of December, 2004. The GTAP model used in this report predicted export shocks and economic welfare losses for Bangladesh, albeit with a lag. Over three-to-four years, the model predicted, the economic welfare costs could run to \$370 million. In terms of jobs, Bangladesh losses could be significant – 17 percent of the current workforce in apparel and 5 percent in textiles. India and perhaps Pakistan could achieve notable gains in South Asia, but Chinese workers appear to be the major winners as demand for textile and apparel, including those of their linkage industries, rises sharply with opening up of global markets. To take advantage of a quota-less trading regime, China, it is feared, could develop the entire range of textile industries from cotton to ready-made garments. The surge in China's import of textile and clothing related machinery appears to corroborate this concern. Between 2000 and 2003, China's import of textile and clothing machinery increased from about \$2 billion to more than \$5 billion. Some experts are predicting that China may capture as much as 50 per cent of the global export market.

	woven garments	Knit garments	RMG Total
2000-01	3,364.2	1,496.4	4,860.6
2001-02	3,124.6	1,459.2	4,583.8
2002-03	3,258.3	1,653.8	4,912.1
2003-04	3,538.1	2,148.0	5,686.1
2004-05	3,598.2	2,819.5	6,417.7
	Year-on-year growth (%)		
2001-02	-7.1	-2.5	-5.7
2002-03	4.3	13.3	7.2
2003-04	8.6	29.9	15.8
2004-05	1.7	31.3	12.9

Source: Export Promotion Bureau

8. The immediate post-MFA period has not revealed this trend. RMG exports from Bangladesh in the post-MFA world did not decline; rather, data show that export growth during January-July 2005 was substantial to end the fiscal year 2004-05 with a growth of 13% (Table 4), with knit garments registering phenomenal growth of 31%. Indeed, performance in the hitherto quota-restricted market of USA revealed inherent strength of the Bangladesh industry relative to its competition (Table 5). During Jan-Jul, 2005, Bangladesh was clearly a winner with China, India and Sri Lanka, while countries like Hong Kong, Taiwan and Malaysia lost out. Knitwear exports to US jumped 70% during Jan-Jun 2005 and BKMEA reports that order books are full. The rather pessimistic projections of the model perhaps stem from the assumptions about quota premia. Clearly, quotas were more binding for Bangladesh than was presumed.

9. Yet, this should give no reason for complacency, as major challenges lie ahead: safeguards on China will be phased out by 2008; Indian textile and garment sector has undergone major technology uplift and policy reform to put India amongst leading contenders in garment exports; and inherent weaknesses in policy continue to plague the woven garment sub-sector, whose share in exports is 56%, though declining.

II. RMG in Bangladesh: Past Achievements no Guarantee of Future Market

10. Success in the coming contest for trade is vital to Bangladesh's economic growth prospects and its hopes of meeting the MDG goal of halving extreme poverty by 2015. As global RMG competition rises, Bangladesh cannot afford to be sidelined. The economy-wide effect of losing ground could be traumatic. Three-quarters of all 2003/04 exports -- \$5.7 billion of a total \$7.6 billion -- came from sales of knitwear and woven goods, and 96 percent of all RMG exports went to buyers in the US and EU. Although the apparel sector contributes 5% to the country's GDP, it is the biggest source of industrial jobs. Along with accessory industries it provide direct employment for over 2 million workers, mostly women. Approximately eight million more Bangladeshis rely indirectly for their livelihood on the RMG industry. RMG not only accounts for 40% of industrial employment, but has also become the main source of foreign exchange earnings needed to finance vital imports of capital goods and essential inputs while serving, as well, as an important training ground for a growing number of new entrepreneurs.

11. As the MFA phase out takes hold and as countries like China-India build ever more formidable RMG export industries, a substantial part of Bangladesh's RMG workforce could be at risk of job loss if the industry fails to stay competitive. The global impact of two measures -- abolishing apparel quotas, and instituting safeguards in US and EU against cheaper imports -- have been explored through GTAP general equilibrium models. According to a simulation done for this study, global gains from quota abolition -- in terms of money-metric measures of economic welfare -- aggregates to over \$16 billion. The principal beneficiaries would be the US (\$6 billion), EU25 (9.4 billion) and China (over \$3 billion.).

This study presents a set of strategic options that begin, appropriately, with proposed measures to meet a crucial test of competitiveness: reduced lead-time in filling RMG orders.

III. Gearing Up to Compete: Strategic Policy Options

12. It is not a foregone conclusion that Bangladesh must fall behind in the race to supply global markets -- especially those of the US and EU -- with ready-made garments and other textile products. That race, like others, will "be to the swift," and Bangladesh can take steps now that will accelerate its responsiveness and lighten the load its RMG firms carry in the contest.

13. In the post-MFA world, lead time has emerged as a crucial determinant of competitiveness. More than in the past, vendors need to show apparel trade buyers that they can fill orders fast. While several developments in the retail business have sharply reduced lead time in the US and Europe, Bangladesh woven RMG manufacturers have continued to lag. Among competing countries, their lead time is one of the longest (90-120 days), principally because of inadequate, easily available supplies of local woven fabric and the consequent need to procure the raw materials from overseas. If the raw materials could be sourced locally the time required to receive them at the factory gate could be reduced from 42-60 days to just one or two weeks, putting Bangladesh garment exporters on a par -- in terms of lead time -- with their major competitors.

14. ***Improving the Domestic and Regional Supply Chain.*** The challenge is easier to describe than to overcome. The best solution – increasing domestic supplies – is not attainable in a short period, but – more easily and rapidly -- part of the demand might be met by increasing the capacity of dyeing and finishing industries. If they were allowed to stock up grey fabric in advance of orders, they could supply finished fabric to the woven garment manufacturers at fairly short notice. Since the lead time would not be greater than when domestic fabric were used, this option merits serious consideration.

15. It will, however, take at least a few years of building up the dyeing and finishing sub-sector to close or dramatically narrow the demand-supply gap. The gestation time would be long; but since the next few years will be crucial for the health of RMG woven industries of Bangladesh, other innovative tactics need to be explored. One could come from building closer relationships with nearby suppliers (e.g. in South Asia region) in order to receive fabric at short notice, a course without clearly foreseeable outcomes. Currently, although RMG manufacturers are free to import fabric from these countries, they have sourced only a small fraction of their requirement from nearby countries such as India, Thailand and Pakistan. They may need the incentive of special advantages given them in order to increase imports, but domestic textile manufacturers as well as competing countries are very likely to oppose such provisions vigorously.

16. ***Opening Land Routes and Modernizing Port and Customs Facilities.*** Even without new inducements, Bangladesh could markedly improve its utilization of available means to reduce lead time by sourcing inputs from the region, starting by rescinding the ban on importing yarn from India by land routes. Whatever reluctance there may be to forging closer links with India or Pakistan for supply of inputs at short notice has to be weighed against the urgent need to cut lead time by bringing yarn to knitters and weavers as rapidly as possible. The policy now in place is self-defeating. Among other things, its continuation would impede eventual free-trade negotiations with India or with other neighbors in South Asia.

17. The removal of the ban should be just a single element in a concerted effort to smooth the path of imports – in some cases, smooth it literally by repairing the roads and modernizing the Chittagong port that constitute serious bottlenecks to the flow of goods. It is important to remedy the ***power and transportation*** infrastructure failures that exporters see as heavy burdens on their competitive performance. While there is no doubt that additional investment is required in energy and transport infrastructure, the earlier World Bank (2005a) report concluded that the *changes that are required most immediately are modifications of policies, processes, and management rather than capital investment.*

18. In addition to dealing with transport flaws, trade-related policy changes need to further simplify the import tax regime and reduce the dispersion and average level of nominal (and thus effective) protection, preferably through a pre-announced medium- and long-term schedule of tariff reductions (as done recently by India), and to eliminate any remaining protective quantitative restrictions. Specifically, to bring high payoffs in export competitiveness, reform should be a priority in Customs as well as the Duty Exemption and Drawback Office (DED0). Practices in both these services are characterized by inefficiency and rent-seeking that penalizes firms capable, in a freer regulatory environment, of expanding Bangladesh's share of world trade.

19. ***Seizing Opportunities for expanding market share and new markets.*** Positioning Bangladesh's RMG industry to compete successfully primarily involves changing domestic policies, practices and incentives. At the same time, Bangladesh should be seeking every opening available or in prospect to gain eased access for its products into US and EU markets into countries like Canada, Australia and Norway which have granted duty-free access, and should even be actively exploring access to China and Japan, in addition to opening up export opportunities within the South Asia region, such as in India.

20. **Preferential access.** As an LDC, Bangladesh has profited substantially from the EU grant of duty-free access for its RMG exports, but still faces average tariffs of 14 percent on goods sold to the US. Not only does the US not offer duty-free access to LDC exports, its tariffs are generally skewed against them to the point that Bangladesh paid more tariff fees on its apparel exports of about \$2 billion in 2003 than French exporters paid on their exports of US\$26 billion. By offering duty-free access to a number of Caribbean countries and African LDCs, moreover, the US has put Bangladesh exporters at a price disadvantage. Their response has been to lobby hard for the US Congress to give them duty-free access under a proposed bipartisan bill called Tariff Relief Assistance for Developing Economies (TRADE) Act 2005. That bill would help several least developed countries – not just Bangladesh – and the work of making the case for wider access is one that international organisations should be called on to support.

21. Were US tariffs eliminated, Bangladesh apparel exports are projected to increase by 90 percent in 3-4 years, and textile exports would grow by 82 percent. Gaining such a foothold and expanding market share in the lucrative US apparel market is every garment exporter's dream, but Bangladesh needs to look at that prospect and preferential access in general with realism. It should take every possible advantage of the preferences it can gain, but also understand the conditions attached and the reality that it will not remain an LDC forever. It should use the time and latitude to prepare for increased competition when it graduates out of the LDC league.

22. **Regional Cumulation.** To gain EU preferences, Bangladesh exports must meet a stringent test in the EU rules of origin requiring that apparel be made of domestically produced fabric. Some Bangladesh products meet that test; others – made with imported materials -- do not. While the EU reconsiders the application of its strict rule to LDC exporters in general, Bangladesh might be able, through the provision of regional cumulation, to get around the barrier to preferential access. A beneficiary country, which is part of a regional trade area such as SAARC may claim, for GSP purposes, fabric purchased from regional member countries as its own when claiming GSP – as long as the value added crosses a high threshold – effectively over 50 percent for Bangladesh – of the finished product. Most Bangladeshi woven goods cannot meet that test and manufacturers are not likely to restructure their current supply chain to benefit from the narrow opening. Since EU requires that respective Governments endorse the cumulation option, what is needed is for the Bangladesh Government to lobby for lower value addition criteria. Such a scheme offers incentives for sourcing inputs from the region, which, in and of itself, could be a way for reducing lead time and enhancing competitiveness. Why pass up the opportunity?

23. **Warehousing for quick turnaround.** Given the very large investment required and an adverse international market situation characterized by over-capacity and low prices, there is little prospect of improving the domestic supply situation in the short or medium term enough to fill the gap between supply and demand. An innovative approach – the establishment of a central bonded warehouse (CBW) – can let local manufacturers match the lead time of competing countries and do so quickly. A CBW differs from the individual bonded warehouse in that each CBW is permitted to stock duty-free imported inputs, while imports to it of duty-free RMG and textile raw materials would not be conditioned on master export LCs. In principle, the CBW operator could be permitted to stock up a whole range of T&C inputs such as finished and grey fabric, accessories, dyes and chemicals, yarn, RMG and textile machinery and spare parts in amounts determined by expected demand. RMG and textile manufacturers can then purchase these inputs duty-free from the CBW directly as export orders are received.

24. Some appropriate system, as suggested by the National Coordination Council, will have to be put in place (such as sale against back-to-back LCs and locating the CBW in Export Processing Zones) to ensure that the duty-free inputs are actually used in the production of goods that are exported, and there are safeguards against leakages to the domestic market.

25. Because a CBW-system will make imported fabric available as quickly as, in some cases more quickly than, domestic fabric, RMG producers who are procuring domestic fabric may switch to cheaper CBW supplies. This prospect generates opposition from textile manufacturers who want priority given to lead-time-reduction measures that would increase their production, not make competing imports more attractive. The reality, though, is that Bangladesh's modern textile industry owes its growth to the RMG industry, and faster growth of RMG – a goal dependent on cutting the time between ordered and delivered goods -- the larger will the market be for domestic textile producers. CBW offers a way to cut lead time, enhance competitiveness, and, thus to improve performance and profit throughout the textile sector.

26. ***Textile protection impedes RMG growth.*** It has also been suggested that the government should actively pursue policies that could quickly increase the capacity of the primary textile sector (PTS) so that they could meet the entire demand for woven garments. To make this possible, the argument goes, existing measures that restrict fabric imports and thus protect the PTS should be maintained. Electing such a policy would run counter to the reality that no government can truly judge or accurately forecast the success of a particular business. Governments do not and will not always choose winners. Indeed, they are more likely to bend to lobby pressure. The best policy for a government is accordingly to take an even-handed approach to all industries by removing any constraints to fair market competition. The challenge for Bangladesh is to adopt domestic policies that ensure a smooth supply of raw materials/inputs to the apparel sector at international prices. Restricting supply in order to protect primary processors is unlikely to strengthen such manufacturers and certain to penalize RMG exporters.

27. ***Meeting New and Old Sourcing Criteria.*** Without the shelter of MFA quotas, Bangladesh and its RMG competitors all face the same changed market conditions. Price still matters, and Bangladesh can retain an advantage in that area. Speed – lead time – matters more and more, and Bangladesh needs to hurry to improve its performance. Quality consistency, reliability and flexibility, and service remain winning attributes, and Bangladesh has achieved and will have to maintain a strong record on those counts.

28. Other factors or combinations of factors, however, have gained weight in the calculations of developed-country buyers. Importers and retailers, for instance, are recasting their sourcing practices in order to better position themselves in a fast changing market. A 2004 study commissioned by the Commonwealth Secretariat on *sourcing practices* of international buyers finds that major buyers of apparel are increasingly adopting sourcing strategies that seek to minimize their *total* costs throughout the supply chain rather than minimizing the cost of procurement from the RMG factories at the lowest end of the supply chain. This relentless drive for total-cost minimization by overseas buyers poses certain challenges for the RMG sector of Bangladesh. In addition to price and lead time, these challenges relate to quality and to social and environmental compliance.

29. As part of a strategic shift in global sourcing post-MFA, buying houses would like to limit the number of countries and factories from which they source their apparels – without, though, putting all their eggs in the Chinese basket. In making country choices post-MFA, macroeconomic and political stability, infrastructure, compliance standards, and good partnerships, will be critical. Globally, therefore, many countries which held significant share of apparel markets will face shrinkage or total elimination. According to various assessments, vulnerable countries include Nepal, Mauritius, Maldives, Sri Lanka, Thailand, Philippines, and Poland. Most analyses predict challenging times for Bangladesh, though all indications are that it will remain a major garment-exporting country.

30. Bangladesh gets mixed reviews on its compliance with many of these criteria. On the positive side, buyers reveal that they are hardly ready to abandon suppliers with whom they built long-term relationships over the years and where they even invested in skill development, management practices and workplace conditions. At the same time, buyers who are now putting extra emphasis on meeting ILO

codes regarding working conditions and labor practices as well as adhering to international standards of waste management perceive weak social and environmental compliance in Bangladesh. Infrastructure weaknesses, lack of raw materials, and antiquated banking system are other problems cited by companies as industry deficiencies that need to be overcome in the days ahead.

31. ***Compliance with social and labor standards.*** As Bangladesh emerges as a major player in the global RMG export market, the pressure is mounting for compliance with social and labor standards. Failure to conform to international norms could undermine competitiveness. It is advisable, therefore, that RMG firms recognize these requirements as necessary for the health and safety of employees and undertake that the standards set out in SA8000 are implemented and maintained. This is important not only from the point of view of enhancing competitiveness and sustaining repeat orders, but is also critical for keeping workers motivated to improve productivity and product quality.

32. ***Bangladeshis must forge a concerted public-private partnership to correct the weaknesses that interfere most with their competitive strengths.*** That partnership needs, among other challenges, to address serious shortcomings with regard to the country's international market orientation – the ability to gear up its marketing campaign in response to changing demand. Long years of exclusive reliance on foreign buying houses or their agents have left ingrained habits that are out of step with the post-MFA demands for savvy merchandising and marketing of products in order to penetrate and maintain market share in export markets. A partnership between government and the RMG sector must focus on such forward linkages. The following approaches highlight some of the key strategies for promoting forward market integration:

- ***Product and market diversification:*** One of the major limitations to apparel export growth is the lack of diversification in products and markets – not least, as noted below – the giant market of neighboring India. A small range of products (shirts, trousers, T-shirts, sweaters, jackets) makes up 60 percent of RMG export. Vigorous marketing and promotional drives would be needed to break into markets for other RMG products that Bangladeshi producers can produce competitively. Since R&D and market research to expand the product mix and public support in this area will be critical, a comprehensive research center built on public-private partnership should be established. Its role would be to gather and disseminate information effectively to local manufacturers on the latest developments in products and markets, including information on fabric developments, blends, colors, patterns, latest fashion trends and design forecasting, as well as providing customer service to foreign buyers purchasing from Bangladesh.
- ***Image building and brand development:*** Image building and branding can achieve a high level of value addition and enhance Bangladesh's reputation as a quality supplier of apparel. As branding is an expensive investment, incentives and opportunities should be provided to exporters, such as through a 'Brand Fund' and by encouraging foreign collaboration to launch collective brand names through corporate marketing companies. Investments in skills, design and advertising will be essential for the "Made in Bangladesh" label to make its mark in the global marketplace. For this, an active promotion campaign will be required by the industry, government, and Export Promotion Bureau. Local and international exhibitions should be held with aggressive efforts to attract foreign buyers. Bangladesh embassies abroad should appoint dynamic business-oriented commercial officers whose main job will be to promote export products through direct contact with potential buyers.
- At home, an exporters' ***performance rating database*** could also be developed, based on factors such as product quality, timely delivery and financial performance. This facility should be set up in collaboration with an accredited international company so as to ensure objectivity and credibility.

- **FDI or Joint ventures:** Bangladesh has been a reluctant recipient of FDI, at least in the RMG sector, limiting it, until recently, to EPZ only while the domestic sector was kept off limits for foreign equity or partnerships. Less than 15 percent of Bangladesh garment firms have foreign equity. This policy has had one positive impact – growth of indigenous entrepreneurs who are now much more prepared to face the post-MFA challenge on their own. Although the restrictions on FDI were finally removed in the Industrial Policy 2005, the Bangladesh RMG sector may have missed out on certain benefits that accrue from the presence of FDI in a sector. Our survey of RMG firms showed those with foreign equity to have productivity levels on average 20 percent higher than those without. In addition, the survey showed positive and significant productivity spillovers. For every 10 percent increase in the productivity level of FDI in the industry, productivity of domestic firms increases by 1.4 percent.

Although Bangladesh has a limited number of joint venture RMG industries, even these can be very effective in bringing in managerial and marketing expertise. Continuous efforts should be made by the Export Promotion Bureau and Board of Investment to ensure that the investment climate of the future favors more FDI or joint ventures. The positive spillover effects of FDI -- can make a substantial addition to Bangladesh's existing strengths.

IV. Conclusion

33. ***The end of MFA presents both challenges and opportunities for the RMG sector of Bangladesh.*** There are many uncertainties about new market developments in the coming months. What is certain is that there will be heightened competitive pressure with the more efficient producers attempting to capture a larger share of the global market. To sustain and enhance Bangladesh's share, all stakeholders including the government, industry and individual firms will have to get behind policies and actions that help Bangladesh become more competitive.

34. Delay in adopting the right policies or removing harmful constraints can only raise the cost of missed opportunities and reduce the competitive strength of the sector that has made a remarkable contribution to industrial employment, woman empowerment, and reduction of poverty. Above all, it would be a grave mistake to take any policy and/or institutional action that might undermine the RMG sector's export competitiveness, and any existing trade policy distortion that is harming this sector's competitiveness would need to be removed urgently.

35. The stakes are high. Trade competition is mounting. Bangladesh has a strong position from which to compete and a wide choice of promising policies to pursue. The one unacceptable policy choice is inaction.

V. Key strategic options and recommendations

Key strategic options	Recommendations
1. Raising productivity is key to competitiveness	<i>Now that the FDI restriction has been removed from the Industrial Policy 2005, all efforts should be made to facilitate FDI inflows into the sector to take advantage of better management, technology, capital and market access.</i>
2. Reducing Lead Time is critical.	<i>Overhaul Chittagong port facilities, improve infrastructure and transport logistics, and streamline the import regime by removing cumbersome procedures. End the ban on yarn imports through land ports.*</i>
3. RMG sector must not be held hostage to backward linkage.	<i>If the Government desires to provide support to the textile industry, such as interest rate or price support, it must do so through its normal budgetary instruments in a transparent manner. The cost of support must not be shifted to the RMG industry that is totally unprotected in the international market.</i>
4. Central Bonded Warehouse for quickening delivery time.	<i>Permit the establishment of CBW in line with the recommendation of the National Coordination Council.</i>
5. Make the most of preferential market access which gives price advantage.	<i>Bangladesh should seize the opportunities offered to it as an LDC but use the space to prepare for increased competition when it graduates out of the LDC league.</i>
6. Take advantage of Regional Cumulation	<i>Government should lobby hard with EU to reduce value added requirement along with liberal regional cumulation option.</i>
7. Compliance with social and labor standards	<i>To remain competitive and win orders, RMG firms must conform to international standards of social compliance for their industry</i>

* The Government has since removed the ban on yarn imports over land routes for 100% export oriented industries.

**Policy Matrix: The Challenge of Export Competitiveness Post-ATC
Recommended Actions to be Undertaken by the Government**

Areas of intervention	Issues	Actions recommended		
		Policy and regulatory reform	Investment	Advocacy or action required
A. General Issues				
Trade Policy				
Further reducing anti-export bias of the trade regime by reducing tariffs and non-tariff barriers (this would require parallel progress in expanding domestic tax base and administration)		Unify all para-tariffs and merge them with customs duty Reduce the general maximum tariff to 15 percent or less over the next five years Eliminate all trade-related quantitative import restrictions/bans and replace them with appropriate tariffs. Simplify import procedures and make rules transparent.		MOC to advocate. MOF/NBR to take action. Make appropriate revisions to Import Policy Order 2003-06 and Export Policy Order 2003-06.
Improving 'duty drawback system'		Implement fully effective and automated 'duty drawback system'. Overhaul DEDO.		NBR
Lead time and backward linkages	Raw material sourcing problems need to be addressed to reduce lead time. There is a strong need to stock up greige fabrics to fill orders on demand.	Remove policy impediments so that both textiles and garment sector are internationally competitive. Allow setting up CBW in EPZ with adequate safeguards and monitoring arrangements.		MOC to advocate and MOF, MOT, BOI for action. MOC/NBR
Preferential access, Input sourcing and regional cumulation	Bangladesh's preferential access as an LDC makes RMG exports competitive subject to meeting ROO requirements.	Government should lobby EU for low value added requirement with liberal regional cumulation.		MOF/MOC
Foreign investment	Until December 2004, FDI in RMG was conditional – required associated investment in backward linkage industries. Industrial Policy 2005 removed this restriction. There is a need to strengthen	Remove institutional constraints for inflow of FDI in textile and RMG without conditions.	Encourage and promote FDI in textiles and RMG.	MOC to advocate and BOI for action.
Forward linkages				MOC to advocate

Areas of intervention	Issues	Actions recommended		
		Policy and regulatory reform	Investment	Advocacy or action required
Image building: the "Made in Bangladesh" brand	government-industry partnership to develop forward linkages, including product and market diversification and specialized units. There is a need to improve the image of Bangladeshi manufactured products abroad and promote quality Bangladeshi producers manufacturing quality products in which foreign buyers may place their confidence.	Commercial sections of Embassies to be strengthened. Appointment and promotion of commercial counselors to be made performance-based.		MOC, MOF and Ministry of Establishment to take action.
B. Fiscal Issues and Regulatory Framework				
Fiscal Issues				
Export subsidy	Export subsidy to textile sector has not benefited RMG industry, specifically knitwear, as yarn is supplied at higher than world prices.	Phase out export subsidy, including some new ones added in the past 2-3 years.		MOC and MOF.
Import duty concessions/exemptions and duty rationalization	Wide ranging tariff concessions for import of machinery and spare parts are causing various anomalies in nominal and effective protection rates. A preferable solution is a gradual elimination of all such tariff concessions and a continued reduction of import duties in general (including on imports of machinery and spare parts). This approach will offer a tariff rationalization path that is consistent with the long-term objective of moving to a lower and uniform duty rate.	Duties on machinery spares need to be commensurate with rates on machineries, while general reductions in customs duties are continued.		MOC to advocate with MOF/NBR.
Regulatory processes and governance				
Customs clearance at ports.	Increases costs of doing business substantially. For example, machinery for knitwear industry costs 10 percent more due to bribes that need to be paid at the port. Irrational duty structure contributes to this.	Improve customs administration. Strengthen ASYCUDA-based systems for cargo clearance. Introduce Direct Trader Input System to reduce number of		MOC to advocate with NBR.

Areas of intervention	Issues	Actions recommended		
		Policy and regulatory reform	Investment	Advocacy or action required
		signatures required. Apply lowest non-zero customs duty on spare parts (7.5%).		
C. Raw Materials, Labour and Finance				
Raw materials				
Yarn and fabric imports	Ban on yarn imports through land ports adds unnecessary lead time pressure for RMG industry, including knitwear.	Remove ban on import of yarn through land ports.		MOC to advocate. NBR to take action.
Labour				
Labour working conditions	Labour policy states that women cannot work beyond 8pm (temporarily relaxed). This prevents factories from running more than 1.5 shifts. This dramatically increases cost and content of labour. Need to upgrade skill of workers to raise labour productivity.	Modify labour policy to allow night-shift work for women so that factories can run multiple shifts.	Provide adequate dormitory facilities for workers.	MOC to advocate with Ministry of Labour.
Labour skills		Strengthen institutions devoted to training in garments industry (e.g. National Institute of Textile Training, Research and Design).		MOC and MOI.
Finance				
Interest rates	Interest rates are high compared to other Asian competitors.	Strengthen financial sector reforms to bring about lower interest rates and lower borrowing costs.		MOC to advocate. MOF to take action.
Import financing	RMG buyers find payment mechanism to be cumbersome and cause time delays.	Review the back-to-back LC system in favour of open LCs and direct payment.		MOC to review.
High capital costs	China and India have recently scaled up investment in textile and garments to upgrade technology. Same is needed for textile and RMG in Bangladesh.	Set up technology upgradation fund to finance partial reduction in market interest rates.		MOF/MOC
D. Infrastructure, Utilities and Logistics				
Infrastructure and utilities				
Ports	Congestion and corruption affects cost competitiveness.	Introduce private management through management contract, with scope for conversion of contract to	Invest in port infrastructure and equipment.	MOC to advocate. MOS/NBR to take action.

Areas of intervention	Issues	Actions recommended		
		Policy and regulatory reform	Investment	Advocacy or action required
	Challenge: convert Chittagong Port from a general cargo port that handles containers to a modern container terminal.	Customs should grant permission to establish off-dock yards to handle inbound containers. a concession later.	Container terminals (a new terminal will be constructed at New Moorings for operation by a private concession). Install ship-to-shore gantry cranes (CPA is in the process of acquiring 4 SSGs).	Bring in technically sophisticated and commercially-oriented managers. Replace casual labour with trained equipment operators.
	There is a need to reduce cost and time associated with border crossing at Benapole land port.	Permit sealed containers or vans to move across the border. Eventually, door-to-door movements by Indian and Bangladeshi trucks should be permitted under bilateral arrangements that incorporate a regional licensing scheme and payment of a transit fee.		At Benapole land port, in the short run, simplify procedures, remove restrictions on truck movements and increase number of customs officials and checkpoints.
Power	Unreliable and inadequate supply of electricity disrupts production.	Allow private sector provision of power to garments-specific industrial parks/EPZs.	Investment in private sector power plants attached to industrial parks/EPZs.	MOC to advocate. MOEMR to take action.
Road transport	Need to improve roads for moving goods into and out of the country.	Road widening needed.	Increase capacity of Dhaka-Chittagong road corridor.	MOC to advocate to Ministry of Communications. MOC to advocate to Ministry of Communications.
Rail transport	The container unit train operation between Dhaka and Chittagong has the potential to provide an important benefit to both importers and exporters in the Dhaka area. However, there are two problems: a) the frequency of train operations is low; and b) non-commercial management style of	Introduce commercial management in Bangladesh Railways. Adjust prices to encourage use of freight services. Increase the number of freight trains.		

Areas of intervention	Issues	Actions recommended		
		Policy and regulatory reform	Investment	Advocacy or action required
	Bangladesh Railways.			
E. Compliance Issues				
Social compliance and labour standards	There is a need to establish physical and social standards in the workplace, including ensuring environmental standards; fire exits and fire-fighting equipment; hygienic and sanitary work environment; medical facilities; observance of labour code; compensation package and social benefits.	Establish good system of reporting on compliance standards so that compliant firms can distinguish themselves. Effluent treatment plants should be set up with public-private partnership in textile parks and SEZs.		MOC to advocate. MOL to take action.
F. Enterprise Capacity and Marketing				
Improve marketing abilities	Most firms do not do proactive marketing and do not have direct contact with wholesalers or retailers.	Develop information services in EPB, BGMEA and/or BIFT. Support trade missions, participation in trade fairs, buyer-seller matchmaking, and training on marketing.		MOC
Inventory management	Enterprises need to improve inventory management in order to improve cost competitiveness.			
Market information	Lack of access to market information, particularly with regards to keeping up with shifting trends in market.	Strengthen commercial section of Embassies. Promote B-to-B and e-commerce.		MOC and the relevant chambers.

End of MFA Quotas: Key Issues and Strategic Options for Bangladesh Readymade Garment Industry

I. Introduction

1.1 ***The end of MFA quotas signals intense global competition and enormous challenges ahead for Bangladesh's readymade garment (RMG) industry.*** Undeniably, it forces the sector to actively search for measures to improve its competitive position by undergoing necessary adjustments fast. At the same time, the policy and physical environment under which the industry operates has to improve, if it is to retain or enhance its share in export markets. The cost of inaction or policy mistakes could be heavy. Hence, the urgency to explore strategic options and put them into operation.

1.2 ***The RMG sector has become the lifeline of the Bangladesh economy*** – for jobs, income, and exports. Some 10 million people, directly or indirectly, depend for their livelihood on this industry, which accounts for 40% of industrial employment. It is of strategic importance to strengthen its competitiveness through appropriate early actions, and to resist pressures to retain policies that are not in the overall interest of the nation. The sector has played a far greater role in Bangladesh's growth performance and employment generation than what might be inferred from this sector's low share in GDP (barely 5%). This very dynamic sector has become the main source of direct and indirect employment, foreign exchange earnings, which in turn helped finance a growing share of imports of vitally important capital goods and essential inputs. It has created significant additional positive externalities, including by being an important training ground for a growing number of new entrepreneurs.

1.3 ***There is urgency to become more competitive and diversified.*** There is indeed an urgency to act fast in addressing the priority policy and institutional constraints to improving Bangladesh's overall competitiveness and that of the RMG sector. All economically sensible options to further improve competitiveness of the RMG sector need to be pursued. Bangladesh cannot afford to (and should not) let the RMG sector lose its international competitiveness. The fact that RMG exports make up over 75 percent of the total export basket gives rise to certain vulnerabilities under the post-MFA global regime. Export concentration, in and of itself, presents a diversification challenge. But with the phase out of the MFA, and the consequent competitiveness pressures on the RMG sector, export diversification takes on new meaning for Bangladesh which must count on superior export performance in the medium- to longer term for sustained high growth and reduction of poverty, if the MDG targets on poverty and human development are to be attained.

1.4 ***The post-MFA external environment is beyond the sector's control.*** But domestic policies and the physical environment can be shaped, for positive results. Given Bangladesh's export concentration in RMG, a two-pronged approach is essential to meet the post-MFA challenge: (a) addressing and removing overall constraints to export competitiveness to unleash forces of export diversification; (b) focusing on the key policy and institutional constraints relating specifically to the textile-RMG sector in order to seize opportunities for market expansion abroad and job creation at home. World Bank's (2005a) just completed Growth and Export Competitiveness Study was a response to the first challenge. The present study relates to the second and tries to identify the critical constraints to competitiveness of RMG sector and recommends strategic policy options available with the public and private sectors to ensure competitiveness of RMG exports in order to retain and augment Bangladesh's market share in the global marketplace.

1.5 The World Bank (2005a) report examined export competitiveness challenges in a broader context, and was able to identify the generic as well as product specific constraints that undermine export

competitiveness – due to policy, institutional and infrastructural bottlenecks. The study revealed a number of key cross-cutting “Behind-the-border²” constraints to export competitiveness. These include weaknesses in economic governance and transport-telecom-port infrastructure; high cost of finance; cumbersome import regime and dysfunctional duty drawback system; product quality, consistency and standardization problems, poor labor skills and low productivity. The present study takes on board the findings and critical recommendations of that report before charting out a menu of strategic options for the RMG sector under the post-MFA regime.

1.6 ***A globally competitive RMG sector is also key to poverty reduction.*** Bangladesh’s Poverty Reduction Strategy Paper 2005 (PRSP) emphasizes acceleration of pro-poor growth as the route to halving the proportion of population living below the poverty line by 2015 – a key MDG target. Job-creating export expansion, based on the nation’s comparative advantage, is the fulcrum on which rests such a strategy for accelerating growth with poverty reduction. No other substantial manufacturing sector offers greater opportunity to increase employment for a given volume of investment than the RMG sector. Hence, the justification for a special focus on this sector.

1.7 The layout of this report is as follows: Section II begins with a brief description of post-MFA global changes in demand and supply sourcing for T&C products. Section III discusses the implications of these changes for Bangladesh’s global market share for RMG and their impact on domestic economic welfare resulting from likely changes in jobs and output. The structure of domestic industry and sources of competitiveness are described in section IV, while section V lays down the strategic options for the industry in the face of heightened global competition. Section VI concludes with a set of recommendations for policy.

II. Post-MFA Global Perspective: Shape of Things to Come

2.1 ***Trade in textile and clothing (T&C) products has been managed under Multi-Fiber Arrangement (MFA) since 1974.*** The hallmark of MFA was quota restrictions on imports into developed country markets of T&C products from a number of developing countries. The 1994 Agreement on Textile and Clothing (ATC), reached with the establishment of the WTO, stipulated phasing out all quota restrictions under MFA by 31 December 2004 and the full integration of T&C products into the multilateral trade disciplines. Accordingly, the quota restrictions were withdrawn by all countries by the agreed date, and T&C entered the uncharted waters of quota-free trade. In order to formulate the strategic options for Bangladesh, it is essential that we have a good perspective of the changed global scenario – markets and supply sourcing -- and their implications for Bangladesh RMG industry.

2.2 ***The world export of apparel doubled between 1993 and 2003, rising from about \$90 billion to \$180 billion.*** Low and middle income countries shared in this expansion the most, their apparel exports rising from \$53 billion to \$123 billion, ending with a 70% share of global exports. While countries like China and India were restrained, these countries (which included Bangladesh) benefited from the quota system as well as preferential access granted to many LDCs (e.g. by EU under GSP and Everything but Arms, and, recently, by USA under AGOA).

² The term ‘behind-the-border’ refers to economic policies, institutional and physical structures within the country that affect economic activity and investment decisions, thus making a distinction from those policies and institutional arrangements that *directly* affect external merchandise trade and other external transactions-- such as trade policies and policies governing ports or customs procedures.

2.3 *Preferential market access and ATC led to the allocation of important economic and human resources for export production*, and thus to welfare gains (or losses), but it also led to increasing the dependency of developing countries such as Bangladesh on these trade preferences. Since EU and US were the major markets protected by quotas, it is expected that the main effects of quota abolition will be felt in EU, US and the countries exporting to these markets.

2.4 Table 1 presents selected countries with the highest dependency of export of apparel and textiles to US and EU. It is apparent from the data presented that although the sector is relatively a small share of GDP, Bangladesh is vulnerable to external shocks due to export dependence on one product category – apparel.

Table 1: Export of apparel and textiles to the US and EU

Country	Apparel as % of exports to EU-US	Textiles as % of exports to EU-US	Export of apparel and textiles to US and EU as share of total exports (%)	Export of apparel and textiles to US and EU as share of GDP (%)
Cambodia	84	0	59	50
Maldives	50	0	86	43
Mauritius	54	0	59	33
Sri Lanka	50	1	35	18
Bangladesh	79	1	75	11
Pakistan	38	13	28	4
Nepal	29	13	34	4
India	16	7	9	1
China	6	2	3	1

Source: UN COMTRADE and World Bank 2005.

2.5 *The freeing up of trade in T&C products have important output, employment and trade implications for both developed and less developed countries.* When analyzing the end of ATC³, it is useful to consider three groups of countries:

- developed countries that used quotas to control the imports of textiles and apparel (USA, European Union and Canada);
- countries whose exports of textiles and apparel were constrained by quotas (China, India, Pakistan); and
- a group of developing countries that used the quota system as an opportunity to develop and promote their export of textiles and apparel (e.g. Bangladesh, Sri Lanka, Cambodia, Vietnam).

2.6 So what is likely to happen after the conclusion of ATC as of end December 2004? A computable general equilibrium model, GTAP (Global Trade Analysis Project; See Annex I for a brief description of the model), was used (World Bank 2005) to determine the possible outcomes globally, as well as for Bangladesh. Because of the high dependence Bangladesh has on RMG exports, there is a strong presumption that quota abolition will have negative impact on its exports with serious output and employment consequences domestically.

³ This section draws heavily from the 2005 World Bank policy note prepared for DECRG Trade by Vlad Malone.

2.7 The CGE techniques using the most recent data available⁴, provides estimates of the impact on economic welfare of these countries considered under three scenarios:

- quota abolition for apparel and textiles;
- imposition of safeguards by US and EU on top of quota abolition; and
- imposition of an export tax of 2 percent on apparel and textiles by China on top of quota abolition.

A fourth scenario is also explored: to see the potential impact on Bangladesh of duty-free access of its exports into the US market.

2.8 Though quota abolition was initially desired by all developing countries (first scenario), the impressive growth of apparel and textiles industry in China and the obvious quota constraints on Chinese exports (Martin, Manole and Van Der Mensbrugge, 2004) led producers from developed and some developing countries to ask for safeguards measures from the US and EU (scenario 2), which was then incorporated into China's WTO accession agreement.⁵ China proposed an alternative voluntary restraint measure: an export tax on apparel and textile sector (scenario 3).

2.9 The economic welfare outcomes for the three scenarios are summarized in Table 2 for selected countries and regions, including Bangladesh.

Country/Region	Quota abolition	Safeguards	Export tax by China
EU25	9358	-1581	-705
United States	6041	-1191	-598
China	3139	590	540
India	-267	60	5
Bangladesh	-370	93	57
Sri Lanka	-142	24	10
Rest of South Asia	-45	53	29
Other countries/regions,	-1670	87	-770
Total of all regions*	16044	-1865	-1432

Source: World Bank 2005

2.10 *The model results clearly reveal the benefits of quota abolition* which, in terms of money-metric measures of economic welfare, aggregates to over \$16 billion, with principal beneficiaries being US, EU25 and China. As expected, Bangladesh loses out to the tune of \$370 million, but gains from any safeguards against China as well as Chinese export taxes. Much of the welfare changes emerge from changes in allocative efficiency and in terms of trade. However, *it must be kept in mind that the comparative static results of the model are not necessarily contemporaneous but takes place over a period of three to four years, assuming Bangladesh is not addressing the competitiveness challenge through appropriate measures.* The adverse impacts, if any, would thus occur with a lag, leaving time and scope for corrective action for countries like Bangladesh who stand to lose out, if nothing is done.

⁴ The last version of GTAP, GTAP 6.4 was used (www.gtap.org). See Annex I for a description of the model and its limitations.

⁵ These safeguards stipulated restraints on China's textiles and apparel export up to 7.5% growth each year.

2.11 Following quota abolition, the reconfiguration of export and import flows between regions and countries results in changes in employment of unskilled labour, which is the principal category of workforce engaged in textile and apparel industry across countries. The implications for employment changes are summarised in Table 3 below showing Bangladesh could suffer significant employment losses – 17 percent in apparel and 5 percent in textiles sector though India and perhaps Pakistan achieve notable gains in South Asia. The Chinese workforce appear to be the major winners as demand for textile and apparel, including those of their linkage industries, rises sharply with opening up of global markets.

Table 3: Changes in Unskilled Labour after Quota Abolition

Country/Region	Changes in Unskilled Labor (%)		
	Raw Materials for Textiles	Textiles	Apparel
EU25	2	-17	-19
China	24	26	59
Bangladesh	1	-5	-17
India	3	4	6
Sri Lanka	5	-3	-17
Rest of South Asia	6	13	3
United States	-1	-12	-19

Source: Vlad Manole (2005)

Table 4: Export of RMG 2001-05

	(US\$ million)		
	Woven garments	Knit garments	RMG Total
2000-01	3,364.2	1,496.4	4,860.6
2001-02	3,124.6	1,459.2	4,583.8
2002-03	3,258.3	1,653.8	4,912.1
2003-04	3,538.1	2,148.0	5,686.1
2004-05	3,598.2	2,819.5	6,417.7
	Year-on-year growth (%)		
2001-02	-7.1	-2.5	-5.7
2002-03	4.3	13.3	7.2
2003-04	8.6	29.9	15.8
2004-05	1.7	31.3	12.9

Source: Export promotion Bureau

2.12 **Model predictions versus actual performance.** MFA quotas were phased out at the end of December, 2004. The GTAP model used predicted export shocks and economic welfare losses for Bangladesh, albeit with a lag. The immediate post-MFA period has not revealed this trend. RMG exports from Bangladesh in the post-MFA world did not decline; rather, data show that export growth during January-July 2005 was substantial to end the fiscal year 2004-05 with a growth of 13% (Table 4), with knit garments registering phenomenal growth of 31%. Indeed, performance in the hitherto quota-restricted market of USA revealed inherent strength of the Bangladesh industry relative to its competition (Table 5). During Jan-Jul, 2005, Bangladesh was clearly a winner with China, India and Sri Lanka, while countries like Hong Kong, Taiwan and Malaysia lost out. Knitwear exports to US jumped 70% during Jan-Jun 2005 and BKMEA reports that order books are full.⁶ Yet, this should give no reason for

⁶ Part of the problem was the absence of quality data on quota premia (export tax equivalents) in Bangladesh. Results cited here and their divergence from actual performance suggest that assumptions of ETE were

complacency, as major challenges lie ahead: safeguards on China will be phased out by 2008; Indian textile and garment sector has undergone major technology uplift and policy reform to put India amongst leading contenders in garment exports; and inherent weaknesses in policy continue to plague the woven garment sub-sector, whose share in exports is 56%, though declining. EU buyers are looking at neighbouring Turkey, Tunisia and Morocco, as makers of garments using EU fabrics to meet the demands of lean retailing and quick deliveries.

Table 5: US Import of MFA Apparel, January – July 2005

	Jan-Jul 04 (million square meters)	Jan-Jul 05 (million square meters)	Growth (%)	Jan-Jul 04 (US\$ million)	Jan-Jul 05 (US\$ million)	Growth (%)
World	11,018	12,443	12.9	35,466	38,827	9.5
Bangladesh	512	613	19.8	1,056	1,284	21.5
Cambodia	324	352	8.6	777	888	14.2
CBI	2,271	2,369	4.3	5,559	5,626	1.2
China	1,536	3,414	122.2	4,673	9,081	94.3
Hong Kong	392	246	-37.2	1,934	1,444	-25.3
India	369	476	28.9	1,324	1,780	34.4
Indonesia	412	464	12.6	1,386	1,595	15.1
Malaysia	112	109	-2.9	390	353	-9.4
Pakistan	290	315	8.5	623	666	6.9
Philippines	284	275	-3.3	987	982	-0.5
South Korea	311	179	-42.5	968	616	-36.3
Sri Lanka	225	265	18.2	817	951	16.4
Sub-Saharan Africa	245	220	-10.0	931	836	-10.2
Taiwan	304	202	-33.6	829	602	-27.4
Thailand	287	295	2.8	940	1,000	6.4
Vietnam	419	426	1.7	1,454	1,440	-0.9

Source: Office of Textiles and Apparel (www.otexa.ita.doc.gov)

2.13 The China Factor. There is widespread concern that the end of MFA would allow the more competitive countries, such as China, to develop the entire range of textile industries from cotton to ready-made garments in order to take advantage of the new trading regime. The surge in China's import of textile and clothing related machinery appears to corroborate this concern. Between 2000 and 2003, China's import of textile and clothing machinery increased from about \$2 billion to more than \$5 billion.⁷ This is being interpreted as suggestive of China's desire to increase its market share very substantially. China is known to produce high quality fabric. The modernization of the textile industry through large scale investment will allow it to further improve upon quality to meet the standards demanded by the global market. Availability of domestic quality fabric will enable the RMG producers in China to meet tighter delivery schedules. With an increase in China's share of the global market, there will be an incentive for migration of textile capacity to China. Some experts are predicting that China may capture as much as 50 per cent of the global export market.⁸

underestimated, compared to, say, Pakistan's (13%). Assuming a higher ETE (e.g. 13%) and re-running the model yields results closer to actual performance – significant export volume growth in hitherto US quota market, modest declines in exports to EU, and lower economic welfare and employment loss. Post-MFA performance in US suggest that MFA quotas were more binding for Bangladesh than presumed.

⁷ See OECD (2004).

⁸ Signs are emerging that China could indeed greatly increase its market share. Chinese customs data for exports to USA show that exports of major apparel products (8 product groups) increased by a massive 546 per cent during the first month after quota abolition over the corresponding month of the previous year. During January 2005 China shipped more cotton trousers and cotton knit shirts to USA than it had done in the whole of last year. Such a large increase was made possible by very large price cuts, 25 per cent on average and in excess of 39 per cent for half of the 8 products (Press Release, National Council for Textile Organizations, March 7,

2.14 The anxiety about the dominance of efficient Chinese producers in post-MFA world is reflected in the WTO protocol on the accession of China. It contains a transitional product-specific safeguard mechanism that allows WTO members to impose restrictions on imports from China if such imports are regarded disruptive of the market (Article 16). There is also a textile safeguard provision valid till 2008. This provision has already been invoked by USA and EU to restrict imports of certain categories of apparel of Chinese origin. The safeguard provision introduces certain amount of uncertainty about the prospect of unlimited market access of Chinese exports.⁹ This should work out well for other countries including Bangladesh. Since there is substantial risk in relying on only Chinese T&C products, retailers and importers in developed countries would be inclined to diversify their sourcing to include several other competing countries. Bangladesh must ensure that it remains one of the major sources of clothing products. However, it should not be lost sight of that although the safeguard actions may provide temporary respite, they cannot be relied upon for the long term growth of the industry; that will depend ultimately on competitive strength. If the Chinese price cuts reflect disappearance of quota premia – which ranged from 25% to 45% -- then other countries will in the long term have to match the Chinese price cuts in order to maintain their market shares.

III. The Domestic Context: Challenges to Overcome

3.1 In this section, we examine how the Bangladesh RMG sector is positioned vis-à-vis the domestic economy and the coping mechanisms at hand for facing the onslaught of post-MFA global competition. The sheer size of RMG sector, which accounts for more than three quarters of total exports, implies that Bangladesh will have to count on its superior performance in the medium to long term if the Millennium Development Goal (MDG) targets on poverty and human development are to be attained. Bangladeshi exporters including the RMG exporters, face enormous challenges to their competitive advantage. Given the problem of export concentration in RMG, and the fact that the sector provides employment for nearly two million workers, mostly women, it appears to be vulnerable to the MFA phase out. There is genuine concern about the competitiveness of Bangladesh RMG products relative to those from China, India and some other developing countries due to the sector's relatively low productivity, perception of poor product quality and long lead times.

3.2 *Many of the weaknesses of the RMG sector are due to cross-cutting infrastructure and governance related problems.* The World Bank (2005a) study noted earlier emphasized the need to address these urgently in order to improve the efficiency of the entire economy, and thereby enhance the export competitiveness of the RMG as well as other export industries. The productivity of the RMG sector is also constrained by a lack of adequately skilled manpower. Compliance with various social, ethical, health and environment related standards demanded by buyers is putting extra strain on the competitive strength of the sector. These issues have been analysed in detail by a study commissioned by the Ministry of Commerce (Gherzi *et al* 2002). The IFC-commissioned report by Dr Martelli Associates (1999) looked at the entire supply chain of the T&C industry, i.e. from spinning to garmenting, and came up with very similar conclusions. These studies, especially Gherzi *et al*, also made a detailed study of the forward linkage activities and pointed out the weaknesses of the industry in this respect. There does not seem to be many irreconcilable differences regarding broad policy options to address the cross-cutting and some of the sector specific issues such as compliance. However, there seem to be a number of yet unresolved issues related to backward linkage, lead time, central bonded warehouse and accessing GSP through regional cumulation. We take a closer look at the economic arguments behind these issues in order to arrive at informed policy options.

2005, www.ncto.org). US textile lobby is fiercely campaigning to have safeguard measures imposed on most of these products.

⁹ China has imposed a small export tax on apparel ostensibly to moderate any surge in exports.

3.3 ***The fact of the matter is that Bangladesh has come to rely heavily on its garment sector for jobs, income and foreign exchange.*** From its current position among the leading garments exporting nations of the world, Bangladesh cannot afford to be sidelined, as the economy-wide effect of this could be traumatic. It is, therefore, absolutely essential that every effort be made to not only retain its current competitive edge in the RMG sector but to enhance it by constantly improving productivity through, among other things, skill development, application of cutting edge technology, courting foreign investment, and taking advantage of scale economies in production and exploiting any opportunities offered by bilateral, regional or multilateral trade concessions.

3.4 ***No doubt the unfolding global economy will impose harsh disciplines on the economy; but there will be also opportunities for competitive sectors.*** To the extent Bangladesh garment exports have been sheltered from competition in the past they will face the full force of competition from other low-cost suppliers such as China, India, Pakistan, and Vietnam. To the extent Bangladesh has been restricted by quotas and tariff barriers, or it has gained in competitive strength, it will benefit from greater opportunities than have hitherto been available in the US market.

Box 1. Post-MFA Action Programme (PMAP)

The Ministry of Commerce has recently designed a Post-MFA Action Programme to support the RMG sector and mitigate possible negative shocks flowing from quota abolition. PMAP is to be implemented in five years, at a cost of \$40 million. The Programme has six components:

Skill and Quality Development Programme: Training is given in several areas such as compliance, quality management and marketing in order to improve the performance of the sector.

Displaced workers Rehabilitation Programme: to assist and retrain those who might lose their jobs

Support to Capacity Enhancement Programme: This has two sub-components – (a) to assist capacity enhancement of smaller RMG producers by helping them form strategic partnerships, mergers, and productivity improvement programmes; (b) Technological Capacity Development Programme, to help SMEs in the RMG and textile sector to access improved technology to enhance their competitiveness.

Support for PTS to improve quality and reduce costs.

Assistance for the handloom sector: to make them more competitive by setting up separate design and development centres for both handloom and PTS.

Assist forward linkage industries to enable them to provide better service to the RMG sector.

Funding from development partners has been sought to finance the PMAP. To start off, an allocation of TK 200 million was made by GOB in the 2004-05 budget for re-training and employment of potential retrenched garment workers, in accordance with component 2 of the PMAP.

Although it is a timely attempt to address the post-MFA challenge, it will be seen that the PMAP is rather limited in its scope and budget. MOC seemed to have designed the PMAP without inter-ministerial coordination mechanism built into it. It does not also address the sector wide fundamental competitiveness issues such as lead time, logistics barriers, import regime, availability of inputs at world prices and preferential access that are of critical importance for the sustainability of the sector. Without addressing these basic constraints, the support program that is envisaged in the PMAP is unlikely to bear fruit. By ignoring these issues the government is passing up an opportunity to strengthen the external position of the sector.

IV. Implications of Quota Abolition

4.1 *The phasing out of MFA on 31 December 2004 marked the abolition of quota restrictions on exports of textile and apparels from some developing country WTO members by the developed countries.* This will undoubtedly have important effects on both the exporting and importing countries; however, the effects are likely to be more far reaching and widespread in countries that have excessive reliance on textile and apparels for export earnings or industrial employment. Since, Bangladesh depends excessively on RMG for export earnings (over 75 per cent) and about half of its industrial employment originates in RMG, it is potentially very vulnerable to any adverse outcome due to the possible changes in the current market structure. To ensure that the RMG sector can withstand the shock of quota abolition, both the industry and the government will have to respond with appropriate policy reforms and measures. It is quite conceivable that with such response, the challenges of MFA phase-out can be turned into an opportunity that would lead to greater expansion of the sector as well as other linkage industries.

4.2 *The effect of quota abolition will, in the final analysis, depend on the competitive strength of the sector.* If it has already attained international competitiveness, or can quickly attain it, then the abolition of the quota regime will turn out to be a welcome event that will promote further expansion of the industry. On the other hand, if it is lagging in terms of competitiveness it will find its market share eroded due to encroachment on its market share by more efficient producers from other countries.

4.3 *Most analysts regard Bangladesh as 'vulnerable'.* A reason for this prediction is the fear that large efficient producers of textiles and clothing such as China, which were quota restricted in developed country markets, in particular USA and EU, will severely undercut prices that will drive out the less efficient producers from these markets. The large quota premium on Chinese exports would permit a large undercutting of prices following quota abolition. Some predict that China could secure as much as 50 per cent of the market share. Market developments with respect to apparel items that were freed from quota restrictions in EU and USA in 2002 as part of ATC are usually cited as early indications of what may happen in 2005 and beyond. Prices of imports of quota-decontrolled apparel items from China fell by 44 per cent in the US and by 42 per cent in EU (see M of C 2004). US imports from China in the decontrolled categories rose by 290 per cent while EU's rose by 162 per cent. US imports from rest of the world declined by 14 per cent during the same period.¹⁰ In January 2005, Chinese apparel exports to USA surged by over 500% with prices declining by over 25 – 40%. Such export performance, if it were to continue, bodes ill for vulnerable economies such as Bangladesh.

4.4 *The Chinese price reduction reflects the elimination of quota premium.* Since the quota premium is an estimate of the excess of export price over cost, it gives a rough indication of the competitive strength of the producers of the exporting country. If quota restrictions are removed, producers could reduce price by this amount and still maintain output at the quota level.¹¹ Any lesser reduction will witness an increase in sales in the hitherto quota-restricted market. Hence, much attention has been paid to quota prices in the empirical studies on the impact of MFA phase out on the RMG sector of various countries.

¹⁰ The surge in Chinese exports to USA in some quota categories during the first month after the expiry of the MFA lends some credence to the concern. Also see footnote 5.

¹¹ If the exporting country is also exporting to unrestricted markets, it will not be able to reduce export price by the full amount of the quota price without reducing sales in the unrestricted market unless it operates under constant cost conditions.

4.5 *A brief assessment of Bangladesh's RMG exports to its main quota market (USA) is in order.*

In the USA, Bangladesh RMG exports faced quotas like everybody else and got no GSP benefits. Moreover, these exports are subject to high tariffs¹². In value terms, about 46 percent of Bangladesh's exports of clothing products are subject to an ad-valorem duty of 15.1-20 percent. Another 13 percent faces tariffs higher than 25 percent. High tariffs considerably reduce Bangladesh's competitive strength in the US market since as many as 72 African and Caribbean countries get zero-tariff access in the US market under African Growth and Opportunity Act (AGOA) 2000 while Mexico gets the same under North American Free Trade Area (NAFTA). In order to formulate strategic options for Bangladesh's RMG exports, it is useful to make an assessment of the changing US market where it faces intense competition. The United States International Trade Commission's 2004 Report on *Textiles and Apparel: Assessment of the Competitiveness of Certain Foreign Suppliers to the US Market* presents the likely effects of MFA quota removal in US market on Bangladesh vis-a-vis its three major competitors viz. China, India and Pakistan. The report also lists what might be the key contributing factors (Table 6). As described earlier (Table 5), during the Jan-July, 2005 period, Bangladesh exports have fared better than analysts' predictions so far. If Bangladesh were to get zero-tariff access into the US market – if the proposed US TRADE Act were to be enacted – estimates suggest that its exports could double over the next three years.

Table 6: Summary of anticipated effects of quota elimination in US market in 2005 and key competitive factors, by selected countries

Country	Likely effects of MFA quota removal	Contributing factors
China	Likely to be the supplier of choice for most large U.S. apparel companies and retailers; uncertainty regarding textile-specific safeguards may temper export growth. Over the long term, competitiveness may diminish as strong economic growth leads to greater domestic demand for textiles and apparel, and for the labour and capital to make these goods. Showed tremendous growth in export of goods for which it became eligible for quota-free entry in 2002.	Labour - Per-unit labour costs very low due to low wages and high productivity. Inputs - Produces fabrics, trim, packaging, and most other components used to make apparel and made-up textile articles. Products - Considered by industry among the best in making most garments and made-up textile articles at any quality or price level. World's largest producer and exporter of textiles and apparel, notwithstanding tight quotas in major world import markets.
India	Likely to remain a competitive supplier to the United States when quotas are removed in 2005. Considered by many U.S. firms the primary alternative to China. Over the long term, competitiveness may diminish as strong economic growth leads to greater domestic demand for textiles and apparel, and for the labour and capital to make these goods.	Labour - Huge, relatively inexpensive, skilled workforce; has design expertise. Inputs - Among the world's largest producers of yarns and fabrics. Products - Wide range of apparel; considered a competitive source for home textiles (e.g., bed linens and towels). Business climate - Personal safety, security of shipments between factories and ports and bureaucratic red tape and infrastructure are issues, with many U.S. firms using agents in lieu of dealing directly with producers.
Pakistan	Likely to continue as a supplier to the U.S. market. Considered by many U.S. firms as a competitive alternative to China, particularly for men's apparel. May continue to be a global supplier of cotton yarns and fabrics.	Labour - Large, relatively inexpensive labour supply. Inputs - Access to local supplies of raw cotton. Business climate - The government is taking steps to ensure the global competitiveness of the textile and apparel sector; personal safety and security of shipments between factories and ports are issues.
Bangladesh	The status of Bangladesh as an overall supplier to U.S. market is uncertain. Considered by some U.S. firms to be competitive alternative to China for mass-produced, low-end apparel.	Labour - Very low wage rates; productivity improving, but lags China; government is working to improve labour standards. Inputs - Relies heavily on imports for woven fabric requirements; becoming increasingly self-sufficient in knit fabrics. Special arrangements - Duty-free access to major world import markets, including the EU, Canada, and Norway. Products - Mass-produced basic garments, including knit cotton tops and woven cotton pants.

Source: Quoted from USITC (2004)

¹² It is on record that in 2003 Bangladesh paid more tariff revenues on its \$2 billion of exports than France did on its exports of \$26 billion to the US.

4.6 ***The final impact of quota abolition on individual countries depends on an array of factors in a complex way.*** When all these factors play out, a new equilibrium price will be established in the market. Whether a country's exports increase or decline will depend on its cost relative to this new price (see Appendix B for a technical discussion). Hence, the key to success in the post MFA regime is to reduce cost relative to other countries, i.e. to be competitive. Reducing cost relative to other countries is particularly important in view of the fact that many of these countries are reorganising their textile and RMG industry through appropriate policies, new investment, technological improvement, forward and where possible backward linkages and conducive business environment in order to exploit the opportunities that will present themselves with the full integration of the industry into multilateral trade agreements. Any country that lags behind in the global competition race will be penalised by a reduction of its market share. Bangladesh must ensure that its RMG industry is up among the winners in this race, and this can be achieved only by reducing costs and satisfying the demand of the customers in terms of lead time, design, quality and standards.

4.7 ***Bangladesh has achieved a global reputation as a reliable supplier of low-value basic items of apparel.*** Despite binding quota restrictions in the US market in the past, Bangladesh has remained a supplier of the cheaper products as it apparently has a comparative advantage in the production of the less expensive clothing. Annex Table 1 provides unit values of selected items of some developing countries to USA before quota phase out. It clearly shows that Bangladeshi exports are among the least expensive; only Pakistan offers cheaper prices across a range of products. Of special interest are the prices of export products of China and India, which are regarded by many as the principal threat to Bangladesh and other apparel exporting countries. Contrary to the general perception, Chinese products are seen to be far more expensive than the products of Bangladesh and other countries listed in the table. Indeed the unit values of the Chinese products are on average thrice as expensive as the unit values of the Bangladeshi exports.

4.8 Note that unit values derived by dividing total FOB value of exports by the volume may not be a good indicator of the cost conditions because of the distortions introduced by quota restrictions of the past. These realised market prices would have then included quota premia if the quotas were binding for any country. Hence, the quota effects need to be netted out to find the producer prices that would exist in the absence of quota. Annex B technical discussions show that quota premia acted as an export tax which exporters had to recoup in order to stay engaged in export business.

4.9 Annex Table 2 provides estimates of quota prices of different categories of apparel in selected countries. As will be seen, quota prices varied quite markedly. They were the highest in China which had the highest prices for almost all categories. India has on average the second highest quota prices. Quota prices in Bangladesh were on average about the same as in the other countries in the table.¹³ Assuming that quota prices given in Annex Table 2 are comparable, it is possible to get an estimate of the net producer price of an item by subtracting the quota price from the market price. This is done in Annex Table 3 for Bangladesh and China. It will be seen that adjusting market price for the quota premium only marginally reduces the proportion by which average Chinese price exceeds average Bangladeshi price. The ratio of Chinese and Bangladeshi average net price falls to 2.7 reflecting a higher quota margin for the Chinese products. The lower this ratio, the more competitive the Chinese exports relative to Bangladeshi exports.

4.10 ***Since quotas applied to volumes rather than values, Chinese suppliers must have found it more profitable to concentrate on high value items.*** That explains the generally higher price of Chinese exports to the US market compared to exports from Bangladesh. Indian and Sri Lankan product prices are

¹³ According to the estimates of Elbehri (2004) the export tax equivalent of quotas of Bangladesh is 70 per cent higher than that of China. However, other estimates reported in Razzaque (2005) are similar to that reported in this paper.

also considerably higher in most cases. It would appear that Bangladesh serves a cheaper segment of the US market than these countries. Hence, Bangladesh may not be in direct competition with them. However, it is possible that these countries could foray into the lower end of the market which earlier they had not because of the quota restrictions. To what extent this climb down from high end to the low end of the market would be successful is difficult to predict. Those who produce high quality, high value products efficiently may not necessarily be competitive in the market for cheap products.

V. Industry Structure and Sources of Competitive Advantage

5.1 **Industry structure.** Before exploring strategic options for the industry, it makes sense to take a quick look at the industry structure and the scale economies it presents. *Bangladesh Garment Manufacturers and Exporters Association (BGMEA) Members' Directory 2004-2005* lists 4300 member firms with the following breakup: 700 knitting factories, 525 sweater factories, and the remaining 2275 are woven garment units. However, a BGMEA internal survey found that some 1300 of these firms were closed or inactive. In addition, *Bangladesh Knitwear Manufacturers and Exporters Association (BKMEA)*, boasts a membership of another 860 knitwear firms, of which some 300 are believed to have dual membership with BGMEA, leaving 560 units with exclusive BKMEA membership. Thus the structure of the garment industry with active firms may be summarized as follows:

Garment category	Number of firms (adjusted)	Share (%)	Employment ¹⁴
Woven	1673	47	836,500
Knitwear	1495	42	747,500
Sweaters	392	11	337,120
Total	3560	100	1,921,120

4.2 **Thus, just about half of the firms are into woven garments, while knitwear and sweaters together make up the other half of the industry.** The latter group has shown tremendous buoyancy of late, with relentless growth particularly in the EU market, notwithstanding the end of the quotas. Capital investments per unit of labor employed is relatively low for the knitting firms. Woven firms are typically larger -- about 13% of them also engage in the knitting industry. These are usually the larger and more productive woven firms.

4.3 Although BGMEA and BKMEA data on member firms would yield total employment of about 2.8 million workers in 2004, adjusting for inactive firms and using our latest survey of 350 RMG firms, yields a total employment of 1.9 million production workers, or 2.0 million, if one includes all employees. At least another million are engaged in accessories and linkage industries (e.g. packaging, courier services). 1% of garment firms operate in EPZ, 63% of which have foreign ownership. These firms use more capital and technology and have higher productivity than those outside, as is reported later.

Data from Export Promotion Bureau on RMG exports reveal the degree of export concentration at the firm level. As it turns out, of the 2387 exporting RMG firms in 2004, the top 500 firms exported 74% of total garment exports; the top 650, up to 81% (Table 5). Which means the remaining 1737 firms in EPB's list of exporters managed only 19% between themselves. That leaves some 1200 firms (out of 3560) that did not export at all or perhaps sub-contracted. Among these firms, some could be facing closure or

¹⁴ Because of the problem of inactive firms, these employment estimates are based on the average number of production workers found in the 350 RMG firm level survey which followed stratified sampling procedures (see Table 8).

operating intermittently. Among exporting firms, the bottom 200 firms which export less than \$50,000 each cannot also be open for business all year.

	Cumulative export share (%)
Top 100 firms	40.5
Top 200 firms	53.0
Top 300 firms	61.9
Top 500 firms	74.3
Top 650 firms	81.0

Source: Data from DG Textiles, EPB

Box 2. Industry Structure and RMG Exports

A Ministry of Commerce study (2001) found that the RMG sector comprises the following four groups of firms: The first group of about 15 large companies own 220 manufacturing units, each with a capacity of 10,000 dozens or more per month. These are well established firms that source their own fabric and have direct marketing link overseas. Another 550 manufacturing units have a production capacity of 5,000 to 10,000 dozens per month who work mostly (60 per cent) on a CM basis for importers or buying agents. There are an estimated 1993 units each with a capacity of less than 5,000 dozens that work mostly on a sub-contracting basis. Finally there are about 200 units that are sick and not currently operating.

During the early years the RMG industry comprised almost entirely of woven apparel manufacture. Even as late as 1993-94, only 17 per cent of total RMG export was accounted for by knit apparel. Since then the knit sector grew very rapidly. During the ten year period 1993-94 to 2003-04, the annual growth rate was in excess of 23 per cent. During the same period the woven apparel export increased by a more modest rate of 10.6 per cent per annum. As a result of the differential growth rates the share of knit apparel in total garment export increased to 37.8 per cent while that of woven apparel decreased from 83 per cent to 62.2 per cent. During the first 8 months of the fiscal year 2004-05 the share of knit increased further to 43 per cent with an equivalent decrease in the share of woven. Assuming this trend persists, in two to three years, the value of export of knit apparel will exceed that of woven apparel suggesting relatively greater international competitiveness of the former relative to the latter in the world market.

There is also high spatial concentration in the export of the apparel products. More than 79 per cent of the knitwear exports went to the EU countries in 2004-05 while the USA absorbed 14 per cent. Canada took in another 4 per cent. Thus these three markets accounted for nearly 98 per cent of the total knitwear exports of Bangladesh. There was similar concentration in the case of woven exports. These three markets imported 98 per cent of the total woven exports of Bangladesh. EU imported 47 per cent, USA 45 per cent and Canada 5 per cent. Woven exports are thus more evenly distributed among EU and USA unlike the knit exports.

There are other potential markets in the horizon. Japan, which is the largest importer of RMG, after US and EU, is yet to be explored, but holds enormous potential. Bangladesh needs to penetrate this market, but faces stiff competition from China. Vigorous marketing and promotion drives are needed to enter the Japanese, East Asian and other growing markets of middle income countries, not to mention Australia, New Zealand, and Norway, all of which have given zero-tariff access to Bangladesh exports.

5.5 Employment in exporting firms reveal certain interesting characteristics. EPB firm-level data reveals that employment in the 2387 exporting firms adds up to over 1.2 million (or 60% of total RMG employment). Which means that some 0.8 million of the RMG workforce are employed in firms that sub-contract (no direct exports) or belong to the group of firms that are vulnerable. Further, the top 650 firms that export 81% of total RMG are found to employ about 411,000 workers (21% of RMG employment), while the remaining 1737 firms that export only 19% of RMG employ around 790,000 workers (40% of total). Clearly, this means that the workforce in the latter group are terribly unproductive (big concern for the sector) or are not fully employed.

5.6 **Sources of competitive advantage of RMG.** Having looked at the RMG industry structure, we examine the sources of competitive advantage of the sector which derives from three channels: (a) factor costs, (b) domestic policy measures and (c) external trade environment. Each of these contributed significantly to the stellar performance of the sector during the last quarter of a century.

Table 9: Labour and power cost in selected countries

	Labour cost per hour US\$	Power cost US cent/kwhr
China	0.69	7.10
India	0.58	8.33
Indonesia	0.32	3.65
Mexico	2.20	n.a.
Pakistan	0.37	6.00
Sri Lanka	0.46	7.78
Vietnam	0.27	n.a.
Bangladesh	0.30	6.75

Source: Gherzi et al (2002)

Table 10: Estimated cost of investment

	Spinning (ring) unit	Weaving unit	Woven fabric processing unit	Knitting and knit fabric processing unit	Woven garment unit	Knit garment unit
Output	Yarn	Grey fabric	Finished woven fabric	Finished knit fabric	Garments**	Garments*
Annual capacity***	5.2 million kg	15.3 million metres	24.0 million metres	13.2 million metres	250,500 dozens	500,000 dozens
Investment cost (mil taka)	756.6	555.6	742.6	267.0	161.4	103.3
of which:						
foreign exchange	582.5	396.2	548.7	194.3	73.8	38.0
Employment	625	335	325	160	1250	745
Capital cost per worker (million taka)	1.211	1.659	2.285	1.669	0.129	0.139

*Ladies, Polo and T- shirts, and children's dress set; **Men, women and boys shirts and trousers; ***1 kg yarn=6 metres of fabric; 1 dozen woven garment=18 metres of fabric.

Source: Gherzi Textile Organisation (2002a). *Executive Summary of the Initial Report on Post-MFA Development Strategy and Technical Assistance for the RMG Sector*, Report submitted to Ministry of Commerce, Government of Bangladesh

5.7 **Factor costs: Ready-made garment manufacturing is a highly labour-intensive operation that requires relatively modest capital investment.** A densely populated and capital-scarce country such as Bangladesh is thus ideal for the expansion of RMG production. The skills required for making fast-moving and inexpensive garments are not too demanding and can be mastered by the nimble women workers of the country without great difficulty. A very large pool of poor women engaged in low productivity home work provides a ready supply of unskilled workers who could be trained into reasonably skilled hands for garmenting. The pressure of the unemployed labour force and the very low standard of living allow the garment wage in Bangladesh to be kept at a level that is one of the lowest among competing countries (see Table 6). The modest capital requirement enables a large number of

entrepreneurs to enter the industry (Table 7). Successful entrepreneurs find it relatively easy to expand their operations by reinvesting profits, and thus avoid costly bank loans.¹⁵ This reduces capital costs of RMG operations.¹⁶ These are the principal strengths of the industry that can be maintained as long as there is an excess supply of workers.

Box 3. Comparative advantage: Basics versus high value added apparel

Most of the RMG firms in Bangladesh (more than 2000 i.e. two-thirds) offer only stitching capacities on what is known in the industry parlance as cutting and making (CM) or cutting, making and trimming (CMT) basis (Industry leaders claim that share of CMT is much lower with increased use of FOB system). This mode of operation requires the least amount of skill and information about the international market, and is thus well-suited to the (limited) capacity of this group of RMG manufacturers. However, being the least skilled, they are vulnerable to the vicissitudes of the market, and may find it difficult to withstand adverse shocks.

There is a natural progression in the production of apparels from low to high value items. Initially entrepreneurs start with basic items that require little sophistication on the part of either the labour force or the management. As the management and workers gain in experience of the apparel market, their efficiency improves. Some of them develop direct marketing strategies, and some begin to manufacture higher value-added items. The process has already commenced in Bangladesh. The more successful entrepreneurs have established direct contacts with their ultimate buyers (retailers) and have developed sophisticated marketing strategies. Some of them have already made a successful transition to high value apparel product such as dresses and suits. However, this should not lead to the suggestion that the RMG manufacturers should abandon the basic item market and shift to the high value fashion items of clothing. The former constitute by far the largest section of the market, and abandoning this market would be a big mistake.

Bangladesh RMG manufacturers have successfully contested the market for standard items for a fair amount of time and its share has increased over time. This is a clear indication that the country has a comparative advantage in the production of cheaper standard items (e.g. see USITC (2004) assessment). This is still the basic strength of the domestic RMG manufacturers and most of the export earnings still derive from this source. As long as this strength is obtaining, the manufacturers should not abandon the market, indeed they should exploit it to the fullest possible extent. Those who find an opportunity to earn higher profits by moving up the value ladder should of course do so. This decision must be based on the profit calculus of each entrepreneur, and not on such concepts as “higher value addition”. High value added products are not necessarily high *total* profit products and there are no special advantages in producing them.

Countries concentrating on the market for high value apparels happen to be the most technologically advanced, skilled and efficient producers of apparel items. To secure a niche in this market, Bangladeshi RMG producers will have to compete against the highly sophisticated apparel manufacturers of the developed countries and such developing countries as China, Sri Lanka and Turkey. To be successful in the high value end of the market the domestic RMG producers will need long preparation with gradual build up of skill, technology and capacity. Alternatively, this can be speeded up through intake of FDI (as in China, Sri Lanka and Cambodia). It is doubtful if many of them will attain that capacity in the near future. Much investment in human capital and technology will be needed to make the transition. Foreign direct investment may act as a catalyst in this respect.

5.8 *The low wage of workers in Bangladesh is unfortunately accompanied by their low productivity which erodes part of the benefits of cheap labour.* Despite the many years, adequate productivity improvement has been lacking in the sector (discussed in Section VII). More efforts and investment are needed in order to raise the productivity of its labour force to place themselves in a superior competitive

¹⁵ Debt exposure of RMG industry is low according to the Bangladesh Garments Manufacturers and Exporters Association (BGMEA) leadership.

¹⁶ Capital cost of borrowed funds is as high as 10.5-14.5 per cent. There is a large spread (about 5 per cent) between borrowing and lending rates of banks.

position.¹⁷ Government intervention might be warranted to develop a high quality workforce through the creation of education and training facilities. This is one area where there is wide scope for private-public partnership and co-operation. Government support is warranted by the public good nature of investment in this area.

5.9 Domestic policies: *Given the heavily protected trade regime of past decades, the rapid growth of RMG would not have been possible without some compensating support mechanisms.* For one, the textile sector was heavily protected; imports of many textile products were prohibited while others carried the highest tariff rate. Amidst this protective environment, the RMG industry needed to source inputs, such as yarn and fabric, at world prices in order to compete in the world market. An early support mechanism was the duty drawback system; but this involved upfront payment of duties on imported inputs that tied up substantial funds of manufacturers besides involving cumbersome procedures for reimbursement. In order to relieve the garment manufacturers of these difficulties, the government introduced the system of bonded warehouse in the early 1980s. The bonded warehouse facility was a significant business-friendly policy support instrument that eliminated the duty-payment requirement and also substantially reduced bureaucratic hassles and delays.¹⁸ The entrepreneurs in RMG now faced essentially the same input cost as their competitors in other countries. Essentially the system created a virtual free trade enclave for imported inputs for the export-oriented RMG producers in order to level the playing field that was earlier skewed against them. The removal of the protection-related costs enhanced the competitiveness of the sector and contributed to the rapid expansion of its share of the international market for garments.

5.10 Another policy support mechanism was the introduction of the back-to-back letter of credit (LC) system. The garment manufacturers were allowed to import their inputs (fabric and accessories) under this LC system. When a manufacturer received an LC from an overseas client for the supply of certain amount of garments, this master LC could be used to open another LC in a local bank for the import of the necessary inputs. The cost of the imported items along with interest and other charges would be deducted by the local bank from the proceeds of the sales of the final output. Hence, the manufacturer was spared the financial involvement in the purchase of the imported inputs, which often amounted to more than 65 per cent of the total cost of the garments. The financial outlay requirement for garment manufacturing was accordingly greatly reduced to essentially wage, energy, transport and overhead costs. This was especially useful for a large number of small and medium enterprises (SME) that had neither large finance capital nor the collateral to secure large bank loans.

5.11 The importance of appropriate domestic policies in enhancing the competitiveness of an industry is underscored by the success of the aforementioned policies.¹⁹ However, there are other policies, such as high tariff and non-tariff barriers to import, that actually reduce the efficiency and competitive strength of the domestic industries, particularly export industries that have to sell their products at international prices. Furthermore such protective barriers also introduce an anti-export bias in the economy by providing relatively greater incentives for import substitution. They also make the import regime for

¹⁷ Recently BGMEA has set up a modest fashion institute. This is absolutely insufficient for the needs of the industry.

¹⁸ It is also open to abuse by the RMG entrepreneurs. It has been alleged that there is widespread leakage from the individual bonded warehouses.

¹⁹ Some piecemeal measures were taken to improve port procedures that also add to costs. Significant improvement in custom procedures reduced signature requirement for export consignments from 17 to only 5 thereby reducing the time required to complete formalities. All custom procedures are now completed within two hours. The cost of freight forwarding has been reduced to only Tk 1250 per consignment from Tk15,000-20,000. A public-private committee has been formed to monitor the functioning of the reforms.

exports rather cumbersome²⁰. It is worth mentioning that the Government has taken some steps in the FY06 budget to ease the situation by reducing duties on dyes and chemicals, eliminating duties on machinery spares, in addition to continuing with the 5% cash subsidy on exports using local inputs. All this adds to the VAT exemption given to utility charges incurred by 100% exporters.

5.12 External trading environment: *There is no denying that the rapid rise of the RMG sector in Bangladesh had much to do with the institution in 1974 of the Multi Fibre Arrangement (MFA) by the developed countries to protect their own textile and apparel industry against competition from the more efficient producers in developing countries, particularly in Asia. Quota restrictions were applied on developing countries that exported significant quantities of textile and apparel products to the developed countries.*

5.13 Quota restrictions on the efficient producers of garments meant that the importers and retailers of garments in developed countries were forced to source garments from a large number of less efficient countries. Producers in quota-restricted countries also started shifting their production facilities to countries that were still not so restricted. A large number of developing countries embarked on garment manufacturing to feed the large clothing market of the developed countries.

5.14 The first major export oriented RMG industry in Bangladesh was established soon after the coming into force of MFA in collaboration with Daewoo, a large garment manufacturer of a quota-restricted country, South Korea. There was no quota restriction on the apparel exports of Bangladesh to USA until 1985 as its exports were not substantial. But quotas were imposed in that year after triple digit growth rate during the previous five years, with exports rising to \$150 million (1 per cent of US market).²¹ Growth rate of exports to USA fell off (and quotas became binding), but total exports increased robustly such that by 2000-01, Bangladesh had captured 3.3 per cent of the US market.²²

5.15 EU offered even better trade preference to the least developed countries (LDCs) that included Bangladesh. It granted quota-free (as well as duty free) access to LDC products. Although exports to EU were much less than that to USA throughout the 1980s, the picture changed in the 1990s. By 2002-03, export of garments to EU was 43 per cent greater than that to the USA. The faster growth of exports to EU was no doubt helped by the absence of quotas that restricted exports of competing countries. The Everything But Arms GSP scheme introduced in 2001 allowed virtually all LDC export products to enter the EU market at zero tariffs when other countries had to pay full or concessional tariffs.²³ This provided a considerable competitive edge to LDC garment exports that qualified for duty-free treatment in the EU market since the MFN (most favoured nation) tariff rates on RMG products were generally quite high.

²⁰ Imagine how simple life would be for RMG exporters if there were no tariffs or import restrictions on textiles. There would be no need for “bonded” warehouses, no complaints of leakages, no customs corruption on this count. But the question is, can the primary textile industry survive such a “free trade in textiles” regime? The general consensus is that, in its current state of competitiveness, it probably cannot.

²¹ Islam (2001), p.51.

²² The market share fell off fractionally since then.

²³ As the title of the scheme implies Armament was excluded from the scheme. A few agricultural products such as banana, sugar and rice were given limited duty-free access until late in the decade after which the restrictions would be entirely removed.

VI. Competitiveness and Strategic Sourcing Decisions

6.1 ***MFA quotas gave market access and shelter from competition to many developing countries, including Bangladesh.*** Quota abolition removes that passport to export markets. Instead, market share can only be gained or retained via international competitiveness of which price is only one – albeit critical – element. During the MFA regime, buying companies typically looked for more than the lowest price of garments in making their sourcing decisions. Quality consistency, speed to market, reliability and flexibility, and service were important attributes amongst suppliers that won them business.

6.2 ***In the emerging competitive apparel market of the post-MFA world, importers and retailers will rationalise their sourcing practices in order to better position themselves in a fast changing market.*** A recent study commissioned by the Commonwealth Secretariat (Lezama *et al* 2004) on sourcing practices of international buyers finds that major buyers of apparel are increasingly adopting sourcing strategies that seek to minimise their *total* costs throughout the supply chain rather than minimizing the cost of procurement from the RMG factories who are the lowest down in the supply chain. This relentless drive for total cost minimization by overseas buyers poses certain challenges for the RMG sector of Bangladesh. These relate to (i) price competitiveness, (ii) quality, (iii) social and environmental compliance and (iv) lead time.

6.3 ***The first strategic shift in global sourcing post-MFA is likely to occur with a shrinkage of the “span of control.”*** Buying houses would like to limit the number of countries and factories from which they source their apparels. But what is also evident is that they will not be putting all their eggs in the Chinese basket. In making country choices post-MFA, macroeconomic and political stability, infrastructure, compliance standards, and good partnerships, will be critical. Globally, therefore, a lot many countries which held significant share of apparel markets will face shrinkage or total elimination. According to various assessments, vulnerable countries include Nepal, Mauritius, Maldives, Sri Lanka, Thailand, Philippines, Poland. Most analysis [World Bank (2005b); USITC (2004); Business for Social Responsibility (2004)] predict challenging times for Bangladesh though all indications are that it will remain a major garment exporting country.

6.4 ***Beyond price, quality consistency, and turnaround time, a large body of factors govern competitiveness to determine sourcing decisions of buyers.*** In 2004, the World Bank participated in a MFA Forum for managing the transition to a Responsible Global Textiles and Garment Industry, along with other multilateral organizations (UNDP), labor groups (AFL-CIO), NGOs (Oxfam), and private sector (Business for Social Responsibility). According to research carried out under the auspices of the working group, companies consistently stated that several significant factors influenced their sourcing decisions. Much the same views were gathered from the survey of apparel industries by the Commonwealth Secretariat²⁴.

6.5 ***These sourcing criteria are likely to remain important in the post-MFA regime.*** A comprehensive list, with no order of priority, would include:

- *Social and environmental compliance*
- *Strong relationships between buyers and suppliers*
- *Preferential trade agreements*
- *Pre-production assistance*
- *Transportation: access, costs*
- *Political environment: safety, corruption*

²⁴ Lezama, M., B. Webber, and C. Dagher, Sourcing Practices in the Apparel Industry. Commonwealth Secretariat, London, 2004.

- *Trade Regulations/barriers*
- *Raw material/fabric access, supply*
- *Vertical integration*
- *Service and Flexibility*
- *Communication skills*

6.6 ***How does Bangladesh fair in an assessment of its attractiveness as a sourcing destination?*** On the positive side, discussion with buyers reveal that they are not just ready to abandon suppliers with whom they built long-term relationships over the years and even invested in skill development, management practices and workplace conditions. Yet Bangladesh presents a mixed bag of strengths in some of the above factors while weaknesses in others. The message for the industry is that low costs and industry efforts will keep it alive but they have to go beyond price and cost competitiveness in order to develop other sourcing criteria. Due to the perception of weak social and environmental compliance in Bangladesh, buyers are now putting extra emphasis on meeting ILO codes regarding working conditions and labor practices as well as adhering to international standards of waste management. Infrastructure weaknesses, lack of raw materials, and antiquated banking system are other problems cited by companies as industry deficiencies that need to be overcome in the days ahead. This can only be done through concerted public-private partnership going forward.

VII. Strategic Options for Bangladesh RMG

7.1 ***The present study takes on board the findings and recommendations of the Bank's Growth and Export Competitiveness Study*** (World Bank 2005a) before charting a course of strategic options for the RMG sector in the post-MFA regime. While the preceding sections laid out the global and domestic context in which the Bangladesh RMG industry must now operate in light of the absence of quotas, in this section, we explore a number of strategic options open to the sector for coping with the challenges faced under the new global regime and seizing the opportunities presented.

Some strategic options open to the garment sector could be categorized as follows:

Policies to enhance global competitiveness:

- minimize anti-export bias of trade policy and remove behind-the-border constraints to overall export competitiveness (World Bank, 2005a);
- raise RMG productivity by courting FDI.

Policies to reduce time to market:

- reduce lead time;
- address the issue of backward linkages;
- explore CBW option.

Taking advantage of external policy environment:

- seize opportunities for preferential market access;
- take advantage of regional cumulation;
- negotiate FTA with India.

Striking government-industry partnership to develop forward linkages.

- *Product and market diversification*
- *Image building and brand development*
- *performance rating database*

- *FDI or Joint ventures*
- *Specialized units*
- *Human Resource Development*

Explore employment options for displaced garment workers.

Enhancing Competitiveness

7.2 *Export concentration in readymade garments makes the economy, jobs and income, extremely vulnerable* to external shocks arising from changes in global demand for RMG. *Export diversification, therefore, is a high priority.* But the import regime for other exports is cumbersome and the duty drawback system dysfunctional, thus literally stopping any prospect of export diversification dead on its tracks. It must be noted that streamlining the import regime for exports in a highly protected economy such as Bangladesh is just as important for ensuring export competitiveness as reducing anti-export bias of the tariff and QR regime.

7.3 *Reduce the remaining significant anti-export bias.* Although Bangladesh has managed to insulate the RMG sector through the bonded-warehouse and EPZ schemes from the effects of protectionist policies, further trade reforms are needed to provide comparable stimulus to other industries with the potential of diversifying the country's exports [World Bank, 2005a]. In addition to dealing with the flaws in governance, transport, and finance, trade-related policy changes need to further simplify the import tax regime and reduce the dispersion and average level of nominal (and thus effective) protection, preferably through a pre-announced medium- and long-term schedule of tariff reductions (as done recently by India), and the elimination of any remaining protective quantitative restrictions. At the same time, Bangladesh should avoid using direct export subsidies because of the strong likelihood of their abuse and limited impact. Policy reform should focus instead on addressing the costly bottlenecks that damage not only performance but also the investment climate.

7.4 *Specifically to bring high payoffs in export competitiveness, reform should be a priority in Customs as well as the Duty Exemption and Drawback Office (DEDO).* Practices in both these services are characterized by inefficiency and rent-seeking that penalizes firms capable, in a freer regulatory environment, of expanding Bangladesh's share of world trade.

7.5 *A thorough-going program is required to match infrastructure services to the needs of a growing, outward-looking economy.* The basic goal should be to redefine the role of the public sector from service provision to regulation while encouraging private-sector participation by establishing rules of competition, strengthening the regulatory environment, and addressing the problem of poorly performing state-owned enterprises (SOEs). Specifically, it is important to remedy the **power and transportation** infrastructure failures that exporters see as heavy burdens on their competitive performance. While there is no doubt that additional investment is required in energy and transport infrastructure, the World Bank (2005a) report concluded that the *changes that are required most immediately are modifications of policies, processes, and management rather than capital investment*

7.6 *Raising productivity is key to competitiveness.* The broad aim of policy measures to improve Bangladesh's competitive performance is to expand exports and to strengthen growth prospects by raising factor productivity and encouraging private investment. Total factor productivity (TFP), i.e., the efficiency with which resources are used in production, has been crucial at the margin to the country's overall economic growth for nearly three decades. Clearly, it is important to improve human capital and to mobilize more investment from foreign and domestic sources. What is also critical for export-accelerated growth, however, is the efficiency with which labor and capital resources do their work. Inefficiencies of various kinds and degrees of severity now hamper all sorts of enterprises.

Box 4: Key Recommendations of the Growth and Competitiveness Report

Trade policy:

- Unify and merge all para-tariffs with the CD.
- Reduce maximum tariff to 15 percent or lower over the next 5 years or so.
- Replace all trade-related QRs with appropriate tariffs.
- Simplify and automate 'duty drawback system'. Overhaul DEDO
- Strengthen commercial sections of Embassies, with performance-based appointment and promotion of commercial counselors.

Fiscal issues:

- Phase out export subsidy, including some new ones added in the past 2-3 years.
- Continue general reductions in CDs on machineries and machinery spares, with rates on both to be commensurate.

Regulatory processes and governance:

- Simplify procedures for registration of firms, issuance of licenses, and abolish unnecessary licenses. Streamline inspection regime.
- Streamline import-export regime for other exports; Improve customs administration.
- Strengthen ASYCUDA; Introduce Direct Trader Input System.

Labor:

- Modify labor policy to allow night shift work for women.
- Provide adequate dormitory facilities for workers.
- Establish good system of reporting on compliance standards.

Finance:

- Strengthen financial sector reforms to bring about lower interest rates.

Infrastructure and utilities:

- Invest in port infrastructure and container terminals. Install ship-to-shore gantry cranes.
- Grant permission to establish off-dock yards to handle inbound containers.
- Permit sealed containers/ vans to move across the border.
- Introduce metered gas with necessary investment in gas pipelines and infrastructure.
- Widen roads and increase capacity of Dhaka-Chittagong road corridor.
- Adjust prices of freight services and increase number of freight trains. Introduce commercial management in Railways.

Quality, social and environmental standards:

- Establish good quality testing laboratories and increase existing laboratory capabilities.
- Improve Govt. and industry capabilities in hygiene and other food safety controls.
- Invest in harbor/ landing facilities, ice-water supplies, etc. for shrimp production.
- Implement the "Shrimp Seal of Quality" program.
- Establish and enforce environmental standards.
- Extend HACCP to farms. Help farms to upgrade production methods.

Enterprise capacity and marketing:

- Develop information services in EPB, BGMEA and/ or BIFT.
- Support trade missions, participation in trade fairs, buyer-seller match making and training.
- Develop financing mechanisms for sustainable training (esp. contribution from industry).

7.7 The link between the two – productivity and competitiveness – is too close to be ignored.

Productivity growth is explained by higher output with given level of inputs, or a situation where the same level of output can be had from a smaller combination of inputs. A host of factors could be driving productivity growth: improved management, labor force with better skills, improved technology, higher quality inputs, improved infrastructure logistics. Productivity improvements enhance competitiveness;

lack of it erodes competitiveness. Most analysts have opined that relatively low productivity in Bangladesh RMG sector undermines its competitive strength stemming from low wages.

7.8 ***In developing countries such as Bangladesh, productivity change is often constrained by, among other things, lack of capital, technology and management.*** Foreign direct investment (FDI), by bringing these scarce inputs as well as market access, could be a critical driver of productivity change. Policies and practice suggests that Bangladesh has been a reluctant receiver of FDI at least in the RMG sector as, until recently, FDI in RMG firms was limited to EPZ only while the domestic sector was kept off limits for foreign equity or partnerships. Unlike many developing countries such as Cambodia, Mauritius and Mongolia, where most of the garment firms are part of some larger multinational corporations in the form of foreign direct investment, less than 15 percent of Bangladesh garment firms have foreign equity. This is partly due to the restrictive policy condition which required that any FDI in RMG be associated with simultaneous investment in a backward linkage facility (spinning, weaving, dyeing and finishing). The ostensible reason for this restriction was to safeguard rents from quota allocations to Bangladeshi entrepreneurs. We believe this policy could have been responsible for insufficient productivity improvements in the RMG sector – something that would have stood Bangladesh in good stead in the post-MFA competitive environment.

7.9 ***The restriction on FDI was finally removed in the Industrial Policy 2005;*** but perhaps the Bangladesh RMG sector missed out on certain benefits that accrue from the presence of FDI in a sector. Conventional wisdom has it that firms with foreign equity tend to be more productive. This could be due to the firm specific tangible assets such as exclusive technology and product designs, or the intangible know-how embodied in foreign equity such as superior management, marketing, networking and sourcing. Such assets may be more readily available in big multinational corporations (MNC). As such, being part of MNCs allow the local subsidiaries with foreign equity to gain access to these assets, which in turn make them produce more output given the same level of inputs, and thus a higher level of total factor productivity (TFP) than the solely domestic owned firms. Such hypothesis has some empirical support based on samples of Venezuela manufacturing firms studied in Aiken and Harrison (AER, 1999) and Malaysia service sector firms in Kee (forthcoming).

7.10 To test the hypothesis that FDI was beneficial to the RMG sector, we carried out a survey of 350 RMG firms, including 49 firms with foreign equity located in the EPZ. The study based on this survey first examined the productivity changes in the RMG sector, and then looked at the potential productivity advantage of FDI firms operating in Bangladesh. In addition, the study tried to identify the possible channels by which local firms could benefit from the FDI firms – the productivity spillover effects, beyond the physical presence of FDI firms.

7.11 ***The main focus of the study was on estimating firm productivity*** – measured by total factor productivity, which is the level of output that is not explained by inputs -- by modifying the state of the art technique due to Olley and Pakes (Econometrica, 1996), to control for firm and year specific biases. Comparing firm productivity across all firms in all sub-industries and locations yields some interesting insights in terms of relative productivity of firms as well as productivity change. A comparison of different firms across different sub-industries, on average, reveals that knitwear firms are the most productive. An average knitwear firm has 10 percent higher productivity than a woven firm, and is 17 percent more productive than a sweater firm. Figure 1 presents the distribution of the estimated firm productivity by the three sub-industries. In terms of locations, productivity of firms located in Dhaka-EPZ is the highest (FDI effect), followed by firms in Dhaka, Chittagong-EPZ and Chittagong. Figure 2 presents the distribution of firm productivity by location.

7.12 Comparing firm productivity from year to year within firms also sheds some interesting new light. On average, garment firms are 3 percent more productive in 2003 than in 1999. The improvement

in productivity is especially clear for the sample of domestic firms -- on average, domestic firm productivity is 5.5 percent higher in 2003 than in 1999. Figure 3 presents the movement of firm productivity over time in the different sub-industries. It is clear that most of the improvements are driven by firms in the Sweater and Woven garment industries. Thus we find that although knitwear firms are on average more productive, sweater and woven garment firms are fast improving their productivity. These results purely reflect the growth in productivity within a given firm, and thus are not contaminated by the composition of firms in different industries. The evidence suggests that although there is widespread perception of low productivity of Bangladeshi RMG firms, there is positive change over the short period picked up by the survey. Such an increase in productivity within a firm suggests that there are some exogenous factors pushing firms to be more productive over time. We explored one such exogenous factor which is the productivity spillover effects of FDI firms.

7.13 Preliminary Findings Based on Firm Survey.

Firm level survey was conducted from the period of November 2004 to April 2005, covering a stratified random sample of 350 firms, which is about 10% of the total population of the garment firms currently operating in Bangladesh. After cleaning up the data to exclude outliers and firms with incomplete information, there are a total of 231 firms in the unbalanced final panel data set of 1026, from 1999 to 2003. In this unbalanced panel data set, the composition of sub-industries of knitwear, sweaters and woven is 24%, 8% and 68% respectively. Among the sampled firms, 13% have foreign equity, while the remaining 87% are purely domestic owned.

7.14 Table 11 presents the sample means of the key variables of the sub-industries of knitwear, sweaters and woven, by foreign versus domestic firms. It is clear that FDI firms are in general larger in sales and exports; they purchase more material inputs, including imported materials; they hire more employees, including production workers. FDI firms also have larger capital stock and investment. All these suggest that FDI firms are larger in scale and presumably more profitable and productive. To formally study the productivity superiority of FDI firms, and the possible productivity spillover to domestic firms, we first needed to estimate firm level productivity for the firm sample. The estimated firm productivity was then related to the ownership of the firms, and the relationship between productivity of domestic and FDI firms in the same sub-industries were statistically examined.

7.15 **Are FDI firms more productive?** To formally study the overall productivity of firms, we needed to estimate firm production functions, taking into account total factor usage per unit of output. To study the effects of FDI on productivity, firm level productivity was then related to ownership characteristics of the firms. This was done by relating

Figure 1: Distribution of Firm Productivity by Sub-industries

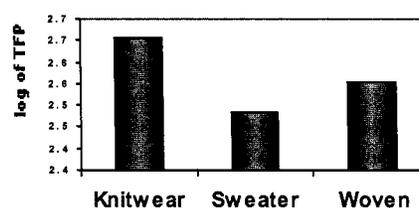


Figure 2: Distribution of Firm Productivity by Location

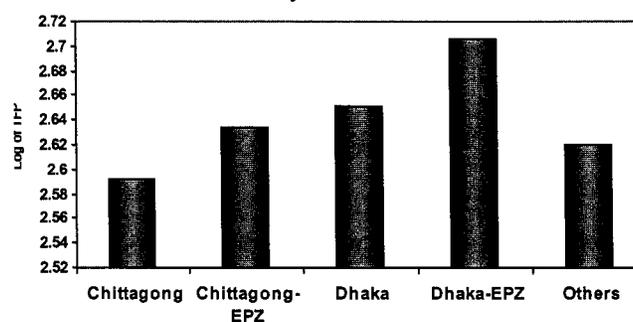
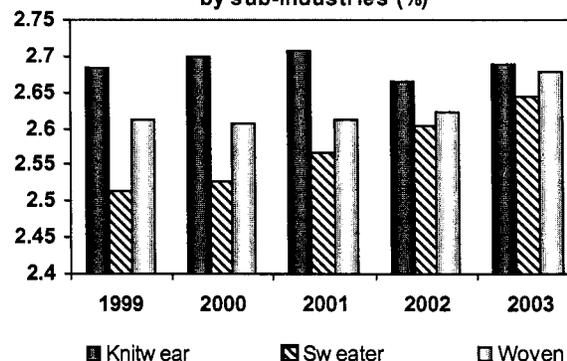
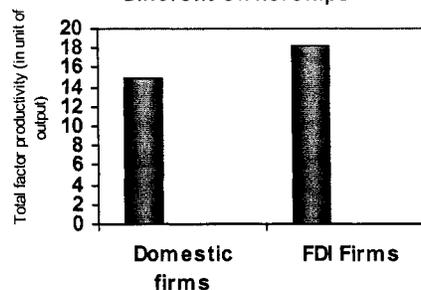


Figure 3: Productivity Growth of Domestic Firms by sub-industries (%)



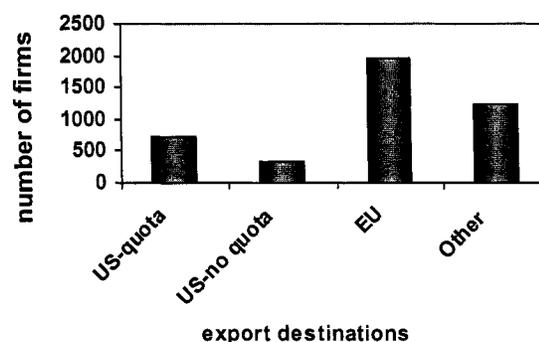
estimated productivity to the ownership structure of firms using between firm panel regression, controlling for industry, year, and location fixed effects. The results show that firms with foreign equity are on average 20 percent more productive than otherwise identical domestic firms. The productivity advantage of FDI firms is robust to age and export destinations. In addition, relating the productivity performance of domestic firms to that of FDI firms we found that there were indeed positive and significant productivity spillovers. For every 10 percent increase in the productivity level of FDI in the industry, productivity of domestic firms increases by 1.4 percent. As shown in Figure 4, on average, productivity of firms with foreign equity was found to be about 20 percent higher than purely domestically owned firms.

Figure 4: Productivity of Firms with Different Ownerships



7.16 What could have explained the 20 percent productivity advantage of FDI firms? To answer that question, we needed to isolate the effect of foreign ownership from the influences of sub-industries, investment climate of the locations, and the macro economic shock in each year. Given that ownership seldom change within firms in our sample, between-firms variation in foreign ownership was used to identify the effect of FDI on productivity. The result shows that a FDI firm is still about 20% more productive than a domestic firm in the same industry, location and year. This shows that the effect of foreign equity on firm productivity is independent of the location of the firms, the sub-industry of the firms and the macroeconomic fluctuations. In addition, the regression results confirm that FDI firms do have higher productivity even after account is taken of the export destinations and thus the potential demand shocks that firms might be subjected to, as well as the experience of firms, as proxied by age. Finally, the results also confirm what the earlier finding from EPB data showed – firms exporting to USA tend to be more productive.

Figure 5: Number of Firms in Different Markets Distribution of Firms by Markets



	Knitwear		Woven		Sweater	
	Domestic firm	FDI firm	Domestic firm	FDI firm	Domestic firm	FDI firm
Sales	3,050.89	5,044.48	2,926.72	13,900	2,363.51	3,603.47
Export	2,951.96	5,044.48	2,919.79	13,900	2,362.95	3,603.47
Cost	2,917.29	4,195.38	2,587.39	12,700	2,141.49	3,350.96
Material	2,037.68	2,888.02	2,015.82	9,665.94	1,435.53	2,389.08
Imported material	1,560.67	2,569.80	1,590.77	8,393.14	564.88	1,811.85
Employees*	582.94	996.23	600.58	1,893.18	906.89	1,305.85
Prod workers*	501.52	943.70	560.29	1,790.30	859.63	1,214.75
Capital	2,033.42	1,510.17	639.52	5,076.09	1,002.34	4,231.34
Investment	817.58	79.31	57.78	315.92	215.66	344.92

(*) These numbers represent average employment per firm.

7.17 Export Performance of Garment Sector and productivity. The past few years have witnessed an expansion of Bangladesh garment export to the world market. In 1998, the total value of garment export

from Bangladesh was about US\$3.8 billion; it increased to US\$4.9 billion in 2003, US\$5.7 billion in 2004, and is expected to be \$6.3 billion in 2005. Some evidence of productivity improvements can be gauged from the distribution of firms by choice of markets.

7.18 In terms of the distribution of firms across different markets in 2004, there were 1967 firms exporting under GSP, mainly to the European market, 1039 firms exporting to the US, of which 709 export under quota allocations, and 1231 firms exporting to other countries. Figure 5 presents the distribution of firms by export destinations. Among these firms, 26 percent only supply to one market, 39 percent supply to two markets, 24 percent to three markets, and 11 percent to all four markets. This is clearly presented in Figure 6.

7.19 Figure 7 presents the choice of export markets of Bangladesh garment exporters according to the number of export market the firms supply. It is very clear that EU is the most popular destination, especially among firms that have only one export market. Among the 1109 firms that only supply one market, nearly 850 firms concentrate on EU which is about 76 percent. The US market appears to be toughest to break in among this group of firms, less than 8 percent only export to the US with and without quota. For firms that supply two markets, both the EU and the others are the favorites. Together, they account for 80 percent of the markets among the 1640 firms that export to two markets. The US in quota market is popular for firms that export to more than 2 markets.

7.20 In addition, according to Eaton, Kortum and Kramarz (AER, 2004) who study the export performance of French firms, the number of markets a firm supplies reflects the productivity and competitiveness of the firm in the world market. The above distribution of firms implies that more than 35 percent of Bangladesh garment exporters participate in world markets widely with at least 3 export destinations, and are thus very competitive. This is quite evidence in Figure 8, when we plot the unit value of garment export (left axis) and total export value (right axis) against the number of export destinations. Firms that export to more destinations tend to have higher average unit values and larger in size, with the former reflects better quality and the latter indicates greater scale economies, both signal higher productivity of the firms. The differences in unit values and total size among firms with different number of markets are statistically significant.

7.21 **Conclusion.** Overall, there is convincing and statistically significant evidence suggesting that FDI firms are more productive than otherwise identical domestic firms operating in Bangladesh. The significant spillover effects are not to be ignored either. This suggests that the earlier policy of restricting FDI in the domestic RMG sector might have harmed it by not helping to raise productivity enough to face global competition from a position of strength. Bangladesh needs to make up for lost time and opportunity. Now that the FDI restriction has been removed from the Industrial Policy 2005, all

Figure 6: Number of Firms vs. Number of Markets
Distribution of Firms by Number of Markets

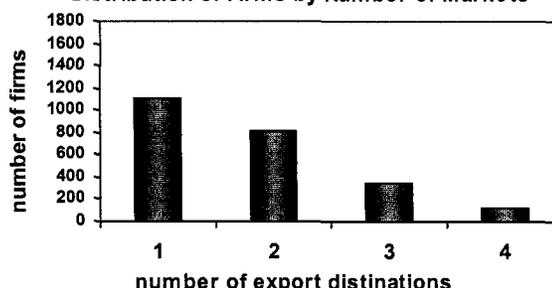
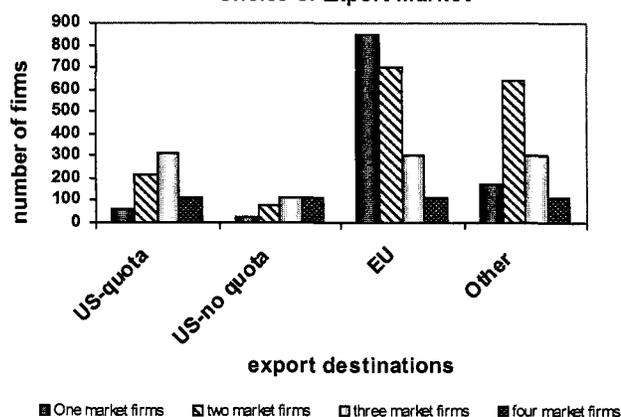


Figure 7: Market Choice by Firms with Different Markets
Choice of Export Market



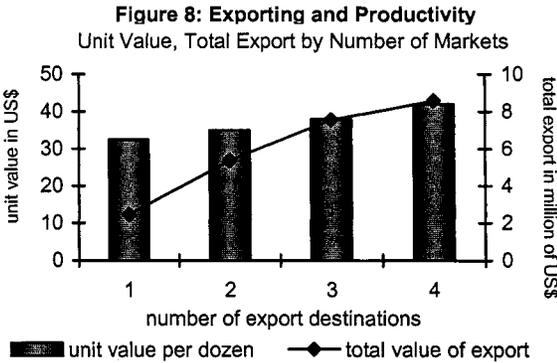
efforts should be made to facilitate FDI inflows into the sector to take advantage of better management, technology, capital and market access.

Options for Reducing Time to Market

7.22 Reducing Lead Time is critical. Lead time – also known as turnaround time -- refers to the time it takes from the receipt of a confirmed order or LC to the delivery of the product to the buyer. It has emerged as an important issue due to certain structural changes in the global market. Many of the changes that have occurred (or one in the offing) in the world apparel industry were driven by exigencies of the competitive retail market where firms have to be lean and mean in order to survive or thrive. The apparel market is no longer bi-seasonal as in the old days. Frequent fashion changes and consequent rapid obsolescence have made it multi-seasonal. The shelf life of fashion clothes and high-value items is accordingly much reduced. The retailers look for flexibility in the supply chain such that products can be put on shelf as and when demanded by consumers. The drive for reduction in lead time is thus an attempt to conform to the market demand as well as achieving greater supply chain efficiency. As observed by Lezama et al (2004), the inexorable pressure for reduction in lead time has grown and the supply chain had to respond by reducing the lead time. A major buying company reduced their average lead time from 21 weeks in 2000, to 18 weeks in 2001, to 14 weeks in 2002, and to 12 weeks in 2003 (p. 36). The progressive reduction is noteworthy as it conforms to the supply chain hypothesis mentioned above.

7.23 Another development that calls for shorter lead time is the recourse to replenishment orders by retailers with the advent of lean retailing. One of the important recent changes in retail inventory management has been the introduction of vendor managed inventory or continuous replenishment programs which entail determination of the optimum stocking levels at the retail point, and a steady transmission of current sales and stock data to the manufacturers in order that they can replenish the stocks to maintain them at their desired levels continuously.²⁵ This might require quick response from the manufacturers. Replenishment orders are more prevalent for the basics and fashion basics as their demand are more stable. This tendency could also create pressure on the RMG manufacturers of Bangladesh, who produce mostly basics and fashion basics, for shorter lead time.

7.24 Lead time and size of the order also vary a great deal depending on the type of the product. Fashion retailers need to carry inventories of products of varying styles and for shorter duration. They operate on smaller but more numerous orders and shorter lead time. Retailers of basic garments, on the other hand, tend towards larger orders, but fewer items and longer lead times. Since the styles of basic items do not change frequently and demand for their products is more stable, mass market retailers can be more flexible about lead times. Notwithstanding this attribute of the mass market, it should be borne in mind that, other things remaining the same, a retailer is likely to prefer shorter to longer lead times. This would imply vendors with longer lead times will have to provide greater incentives or more favourable terms in other areas, such as price and quality, in order to offset the attractiveness of shorter lead time to the buyers. This cuts into the profit margins of vendors with a longer lead time and reduces their competitive strength.



²⁵ See Abernathy et al (1999) for an excellent discussion.

7.25 *The importance of time factor in future RMG trade has been recognised also by OECD (2004).* The study finds that lead time will play a crucial role in determining international competitiveness. “Time factors can be an important trade barrier for intermediary inputs involved in an internationally fragmented production process. There are trade-offs between low wage cost and time factors since temporal proximity to large consumer market provides a competitive edge in the highly competitive, time sensitive and fashion-oriented clothing market” (p. 25) Thus, OECD warns that countries that rely on imported intermediate inputs (such as fabric) and have a long lead time will face some competitive disadvantage in the post-MFA world. Lead time was also mentioned by leading buyers of apparel as one of their two main concerns in a discussion meeting with the stakeholders in Dhaka recently.

Table 12: Lead time for servicing an order for RMG

	Lead time (days)
Cambodia	90-120
China	45-60
Indonesia	60-90
Malaysia	60-90
Thailand	60-90
Vietnam	60-90
Bangladesh	90-120

Source: BGMEA (2004a)

7.26 *Bangladesh is in the unenviable position of having the longest lead time among its major competitors* (Table 9). Its lead time varies between 90-120 days (for woven garments). It is considerably shorter for knitwear items (45-60 days) since most raw materials (yarn and knitted fabric) are procured domestically. The breakdown of the total lead time into its various components is shown in Table 10. This breakdown is very revealing as it indicates the underlying reasons for the longer lead time for woven exports.

7.27 *It takes a factory 42-60 days to receive the raw materials (essentially fabric) at its premises from the time it receives a confirmed LC.* Several factors contribute to this long time required to receive the raw materials. First, most of the fabric requirements of woven RMG (80 per cent or more) are imported from such distant countries as China, Korea and Taiwan (as well as less distant India). Given the geographic position of Bangladesh and the prevailing shipping routes, it takes considerable time for shipments from these countries to reach the ports in Bangladesh. The time requirement is further lengthened by the fact that goods have to be brought from China and elsewhere through transshipment at Singapore or Malaysia as goods cannot be shipped directly to Bangladesh from these countries. As a result it takes 25-30 days for the consignment to reach local ports. Archaic port facilities, and bureaucratic hassles add to the time it takes to take delivery of the consignments. Bangladesh is situated farthest away from its main market USA and also very considerable shipping distance from the European countries. Further, the export consignments have to be sent by feeder vessels to Singapore or Malaysia to be loaded into mother vessels to carry them to their final destinations in USA and Europe. Consequently, it takes about 28-30 days for export shipment. The time is reduced by about a week or so if more expensive faster vessels are used for shipment.

7.28 *It is evident that much of the excess time required for processing an order is due to having to procure the raw materials from overseas.* If the raw materials could be sourced locally the time required to receive them at the factory gate could be reduced from 42-60 days to just one or two weeks. Hence, local sourcing could reduce the lead time to 55-75 days. This would make the lead time of Bangladeshi garment exporters comparable to that of its major competitors.

Table 13: Typical lead time components for Bangladesh (days)

	Days taken after ceding step	
	Optimal	Non-optimal
Exporter receives confirmed LC	0	0
Raw material supplier receives LC	4	6
Raw material supplier produces and ships goods	7	15
Ship berths at port of import	26	30
Raw material is unloaded and taken delivery from port	4	7
Consignment reaches factory	1	2
Garment packed and shipped	20	30
Consignment reaches buyer's port	28	30
Total	90	120

Source: BGMEA (2004a)

7.29 *The discussion above clearly suggests that the first best option for reducing lead time is to have the raw materials of RMG industry produced domestically.* This has already happened in varying degrees for different raw materials. During the last decade and half Bangladesh has become almost self-sufficient in the production of many accessories items. It now produces, according to BKMEA leadership, 90 per cent of the knit fabric requirements of the export-oriented knit garment manufacturers. This enabled the sector to reduce the average lead time to only 50-60 days. However, despite all the incentives and large protective barriers, the woven fabric section of the textile sector has not been able to reduce the demand-supply gap. It can meet only about one-fifth of the total requirement of the woven RMG sector, and this situation has not changed much for the last five years. The excess demand for woven fabric (over and above domestic supply) has, therefore, increased over the years. The unavailability of domestic woven fabric not only increases lead time, but also causes GSP related disadvantages as discussed later. It poses a serious constraint to export competitiveness.

7.30 The next section on backward linkages discusses the reasons for insufficient investment in the woven fabric production facilities. It seems fairly certain that the demand-supply gap for woven fabric cannot be reduced in the short to medium term; in fact it may increase. Consequently, lead time cannot be reduced by domestic sourcing of fabric alone.

7.31 Although it may not be possible to increase domestic supply of fabric at par or in excess of the increase in demand within a short period, it might be possible to meet part of the demand by increasing the capacity of dyeing and finishing industries. If these industries are allowed to stock up grey fabric in advance of orders, they could supply finished fabric to the woven garment manufacturers at fairly short notice. The lead time would not be greater than when domestic fabric is used. Hence, this option should receive serious consideration.

7.32 This option also cannot be expected to dramatically change the demand-supply gap within a few years as the gestation time would be long; but the next few years will be crucial for the health of RMG woven industries of Bangladesh. If they progressively lose their market due to their inability to supply the market at short notice due to long lead time, they will find it difficult to recapture it in the future since markets once lost are not easily or quickly regained. With the loss of market, demand for fabric will decline, reducing the total market of the local textile industry. Ironically, in this event there will be greater self-sufficiency, i.e. a reduction in the demand-supply gap; but this will be achieved through a reduction in demand, not an increase in supply. Both RMG and the textile industries stand to lose in such a milieu. They will not be able to contribute to national development and poverty reduction as robustly as envisaged. Over-protectiveness of one industry could end up injuring several other industries and the economy as a whole.

7.33 *A third option that has been mooted is building up a close relationship with nearby suppliers in order to receive fabric at short notice.* Currently the RMG manufacturers are free to import fabric from these countries. But they have sourced only a small fraction of their requirement from nearby countries such as India, Thailand and Pakistan. Interviews with producers reveal that bulk of the fabric is currently sourced from China, Hong Kong or S. Korea. Long-term relationships with suppliers, buyer preferences for fabric sourcing, dependability regarding timeliness and quality, are some of the determinants of such distant sourcing rather than from the neighborhood. This would suggest that, for woven garments, market conditions or other constraints have thus far restricted imports of fabric from the region, -- a process which could have cut lead time substantially. .

7.34 *It appears that certain policy constraints have prevented Bangladesh from utilising available opportunities to reduce lead time by sourcing inputs from the region.* There is also some reluctance in forging closer links with India or Pakistan for supply of inputs at short notice. Many integrated knit units could reduce lead time by importing yarn from India by land routes. However, the government banned the import of yarn by land route²⁶. Importation by sea routes adds to transport costs and often takes 10-20 days extra to reach Chittagong port, thus removing much of the advantage of obtaining yarn from India. The limited opportunity that was available for reducing lead time to meet tighter delivery schedule was eliminated by this ban. It is difficult to imagine any good reason for imposing ban on import by land routes. It is hurtful to local industries, bad for bilateral relations, and adversely impacts on exports and balance of payments. The case for its withdrawal appears compelling.

Recommendation: Overhaul Chittagong port facilities, improve infrastructure and transport logistics, and streamline the import regime by removing cumbersome procedures. End the ban on textile imports through land ports.

7.35 *Backward Linkages: what are the options?.* The ready-made garments industry grew up in Bangladesh without the benefit of either backward (upstream) or forward (downstream) linkage industries. During the early years, the RMG industry in Bangladesh purchased almost all its material inputs such as accessories and fabric from overseas. This was also the period of most rapid growth of RMG export. As the production of RMG increased by leaps and bounds, so did the import of these inputs. Local entrepreneurs perceived profit-earning opportunities in the manufacture of these inputs. Since the investment cost of manufacturing accessories is relatively low, this was the first area exploited by the domestic entrepreneurs. The local accessories industry now supplies most of the requirements of the RMG industry and is also exporting small quantities.

Table 14: Consumption of woven and knit fabric by export-oriented RMG sector

Year	Woven fabric		Knit fabric		RMG Total		
	Domestic	Total	Domestic	Total	Domestic	Total	Domestic/Total
1997-98	102	1215	230	585	332	1800	0.184
1998-99	132	1200	289	660	421	1860	0.226
1999-00	150	1234	448	815	598	2049	0.292
2000-01	190	1317	565	943	755	2260	0.334
2001-02	200	1386	741	1140	941	2526	0.373
2002/03	224	1491	1046	1245	1270	2736	0.464
2003/04	261	1629	1484	1649	1745	3278	0.532

Source: BDSDP (2001) and Gherzi *et al* (2002) and staff calculations.

²⁶ The rationale for this ban was to prevent smuggling of yarn over land route where monitoring at customs border stations was slack. In reality, this measure gave added protection to textiles while raising input costs for RMG exporters.

7.36 *The increase in import of fabric also encouraged domestic entrepreneurs to move into the primary textile sector*, which was then dominated by loss-making public enterprises. The sale of domestic fabric to the export-oriented RMG industry increased very rapidly from only 45 million square metres in 1993-94 to more than a billion square metres by 2002-03 (BDXDP 2001 and Table 11).²⁷ This was helped by generous cash incentives given to textile production for exports or deemed export and the duty-free access to EU market.

7.37 *However, the two sections of RMG, knit and woven, did not benefit equally from the expansion of domestic fabric production.* Most of the fabric sold to the RMG industry was actually used by the knit section of the industry. As shown in Table 11 nearly 80 per cent of the total sale of fabric to RMG was made to the knit section by 2001-02. The Bangladesh Knitwear Manufacturers and Exporters Association (BKMEA) leadership claimed during a discussion that the production of knit fabric has expanded sufficiently to meet most of the demand for such fabric (more than 90 per cent) by the knit industry.²⁸ In contrast, woven garment industry is still overwhelmingly dependent on imported woven fabric. Domestic producers can meet less than one-fifth of the total demand of the woven section, which is by far the larger section of the RMG industry accounting for about 60% of the total value of exports (and output) of RMG.

7.38 *Three factors appear to have been responsible for this uneven growth in the utilisation of domestic fabric by the two sections of the RMG industry.* First, most of the knit garmenting is done in integrated plants which house the major part of the country's knitted fabric processing capacity (Gherzi *et al* 2002). The growth of such plants has been facilitated by the low cost of investment and the relatively simple skills required to operate them. The integrated plants can knit fabric from yarns. Spinning industry also grew with the increase in the demand for yarn. Local spinners now meet about 60-70% of the demand of the knit section of RMG for yarn. The rest is imported. The knit fabric is dyed and processed in the same establishment for use as inputs for knit garmenting.

7.39 *Second, the real boost to knit garment manufacturing was given by the change in the applicable rules of origin for availing European GSP from three to two stages.* The relaxation of the stringency of the rules of origin opened up a huge opportunity for the knit garment manufacturers. Many of them invested in integrated knit plants as the cost of investment was relatively modest. Knit exports to EU now qualified for duty-free and quota-free treatment as most of the knit fabric used by RMG industry was manufactured locally. This gave knit exports from Bangladesh considerable price advantage over non-LDC competitors since the MFN duty rates on garments in EU were relatively high (up to 12.8 per cent).²⁹

7.40 *The third factor promoting the rapid growth of knit fabric manufacturing was the granting of generous cash incentives in 1993-94 on exports of (garments made from) fabric produced locally from domestically spun yarns.* This encouraged large investment in spinning and composite textile mills despite the fact that the costs of production of yarn and fabric were considerably above international prices and there was surplus capacity in the international market (Table 15). There was some skepticism if the domestic textile industry would remain competitive once the cash incentives are phased out in July 2005. However, the reduction of the cash incentive from 30 per cent a few years ago to only 5 per cent now must have reduced the effective price received by the spinners by a large amount; but this has not reduced the supply of domestic yarn. In any case the cessation of the cash incentives will remove a support mechanism and force the spinners to stand on their own. It should be pointed out that the payment of cash subsidies to exports contingent on the use of domestic over imported goods (inputs) is

²⁷ Much of this is actually self-sale.

²⁸ BGMEA leadership concur with the claim.

²⁹ For illustration of this price advantage, see section on preferential access discussed later.

inconsistent with Article 3.1(b) of the Agreement on Subsidies and Countervailing Measures of the WTO Agreement.

Table 15: Relative prices of typical knitting yarns (US\$/kg)

Yarn count Ne	Market prices in Bangladesh of yarn			
	Bangladeshi yarn		Indian yarn	Pakistani yarn
	Local market	RMG		
Carded 20/1	1.60-1.70	1.75-1.85	1.50-1.65	1.55-1.70
Carded 24/1 – 26/1	1.65-1.75	1.95-2.10	1.55-1.75	1.60-1.80
Carded 30/1	1.80-1.95	2.05-2.20	1.70-1.80	1.75-1.85
Combed 20/1	-	2.15-2.40	1.75-1.95	1.80-2.00
Combed 24/1 – 26/1	2.10-2.30	2.25-2.50	1.85-2.20	1.90-2.25
Combed 30/1	2.25-2.4	2.35-2.60	2.00-2.30	2.05-2.30

Source: Gherzi *et al* (2002)

7.41 *A similar development did not happen in the upstream industries of the woven section of the garment industry.* The principal reason for this is perhaps the large cost of investment required to set up upstream linkage industries such as spinning and weaving.³⁰ While the relatively modest cost of investment for integrated knit plants enabled the knit garment manufacturers to move to knit fabric manufacturing, the same was not possible for most woven garment manufacturers. According to the estimates shown in Table 10 (p.14), the investment cost of manufacturing capacity of certain volume of processed knitted fabric is less than one-third of the cost of creating the same capacity for processed woven fabric. Hence, unlike the knit industry, woven fabric manufacturing and woven garment manufacturing remained separate (non-integrated) activities. The large investment requirements of primary textile manufacturing and low international prices due to worldwide excess capacity limited the growth of woven fabric manufacturing. It has barely managed to retain its share of the demand of woven RMG for woven fabric at around 15 per cent during the last several years. The trend of consumption of domestic fabric by the woven sub-sector seems to suggest that the domestic primary textile sector will be unable to supply the greater part of the total demand for fabric of woven RMG in the *near future*. However, substantial FDI in this sector could change the picture fairly rapidly. There are some encouraging signs that foreign textile manufacturers are showing keen interest in establishing production facilities in Bangladesh. The government and the private sector should put in effort to ensure that this interest is turned into actual investment. FDI will also help the overall productivity of the sector by bringing in advanced technical know how, better management practices and wider linkages with the international market.

7.42 *Can there be substantial expansion of domestic capacity for woven textile in the near future in light of global excess capacity in yarn and fabric?* That depends on whether production costs of yarn and fabric at home are competitive with international prices. If cash subsidy and other protection become absolute necessities to enable domestic industries to continue operating, it could have negative implications for the downstream garment industry. In the past these industries were provided with generous cash incentives (30 per cent of output cost) and total prohibition of imports of competing products. Although the cash subsidy has been reduced to 5 per cent (scheduled to be phased out by July 1, 2005) and import bans have been withdrawn, the sector is still protected by very high import taxes³¹. The protection given to the spinning and weaving sectors has some spill over effects on the RMG industry. The cost of procuring yarn and fabric domestically is considerably higher than the international prices leading to higher costs of production of RMG products that reduces the competitiveness (see Table 15).

³⁰ These activities also require highly skilled manpower and specialized knowledge that the country lack.

³¹ Protective duties on fabrics and yarn are 72% and 39%, respectively.

Imports under bond being free, the high price of domestic inputs apparently should not matter. However, import from overseas adds about 5-8 per cent to the cost of input on account of transport and port clearance charges. More, importantly, it takes about 30-60 days longer to procure inputs from overseas. Thus, Bangladesh RMG producers suffer from a natural cost and time disadvantage against producers in countries who can access inputs domestically such as in China, India and Pakistan, or RMG producers who are in close proximity to major producers of the inputs and are not subjected to selective import restrictions.

7.43 ***The immediate upstream activity in the PTS sector for the RMG industry is fabric processing or dyeing and finishing.*** As such this section of PTS has important influence on the performance of the RMG industry. The knitting sub-sector can now meet most of the demand for finished knit fabric, but the weaving sector cannot satisfy more than a small fraction of the total woven demand (see Table 11). The BTMA reports that the current capacity is over one billion metres, up from some 650 million meters in 1996-97. Though breakdown of the capacity between knit and woven is unavailable, from the known fact that most of the knit fabric is processed locally it would seem that the major part of the total capacity is devoted to the knitting industry. Consequently the capacity for processing woven grey must be quite limited and much of it housed in composite textile mills. The number of mechanised dyeing and finishing units increased from 75 in 1996-97 to only 115 currently. There has not been any significant investment in the semi-mechanised units. This lack of large investment in this activity is surprising since both the major studies in the textile sector done during the last half a dozen years (Dr Martelli 1999 and Gherzi *et al* 2002) recommended more emphasis on fabric processing. Dr Martelli Associates had concluded that “conditions for setting up new fabric processing operations on a converter basis appears to be significantly more favourable compared to setting up weaving and spinning plants...” (p.12). There were a number of reasons for this conclusion. First, while there was surplus spinning and weaving capacity in the competing countries, there was a dearth of good processing facilities in these countries. Hence, the competition in processing would be less severe than that in weaving and spinning. Second, there was a huge unmet demand for finished fabric in the domestic market. Third, fabric processing on a converter basis could reduce lead time by 6-8 weeks if sufficient grey fabric were held in stock. Fourth, the use of imported grey fabric would increase value addition in garment manufacturing and thereby help availing duty-free facility in EU market. The reduction in lead time, opportunity to rectify faults in fabric quickly and increased value addition would encourage the RMG manufacturers to source fabric locally (p. 13).³²

7.44 Dr. Martelli Associates (1999) indicated that the ***successful operation of the dyeing and finishing units would critically depend on the availability of grey fabric.*** Large stocks of grey fabric of the most common constructions would, therefore, need to be held to supply the processing units as and when demanded. The study did not mention how this could be done, but it is clear that measures other than the existing individual bonded warehouse system, where fabric can be imported only against confirmed letter of credit, will have to be devised to make large scale fabric processing worthwhile for investors. One such system is Central Bonded Warehouse which is discussed later.

7.45 ***Is there a case for local sourcing/backward linkage?*** Since an internationally competitive domestic primary textile sector contribute to the competitive strength of local RMG by reducing cost and lead time, a favourable environment for their growth should be ensured by removing any constraints. However, this should not mean adopting (or not adopting) such measures that would raise the cost of inputs for the RMG industry or prevent them from reducing the lead time. Industry assistance could take the form of availability of long term loans at reasonable rates through reforms of the financial sector, the development of more efficient infrastructure, greater emphasis on skill development through education

³² Industry sources suggest that although investment requirements in dyeing and finishing are not very high, the skill requirements for successful operation of the industry are very specialized and difficult to acquire. This might be a reason for the slow growth of this sub-sector.

and training, improved governance that reduces transaction costs and provides security of contracts and measures to aggressively court FDI. Since borrowing cost in Bangladesh is much higher than that in the competing countries, some intervention might be warranted in this area. India might have used a innovative scheme (Technology Upgradation Fund) to good advantage.³³ Any intervention, however, should not be in the form of policies that compel RMG manufacturers to purchase domestic inputs at a higher cost than their international competitors, such as banning of overland import of yarn or preventing them from the opportunity to access a ready supply of fabric.

7.46 *The fundamental force behind the rapid growth of yarn and fabric production in the 1990's has been the spectacular growth of RMG output and export, and not textile protection per se.*³⁴ Any dampening of the growth of RMG export will adversely impact on the growth of the primary textile sector. Protection given by restricting trade may allow the existing producers to increase their profits, but it will not provide space for further expansion of the primary textile sector unless the sector becomes internationally competitive. If the sector attains international competitiveness, it does not need trade protection nor should such protection be given that would stifle the RMG sector and hurt PTS in the longer term. High protection of the textile sector is a drag on the RMG industry requiring cumbersome procedures (e.g. SBW) for duty-free sourcing of textile inputs. Reduction of textile protection over time is a policy imperative for enhancing competitiveness and growth of RMG exports.

7.47 *Given the relative importance of RMG in the national economic life, it will be unwise to tie its fortunes to the fortunes of fabric manufacturing, or for that matter, any other industry.* As mentioned earlier, it is not desirable to make the growth of any industry contingent on the growth of another industry. It is folly to think that a country could always have comparative advantage in all activities in the value chain of a product. Many textile producers and exporters do not have a comparative advantage in the production of apparel, just as many RMG exporters do not have a comparative advantage in the production of textiles. Hence, the growth of each sub-sector should be determined by its comparative advantage. This is particularly true of export industries since they have to compete in the global marketplace over which the country has virtually no control. In order to survive and compete in the global market, domestic export industries should be able to access inputs from the cheapest sources, local or foreign, and exploit any (and all) advantages that might be available (such as GSP). It is of supreme importance to gain an edge over the international competitors, and no profitable opportunities should be allowed to pass by. The growth of the RMG industry will create opportunities for both backward and forward linkage activities, some more profitable than others. It will also create opportunities for expansion of many co-operating activities such as banking, insurance and transport. Unless the government or powerful sections of the society erect insurmountable barriers, dynamic entrepreneurs will exploit these opportunities to build up nascent as well as hitherto non-existent industries. The nation has already witnessed the remarkable growth of apparel accessories industries as well as industrial laundries to service the RMG industries. The previously non-existent local accessories industry now supplies almost the entire demand of the RMG sector.

Recommendation: The fortunes of the textile industry must not be tied to the RMG industry. If the Government desires to provide support to the textile industry, such as interest rate or price support, it

³³ Government of India established a Technology Upgradation Fund (TUF) to support investment for upgradation of textile machinery. Textile firms borrowed from commercial banks at lower-than-market rates, the difference being re-financed from TUF.

³⁴ Textile had extremely high protection in the earlier years, but that did not lead to an expansion of the primary textile industry nor did it entice many entrepreneurs to invest in the industry. It is only when the growth of RMG industry had created a substantial demand for PTS products by the early 1990s that the upstream industries flourished.

must do so through its normal budgetary instruments in a transparent manner. The cost of support must not be shifted to the RMG industry that is totally unprotected in the international market.

7.48 **Central Bonded Warehouse.** An innovative scheme suggested by some quarters including BGMEA as a solution to the problem of long lead time is the establishment of central bonded warehouses. Conceptually CBW is similar to the individual bonded warehouse that each export-oriented RMG factory is permitted to have to stock duty-free imported inputs. The difference is that CBW can be set up by any firm and the imports of duty-free RMG and textile raw materials will not be conditioned on master LCs. The CBW operator could be permitted to stock up a whole range of T&C inputs such as finished and grey fabric, accessories, dyes and chemicals, yarn, RMG and textile machinery and spare parts in amounts determined by expected demand. The RMG and textile manufacturers can then purchase these inputs duty-free from the CBW directly. Some appropriate system will have to be put in place (such as sale against back-to-back LCs and locating the CBW in Export Processing Zones) to ensure that the duty-free inputs are actually used in the production of goods that are exported.³⁵ It is also possible that in order to protect the interests of local competing industries some restrictions may be placed on the CBW regarding the range, amounts and types of inputs it can store.

7.49 The principal difference between a firm's bonded warehouse and CBW is that while an individual bonded warehouse can import inputs duty-free only against a confirmed back-to-back LC or export order, the CBW can engage in duty-free imports of listed raw materials without any back-to-back LC or export order. Thus the lead time in the case of individual bonded warehouse for woven garments will be of the normal duration (90-120 days) since inputs can be ordered from overseas only after an export order is received. But inputs can be purchased duty-free directly from CBW as soon as an export order is received. Hence, RMG exporters can save on the shipping time required for importing inputs. The lead time is accordingly reduced by 35-45 days. In a way, CBW replicates the advantages of domestic supply. It should not take more time to procure raw materials from CBW than it would take to procure them from domestic producers.

7.50 Another important difference is the scale of operation. The bonded warehouse is of relatively small scale servicing the need of a single factory. CBW on the other hand will be of a very large scale supplying inputs to numerous factories. Hence, CBW will be able to reap the economies of scale that are unavailable to individual bonded warehouses. The large size of the order of CBW should enable it to negotiate a lower bulk price and perhaps lower unit shipping cost. It would also reduce unit administrative and transaction costs associated with imports such as port costs. Part of the reduced costs of CBW could be passed on to the domestic exporters. They could also save on interest charges as the local LCs required to purchase inputs from CBW would be of shorter duration. These potential cost savings should improve the competitive strength of domestic RMG producers.

7.51 However, *the operation of CBW by private entrepreneurs would also imply certain costs.* Large inventories of inputs must be held if the system is to function efficiently. This obviously has financing cost implications. The entrepreneurs must be remunerated with sufficiently high profit margin for them to continue in the business. These will add to the cost of the inputs. Double trucking and clearance requirements could also raise the cost. The RMG producers will buy from the CBW only if the cost of procuring inputs from the CBW is less than the cost of procuring the same directly from overseas through their own bonded warehouses discounting for the lead time factor. If this is not the case the CBW cannot be sustained. Indeed, if such an outcome is foreseen by the entrepreneurs they will not invest in the CBW business notwithstanding any permission given by the Government; and if they have already incorrectly invested they will soon go out of business. No public fund should be committed in setting up a CBW.

³⁵ National Co-ordination Council (2004) has suggested such a scheme for CBW.

7.52 **Local export-oriented PTS could also benefit from the CBW.** They can procure their raw materials such as yarn, grey fabric, dyes and chemicals etc. from CBW. They would also get the raw materials bulk-purchased by CBW at a reduced cost, and could service any orders from local RMG firms at a reduced time and thereby saving on the lead time of RMG exporters.

7.53 **CBW can significantly reduce uncertainties of importing inputs from overseas.** There could be delays in shipment, shipping time, transshipment or port clearance when inputs are imported from overseas. Such delays impose significant costs on exporters as they get less time for production and may be required to ship finished products by air at multiple cost. The delay could also result in the cancellation of the order. Profit margin is eroded due to such occurrences.

7.54 **Some of the problems with sourcing arises due to the high protection given to the textile sector.** Until the beginning of this year import of certain categories of textiles was prohibited outright. Although the prohibition has been lifted, the textile sector enjoys fairly high protection. The effective import duty on many textile products is as high as 47 per cent. If the protective barriers were to be reduced, some of these problems will fade away. For example, if import duties on fabric and yarn were abolished, there will be no necessity of bonded warehouses, either individual or central.³⁶ Just as some business houses stock cotton (that is imported duty free) in order to sell directly to spinners, so there will be business houses that would stock yarn, fabric and other raw materials and intermediate inputs for selling to weavers, processors and RMG manufacturers. The presence of a tariff wall and the duty-free facility for the exporters prevent such business houses from stocking yarn, fabric or other inputs for textile and RMG manufacturers. Hence, elimination of import duties will have the same effect in reducing lead time as the establishment of central bonded warehouses in a tariff-ridden economy.³⁷ To the extent the immediate suspension of import duties on textile products is not feasible for revenue or other reasons, the case for central bonded warehouse has merit. It should be given serious consideration as an instrument of raising export competitiveness of RMG sector of Bangladesh in the post-MFA era.

7.55 **The textile manufacturers are predictably not convinced about the merit of CBW.** They are staunchly opposed to government giving permission to set up CBW. In their opinion, the PTS as well as RMG industries will be destroyed (*sic*) if permission were given for the establishment of CBW as this would flood the market with imported fabric through both formal and informal routes. Their concerns are twofold: (1) CBW will reduce the prices they receive for their yarn and fabric, and (2) it will reduce the size of the domestic market of the primary textile sector. If (1) above has any merit then currently domestic yarn and fabric must be selling at higher than the international market price (import price) of these inputs. This is known to be true. Table 12 shows that not only the prices paid by RMG manufacturers for domestic yarn is 10-15 per cent higher than the prices of Indian and Pakistani yarn, but also about 10 per cent higher than the prices paid by purchasers in the local market. BGMEA/BKMEA reports that domestic yarn manufacturers charge prices that are often 20% higher than the international prices. The higher prices were until now sustained by generous cash incentives given to fabric manufacturers for using local yarn, which constitutes up to 75 per cent of the value of grey fabric. Because of the budgetary constraints and abuse of the system the Government gradually reduced cash incentives from 30 per cent of the value of the fabric to 5 per cent. In line with yarn prices, the prices of domestic fabric is also considerably higher than that of the imported fabric by a considerable margin (see Table 12).

³⁶ The elimination of tariffs could also see outsourcing of CMT activities to households on a large scale by the garment exporters who would not then need to maintain large manufacturing facilities. This could help them to reduce costs. However, with such outsourcing, it would be nearly impossible to monitor social compliance.

³⁷ The converse also holds; if all textile imports were subjected to the same tariffs regardless of the user or use, there would not be any necessity of bonded warehouses. However, in this case the RMG producers will be priced out of the world market.

7.56 *Since there are no restrictions on imports by RMG manufacturers, one may wonder why they should pay higher prices for domestic yarn or fabric.* There are at least three reasons for which the garment manufacturers pay the higher prices for domestic fabric. The RMG manufacturers freely admit that they are quite willing to pay 5-8 per cent higher for domestic fabric because of the saving they make on the total costs of importing fabric from overseas. The saving is due to the reduction in transport costs, port and custom clearance costs and hassles and reduction in lead time. The other reason that permits local fabric producers to charge a higher price is the European rules of origin that need to be complied with in order to avail duty-free access for RMG. Since duty-free imports are only a small fraction of the total European imports, European domestic prices of garments are not likely to be influenced by these preferential imports. Consequently, the manufacturers of RMG who can access duty-free privilege can charge prices higher than the competitors' prices by the margin of the average tariffs. However, the EU rules of origin require that the garments from LDCs including Bangladesh must be made from domestically manufactured fabric in order to avail the duty-free access. Most of the knit garments exported by Bangladesh are made from domestic fabric. As such knit garments enjoy duty-free access into European Union. But only a small fraction of the woven garment exports from Bangladesh are made from domestic fabric due to the shortage of domestic supply and hence only this fraction of the total exports can access duty-free privilege granted to LDCs.³⁸ The domestic fabric manufacturers thus enjoy a monopoly position with respect to duty-free access into the EU market. This permits them to raise the price of the fabric to mop up part or all of the margin on garment exports on account of the duty-free access.

7.57 *The third reason is the reduction in lead time made possible by the availability of fabric from domestic sources.* An order with quick shipment requirement could be serviced only if fabric and other accessories could be sourced domestically. If the profit margin on such quick orders is adequate, the RMG manufacturers would be willing to pay a premium on domestic fabric prices.

7.58 *The establishment of CBW does not adversely impact on the first two reasons for the higher price of fabric.* Import costs are probably reduced, if at all, only marginally due to CBW; indeed according to the BTMA presentation to the National Co-ordination Council on RMG Sector of Bangladesh such costs will rise because of double clearance and double trucking requirements. Since CBW will stock only imported fabric, any garments made from fabric purchased from CBW will obviously not qualify for duty-free access to EU. Hence, domestic producers will not pay a premium price for CBW fabric. The latter cannot compete with domestic fabric in the market for duty-free export. The monopoly position, and therefore, the premium price of domestic fabric will not be affected by the operation of CBW.

7.59 *However, the establishment of CBW will make imported fabric available as quickly as, in some cases more quickly than, domestic fabric.* The RMG producers who are procuring domestic fabric for reducing lead time will be unwilling to pay a premium on this account on the price of the fabric that is also available from CBW at the international price. This provides a plausible reason for the opposition of the textile manufacturers against CBW. The textile manufacturers have an interest to oppose any attempts to reduce the lead time except through an increase in their production. As explained earlier, lead time has become an important competitive factor in the post-MFA world and its importance will increase with greater integration and specialization of the textile market. To remain competitive, and to exploit the full potential for growth, the RMG industry of Bangladesh must be able to reduce the lead time to the level of its major competitors. The modern textile industry of Bangladesh owes its growth to the RMG industry. The latter provided the market for the products of PTS. Faster the growth of the RMG industry, the larger would be the market of the domestic textile producers. Any diminution of RMG industry growth will

³⁸ According to local EU officials, about a quarter of the woven exports to EU receive GSP, but BGMEA (2004a) reports that the figure is only 16 per cent.

impact on the primary textile industry adversely. The policy of restricting the growth of RMG is, therefore, counterproductive; it might bring in higher profit for some of the current producers by artificially raising the prices of primary textile products, but it also generates inefficiencies and reduces the market size, and thereby stunts the growth of the industry in the longer term.

7.60 *The other concern of PTS is that the setting up of CBW will reduce the demand for textile products supplied by the domestic PTS industries.* RMG producers will buy these from the CBW instead. This is an admission that the domestic PTS industries are still not competitive internationally. Hence, they must be shielded from the competition of more efficient foreign producers until they grow stronger. This is the classic infant industry argument which appears to have wide acceptance in the country. The government has provided generous support to the textile sector in order to support their growth. The spinners have been given the benefit of cash incentives for more than a decade while the fabric manufacturers were protected by either outright prohibition of imports or very high tariff barriers. The import prohibitions have been phased out at the end of 2004, but the high import specific duties (47.7 per cent in 2004-05) are still maintained.³⁹

7.61 *The protection and support given to PTS have resulted in large increases in investment and production capacity*⁴⁰. Spinning capacity, according to BTMA, has trebled between 1994 and 2004 from 1.4 million to 4.2 million spindles. The output of knit fabric increased from 385 to 990 million meters between 1997-98 and 2003-04 (Table 16). During the same period, woven fabric production increased from 971 to 1430 million meters. Most of the woven fabric produced domestically is destined for domestic consumption. Domestic producers supplied less than 15 per cent of the total requirements of woven RMG producers (see Table 11). There is no reliable data about the situation since then, but it is believed to have not improved much. Domestic producers were, however, much more successful in meeting RMG demand for knit fabric. By 2001-02, they supplied 65 per cent of the demand for knit fabric of the knitwear manufacturers. As mentioned earlier, BKMEA claims that their market share now exceeds 90 per cent. If current trends persist, within a very short period Bangladesh is likely to become self sufficient in knit fabric production.

7.62 *The knitwear manufacturers appear to be satisfied with the quality of knit fabric* (Gherzi *et al* 2002). The prices are higher than the comparable international prices, but this is offset by the savings on import costs and the higher prices in EU due to the EBA initiative. The knitwear exports have been growing robustly despite the erosion of the EBA advantage due to the higher prices.⁴¹ It was mentioned earlier that CBW will work satisfactorily only if it is complemented by a flourishing dyeing and finishing industry that can process grey fabric into finished fabric of the quality that matches those offered by competitors. It is unlikely that CBW can stock finished fabric of exactly the colour and design demanded by every single order from overseas buyers. But if the CBW stock grey fabric of various constructions and there is sufficient dyeing and finishing capacity, the fabric of the stipulated construction could be dyed and processed into finished fabric of the colour and design demanded by the buyer at a short notice thereby reducing the lead time. Since most the fabric demanded are of some common constructions, it will not be necessary to stock up grey of numerous constructions.

³⁹ Pursell (2005).

⁴⁰ The Government seems convinced that backward linkage is important which justifies the huge investments made recently in PTS, largely financed through bank loans. Hence, the desire to protect. The point is that it would be much better to protect PTS through direct budgetary subsidies, instead of dragging down the RMG sector by imposing various policy constraints.

⁴¹ This may be overstated. Many exporters now have integrated knit industry that converts yarn to garments. Hence, the higher price of fabric is a transfer between different branches of the same firm.

Table 16: Domestic production of yarn and fabric

	Yarn million kg	Fabric (million metres)		
		All types	Woven	Hosiery & Knitting
1997/98	213	1356	971	385
1998/99	229	1424	994	430
1999/00	251	1599	1091	508
2000/01	252	1800	1070	730
2001/02	275	2000	1148	852
2003/04	350	2420	1430	990

Source: Gherzi *et al* (2002) and BTMA *Annual Report* 2004.

7.63 ***The woven section of PTS supplies less than a fifth of the total requirements of woven RMG producers.*** The rest has to be imported. The problem is then whether the fabric should be imported by individual RMG firms against firm orders (LCs) as is the current practice, or at least part of this excess demand should be met through the establishment of CBW in order to reduce lead time of at least part of the exports. To assuage the concern of the PTS that if CBW are allowed unrestricted import of woven fabric, the market of domestic manufacturers may shrink, CBW may be permitted initially to import only a fraction, say 60 per cent, of the *excess* demand for each type of fabric. Such a restriction on the imports of CBW ensures that the market of domestic woven fabric manufacturers cannot be reduced given their production and projected growth. A similar type of restriction could be placed on yarn, too, so as to protect the market of the local yarn producers. However, such protection should be time-bound to ensure that inefficiencies are not generated in the sector.

7.64 ***An oft-repeated concern about CBW is that there will be leakages into the domestic market that will harm the local primary textile sector.*** This does not seem to have substance. There are three thousand plus bonded warehouses under the control and supervision of the individual firms. If leakages from these bonded warehouses have not hurt the growth of PTS, it is unclear how leakages from well protected, government and perhaps industry supervised CBW could be hurtful. In any case, the solution to this problem is tightening of the custom security measures in order to prevent or minimize leakages. This may be achieved by locating the CBW in the EPZs as suggested by the National Co-ordination Council. The first best option is always to go at the source of the problem, rather than controlling its effects through more regulatory measures which could have other undesirable effects.

Recommendation: Permit the establishment of CBW in line with the recommendation of the National Coordination Council.

Take advantage of external policy environment.

7.65 ***Make the most of preferential market access which gives price advantage.*** Bangladesh experience shows that preferential access to global markets creates price advantage that translates into more exports. As mentioned earlier, MFA quotas provided sheltered market access to Bangladesh garment exports to US and EU, prompting the growth and expansion of an entire industry, and providing job opportunities to hundreds of thousands of unskilled labor, mostly women. On top of it, being a Least developed country (LDC) afforded Bangladesh the benefit of GSP plus zero tariff access to EU under Everything But Arms (EBA) scheme, though subject to certain stringent rules of origin (ROO) requirement. While other developing countries like India and China were restrained both by quotas and non-zero tariffs averaging in excess of 12%, Bangladesh exports which satisfied ROO requirements entered EU markets duty-free, giving them substantial competitive advantage over competitors.

7.66 This is illustrated in Table 17. Suppose an apparel product is exported to EU from either a developing or a least developed, or a non-GSP country at \$10 per piece. The applicable MFN tariff on the product is 12.5 per cent. The duty reduction for developing country will be 2.5 per cent but for the least developed country it will be full 12.5 per cent. The non-GSP countries of course receive no duty reduction. The landed duty-paid price of the product exported from the non-GSP country will be \$11.25, that from the developing country \$11 while that from the least developed country \$10. Hence, if all these countries were equally efficient in the production of this item, the least developed country will have a 10 per cent price advantage over its developing country competitor and a full 12.5 per cent advantage over a non-GSP competitor. Conversely, even if the cost of production of the least developed country were to be 10 per cent higher than that of the developing country or 12.5 per cent higher than that of the non-GSP country, its product would still be competitive as the landed duty-paid price of all these countries would be the same. If the product were priced at \$50, the percentage margin per piece remains the same, but the absolute margin becomes larger.

Table 17: Illustration of price advantage due to GSP scheme

Price of Item	MFN tariff	GSP for developing countries	GSP for least developed countries	Tariff inclusive price of non-GSP countries	Tariff inclusive price of developing countries	Tariff inclusive price of least developed countries
\$10	12.5 %	2.5%	12.5%	11.25	\$11	\$10
\$50	12.5 %	2.5%	12.5%	56.25	\$55	\$50

7.67 *This preferential margin greatly helped to increase the export of knitwear to EU at a rapid rate.* Indeed, more than 95 per cent of the increase in total knitwear exports of Bangladesh between 1997-98 and 2002-03 was accounted for by the increased exports to EU. Total knitwear exports were only about one-fifth of the total exports of woven garments in 1993-94, but by 2003-04 this ratio rose to more than three-fifths. By volume, knitwear exports now exceed woven exports. EU absorbs nearly three-fourths of the knitwear exports of Bangladesh.

7.68 *Textile and apparel imports to the North American market (US and Canada) were not subject to GSP preferences.* Consequently, Bangladesh apparel exports to US faced average tariffs of about 14%. In 2003, Canada offered zero tariff access and relaxed ROO for LDCs. As a result, Bangladesh's exports of apparel went from US\$90 million in 2002 to US\$342 million in 2004 – a fourfold increase of exports in just two years. This trend is continuing.

7.69 *Gaining a foothold and expanding market share in the lucrative US apparel market is every garment exporters dream.* Not only does the US not offer duty-free access to LDC exports, its tariffs are generally skewed against export products from developing countries, as a consequence of which Bangladesh ends up paying more tariff revenues on its apparel exports of about \$2 billion in 2003 than French exporters paid on their exports of US\$26 billion. Under the Caribbean Basin Initiative (CBI) and African Growth and Opportunity Act (AGOA), the US offered duty-free access to a number of Caribbean countries and African LDCs. These concessions put Bangladesh exporters at a price disadvantage and they have been lobbying hard with US Congress to give them duty-free access under a proposed bipartisan bill called Tariff Relief Assistance for Developing Economies (TRADE) Act 2005.

7.70 *What would be the implications of such a concession to Bangladesh?* Using Computational General Equilibrium techniques and the most recent data available⁴² the effects of elimination of US

⁴² The last version of GTAP, GTAP 6.4 (www.gtap.org), with the base year 2001.

tariffs on imports of textiles and apparel from Bangladesh has been estimated. The reduction of tariffs on the US market should increase the volume of Bangladesh's exports to US. Table 18 shows the percentage change in Bangladesh exports toward European Union and United States occurring over a period of 3-4 years. The elimination of tariffs leads to a 90 percent increase in the apparel export to US, and an 82 percent increase in the textiles export to US. The significant increase in exports toward US markets is possible by an increase in production (as a consequence, the demand for labor in the Bangladesh's apparel industry would increase by one third) and by shifting exports from other markets to the US market (there would be a 15 percent decrease in export of apparel to EU and a 17 percent decrease in export of textiles to EU). The increase in demand for textiles and apparel increases the demand for labor (34 percent increase in the apparel industry and 7 percent increase in the textile industry).

Table 18: Changes in Bangladesh exports

Category	EU25	USA
Textiles	-17	82
Apparel	-15	90

Source: World Bank, DECRG Trade

Table 19: Welfare changes due to elimination of tariffs for Bangladesh's Exports of textiles and apparel to US

Country/Region	Welfare change US\$ mil
EU25	-36
China	-27
Bangladesh	476
India	20
Sri Lanka	-3
United States	-210
Mexico	-16
Global change	205

Source: World Bank, DECRG Trade

7.71 Table 19 shows the welfare effects of tariff elimination for Bangladesh's exports of textiles and apparel to US. The increase in competitiveness of Bangladesh exports of textiles and apparel lead to almost a half a billion US dollars increase in welfare for Bangladesh. The loss of tariff revenue seems to be the main reason of welfare loss for US, the increase in competition in the apparel market having just a marginal effect on the domestic apparel producers. The increase in US exports is compensated by a 15 percent decrease in exports towards EU which may result in a marginal increase in the price of apparel in EU and a welfare loss of US\$ 36 million.⁴³ The welfare losses of China and Mexico (of US\$ 27 million, respectively US\$ 16 million) may be explained by the increase in competition in the US market for apparel and the welfare gain of India due to the increase in the export of textiles from India to Bangladesh.⁴⁴ The elimination of tariffs results in a global welfare gain of US\$ 205 million as well as large welfare gains for Bangladesh.

⁴³ Bangladesh exported US\$ 3.8 billion apparel to EU25 in 2003, roughly 4 percent of EU's imports (UN COMTRADE).

⁴⁴ The welfare changes for China and India are influenced by their double role. They are suppliers of textiles to Bangladesh, thus benefiting from the increase in the demand for textiles due to an increase in the apparel production in Bangladesh. On the other hand, they are direct competitors with Bangladesh on the US market.

7.72 The decomposition of welfare changes in variations due to the allocative efficiency or terms of trade allow for a more precise analysis of welfare changes (see Table 20). In the case of Bangladesh, the most significant change in welfare is due to allocative efficiency (US\$ 281 million), followed closely by welfare changes due to changes in terms of trade (US\$ 195 million).⁴⁵ Almost three quarters of the welfare changes for US are due to terms of trade. The elimination of US tariffs allows for an increase in the price and volume of Bangladesh apparel exports to US.

Table 20: Decomposition of Welfare Changes

Countries	Allocative Efficiency	Terms of Trade	Total Welfare Gains
EU25	2	-38	-36
China	-4	-24	-27
Bangladesh	281	195	476
India	8	12	20
Sri Lanka	-1	-2	-3
United States	-56	-154	-210
Mexico	-6	-10	-16
Global Welfare	208	-3	205

The table shows just the countries with the biggest variation in welfare. Global welfare cumulate welfare changes for all the countries.

7.73 Although the above discussions have focused on staying competitive and seizing preferential access into the major export markets for RMG (US and EU), this is not to under-estimate the potential for exports to hitherto untapped markets. Japan, which is the largest importer of RMG., after US and EU, is yet to be explored, but holds enormous potential. Bangladesh needs to penetrate this market, but faces stiff competition from China. Vigorous marketing and promotion drives are needed to enter the Japanese, East Asian and other growing markets of middle income countries, not to mention Australia, New Zealand, and Norway, all of which have given zero-tariff access to Bangladesh exports. Even Russia and the Middle East hold significant prospects for future exports.

Recommendation. Preferential access is time bound and comes with conditions. Bangladesh should seize the opportunities offered to it as an LDC but use the space to prepare for increased competition when it graduates out of the LDC league. The industry should be looking out for other markets beyond US and EU.

7.74 **Why not take advantage of Regional Cumulation.** An essential requirement for obtaining GSP facilities is that the export products of these beneficiary countries must satisfy the applicable rules of origin. Each developed country (or custom territory) has its own GSP scheme to provide preferential treatment to export products of developing countries and a set of rules of origin to go with it. The discussion on the rules of origin in Bangladesh usually centers around the EU rules of origin applying to GSP (EBA) benefits. The reason for this exclusive focus on EU rules of origin is that Bangladeshi exports are prevented from fully utilizing GSP facilities because of RoO related problems only in EU. Currently only about one-half of the RMG exports to EU can access GSP facilities. The rest is traded on an MFN basis. Such a RoO related problem does not occur in USA since it does not give any GSP benefits to textile and leather products, and other products such as shrimp easily meet the US preferential RoO. The

⁴⁵ Allocative efficiency results from higher Bangladesh exports in response to increased US demand. Terms of trade effect refer to the rise in the relative price of exports over imports and the consequent welfare implications.

RoO is also not a problem in Canada and Australia as these are now sufficiently liberal to permit all exports to obtain GSP benefits. There is little export of RMG products to Japan or Norway and hence, RoO of these countries have not emerged as an issue at this moment.

7.75 According to the current EU rules of origin, exported items of apparel must be ‘manufacture from yarn’, implying that ordinary apparel items must be made from domestically produced fabric in order to obtain originating status. This requirement turns out to be fairly stringent. Most of the exported woven garments to EU are made from imported fabric and consequently do not satisfy the rules of origin.

7.76 ***The RMG producers have lobbied with EU for the last several years for a relaxation of the aforementioned rules of origin*** such that garments manufactured from imported fabric could also qualify for GSP benefits, but primary textile producers have opposed any relaxation and the government has also not supported their demand. So far EU has not relaxed the rules of origin.⁴⁶ However, there exists a small window of opportunity to circumvent the rules of origin in the form of regional cumulation, which permits derogation from the provisions of Article 67 that define originating rules.⁴⁷ A beneficiary country, which is part of a regional trade area such as SAARC may claim, for GSP purposes, fabric purchased from regional member countries as their own when claiming GSP if the value added there is greater than the highest customs value of the fabric used originating in any one of the other countries of the regional group and the working or processing carried out there exceeds certain minimum processing requirements.⁴⁸ However, when these conditions are not satisfied, the products shall have the origin of the country of the regional group which accounts for the highest customs value of originating products coming from other countries of the regional group.

7.77 ***The cumulation rules clearly indicate that availing this facility depends on the cost structure of RMG production and the number of sources of imported inputs used in production.*** If fabric is imported from a single regional country (as is mostly the case) and all other inputs going into RMG production are sourced domestically, the domestic value addition must exceed 50 per cent of the *ex works* price of the garments to qualify as originating domestic product under the cumulation derogation. This is unlikely to happen as fabric value is typically over 60% of costs. Therefore, Bangladesh needs to request for further derogation from GSP rules of origin, as was done and granted to Cambodia, Laos, and Nepal. That would allow Bangladesh zero-tariff access to EU as an LDC, while manufacturing operation takes place from there without any value-added condition.

7.78 ***The current value addition requirement turns out to be prohibitive for most of the woven RMG manufactures.*** A number of studies including Dr. Martelli Associates (1999), Bhattacharya and Rahman (2000) and Gherzi *et al* (2002) show that the value addition in the production of the most common items falls short of the minimum required to qualify for EU GSP. In other words, without a substantial relaxation of the value addition requirement, most of the RMG exports to EU will not qualify for GSP *even if regional fabric is used*. Only the high value and fashion items, which account for a small part of the total RMG production could benefit from the existing cumulation rules. Notwithstanding this fact, textile manufacturers have strongly opposed cumulation because of their apprehension that they would lose market share to Indian textile producers if cumulation is allowed.

⁴⁶ The inability of a large part of the LDC manufactured exports to cash on EBA benefits has finally persuaded EU to reconsider the rules of origin. It is now contemplating changes in the rules to a simple value addition criterion such that more exports from LDCs qualify for EBA benefits.

⁴⁷ Actually there is another provision that could be used to access EBA. The government can request for a derogation of the rules as an LDC. Such derogation has been allowed for Cambodia, Laos and Nepal. Not so for Bangladesh as no such request was made in view of stiff opposition from PTS.

⁴⁸ See European Council Regulation (EC) No. 2501/2001.

7.79 As stated earlier, the local woven textile sub-sector supplies about 15 percent of the total demand of the woven RMG sector. This sub-sector of PTS has not been able to increase its share of the RMG requirement during the last several years since RMG demand has increased at a faster pace than the increase in their production capacity. Unless locally produced woven fabric is currently being used only to produce high value fashion items where value addition exceeds 50 per cent and all of it is exported to EU, SAARC cumulation can have hardly any effect on the domestic producers. The privileged position, and consequently the price premium, enjoyed by the locally produced fabric due to the rules of origin for EBA will not be affected much by cumulation. Hence, it appears imprudent to pursue a policy that holds back RMG producers from taking advantage of regional cumulation.

Recommendation. Regional cumulation, in whatever shape or form, offers incentives for sourcing inputs from the region, which, in and of itself, could be a way for reducing lead time and enhancing competitiveness. Why pass up the opportunity? Government should lobby hard with EU to reduce value added requirement along with liberal regional cumulation option.

7.80 **An FTA with India could spur RMG exports to the vast Indian market.**⁴⁹ Access to the vast Indian market for readymade apparel without hindrance from tariff and non-tariff barriers could add a significant dimension to India-Bangladesh trade by opening a potential channel for addressing the bilateral trade gap that often is an eyesore in Indo-Bangladesh relations. An FTA that gives unilateral duty-free access to RMG exports (among others) from Bangladesh, with staggered reduction of duties for Indian imports, is an attractive option from the Bangladesh perspective. Whether such an arrangement can be pulled off in the near term is a political economy question.

Fiscal Year	India			Bangladesh		
	Knitted HS 61	Not knitted HS 62	Total	Knitted HS 6	Not knitted HS 62	Total
1997	1034	2719	3753	763	2238	3001
1998	1023	2855	3878	940	2843	3783
1999	1258	3107	4365	1035	2985	4020
2000	1588	3177	4765	1270	3083	4353
2001	1769	3790	5559	1496	3364	4860
2002	1864	3143	5007	1459	3125	4584
2003	2387	3352	5739	1652	3255	4907
2004	2701	3541	6242	1859	3116	4975

Sources: India: Department of Commerce, Export Import Data Bank. Bangladesh Bank and Export Promotion Bureau. Exports for Bangladesh FY04 are up to May 2004 only. The Indian fiscal year is from April 1 to March 30. The Bangladesh fiscal year is from July 1 to June 30

7.81 **India and Bangladesh are two of the world's leading exporters of readymade garments** (Table 21). The RMG industries in both countries are very large, low cost, internationally competitive and economically efficient export industries. Therefore, the likely economic consequences of their inclusion in a free trade agreement –whether bilateral or under SAFTA-- are of special interest. This is especially the case in Bangladesh, where many Bangladeshis hope that RMG exports might help reduce Bangladesh's large bilateral trade deficit with India.

⁴⁹ Discussion on this strategic option draws from Garry Pursell (2005), *Free trade between India and Bangladesh: A Case study of the ready made garment industry*, World Bank, mimeo.

7.82 But the economic effects of opening up RMG trade between the two countries in the context of an FTA are complicated by:

- India's prohibitively high specific duties on most garments
- Bangladesh's very high RMG and textile tariffs
- Bangladesh's ambiguous policies on domestic sales by exporting RMG firms

7.83 **Tariffs.** Before the final removal of the textile and clothing import ban, with the support of the Ministry of Textiles, India's T&C industry lobbied the government to impose specific duties on a large number of textile fabrics and garments. This was done in 2000. In 2002/03, the proportions of HS 6-digit tariff lines subject to specific duties were: cotton fabrics, 49%; man-made filament fabrics 88%; man-made staple fibre fabrics 69%; special woven fabrics (including tyre cord fabrics) 51%; knitted apparel 30%; apparel, not knitted 62%. The tariffs are compound i.e. the higher of an amount calculated using an ad valorem rate or the specific amount. The specific component is in Rupees per square metre or per kilo in the case of fabrics, and per item (e.g. per shirt) in the case of garments. For the products subject to specific duties, the objective and effect is to target and keep out imports of specifications and qualities that sell for low prices for which there is the largest demand in the Indian domestic market, and of which other developing countries are the most competitive foreign suppliers. The specific tariffs were initially set at very high levels during FY 2001: they were reduced somewhat in FY 2002 and have remained at that level since.⁵⁰

Table 22: India. Mens' or boys' woven cotton shirts: MFN tariffs and SAPTA preferential tariffs on imports from Bangladesh. Comparisons of ad valorem and ad valorem equivalents of specific tariffs, 1999/2000-2005/06

	Ad valorem rates		Specific tariff ad valorem equivalents					
	MFN	Pref	\$3 shirt		\$4 shirt		\$5 shirt	
	MFN	Pref	MFN	Pref	MFN	Pref	MFN	Pref
1999/00	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7
2000/01	44	24	106.5	55.2	80.8	42.4	65.5	34.7
2001/02	40.8	22.6	66.3	35.3	50.8	27.6	41.5	22.9
2002/03	35.8	20	65.4	34.9	50.1	27.2	41	22.6
2003/04	35.8	20	68.6	36.5	52.6	28.4	42.9	23.6
2004/05	20	10	63.1	31.6	47.3	23.7	37.9	18.9
2005/06	15	7.5	63.1	31.6	47.3	23.7	37.9	18.9

Notes: There were no SAPTA preferences for garments in 1999/2000 and before, and no specific duties. From 2000/01 the Bangladesh SAPTA preference has been 50%, but that only applies to the Indian "Basic" Customs duty. Consequently, until 2004/05 the preferential tariffs were more than 50% of the MFN tariffs owing to the application of other protective import duties. The last of these other duties (the Special Additional Duty or Sadd) was removed in January 2004. A small "education cess" (2% of all import duties) introduced in 2004 has not been allowed for.

7.84 **Under SAPTA, preferences for garments were introduced in FY01—but for "least developed" SAPTA countries only.** Subject to meeting rules of origin, the preference for Bangladesh and the other SAPTA LDCs (Nepal, Bhutan and Maldives) on most garments is 50%, so the basic Customs duty would be the greater of an amount calculated by applying half the ad valorem rate to the cif price, and half the

⁵⁰ The FY 2003/04 Customs tariff schedule extended the HS classification system from 6 to 8 digits, and in doing this the specific duty for any given 6-digit product was also used for its 8 digit subproducts.

specific amount⁵¹. There are no garment tariff preferences for the other “developed” SAPTA members i.e. Pakistan and Sri Lanka. However, under the bilateral agreement with Sri Lanka (ILFTA) the preference for garment imports from Sri Lanka is 75%, and garment imports from Nepal (like imports of nearly all other products) are duty free. In order to qualify for the SAPTA preferences, garments imported from Bangladesh would have to satisfy the SAPTA origin rules. For the SAPTA LDCs the principal requirement is that the cif value of non-SAPTA imported inputs included in the exported product should not exceed 70% of the fob price, or put another way, that national value added should be no less than 30% of the fob price.

7.85 Prospects for Bangladesh garment exports to India. Three important factors which affect the ability of Bangladesh garment firms to export to India with the present SAPTA preferences or hypothetically in the future with a free trade agreement, are: (1) production costs in Bangladesh relative to production costs in India; (b) India’s tariffs in relation to the Bangladesh cost advantage, if any; and (3) whether and how the Bangladesh firms satisfy rules of origin.

7.86 Production costs: Bangladesh vs India. Studies of export firms in major garment exporting countries consistently indicate the Bangladesh has the lowest wages, and that the advantage this should give Bangladesh garment firms over firms in other developing countries (including India) is not offset by lower labour productivity. Table 23 shows some comparisons taken from a recent (2002) report on the RMG industry in Bangladesh.

Table 23: Comparisons of labour costs and productivity in the RMG industry

	Labour cost \$US/hour	Minutes per woven dress shirt	Implied labor cost \$US/shirt	Minutes per pair of jeans	Implied labour cost \$US /pair of jeans
Bangladesh	0.23	61	0.23	62	0.24
India	0.41	63	0.43	65	0.44
Pakistan	0.37	65	0.40	70	0.43
Sri Lanka	0.35	50	0.29	55	0.32
China	0.77	60	0.77	60	0.77
Indonesia	0.41	n.a.	n.a.	70	0.48
Vietnam	0.30	65	0.33	65	0.33
Italy	14.71	35	8.59	35	8.59

Notes: Labour costs and productivity estimates from Gherzi report (2002). Implied labour costs calculated from these numbers. The productivity comparisons are for the same technology levels except in the case of Italy

7.87 The implied direct labour costs derived from these comparisons suggest that for dress shirts and jeans Bangladesh has a labour cost advantage of about US 20 cents per unit over India. Generally lower wage levels in Bangladesh also presumably mean that—provided productivity is similar or better—clerical and other overhead labour costs are also lower in Bangladesh than in India, and this would also apply to transport and other expenses if (a big if) these services were equally or more efficient. Even so, relative to typical selling prices, the likely cost differences are minor and could easily be offset, or more than offset, by differences in other costs, or in quality, design, delivery times and other non-price factors. Certainly, they do not provide a decisive cost advantage comparable to the cost advantage that

⁵¹ The preferences did not apply to India’s “Special additional duty” (Sadd). In most circumstances the Sadd provided significant extra protection, so the preferential protection rate was greater than implied by the apparent preference. For example, in 2002/03 the MFN ad valorem protective rate on garments (including the effect of the Sadd) was 35.8% and the preferential protective rate on imports from Bangladesh was 20%. The Sadd was abolished in January 2004.

Bangladesh and other developing countries have over garment producers in developed countries, as illustrated by the direct labour cost per shirt in Italy (\$8.59) versus US 23 cents per shirt in Bangladesh. Relative to prices, the 20 cents production cost advantage over India is only 6.6% of the price of a shirt selling for \$3, and 4% of the price of a shirt selling for \$5. Relative to margins (fob prices over input costs), the difference is greater: about 20% of typical woven shirt margins of about \$1/shirt⁵², *but even if there were an FTA this difference still appears to be too small to be a major influence on sourcing decisions.*

7.88 **Cost advantages and Indian tariffs.** It is also instructive to compare the apparent labour cost advantage of garment production in Bangladesh with India’s tariffs, especially the specific tariffs. For woven shirts, for which the apparent labour cost advantage is about 20 cents, in 2004/05 the Indian specific tariff on a shirt imported from Bangladesh was 92 cents, and on a man made fibre shirt it was about \$1.31. These tariffs far outweigh the Bangladesh labour cost advantage, and unless the Bangladesh shirts had some special style, brand, marketing or other advantage, would appear to preclude imports of low value shirts, at least on a substantial scale. As discussed previously, most of the garments which Bangladesh exports to developed countries in large quantities are subject to specific duties in India, and *even though India’s SAPTA preferences for Bangladesh cut most of these duties by 50% (and a few by 60%), the preferential duty in most cases is still much too high to allow substantial exports from Bangladesh to India.*

Table 24: Prices of some Bangladesh exported RMGs and preferential tariffs for Bangladesh imports in India.

	Prices & tariffs in \$US/garment			Ad
	Export price	CMT price	Specific duty	valorem duty
Polo shirts	2.53	0.96	0.98	7.5% 0.19
T-shirts	1.45	0.38	0.52	0.11
Sweaters	3.58	n.a.	0.98	0.27
Jogging suits	9.79	n.a.	none	0.73
Nightwear	3.5	n.a.	none	0.26
Pyjamas	2.33	n.a.	none	0.18

Notes: prices from Gherzi report. Ch 4, p.64. HS classifications are not given, so the Indian tariffs may vary from these e.g. depending on the predominant material used

7.89 Table 24 shows current Indian 2005/06 tariffs in relation to typical export prices of a few Bangladesh RMGs. The specific duties on knitted polo shirts and T-shirts, which are two of Bangladesh’s high volume exports, are higher than typical CMT prices i.e. the prices quoted to cut, make and trim from fabrics provided by the buyers, so it is unlikely in the extreme that an Indian trader would ever source these garments in Bangladesh if comparable prices could be obtained from suppliers in India (and even less likely to source from China or some other MFN supplier for which the specific tariffs are double the rates applied to Bangladesh e.g. \$1.04 for a T-shirt selling for \$1.45 fob and with a CMT price of US 38 cents). The products just subject to the preferential 7.5% *ad valorem* would have a better chance of competing in India, but for low value products even these duties would probably make life difficult for Bangladesh suppliers. For example, if India were to remove the specific duty on Bangladesh T-shirts, the *ad valorem* duty for Bangladesh suppliers would still be around 30% of the CMT price. For these reasons, given the highly competitive Indian RMG industry, Bangladesh garment exporters would probably need duty free access to India to have much hope of winning substantial market shares in high volume products. If India abolishes the specific duties, even at the current reduced *ad valorem* tariffs and

⁵² Gherzi report Table 4.3

with a substantial advantage over MFN suppliers, export prospects would be modest, and if the present specific duties are maintained, Bangladesh suppliers would probably be confined to small, mostly specialised or opportunistic fringes of the Indian RMG market.

7.90 **Rules of origin.** For the SAPTA LDCs (Bangladesh, Nepal, Bhutan and the Maldives) to obtain tariff preferences in exporting to India, the maximum material input content (valued at cif prices) that can be imported from non-SAPTA countries, is 70% of the fob price. In this respect, Bangladesh has an advantage over Pakistan and Sri Lanka, for which the maximum imported content is still 60%. As is usual in preferential trading areas, the minimum local content requirement can be met by importing materials from other SAPTA members, but subject to the additional constraint that if this is done, the content requirement increases to 40% of the fob price. For Bangladesh firms exporting to India, this means that if they use imported materials from India to help satisfy the SAPTA origin rule, they have to buy sufficient of these materials to raise the regional content (i.e. processing costs and Bangladesh materials, plus the materials imported from India) to at least 40% of the fob price.

7.91 As India is in any case supplying a substantial share of the imported inputs of Bangladesh's exported RMGs, satisfying the SAPTA rules of origin is probably not at present a serious problem for most Bangladesh RMG exports to India. Moreover, backward integration in knitting already allows most Bangladesh knitted garment producers to easily satisfy this requirement. Therefore the application of the same or similar origin rules in a bilateral India-Bangladesh FTA, or in SAFTA, would constrain Bangladesh exporters to some extent, but not seriously. Nevertheless, if Indian materials that would otherwise not be used, are used to satisfy the origin rules, by definition the Bangladesh exporters to India are disadvantaged relative to a situation without the rules of origin. In this regard, the Bangladesh ban on yarn imports from India by the land route (in force since 2002) obviously disadvantages Bangladesh RMG firms (especially knitwear firms, it seems) exporting to the rest of the world and actually exporting (or interested in exporting) to India.

7.92 In the preceding sections, we have tried to demonstrate that an FTA with India, with both countries maintaining their present tariff and other policies with respect to the rest of the world, would provide export opportunities in India for Bangladesh RMG products. This was demonstrated using the example of mens' and boys' cotton shirts, which are among Bangladesh's principal exports to developed countries and which are being exported to India in small volumes over India's specific tariff, but with the assistance of a 50% SAPTA preference. This is done on the assumption that initially there would be just a one-way agreement, in which India would grant duty free access to Bangladesh RMGs, but Bangladesh would for the time being not provide any preferences for RMG imports from India, or stagger duty elimination for a few years.

7.93 However, a number of cautionary points need to be made in this regard:

- RMG industry in both India and Bangladesh are highly competitive. Domestic prices of exported garments are probably close to or below cif import prices. Therefore, even with the advantages of tariff exempt access and proximity, Bangladesh garment exporters would have to mainly compete for market niches based on styles, design, marketing, quality etc. For this they would need to work with Indian traders and distributors, and the Indian traders would have to find some clear advantage in sourcing from Bangladesh rather than from Indian suppliers.
- A number of RMGs which Bangladesh exports to other countries are not subject to specific duties in India, but until FY 04 none were being exported to India. For most RMGs India's preferential *ad valorem* tariff for Bangladesh in 2003/04 was 20%, and after that it was reduced to 10% in FY 05 and in FY 06 to 7.5%. Unless some Bangladesh exports have

developed since FY 04, this suggests that even relatively low *ad valorem* tariffs are sufficient to deter exports of these products to India.

- Sri Lanka is a major RMG exporter and under ILFTA it has more generous RMG tariff preferences (mostly 75%) in India than Bangladesh's SAPTA preferences (mostly 50%, some 60%). In 2005/06 its preferential ad valorem tariff for RMG products was 3.75%. Despite this, its RMG exports to India are practically nil.
- Garment industry direct labour costs are much lower in Bangladesh than in India, but these differences are minor relative to typical garment selling prices in world markets, and in selling to India could easily be offset, or more than offset, by differences in other costs (especially fabric and yarn costs), quality, design, delivery times and other non-price factors
- If Bangladesh garment exporters were to develop substantial exports of some RMGs to India, part of the new exports are likely to have been diverted from other export markets. Hence, the net increase in exports resulting from the preferential opening of the Indian market will be less than the increase in exports to India.

Finally, it is useful to take note that Bangladesh has signed on to the framework agreement for Bay of Bengal Initiative for Multi-sectoral Technical and Economic Cooperation (BIMSTEC) Free Trade Area, whose constituent agreement for trade in goods is slated to take effect in June 2006. This brings into focus a middle income country like Thailand as a potential market for RMG with zero-tariff access.

Recommendation. As a negotiating strategy, Bangladesh would be well advised to have a short negative list for SAFTA or FTA, as long as RMG is not on India's negative list. Penetration of the Indian RMG market via preferential arrangements remains a viable strategic option, as also are potential openings through BIMSTEC free trade area.

Compliance with social and labor standards

7.94 As Bangladesh emerges as a major player in the global RMG export market, the pressure is mounting for compliance with social and labor standards. Failure to conform to international norms could undermine competitiveness. The European Union and the United States, which together account for more than 70 percent of Bangladesh's total export market, insist on strict compliance with social and labour-related standards, as well as ecological norms, as a pre-condition for doing business. In the face of international competition in the post-MFA era, Bangladeshi manufacturers must be able to respond to and harmonize their views with buyers in order to address the challenge.

7.95 Evidence suggests that hitherto inadequate attention has been given by the industry to the various aspects of social accountability. It would now be opportune for Bangladeshi firms to conform to SA8000 standards – the international standard for social accountability in the workplace. SA8000 provisions focus attention on the personal safety and health of all employees recognizing that contented workers are motivated to raise their productivity and work quality. Though designed to cover welfare and comfort of employees, SA8000 has now been adopted, with some variations, as a benchmark for sourcing decisions by buyers⁵³. Aspects covered by these standards include fair compensation, compliance with labor laws – e.g. minimum working age, work hours, good personnel practices, environmental protection, hygiene and sanitation, etc. They also relate to labor safeguards to ensure health and comfort of employees in the workplace: e.g. work posture, temperature, humidity and air circulation, illumination, fire prevention and firefighting, etc.

⁵³ The problem is that, unless adapted to country circumstances, SA8000 could become a ploy to protect high cost firms in developed country markets.

7.96 It is advisable, therefore, that RMG firms recognize these requirements as necessary for the health and safety of employees and undertake that the standards set out in SA8000 are implemented and maintained. This is important not only from the point of view of enhancing competitiveness and sustaining repeat orders, but is also critical for keeping workers motivated to improve productivity and product quality.

7.97 BGMEA, in cooperation with ILO, has been working towards meeting social compliance requirements in its member factories. Besides ILO, development partners, like UNDP, GTZ, and EU, are working with manufacturing enterprises, civil society, buying houses, labor organizations and the Government to effectively raise the capacity of compliance services in Bangladesh. The Ministry of Commerce has taken the initiative to form a “National Forum on Social Compliance in the Textile and Garment Industry”, along with issue-based “Task Forces on Social Compliance”, and a “Compliance Monitoring Cell”. All this augurs well for the sector under the post-MFA regime.

Recommendation: To remain competitive and win orders, RMG firms must conform to international standards of social compliance for their industry.

Government-industry partnership to develop forward linkages

7.98 ***Most assessments of the Bangladesh RMG industry find serious shortcomings with regard to its international market orientation*** – the ability to gear up its marketing campaign in response to changing demand. Long years of exclusive reliance on foreign buying houses or their agents have contributed to this outcome. The post-MFA trading regime demands savvy merchandising and marketing of products in order to penetrate and maintain market share in export markets. Focus on such forward linkages is a must. The following approaches highlight some of the key strategies for promoting forward market integration:

7.99 ***Product and market diversification:*** One of the major limitations to apparel export growth is the lack of diversification in products and markets. Besides the export concentration that has been discussed earlier, there is also a problem of product concentration – a small range of products (shirts, trousers, T-shirts, sweaters, jackets) make up 60% of RMG export. Vigorous marketing and promotional drives would be needed to break into markets for other RMG products that Bangladeshi producers are capable of producing competitively. That brings up the critical role of R&D and market research to expand the product mix and public support in this area might be needed. A comprehensive research centre built on public-private partnership should be able to gather and disseminate information effectively to local manufacturers on the latest developments in products and markets, including information on fabric developments, blends, colours, patterns, latest fashion trends and design forecasting, as well as providing customer service to foreign buyers purchasing from Bangladesh.

7.100 ***Image building and brand development:*** Image building and branding can achieve a high level of value addition. As part of image building, brand development can also enhance Bangladesh’s reputation as a quality supplier of apparel. As branding is an expensive investment, incentives and opportunities should be provided to exporters, such as through a ‘Brand Fund’ and encouraging foreign collaboration to launch collective brand names through corporate marketing companies. Investments in skills, design and advertising will have to be made in order to make the yet unknown “Made in Bangladesh” label become known in the global marketplace. For this, an active promotion campaign will be required by the industry, Government and Export Promotion Bureau. Local and international exhibitions should be held with aggressive efforts to attract foreign buyers. Bangladesh embassies abroad should appoint dynamic business oriented commercial officers whose main job will be to promote export products through direct contact with potential buyers. Without being pro-active, it is impossible to build direct relationships with buyers.

7.101 At home, an exporters' *performance rating database* could also be developed, based on factors such as product quality, timely delivery and financial performance. This facility should be set up in collaboration with an accredited international company so as to ensure objectivity and credibility.

7.102 ***FDI or Joint ventures:*** Bangladesh has a limited number of joint venture RMG industries; but these can be very effective in bringing in managerial and marketing expertise. Continuous efforts should be made by the Export Promotion Bureau and Board of Investment to ensure a favourable investment climate to allow for more FDI or joint ventures. The positive spillover effects of FDI has already been noted.

7.103 ***Specialized units:*** The RMG sector constitutes a long value chain, ranging from spinning, dyeing, weaving, printing, stitching and knitting. Each of these processes involves independent units with specialized labour and machinery. Small and medium enterprises should be encouraged to set up these specialized units, with incentives such as provision of long-term financing at subsidized rates and allowing duty-free imports of the machinery required. This calls for supportive public policy.

7.104 ***Human resources development:*** Middle-level management is a bottleneck in the industry and there is a critical need for skill enhancement. Focus should be placed on 'training of trainers' to ensure continual quality training and skill development.

7.105 It is relevant to note that FDI, specialized units and HR development are all important topics by themselves. But the report does not elaborate on these topics as they would require very detailed treatment.

Recommendation: Bangladesh RMG industry must gear up to meet the many shortcomings that create a distance between itself and its markets/consumers. Building strong buyer-supplier relationships and focusing on image building (quality, skills, branding, etc.) are two areas most in need of attention through public-private partnership.

Employment Options for displaced garment workers

7.105 ***Post-MFA threat of job loss. What needs to be done.*** RMG has been the driver of job growth in Bangladesh. As such, there is justifiable concern regarding the employment effects of quota elimination. Though nothing is certain, there is general agreement that there will be some disruption of employment with consequent labor market adjustment. Transitional adjustments within the RMG workforce is not unknown. An internal BGMEA survey recently found that of the 4300 listed firms in their database, some 1300 were either closed or inoperative prior to the MFA phase out. That would put an estimated 700,000 workers in jeopardy. However, in light of expanding demand, the remaining 3000 BGMEA firms have expanded jobs and exports, and, according to BGMEA, as many as 84 new firms were established in FY05. In all likelihood, most of the laid off workforce from the 1300 closed firms will have found alternative RMG employment or, as discussed later, moved to home based work. Consequently, most analysts find little evidence of floating unemployed garment workers. Whether or not this situation will change depends on how the industry copes with the competitiveness challenges of the future.

7.106 Earlier, we estimated the RMG workforce to be around 2.0 million of whom some 80% were females. Another 0.8 million are engaged in accessory and linkage industries. Overall, some 10 million people depend for their livelihood on the RMG sector. That is a substantial proportion of the nation's population whose livelihoods might be at risk if post-MFA developments have adverse implications for the sector. Using CGE global models, the World Bank (2005b) estimates potential job losses to the tune of 17% of RMG employment (about 0.3 million) over the next three-four years, assuming no change in productivity or competitiveness. However, if duty-free access to USA could be obtained under the

TRADE Act, this could alone generate 0.6 million jobs. By implementing some of the strategic options identified for the sector, we have argued that these job losses could be prevented or even reversed. Because of the predominance of females in the workforce, some negative social outcomes of massive job losses cannot be ignored and steps need to be taken in advance to forestall any adverse fallout.

7.107 Labor market adjustment towards home-based work. Because of the potentially disproportionate impact on women of any adverse change, alternative employment opportunities ought to be explored. Surveys reveal that there is some tendency for retrenched garment workers to move to home-based informal employment. The pressure to achieve competitiveness globally is likely to push down labor cost further, leading many workers to move towards more informal setting e.g. home-based work⁵⁴. There is evidence that there is more sub-contracting for piece work, and a portion of it is going to home based workers. In 1990, a BIDS survey found that 44% of factories were manufacturing their own products without sub-contracting, which was reduced to 27% in 2003. Recent reports indicate that majority of the retrenched garments workers have moved to home-based informal work, without any formal protection or support⁵⁵. However, movement of factory workers towards home-based work has become a common practice in most garment exporting countries. This has been the trend in Thailand and Sri Lanka, where home-based workers are a substantial proportion of RMG workforce. India, a major competitor of Bangladesh RMG in global market, has a long tradition of home-based workers in garments and textile industries. In India, a large number of home-based women work in the informal sector, producing fashion products and customized materials for global export. The home-based industry in India have a major research and development (R&D) components, so this sector is introducing new fashion, design, ethnic textile and embroideries, which is captivating the global high fashion market. These women have formed cooperatives like SEWA in Gujarat, and are able to conduct collective bargaining agency (CBA) functions with buyers, and get wages and benefits close to formal sector. SEWA was able to establish their own credit system through bank's and marketing information and system. Bangladesh NGOs are famous for micro-credit, which promoted income generation via micro-enterprise for women. However, these women have not been able to form cooperatives like SEWA, in order to access large scale loans, obtain market information, and engage in collective bargaining with buyers. As current trends suggest significant movement of women workers towards informal home-based markets, it has become important to provide them with credit, technical and managerial skills, and appropriate institutions so that they are able to expand their enterprises and enhance their well being.

7.108 Reverse migration. Though the number of home-based workers is still not substantial in Bangladesh as in other garment exporting countries, there are pockets where one could find workers working from home, especially embroideries in knitwear. A study on garment workers who were retrenched after 2001 found that 60% has become home-based workers and doing embroidery and other piece rate work for garments industry. Some of them have gone back home in Gazipur, Netrokona and Mymensingh, where some RMG industries have also moved. These women either found RMG jobs in their home districts or are doing piece work from home. There has been a trend by RMG owners, especially knitwear, to move factories towards small towns, where skilled workers live. Many of these moved towards areas with concentration of tribal population, as they are known to be hardworking, honest and usually do not have much work, but are unwilling to move from their ancestral land. Therefore, some experts feel that one possible adjustment to post-MFA labor market shocks could be a reverse migration by workers who move back to their own localities and work there.

⁵⁴ Paul-Majumdar P. (2005) "Bangladesh RMG Moving Towards Informal sector". BIDS Annual Journal, Vol. 22.

⁵⁵ *ibid*

7.109 A recent survey on RMG workers found that about 80% of workers know about MFA phase out and its potential implications on their livelihood⁵⁶. To conclude,, for potential laid off workers, there are three possible adjustment options – (a) find other jobs or income opportunity in the RMG sector in the cities, (b) return home in rural areas, or (c) migrate abroad. Among women interviewed, 68% would like to stay and find opportunities in the city, 10% will go back to rural areas, and 12% would try to go abroad as they have been saving for this purpose. Majority of workers will look for jobs in other industries, especially garments or become self employed by using their sewing skill. Women who are planning to go back to rural areas expect to initiate small enterprises in livestock, poultry, and cash crop by taking micro-credit from NGOs.

Recommendations

Facilitating home-based work is an option that will help labor market adjustment should there be adverse impact of post-MFA.

Skill development and refreshers training: This would be strategic for accommodating laid off workers as well as new entrants in the labor force. Therefore, skill development and refreshers training, consistent with market demand, should be ensured. . For developing such training modules, market survey for skills should be undertaken.

Labor Market Information (LMI) System: Most workers do not get severance pay or notice when retrenched. If government wants to provide a safety net package, it would be difficult to trace the retrenched workers. Therefore, Labour Market Information (LMI) System will be necessary, within which all workers would have ID card with registration number and home district address so that they can be traced if retrenched.

VIII. Conclusions

8.1 ***The end of MFA presents both challenges and opportunities for the RMG sector of Bangladesh.*** There are many uncertainties about new market developments in the coming months. What is certain is that there will be heightened competitive pressure with the more efficient producers attempting to capture a larger share of the global market. Signs of this are already visible. To sustain and enhance Bangladesh's share, all stakeholders including the government, industry and individual firms will have to quickly respond to the emerging situation with the right policies and actions in order to become more competitive. As stated at the outset, the cost of inaction or policy errors could be severe. Delays to adopt the right policies, or remove the constraints, can only raise the cost of missed opportunities and reduce the competitive strength of the sector that has made a remarkable contribution to industrial employment, woman empowerment and reduction of poverty. It would be unfortunate if the growth potential of the sector is stifled or the hard earned gains whittled away because of policy failures. More important, it would be a grave mistake to take any policy and/or institutional action that might undermine the RMG sector's export competitiveness, and any existing trade policy distortion that is harming this sector's competitiveness would need to be removed urgently.

8.2 ***In the post-MFA world, lead time has emerged as a crucial determinant of competitiveness*** or attractiveness of the vendor to the buyer in apparel trade. Several new developments in the retail business have contributed to a sharp decline in the lead time in USA and Europe. Bangladesh woven RMG

⁵⁶ Suhrawardy G.M., Ghosh, P.S. and Hossain, M. A. (2004), "Post MFA – Potential Disempowerment of RMG women workers". Bangladesh Economic Association Conference, December 8-10, 2004

manufacturers have one of the longest lead times amongst competing countries. The principal reason for the long lead time is the unavailability of local woven fabric. There is little prospect of changing the situation in the short to medium term given the very large investment requirement and an adverse international market situation characterized by over-capacity and low prices. Hence, some innovative scheme needs to be put in place to shorten the lead time. One such scheme is the establishment of central bonded warehouses. CBW can reduce the lead time of local manufacturers to the level of competing countries. However, to reap the full benefits of CBW, these would have to be complemented by good processing facilities. Appropriate policies to set up CBW with adequate safeguards against leakages, such as that suggested by the National Coordination Council, should be implemented to ensure that the local woven RMG manufacturers do not lose out to competitors because of the long lead time.

8.3 *There is a suggestion that the government should actively pursue policies to quickly increase the capacity of the woven PTS* such that they can meet the entire demand for woven garments. To make this possible, the argument goes, the protective measures for the PTS should be maintained. Some caution is needed in resorting to such a course. The government in any country is not in the best position to judge or accurately forecast the success of a particular business and hence, it will not always correctly choose winners. It is more likely to bend to lobby pressure. The best course for policy action for a government is accordingly to take an even handed approach to all industries by removing any constraints to fair market competition. Studies have been completed in most South Asian countries in order to formulate a strategic vision for the apparel-textile sectors under the post-MFA regime. In these studies, the potential for the apparel sector to lead the thrust for textile growth has been recognized. So is the case in Bangladesh. *This brings up the strategic importance of domestic policies to ensure a smooth supply of raw materials/inputs to the apparel sector at international prices.*

8.4 *Past experience suggests that trade preference given to the LDCs by the developed world can play an important role in promoting their exports.* Currently RMG products from Bangladesh are not eligible for the duty-free access to the US market, but such access is available to the exporters of African, Caribbean and several other countries. The slow growth of exports to the USA (relative to EU) is partly explained by this lack of preferential access. Efforts should be made to ensure that the bill to secure duty-free access to the US market for the exports of several least developed countries including Bangladesh, now under consideration of the US lawmakers, is passed. The support of international organisations should be courted to achieve this result.

8.5 *Most of the woven RMG exports to EU do not qualify for duty-free entry as they do not meet the rules of origin.* If these rules were relaxed, such as by reducing the process requirement from two to a single stage or by applying a sufficiently liberal value addition criterion, the woven exports would qualify for the duty-free access. This would give a boost to the sector for more rapid expansion. Currently the EU is considering adopting a simple value addition criterion that would help the beneficiary countries to better utilize the GSP facilities. *The government, together with industry, should mount a campaign to convince EU authorities that the criterion actually adopted is sufficiently liberal to allow the woven manufacturers to avail duty-free access.*

8.6 *Under the existing rules of origin exports of RMG products made from imported fabric could access duty-free facility under EBA only through regional cumulation.* If the value addition criterion actually adopted is not sufficiently liberal, the option of accessing duty-free facility through cumulation should be kept open. Cumulation will not reduce the opportunities for the expansion of the domestic woven textile industry given that it supplies only a small fraction of the market demand. *Significant expansion of RMG production can only drive up the demand for domestic fabric providing the needed stimulus to the primary textile sector.*

8.7 ***Comprehensively facing the post-MFA challenge requires actions on the part of Government, private sector collective bodies and individual firms.*** Clearly, some of the required actions identified in the report are in the nature of public goods (e.g. textiles protection policy) and hence are best dealt with by government through public policy, including public investment; some are club goods (e.g. promoting social compliance) and are best addressed by the private sector collective bodies (BGMEA, BKMEA, and BTMA); while some others are private goods (e.g. striving for cost competitiveness) and should be addressed by individual firms. Only then will the overall outcome exceed the sum of these constituent endeavors and what might have been a zero-sum game becomes a positive sum game.

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Annexes

Annex A

GTAP Computable General Equilibrium Model and its Limitations

To determine the global and country-by-country effects of the abolition of MFA quotas, a computable general equilibrium (CGE) model formulated under the GTAP (Global Trade Analysis Projects) was used after adequately restructuring the model to cover and as correctly as possible portray the following:

- First the highly complex interaction between tariff reductions and quota liberalization on the one side and changes in trade flows and key economic indicators on the other.
- Secondly, Greater China's accession to the WTO, with all its implications for the global textile and clothing industries and trade in general is explicitly incorporated into the exercise.
- Thirdly, exploring the implications of China's policy of export restraint through the imposition of export tax.
- Fourthly, determining the implication for Bangladesh of duty-free access for apparels in the US market.

The main thrust of the exercise was of course to determine the likely impact of carrying out the ATC and eliminating quotas on T&C exports. In simple terms this means that we examine the changes which will occur with respect to output, foreign trade and income when the ATC has been effected and when Greater China's WTO accession has been completed with respect to China (PRC) as well as Chinese Taipei. The "computable general equilibrium" (or CGE) model used here allows assessment of the economic impact of regional, multilateral and global trade agreements. It likewise permits the assessment of liberalization across broad sectors of individual economies, including interactions between sectors that may result. The estimated effects from the CGE model at the national level, of course, reflect the interactions with neighboring economies as well as with economies/regions in other parts of the world.

Some Background of the Model

The GTAP 6.4 version of the model used belongs to a family of economic models characterized by an input-output structure (based on regional and national input-output tables) that explicitly links industries in a value added chain from primary goods, over continuously higher stages of intermediate processing, to the final assembling of goods and services for consumption. Linkages between sectors are both direct (like the input of textiles in the production of automobiles) and indirect (like the use of mining inputs into steel, which feeds into machines which weaves the textiles). The model captures these linkages by modeling firms' use of factors and intermediate inputs when producing goods and services. The most important aspects of the model can be summarized as follows:

- it covers all world trade and production;
- it includes intermediate linkages between sectors;
- and it allows for trade to affect capital stocks through investment effects, hence we model medium to long-run investment effects.

The Data Used in the Model

The data come from a number of sources. Data on production and trade are based on national accounting data linked through trade flows and drawn directly from the Global Trade Analysis Project (GTAP) version 6.4 dataset. The GTAP version 6.4 dataset is benchmarked to 2001, and includes detailed

national input-output, trade, and final demand structures. Significant modifications have been made to the basic GTAP database. The basic social accounting and trade data are supplemented with trade policy data, including additional data on tariffs and non-tariff barriers. The dataset has also been updated to better reflect actual import protection for goods and services (the basic GTAP database includes no information at all on trade barriers for services).

Some Limitations of the Model

Since this exercise is based on an economic model, it is useful – as with all models – to keep the limitations of the exercise in mind. The GTAP model is a static, multi-country and multi-sector global general equilibrium model capable of generating comparative-static simulations; (one could mimic some dynamic linkages, but fully dynamic solutions are not possible). By necessity, the production structure is based on the inclusion of highly ‘aggregated’ sectors. Thus, for instance, clothing and textiles are each treated in the model as single, homogenous products or fairly aggregated activities (despite the fact that there is a wide range of apparel items, not all of which were subject to quotas). This (very understandable) limitation on the level of disaggregation in modeling the production side would of course affect the simulation results on the likely (comparative static) impacts by ignoring intra-sectoral specializations.

--On the **demand side**, the GTAP 6.4 version has attempted to model product heterogeneity by treating T&C exports of competing countries as differentiated products, which would be certainly an important effort to improve the reliability of simulations results.

--On the **supply side**, because of the model’s highly aggregated production structure, the simulations results would not fully capture some of the positive resource allocation shifts that would be induced in each country, including Bangladesh, towards relatively more competitive and profitable individual items--i.e., the induced **intra-sectoral** production and trade specialization (among hundreds and hundreds of differentiated apparels and textiles products) in the post-ATC period. This would mean that the current results might be underestimating positive output/export impacts (or over-estimating adverse impacts). Not considered are the likely **dynamic**, long-term positive effects of the removal of the T & C export quotas, though this might be another point that could be made on the side of the likely long-term positive impacts.

Finally, one can think of some generalized limitations associated with most models that are designed to approximate rather than replicate reality. First, the model cannot forecast all future events. It is highly likely that unanticipated economic, political, and/or natural events will occur and will have important effects on some of the agents and activities identified in the model. (Consider, for example, the impact of the East Asian financial crisis, which was not envisaged in the ATC formulation). In this regard, one could think of the model as saying “in a world like the one we currently observe and with the assumed demand and production structure, if policies were different, this world would then change in the ways reported in the tables.” Thus the model makes no claim of being able to forecast future changes with precision. Rather, in the absence of surprises (which no one can predict with any degree of certainty for the next decade), the model helps to generate estimates of likely economic effects. Another limitation is the simplifications embodied in the model. This poses a standard challenge. When economic policy and its impacts are being modeled, the strategy is to develop a reasonable, though stylized representation of complex policy, demand, and production relationships. The trade-off is between keeping the model workable, and keeping it realistic enough to actually be useful. This having been said, it is worth noting that this class of models does actually do well in identifying resource, production, and trade shift

Annex B

Economics of Quota

The imposition of a quota restricts access of exports into a market. If the quota is binding, the price of the restricted product will rise in this market, but it could fall in any non-restricted markets. Quotas, therefore, have price (and therefore, quantity) implications not only in the quota restricted market but also in non-restricted markets. This can be illustrated by Figure 1 due to Kathuria, Martin and Bhardwaj (2001). The demand curves, D_i , are drawn as downward-sloping by adopting the Armington assumption. The subscript U refers to the unrestricted market, R to the restricted market and T to the total demand. In the absence of any restrictions, the global price will be p_w . At this price p_wA and p_wB will be sold in the two markets respectively. If a quota equal to OQ is imposed, the effective global demand curve is given by D'_T (Figure 2). The country now exports an amount equal to the quota to the restricted country (assuming the quota is binding) at a price p_R , and exports $p_U E$ to the unrestricted country at price p_U . The imposition of the quota raises the price of exports in the restricted market, but reduces it in the unrestricted market. The quota reallocates some of the exports to the unrestricted market and hence the price has to be reduced to absorb the additional amount. The abolition of the quota will reverse the process. The price of the product in the unrestricted market will rise with a concomitant fall in quantity. On the other hand, the price in the quota-restricted market will fall with an accompanying increase in the quantity sold. Exporters will shift part of their sales to the high profit quota-restricted market by reducing the sales in the unrestricted market.

Figure 2 provides an estimate of the quota premium. For there to be an equilibrium, the quota premium must be such as to exhaust any advantage of selling in the restricted market. Hence, the quota premium will settle at the difference between the prices in the two markets ($p_R - p_U$). In other words, the quota-holder would be indifferent between producing and selling the product in the restricted market at price p_R , or cede his right to others for a quota premium of ($p_R - p_U$). Alternatively, a producer who does not hold quota will be willing to pay up to ($p_R - p_U$) in order to acquire the quota and sell in the restricted market. If there is a free market for quota transactions, the quota premium will tend toward ($p_R - p_U$). Of course, the actual quota price may be less than this amount. There may be transaction costs that reduce the margin. Large importers and retailers may use their market power to extract a slice of the quota premium such that the quota-holder may not receive the full market premium. Abstracting from these qualifications, the quota premium, provides a good measure of the excess of market price over cost. This is also a measure of the competitive strength of the country as the market price could be reduced by this margin and still maintain production at the quota-restricted level. The effect of the quota can be duplicated in an otherwise free market if a tax equal to the quota premium is imposed on the export of the product.⁵⁷ Hence, the analysis is also referred to as export tax equivalent approach.

The analysis above explains the reallocation of exports of the RMG sector of the country between its quota-restricted and unrestricted markets in a static framework. It does not indicate how the market shares of the competing countries will be affected by the abolition of the quota regime. To understand the market share implications of quota-abolition we use Figure 3. Let the line marked C be the export supply curve of a particular apparel item of a (group of) low-cost country C, the line market B the export supply curve of a (group of) moderate cost country, B, and the line market E be the export supply of the item of a (group of) high cost country, E. The high cost country in this example may also be regarded as the domestic economy. The line E then represents the supply curve of the domestic firms of the economy. The line marked D is the domestic economy's demand for the item. Horizontal summation of the supply curves of the three countries gives the aggregate supply curve $amns_F$ under free market conditions.

⁵⁷ See Kathuria and Bharadwaj (1998).

Now assume that both the low cost and the moderate cost countries are quota-restricted. Each of them can sell at most Q_C amount of the product. In order to avoid cluttering up the figure too much, the supply curves and quota amounts are so drawn that the quotas are binding. As a result of the quotas, the supply function is no longer $amnS_F$, but the step function $abvdeS_R$. As long as the price is less than b , only the low cost country supplies the market.

At price b , the low-cost country hits the quota ceiling Q_C . As the prices increase to v , the profitability of exporting Q_C increases but export of the low cost country cannot expand. When the price exceeds v , the moderate cost country can enter the market. Its export increases along vd until the price reaches d at which point it, too, encounters a quota ceiling. As the price increases further, the quota-rent increases for both countries, but export supply remains constant at Q . When the price exceeds e , the high cost producer E can enter the market. As E is not quota restricted any increase in price beyond e raises the output supplied to the domestic market along eS_R . Hence, the quota distorted supply curve for the item is $abvdeS_R$. The intersection of this supply curve and the demand curve D establishes P_R as the equilibrium price and R as the equilibrium quantity in the quota-restricted market. Each of the restricted countries supplies Q_C amount of the item while the rest ($R-Q=P_{RY}$) is supplied by the high cost country.

When the quota regime is abolished, the relevant aggregate supply curve is $amnS_F$. Its intersection with the demand curve D establishes P_F as the free market price and F as the total purchase of the economy. Since the free market supply curve lies below the quota-distorted supply curve, price $P_F < P_R$ and quantity $F > R$. The abolition of quota unambiguously raises the market size, but reduces the price. Whether the total purchase F in value terms will increase or not will of course depend on the elasticity of demand. If demand is elastic (as is most likely for apparels), total export in value terms will also increase with an increase in export volume ($P_F F > P_R R$).

At the new unrestricted price, the export of the most competitive country increases most, from Q_C to C' . The moderate cost country B also increases its export, though not by as much as the low cost country. Its export increases from Q_C to B' . The high cost country suffers from the change; its production (export) declines from $(R-Q)$ to only E' . The reallocation of production and export after the abolition of the quota regime unambiguously increases global welfare (in terms of an increase in consumer and producer surplus) but reduces apparel production in the high cost country imposing some adjustment costs on it. The severity of the cost will obviously depend on the magnitude of the adjustment.

The diagrammatic analysis above provides an indication of what to expect in the post-MFA era. It also suggests the conditions under which the predictions will be different from what have been depicted above. It is certain that the abolition of quotas will reduce the market price so long as some of the supplying countries were quota-restricted. It is also certain that the low cost country will gain from quota abolition – its output and export will expand. The high cost country on the other hand will witness a reduction in production and/or export. However, what happens to the country in-between will depend very much on the cost and demand conditions. For the configuration of the supply and demand curves as drawn above the moderate cost country also gains from quota abolition. But it is easy to see that the lower the cost of production in the low cost country, i.e. the lower the supply curve C , the smaller would be the gain to the moderate cost country; and beyond some point it will actually suffer a reduction in output and export. The reverse also holds.

The problem (and prospect) of the RMG sector of Bangladesh in the post-MFA world will be evident if in the diagram above the low cost country is interpreted to be a country such as China or India, the high cost country to be USA, and the moderate cost country to be Bangladesh. Whether Bangladesh will fare well in the emerging market situation will depend on the competitiveness of the industry, i.e. the position and the slope of its export supply curve. If it can bring down its cost at a faster rate than the lower cost countries, i.e. if it is dynamically efficient, it can actually increase the market share. Note that

even if Bangladesh were to gain initially from quota abolition, as indicated by the figure above, it will not be able to hold on to the gains unless it can maintain the competitive position. If other countries are becoming more efficient through industry restructuring and rationalisation, appropriate government polices, superior infrastructure and importantly technological innovation, Bangladesh will have to respond with appropriate policies and actions in all these areas by both the government and the private sector in order to remain competitive and maintain market share.

Figure 1. Market equilibrium in the absence of quotas

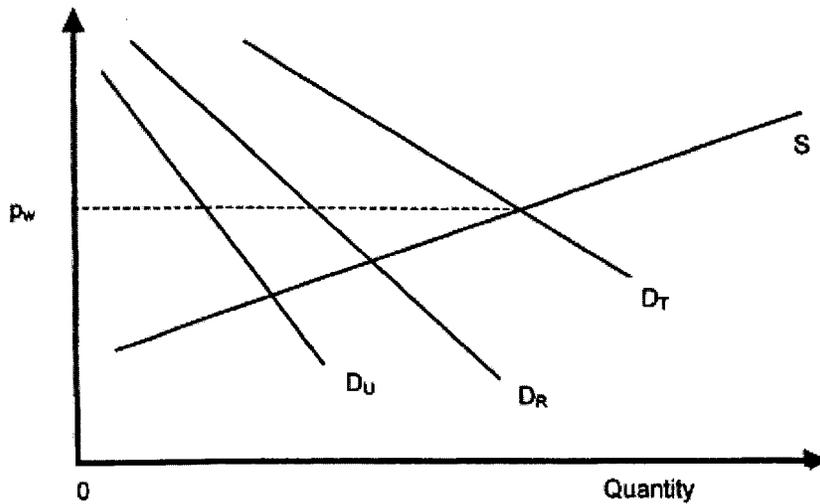


Figure 2. Market equilibrium in the presence of quotas

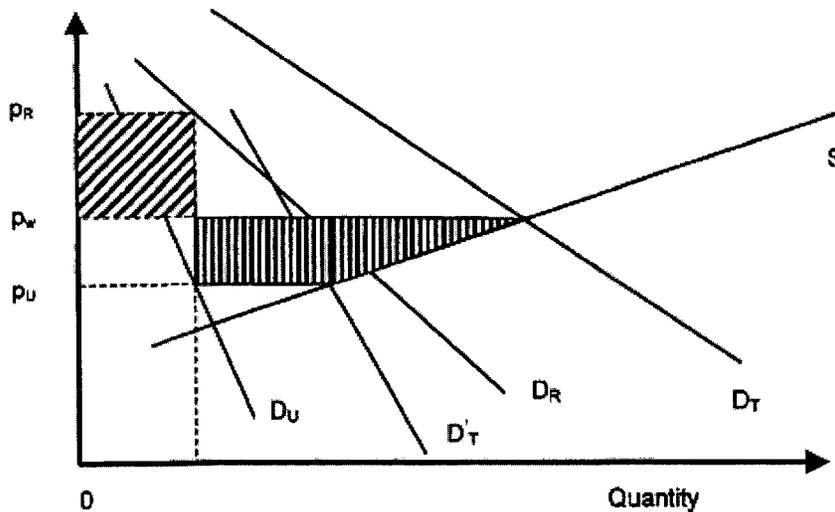
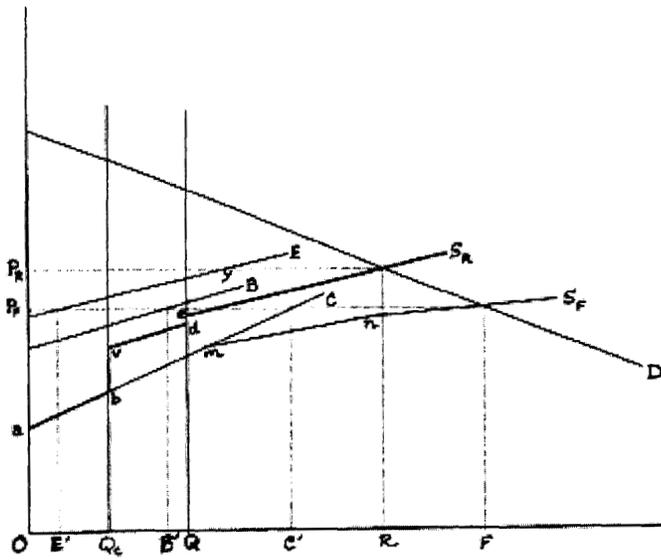


Figure 3. Market Equilibrium after quota abolition



Annex Table 1: Unit Price of Selected Apparel Items to USA

	2002	2003	Year to date 10/04		2002	2003	Year to date 10/04
237: Playsuit/sunsuit (\$ per dozen)				331: Cotton gloves/mittens (\$ per DPR)			
World	32.74	33.16	28.54	World	2.30	2.17	2.00
Bangladesh	30.83	36.08	39.93	Bangladesh	0.84	0.68	0.76
China	28.31	29.81	25.67	China	2.04	1.84	1.76
India	42.68	48.75	42.26	India	1.68	0.64	0.87
Indonesia	42.55	41.53	43.90	Indonesia	1.09	0.95	1.14
Mexico	56.31	50.60	42.04	Mexico	3.97	4.01	3.03
Pakistan	20.96	23.48	25.34	Pakistan	1.74	1.60	1.70
Sri Lanka	54.42	49.10	46.66	Sri Lanka	3.76	3.15	3.28
Vietnam	30.16	25.95	33.10	Vietnam	2.09	2.39	2.19
334: Other coats, M/B (\$ per dozen)				335: Cotton coats, W/G (\$ per dozen)			
World	118.66	117.18	121.50	World	108.84	107.97	117.08
Bangladesh	92.82	90.39	101.89	Bangladesh	76.60	86.96	86.58
China	165.22	185.03	179.89	China	192.26	208.76	228.05
India	103.58	113.70	122.07	India	94.54	110.42	110.59
Indonesia	129.29	125.59	116.67	Indonesia	128.05	131.99	132.10
Mexico	185.20	224.46	215.07	Mexico	89.58	97.50	105.13
Pakistan	70.58	70.72	81.05	Pakistan	49.26	52.76	50.84
Sri Lanka	95.10	110.23	132.25	Sri Lanka	98.68	103.55	100.65
Vietnam	76.84	99.68	144.75	Vietnam	62.84	75.78	101.45
336: Cotton dresses (\$ per dozen)				636: Dresses, MMF (\$ per dozen)			
World	61.32	60.10	60.67	World	107.74	108.19	106.60
Bangladesh	42.93	45.70	39.58	Bangladesh	48.53	48.99	45.00
China	113.38	132.29	167.95	China	309.61	339.59	397.22
India	70.66	70.42	57.57	India	79.29	83.11	77.62
Indonesia	62.51	58.82	67.37	Indonesia	84.24	80.73	72.22
Mexico	53.24	55.32	62.85	Mexico	65.52	61.58	64.12
Pakistan	24.27	21.51	21.54	Pakistan	32.75	30.96	32.45
Sri Lanka	65.10	65.37	66.99	Sri Lanka	88.03	88.64	89.77
Vietnam	47.59	46.22	42.36	Vietnam	70.64	68.70	66.10
338: Knit shirts, M/B (\$ per dozen)				339: Knit shirts/blouses, W/G (\$ per dozen)			
World	35.95	33.24	33.49	World	38.82	37.00	36.39
Bangladesh	44.87	42.57	39.92	Bangladesh	44.25	43.54	37.77
China	83.64	87.96	78.52	China	61.80	64.54	74.03
India	61.45	67.40	65.10	India	57.22	62.17	58.18
Indonesia	75.42	70.29	70.10	Indonesia	69.17	62.20	55.66
Mexico	26.99	25.52	25.00	Mexico	28.39	26.43	23.98
Pakistan	48.39	45.01	45.27	Pakistan	36.50	34.75	30.16
Sri Lanka	81.79	80.92	73.56	Sri Lanka	52.60	52.36	51.99
Vietnam	44.48	43.25	48.54	Vietnam	35.09	36.00	37.16
340: Non-knit cotton shirts, M/B (\$ per dozen)				640: Non-knit MMF shirts, M/B (\$ per dozen)			
World	74.22	74.71	78.18	World	52.11	52.30	51.91
Bangladesh	53.06	50.07	50.89	Bangladesh	55.37	50.50	45.04
China	76.60	79.99	85.92	China	49.62	51.13	51.62
India	59.36	64.11	71.92	India	47.79	56.72	68.26

Indonesia	70.08	73.43	75.78	Indonesia	63.36	64.20	62.70
Mexico	73.52	80.57	79.71	Mexico	66.67	63.94	62.27
Pakistan	40.20	35.68	38.42	Pakistan	31.21	26.17	19.50
Sri Lanka	71.36	66.06	64.43	Sri Lanka	30.36	60.11	51.46
Vietnam	48.12	50.01	58.94	Vietnam	46.97	46.77	56.26
341: Non-knit cotton blouses, W/G (\$ per dozen)				342: Cotton skirts (\$ per dozen)			
World	61.60	63.18	64.58	World	67.68	65.81	64.91
Bangladesh	39.05	36.94	39.94	Bangladesh	50.10	53.98	54.76
China	100.13	117.78	109.02	China	103.59	125.24	135.52
India	52.78	57.98	52.09	India	58.65	65.90	62.46
Indonesia	64.04	67.10	74.63	Indonesia	72.67	82.90	81.63
Mexico	51.95	60.87	59.91	Mexico	80.22	72.60	56.15
Pakistan	33.00	33.43	36.88	Pakistan	36.83	35.06	34.57
Sri Lanka	57.25	58.15	58.84	Sri Lanka	58.49	60.84	63.74
Vietnam	39.79	44.10	54.32	Vietnam	50.85	47.62	53.25
642: Skirts, MMF (\$ per dozen)				347: Cotton trousers, M/B (\$ per dozen)			
World	71.41	69.74	69.35	World	77.65	77.29	78.38
Bangladesh	55.53	62.33	58.39	Bangladesh	60.68	63.89	70.08
China	100.37	113.06	118.58	China	105.70	104.80	118.61
India	64.49	67.54	71.78	India	99.02	101.93	115.59
Indonesia	70.18	75.96	73.44	Indonesia	79.48	88.49	87.34
Mexico	46.29	48.75	45.62	Mexico	87.70	89.00	88.98
Pakistan	28.87	28.07	27.46	Pakistan	63.20	62.07	67.99
Sri Lanka	62.06	62.46	59.00	Sri Lanka	79.64	94.92	88.61
Vietnam	44.70	53.55	51.39	Vietnam	57.38	59.82	72.20
348: Cotton trousers, slacks, etc. W/G (\$ per dozen)				351: Cotton nightwear/pyjamas (\$ per dozen)			
World	71.45	70.57	73.52	World	52.47	48.15	48.70
Bangladesh	60.05	64.51	67.56	Bangladesh	41.51	44.27	38.11
China	117.69	118.70	135.80	China	78.99	76.96	79.44
India	100.04	107.37	102.01	India	73.58	72.39	63.92
Indonesia	79.96	95.06	87.25	Indonesia	51.38	52.79	55.67
Mexico	78.38	84.17	86.04	Mexico	54.94	48.49	42.45
Pakistan	50.23	55.44	62.97	Pakistan	45.98	39.25	37.37
Sri Lanka	72.40	81.41	77.51	Sri Lanka	70.04	72.68	68.80
Vietnam	52.91	51.35	62.95	Vietnam	32.82	34.38	66.56
651: Nightwear/pyjamas, MMF (\$ per dozen)				352: Cotton underwear (\$ per dozen)			
World	47.97	44.69	44.74	World	12.04	11.57	11.25
Bangladesh	43.81	44.36	45.25	Bangladesh	7.68	7.95	8.11
China	77.17	70.20	74.68	China	30.58	29.52	33.49
India	75.68	37.24	61.35	India	12.50	13.24	13.47
Indonesia	57.58	67.08	58.51	Indonesia	23.31	22.67	19.57
Mexico	46.34	46.45	46.62	Mexico	15.09	15.51	14.88
Pakistan	41.27	35.95	37.05	Pakistan	14.84	15.97	16.23
Sri Lanka	75.22	79.10	73.89	Sri Lanka	22.82	27.04	23.23
Vietnam	33.87	41.89	45.90	Vietnam	8.56	9.74	11.67
652: Underwear, MMF (\$ per dozen)				363: Cotton terry and other pile towels (\$ per unit)			
World	15.62	15.79	15.87	World	1.61	1.70	1.81
Bangladesh	7.31	6.69	7.66	Bangladesh	0.43	0.57	0.74
China	19.40	18.83	21.90	China	2.68	2.98	3.34
India	12.70	8.40	19.40	India	1.55	1.82	1.92
Indonesia	14.79	20.03	11.26	Indonesia	1.51	1.69	2.63

Mexico	20.56	19.25	16.42	Mexico	1.05	1.89	2.48
Pakistan	25.73	20.29	9.93	Pakistan	1.13	1.27	1.59
Sri Lanka	33.33	38.74	34.71	Sri Lanka	0.56	0.64	0.77
Vietnam	2.72	5.23	5.89	Vietnam	0.61	0.89	0.97
369: Other cotton manufactures (\$ per kg)				634: Other coats, MMF M/B (\$ per dozen)			
World	5.86	5.63	5.70	World	121.57	123.00	124.57
Bangladesh	2.57	2.44	2.58	Bangladesh	99.95	103.87	106.03
China	7.59	6.68	6.59	China	227.03	259.29	282.59
India	5.18	5.14	5.29	India	115.33	115.21	121.89
Indonesia	7.35	5.70	4.57	Indonesia	219.58	226.85	169.00
Mexico	7.47	8.14	6.12	Mexico	87.76	93.88	108.11
Pakistan	3.17	3.14	3.37	Pakistan	60.23	63.24	60.24
Sri Lanka	3.09	2.32	3.04	Sri Lanka	110.56	114.03	114.95
Vietnam	3.97	6.78	8.29	Vietnam	106.25	123.15	123.50
635: Coats, MMF W/G (\$ per dozen)				638: Knit shirts, MMF M/B (\$ per dozen)			
World	116.02	117.03	116.50	World	34.10	35.57	36.50
Bangladesh	93.44	103.61	115.08	Bangladesh	32.71	30.84	27.15
China	231.24	251.23	258.44	China	66.34	72.33	75.83
India	105.44	94.83	97.20	India	41.25	40.43	41.82
Indonesia	167.18	172.76	131.21	Indonesia	42.29	42.07	40.63
Mexico	76.81	80.60	79.34	Mexico	29.15	27.91	28.71
Pakistan	43.58	46.20	40.46	Pakistan	22.59	22.88	22.56
Sri Lanka	107.67	110.76	112.06	Sri Lanka	52.14	50.43	51.05
Vietnam	118.22	113.78	108.09	Vietnam	38.22	43.08	55.90
639: Knit blouses, MMF W/G (\$ per dozen)				641: Non-knit shirts & blouses, MMF W/G (\$ per dz)			
World	53.95	53.56	53.42	World	56.71	55.11	51.78
Bangladesh	31.98	33.83	36.20	Bangladesh	42.31	43.05	40.12
China	80.98	78.20	80.18	China	80.58	76.66	75.34
India	38.25	39.33	42.66	India	44.70	44.75	47.73
Indonesia	51.70	52.74	55.25	Indonesia	48.72	48.09	45.46
Mexico	41.40	43.39	42.34	Mexico	44.90	46.24	42.84
Pakistan	29.03	23.34	22.60	Pakistan	25.65	25.05	24.35
Sri Lanka	50.66	50.93	46.94	Sri Lanka	61.36	62.88	56.02
Vietnam	42.81	44.71	49.44	Vietnam	39.38	45.78	49.67
645: Sweater, MMF M/B (\$ per dozen)				646: Sweater, MMF W/G (\$ per dozen)			
World	61.73	65.99	58.74	World	68.36	61.62	61.69
Bangladesh	42.35	49.89	37.16	Bangladesh	40.18	32.29	31.59
China	68.25	77.83	65.95	China	98.09	79.71	85.87
India	56.50	51.37	69.02	India	81.56	79.35	91.50
Indonesia	50.44	53.27	45.01	Indonesia	60.36	53.14	48.73
Mexico	70.62	85.26	72.54	Mexico	65.03	66.80	92.01
Pakistan	23.61			Pakistan	45.10	21.20	
Sri Lanka	64.92	66.11	68.15	Sri Lanka	68.92	71.98	68.82
Vietnam	37.64	42.31	52.03	Vietnam	64.20	58.82	61.08
647: Trousers, breeches, shorts, MMF M/B (\$ per doz)				648: Trousers, breeches, shorts, MMF W/G (\$ per doz)			
World	55.64	55.47	55.19	World	59.01	59.81	58.69
Bangladesh	40.12	39.53	36.50	Bangladesh	46.94	52.07	51.59
China	76.23	84.98	97.76	China	96.28	104.13	106.44
India	51.48	51.40	52.93	India	55.01	45.40	43.23
Indonesia	53.30	53.41	51.28	Indonesia	62.09	64.83	62.76
Mexico	56.38	55.71	56.54	Mexico	46.87	49.54	47.29
Pakistan	31.52	27.94	27.72	Pakistan	33.17	22.46	19.88

Sri Lanka	58.42	58.65	49.35	Sri Lanka	67.20	64.85	61.13
Vietnam	45.85	48.87	69.81	Vietnam	43.05	45.16	61.77
847: Trousers, etc. Silk & Vegetable (\$ per dozen)							
World	75.07	64.00	60.51				
Bangladesh	40.33	36.98	36.70				
China	73.81	62.93	59.59				
India	95.50	94.36	81.71				
Indonesia	49.26	40.65	45.76				
Mexico	103.88	84.40	124.70				
Pakistan	35.73	35.41	28.36				
Sri Lanka	114.20	110.44	93.37				
Vietnam	46.64	71.34	64.23				

Source: Office of Textiles and Apparel, US Department of Commerce (www.otexa.ita.doc.gov)

Annex Table 2: Average quota prices of selected items in selected countries

Cat	Unit	Description	<i>QUOTA: Average price (US\$)</i>				
			Pakistan 2003	India 2001	Indonesia 2002	China	Bangladesh 2002
237	DOZ	Play Suits, Sun suits	0.01		0.02	2.50	1.06
334/634	DOZ	Other coat MB	5.99	7.15	7.90	37	13.77
335/635	DOZ	Coat W&G	0.20	1.79	7.90	41	11.61
336/636	DOZ	Dresses	0.56	16.09	2.26	33.5	3.76
338	DOZ	Knitted Shirts M & B	8.70	16.09	5.43	46.5	11.56
339	DOZ	Knit Shirts & Blouses W & G	6.10	16.09	5.75	46.5	
340/640	Doz			20.94	1.63	26	3.41
347/48	DOZ	Trousers, Slacks & Shorts M&B	41.60	46.72	10.18	39	21.65
351/651	SME	Night wears and Pajamas	5.85	15.32	5.5	20.75	5.08
352/652	DOZ	Under wears	3.68			5.5	0.40
634/635		other coats MMF M/B and W/G			39.63	40.5	
638/639	DOZ	Knit Shirts, M & B	3.71		1.46	22	1.62
640	Doz				1.77		
641	Doz	W & G Shirts & Blouses, not Knit		2.30		15	0.36
645/646	Doz	Sweaters				23.5	
647/648	DOZ	M/B, W/G Trousers, Breeches & Shorts	0.48	12.77	2.66	16.25	9.31
Mean			6.99	15.52	7.08	27.7	6.97

Source: Communication texwatch.com

Annex Table 3: Unit prices of garments exported from Bangladesh and China, 2003

Cat.	Product	China	Bangladesh	China	China-Bangladesh
		quota price	quota price	FOB net of quota price	price ratio
		US\$	US\$	US\$	
237	Playsuits, etc.	0.00	2.86	25.60	2.0
331	Gloves	0.00	1.14	7.07	2.2
334	Coats, non-suit, M&B	0.00	42.29	85.98	1.8
335	Coats, W&G	0.92	43.43	61.28	2.5
336/636	Dresses	0.86	38.29	47.52	7.5
338/339	Knit Shirt & Blouses	1.22	53.15	43.52	0.8
340/640	Shirts, not Knit, M&B	0.27	29.72	44.76	0.9
341	Shirts & Blouses, not Knit, W&G	0.08	30.86	28.15	2.9
342/642	Skirts	2.65	38.29	53.01	1.7
347/348	Trousers, etc.	6.63	44.58	66.27	1.5
351/651	Nightwear	0.99	23.72	39.64	1.4
352/652	Underwear	0.02	6.29	7.48	2.3
363	Terry & other pile Towels	0.00	0.00	0.50	6.2
369-S*	Shop Towels	0.00	0.00	10.24	-
634	Coats, non-suit, M&B	2.48	42.29	99.26	2.7
635	Coats, W&G	2.60	50.29	103.84	2.0
638/639	Knit Shirts & Blouses	0.15	25.15	25.44	2.3
641	Shirts & Blouses, not Knit, W&G	0.18	17.15	30.24	2.3
645/646	Sweaters	0.51	26.86	28.38	2.7
647/648	Trousers, etc.		18.57		89.31

Source: Eurostat (<http://europa.eu.int/comm/eurostat>)

Statistical Annex

Table 1: Bangladesh Macroeconomic Indicators

Description	Ave 1980s	FY92	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05 (p)
Growth Rates (%)												
GDP Growth	3.7	5.0	4.6	5.4	5.2	4.9	5.9	5.3	4.4	5.3	6.3	5.4
GDP Growth Per Capita	1.2	3.0	2.8	3.6	3.5	3.6	4.9	3.7	2.9	4.0	6.3	5.4
Per Capita GDP Atlas Method (US\$)	226.6	298.0	332.8	347.9	350.7	354.1	367.3	371.1	372.0	389.0	418.0	445.0
Saving & Investment (% of GDP)												
Gross Domestic Saving	11.6	13.9	14.7	15.9	17.4	17.7	17.9	18.0	18.2	18.6	19.5	20.2
Gross National Saving	17.0	19.3	20.0	21.6	21.8	22.3	23.1	22.4	23.4	24.9	25.4	26.5
Private Investment	11.3	10.3	13.6	13.7	15.3	15.5	15.6	15.8	16.8	17.2	17.8	18.5
Public Investment	5.5	7.0	6.4	7.0	6.4	6.7	7.4	7.2	6.4	6.2	6.2	5.9
Central Govt. Budget (% of GDP)												
Total Revenue	8.8	8.3	9.0	9.2	9.3	9.0	8.5	9.0	10.1	10.3	10.1	10.6
Total Expenditure	17.2	12.7	13.4	13.5	13.3	13.8	14.7	14.1	14.8	13.7	13.3	15.1
Overall Budget Balance	8.3	4.5	4.5	4.3	4.1	4.8	6.2	5.0	4.6	3.4	3.2	4.5
Balance of Payments (% of GDP)												
Exports	4.3	6.4	9.5	10.5	11.7	11.6	12.2	13.8	12.5	12.6	13.3	12.8
Imports	12.4	-11.3	-17.1	-16.9	-17.1	-17.5	-17.8	-19.9	-16.3	-16.8	-17.4	-19.0
Services & Income (net)	-0.4	-0.1	-0.1	0.1	0.2	0.1	-0.1	-0.5	-1.7	-1.7	2.2	2.5
Current Transfers	4.1	4.6	4.5	5.1	4.6	4.9	5.7	4.9	6.0	6.7	6.6	6.9
Current Account Balance (including transfers)	-3.9	-0.4	-3.2	-1.3	-0.6	-0.9	0.0	-1.7	0.5	0.6	0.3	-1.8
External Indicators												
External Debt (US\$ b.)	7.9	13.3	15.2	15.0	14.0	14.8	16.2	15.1	16.3	16.5	16.8	17.8
Ext. Debt as % of GDP	34.2	39.5	37.3	34.7	31.6	32.7	34.0	30.8	34.4	31.9	29.5	29.3
BB Gross Reserves (US\$ b.) (end of period)	0.5	1.6	2.0	1.7	1.8	1.5	1.6	1.3	1.6	2.5	2.7	2.7
BB Gross Reserves months of imports) (in	0.7	5.5	3.5	2.9	2.8	2.3	2.3	1.7	2.1	2.9	2.8	2.4
External Debt Service Ratio (% of Export Earning)	7.8	15.8	10.7	9.6	7.9	8.4	8.0	6.4	6.1	5.6	4.3	5.0
Exchange Rate												
Nominal Period Average (TK/US\$)	26.8	38.2	40.8	42.7	45.5	48.1	50.3	54.0	57.4	57.9	58.9	60.5
Nominal End of Period (TK/US\$)	34.9	39.0	41.8	43.7	46.3	48.5	51.0	57.0	57.9	58.5	60.4	63.7*
Real Effective (1990=100)	107.0	95.4	93.4	93.5	101.9	104.4	102.6	100.3	97.5	93.6		
Rate of Inflation (%) (year on year)												
	10.8	4.6	6.8	2.5	8.7	7.1	2.8	1.9	2.8	4.4	5.8	6.5
Total Public Debt (% of GDP)												
	NA	NA	45.7	43.8	41.5	43.8	46.9	45.2	52.7	51.0	48.3	47.9
Memorandum Items												
GDP at Current Prices (Taka bill.)	619.8	1,195.4	1,663.2	1,807.0	2,001.8	2,197.0	2,370.9	2,535.5	2,732.0	3,005.8	3,329.7	3,684.8
GDP at Current Prices Atlas Method (US\$ bill)	22.5	33.8	40.6	43.2	44.4	45.4	47.7	48.9	49.5	51.7	56.5	61.0
Population (mill.)	98.7	113.0	120.8	122.6	124.5	126.3	128.1	129.9	131.6	133.4	135.2	137.0
Population growth Rate	2.5	1.4	1.7	1.5	1.5	1.4	1.4	1.4	1.3	1.4	1.3	1.3

Source: Various publications of the World Bank, ADB and Bangladesh Bureau of Statistics

*As of 19 June 2005

The Atlas Method was not used for calculating average per capita GDP and GDP at current market prices in the 1980s, in FY04 and FY05

Table 2: Bangladesh Balance of Payments
(in million US\$)

Items	FY98	FY99	FY2000	FY01	FY02	FY03	FY04 (estimate)	FY05 (projection)
Trade Balance	-1,669	-1,934	-1,865	-2,011	-1,768	-2,215	-2,319	-3,783
Exports f.o.b. (including EPZ) ^{1/}	5,103	5,283	5,701	6,419	5,929	6,492	7,521	7,827
Imports c.I.f. (including EPZ) ^{2/}	-6,772	-7,217	-7,566	-8,430	-7,697	-8,707	-9,840	-11,610
Services (net)	-570	-603	-645	-914	-499	-691	-874	-1,141
Income (net)	-100	-135	-221	-264	-319	-458	-374	-354
Current Transfers	1,876	2,195	2,394	2,171	2,826	3,440	3,743	4,200
Official ^{3/}	126	220	165	72	69	82	61	52
Private	1,750	1,975	2,229	2,099	2,757	3,358	3,682	4,148
of which: Workers' remittances	1,525	1,706	1,949	1,882	2,501	3,062	3,372	3,824
Current Account Balance	-463	-477	-337	-1,018	240	76	176	-1,078
Capital Account	445	387	561	432	410	428	319	309
Capital transfers ^{4/}	445	387	561	432	410	428	319	309
Financial Account	237	-395	-185	249	71	581	173	845
Direct Investment	249	198	194	174	65	376	385	410
Portfolio Investment	3	-6	0	0	-6	2	6	0
Other Investment	-15	-587	-379	374	12	634	242	931
MLT loans ^{5/}	706	821	806	790	733	1,070	734	1,373
MLT amortization payments	-308	-341	-396	-416	-421	-436	-492	-442
Other long term loans (net)	-47	-41	127	-13	-42	-20	-41	-45
Other short term loans (net)	168	-78	56	86	20	142	13	150
Other assets	-41	-58	-55	-68	-52	-125	-125	-200
Trade credit (net)	-522	-829	-641	-260	-253	-499	-321	-375
Commercial bank (net)	29	-61	-276	-44	27	71	14	-26
Errors and Omissions	-88	267	125	-47	-356	-274	-355	0
OVERALL BALANCE	131	-218	164	-384	365	811	313	76
Reserve Assets	-131	218	-164	384	-365	-811	-401	-76
Bangladesh Bank	-131	218	-164	384	-365	-811	-313	-76

1/ Includes: a) Goods procured in ports; b) Repairs on goods; c) Internal sales of bonded commodities. Excludes: Local sale

2/ Includes: a) Goods procured in ports; b) Repairs on goods. Excludes: Freight & Insurance charges

3/ Excludes: JDR grants

4/ Includes: JDR grants

5/ Excludes: Supplier's credit

Source: IMF

Table 3: Bangladesh Readymade Garment Sector Profile
(all prices in US Dollars)

1.0 Number of factories currently operating in the sector	3,560 approximately
2.0 Employment	
2.1 People directly employed in the garment sector	2.0 million (90% female)
2.2 People engaged in accessory industry	0.8 million
2.3 People indirectly dependent on sector	10 million
3.0 Percent of country's exports from sector (2003/04)	75%
4.0 Exports (2003/04)	
4.1 Total exports	\$7.6 billion
4.2 Garment exports	\$5.7 billion
4.2.1 Knitwear exports	\$2.1 billion
4.2.2 Woven exports	\$3.5 billion
5.0 Number of textile operations (2004)	
5.1 Spinning mills	211
5.2 Weaving mills	278
5.3 Dyeing, printing, finishing, other	115
6.0 Amount of total manufacturing exports attributable to garment and textiles	80%
7.0 Amount of key inputs imported	
7.1 Cotton	99%
7.2 Fabric	60% - 70%
7.3 Yarn	60% - 70%
7.4 Dyes	99%
7.5 Chemicals	99%
7.6 Accessories	10%
8.0 Key Export markets (of total exports) in 2003/04	
United States	\$1.9 billion
European Union	\$3.7 billion
Germany	\$1.3 billion
UK	\$898 million
France	\$553 million
Belgium	\$327 million

Sources: Global Development Solutions, LLC, Export Promotion Bureau and Bangladesh Garment Manufacturers And Exporters' Association, Ministry of Textiles

Table 4: Bangladesh Exports of Over \$10 Million, FY96-FY04

		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	FY04
(In Million US\$)										
A.	Primary Commodities	476	526	502	422	469	485	390	463	553
1	Raw Jute	91	116	108	72	72	67	61	82	80
2	Tea	33	38	47	39	18	22	17	15	16
3	Frozen Food	314	321	294	274	344	363	276	322	390
3a	Shrimps	271	279	260	242	322	350	252	297	363
3b	Fish	43	42	33	32	21	13	24	25	27
4	Agricultural Products	22	29	39	22	18	18	23	25	41
4a	Vegetables	15	25	32	18	14	13	15	13	25
5	Other Primary Commodities	10	15	5	4	4	14	13	17	26
B.	Manufactured Commodities	3,407	3,892	4,659	4,891	5,283	5,983	5,596	6,086	7,050
1	Jute Goods	329	318	281	304	266	230	244	257	246
2	Leather	212	195	190	168	195	254	207	191	211
3	Leather Goods	29	27	48	51	52	37	45	38	55
3a	Footwear	22	23	43	47	48	34	41	35	51
4	Naptha & Furnace Oil	11	16	11	5	11	10	10	31	37
5	Readymade Garments	1,949	2,238	2,843	2,985	3,083	3,364	3,125	3,258	3,538
6	Knitwear	598	763	940	1,035	1,270	1,496	1,459	1,654	2,148
7	Chemical Products	98	108	74	79	94	97	67	100	121
7a	Chemical Fertilizer	95	104	59	59	60	68	48	79	81
7b	PVC Bags	0.04	...	4	11	25	18	10	10	17
8	Engineering Products	15	16	20	11	8	3	1	13	42
9	Specialised Textile & Household Linen	41	52	58	76	96	117	126	128	204
10	Other Manufactured Commodities	124	149	193	176	209	374	312	414	447
10a	Ceramic Products	11	14	11	10	9	19	18	19	24
10b	Textile Fabrics	6	8	26	26	34	122	48	22	27
10c	Jamdani Saree	0.17	0.06	20	4	0.02	0.04	...	0.03	0.1
10d	Tents	14	14	21	26	39	58	43	47	39
10e	Camera Parts	2	7	11	9	10	13	12	17	22
10f	Golf Shaft	21	10	14	8	10	9	12	10	11
10g	Bicycle	5	10	12	31	52	40
10h	Others	69	95	90	100	95	141	148	247	285
A+B	TOTAL EXPORTS	3,882	4,418	5,161	5,313	5,752	6,467	5,986	6,548	7,603

Source: Export Promotion Bureau

Table 5: Growth of Exports and RMG

		<i>(US\$ million)</i>				<i>Growth (%)</i>			
		Total Exports	RMG	Woven garments	Knitwear	Total Exports	RMG	Woven garments	Knitwear
2002-03	Jul	612.2	473.1	319.5	153.6	-1.2	-5.2	-4.8	-5.9
	Aug	1,220.9	948.6	614.8	333.8	5.0	3.2	-4.1	20.2
	Sep	1,727.2	1,318.3	843.0	475.3	7.5	6.1	-1.5	23.0
	Oct	2,187.0	1,626.3	1,035.9	590.4	9.1	6.5	-1.1	23.0
	Nov	2,626.6	1,930.8	1,226.9	704.0	6.8	2.6	-4.7	18.3
	Dec	3,156.4	2,355.8	1,535.1	820.7	5.4	2.9	-3.1	16.2
	Jan	3,725.3	2,790.0	1,833.0	957.0	5.4	2.6	-2.6	14.4
	Feb	4,206.5	3,146.4	2,092.6	1,053.8	4.4	1.3	-2.9	10.9
	Mar	4,720.1	3,533.7	2,349.6	1,184.1	6.1	3.2	-0.9	12.6
	Apr	5,253.0	3,917.2	2,589.1	1,328.1	7.7	5.1	1.1	14.1
	May	5,869.9	4,383.5	2,923.1	1,460.4	8.5	5.9	3.1	12.1
	Jun	6,545.1	4,912.1	3,258.3	1,653.8	9.3	7.1	4.2	13.4
2003-04	Jul	678.2	530.9	341.7	189.3	10.8	12.2	6.9	23.2
	Aug	1,315.1	1,027.2	662.6	364.6	7.7	8.3	7.8	9.2
	Sep	1,898.6	1,450.4	914.9	535.5	9.9	10.0	8.5	12.7
	Oct	2,414.7	1,815.6	1,119.4	696.2	10.4	11.6	8.1	17.9
	Nov	2,972.9	2,223.0	1,357.2	865.8	13.2	15.1	10.6	23.0
	Dec	3,598.3	2,692.9	1,675.7	1,017.2	14.0	14.3	9.2	23.9
	Jan	4,328.0	3,262.4	2,052.3	1,210.1	16.2	16.9	12.0	26.5
	Feb	4,790.5	3,593.7	2,275.2	1,318.4	13.9	14.2	8.7	25.1
	Mar	5,417.8	4,064.8	2,579.3	1,485.4	14.8	15.0	9.8	25.4
	Apr	6,045.6	4,511.9	2,842.4	1,669.5	15.1	15.2	9.8	25.7
	May	6,761.9	5,043.1	3,158.9	1,884.1	15.2	15.0	8.1	29.0
	Jun	7,598.5	5,685.8	3,538.6	2,147.2	16.1	15.8	8.6	29.8
2004-05	Jul	868.2	681.9	402.0	280.0	28.0	28.4	17.6	47.9
	Aug	1,661.9	1,326.3	772.1	554.2	26.4	29.1	16.5	52.0
	Sep	2,311.9	1,831.5	1,052.3	779.2	21.8	26.3	15.0	45.5
	Oct	2,872.4	2,261.3	1,283.8	977.5	19.0	24.5	14.7	40.4
	Nov	3,424.7	2,686.3	1,515.8	1,170.5	15.2	20.8	11.7	35.2
	Dec	4,142.4	3,226.5	1,823.9	1,402.7	15.1	19.8	8.8	37.9
	Jan	4,785.1	3,740.5	2,117.9	1,622.6	10.6	14.7	3.2	34.1
	Feb	5,409.3	4,229.5	2,410.9	1,818.6	12.9	17.7	6.0	37.9
	Mar	6,089.5	4,725.5	2,675.4	2,050.1	12.4	16.3	3.7	38.0
	Apr	6,961.2	5,171.0	2,907.6	2,263.3	15.1	14.6	2.3	35.6
	May	7,784.6	5,755.3	3,219.6	2,535.7	15.1	14.1	1.9	34.6
	Jun	8,654.5	6,417.7	3,598.2	2,819.5	13.9	12.9	1.7	31.3

Source: Export Promotion Bureau

Table 6: Export of Home Textiles

		US\$ million	Growth* (%)
2002-03	Jul	6.0	-23.6
	Aug	13.6	2.2
	Sep	20.9	16.2
	Oct	27.7	19.2
	Nov	33.7	12.8
	Dec	38.7	12.3
	Jan	43.9	3.0
	Feb	46.8	-5.6
	Mar	51.3	-8.2
	Apr	58.2	-3.5
	May	64.8	-2.8
	Jun	71.4	-4.7
2003-04	Jul	8.2	36.7
	Aug	18.3	34.5
	Sep	28.2	35.0
	Oct	39.9	44.0
	Nov	52.4	55.5
	Dec	63.0	62.7
	Jan	78.9	79.5
	Feb	86.9	85.5
	Mar	100.0	94.8
	Apr	110.5	89.9
	May	122.3	88.7
	Jun	135.5	89.8
2004-05	Jul	14.1	72.1
	Aug	26.6	45.6
	Sep	43.1	52.6
	Oct	57.4	43.8
	Nov	69.8	33.3
	Dec	85.2	35.3
	Jan	95.3	20.9
	Feb	104.0	19.7
	Mar	117.1	17.1
	Apr	131.0	18.6
	May	145.6	19.0
	Jun	156.1	15.2

*/ Annual growth

Source: Export Promotion Bureau

Table 7: Export of RMG to EU and USA
(US\$ million)

	Woven				Knitwear				Total RMG			
	EU	USA	Others	Total	EU	USA	Others	Total	EU	USA	Others	Total
1999-2000	1,250.0	1,673.9	158.7	3,082.6	885.0	321.6	63.5	1,270.1	2,135.0	1,995.5	222.2	4,352.7
2000-01	1,404.6	1,825.4	134.2	3,364.2	1,049.3	373.1	74.0	1,496.4	2,453.9	2,198.5	208.2	4,860.6
2001-02	1,391.8	1,591.9	140.9	3,124.6	1,019.7	364.2	75.3	1,459.2	2,411.5	1,956.1	216.2	4,583.8
2002-03	1,553.9	1,517.3	187.1	3,258.3	1,209.2	350.8	93.8	1,653.8	2,763.1	1,868.1	280.9	4,912.1
2003-04	1,871.0	1,392.0	275.1	3,538.1	1,781.0	237.0	130.0	2,148.0	3,652.0	1,629.0	405.1	5,686.1
2004-05*	1,708.0	1,623.0	267.2	3,598.2	2,238.0	403.0	178.5	2,819.5	3,946.0	2,026.0	445.7	6,417.7
Year-on-year growth (%)												
1999-2000	-10.1	13.3	35.2	3.3	23.5	22.2	14.2	22.7	1.3	14.7	28.4	8.3
2000-01	12.4	9.1	-15.4	9.1	18.6	16.0	16.4	17.8	14.9	10.2	-6.3	11.7
2001-02	-0.9	-12.8	5.0	-7.1	-2.8	-2.4	1.9	-2.5	-1.7	-11.0	3.9	-5.7
2002-03	11.6	-4.7	32.8	4.3	18.6	-3.7	24.5	13.3	14.6	-4.5	29.9	7.2
2003-04	20.4	-8.3	47.0	8.6	47.3	-32.4	38.6	29.9	32.2	-12.8	44.2	15.8
2004-05	-8.7	16.6	-2.9	1.7	25.7	70.0	37.3	31.3	8.1	24.4	10.0	12.9

*/ EU-25 from 2004-05

Source: Export Promotion Bureau