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India–Pakistan Economic Co-operation: Implications for Regional Integration in South Asia

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Abstract

The trade relationship between India and Pakistan is considered to be one of the most important determinants of the South Asian regional integration initiative. There have been several initiatives taken by India and Pakistan for strengthening bilateral relations, of which Pakistan's recent decision to offer India most favoured nation (MFN) status is of great importance to the two countries and the region. This paper presents a comprehensive assessment of India–Pakistan trade relations, analysing the modalities of co-operation, and providing simulation results of potential economic benefits to both countries and to the South Asian region. The results show that exchange of MFN status leads to welfare and trade gains, and, when combined with improved trade facilitation measures, such gains become even more substantial.

JEL Classification: F13, F15, F55
Keywords: India, Pakistan, South Asia, trade, economic co-operation, regional integration, bilateral relations, trade facilitation

Contents

Abbreviations and acronyms

BSE	Bombay Stock Exchange
CES	constant elasticity of substitution
CGE	computable general equilibrium
CV	coefficient of variation
ESI	export similarity index
EU	European Union
FDI	foreign direct investment
FEMA	Foreign Exchange Management Act
FTA	free trade agreement
GATT	General Agreement on Tariffs and Trade
GDP	gross domestic product
GTAP	Global Trade Analysis Project
HS	Harmonised System
ICP	integrated check post
IIT	intra-industry trade
JWG	joint working group
KSE	Karachi Stock Exchange
LDC	least developed country
MFN	most favoured nation
NTB	non-tariff barrier
NTM	non-tariff measure
PSQCA	Pakistan Standards and Quality Control Authority
RCA	revealed comparative advantage
SAARC	South Asian Association for Regional Cooperation
SAFTA	South Asian Free Trade Area
SCCI	SAARC Chamber of Commerce and Industry
SENSEX	Bombay Exchange Sensitive Index
TBT	technical barriers to trade
TCI	trade complementarity index
UNCTAD	United Nations Conference on Trade and Development
US	United States
WITS	World Integrated Trade Solutions
WTO	World Trade Organization

1. Introduction[1]

One of the most significant recent developments in India–Pakistan bilateral economic co-operation is the revival of trade talks in 2011. Since then, the two countries have built closer economic relations, with a shared vision of enhancing peace and stability in the South Asia region. There have been several initiatives taken by both countries to strengthen bilateral relations, of which Pakistan's decision to offer most favoured nation (MFN) status to India is remarkable.

After partition in 1947, India accounted for about 70 per cent of Pakistan's official trade. However, discordant political relations brought a halt to the bilateral official trade between the two countries. Between 1965 and 1973, bilateral trade dropped to zero. In 1971, India and Pakistan signed a first trade agreement, which did not last long. In 1989, Pakistan introduced a first positive list of tradeable items (for four products originally), and it kept increasing the number of items almost every year. Soon after the establishment of the World Trade Organization (WTO) in 1995, India granted MFN status to Pakistan. From the end of 1990s until the mid-2000s, political issues affected bilateral economic relations. When the leaders of the two countries felt the need for stronger bilateral economic relations, they came forward with measures to enhance economic exchanges. The Musharraf–Singh composite dialogue in 2004 is an example where 'trade' alone was the subject of four treaties between the two countries. Later in 2004, Pakistan announced a positive list of 757 trade items, and rail and air routes were re-opened in the same year. Pakistan announced another positive list of 1,075 items in 2006, and more trade incentives were introduced, such as for cross-border truck movement, among others. Bilateral trade declined sharply in the aftermath of the 2008 global financial crisis, and Pakistan had to announce another positive list of 1,934 items in 2009 with the aim of bringing back momentum to the growth in bilateral trade.[2] As the region recovers from the global financial crisis, India and Pakistan have agreed to deepen their bilateral relations. Pakistan decided to extend MFN status to India in 2012 and replaced the restricted positive list with a negative list in February 2012. India reciprocated by allowing foreign direct investment (FDI) from Pakistan. There have been many such initiatives originated by both the countries; they have agreed to simplify customs procedures, facilitate the process of goods certification, and liberalise the issuing of visas. Undoubtedly, the environment for bilateral trade has greatly improved.

India and Pakistan aim to reduce the barriers to various aspects of bilateral trade and investment. In particular, three areas of co-operation have emerged from Secretary-level meetings between the two countries: i) increased access to each other's markets for goods and

1 The authors are grateful to two anonymous referees of the Commonwealth Secretariat and Mohammad Razzaque for their useful comments. The research assistance of Sreya Pan is gratefully acknowledged.

2 Interestingly, the cumulative list of tradeable items in Pakistan's positive list saw a modest rise from 600 in 2000 to 4,376 in 2009.

services through trade liberalisation, including the removal of non-tariff barriers (NTBs); ii) strengthened trade facilitation, including improvements in physical connectivity; and iii) allowing investments to flow between the two countries. Co-operation in each of these areas can potentially result in significant economic and social benefits for both India and Pakistan. In addition, this is likely to have important implications for extended and intensive regional integration in South Asia, given the fact that many of the potential gains from an integrated South Asia have remained unrealised because of the political issues between India and Pakistan. Studies suggest that deeper economic relations between the countries would benefit not only India and Pakistan, but would also benefit the entire South Asia region by increasing trade competitiveness, growth and quality of life in the region.[3] Undoubtedly, improved bilateral economic relations would improve South Asia's footprint in the world economy. However, we should also keep in mind that persistent political issues will continue to hamper the normalisation of relations into the future.

Against this backdrop, this paper presents a comprehensive overview of the trade relations between India and Pakistan, analyses the modalities of co-operation, and assesses the potential economic benefits for both countries and the South Asia region. It examines the trade potential between India and Pakistan and maps the major trade barriers affecting both bilateral and regional trade, and also makes an attempt to quantify the gains for India and Pakistan and the South Asia region from the MFN scenario.

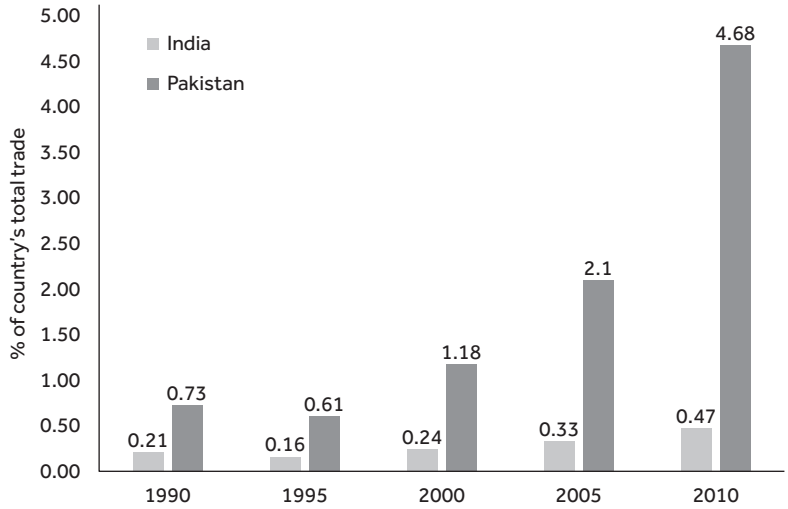
The rest of this paper is organised as follows. Section 2 presents some facts on India–Pakistan trade and the barriers to trade. Competitiveness and complementarities between India and Pakistan are then discussed in section 3. Section 4 analyses the impact of India–Pakistan MFN status on trade flows and the regional implications. Section 5 discusses the opportunities from FDI inflows between the two countries and the measures to be undertaken in order to strengthen such FDI inflows. Policy recommendations are given in section 6, followed by concluding remarks in section 7.

2. Bilateral trade: trends and bottlenecks

South Asia remains one of the least integrated regions in the world. Pakistan and India account for almost 92 per cent of South Asia's gross domestic product (GDP), 85 per cent of South Asia's population and 80 per cent of South Asia's

3 For a general discussion of the advantages of closer economic relations between India and Pakistan, see, for example, World Bank (2007), Panagariya (2007), Kemal et al. (2002), Khan (2011), De et al. (2012) and Pasha and Imran (2012).

Figure 2.1 Bilateral trade as a percentage of each country's total trade



Source: Calculated based on IMF Direction of Trade Statistics (DOTS) http://elibrary-data.imf.org

surface area, whereas only 20 per cent of the regional trade is India–Pakistan trade.[4] South Asia's two largest economies barely trade with each other (Figure 2.1), although they share 3,323 km of land border between the Indian states of Punjab, Rajasthan and Gujarat and the Pakistani provinces of Punjab and Sindh. In addition to the Attari–Wagah land border, which is the major road and rail crossing between India and Pakistan, three more land routes, namely Khokrapar–Munabao, Muzaffrabad–Srinagar and Poonch–Rawalakot, have been used for bilateral trade. Three land customs stations handle the overland trade between the two countries. India and Pakistan also have one direct sea route (Mumbai–Karachi) and three air routes (Delhi–Lahore, Delhi–Karachi and Mumbai–Karachi). Needless to say, restrictions imposed by the two countries on trade across the border have opened many indirect trade routes through neighbouring countries, some of which, Mumbai–Dubai–Karachi and Mumbai–Dubai–Bandar Abbas–Afghanistan–Pakistan, act as major trade axes between the two countries.

Despite the fact that trade between the two countries has increased over the years, India's trade with Pakistan has remained negligible. By 2010, trade with Pakistan accounted for less than half a per cent of India's total trade, whereas Pakistan's trade with India was 4.7 per cent of its total trade. Except for the first agreement, talks always led to increasing trade; however, trade was then halted, largely by political disputes. In the past, both India and Pakistan paid minimal attention to trade relations and regional integration in South Asia, as South Asia was not their major trade destination. In

4 Data refer to the year 2010, sourced from the World Bank's World Development Indicators online database.

Table 2.1 India's trade with Pakistan

	Exports	Imports	Total trade	Trade balance
	(US$ million)			
1990	43.49	44.86	88.35	-1.37
1995	70.4	37.37	107.77	33.03
2000	163.33	65.05	228.38	98.28
2005	647.19	158.42	805.61	488.77
2010	2,252.89	310.44	2,563.33	1,942.45
Compound annual growth rate(%)				
1990–1999	9.22	9.88	9.56	
2000–2009	27.45	17.32	25.18	

Source: Calculations based on the United Nations Comtrade database, http://comtrade.un.org

addition to this, India–Pakistan political tensions and conflicts continued to impose restrictions on bilateral trade and investment, which led both countries to look beyond South Asia. This is one of the major reasons why the initial attempts to create a regional trade bloc through the South Asian Free Trade Area (SAFTA) did not gain the desired momentum. However, the success of SAFTA has also been constrained by the lack of domestic economic reforms in the member countries and the lack of progress of a trade-enabling environment in the region.[5] To a great extent, the India–Pakistan conflict overshadowed the South Asian Association for Regional Cooperation (SAARC) agenda for a long time.

The bilateral trade between the two neighbours witnessed an upward trend in the second half of the 2000s, owing much to the India–Pakistan composite dialogue in 2004. India's trade with Pakistan trebled in 2010 and reached an all-time record of US$2.56 billion (Table 2.1). India's exports to Pakistan increased much faster than imports, thereby increasing India's trade surplus with Pakistan from <US$100 million at the beginning of 2000 to US$1.94 billion in 2010 (Table 2.1). Therefore, the increasing trade between India and Pakistan has also been accompanied by a sharp rise in the bilateral trade deficit in Pakistan.[6] Nevertheless, compared with their respective economic strength, trade between India and Pakistan is negligible and much below its potential.

Analysis by sector reveals that the composition of exports from India to Pakistan was primarily limited to about 14 commodities defined by the Harmonised System (HS) four-digit level in 2010–11, which on average accounted for around 78 per cent of the total Indian exports to Pakistan (Table 2.2). These commodities include sugar, raw cotton, synthetic fabrics, tea, petroleum products and chemicals, reflecting India's more

5 See, for example, Ahmed and Ghani (2007).

6 The widening trade balance is in favour of India, but it should not be a major concern. A bilateral trade deficit has to be seen in the light of a country's total trade balance.

Table 2.2 Composition of India's 14 major exports to Pakistan in 2010–11[a]

	HS 4-digit code	Commodity	Exports (2010–11)	
			Value (US$ million)	Shareb (%)
1	17.01	Cane or beet sugar and chemically pure sucrose in solid form	652.31	27.95
2	52.01	Cotton, not carded or combed	384.76	16.49
3	54.07	Woven fabrics of synthetic filament yarn	233.23	9.99
4	29.02	Cyclic hydrocarbons	197.17	8.45
5	07.13	Dried leguminous vegetables, shelled	59.6	2.55
6	23.04	Oil-cake and solid residues resulting from extraction of soya-bean oil	51.13	2.19
7	40.11	New pneumatic tyres, of rubber	42.01	1.80
8	32.04	Synthetic organic colouring matter, whether or not chemically defined	32.92	1.41
9	09.04	Pepper, genus piper; genus capsicum or pimento	29.82	1.28
10	27.10	Petroleum oils and oils obtained from bituminous minerals, other than crude	28.76	1.23
11	99.93	Special transactions and commodities not classified according to kind	27.06	1.16
12	38.08	Insecticides, rodenticides, fungicides, herbicides, anti-sprouting products, disinfectants packaged for retail	25.1	1.08
13	72.02	Ferroalloys	24.28	1.04
14	09.02	Tea, whether or not flavoured	23.25	1.00

Notes: [a]For those having a 1 per cent and above share in total exports; [b]Share in India's total exports to Pakistan. HS: Harmonised System

Source: Calculated based on Government of India Export–Import Databank, http://commerce.nic.in/eidb

diversified export base. The shares of both raw cotton and woven fabrics in India's exports to Pakistan increased from almost zero in 2000 to more than 13 per cent in 2010, whereas the share of oil-cake and other solid residues declined from about 16 per cent to 3 per cent during the same period. Official major imports from Pakistan to India have been limited to 18 commodities, namely fruit and vegetables, wool and wool products, petroleum products, chemicals, lead, and, more recently, cement. These products together form about 88 per cent of India's total imports from Pakistan. In 2010, the sectors with large shares of the exports from Pakistan to India were fruit (19 per cent), followed by petroleum products (12 per cent) and cement (11 per cent) (Table 2.3). In short, the trade volume between India and Pakistan has never expanded in the way it would have in a

Table 2.3 Composition of India's major 18 imports from Pakistan in 2010–11[a]

	HS 4-digit code	Commodity	Imports (2010–11)	
			Value (US$ million)	Share[b] (%)
1	08.04	Dates, figs, pineapples, avocados, guavas, mangoes and mangosteens, fresh or dried	62.56	18.81
2	27.10	Petroleum oils and oils obtained from bituminous minerals, other than crude	40.98	12.32
3	25.23	Portland cement, aluminous cement, slag cement, super sulphate cement and similar hydraulic cements, whether or not coloured or in the form of clinkers	37.00	11.13
4	78.01	Unwrought lead	20.56	6.18
5	27.11	Petroleum gases and other gaseous hydrocarbons	15.99	4.81
6	29.03	Halogenated derivatives of hydrocarbons	12.53	3.77
7	29.17	Polycarboxylic acids, their anhydrides, halides, peroxides and peroxyacids; their halogenated, sulphonated nitrated or nitrosated derivatives	10.67	3.21
8	52.09	Woven cotton fabrics, ≥85% or more cotton, weight >200 g/m^2	10.13	3.05
9	29.02	Cyclic hydrocarbons	9.47	2.85
10	51.01	Wool, not carded or combed	9.27	2.79
11	28.36	Carbonates; peroxocarbonates; commercial ammonium carbonate containing ammonium carbamate	8.80	2.65
12	74.04	Copper waste and scrap	6.42	1.93
13	52.08	Woven fabrics of cotton, with ≥85% cotton, but <200 g/m^2	6.10	1.83
14	39.23	Articles of plastic for the conveyance or packing of goods or closures stoppers, lids, caps, closures, plastic containers, boxes, crates, cases, bottles	5.93	1.78
15	41.07	Leather further prepared after tanning or crusting, including parchment-dressed leather, of bovine (including buffalo) or equine animals, without hair on, whether or not split, other than leather of heading 41.14	5.69	1.71
16	41.04	Tanned or crust hides and skins of bovine (including buffalo) or equine animals, without hair on, whether or not split, but not further prepared	5.58	1.68
17	07.13	Dried leguminous vegetables, shelled. 071310, Peas, dried shelled, including seed.	5.58	1.68
18	52.05	Cotton yarn, with ≥85% cotton, not put up for retail sale	5.09	1.53

Notes: [a]For those having 1 per cent and above share in total imports; [b]Share in India's total imports from Pakistan. HS: Harmonised System

Source: Calculations based on the United Nations Comtrade database, http://comtrade.un.org

normal trade environment. Why? First and foremost are political disturbances. Bilateral trade and commerce were held hostage to the resolution of political disputes. Second is protectionism. For years, domestic industry in Pakistan has feared it would be swamped by imports from India. Third are restrictive trade policies in both countries, which are embedded in a variety of trade barriers targeted at each other's markets. But even here, the mood appears to have shifted. Expansion of trade will create stronger constituencies for peace in both countries and the entire South Asia region.

Pakistan maintains 1,209 items on the negative tradeable item list, which was supposed to be phased out by end of 2012, but this did not happen. Appendix 1 shows the sector-wise aggregation of the negative list. Out of 8,000 items, only 15 per cent, or 1,209 items, are on the negative list. The remaining 6,800 can now be imported from India, while the previous positive list had only 2,000 items. This is a significant change, whereby 85 per cent of tradeable goods can be procured from India, compared with 25 per cent previously. SAFTA, which both India and Pakistan have signed up to, will gradually phase out all tariffs on traded goods, with zero tariffs by 2016.

Pakistan and India's trade regimes have been among the most restrictive, but their barriers to trade are different. As mentioned earlier, bilateral trade was often made hostage to political conflicts. In addition, bilateral trade barriers continued to increase despite a fall in overall trade protections in India and Pakistan. Bilateral barriers to trade are very complex in nature and appear to be 'thick' at the land border. This results in a large informal trade, because of restrictive trade policies and transport bottlenecks, which varies in value from US$500 million to about US$1 billion (Kahn et al. 2007). At present, a great deal of trade goes via Dubai, a trade process which is inefficient and fraught with illegalities, effectively functioning as behind-the-border barriers to trade.

The composition of informal trade between the two countries shows that a range of products are avoiding official tariff and non-tariff barriers through a third country, reflecting the potential to expand official trade. The SAARC Chamber of Commerce and Industry (SCCI) and several other business groups in Pakistan have listed a variety of goods and services traded informally or through a third country, which could offer considerable potential for trade between the two countries (SCCI 2011). Indian products that arrive in Pakistan through this process include tyres, auto components, pharmaceuticals, engineering products, betel leaf, chemicals and some textiles. These industries in India will, therefore, benefit immediately from the changing environment. Moreover, consumers in Pakistan will benefit from reduced prices for these products. As far as Pakistan's exports to India are concerned, cement, fruit and vegetables, cotton, some specialised textiles, and sports items – also currently arriving via Dubai – are expected to experience a rapid increase. And these are only the existing sectors; there are possibilities for emergence of trade in new products between the two countries in the new environment. However, it should be mentioned that India and Pakistan perform poorly compared with their global peers in terms of improvement in trade logistics. Non-price barriers, such as costs of documentation and transportation,

surpass the price barriers to trade in South Asia.[7] Trade becomes uncompetitive when channelled through Dubai due to the increased transportation costs and time taken, since normal/MFN trade at the land border between India and Pakistan is still not permitted.[8] While both countries have adopted a negative list of tradeable items, Pakistan still maintains a positive list for imports from India at the Attari–Wagah land border. Incidentally, both the lists are inconsistent with the General Agreement on Tariffs and Trade (GATT) principles.

In bilateral trade between India and Pakistan, average tariffs do not appear to be a major barrier (De et al. 2012).[9] However, a high tariff still exists on some specific goods. For example, India's tariffs are relatively high on imports of textiles and agricultural products from Pakistan.[10] Since both countries enjoy comparative advantages in textiles and clothing, they follow a restrictive strategy. For example, textiles and clothing feature prominently on SAFTA's sensitive list. It should also be mentioned that tariffs between India and Pakistan have come down much faster than NTBs. Despite the fall in average tariffs, the trade restrictiveness of both India and Pakistan has been heavily influenced by the large volume of NTBs.[11] In promoting trade between India and Pakistan, the major stumbling block is the presence of such non-tariff measures (NTMs) (Taneja et al. 2011); box 2.1 provides a list of such NTMs. Box 2.2 presents a list of impediments to India–Pakistan trade. Deeper co-operation between India and Pakistan can potentially result in significant reduction of these barriers.

Lacklustre performance in easing trade restrictiveness in India and Pakistan cannot be ignored. Measures that harm the commercial interests of trading partners still outnumber measures with beneficial effects. Highly restrictive trade policies and practices, and other behind-the-border discriminatory policies and measures, significantly constrain official trade between

7 See De (2011), for a general discussion on the cost of trade in South Asia.

8 More because of Pakistan's trade with India, since Pakistan has a positive list of 137 items that can be imported from India through the Attari–Wagah land border.

9 Tariff-related measures include tariff and trade defence measures. Non-tariff measures at the border include quotas, import bans, technical barriers to trade (TBT), NTBs (not otherwise specified). Non-tariff measures behind the border include consumption subsidies, local content requirements, public procurement, bailout/state aid measures, export subsidies, trade finance support, support to state-owned trading enterprises and state-controlled companies. Others include investment, migration, intellectual property protection and other service sector measures.

10 India imposes both an *ad valorem* rate and a specific duty, whichever is higher, on imports of textiles and clothing goods. Generally, the specific duties appear to be higher in India and, in some cases, exceed 100 per cent, especially on value-added textiles. Compared with the specific duty, *ad valorem* rates are much lower.

11 India still has significant NTBs. For example, the NTB frequency/trade coverage ratio is as high as 51 per cent in India. In the literature we find NTBs that have protectionist intent such as quotas, tariff-rate quotas, licensing regimes, price bands and non-tariff measures (NTMs). NTMs are policy measures, other than ordinary customs tariffs, that can potentially have an economic effect on international trade in goods, changing the quantities traded, or prices, or both. Some of these measures may constitute NTBs.

Box 2.1. Non-tariff measures

- Payment procedures: some Indian banks do not recognise letters of credit from all Pakistani banks, and *vice versa*.
- Visa regime: still very restrictive on both sides. The visa regime is unpredictable, city-specific, single-entry and limited to stays of very few days.
- Air travel: very limited to a few flights. The capital cities are not connected by direct flights.
- Road and rail travel: limited traffic, lack of railway wagons and locomotives, rail wagons carrying goods must return empty.
- Sea travel: ships should touch a third country port (e.g. Dubai or Singapore) before delivering import goods, except for limited ports of call between Karachi in Pakistan and Nava Sheva in India.
- Services/information technology: heavy restrictions limit professional exchanges/co-operation.
- Services/banking: bank branches are not allowed across the border and export/imports must be made through a third country.
- Standards: the Bureau of Indian Standards requires a certificate for cement, and it takes 6 months (3 weeks in theory) to clear certification. Pakistani laboratory reports for compliance with certification requirements for fabrics and garments are often not accepted in India. Finished leather from Pakistan requires additional certification from the Indian veterinary department.
- Infrastructure: a 10-hour window is given to Indian importers to unload/load, clear customs and reload, but this is rarely accomplished. Warehousing facilities on both sides of the border are inadequate. Behind-the-border facilities are very poor. For example, a major part of the road linking Attari with Panipat on India's National Highway 1 is narrow.
- Trade logistics: goods move by air, sea and rail between India and Pakistan. Road routes for trade are non-existent, and rail and air connections between the two countries have been erratic. Interchange between Pakistan and Indian railways takes place only on Sunday. There are restrictions on the mode of transport for export goods. For example, export of cement to India is allowed only by train, and exporting large quantities by train is not possible as the frequency of trains running between India and Pakistan is very low. There are major port congestions, high port and demurrage charges, cumbersome paperwork, and generally more issues of trade and transport facilitation in Pakistan.
- Transit: although India and Pakistan are signatories to the General Agreement on Tariffs and Trade article V, they do not extend freedom of transit to each other or to international traffic in transit.
- Testing laboratories at borders: testing laboratories for trade in agriculture, processed food, chemicals, garments, etc., are not available on both sides of the Attari–Wagah border.

Source: based on De et al. (2012)

India and Pakistan. For a long time, the India–Pakistan trade regime promoted ambiguity, market imperfections and information asymmetries in trade.[12] Some notable anti-trade measures are as follows:

12 Noted in Taneja (2007) and Khan (2011), the India–Pakistan trade regime lacks transparency, creates uncertainties for traders and leads to high transaction costs.

Box 2.2 Major impediments to India–Pakistan trade

Tariff barriers:
- Customs duties
- Special additional duties
- Countervailing duties

Non-tariff barriers:
- Stringent visa regimes
- Trade-distorting subsidies
- Overland transportation limitations
- Air travel restrictions
- Sea transportation restrictions
- Transit restrictions
- Port of call restrictions
- Railway carriage restrictions

Financial measures:
- Cumbersome payment systems
- Restrictive official foreign exchange allocation[a]
- Regulations concerning terms of trade for import payments[b]
- Non-acceptance of letters of credit
- High commission charges by foreign banks offering letters of credit
- Lack of bank branches

Quality control measures:
- Licences with no specific *ex-ante* criteria[c]
- Licences for selected importers
- Sanitary and phytosanitary measures

Technical barriers to trade:
- Marking requirements
- Labelling requirements
- Testing, inspection and quarantine requirements
- Pre-shipment inspection/certificate acquisition

Notes: [a]Indian firms and individuals are subject to capital account restrictions; [b]if imports of physical capital exceed US$15,000, an international bank must cover the advance remittance through a bank guarantee; [c]a special import licence is required to import certain goods.

Sources: De et al. (2012), based on Taneja (2012), Khan (2011) and Husain (2012)

- Only a limited number of items are allowed to be transported via rail/road, there are specific timings for the opening of these routes and, in most cases, there are no proper warehousing/storage facilities available. The quality of the road network is low with few regional road linkages, while rail networks between ports and markets are often missing, putting unnecessary burdens on already inadequate road networks. Unavailability of railway wagons and locomotives at the border, fixed times of loading and unloading of goods and inter-changing goods trains between the two countries add to the high transaction time and cost of trade.

- The imposition and application of standards in India is often perceived as a NTB by Pakistan. More importantly, information flow for trade-related matters between the two countries is particularly weak, thereby generating enormous problems for exporters and importers.
- India and Pakistan still follow restrictive visa regimes. Granting city-specific visas, visas for a limited number of cities, limits on the number of entries and for limited periods of stay, requirements to report to police on arrival and before departure, requirements to exit from the port of entry, lack of criteria for rejection of visas, granting mode-specific visas, disregarding the requested date of entry and delays in granting visas are some of the known restrictions.
- There is a mismatch between the Harmonised System (HS) classifications of goods. The Indian HS eight-digit classification is sometimes used for the Pakistani HS six-digit classification of items on the positive list, giving customs officials room to allow entry based on discretion.
- Most bilateral payments are made through the Asian Clearing Union and businesspeople in both countries have complained about the inefficiency of this procedure. Since banks are not allowed to open branches freely across the border, this leads to significant delays, especially when letters of credit need to be confirmed, which can take up to a month.
- Mechanisms for redress of grievances do not exist, which prevents some mutually beneficial exchanges from taking place.

Both India and Pakistan have announced several NTMs under SAFTA and later under the bilateral trade negotiations. As mentioned in Taneja (2012), some of these NTMs did not offer any barriers, as they were compatible with WTO rules; some NTMs were also applicable to domestic manufacturers in India but were perceived as NTMs by Pakistan (e.g. inter-state taxes); and in some cases corrective action had been taken but they were still notified as NTMs (e.g. for jute bags). Conversely, some NTMs imposed by India were found to be trade restrictive. For example, some of the TBT and sanitary and phytosanitary measures in India involved cumbersome procedures. In addition, the lack of transparency in the regulations is a problem (e.g. regulations related to woollen products and other textiles and jute products). The measure related to labelling requirements for processed foods qualifies as a barrier because it violates the principle of national treatment.[13] Lack of information about regulatory regimes (e.g. pest risk assessments) is another NTM. Absence of systems for the recognition of standards for products (e.g. textiles for the domestic market) is also a NTM faced by traders between India and Pakistan. To facilitate bilateral trade, these are the

13 The measure requires imported processed food items to have a shelf life of at least 60 per cent of its original shelf life at the time of import. There is no such stipulation for domestic goods.

immediate challenges that need to be addressed through appropriate policy measures.

Another barrier is the use of dual lists for bilateral trade by both India and Pakistan, which is inconsistent with GATT principles. Pakistan has 1,209 items on the negative list for trade with India. Contrary to popular belief, these items are not allowed to be traded through land routes. For trade through land routes (mainly Attari–Wagah), Pakistan maintains a positive list of 137 items, most of which belong to commodity groups such as vegetables, cotton, and iron and steel. This clearly suggests that goods should move by ocean and/or air routes despite there being land border crossings between the two countries. With the integrated check post (ICP) in Attari, handling goods across the land border may not always be cost effective, but is certainly faster than ocean routes. Once the infrastructure at the land border has been improved, India and Pakistan should not impose any restriction on movement of goods across the land border.

There are many opportunities for trade in services between the two countries. A rise in trade in goods and investment would encourage the flow of trade in services between the two countries, particularly in health, education and financial services.[14] Both countries should identify the barriers to trade in services in conformity with their General Agreement on Trade in Services and SAARC Agreement on Trade in Services commitments and obligations.

Finally, India and Pakistan compare poorly with their global peers in terms of logistics. South Asian countries suffer from excessive direct costs and time taken to cross borders and from inefficiency in cross-border transactions, which ultimately affect trade negatively. Trade procedures are lengthy and flow of goods is constrained by the poor condition of infrastructure, congestion, high costs and lengthy delays.[15] These problems are particularly severe at India–Pakistan border crossings, many of which pose significant barriers to trade.

Barriers to trade between India and Pakistan can be grouped into three categories: first, tariff barriers (e.g. Pakistan's positive list until 20 February 2012); second, a large volume of NTBs (e.g. port restrictions imposed by both countries); and third, poor connectivity (e.g. the single trading point at the Attari–Wagah border takes most of the load). All these add to the high transaction costs and time for trading between the two countries. The large potential for trade between the two countries could therefore be tapped by removing these barriers. This would also facilitate rise of trade complementarity between the countries.

14 For example, the Indian School of Business has joined with the Institute of Business Administration, Karachi, to launch executive education programmes in Pakistan.

15 See, for example, Roy and Banerjee (2010).

3. Trade complementarity between India and Pakistan

Bilateral trade between India and Pakistan will continue to depend on complementarities and other locational factors. The magnitude of competitiveness and complementarity, to a great extent, reflects the possibility of success of a trading agreement, bilateral or otherwise. It has been argued that the greater the competitiveness between trading countries the lower the probability that a bilateral trading arrangement will succeed.[16] Countries with different comparative advantages and therefore greater complementarities, in principle, have more opportunities to trade with each other compared with those with similar comparative advantage profiles. Assessment of trade complementarity is important for the success of policy-driven trade agreements. The results show that trade complementarities are higher for successful arrangements such as the Canada–United States (US) Free Trade Area, and trade complementarities are lower for unsuccessful arrangements such as the Australia–New Zealand Free Trade Area. Furthermore, changes in the index over time can help determine whether trade profiles are becoming more, or less, compatible.

In this study, the magnitudes of competitiveness and complementarities at the six-digit HS trade classification level between India and Pakistan for the years 2005 and 2010 are estimated. The main objective of this exercise is to examine whether there has been a change in the composition of competitiveness and complementarity baskets between the two countries over time, especially given the fact that these two countries, particularly India, have undergone a significant change in their production structures in that time.

Comparative advantage increases a country's market access. Are Pakistan and India achieving higher market access globally? Answering this question reveals opportunities for expansion of trade between India and Pakistan. Based on the Ricardian comparative advantage concept, the revealed comparative advantage (RCA) indicates the relative advantage or disadvantage of a certain country in a certain class of goods or services as evidenced by trade flows. A comparative advantage is 'revealed', if RCA>1. If RCA is less than unity, the country is said to have a comparative disadvantage in the commodity or industry. In other words, the RCA index uses the trade pattern to identify the sectors in which an economy has a comparative advantage, by comparing the country of interest's trade profile with

16 There is a strong literature on the association between competitiveness and trading arrangements. See, for example, Bhagwati and Panagariya (1996).

Table 3.1 Revealed comparative advantage (RCA) index

Country	Year	Trade classification	Number of products exported	Number of products having RCA>1[a]
Pakistan	2005	HS 6 (at H2)	2,848	668 (23)
Pakistan	2010		3,194	708 (22)
India	2005		4,696	1,246 (27)
India	2010		4,979	1,490 (30)

Note: [a]Data in parentheses indicate per-cent share of total products exported. HS: Harmonised System; H2: HS 2002

Source: Calculations based on the United Nations Comtrade database, http://comtrade.un.org

the world average.[17] The RCA indices in Table 3.1 show an absolute rise in trade comparative advantages in India and Pakistan during 2005 and 2010. In relative terms, 30 per cent of Indian exports in 2010 witnessed RCA, an increase from 27 per cent in 2005, whereas for Pakistan it had fallen marginally to 22 per cent in 2010 from 23 per cent (Table 3.2). With a few exceptions, most products were not exchanged between the two countries despite their comparative advantages. Undoubtedly, India and Pakistan have not been able to harness their true trade potentials.

The RCA scores also show that the competitive trade basket has expanded over time for India and Pakistan. This indicates not only the potential for a rise in total trade but also the products in which the countries can increase their bilateral trade. For example, competitiveness has increased substantially in textiles and clothing, dyes, pharmaceuticals and yarns, etc. However, whether or not the competitive edge of a country leads to higher bilateral exports of certain products also depends on whether or not the partner country imports these products. Therefore, it is important to examine the complementarities between India and Pakistan.

To what extent are India and Pakistan competitors in the world market? Do they show any complementarities in trade? Answering these questions gives an idea of the prospects for prospects between them. At first, the export similarity index (ESI) for the two economies

17 See Balassa (1965). Mathematically, RCA can be calculated based on the following formula:

$$\frac{\Sigma_d x_{isd} / \Sigma_d X_{sd}}{\Sigma_{wd} x_{iwd} / \Sigma_{wd} X_{wd}}$$

where *s* is the country of interest, *d* and *w* are the set of all countries in the world, *i* is the sector of interest, *x* is the commodity export flow and *X* is the total export flow. The numerator is the share of good *i* in the exports of country s, while the denominator is the share of good *i* in the exports of the world.

Table 3.2 Export similarity index

Trade classification	Trade partner	Export similarity index (%)	
		2005	2010
HS 6-digit (at H2)	India–Pakistan	21.027	22.496
HS 6-digit (at H3)	India–Pakistan		23.158

Notes: HS: Harmonised System; H2: HS 2002; H3: HS 2007

Source: Calculations based on the United Nations Comtrade database, http://comtrade.un.org

at a disaggregated level is constructed.[18] The ESI is designed to measure the degree of similarity between the export profiles of two economies. The more similar the export profiles are, the more likely that the economies are competitors in global markets. High similarity indices may also indicate limited potential for intra-industry trade (IIT) under a regional trading arrangement. It takes a value between 0 and 100 per cent. A value of 0 indicates no overlap in the export profiles (the countries are not competitors), a value of 100 indicates perfect overlap. The results in Table 3.2 suggest that the export profiles of these two economies are not very similar. In large part this reflects the major shift by India into exports in the high-skilled and technology-intensive categories, a move that is yet to be matched by Pakistan (Table 3.3). Today, a quarter of India's global exports are contributed by manufacturers having medium to high skill and technology intensity, whereas almost two-thirds of Pakistan's global exports come from labour-intensive and resource-based manufactures. Trade complementarity between the two countries may be seen in this perspective.

A trade complementarity index (TCI) can be constructed to measure the degree to which the export pattern of one country matches the import pattern of another.[19] An increasing tendency in the index scores between two countries also provides some indication of the likelihood of their further integration. The TCI is a type of overlap index. A high degree of complementarity is assumed to indicate more favourable prospects for a successful trade arrangement. Changes over time may indicate whether the trade profiles are becoming more or less compatible.

18 Export similarity index can be calculated based on following formula:

$$\Sigma_i \min\left(\frac{\Sigma_w x_{isw}}{\Sigma_w X_{sw}}, \frac{\Sigma_w x_{idw}}{\Sigma_w X_{dw}}\right) \times 100$$

where d and s are the countries of interest, w is the set of all countries in the world, i is the set of industries, x is the commodity export flow, and X is the total export flow. In words, the smaller of the sectoral export shares (as a percentage) in each product category are taken and added together.

19 TCI can be calculated based on following formula:,

$$\left[1 - \left(\Sigma_i \left|\frac{\Sigma_w m_{iwd}}{\Sigma_w M_{wd}} - \frac{\Sigma_w x_{isw}}{\Sigma_w X_{sw}}\right|\right) \div 2\right] \times 100$$

where d is the importing country of interest, s is the exporting country of interest, w is the set of all countries in the world, i is the set of industries, x is the commodity export flow, X is the total export flow, m the commodity import flow, and M the total import flow.

Table 3.3 Structural change in merchandise trade: share in the country's exports

	Pakistan			
	1995	**2000**	**2005**	**2010**
Labour-intensive and resource-based manufactures	79.18	78.74	73.15	62.03
Manufactures with low skill and technology intensity	0.41	0.66	1.39	1.84
Manufactures with medium skill and technology intensity	0.53	0.98	1.79	2.39
Manufactures with high skill and technology intensity	2.08	3.17	4.80	5.18
	India			
	1995	**2000**	**2005**	**2010**
Labour-intensive and resource-based manufactures	32.90	32.74	21.45	15.09
Manufactures with low skill and technology intensity	6.16	6.77	9.29	9.88
Manufactures with medium skill and technology intensity	6.59	6.67	9.68	9.90
Manufactures with high skill and technology intensity	9.97	11.87	12.90	13.84

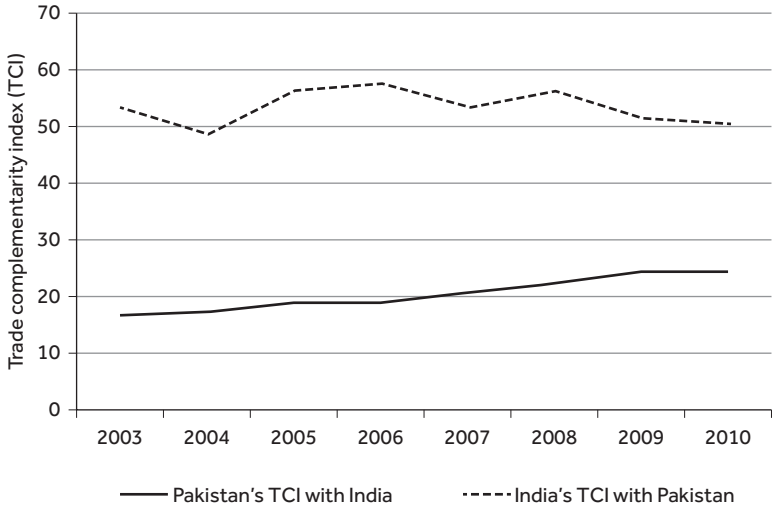
Source: Calculations based on the United Nations Conference on Trade and Development (UNCTAD) Stat database

TCI takes a value between 0 and 100, with 0 indicating no overlap and 100 indicating a perfect match in the import/export pattern. TCI trends in Figure 3.1 indicate that both countries witnessed an increase in trade complementarity between 2003 and 2010.[20] However, as noted in Lopez-Calix (2012), major gains would come from diversifying exports since a 'complementarity index' as low as 24 per cent between Pakistan's exports and India's imports shows clearly that the opportunities for Pakistan are not large at the 'intensive margin' (to export more of the same to new Indian markets).[21] Hence, developing exports at the 'extensive margin' (diversifying the exports basket to India) is fundamental to tapping larger benefits from accessing this large and growing neighbouring market. In short, it can be said that an increase in trade competitiveness of India and Pakistan has been accompanied by a rise in trade complementarities. However, almost 90 per cent of the goods on the Pakistan's negative list belong to manufacturing items for

20 The calculated TCI at the disaggregated level (HS sex-digit for the years 2005 and 2010 (see appendix 2) suggests a mixed result. Pakistan had a higher trade complementarity than India for the years 2005 and 2010.

21 Hummels–Klenow (products) intensive margin refers to the share of country A's exports in world exports of only those goods that country A exports, whereas Hummels–Klenow (products) extensive margin refers to the share of world exports only in goods that country A exports in total world exports of all goods. Pakistan's intensive margin (products) is found to be only 0.17 per cent in 2010 at HS four-digit [at H3 (2007)] trade classification, whereas the same for India is 1.57 per cent [calculated based on the World Bank's World Integrated Trade Solution (WITS)].

Figure 3.1 Trends in complementarity between India and Pakistan



Source: Calculations based on the United Nations Comtrade database, http://comtrade.un.org

which India has gained competitiveness (e.g. automobiles, iron and steel, etc.). Therefore, Pakistan would lose welfare gains by trading with India if the negative list remains in operation.

Improving trade complementarities would thus imply encouraging IIT across borders. Apparently, the potential for IIT between the two countries is not limited to a few products (Figure 3.2). To examine whether the countries are at different stages of production within an industry – which might further strengthen the argument for a growing potential for bilateral (and also intra-regional trade) – the IIT index was estimated and the intensity of IIT at the disaggregated (HS six-digit) level was assessed. IIT occurs when a country simultaneously imports and exports similar types of products within the same 'industry' or 'sector'. There are two types of IITs: horizontal IITs and vertical IITs (Greenaway et al. 1995). Horizontal IIT refers to the simultaneous export and import of goods classified in the same sector and at the same stage of processing. This is usually based on product differentiation. Vertical IIT refers to the simultaneous export and import of goods classified in the same sector, but at different stages of processing. This is normally based on the 'fragmentation' of the production process into different stages, each performed at different locations by taking advantage of the local conditions. Widely discussed in the literature is that the IIT index is a measure of the degree to which trade in a particular sector represents IIT (based on scale economies and/or market structure) (see, for example, Sodersten and Reed 1994). By engaging in IIT, a country can reduce the number of similar goods it produces and benefit from economies of scale. Higher IIT ratios suggest that these sources of gains are being exploited. The IIT index measures the degree of overlap between imports and exports in the same commodity category, with a value of 1

Figure 3.2 Potential export trade sectors in a) Pakistan and b) India

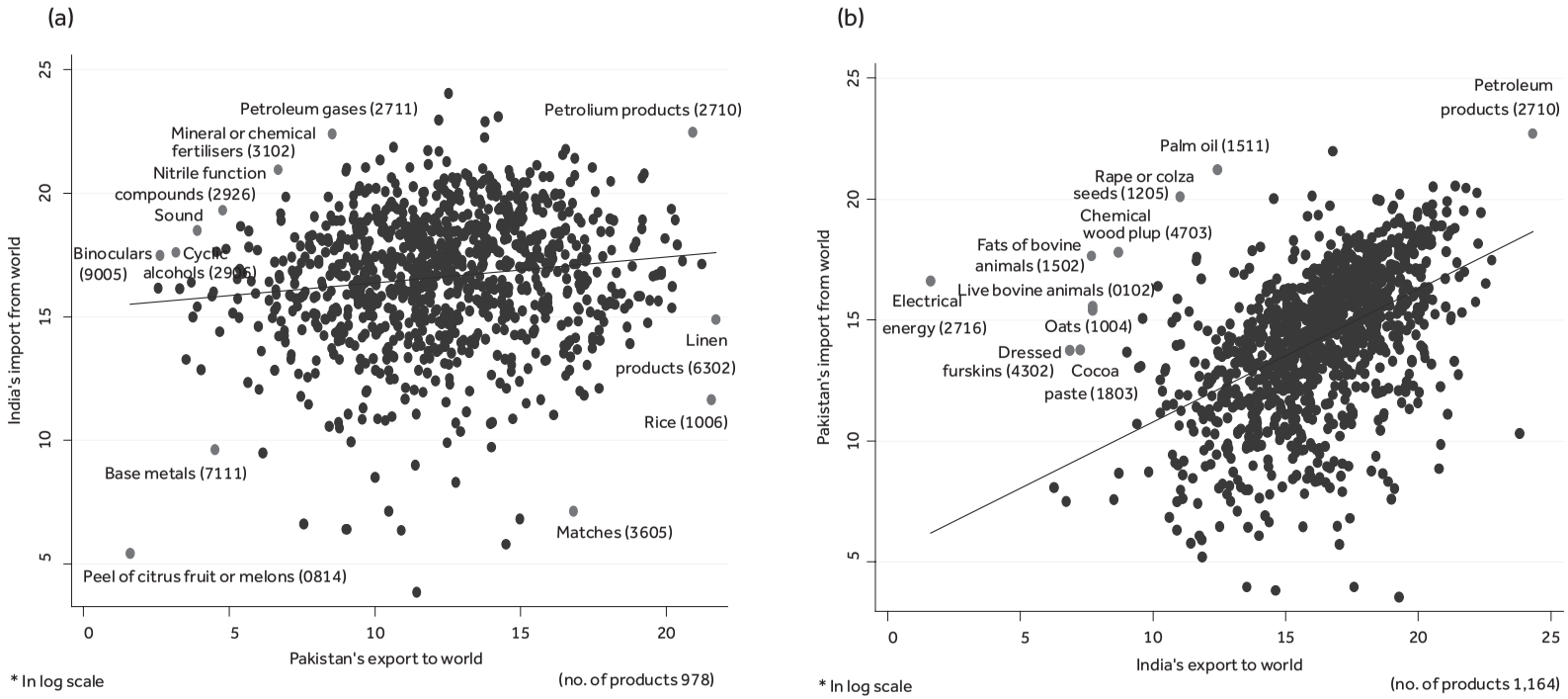


Table 3.4 Intra-industry trade (IIT), IIT> 0.50

IIT	Trade classification: HS 6-digit at H2				Trade classification: HS 6-digit at H3	
	2005	2005	2010	2010	2010	2010
	Global	Bilateral common	Global	Bilateral common	Global	Bilateral common
India	1,533	885	1,421	965	1,438	955
Pakistan	418	413	428	413	471	450
Total traded products						
India	4,708	2,503	4,441	2864	4,525	2,900
Pakistan	2,558		2,965		3,004	

Notes: HS: Harmonised System; H2: HS at 2002; H3: HS at 2007

Source: Calculations based on United Nations Comtrade database, http://comtrade.un.org

indicating pure IIT and a value of 0 indicating pure inter-industry trade.[22]

Table 3.4 lists the common set of traded goods between India and Pakistan, showing relatively high IIT index scores. Appendix 3 provides the estimated IIT indices for major products for both partners. The calculated scores suggest that the IIT levels are higher for manufactured products than for primary goods, reflecting the greater role of economies of scale in the production of those products. Over 32 per cent of total traded products had IIT >0.50 in the case of India, and this was about 15 per cent in the case of Pakistan. The IIT index scores also indicate that there is large potential for about 30 products, with varying capacity. The range of such products varies from textiles and clothing, iron and steel, electrical machinery and equipment, to mechanical appliances, etc. This indicates the potential to integrate production structures in many sectors and improve global competitiveness. The analysis so far indicates that a number of product categories and sectors exhibit an increasing share of IIT, offering greater economies of scale between India and Pakistan, and these are the sectors where there is the potential for the growth of bilateral trade between the two countries through IIT. This sort of production-sharing arrangement may emerge in regional and/or global value chains, if supported by improved

22 Before calculating IIT, data co-ordinates at HS nomenclature H2 were matched for both countries. The traditional way to measure the degree of intra-industry trade is the Grubel–Lloyd Index, using the following formula:

$$1 - \frac{\left|\Sigma_d x_{isd} - \Sigma_d m_{ids}\right|}{\Sigma_d x_{isd} + \Sigma_d m_{ids}},$$

where s is the country of interest, d is the set of all other countries in the world, i is the sector of interest, x is the commodity export flow and m the commodity import flow. In the ratio, the numerator is the absolute value of the difference between total exports and total imports in sector i and the denominator is the sum of the total exports and imports in sector i.

logistics and lower NTBs. In order to realise the potential, both countries have to undertake further trade liberalisation, such as reducing tariffs and removing NTBs, and also take effective action to reduce trade costs by improving trade facilitation both 'at-the-border' and 'behind-the-border'. It has been argued that by driving down real trade costs and trade and transport logistics barriers, India and Pakistan may realise the potential of higher production-sharing arrangements (see, for example, World Bank 2010 and Amjad et al. 2012).

The World Bank (2010) stated that the drivers of such trade go beyond relative factor endowments to factors such as complementary use of information and communication technologies and natural geographies (clustering, agglomeration and scale effects).[23] Kimura and Kobayashi (2009) argued that according to fragmentation theory the key to attracting fragmented production blocks is to i) improve locational advantages by, for example, developing special economic zones with at least an improved local-level investment climate, and ii) reduce the cost of service links that connect remotely located production blocks by improving trade and transport facilitation. Therefore, better service links, which means improved trade facilitation and connectivity between India and Pakistan, are necessary to facilitate production networks across the borders. Moreover, unleashing the intra-regional trade potential can lead to a better allocation of resources between the two countries and also in the region, allow economies of scale, and improve efficiency in production.

4. Pakistan's granting of most favoured nation status to India and its impact on bilateral and regional trade

How much would be the bilateral gains from the two countries trading on the basis of the MFN principle? Do other South Asian countries benefit from India–Pakistan MFN trade? To what extent would MFN trade between India and Pakistan increase regional trade in South Asia? These are the questions we often face with changes in the trade environment between India and Pakistan. To answer these questions, we use the help of a computable general equilibrium (CGE) modelling exercise. Pakistan's benefits from trade with India, comparing unit price, are huge. We factor in this benefit quantitatively while modelling the gains from trade.

First, we identified 561 products for Pakistan at the HS six-digit level from

23 Manufacturing production sharing (or vertical specialisation) is a key characteristic in East Asia's regional integration and export dynamism. See, for example, Ando and Kimura (2009) and Kimura and Kobayashi (2009).

the World Bank's World Integrated Trade Solution (WITS) database, where the unit costs of imports if they were sourced from India would be lower than the unit costs of imports if they were sourced from other countries (Table 4.1). The percentage differences in these unit import costs were then calculated. The percentage differences in unit prices for these 561 products at the HS six-digit code were then aggregated into Global Trade Analysis Project (GTAP) sectors matching the concordance and weights for each product.

Since Pakistan would only enjoy a fall in unit import prices for these products if the import source were India, in the GTAP model a scenario ('MFN' scenario) is considered, where there would be a fall in import price for Pakistan while importing from India.[24] This simulation is done by shocking on the transaction cost of the import from India to Pakistan. In this regard, the 'ams' – import-augmenting 'technical change' in the Armington nest (which can be used to lower the effective price of imported products) – is shocked. In brief, the MFN scenario incorporates a reduction in import prices for Pakistan because of the increased potential to source imports from India at cheaper prices. In addition, it is assumed that there would be some 'peace dividends' for all the South Asian countries because of the improved trade relations between India and Pakistan. In the GTAP framework, such a 'peace dividend' is assumed to lower transaction costs in bilateral trade among the South Asian countries by 0.5 per cent.

The results of the MFN scenario are presented in Table 4.2. The simulation indicates that the welfare effects of MFN will be positive for both India and Pakistan. The GTAP simulation suggests that there would be some positive welfare effects on other South Asian countries out of the 'peace dividends' generated by improved economic cooperation between India and Pakistan. However, there will be some negative welfare effects for countries outside South Asia, since Pakistan, after giving MFN status to India, would change the source of some of its imports from other countries to India.

Table 4.3 presents the impact on Pakistan's imports of the MFN scenario. The simulations suggest that Pakistan's imports from India would rise by 32 per cent. In addition, there would be some marginal rise in imports from Bangladesh, Nepal and the rest of South Asia. However, imports from China, US, the European Union (EU) and the rest of the world would decline by some margin. This suggests that a rise in imports from India would lead to a fall in imports from other major sources. However, Pakistan's total imports would increase by only 0.28 per cent. This apparently indicates that the MFN scenario on its own would not have a major impact on Pakistan's total imports. A number of sectors in India would benefit in terms of increases in exports to Pakistan due to its MFN status. Such rises in exports from India would happen because of India's unit cost advantage compared with Pakistan's other trading partners. Under this scenario, the change in exports from

24 A brief description of the GTAP model with country and commodity classifications is presented in appendix 4.

Table 4.1 Unit costs of imports: sourced from India *versus* existing sources

HS 2-digit code[a]	Code name	No. of products at the HS 6-digit code level[b]	% share of 'possible' imports in total imports at the HS 2-digit code level[b]	% share of 'possible' imports in total imports[b]
01	Live animals; animal products	3	33.2130	0.0110
02	Meat and edible meat offal	4	1.7019	0.0002
03	Fish and crustaceans, molluscs and other aquatic invertebrates	5	8.0143	0.0005
04	Dairy produce; birds' eggs; natural honey; edible products of animal origin, not elsewhere specified or included	9	17.5244	0.0428
07	Edible vegetables and certain roots and tubers	6	7.0999	0.0959
08	Edible fruit and nuts; peel of citrus fruit or melons	1	0.0002	0.000001
09	Coffee, tea, maté and spices	1	0.0001	0.000001
10	Cereals	4	27.8573	0.0543
11	Products of the milling industry; malt; starches; inulin; wheat gluten	7	83.5677	0.1352
12	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder	4	87.0885	1.4567
13	Lac; gums, resins and other vegetable saps and extracts	2	17.8070	0.0047
15	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes	14	28.4721	1.4050
17	Sugars and sugar confectionery	6	4.6694	0.1039
18	Cocoa and cocoa preparations	1	41.7007	0.0209
19	Preparations of cereals, flour, starch or milk; pastrycooks' products	3	55.6847	0.1024
20	Preparations of vegetables, fruit, nuts or other parts of plants	6	11.6715	0.0074
21	Miscellaneous edible preparations	5	3.1082	0.0036
22	Beverages, spirits and vinegar	7	11.6154	0.0025
23	Residues and waste from the food industries; prepared animal fodder	7	14.3373	0.0617

(continued)

Table 4.1 Unit costs of imports: sourced from India *versus* existing sources (continued)

HS 2-digit code[a]	Code name	No. of products at the HS 6-digit code level[b]	% share of 'possible' imports in total imports at the HS 2-digit code level[b]	% share of 'possible' imports in total imports[b]
24	Tobacco and manufactured tobacco substitutes	6	99.1908	0.0385
25	Salt; sulphur; earths and stone; plastering materials, lime and cement	12	58.5373	0.1372
27	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	16	41.7734	12.6849
28	Inorganic chemicals; organic or inorganic compounds of precious metals, of rare-earth metals, of radioactive elements or of isotopes	31	5.3680	0.0606
29	Organic chemicals	42	17.9378	0.8225
30	Pharmaceutical products	1	0.1769	0.0023
31	Fertilisers	5	86.1809	1.4887
32	Tanning or dyeing extracts; tannins and their derivatives; dyes, pigments and other colouring matter; paints and varnishes; putty and other mastics; inks	6	17.5249	0.1475
34	Soap, organic surface-active agents, washing preparations, lubricating preparations, artificial waxes, prepared waxes, polishing or scouring preparations, candles and similar articles, modelling pastes, 'dental waxes' and dental preparations with a basis of plaster	5	6.3058	0.0261
35	Albuminoidal substances; modified starches; glues; enzymes	3	6.5119	0.0061
36	Explosives; pyrotechnic products; matches; pyrophoric alloys; certain combustible preparations	2	4.1041	0.0005
37	Photographic or cinematographic goods	8	45.6573	0.0316
38	Miscellaneous chemical products	13	3.2215	0.0476
39	Plastics and articles thereof	25	10.9331	0.4247
40	Rubber and articles thereof	11	16.5929	0.1825
41	Raw hides and skins (other than furskins) and leather	11	45.0799	0.0936
43	Furskins and artificial fur; manufactures thereof	1	27.9042	0.0015
44	Wood and articles of wood; wood charcoal	11	3.8549	0.0102

(continued)

Table 4.1 Unit costs of imports: sourced from India *versus* existing sources (continued)

HS 2-digit code[a]	Code name	No. of products at the HS 6-digit code level[b]	% share of 'possible' imports in total imports at the HS 2-digit code level[b]	% share of 'possible' imports in total imports[b]
46	Manufactures of straw, of esparto or of other plaiting materials; basketware and wickerwork	1	3.6948	0.000034
47	Pulp of wood or of other fibrous cellulosic material; recovered (waste and scrap) of paper or paperboard	7	29.9244	0.0700
48	Paper and paperboard; articles of paper pulp, of paper or of paperboard	20	33.1310	0.3884
49	Printed books, newspapers, pictures and other products of the printing industry; manuscripts, typescripts and plans	4	3.8788	0.0047
51	Wool, fine or coarse animal hair; horsehair yarn and woven fabric	2	5.4159	0.0020
52	Cotton	6	0.0540	0.0012
53	Other vegetable textile fibres; paper yarn and woven fabrics of paper yarn	3	6.4791	0.0129
54	Man-made filaments; strip and the like of man-made textile materials	7	7.7860	0.1070
55	Man-made staple fibres	14	52.1706	0.7020
58	Special woven fabrics; tufted textile fabrics; lace; tapestries; trimmings; embroidery	3	1.6414	0.0017
60	Knitted or crocheted fabrics	9	58.1876	0.0353
63	Other made up textile articles; sets; worn clothing and worn textile articles; rags	1	0.0905	0.0004
68	Articles of stone, plaster, cement, asbestos, mica or similar materials	6	5.1436	0.0046
69	Ceramic products	5	44.1050	0.0879
70	Glass and glassware	9	14.1888	0.0263
71	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal, and articles thereof; imitation jewellery; coin	6	68.5697	0.3340
72	Iron and steel	29	17.1504	0.7745
73	Articles of iron or steel	17	5.1074	0.0578
74	Copper and articles thereof	6	2.2125	0.0081
75	Nickel and articles thereof	3	62.7536	0.0285

(continued)

Table 4.1 Unit costs of imports: sourced from India *versus* existing sources (continued)

HS 2-digit code[a]	Code name	No. of products at the HS 6-digit code level[b]	% share of 'possible' imports in total imports at the HS 2-digit code level[b]	% share of 'possible' imports in total imports[b]
76	Aluminium and articles thereof	5	18.0886	0.1038
78	Lead and articles thereof	3	97.7582	0.1415
79	Zinc and articles thereof	3	14.2653	0.0147
81	Other base metals; cermets; articles thereof	5	1.5309	0.0004
84	Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof	33	4.2856	0.3372
85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	13	6.3953	0.4160
86	Railway or tramway locomotives, rolling-stock and parts thereof; railway or tramway track fixtures and fittings and parts thereof; mechanical (including electro-mechanical) traffic signalling equipment of all kinds	1	0.6091	0.0007
87	Vehicles other than railway or tramway rolling-stock, and parts and accessories thereof	14	8.9598	0.3121
88	Aircraft, spacecraft, and parts thereof	3	38.6654	0.1265
90	Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; parts and accessories thereof	8	2.2149	0.0256
93	Arms and ammunition; parts and accessories thereof	1	2.3240	0.0007
94	Furniture; bedding, mattresses, mattress supports, cushions and similar stuffed furnishings; lamps and lighting fittings, not elsewhere specified or included; illuminated signs, illuminated name-plates and the like; prefabricated buildings	4	21.0204	0.0362
95	Toys, games and sports requisites; parts and accessories thereof	3	2.9249	0.0036
96	Miscellaneous manufactured articles	3	23.9438	0.0718

Notes: [a] the products are classified according to the Harmonised System (HS) classification of 2007;
[b]for which 'unit price of imports if India becomes the import source' is lower than the 'unit price of imports from existing source'

Source: calculations based on the United Nations Comtrade database, http://comtrade.un.org

Table 4.2 Welfare effects of most favoured nation (MFN): equivalent variation in US$ million at 2007 prices

Country	Welfare effects of MFN
Bangladesh	21.08
India	160.71
Nepal	18.01
Pakistan	99.21
Sri Lanka	34.92
Rest of South Asia	15.72
China	-10.52
United States	-18.39
European Union	-29.55
Rest of the world	-66.71

Source: Global Trade Analysis Project simulation

India to Pakistan would vary from meat (348 per cent) to vegetables, fruits and nuts (0.2 per cent). In addition, India's exports to Pakistan would rise for chemical, rubber and plastics, food processing, mineral fuels (petroleum and coal products), metals, machinery and equipment, textiles, leather products, dairy products and fishing, etc.

The impact of the MFN scenario on Pakistan's total exports would also be minimal (Table 4.4). Pakistan's total exports might rise by only 0.17 per cent and the exports to India in particular might rise by 0.4 per cent. MFN status for India would thus have negligible impact on Pakistan's sectoral exports to India. There would, however, be some rise in the exports of plant based fibres, animal products and metals from Pakistan to India. Pakistan would experience some rise in exports to Bangladesh, Nepal, Sri Lanka, the rest of South Asia and China. At the same time, Pakistan would experience some marginal fall in exports to its major export destinations, such as US and EU. This suggests that the MFN scenario would lead Pakistan to reorient some of its exports to the South Asia region.

The impacts of the MFN scenario on India's imports and exports are reported in tables 4.5 and 4.6, respectively. India's total imports would rise by only 0.1 per cent, and its imports from Pakistan would rise by only 0.4 per cent. Other South Asian countries would experience some increases in exports to India due to the 'peace dividend' of the MFN scenario assumed in the GTAP model simulation. This suggests that the MFN scenario on its own would not have much impact on India's imports. In addition, India's total exports would rise by only 0.12 per cent with a large rise in exports to Pakistan by 32 per cent. In a static sense, India would experience some small reductions in its exports to China, US and the EU.

The above analysis points to the possibility that although the MFN scenario would generate some welfare and export gains for both India and Pakistan, such gains appear to be small. This suggests

Table 4.3 Impact of a most favoured nation scenario on Pakistan's imports (per cent change in imports from base)

	Sectors	Import from									
		Bangladesh	India	Nepal	Sri Lanka	Rest of South Asia	China	US	EU	Rest of world	Total
1	Paddy rice						-0.47		-27.20	0.45	-0.81
2	Wheat							-0.85	18.60	-0.68	-0.45
3	Cereal grains n.e.s.		6.35					-1.32	-2.71	-1.67	-1.12
4	Vegetables, fruit, nuts		0.18		0.84	1.05	0.14	-0.18	0.47	0.19	0.28
5	Oil seeds		450.18		-1.70	-4.94	2.70		-3.33	-3.12	-0.65
6	Sugar cane, sugar beet									3.00	8.00
7	Plant-based fibres	1.88	-0.32		41.80	0.99	-0.38	-0.08	-0.19	-0.07	0.04
8	Crops n.e.s.	2.10	12.55	-2.98	1.70	-0.43	-0.64	-1.88	-0.17	-0.61	0.58
9	Cattle, sheep, goats, horses		2.80					6.10	10.90	-1.43	-0.36
10	Animal products n.e.s.		27.82		47.70	-2.51	-3.77	1.37	-0.56	-1.05	0.54
11	Raw milk		2088.90						-84.40	-77.42	190.83
12	Wool, silk-worm cocoons		-41.70			55.90	-49.80		-1.10	0.24	0.81
13	Forestry	-1.67	14.08		-1.98	-2.24	14.80	-1.55	-2.98	-3.08	0.84
14	Fishing		23.85				-2.30		13.45	1.45	0.14
15	Coal						2.90	19.95	28.70	0.32	0.32
16	Oil					0.09			14.23	-0.13	-0.13
17	Gas									-24.18	-21.60
18	Minerals n.e.s.		15.87		-32.30	-29.99	-27.23	-27.84	-27.77	-27.76	-10.23
19	Meat: cattle, sheep, goats, horses		347.65				-66.31	-65.62	-65.70	-65.44	45.51
20	Meat products n.e.s.		668.10				12.50	-2.50	0.07	-2.74	1.96
21	Vegetable oils and fats		68.62		-0.15		12.95	-3.20	-3.75	-3.25	1.05

(continued)

Table 4.3 Impact of a most favoured nation scenario on Pakistan's imports (per cent change in imports from base) (continued)

	Sectors	Import from									
		Bangladesh	India	Nepal	Sri Lanka	Rest of South Asia	China	US	EU	Rest of world	Total
22	Dairy products		38.21				-4.17	0.06	-0.41	-0.16	0.91
23	Processed rice		-11.50				-28.30			4.40	-3.31
24	Sugar		4.23					37.90	-2.19	-2.41	2.05
25	Food products n.e.s.	-4.74	139.08		-4.98	-18.90	-2.40	-2.50	-2.38	-2.49	0.24
26	Beverages and tobacco products		26.10				-8.07	-3.83	0.46	0.32	0.23
27	Textiles	1.87	34.01		3.56	4.65	-0.48	-0.58	-0.51	-0.46	0.35
28	Wearing apparel	10.57	-9.07		-15.40		0.15	-0.83	-0.22	0.21	0.17
29	Leather products		115.55				-5.27	-7.34	-5.23	-5.25	2.46
30	Wood products		15.30		2.95	3.79	0.32	0.36	0.35	0.34	0.36
31	Paper products, publishing	1.10	77.80		10.00		-1.22	-1.15	-1.14	-1.16	0.34
32	Petroleum, coal products		8.41		-42.00	6.58	-0.49	-0.39	-0.30	-0.49	0.07
33	Chemical, rubber, plastic prods	5.72	54.82	13.20	-4.26	-14.70	-6.44	-6.44	-6.44	-6.43	0.49
34	Mineral products n.e.s.		53.42		35.70		-0.37	-1.87	-0.40	-0.38	0.59
35	Ferrous metals	14.15	45.93			1.73	-1.35	-1.40	-1.39	-1.37	0.25
36	Metals n.e.s.		129.97		20.75	-4.09	-5.52	-6.06	-5.52	-5.51	-0.22
37	Metal products	28.40	4.19		-2.90	10.28	-0.17	0.06	-0.15	-0.14	-0.01
38	Motor vehicles and parts		38.50			8.70	0.18	0.50	0.16	0.19	0.21
39	Transport equipment n.e.s.		28.26				0.17	0.15	0.15	0.14	0.17
40	Electronic equipment		-4.53				0.16	0.10	0.16	0.17	0.16

(continued)

Table 4.3 Impact of a most favoured nation scenario on Pakistan's imports (per cent change in imports from base) (continued)

	Sectors	Import from									
		Bangladesh	India	Nepal	Sri Lanka	Rest of South Asia	China	US	EU	Rest of world	Total
41	Machinery and equipment n.e.s.	4.17	52.86	-13.10	-6.52	5.20	-0.11	-0.11	-0.11	-0.11	0.20
42	Manufactures n.e.s.	-8.37	10.43		-5.35		0.20	0.21	0.16	0.17	0.25
43	Electricity								-34.20	-	10.40
44	Gas manufacture, distribution						4.60	-4.83	-2.56	-2.07	0.98
45	Water						3.60	1.02	2.06	0.66	-0.08
46	Construction		2.44			-44.90	1.45	0.32	0.10	-0.17	-0.05
47	Trade		0.30		3.00	-12.85	0.56	0.25	0.26	0.30	0.29
48	Transport n.e.s.	-12.30	0.09	-10.60	-11.23	3.87	0.09	0.22	0.20	0.17	0.19
49	Sea transport	-16.60	1.27		-0.75	-38.10	0.12	-1.03	0.29	0.41	0.37
50	Air transport		1.87			3.00	0.16	0.06	0.04	0.03	0.03
51	Communication	-1.90	-0.37		1.20	-11.60	-0.97	0.50	0.25	0.25	0.32
52	Financial services n.e.s.		1.50			7.20	2.03	0.31	0.30	0.22	0.30
53	Insurance		-2.28		-23.00	0.70	-1.76	0.43	0.30	0.44	0.38
54	Business services n.e.s.	2.96	0.04	-21.05	2.72	3.68	0.28	0.23	0.23	0.23	0.22
55	Recreation and other services		49.20	-39.30	-44.70	-11.15	0.39	0.27	0.29	0.28	0.26
56	Public administration/defence/ health/education	2.56	0.15	8.42	8.90	10.15	0.17	0.34	0.31	0.34	0.33
57	Dwellings									-	-
	Total	1.83	32.03	1.63	-1.74	0.59	-1.43	-0.62	-0.90	-1.59	0.28

Note: US: United States; EU: European Union; n.e.s.: not elsewhere specified

Source: Global Trade Analysis Project simulation

Table 4.4 Impact of a most favoured nation scenario on Pakistan's exports (per cent change in export from base)

	Sectors	Export to									
		Bangladesh	India	Nepal	Sri Lanka	Rest of South Asia	China	US	EU	Rest of world	Total
1	Paddy rice				-39.40			-0.71	0.02	-0.22	-0.16
2	Wheat	3.89	0.32		4.59	2.58				-0.14	0.55
3	Cereal grains n.e.s.					-19.40				-0.92	-0.32
4	Vegetables, fruit, nuts	-0.92	-0.04	-35.30	0.91	1.39	-1.29	-1.47	-0.22	-0.23	-0.07
5	Oil seeds	-33.80	3.20		-4.90	9.80	3.79		-4.94	0.35	0.84
6	Sugar cane, sugar beet										
7	Plant-based fibres	1.80	11.33				0.72		-2.33	-0.16	0.66
8	Crops n.e.s.	4.43	-0.49	-13.90	0.59	3.79	-24.00	-0.70	-0.11	-0.48	-0.11
9	Cattle, sheep, goats, horses							26.40	3.30	-5.33	-1.15
10	Animal products n.e.s.	11.80	15.20			0.17	2.95	-5.77	0.15	0.07	-0.04
11	Raw milk						-16.75	2.85	0.74	-0.96	-1.18
12	Wool, silk-worm cocoons		2.71				-11.00		-1.38	-8.52	-0.21
13	Forestry		-2.67			2.35	3.13	-40.20	-0.33	1.55	-0.59
14	Fishing		-3.19			-43.20	-1.36	0.42	11.35	0.00	-0.09
15	Coal										
16	Oil									0.60	1.84
17	Gas										
18	Minerals n.e.s.	4.83	0.25			-4.35	0.66	-0.69	0.94	0.77	0.74
20	Meat products n.e.s.					-4.00			-43.90	1.49	-0.09
21	Vegetable oils and fats					1.23	2.02	-10.85	5.90	0.32	1.16

(continued)

Table 4.4 Impact of a most favoured nation scenario on Pakistan's exports (per cent change in export from base) (continued)

	Sectors	Export to									
		Bangladesh	India	Nepal	Sri Lanka	Rest of South Asia	China	US	EU	Rest of world	Total
22	Dairy products					2.13		39.10	-2.40	5.94	2.14
23	Processed rice	0.13			0.72	1.09	5.25	-0.77	-0.32	-0.29	-0.24
24	Sugar					5.27	-47.80	-3.30	-0.60	-0.07	-0.39
25	Food products n.e.s.	0.66	-0.27		1.72	0.93	-0.07	-0.17	0.06	-0.07	0.28
26	Beverages and tobacco products		0.05		1.05	0.26		1.32	-0.11	-0.18	-0.04
27	Textiles	2.79	-0.03	49.20	2.13	2.46	-0.02	-0.01	-0.01	-0.02	0.08
28	Wearing apparel	5.27	-0.63		3.03	-12.30	2.39	-0.19	-0.20	-0.21	-0.20
29	Leather products	2.21	-0.20		5.06	2.16	-0.22	-0.52	-0.24	-0.28	-0.17
30	Wood products	0.90				2.42	0.70	-2.25	0.20	0.18	0.75
31	Paper products, publishing	3.48	0.18		-0.10	0.70		-1.22	-1.45	-0.08	0.41
32	Petroleum, coal products	-4.00	0.02		-49.70	0.73	-12.15	-5.91	-1.40	-0.03	0.15
33	Chemical, rubber, plastic prods	3.32	0.61		2.83	2.67	0.48	0.29	0.54	0.48	0.93
34	Mineral products n.e.s.	45.30	-0.27		1.78	0.97	21.85	-0.09	0.67	0.06	0.38
35	Ferrous metals		-0.01		1.99	2.05	0.71		0.74	0.49	1.34
36	Metals n.e.s.		6.34		8.39	14.80	6.57	2.68	5.98	6.57	6.56
37	Metal products	7.41	-12.90		2.10	5.53	0.81	2.77	2.63	2.70	3.23
38	Motor vehicles and parts	0.04	6.45		-2.12	3.50		0.02	0.84	-0.03	0.44
39	Transport equipment n.e.s.	5.59			-47.30	13.30	-32.00	-2.83	0.00	0.04	0.65
40	Electronic equipment	13.15			-6.70	11.00		0.99	0.23	0.04	0.16

(continued)

Table 4.4 Impact of a most favoured nation scenario on Pakistan's exports (per cent change in export from base) (continued)

	Sectors	Export to									
		Bangladesh	India	Nepal	Sri Lanka	Rest of South Asia	China	US	EU	Rest of world	Total
41	Machinery and equipment n.e.s.	3.10	-0.93	11.15	3.68	3.10	0.74	-0.22	-0.15	-0.12	0.12
42	Manufactures n.e.s.	8.37	7.87		-5.00	2.44	-2.16	-0.09	-0.08	-0.09	-0.02
43	Electricity										
44	Gas manufacture, distribution								-11.70	-25.50	-13.60
45	Water								24.80	-23.35	10.17
46	Construction		-2.97			-43.10	0.96	0.86	0.53	0.37	0.38
47	Trade		-5.64			-17.20	0.06	-1.18	-0.56	-0.43	-0.33
48	Transport n.e.s.	-41.40	-2.26	-45.70	-21.00	-1.77	0.58	-0.07	-0.01	-0.04	-0.09
49	Sea transport		0.94		-15.13	-46.50	0.95	3.47	-0.39	-0.33	-0.31
50	Air transport	1.79	0.59	-0.04		-3.93	0.31	0.26	0.26	0.26	0.26
51	Communication		0.26		-15.00		-0.69	-0.58	-0.45	-0.41	-0.38
52	Financial services n.e.s.		-1.73			0.90	-1.33	-0.70	-0.56	-0.18	-0.42
53	Insurance		-4.76			-43.30	0.89	-0.29	-0.41	-0.45	-0.48
54	Business services n.e.s.	25.30	-0.06	-40.70	7.25	0.40	-0.39	-0.26	-0.26	-0.26	-0.28
55	Recreation and other services		2.55			-25.70	-3.41	-0.06	-0.12	-0.04	-0.11
56	Public administration/defence/ health/education	1.24	-0.73	3.20	3.50	-5.20	-0.62	-0.34	-0.36	-0.35	-0.34
57	Dwellings										
	Total	2.73	0.40	2.62	2.14	1.50	0.67	-0.09	-0.06	0.15	0.17

Notes: US: United States; EU: European Union; n.e.s.: not elsewhere specified

Source: Global Trade Analysis Project simulation

Table 4.5 Impact of a most favoured nation scenario on India's imports (per cent change in imports from base)

	Sectors	Import from									
		Bangladesh	India	Nepal	Sri Lanka	Rest of South Asia	China	US	EU	Rest of world	Total
1	Paddy rice							-16.43		-3.88	-1.01
2	Wheat			-0.09					-0.04	0.27	0.26
3	Cereal grains n.e.s.		6.00					5.35	24.40	0.23	0.92
4	Vegetables, fruit, nuts	0.77	-0.44	-0.18	2.99	0.85	0.24	0.16	0.12	0.17	0.19
5	Oil seeds		5.40	21.75				-15.30	38.10	0.49	0.42
6	Sugar cane, sugar beet									8.52	9.62
7	Plant-based fibres	1.78		-5.20	-19.90		2.07	-0.14	-0.48	-0.16	0.24
8	Crops n.e.s.	49.60	0.96	-0.86	2.60	3.13	-0.10	0.50	0.29	0.20	0.52
9	Cattle, sheep, goats, horses							-20.00	1.71	1.43	1.43
10	Animal products n.e.s.	0.72	5.14	24.15	-34.70		0.76	0.16	0.07	0.18	0.16
11	Raw milk					-10.70		6.40	0.70	-1.33	2.62
12	Wool, silk-worm cocoons			-3.16			-0.21	0.26	0.60	0.47	0.46
13	Forestry	39.40	0.16	3.49	0.73	1.07	3.32	0.93	0.16	0.13	0.15
14	Fishing	0.33		4.42	6.61		-1.68	-10.37	-1.27	0.03	0.24
15	Coal					13.50	0.19	0.06	4.60	0.07	0.07
16	Oil					4.48	-1.33	-39.30	0.20	0.08	0.08
17	Gas									0.23	0.23
18	Minerals n.e.s.	-0.26	0.31	0.08	-0.32	0.16	-0.01	-0.02	0.00	0.00	0.00
19	Meat: cattle, sheep, goats, horses						1.33	0.30	-1.14	-0.09	0.20
20	Meat products n.e.s.				2.38		-8.40	-0.44	1.39	0.20	0.35

(continued)

Table 4.5 Impact of a most favoured nation scenario on India's imports (per cent change in imports from base) (continued)

	Sectors	Import from									
		Bangladesh	India	Nepal	Sri Lanka	Rest of South Asia	China	US	EU	Rest of world	Total
21	Vegetable oils and fats	2.89	2.42		2.10	2.53	0.67	-0.16	-0.06	0.16	0.30
22	Dairy products		1.00			0.96	-1.11	0.37	0.17	-0.04	0.20
23	Processed rice							38.80	16.70	-0.37	-0.72
24	Sugar	4.30	9.46					1.57	-0.08	0.09	0.20
25	Food products n.e.s.	1.57	1.09	0.48	1.51	0.80	0.13	0.10	0.06	0.09	0.20
26	Beverages and tobacco products	0.32	0.48	2.06	21.10	0.15	1.18	0.28	0.04	0.05	0.11
27	Textiles	3.26	2.51	-0.01	2.53	2.83	0.07	0.09	0.07	0.07	0.23
28	Wearing apparel	4.06	1.40	-3.50	1.10	-40.10	0.03	0.22	0.11	0.15	0.26
29	Leather products	2.99	1.30	0.12	4.33	-40.20	0.14	0.05	0.15	0.13	0.17
30	Wood products	5.81	2.27		2.66	2.31	0.12	0.14	0.11	0.15	0.25
31	Paper products, publishing	6.37	2.46	-1.85	2.47	-44.40	0.13	0.13	0.14	0.13	0.15
32	Petroleum, coal products			-0.02	-0.65	1.77	0.07	0.08	0.08	0.07	0.07
33	Chemical, rubber, plastic prods	2.96	4.18	0.55	2.66	3.69	0.18	0.17	0.17	0.18	0.21
34	Mineral products n.e.s.	2.67	0.98	0.17	1.64	17.10	0.12	0.10	0.11	0.12	0.17
35	Ferrous metals	2.37	2.49	1.37	4.08	3.04	0.07	0.06	0.06	0.07	0.11
36	Metals n.e.s.	3.62	0.57	6.23	4.37	2.28	0.00	-0.01	0.00	0.01	0.03
37	Metal products	2.05	0.95	-6.65	4.74	-11.00	0.15	0.14	0.14	0.15	0.15
38	Motor vehicles and parts			10.65	1.70	-12.85	0.15	0.12	0.12	0.13	0.13
39	Transport equipment n.e.s.	6.37	6.47	-49.40	4.45		0.07	0.07	0.07	0.08	0.08
40	Electronic equipment	4.33			-6.60		0.08	0.07	0.08	0.08	0.08

(continued)

Table 4.5 Impact of a most favoured nation scenario on India's imports (per cent change in imports from base) (continued)

	Sectors	Import from									
		Bangladesh	India	Nepal	Sri Lanka	Rest of South Asia	China	US	EU	Rest of world	Total
41	Machinery and equipment n.e.s.	3.67	4.31	0.10	3.65	-7.80	0.12	0.12	0.12	0.12	0.13
42	Manufactures n.e.s.	2.46	-2.47	0.10	2.45	2.11	0.12	0.11	0.11	0.11	0.12
44	Gas manufacture, distribution						2.07	0.29	-0.08	0.21	0.14
45	Water						-2.25	0.15	0.70	0.22	0.27
46	Construction	-12.60	-14.13	-2.97	8.27	-7.04	0.02	0.10	0.09	0.09	0.10
47	Trade	-7.70	-15.87	-5.64	-1.32	3.75	0.14	0.13	0.13	0.13	0.13
48	Transport n.e.s.	0.97	-5.44	-2.26	2.79	0.14	0.08	0.10	0.10	0.10	0.11
49	Sea transport	3.78		0.94	1.30	7.74	1.09	0.02	0.06	0.06	0.07
50	Air transport	-20.20	-8.80	0.59	-9.30	3.16	0.07	0.05	0.06	0.06	0.06
51	Communication	3.82	3.13	0.26	7.16	7.13	0.03	0.06	0.09	0.08	0.10
52	Financial services n.e.s.	15.67	3.87	-1.73	-1.00	0.28	0.89	0.12	0.12	0.12	0.12
53	Insurance	-10.40	-4.40	-4.76	1.03	0.04	0.09	0.09	0.10	0.11	0.11
54	Business services n.e.s.	1.48	0.44	-0.06	0.83	0.94	0.04	0.03	0.03	0.04	0.03
55	Recreation and other services	42.60	-2.73	2.55	2.70	0.82	-0.10	0.09	0.09	0.09	0.10
56	Public administration/defence/ health/education	0.92	9.90	-0.73	-8.07	1.71	0.37	0.03	0.02	0.03	0.03
57	Dwellings										
	Total	2.61	2.39	0.40	2.51	2.01	0.11	0.09	0.08	0.08	0.10

Note: US: United States; EU: European Union; n.e.s.: not elsewhere specified

Source: Global Trade Analysis Project simulation

Table 4.6 Impact of a most favoured nation scenario on India's exports (per cent change in exports from base)

	Sectors	Export to									
		Bangladesh	India	Nepal	Sri Lanka	Rest of South Asia	China	US	EU	Rest of world	Total
1	Paddy rice	4.83	2.17		-7.50		-40.30	-0.55	-0.42	-0.73	-0.39
2	Wheat		-42.50		-10.30	3.35		-5.80	7.70	2.38	5.87
3	Cereal grains n.e.s.	-0.11	1.16	5.77	0.07		-0.02	-0.76	0.11	-0.16	-0.06
4	Vegetables, fruit, nuts	0.89	1.62	0.12	1.09	1.98	-0.17	-0.24	-0.21	-0.19	-0.02
5	Oil seeds		1.79	466.64	5.13	-22.30	-0.41	-0.45	-0.50	-0.50	1.28
6	Sugar cane, sugar beet		1.47					9.26	2.14	-4.84	-1.24
7	Plant-based fibres	1.69	1.19	-0.32	-37.60		-0.17	-1.37	-0.28	-0.22	-0.15
8	Crops n.e.s.	1.31	2.47	12.49	1.86	3.57	0.03	-0.45	-0.45	-0.43	-0.01
9	Cattle, sheep, goats, horses		1.06	43.65		-37.10		6.10	-6.05	-0.53	0.66
10	Animal products n.e.s.	7.04	10.50	25.50	-22.20	0.85	-1.40	-0.35	-0.08	-0.07	0.26
11	Raw milk			2088.90			3.12	-0.58	-0.43	-0.52	2.19
12	Wool, silk-worm cocoons			-41.70			-1.12	-0.18	-0.51	-0.66	-0.74
13	Forestry	3.53	8.28	15.22	1.85	8.53	-1.60	-0.22	-0.19	-0.22	0.52
14	Fishing	-2.40	-10.58	15.65	4.64	2.43	1.87	-0.11	-0.06	-0.13	-0.15
15	Coal	-0.40	0.36			-1.23		-8.95	-8.16	-1.87	0.07
16	Oil				-4.70	-8.50					2.52
17	Gas										
18	Minerals n.e.s.	0.30	0.36	15.91	-0.27	-0.34	-0.03	0.00	-0.03	-0.04	0.05
19	Meat: cattle, sheep, goats, horses		-4.45	347.10		1.10		-1.97	-3.62	-0.39	6.59
21	Vegetable oils and fats	2.19	1.86	68.76	2.21	-3.00	-0.47	-0.57	-0.49	-0.46	2.73

(continued)

Table 4.6 Impact of a most favoured nation scenario on India's exports (per cent change in exports from base) (continued)

	Sectors	Export to									
		Bangladesh	India	Nepal	Sri Lanka	Rest of South Asia	China	US	EU	Rest of world	Total
22	Dairy products	2.67	2.54	36.03	3.83	1.41	-0.34	-0.35	-0.40	-0.37	0.31
23	Processed rice	0.74	1.58	-11.50	1.04	0.75	5.93	-0.25	-0.13	-0.18	0.01
24	Sugar	1.30	0.78	4.26	0.26	0.02	-0.33	-0.65	-0.23	-0.28	0.28
25	Food products n.e.s.	1.17	1.26	143.19	1.03	0.42	-0.17	-0.19	-0.19	-0.19	-0.01
26	Beverages and tobacco products	-12.07	1.22	23.40	1.54	0.60	-0.53	-0.21	-0.12	-0.08	0.03
27	Textiles	2.49	2.01	34.00	1.80	2.04	-0.31	-0.30	-0.30	-0.30	-0.10
28	Wearing apparel	3.09	4.20	-11.23	2.64	2.83	-0.62	-0.30	-0.30	-0.31	-0.29
29	Leather products	3.25	2.62	115.04	0.79	6.40	-0.43	-0.40	-0.40	-0.42	-0.12
30	Wood products	4.17	1.75	0.10	2.28	2.75	0.31	-0.27	-0.30	-0.28	-0.23
31	Paper products, publishing	2.30	1.86	77.13	1.85	1.68	-0.26	-0.23	-0.25	-0.24	1.14
32	Petroleum, coal products	1.42	-0.19	8.40	0.18	0.31	-0.12	-0.03	-0.03	-0.03	0.10
33	Chemical, rubber, plastic prods	2.29	1.61	54.83	2.11	1.96	-0.21	-0.21	-0.21	-0.21	1.49
34	Mineral products n.e.s.	1.71	0.44	53.02	2.06	0.29	-0.31	-0.20	-0.21	-0.20	-0.04
35	Ferrous metals	1.82	1.16	46.11	1.12	1.53	-0.22	-0.21	-0.21	-0.21	0.12
36	Metals n.e.s.	3.19	3.91	129.18	2.21	5.19	-0.32	-0.29	-0.32	-0.31	0.05
37	Metal products	2.64	1.73	4.30	2.76	2.74	-0.33	-0.27	-0.27	-0.27	-0.20
38	Motor vehicles and parts	1.46	0.94	33.88	1.46	1.94	-0.28	-0.21	-0.22	-0.22	-0.08
39	Transport equipment n.e.s.	3.31	0.95	25.92	1.55	0.11	4.03	-0.40	-0.37	-0.34	-0.03
40	Electronic equipment	3.30	2.92	-6.93	3.78	3.13	-0.30	-0.30	-0.32	-0.31	-0.22

(continued)

Table 4.6 Impact of a most favoured nation scenario on India's exports (per cent change in exports from base) (continued)

	Sectors	Export to									
		Bangladesh	India	Nepal	Sri Lanka	Rest of South Asia	China	US	EU	Rest of world	Total
41	Machinery and equipment n.e.s.	3.09	1.97	52.76	3.10	2.81	-0.30	-0.30	-0.30	-0.30	-0.06
42	Manufactures n.e.s.	3.08	2.27	8.64	2.71	1.57	-0.31	-0.31	-0.32	-0.30	-0.30
43	Electricity		-6.25			5.29	-4.98	-0.95	0.15	-0.37	-0.07
44	Gas manufacture, distribution							-25.00	-7.92	10.93	4.28
45	Water						-18.90	-0.88	-1.14	-1.18	-1.04
46	Construction			2.44	-9.60	5.38	-0.39	-0.38	-0.12	-0.16	-0.16
47	Trade	-1.80	9.97	0.30	11.34	2.05	-0.18	-0.18	-0.19	-0.19	-0.19
48	Transport n.e.s.	-1.19	1.63	0.09	1.88	2.77	-0.18	-0.14	-0.14	-0.14	-0.14
49	Sea transport	-3.50	-2.32	1.27	-0.09	3.66	-0.24	-0.10	-0.14	-0.14	-0.13
50	Air transport	3.85	-4.60	1.87	-20.05	-2.45	0.33	-0.14	-0.15	-0.15	-0.15
51	Communication	5.27	-15.40	-0.37	0.42	-0.08	-0.08	-0.17	-0.18	-0.17	-0.17
52	Financial services n.e.s.	-5.24	-37.30	1.50	-16.70	4.32	-0.22	-0.18	-0.18	-0.18	-0.18
53	Insurance	1.56	-4.05	-2.28	2.99	-0.60	-0.16	-0.17	-0.18	-0.18	-0.18
54	Business services n.e.s.	0.71	0.12	0.04	1.31	0.70	-0.16	-0.15	-0.16	-0.16	-0.16
55	Recreation and other services			49.20		-21.35	-0.99	-0.27	-0.16	-0.15	-0.17
56	Public administration/defence/ health/education	3.69	-6.33	0.15	-4.46	0.41	-0.33	-0.17	-0.19	-0.18	-0.17
57	Dwellings										
	Total	1.77	0.93	32.18	0.96	1.74	-0.13	-0.22	-0.21	-0.21	0.12

Note: US: United States; EU: European Union; n.e.s.: not elsewhere specified

Source: Global Trade Analysis Project simulation

that MFN alone would not be enough; and to reap larger benefits extended economic co-operation between India and Pakistan might be needed. In order to explore such possibilities this study also looks at several other scenarios in the GTAP framework. These scenarios include a bilateral free trade agreement (FTA) between India and Pakistan, a bilateral FTA plus increased bilateral trade facilitation, a SAFTA scenario (where all South Asian countries reduce their bilateral tariffs on the goods trade to zero) and a SAFTA scenario plus regional trade facilitation scenario. However, it should be mentioned that all these scenarios incorporate the MFN scenario. The reason for incorporating the MFN scenario is to highlight that full and effective implementation of any bilateral FTA between India and Pakistan or SAFTA would require Pakistan granting MFN status to India.

Table 4.7 presents the welfare effects of different scenarios. Under a bilateral FTA scenario, both India and Pakistan would gain, and the gain for Pakistan would be greater than that for India. However, other countries would experience some welfare losses due to exclusion from the FTA. The gains from the bilateral FTA would be much larger for both countries when associated with enhanced bilateral trade facilitation.[25]

However, under this scenario the size of the welfare gain for India would be greater than that for Pakistan. It should be mentioned here that deeper bilateral economic co-operation between India and Pakistan may give rise to some concerns about the prospect of deepening economic co-operation among other countries of South Asia. Therefore, effective implementation of the SAFTA would be more desirable for the South Asian countries. Thus, a scenario of SAFTA was also run and the simulation results suggest larger welfare gains for both India and Pakistan. In terms of gains in both allocative efficiency and of trade, a full SAFTA would generate much larger welfare gains for India and Pakistan than those under a simple bilateral FTA between the two countries. There would be a welfare loss for Bangladesh due to the possibility of a larger trade-diversion than trade-creation effect (see Raihan 2012). However, when the SAFTA scenario is run with a regional trade facilitation scenario, welfare gains for all South Asian countries would increase dramatically, and Bangladesh's welfare loss would be more than compensated by the resulting large welfare gain.[26] Under this scenario, the welfare gains for India and Pakistan would be much greater than those under any other scenarios.

The impacts on Pakistan's imports and exports are presented in tables 4.8 and 4.9, respectively. The scenarios with enhanced trade facilitation would result in much larger rises in Pakistan's overall

25 Under the bilateral trade facilitation scenario, the transaction costs in the bilateral trade between India and Pakistan are reduced by 25 per cent. In this regard, the 'ams' – import-augmenting 'technical change' in the Armington nest in the GTAP model (which can be used to lower the effective price of imported products), is shocked.

26 Under the regional trade facilitation scenario, the transaction costs in the regional trade among the South Asian countries are reduced by 25 per cent. In this regard, the 'ams' – import-augmenting 'technical change' in the Armington nest in the GTAP model (which can be used to lower the effective price of imported products), is shocked.

Table 4.7 Comparison of welfare effects of different most favoured nation (MFN) scenarios (equivalent variation in US$ million at 2007 prices)

Country	MFN	MFN plus India–Pakistan FTA	MFN plus India–Pakistan FTA with bilateral trade facilitation	MFN plus SAFTA	MFN plus SAFTA with regional trade facilitation
Bangladesh	21.08	-2.58	-14.59	-111.77	1,479.56
India	160.71	376.43	2,288.46	1,810.73	5,452.03
Nepal	18.01	-0.65	-6.85	485.03	1,654.21
Pakistan	99.21	4,43.96	1,964.11	1,121.67	2,618.38
Sri Lanka	34.92	-4.28	-15.56	71.88	2,173.12
Rest of South Asia	15.72	-20.27	-41.22	298.21	1,265.02
China	-10.52	-4.81	-128.04	-216.19	-760.12
US	-18.39	-62.13	-223.79	-270.47	-985.54
European Union	-29.55	-38.32	-262.74	-348.32	-1,394.91
Rest of the world	-66.71	-185.81	-861.13	-681.72	-3,020.78

Notes: FTA: free trade agreement; SAFTA: South Asian Free Trade Area; US: United States; EU: European Union

Source: Global Trade Analysis Project simulation

imports and exports. Under the bilateral FTA scenario with trade facilitation, Pakistan's total imports would rise by 7.35 per cent, which would be 4.95 percentage points higher than under the bilateral FTA scenario. Similarly, the rise in total exports would be 5.4 percentage points higher under the former scenario than under the latter scenario. Similar observations can also be made for the SAFTA scenarios. The rises in imports and exports would be the highest under the scenario of SAFTA with enhanced regional trade facilitation. It should also be mentioned that the MFN scenario on its own would result in the least increases in imports and exports for Pakistan. Although the magnitudes are lower, similar results are observed as far as the impacts of different scenarios on India's imports and exports are concerned, presented in tables 4.10 and 4.11, respectively.

To conclude, Pakistan granting MFN status to India would generate larger benefits if supported by improved connectivity and trade facilitation.[27] The net economic impacts of SAFTA along with trade facilitation are beneficial to both Pakistan and India, and eventually would lead to stronger economic growth of the entire South Asian region.

27 In an another study, Hertel and Mirza (2009) observed that trade facilitation plays an important role in determining patterns of global trade flows, where the relative effect on bilateral trade of improving an exporter's border logistics is larger than that of improving an importer's trade facilitation. The study also revealed that proportionate increases in intra-South Asia trade are larger in all countries for textiles and clothing, automobiles and their parts, and other manufacturing goods.

Table 4.8 Impacts on Pakistan's imports under different most favoured nation (MFN) scenarios (per cent change in imports from base)

	Sectors	MFN	MFN plus India–Pakistan FTA	MFN plus India–Pakistan FTA with bilateral trade facilitation	MFN plus SAFTA	MFN plus SAFTA with regional trade facilitation
1	Paddy rice	-0.81	5.30	11.77	7.69	18.74
2	Wheat	-0.45	42.54	75.88	45.56	91.46
3	Cereal grains n.e.s.	-1.12	1.82	1.66	2.81	6.75
4	Vegetables, fruit, nuts	0.28	8.68	21.06	12.45	30.17
5	Oil seeds	-0.65	-1.48	-5.75	-0.67	-2.95
6	Sugar cane, sugar beet	8	14.10	20.90	0.00	17.61
7	Plant-based fibres	0.04	3.81	13.45	5.80	18.12
8	Crops n.e.s.	0.58	15.24	39.42	18.34	51.60
9	Cattle, sheep, goats, horses	-0.36	7.75	18.47	9.52	25.21
10	Animal products n.e.s.	0.54	6.18	12.97	7.42	17.35
11	Raw milk	190.83	61.65	195.94	62.50	125.52
12	Wool, silk-worm cocoons	0.81	18.58	47.61	23.08	75.00
13	Forestry	0.84	21.16	44.12	34.07	61.94
14	Fishing	0.14	2.72	7.81	5.88	12.39
15	Coal	0.32	0.51	2.60	1.23	5.25
16	Oil	-0.13	-0.25	-1.48	-0.03	-0.42
17	Gas	-21.6	-23.33	-71.43	-25.00	-56.38
18	Minerals n.e.s.	-10.23	-3.15	-3.45	-2.94	2.37
19	Meat: cattle, sheep, goats, horses	45.51	29.75	85.92	31.85	69.89
20	Meat products n.e.s.	1.96	9.37	35.96	12.43	47.78
21	Vegetable oils and fats	1.05	7.40	21.57	8.80	25.84
22	Dairy products	0.91	14.52	52.50	17.35	64.89
23	Processed rice	-3.31	-0.15	9.79	0.00	22.42
24	Sugar	2.05	27.39	85.69	29.42	94.20
25	Food products n.e.s.	0.24	10.60	19.01	11.75	23.38
26	Beverages and tobacco products	0.23	1.82	5.50	2.99	9.08
27	Textiles	0.35	2.93	13.11	5.04	20.40

(continued)

Table 4.8 Impacts on Pakistan's imports under different most favoured nation (MFN) scenarios (per cent change in imports from base) (continued)

	Sectors	MFN	MFN plus India–Pakistan FTA	MFN plus India–Pakistan FTA with bilateral trade facilitation	MFN plus SAFTA	MFN plus SAFTA with regional trade facilitation
28	Wearing apparel	0.17	1.97	5.81	3.82	13.78
29	Leather products	2.46	22.33	73.75	24.34	80.59
30	Wood products	0.36	1.68	7.60	3.90	17.72
31	Paper products, publishing	0.34	0.99	4.61	1.98	7.94
32	Petroleum, coal products	0.07	2.20	4.86	2.44	5.88
33	Chemical, rubber, plastic prods	0.49	3.42	9.88	4.26	12.61
34	Mineral products n.e.s.	0.59	4.48	17.40	6.46	25.46
35	Ferrous metals	0.25	0.92	3.82	1.91	7.25
36	Metals n.e.s.	-0.22	1.99	13.81	2.68	16.19
37	Metal products	-0.01	1.69	4.43	2.11	5.87
38	Motor vehicles and parts	0.21	0.91	3.68	1.64	6.27
39	Transport equipment n.e.s.	0.17	0.67	2.84	1.31	5.00
40	Electronic equipment	0.16	2.01	7.42	3.78	14.25
41	Machinery and equipment n.e.s.	0.2	0.50	2.12	0.81	3.23
42	Manufactures n.e.s.	0.25	3.61	13.74	5.54	21.44
43	Electricity	10.4	12.30	16.50	0.00	11.42
44	Gas manufacture, distribution	0.98	3.83	9.26	6.67	16.78
45	Water	-0.08	-0.66	4.69	1.59	11.80
46	Construction	-0.05	1.43	5.91	2.63	10.90
47	Trade	0.29	1.95	7.45	3.47	13.23
48	Transport n.e.s.	0.19	1.21	4.81	2.21	8.76
49	Sea transport	0.37	1.90	6.93	3.09	11.70
50	Air transport	0.03	1.20	4.21	2.15	8.00
51	Communication	0.32	1.54	6.41	2.66	10.81
52	Financial services n.e.s.	0.3	1.20	5.53	2.31	9.73
53	Insurance	0.38	2.04	8.03	3.48	13.63

(continued)

Table 4.8 Impacts on Pakistan's imports under different most favoured nation (MFN) scenarios (per cent change in imports from base) (continued)

	Sectors	MFN	MFN plus India–Pakistan FTA	MFN plus India–Pakistan FTA with bilateral trade facilitation	MFN plus SAFTA	MFN plus SAFTA with regional trade facilitation
54	Business services n.e.s.	0.22	1.11	4.49	1.93	7.59
55	Recreation and other services	0.26	1.93	6.94	3.31	12.44
56	Public administration/ defence/health/ education	0.33	2.57	8.32	4.04	14.33
57	Dwellings					
	Total	0.28	2.40	7.35	3.29	10.50

Notes: FTA: free trade agreement; SAFTA: South Asian Free Trade Area; n.e.s.: not elsewhere specified

Source: Global Trade Analysis Project simulation

Table 4.9 Impacts on Pakistan's exports under different most favoured nation (MFN) scenarios (per cent change in exports from base)

	Sectors	MFN	MFN plus India–Pakistan FTA	MFN plus India–Pakistan FTA with bilateral trade facilitation	MFN plus SAFTA	MFN plus SAFTA with regional trade facilitation
1	Paddy rice	-0.16	-18.50	-31.02	-21.11	-38.56
2	Wheat	0.55	947.30	1547.24	938.31	1542.90
3	Cereal grains n.e.s.	-0.32	-4.65	-7.65	0.00	8.09
4	Vegetables, fruit, nuts	-0.07	21.25	46.68	43.34	81.64
5	Oil seeds	0.84	-4.48	-4.36	-3.88	3.27
6	Sugar cane, sugar beet					-32.35
7	Plant-based fibres	0.66	-7.25	-7.89	-9.17	20.19
8	Crops n.e.s.	-0.11	4.56	43.93	-0.92	35.37

(continued)

Table 4.9 Impacts on Pakistan's exports under different most favoured nation (MFN) scenarios (per cent change in exports from base) (continued)

	Sectors	MFN	MFN plus India–Pakistan FTA	MFN plus India–Pakistan FTA with bilateral trade facilitation	MFN plus SAFTA	MFN plus SAFTA with regional trade facilitation
9	Cattle, sheep, goats, horses	-1.15	-11.40	-19.84	-14.29	-21.03
10	Animal products n.e.s.	-0.04	-6.09	-10.88	-6.51	-12.44
11	Raw milk	-1.18	-23.63	-38.79	-25.93	-45.90
12	Wool, silk-worm cocoons	-0.21	116.50	1464.14	105.26	1223.87
13	Forestry	-0.59	28.31	81.75	31.48	96.17
14	Fishing	-0.09	0.92	-0.36	0.00	-3.97
15	Coal					125.00
16	Oil	1.84	1.42	2.34	0.00	-3.12
17	Gas					983.33
18	Minerals n.e.s.	0.74	0.86	0.97	0.85	-0.02
19	Meat: cattle, sheep, goats, horses	3.67	-5.64	-13.73	-9.52	-26.82
20	Meat products n.e.s.	-0.09	-10.71	-26.58	-11.11	5.79
21	Vegetable oils and fats	1.16	-4.24	-7.91	15.50	56.01
22	Dairy products	2.14	-6.18	-15.33	54.05	248.36
23	Processed rice	-0.24	-5.87	-12.81	-6.23	-13.48
24	Sugar	-0.39	-6.25	-14.13	-8.22	-21.05
25	Food products n.e.s.	0.28	-17.45	-26.63	-13.86	-8.27
26	Beverages and tobacco products	-0.04	1.20	-0.24	13.55	17.99
27	Textiles	0.08	-3.57	-1.20	-1.90	2.54
28	Wearing apparel	-0.2	-4.50	-9.96	-7.48	-19.25
29	Leather products	-0.17	-9.35	-4.55	-12.59	-12.59
30	Wood products	0.75	-2.47	-9.51	13.45	80.93
31	Paper products, publishing	0.41	3.32	19.87	13.08	65.40
32	Petroleum, coal products	0.15	7.74	25.52	10.50	36.63
33	Chemical, rubber, plastic products	0.93	2.24	17.88	6.28	39.85
34	Mineral products n.e.s.	0.38	1.83	9.94	7.34	33.62

(continued)

Table 4.9 Impacts on Pakistan's exports under different most favoured nation (MFN) scenarios (per cent change in exports from base) (continued)

	Sectors	MFN	MFN plus India–Pakistan FTA	MFN plus India–Pakistan FTA with bilateral trade facilitation	MFN plus SAFTA	MFN plus SAFTA with regional trade facilitation
35	Ferrous metals	1.34	6.71	26.75	27.63	147.10
36	Metals n.e.s.	6.56	10.47	67.31	6.88	44.32
37	Metal products	3.23	-2.50	-9.40	0.07	22.42
38	Motor vehicles and parts	0.44	-0.25	0.83	4.55	20.33
39	Transport equipment n.e.s.	0.65	-1.87	-3.65	16.91	52.40
40	Electronic equipment	0.16	-4.76	-14.13	-5.69	-9.11
41	Machinery and equipment n.e.s.	0.12	-0.73	7.04	-0.78	15.99
42	Manufactures n.e.s.	-0.02	-4.13	-11.02	-5.16	-15.83
43	Electricity					-7.32
44	Gas manufacture, distribution	-13.6	-17.75	-26.40	0.00	-25.37
45	Water	10.17	6.70	-1.33	0.00	-19.47
46	Construction	0.38	-1.79	-5.03	-3.43	-10.63
47	Trade	-0.33	-3.32	-9.24	-5.25	-15.61
48	Transport n.e.s.	-0.09	-1.10	-2.78	-2.30	-6.78
49	Sea transport	-0.31	-2.41	-5.89	-4.22	-11.71
50	Air transport	0.26	-1.35	-3.06	-2.76	-8.05
51	Communication	-0.38	-2.60	-8.26	-4.52	-14.48
52	Financial services n.e.s.	-0.42	-2.61	-7.11	-4.43	-12.92
53	Insurance	-0.48	-2.64	-8.11	-4.68	-14.30
54	Business services n.e.s.	-0.28	-2.37	-6.23	-4.19	-12.36
55	Recreation and other services	-0.11	-2.01	-6.30	-3.65	-11.77
56	Public administration/ defence/health/ education	-0.34	-2.82	-8.47	-4.63	-14.40
57	Dwellings					
	Total	0.17	3.51	8.94	4.21	11.33

Notes: FTA: free trade agreement; SAFTA: South Asian Free Trade Area; n.e.s.: not elsewhere specified

Source: Global Trade Analysis Project simulation

Table 4.10 Impacts on India's imports under different most favoured nation (MFN) scenarios (per cent change in imports from base)

	Sectors	MFN	MFN plus India–Pakistan FTA	MFN plus India–Pakistan FTA with bilateral trade facilitation	MFN plus SAFTA	MFN plus SAFTA with regional trade facilitation
1	Paddy rice	-1.01	-1.80	-0.88	0.00	4.97
2	Wheat	0.26	192.75	330.61	191.22	325.11
3	Cereal grains n.e.s.	0.92	0.65	1.19	0.00	1.83
4	Vegetables, fruit, nuts	0.19	1.40	3.57	3.18	7.96
5	Oil seeds	0.42	0.72	3.93	1.33	6.81
6	Sugar cane, sugar beet	9.62	9.06	10.54	20.00	6.18
7	Plant-based fibres	0.24	0.06	1.62	6.16	26.83
8	Crops n.e.s.	0.52	1.63	8.12	38.89	55.17
9	Cattle, sheep, goats, horses	1.43	0.44	2.23	0.00	3.79
10	Animal products n.e.s.	0.16	-0.11	0.48	0.51	2.67
11	Raw milk	2.62	1.28	4.43	0.00	7.94
12	Wool, silk-worm cocoons	0.46	-0.01	7.89	1.54	15.32
13	Forestry	0.15	0.33	1.28	1.95	5.03
14	Fishing	0.24	1.48	2.71	2.01	7.31
15	Coal	0.07	-0.54	-0.79	-0.20	0.36
16	Oil	0.08	0.22	0.76	0.70	1.70
17	Gas	0.23	0.10	0.86	0.26	1.38
18	Minerals n.e.s.	0	0.03	0.05	0.05	0.10
19	Meat: cattle, sheep, goats, horses	0.2	0.57	3.58	1.11	6.86
20	Meat products n.e.s.	0.35	-0.72	0.75	0.00	10.77
21	Vegetable oils and fats	0.3	0.04	1.14	5.91	16.42
22	Dairy products	0.2	-0.19	0.92	9.73	10.65
23	Processed rice	-0.72	-1.03	-0.28	0.00	4.24
24	Sugar	0.2	-0.09	1.01	2.08	8.41
25	Food products n.e.s.	0.2	-0.47	-0.33	5.74	11.18
26	Beverages and tobacco products	0.11	1.23	2.05	7.93	9.81
27	Textiles	0.23	1.62	9.39	4.30	20.33
28	Wearing apparel	0.26	0.56	3.54	2.63	14.46
29	Leather products	0.17	1.27	7.22	1.87	10.16
30	Wood products	0.25	0.21	1.21	1.43	7.78
31	Paper products, publishing	0.15	0.15	0.86	0.74	3.65

(continued)

Table 4.10 Impacts on India's imports under different most favoured nation (MFN) scenarios (per cent change in imports from base) (continued)

	Sectors	MFN	MFN plus India–Pakistan FTA	MFN plus India–Pakistan FTA with bilateral trade facilitation	MFN plus SAFTA	MFN plus SAFTA with regional trade facilitation
32	Petroleum, coal products	0.07	0.28	0.94	0.46	1.48
33	Chemical, rubber, plastic products	0.21	0.18	1.10	0.89	5.02
34	Mineral products n.e.s.	0.17	0.60	2.93	1.51	7.20
35	Ferrous metals	0.11	0.12	0.71	1.69	6.93
36	Metals n.e.s.	0.03	0.12	0.59	0.32	1.81
37	Metal products	0.15	0.08	0.77	0.78	3.81
38	Motor vehicles and parts	0.13	0.09	0.71	0.63	2.95
39	Transport equipment n.e.s.	0.08	0.05	0.42	0.41	2.02
40	Electronic equipment	0.08	0.05	0.45	0.40	1.98
41	Machinery and equipment n.e.s.	0.13	0.07	0.69	0.60	3.20
42	Manufactures n.e.s.	0.12	0.09	0.73	0.63	3.25
43	Electricity	0.36	-0.41	-0.22	-0.60	11.10
44	Gas manufacture, distribution	0.14	0.00	0.75	0.62	3.47
45	Water	0.27	0.17	1.08	0.75	3.99
46	Construction	0.1	0.03	0.39	0.49	2.35
47	Trade	0.13	0.05	0.70	0.52	2.80
48	Transport n.e.s.	0.11	0.06	0.56	0.45	2.29
49	Sea transport	0.07	0.07	0.44	0.30	1.44
50	Air transport	0.06	0.07	0.38	0.27	1.22
51	Communication	0.1	0.07	0.58	0.46	2.35
52	Financial services n.e.s.	0.12	0.09	0.68	0.54	2.65
53	Insurance	0.11	0.09	0.61	0.55	2.55
54	Business services n.e.s.	0.03	0.05	0.28	0.20	0.99
55	Recreation and other services	0.1	0.10	0.61	0.45	2.12
56	Public administration/ defence/health/ education	0.03	0.06	0.18	0.14	0.53
57	Dwellings					

Notes: FTA: free trade agreement; SAFTA: South Asian Free Trade Area; n.e.s.: not elsewhere specified

Source: Global Trade Analysis Project simulation

Table 4.11 Impacts on India's exports under different most favoured nation (MFN) scenarios (per cent change in exports from base)

	Sectors	MFN	MFN plus India–Pakistan FTA	MFN plus India–Pakistan FTA with bilateral trade facilitation	MFN plus SAFTA	MFN plus SAFTA with regional trade facilitation
1	Paddy rice	-0.39	2.75	2.22	3.41	5.48
2	Wheat	5.87	15.37	29.58	23.81	324.21
3	Cereal grains n.e.s.	-0.06	0.29	0.32	3.72	5.97
4	Vegetables, fruit, nuts	-0.02	1.92	5.32	10.73	25.58
5	Oil seeds	1.28	1.10	0.64	3.33	5.29
6	Sugar cane, sugar beet	-1.24	-0.63	-2.18	8.33	48.72
7	Plant-based fibres	-0.15	4.43	19.78	3.43	16.25
8	Crops n.e.s.	-0.01	3.43	10.49	9.90	29.76
9	Cattle, sheep, goats, horses	0.66	0.85	2.05	27.53	100.46
10	Animal products n.e.s.	0.26	0.70	1.06	1.68	4.57
11	Raw milk	2.19	2.33	1.97	0.66	-5.78
12	Wool, silk-worm cocoons	-0.74	1.94	2.49	-1.28	-9.49
13	Forestry	0.52	10.28	19.42	9.16	19.90
14	Fishing	-0.15	-0.17	-0.71	0.10	1.19
15	Coal	0.07	-0.02	0.00	13.50	50.28
16	Oil	2.52	-1.76	-2.78	0.00	506.23
17	Gas					71.50
18	Minerals n.e.s.	0.05	0.05	-0.01	0.03	-0.34
19	Meat: cattle, sheep, goats, horses	6.59	4.46	9.01	3.34	2.44
20	Meat products n.e.s.	2.77	5.86	23.96	10.00	102.91
21	Vegetable oils and fats	2.73	5.96	23.75	7.31	35.75
22	Dairy products	0.31	5.41	19.74	26.04	91.39
23	Processed rice	0.01	0.52	0.24	3.82	14.97
24	Sugar	0.28	3.96	11.06	12.42	25.68
25	Food products n.e.s.	-0.01	2.17	3.54	3.14	5.15
26	Beverages and tobacco products	0.03	0.13	-0.09	15.13	24.73
27	Textiles	-0.1	0.47	0.51	3.02	10.09
28	Wearing apparel	-0.29	0.02	-1.16	-0.70	-3.10
29	Leather products	-0.12	1.65	3.66	0.78	0.05
30	Wood products	-0.23	-0.20	-1.58	1.34	7.10
31	Paper products, publishing	1.14	1.46	5.81	10.22	42.53

(continued)

Table 4.11 Impacts on India's exports under different most favoured nation (MFN) scenarios (per cent change in exports from base) (continued)

	Sectors	MFN	MFN plus India–Pakistan FTA	MFN plus India–Pakistan FTA with bilateral trade facilitation	MFN plus SAFTA	MFN plus SAFTA with regional trade facilitation
32	Petroleum, coal products	0.1	1.01	2.92	2.79	5.90
33	Chemical, rubber, plastic prods	1.49	2.54	9.65	3.84	16.54
34	Mineral products n.e.s.	-0.04	0.45	1.02	2.23	6.41
35	Ferrous metals	0.12	0.34	1.16	0.98	4.56
36	Metals n.e.s.	0.05	0.26	0.94	-0.22	1.72
37	Metal products	-0.2	0.99	2.96	2.22	9.13
38	Motor vehicles and parts	-0.08	-0.03	-0.85	4.99	8.86
39	Transport equipment n.e.s.	-0.03	0.07	-0.15	8.43	28.13
40	Electronic equipment	-0.22	-0.13	-1.41	1.56	12.74
41	Machinery and equipment n.e.s.	-0.06	0.25	1.26	0.86	8.31
42	Manufactures n.e.s.	-0.3	-0.11	-1.36	-0.97	-4.89
43	Electricity	-0.07	-0.06	-1.09	0.94	35.38
44	Gas manufacture, distribution	4.28	4.37	2.82	0.00	-6.60
45	Water	-1.04	-0.92	-1.95	-1.67	-5.07
46	Construction	-0.16	-0.07	-0.74	-0.63	-3.00
47	Trade	-0.19	-0.02	-0.78	-0.71	-3.57
48	Transport n.e.s.	-0.14	-0.05	-0.52	-0.55	-2.40
49	Sea transport	-0.13	-0.06	-0.65	-0.58	-2.35
50	Air transport	-0.15	-0.07	-0.58	-0.59	-2.43
51	Communication	-0.17	-0.11	-0.83	-0.74	-3.36
52	Financial services n.e.s.	-0.18	-0.12	-0.94	-0.82	-3.83
53	Insurance	-0.18	-0.11	-0.88	-0.77	-3.38
54	Business services n.e.s.	-0.16	-0.10	-0.63	-0.70	-3.14
55	Recreation and other services	-0.17	-0.11	-0.89	-0.72	-3.44
56	Public administration/ defence/health/ education	-0.17	-0.08	-0.71	-0.71	-3.14
57	Dwellings					
	Total	0.12	0.64	1.78	1.36	4.32

Notes: FTA: free trade agreement; SAFTA: South Asian Free Trade Area; n.e.s.: not elsewhere specified

Source: Global Trade Analysis Project simulation

With Pakistan granting MFN status to India, the full implementation of SAFTA is, therefore, not beyond reach. Both countries should go beyond MFN and embrace a second-generation FTA that would open the door to other regional co-operation initiatives. At the same time, investment from India could provide a major boost to Pakistan's export industry, which in turn would reduce its trade gaps with India and other countries in the world.

5. The role of foreign direct investment in narrowing Pakistan's trade gap with India

Developing countries and emerging economies identify FDI as a source of economic development and growth.[28] Hence, developing countries make efforts to attract FDI by pursuing policies to liberalise investment regimes and to ensure the maximum benefits to the domestic economy.[29] FDI facilitates international trade, helps in transferring technology and encourages specialisation, which in turn increases productivity (Ramirez 2006). FDI also increases the rate of technical progress in the host country through a 'contagion' effect from the more advanced technology, management practices, etc. used by foreign firms. In due course there is a transfer of technology as the local workforce gains knowledge of manufacturing processes and management practices. The value added in these industries makes a contribution to GDP and foreign exchange earnings. Therefore, FDI contributes to foreign exchange earnings, employment creation and increases in income for the economy. However, to attract FDI, a congenial investment climate must be ensured. Consistent macroeconomic policies, good governance, economic stability, guarantee of property rights, the rule of law and absence of corruption are among the conditions required to attract FDI. Consistency and predictability in economic policies and political stability are preconditions for attracting FDI. There has been a long-standing complaint from Pakistan that the huge imbalance in trade with India was affecting steps to improve economic relations and the growth of beneficial mutual investment. In a world of increased competition and rapid technological change, the role of FDI is thus very valuable. FDI helps to narrow the trade gap between countries or regions.

Despite the huge inflow of FDI towards developing countries, particularly China and India, the inflow of FDI

28 FDI is an important vehicle for contributing relatively more to growth than domestic investment can (Borensztein 1998). Blomstrom et al. (1992) also found a strong effect of FDI on economic growth in the least developed countries (LDCs).

29 FDI is usually preferred to other forms of external finance because it is non-debt-creating and non-volatile and the returns depend on the performance of the projects financed by the investors.

Table 5.1 Foreign direct investment (FDI) inflows, 1980–2009

	1980–9		1990–9		2000–9	
	Inward FDI (% of GDP)	Share in world FDI inflow (%)	Inward FDI (% of GDP)	Share in world FDI inflow (%)	Inward FDI (% of GDP)	Share in world FDI inflow (%)
China	0.63	1.83	3.91	6.24	3.09	6.26
India	0.02	0.11	0.39	0.35	1.54	1.13
Pakistan	0.33	0.12	0.88	0.15	1.78	0.16
South Asia	0.08	0.29	0.45	0.55	1.52	1.37
World	0.67	100	1.48	100	2.85	100

Note: FDI inflows counts net inflows, and its share in world FDI inflow. GDP: gross domestic product

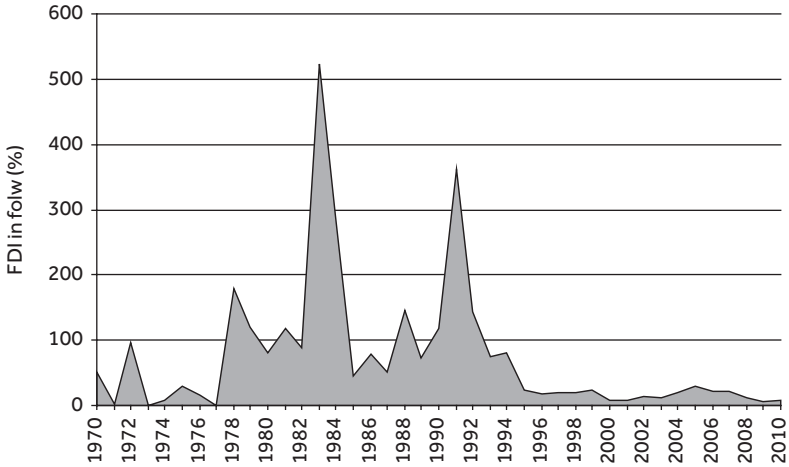
Source: Calculations based on the United Nations Conference on Trade and Development (UNCTAD) Stat database

in Pakistan has not been impressive. During the 2000s, Pakistan accounted for 0.16 per cent of world FDI, increasing marginally over the next two decades, but always remaining lower than the South Asia average (Table 5.1). In contrast, India successfully increased its share in global FDI inflows to over 1 per cent in the 2000s from a meagre 0.11 per cent in the 1980s. The size of FDI inflows to Pakistan was not significant until the beginning of the 2000s, when the FDI inflow increased sharply (Table 5.1). However, the 1980s was a good decade for Pakistan, in which it outperformed neighbouring India in attracting FDI. On average, 149 per cent of India's total FDI inflow went to Pakistan, but this reduced in later periods (Figure 5.1). At the time of writing, FDI inflow contributes to about 1.78 per cent of GDP in Pakistan and 1.54 per cent in India, but remains consistently lower than the Chinese and world averages (Table 5.1). On the positive side, India and Pakistan have witnessed sharp rises in FDI inflow since 2000. Table 5.2 shows that FDI inflow to India increased from US$3.59 billion in 2000 to US$24.64 billion, with a peak of US$52.55 billion in 2008, whereas a little over US$2 billion FDI had gone to Pakistan in 2010, increased from less than US$500 million in 2000. However, FDI to both the countries has shown a declining trend since 2008.

The inflow of FDI into Pakistan is small and concentrated in only a few sectors, mostly in communications, financial services and power (Table 5.3).[30] Broadly, manufacturing industries, mining and quarrying, and the financial sector are the major sectors dominating FDI inflow into Pakistan. Concurrently, a large number of sectors have been attracting FDI in India. The sectoral compositions of FDI in Pakistan and

30 Appendix 5 captures economic group-wise breakdowns of FDI inflows to Pakistan for the 2011–12 financial year.

Figure 5.1 Pakistan's inflow of foreign direct investment (FDI) as percentage of India's FDI inflow



Source: Calculations based on the United Nations Conference on Trade and Development (UNCTAD) Stat database

India have changed over time.[31] Although FDI inflow to India and Pakistan shows wide variations in levels, both have some similarities. First, the communication sector occupies the top position in both the countries. While Pakistan attracted US$7.36 billion of FDI in the communications sector during 2000–10, about US$12.55 billion went to India in the telecommunications sector in the same period. Power, oil and gas, and construction are other common sectors receiving FDI in India and Pakistan. The services, automobile, metallurgical, drugs and pharmaceuticals, and computer software and hardware sectors in India have also attracted modest FDI in the past decade. Incidentally, these are India's prime export sectors. Mauritius and US have been the largest direct investors in India and Pakistan, respectively. US, United Arab Emirates, Switzerland, Japan and Germany are major common investors (Table 5.4).

South Asian economies have great potential to attract FDI. However, except for India, all other countries in the region attract very low amounts of FDI. A number of policy and regulatory measures have been taken to improve the investment climate and attract foreign investment in most of the South Asian countries. For example, restrictions on capital inflows and outflows have been gradually lifted across the South Asian countries. In spite of the liberalisation of their formerly inward-looking FDI regimes and the tempering or removing of obstacles to foreign investors, the performance of most of the South Asian

31 In India, foreign investments are currently permitted through financial collaborations, through private equity or preferential allotments and in joint ventures. FDI is not permitted in the arms, nuclear, railway, coal or mining industries.

Table 5.2 Foreign direct investment (FDI) inflows and outflows

	Inward FDI (US$ billion)		Outward FDI (US$ billion)	
	India	Pakistan	India	Pakistan
2000	3.588	0.309	0.514	0.011
2001	5.478	0.383	1.397	0.031
2002	5.630	0.823	1.678	0.028
2003	4.321	0.534	1.876	0.019
2004	5.778	1.118	2.175	0.056
2005	7.622	2.201	2.985	0.045
2006	20.328	4.273	14.285	0.109
2007	25.350	5.590	17.234	0.098
2008	42.546	5.438	19.397	0.049
2009	35.649	2.338	15.929	0.071
2010	24.640	2.016	14.626	0.046

Source: Calculations based on the United Nations Conference on Trade and Development (UNCTAD) Stat database

Table 5.3 Top 10 sectors attracting foreign direct investment during 2000–10

Pakistan		India	
Sectors	**Volume (US$ million)**	**Sectors**	**Volume (US$ million)**
Communication (information technology and telecommunications)	7,375.80	Telecommunications	12,546.09
Financial business	4,929.30	Computer software and hardware	10,997.13
Others	4,666.90	Housing and real estate	10,932.53
Oil and gas	4,452.30	Construction activities	10,239.18
Trade	976.80	Drugs and pharmaceuticals	9,196.54
Power	918.40	Power	7,136.46
Construction	709.00	Automobile industry	6,601.12
Transport	626.00	Metallurgical industries	5,761.36
Chemical	588.50	Hotel and tourism	3,195.70
Textiles	350.10	Petroleum and natural gas	3,334.83

Sources: Department of Industrial Policy and Promotion, Government of India and State Bank of Pakistan

Table 5.4 Top ten investors during 2000–10

Pakistan		India	
Country	**Volume (US$ million)**	**Country**	**Volume (US$ million)**
US	5,688.50	Mauritius	62,658.31
UAE	4,085.30	Singapore	15,895.36
UK	3,075.50	Japan	12,109.86
Switzerland	1,396.10	US	10,472.81
China	793.40	Ukraine	9,228.65
Hong Kong	780.00	Netherlands	6,792.23
Norway	550.20	Cyprus	5,839.09
Japan	463.50	Germany	4,404.34
Germany	392.80	France	2,719.21
Saudi Arabia	320.50	UAE	2,091.46
South Korea	51.60	Switzerland	2,047.10

Notes: US: United States; UAE: United Arab Emirates; UK: United Kingdom

Sources: Department of Industrial Policy and Promotion, Government of India and State Bank of Pakistan

countries, barring perhaps India, in attracting FDI has been lacklustre, volatile and unpredictable. Many believe that major barriers to investment in South Asia are widespread corruption, poor governance, and weak political and institutional structures, which are creating gaps between policies and their implementation in these economies. The domestic business environment needs to be drastically improved. Starting a business takes about 3 weeks in Pakistan and about a month in India (Table 5.5). Countries show wide variations in terms of procedures for starting a business [coefficients of variation (CV) have increased over time]. The time involved in starting a business is relatively less varied and witnessed falls between 2005 and 2011, as presented in Table 5.5.[32] The performance of some of the South Asian countries in starting a business in terms of procedures and times are better than in a few prominent East Asian countries such as in China. Nonetheless, all countries, irrespective of region, need to show drastic improvement in reducing procedures required to start a business. Unilateral reforms in business facilitation, by cutting investment procedures and processes, would help strengthen the FDI environment. Countries in South Asia have taken unilateral measures to reverse the declining trend of FDI, but success to date is limited to some sectors – and applies in India too. For example, by simplifying measures in the banking and financial sectors, India has been

32 Distributions with CV<1 are considered low-variance, while those with CV>1 are considered high-variance. Between any two variables, the variable with the smaller CV is less dispersed than the variable with the larger CV.

Table 5.5 Starting a business: procedures and time

	Procedures (number)		Time (days)	
	2005[a]	2011[b]	2005[a]	2011[b]
Bangladesh	8	7	50	19
China	13	14	48	38
India	11	12	71	29
Indonesia	12	8	151	45
Malaysia	10	4	37	6
Nepal	7	7	31	29
Pakistan	11	10	24	21
Philippines	17	15	47	35
Sri Lanka	8	4	50	35
Thailand	8	5	33	29
Vietnam	11	9	50	44
Average	11	9	54	30
CV[c]	0.26	0.42	0.61	0.36

Notes: [a]Reported in the Doing Business database 2006; [b]Reported in the Doing Business database 2012; [c]CV: co-efficient of variation.

Source: Calculations based on the World Bank Doing Business database, www.doingbusiness.org

attempting to restart the stalled reform processes.[33] Overall, the results so far have been mixed.

Emerging market economies, such as the BRICS (Brazil, Russia, India, China and South Africa) countries, are increasingly becoming a source of foreign investment for rest of the world. It is not only a sign of their increasing participation in the global economy, but also of their increasing competence. More importantly, a growing impetus for change comes from developing countries and economies in transition, where a number of enterprises are increasingly undertaking outward expansion through FDI. Companies are expanding their business operations by investing overseas with a view to acquiring a regional and global reach. For example, India has emerged as one of the key investors in the world. Outward FDI from India increased from half a billion US$ in 2000 to US$14.63 billion in 2010 with a peak of US$19.40 billion in 2009, with most of the outflow being in the form of guarantees to offshore investment companies. Indian firms have continued to invest

33 Differences in the political ideologies of the coalition parties of the present government were identified as a major cause for the slowdown of the FDI inflow to India in recent years. While the Indian cabinet had proposed 51 per cent FDI on multi-brand retail, with conditions, the decision has been suspended due to lack of political consensus. An amendment bill has been introduced in the Indian upper house of parliament to raise the FDI limit in the insurance sector from 21 per cent to 49 per cent, but the government is yet to decide on the matter. Similarly, the government is yet to take a decision on foreign airlines' stakes in India's airlines.

aggressively in foreign countries to explore new markets and also increase their global footprint, while taking advantage of the attractive valuations of assets overseas. However, not one Indian firm has any commercial presence in Pakistan. There is no denying that Indian FDI is important for Pakistan for many reasons, and one reason would certainly be to narrow Pakistan's trade gap with India.[34]

5.1 Barriers to and constraints on bilateral foreign direct investment

While India and Pakistan have succeeded in attracting FDI from the rest of the world, there is hardly any investment between the two neighbours. Pakistan has long complained about the Indian government's policy that bars Pakistani industry from making investments in India. India did not allow FDI from Pakistan until recently.[35] There has been demand from Pakistan to allow investments in India, but the proposal did not find many takers within the government, due mainly to security concerns. In contrast, Pakistan does not place any major restrictions on Indian investments. However, Indian companies have not made any investments in Pakistan. In the cases of services trade and FDI, prior government approval has to be obtained, and it is clear that such approvals have been granted very sparingly by both countries.

At the time of writing, there are no joint ventures between India and Pakistan. Institutional mechanisms for bilateral investment guarantees are yet to be established. There is considerable lack of information and awareness in India about Pakistan's trade regime, commercial policies and business and regulatory procedures. Indian companies have shown interest in floating joint ventures in Pakistan and have asked the two governments to set up an institutional mechanism that would guarantee protection of each other's investments. Companies from Pakistan are also showing interest in investment in India. As several companies are showing interest in investing in each other's countries, it is imperative to understand the nature of such investment and provide timely facilitation.

5.2 Measures to strengthen bilateral foreign direct investment

There is a complementary (joint) impact of institutions and openness on FDI (Dollar and Kraay 2003). Several empirical studies support the view that

34 In a joint press conference (on 15 February 2012) with his Pakistan counterpart, the Indian Commerce, Industry and Textiles Minister Anand Sharma told reporters 'The question of investment becomes relevant as economic engagement between the two countries deepens. The concerns expressed (by Pakistan) on investment have been seriously taken on board and would take an appropriate and correct view soon'. Sharma is the first Indian commerce minister to have visited Pakistan since independence. He arrived through the Attari–Wagah border, accompanied by a 150-strong business delegation.

35 There used to be a negative list of countries under the Foreign Exchange Management Act (FEMA) in India. The government removed Sri Lanka in 2006, Bangladesh in 2007 and Pakistan in 2012 from the list.

institutional quality is an important determinant of FDI and that a healthy institutional environment (i.e. efficient bureaucracy, low corruption, better law and order conditions and secure property rights) is important to enhance FDI in developing economies.[36] At a time when rising protectionism is slowing down openness amid a global financial crisis, strengthening institutions and governance would perhaps help South Asian countries to increase FDI inflow.

Improving the investment environment and political relationships are the most important measures for bilateral FDI between India and Pakistan. Physical and technological infrastructures also need to be developed, most importantly at the border check-posts. The poor state of infrastructure acts as a serious bottleneck, not only for exports, but also for foreign investment.[37] Improving labour market conditions and administrative capabilities are also important to induce higher levels of foreign investment. Easier travel rules for business people should be enacted. There should be a pro-active policy of promoting investment through joint ventures in both countries, market access for banks in each other's market, etc. At the same time, institutions to deal with investment-related grievances along with transparent rules and regulations should be set up. Improving the border trade infrastructure and mutual recognition agreements to facilitate movement of goods are also very important. In September 2012, India and Pakistan took steps to ease visa restrictions and increase travel between the two countries. Both countries have agreed to allow 1-year multiple entry visas for business visitors and entry and exit through different cities. The central banks – the State Bank of Pakistan and the Reserve Bank of India – had finalised a deal to open up banking outlets in each other's country, which would reduce the transaction cost of trade and facilitate FDI.[38] These steps are perceived as fruitful ways and means to boost business sentiments and bilateral relations.

5.3 Industries to benefit from enhanced foreign direct investment

As India and Pakistan compete to sell their goods in the global market, there are many areas in which both the countries can complement each other's needs and hence produce cost-effective quality goods. According to the SCCI, investment possibilities in Pakistan exist in sectors such as food processing, chemicals and pharmaceuticals, automobile components and information technology.

36 However, many studies have failed to establish significant relationships between institutions and FDI. The literature revealing evidence of significant associations between institutions' quality and FDI remains mixed. See, for example, Lim (2001), Blonigen (2005).

37 Refer to, for example, Amjad et al. (2012), which evaluated Pakistani exporters' perceptions of the problems they face in exploiting their full competitive potential in the international market. Using firm-level survey data, they found that a shortage of skilled labour, the energy crisis, institutional rigidities, market imperfections, and weaknesses in physical infrastructure have been the key impediments to achieving export competitiveness.

38 From India, the Bank of India and the State Bank of India and from Pakistan, the National Bank of Pakistan and the United Bank are likely to open branches in Pakistan and India, respectively.

Previously, a number of potential sectors for mutual co-operation between India and Pakistan were identified, including agricultural products, the textile machinery industry, the automobile industry, the petrochemical industry, minerals, chemicals, pharmaceuticals, leather, telecommunications, etc.

India and Pakistan could also establish joint ventures to harness and transmit the region's hydropower resources. With higher energy demands, there is potential for co-operation between India and Pakistan in electricity generation using coal or wind energy. There is potential for tapping wind energy in the Sindh province of Pakistan, which could make use of wind power in co-operation with India. Co-operation in water management and power projects might help in increasing irrigation benefits, decreasing risks of floods, and establishing an India–Pakistan electricity grid system for intra-country transmission of electricity. Both countries require large volumes of natural gas imports to meet their future domestic needs. A single, joint natural gas pipeline extending overland from Pakistan to India would be economically more viable for both countries than constructing their pipelines independently.

5.4 Recent progress in foreign direct investment

Both governments plan to restart investment flows, and have made notable progress in reinstating a favourable climate. With political and economic stability, India and Pakistan can expect fresh foreign investment inflows. An atmosphere of co-operation and amicability is apparent between India and Pakistan, and both countries are trying to improve their bilateral trade relations, which would improve the security climate for investment. As a part of the broader process of regional integration, an economy with greater access to regional markets becomes more attractive to foreign investors. Greater inflow of FDI, in turn, may lead to increased technology transfers and productivity. These steps would greatly expand the scope of integration, with potentially large efficiency gains for both sides.

The Indian government has amended the FEMA act, which has paved the way for investment from Pakistan. Subsequently, FEMA rules have also been amended. Investment from Pakistan is now allowed except in the defence, space and atomic energy sectors. However, proposals for investment in India by companies from Pakistan must be routed only through the Foreign Investment Promotion Board and not through other channels. It is expected that FDI from Pakistan to India will be slow, since companies may wait and watch overall political progress before making any commercial decisions. However, this is not to deny that compared with the past, current progress in FDI has been very healthy.

India and Pakistan have agreed to develop mechanisms to address trade and investment issues. The 5th round of Commerce Secretary-level talks held on 27–28 April 2011 discussed trade promotion options. The discussion progressed further at the 6th and 7th rounds of Commerce Secretary-level talks, held on 14–16 November 2011 and 20–21 September 2012, respectively. The concerned authorities, trade bodies and associations have suggested that the Pakistani Government should consciously relax conditions on Indian investment. It was also clarified that there would be no harm

to indigenous industry if an industry was established by Pakistani and Indian companies, each party having a 50 per cent share. The opening of investment would not result in a deluge of money flowing both ways across the border. Nonetheless, closer economic co-operation will lead to positive political gains.

6. Ways to facilitate bilateral trade and policy options: recommendations

Normal trade between India and Pakistan will place peace on a fast track. This is not to deny that there were disruptions in the past, but they have become shorter-lived.[39] Some recent studies show that trade between the two countries may touch US$12 billion by 2015, if trade and investment barriers are removed (De et al. 2012). To achieve this, we have to strengthen the peace process and continue interactions. 'Peace dividends' is yet another effort to nudge the two countries in keeping the economy high on the agenda. Undoubtedly, normal relations between the two countries offer huge peace dividends. They offer great opportunities for a new era of integration.

While the foregoing is good, both governments must be much more ambitious. Pakistan needs to focus on improving customs and scrapping the remaining negative list of trade items, but India, which stands to gain disproportionately from burgeoning trade, must take bigger responsibilities. Stable relations with Pakistan are a prize in itself for India. Immense hurdles remain, not least the quest for peace in Afghanistan, but the longer-term dream is of land trade through Pakistan to Central Asia, with its oil and gas, and even to European markets. Given all that, India should dare to be generous, removing NTBs, cutting duties on Pakistani imports and making it easier to invest in India. Important steps at the border today will bring great rewards in the future. Nevertheless, progress is so far impressive (see box 6.1).

A battery of recent studies indicate that India and Pakistan should further liberalise trade by cutting lists of sensitive products and removing NTMs, along with improvements in trade facilitation, and in transit of goods and services.[40] So far, by replacing the positive lists with negative lists of trade items, India and Pakistan have come relatively closer to reinstating

39 See Appendix 6, which presents trends in Bombay Stock Exchange (BSE) Sensitive Index (SENSEX) for three cases: i) just days after the Kargil War in 1999; ii) at the time of Indian Parliament attack in 2001; and iii) after the Mumbai attacks in 2008. SENSEX fell drastically soon after the incidents in all the three cases and adversely affected economic gains.

40 Gains for South Asian intra-regional trade accruing from improvements in regulatory and logistical issues are huge (Wilson and Otsuki 2007). See also Taneja (2012), Kochhar (2012), Lopez-Calix (2012), Khan (2012), De et al. (2012) and Pasha and Imran (2012).

Box 6.1 Normalisation of trade relations: some recent developments

The prospects for increased trade between India and Pakistan seem to be brighter than ever as the current governments of both countries have shown the political will for it, particularly when Pakistan agreed to extend MFN status to India. Unlike previous occasions, trade talks between the two countries are headed with a time line and managed professionally. The issues pertaining to commercial and economic co-operation are discussed at the commerce secretary level within the framework of the Musharraf–Singh Composite Dialogue. The 7th round of commerce secretary level talks were held on 20–21 September 2012 in Islamabad.

Pakistan recognised that granting MFN status to India would help in expanding bilateral trade relations. The transition towards full normalisation of trade relations with India was initiated by moving from a 'positive list' regime to a 'negative list' regime. Pakistan had already announced its negative list on 20 March 2012. The understanding at the previous ministerial-level talks was that after approval by the cabinet, this negative list would be dismantled before the end of 2012.

Commerce secretaries of both countries have agreed that better trading opportunities provided through land routes would enhance mutual prosperity of the business communities and consumers on both sides of the border. However, they have noted that there is a need to further strengthen the infrastructure on both sides. Both governments have directed their customs and the port authorities to resolve all issues through mutual co-operation, harmonisation of customs procedures, provision of laboratory facilities, scanners, weighbridges, cold houses, containerised services and automation of business processes. For this purpose, meetings of the Customs Liaison Border Committee would be held on a monthly basis. The Committee would also explore the possibilities of organising meetings between the relevant importers and exporters at the Attari–Wagah border. It was decided that Attari–Wagah customs stations would operate 7 days a week.

The need for more trade traffic to be carried by railway was emphasised at the 7th round of commerce secretary level meetings. For this purpose, it was agreed that the railway ministries would hold joint co-ordination meetings on a monthly basis, at the appropriate levels. Issues about availability of sufficient number of rakes for interchange was also highlighted by the Pakistan railway representatives. It was noted that the earlier agreed provision of three or four interchanges a day had not been adhered to due to current trade patterns. A viable solution is to allow high-capacity wagons from Pakistan which would carry three times more load than the regular wagons. The Indian railways agreed that specifications already provided by the Pakistan railways for high-capacity wagons would be examined and conveyed accordingly.

Trade regulations, standards, labelling and marking requirements have also been identified as key issues for bilateral co-operation. During the 6th round of commerce secretary level meetings, held on 14–16 November 2011 in New Delhi, India and Pakistan agreed to develop mechanisms to address issues of NTBs. At the 7th round of commerce secretary level meetings, the Pakistan government highlighted that certifications/licensing/laboratory testing are not the only NTBs, and issues such as delays in customs clearance, non-availability of railway wagons for cargo transport, absence of direct flights or any problem which delays the clearance of goods with no end results or change, when faced by the importer/exporter is an NTB. The two countries have signed three agreements relating to trade (Customs Co-operation Agreement, Mutual Recognition Agreement and Redressal of Trade Grievances Agreement) to build the confidence of the business communities on both sides. Through the implementation of these agreements, the two countries will systematically address the issues related to NTBs. It was also agreed at the 7th round of commerce secretary level meetings that, on the same lines as the mutual recognition agreement between the Bureau of Indian Standards and the Pakistan Standards and Quality Control Authority (PSQCA), another agreement between the Export Inspection Council of India and the PSQCA will be signed. Both sides have already exchanged the draft texts and it was agreed that internal approvals would be completed before

(continued)

Box 6.1 Normalisation of trade relations: some recent developments (continued)

the next meeting of the commerce secretaries. Previously, in November 2011, four agreements were signed: i) the New Business Visa Agreement; ii) the Customs Co-operation Agreement (information, data and harmonisation); iii) the Mutual Recognition Agreement (standards – health, cement, textiles, etc. – as India features non-WTO standards); and iv) the Redressal of Grievances Agreement (commercial disputes resolution mechanism), and in September 2012, India and Pakistan signed an agreement for facilitation of visas. Once implemented, the new visa agreement will liberalise the bilateral visa regime and introduce a number of measures aimed at easing travel, including travel for business purposes. The new agreement has still not come into force. Pakistan needs to indicate its readiness to bring into force the new visa agreement.

On exploring the possibilities of opening new land routes for trade, the Pakistan government has announced that a working group on Munabhao–Khokhrapar has been constituted. The Indian government had already announced the constitution of a working group. Opening this route will depend on the recommendations of the working groups.

The Pakistan government has expressed appreciation of the steps taken by India to reduce its SAFTA-sensitive list by 30 per cent from 878 tariff lines to 614 tariff lines, as agreed earlier during the 6th round of talks. The Indian side explained that, out of the 264 tariff lines that have been removed from India's SAFTA sensitive list, 155 tariff lines pertain to agricultural commodities and 106 tariff lines relate to textile items. To further deepen the preferential arrangements under SAFTA and to provide a level playing field to Pakistani exporters in comparison to concessions allowed by India under SAFTA with the rest of the countries in the SAARC region, both sides have developed a long-term plan. It was noted that Pakistan now has a total of 936 tariff lines at HS six-digit level under its SAFTA-sensitive list, compared with the 614 tariff lines at HS six-digit level of India. It has been agreed that after Pakistan has announced the removal of all restrictions on trade by the Attari–Wagah land route, the Indian side will reduce its SAFTA-sensitive list by 30 per cent before December 2012, keeping in view Pakistan's export interests. Pakistan would transition fully to granting MFN (non-discriminatory) status to India by December 2012, as agreed earlier. India would thereafter reduce its SAFTA-sensitive list to 100 tariff lines at HS six-digit level by April 2013. As India notifies the reduced sensitive list, Pakistan, after seeking approval of the cabinet, will also simultaneously notify its dates for reducing its SAFTA-sensitive list to a maximum of 100 tariff lines at HS six-digit level within the following 5 years. The reductions shall be notified by Pakistan in equal amounts for each year so as to complete reduction to 100 lines before the end of 2017. Thus, before the end of 2017, both India and Pakistan would each have no more than 100 (HS six-digit) tariff lines in their SAFTA-sensitive lists. Before the end of 2020, except for this small number of tariff lines in the respective SAFTA-sensitive lists, the peak tariff rate for all other tariff lines would not be more than 5 per cent.

The commerce secretaries also reviewed progress on other issues, such as enhanced trade for petroleum products, trade in power and reciprocal opening of bank branches. Based on this review, the commerce secretaries exhorted the relevant stakeholders on both sides to speed up mutual consultations so that concrete progress would be achieved within the next six months. During this review, the Indian side announced its willingness to consider export of gas up to 5 million m^3/day, for an initial period of 5 years. The Pakistan side announced that India's offer had been received and was under active consideration. Bharat Heavy Electricals Ltd (an Indian public sector undertaking) made an offer to co-operate with Pakistan in setting up 500–2000 MW capacity coal, hydro or gas power plants, as per their requirements. The Indian side indicated its willingness to co-operate with Pakistan in the areas of wind and solar energy. The Indian side also made an offer to meet the requirements of Pakistan railways for up to 100 locomotives.

The Pakistan government has emphasised the importance of including small and medium-sized enterprises in this trade normalisation process. It has highlighted that sectors like surgical

(continued)

Box 6.1 Normalisation of trade relations: some recent developments (continued)

instruments, cutlery, fans, leather and marble products have a huge potential for trade. It was agreed that an institutional mechanism would be constituted to work out exhibitions of these products in India. Sharing of technology, skill development, training and collaboration in development of designs would also be encouraged. Co-operation in the manufacturing activities of the gems and jewellery sector would be actively encouraged.

The civil aviation authorities of both countries undertook discussions to ensure better air connectivity between New Delhi and Islamabad. It was noted that against an average of about 23 flights per week between New Delhi and other important national capitals of the SAARC countries, there is as yet no direct air connectivity between New Delhi and Islamabad. It was agreed that a joint working group would be formed, which would work out a more liberal regime of reciprocal bilateral rights for commercial flights, to ensure the economic viability of this air route. This working group would also explore mechanisms for more efficient courier services.

In addition, preliminary discussions were held on the possibilities for better telecommunication linkages, keeping in view the requirements of business communities on both sides for international roaming facilities. It was agreed that separate sub-groups on either side would take forward this dialogue. The commerce secretaries would review thereafter.

Both sides reviewed the previously discussed possibilities for greater trade co-operation in the agriculture and information technology sectors. Relevant stakeholders would be encouraged to take forward economic co-operation in these areas. Co-operation to increase cotton yields in Pakistan through trials of suitable Bt cotton seeds (a genetically modified variety of cotton), would be given more focused attention.

Source: compiled from various statements of commerce secretary meetings between Pakistan and India

a non-discriminatory trade regime. With MFN status, Pakistan will provide equal treatment to India in terms of tariffs and trade regulations to that it offers to other WTO members. This will obviously encourage formal trade to grow, and informal and third-country trade is expected to disappear gradually. At the same time, MFN treatment does not necessarily mean that the trade regime becomes preferential, open or accessible. As trade flows between India and Pakistan increase, there would be a greater demand for transparency, faster movement of goods and services across borders and increased market access. New solutions need to be worked out to ease NTBs. A step forward in this direction could mark the beginning of greater trade and economic co-operation between the two countries through the MFN regime. A lot more needs to be accomplished before free trade would give each country a stake in the other's success.

What makes a MFN work is the trade facilitation that surrounds it. The results of the general equilibrium simulations indicate Pakistan's granting MFN to India would generate larger benefits if supported by improved connectivity and trade facilitation. In other words, gains to Pakistan would be limited in the absence of improved connectivity and trade facilitation. The net economic impacts of SAFTA along with trade facilitation are beneficial to both Pakistan and India, and eventually would lead to stronger economic growth of the region. With Pakistan's granting

MFN to India, the full implementation of SAFTA is, therefore, inevitable.

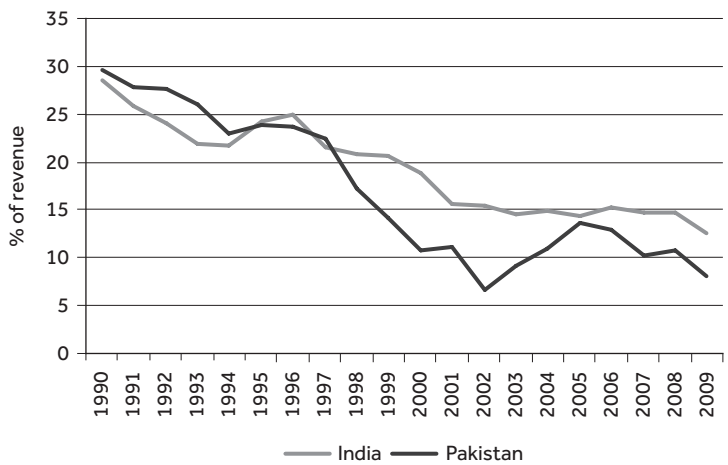
In general, three policy options are recommended. First, further deepening of trade liberalisation (e.g. removal of NTBs, cleaning the sensitive lists, duty-free quota-free access to products where marginal return from trade is very high and the removal of quantitative restrictions). Second, supporting trade facilitation to complement trade liberalisation (e.g. removing the delay in payment between exporter and importer by introducing internet banking and allowing more banks to operate). Third, freeing the flow of FDI between the two nations (e.g. building the institutional mechanism for bilateral investment guarantees).

6.1 Option 1: tariff rationalisation and removal of non-tariff barriers

Trade liberalisation initiatives in both countries since the 1990s have been deep as well as broad. Government's dependence on import duties has declined in both India and Pakistan (Figure 6.1). Given that import tariffs introduce a bias against exporting, the large reductions in tariffs have played a role in improving export competitiveness in India and Pakistan. Thus, customs duties are still the principal instrument of trade policy, particularly in the context of India and Pakistan trade.

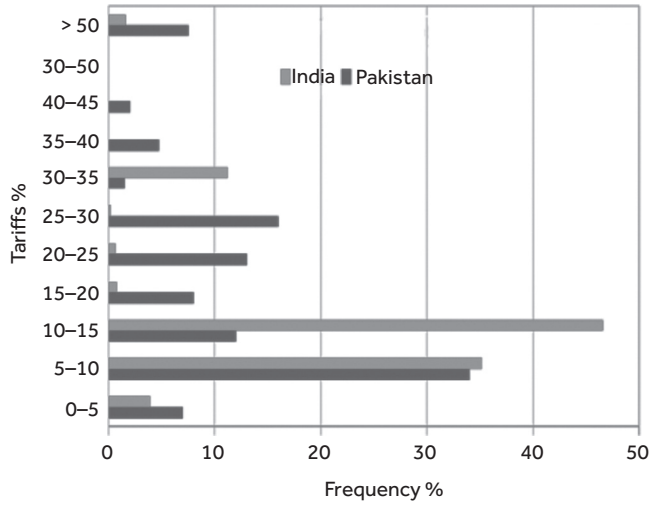
Average tariffs between India and Pakistan have come down much faster than NTBs. But, as shown in Figure 6.2, both countries feature large variations between – and within – statutory tariffs. For example, India's distribution is skewed more towards lower tariffs. Although the average tariff has come down to 10–15 per cent in both countries, high tariffs still persist for some major products. For example, Pakistan's import tariff of 35 per cent on Indian exports of granite (contributing about 55 per cent of Pakistan's total granite imports from the world) or 20 per cent on condensers for steam or other vapour power units (contributing about 100 per cent of Pakistan's condenser imports

Figure 6.1 Taxes on international trade



Source: Calculations based on World Bank Doing Business database

Figure 6.2 Distribution of statutory tariffs in India and Pakistan, 2009–10



Source: Adapted from Lopez-Calix (2012)

from the world) have been penalising the growth of bilateral trade. Conversely, India's import tariff of 24 per cent on Pakistani exports of dates (edible fruits and nuts) appears to be on the high side. India imported about US$35 million of dates from Pakistan in 2009. India's tariffs are also relatively high on imports of textiles and agricultural products from Pakistan. India imposes both an *ad valorem* rate and a specific duty, whichever is higher, on the import of textiles and clothing and agricultural goods. Generally, the specific duties appear to be higher in India and, in some cases, exceed 100 per cent, especially on value-added textiles. Compared with the specific duty, *ad valorem* rates are much lower. India has also kept 243 items in the textile and clothing sector as sensitive items under SAFTA (Table 6.1).[41] Appendix 8 presents Pakistan's and India's import tariffs on selected products on each other's exports. Quick gains could be obtained by reducing Indian tariffs on Pakistani cotton yarn, fruits and vegetables and removing NTBs. Similarly, freeing imports of newsprint from India would help Pakistan to manage its huge shortfall in demand for newsprint. Therefore, pruning the sensitive lists and normalisation of import tariffs may enhance bilateral trade.

In addition to rationalising import duties, quantitative restrictions, regulatory duties and other para-tariffs, and several other measures that have restricted trade in the past should be eliminated. Despite the fall in average tariffs, trade restrictiveness in both India and Pakistan has been heavily triggered by the large number of NTBs. In promoting trade between India and Pakistan, the major stumbling block is

41 Appendix 7 presents India's sensitive lists at the HS two-digit level under SAFTA for non-LDCs.

Table 6.1 India's sensitive list in the textile and clothing sector under the South Asian Free Trade Area for non-least developed countries

HS codes 2002	Commodity groups	Share in total items (%)	Frequency
61	Articles of apparel and clothing accessories – knitted or crocheted	11.43	96
62	Articles of apparel and clothing accessories – not knitted or crocheted	9.17	77
60	Knitted or crocheted fabrics	5.00	42
55	Man-made staple fibres, including Yarns, etc.	2.50	21
54	Man-made filaments, including yarns and woven, etc.	0.60	5
58	Special woven fabrics, tufted textiles, lace	0.24	2
	Total	28.93	243

Source: Calculations based on South Asian Association for Regional Co-operation Secretariat data

the presence of such NTBs.[42] Deeper co-operation between India and Pakistan can potentially result in significant reductions of these barriers.

Trade liberalisation has long been seen as an important element of sound economic policy, and trade facilitation is a necessary step to achieve it. Trading more efficiently between India and Pakistan would probably increase average incomes, providing more resources with which to tackle poverty.

6.2 Option 2: trade facilitation and improvements in connectivity

Trade facilitation is aimed at ensuring the movement and clearance of goods across borders within the shortest time at the minimum cost.[43] Thus, the two elements that form the crux of the issue are time and cost. Trade facilitation would mean addressing these issues and attempting ways and means to minimise the cost and time taken for movement of import and export cargo.

Trade facilitation in South Asia is unimpressive when we consider behind-the-border issues. India and Pakistan compare poorly with their global peers in improving logistics. South Asian countries suffer from excessive direct costs and excessive time taken to cross borders and from inefficiency in cross-border transactions, which ultimately affect trade negatively. Trade in the region is also constrained by the poor condition of infrastructure, congestion, high costs and lengthy delays. These problems are particularly acute at the India–Pakistan border crossings, many of which pose significant barriers to trade. Among the

42 This has been well recognised at the ministerial level. See, for example, the Joint Declaration of 7th Ministerial Meeting, 20–21 September 2012.

43 The broader definition of trade facilitation goes beyond what has been noted in the WTO. In the literature, trade facilitation has been identified as the means of moving trade across borders and is not restricted to a country's customs authority.

major causes of high trade transaction costs is the number of cumbersome and complex cross-border trading practices, which also increase the possibility of corruption. Goods carried by road are largely subject to trans-shipment and manual checking at the border, which creates serious impediments to regional and multilateral trade. The problem is further compounded by lack of harmonisation of technical standards.

The GTAP simulations show that improved trade facilitation (e.g. removal of behind-the-border barriers) would increase the volume of trade between India and Pakistan, by reducing the transaction costs of trade, thus making exports more competitive and imports less expensive. However, in reality, the South Asian countries are much behind their global peers in trade facilitation. India has an edge over Pakistan in all dimensions of the World Bank's Logistics Performance Index.[44] While larger economies such as India have successfully reduced the time taken to export, exporting a consignment in Pakistan still takes about 21 days (see appendix 9). On the positive side, Pakistan beats India and the other South Asian countries with lowest cost of exports in the region (appendix 9). In terms of export time, as shown in Figure 6.3, the preparation of documents takes most of the time needed for exports in South Asia, except for Maldives and Nepal, where the time needed for customs and ports, and inland transit, respectively, outweigh document preparation time. Therefore, reduction of transaction time through simplification of documentation and paperless trade should be the priority.[45] Pakistan has the advantage of the lowest costs of trading across the border in South Asia (Figure 6.4). However, other South Asian countries have relatively higher costs of exporting and importing. Therefore, significant reductions in transaction costs in South Asia will be critical to the effectiveness of bilateral trade co-operation. To reduce trade-related transaction costs, governments must collaborate on a trade facilitation agenda that encompasses procedures, regulations and processes that impose costs on cross-border commercial transactions (e.g. customs, standards, movement of people, etc.).[46]

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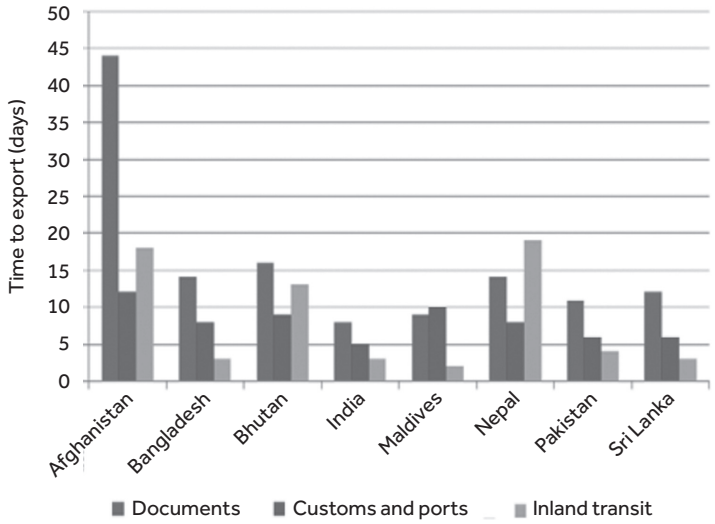
44 This refers to the year 2010. Source: World Bank Logistics Performance Index, http://lpi.worldbank.org

45 To support the trade flows between the two countries, India's ICP at the Attari border, inaugurated on 13 April 2012, is a step forward. The setting up of the ICP is significant as it will naturally boost bilateral trade between the two countries. Built at a cost of nearly 15 billion rupees and spread over about 130 acres, the ICP has passenger and cargo terminals, security and scanning equipment, and passenger amenities, in addition to waiting areas, restaurants, restrooms, duty-free shops, banks and other financial services. The ICP can handle about 600 trucks at a time. As a consequence of this enhanced infrastructure, trade, previously conducted only between 8am and 4pm, can now be conducted for 12 hours – between 7am and 7pm. Thus, more trucks can drive to India and cross over to Pakistan each day. However, the physical infrastructure facilities at the Wagah border-control facilities must be expanded. Specifically, sophisticated X-ray machines through which trucks can pass quickly should be a top priority; warehousing is needed at Attari; and several new train stations need to be built.

46 Seeking to give a big push to opening up of borders for trade and commerce, both countries have established several joint working groups (JWGs), such as the JWG on electricity, petroleum and banking, the JWG for visas, the JWG for border trade on the Munabao–Khokharapar route, the JWG for trade in petroleum, the JWG for electricity trade, etc.

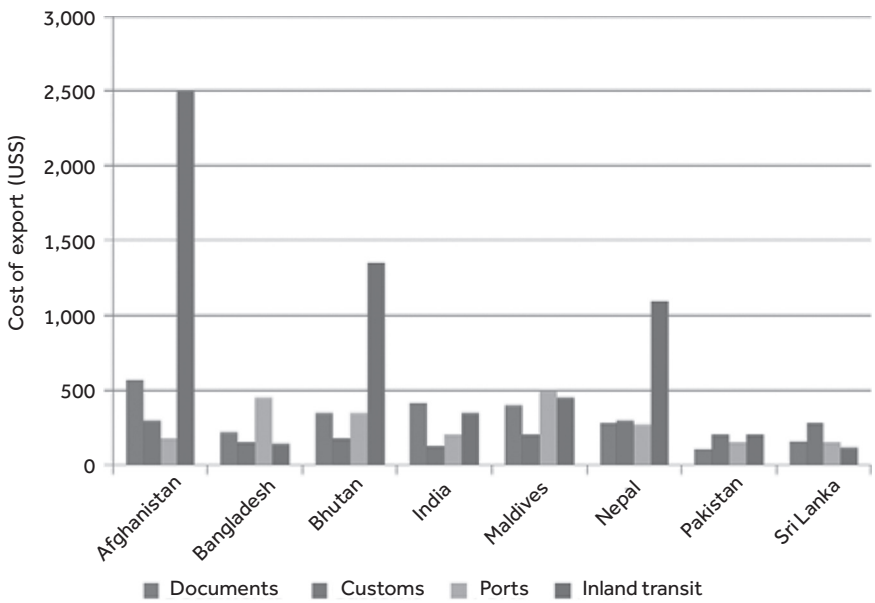
Figure 6.3 Time to export, 2011



Source: World Bank Doing Business database, www.doingbusiness.org

Trade between India and Pakistan is expected to increase manifold in the coming years. Accompanying this growth will be an increase in demand for national and regional infrastructure for production and consumption and international trade purposes. A failure to respond to this demand will slow the trade between

Figure 6.4 Costs of export, 2011



Source: World Bank Doing Business database, www.doingbusiness.org

the two countries. Despite their proximity, India and Pakistan do not have much cross-border infrastructure between them and, therefore, circumvent this by transporting much of their bilateral trade through unofficial routes. Thus, development of cross-border infrastructure, especially transportation linkages and energy pipelines, should be given the utmost priority, since completion of this will contribute to bilateral as well as regional integration by reducing transportation costs and facilitating trade and services. With MFN status in trade, India and Pakistan should consider a strategy that will not only eliminate the barriers to cross-border infrastructure development but will also encourage investment flows in the region. Given that most cross-border projects are associated with several risks, India and Pakistan have to play a larger role in creating an enabling environment for the private sector to invest in regional infrastructure projects.

Improved transit in South Asia is long overdue. SAFTA may give Afghanistan increased access to South Asian market. Similarly, the MFN agreement offers the potential for India and Pakistan to improve their connectivity with South-West Asia, Central Asia and beyond. If goods are permitted to transit freely in South Asia, the whole region will benefit. Better trade relations with Pakistan can provide transit access for Indian goods to Afghanistan and Central Asia, on the one hand, and to Iran and Turkey, on the other. Pakistan has a bilateral transit agreement with Afghanistan, which was renewed in 2010. In addition, Pakistan is an integral part of the trade and transit arrangement in the Economic Co-operation Organization, which has helped Pakistan to run container trains between Islamabad and Turkey *via* Tehran. In November 2006, Pakistan signed an FTA with China, and in November 2008, fast-track clearance for cross-border transit between China, Pakistan, Kazakhstan and Kyrgyzstan commenced after 13 years of negotiations. Transit between Pakistan and Afghanistan will facilitate the market for goods and energy trade (power and gas pipelines) between India and the energy-rich Central Asia, South-West Asia and the Gulf. The advent of MFN status may perhaps help complete the implementation of the Turkmenistan–Afghanistan–Pakistan–India gas pipeline, as a new environment of trust and co-operation prevails. At the same time, sub-regional transit between Afghanistan, India and Pakistan would help build regional transit, thereby moving towards a customs union in 2015 and an economic union in 2020 in South Asia. In addition, India and Pakistan should work to harmonise trade and tariff policies, customs procedures, exchange of customs information, and establish linkages between trade associations in the trade transport and transit areas and prepare a trade guide and website giving information on trade, transport, transit and customs facilitation institutions and activities.

6.3 Option 3: allowing foreign direct investment to narrow the trade gap

The GTAP simulations indicate the winning sectors in terms of increases in exports from India to Pakistan, such as chemical, rubber and plastics, food processing, mineral fuels (petroleum, coal products), metals, machinery and equipment, textiles, leather products, sugar,

etc. SAFTA with enhanced trade facilitation will help firms in India and Pakistan exploit economies of scale through access to an enlarged market. Indian FDI (and also from other countries) would help Pakistan to narrow the trade deficit with India. In view of the larger market size, Pakistan's MFN status for India would attract Indian FDI in Pakistan in these sectors, thereby facilitating IIT between the two counties.[47] For example, the export of petroleum products from India to Pakistan is one aspect of trade relations that will benefit from the new arrangement.[48] Undoubtedly, there would be a huge expansion in the number of new opportunities for trade and commercial enterprise in the region.

FDI becomes relevant as economic engagement between the two countries deepens. A greater degree of bilateral investment could strengthen bilateral exports between India and Pakistan. Exports in sectors such as agricultural produce, chemicals, textiles and auto components could be enhanced through bilateral investment.

Can a Pakistani enterprise invest in India? Yes.[49] Pakistan was the only country from which investment was barred until 1 August 2012. Indian investors have shown willingness to invest US$20–50 billion in Pakistan's mining, petroleum, energy, power and infrastructure projects.[50] The Indian private sector has also shown eagerness to export electricity and petroleum products to Pakistan.[51] After enhancement of trade ties, opportunities for big projects like the gas pipeline project between Turkmenistan, Afghanistan, Pakistan and India will further increase.

India has amended the FEMA to allow FDI from Pakistan and made an appropriate change in the Consolidated FDI Policy. Subsequently, FEMA rules were also amended, the overall FDI policy now applies to Pakistan and proposals for investment in India by companies from Pakistan are routed through the Foreign Investment Promotion Board .

Pakistan has lifted restrictions on investment but no Indian has been able to invest in the country. India is a large market and Pakistanis have great opportunities to set up manufacturing bases, besides exporting their products. Therefore, there is an urgent need for both governments to set up an institutional mechanism that would guarantee

47 In an article, one of India's largest business chambers commented: 'intra-industry trade should increase as the MFN agreement takes effect, and a large number of multinational corporations will likely set up their plants to serve both markets' (Kumar 2011).

48 Lakshmi Mittal, an Indian steel tycoon, is currently constructing a new oil refinery in the border city of Bhatinda in India's Punjab state in association with India's Hindustan Petroleum Corporation. It will eventually have the capacity to supply large amounts of petroleum products to northern Pakistan. India's Essar Oil has entered into an agreement with Pakistan's Maple Leaf, a major cement manufacturer, to supply petcoke.

49 But India did not allow FDI from Pakistan until recently. The Indian policy on FDI used to state: 'A non-resident entity (other than a citizen of Pakistan or an entity incorporated in Pakistan) can invest in India, subject to the FDI Policy. A citizen of Bangladesh or an entity incorporated in Bangladesh can invest only under the Government route' (DIPP 2012).

50 According to Pakistan–India Business Council Chairman, Noor Muhammad Kasuri.

51 There is a proposal to export surplus diesel from Bhatinda refinery in India to Pakistan through a 200km pipeline.

protection to each other's investments. As of yet, Pakistan and India do not have a bilateral investment protection agreement. Both countries should sign such an agreement at the earliest opportunity. This would enable financial institutions to protect investments by extending insurance cover at the market rate.

There should be a proactive policy to promote investment through joint ventures in both countries, access for banks in each other's market, etc. There is ample scope for joint ventures across borders. Linking the capital and financial markets of both countries would give a boost to economic activities. An integrated network of multi-commodity markets in the SAARC countries would help to provide the maximum benefit from the region's potential.[52] The Karachi Stock Exchange (KSE) and BSE are about to sign a memorandum of understanding, which would enable the KSE to be listed at the BSE.[53]

Improving border trade infrastructure and mutual recognition agreements to facilitate movement of goods and services is also important. Facilitating visas for increased business travel is needed. Business travellers, medical patients and students from both countries should be exempted from any sort of visa restrictions. On-arrival visas at selected air and land ports should be extended to patients, investors and selected services professionals. Improved frequency of transport services (i.e. bus, rail and air) would provide increased flexibility for businessmen and the population as a whole. These steps are perceived as fruitful ways and means to boost business attitudes and bilateral relations. Finally, besides withdrawing bans on investment in both countries, a change in the mindset on both sides of border is a key to bridging the trust deficit and building a lasting partnership.

7. Concluding remarks

Trade is a key component of international co-operation and sustainable development. While the world has changed in fundamental ways since the global financial crisis erupted in 2008, and faces challenges both old and new, furthering South–South co-operation remains vital. Merchandise exports from developed economies have turned ominously downward. Conversely, trade flows of developing economies have mostly remained strong. Thus, it appears that the trade slowdown is mostly confined to developed economies, especially in Europe. This suggests that South–South trade may be one of the best ways to avoid a more serious trade slump. Countries in the South will continue to have higher trade in the southern region. India and Pakistan in South Asia, and China in East Asia, for example, have the added responsibility to drive this.

52 Refer to Mr Joseph Massey, Managing Director of the Multi Commodity Exchange, Mumbai.
53 Refer to Mr Muneer Kamal, Chairman, KSE, Karachi.

India and Pakistan have come a long way in rebuilding their economic and political relations. A liberalised India–Pakistan trade regime would strengthen the economic relationship and regional integration. We need to undertake projects on priority basis, not only to rebuild bilateral relations (starting with MFN status) but also to strengthen South Asian regional co-operation. A list of such projects is given in box 7.1. Finally, a stronger relationship between India and Pakistan would help realise a prosperous and peaceful South Asia.

Box 7.1 Priority projects

1. Remove Pakistan's negative list.
2. Remove non-tariff barriers on a fast-track basis.
3. Further lower tariffs on items in India's sensitive lists under the South Asian Free Trade Area for non-least developed countries.
4. Ease financial constraints by allowing national banks to set up branches on either side of the border.
5. Improve frequency of transport services by air, rail, bus and ship. Islamabad and Delhi should be directly connected by air. There should be more trade *via* rail routes and more direct shipping services between India and Pakistan.
6. Ease visa restrictions on movement of people across the border. On-arrival visas should be considered for business travellers, medical patients and selected services professionals at selected land and air ports.
7. Allow transit trade between Afghanistan, India and Pakistan. India should extend transit facilities to Pakistan for its trade with Nepal and Bangladesh, and Pakistan should make a similar gesture to India for its trade with Afghanistan and West Asia.
8. India and Pakistan should sign a bilateral investment treaty and allow financial institutions to extend insurance coverage to business establishments in either market.
9. Consider setting up an exclusive economic zone or special economic zone/free trade zone in Pakistan for Indian investments.
10. Pakistan and India should remove the positive list of overland trade items at the Attari–Wagah border.
11. Accept a common-to-trade classification of products between the customs authorities of India and Pakistan.
12. Set up an institutional framework to support bilateral foreign direct investment. An appropriate mechanism for redress of trade and investment grievances should be created.
13. Strengthen the cargo handling facilities at the Attari–Wagah border and reduce the time and cost of bilateral trade by cutting excessive trade procedures and processes.
14. Open additional border crossings to allow increased traffic between the two countries.
15. Energy trade between the two countries should be facilitated. The Amritsar–Lahore electricity grid should be implemented as a priority.
16. Improve the road and rail networks connecting Attari and Wagah with national networks. For example, widening of National Highway 1 (Panipat–Attari section) to six lanes is needed to accommodate a larger volume of cargo movement between the two countries.
17. Allow mobile roaming (and other value-added services) to operate between the two countries.

Appendix 1. Sectoral composition of Pakistan's negative list

Sectors	No. of items
Automobile	385
Iron and steel	137
Paper and board	92
Plastic	83
Textile	74
Electric appliances and machinery	57
Pharmaceuticals	49
Machinery	37
Chemicals	33
Sports goods	32
Ceramics	28
Cutlery	22
Glass	22
Miscellaneous manufacturing	22
Leather goods	19
Rubber goods	19
Agriculture	16
Furniture	16
Aluminium products	12
Surgical goods	10
Footwear	7
Soap and toiletry	7
Metres	6
Metal products	5
Prefab building	5
Stone and marble	5
Wood	4
Gems and jewellery	3
Optical fibre	2
Total	1,209

Source: Circular No. SAARC-2/4-A/2012 dated 20 March 2012, Ministry of Foreign Affairs, Islamabad

Appendix 2. Trade complementarity index at Harmonised System (HS) six-digit level

HS classification	Reporter	Partner	2005	2010
HS 6-digit (at H2)	Pakistan	India	37.987	
HS 6-digit (at H2)	Pakistan	India		40.356
HS 6-digit (at H2)	India	Pakistan	27.289	
HS 6-digit (at H2)	India	Pakistan		33.419
HS 6-digit (at H3)	Pakistan	India		39.377
HS 6-digit (at H3)	India	Pakistan		33.289

Source: Calculations based on the United Nations Comtrade database, http://comtrade.un.org

Appendix 3. Top intra-industry trade (IIT) index products of India and Pakistan

Table A3.1 India: top 20 IIT index products at HS 6-digit level (at H2)

2005			2010		
HS code	**Product description**	**IIT**	**HS code**	**Product description**	**IIT**
841182	Gas turbines	1.000	420292	Bags	1.000
580134	Warp pile fabrics	0.999	530921	Woven fabrics of flax	0.999
293379	Lactams	0.998	730290	Railway or tramway track construction material	0.999
611790	Parts of garments or of clothing accessories	0.998	382430	Non-agglomerated metal carbides	0.998
292090	Esters of other inorganic acids	0.998	290243	p-Xylene	0.997
750522	Nickel alloy	0.997	860210	Diesel-electric locomotives	0.997
281511	Sodium hydroxide (caustic soda)	0.997	230910	Dog or cat food	0.997
283340	Peroxosulphates (persulphates)	0.997	350190	Caseinates and other casein derivatives	0.997
843820	Machinery for sugar manufacture	0.997	551623	Woven fabrics of artificial staple fibres	0.996
310100	Animal or vegetable fertilisers	0.997	740321	Copper-zinc base alloys (brass)	0.996

(continued)

Table A3.1 India: top 20 IIT index products at HS 6-digit level (at H2) (continued)

2005			2010		
HS code	**Product description**	**IIT**	**HS code**	**Product description**	**IIT**
292222	Anisidines, dianisidines, phenetidines	0.996	80240	Chestnuts	0.995
482340	Rolls, sheets and dials of paper or paperboard printed for self-recording apparatus	0.996	841012	Hydraulic turbines and water wheels	0.995
350691	Adhesive preparations based on rubber or plastics	0.996	911220	Clock cases	0.994
960839	Pens, fountain, stylograph and other pens	0.996	790700	Zinc	0.994
790600	Zinc, tubes or pipes and fittings for tubes or pipes	0.996	440420	Non-coniferous wood, roughly shaped	0.994
391729	Tubes, pipes and hoses, rigid, of other plastics	0.996	741011	Refined copper, foil	0.993
960850	Sets of pens, mechanical pencils	0.996	847920	Machinery for the extraction or preparation of animal or fixed vegetable fats or oils	0.993
410411	Bovine skin and hide leather	0.996	760429	Aluminium alloy	0.993
330210	Odoriferous substances	0.996	840212	Watertube boilers with a steam production	0.993
480451	Kraft paper and paperboard	0.996	190220	Stuffed pasta	0.993

Table A3.2 Pakistan: top 20 IIT index products at HS 6-digit level (at H2)

2005			2010		
HS code	**Product description**	**IIT**	**HS code**	**Product description**	**IIT**
570241	Of wool or fine animal hair	0.999	940592	Parts of lamps, lighting fixtures, illuminated signs and the like, of plastics	0.999
482290	Bobbins, spools, cops and similar supports of paper pulp, paper or paperboard	0.998	321310	Painters' colours, in tablets, tubes, jars, bottles, pans or in similar packings, in sets	0.998
960920	Pencil leads, black or coloured	0.996	820840	Blades for agricultural, horticultural or forestry machines	0.997
621710	Accessories for articles of apparel	0.995	851621	Electric storage heating radiators	0.995

(continued)

Table A3.2 Pakistan: top 20 IIT index products at HS 6-digit level (at H2) (continued)

2005			2010		
HS code	**Product description**	**IIT**	**HS code**	**Product description**	**IIT**
271500	Bituminous mixtures based on natural asphalt, natural bitumen, petroleum bitumen, mineral tar or mineral tar pitch	0.991	282810	Commercial calcium hypochlorite and other calcium hypochlorites	0.991
960200	Vegetable, mineral or gum materials, worked and articles of these materials	0.991	550120	Synthetic filament tow of polyesters	0.991
420299	Cases, bags and similar containers	0.99	401390	Inner tubes of rubber for vehicles	0.989
430390	Articles of furskin	0.989	190590	Bakers' wares	0.988
680430	Hand sharpening or polishing stones	0.988	570232	Floor coverings of pile construction	0.987
330520	Preparations for permanent waving or straightening the hair	0.987	960400	Hand sieves and hand riddles.	0.987
821220	Base metal safety razor blades	0.985	720450	Iron or steel remelting scrap ingots	0.987
190590	Bakers' wares	0.985	731300	Barbed wire of iron or steel; twist	0.986
910990	Clock movements	0.984	843340	Straw or fodder balers, including pick-up balers	0.982
091030	Turmeric (curcuma)	0.982	291732	Dioctyl orthophthalates	0.981
391590	Waste parings and scrap of other plastics	0.979	330790	Depilatories and other perfumery, cosmetic or toilet preparations	0.979
284290	Salts of inorganic acids or peroxoacids	0.978	741300	Stranded wire, cables, plaited band	0.978
690990	Ceramic troughs, tubes and similar receptacles for agriculture	0.971	730590	Steel	0.976
420212	Trunks, suitcases, vanity and attaché cases	0.97	80620	Raisins, dried grapes	0.975
732490	Iron or steel, sanitary ware	0.97	731021	Cans which are to be closed by sold	0.975
300670	Gel preparation use human/veterinary medicine lubricant in surgical operation	0.97	70310	Onions and shallots	0.974

Table A3.3 India: top 20 IIT index products at HS 6-digit level (at H3), 2010

HS code	Product description	IIT
420292	Trunks, suitcases, vanity cases, executive cases, briefcases, school satchels, spectacle cases, binocular cases, camera cases, musical instrument cases, gun cases, holsters and similar containers; travelling-bags, insulated food/beverages bags	1.000
530921	Woven fabrics of flax, containing <85% by weight of flax, unbleached/ bleached	0.999
730290	Railway/tramway track construction material of iron/steel, the following: check-rails and rack rails, sleepers (cross-ties), chairs, chair wedges, rail clips, bedplates, ties and other material specialised for jointing/fixing rails	0.999
382430	Non-agglomerated metal carbides mixed together/with metallic binders	0.998
290243	p-Xylene	0.997
860210	Diesel-electric locomotives	0.997
230910	Dog or cat food, put up for retail sale	0.997
350190	Casein glues; caseinates and other casein derivatives	0.997
551623	Woven fabrics of artificial staple fibres containing <85% by weight of artificial staple fibres, mixed mainly/solely with man-made filaments, of yarns of different colours	0.996
740321	Copper-zinc base alloys (brass), unwrought	0.996
80240	Chestnuts	0.995
841012	Hydraulic turbines and water wheels, of a power >1,000kW but not >10,000kW	0.995
911220	Clock cases and cases of a similar type for other goods of Ch.91	0.994
790700	Other articles of zinc	0.994
440420	Non-coniferous wood, roughly shaped into poles, pickets, stakes, sticks and other forms, to be finished into specific articles or products	0.994
741011	Refined copper, foil, w/thickness of 0.15 mm or less, not backed	0.993
847920	Machinery for the extraction or preparation of animal or fixed vegetable fats or oils	0.993
760429	Bars, rods and profiles (excluding hollow profiles) of aluminium alloys	0.993
840212	Watertube boilers with a steam production not >45 t/hour (excluding central heating hot water boilers capable also of producing low pressure steam)	0.993
190220	Stuffed pasta, whether/not cooked/otherwise prepared	0.993

Table A3.4 Pakistan: top 20 IIT index products at HS 6-digit level (at H3), 2010

HS code	Product description	IIT
940592	Parts of the lamps and lighting fittings of 94.05, of plastics	0.999
321310	Artists', students' or signboard painters' colours, in tablets, tubes, jars, bottles, pans or in similar packings, in sets	0.998
820840	Knives and cutting blades, for machines/mechanical appliances, for agricultural/horticultural/forestry machines	0.997
851621	Electric storage heating radiators	0.995
282810	Commercial calcium hypochlorite and other calcium hypochlorites	0.991
550120	Synthetic filament tow, of polyesters	0.991
890400	Tugs and pusher craft	0.990
930390	Revolvers and pistols, designed to fire only blank cartridges or blank ammunition; firearms and similar devices that operate by the firing of an explosive charge	0.990
401390	Inner tubes, of rubber (excluding of 401310 and 401320)	0.989
190590	Bread, pastry, cakes, biscuits and other bakers' wares, whether/not containing cocoa; communion wafers, empty cachets of a kind suitable for pharmaceutical use, sealing wafers, rice paper and similar products (excluding of 190510–190540)	0.988
570232	Carpets and other textile floor coverings, woven, of pile construction, not made up, of man-made textile materials	0.987
960400	Hand sieves and hand riddles	0.987
720450	Remelting ferrous scrap ingots	0.987
843340	Straw/fodder balers, including pick-up balers	0.982
291732	Dioctyl orthophthalates	0.981
330790	Depilatories and other perfumery, cosmetic/toilet preparations, n.e.s	0.979
741300	Stranded wire, cables, plaited bands and the like, of copper, not electrically insulated	0.978
940171	Seats n.e.s., with metal frame (other than of heading 9402), upholstered	0.976
730590	Tubes and pipes (e.g. welded/riveted/similarly closed), having circular cross-sections, the external diameter of which exceeds 406.4mm, of iron/steel (excluding of 730511–730539)	0.976
080620	Grapes, dried	0.975

Note: n.e.s.: not elsewhere specified

Table A3.5 IIT scores (>0.50) of commonly traded products between India and Pakistan, 2005

Product code	Product description	IIT
490199	Printed books, brochures, leaflets and similar printed matter, other than in single sheets	0.993
520511	Single cotton yarn, 85% or more cotton by weight, of uncombed fibres, not over 14 nm	0.975
170199	Cane/beet sugar and pure sucrose, refined, solid, without added colouring or flavouring	0.934
410719	Bovine/buffalo skin leather	0.926
391390	Chemical derivatives of natural rubber; polysaccharides and their derivatives; natural polymers and modified natural polymers	0.918
520542	Multiple or cabled cotton yarn, 85% or more cotton by weight, of combed fibres, yarn over 14 but not over 43 nm, not put up for retail sale	0.915
392010	Non-adhesive plates, sheets, film, foil and strip, non-cellular, not reinforced or combined with other materials, of polymers of ethylene	0.895
711719	Jewellery rope, curb, cable, chain, etc., of base metal	0.875
520942	Denim containing 85% or more cotton by weight, weighing more than 200 g/m^2, of yarns of different colours	0.852
490210	Newspapers, journals and periodicals, appearing at least four times a week	0.840
080290	Pecans, pignolias, nuts n.e.s., kola nuts, fresh or dried, in shell, shelled	0.805
200190	Edible parts of plants n.e.s.prepared or preserved by vinegar or acetic acid	0.764
410711	Bovine/buffalo skin leather	0.754
520812	Woven cotton fabric, 85% or more cotton by weight, plain weave, weight over 100 g/m^2 but not over 200 g/m^2	0.753
903300	Parts and accessories for machines, appliances, instruments or apparatus of chapter 90	0.748
680221	Marble, travertine and alabaster	0.747
410530	Sheep or lamb skins, without wool on, tanned but not further prepared, in the dry state (crust)	0.746
631090	Used or new rags, scrap and worn out articles of twine, cordage, rope or cables, of wool or fine animal hair, of textile materials, not sorted	0.741
520821	Woven cotton fabric, 85% or more cotton by weight, plain weave, not over 100 g/m^2, bleached	0.677
291736	Terephthalic acid and its salts	0.650
640359	Footwear with outer soles of leather and uppers of leather, not covering the ankle	0.643
611710	Shawls, scarves, mufflers, mantillas, veils and the like	0.632
844790	Braiding and lace-braiding machines; embroidery machines; knitting machines	0.632
081340	Dried fruit	0.631

(continued)

Table A3.5 IIT scores (>0.50) of commonly traded products between India and Pakistan, 2005 (continued)

Product code	Product description	IIT
540710	Woven fabrics obtained from high tenacity yarn of nylon or other polyamides or of polyesters	0.599
071390	Seeds of leguminous vegetables	0.589
392329	Sacks and bags (including cones) for the conveyance or packing of goods, of plastics other than polymers of ethylene	0.557
902110	Orthopaedic or fracture appliances	0.557
580710	Labels, in the piece, in strips or cut to shape or size, woven, not embroidered, of cotton or man-made fibres	0.538
950662	Inflatable footballs and soccer balls	0.534
701120	For cathode-ray tubes	0.527
551321	Woven fabrics of polyester staple fibres	0.497

Note: Calculated based on Harmonised System nomenclature H2 (2002). n.e.s.: not elsewhere specified

Table A3.6 IIT scores (>0.50) of commonly traded products between India and Pakistan, 2010

Product code	Product description	IIT
210690	Food preparations, n.e.s.	1.00
400249	Chloroprene (chlorobutadiene) rubber , other than latex, in primary forms/in plates/sheets/strip	0.99
902290	X-ray generators (excluding tubes), high tension generators, control panels and desks, screens, examination/treatment tables, chairs and the like	0.99
080520	Mandarins (including tangerines and satsumas); clementines, wilkings and similar citrus hybrids, fresh or dried	0.99
731816	Nuts of iron/steel	0.93
081340	Dried fruit (excluding of 0801–0806 and 081310–081330)	0.93
071310	Peas (Pisum sativum), dried, shelled, whether/not skinned/split	0.92
610510	Men's/boys' shirts, knitted/crocheted, of cotton	0.92
560750	Twine, cordage, ropes and cables of synthetic fibres other than polyethylene/polypropylene, whether/not plaited/braided and whether/not impregnated/coated/covered/sheathed with rubber/plastics	0.92
520511	Cotton yarn, single (excluding sewing thread), of uncombed fibres, containing ≥85% by weight of cotton, measuring ≥714.29dtx (not >14 metric number), not put up for retail sale	0.90
581092	Embroidery in the piece (excluding embroidery without visible ground), in strips/motifs, of man-made fibres	0.89

(continued)

Table A3.6 IIT scores (>0.50) of commonly traded products between India and Pakistan, 2010 (continued)

Product code	Product description	IIT
540781	Woven fabrics (excluding of 540710–540730), containing <85% by weight of synthetic filaments, mixed mainly/solely with cotton, unbleached/bleached	0.89
870810	Bumpers and parts thereof of the motor vehicles of 8701–8705	0.88
820320	Pliers (including cutting pliers), pincers, tweezers and similar tools	0.87
621790	Parts of garments/clothing accessories (excluding knitted/crocheted; excluding of 6212)	0.87
253090	Mineral substance, n.e.s. in chapter 25	0.87
920590	Other wind musical instruments (e.g. clarinets, trumpets, bagpipes), other than brass-wind instruments	0.86
392329	Sacks and bags (including cones), of plastics other than polymers of ethylene	0.86
611710	Shawls, scarves, mufflers, mantillas, veils and the like, knitted/crocheted	0.84
220720	Ethyl alcohol and other spirits, denatured, of any strength	0.83
841480	Air pumps, air/other gas compressors and fans (excluding of 841410–841459); ventilating/recycling hoods incorporating a fan, whether/not fitted with filters (excluding of 841460)	0.82
440420	Non-coniferous wood, roughly shaped into poles, pickets, stakes, sticks and other forms, to be finished into specific articles or products	0.81
391810	Floor coverings of polymers of vinyl chloride, whether/not self-adhesive, in rolls/in the form of tiles; wall/ceiling coverings of plastics as defined in note 9 to chapter 39	0.81
401012	Conveyor belts/belting, reinforced only with textile materials, of vulcanised rubber	0.80
847190	Magnetic/optical readers, machines for transcribing data onto data media in coded form and machines for processing such data, n.e.s.	0.79
847141	Other automatic data processing machines comprising in the same housing at least a central processing unit and an input and output unit, whether/not combined	0.78
620520	Men's/boys' shirts (excluding knitted/crocheted), of cotton	0.77
640391	Other footwear without outer soles of leather, covering the ankle	0.76
700910	Rear-view mirrors for vehicles	0.76
851230	Sound signalling equipment of a kind used for cycles/motor vehicles	0.76
251990	Fused magnesia; dead-burned (sintered) magnesia, whether/not containing small quantities of other oxides added before sintering; other magnesium oxide, whether/not pure	0.75
852872	Other colour reception apparatus for television, whether/not incorporating radio-broadcast receivers/sound/video recording/reproducing apparatus	0.74
520831	Woven fabrics of cotton, containing ≥85% by weight of cotton, dyed, plain weave, weighing not >100g/m^2	0.73

(continued)

Table A3.6 IIT scores (>0.50) of commonly traded products between India and Pakistan, 2010 (continued)

Product code	Product description	IIT
120740	Sesamum seeds, whether/not broken	0.72
420229	Handbags, whether/not with shoulder strap, incling those without handle, n.e.s. in 4202	0.72
854449	Other electric conductors, for a voltage not >1,000 V, not fitted with connectors	0.72
847490	Parts of the machinery of 8474	0.70
411310	Leather further prepared after tanning/crusting, including parchment-dressed leather, of goats/kids, without wool/hair on, whether/not split, other than leather of 4114	0.69
630900	Worn clothing and other worn articles	0.69
848190	Parts of the appliances of 8481	0.66
500720	Woven fabrics containing ≥85% by weight of silk/silk waste other than noil silk	0.65
282710	Ammonium chloride	0.63
390110	Polyethylene having a specific gravity <0.94, in primary forms	0.63
420321	Gloves, mittens and mitts, of leather/composition leather, specially designed for use in sports	0.62
540784	Woven fabrics (excluding of 540710–540730), containing <85% by weight of synthetic filaments, mixed mainly/solely with cotton, printed	0.62
732690	Articles of iron/steel, n.e.s.	0.61
842240	Packing/wrapping machinery, including heat-shrink wrapping machinery (excluding of 842230)	0.61
830241	Mountings, fittings and similar articles suitable for buildings, of base metal (excluding of 830210 and 831020)	0.61
903300	Parts and accessories n.e.s. in chapter 90 for machines/appliances/instruments/apparatus of chapter 90	0.59
844790	Knitting machines (excluding of 844711–844720) and machines for making gimped yarn/tulle/lace/embroidery/trimmings/braid/net and machines for tufting	0.59
520842	Woven fabrics of cotton, containing ≥85% by weight of cotton, of yarns of different colours, plain weave, weighing >100g/m^2	0.58
950699	Articles and equipment for sports, n.e.s. in chapter 95 (excluding gloves, strings for rackets, bags, clothing, footwear and nets); swimming pools and paddling pools	0.57
950659	Badminton/similar rackets, whether/not strung	0.57
640411	Sports footwear; tennis shoes, basketball shoes, gym shoes, training shoes and the like, with outer soles of rubber/plastics and uppers of textile materials	0.56
251512	Marble and travertine, merely cut, by sawing/otherwise, into blocks/slabs of a rectangular (including square) shape	0.56

(continued)

Table A3.6 IIT scores (>0.50) of commonly traded products between India and Pakistan, 2010 (continued)

Product code	Product description	IIT
130190	Lac; natural gums (excluding of 130120), resins, gum-resins and oleoresins (e.g. balsams)	0.55
520911	Woven fabrics of cotton, containing ≥85% by weight of cotton, unbleached, plain weave, weighing >200g/m^2	0.55
847160	Input/output units, whether/not containing storage units in the same housing	0.53
091091	Mixtures of two or more products of different headings of 0904–0910	0.53
841391	Parts of the pumps of 841311–841381	0.53
520942	Woven fabrics of cotton, containing ≥85% by weight of cotton, denim, weighing >200g/m^2	0.52
481910	Cartons, boxes and cases, of corrugated paper/paperboard	0.51

Note: Calculated based on Harmonised System nomenclature H3 (2007). n.e.s.: not elsewhere specified

Appendix 4. The Global Trade Analysis Project model

The global CGE modelling framework of the Global Trade Analysis Project (GTAP) (Hertel 1997), is the best possible means for the *ex ante* analysis of the economic and trade consequences of multilateral or bilateral trade agreements. The GTAP model is a comparative static model, and is based on neoclassical theories.[54] The GTAP model is a linearised model, and it uses a common global database for the CGE analysis. The model assumes perfect competition in all markets, constant returns to scale in all production and trade activities, and profit- and utility-maximising behaviour of firms and households, respectively. The model is solved using the software GEMPACK (Harrison and Pearson 1996).

In the GTAP model each region has a single representative household, termed the regional household. The income of the regional household is generated through factor payments and tax revenues (including export and import taxes) net of subsidies. The regional household allocates expenditure over private household expenditure, government expenditure

54 Full documentation of the GTAP model and the database can be found in Hertel (1997) and also in Dimaranan and McDougall (2002).

and savings according to a Cobb–Douglas *per capita* utility function.[55] Thus, each component of final demand maintains a constant share of total regional income.

The private household buys commodity bundles to maximise utility subject to its expenditure constraint. The constrained optimising behaviour of the private household is represented in the GTAP model by a constant difference of elasticity expenditure function. The private household spends its income on consumption of both domestic and imported commodities and pays taxes. The consumption bundles are constant elasticity of substitution (CES) aggregates of domestic and imported goods, where the imported goods are also CES aggregates of imports from different regions. Taxes paid by the private household cover commodity taxes for domestically produced and imported goods and the income tax net of subsidies.

The government also spends its income on domestic and imported commodities and also pays taxes. For the government, taxes consist of commodity taxes for domestically produced and imported commodities. Like the private household, government consumption is a CES composition of domestically produced goods and imports.

The GTAP model considers the demand for investment in a particular region as savings driven. In the multi-country setting the model is closed by assuming that regional savings are homogenous and contribute to a global pool of savings (global savings). This is then allocated among regions for investment in response to the changes in the expected rates of return in different regions. If all other markets in the multi-regional model are in equilibrium, if all firms earn zero profits, and if all households are on their budget constraint, such a treatment of savings and investment will lead to a situation where global investment must equal global savings, and Walras' Law will be satisfied.

In the GTAP model, producers receive payments for selling consumption goods and intermediate inputs both in the domestic market and to the rest of the world. Under the zero-profit assumption employed in the model, these revenues must be precisely exhausted by spending on domestic intermediate inputs, imported intermediate inputs, factor income and taxes paid to regional household (taxes on both domestic and imported intermediate inputs and production taxes net of subsidies).

The GTAP model considers a nested production technology with the assumption that every industry produces a single output, and constant returns to scale prevail in all markets. Industries have a Leontief production technology to produce their outputs. Industries maximise profits by choosing two broad categories of inputs, namely a composite of factors (value added) and a composite of intermediate inputs. The factor composite is a CES function of labour, capital, land and natural resources. The intermediate composite is a Leontief function of material inputs, which are in turn a CES composition of domestically produced goods and imports. Imports are sourced from all regions.

The GTAP model employs the Armington assumption, which provides the possibility of distinguishing imports

55 Savings enter in the static utility function as a proxy for future consumption.

by their origin and explains intra-industry trade of similar products. Following the Armington approach, import shares of different regions depend on relative prices and the substitution elasticity between domestically and imported commodities.

This study uses the version 8 database of the GTAP global general equilibrium model. Version 8 of the GTAP database has 2007 as the base year and it covers 57 commodities, 129 regions/countries, and five factors of production. The current study has kept the 57-commodity classification but has aggregated 129 regions into 10, as shown in tables A4.1 and A4.2, respectively.

Table A4.1 GTAP commodity classification in the present study

	Sector name		Sector name
1	Paddy rice	30	Wood products
2	Wheat	31	Paper products, publishing
3	Cereal grains n.e.s.	32	Petroleum, coal products
4	Vegetables, fruit, nuts	33	Chemical, rubber, plastic products
5	Oil seeds	34	Mineral products n.e.s.
6	Sugar cane, sugar beet	35	Ferrous metals
7	Plant-based fibres	36	Metals n.e.s.
8	Crops n.e.s.	37	Metal products
9	Cattle, sheep, goats, horses	38	Motor vehicles and parts
10	Animal products n.e.s.	39	Transport equipment n.e.s.
11	Raw milk	40	Electronic equipment
12	Wool, silk-worm cocoons	41	Machinery and equipment n.e.s.
13	Forestry	42	Manufactures n.e.s.
14	Fishing	43	Electricity
15	Coal	44	Gas manufacture, distribution
16	Oil	45	Water
17	Gas	46	Construction
18	Minerals n.e.s.	47	Trade
19	Meat: cattle, sheep, goats, horse	48	Transport n.e.s.
20	Meat products n.e.s.	49	Sea transport
21	Vegetable oils and fats	50	Air transport
22	Dairy products	51	Communication
23	Processed rice	52	Financial services n.e.s.
24	Sugar	53	Insurance
25	Food products n.e.s.	54	Business services n.e.s.
26	Beverages and tobacco products	55	Recreation and other services
27	Textiles	56	Public administration/defence/health/ education
28	Wearing apparel		
29	Leather products	57	Dwellings

Notes: n.e.s.: not elsewhere specified

Source: GTAP Database Version 8

Table A4.2 Global Trade Analysis Project (GTAP) region aggregation in the present study

Aggregated regions	Comprising regions
Bangladesh	Bangladesh
India	India
Nepal	Nepal
Pakistan	Pakistan
Sri Lanka	Sri Lanka
Rest of South Asia	Comprising Afghanistan, Bhutan and Maldives
China	China
United States	United States
European Union	EU
Rest of world	Rest of world

Source: GTAP Database Version 8

Appendix 5. Foreign direct investment inflows in Pakistan, 2011

Table A5.1 FDI inflows by economic groups in Pakistan in financial year 2011 (US$ million)

Economic groups	FDI volume (US$ million)
Total	1,292.9
Oil and gas explorations	412.30
Financial business	223.10
Others	146.80
Power	133.80
Thermal	129.00
Transport	95.80
Telecommunications	72.90
Construction	52.80
Trade	44.80
Chemicals	34.30
Food	28.80
Personal services	25.00
Textiles	20.10

(continued)

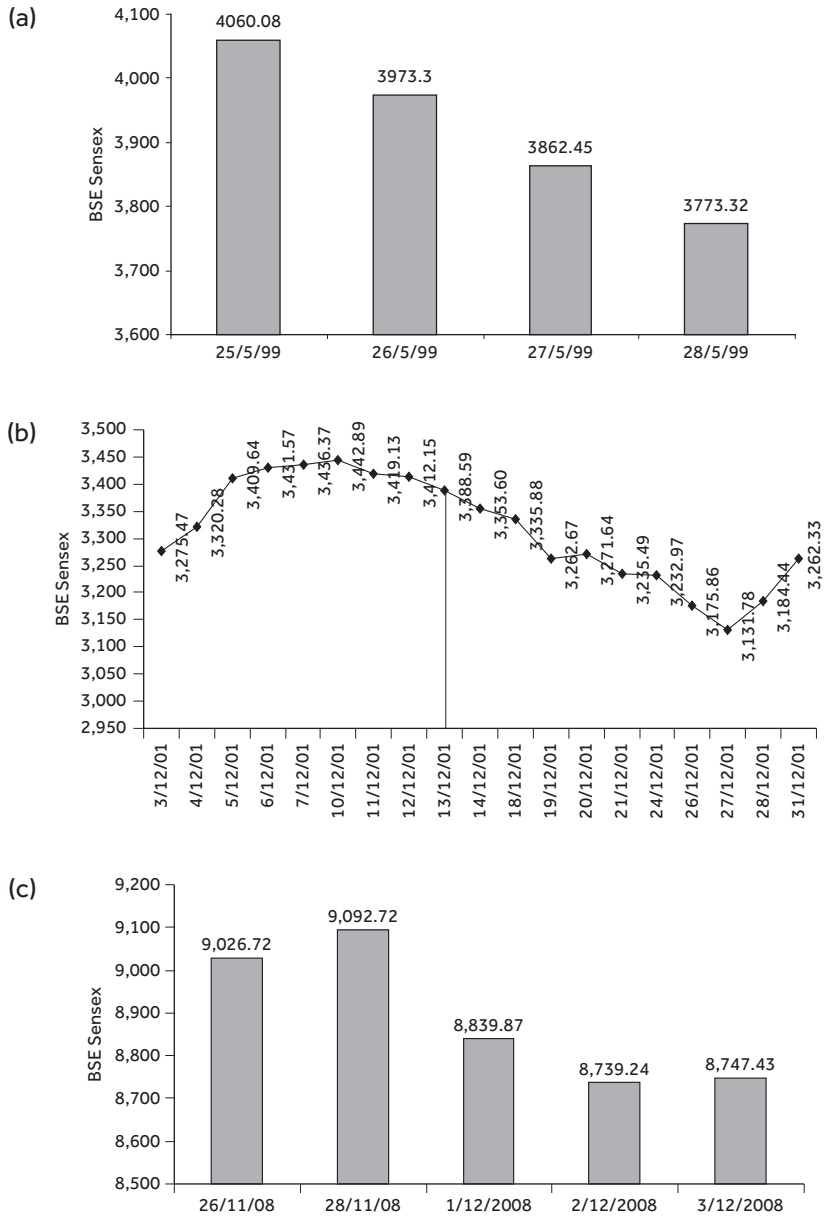
Table A5.1 FDI inflows by economic groups in Pakistan in financial year 2011 (US$ million) (continued)

Economic groups	FDI volume (US$ million)
Cement	20.10
Mining and quarrying	12.60
Software development	12.50
Ceramics	10.30
Tobacco and cigarettes	9.60
Sugar	9.50
Industrial	9.10
Beverages	8.40
Buses, trucks, vans and trail	8.30
Basic metals	7.50
Transport equipment (Automobiles)	7.40
Leather and leather products	5.80
Electronics	5.00
Electrical machinery	4.30
Hydel (hydroelectric)	4.30
Rubber and rubber products	3.10
Pharmaceuticals and over-the-counter products	2.40
Food packaging	1.90
Hardware development	1.90
Cosmetics	1.40
Metal products	1.20
Machinery other than electrical	0.80
Social services	0.70
Paper and pulp	0.50
Coal	0.50
Fertilisers	0.30
Storage facilities	0.10

Source: State Bank of Pakistan

Appendix 6. Trends in Bombay Stock Exchange (BSE) Sensitive Index (SENSEX)

Figure A6.1 a) days after the beginning of the Kargil War in 1999; b) days before and after the attack on the Indian Parliament on 13 December 2001; c) days after the attacks in Mumbai on 26 November 2008



Source: Calculated based on BSE data

Appendix 7. India's sensitive list under SAFTA

Table A7.1 India's sensitive list under SAFTA for non-least developed countries

HS 2-digit level	Commodity groups	Frequency
02	Meat and edible meat offal	8
03	Fish and crustaceans, molluscs and other aquatic invertebrates	8
04	Dairy produce; birds' eggs; natural honey; edible products of animal origin, not elsewhere specified or included	9
05	Products of animal origin, not elsewhere specified or included	1
07	Edible vegetables and certain roots and tubers	44
08	Edible fruit and nuts; peel or citrus fruit or melons	31
09	Coffee, tea, mate and spices	22
10	Cereals	11
11	Products of the milling industry; malt; starches; inulin; wheat gluten	28
12	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder	17
13	Lac; gums, resins and other vegetable saps and extracts	2
15	Animal or vegetable fats and oils and their cleavage products; pre. edible fats; animal or vegetable waxes	29
16	Preparations of meat, of fish or of crustaceans, molluscs or other aquatic invertebrates	2
17	Sugars and sugar confectionery	4
18	Cocoa and cocoa preparations	7
19	Preparations of cereals, flour, starch or milk; pastrycooks products	1
20	Preparations of vegetables, fruit, nuts or other parts of plants	8
22	Beverages, spirits and vinegar	16
23	Residues and waste from the food industries; prepared animal fodder	18
24	Tobacco and manufactured tobacco substitutes	9
25	Salt; sulphur; earths and stone; plastering materials, lime and cement	5
27	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	3
28	Inorganic chemicals; organic or inorganic compounds of precious metals, of rare-earth metals, or radioactive elements or of isotopes	1

(continued)

Table A7.1 India's sensitive list under SAFTA for non-least developed countries (continued)

HS 2-digit level	Commodity groups	Frequency
30	Pharmaceutical products	5
32	Tanning or dyeing extracts; tannins and their derivative dyes, pigments and other colouring matter; paints and ver; putty and other mastics; inks	8
33	Essential oils and resinoids; perfumery, cosmetic or toilet preparations	15
34	Soap, organic surface-active agents, washing preparations, lubricating preparations, artificial waxes, prepared waxes, polishing or scouring preparations	2
35	Albuminoidal substances; modified starches; glues; enzymes	2
36	Explosives; pyrotechnic products; matches; pyrophoric alloys; certain combustible preparations	1
38	Miscellaneous chemical products	2
39	Plastic and articles thereof	70
40	Rubber and articles thereof	27
46	Manufactures of straw, of esparto or of other plaiting materials; basketware and wickerwork	5
48	Paper and paperboard; articles of paper pulp, of paper or of paperboard	12
49	Printed books, newspapers, pictures and other products of the printing industry; manuscripts, typescripts and plans	1
50	Silk	9
52	Cotton	12
54	Man-made filaments	5
55	Man-made staple fibres	21
57	Carpets and other textile floor coverings	14
58	Special woven fabrics; tufted textile fabrics; lace; tapestries; trimmings; embroidery	2
59	Impregnated, coated, covered or laminated textile fabrics; textile articles of a kind suitable for industrial use	3
60	Knitted or crocheted fabrics	42
61	Articles of apparel and clothing accessories, knitted or crocheted	96
62	Articles of apparel and clothing accessories, not knitted or crocheted	77
63	Other made up textile articles; sets; worn clothing and worn textile articles; rags	6

(continued)

Table A7.1 India's sensitive list under SAFTA for non-least developed countries (continued)

HS 2-digit level	Commodity groups	Frequency
64	Footwear, gaiters and the like; parts of such articles	14
68	Articles of stone, plaster, cement, asbestos, mica or similar materials.	2
69	Ceramic products	5
70	Glass and glassware	2
71	Natural or cultured pearls, precious or semiprecious stones, precious metals, clad with precious metal and articles thereof; imitation jewellery; coin	1
72	Iron and steel	49
73	Articles of iron or steel	3
74	Copper and articles thereof	6
76	Aluminium and articles thereof	1
78	Lead and articles thereof	1
84	Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof	5
85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts	21
87	Vehicles other than railway or tramway rolling stock, and parts and accessories thereof	4
90	Optical, photographic cinematographic measuring, checking precision, medical or surgical inst. and apparatus parts and accessories thereof	2
94	Furniture; bedding, mattresses, mattress supports, cushions and similar stuffed furnishing; lamps and lighting fittings not elsewhere specified or included	1
96	Miscellaneous manufactured articles	2

Source: Compiled based on South Asian Association for Regional Co-operation Secretariat data

Appendix 8. Import tariffs on major exports, 2009

Table A8.1 Pakistan's import tariffs on major Indian exports in 2009

Product	Product name	Partner	Tariff, simple average (%)	Import (US$ million)	Share in total import (%)
680223	Monumental or building stone and arts, granite	India	35.00	2.089	54.67
		China	35.00	1.672	43.77
		World	35.00	3.821	
401161	New pneumatic tires, of rubber, of a kind used on agricultural or forestry vehicles and machines	India	20.00	4.406	48.64
		China	20.00	1.267	13.99
		World	20.00	9.058	
841989	Machinery and equipment for the treatment of materials	India	20.00	2.763	1.84
		China	20.00	4.585	3.05
		World	20.00	150.197	
840420	Condensers for steam or other vapour power units	India	20.00	1.714	100.00
		China	20.00	0.000	0.00
		World	20.00	1.714	
382460	Sorbitol other than that of subheading 290 (chemical products)	India	20.00	1.586	55.99
		China	20.00	0.338	11.94
		World	20.00	2.833	
960720	Parts of slide fasteners	India	20.00	1.385	22.40
		China	20.00	0.463	7.49
		World	20.00	6.183	
293949	Ephedrines and their salts	India	20.00	1.247	100.00
		China	0.00	0.000	
		World	20.00	1.247	
960719	Slide fasteners, not fitted with chain scoops of base metal	India	20.00	1.065	7.39
		China	20.00	4.880	33.89
		World	20.00	14.400	

Source: Calculated based on World Integrated Trade Solutions (WITS) database

Table A8.2 India's import tariffs on major Pakistani exports in 2009

Product	Product name	Tariff, simple average (%)	Import (US$ million)
081350	Mixtures of nuts or dried fruits of chapter 8	30.000	0.780
091091	Mixtures of spices	30.000	0.116
130190	Lac, natural gums, resin, etc.	26.760	0.154
080410	Dates (edible fruits and nuts)	24.000	35.383
030613	Shrimps and prawns	23.330	0.840
090910	Seeds of anise or badian	20.000	0.308
121120	Ginseng roots	20.000	0.287
200911	Orange juice, frozen	20.000	0.879
350300	Gelatin	15.400	0.370

Source: Calculated based on World Integrated Trade Solutions (WITS) database

Appendix 9. Time and costs to export

Table A9.1 Time to export (days)

Year	Afghanistan	Bangladesh	Bhutan	India	Maldives	Nepal	Pakistan	Sri Lanka
2006	66	35	38	27	21	43	31	25
2007	67	35	38	27	21	43	22	25
2008	67	28	38	18	21	43	22	21
2009	74	28	38	17	21	41	22	21
2010	74	25	38	17	21	41	22	21
2011	74	25	38	17	21	41	21	21

Source: World Bank Doing Business database

Table A9.2 Costs of export (US$ per container)

Year	Afghanistan	Bangladesh	Bhutan	India	Maldives	Nepal	Pakistan	Sri Lanka
2006	2,500	902	1,150	864	1,200	1,600	996	647
2007	2,500	902	1,150	864	1,200	1,600	515	647
2008	2,500	844	1,150	820	1,200	1,600	515	660
2009	3,000	970	1,210	945	1,348	1,764	611	715
2010	3,350	970	1,210	945	1,348	1,764	611	715
2011	3,865	985	1,352	1,055	1,550	1,960	611	715

Source: World Bank Doing Business database

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