

PART IV. CASE STUDIES ON BILATERAL CO-OPERATION

Chapter 21

Indo-Bangla Trade: Composition, Trends and the Way Forward

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21.1 Introduction

Since the 1990s, South Asia has grown twice as fast as the rest of the world.² Most of the countries in the region have embarked upon more systematic and persistent trade liberalisation measures and, on the whole, such a policy stance has been maintained. This change in policy orientation has contributed to the improved trade performance of the region, coinciding with accelerated economic and per capita income growth. Enhanced outward orientation and improved growth performance also provide potential for increased regional trade and economic co-operation. In reality, however, South Asia is still one of the least-integrated regions of the world.

Like any other South Asian country, Bangladesh also needs to think about expanding regional trade as a source of economic growth. Policy-makers in Bangladesh and India are concerned about the meagre bilateral trade and are keen to bring dynamism to it, as reflected in their continued dialogues and efforts. The Sixth Five-Year Plan of Bangladesh attaches special importance to regional co-operation and the signing of the South Asian Free Trade Area (SAFTA) agreement by South Asian Association for Regional Cooperation (SAARC) member countries also indicates their shared objectives for closer economic integration.

According to trade theories, export potentials of any country are not omnipresent. Therefore, in its efforts to realise the above shared objectives, countries should look for the areas of their comparative advantage to maximise the gains from any policy-support measures. At the same time, it is important to recognise that the comparative advantage could change over time.

Against the above backdrop, this chapter examines the trade prospects between India and Bangladesh with emphasis on how the latter, faced with a growing bilateral trade-deficit, can expand its exports to the former. It reviews the trade policy of Bangladesh, composition and trends of bilateral trade between Bangladesh and India, and analyses trade data to ascertain the trade complementarities between the two countries. It also discusses the NTBs that hinder Bangladesh's export to India and provides some policy recommendations.

21.2 Bangladesh's trade policies and implications for Indo-Bangla trade

The gradual changes of Bangladesh's trade policies provide an opportunity for enhanced Indo-Bangla trade. Three distinct phases can be identified in Bangladesh's trade policy

regimes. The first phase (1972–75) was distinguished for heavy controls on export and import, and pervasive price control. The second phase (1976–90) was marked by a move towards a market-based economy, the beginning of de nationalisation, modest downward adjustment of tariffs, partial elimination of quantitative restrictions, and policy support to ready-made garments (RMG) export. The third phase (1990–to date) approached trade liberalisation in a more concerted manner. Major progress made so far includes substantial scaling down and rationalisation of tariffs, removal of trade-related quantitative restriction, unification of exchange rates and the move to a managed floating exchange rate regime. Despite frequently veering from its path, the trade liberalisation agenda continues to make progress over time.

The overall (trade-weighted) real exchange rate of the country also has moved within a fairly small band of about 8 per cent around its trend since the adoption of floating system. It showed a depreciating trend from fiscal year (FY) 04 to FY07, followed by a modest appreciation since then. The nominal rate of protection, measured as the unweighted sum of the average rate of tariffs and para-tariffs declined from 59.74 per cent in FY92 to 26.51 per cent in FY12.

The enhanced outward policy orientation is also reflected in the country's overall trade outcome, which is not matched by Indo-Bangla bilateral trade statistics. The openness of Bangladesh's economy, as measured by the ratio of export-plus-imports to GDP, increased from 16 per cent on average in the 1980s to 40 per cent in the 2000s (World Bank 2012). Exports as a share of gross domestic product (GDP) grew from 6.7 per cent in FY91 to 20.6 per cent in FY11. The impact the liberalised regime has on Indo-Bangla bilateral trade appears to be predominantly unidirectional, favouring Indian exports to Bangladesh. India as a destination market accounts for only about 2 per cent of Bangladesh's exports. In comparison, the European Union (EU) and USA together account for about two-thirds of Bangladesh's total export.

About four-fifths of the country's total export earnings are contributed by ready-made garments. With India changing to being an importer instead of exporter of some basic garments, Bangladesh's export of these items to the Indian market has been increasing. Therefore, such increase does not reflect any new dynamism of Bangladesh's export strength; rather it demonstrates that the increase was a dividend of being a neighbour of one of the fastest growing economies of the world. The South Asian Free Trade Area (SAFTA) agreement, which was signed by the member countries of SAARC in January 2004 to promote regional trade, is yet to make a notable impact on Indo-Bangla trade.³ A number of studies have evaluated the potential effects of the full implementation of SAFTA on bilateral trade flows and the findings are mixed.⁴

21.3 Composition and trend of Indo-Bangla trade

21.3.1 Some stylised facts and recent trends

The Bangladesh and Indian economies are different, perhaps not so much in terms of the overall level of development but more in terms of growth dynamics. The former has started off a slow but persistent acceleration of growth, whereas the latter has maintained one of the highest growth rates of GDP in the world for more than a

decade. In terms of composition of domestic outputs, there is no striking difference between these two economies. Both are dominated by the activities of the service sector, which contributes to about 53 and 50 per cent of total output in India and Bangladesh, respectively, followed by the industry sector, which contributes around 29 per cent of GDP in both economies.

As neighbours, the countries have established strong bilateral relations in political, economic, social and cultural areas since Bangladesh gained independence. Political relations have had their usual undulations but economic relations have always remained strong and have grown over time. Two-way trade flows between Bangladesh and India were nearly US\$5.07 billion in 2011, a notable increase from US\$1.12 billion in 2001, registering an average annual growth of about 26 per cent. However, India's exports to Bangladesh dominated and the resultant trade gap increased over time to about US\$2.78 billion in 2011 from about US\$1.01 billion in 2001.

Indo-Bangla bilateral trade flows demonstrate significant fluctuations. The growth of Bangladesh's export to India accelerated until 2005 and then started decelerating until 2009. During 2009, following the global economic and financial crisis of 2008, Bangladesh's export to India declined in absolute terms. It recovered strongly in 2010, resuming its earlier growth trajectory. The growth of imports from India had accelerated until it dipped in 2004, but recovered quickly. After a massive decline in 2009, it again recovered.

Despite the peaks and troughs, overall Indo-Bangla trade has increased over time, especially Bangladesh's imports from India. Bangladesh's export receipts from the Indian market increased from US\$0.005 billion in 1991 to US\$0.51 billion in 2011. The share of earnings from India in Bangladesh's overall exports fell from 0.33 per cent in 1991 to 0.31 in 2001, but then registered a rise to 1.88 per cent in 2011 (Table 21.1).

India's exports to Bangladesh increased from US\$0.2 billion in 1991 to US\$0.89 billion in 2001, and further to US\$4.56 billion in 2011. Nevertheless, the proportion of export receipts from Bangladesh in India's overall export earnings declined from 2.42 per cent in 2001 to 1.13 per cent in 2011, implying a faster growth of India's overall exports to the rest of the world.

Table 21.1 Trade between India and Bangladesh in different years

Year	BD's export to India (US\$ million)	BD's export to India as % of BD's total export	BD's export to India as % of India's total import	BD's import from India (US\$ million)	BD's import from India as % of BD's total import	BD's import from India as % of total export of India
1991	5.49	0.33	0.03	199.85	6.37	1.12
2001	16.51	0.31	0.03	889.59	11.06	2.03
2011	512.51	1.88	0.11	4,560.00	12.06	1.51

Source: UNCTADstat

Bangladesh's trade deficit is notably high with India compared with the rest of the world (Table 21.2). The overall trade deficit of the country accounted for about 24 per cent of its total imports and 32 per cent of total exports in 2001. These shares remained unchanged in 2011. But Bangladesh's trade deficit with India in 2001 was 95 per cent of its total import from and 1925 per cent of total export to India. These shares declined to 82 and 448 per cent respectively in 2011, yet these figures imply that India is predominantly a source country for imports rather than a destination market for the exports of Bangladesh. According to the latest information available from Bangladesh Bank, India is the second largest source of Bangladesh's overall imports and accounted for 15.1 per cent of the total imports of the country.

India's relative significance as a bilateral trade partner is second only to China, which was the source for about 21.5 per cent of Bangladesh's total imports. Other important import sources for Bangladesh are South Korea, Singapore, Japan, Malaysia, Indonesia, Brazil, Kuwait and Thailand with their shares in 2012 of 5.0, 4.7, 4.7, 4.4, 3.9, 3.8, 2.9 and 2.7 per cent, respectively.

Despite being the second largest source for imports, India is the only Asian country to emerge as one of the top ten export destinations of Bangladesh. The USA is by far the largest destination for Bangladesh's exports with a share of about one-fifth in the country's total export followed by Germany (16.4%), the UK (10.3%), France (6.6%), Spain (4.6%), Italy (4.4%), Canada (3.9%), the Netherlands (3.1%) and Belgium (2.9%). India's share in Bangladesh's overall exports was 2.7 per cent in 2012.

However, Bangladesh's exports to India and China have grown at an average annual rate of 28 per cent compared with 14 per cent for the USA and the EU. This suggests that the relative significance of India as well as China as Bangladesh's major export destinations is likely to grow in the future.

21.3.2 Dynamics of compositional change of export basket of Bangladesh to India

Contrasting with overall export structure of the country, Bangladesh's exports to India are dominated by primary *not* manufactured commodities. The shares of manufactured goods in Bangladesh's export to global markets were about 92 and 91 per cent in 2001 and 2011, respectively. During the same years, their shares in total export to India were about 51 and 45 per cent, respectively. Primary commodities

Table 21.2 Trade deficit of Bangladesh as percentage of total import and export

Year	With world		With India	
	Import	Export	Import	Export
2001	24.39	32.26	95.06	1925.23
2011	24.41	32.29	81.74	447.59

Source: Computed from UNCTADstat

accounted for about 35 per cent of Bangladesh’s total exports to India in 2001, and 57 per cent in 2011. They accounted for only 7.41 and 8.24 per cent in Bangladesh’s total export to global markets during the same years. Agricultural raw materials accounted for less than 2 per cent of the country’s total exports to global markets both in 2001 and 2011. But they hovered around 27 per cent of the country’s total export to India during the same years.

Bangladesh’s exports of manufactured goods to India contain a puzzling feature. While labour-intensive commodities, with an 87 per cent share, dominated in Bangladesh’s total export to global markets in 2011, they accounted for only about 22 per cent of total exports to India in the same year.⁵ Similarly, the share of high skill-intensive products accounted for 2.46 per cent of country’s total exports to global markets as against of 21 per cent of country’s total export to India.

Bangladesh succeeded in exporting new products to India while continuing to also export most the traditional ones (Figure 21.1). During 2001 and 2011, about 31 new products have been added to Bangladesh’s global export basket. In contrast, as many as 103 new products were introduced to the export basket destined for the Indian market. Six items that were exported in 2001 but not in 2011 were pulp and waste paper (SITC 251), wool and other animal hair (SITC 268), cheese and curd (SITC 024), unmilled wheat (SITC 041), unmilled maize (SITC 044), and silk (SITC 261). The number of Bangladesh’s export items to India with an export value of at least US\$1 million has increased from 4 in 2001 to 37 in 2011. At the same time, the comparable exports to the world market increased from 61 to 146 (Table 21.3).

Of the new export items to India, only a few were able to make a reasonable mark in terms of value of export. Exports of new commodities accounted for about 14.93 per cent of total export to India in 2011. Only ten of these accounted for about 12.55 per cent while the remaining 93 products accounted for only 2.38 per cent of total export to India. The relative contributions of the top ten new commodities are shown in Table 21.4. Petroleum oil or bituminous mineral (SITC 334) by far is the largest new export of Bangladesh to India in 2011.

Figure 21.1 Share (in %) of different product groups in Bangladesh’s exports to India during 2001 and 2011

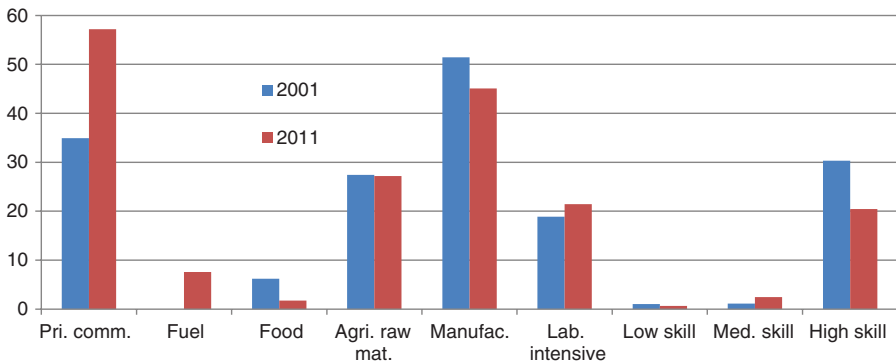


Table 21.3 Number of commodities exported from Bangladesh during 2001 and 2011

Year	Number of exports from Bangladesh		Number of exports with export value of at least US\$1 million	
	To World	To India	To World	To India
2001	214	90	61	4
2011	245	187	146	37

Source: UNCTADstat

Table 21.4 Top 10 new exports to India from Bangladesh in 2011

Commodities with [SITC] code	Value of export (in US\$ thousand)	Share in total export value of new commodities (%)	Share in total export value of all exports in 2011 (%)
[784] Parts and accessories of vehicles	1,165.9	1.3	0.2
[686] Zinc	1,316.2	1.4	0.2
[269] Worn clothing and other textile articles	1,873.5	2.0	0.3
[081] Feeding stuff for animals	2,296.0	2.5	0.4
[842] Women's clothing of textile fabrics	2,989.5	3.2	0.5
[571] Polymers of ethylene, in primary forms	3,180.6	3.4	0.5
[231] Natural rubber and similar gums, in primary forms	5,323.5	5.7	0.9
[422] Vegetable fats and oils, crude and refined	6,229.8	6.7	1.0
[273] Stone, sand and gravel	10,333.5	11.1	1.7
[334] Petroleum oils or bituminous minerals	43,316.9	46.7	7.0
Total	78,025.4	84.1	12.5

Source: UNCTADstat

Along with the inclusion of new commodities in the export basket, the relative share of different commodities in Bangladesh's total export to India has changed. Out of the top ten Bangladeshi exports to India in 2001, four failed to retain their position in 2011. They were copper [SITC 682], woven textile fabrics [SITC 654], special fabrics [SITC 657] and leather [SITC 611], which were replaced by non-ferrous base metal and scrap [SITC 288], fruits and nuts [SITC 057], petroleum oils or bituminous minerals [SITC 334], and cotton [SITC 263]. The top ten exports of 2001 accounted for 52.77 and 43.29 per cent of total Bangladeshi exports to India in 2001 and 2011, respectively. Similarly, the top ten commodities of 2011 accounted for 48.33 and 65.23 per cent of total exports in 2001 and 2011, respectively.

Being a developing country, the total imports of Bangladesh are understandably dominated by manufactured goods. However, Bangladesh's import from India is heavily dominated by primary commodities and food instead of manufactured goods (Table 21.5). This coupled with our earlier findings that Bangladesh's export to India is also dominated by primary commodities indicates the dominance of intra-industry trade in their bilateral economic relationship. The nature of the Indo-Bangla relationship is analysed in detail in Section 12.4. Bangladesh's reliance on India for primary commodities, food and agricultural raw materials is increasing over time (Figure 21.2).

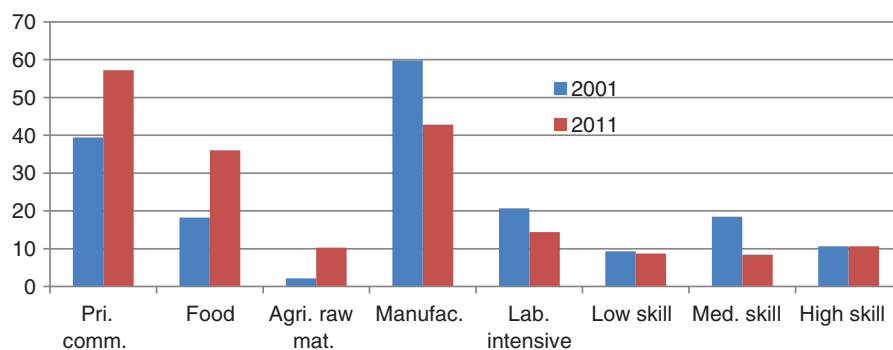
India's importance to Bangladesh as a source of imports has increased over time, not only in terms of value of imports but also in terms of number of imported commodities. Total number of commodities imported by Bangladesh from India increased from 212 in 2001 to 241 in 2011. Three commodities imported in 2001 but not in 2011 were wood particles and waste (SITC 246), meat of bovine animals (SITC 011) and fuel wood (SITC 245). The number of commodities with import value at least US\$1 million

Table 21.5 Percentage share of different imports by Bangladesh from India and world in 2011

Commodities	India	Global
Primary commodities	57.21	30.14
Food	36.02	20.42
Agricultural raw materials	10.30	6.48
Total manufacturing	42.79	60.93
Labour-intensive and resource-based manufacturing	14.43	21.53
Low skill- and technology-intensive manufacturing	8.74	7.94
Medium skill- and technology-intensive manufacturing	8.45	12.29
High skill- and technology-intensive manufacturing	10.64	18.10

Source: UNCTADstat

Figure 21.2 Share (in %) of different groups of commodities in total import from India by Bangladesh during 2001 and 2011



Source: UNCTADstat

has also increased from 98 in 2001 to 213 in 2011. To put them in context, the number of commodities imported from world markets increased from 235 in 2001 to 252 in 2011 and the number of imports from the same markets with an import value of at least US\$1 million increased from 139 to 239 during the same period.

The share of the new commodities added in Bangladesh's import basket from India in 2011 in total import (from India) was not significant and accounted for only about 0.23 per cent of total import from India. Only five commodities accounted for about 85 per cent of total value of all new imports. They are: natural gas (SITC 343), sulphur and unroasted iron pyrites (SITC 274), hides and skins (SITC 211), meat (SITC 017) and cereal meal and flour (SITC 047).

Although the new imports did not seem important in terms of their relative share, the relative importance of the existing imports changed during 2001–11. Out of the top ten imports of Bangladesh from India in 2001, four failed to retain their position in 2011. They were rice [SITC 042], cotton fabrics [SITC 652], parts and accessories of vehicles [SITC 784] and paper and paper board [SITC 641], which were replaced by cotton [SITC 263], maize [SITC 044], motorcycles and cycles [SITC 785], and fruits and nuts [SITC 057] in 2011. The top ten imports of 2001, accounted for 50.55 and 39.77 per cent of Bangladesh's total import from India in 2001 and 2011, respectively. Similarly, the top ten imports of 2011 accounted for 41.76 and 55.92 per cent of Bangladesh's total import from India in 2001 and 2011, respectively.

21.4 Explaining Indo-Bangla trade

The Indo-Bangla trade relationship appears to be concentrated in a few commodities, mostly in the domain of primary commodities. When viewed through a global lens, Bangladesh's export strength does not seem to lie in the area of primary commodities. Therefore, it raises a question about Bangladesh's export complementarity with India. Complementary trading partners, in many ways, are characterised by the differences in the goods and services produced and consumed. Economies that are structurally different from one another and produce a different basket of goods and services have greater potential for gains from trade. To assess the degree to which the Bangladesh and Indian economies can be considered as complementary rather competing, several indices as constructed in Basher (2013), using Standard International Trade Classification (SITC) three-level digit data, can be taken into consideration.⁶ They are: (i) the revealed symmetric comparative advantage (RSCA) index (ii) the trade specialisation index (TSI), (iii) the bilateral trade intensity index (BTII), (iv) the intra-industry trade index (IITI), and (v) the trade complementarity index (TCI). These indices are constructed using Standard International Trade Classification (SITC) three-digit level data as published by UNCTAD.

21.4.1 Different trade indices

Revealed symmetric comparative advantage (RSCA) index

The RSCA index is a modified specification of the share of a commodity group in a country's total exports as against the same for a partner country to indicate relative

advantage and disadvantage of the country in question as evidenced by trade flows. Basher (2013) presents the RSCA indices for the top 15 exports of Bangladesh and India in 2011 to assess their export competitiveness both bilaterally and globally. Nine commodities are part of the top fifteen exports of both countries, which to some extent provide primary indications that these two countries are competing on the same turf in the global market for their exports. The RSCA ranges from -1 to 1 , where a value greater than (less than) zero reveals a country's comparative advantage (disadvantage) in the export of a good. While it is possible for Bangladesh and India to each have comparative advantage (disadvantage) in one commodity relative to the world markets, only one of them will have comparative advantage relative to the other country in that particular commodity. The commodities, in which both countries have comparative advantage relative to the world markets, may not be suitable candidates for bilateral trade as both countries will be better off by exporting them to the world markets. The ideal candidates for Bangladesh to increase its export to India will be the commodities in which it has clear comparative advantage and India has comparative disadvantage – not only relative to Bangladesh but to world markets as well.

Out of the 21 commodities listed for which significant trade exists between the two countries, Bangladesh has comparative advantage relative to India in the case of 14 commodities. Most notable of these commodities are different categories of ready-made garments and leather products. However, out of these 14 commodities, India has comparative advantage relative to the world markets in 13 of them. The countries compete with each other in the case of these 13 commodities in the world market. The only commodity in which Bangladesh has clear advantage and can potentially increase its exports to India is fertilisers [SITC 562]. However, Bangladesh has limited installed production capacity in this commodity. Out of the 187 commodities exported to India in 2011, Bangladesh has clear advantage over India in only 16 (Bangladesh has comparative advantage over India and India has comparative disadvantage relative to world markets). The combined export value of these commodities accounted only for 2.5 per cent of Bangladesh's total export.

India has comparative advantage relative to Bangladesh in the export of seven commodities. Bangladesh has comparative disadvantage in the case of six of them relative to world market, giving India a clear advantage to increase the export of these six commodities to Bangladesh. They are petroleum oils and bituminous minerals [SITC 334], medicaments [SITC 542], rice [SITC 042], ships, boats and floating structure [SITC 793], telecommunication parts and equipment [SITC 764], and iron ore and concentrates [SITC 281]. Out of the 241 commodities exported by India to Bangladesh in 2011, India has clear advantage (India has comparative advantage over Bangladesh and Bangladesh has comparative disadvantage relative to world) in the case of 195 commodities. The total export value of these commodities accounted for about 85.1 per cent of India's total export.

Trade specialisation index (TSI)

The trade specialisation index (TSI) analyses the bilateral competitiveness by comparing the net flow of goods (exports minus imports) to the total flow (exports

plus imports) for Bangladesh and India. A positive value indicates that a country exports more than it imports of a commodity. The maximum value of this index could be 1, which would mean export specialisation, where the minimum value could be -1, which would mean import specialisation.

A total of 35 out of the 254 commodities that Bangladesh exports globally have a positive TSI, implying that Bangladesh specialises in their production and export. However, India also specialises in the production and export of 20 of these 35 commodities, thus implying that these two countries are more competitive with than complementary to each other. The correlation between Bangladesh's and India's TSI of all commodities is positive, reiterating the evidence of the competing nature of these two economies.

However, because of the concentration of Bangladesh's export around a number of commodities, indices estimated at a detailed disaggregated level may be misleading. Therefore, we evaluated the correlation between the TSI of Bangladesh and India for Bangladeshi exports overall export values of US\$5 million (Table 21.6). In the case of both groups of exports, classified on the basis of value of exports, the Bangladeshi and Indian economies appear to be competing with rather than complementary to each other.

Bilateral trade intensity index

Bilateral trade intensity is determined by comparing bilateral exports between Bangladesh and India to the exports of each country to the rest of the world. Bilateral export is deemed 'intense' if they trade with each other relatively more than they do with the rest of the world. Basher (2013) provides the results of the bilateral trade indices of commodities that have a bilateral export value of US\$5 million or more.

The results show that the degree of 'intense' bilateral trade relationship between India and Bangladesh is low, albeit increasing over time. Of the 19 SITC three-digit level products considered, Bangladesh had intense trade relationships with India only in the case of two commodities in 2001. This number has increased to six in 2011. However, India does not have an intense trade relationship for any commodity with Bangladesh. In fact, its trade intensity with Bangladesh is decreasing over time, implying its integration with the rest of the world at a faster rate than its integration with Bangladesh.

Table 21.6 Trade intensity indices of Bangladesh and India, 2011

Group of commodities	Number of commodities with positive TSI		Number of commodities with negative TSI		Correlation coefficient
	Bangladesh	India	Bangladesh	India	
All at SITC three-digit level	35	108	229	156	0.37
Export value \geq US\$5 million	34	71	112	15	0.43

Source: Estimated by using data from UNCTADstat

Intra-industry trade indices

The intra-industry trade index measures how much trade between the two economies occurs within the same industry. It is based on the premise that economies of scale provide an incentive to trade even when factor endowments and consumer preferences are identical between partner economies. Results reported in Basher (2013) show the intra-industry trade indices for commodities in which Bangladesh has an export value of US\$5 million or more in 2011. Bangladesh had significant relationship in the case of five in 2001. This number has increased to seven in 2011. India, on the other hand, had a significant trade relationship with Bangladesh in the case of six commodities in 2001. This number has decreased to four in 2011, implying the diminishing importance of Bangladesh as a trade partner.

Trade complementarity index

The trade complementarity index (TCI) assesses how well the export structure of one country matches the import structure of the other country. The critical value of TCI is 40, meaning any value less than this level indicates lack of trade complementarity. The trade complementarity indices, constructed for each year from 2001 to 2011 by using the bilateral trade information (export and import) of these two countries disaggregated at SITC three-digit level, show that India has had clear export complementarity with Bangladesh (Table 21.7). India being the second largest import source for Bangladesh, this result is quite expected. Bangladesh, on the other hand, clearly lacks export complementarity with India. Its export complementarity is less than ten for the period 2001–2011 and shows no sign of any improvement.

Impact of real exchange rate on exports of Bangladesh to India

It is difficult to identify any sizable complementarity between the economies of Bangladesh and India on the basis of different trade indices, which corroborates the findings of other studies, for example Sikdar (2003). Nevertheless, Bangladesh's export

Table 21.7 Export complementarity between Bangladesh and India in different years

Year	Bangladesh	India
2001	9.21	45.04
2002	8.66	45.99
2003	8.50	46.84
2004	8.34	45.29
2005	9.60	45.95
2006	8.24	44.60
2007	8.93	46.28
2008	9.85	48.48
2009	8.31	28.91
2010	9.50	43.16
2011	9.17	44.12

Source: Estimated by using data from UNCTADstat

to India is growing over time, even at a faster rate than its growth to traditional export markets such as the USA and EU. Therefore, it is important to see what explains this growth.

It is postulated that in an open economy, two main determinants of the exports of a country are the real exchange rate and foreign (destination country) income. In fact, the main target of exchange rate policy of the country is to foster exports and remittances. Although it introduced a 'floating' exchange rate policy in 2003, the de facto exchange rate regime in Bangladesh has been a managed one with a dominant role played by the central bank in determining the value of taka.

The real exchange rate of Bangladesh with India is estimated as:

$$q = \frac{e.P^I}{P^B}, \quad (21.1)$$

where P^I and P^B represent the price levels (measured in terms of the consumer price index) in India and Bangladesh, and e is the nominal exchange rate (equivalence of one Indian rupee in terms of Bangladeshi taka). Thus, this estimate of the real exchange rate shows to what extent Indian products are expensive vis-à-vis Bangladeshi products. Based on the above formulation, a rise in the real exchange rate would mean an increase of Bangladesh's competitiveness vis-à-vis India, and vice versa.

It emerges from our econometric exercises (including from Granger causality tests) that the real exchange rate and GDP of India affect the exports of Bangladesh to India. While statistically one can reject the hypothesis that real exchange rate does not cause exports of Bangladesh to India, the hypothesis that exports of Bangladesh to India does not affect the real exchange rate cannot be rejected. The real exchange rate is a useful summary of external competitiveness of a country vis-à-vis its export destination. Thus, the results of a Granger causality test imply that all else remaining unchanged, Bangladesh can increase its exports to India by improving its competitiveness, conforming the fundamental recipe for export promotion.

Similarly, the hypothesis that the GDP of India does not Granger cause Bangladesh's export to India can be rejected at the conventional levels of statistical significance, but it is not possible to reject that Bangladesh's export does not affect the economic activities (as reflected in GDP) of India. This implies, all else remaining unchanged, Bangladesh's exports to India will change with the growth of the Indian economy.

To analyse the direction of the relationship between the real exchange rate, GDP of India and Bangladesh's export to India, a linear specification as

$$XB = f(q, YI) \quad (21.2)$$

is empirically evaluated, where XB is Bangladesh's export to India, YI is GDP of India. In evaluating the above specification, we use the annual data for the period of 1990–2011. Keeping the analysis limited to this period is justified by the fact that the Bangladesh economy was more or less closed before the 1990s. Based on the results from the unit roots and co-integration analysis, it is possible to confirm a valid long-term relationship among these variables in equation (21.2).

The signs associated with all the estimated parameters of the long-term relationship turn out as expected. The empirical results also imply that Bangladesh's exports to India are highly responsive to changes in the competitiveness of the country as reflected in real exchange rate movements. All else remaining unchanged, a 1 per cent increase in competitiveness is likely to increase Bangladesh's export to India by about 8 per cent. A 1 per cent increase of Indian GDP is found to be associated with a 0.8 per cent rise in Bangladesh's exports to India. These results indicate that improved competitiveness matters for exports. While policy-induced measures such as exchange rate management can be a difficult option, enhanced external competitiveness can be achieved through tackling supply-side hindrances.

21.5 Non-tariff trade barriers between Bangladesh and India

As discussed in Section 21.4, both growth in the Indian economy and enhanced external competitiveness of Bangladesh are significant determinants of the country's exports to India. Since the Indian economy is expected to continue its growth momentum, opportunities for Bangladesh to increase its exports to India are likely to continue. One of the main hindrances to taking full advantage of the potential are the NTBs that hinder bilateral trade between India and Bangladesh.

It has been estimated that only about 30 per cent of Bangladesh's import needs are being sourced from the region despite the potential of the region's being able to supply all the import requirements of the country. In the case of the inputs of Bangladesh's main export sector – ready-made garments (RMG) – only US\$147 million (18.3 per cent of the total need of the country) was imported from the region, while the region's total exports of the same inputs were almost US\$2.7 billion in 2011 (Razzaque 2012). Intermediate inputs, when imported from a neighbouring country to produce the final export goods for the global market, can potentially reduce the lead time. However, a plethora of non-tariff measures severely constrain bilateral trade. The trade between these two countries also suffers from a poor state of trade facilitation and high transaction costs associated with cross-border exchanges.

An overwhelming majority of the NTBs faced by SAARC countries are related to sanitary and phytosanitary measures (SPS) and technical barriers to trade (TBT), which, according to an Asian Development Bank study (ADB 2008), accounts for about 86 per cent of all such constraints. Bangladesh also faces a number of SPS- and TBT-related trade barriers in promoting its export to India.

Lack of clarity and transparency about SPS standards of India affects Bangladeshi exports to its market. As discussed earlier, Bangladesh's exports to India are dominated by primary and agricultural products. India requires an approved risk analysis of agricultural imports in biosecurity and SPS categories in order to protect the human, animal and plant life. Nearly all livestock, agricultural and food imports require SPS certificates and import permits from India's Ministry of Agriculture. The process of getting these certificates and permits lacks transparency, which in turn affects Bangladesh's exports to India. Bangladesh's products are sent to Indian

standards testing laboratories (Bureau of Indian Standards) for certificates on quality, adding another layer of bureaucratic hassle and delay.

The Indian Prevention of Food Adulteration Act, 1954, requires the shelf life of processed foods to be not less than 60 per cent of the original shelf life at the time of import. While this objective is fine, the process of determining shelf life is often arbitrary and non-transparent. India's Prevention of Food Adulteration Rules, 1955 are complicated. Just one rule alone, number 32, has 30 provisions with further sub-provisions. It also cross-references other rules prescribing content, size and design of labels, display panel specifications, details of colours and flavours, trade names and so on. No certificate from the country of origin is accepted. The results of laboratory tests cannot be challenged. Separate regulations exist for various food types.

To export textiles and textile products to India, exporters must obtain a pre-shipment inspection certificate from a textile testing laboratory accredited to the National Accreditation Agency of the country of origin. In some cases, even certificates issued by EU-accredited laboratories are rejected by Indian customs authorities.

The Benapole land port is the main gateway for Indo-Bangla trade. The current traffic in this crossing is 300–500 loaded trucks entering Bangladesh each day and 100–200 loaded trucks exiting. The Indian trucks are allowed to proceed up to 500 yards of the zero point inside Bangladesh without checking, but the Bangladeshi trucks are allowed to go up to the border where the goods are transferred to an Indian truck using a back-to-back operation. This is a cumbersome procedure since the area is very small, only about 0.2 hectares.

Poor services at land ports and arbitrary decisions taken by custom officials are mentioned as a problem in promoting Bangladeshi exports to India. Poor logistic facilities of most of the Indian land ports, restrictions of commodities that can pass through land ports, cumbersome customs requirements, manual clearance, excessive inspection in the name of security, no customs co-operation or joint inspection, no harmonisation of standards, lack of warehouse facilities in most of the Indian land ports, no testing facilities in any Indian land port bordering Bangladesh, etc. are some of the major hurdles mentioned by the exporters of Bangladesh in the way of smooth movement of goods exported by Bangladesh to India.⁷

Lack of co-ordination between central and state government's rules and regulations also affects Bangladesh's export to India. The Directorate General of Foreign Trade (DGFT) of India is not the only authority to impose rules and regulations regarding exports from Bangladesh to India. Various state agencies even impose different barriers on their own. For example, the state customs departments (tariff agencies) sometimes ban different imports from Bangladesh. The customs authority of West Bengal at Kolkata once banned the import of soap from Bangladesh. DGFT claimed complete ignorance of the matter.

21.6 Conclusions and policy recommendations

South Asia is emerging as one of the most vibrant economic regions of the world. Within the region, India is by far the leading, as well as the fastest growing, economy.

Growth of Indian markets provides potential for increased intra-regional trade. Yet the intra-regional trade is very low in this region. In particular, bilateral trade between India and Bangladesh is not only low but also dominated by one-way traffic of commodities, from India to Bangladesh, making the former the second largest source for imports of the latter.

Bangladesh and India have an unusual trade profile compared with their overall trade with the rest of the world. While Bangladesh's export to rest of the world is dominated by labour-intensive manufactured commodities, its export to India is dominated by primary commodities and agricultural raw materials. A skill-puzzle is also observed in the case of whatever manufacturing commodities are exported to India by Bangladesh. The low-skill and labour-intensive commodities dominate in Bangladesh's overall exports but such dominance is not observed in the case of its export to India.

Bangladesh's import from India also represents a notable departure from its overall import structure. Being a developing country, total import of the country is understandably dominated by manufactured goods. But its import from India is heavily dominated by primary commodities and food, not by manufactured goods. This, coupled with the fact that Bangladesh's exports to India are also dominated by primary commodities, indicates the dominance of intra-industry trade in their bilateral economic relationship.

Trade between Bangladesh and India exhibited dynamism both in terms of consolidating the trade of the existing commodities and diversifying into new commodities. The composition of the top ten exports to Bangladesh has changed between 2001 and 2011. Similar compositional change is also observed in the case of imports from India.

Trade between Bangladesh and India cannot be explained by the trade complementarity between these two economies. An evaluation using five trade indices, namely revealed symmetric comparative advantage index, trade specialisation index, bilateral trade index, intra-industry trade index, and trade complementary index, shows that these two economies are more competing in nature. The lack of trade complementarity of these two economies is attributable to their similar economic and production structure, with both countries having a large service sector (about 53 and 50 per cent of GDP in India and Bangladesh, respectively), followed by the industry sector (with about 29 per cent of GDP in both countries). In many cases, both Bangladesh and India have comparative advantage in the same commodities in regard to the world export markets. Despite both countries being a story of service-led growth, services trade is conspicuously absent in their bilateral economic relationship.

Bangladesh's export to India can be explained by two factors: (i) increase of external competitiveness of Bangladesh vis-à-vis other countries including India and (ii) growth of Indian markets as represented by growth of Indian GDP. With growth of per capita income, India is moving up the value chain of a product or industrial ladder, favouring its neighbours, including Bangladesh, not only through lessening the intensity of competition but also by becoming a market for them. This is

why the World Bank (2011) argues that India and China 'are now changing from competitors to markets for Bangladeshi exports' (p8).

As long as the Indian economy continues to grow, the scope for Bangladesh to increase export to the Indian market will increase. In such a situation, it is imperative for Bangladesh to increase its competitiveness to take full advantage of the emerging opportunities. Bangladesh does not have to reinvent the wheel to do that: taking care of the usual suspects that limit country's manufacturing growth will suffice. A three-level intervention would be needed to eliminate the obstacles at the border, behind the border and over the border. Bangladesh needs to increase efficiency at the border in order to increase its export to India. About half of the bilateral trade between India and Bangladesh takes place through land ports. There are 16 land ports operating between these two countries.⁸ But Benapole is by far the most important land port of the country. Restructuring the Benapole crossing to allow cross-docking (unloading of materials from an incoming carrier directly onto outbound carriers, with little or no storage in between) and electronic processing of declarations at the border need to be introduced. The users of the Benapole port identified a number of actions to improve the efficiency of the port. They include: (a) construction of more sheds and a cold storage for perishables, (b) procurement of new cranes and forklifts, (c) expediting the completion of the bypass road to reduce traffic jams, and (d) construction of a new link road to be used exclusively by the passenger vehicles and passengers entering into and exiting from Bangladesh (World Bank 2011: 18).

A number of reports identified the main behind-the-border problems that reduce the external competitiveness of Bangladesh. The Sixth Five-Year Plan of Bangladesh also identified areas for improvements to increase the country's manufacturing as well as external competitiveness. The cross-cutting action areas are infrastructure, human development and the business regulatory environment.

- Infrastructure: infrastructure deficiencies have been a perennial problem in Bangladesh. The share of value-added infrastructure services in total GDP has remained mostly unchanged at around 11 per cent since the 1980s with very insignificant changes among different forms of infrastructure, while the economic structure has become more and more infrastructure service-intensive. As concluded in a World Bank report (2012), it is important to forge 'partnership with domestic and private investors to increase power generation, raise public spending on road maintenance, improve the management of Chittagong port'.
- Human development: according to World Bank (2012), skill shortages in Bangladesh have driven the real wages by 30 per cent, meaning the country can significantly improve its external competitiveness vis-à-vis the rest of the world including India by improving its skill situation. It is puzzling that the rising skill gaps and shortages have so far failed to incentivise the private sector to impart training, indicating a market failure in the provision of adequate skills. This warrants active public actions including trainee- and employer-targeted financing to impart training. In the first case, the government can introduce

'training vouchers' for interested trainees to finance part of their training cost. To minimise the moral hazard problem,⁹ the government can make the vouchers redeemable only after the trainee has found a suitable job. It emerged from the discussion with exporters and also from different anecdotes that job-hopping of skilled or trained workers is one of the reasons why employers are reluctant to impart on-the-job training in Bangladesh. To solve this problem, the Government of Bangladesh can undertake a levy scheme, as already undertaken by 30 different countries, under which employers pay a levy of a certain percentage of their wage bills and are eligible to claim a certain portion of allowable cost from this fund to train their employees. This can be topped up with government funding, at least until the time that sufficient funds are collected from the employers.

- Business regulatory environment: being a labour-abundant and capital-scarce country, Bangladesh should be an ideal candidate for global foreign direct investment (FDI). But the poor regulatory environment and difficulties in doing business are the major hindrance to FDI. According to the World Bank's *Doing Business Report 2012*, Bangladesh ranks 122 out of 183 countries, with property registration typically taking 245 days, compared with 44 days in India, 57 days in Vietnam, 22 days in Indonesia and only 2 days in Thailand. The Government of Bangladesh needs to take measures to improve its poor governance and property rights.

The Government of Bangladesh should work closely with its Indian counterpart to overcome the over-the-border problems. The main over-the-border problems that seriously affect Bangladesh's export to India were discussed in Section 21.5 of this chapter. A joint effort by the Bangladeshi and Indian governments would be required to solve these problems and promote bilateral trade between these two countries.

Notes

- 1 The author has benefitted immensely from the insightful comments of Mohammad Razzaque and other anonymous referee(s). Excellent data and research support was provided by Jahangir Alam.
- 2 South Asia comprises eight economies – Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka. Seven of them, excluding Afghanistan, formed the South Asian Association for Regional Cooperation (SAARC).
- 3 According to the Trade Liberalization Programme (TLP), one of the core elements of SAFTA, all non-LDC member countries of SAARC – India, Pakistan and Sri Lanka – shall reduce their existing tariffs to 20 per cent in two years from the date of coming into the force of the treaty, and thereafter to 0–5 per cent over a five-year period (i.e. by 2013). However, Sri Lanka, because of its smaller size compared with India and Pakistan, has been allowed an extended period of six years to achieve such levels (i.e. by 2014). The LDC member countries – Bangladesh, Bhutan, Maldives and Nepal – shall reduce the existing tariffs to 30 per cent within the first two years from the date of coming into force of the treaty, and thereafter 0–5 per cent in eight years (i.e. by 2016).
- 4 The findings of these studies are mixed. Rodriguez-Delgado (2007) predicted that SAFTA will have 'minor effect' on regional trade flow. Raihan and Razzaque (2007) found that if all SAARC countries eliminate their intra-regional tariffs while keeping them intact for the rest of the world, Bangladesh will gain a positive effect from trade creation which surpasses the negative effect of trade diversion. Raihan (2008) found that under SAFTA Bangladesh's export to India will increase

to US\$78 million. Raihan (2008), observes that ‘... there are some special and differential provisions for the LDC members in the SAFTA Agreement. However,... most of these provisions are rather “vague” in nature and thus require substantial clarification and revision so that Bangladesh and other LDC members can effectively take advantage of these provisions.’ Bandara and Yu (2003) found that unilateral liberalisation would benefit South Asian countries more than preferential liberalisation.

- 5 According to UNCTAD’s classification, labour-intensive commodities include clothing, fabrics, yarn, apparel and clothing accessories, etc. High skill-intensive commodities include leather products, footwear, textile fibre, chemical products, fertilisers, machineries and transport equipment, etc.
- 6 One has to bear in mind that each of these indices contains certain limitations. The indices themselves cannot explain why trade takes place in the first place. They also fail to identify the problems that constrain exports.
- 7 One exporter of fruit juice from Bangladesh to India claims that the customs authorities of India frequently change their positions about where to print the expiry date of the juice, on the bottom of the bottle or on the label of the bottle. Such changed rules increase the cost of production. He further claims that he needed 40–50 days to get the results of testing of the products from the Indian authority.
- 8 They are: 1. Benapole, Jessore, 2. Banglabandha, Panchagarh, 3. Bhurimari, Lalmonirhat, 4. Hilli, Dinajpur, 5. Sonamasjid, Chapai Nawabgonj, 6. Tamabil, Sylhet, 7. Akhaura, Bhahmanbaria, 8. Nakugaon, Sherpur, 9. Haluaghat, Mymensingh, 10. Darshana, Chuadanga, 11. Birol, Dinajpur, 12. Bhomra, Satkhira, 13. Teknaf, Cox’sbazar, 14. Bibirbazar, Comilla, 15. Bilonia, Feni, and 16. Gobraakura and Karaitoli, Mymensingh.
- 9 Introduction of training vouchers may encourage the private training institutions to enroll fake students to redeem their vouchers and share a portion of the money with them, with the students leaving the programme before completion.

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