

Nisha Taneja
Isha Dayal *Editors*

India–Pakistan Trade Normalisation

The Unfinished Economic Agenda

 Springer

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Dr. Taneja's research work has been a key contributor to the trade negotiations in the South Asian region. She has served on committees set up by the Government of India on informal trade, rules of origin and non-tariff barriers. She has been a consultant to the World Bank and the Asian Development Bank. Dr. Taneja has also conducted research for several government ministries, bilateral and multilateral agencies.

Dr. Taneja has published three books, more than 50 articles in books and journals and 35 reports/working papers. She is the co-editor of the book *India-Pakistan Trade: Strengthening Economic Relations*, published by Springer in August 2014. Her work has been disseminated widely in India and several other countries including Bangladesh, Nepal, Sri Lanka, Pakistan, Philippines, Thailand, Korea, Japan, USA, UAE and Germany.

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Abbreviations

ACMA	Auto Component Manufacturers Association (India)
AIDP	Auto Industry Development Programme
APIs	Active Pharmaceutical Ingredients
APMA	Association of Pakistan's Motorcycle Assemblers
APTTA	Afghanistan–Pakistan Transit-Trade Agreement
APTU	Technical standards and adoption of uniform technical prescriptions for railway material
ATC	Agreement on Textiles and clothing
ATMF	Technical admission of railway vehicles/railway material used in international traffic
ATT	Afghan Transit Trade
BIS	Bureau of Indian Standards
BoI	Board of Investment
BRCA	Bilateral Revealed Comparative Advantage
BS	Business Standard
CAGR	Compound Average Growth Rate
CBU	Completely Built Up
CBUs	Completely Built Units
CCP	Competition Commission of Pakistan
CDP	Composite Dialogue Process
CIF	Cost, Insurance and Freight
CIM	Contracts of carriage for the international carriage goods
CITI	Confederation of Indian Textile Industry
CIV	Contracts of carriage for the international carriage of passengers
CKD	Completely Knocked Down
CONCOR	Container Corporation of India Limited
COTIF	Convention Concerning the International Transport of Goods by Rail
CPD	Convergent Parallel Design

CPFTA	China–Pakistan free trade area
CUI	Contract on the use of railway infrastructure
CUV	Contracts of Use of Vehicles
CV	Coefficient of Variation
CVD	Countervailing Duties
CWC	Central Warehousing Corporation
DGCIS	Directorate General of Commercial Intelligence and Statistics
DOP	Department of Pharmaceuticals
DRAP	Drug Regulatory Authority of Pakistan
ECO	Economic Cooperation Organization
EDB	Engineering Development Board
EDI	Electronic Data Interchange
ET	Economic Times
FCL	Full Container Load
FDGs	Focus Group Discussions
FDI	Foreign Direct Investment
FGD	Focus Group Discussion
FOB	Free on Board
FPCCI	Federation of Pakistan Chambers of Commerce and Industry
FTA	Free Trade Agreement
GATT	General Agreement on Trade and Tariffs
GDP	Gross Domestic Product
GNP	Gross National Product
GoP	Government of Pakistan
HC & NO _x	Hydrocarbons and nitrogen oxides
HC, CO & NO _x	Hydrocarbons, carbon monoxide and nitrogen oxides
HCV	Heavy Commercial Vehicles
HIIT	Horizontal Intra-Industry Trade
HS Classification	Harmonized System of Classification
HS	Harmon System
IBM	Institute of Business Management
ICD	Inland container depot
ICP	Integrated Check Post
ICT	Information and Communication Technology
IDC	India Drive Cycle
IDMA	Indian Drug Manufacturers Association
IIT	Intra-Industry Trade
ILAC	International Laboratory Accreditation Cooperation
INR	Indian Rupee
IPP	Institute of Public Policy
IRU	International Road Transport Union
ISDPs	Industry Specific Deletion Programmes
IT	Information Technology
ITC	International Trade Centre
JICA	Japan International Co-operation Agency

L/C	Letter of Credit
LCS	Land Customs Stations
LCVs	Light Commercial Vehicles
LDC	Least Developed Country
LPAI	Land Port Authority of India
MFA	Multi-Fibre Agreement
MFN	Most Favoured Nation
MMF	Manmade Fibres
MMR	Mixed Method Research
MNC	Multinational Corporation
MNCs	Multinational Companies
MoC	Ministry of Commerce, Pakistan
MSME	Micro, Small, and Medium Enterprises
n.e.s	Not Elsewhere Specified
NDMA	Non-Discriminatory Market Access
NHSRC	National Health Services Regulation and Co-ordination Division
NICs	Newly Industrialized Countries
NLDC	Non-Least Developed Country
NMCC	National Manufacturing Competitiveness Council
NTBs	Non-Tariff Barriers
NTC	National Textile Corporation
NTM	Non-Tariff Measure
NYT	New York Times
OEM	Original Equipment Manufacturers
OICCI	Overseas Investors Chamber of Commerce and Industry
OTIF	Intergovernmental Organisation for International Carriage by Rail
PAAPAM	Pakistan Association of Automotive Parts and Accessories Manufacturers
PACO	Pakistan Automobile Corporation
PAMA	Pakistan Automotive Manufacturers Association
PILDAT	Pakistan Institute of Legislative Development and Transparency
PKR	Pakistani Rupee
PM	Particulate Matter
PPA	Pakistan Pharmacist Association
PPMA	Pakistan Pharmaceutical Manufacturers Association
PPP	Public Private Partnership
PSDP	Industry Specific Deletion Programmes
PSQCA	Pakistan Standards and Quality Control Authority
PTA	Preferential Trade Agreement
QC	Quality Control
R&D	Research and Development
RCA	Revealed Comparative Advantage

RID	Carriage of dangerous goods
RMS	Risk Management System
SAARC	South Asian Association for Regional Cooperation
SAFTA	South Asian Free Trade Agreement
SAPTA	South Asian Preferential trade Agreement
SD	Standard Deviation
SIMA	Southern India Mills' Association
SME	Small and medium enterprises
SMEDA	Small and Medium Enterprise Development Authority
SPS	Sanitary and Phytosanitary
TBS	Tariff-Based System
TBT	Technical Barriers to Trade
TCI	Trade Complementarity Index
TCM	Traditional Chinese medicine
TDAP	Trade Development Authority of Pakistan
TE	Triennium Ending
TFA	Trade facilitation Agreement
TIR	International Road Transport
TIR	Transports Internationaux Routiers (or International Road Transport)
TMC	Technology Missions on Cotton
TOI	Times of India
TRIPS	Trade Related Aspects of Intellectual Property Rights
TUFS	Technology Up-gradation Fund Scheme
UNCTAD	United Nations Conference on Trade and Development
UNECE	United Nations Economic Commission for Europe
USD	United States Dollars
VIIT	Vertical Intra-Industry Trade
WCO	World Customs Organization
WHT	Withholding Tax
WMTC	Worldwide Harmonised Motorcycle emission Test Cycle
WSJ	Wall Street Journal
WTO	World Trade Organization

Chapter 1

Emerging Issues in India–Pakistan Trade: An Introduction

Nisha Taneja, Rohan Ray, Isha Dayal and Samridhi Bimal

India and Pakistan, the two largest economies of South Asia, have been trading under a rather restrictive bilateral trade regime. Several attempts have been made in the past to normalize trade between the two countries, the most significant of these being the fifth round of talks conducted between the two Commerce Secretaries in April 2011. The talks laid down the blueprint for normalizing trade between India and Pakistan. There was a recognition of the need to promote bilateral trade to “build confidence, dispel misunderstandings and allay misapprehensions.” While the agenda was very detailed (covering, *inter alia*, the MFN issue, nontariff barriers, border infrastructure, customs liaison, harmonization of customs procedures, trade in electricity and petroleum products, cooperation in information technology, visas, bilateral investments, and opening of bank branches), the two negotiating points revolved around Pakistan granting Most Favored Nation (MFN) status to India and India addressing nontariff barriers faced by Pakistan in accessing the Indian market.

In a major breakthrough, Pakistan decided to grant MFN status to India in November 2011. The Joint Statement issued in November 2011 laid down the sequence and timelines for full phasing in of MFN status for India. In the first phase, Pakistan would graduate from the positive list to a small negative list that specified banned rather than permitted items. In the second stage, the negative list would be phased out—overall, as well as for the road route on which trade takes place for only a fraction of the items on the positive list. These changes would usher in the full phasing in of MFN that forms an essential part of the trade normalization process. Adhering to the Joint Statement, in March 2012 Pakistan made a transition from the positive list approach to a small negative list of 1209 items; however, it continued to restrict road trade by allowing only 137 items to be imported from India via road. India addressed Pakistan’s concerns by taking several steps to address Non-Tariff Barriers (NTBs). Subsequently in September 2012, both

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countries offered concessions to each other under SAFTA. India reduced its sensitive list for non-LDCs from 884 items to 614 items and Pakistan reduced its sensitive list from 1169 items to 936 items. Despite the reduction, the two countries continue to maintain a large number of items on the sensitive list. While the 2011 talks heralded a new chapter in India–Pakistan trade relations, and laid down the blueprint for trade normalization, the dialogue came to a halt within a year.

Even though the trade normalization agenda remains incomplete, there has been some trade liberalization between the two countries with Pakistan switching from the positive list approach to a small negative list of items that cannot be imported from India. It is pertinent to analyze the extent of the trade realization that has taken place as a result of this liberalization. With the number of items that Pakistan allows to be imported from India going up substantially, changes in the volume and composition of Indian exports to Pakistan are naturally expected.

It is important to note that even though the trade talks have come to a halt, trade has not. Since the trade normalization process was set in motion, bilateral trade between India and Pakistan increased by 1.3 times between 2011–2012 and 2015–2016. Total trade between the two countries was US\$ 1.94 billion in 2011–2012, of which India's exports to Pakistan were US\$ 1.54 billion and imports were US\$ 398 million. Despite the negative list maintained by Pakistan, India has always had a trade surplus with Pakistan. India's trade balance as a proportion of its total trade with Pakistan increased from 59 to 65 % between 2011–2012 and 2015–2016.

In 2015–2016, the top commodities exported from India to Pakistan included cotton, polypropylene, woven fabrics and fabrics of polyester, tomatoes, sugar, chickpeas, cotton yarn, tea and pneumatic tires of rubber. Cotton alone accounted for 30 % of exports. India's top imports from Pakistan for the same year included petroleum oils and preparation, dates, cement, cotton, gypsum, aluminum ores, and concentrates disodium carbonate.

On a positive side, in the last five years, the two countries have made several attempts to resume the dialogue. Even though political considerations have hampered the dialogue, persistent efforts are likely to lead to restarting the dialogue with the pending trade normalization agenda expected to be at the forefront. The trade normalization process, when completed, is likely to unleash the untapped trade potential between the two countries. Taneja et al. (2013) estimate bilateral trade potential between the two countries to be US\$ 19.8 billion. The abolition of the negative list is perhaps the most important measure that is likely to be undertaken when the bilateral dialogue resumes. Reduction in sensitive lists by both countries is also likely to be addressed. The automobile, agriculture, and pharmaceutical sector in Pakistan and the textile sector in India are often at the center of debate in the normalization agenda owing to their dominant presence on the negative list, sensitive list or both. It is important to quantify the trade potential in these sensitive sectors as they would indicate the extent to which possible losers and gainers in different industries might be affected.

Connectivity is yet another area that deserves attention. Significant measures were taken in 2005, with amendment of the restrictive maritime protocol which allowed only Indian and Pakistani vessels to carry cargo between the two countries

and did not permit Indian and Pakistani vessels to send cargo to a third country from the ports of either country and opening of the road route for trade, however, no major initiatives have been taken after resumption of dialogue in 2011. The most feasible and cost-effective way of moving goods between the two countries is through the land route. Unless the land route is improved substantially, transaction costs of trading between the two countries will remain high which will deter trade realization. Thus, there is a need to undertake substantial measures to improve cross-border movement of goods and facilitate trade. A comprehensive and integrated international land transport policy needs to be put in place not only to provide rail and road services to the two countries, but also to service other countries as well by linking sea ports through land borders so that the two countries can connect with each other as well as the rest of the world. Connectivity should thus be included in the agenda under the aegis of the bilateral composite dialogue.

The restrictive trading environment between India and Pakistan has resulted in large informal trade flow, with most of the trade taking place via third country ports such as Dubai. It is important to understand the functioning of informal trading channels as they reflect the weakness in the formal trading channels. Trade through Dubai, as a third country, provides a neutral ground for business and acts as a risk mitigator and guarantor of payment. The extent to which informal trade can move to formal channel will determine the effectiveness of trade normalization process.

Building upon the themes covered in our previous book “India–Pakistan Trade: Strengthening Economic Relations” (Springer 2014) the present book compiles a new set of studies that delve into the unfinished India–Pakistan Trade normalization agenda while discussing the steps that must be undertaken for taking the bilateral engagement forward. The unfinished agenda largely includes impediments such as the negative list and sensitive list of items which continue to restrict export of goods from India to Pakistan; lack of land borders and seamless cross-border transport services that restrict realization of trade potential; informational barriers to India–Pakistan trade and negative reporting in media that hamper traders’ perceptions; and the continued incidence of informal trade resulting out of inadequacies in formal trade relations. Understanding these issues is important as it will determine the likely impact of the trade normalization process and play a huge role in helping realize the untapped trade potential between India and Pakistan. The book also includes the second round of India–Pakistan trade perception survey which identifies impediments to India–Pakistan bilateral trade and gauges the change in traders’ perceptions over the two rounds of survey, the first of which was published in 2014.

The book encompasses five broad areas. Part I (Chaps. 2–7) entails a sector wise analysis of bilateral trade between India and Pakistan in agriculture, textiles and clothing, automobiles, and pharmaceuticals. Secondary data as well as information from meetings with various stakeholders have been used to analyze the trade performance in these sectors. In particular, the chapters have addressed the growing concern in the Pakistan economy regarding Indian products flooding the pharmaceuticals and automobiles markets and the perceived threat from agricultural products. Part II (Chap. 8) examines informal trade that is prevalent between India and Pakistan and estimates the difference in transaction costs between trading

formally and informally and recommends ways to shift informal trade to formal channels. Part III (Chap. 9) documents the findings from a second round of Trade Perception Survey to assess any change in the extent of impediments faced by stakeholders in India–Pakistan trade and improvements in the business environment from the first round conducted by ICRIER in 2014. Part IV (Chaps. 10 and 11) addresses the impediments faced by exporters of each country while trading via the Attari–Wagah land route and also seek to examine the potential of greater connectivity between Rajasthan and Sindh via the Munabao–Khokhrapar land route. Finally Part V (Chap. 12) tries to capture the role of the media in its ability to highlight developments in India–Pakistan economic and trade activities as opposed to those in the realm of security concerns.

In Chap. 2, “Agricultural Trade between India and Pakistan: Status and Potential,” Ramesh Chand and Raka Saxena have examined the trend and composition of agricultural trade between India and Pakistan and identified opportunities for increasing bilateral trade. Considering a structural break around the time of implementation of the SAFTA, the study has analyzed the bilateral trade performance before and after the coming into being of the regional trade agreement. The authors have also documented some major impediments faced by exporters of either country, both in the form of higher duties and prevalence of nontariff barriers.

Although agricultural trade between the two countries has been increasing, the share of bilateral trade in total world trade has been miniscule. In the post SAFTA period, agricultural exports from India to Pakistan have grown at a much faster rate than export of nonagricultural products. In comparison, it has been observed that Pakistan’s agricultural exports to India have increased at a much slower rate possibly due to supply side constraints in Pakistan. Though India’s exports have shown a rising trend over time, there has been much variability since a greater share of the exports was to stabilize the domestic supply in Pakistan. While cotton has been India’s major export item accounting for 38 % of total agricultural exports, it has mostly fed into woven fabrics and textile exports from Pakistan. This provides the scope for a trade-led agricultural link between the two neighboring states. On the other hand, India’s major import items from Pakistan have been edible fruits and nuts and cotton fabrics and textiles. An analysis of trade complementarity between the two countries shows that while India’s exports more closely match Pakistan’s imports, the patterns differ considerably for Pakistan’s exports and India’s imports. A study of growth opportunities in trade indicates that India has significant export potential in cotton, dairy products and eggs, oilseeds while there is much untapped import potential in raw hides and skins. Thus, unlike India, Pakistan has limited opportunities to promote agricultural exports to India since its export surplus matches India’s import needs only for a few commodities. However, by addressing supply side factors, Pakistan can take advantage of rapid diversification of demand for several products in India such as fruits and vegetables. An analysis of the impediments to increasing bilateral trade shows that while tariff rates have lowered considerably for majority of the agricultural products, nontariff barriers continue to be a major obstacle for exporters of either country. The authors have documented such nontariff barriers using information from WTO, the government web sites and

the MacMap website. Pakistan has often complained of the Indian government being much supportive to its agricultural sector through provision of food subsidy and concessions on major agricultural inputs. The study estimates that Indian farmers have a benefit of 4 % over Pakistani farmers in terms of subsidies. But since these can be factored into the trade policy, this should not be a major issue against trade promotion between the two countries. The authors finally conclude by providing major policy recommendations through concerted actions being taken by either country in trade facilitation, lowering of tariff and nontariff barriers and pruning of negative lists.

In Chap. 3, “Exploring the Trade in Textiles and Clothing Between India and Pakistan,” Nisha Taneja, Saon Ray, and Devyani Pande have sought to make a case for enhancing bilateral trade between India and Pakistan in the textile sector owing to the similarities in culture and clothing and in the process harness the potential for the two countries to integrate in supply chains. The paper has analyzed the existing trade between the countries in the textiles and garments sector, the untapped potential in the sector and the reasons behind the low levels of trade and the type of intra-industry trade that is prevalent.

While the textiles and clothing sector account for the largest share in trade between India and Pakistan, bilateral trade is more pronounced in textiles with cotton yarn being the most traded textile item. However, the sector occupies a negligible share in bilateral trade with respect to the world. Though the quantum of exports of textiles and clothing to Pakistan has increased over the years, the share in total exports has been on the decline. Thus there is much untapped potential in both the export and import market. The low trade figures can be attributed to the fact that textiles and clothing make up for 5.7 % of the items in Pakistan’s negative list and also 25 % of the sensitive lists of both the countries under SAFTA. While India is one of the primary producers of man-made filaments and fibers, most of the textile items in Pakistan’s negative list consist of these items. Pakistan has complained of the Indian government providing favorable treatment to its producers in the form of tax breaks, interest subsidy and tariff protection but the authors have argued that Pakistan can impose countervailing duties to offset the disadvantage to its local manufacturers. Intra-industry trade, which has been the most dominant form of trade between India and Pakistan in the textiles and clothing sector, has been observed to be the highest in clothing accessories and woven fabrics of cotton. Thus, though the quantity of trade in the garments and apparel sector has not been large, there is a large overlap in bilateral trade. The authors have made use of the unit value approach to conclude that not only has intra-industry trade in textiles and clothing been more vertical in nature, unit value of India’s exports has been higher than that of imports, implying India’s exports are of higher quality.

The outcomes of interviews with different stakeholders with regard to competitiveness of either country in different stages of a textiles value chain have also been documented. While Indians spinning mills are more advanced and India produces finer quality of cotton, the weaving sector is much advanced in Pakistan. The authors also point out that similar to formal trade in the sector, the value of informal trade in the textiles sector is also the highest with vendors in either country finding

alternative routes for import. The authors conclude by saying that exchange of textiles and clothing with different levels of processing between India and Pakistan will go a long way in collaboration in the textiles segment within South Asia and help the region get access to the supply chains in textiles.

In Chap. 4, “Assessing the Future of Trade in the Automobile Sector between India and Pakistan: Implications for Abolishing the Negative List,” Biswajit Nag analyzes the implications of trade normalization between India and Pakistan on the automobile sector. Though there is much apprehension in Pakistan that opening up of the automobile sector to India will flood their market with Indian vehicles and automobile components, the author is of the opinion that Indian automotive products will mostly compete with the East Asian players namely Thailand, Japan, and China and not directly with the domestic suppliers. Through harnessing imports from India, Pakistan shall be able to substitute costly components currently imported from the more developed economies by relatively cheaper accessories from India, thus reducing the consumer price of these products. The lower price of vehicles will then enable the Pakistani government to gain through higher custom and excise revenue, as aggregate demand for automobiles will experience a rise.

While Pakistan has experienced a healthy growth in small and big car (above 1300 cc) segments and two and three wheelers, commercial vehicles have witnessed a drop in production. The shortfall in production vis-à-vis installed capacity has affected the entire supply chain especially component SMEs which supply parts and components at the lower end of the supply chain. In comparison to the declining domestic production, Pakistan has experienced a phenomenal increase in the import of passenger cars in recent years, the major exporters being Japan, China, and the Republic of Korea. Pakistan also imports major automobile component parts such as metal scrap, engines and its parts, parts of air conditioning tools and gear and its components from Japan, China, Thailand, Indonesia, and the Republic of Korea. With regard to bilateral trade between India and Pakistan in the automobile industry, the existing level of trade is low as most items fall under Pakistan’s negative list or India’s sensitive list. While the general notion has been that once nondiscriminatory market access is granted to India, Indian exports will inundate the Pakistan market, lack of data pertaining to the past has made it difficult to estimate the trade potential. The paper has thus made an attempt to provide a measure of the potential using inputs from Pakistani manufacturers and through focus group discussions. Though such meetings ratify the common perception that Indian automakers will overwhelm the Pakistani market due to exploitation of economies of scale, there is also much apprehension about market access in India because of nontariff barriers. However in a recent development, Pakistan has shown interest in importing automobile parts in a completely knocked down form. Also India has agreed to accept emission and quality certificates issued by Pakistan Standards and Quality Control Authority (PSQCA), provided the norms match the Bharat IV criteria. The author finally concludes by identifying products for which perceived competition from India will increase in the post MFN period. After taking into account economic factors, the author concludes that there is no threat of

imports in the case of around 74 of the 167 products while Pakistan should develop strategies for the residual items.

In Chap. 5, “India–Pakistan Trade: Perspectives from the Automobile Sector in Pakistan,” Vaqar Ahmed and Samavia Batool have proposed a way forward for the commerce ministries of the two neighboring states to address the concerns of Pakistan’s automobile sector regarding opening up of the sector to competition from India. Besides analyzing Pakistan’s competitiveness in the automobile sector, the paper has also identified the obstacles that impede cross-border trade in automobiles, explored the justification of placing automobile products in Pakistan’s negative list vis-à-vis India and also documented trade and investment policies undertaken in the sector in the two countries. The authors have also presented findings from 15 key informant interviews and two formal group discussions with major stakeholders from both India and Pakistan.

While import of completely built units by Pakistan has been on the rise since 2009, there has been a decline in automobile parts. The author has attributed this trend to increased import of used cars in 2011 as a result of an increase in the limit of the age of imported cars (from 3 to 5 years) during the year 2011. On the other hand, there has been a decline in Pakistan’s automobile exports primarily due to the energy shortage in the country. One unique aspect of the study has been that it has looked upon consumers as stakeholders in the automobile sector. While consumers have a high interest in enhancing bilateral trade, they have little power to influence decision-making. In a study by Chatterjee and George (2012), consumer welfare gains were estimated to be in the range of 203 US\$ million for Pakistan if it traded with India while India would gain approximately 545 US\$ million. Several consumer groups in Pakistan have pointed toward the welfare loss incurred due to the expensive imports from the rest of the world. With Pakistan being one of the most expensive countries for automobiles and the middle-income group being the largest portion in the country’s overall population structure, consumers desire import of small engine passenger cars from India. Also there is considerable time lag in delivery of cars in Pakistan. The authors are of the view that liberalizing trade with India would generate employment opportunities and also invite Indian manufacturers to invest in the automobile sector in Pakistan. A revealed comparative advantage study shows that while for completely built units, India is competitive in 17 items and Pakistan is competitive in six products, the numbers stand at 24 and 0 for India and Pakistan, respectively, for automobile parts. The study has also analyzed the trade complementarity between the two countries to infer that there is greater complementarity between Pakistan’s import and India’s export as compared to Pakistan’s export and India’s import. To conclude, the author has documented certain measures that the Pakistani government should undertake before opening up automobile trade. These involve increasing Pakistan’s capacity at the local level, considering technology transfer from India and mutual recognition of quality control standards. The Indian government should also ensure buy-back of a significant amount of the automobile products it exports to Pakistan in order to assume mutual gains.

Manoj Pant and Devyani Pande, in Chap. 6, “India–Pakistan Trade: An Analysis of the Pharmaceutical Sector,” have explored the current pharmaceutical trade between India and Pakistan with emphasis on the inherent trade complementarities in the sector and the consequences of opening up bilateral trade further by means of pruning Pakistan’s negative list. In this light, the authors have tried to address the concerns of the Pakistani pharmaceutical industry that owing to economies of scale and superior technological and human resources, Indian pharmaceutical companies will inundate the market on receiving greater market access.

The Indian pharmaceutical industry is much developed and is dominated by national companies comprising of bulk manufacturers of bulk drugs and formulations. On the other hand, the sector in Pakistan is at a nascent stage with most of the companies being multinational. With the share of bilateral trade in global pharmaceutical trade being miniscule, the study has estimated that India has an untapped export potential of 1534 US\$ million in the Pakistan market, whereas import potential is of the magnitude of 102 US\$ million. The study has also assessed that there is a fair degree of complementarity between the two countries in the sector. However, intra-industry trade has not been able to exploit this opportunity. Limited intra-industry trade has occurred in bulk and intermediaries while it is almost nonexistent for formulations. This can be attributed to the fact that the Indian pharmaceutical industry has spent much more on research and development and therefore can produce formulations for which it needs bulk drugs. On the other hand, only a few companies manufacture good quality active pharmaceutical ingredients in Pakistan and it is mostly dependent on imports from other countries for the raw material requirements. Despite the trade complementarities that exist between India and Pakistan in terms of geographical proximity and other similarities, Pakistan imports more pharmaceutical products from China than from India. The study has calculated unit values for the top 13 Pakistan imports of pharmaceutical items from China to infer that Pak–India unit values are greater than Pak–China unit values for the categories in Pakistan’s negative list. The authors are of the opinion that it is needless to retain these items in the negative list since upon removal of these items from the negative list, Indian producers would have to compete with their Chinese counterparts. Thus, the ultimate beneficiaries would be Pakistan consumers since free competition in the market would lead to survival of the cheapest and best quality products. Though foreign direct investment norms are very liberal in either country, considering the current political situation it is unlikely that high volumes of FDI will flow from India to Pakistan or vice versa. Interactions with pharmaceutical industry stakeholders in both India and Pakistan have revealed that firms have realized the possibility of huge benefits from increased trade and investment. However, both parties have acknowledged that the weak regulatory structure in Pakistan has worked to its disadvantage. The study finally concludes by providing various policy recommendations such as removal of pharmaceutical items from the negative and sensitive lists, harnessing foreign direct investment in pharmaceuticals, harmonizing regulatory regimes in the sector and signing of mutual recognition agreements between India and Pakistan.

In Chap. 7, “India–Pakistan Trade: A Case Study of the Pharmaceutical Sector,” Vaqar Ahmed and Samavia Batool have evaluated the possible gains and losses arising from gradual opening up of the pharmaceutical trade between India and Pakistan. Fifteen key informant interviews and two formal group discussions were conducted with various stakeholders including manufacturers, government authorities, and consumer groups to analyze industry specifications, restrictions and barriers to trade, impact of liberalizing trade in the pharmaceuticals sector, and possible avenues for collaboration among manufacturers in the two countries.

The level of bilateral trade between India and Pakistan in pharmaceutical products has been quite low. The study has performed chapter wise analysis of Pakistan’s pharmaceutical trade namely Chap. 15 (animal, vegetable fats and oils, cleavage products etc.), Chap. 28 (inorganic chemicals), Chap. 29 (organic chemicals), and Chap. 30 (pharmaceutical products). Analysis of bilateral trade in pharmaceutical products and chemical raw materials suggests that the trade balance is highly in favor of India, except for inorganic chemicals trade. The paper has also analyzed Pakistan’s negative list with respect to India and sensitive lists of either country under the SAFTA. Though the local pharmaceutical industry in Pakistan is highly dependent on imports, most of the pharmaceutical inputs are included in the negative list. Indian exports of certain pharmaceutical products and chemical ingredients required for the preparation of medicines continue to be a part of Pakistan’s negative list where as Pakistan has allowed import of the same from China. Large sensitive lists for either country under the SAFTA also act as a major impediment to trade normalization. The study has performed a desk review and on-sight examination of prices of medicine across the border. The price comparison reveals that most of the Pakistani medicines are highly priced compared to the Indian counterparts. The authors have attributed this price differential to the difference in “innovator brand” or “generic brand” medicines. This large price differential could also be one of the reasons behind the increasing informal flow of Indian medicines in Pakistani markets. The perspectives of several Pakistani pharmaceutical manufacturers and consumer groups have also been documented in the paper. While most of the manufacturers have advocated liberalization of trade with India on grounds of knowledge and skill transfer, they have advised selective buying from India and that opening of trade should be planned in several phases. However, some of the concerns that continue to plague the Pakistan industry are price advantages enjoyed by Indian producers, import of low quality medicines and the fear of multinational companies in Pakistan outsourcing the manufacturing process to lower cost counterparts in India. However, the study has also estimated that around 28.6 million people in Pakistan would benefit from increased trade with India in terms of both price and quality. The authors conclude by proving inputs for enhancing bilateral trade in pharmaceuticals through reduction of items on negative list, forming an investment-trade nexus, improved quality control systems, and simplification of cumbersome and irregular customs procedures. Also the need to develop strong databases to promote evidence-based policymaking has been advocated by the authors.

In Chap. 8, “India’s Informal Trade with Pakistan,” Nisha Taneja and Samridhi Bimal have performed an in-depth analysis of India’s informal trade with Pakistan. Informal trade continues to thrive between India and Pakistan despite recent measures undertaken by the two countries to normalize trade and reduce transport impediments. Studying the informal aspect of the trading relationship would offer insights into the functioning of the bilateral economic relationship and help provide policy inputs into the trade normalization process. In this context the study (i) identifies factors determining informal trade, (ii) prepares estimates of India’s informal trade with Pakistan, (iii) examines the modalities of informal trade, (iv) analyzes the transaction cost incurred in trading formally and informally, and (v) proposes recommendations needed to shift informal trade to formal channels.

A survey conducted in India and Dubai revealed that the most important reasons for informal exports from India to Pakistan is the presence of a negative list of 1209 items and imposition of high duties by Pakistan. These impediments are related to the policy environment and give a strong incentive for negative list and high duty goods to be traded informally between India to Pakistan, largely through third country ports like Dubai. The magnitude and pattern of India’s informal trade with Pakistan were estimated through primary surveys covering both formal and informal traders in India and Dubai using Delphi technique. The study estimates informal trade to be US\$ 4.71 billion. Of this, India’s exports to Pakistan are estimated to be USD 3.99 billion and imports from Pakistan to be of the magnitude of USD 0.72 billion. The main informal export items are jewelry, textiles, machinery and machine parts, electronic appliances, chemicals, paper, betel leaves, and tires. India’s informal imports from Pakistan mainly consist of textiles, dry fruits, cement, and spices. The study concludes that informal traders in India and Pakistan have developed efficient mechanisms for contract enforcement, information flows, risk sharing, and risk mitigation. Further, a comparison of transaction costs between the direct Delhi–Lahore route and indirect and informal Delhi–Mumbai–Dubai–Karachi–Lahore route shows that the indirect route is 11 times longer than the direct route, four times more expensive than the direct route but is almost three times more efficient. This results from the restrictive trade regime and inadequate transport system operating between the two countries. The study concludes that even though the transaction costs of trading in the informal channel are significantly higher than the formal channel, traders prefer to conduct their businesses through the informal channel since it is more efficient than the formal channel. An important policy implication is that unless the formal trade environment improves, informal trade will not only continue to coexist with formal trade, but will also impact its potential magnitude in the coming years.

In Chap. 9, “India–Pakistan: Second Trade Perception Survey,” Nisha Taneja, Mohammad Usman Khan, Isha Dayal, and Samridhi Bimal seek to identify the major deterrents in trade between India and Pakistan and assess any improvement in the perceived business environment from the previous survey (ICRIER 2014) based on six indicators namely awareness of India–Pakistan trade policies, ease in meeting product standards, market access, business facilitation, customs and documentation processes, and infrastructure at various ports. A total of 450 firms (225

in each country) engaging in bilateral trade between the two countries were surveyed and their responses were noted to gauge the perception of traders with respect to each of the indicators mentioned above. Based on the findings, policy recommendations have been made in order to facilitate trade between the two countries.

The overall awareness of policy with respect to trade was found to be almost same between the two countries. However, with respect to trade via the land route, awareness levels in Pakistan were found to be much higher. In relation to ease of meeting product standards, Indian firms were found to be at much greater comfort in doing so than their Pakistani counterparts. In terms of market access, importers of both countries are found to be more optimistic than the exporters. Issues relating to market access are expected to be minimal for goods carrying the country label and conditions are supposed to improve in the coming years thus making a case to facilitate bilateral trade between the two countries. There have been continued difficulties in obtaining visas to either country despite improved overall business facilitation. These could be brought to the knowledge of Home and Interior Ministries of India and Pakistan to allow feasible travel opportunities to traders in order to establish strong business relationships. The overall notion of traders in regard to the efficiency of the customs in processing documents, laboratory testing, security, and competence of customs officials was seen to be largely average or poor. A need for expansion of port infrastructure, especially the rail and road ports at Wagah–Attari was felt by traders of India and Pakistan alike. Steps must be taken to overcome the shortages in rail wagons plying on India–Pakistan rail route given the fact that trade via this route is unrestricted. The authors finally conclude with a number of policy recommendations which would provide much needed impetus to India–Pakistan bilateral trade such as increasing the general awareness regarding trade-related rules and procedures by making them publicly available, liberalization of visa regimes and recognizing the integral role of banks by having more branches of Indian and Pakistani banks in Pakistan and India, respectively.

In Chap. 10, “Facilitating India–Pakistan Trade through the Land Route,” Nisha Taneja, Isha Dayal and Samridhi Bimal, besides examining trade between India and Pakistan by different modes of transport, have identified impediments to transporting goods by land route and suggested measures to address the constraints which are also in compliance with the provisions in the recently signed WTO Agreement on Trade Facilitation. The study has also recommended that acceding to international conventions will make it easier for the two countries to connect with the rest of the world.

The majority of bilateral trade between India and Pakistan in recent years has taken place through sea and road as opposed to the rail route. The share of road in India’s exports to Pakistan has experienced a surge despite Pakistan’s restrictive trade policy where in it allows import of only 137 items via road. Goods, which cannot be exported by the road route, are transported at a much higher cost by sea. The lack of trade through the rail route resulted in a decline of India’s exports to Pakistan by 17 % from 2011–2012 to 2014–2015. Thus, the need of the hour is to address the impediments on the rail route as for Indian exports; it is the cheapest mode of transport available. The authors have therefore documented the various

impediments to transporting goods by rail through Attari. Some of the major obstacles are inadequacy in the number of wagons allocated to Indian exporters as well as lack of transparency in allocation of these wagons. Also there is a long waiting time on the Pakistani side and a delay in return of wagons since most of the export cargo from Pakistan has shifted to the road route. The authors are of the opinion that railway wagons carrying export cargo should be allowed to return empty instead of waiting in Lahore to get loaded. Also there is lack of infrastructure at the rail port in Amritsar, which leads to deterioration of goods and unnecessary demurrage charges. Lack of coordination among different agencies at the center and with local agencies at the state level is also one key reason as to why such impediments have not been addressed in a timely manner. The authors have also addressed the impediments to transporting goods by road through Wagah. Though a major step was taken in 2012 by opening up of the Integrated Check Post at the land customs station at Wagah, there continues to be infrastructural issues relating to warehouse checking, manual checking of trucks, and lack of laboratory testing facilities. Lack of transparency in conducting trade coupled with frequent breakdown of Electronic Data Interchange and nonoperational risk management system add to the problems of traders. The study has advocated recommendations to overcome these hurdles by providing urgent attention to railways, implementing a comprehensive and integrated international land transport policy, and promoting public–private partnership to develop infrastructure. Also lack of coordination between different agencies can be addressed by setting up a National Trade Facilitation Committee. Finally given India’s opportunity to link up with Central Asia through Afghanistan, India should accede to international conventions namely International Road Transport Convention (TIR) and Convention Concerning the International Transportation of Goods by Rail (COTIF).

Tridivesh Singh Maini, in Chap. 11 on “Munabao-Khokhrapur Land Route and India–Pakistan Relations” has sought to examine the potential of greater connectivity between Rajasthan and Sindh, via the Munabao–Khokhrapur land route and the benefits that will accrue to the business community of Rajasthan and beyond. Through secondary research as well as meetings with various stakeholders including businessmen, central government officials, customs and security officials, and passengers, the author has come to the conclusion that opening up of the land crossing at Munabao–Khokhrapur will not only help Barmar and parts of Rajasthan, but will also facilitate trade with other parts of the country.

The resumption of the Thar Express in 2006 revived links between Western Rajasthan and Sindh and the number of passengers has been reasonably consistent. While a large number of passengers are from separated families, a substantial number of people travel for pilgrimages to religious sites. Some of the complaints made by the passengers are logistical problems especially the fact that they had to travel a long way to board the train and securing a Pakistani visa was also a tedious process. Though there is currently no trade via the Munabao–Khokhrapur route or direct trade between Rajasthan and Sindh, there has been pressure for opening up the land route for trade as well as starting a goods train via this route. The author has estimated that upon opening up of the Munabao–Khokhrapur land crossing,

Indian exports to Pakistan worth 23.3 US\$ million and imports from Pakistan worth 5.3 US\$ million are expected to see a diversion in the route by which they presently reach the cities of Rajasthan, Madhya Pradesh, western Uttar Pradesh, and northern interior cities of Maharashtra. Although the share of trade diversion or potential trade through Munabo–Khokhrapar is very small in comparison to total trade between India and Pakistan, it has the potential to multiply through closer proximity to trade route, increased interaction between businessmen, substantial decline in trade costs and revival of linkages and complementarities between Western India and Sindh. On the Indian side, the biggest beneficiary of trade via the Munabao–Khokhrapar land crossing is Western Rajasthan, which includes Jodhpur, Jaisalmer, and Bikaner. It has also been observed through surveys that businessmen from Rajasthan have already established links with their counterparts in Pakistan but through Dubai. This is again a tedious process, which involves high costs estimated to be approximately INR 5 per Kg. Opening up of the Munabao–Khorakhpar route could save on about 3000 km of the present trading route and could also reduce the time taken for exports from one week to one day. The survey results conclude that India has high export potential in inorganic chemicals, stones, handicrafts, and food items. To conclude, the author has addressed some of the impediments to opening up of the land route such as lack of lobbying by the business community of Jodhpur, passiveness of the political class of Rajasthan, lack of concerted efforts by the Chamber of Commerce of both the countries and stringent visa regime. Thus, some of the issues that need to be addressed without further ado are greater involvement of the concerned stakeholders, organizing more Indo–Pak expos and establishing a Pakistani consulate in Jodhpur and an Indian one in Karachi.

In Chap. 12, “Media Underreporting as a Barrier to India–Pakistan Trade Normalization: Quantitative Analysis of Newsprint Dailies,” Rahul Mediratta assesses the role of newsprint media in its ability to capture the dynamism of economic and trade-related activities between India and Pakistan as opposed to its preoccupation with developments in the security realm. Lack of awareness about economic development between the neighboring states can be a major impediment for governments to invest further resources toward trade normalization. The study has looked into the quantum of nearly two decades of media coverage on India–Pakistan trade among five newspapers: Times of India (TOI), Economic Times (ET), Business Standard (BS), New York Times (NYT), and Wall Street Journal (WSJ). Digital archives of the five aforementioned news dailies were assessed using the Factiva database owned by Dow Jones and Company and a quantitative content analysis was performed for the period 1997–2013. Three keyword searches namely “India,” “India AND Pakistan,” and “India AND Pakistan AND Trade” were conducted on each newspaper for each of the years.

While “India AND Pakistan” results account for only 5 % of “India” results, “India AND Pakistan AND Trade” account for around 2.5 %. However, for international dailies, the proportion of content containing “India and Pakistan” among “India” was much higher since global news media would focus less on local news. The “India AND Pakistan” result peaked for New York Times and Wall

Street Journal particularly during the times of the Kargil War, attacks on the Indian Parliament and Mumbai terror attacks. Analysis was also conducted to observe what proportion of news on India and Pakistan focuses on trade-related activities and economic development. While the Economic Times, Business Standard, and Wall Street Journal exhibit waves over time depending upon the dynamism of bilateral trade, Times of India exhibits a relatively flatter line throughout the same period. Though the author acknowledges the fact that a popular daily is less likely to lay focus on trade-related matters as compared to an economic daily, the dynamism of an issue should be captured in both platforms. Times of India and New York Times also do not exhibit much variation in coverage on trade-related matters while the narrow economic dailies exhibit larger variations in proportions of coverage with coverage being high during periods of greater economic activity. Since the Times of India and New York Times cater to wider and popular audience base as compared to more select and politically influential users of the Economic Times, Business Standard, and Wall Street Journal, one of the major implications of such a dichotomy is that a large voting public is under informed about the decisions of a small elite group. Thus, not only can the public not exert the politicians to invest further resources toward trade normalization, but the government is also incapable of making informed decisions.

The author finally concludes by showing the way for future research directions in evaluating biases in reporting through qualitative content analysis, agenda-setting in India's Internet age, agenda-setting in India's cognitive, and social contexts and the media agenda which refers to the political economy of media production.

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Chapter 2

Agricultural Trade Between India and Pakistan: Status and Potential

Ramesh Chand and Raka Saxena

1 Backdrop

Trade among neighbouring nations has remained an important economic activity and has played a significant role in the economic development of trading partners. The literature on trade suggests that proximity is one of the major determinants of trade. Geographic proximity is also used as an important explanation for regional trade groupings or blocs. Often, regional economic relations are marred by historical hostility between neighbours, because of which neighbouring countries trade less with each other than with more distant countries. Trade between India and Pakistan is a classic case in this regard. Because of the historical hostility between the two countries, not much progress has been achieved in increasing regional trade in South Asia despite efforts to promote preferential trade (Chand 2006). The renowned proponent of free, multilateral trade and an opponent of regional groupings, Jagdish Bhagwati, cites the example of poor trade between India and Pakistan to refute the role of geographic proximity in trade (Bhagwati 1993). However, history shows that neighbourhood hostility can check neighbourhood trade for a long time, but not for ever. Eventually, trade liberalization prevails, even among hostile neighbours. One would expect trade to take place based on inherent comparative and competitive advantages, but often, in case of sectors like agriculture, trade occurs to meet the objectives of food security and achieving price stability.

At the time of partition, India accounted for about 70 % of Pakistan's official trade (Raihan and De 2013). Ever since, political relations between the two countries have led to frequent disruptions in trade. India granted the most favoured nation status to Pakistan after the establishment of World Trade Organization in 1996. Pakistan is still in the process of granting MFN status to India. The two

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countries have been trying to strengthen their bilateral economic and trade relation despite these disruptions.

South Asia's total trade has increased at a faster rate than the growth in world trade after 2005, however, trade within the South Asian bloc has increased at a lower rate than trade with the rest of the world (Chand 2012). Studies suggest that deeper economic relations between India and Pakistan would benefit not just the two countries but also the entire South Asian region, leading, potentially, to a rise in economic growth and trade competitiveness in the region. The study examines the trend and composition of agricultural trade between India and Pakistan focusing on 7 years before and after the implementation of SAFTA. It discusses the effect of SAFTA in promoting agricultural trade between the two countries. The study also analyzes the comparative advantage and trade complementarities in agricultural trade between the two countries. Additionally, the paper compares the level of subsidies given in agriculture in India and Pakistan in terms of their effect on fair trade. The results of the study have been used to identify opportunities for agricultural trade between the two countries.

2 Data and Methodology

The paper uses time series data on agricultural exports to Pakistan and agricultural imports from Pakistan, which is taken from Export-Import Databank, Ministry of Commerce, Government of India. The data on Pakistan's exports and imports to the World is taken from International Trade Centre website. Information on tariff and non-tariff barriers was taken from WTO, the respective Government websites and the MacMap website. Information related to SAFTA was obtained from the SAARC Website. Other relevant data was obtained from official, country specific sources. Theoretically, the value of export from country A to B should be same as the value of import of country B from A. However, there is often a mismatch between the two due to various reasons. In order to maintain consistency in trade data, the imports from Pakistan to India are considered to be the same as Pakistan's exports to India.

The study uses time series data on trade for 17 years from 1996–1997 to 2012–2013 (Annexure 2 and 3). The choice of the year 1996–1997 was based on the consideration that this was the first year after the constitution of the WTO, which marked a new beginning in agricultural trade liberalization in many developing countries. A major development related to trade in South Asia took place with the formulation of South Asia Free Trade Agreement (SAFTA) which came into effect in 2006. The study compares trade trends by dividing the relevant time period in two phases, i.e. before the formulation of SAFTA and after the formulation of SAFTA to assess its influence on the trade flows between the two countries. Thus, 2006–2007 was taken as the benchmark year for analyzing the trade trends between

India and Pakistan during 2006–2007 to 2012–2013. This comparison was used to reveal the effect of the regional trade agreement on bilateral agricultural trade. As the trade between the two countries fluctuates from year to year, the trade data is presented as an average of triennium ending (TE).

The revealed comparative advantage (RCA), most commonly calculated by using the Balassa Index (1965) indicates the relative advantage or disadvantage in major exportable commodities of both the countries. The index is estimated as follows:

$$RCA_{ij} = (X_{ij}/X_i)/(X_{wj}/X_w)$$

where

RCA_{ij} Revealed comparative advantage of i th country for j th commodity
 X_{ij} i th country's export of commodity j to world
 X_i i th country's total exports to world
 X_{wj} World exports of commodity j
 X_w Total world exports.

The revealed comparative advantage explains the position of a country with respect to global trade levels and indicates how other competing countries are integrating themselves with global trade.

The trade complementarity index was computed to assess the congruence in trade between two nations. The index is given by the sum of the absolute difference between the import share and the export share of the same commodity/category for one nation (exporting nation) and the other (importing nation) for the considered commodity/category, divided by two. It measures the degree to which the export pattern of one country (exporting country) matches the import pattern of the other country (importing country). The index, converted in percentage form, ranges from 0 to 100 and changes in the index over time indicate how compatibility between the supply in partner country and the demand in the destination country changes over time. An index value of 0 indicates no match, while a value of 100 indicates a perfect match in import demand and export supply.

The trade complementarity index (TCI) for trade between India and Pakistan is estimated as

$$\left\{ 1 - \left[\frac{\sum_i \left(\frac{\sum m_{id} \sum x_{is}}{\sum M_d \sum X_s} \right)}{2} \right] \right\} * 100$$

where d is the importing country of interest, s is the exporting country of interest, i is the set of commodities, x is the commodity export flow, X is the total export flow, m the commodity import flow and M the total import flow.

3 Total Trade and Agricultural Trade Between Pakistan and India

The broad picture of total trade and total agricultural trade between India and Pakistan during 1996–1997 to 2012–2013, is presented in Table 1, while a list of selected items under the agriculture category is provided in Annexure 1. The trend in trade during the relevant period before and after the implementation of the SAFTA is explained in these tables. Since there were yearly fluctuations in trade trends of the two countries, trade data is presented as triennium averages. The total trade between India and Pakistan was US\$234 million during the late 1990s. It increased to US\$ 610 million by TE 2005–2006. There was a growth of almost 30 % over the next 7 years in bilateral trade, which has now reached US\$ 2.3 billion. Trade flows between the two countries show that India's export to Pakistan remained far above Pakistan's export to India. During the 7 years before SAFTA, Pakistan's export to India shows a marginal increase. In the seven years following SAFTA, Pakistan's export to India rose by almost four times. India's export to Pakistan after the implementation of SAFTA showed slightly lower growth than its imports from Pakistan during the same period. However, due to the large difference in the base in TE 2005–2006, India's net trade with Pakistan increased from US\$ 388 million to US\$ 1458 million.

Until the late 1990s, India and Pakistan traded a few non-agricultural commodities and 69.8 % of the total trade was in agricultural products. This dominance of agriculture vanished during the next 7 years, largely because of a sharp rise in non-agricultural exports from India to Pakistan and partly because of a decline in agricultural exports from Pakistan to India. Agriculture trade recovered some ground after 2005–2006. Its share in total trade increased from 36.4 to 43.6 %. In volume, the trade between the two countries in this sector increased from US\$ 221 million in 2005–2006 to US\$ 842 million in TE 2012–2013. Around 85 % of this increase in agricultural trade was because of an increase in India's export to Pakistan and 15 % due to the increase in Pakistan's exports to India. The sluggish

Table 1 Total and agricultural trade between India and Pakistan before and after SAFTA implementation (US\$ million)

Trade	TE 1998/99	TE 2005/06	TE 2012/13
Total exports from India to Pakistan	135.5	499.1	1882.0
Total exports from Pakistan to India	98.4	110.7	424.0
Total trade	233.8	609.8	2306.0
Net trade	37.1	388.3	1458.0
Agricultural exports (India to Pakistan)	69.4	133.2	842.7
Agricultural exports (Pakistan to India)	93.7	88.6	162.7
Total agricultural trade	163.1	221.8	1005.4
Net agricultural trade	-24.3	44.6	680.0
Share of agricultural trade in total trade	69.8	36.4	43.6

Source EXIM databank, Ministry of Commerce, Government of India

growth in Pakistan's exports of agricultural products to India needs to be analysed by looking at supply side constraints in Pakistan's agricultural sector.

The series of annual trade data of the two countries reveal some interesting patterns (Fig. 1). Between 1996–1997 and 2003–2004, Indo–Pak trade did not increase much. However, in 2004–2005, the year when SAFTA was formulated, both India's exports to Pakistan and Pakistan's exports to India increased significantly. In the next year, trade between the two countries doubled. There was a further increase in bilateral trade in the year 2006–2007, but the momentum in trade seen during 2002–2003 to 2006–2007 could not be sustained in the subsequent years and SAFTA proved to be in the nature of a one-time gain.

From the data, it can be seen that India's export to Pakistan has risen faster than India's imports from Pakistan for 2 years after the formulation of SAFTA. This resulted in the net trade favouring India to the tune of US\$ 1.66 billion in year 2007–2008, which declined in subsequent years except in 2010–2011. It is also interesting to note that ever since the implementation of SAFTA, Pakistan's export to India increased from US\$ 323 to US\$ 542 million during 2006–2007 to 2012–2013, recording an increase of 67.8 % over six years, while India's exports to Pakistan in the same period increased by 56.4 %, from US\$ 1350 million to US\$ 2064 million.

4 Trend and Composition of Indian Agricultural Exports to Pakistan

SAFTA's effect on India–Pakistan trade is much sharper on trade of agricultural goods as compared to its effect on total trade (Fig. 2 and Annexure 1). India's export of agricultural products remained small till the year 2004–2005 and followed

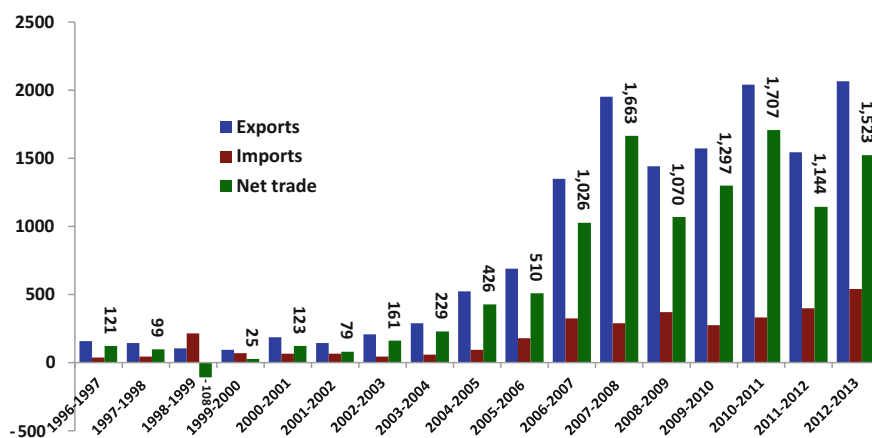


Fig. 1 India's trade (all commodities) with Pakistan (US\$ million). *Source* EXIM databank, Ministry of Commerce, Government of India

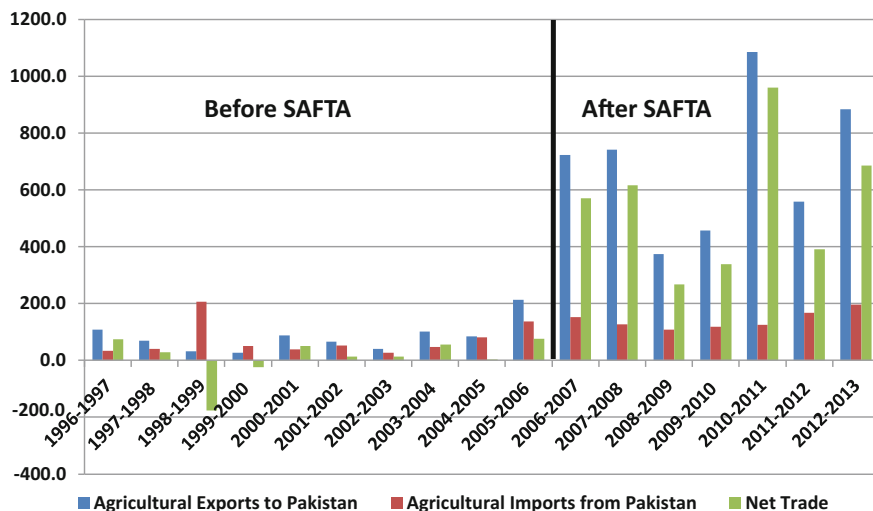


Fig. 2 India's agricultural trade with Pakistan (US\$ million). *Source* EXIM databank, Ministry of Commerce, Government of India

a U-shaped trend during 1996–1997 to 2004–2005. Exports declined from US\$ 108 million to US\$ 26 million between 1996–1997 and 1999–2000 and then rose to US\$ 101 million in year 2003–2004. In this period, Pakistan's total exports to India hovered around US\$ 40 million, except in the year 1998–1999, when its exports reached US\$ 207 million—a record, which remained till the year 2012–2013. Moreover, 1998–1999 was the only year when Pakistan's exports to India exceeded its imports from India by a big margin.

India's agricultural exports to Pakistan started picking up in the year 2005–2006 and have increased substantially ever since. Exports increased three-and-a-half times to US\$ 722 million in the year 2006–2007. However, there was a break in this trend for 3 years, after which, exports of agricultural products from India to Pakistan increased again and crossed the US\$ 1 billion mark. Thus, India's exports to Pakistan have been characterized by a cyclical pattern with an upward trend. Exports have increased to much higher levels since the implementation of SAFTA.

India's annual imports of agricultural products from Pakistan (alternatively, Pakistan's annual agricultural exports to India) have ranged between US\$ 100–200 million since the year 2005–2006, the period beginning with a decline in exports followed by an increase.

The sharp rise in India's exports to Pakistan resulted in exports exceeding imports by more than US\$ 500 million in year 2006–2007. The gap declined to less than half in subsequent years and again rose to another peak level of US\$ 969 million in 2010–2011. The net trade pattern has been determined by the pattern of India's agricultural exports to Pakistan because Pakistan's exports to India played a limited role in influencing it.

Agricultural trade trends between the two countries reveal a clear but one-time increase in year 2006–2007, the year in which the SAFTA agreement was implemented. After 2006–2007, agricultural exports from India to Pakistan remained higher than those from Pakistan to India in all years but show a lot of variability. Agricultural imports from Pakistan, though small, did not fluctuate as much as exports to Pakistan. It appears that a large part of India's export to Pakistan catered to stabilization of domestic supply in Pakistan. Such trade is usually not based on strong comparative advantage but on climatic factors causing production fluctuations in the destination country.

The composition of India's agricultural exports to Pakistan during TE 1998–1999 to TE 2005–2006 and during TE 2005–2006 to TE 2012–2013 can be found in Table 3. The commodity composition of export has undergone significant changes overtime, as there has been export diversification. During TE 1998–1999, sugar and confectionery accounted for more than half of the total agricultural exports from India and close to one-fifth of exports consisted of coffee, tea, mate and spices. These two groups accounted for almost 80 % of Pakistan's agricultural imports from India. Rubber and its article was the third important item of import with a 7.7 % share in India's imports to Pakistan. Oilseeds accounted for 4 % while vegetables, roots and tubers accounted for 2 % share in the export basket.

In the next seven years, sugar and sugar confectionery was relegated to the fifth position and its share declined to less than 10 %. The volume of sugar and sugar confectionery imported by Pakistan from India declined from US\$ 40 million to US\$ 11.8 million between TE 1998–1999 and TE 2005–2006. Cotton emerged as a significant item of export from India to Pakistan since the year 2003–2004. During TE 2005–2006, cotton, mainly lint, constituted 31 % of India's agricultural exports to Pakistan with an annual volume of US\$ 42 million. Rubber and its articles ranked second, accounting for more than one-fifth of the total. Like sugar, the share of coffee, tea, mate and spices also declined sharply. Vegetables emerged as an important item of export to Pakistan, with an annual value of US\$ 12.6 million. Oilseeds like soybean, groundnut and soy meal, vegetables seeds, and *isabgul* husk accounted for 7.9 % of agricultural exports from India to Pakistan. Pakistan also started importing cereals like maize and rice from India in the mid-2000s. Livestock products like meat and dairy produce also figured as important Indian exports to Pakistan. Trade data, for the three-year period ending 2012–2013, reveals that cotton is now the dominant export item from India to Pakistan. Cotton alone accounted for 38.8 % of total exports of agricultural products to Pakistan. Year-wise data show that cotton export dropped significantly in some years but the 3-year average has remained quite high.

The volume of agriculture exports increased by more than six times during the seven-year period after 2005–2006. Out of the total exports of US\$ 843 million during TE 2012–2013, export of cotton accounted for close to 40 %. It seems these imports are feeding into woven fabrics and textile exports from Pakistan. This presents as an excellent example of a trade-led agriculture industry link between India and Pakistan. Sugar is the second most important item with a 14 % share and volume of US\$ 118 million. Export of edible vegetables, including pulses, has

increased since 2004–2005; this includes export of tomatoes, onions and pulses. In the year 2012–2013, exports of these items crossed US\$ 144 million. Coffee, tea and spices, which are traditional export items, accounted for 10 % of the total export while rubber and its articles accounted for 6.5 % of export. Disaggregated data show that the growth in the export of vegetable seeds, *isabgul* husk and groundnut has been robust and smooth. Other important items figuring in export in recent years are milk and coconut (Table 2).

The growth rate in export of major items (measured in US dollars) during 1996–2004 is presented in Table 3. During the eight-year period before SAFTA, the export of more than half the products on this list either declined or registered zero

Table 2 Composition of Indian agricultural exports to Pakistan (%)

HS code (2-digit)		TE 1998/99	TE 2005/06	TE 2012/13
	Total agricultural exports (US\$ million)	69.47	133.29	842.73
01	Live animals	0.00	0.03	0.00
02	Meat and meat products	0.04	2.20	0.59
03	Fish and crustaceans	0.09	0.04	0.12
04	Dairy products and bird eggs	0.01	2.30	1.21
05	Products of animal origin	0.01	0.00	0.09
06	Live trees and other plants	0.02	0.00	0.01
07	Edible vegetables	2.13	9.35	14.42
08	Fruits	0.89	0.40	2.30
09	Tea and beverages	19.09	8.77	10.22
10	Cereals	0.19	1.93	2.56
12	Oilseeds	4.01	7.94	5.91
13	Lac, gums, etc.	1.58	1.36	1.27
14	Vegetable planting material	4.03	1.64	0.31
15	Animal or vegetable fat	0.19	0.33	0.06
17	Sugar	58.81	8.65	14.07
19	Cereal preparations	0.02	0.69	0.63
20	Vegetable and fruit preparations	0.00	0.01	0.09
21	Misc. edible preparations	0.36	0.19	0.05
22	Beverages	0.00	0.06	0.01
24	Tobacco	0.14	0.31	0.27
40	Rubber and articles	7.67	21.79	6.46
41	Raw hides and skins	0.01	0.13	0.06
51	Wool	0.01	0.45	0.07
52	Cotton	0.37	31.33	38.84
53	Other vegetable fibres	0.26	0.04	0.26
	Others items (11, 44, 47, 50)	0.08	0.06	0.12

Source EXIM databank, Ministry of Commerce, Government of India

Table 3 Growth trends in major exportable commodities to Pakistan

HS code (4-digit)	Commodity	Compound annual growth rates (%)		Change in growth
		1996– 2004	2004– 2012	
0402	Milk and cream	0.00	23.38	↑
0407	Bird eggs	0.00	18.23	↑
0713	Dried leguminous vegetables	-10.12	28.81	↑
0702	Tomatoes	13.08	96.63	↑
0703	Onion and other vegetables	-14.85	28.66	↑
0801	Coconut and other nuts	-25.27	99.42	↑
0902	Tea and beverages	37.09	29.26	↓
0904	Pepper	-31.07	85.09	↑
0908	Nutmeg and spices	-1.28	28.70	↑
1006	Rice	46.38	24.54	↓
1007	Grain sorghum	-29.82	87.98	↑
1008	Buckwheat and other cereals	-26.44	115.22	↑
1211	Plants and parts of plants	5.34	26.08	↑
1209	Seeds and planting material	2.37	24.75	↑
1202	Groundnuts	-14.83	77.08	↑
1701	Cane/beet sugar	-21.85	-5.29	↑
4011	Rubber tyres	46.51	3.37	↓
4013	Rubber tubes	7.08	1.45	↓
5201	Cotton	59.84	31.79	↓
5205	Cotton yarn	45.91	34.99	↓
5209	Woven fabrics	14.13	28.46	↑

Source Computed by authors

growth. These include milk, egg, pulses, vegetables, coconut, spices, coarse cereals, groundnut and sugar. The remaining items like tomato, rice, plants and parts of plants, vegetable seeds, rubber and cotton registered positive growth. Between 2004–2005 and 2012–2013, all 21 products included in the table except sugar showed a positive trend. Further, except rubber tyres and tubes, the annual growth rate was more than 18 % for all the items.

Due to very high year-to-year fluctuation in the export of some items, the growth rates do not reveal the true picture of exports, particularly in the case when exports cater to ensuring stability in domestic supply. For Instance, India's export of sugar to Pakistan has been significant in some years like 2006–2007 and 2010–2011, when the export volume exceeded US\$ 335 million. As very little was exported in

other years, this trend growth rate is misleading. Therefore, we do not place much weight on trend growth rate statistics for such items.

5 Major Suppliers of Agricultural Products to Pakistan

In order to assess India's position in meeting import demand from Pakistan, this paper identifies major overseas suppliers of agricultural products to Pakistan. Table 4 presents data on agricultural import of major items by Pakistan from the world during TE 2004–2005 and TE 2012–2013 along with the share of top 5 exporting countries. Cotton has been the major item of import by Pakistan and its volume has increased from US\$ 455 million during TE 2004–2005 to US\$ 716 million in TE 2012/2013. India is the largest supplier of raw cotton (carded or combed) as well as cotton yarn. Tea and beverages are the second most important items imported by Pakistan. Kenya meets 61 % and India meets one-tenth of the import demand for tea in Pakistan. In case of dried leguminous vegetables, i.e. pulses, India meets one-tenth of Pakistan's imports. In the case of fresh vegetables like tomatoes and onions, India is the major overseas supplier for Pakistan. Similarly, for plant and parts of plants, close to 80 % of the total import demand is met from India. Pakistan's import of milk and cream has increased sharply, touching US\$ 88 million during TE 2012–2013. This demand is met by imports from the USA and Europe and India does not figure among the top five suppliers to Pakistan. Surprisingly, India also does not figure among the top five suppliers of sugar, although it exports sugar to many countries. Pakistan's sugar import is quite sizable with half of import supply coming from Malaysia. This is one area where India can push its exports. Pakistan imports small quantities of coarse cereal, which is met almost entirely by India. India also meets half of Pakistan's groundnut import demand. The trends in Pakistan's imports indicate that India has not been able to take advantage of the growth in imports of many items such as milk, cream, sugar, pulses, and tea and beverages. The commodities, whose imports from India show a large increase, are tomatoes, onions, and other vegetables, pepper, seeds, and planting material and cotton.

6 Trends and Composition of Indian Agricultural Imports from Pakistan

India imported agricultural items from Pakistan worth US\$ 94 million in the late 1990s (Table 5). In the next seven years, the volume of India's import from Pakistan dropped to US\$ 88.6 million but recovered after the implementation of the SAFTA agreement in the year 2006. Pakistan's agricultural exports to India were dominated by a few commodities. In the late 1990s, sugar and confectionery

Table 4 Pakistan's imports of major agricultural commodities and major suppliers to Pakistan, US\$ 000

HS code (4-digit)		TE 2004/05	TE 2012/13	Top suppliers to Pakistan and their share (%) (2012)
0402	Milk and cream	13,391	88,381	USA (34.5), New Zealand (16.7), Germany (12.7), Lithuania (10.6), France (6.2)
0407	Bird eggs	374	2759	USA (17.1), Germany (10.9), France (8.5), Jordan (6.5), United Kingdom (1.5)
0702	Tomatoes	45	77,728	India (97.9), Afghanistan (1.9), Iran (Islamic Republic of) (0.2)
0703	Onion and other vegetables	22,107	72,115	India (56.2), China (30.5), Afghanistan (12.9), Iran (Islamic Republic of) (0.1), Iceland (0.1)
0713	Dried leguminous vegetables	105,810	390,160	Australia (31), Myanmar (11.1), India (10.8), Ethiopia (8.8), Canada (7.4)
0801	Coconut and other nuts	7529	9032	Sri Lanka (64.5), Malaysia (10), Vietnam (7.8), India (7.1), Thailand (7)
0902	Tea and beverages	207,398	338,359	Kenya (61.2), India (9.9), Rwanda (6), Sri Lanka (4.3), Viet Nam (4.2)
0904	Pepper	7199	22,657	India (49.4), Viet Nam (29.2), Sri Lanka (9.7), Brazil (5.8), Indonesia (2.5)
0908	Nutmeg and spices	7935	9961	Guatemala (71.6), India (19.2), Indonesia (5.5), Sri Lanka (3.1), China (0.4)
1006	Rice	1455	35,052	China (66.1), USA (29.6), Sri Lanka (2), Philippines (1.6), India (0.4)
1007	Grain sorghum	115	2282	India (100)
1008	Buckwheat and other cereals	157	3918	India (72.7), Ukraine (22.9), Canada (2.1), Australia (1.5), China (0.6)
1202	Groundnuts	1746	6836	India (50.4), China (44.1), United Republic of Tanzania (3.8), Madagascar (0.9), Kenya (0.3)
1209	Seeds and planting material	20,298	57,418	India (36.6), Egypt (26.9), USA (9.2), China (6.5), Thailand (4.7)
1211	Plants and parts of plants	3251	6016	India (79.6), Afghanistan (5.8), Ethiopia (3), Iran (2.9), Syrian Arab Republic (1.9)
1701	Cane/beet sugar	153,163	302,262	Malaysia (54.3), United Arab Emirates (17.8), Saudi Arabia (11.2), Germany (5.9), United Kingdom (3.1)
4011	Rubber tyres	111,252	196,561	China (62.6), India (10.4), Thailand (9.3), Japan (7.2), Indonesia (2.6)
4013	Rubber tubes	3199	3421	China (62.4), India (22.2), Thailand (2.9), Indonesia (2.7), Korea (2.6)

(continued)

Table 4 (continued)

HS code (4-digit)		TE 2004/05	TE 2012/13	Top suppliers to Pakistan and their share (%) (2012)
5201	Cotton	455,467	716,636	India (28.6), USA (21.1), Brazil (19.1), Afghanistan (12.1), Egypt (6.4)
5205	Cotton yarn	8178	26,611	India (71.2), China (12.9), Egypt (8.8), Turkmenistan (4.4), Bangladesh (0.7)
5209	Woven fabrics	3556	9501	China (61.2), Hong Kong (7.2), India (5.6), Turkey (4.8), Bahrain (4.4)

Source www.intracen.org

accounted for 69 % of India's agricultural imports from Pakistan. The share of sugar dropped to 14.6 % in the mid-2000s and has been shrinking ever since, with Pakistan remaining a large net importer of sugar. Edible fruits and nuts emerged as India's largest import item from Pakistan, accounting for 48.4 % of total agricultural imports. This mainly consists of dates. The second most important item in recent years has been cotton fabric and textiles having a 30 % share in total agricultural imports. Annual import data shows that India imported fruits worth US\$ 92.5 million and cotton fabric and textiles worth US\$ 60 million in the year 2012–2013 (Annexure 2). The import of raw hides and skins has been over US\$ 11 million for a couple of years. Annual import data also shows a consistent increase 2008–2009 onward, which increased the value of India's imports from Pakistan from US\$ 107 million to US\$ 196 million in 2012–2013.

Changes in India's major agricultural imports between TE 2004–2005 and TE 2012–2013 and the share of major overseas suppliers in these imports are presented in Table 6. Pakistan figures among the top five suppliers of agricultural products to India in some commodities, but it figures at the bottom in most cases with a very low share. However, Pakistan meets almost one fourth of India's import demand of dates and other fruits. Pakistan also has a significant presence in India's import of raw hides and skin and cotton products with a share close to 14 %. Even in case of dates, Iraq exports a much higher quantity to India than Pakistan.

The trend growth rates of India's import of major agricultural commodities during 1996–1997 to 2004–2005 and during 2004–2005 to 2012–2013 are presented in Table 7. Dates and other fruits, which are the major items of India's import from Pakistan, showed an annual decline of 6 % for the eight-year period ending in 2004–2005. Thereafter, these imports increased at 16.7 % every year. A similar pattern is observed in the import of grapes. The import of pulses, although small, showed a sharp rise before 2004–2005 followed by a sharp decline thereafter. The import of raw hide and skin and cotton products (fabric and textile) registered a high rate of growth in both periods.

Table 5 Composition of Indian agricultural imports from Pakistan (%)

HS code (2-digit)		TE 1998/99	TE 2005/06	TE 2012/13
Total agricultural imports from Pakistan (US \$ million)		93.73	88.64	162.7
03	Fish and crustaceans	0.00	0.26	0.70
05	Products of animal origin	0.00	0.01	0.06
07	Edible vegetables	0.52	36.98	2.16
08	Fruits	24.58	23.02	48.40
09	Tea and beverages	0.51	1.30	1.05
12	Oilseeds	1.24	1.42	2.55
13	Lac, gums, etc.	1.07	1.32	0.84
14	Vegetable planting material	0.01	0.02	0.01
15	Animal or vegetable fat	0.00	0.00	0.34
17	Sugar	69.22	14.59	1.38
19	Cereal preparations	0.00	0.00	0.01
20	Vegetable and fruit preparations	0.00	0.00	0.38
21	Misc edible preparations	0.00	0.01	0.04
41	Raw hides and skins	1.02	1.31	7.43
51	Wool	1.44	2.12	5.22
52	Cotton	0.37	17.63	29.35
53	Other vegetable fibres	0.00	0.00	0.06

Source Computed by authors

7 Share of Bilateral Agricultural Trade in Total Agricultural Trade

Although agricultural trade between the two countries has been increasing, the share of bilateral trade in the total trade with the world remained quite low for both the countries. However, Indo–Pak trade increased much faster than each country’s trade with the rest of the world during 2003–2006. After 2006, Indo–Pak trade could not keep pace with their trade with the rest of the world (Fig. 3). India’s agricultural trade with Pakistan constituted 0.59 % of its total agricultural trade with all countries in 2003. The share steadily increased to 3.09 % by 2006. These gains were lost in the subsequent periods and the share of India’s trade with Pakistan declined to 1.40 % in 2009 and 1.00 % of its total agricultural trade by the year 2012. Pakistan’s trade with India presented a somewhat better picture. Trade in agricultural commodities between India and Pakistan constituted 1.61 % of Pakistan’s total agricultural trade in 2003. This share increased to 7.52 % by 2006. However, neither the pace nor the level could be sustained after 2007, except 2010

Table 6 India's imports of major agricultural commodities and major suppliers in Indian market, US\$ 000

HS code (4-digit)		TE 2005/06	TE 2012/13	Top 5 suppliers to India and their share (%) vis a vis share of Pakistan, 2012
0713	Dried vegetables, shelled	544,698	1,996,198	Myanmar (26.2), Canada (22.9), Australia (14.5), Russian Federation (8.7), China (4.4), Pakistan (0.1)
0802	Nuts	149,273	467,644	United States of America (59.4), Bangladesh (11.5), Australia (9.9), Iran (Islamic Republic of) (7.9), China (2.4), Pakistan (close to 0)
0804	Dates, figs, pineapples, mangoes, avocados, guavas	48,895	156,099	Iraq (40.1), Pakistan (24.4), Afghanistan (10.5), Iran (Islamic Republic of) (7.6), United Arab Emirates (5.6)
0806	Grapes, fresh or dried	10,942	20,441	Afghanistan (51), United States of America (24.2), Peru (5.9), China (5.3), Chile (4), Pakistan (0.9)
1207	Oil seeds	12,555	58,367	Turkey (41.8), Ghana (11.9), Benin (7.6), Somalia (7.2), Sudan (5.4), Pakistan (5.1)
1211	Medicinal plants	14,636	40,481	Australia (12.3), Netherlands (11.8), Congo (10.1), Vietnam (8.9), Sri Lanka (5.5), Pakistan (2.7)
1511	Palm oil and its fraction	1,560,483	6,376,759	Indonesia (65.8), Malaysia (31.8), China (0.6), Argentina (0.2), Brazil (0.1)
1512	Safflower, sunflower/cottonseed oil and fractions	40,191	953,878	Ukraine (88.6), China (4.2), Argentina (3.3), Russian Federation (1.5), Bahrain (0.7)
1701	Cane or beet sugar	126,184	476,255	Brazil (99.5), Pakistan (0.2), United States of America (0.1), Germany (0.1), United Arab Emirates (0.1)
4101	Raw hides and skins of bovine/equine animals	28,306	50,480	Italy (14.8), Germany (5.5), France (5.3), Iraq (5.1), China (4.3), Pakistan (2.1)
4104	Leather of bovine/equine animal	117,443	228,743	Italy (13.9), Argentina (11.8), China (7.1), Thailand (6.3), Indonesia (5.2), Pakistan (1.5)
4107	Leather of other animals	19,711	69,394	Italy (42.8), Thailand (7.7), China (5.9), Germany (4.2), Pakistan (4.1)

(continued)

Table 6 (continued)

HS code (4-digit)		TE 2005/06	TE 2012/13	Top 5 suppliers to India and their share (%) vis a vis share of Pakistan, 2012
5201	Cotton, not carded or combed	245,126	272,000	United States of America (22.6), Pakistan (13.9), Egypt (9.8), United Republic of Tanzania (9), Côte d'Ivoire (6.1)
5208	Woven cotton fabrics	111,386	164,111	China (72.7), Bangladesh (6.4), Hong Kong, China (4.8), Italy (2.7), Pakistan (2.3)
5209	Woven cotton fabrics	49,099	59,785	China (31.6), Turkey (18.9), Pakistan (13.8), Italy (8.8), Hong Kong, China (3.7)

Source www.intracen.org

Table 7 Growth trends in major exportable commodities of Pakistan

HS code (4-digit)	Commodity	Compound annual growth rates		Direction of growth
		1996–2004	2004–2012	
0713	Dried leguminous vegetables	77.98	-20.12	↓
0804	Dates and other fruits	-5.93	16.68	↑
0806	Grapes	-7.48	12.59	↑
0802	Nuts	-26.44	-2.88	↑
1207	Oilseeds	5.04	5.67	↑
1211	Plants and parts of plants	-0.92	7.18	↑
1701	Cane/beet sugar	-26.76	13.86	↑
4107	Leather	-6.28	57.23	↑
4104	Tanned/crust hides and skins	-11.47	32.84	↑
4101	Raw hides and skins	13.46	29.74	↑
5201	Cotton	9.09	45.15	↑
5209	Woven fabrics	26.47	2.96	↓
5208	Woven fabrics	73.15	-7.96	↓

Source Computed by authors

when India's agricultural exports to Pakistan jumped from US\$ 457 million to US\$ 1085 and Pakistan's trade ratio increased to 9.27 %, while India's trade ratio increased to 2.9 %. The latest data show that Pakistan's trade in agriculture with India is 4.55 % of its agricultural trade with all countries.

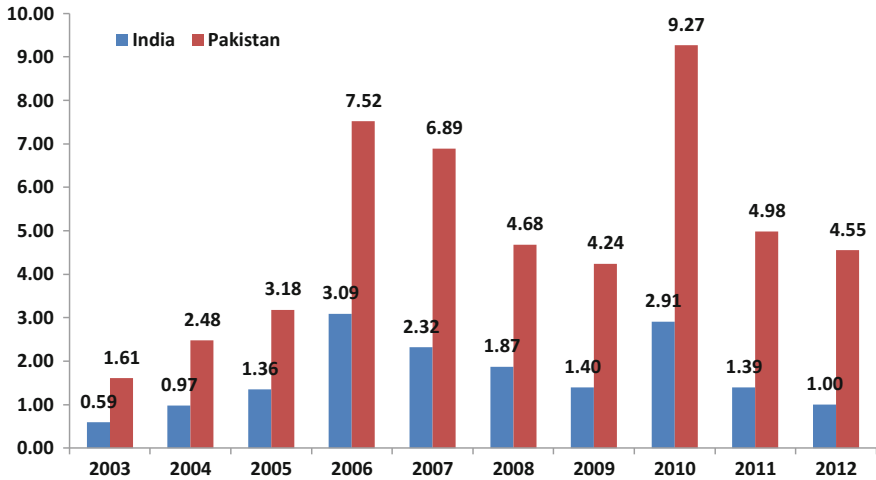


Fig. 3 India and Pakistan's bilateral agricultural trade: share in total world agricultural trade of two countries. *Source* Computed by authors

8 Agricultural Trade Complementarity Between India and Pakistan

The trend in trade complementarity index explains why India's exports to Pakistan have seen higher growth than Pakistan's exports to India. The agricultural trade complementarity between Indian exports and Pakistan imports increased from close to 46 % in 2003 to around 60 % in 2008. Thereafter, the index decreased to 44 % in 2012 (Fig. 4). India's export pattern matches significantly with the import pattern of Pakistan in case of cereals and oilseeds. Since India is self-sufficient in most agricultural commodities and major Indian agricultural imports from Pakistan are limited to only a few items, the complementarity is low in case of Pakistani exports and Indian imports. The trade complementarity index between Pakistan exports and Indian imports remained close to 20 % over the last ten years except in 2008. Pakistan's import demand largely matches the export supply of India whereas India's import demand does not match too much with Pakistan's export supply.

9 Revealed Comparative Advantage

The pattern of RCA was examined at the HS 4-digit level for the last 10–12 years to understand its temporal movement. An RCA index value of greater than one indicates a revealed comparative advantage in that product. Table 8 provides the estimates of RCA for major Indian commodities being exported to Pakistan. Tea has been a traditional Indian item of export, but analysis of its RCA, indicates

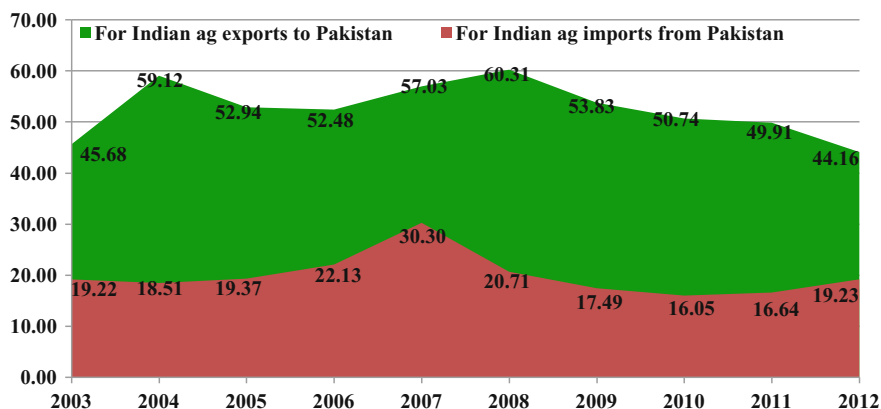


Fig. 4 Trade complementarity index for agricultural trade between India and Pakistan. *Source* Computed by authors

Table 8 RCA for major exportable commodities of India to Pakistan

Year	Tea (0902)	Cotton (5201)	Dried leguminous vegetables (0713)	Tomato (0702)	Cane/beet sugar (1701)
2001	8.35	0.10	1.61	0.01	1.94
2002	7.34	0.07	1.56	0.04	1.77
2003	6.77	0.29	1.66	0.02	2.49
2004	7.02	1.07	2.04	0.02	0.3
2005	6.27	1.97	3.92	0.01	0.16
2006	5.55	4.92	2.68	0.08	1.86
2007	5.12	7.65	1.44	0.16	2.99
2008	5.19	7.31	0.72	0.24	3.89
2009	5.84	6.87	0.62	0.25	0.09
2010	5.01	9.17	1.15	0.14	1.34
2011	4.88	6.39	1.05	0.40	2.09
2012	3.51	5.92	0.7	0.22	1.94

Source Computed by authors

declining comparative advantage over time even though its value remains greater than unity. In case of raw cotton, there was a significant increase in RCA after the adoption of Bt cotton technology in India. Trade in other commodities like pulses and tomatoes seems to have risen due to neighbourhood factors and domestic stability concerns.

Table 9 provides the RCA for major commodities being exported by Pakistan to India. Due to the climatic factors, Pakistan has an inherent and sustained comparative advantage in case of dates. The greatest comparative advantage lies in the exports of cotton textiles and woven fabrics. Both countries have integrated themselves in creating a value chain, in which India is exporting raw staple cotton

Table 9 RCA for major exportable commodities of Pakistan to India

Year	Dates, etc. (0804)	Cotton (5201)	Woven fabrics (5209)	Woven fabrics (5208)	Leather (4107)	Leather of bovine (4104)	Cane or beet sugar (1701)
2003	3.15	1.02	1.01	11.02	0.02	3.7	0.43
2004	3.18	1.42	1.67	8.65	0.12	3.78	0.32
2005	2.54	1.24	1.6	9.25	0.01	3.84	0.28
2006	2.34	0.85	4.06	8.93	0.19	3.15	0.14
2007	2.7	0.76	7.41	9.34	0.54	3.38	0.01
2008	2.29	1.79	10.22	9.55	1.41	1.08	0.84
2009	3.08	3.65	13.46	8.5	1.68	0.87	0.02
2010	2.49	2.4	14.81	7.87	2.45	0.52	0.01
2011	2.66	2.71	16.18	7.78	2.45	0.13	0.01
2012	3.15	3.01	19.98	7.97	2.72	0.26	0.82

Source Computed by authors

to Pakistan and buying value added textiles and fabrics from it. Similar customer taste and preferences for the fabrics/textiles and designs in the neighbouring states of Punjab and Kashmir have further enhanced the cotton trade between the two countries.

10 Identifying Growth Opportunities

There are two types of opportunities to expand agricultural trade between the two countries—one, by replacing existing trade with a third country and second through trade creation. The neighbourhood factor, as in the case of India and Pakistan, favours both. The opportunities to expand bilateral trade by efficiently replacing third country trade can be identified by looking at the export volume of country “A” to the world, import volume of country “B” from the world and from country “A” and vice versa. Table 10 presents opportunities for export from India to Pakistan and Table 11 presents opportunities for export from Pakistan to India.

It can be observed from Table 10 that there is no scope for expanding exports of a few items from India to Pakistan, although these are items of large export from India. For instance, India exports meat and meat products worth US\$ 2720 million and Pakistan’s total import of this item is US\$ 5.0 million. Since Pakistan’s entire import demand for this product is already met by India, this implies no further scope for expanding exports by substituting third-country exports. In contrast to this, dairy products and eggs present with a significant export potential to Pakistan. Pakistan’s import demand for dairy products and eggs is US\$ 114 million and it meets less than one-tenth of it from India, despite the fact that India’s export volume is 2.5 times the import demand in Pakistan. Similarly, an opportunity exists for promoting oilseeds exports from India to Pakistan; the latter imports oilseeds

Table 10 India's agricultural exports and Pakistan's imports (TE 2012–2013, US\$ million)

Product	India's exports to the world	Pakistan's imports from India	Pakistan's imports from world
Live animals	11.9	0.0	15.7
Meat and meat products	2720.4	4.2	4.9
Fish and crustaceans	2976.7	1.0	4.0
Dairy products and eggs	289.1	11.5	114.1
Products of animal origin	134.5	0.7	2.6
Live trees and plants of parts	73.0	0.0	1.4
Vegetables, roots and tubers	981.1	121.7	554.8
Fruits and nuts	1355.4	19.4	125.4
Tea and spices	2662.4	86.2	433.5
Cereals	6424.8	21.6	87.1
Oilseeds	1660.3	49.9	644.9
Lac gums, etc.	2951.5	10.7	10.7
Vegetable planting material and prod	62.4	2.6	18.8
Animal or vegetable fats	937.6	0.5	2251.5
Sugar and sugar confectionery	1698.0	118.7	323.6
Cereal preparations	357.6	5.3	79.3
Vegetable, fruits and nuts prep	345.7	0.8	28.6
Misc edible preparations	437.7	0.4	48.4
Tobacco and tobacco products	877.6	2.3	16.4
Raw hides and skins	990.0	0.5	92.1
Wool and other products	184.1	0.6	15.5
Cotton	8261.6	327.6	808.1
Other vegetable textile fibres	364.4	2.2	67.8

Source Computed by Authors

worth US\$ 645 million, which is less than 40 % of India's exports of oilseeds. Like dairy products and eggs, Pakistan meets less than one-tenth of its oilseeds imports from India. Additionally, there is a much stronger case for promoting cotton export from India to Pakistan. It emerges from Table 10 that, except meat and meat products, there is a vast scope for India to promote agricultural exports to Pakistan by taking advantage of the neighbourhood factor, which gives it an edge over rest of the world.

Table 11 Pakistan's agricultural exports and India's imports, TE 2012–2013, US\$ million

Item	Pakistan's exports to world	India's imports from Pakistan	India's imports from world
Live animals	23.0	0.0	10.0
Meat and meat products	166.7	0.0	1.6
Fish and crustaceans	261.4	1.1	83.1
Dairy products and eggs	71.4	0.0	157.0
Products of animal origin	48.0	0.1	39.7
Live trees and plants of parts	1.1	0.0	19.9
Vegetables, roots and tubers	189.0	3.5	2030.7
Fruits and nuts	304.3	78.7	1882.4
Tea and spices	57.8	1.7	432.8
Cereals	2382.6	0.0	32.8
Oilseeds	57.7	4.2	202.3
Lac gums, etc.	97.8	1.4	135.5
Vegetable planting material and products	6.4	0.0	10.1
Animal or vegetable fats	166.4	0.6	9219.4
Sugar and sugar confectionery	136.0	2.3	486.5
Cereal preparations	40.6	0.0	40.7
Vegetable, fruits and nuts preparations	50.6	0.6	72.4
Misc edible preparations	19.6	0.1	108.1
Tobacco and tobacco products	25.2	0.0	36.8
Raw hides and skins	447.0	12.1	515.8
Wool and other products	11.7	8.5	399.1
Cotton	4778.7	47.8	572.0
Other vegetable textile fibres	4.8	0.2	251.9

Source Computed by authors

Opportunities for Pakistan to promote its export to India are captured in the information presented in Table 11. India imported raw hides and skins worth US\$ 515 million during TE 2012–2013; only 2.5 % of this import was from Pakistan, although Pakistan's exports of raw hides and skins were large enough to meet 87 % of the demand in India.

Unlike India, Pakistan has limited opportunities to promote agricultural exports to India because its export surplus matches India's import needs only for a few commodities. Pakistan's major agricultural export is cereals and India itself is a large exporter of cereals. Where, India is in deficit, Pakistan is not in surplus.

Therefore, the scope for Pakistan to replace third-country export to India is limited. However, Pakistan can take advantage of rapid diversification of demand for several products in India, for instance, the expanding demand for different varieties of fruits and vegetables. This will, of course, require addressing supply side factors in Pakistan.

The paper also looks at opportunities for trade in farm inputs like fertilizer, farm machinery, diesel oil and seed, which are tradable inputs for the agriculture sector. India imported fertilizers worth US\$ 7.5 billion in TE 2012–2013. Pakistan also imported fertilizers worth US\$ 0.8 billion in TE 2012–2013. Fertilizer imports in both countries increased until 2011, but declined thereafter. Further, both the countries import farm machinery, especially tractors, and diesel oil. Thus, there are hardly any prospects of trade in these farm inputs between the two countries.

However, there are opportunities in seed trade although these have not been properly harnessed due to a variety of protection related issues and other non-tariff measures.

11 Tariff and Non-tariff Measures for India and Pakistan

The previous section identified a number of opportunities for trade between India and Pakistan. However, trade policies between the two countries restrict and create hindrance in the movement of goods across borders. To address this, the two countries have agreed to simplify their trade procedures and facilitate the flow of goods between them.

SAFTA was signed in 2004 to enhance and facilitate trade among South Asian countries and reduce customs duties on all traded goods to zero by the year 2016. The agreement came into force on 1 January, 2006, and requires India, Pakistan and Sri Lanka (the developing countries) in South Asia to bring their duties down in the form of annual cuts, until they are reduced to zero. Besides the reduced tariff limits under South Asian Free Trade Area (SAFTA), efforts are also being made to reduce non-tariff barriers.

The tariff structures for Pakistan and India were examined at the disaggregated product level and are given in Tables 12 and 13. The tariff structure for commodity groups at the HS 2-digit level is given in Annexure 4 and 5. SAFTA provisions indicated that the tariffs would be reduced to 5 % with effect from 1 January, 2013, for all products other than those on the sensitive list. An analysis of changes in the protection level for agricultural commodities traded between India and Pakistan reveals that the applied tariff rates were significantly high for most of the traded agricultural commodities until 2011. But after the implementation of SAFTA, tariffs have been reduced and brought to the desired level of 5 %. Pakistan has reduced tariffs to 5 % for most exports from India. However, tariffs still remain high for dried vegetables, dates, oilseeds and sugar in India.

Although countries have tried to relax their tariff structures, a number of non-tariff measures are applied supposedly for protection of human life, animal life,

Table 12 Pakistan's tariff structure for products identified as exportable from India to Pakistan

HS code (4-digit)	Description	Tariff (%) (w.e.f. 31st December, 2008)	Tariff (%) (w.e.f. 31st December, 2012)
0402	Milk and cream	17	5
0407	Birds' eggs	5	5
0703	Onion and other vegetables	7.4	5
0713	Dried leguminous vegetables	5	5
0801	Coconut and other nuts	7.4	5
0902	Tea and beverages	5	5
0904	Pepper	5	5
0908	Nutmeg and spices	5	5
1006	Rice	7.4	5
1007	Grain sorghum	5	5
1008	Buckwheat and other cereals	5	5
1202	Groundnuts	7.4	5
1209	Seeds and planting material	5	5
1211	Plants and parts of plants	5	5
1701	Cane/beet sugar	7.4	5
4011	Rubber tyres	5	5
5201	Cotton	5	5
5205	Cotton yarn	5	5
5209	Woven fabrics	17	5

Source Government of Pakistan (2008 and 2012)

health and safety. The details are attached in Annexure 5, 6 and 7. A few commodities are kept on the sensitive list to protect the health of humans, animals and domestic industries. There are currently 614 items on India's sensitive list applicable to Pakistan, whereas Pakistan's sensitive list applicable to India includes 936 items. Out of these, there are 47 agricultural items in India's sensitive list and 246 in Pakistan's sensitive list. The items on the sensitive list have to pass through certain testing, labelling, packaging and certification requirements to check any harm to any living organism.

Pakistan has considerably reduced the items on its sensitive list in various groups except in dairy and animal products and fruits and nuts like apples, grapes and apricots (Table 14). Being an essential commodity, raw and refined sugar has also been kept on the sensitive list. India has also restricted some fruits, vegetables and nuts and put these on the sensitive list. Meat and fish products along with animal products are also part of India's sensitive list for Pakistan.

Table 13 India's tariff structure for products identified as exportable from Pakistan to India

HS code (4-digit)	Description	Tariff (%) (w.e.f. 1st Jan 2011)	Tariff (%) (w.e.f. 1st Jan 2013)
0713	Dried vegetables, shelled	11	8
0802	Nuts	Rs. 28 and 52/kg	Rs. 28 and 52/kg
0804	Dates, figs, pineapples, mangoes, avocados, guavas	11	8
0806	Grapes, fresh or dried	11	5
1207	Oil seeds	11	8
1211	Medicinal plants	7.8	5
1701	Cane or beet sugar	NA	8
1703	Molasses from the extraction/refining of sugar	6.2	5
4101	Raw hides and skins of bovine/equine animals	7	5
4104	Leather of bovine/equine animal	7	5
4107	Leather of other animals	7	5
5201	Cotton, not carded or combed	6.2	5
5208	Woven cotton fabrics	7	5
5209	Woven cotton fabrics	7	5

Source Government of India (2011 and 2013)

12 Agricultural Subsidies in India and Pakistan

Agricultural subsidies have been a matter of intense debate in various WTO rounds. Initially, developing countries took on developed countries for offering high level of subsidies and support to their agricultural sector, and thus creating an uneven playing field. Of late, the discussion on subsidies has also extended to developing countries with some developing countries expressing concern about the subsidies in other developing countries affecting their agriculture. It is reported that agricultural subsidies by relatively advanced developing countries like India impact farmers in smaller and least developed economies (Pasha and Pasha USAID Report).

Between India and Pakistan, India provides food subsidy and also subsidies on major agricultural inputs for meeting the goals of food security and protection of small and marginal farmers. Major agricultural inputs namely fertilizers, irrigation and electricity are supplied to farmers at prices that are below the cost of production. Similarly, Pakistan also provides input subsidies to its farmers. Table 15 compares the agricultural subsidies between India and Pakistan for the year 2010–2011, the latest year for which comparable information is available for both countries.

During the year 2010–2011, India's level of agricultural subsidies was US\$ 31.9 billion while Pakistan subsidized its agriculture by US\$ 2.6 billion. As there is a huge difference in the size of the sector in the two countries, the comparison makes better sense in terms of ratio or share. The level of input subsidies per hectare

Table 14 Sensitive list of India and Pakistan for agricultural commodities under SAFTA

HS code (2-digit)	Description	Sensitive list of Pakistan for India		Sensitive list of India for Pakistan
		2008	2012	
01	Live animals	31	0	0
02	Meat and edible meat offal	54	0	8
03	Fish and crustaceans, molluscs and other aquatic invertebrates	106	0	8
04	Dairy produce; birds' eggs; natural honey; edible prod. of animal origin, not elsewhere spec. or included	11	10	10
05	Products of animal origin, not elsewhere specified or included	22	0	1
06	Live trees and other plants; bulbs; roots and the like; cut flowers and ornamental foliage	18	0	0
07	Edible vegetables and certain roots and tubers	58	1	48
08	Edible fruit and nuts; peel or citrus fruit or melons	40	4	33
09	Coffee, tea, mate and spices	30	5	25
10	Cereals	13	3	11
12	Oil seeds and olea, fruits; misc. grains, seeds and fruit; industrial or medicinal plants; straw and fodder	44	0	32
13	Lac, gums, resins and other vegetable saps and extracts	13	0	2
14	Vegetable plaiting materials; vegetable products not elsewhere specified or included	9	1	0
15	Animal or vegetable fats and oils and their cleavage products; edible fats; animal or vegetable waxes	22	13	32
16	Preparations of meat, of fish or of crustaceans, molluscs or other aquatic invertebrates	28	0	2
17	Sugars and sugar confectionery	18	2	4
19	Preparations of cereals, flour, starch or milk; and other products	25	0	1
20	Preparations of vegetables, fruit, nuts or other parts of plants	41	4	8
21	Miscellaneous edible preparations	25	0	0
24	Tobacco and manufactured tobacco substitutes	3	2	9
41	Raw hides and skins (other than fur skins) and leather	43	0	0
51	Wool, fine or coarse animal hair, horsehair yarn and woven fabric	38	0	0

(continued)

Table 14 (continued)

HS code (2-digit)	Description	Sensitive list of Pakistan for India		Sensitive list of India for Pakistan
		2008	2012	
52	Cotton	128	0	12
53	Other vegetable textile fibres; paper yarn and woven fabrics of paper yarn	25	2	0

Source Government of India and Pakistan

Table 15 Subsidies on agricultural inputs in India and Pakistan, 2010–2011

Particular	Unit	India ^a	Pakistan ^b
Subsidies	Million US\$	31,941	2676
Agriculture value added	Million US\$	286,754	43,088
GNP (at current prices) ^c	Million US\$	1,576,487	219,732
Net cropped area	Million hectares	141.6	15.9
Subsidies as % of value added	Per cent	11.1	6.2
Subsidies as % of GNP	Per cent	2.0	1.2
Subsidy per hectare	US\$	225.6	168.1
Subsidies as % of value of production of agriculture	Per cent	8.8	4.9

^aEstimated by the authors using data from National Accounts Statistics 2012, CSO, GOI

^b*Source* Pasha and Pasha, USAID Report

^cRefers to GNI for India

of net sown area was US\$ 225.6 in India and US\$ 168.1 in Pakistan. India subsidized its agriculture by 8.8 % of the value of agriculture production as compared to 4.9 % in Pakistan. These comparisons show that Indian farmers have a benefit of 4 % over Pakistani farmers in terms of subsidies and this can be factored into the trade policy. Therefore, higher level of subsidies in Indian agriculture compared to Pakistan should not be a major issue against trade promotion between the two countries.

13 Conclusions and Policy Implications

Despite strong neighbourhood and proximity advantage, India and Pakistan did not trade much until the late 1990s. Bilateral trade started expanding in the new century and it picked up momentum after SAFTA came into effect in 2006. In case of the agricultural sector, trade picked up after 2005–2006. Since then, agricultural exports from India to Pakistan have grown at a faster rate than export of

non-agricultural products. However, agricultural exports from Pakistan to India increased at a slow rate, seemingly due to supply side constraints in Pakistan's agricultural sector. Average trade showed a big jump after SAFTA came into effect, but it proved to be a one-time gain, as the trend remained sluggish after the increase in 2006–2007. On the whole, India's agricultural exports to Pakistan show a much better performance than agricultural exports from Pakistan to India.

Trade in most commodities shows very large year-on-year variation and most of the agriculture trade was taking place for stabilizing the fluctuations in domestic production. The trade pattern of the past 15 years indicates that the Indo–Pak agriculture trade can be classified in three categories namely (a) trade for domestic stabilization; (b) trade based on comparative advantage of more or less permanent nature, and (c) trade in specialized products. Some of India's major exports, like sugar, onion and even cotton, are meant largely for regulating the fluctuating domestic supply (due to production shocks) in Pakistan. Experience shows that there is considerable delay in arranging import on both sides to address domestic shortages. Suitable mechanisms need to be developed for liberalized trade in such commodities to address price shocks that hurt consumers and also adversely affect the economy. Bilateral trade is a cost effective and efficient instrument to address price and market volatility in the two countries.

Both countries have comparative advantage in the export of some commodities to each other. These include tomato, cane sugar, onion, fresh vegetables, cotton (carded and combed), groundnut, coarse cereals as feed and dairy products for exports from India to Pakistan. Similarly, Pakistan has comparative advantage in exporting dates, leather, hides and skins and woven fabrics to India. There is considerable scope for promoting export of specialized items as trade is stable and growing in this case. These include products with unique attributes like herbs, medicinal and aromatic plants and some cereals. Buckwheat (*kuttu*) and Psyllium (*Isabgol*) can be cited as specific examples here.

Despite implementation of SAFTA, some strong tariff and non-tariff barriers continue to restrict agricultural trade between the two countries. This requires action in the following areas:

- Trade facilitation
- Further lowering of tariffs
- Pruning the negative list
- Removal of non-tariff trade barriers

Of these, trade facilitation in the form of simplification of custom and other border formalities, transport linkages, transparency in regulatory provisions, improved logistics for rail, road, air and maritime transport, a better information network, etc. are among the most important measures to increase bilateral trade. Chand (2012) also reported that a major factor for low volume and low share of intra-regional trade in South Asia seems to be the poor facilitation for intra-regional trade, like efficiency of custom, other border procedures, quality of transport and IT infrastructure, etc. Other studies also reported that trade facilitation is a major factor

in the growth of intra-regional and total trade from South Asia (ADB 2009; Jain and Singh 2009; Wilson and Otsuki 2007). Improved trade facilitation and logistics will reduce the transaction cost of trade, which is more significant than tariff. India and Pakistan must promptly take up measures individually and as a group to achieve higher trade facilitation.

Differences in the level of agricultural subsidies between India and Pakistan are cited as an important reason for not liberalizing India's agricultural export to Pakistan. As there is a huge difference in the size of the sector in the two countries, comparisons of subsidies make better sense in terms of the ratio or share. The level of input subsidies per hectare of net sown area was US\$ 225.6 in India and US\$ 168.1 in Pakistan. India subsidized its agriculture by 8.8 % of the value of agriculture production as compared to 4.9 % in Pakistan. These comparisons show that Indian farmers have a benefit of 4 % over Pakistani farmers in terms of subsidies and this can be factored into the trade policy. Therefore, higher levels of subsidy in Indian agriculture compared to Pakistan should not be a major issue in terms of promoting trade between the two countries.

Another hitherto neglected area related to agriculture trade is the trade in technology. Agriculture in both countries faces some serious challenges while there are tremendous opportunities for science-led agricultural growth. Modern research also requires large amounts of capital and a high level of skill and knowledge. India and Pakistan can benefit immensely through trade in technology.

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Annexure 1: List of Groups Covered in Agriculture

HS code (2-digit)	Description
01	Live animals
02	Meat and meat products
03	Fish and crustaceans
04	Dairy products and bird eggs
05	Products of animal origin
06	Live trees and other plants
07	Edible vegetables
08	Edible fruits
09	Tea and beverages
10	Cereals
11	Products of milling industry
12	Oilseeds

(continued)

(continued)

HS code (2-digit)	Description
13	Lack gums, etc.
14	Vegetable planting materials
15	Animal or vegetable fat
17	Sugar
19	Cereals preparations
20	Vegetables and fruit preparations
21	Misc edible preparations
22	Beverages
24	Tobacco
40	Rubber and the articles thereof
41	Raw hides and skin
44	Wood
47	Pulp of wood
50	Silk
51	Wool
52	Cotton
53	Other vegetable fibres

Source List finalized by the authors

Annexure 2: India's Major Agricultural Exports to Pakistan (US\$ Million)

HS code (2-digit)	Commodity	1996-1997	1997-1998	1998-1999	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
01	Live animals	0	0	0	0	0	0	0	0	0.01	0.06	0.29	0.21	0	0	0	0	0
02	Meat and meat products	0	0	0.03	0	0	0	0	0	0.07	5.84	29.81	15.25	3.94	4.12	4.87	5.92	4.16
03	Fish and crustaceans	0	0.12	0	0	0	0.08	0.13	0.04	0.08	0.06	0.02	0.22	0	0	0	1.01	0
04	Dairy products and bird eggs	0	0.01	0	0	0	0.01	0.1	0.07	1.17	8.03	4	6.13	2.7	2.66	11.61	4.79	14.29
05	Products of animal origin	0	0.01	0	0	0	0	0	0.01	0	0.01	0.01	0	0	0.14	0.56	0.88	0.83
06	Live trees and other plants	0.01	0.04	0	0	0	0.01	0.02	0	0	0.01	0.01	0.03	0.04	0.08	0.02	0.01	0.11
07	Edible vegetables	0.29	0.7	3.45	0.75	1.02	1.73	0.99	0.87	6.44	30.46	35.71	68.02	91.16	59.85	74.07	146.39	144.51
08	Edible fruits	0.68	0.33	0.84	1.44	0.25	0.29	0.34	0.62	0.1	0.88	0.63	0.84	0.4	1.86	10.96	22.2	25.03
09	Tea and beverages	11.37	15.68	12.76	10.09	14.61	6.06	7.37	8.59	14.82	12.01	21.46	30.32	56.66	36.9	71.26	103.74	83.71
10	Cereals	0.04	0.03	0.33	0	0.42	0	2	1.79	4.29	1.71	1.24	7.22	31.66	10.94	18.87	31.47	14.47
11	Products of milling industry	0.03	0	0.03	0.01	0	0	0	0.05	0.02	0.02	0	0.07	0.05	0.06	0.12	0.1	0.64
12	Oilseeds	2.42	2.50	3.44	3.32	2.65	2.25	3.44	13.85	4.59	13.63	16.46	19.85	18.76	35.51	48.89	48.31	52.37
13	Lack gums, etc.	1.5	1.13	0.66	0.68	1.31	0.48	0.67	1.43	1.75	2.31	4.46	3.49	3.89	4.22	7.44	12.48	12.24

(continued)

(continued)

HS code (2-digit)	Commodity	1996- 1997	1997- 1998	1998- 1999	1999- 2000	2000- 2001	2001- 2002	2002- 2003	2003- 2004	2004- 2005	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012	2012- 2013
14	Vegetable planting materials	3.99	2.35	2.06	2.47	2.03	2.04	1.94	2.03	2.56	2.04	3.2	3.79	2.05	2.68	2.12	2.76	2.84
15	Animal or vegetable fat	0.13	0.11	0.15	0.16	0.16	0.1	0.7	0.34	0.35	0.65	0.98	0.64	0.6	0.57	0.63	0.61	0.38
17	Sugar	86.82	35.7	0.14	0.02	56.65	43.21	6.38	3.9	0.55	30.48	352.82	70.94	10.89	1.07	336.85	18.64	0.5
19	Cereals preparations	0	0.01	0.03	0.01	0.11	0	0.05	0.04	0.03	2.73	0.26	0.34	8.91	7.37	3.11	6.85	6.02
20	Vegetables and fruit preparations	0	0	0	0.01	0	0	0	0.01	0	0.04	0.11	0.11	0	0.29	0	0.63	1.63
21	Misc edible preparations	0.2	0.33	0.22	0.13	0.02	0.01	0.47	0.01	0.56	0.19	0.38	0.07	0.23	0.19	0.11	0.25	0.83
22	Beverages	0	0	0	0	0	0.02	0.02	0	0.08	0	0.03	0	0.11	0.22	0.11	0	0.01
24	Tobacco	0	0.14	0.16	0.04		0.02	0.09	0	0	0.42	0.01	0.04	0.88	0	6.27	0	0.53
40	Rubber and the articles thereof	0.35	9.05	6.59	6.86	8.54	8.94	14.77	15.69	29.69	42.61	39.77	51.51	42.49	41.65	56.03	62.25	45.08
41	Raw hides and skin	0	0.01	0.01	0	0	0.01	0.09	0.29	0.04	0.19	0.07	0.14	0.89	0.16	0.5	0.49	0.51
44	Wood	0.02	0.02	0	0.03	0	0.03	0.03	0.06	0.04	0.03	0.01	0.25	0.41	0.36	0.41	0.2	1.58
47	Pulp of wood	0	0	0	0	0	0	0	0	0.02	0	0	0.11	0	0	0.01	0.01	0
50	Silk	0.04	0.01	0.02	0	0	0	0.02	0.01	0.01	0	0	0.02	0.22	0.07	0.04	0.01	0.02
51	Wool	0.01	0.01	0	0	0	0	0.12	0.47	0.68	0.67	0.43	1.24	0.37	0.64	0.62	1.13	0.09

(continued)

(continued)

HS code (2-digit)	Commodity	1996–1997		1997–1998		1998–1999		1999–2000		2000–2001		2001–2002		2002–2003		2003–2004		2004–2005		2005–2006		2006–2007		2007–2008		2008–2009		2009–2010		2010–2011		2011–2012		2012–2013			
		0.13	0.13	0.27	0.27	0.37	0.37	0.7	0.7	0.07	0.07	0.84	0.84	1.18	1.18	51.73	51.73	16.69	16.69	58.09	58.09	210.06	210.06	461.72	461.72	97.25	97.25	242.77	242.77	423.69	423.69	87.12	87.12	471.93	471.93		
52	Cotton																																				
53	Other vegetable fibres																																				

Source EXIM Databank, Government of India

Annexure 3: India's Major Agricultural Imports from Pakistan (US\$ Million)

HS code (2-digit)	Commodity	1996- 1997	1997- 1998	1998- 1999	1999- 2000	2000- 2001	2001- 2002	2002- 2003	2003- 2004	2004- 2005	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012	2012- 2013
02	Meat and meat products	0	0	0	0	0	0	0	0	0	0	0	0.04	0.01	0	0	0	0
03	Fish and crustaceans	0	0	0	0	0	0.11	0	0	0.04	0.65	0.21	0.89	0.74	0.89	0.61	1.35	1.48
04	Dairy produce; birds' eggs	0	0	0	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0
05	Products of animal origin	0	0	0	0	0	0	0	0	0.01	0.02	0.04	0.04	0	0	0.14	0.16	0
07	Edible vegetables	0	1.47	20.38	20.75	25.89	27.18	9.04	12	23.07	26.14	88.76	42.4	36.68	46.41	62.98	80.68	92.55
08	Edible fruit	26.51	22.22	20.38	20.75	25.89	27.18	9.04	12	23.07	26.14	88.76	42.4	36.68	46.41	62.98	80.68	92.55
09	Tea and beverages	0.55	0.59	0.3	0.68	0.51	2.35	0.91	0.58	1.96	0.93	0.82	1.82	1.01	2.76	1.61	2.91	0.61
10	Cereals	0	0	0	6.07	0.08	0	0	0	0	0	0	12.36	0	0	0	0	0
12	Oil seeds	1.25	0.79	1.46	2.31	1.05	1.59	0.23	0.61	1.44	1.73	1.6	3.02	5.39	8.29	3.63	2.96	5.87
13	Lac; gums,	0.93	1.26	0.83	1.75	2.71	3.66	2.1	1.53	1.13	0.86	1.28	0.62	1.27	1.25	1.03	1.44	1.63
14	Vegetable plating materials	0.01	0.02	0.01	0.03	0.02	0.06	0	0	0.01	0.03	0.02	0.03	0.02	0.03	0.05	0.01	
15	Animal or vegetable fats	0	0	0	0.07	0	0	0	0	0	0	0.02	0	0	0	1.65	0	0
16	Preparations of meat	0	0	0	0	0	0	0	0	0	0	0.02	0.03	0	0	0.01	0.01	0.01
17	Sugars	0	13.49	181.16	16.37	2.42	6.77	0	0	31.35	7.45	0	0	0	0	0	0	6.75
19	Preparations of cereals	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0.02	0	0.02	0.01	0
20	Vegetables and fruit preparations	0	0	0	0	0	0	0	0	0.01	0	1.31	0.48	1.41	1.64	0	0	1.87
21	Miscellaneous edible preparations	0	0	0	0	0	0	0	0	0.01	0.01	0	0.03	0.02	0	0.03	0.18	0
24	Tobacco and manufactured tobacco substitutes	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0	0	0	0
41	Raw hides and skins	0.97	1.35	0.56	0.48	0.37	0.44	0.15	0.66	1.12	1.71	3.94	12.54	12.17	8.28	13.4	11.22	11.62
51	Wool	2.57	1.23	0.24	0.2	0.02	0.52	0.85	2.29	1.2	2.15	3.77	5.19	3.52	3.98	9.32	5.74	10.4
52	Cotton	0.39	0.03	0.62	1.82	1.05	3.03	1.51	3.64	15.13	28.11	48.88	45.29	44.76	39.1	22.45	60.43	60.38
53	Other vegetable textile fibres	0	0	0	0	0.01	0.01	0	0	0	0	0.02	0	0.22	0.13	0.05	0	0.26

Source EXIM Databank, Government of India

Annexure 4: Pakistan's Tariff Structure at HS 2 Digit Level

HS code (2-digit)	Description	Tariff (%) (w.e.f. 31st Dec 2008)	Tariff (%) (w.e.f. 31st Dec 2012)
01	Live animals	5	5
02	Meat and edible meat offal	17 and 5	5
03	Fish and crustaceans, molluscs and other aquatic invertebrates	7.4 and 5	5
04	Dairy produce; birds' eggs; natural honey; edible prod. Of animal origin, not elsewhere spec. Or included	17, 10.6 and 5	5
05	Products of animal origin, not elsewhere specified or included	17 and 5	5
06	Live trees and other plants; bulbs; roots and the like; cut flowers and ornamental foliage	17, 10.6 and 5	5
07	Edible vegetables and certain roots and tubers	10.6, 7.4 and 5	5
	0710.1000 potatoes	10.6	5
	0709.5100 mushrooms of the genus <i>Agaricus</i>	7.4	5
	0705.1100 cabbage and carrots	5	5
08	Edible fruit and nuts; peel or citrus fruit or melons	17, 7.4 and 5	5
09	Coffee, tea, mate and spices	10.6, 7.4 and 5	5
	0904.1200 Pepper seeds for sowing, crushed or ground	10.6	5
	0903.0000 mate	7.4	5
	0909.6100 seeds of anise or badian	5	5
10	Cereals	7.4 and 5	5
12	Oil seeds and olea. Fruits; misc. Grains, seeds and fruit; industrial or medicinal plants; straw and fodder	17, 7.4 and 5	5
13	Lac; gums, resins and other vegetable saps and extracts	17 and 10.6	5
14	Vegetable plaiting materials; vegetable products not elsewhere specified or included	17, 10.6, 7.4 and 5	5
15	Animal or vegetable fats and oils and their cleavage products; pre. Edible fats; animal or vegetable waxes	17, 7.4, 5, Rs. 9500/MT, Rs. 9500/MT and Rs. 10,200/MT and 10,800/MT	5 and Rs. 9500/ MT Rs. 9500/MT, Rs. 10,200/MT and 10,800/MT
	1503.0010 lard stearin, lard oil	17	5
	1503.0090 other	7.4	5
	1509.1000 virgin	Rs. 9050/MT	Rs. 9050/MT
	1509.9000 other	Rs. 10,200/MT	Rs. 10,200/MT
	1513.1100 crude oil	Rs. 9500/MT	Rs. 9500/MT
	1513.1900 other	Rs. 10,800/MT	Rs. 10,800/MT

(continued)

(continued)

HS code (2-digit)	Description	Tariff (%) (w.e.f. 31st Dec 2008)	Tariff (%) (w.e.f. 31st Dec 2012)
16	Preparations of meat, of fish or of crustaceans, molluscs or other aquatic invertebrates	17	5
17	Sugars and sugar confectionery	17, 10.6, 7.4 and 5	5
	1702.3000 glucose and glucose syrup	17	5
	1702.5000 chemically pure fructose	10.6	5
	1701.1200 beet sugar	7.4	5
	1703.1000 cane molasses	5	5
19	Preparations of cereals, flour, starch or milk; pastry cooks products	17 and 10.6	5
20	Preparations of vegetables, fruit, nuts or other parts of plants	17 and 10.6	5
21	Miscellaneous edible preparations	17, 10.6 and 7.4	5
24	Tobacco and manufactured tobacco substitutes	5	5
41	Raw hides and skins (other than fur skins) and leather	17, 7.4 and 5	5
51	Wool, fine or coarse animal hair, horsehair yarn and woven fabric	9.96, 7.4, 5.48 and 5	5
52	Cotton	17, 9.96, 7.4 and 5	5
	5204.1100 cotton, carded or combed containing 85 % or more by weight of cotton	17	5
	5210.1100 plain weave and fabrics	9.96	5
	5202.1000 yarn waste (including thread waste)	7.4	5
	5201.0030 American or Egyptian cotton	5	5
53	Other vegetable textile fibres; paper yarn and woven fabrics of paper yarn	17, 9.96, 7.4 and 5	5

Source Government of Pakistan (2008 and 2012)

Annexure 5: India's Tariff Structure at HS 2 Digit Level

HS code (2-digit)	Description	Tariff (%) (1st Jan 2011)	Tariff (%) (1st Jan 2013)
01	Live animals	11	5
02	Meat and edible meat offal	11	5
03	Fish and crustaceans, molluscs and other aquatic invertebrates	11	5
04	Dairy produce; birds' eggs; natural honey; edible prod. Of animal origin, not elsewhere spec. Or included	11	5
05	Products of animal origin, not elsewhere specified or included	11	5
06	Live trees and other plants; bulbs; roots and the like; cut flowers and ornamental foliage	11	5
07	Edible vegetables and certain roots and tubers	11	5 and 8
08	Edible fruit and nuts; peel or citrus fruit or melons	Rs. 28/kg, Rs. 52/kg, 7.8, 11	Rs. 28/kg, Rs. 52/kg, 5 and 8
	0813 20 00 cashew nuts fresh/dried shelled	11	5
	0810 60 00 durians	7.8	5
	0802 11 00 almonds fresh or dried in shell	Rs. 28/kg	Rs. 28/kg
	0802 12 00 shelled almonds fresh or dried	Rs. 52/kg	Rs. 52/kg
09	Coffee, tea, mate and spices	11	5 and 8
10	Cereals		5 and 8
12	Oil seeds and olea. Fruits; misc. Grains, seeds and fruit; industrial or medicinal plants; straw and fodder	7.8 and 11	5 and 8
	12 all goods	11	5 and 8
	1211 30 coca leaf fresh/dried w/n cut crushed/powdered	7.8	5
13	Lac; gums, resins and other vegetable saps and extracts	7.8	5 and 8
14	Vegetable plaiting materials; vegetable products not elsewhere specified or included	11	5
15	Animal or vegetable fats and oils and their cleavage products; pre. Edible fats; animal or vegetable waxes	7.8 and 11	5 and 8
16	Preparations of meat, of fish or of crustaceans, molluscs or other aquatic invertebrates	11	5 and 8
17	Sugars and sugar confectionery	6.2 and 11	5 and 8
	1702 chemically pure lactose, maltose, glucose and fructose	11	5

(continued)

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HS code (2-digit)	Description	Tariff (%) (1st Jan 2011)	Tariff (%) (1st Jan 2013)
	1703 molasses resulted from the extracting/refining of sugar	6.2	5
19	Preparations of cereals, flour, starch or milk; and other products	11	5
20	Preparations of vegetables, fruit, nuts or other parts of plants	11	5
21	Miscellaneous edible preparations	11	5
24	Tobacco and manufactured tobacco substitutes		5
41	Raw hides and skins (other than fur skins) and leather	7	5
51	Wool, fine or coarse animal hair, horsehair yarn and woven fabric	7	5
52	Cotton	6.2,7 and 11	5 and 8
	5203 00 00 Cotton, carded or combed	11	5
	52 (except 5203 00 00)	7	5
	5201 cotton, not carded or combed	6.2	5
53	Other vegetable textile fibres; paper yarn and woven fabrics of paper yarn	7 and 11	5

Source Government of India (2011 and 2013)

Annexure 6: Non-tariff Measures on Agricultural Commodities: Specific NTBs Faced by Indian Exporters in Pakistan

Product and HS code (4-digit)	NTM	NTM description	NTM objective	Legislation
Bird eggs (0407)	Prohibition for political reasons (embargo)	Goods of Israeli origin or imported from Israel are banned	NA	Ministry of Commerce, Pakistan
	Treatment for elimination of plant and animal pests and disease-causing organisms in the final production	Poultry products are banned from Avian Influenza H5N1 strain affected countries	NA	Ministry of Commerce, Pakistan
Tomato (0702)	Requirement to pass through specified port of customs	Importable from India through land route from Wagah	Protection of human life; health and safety	Ministry of Commerce, Pakistan

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Product and HS code (4-digit)	NTM	NTM description	NTM objective	Legislation
Onion and other vegetables (0703)	Requirement to pass through specified port of customs	Importable from India through land route from Wagah	Protection of human life; health and safety	Ministry of Commerce, Pakistan
Dried leguminous vegetables (0713)	Product quality or performance requirement	Vetches (whole grain, split or any other form) are banned	Protection of human life; health and safety	Ministry of Commerce, Pakistan
Tea and beverages (0902)	Testing requirement	Mandatory standards set out by PSQCA	NA	Government of Pakistan—Mandatory standards and conformity test by the PSQCA
Pepper (0904)	Requirement to pass through specified port of customs	Importable from India through land route from Wagah	Protection of human life; health and safety	Ministry of Commerce, Pakistan
	Product quality or performance requirement	Vetches (whole grain, split or any other form) are banned	Protection of human life; health and safety	Ministry of Commerce, Pakistan
	Testing requirement	Mandatory standards set out by PSQCA	NA	Government of Pakistan—Mandatory standards and conformity test by the PSQCA
Rice (1006)	Requirement to pass through specified port of customs	If imported from India, import from Wagah is also allowed	NA	Ministry of Commerce, Pakistan
Seeds and planting material (1209)	Product quality or performance requirement	Vetches (whole grain, split or any other form) are banned	Protection of human life; health and safety	Ministry of Commerce, Pakistan
	Geographical restrictions on eligibility	Opium poppy seeds shall be allowed from those countries only where it is legally produced	NA	Ministry of Commerce, Pakistan
	Testing requirement	Importable subject to drawing sample and testing quality by Dept of Plant Protection and Federal Seed Certification Agency	Protection of animal life and health	Department of Plant Protection, Pakistan

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Product and HS code (4-digit)	NTM	NTM description	NTM objective	Legislation
	Quarantine requirement	Rice seed shall be subject to strict quarantine measures prescribed under the seed act 1976	NA	Department of Plant Protection, Pakistan
Plants and parts of plants (1211)	Prohibition for non-economic reasons	Extract and tinctures of cannabis are banned	NA	Ministry of Commerce, Pakistan
Cane/beet sugar (1701)	Requirement to pass through specified port of customs	If imported from India, import from Wagah is also allowed	NA	Ministry of Commerce, Pakistan
Cotton (5201)	Product quality or performance requirement	Vetches (whole grain, split or any other form) are banned	Protection of human life; health and safety	Ministry of Commerce, Pakistan
	Additional taxes and charges levied in connection to services provided by the Government	Levy of value addition tax	NA	Federal Board of Revenue website, Government of Pakistan—SROs
	Requirement to pass through specified port of customs	Importable from India through land route from Wagah	Protection of human life; health and safety	Ministry of Commerce, Pakistan
Cotton yarn (5205)	Additional taxes and charges levied in connection to services provided by the Government	Levy of value addition tax	NA	Federal Board of Revenue website, Government of Pakistan—SROs
	Requirement to pass through specified port of customs	Importable from India through land route from Wagah	Protection of human life; health and safety	Ministry of Commerce, Pakistan
	Product quality or performance requirement	Vetches (whole grain, split or any other form) are banned	Protection of human life; health and safety	Ministry of Commerce, Pakistan

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Product and HS code (4-digit)	NTM	NTM description	NTM objective	Legislation
Woven fabrics (5209)	Additional taxes and charges levied in connection to services provided by the Government	Levy of value addition tax	NA	Federal Board of Revenue website, Government of Pakistan—SROs
	Product quality or performance requirement	Vetches (whole grain, split or any other form) are banned	Protection of human life; health and safety	Ministry of Commerce, Pakistan

Source www.macmap.org

Annexure 7: Non-tariff Barriers on Agricultural Commodities: Specific NTBs Faced by Pakistan's Exporters in India

NTM	NTM description	Legislation	Applicable for
Authorization requirement for TBT reasons	The regulation requires that a license has to be granted/obtained to (a) commence or carry on the business as (i) a manufacturer of, or dealer in, any animal article, or (ii) a taxidermist; or (iii) a dealer in trophy or uncured trophy; or (iv) a dealer in captive animal; or (v) a dealer in meat; or (b) cook or serve meat in any eating house	Wild Life Protection Act, 1972	4101 Raw hides and skins of bovine/equine animals 4107 Leather of other animals

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NTM	NTM description	Legislation	Applicable for
Conformity assessment related to TBT	The regulation requires that no person without proof of ownership shall sell certain animals and animal products without prior approval of the authorized officer	Wild Life Protection Act, 1972	4101 Raw hides and skins of bovine/equine animals 4107 Leather of other animals
Food and feed processing	These regulations mandate that a well-equipped laboratory for testing of food materials shall be in place inside the premises of food business units for physical, microbiological and chemical analysis	Food Safety and Standards(licensing and registration of food businesses) Regulations, 2011	1211 Medicinal plants
Fumigation	The order provides for fumigation requirement when considered necessary based on the authority's discretion, the importer at its own cost is required to comply with the same	Plant Quarantine (regulation of import into India) Order, 2003	802 Nuts 804 Dates, figs, pineapples, mangoes, avocados, guavas 806 Grapes, fresh or dried 1207 Oil seeds
Geographical restrictions on eligibility	The regulation prohibits imports of certain plants/planting materials from certain countries based on specific justification provided thereof	Plant Quarantine (regulation of import into India) Order, 2003	802 Nuts 804 Dates, figs, pineapples, mangoes, avocados, guavas 806 Grapes, fresh or dried 1207 Oil seeds

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NTM	NTM description	Legislation	Applicable for
Irradiation	These regulations mandate that certain food items such as onions, spices, potatoes, wheat, atta, pulses, etc. dried fruits such as raisins, figs and dried dates, meat and meat products including chicken, etc. will not be subject to a dose of irradiation in excess of the specified quantity in the Regulation. For instance, onions can be subjected to an irradiation of a maximum of 0.09 KGY, spices can be subjected to an irradiation of a maximum of 14 KGY, etc. Further, such irradiation facility should be approved and licensed by the Government, and in accordance with specified procedures	Food Safety and Standards (food products standards and food additives) Regulations, 2011	713 Dried vegetables, shelled 804 Dates, figs, pineapples, mangoes, avocados, guavas 806 Grapes, fresh or dried
Licensing for non-economic reasons	Import will be subject to provision of convention of international trade in Endangered species of wild fauna and flora (CITES)	Director General Foreign Trade (DGFT) notification —restricted items for imports	1211 Medicinal plants

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NTM	NTM description	Legislation	Applicable for
Microbiological criteria of the final product	These rules require certain food products to conform to certain microbiological requirements such as the amount of <i>E. coli</i> , staphylococcus, salmonella that can be found in various food items such as milk and milk products, fish and meat products, fruits and vegetables products, etc. For instance, in case of ice creams, the <i>E. Coli</i> count cannot be more than 100/g and there should be no salmonella	Food Safety and Standards (food products standards and food additives) Regulations, 2011	804 Dates, figs, pineapples, mangoes, avocados, guavas 806 Grapes, fresh or dried
Non-automatic import licensing procedures	Licensing is required to import	Director General Foreign Trade (DGFT) notification —restricted items for imports	1207 Oil seeds 1211 Medicinal plants
Price control measures	When goods of the description mentioned in the Schedule chargeable with a duty of excise under the Central Excise Act, 1944 (1 of 1944), read with any notification for the time being in force issued by the Central Government in relation to the duty so chargeable (not being a notification providing for any exemption for giving credit with respect to, or reduction of duty of excise under the said act on such goods equal to, any duty of excise under	Central Board of Excise and Customs, Government of India —Additional Duties Of Excise (textiles and textile articles) Act, 1978 (40 of 1978)	5201 Cotton, not carded or combed 5208 Woven cotton fabrics 5209 Woven cotton fabrics

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NTM	NTM description	Legislation	Applicable for
	the said act, or the additional duty under section 3 of the Customs Tariff Act, 1975 (51 of 1975), already paid on the raw material used in the production or manufacture of such goods), are assessed to duty, there shall be levied and collected a duty of excise equal to fifteen per cent of the total amount so chargeable on such goods		
Prohibitions/restrictions of imports for objectives set out in the TBT agreement	The regulation specifies that no person shall carry on the business of selling, exporting or importing seeds at any place except under and in accordance with the terms and conditions of license granted to him under this order	Seed Control Order, 1983	1207 Oil seeds
Quarantine requirement	The order specifies that plant and seed consignments that may pose a threat are to be subjected to post-entry quarantine, as specified in the order, to be implemented by using established quarantine facilities, at the importer's expense	Plant Quarantine (regulation of import into India) Order, 2003	802 Nuts 804 Dates, figs, pineapples, mangoes, avocados, guavas 806 Grapes, fresh or dried 1207 Oil seeds

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NTM	NTM description	Legislation	Applicable for
Special authorization requirement for SPS reasons	The regulation specifies grant of permit by notified authorities as a prerequisite to a plant, plant product, seed, etc. being imported	Plant Quarantine (regulation of import into India) Order, 2003	802 Nuts 1207 Oil seeds
TBT regulations on production processes	The regulation requires that no person shall sell or offer or expose for sale or have in his premises for the purpose of sale under any description, fruit which has been artificially ripened by use of acetylene gas, commonly known as carbide gas	The Prevention of Food Adulteration Rules, 1955	804 Dates, figs, pineapples, mangoes, avocados, guavas 806 Grapes, fresh or dried

Source www.macmap.org

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Chapter 3

Exploring the Trade in Textiles and Clothing Between India and Pakistan

Nisha Taneja, Saon Ray and Devyani Pande

1 Introduction

The textiles and clothing (T&C) sector has been one of the most prominent manufacturing sectors of South Asia in terms of its contribution to output, employment and trade. The share of the region's trade in textiles and clothing with the world increased from 2 to 8 % over the period 2007–2014 (WITS database). Needless to say, textiles have played an important role in the social, cultural and economic life of South Asia. In the recent times, the two South Asian giants—India and Pakistan have emerged as the leading textile trading nations in the global trade scenario. Both countries remain strongly interrelated and interconnected with each other through the similar culture, language, dress, climate and traditions, which bond them together despite the diplomatic differences (Mohammad and Naqvi 2012). Given the similarities in the dressing and fashion, potential for trade between the two countries in clothing items such as salwar kameez dupatta (SKD), bridal wear and dresses is immense. Many Pakistani textile firms have made efforts to collaborate with their Indian counterparts to market their products in India. In addition, the setting up of the Pakistan Fashion Design Council (PFDC) in 2012 in New Delhi that showcases designer wear from Pakistan affirms the potential for traders from across the border to cater to the demand for apparel and clothing. From the Indian side, the opening of “The Raymond Shop”, an Indian suitings and fabrics showroom in Karachi in 2013 was another positive step for trade and investment in textiles between the countries.

However, India and Pakistan have had their share of ups and downs that had a bearing on trade between them. Tracing back the relations between the countries to the previous decade, the December 2001 attack on the Indian Parliament, Samjhauta Express blast in 2007 and the Mumbai attacks in 2008 were the times of

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discord between the countries, apart from the diplomatic differences that have ensued over the years. On the trade front, India granted the MFN (Most Favoured Nation) status to Pakistan in 1996, which is yet to be reciprocated by Pakistan. The two countries came together as trade partners in 2006 by signing the South Asian Free Trade Area (SAFTA) Agreement.¹ During this time till 2012, Pakistan maintained a positive list that allowed only 767 items to be imported from India. Adhering to a Joint Statement between the two nations, it made a transition from the positive list approach to a more trade enabling, small negative list of 1209 items in March 2012. However, it continued to restrict road-based trade by allowing only 137 items to be imported from India via road. Following the shift to a negative list, the focus of the trade negotiation has shifted to Pakistan granting the NDMA (Non-discriminatory market access)² status to India. This will entail termination of the negative list and lead to further liberalization of trade between the countries. There have been a series of discussions between the governments with regard to grant of the NDMA to India but the agreement has not yet materialized. Perhaps the apprehensions of the traders regarding the influx of imports from India and the resulting increase in trade imbalance along with political issues are the main reasons, which have led to a delay in the grant of NDMA from the Pakistani side. The agricultural lobbyists and textile traders themselves are skeptical of opening the Pakistani market for India citing loss of employment and weakening of the domestic textile sector. This paper seeks to make a case for enhancing bilateral trade between India and Pakistan in the textile sector owing to the similarities in culture and clothing. Apart from the existing similarities between the two countries, the textile and clothing (T&C) industry occupies a unique position in the economies of both India and Pakistan in terms of its contribution to industrial production, employment and exports. The proliferation of international production and distribution networks spanning across borders is presenting developing countries with both new economic development opportunities and challenges. Participation in these production and distribution networks is an important way to attract investment, increase technological capability, build industrial capacity, and foster economic growth. Harnessing this potential by enhancing bilateral trade in textile sector will go a long way in improving relations between the two countries. The importance of this sector in integrating the economies of India and Pakistan can be ascertained by a sectorwise comparison of bilateral trade between the countries.

A snapshot of the sectorwise trade between the two countries over the period 2005–2013, shows that vegetables, chemicals and textile and clothing are the major sectors of bilateral trade. This sectoral trade between India and Pakistan has undergone major changes over the period 2005–2013 (Fig. 1).

¹SAFTA is the South Asian Free Trade Area Agreement comprising of India, Pakistan and Sri Lanka as the non-least developing countries (NLDCs) and Bangladesh, Nepal, Bhutan, Afghanistan and Maldives as the least developing countries (LDCs).

²The NDMA status is the same as the Most-favoured Nation (MFN) status. The change in terminology was made to avoid political ramifications.

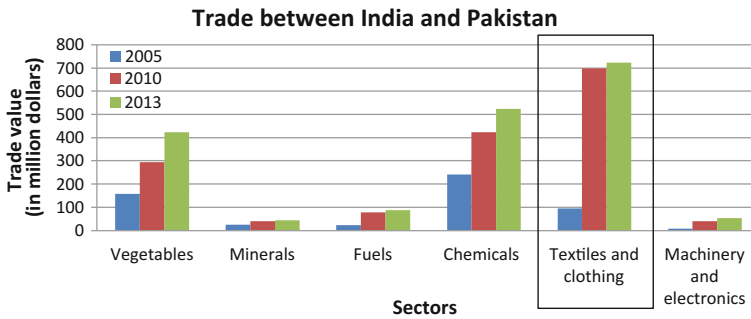


Fig. 1 Total trade between India and Pakistan in the major sectors (2005, 2010 and 2013). *Source* Based on data from UN COMTRADE

Initially, bilateral trade in textiles and clothing was very small, third largest, after chemicals and vegetables. However, the period 2005–2010 saw an uptick in the total trade in textiles recording the largest CAGR of 49 % among the major sectors of trade between India and Pakistan. At present, the textiles and clothing sector accounts for the largest proportion of trade between the countries. The rise in T&C trade from the year 2005–2010 is noteworthy. This can be attributed to the trade liberalization programme under SAFTA. The trade liberalization programme entailed tariff reduction by Non-Least Developed Contracting States (NLDCs)³ from 20 % or below to 0–5 % within a time frame of 5 years, beginning from the third year from the date of coming into force of the Agreement. The total trade in other sectors has increased, but none of them has shown such a meteoric rise as that of the T&C sector over the years.

With this backdrop, we look at the pattern of trade within this sector and try to gauge the potential for T&C trade between India and Pakistan by qualitative and quantitative analysis. Section 2 explains the objectives of the study by a short discussion of the structure of the T&C sector and research questions Sect. 3 presents the evolution of the T&C sector in India and Pakistan. This will provide an insight into the development of the textile policies and regulations in the countries over the years. Section 4 gives an overview of the current trade of T&C and its trade potential, the nature of textile trade and the items in the negative and sensitive lists. Section 5 presents the results of the quantitative analysis. We discuss the intra-industry trade indices and the type of intra-industry trade taking place in the T&C sector. Section 6 presents the findings from surveys with traders and stakeholders of the textile sectors on both sides and a brief discussion on informal trade. Section 7 concludes the research findings by providing recommendations for enhancing India–Pakistan trade in T&C.

³SAFTA is the South Asian Free Trade Agreement comprising of India, Pakistan and Sri Lanka (as the NLDCs) and Bangladesh, Nepal, Bhutan, Afghanistan and Maldives as the least developing countries (LDCs).

2 Objectives of the Study

The importance of textiles and clothing in the global trade scenario is well documented in the literature. Most developed countries of today and newly industrialized countries (NICs) used this industry as the springboard for their development journey and even some least developed countries (LDCs) were able to step onto the development ladder on the basis of their T&C industry (Adhikari and Yamamoto 2008). The T&C is a peculiar sector that has witnessed a remarkable evolution in structure and nature over the years.

Textiles and clothing are closely related both technologically and in terms of trade policy. Textiles provide the major input to the clothing industry, creating vertical linkages between the two sectors (Nordås 2004). At the micro-level, the two sectors are increasingly integrated through vertical supply chains that also involve the distribution and sales activities. They can be seen as a supply chain consisting of a number of discrete activities. The clothing industry is labour intensive industry where relatively modern technology can be adopted. The textile industry is usually more capital intensive than the clothing industry and it is highly automated, particularly in developed countries. It consists of spinning, weaving and finishing, and the three functions are often undertaken in integrated plants (Fig. 2).

The main aim of the research undertaken is to track the various aspects of trade in T&C between India and Pakistan over the years and determine the potential for bilateral trade in this sector. For this, we try to answer the following questions:

- How has the T&C sector evolved in India and Pakistan?
- What has been the pattern of bilateral trade in T&C between India and Pakistan and how important is this sector for the two countries with respect to their trade with the world?
- What has been the individual contribution of the textiles and clothing segments to trade in the T&C sector? What is the trade potential for both countries in this sector and how much of the trade potential has been capitalized? In what way does the maintenance of the negative and sensitive lists restrict the trade T&C between the countries?

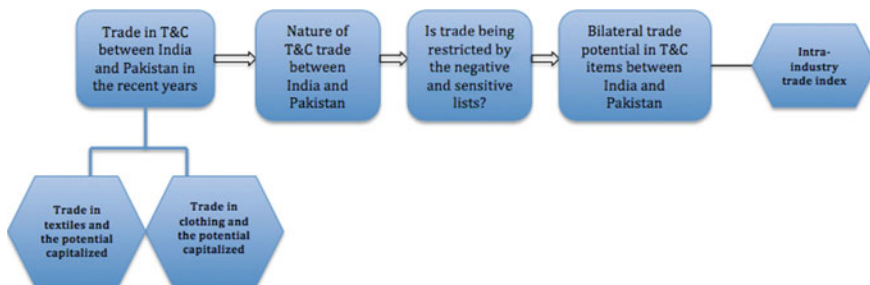


Fig. 2 Analytical framework

- What has been the nature of trade in T&C between India and Pakistan? What is the extent of intra-industry trade in the T&C sector between India and Pakistan? How do firms perceive trade complementarities in this sector?

To gauge the trade potential in this sector, we have calculated the intra-industry trade (IIT) indices in T&C items of each of the countries. Since the trade in T&C sector has both vertical and horizontal linkages, we have also looked at the components of IIT viz. vertical and horizontal IIT. The results of these quantitative exercises will also help in demonstrating the trade complementarities that exist in the T&C sectors between India and Pakistan. The trade figures have been extracted from UN COMTRADE and we have made use of the Trade Sift software for calculation of intra-industry trade indices.

3 Evolution and Structure of the Textile Sectors in India and Pakistan

The phasing out of the Multi-fibre Agreement (MFA) and the WTO agreement on Textiles and Clothing were possibly the major global trade policy changes that impacted the T&C sectors, especially cotton, of both India and Pakistan. The MFA was a trade agreement adopted in 1973 by the United States, Canada, and Europe that set quotas for the amount of textiles and apparel that other countries could export to these countries. It came into force in 1974, and was seen as a protectionist measure intended to prevent the loss of textile and garment industry jobs in the developed countries from mainly developing countries, where such goods could be more cheaply produced (Economic Review 2005). After many rounds of renewal, it was in 1991 as part of GATT's (General Agreement on Tariffs and Trade) Uruguay Round trade negotiations that a definitive plan for phasing out of the quantitative restrictions was laid down, known as the Agreement on Textiles and clothing (ATC). The ATC set a four-stage liberalization schedule with 2005 being the final stage of full integration into GATT (elimination of quotas and termination of the ATC). Post the MFA, India and Pakistan have been the biggest gainers in terms of their growth in textile exports along with China (The Dawn 2005). The increase in trade post MFA, over the period 2007–2013 for India, China and Pakistan was 119, 49 and 44 %, respectively (WITS database). In addition to this, the various domestic reforms undertaken in India and Pakistan have also given a push to the T&C sector of India and Pakistan.

The textile policies of both India and Pakistan clearly point to the importance of the sector in their respective economies. According to the Textile Policy of Pakistan (2014–2019), textiles is the most important manufacturing sector of Pakistan and has the longest production chain, with inherent potential for value addition at each stage of processing, from cotton to ginning, spinning, fabric, dyeing and finishing, made-ups and garments. The sector contributes nearly one-fourth of industrial value added, provides employment to about 40 % of industrial labour force, consumes

about 40 % of banking credit and accounts for 8 % of GDP. Textiles are the mainstay of the exports of Pakistan accounting for 53 % of its total world exports. Pakistan is the fourth largest producer and third largest consumer of cotton in the world (Textile Policy 2014–2019, Ministry of Textile Industry, Government of Pakistan).

The textile industry in India traditionally, after agriculture, is the only industry that has generated huge employment for both skilled and unskilled labour in textiles. It continues to be the second largest employment generating sector in India. The potential size of the Indian textiles and apparel industry is expected to reach USD 223 billion by 2021, according to a report by Technopak Advisors. The Textiles Vision Document formulated by the National Manufacturing Competitiveness Council (NMCC) has projected that textiles exports from India will touch USD 300 billion by the year 2024–2025.

In both India and Pakistan, the textile and apparel sectors exhibit different degrees of specialization. Firms in Pakistan specialize in cotton textile intermediate goods (yarn and grey fabric), as well as towels and bed linen. Firms in India have developed a highly complex sector covering the entire value and production chain from fibre production to garment manufacture and packaging (Rasheed 2012). We discuss the evolution and structure of the textiles industry in India and Pakistan in this section, which has contributed to the growth of the industry in each of the countries.

3.1 India

The size of India's textile and apparel industry is estimated at USD 94 billion in 2012. Out of this domestic industry constitutes of USD 63 billion and exports are worth USD 31 billion. India has an overwhelming presence in textiles from fibre to garments stage and the sector's importance in the economy can be seen from its contribution in GDP, industrial production, export earnings and employment (*ibid.*). India is the second largest textile and apparel exporter in the world. Textiles and apparel exports from India are expected to grow at a CAGR of 9 % over the next decade. The rate of growth of apparel exports will continue to be higher than that of textiles. The top textile and clothing export partners of Pakistan in 2013 were China, the US, Bangladesh and UAE (Presentation on Global & Indian Textile & Apparel Trade Background Information, Technopak, 2014).

The Industrialisation Policy enacted in 1948, right after independence laid down the priority areas and regulations for the development of industries. Post this, till the late 1980s, the textiles industry remained one of the most restricted industries due to the regulations and policies to ensure that mechanization did not occur, labour intensive textiles were produced and large-scale production was discouraged by restrictions on total capacity. The production of all textile mills was controlled as was the maximum number of counts of yarn, and the width of the cloth to be produced for products like dhotis and saris. It was also a common practice to

reserve the production of some product lines such as towels, for small-scale firms (Bedi and Cororaton 2008). The imposition of quotas on yarn exports, stringent licensing for organized sector and price regulations to handle the shortages resulting from the licensing restrictions were the other barriers to the growth of the sector in India during this period.

It was only in 1991, with the ushering in of the reforms and the New Industrial Policy that the textile industry was removed from the licensing category. The Statement of Industrial Policy 1991 and the Textile Development and Regulation Order of 1992 brought about the reduction in controls to bring about greater transparency. In the later years, the National Textiles Policy, 2000 redefined the goals and objectives in tune with the times to develop a strong and vibrant industry. The Policy laid down targets and outputs for all segments of the textiles and clothing industry like cotton textiles, silk textiles, jute textiles, man-made fibres, made-up textiles, etc. It emphasized the crucial role of exports of textile items. The Policy also laid down the objective of increasing exports to USD 50 billion by 2010 from the then present level of USD 11 billion.

Other major reforms in the policy were: inducing technological development in the value-added stages of processing, including (1) Development of export zones and technology parks to encourage economies of scale through government support by exempting firms from labour regulations and providing them with concessions on land purchases, credit, and taxes; (2) Removal of foreign direct investment constraints; (3) Reforms in labour regulations that allow splitting of units into several smaller units to avoid complications in laying off workers and in availing tax incentives; (4) Launching the Technology Upgradation Fund Scheme (TUFS) to encourage technological improvement through incentives. The total inflow of foreign direct investment (FDI) in all sectors improved in response to the economic reforms, but FDI remained small relative to domestic investment. Moreover, since 1991, the textiles sector accounted for only about 1 % of FDI inflows to India (Economic Survey, Government of India, 2004). Indian labour policies were cited by several Indian companies as the principal constraint on firm size, industry investment, and international competitiveness. The labour reform benefited particularly those units operating in export zones. The open-ended scheme depended on the capacity of the industry to absorb funds in bankable and the 5 % interest reimbursement of the normal interest charged by lending agencies; (5) Sponsorship of various Technology Missions on Cotton (TMC), which seek to address the issues of integrating the different aspects of cotton, such as research, extension and development for production, development of market infrastructure/yards, and modernization of ginning/pressing factories.

The change in the domestic policy environment along with the phasing out of the global Multi-fibre Agreement (MFA) under the WTO created tremendous opportunities for the textiles and apparel sectors in India. In the international scenario, India is regarded as a major alternative source to China after the quotas were removed for textiles and made-up articles. It has inherent strengths in terms of a strong multi-fibre raw material base, low cost of labour, intellectual capital and dynamic entrepreneurship.

3.2 *Pakistan*

Pakistan's textile industry provides 9 % of the global textile needs and is ranked at 10th among the world textile producers. The textile industry, based on locally grown cotton, produces mainly cotton yarn, cotton cloth, and made-up textiles and apparel. Market for imported textile machinery and equipment in Pakistan is directly proportional to the overall strength of the local textile industry (Kazmi and Takala 2014). The top textile and clothing export partners of Pakistan in 2013 were the US, China, UK, Germany and Bangladesh (International Trade Map).

Industrialization in Pakistan began in the 1950s with the textiles sector being the main focus area. The Valika Textile mill at Karachi was set up in 1953 which set the tone for modern development of the textile sector in the country. By the mid-1960s, there were 180 units of textile bleaching, printing and processing units, mostly in Punjab and Karachi. New mills were being established with the import of technology, but suffered from lack of technical staff and capital shortages. During the 1970s, the Cotton Export Corporation (CEC) controlled most of the textile exports of Pakistan (Tahir 2013). The monopoly power wielded by the organization excluded the private sector from international cotton trade (Cororaton et al. 2008). The exports of cotton were subject to a minimum export price and benchmark pricing system. This was done to prevent under invoicing and to ensure a definite amount of export duty. However, in the later stages, the price intervention system of the CEC led to depression in domestic cotton prices which eventually made the system untenable. The export duty was finally abolished in 1994 and domestic prices were in line with international prices. From the late 1980s to mid-1990s, the investment friendly policies of the government led to the growth in the textile industry. A number of incentives such as tax holidays and breaks were announced for new investments. It was in the 1990s that the modernization process kick started with a huge world demand for good quality fabrics with wide width. A huge expansion in the spinning sector also took place with the abolishing of the import duty on machinery for producing garments and made-ups during this decade.

The Economic Survey of Pakistan 2012–2013 has noted that the textile industry is the most important manufacturing sector of Pakistan with the longest production chain with inherent potential for value addition at each stage of processing, from cotton to ginning, spinning, fabric, processing, made-ups and garments. The textiles and clothing sector is an important sector providing livelihood to more than 10 million farming families.

Several policies have been undertaken to boost the performance of the sector. A Textile Vision 2005 was developed by the Small and Medium Enterprise Development Authority (SMEDA) which suggested three different scenarios for the growth of the sector. In subsequent years, parts of the recommendations of the Textile Vision were implemented through trade policies and trade/investment promotion measures. A separate Textile Ministry was created a few years back for exclusive focus on textile and clothing sector.

The Strategic Trade Policy Framework (STPF) 2009–2014 aims to increase exports of textile from Pakistan's existing exports USD 10 billion to USD 25 billion by the year 2015. This policy formulated as the first textile policy of Pakistan, made a large allocation of funds of about Pakistani Rupees 123 billion for this purpose. The key features of this policy include: establishment of a Textiles Investment Support Fund (TISF) for incentivizing investments in specific areas including modernization of machinery and technology, removing infrastructural bottlenecks, enhancing skills, better marketing and use of information and communication technology (ICT).

A Technology Upgradation Fund (TUF) was announced for part financing of capital intensive projects. This proposed that for capital intensive projects, the government will pay 50 % of interest cost of new investment in plant and machinery (maximum of 5 %). For small investments, it was proposed that the government will contribute up to 20 % of capital cost as a grant. The budget of Rs. 1.6 billion was initially earmarked for this and was expected to increase to Rs. 17 billion by 2014. For development of infrastructure, the policy announced schemes for common warehousing, storage and marketing facilities and an amount of Rs. 1 billion was allocated for the same, to be built on public–private partnership model.

Given the success of textiles city and garments cities models, there was a proposal to set up more such industrial estates to ensure availability of all industrial amenities at reasonable cost. Similarly for skill development, the policy proposed that a comprehensive training plan be developed to upgrade the overall pool of skills in the textiles value chain and also allocated Rs. 1 billion during the current year for skill development initiatives. This policy also lays down the sub-sector initiatives to be launched including those for ginning, spinning, weaving, knitting, processing, fashion design, handlooms and handicrafts, carpets and technical textiles. These schemes were to be launched on a public–private partnership basis with the aim to upgrade and improve these sectors.

However, in the recent years, Pakistan's textile industry is facing problems due to the energy crisis in the country. The energy shortages are creating pressure on the Pakistan's crippled and debt-ridden economy. Despite a wealth of natural resources, Pakistan produces only 80 % of its electricity needs and even some of that comes from imported fuel.

4 Trade Between India and Pakistan in Textiles and Clothing

4.1 Existing Trade Between the Two Countries

Trade in the T&C sector between India and Pakistan occupies the largest share (24 %) in total bilateral trade between the countries (WITS database). However, it



Fig. 3 Trade in textile and clothing between India and Pakistan (2009–2013). *Source* Based on data from UN COMTRADE

occupies a negligible share in India–Pakistan bilateral trade in T&C with respect to the world.

The exports have shown an increasing trend except for a fall in 2011. Perhaps the revival of the trade talks between India and Pakistan in 2011 and the subsequent removal of the positive list led to the increase in exports thereafter. However, even though the quantum of exports has increased over the years, the share of T&C trade in total exports has gone down recording a minor increase in 2013.

The imports of T&C from Pakistan have been much lower than the exports. The imports showed an increasing trend from 2009 to 2012. However, the share of T&C imports in bilateral trade does not show a consistent trend (Fig. 3).

Since the total trade in the T&C sector between India and Pakistan shows a mixed trend, it would be worth investigating the trade in textiles and the clothing segments separately to get a sense of the importance of individual sectors.

4.2 Trade Potential and Capitalization in the Textiles and Clothing Divisions

The trade figures of T&C warrant a further analysis of the nature of trade in this sector between India and Pakistan. To analyse this, we have considered two segments—textiles (HS codes 50–60 and 63), consisting of yarn, fabrics, fibres, filaments, textile floor coverings and textile products for industrial use and clothing (HS codes 61 and 62) consisting of articles of apparel and clothing. Along with this, we have also calculated the trade potential of textiles and clothing. The export and import potential will give us an insight into the trade that can be achieved given the current trade levels between India and Pakistan. The Trade Possibility Approach

has been used to calculate the potential. It is a simple, yet intuitive method that yields practical results. It is calculated as follows:

$$\text{Min(SE, MI)} - \text{ET} \quad (1)$$

where SE, MI and ET are the reporting country's global exports/imports, partner country's global imports/exports and existing trade, quantified by the exports of the reporting country to the partner country.

Trade potential calculated using the trade possibility approach, when considered in isolation would lend inflated figures. It is important to take into account the comparative advantage of the country in question to yield realistic results. Comparative advantage is the term used to describe the tendency for countries to export those commodities which they are relatively adept at producing, vis-à-vis the rest of the world. In other words, if a country can produce a good at a lower relative cost than other countries, then with trade, that country should devote more of its scarce resources to the production of that particular good. Through trade, that country can obtain other goods at a lower price (opportunity cost), in exchange for the good in which it has a comparative advantage (Bhattacharyya 2011).

The revealed comparative advantage (RCA) measures if the share of products in the exports of a country is higher than its international participation (Data viva 2013). The concept of revealed comparative advantage (Balassa 1965, 1977, 1979, 1986) pertains to the relative trade performance of individual countries in particular commodities. On the assumption that the commodity pattern of trade reflects the inter-country differences in relative costs as well as in non-price factors, this is assumed to "reveal" the comparative advantage of the trading countries (Batra and Khan 2005). The revealed comparative advantage of a nation is measured by the relative weight of a percentage of total export of commodity's in a nation over the percentage of world export in that commodity. Balassa (1965) suggested the following of index of RCA:

$$\text{RCA}_{ij} = \frac{\frac{X_{ij}}{X_{wj}}}{\frac{X_i}{X_w}}, \quad (2)$$

where X_{ij} are the i th country's exports of commodity j .

X_{wj} are the world exports from country of commodity j , X_i are the total exports of country i and X_w are the total world exports.

We have followed a two-stage method to arrive at the realistic export and import potential figures. First, we have used the trade possibility approach to calculate the trade potential figures. Then, to select the commodities in which the country has a comparative advantage, we have mapped the commodities with an RCA greater than 1 to the respective export/import potential figures. For instance, to calculate the potential for importing textile and clothing items from Pakistan, the figures were calculated by using data for India's global imports, Pakistan's global exports and India's imports from Pakistan and applying formula (1). The RCAs (taking in

account Pakistan's exports, in this case) were also calculated using formula (2) and those commodities with an RCA greater than 1 were then mapped with the import potential figures. The import potential figures for each of the commodities with RCA greater than 1 were then added up to arrive at the figures in Table 1.

Additionally, we have also calculated the ratio of current exports to export potential to assess how much of the trade is being capitalized on (Table 2).

Table 1 Trade in T&C between India and the world and India and Pakistan with respective shares (2009–2013)

	Indian T&C exports to Pakistan	Indian T&C imports from Pakistan	Indian exports to the world	Indian imports from the world	Share of T&C exports in total exports	Share of T&C imports in total imports
	In million USD		In million USD		(%)	(%)
2009	566.2	45.3	21,912.9	3215.9	3	1
2010	654.2	43.4	27,127.8	3914.3	2	1
2011	393.8	39.1	33,374.1	4934.2	1	1
2012	413.4	102.5	32,682.9	5151.1	1	2
2013	655.9	66.1	40,191.3	5410.1	2	1

Source Calculations based on data from UN COMTRADE

Table 2 Export and import potential in textiles between India and Pakistan

	T&C exports				
	India's exports to world (2013)	India's exports to Pakistan (2013)	Share in world exports	Export Potential	Potential capitalization ratio = current exports/export potential
	In million USD		(%)	In million USD	(%)
Textile	24488.8	654.6	3	1223.9	53.5
Clothing	15702.4	0.65	0	12.9	5
Total	40191.2	655.3	2	1236.8	53
	T&C imports				
	India's imports from the world (2013)	India's imports from Pakistan (2013)	Share in world imports	Import Potential	Potential capitalization ratio = current imports/import potential
	In million USD		(%)	In million USD	(%)
Textile	4605.2	64.1	1	642.6	9.9
Clothing	416.7	2.1	1	251.3	0.8
Total	5021.9	66.2	1	893.9	7

Source Calculations based on data from UN COMTRADE

The figures clearly show that trade between India and Pakistan is mainly concentrated in textile items. The textiles segment has majorly driven the T&C exports from India to Pakistan. The share of India's textile exports to Pakistan in world trade is close to 3 %. Even though this share in world exports is very low, the export potential for textiles from India to Pakistan has been capitalized to the extent of 53 %. The share of imports of textiles from Pakistan in world imports is also very low. Textiles imports of India from Pakistan occupy a miniscule 1 % share in world trade. However, the potential for textiles imports is 10 times the current textile imports of India from Pakistan. As a result of the low trade, the import potential has been capitalized only to the extent of 7 % of the current imports. With regard to the clothing segment, the quantum of exports and imports is much lower than that of textiles. However, India's import potential in clothing from Pakistan is proportionately higher than the export potential. A noteworthy point is the incredibly high-import potential in clothing from Pakistan that has not been tapped till now—only 0.8 % of the potential has been capitalized by India in imports of clothing from Pakistan. Why has India not been able to exploit the import and export potential? Why are the trade figures so low? Perhaps an analysis of the restrictions in trade between the two countries will provide answers to these questions.

4.3 Sensitive and Negative List Analysis

Trade between India and Pakistan has also been affected by the maintenance of sensitive lists and the negative list. Pakistan maintains a negative list for India consisting of items that cannot be imported from India. Only certain goods specified are importable via land route from Wagha. Being members of SAFTA, the countries also have sensitive lists consisting of items that are exempted from the low SAFTA tariffs. The negative and sensitive lists operational in Pakistan applicable to India and the sensitive list maintained by India for Pakistan are indicative of the sectors in which the two countries want to offer protection to domestic industries from each other's imports. The textile and clothing items make up for 5.7 % of the items Pakistan's negative list. As opposed to that, T&C items make up for almost 25 % of the sensitive lists of both countries. Out of 614 items, India has 176 T&C items in its sensitive list which accounts for the largest number of items of a particular sector in the list.

Most of the textile items in the Pakistan's negative list consist of man-made filaments and man-made fibres (across HS codes 54 and 55). The clothing items (across HS codes 61 and 62) consist of nine items of apparel and clothing accessories—knitted and crocheted. India ranks second in the production of polyester textile yarn production in the world (Oerlikon Textile 2010). The top ten synthetic fibres consuming countries in 2007 accounted for 76 % of world synthetic fibre consumption, and included (in decreasing order) China, the United States, India, Japan, the Russian Federation, Germany, South Korea, the United Kingdom, Italy,

and Pakistan (Food and Agriculture Organization of the United Nations and International Cotton Advisory Committee 2013). Clearly, India features in the top ranks of countries producing man-made filaments and fibres. Pakistan has competitive advantage in cotton textile products. India, on the other hand, has an upper hand in silk and other synthetic fibre. This throws open the opportunity for Pakistan to utilize India's large production of materials, especially polyester staple fibre (PSF) and polyester filament yarn (PFY). However, Pakistani textile manufacturers are apprehensive of the competition that they will face from Indian polyester producers. Besides the scale, the Indian government gives tax breaks, subsidy on interest, tariff protection, land on concessional rates and other favours (Hasan 2014). However, is the favourable treatment provided to the Indian textile government a strong enough argument to restrict trade by way of maintaining a negative list? Maybe not. As per WTO, subsidies for production fall in the "actionable" category where the affected importing country can impose countervailing duties to offset the disadvantage to its local manufacturers due to the cheaper imported item. According to the Agreement on Subsidies and Countervailing Measures (SCM Agreement), actionable subsidies are not prohibited. However, they are subject to challenge, either through multilateral dispute settlement or through countervailing action, in the event that they cause adverse effects to the interests of another Member. There are three types of adverse effects. First, there is **injury** to a domestic industry caused by subsidized imports in the territory of the complaining Member. This is the sole basis for countervailing action. Second, there is **serious prejudice**. Serious prejudice usually arises as a result of adverse effects (e.g. export displacement) in the market of the subsidizing Member or in a third country market. Thus, unlike injury, it can serve as the basis for a complaint related to harm to a Member's export interests. Finally, there is **nullification or impairment** of benefits accruing under the GATT 1994. Nullification or impairment arises most typically where the improved market access presumed to flow from a bound tariff reduction is undercut by subsidization. The Pakistan textile industry can resort to this clause under WTO if it feels threatened by Indian textiles inundating their market.

With respect to the maintenance of sensitive lists, it is important to look at the value of imports subject to the higher tariffs under the respective lists of the countries. This will throw light on whether these lists actually pose a restriction to trade between both the countries. The proportion of the Pakistani T&C items that are part of Pakistan's sensitive list is a mere 4 % of the total T&C imports from India. On the other hand, the share of imports of Indian textiles from Pakistan that are a part of India's sensitive list is as high as 42 %. So, while Pakistan does restrict trade by maintenance of the negative list, India is also trying to protect its textile industry by way of applying non-concessional tariffs on items in the sensitive list (Table 3).

Apart from the fact that a majority of the items that are importable through the Wagah border consists of textile items, the proportion of these items in Pakistan's imports of textile items from India is as high as 85 %. This figure points to the importance of single yarn of combed and uncombed fibres in the Pakistan's imports from India. However, a caveat is that these items are not part of the negative list and

Table 3 Textile items in the negative and sensitive lists

	Segments	Number of items	Remarks
Pakistan's negative list	Textile	60	Most of the items consist of man-made filaments and man-made fibres (HS codes 54 and 55). Items from the clothing segment: of wool, cotton and man-made fibres
	Clothing	9	
Items importable from India through Wagah	Textile	48	Single yarn of combed and uncombed fibres, multiple or cabled yarn of combed and uncombed fibres and raw jute (HS codes 52 and 53)
Pakistan's sensitive list	Textile	70	Items in this list range from woven fabrics (of man-made fibres) to carpets and knitted fabrics. Majority of the items are in the clothing segment (HS Code 61 and 62) Bed linen (HS 63), sacks and bags are also under the sensitive list
	Clothing	149	
India's sensitive list	Textile	30	Textile items include cotton yarn, woven fabrics of artificial and polyester staple fibres, carpets and knitted fabrics of cotton RMG—menswear, women's wear, t-shirts, jerseys, track suits, gloves, shawls etc.
	Clothing	146	

Source SAFTA related documents retrieved from www.saarc-sec.org

it is quite possible that they are being exported to Pakistan through other routes such as sea and air. Nonetheless, their importance in the bilateral trade of textiles remains.

5 Nature of Trade in Textiles and Clothing Between India and Pakistan

An insight into the top exports and imports of textile and clothing items between India and Pakistan will help in highlighting the trade basket. Among the top 10 textile exports from India to Pakistan, cotton has the highest share in bilateral trade. India exports many varieties of cotton yarn containing 85 % or more cotton in terms of the count of the fabrics. Woven fabrics of polyester and polyamides and yarn of synthetic staple fibres also occupy a substantial share in India's total exports of T&C to Pakistan. In fact, the share of exports of synthetic fibres is quite substantial after that of cotton yarn containing 85 % or more cotton measuring less than 83.33 decitex. An impressive 38 % of cotton yarn, single, of combed fibres, measuring less than 106.38 dtx. and 69 % of the same yarn measuring less than 83.33 dtx. as a proportion of India's global exports to the world is exported to Pakistan.

Of the top 10 Indian exports, six items fall in the category of cotton yarn (other than sewing thread) containing 85 % or more by weight of cotton not put up for retail sale. Other top export items consist of man-made staple fibres like polyester.

The top imports of T&C from Pakistan are cotton, not carded or combed and wool, not carded or combed. The share of Pakistan's cotton imports as a proportion of India's global exports is a meager 5 %. The nature of trade in case of woven fabrics is interesting to note. Woven fabrics of cotton weighing more than 200 g/m², make up for 30 % of India's global imports even though the import values are much lower. This can be attributed to the fact that Pakistan's strength lies in woven fabrics and India imports a substantial quantity from Pakistan. Within the clothing segment, the Pakistani exports of woven fabrics have registered robust growth during the last two decades (WITS database). The production of woven cotton cloth has increased substantially and serves as the main strength for downstream sectors such as bed wear, made-ups and garments (Pakistan Economic Survey, 2011–2012).

An analysis of the top import and export items of India from and to Pakistan shows that cotton, not carded or combed has the highest trade values incase of both exports and imports. Apart from cotton, other closely related items in this segment include woven fabrics of cotton, containing 85 % or more by the weight of fabric. Trade in similar segments of textiles and clothing seems to be the hallmark of bilateral trade between India and Pakistan. Such trade patterns resonate with the trade theories on intra-industry trade or the simultaneous export and import of similar type of goods. Similarity is identified here by the goods or services being classified in the same "sector" (van Marrewijk 2008).

5.1 *Intra-industry Trade in Textiles and Clothing*

An analysis of the intra-industry trade in textiles between India and Pakistan will help pick out items with bilateral trade potential between the countries. Intra-industry trade has been the dominant form of trade in the textile sectors between India and Pakistan. We have tried to quantify this overlap of imports and exports at a given aggregation level by calculating the intra-industry trade index. The Grubel–Llyod (GL) index is the standard index used to measure intra-industry trade. It is calculated as follows:

$$IIT_{jt} = 1 - \left(\frac{|x_{ij}^k - m_{ij}^k|}{x_{ij}^k + m_{ij}^k} \right),$$

where x_{ij}^k are the exports from India to Pakistan of commodity k and m_{ij}^k are the imports of India from Pakistan of commodity k .

Table 4 Intra-industry trade in the T&C sector at the 6-digit level (2013)

Product	Product name	IIT in 2013
621790	Parts of garments or of clothing accessories	0.96
520829	Other woven fabrics of cotton (cotton 85 % or more; not more than 200 g/m ² ; bleached)	0.95
580429	Mechanically made lace of other textile materials	0.90
520831	Plain woven fabrics of cotton (cotton 85 % or more; dyed; not more than 100 g/m ²)	0.89
630900	Worn clothing and other worn articles	0.89
520851	Plain woven fabrics of cotton (cotton 85 % or more; printed; not more than 100 g/m ²)	0.88
581099	Embroidery of other textile materials, in the piece, in the strips	0.87
550810	Sewing thread of synthetic staple fibres	0.87
620590	Men's or boys' shirts, of other textile materials	0.86
521213	Other woven fabrics of cotton (dyed; weighing not more than 200 g/m ²)	0.81
620339	Men's or boys' jackets, blazers, of other textile materials	0.80

Source Calculations on trade sift using data from UN COMTRADE

An IIT of the value 0 would indicate pure inter-industry trade (or trade within different sectors) and an IIT index of value 1 would indicate pure intra-industry trade (Table 4).

The IIT_{ji} at the six-digit level shows that intra-industry trade is the highest in parts of garments/clothing accessories and woven fabrics of cotton. In fact, among the top 10 items woven fabrics of cotton containing 85 % more by weight of cotton not put up for retail sale are both exported to and imported by India. Other items with a high level of intra-industry trade in the textiles segment include embroidery, sewing thread of man-made staples and mechanical lace. Among the items in the clothing segment, parts of garments and clothing accessories had the highest intra-industry trade index in 2013 (Table 5).

At a more aggregated level, the indices show that apparel and clothing has had the highest intra-industry trade index in the years 2011–2013. Except for a high IIT index of 0.50 in 2012, there has been low intra-industry trade in the cotton segment. Interestingly, if we consider the top 10 exports and imports of T&C between the two countries, apparel and clothing items do not figure in the top 10 items of trade between India and Pakistan in terms of value. Instead, cotton occupies a dominant position in trade between the two countries, accounting for 82.3 % in the top 10 exports of India to Pakistan and 63.92 % in the top 10 imports of India from Pakistan (refer Annexures 1 and 2). So, even though the quantum of trade in the garments and apparel segment is not very high, there is a high overlap of India and Pakistan's imports and exports in their bilateral trade. Such a pattern of trade reflects complementarities in trade in T&C between India and Pakistan. The very fact that both countries exchange different varieties of items in similar segments

Table 5 Intra-industry trade in the T&C sector at the 2-digit level (2011–2013)

HS codes	Textile and clothing items	2013	2012	2011
62	Articles of apparel and clothing accessories, not knitted or crocheted	0.63	0.62	0.70
53	Other vegetable textile fibres; paper yarn and woven fabrics of paper yarn	0.51	0	0.27
63	Other made-up textile articles; sets; worn clothing and worn textile articles; rags	0.20	0.41	0.66
58	Special woven fabrics; tufted textile fabrics; lace; tapestries; trimmings; embroidery	0.17	0.17	0.12
52	Cotton	0.16	0.50	0.17
59	Impregnated, coated, covered or laminated textile fabrics; textile articles of a kind suitable for industrial use	0.14	0.17	0.27
57	Carpets and other textile floor coverings	0.12	–	0.09
61	Articles of apparel and clothing accessories, knitted or crocheted	0.11	0.02	0.11
56	Wadding, felt and nonwovens; special yarns; twine, cordage, ropes and cables and articles thereof	0.07	0.20	0.64
50	Silk	0.07	0.24	0.11
60	Knitted or crocheted fabrics	0.05	0.17	0.20
51	Wool, fine or coarse animal hair; horsehair yarn and woven fabric	0.02	0.12	0.27
54	Man-made filaments	0.01	0.01	0.03
55	Man-made staple fibres	0.01	0.01	0.02

Source Calculations on Trade Sift using data from UN COMTRADE

illustrates the potential for increased trade, especially in the apparels and woven fabrics segment. With such high levels of similar trade, it is worth exploring the type/nature of intra-industry trade in T&C. There are two different types of intra-industry trade—horizontal and vertical. Horizontal IIT (HIIT) represents an exchange of commodities within broadly similar levels of quality or stage of processing while vertical IIT (VIIT) is defined as exchange of commodities with different levels of quality or stage of processing.

5.2 Components of Intra-industry Trade Index

A typical textiles value chain starts with cotton production, which then passes through ginning where fibre is separated from the cotton seed. The next stage is spinning where the fibre is spun into yarn. At this stage, Man-made Fibers (MMF) such as polyester is also used as substitute for cotton fibre. The next stage of processing includes knitting and weaving depending on the type of fabric to be produced. The knitted or woven fabric then goes through dyeing and further

processing such as bleaching. Once the fabric is processed, the last stage is stitching through which various made-ups are produced. Additional steps in the value chain include branding and retailing. These core activities of the value chain are facilitated by a network of supporting activities that include transport and logistics as well as export support.

To analyse the nature of intra-industry trade between India and Pakistan, for each product at the 6-digit level, we separate the total IIT into two components—horizontal and vertical, using the relative unit values of exports and imports. Unit value can be used as an indicator of the average price of a particular good for assessing product quality in trade data. The underlying assumption is that relative prices are likely to reflect relative qualities (Stiglitz 1987). Unit values can be calculated in several ways: per item, per tonne, per square metre, etc. (Ferto and Hubbard 2002).

For this exercise, unit values have been calculated by dividing the trade value by the quantity. However, using unit values has certain disadvantages. Unit values may be positively associated with size, whereas other characteristics more closely related to quality, like durability and reliability, may be inversely associated with size, causing interpretation problems. They also might be affected by the quantity, causing unit values to be deflated or inflated, as the case may be. Despite these shortcomings, the use of unit values has become common in the measurement of horizontal and vertical intra-industry trade. Following the general practice in the literature, IIT is defined as HIIT if the ratio of export unit value to import unit value is within the range of 0.75–1.25. When ratios are outside the specified range, IIT is considered to be vertical in nature (Tewari et al. 2014). After calculating the unit values, we have counted the number of items with unit values less than 0.75, between 0.75 and 1.25 and more than 1.25 to classify them into the respective types of IIT.

	2009	2010	2011	2012	2013
	Number of items				
HIIT (between 0.75 and 1.25)	15	4	18	40	29
VIIT (less than 0.75 and more than 1.25)	32	44	32	19	34

Source Calculations based on data from UN Comtrade

The results show that most of the items traded have unit values that are less than 0.75 and more than 1.25 through the years 2009–2013. This implies that the trade in T&C is more of the VIIT nature than HIIT. This would imply that trade is mostly concentrated in items that need processing and are different in terms of quality. The nature of VIIT in textiles and clothing can be attributed to the textile value chains that exist in the sector and can be tapped to enhance trade in T&C between India and Pakistan.

5.3 High Quality Versus Low Quality

The VIIT can be further subdivided into two categories—high-quality or high-value VIIT (HVIIT) and low-quality VIIT (LVIIT). If the ratio of unit value of export to import is greater than 1.25, then the quality or processing stage of exports is higher than that of imports (HVIIT), while ratios below 0.75 indicate higher quality of imports compared with exports (LVIIT).

	2009	2010	2011	2012	2013
	Number of items				
LVIIT (less than 0.75)	7	13	22	7	10
HVIIT (more than 1.25)	25	31	10	12	24

Source Calculations based on data from UN Comtrade

The results show a rather mixed pattern of high and low-value VIIT over the years 2009–2013. Leaving aside the results of the year 2011, which seems to be an outlier, the number of items in which high-vertical IIT is occurring seems to be much greater than the items with a low VIIT. Since much of the IIT in the T&C sector represents VIIT, this implies that the unit values of products exported by India are generally higher than that of imports. Since the quality or processing stage of exports is higher than that of the imports, it seems Indian exports are more likely to be high-quality processed exports. This points towards the complementarities in the textile sectors between India and Pakistan.

6 Findings from the Survey

To supplement the secondary research, interviews were conducted with stakeholders and textile traders in India and Pakistan. These were semi-structured interviews with Confederation of Indian Textile Industry (CITI) (New Delhi), The Textile Association (India) (Mumbai), Textile Machinery Association (TMA) (Mumbai), Textile Commissioner (Mumbai), National Textile Corporation (NTC) (Mumbai and Coimbatore), and Southern India Mills' Association (SIMA) (Coimbatore) in 2012–2013. The questions posed in the interviews were mainly concerned with the progress of the sector in the two countries, their strengths and weaknesses and the potential for trade between the two countries.

6.1 Cotton Production

Cotton production in India is concentrated in three states, Gujarat, Maharashtra and Andhra Pradesh. Among these three states the yield of cotton in Gujarat

(1000 kg/ha) surpasses the international standards. In terms of production of cotton, Gujarat accounts for 33 % of the total cotton produced but only accounts for 20 % of acreage, while Maharashtra has the largest acreage among the three states but contributes only 30 % of the total production of cotton.⁴ India's total production of cotton is higher than that of Pakistan because the total acreage in India is higher (almost double that of Pakistan). India's average yield is 500 kg/ha and the corresponding figure in Pakistan is 600 kg/ha. This is much lower than the international standard yield of 750 kg/hectare. However, Pakistan definitely has a competitive advantage over India in terms of productivity (*CITI*, Interview, New Delhi).

6.2 Spinning

India has the second largest spindle capacity in the world. It accounts for 22 % of the world's spindle capacity, while Pakistan is the third largest and accounts for 12–14 % of the world's spindle capacity. On an average India produces 4600 million kg of yarn while Pakistan produces 3000 million kg of yarn in a year. Exports of yarn from both the countries, relative to total production is in the range from 20–25 %, though in absolute value terms India exports more yarn to the world than Pakistan (*CITI*, Interview, New Delhi).

The TUFs scheme has been instrumental in increasing the spindle capacity in India. About 95 % of the yarn in India is produced in the organized sector with the latest machines, which boosts the competitiveness in this segment. There are approximately 35,000 spindles and manufacture cotton (40–150 counts), polyester (40–76 counts) and polyester cotton (30–64 counts) yarn. Constant availability of power is a major concern which the spinning industry faces, and the cost and availability of electricity determines India's competitiveness in this segment (*CITI*, Interview, New Delhi).

The spinning segment is also one of Pakistan's biggest strengths—it is highly organized with huge capital investments and in this segment, there are very few medium and small firms. There has been a lot of investment in the spinning sector in Pakistan which has reduced the average machinery age to 7–8 years (*Industry interviews*, Lahore). In 2008, 50 % of their spinning segment was modernized. However, Pakistan does not have finer quality of cotton and specializes in production of only few counts of yarn (less than 20). India on the other hand has cotton of much higher quality and Indian spinning mills are more advanced, producing a

⁴The Northern region is the primary producer of short and medium staple cotton and the southern states primarily grow long staples. The central region produces medium and long staples (ITC 2007).

variety of yarn ranging from 20–150 counts⁵ (*The Textile Association*, Interview, Mumbai).

On the spinning part, the production segment of the spinning sector in Pakistan is tilted towards the production of coarser categories of yarns over average count of 20. There is a huge potential for trade in textiles between the two countries, for instance, in lower count of yarn of less than 20, which is largely imported by Indian garment manufactures from the rest of the world.

6.3 Weaving

Yarn can be spun in the form of a coon or in the form of hank yarn. The coon is the standard spun yarn which is used by the mills and power looms for the process of fabrication both in the domestic and export market. The hank yarn obligation for the spinning mills in India restricts 40 % of the total output for the handloom sector. The profits in production of hank yarn are low, since the cost of production increases as additional processes are involved to prepare the yarn in hank form. Also, the price for hank yarn is fixed in the domestic market (which is lower than market price of yarn in a coon) and cannot be exported, therefore the prices which are realized are also low. Usually as an industry practice, the worst quality of cotton is used for the production of hank yarn to save input costs (*CITI*, Interview, New Delhi).

The Indian weaving industry is relatively underdeveloped as even today, 40 thousand looms have old technology. Also 80 % of the shuttle-less looms are secondhand, which reduces the competitiveness of the industry (*Textile Machinery Association*, Interview, Mumbai).⁶

The weaving sector in Pakistan has both large firms (60 %) and SMEs (40 %). Pakistan generally produces a standard quality of yarn and has brands like Fax and Kohinoor. Pakistan's weaving industry is also very strong with advanced wider width looms. There has also been a significant amount of product diversification, for instance in cotton blending. In the last 10–12 years, there have been massive investments in denim wear in Pakistan. Due to its good cotton and low yarn count as well as strength in weaving, Pakistan's jeans are sourced to all the major global brands (*Industry interviews*, Lahore).

Entrepreneurs in India are not able to take full advantage of schemes like TUFs as weaving machines are costly, while the gestation period for returns is long and

⁵ITC (2007) notes that while India produces all counts of cotton, Pakistan produces medium and medium long staple and imports long staple. Fine and super fine counts are made from imported cotton in Pakistan.

⁶Out of 96 looms, 36 were modernized to shuttle less in 2008 by NTC in India. Full modernization was not undertaken by so as to retain workforce. Rs. 2000 crores of investment across NTC increased productivity by 30–40 % and the workforce engaged reduced to less than half. The total output of 124 units before modernization is equivalent to that of 23 semi-modernized ones today.

the market is very demand elastic. This is unlike spinning, which is very viable with maximum returns and demand does not depend on final consumer. Even in the processing industry, Indian firms do not have sophisticated machinery as majority of the players are small. Environment norms also act as a barrier in the processing industry as processing is a very polluting industry. Also, there is a shortage of skilled manpower (*Textile Commissioner, Interview, Mumbai*).

In the weaving sector, Pakistan is stronger than India due to high investment. Investments did not take place in the weaving sector in India due to the small-scale industrialisation policy that was in place and the smaller fragmented holdings which without financial support and low risk appetite, faced uncertainty in the demand for fabric.

6.4 Production of Fabric

Fabrication is undertaken by the following sectors in India:

- (a) Mills—account for only 4 % of the total production of fabric in India
- (b) Handloom sector—accounts for 20 % of the total production of fabric in India
- (c) Decentralized Power Looms—account for 30 % of the total production of fabric in India
- (d) Hosiery mills (knitted fabric sector)—account for 46 % of the total production of fabric in India

India produced about 62 billion m² of fabric in 2011 while Pakistan produces about 30 billion square metres. The quality of fabric from mills is better in India vis-à-vis Pakistan but the production of mill fabric in India only accounts for 4 %. Majority of the fabric in Pakistan is produced by shuttle-less looms. The fabricating sector in Pakistan upgraded to shuttle-less looms from shuttle looms in the early 1990s but due to the reservation in India of the textile sector in SME, the upgradation to shuttle-less loom has picked up in the Indian textile industry in the last few years. The total production of fabric by the handloom sector is about 20 % and given this fact, the hank yarn obligation needs to be lowered for the spinning mills in India (*CITI, Interview, New Delhi*).

Although India is self-sufficient in fabric production, imports of fabric from Pakistan also occur due to two reasons. First, the exchange rate favours Pakistan, and many garment producers from India source materials from Pakistan since the price is lower due to the exchange rate advantage. Second, India's trade policy for imports of raw material for exports of final goods gives a lot of benefits/incentives to the firm, and sometimes firm's import fabrics to avail these benefits (*CITI, Interview, New Delhi*).

Pakistan is the second largest exporter of home textiles in the world. In terms of use of fabrics, for Pakistan a larger proportion is used as made-up in comparison to India. Pakistan's textile industry is eyeing the market for made-up textiles which is

expanding in India due to the reality sector boom and rise of the Indian middle class, but would face stiff competition from Indian textile firms (*CITI*, Interview, New Delhi). Pakistan's processing industry is stronger than India's due to strength in dyeing and printing of woven fabrics and in processing shirting and trousers. The Pakistani processing sector has a 50–50 mix of large and SME firms. Embroidering and printing are generally outsourced due to limitations of generalized skill of labour (*Industry interviews*, Lahore).

6.5 Knitting

In the last few years, the textile industry in India is looking to shift away from weaving to knitting which is a less capital intensive process. Till 2003 the knitting sector was reserved for the small-scale sector, but the Indian knitting sector is picking up because of increased demand. The knitting process is one which was invented in Europe and increasingly the European economies are dismantling production capacity, and moving into India. The major knitwear sector in India is based out of Tirupur and Ludhiana. A similar movement is seen in Pakistan but still there is a domination of woven fabric (*CITI*, Interview, New Delhi).

6.6 Synthetic and Other Fibres

With respect to availability of man-made fibres (MMF) India has a clear advantage over Pakistan. India is the largest producer of man-made fibre, though India is not price competitive (*CITI*, Interview, New Delhi).⁷ Pakistan is not very strong in producing synthetic fabrics; the only strong area in this field is polyester staple fibres (*Industry interviews*, Lahore).

India's trade in MMF readymade garments globally is 35–40 % for Cotton and 60–65 % in MMF. While India produces 60 % cotton garments and 40 % MMF garment and exports about 70 % of cotton garments and 30 % MMF garment. Given the trend and demand globally of MMF the Indian textile industry needs to develop competitive edge in the MMF segment. India's strength lies in cotton which is a relatively cheaper fibre in India. The MMF industry feels that cotton should be taxed as their industry which is at a relative disadvantage due to higher costs/prices and does not get any benefits from the government (*CITI*, Interview, New Delhi).

⁷India is the second largest producer of Polyester Staple Fibre (PSF), Polypropylene Filament Yarn (PFY), Viscose Filament Yarn (VFY), the third largest manufacturer of Viscose Staple Fibre (VSF) and eighth largest manufacturer of Acrylic Staple Fibre (ASF) in the world. Pakistan could import PFY, VSF, and VFY from India, though some of these items are on Pakistan's negative list.

There has hardly been any growth in trade between the two countries in knitwear (RMG) as there is more competition in this segment. Pakistan's lowers are very competitive. India produces both uppers and lowers, but it is not very competitive in lowers. The RMG sector in Pakistan has mostly small and medium enterprises (90 %). Just as in the case of India, the lower segment of the RMG market in Pakistan is extremely price sensitive and manufacturers face huge losses (*Industry interviews*, Lahore).

In case of jute manufacturing, India is one of the largest producers in the world and has a clear advantage over Pakistan. Even in silk production, India has a larger production base than Pakistan (*CITI*, Interview, New Delhi).

6.7 Informal Trade in Textiles and Efforts to Tap the Trade Potential

Trade between India and Pakistan is also characterized by the informal flow of goods, particularly due to tariffs on certain commodities, non-tariff barriers to trade and the inadequacies of transportation and infrastructure for formal trade (Ahmed et al. 2015). Trade in ethnic garments constitutes a major share in this informal trade. Textile items such as apparel and clothing and carpets attract a customs duty of 25 %. In a survey on informal trade conducted by Ahmed et al. (2015), the main textile items found in the informal markets are Indian raw silk, cotton, Banarsi saris, muslin and readymade bridal dresses. The increase in demand for ethnic Indian garments is mainly attributed to the influence of media. The demand for ethnic ladies' suits increases significantly during the peak wedding season (after August). Saris account for USD 204.40 million and fancy dresses (including bridal wear) for USD 1152 million of the informal trade between India and Pakistan. The study also noted that some vendors import Indian cloth through Dubai and Singapore. In this case, the Indian cloth that goes to Dubai or Singapore is not stamped for its origin. An ICRIER survey conducted from the Indian side in 2013–2014 states that textiles constitute 20 % of the total informal exports from India to Pakistan. There has been a lot of demand for Indian synthetic fabric, silk-based fabrics and salwar kameez dupatta in Pakistan. Majority of the exports are from Surat and South India. With a value of USD 350 million, Indian informal imports of textiles constitute 49 % of the total informal imports. Indian traders import textiles informally via Samjhauta Express, cross-LoC trade routes and sometimes even via Dubai (ICRIER Survey, 2013–14).

The value of informal trade in the textiles sector is also the highest, similar to the formal trade in the sector. The surge in trade in textiles, especially, ethnic garments was particularly seen after the bout of liberalization in 2012, when Pakistan shifted to a negative list. This has also been documented by the survey with importers, exporters, wholesalers, retailers, transporters, customs clearing agents, *khepias* undertaken in Pakistan. To formalize trade and enhance bilateral trade relations,

efforts have been made at the Track II level wherein textile firms have collaborated to showcase apparels and clothing from either countries (Refer Box 1).

Box 1: Efforts to Collaborate in T&C between India and Pakistan

Retail brands, fashion houses and textile firms in India and Pakistan have made several efforts to carry forward cross-border collaborations in the past. Fashion labels from Pakistan such as Gul Ahmed and Khadi have expressed keen desire to partner with Indian fashion brands. The Shan-e-Pakistan event has held two editions in 2015 and 2016 that brought together fashion designers and retail brands on one platform. Such events give a push to Track II diplomacy, which is much needed to improve India–Pakistan trade relations. The Lakme Fashion Week held in 2014 also showcased designers from Pakistan. Apart from these events, Alishan Pakistan was another life-style event held in New Delhi in 2012 and 2014 to encourage business and realize the trade potential between the two countries.

7 Conclusion

The T&C sector occupies a pivotal position in the economies of India and Pakistan. Over the years, the textile policies of India and Pakistan have evolved, recognizing the importance of the sector in GDP, employment and trade. Among the major sectors of trade such as minerals, fuels, chemicals, vegetables and machinery, T&C saw a tremendous increase in bilateral trade between India and Pakistan post 2005. The potential for trade between the two countries is also exemplified by the similarities in culture, tastes and preferences in clothing. However, in spite of the USD 2.1 billion trade potential in T&C, the trade between both countries in this sector remains low. The low trade potential capitalization ratios in the textile and clothing sectors signal the scope for more engagements between India and Pakistan in these sectors. Though the export potential capitalization ratio is as high as 53 %, most of it is attributable to trade in textiles. As compared to this, the import potential capitalization ratio of 7 % is very low. The negative list is not the only barrier to trade in T&C between India and Pakistan. The sensitive list that India maintains for NLDCs under SAFTA covers 42 % of the trade in T&C between both the countries. Hence, trade barriers in the form of negative list of Pakistan and the non-concessional tariffs by India have hindered trade in T&C between both countries. The favourable treatment towards the Indian textile industry is an argument advanced by the Pakistan textile firms for keeping textile items in the negative list. However, this might not be a completely valid reason since countervailing duties can always be imposed as per the WTO. The abolition of the negative list maintained by Pakistan and reduction of India's sensitive list are the first steps that need to be undertaken to tap the potential in this sector.

The nature of trade in the sector between the countries brings out the potential to integrate in the supply chains. An examination of the trade data shows existence of high intra-industry trade in items of cotton, especially woven fabrics. India is one of the world's leading producers of man-made filaments and Pakistan's competitive advantage lies in cotton production. This suggests some inherent complementarities that need to be capitalized. A strong overlap of T&C items traded between the countries has also been found. This signals potential, particularly in the segment of apparel and clothing accessories. The trade in cultural and ethnic clothing, especially salwar kameez dupatta has certainly received a boost with designers from both nations collaborating and making efforts to showcase their works in both countries.

In the South Asian region, India, Pakistan, Bangladesh and Sri Lanka are the major T&C exporters. Pakistan and India could join hands with Bangladesh and Sri Lanka to jointly liberalize trade in at least those textile value chain items that they import from outside the region to reduce their costs owing to lower transportation costs (The International News, Pakistan 2014). There is huge diversity in terms of the T&C production in South Asian countries. There is a need to enhance the exchange of T&C with different levels of processing between India and Pakistan. This would eventually pave the way for collaboration in the textiles segment within South Asia and help the region to gain access to the supply chains in textiles.

Annexure 1: Top 10 Indian T&C Exports to Pakistan (2013)

HS Code	Items	India's exports to Pakistan		India's global exports	Difference between India's exports to Pakistan and its global exports	Share = India's exports to Pak/India's global exports to the world (%)
		In million USD				
520100	Cotton, not carded/combed	352.4	4513.4	4161	8	
540710	Woven fabrics obt. from high tenacity yarn of nylon/other polyamides/polyesters	87.2	555	467.8	16	
520527	Cotton yarn, single (excl. sewing thread), of combed fibres, containing 85 %/more by weight of cotton, measuring <106.38 dtx. but not <83.33 dtx. (>94 metric number but not >120 metric number), not put up for retail sale	33.5	88	54.5	38	
550410	Artificial staple fibres, not carded/combed/othw. Processed for spinning, of viscose rayon	25.5	224	198.5	11	
520528	Cotton yarn, single (excl. sewing thread), of combed fibres, containing 85 %/more by weight of cotton, measuring <83.33 dtx. (>120 metric number), not put up for retail sale	23.2	33.4	10.2	69	
520513	Cotton yarn, single (excl. sewing thread), of uncombed fibres, containing 85 %/more by weight of cotton, measuring <232.56 dtx. but not <192.31 dtx. (>43 metric number but not >52 metric number), not put up for retail sale	17.5	166.2	148.7	11	
520524	Cotton yarn, single (excl. sewing thread), of combed fibres, containing 85 %/more by weight of cotton, measuring <192.31 dtx. but not <125 dtx. (>52 metric number but not >80 metric number), not put up for retail sale	14.7	898.25	883.55	2	
550921	Yarn other than sewing thread, of synthetic staple fibres, containing 85 %/more by weight of polyester staple fibres, single yarn, not put up for retail sale	8.9	50.46	41.56	18	

(continued)

(continued)

HS Code	Items	India's exports to Pakistan	India's global exports	Difference between India's exports to Pakistan and its global exports	Share = India's exports to Pak/India's global exports to the world (%)
		In million USD			
520512	Cotton yarn, single (excl. sewing thread), of uncombed fibres, containing 85 %/more by weight of cotton, measuring <714.29 dtx. but not <232.56 dtx. (>14 metric number but not >43 metric number), not put up for retail sale	8.8	666.23	657.43	1
520511	Cotton yarn, single (excl. sewing thread), of uncombed fibres, containing 85 %/more by weight of cotton, measuring 714.29 dtx./more (not >14 metric number), not put up for retail sale	8.6	289.9	281.3	3

Annexure 2: Top 10 T&C Imports of India from Pakistan

HS Code	Items	India's imports from Pakistan	India's global imports	Difference	Share = India's imports from Pakistan/India's global imports
		In million USD			(%)
520100	Cotton, not carded/combed	21.4	399.8	378.3	5
510119	Wool, not carded/combed, greasy, in	9.9	232.8	222.9	4
631090	Used/new rags, scrap twine, cordage, rope and cables and worn out articles of twine/cordage/rope/cables, of textile materials (excl. sorted)	4.4	49.2	44.8	9
520942	Woven fabrics of cotton, containing 85 %/more by weight of cotton, denim, weighing >200 g/m ²	4.4	28.2	23.8	16
510129	Wool, not carded/combed, degreased	3.9	72	68	5
520932	Woven fabrics of cotton, containing 85 %/more by weight of cotton, dyed, 3-/4-thread twill, incl. cross twill, weighing >200 g/m ²	3.2	12.4	9.2	26
521142	Woven fabrics of cotton, containing <85 % by weight of cotton, mixed mainly/solely with man-made fibres, denim, weighing >200 g/m ²	2.7	7.2	4.4	38
520832	Woven fabrics of cotton, containing 85 %/more by weight of cotton, dyed, plain weave, weighing >100 g/m ²	1.1	24.4	23.3	5
520528	Cotton yarn, single (excl. sewing thread), of combed fibres, containing 85 %/more by weight of cotton, measuring <83.33 dtex. (>120 metric number), not put up for retail sale	1.05	40.4	39.3	3
520931	Woven fabrics of cotton, containing 85 %/more by weight of cotton, dyed, plain weave, weighing >200 g/m ²	0.9	8.2	7.2	11

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Chapter 4

Assessing the Future of Trade in the Automobile Sector Between India and Pakistan: Implications of Abolishing the Negative List

Biswajit Nag

1 Introduction

1.1 A Brief Chronology of India Pakistan Trade

Pakistan is in the process of offering the most favoured nation (MFN) status to India and this is expected to open a new trade regime between the two neighbours. Since 1947, trade between the two countries has gone down and it came to a halt for almost a decade following the war in 1965. In 1974, a protocol was signed between two countries for restoration of commercial relations. This was followed by a trade agreement in 1975. Trade resumed on a list of mutually agreed items following this agreement. Both the countries joined the WTO in 1995 and India accorded the MFN status to Pakistan in 1996. However, Pakistan initially allowed import from India on the basis of a ‘positive list’, which specified the products that were eligible to be exported from India to Pakistan. The number of products in the list has increased over the years. Until 2011, Pakistan allowed only 1946 items to be imported from India. In November 2011, Pakistan decided to accord MFN status to India and in March 2012, it shifted to a ‘negative list’, which comprises items that are prohibited from being imported by Pakistan from India. Currently, Pakistan’s negative list has 1209 items.

Immediately after independence, Pakistan had a trade surplus with India. During 1960–61, total trade was around US\$50 million but due to armed conflict, it reached near zero in 1966–67. Trade remained suspended until 1974–75. Following

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the 1975 agreement, trade resumed for 3 years. This agreement was never renewed. In the 1980s, India's exports to Pakistan started showing a slow rising trend and in some years, the balance of trade was in favour of India. The trade balance remained in favour of India during the 1990s with a few exceptions. India's exports to Pakistan jumped significantly in 1996–97 and again in 2000–01. The steady rise in India's exports is visible after 2000. As Pakistan has been shifting products to 'positive list' gradually, India's exports responded accordingly. However, India's import from Pakistan remained at a very low level throughout the last decade. Since 2011–12, total trade between these two countries crossed the US\$2 billion mark and in 2012–13, it touched US\$2.4 billion. Pakistan's exports increased by 28 % and for India the increase is of 19 % in 2012–13. Figure 1 provides the decade-wise growth in trade between India and Pakistan.

1.2 Objective of the Study

Trade data shows that there has been some trade in the automobile sector in the past. This is perhaps because the positive list approach was sometimes difficult to administer as there were ambiguities regarding the classification of certain items. Currently, at the HS 8-digit level, there are 385 automotive components and accessories that are on Pakistan's negative list of 1209 products. There has been a significant growth in the Pakistani automotive market in recent times and with the opening up of the market, India's export to Pakistan in the automobile sector is also expected to grow. Pakistan has also gained a comparative advantage in some components and they are interested in exporting these to India. The news of the opening up of the automobile sector in Pakistan has generated a debate on whether it would be good for the local industry and economy as a whole. Studies indicate that imports from India will mostly replace expensive components imported from other countries and larger imports will lead to higher tax revenues to Pakistani government. Nonetheless, the fear of job loss and negative impact on local suppliers in Pakistani automobile sector is widespread. The current study looks at the possibility of trade between India and Pakistan in the automotive sector with a focus on its possible impact on Pakistan's local automotive industry.

1.3 Organisation of the Study and Methodology Used

The study is structured as follows. Section 2 discusses in brief the evolution and current status of the automobile industry in Pakistan, focusing on the growth of production, impact of policy change, degree of localisation, etc. The import structure of Pakistan's automobile industry is analysed in Sect. 3. Opportunities for bilateral trade between India and Pakistan are the main focus area of Sect. 4. In this section, views of individual auto makers and industry associations in Pakistan

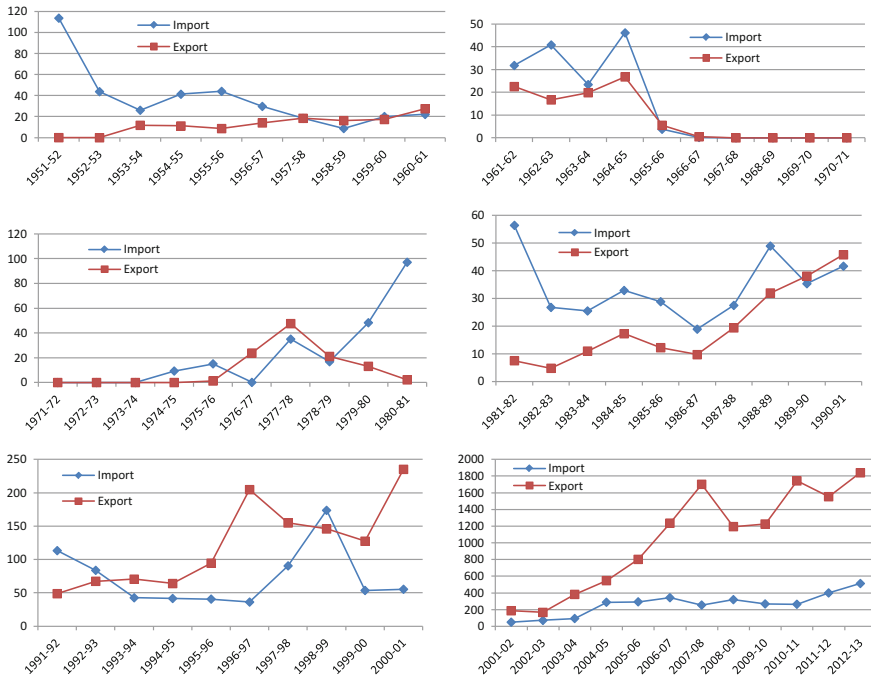


Fig. 1 Decade-wise India’s Export and Import to/from Pakistan (US\$ million). *Source* Data taken from Table 1: Pakistan India Trade, from the article ‘MFN Status and Trade Between Pakistan and India’ published by Pakistan Institute of Legislative Development and Transparency (PILDAT) (2012); and India Trades, CMIE Database

regarding the removal of ‘negative list’ have been taken into consideration. Issues such as non-tariff barriers, environmental issues, along with investment opportunities have also been included in this section. India’s advantage in Pakistan through the SAFTA route in the post-MFN period is also examined through automobile product tariff data analysis. In Sect. 5, automobile products are divided into some groups based on Pakistan’s sensitivity to their imports. Products are identified on which the impact of the removal of the negative list is expected to be minimal. The concluding section summarises the main findings of the study and provides policy recommendations for future growth.

2 Pakistan’s Automobile Industry at a Glance

2.1 Growth in Industry and Production

The automobile industry in Pakistan took a giant leap forward when General Motors, USA, started assembly operations and established National Motors

Limited, a public limited company in 1950. The company assembled passenger cars as well as commercial vehicles, which carried the General Motors brand names. The first vehicle was a Bedford truck assembled in Pakistan in 1950. Subsequently buses, light trucks and cars were assembled in the same plant.

Until the 1990s, the industry was highly regulated with very little competition. However, since 1990, the industry was de-regularised. After deregulation, major Japanese manufacturers entered in the market and brought in some competition in this sector. Assemblers of HINO trucks, Mazda trucks, Toyota (1993) and Honda (1994), in particular, entered once deregulation was introduced. The assembly of Daihatsu and Hyundai cars (1999) and various brands of light commercial vehicles (LCVs) and range of mini-trucks began in the early 2000s. A regular car industry started in the country in 1983, when Suzuki began to assemble the FX 800 cc to target the middle-income group. Suzuki introduced Khyber 1000 cc and Margalla 1300 cc in 1992 to strengthen its customer base. Since its inception, Suzuki has enjoyed the position of a market leader in the car and LCV segments. In 1993, Indus Motor (Toyota), and in the succeeding year (1994) Honda Atlas commenced their operations in Pakistan as the main competitors to Suzuki in the high price segment of the market (i.e. 1300–2000 cc range). In the commercial vehicles segment, Hino Pak started assembling operations in 1986 and is the market leader in the segment with a market share of 65 % at present. Today, there are 32 assemblers including multinationals with equity participation (Toyota, Honda, Suzuki, Hino, Nissan, Hyundai/Kia) engaged in manufacturing/assembling of different automobiles under the approved ‘deletion programme’¹ of the Ministry of Industries and Production, Government of Pakistan. There are also more than 50 assemblers/manufacturers of motorcycles and three-wheelers.

The car industry of Pakistan saw a major boom during 2006–07 when sales volume touched 180,834 units. However, since then, sales volumes have fallen. During 2012–13, total car sales were around 120,332. In 2007, the total contribution of the auto industry to GDP was 2.8 % and to manufacturing was 16 %. Vehicles’ manufacturers directly employ over 192,000 people with a total investment of over US\$1.5 billion.²

The industry’s development history can be roughly divided into the following four phases³:

1. Nascent period (1949–1971);
2. Nationalisation period (1972–1982);
3. Partnership with the private sector (1983–1990);
4. Post-privatisation (1991 to present).

¹This refers to Pakistan’s localization policy which was pursued from 1980s till early 2006. For more detailed discussion refer to Sect. 2.2.

²Source: Economic Pakistan <http://economicpakistan.wordpress.com/2008/02/08/automobile-industry/>.

³Japan International Co-operation Agency (JICA) (2011): Project for Automobile Industry Development Policy in the Islamic Republic of Pakistan: Main Report.

As of August 2010, over 100 manufacturers are estimated to be engaged in production of motor vehicles (including passenger cars, buses, trucks, two-wheelers, rickshaws and tractors) in the country. Also there are close to 500 component manufacturers in the country.

Demand-driven production was very high in 2007–08. However, production started dwindling in almost all segments of the automobile sector since then with some exceptions. Table 1 shows the production trend and the compound average growth rate (CAGR). The CAGR for 2007–08 data has been omitted as we consider it an outlier. Healthy growth is visible in the small and big car (above 1300 cc) segment. In the case of commercial vehicles, Pakistan has witnessed a drop in production with a CAGR of -10.39% . Among the various segments, two- and three-wheelers have posted robust growth. There are a large number of domestic producers and technology is mostly localised now due to Deletion policy pursued during 1985 to early 2006. Out of the production of 8 lakh units of bikes and three-wheelers, almost 6 lakh is by Honda. Other major players in this segment are DYL, Suzuki, Habib, Hero, etc. In the case of passenger vehicles, Suzuki had more than 58% of the market share in 2011, followed by Toyota (29%) and Honda (8.2%). Toyota Corolla, produced by Indus Motor, a local Toyota subsidiary, is the largest selling car and has a market share of nearly half of the over 1300 cc segment. Suzuki has the largest share in the smaller engine and mini-car segments.

At present, Japanese automakers operating in Pakistan purchase $40\text{--}70\%$ of parts and components for passenger cars from local sources, $43\text{--}65\%$ for buses and trucks and $85\text{--}92\%$ for motorcycles. The very high local content levels for motorcycles reflect the fact that original equipment manufacturers (OEM)/assemblers make most parts internally. In the case of passenger vehicles, almost 70% of the components are locally sourced. However, the general perception is that less than 50% of locally made parts satisfy the quality requirements demanded by OEM assemblers. Hence, at the outset, there is a large demand for quality auto components in Pakistan.

2.2 Changing Automobile Policy and Its Impact on Industry

Pakistan's automobile policy has evolved around the policy of localisation. Since 1980s, the country has been pursuing a useful local content scheme, which has done some good to the technological base of the automotive sector and improved its design and development capabilities. The methodology adopted is that the manufacturers are offered tariff incentives for progressive local manufacturing of automobiles and other engineering goods. Several production activities were identified for this purpose. In this case, the importer or assembler needs to have suitable in-house facilities or have a commercial relationship with another component manufacturer who has in-house production facilities. The policy of gradual localisation was guided by Engineering Development Board. These companies were allowed to import specific components with a discount. The policy of local content

Table 1 Production of automobile in Pakistan

	2007–08	2008–09	2009–10	2010–11	2011–2	2012–13	CAGR 08/09–12/13
1300 and above cc	50,310	39,478	60,360	62,111	66,299	60,223	11.14
1000 cc	48,495	16,149	23,330	25,287	28,888	12,785	–5.67
800 cc and below 1000 cc	65,905	28,681	37,957	46,574	59,068	47,324	13.34
Total cars	164,710	84,308	121,647	133,972	154,255	120,332	9.30
Trucks	4993	3135	3425	2901	2597	1923	–11.50
Buses	1146	657	628	490	568	522	–5.59
Total trucks and buses	6139	3792	4053	3391	3165	2445	–10.39
LCVs, vans and jeeps (4 × 4)	1590	932	1172	883	451	1475	12.16
Pick ups	21,354	16,158	15,768	19,142	20,929	14,517	–2.64
Farm tractors	53,256	59,968	71,607	70,770	48,120	50,859	–4.04
Motorcycles and three-wheelers ^a	641,031	493,592	736,861	838,665	828,576	819,556	13.51

^aIt is important to note that many motorcycle producers are not members of PAMA and this table does not include them. Considering the data provided by Association of Pakistan's Motorcycle Assemblers (APMA), the total production is 1,636,721 in 2011–12 and 1,634,803 in 2012–13
Source PAMA Website

requirement, which Pakistan pursued during 1985–2005, was commonly referred to as 'Deletion programme'. This programme worked on the basis of industry-specific deletion programmes (ISDPs) and product-specific deletion programmes (PSDP). All local manufacturers were given permission for local assembly of Japanese cars with the explicit understanding that the manufacturers will steadily reach a certain 'deletion level', thus increasing the local content of automobile parts and giving up the concessional tariffs being availed by them under their specific 'deletion programmes'. Under these programmes, annual deletion targets for each model of vehicle would be set by giving a choice to the assembler to choose components from basket-carrying fixed indices based on their individual values. The Engineering Development Board (EDB) would conduct the technical audits annually to determine the achievement or shortfall in meeting deletion targets. In the case of a shortfall, assemblers would be penalised by imposing the full rate of duty on the value of components that were not indigenised in that period on the completely built unit (CBU).⁴ In 2006, Pakistan shifted to a tariff-based system (TBS) bringing an end to the Deletion Programme. As per the notification SRO 656 (I)/2006, activities under Annex A have been made open. These activities were

⁴Shahrukh and Irfan (2011).

Table 2 Activities under Annex A for localisation

Vehicle type	Minimum Production activity under 'Annex A' Following Deletion Programme
Cars and LCVs	Body welding shop, Body Paint shop, Vehicle Final Assembly (Trim line, Chassis line and Final Line with multiple stations), Performance testing facility, Inspection equipment, storage
HCVs	Main Chassis Frame Assembly and/or Riveting line, Axle Assembly, Welding Shop, Paint Shop, Vehicle Final Assembly (Trim line, Chassis line and Final Line with multiple stations), Performance testing facility, Inspection equipment, storage
Tractors	Engine Assembly, Paint Shop for Sheet Metal and Chassis, Vehicle Final Assembly, Performance testing facility, Inspection tools/equipment, storage, Test rigs for Endurance testing for safety, Availability of drawings of components
Motorcycles and Motorcycles Rickshaws	Frame Welding Shop, Body Paint Shop, Engine Assembly and Testing, Frame Assembly Fixtures, Final Assembly Tools, Final Inspection and Storage
Stroke Auto rickshaws	Frame Welding Shop, Body Paint Shop, Engine Assembly and Testing, Final Assembly, Final Inspection Tools and Storage

Note For details of Annex A activities refer to SRO 656(I)/2006, Govt. of Pakistan

controlled under the Deletion Programme earlier. Table 2 provides a snapshot of the kind of activities that have been put under Annex A. Tariff rates for components required for Annex A have always been high compared to others to encourage local production of components. Through SRO 693(I)/2006, tariffs were revised. The shifting to tariff-based system did not matter much to the assemblers but posed challenges to the vendors who were more comfortable with the previous system and were pushed to improve the quality, supply systems, shop floor efficiencies and marketing. This is because while importers could import many components paying higher duties, component manufacturers found it difficult to modernise their plants to compete with imported components under the new environment

It needs to be noted that under the earlier strategy, the rate of localization was significant, especially for tractors and motorcycles. Table 3 provides the localization position during the early 2000s. According to information from Pakistan Association of Automotive Parts and Accessories Manufacturers (PAAPAM), localization had been to the extent of almost 95 % in the case of tractors and 90–92 % in the case of motorcycles. But in the case of cars, localization is still less than 70 %. This implies that in post-2006 period, assemblers continued to use local components manufactured by local SMEs in a relatively inefficient manner, especially for passenger vehicles.

None of the local manufacturers have achieved the deletion level undertaken by them under their respective programmes. Therefore, the local car industry has not become as efficient as it should have. Local vendors of automobile parts have also suffered in the process. Influential automobile manufacturers have been enjoying concessional tariffs on imported automobile parts under their deletion programmes by manipulating extensions in the time schedules of such programmes. The only

Table 3 Level of localization in Pak Automobile Industries

Automobile	Percentage
Cars	68
Tractors	85
Motorcycles	82
LCVs	43
Buses/Trucks	50

Source Development of the Automotive Sector in Selected countries in ESCAP region, UNESCAP (2002)

locally assembled car which has achieved a significantly high local content under its deletion programme is Suzuki Mehran.⁵ In the passenger car segment, Suzuki, with the highest market share, has reached 65 % of the targets under the deletion programme and they produce almost 25 % of complex components. Suzuki Motors Japan supports the technology transfer directly to local vendors through parts, drawings and process sheets. In the absence of good infrastructure and manufacturing facility at the SME level, Suzuki has not been very successful in providing technological assistance to local companies. Along with this, the absence of adequate quality control standards and lack of competition among vendors have resulted in the deteriorating quality of final products. Due to non-availability of expensive quality control equipment, many of the precision safety components are imported. Regular training at all levels is being imparted locally in the factory areas in Karachi as well as at dealerships throughout Pakistan. Manufacturing knowhow is transferred directly to local vendors according to their qualification and skills, whereas assembly and operational knowhow is transferred to Pak Suzuki Motor Company. On the contrary, Indus Motors, producing Toyota cars, has reached a 45 % deletion level. Toyota is unable to transfer adequate technology due to lack of local capacity and skills. Only 15 % of critical components are manufactured by Toyota or by its vendors in Pakistan. Honda Motor Company Japan gets only 5 % parts manufactured locally, partly because the localization policy has not been enforced strictly and partly because of Honda's reluctance to transferring design and manufacturing knowhow to local vendor industry. Honda is of the opinion that non-availability of R&D facilities in the automobile industry, and the lack of highly skilled manpower and well-developed infrastructure are the main hindrances to the development of indigenous component sector. Figure 2 provides a snapshot of achievement of deletion level under the deletion programme and the production of complex components by major assemblers in Pakistan.

The above discussion indicates that the 'deletion programme' has proved inadequate to promote localization of the component industry. The automobile industry is very dynamic. Consumer choice, comfort and safety, design, IT-driven accessories, etc. are driving the industry. Government needs to encourage the

⁵'Local Auto Industry: Foreign Competition', by Zaheer Ahmed; published in Dawn.com dated 8 February 2012, <http://www.dawn.com/news/739064/local-auto-industry-foreign-competition>.

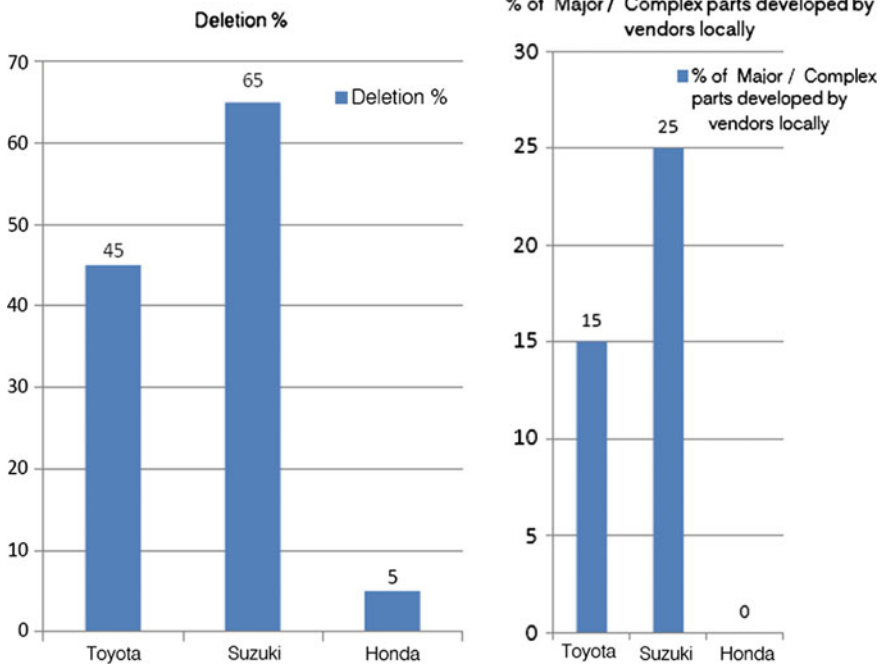


Fig. 2 Deletion and production of complex components by Major Assemblers in Pakistan. *Source* Shahrukh and Irfan (2011)

development of R&D centres, schools for advanced learning of auto technology and the development of quality control instruments, which create an enabling environment for the component industry to grow. Apart from this, competition among component manufacturers is important to drive local innovation. It seems Pakistan has achieved some level of localization but it lacks the capability to move to the next level of value addition. Major local vendors (see Table 4) are still supplying basic components and OEMs are still significantly dependant on foreign players for critical components. As a result, the number of models available in the Pakistani market has been limited.

3 Import Structure of Automotive Products in Pakistan

The automotive industry consists of vehicles and its components. Components spread over different industrial segments. These include plastic and rubber products, components made from glass, steel, etc. Apart from this, there are critical components such as engines, gearbox, brakes, body parts, computerised or digital components. As a result, the HS codes to describe the trade pattern include different

Table 4 Major vendors associated with automobile parts manufacturing in Pakistan

Name of vendor	Products of vendor	Manufacturing since (year)	Vehicles using these products
Allied Engineering Works	Shock Absorbers-150 (Gabriel)	1990	Toyota Corolla, Suzuki Mehran
	Shock Absorbers-160 (Gabriel)	1996	Suzuki Alto, Suzuki Bolan
Agri Auto Industry	Shock Absorbers	1988	Toyota Corolla, Suzuki Alto
	Strut Assembly	1995	Daihatsu Cuore, Suzuki Liane
	Steering gear box	2005	Suzuki Alto, Suzuki Bolan
Alsons Auto Parts (Pvt.) Ltd	Cooling Fans	1992	Toyota Corolla, Daihatsu Cuore
	Brake Assembly	1992	Suzuki Vehicles (All type)
Atlas Engineering	Radiators, Fly Wheel Assembly	1967	Toyota Corolla, Daihatsu Cuore
	Disc Brake, Brake Drum	1982	Suzuki Van/Pick up
	Piston Sleeves	1996	
Atlas Battery Company	Dry Cell Batteries	1969	Vehicles (all types)
	Range (12V 6 AH to 12V 200 AH)		
Baluchistan Wheels limited	Wheel rims	1980	Vehicles (all types)
	Range (12–30 in.)		
General Tyres	Tyre size	1964	Vehicles (all types)
	Diameter (12–30 in.)		
Infinity Engineering	Spur gear for transmission	1994	Toyota Corolla, Daihatsu Cuore
	Transmission shafts, Connecting rod	1994	Suzuki Vehicles
Mecas Engineering (Pvt.) Limited	Brake Disc, Drum	1987	Toyota Corolla, Daihatsu Cuore
	Axle Hub Mounting Bracket	2000	Suzuki Vehicles
Rastgar Engineering	Steering Knuckle	1994	Toyota Corolla, Daihatsu Cuore

Source Shahruckh and Irfan (2011)

HS chapters (40, 85, 87, etc.). The HS codes of some components also depend on the size of the vehicle and engine capacity. In this study, we have considered the list prepared by ACMA and Pakistan's negative list for data analysis. As international data is available at the 6-digit level, we have converted the 8-digit level data into

6-digit level for analysis. There are 167 automobile items at the 6-digit level, which have been considered for the data analysis in this section.

3.1 Import of Vehicles and Major Parts Thereof

Pakistan has experienced a phenomenal increase in the import of passenger cars over the last 4 years. Part of it has been due to the relaxation on the import of used vehicles. The Import of commercial vehicles, especially trucks, increased dramatically in 2009–10 and then almost doubled in 2010–11. However, it dropped significantly in 2011–12. Increased economic activity and the need to transport goods have created the demand for trucks and lorries. The import of motorcycles increased slowly in the mid-2000s as the production of domestic motorcycles surged. However, a jump in imports is visible in the last couple of years. Pakistan reported strong domestic growth of motor rickshaws along with high import growth during 2009–10.

It has been mentioned earlier that domestic production peaked in 2006–07 and declined thereafter. On the other hand, the number of cars imported has kept increasing. Pakistan's average production of cars is around 120,000 against its installed capacity of 240,000. A large number of SMEs supply parts and components. The shortfall in production vis-à-vis installed capacity has affected the entire supply chain, particularly component SMEs that supply parts and components, which are at the lower end of the supply chain. The increase in vehicle imports has hurt them further. As a result of this, the major dilemma is about the consumer choice (higher imports with lower price) versus need for protection to domestic producers.

Pakistan's import policy allows import of both new and used vehicles. New vehicles can be imported freely by any one, under the generally applicable import procedures and requirements, on payment of applicable duty and taxes. Used vehicles, on the other hand, can only be imported by Pakistani nationals under three schemes, namely the transfer of residence scheme, the gift scheme and the personal baggage scheme. These schemes are often used by commercial interests to import used vehicles for sale in the local market and are a cause of concern to local producers. Producers have also protested the increasing incidence of smuggling through Pakistan's border with Afghanistan.

Pakistan's total import in the automotive sector in 2012 was roughly around US \$2.49 billion, of which the import value of various vehicles (mostly in completely knocked down (CKD) form) was US\$1.27 billion. Tables 5 and 6 provide more detailed information.

The products listed in Table 5 constitute almost 96 % of vehicle imports in Pakistan. The table shows Pakistan's import structure. Small cars and cars with engine capacity between 1000 and 1500 cc account for the largest chunk of imports. Mini vans and other vehicles with more than 1500 cc are also major imports. The 5-year CAGR is also high in these categories. Other segments where

Table 5 Value of Pakistan's import of vehicles (major products under HS 87)

HS code	Description	Import value (US\$000) in 2012	Share in total vehicle import (%)	5 year CAGR (%)
870120	Road tractors for semi-trailers	14,628.79	1.15	17.68
870190	Wheeled tractors nes	37,982.68	2.98	7.69
870210	Diesel-powered buses with a seating more than 10	51,620.60	4.05	18.41
870290	Other Buses (CNG, LPG, others)	39,132.50	3.07	4.46
870321	Cars (not exceeding 1000 cc)	290,441.32	22.80	10.19
870322	Cars (more than 1000 cc, not exceeding 1500 cc)	400,407.05	31.43	28.40
870323	Automobiles (more than 1500 cc, not exceeding 3000 cc)	151,281.91	11.87	26.01
870324	Automobiles (exceeding 3000 cc)	30,587.57	2.40	20.56
870421	Diesel-powered trucks with a GVW not exceeding 5 tons	79,106.34	6.21	12.37
870422	Diesel-powered trucks with a GVW more than 5 tonnes but not exceeding 20 tons	28,803.44	2.26	0.98
870423	Diesel-powered trucks with a GVW exceeding 20 tonnes	24,881.95	1.95	26.27
870431	Gas-powered trucks with a GVW not exceeding 5 tonnes	35,407.78	2.78	49.22
870590	Special purpose motor vehicles nes	39,975.57	3.14	31.91
	Total import of vehicles ^a	1,274,081.41		

^aTotal import consists import of other vehicles also and hence is not the sum of listed products
Source Calculated from COMTRADE database available from WITS

high growth is visible are diesel-powered buses and trucks, road tractors and special purpose vehicles. The growth of these segments is directly related to the economic health of the country.

3.2 Import of Components

Table 6 shows the major auto components that Pakistan imports. These products consist of around 81 % of total component import in Pakistan in 2012. Metal scrap, engines and its parts, body parts, parts of air conditioning tools, bearings, gears and its components, etc. are the main auto parts imported. The import growth of some of these products is also very high. In last 3 years, the average import growth of parts of spark-ignition internal combustion piston engines have been more than 112 % followed by air filters for internal combustion engines (67 %), body parts (61 %), air conditioning machinery (36 %), bearing housings and plain shaft bearings

Table 6 Value of Pakistan's import of major auto parts and accessories

HS code	Description	Import in 2012	CAGR % (2009–12)	Share (%) in total import of components
		(Value in US thousand)		
401699	Other articles of vulcanised rubber	16,040.3	8.00	1.31
720449	Other ferrous waste and scrap	321,055.8	9.11	26.26
731815	Other screws and bolts, whether or not with their nuts or washers of iron or steel	14,398.5	10.30	1.18
760200	Aluminium waste and scrap	46,430.6	5.19	3.80
840991	Parts of spark-ignition internal combustion piston engines	89,438.0	112.18	7.32
840999	Parts of compression-ignition internal combustion piston engines	64,148.7	14.64	5.25
841330	Fuel, lubricating or cooling medium pumps	15,910.6	-25.46	1.30
841391	Parts of pumps for liquids	21,941.2	11.80	1.79
841590	Parts of air conditioning machines	37,580.9	36.04	3.07
842131	Intake air filters for internal combustion engines	19,330.6	67.66	1.58
848180	Other valves and other appliances for pipes, tanks, vats or the like	60,408.0	-24.19	4.94
848310	Transmission shafts (including camshafts and crankshafts) and cranks	21,503.1	-1.45	1.76
848330	Bearing housings; plain shaft bearings	19,712.9	31.08	1.61
848340	Gears and gearing; ball screws; gear boxes and other speed changers	17,286.8	5.76	1.41
853710	Bases for electric control or the distribution, not exceeding 1000 V	18,675.0	-19.62	1.53
870829	Other parts and accessories of bodies for the motor vehicles	74,695.0	61.12	6.11
870880	Suspension shock absorbers	14,701.7	8.15	1.20
870899	Other parts and accessories of vehicles	60,022.5	1.66	4.91
871419	Other parts and accessories of motorbikes	39,152.8	-6.77	3.20
903289	Other automatic regulating or controlling instruments and apparatus	16,568.5	-4.85	1.36
Total Import of parts and accessories including machinery ^a		1,222,591.16		

^aTotal import consists of other components also and hence is not the sum of listed products
Source Calculated from COMTRADE database available from WITS

(31 %), etc. It is important to note that all these are critical components. High imports of these parts and accessories indicate that the Japanese, who are the main players in Pakistan, are still dependent on imported components. Japanese manufacturers have difficulty transferring technology to local players in Pakistan because of lack of infrastructure, capability, absence of precision machinery and R&D facilities.

3.3 Import Sources

Japan, China and the Republic of Korea are the primary countries from which Pakistan imports its vehicles. Table 7 provides Pakistan's country-wise imports of selected vehicles, mostly in CKD form. In 2012, the import value from these three countries has been over US\$900 million.

In the case of components, Pakistan mainly imports from Japan, China, Thailand, the Republic of Korea and Indonesia. In 2012, these countries accounted

Table 7 Major sources of Pakistan's import of vehicles in 2012

HS code	Description	China	Japan	Korea Rep
		(US\$ thousands)		
870120	Road tractors for semi-trailers	4518.78	9353.58	579.23
870190	Wheeled tractors nes	1871.23	3845.39	3397.13
870210	Diesel-powered buses with a seating more than 10	15,430.36	31,269.11	4423.65
870290	Other Buses (CNG, LPG, others)	27,900.03	6525.14	2483.28
870321	Cars (not exceeding 1000 cc)	5315.38	276,130.68	51.94
870322	Cars (more than 1000 cc, not exceeding 1500 cc)	293.37	304,961.22	135.65
870323	Automobiles (more than 1500 cc, not exceeding 3000 cc)	454.44	76,401.73	83.65
870324	Automobiles (exceeding 3000 cc)	249.91	17,622.13	494.91
870421	Diesel-powered trucks with a GVW not exceeding 5 tonnes	797.52	19,303.04	17.49
870422	Diesel-powered trucks with a GVW more than 5 tonnes but not exceeding 20 tonnes	4824.96	19,588.19	32.14
870423	Diesel-powered trucks with a GVW exceeding 20 tonnes	2286.56	20,746.64	982.07
870431	Gas-powered trucks with a GVW not exceeding 5 tonnes	167.61	34,738.33	3562.77
870590	Special purpose motor vehicles nes	2331.31	7657.41	3.25

Note Some Import values (in italics) from Korea are for the year 2011

Source Calculated from COMTRADE database available from WITS

for almost 63 % of Pakistan's total import of auto components or close to US \$776 million. The remaining imports were from other parts of the world, including the European Union. It is important to note that Japanese companies prefer to import components from their trusted vendors in Thailand. Sometimes, Thai subsidiaries of Japanese companies play an active role in exporting components (such as body parts and accessories, air conditioning machinery, etc.) to Pakistan (see Table 8). However, as Table 8 indicates, there are a number of components and parts that the major players are willing to import from sources other than their trusted partners. These include products such as metal scrap, engine parts, air filters, transmission equipment, bearing and gear parts. It is in these products that India could corner a large part of the market if it were granted MFN status.

4 Opportunities and Challenges in Bilateral Trade in Automobiles Between India and Pakistan

4.1 Trends in Bilateral Trade

The existing level of trade in automobiles and components between India and Pakistan is negligible as most items fall either under the negative list which is not allowed to be imported (in the case of Pakistan) or they fall in the sensitive list (in India's case). There have been exports of a limited number of components from India to Pakistan due to problems in administering the positive list (Table 9). Pakistan's exports also have also been low. Following Indian data source, its imports from Pakistan under HS 87 have been around US\$1.43 million in 2011–12. However, this was an exceptional year; India's imports from Pakistan have ranged from a high of US\$1 million in 2008–09 to a low of US\$0.09 million in 2009–10. Parts and accessories under HS 8708 are the major importable products under HS 87. In the case of exports, India was able to sell components of commercial vehicles and some chassis fitted with engines during 2006–07.

4.2 Industry Views from Pakistan

While it is widely believed within both government and industry that India's exports to Pakistan will increase once non-discriminatory market access is granted, it is difficult to estimate potential exports because of the lack of data pertaining to the past. However, this paper makes an attempt to assess the potential through an analysis of the source of Pakistan's imports discussed in the previous section and through discussions with Pakistani manufacturers who provided their inputs either through personal meetings with the author or through a focus group discussion

Table 8 Major sources of Pakistan's import of auto components in 2012

HS code	Description	China	Indonesia	Japan	Korea Rep	Thailand	RoW	Share of RoW (%)
		(US\$ thousands)						
401699	Other articles of vulcanised rubber	4132.92	30.42	4038.20	41.03	309.99	7487.74	46.68
720449	Other ferrous waste and scrap	144.14	10.28	1174.29	912.99	290.36	318,523.70	99.21
731815	Other screws and bolts	3972.40	68.83	902.78	122.21	2132.58	7199.69	50.00
760200	Aluminium waste and scrap	18.52		14.84	125.46	2.22	46,269.56	99.65
840991	Parts of spark-ignition internal combustion piston engines	13,108.48	79.51	61,894.67	31.34	6444.58	7879.46	8.81
840999	Parts of compression-ignition internal combustion piston engines	17,785.62	78.04	4078.35	457.72	14.34	41,734.64	65.06
841330	Fuel, lubricating or cooling medium pumps	1930.60	0.94	368.42	26.08	126.83	13,457.72	84.58
841391	Parts of pumps for liquids	2793.68	3.89	1032.46	197.92	10.32	17,902.94	81.60
841590	Parts of air conditioning machines	23,360.45	301.22	3216.88	8.52	9590.05	1103.75	2.94
842131	Intake air filters for internal combustion engines	1285.18	70.37	621.76	69.67	290.45	16,993.20	87.91
848180	Other valves and other appliances for pipes, tanks,	8147.96	417.63	3778.52	1104.07	848.08	46,111.76	76.33
848310	Transmission shafts (including camshafts and crankshafts)	8767.07	0.81	716.80	78.48	46.70	11,893.25	55.31
848330	Bearing housings; plain shaft bearings	1898.86	63.20	1495.16	184.76	56.88	16,014.04	81.24
848340	Gears and gearing; ball screws; gear boxes	5667.37	0.22	852.02	226.20	96.29	10,444.70	60.42
853710	Bases for electric control or the distribution, not exceeding 1000 V	5400.04	0.33	3090.73	65.56	14.18	10,104.18	54.11

(continued)

Table 8 (continued)

HS code	Description	China (US\$ thousands)	Indonesia	Japan	Korea Rep	Thailand	RoW	Share of RoW (%)
870829	Other parts and accessories of bodies for the motor vehicles	1513.07	638.50	11,947.22	68.92	48,403.92	12,123.36	16.23
870880	Suspension shock absorbers	430.43	1.47	9002.45	24.64	3959.91	1282.80	8.73
870899	Other parts and accessories of vehicles	4542.86	542.59	17,153.22	2459.20	13,424.71	21,899.92	36.49
871419	Other Parts and accessories of motorbikes	23,686.99	682.42	8952.71		4132.15	1698.54	4.34
903289	Other automatic regulating or controlling instruments	2153.67	3.49	2080.51	1333.81	59.09	10,937.93	66.02

Note Bold ones having higher share in that category

Source Calculated from COMTRADE database available from WITS

Table 9 India–Pakistan Bilateral trade under HS code 87 (vehicles and parts thereof)

HS code	Commodity name	India's exports to Pakistan				India's imports from Pakistan			
		2006/07	2009/10	2010/11	2011/12	2006/07	2009/10	2010/11	2011/12
		(Value in US\$ million)							
87	Vehicles and parts and accessories thereof	2.59	0.23	0.32	0.12	0.39	0.09	0.43	1.43
8701	Tractors (other than tractors under heading 8709)	0.01				0.06			
8702	Motor vehicles for the transport of 10 or more persons	1.36							
8703	Cars	0.06	0.01	0.02	0.02				0.23
8706	Chassis fitted with engines	0.51							
8708	Parts and accessories of the motor vehicles	0.28	0.16	0.05	0.05	0.32	0.09	0.43	1.16
8709	Works trucks, used in factories, warehouses and docks	0		0.01	0.01				0
8711	Motorcycles (including mopeds)	0			0			0	
8712	Bicycles and other cycles	0.13		0.1	0.02		0		
8713	Carriages for disabled persons			0.02					
8714	Parts and accessories of vehicles of headings 8711–8713	0.24	0.06	0.13				0.01	0
8715	Baby carriages and parts thereof							0	
8716	Trailers and semi-trailers; parts thereof							0	0.03

Note 0 value indicates trade with of low value. If there was no trade the cell has been left blank

Source India Trades, CMIE

(FGD). Representatives of PAMA and PAAPAM also participated in the meeting and provided their views.⁶

Pakistan's auto industry in general is apprehensive of normalising trade between India and Pakistan. They fear that Indian automakers will overwhelm the Pakistani market because of the size of the Indian automotive industry that allows it to exploit scale economies. They also feel that Pakistani manufacturers will not be able to access the Indian market because of non-tariff barriers (NTBs). In fact, many participants during FGD showed their uneasiness about pollution and other standards (especially for motorcycles) in India. After initial opposition to the very idea of liberalised trade with India, car assemblers of Pakistan have now pushed for a middle path. At present, they appear inclined to import parts in a completely knocked down (CKD) form, but oppose imports of completely built units (CBUs).

4.2.1 Market Entry and Automobile Value Chain

Currently, the Pakistani automotive industry is divided into two groups—one favouring imports from India and others opposing. Suzuki, which has a large production base and enjoys scale economies in India, is naturally interested in exporting to Pakistan. Over the years, Suzuki's trusted suppliers in India have achieved some level of productive efficiency through competition and innovation. Importing major car parts from India will help reduce the cost of production of cars. Pakistan imports car parts from Thailand and Japan that can be easily imported from neighbouring India owing to its proximity with the country. Production costs in India are substantially lower due to low labour and material costs. By changing the source of automobile components from Japan and Thailand to India, Pakistan stands to gain substantially in terms of foreign exchange savings. It is important to note that the cost of importing from Japan almost doubled over the past 5 years because of the depreciation of the Pakistani rupee against Japanese yen. Besides, since India is a big market, Suzuki takes into consideration local market preferences to develop India-oriented models. As culture and preference in Pakistan is almost the same as in India, imports from India can allow Suzuki to introduce models in Pakistan without much R&D. Suzuki is also interested in transferring technology to Pakistan and work towards promoting joint ventures between Indian and Pakistani vendors for component and parts manufacturing. Pak Suzuki discontinued production of its Suzuki Alto model in Pakistan from 1 July 2012, when the Pakistani government made compliance with Euro II emission standards mandatory for all car producers in the country. The company not only wants to import Alto engines from India but also launch new models, especially in the small engine category (including pick-up vans) with the help of cheaper Indian components. In other words, Suzuki is interested in extending its value chain, combining India and Pakistan into a single market with some sourcing facilities in each country.

⁶Focus Group Discussion was conducted at Karachi on 27 November 2013.

The biggest stumbling block for increasing exports of vehicles from Pakistan to India is the difference in pollution standards in the two countries. India has introduced superior standards (Bharat IV/Euro IV)⁷ while vehicles produced in Pakistan have Euro II/Pak II standards. To export to India, Pakistani manufacturers will have to upgrade their vehicles to meet emission norms in India. India has agreed to accept emission and quality certificates issued by Pakistan Standards and Quality Control Authority (PSQCA), provided the norms match the Bharat IV norms.

Unlike Suzuki, which has been pushing for liberalisation of trade in the automotive sector, Toyota does not support or oppose liberalisation. Toyota is dependent on Japan significantly for engines and other critical components. It also imports from Thailand, Indonesia and others. After the implementation of the India–Thailand FTA, Toyota teamed up with Kirloskar to set up a joint venture to produce transmission equipment, engines, axles and shafts. Hence, it is important for Indus to develop close relations with its counterpart in India. It is reported that Indus has requested Toyota Headquarters⁸ to support its affiliates in India and Pakistan equally because some car components of Toyota cars are cheap in Pakistan and some are cheap in India. So, both of Toyota affiliates will grow if they collaborate with each other. For example, Toyota is now producing critical components of cars such as Etios, Innova and Fortuner in India which is expectedly less costly than those from Japan. Tables 7 and 8 describe that CKD components and engines for bigger cars (more than 1000 cc) are mostly imported from Japan and Thailand. Import of these components from India will reduce the import cost significantly without in any way affecting domestic players in Pakistan as these imports will merely substitute for imports from Japan and Thailand. From the Pakistani side, Indus is interested in exporting products such as special type of sheet metals, chemicals for paints, etc., to India.

4.2.2 Environmental Norms in India

Atlas Honda, one of Pakistan's major motorcycle producers, opposes trade liberalisation in the automotive sector. The level of localization in motorcycles has reached more than 90 % and opening up the sector to India directly invites intense competition. India is a potential exporter of engine parts. Atlas Honda feels that the import of bikes and components from India would seriously affect the local industry. Besides, the company, which is seeking to export to India, has serious

⁷In 2010, as part of auto fuel policy, Bharat Standard (BS) IV has been introduced to 13 cities and it is expected that 50 cities will be covered by 2015. Other cities are currently having BS III norms. Hence, it is clear that eventually India will move to BS IV and all imported cars and components must comply with that.

⁸<http://tribune.com.pk/story/579956/trade-competition-pakistans-auto-industry-determined-to-find-middle-ground-with-indian-counterparts/>, accessed on 10 January 2014.

reservations about the emission standards for motorcycles in India (see Box 1).⁹ India's two-wheeler emission norms are unique and cannot be compared with European standards. It follows a joint emission level corresponding to hydrocarbons and nitrogen oxides (HC and NO_x). Also, it follows the India Drive Cycle (IDC), following driving norms in India, not the Worldwide Harmonised Motorcycle emission Test Cycle (WMTC), which is followed in developed economies. Atlas considers this a major NTB from the Indian side. It is important to note that India recently made testing under WMTC optional and has already announced that it would be mandatory in couple of year's time.

In the Pakistani motorcycle sector as a whole, there are close to 100 manufacturers; among these are many Chinese assemblers who import components from China. Atlas Honda has already proven itself in the intensely competitive Pakistan market and has acquired a market share of 47 %. Normalisation of trade between India and Pakistan can provide an opportunity to Indian manufacturers to set up plants (if CBU import is not allowed) and compete with the large number of Chinese manufacturers and with Atlas Honda. This will definitely help consumers to get wider choice.

Box 1: Emission Norms for Two- and Three-Wheelers in India

Two- and three-wheelers in India accounted for almost 80 % of all new vehicle sales in the 2009–2010 fiscal year. The regulated pollutants for these vehicles in India are hydrocarbons, carbon monoxide and nitrogen oxides (HC, CO and NO_x) with extra particulate matter (PM) regulations for diesel-powered three-wheelers. Gasoline is the most common fuel for these types of vehicles, although some three-wheelers, particularly commercial ones, run on CNG or diesel. India introduced its first two- and three-wheeler emissions standards in 1991, with limits for CO and HC. Since then, other pollutants have been brought under regulation and emission limits have been tightened. In the case of two- and three-wheelers, India does not follow the European model.

As emission standards were tightened, two-stroke motorcycles all but disappeared from the market. However, two strokes do continue to be produced for some mopeds (50 cc or smaller engines), which are a small part of the market, as well as for three-wheelers (mainly auto rickshaws). Even as standards for two- and three-wheelers are tightened over time, these remain more polluting than four-wheeled vehicles on a per kilometre basis, particularly for PM. India has a joint HC + NO_x emission standard for two- and three-wheelers. This often leads to a situation in which two- and three-wheeler engines run fuel lean, lowering HC emissions but increasing NO_x emissions.

⁹<http://tribune.com.pk/story/641199/assurances-needed-opening-road-for-india-may-hit-our-motorcycle-industry/>. Article published in 4 December 2013, accessed on 10 January 2014.

While Europe uses WMTC (Worldwide harmonised Motorcycle emission test cycle) test cycles, India has traditionally used the India Drive Cycle (IDC), which is said to more closely represent Indian driving norms. The differences in these test cycles mean measurements of pollutant emissions vary, making it difficult to compare Indian and European emission standards. India recently made testing under the WMTC optional for two-wheelers. It is expected to become mandatory for the next stage of two-wheeler emission standards after 2015.

http://transportpolicy.net/index.php?title=India:_Motorcycles:_Emissions. Accessed on 15th March 2014.

4.2.3 Other NTBs and Possibilities of Joint Ventures

During the discussion with Pakistani players, a few other important points have emerged. Pakistan is in favour of foreign direct investment (FDI) in heavy commercial vehicles (HCV) sector and Indian companies such as Tata and Mahindra may look for opportunities. Several Pakistani respondents mooted the idea of an auto park near the border for the smooth development and functioning of production networks. Tractor manufacturers in Pakistan such as Millat Tractors are interested to export to India. However, more studies are required to understand the nature of non-tariff barriers (NTBs) imposed on tractor imports in India as apprehension of NTBs (emission and homologation related) affecting tractor export is widely present. Pakistani manufacturers are also concerned about the layers of centre and state taxes levied in India. It is important to note that none of these are country-specific barriers and hence, both countries need to find practical solutions to resolve such issues. In an earlier study, Husain (2012) also highlighted the concern of Pakistani businessmen about the NTBs imposed by India.

4.2.4 India's Advantage Through the SAFTA Route

Pakistan is also concerned about India's ability to enter the Pakistani market with a lower tariff under the South Asian Free Trade Agreement (SAFTA) once non-discriminatory market access is given to India. It is argued that the average duty on these products under SAFTA is around 5 % only and given NDMA, India will be able to enter the Pakistani market at rates much lower than the MFN rate and jeopardise the domestic auto industry, which is dominated by SMEs. Table 10 provides the frequency distribution of the MFN rates on all auto products under negative list. Almost 66 % of the products attract duty of between 30 and 35 % and hence, the apprehension that India will use the SAFTA route seems to be genuine.

Table 10 Frequency distribution of MFN rates of the auto products under the negative list

MFN duty (%)	Frequency
0–15	7.8
15–25	4.9
25–30	6.5
30–35	65.9
35–50	3.4
50–75	8.1
75–100	3.4

Source Calculated from Pakistan's custom duty

The question is whether India has truly received any advantage under SAFTA. We have juxtaposed the SAFTA duties vis-à-vis MFN duties and noticed that only 14 % of the products (54 in number) attract a duty of 5 % under the SAFTA scheme, which India can take advantage of. All other products are still under the SAFTA 'sensitive list', for which domestic producers in Pakistan enjoy protection against competition from Indian exporters.

Let us now examine the products in which India has an advantage. For example, under HS 87 there are 10 products (vide Table 11) in which India can have easy market access in a post-MFN scenario. These products are cash carrying vehicles, carriages for disabled persons, saddles, engine components for motorcycles, etc. Under HS 90, various metres for measuring temperatures, revolution, etc. are there in the list in which India will be able to enter Pakistani market with 5 % tariff. The profile of these products clearly depicts that either they are specialised in nature for which demand is less or they are non-critical components in which Pakistan already has a comparative advantage. Pakistan will face competition from India only in case

Table 11 HS code-wise number of common products under India-Pak negative list and SAFTA normal track list

	No of products
HS 40	7
HS 48	3
HS 68	2
HS 72	2
HS 73	3
HS 76	1
HS 82	3
HS 83	3
HS 84	4
HS 87	10
HS 90	7
HS 91	4
HS 94	3
HS 96	2

Source Calculated from Pakistan's SAFTA notification (SAARC 2/4-A/2012) and negative list

of engine components of motorcycles. Hence, the fear that India will wipe out the domestic industries is not true.

5 Identification of Products with Respect to Pakistan's Import Sensitivity in Post-MFN Period

It is important to understand the concerns of the Pakistan automobile industry. An attempt has been made in this section to divide auto products into sub-groups based on the value of Pakistan's imports of these goods in 2012, the growth rate of Pakistani imports of the products from the rest of the world, the value of India's exports to the world and its growth rate. India's Revealed Comparative Advantage (RCA)¹⁰ for these products is also considered for analysis. Tables 12 and 13 provide the details. A total of 167 HS6-digit products are divided into eight categories, including one category for which there is no import data for Pakistan in 2012. These groupings will help industry to develop strategies for those products in which perceived competition after the removal of 'negative list' will go up. Industrialists in Pakistan will also be able to gauge India's competitive advantage in those products from the change of RCAs between 2007 and 2012.

It needs to be noted that there is no threat from imports in the case of around 74 out of 167 products. These are the products in which either Pakistan's import from the world is not much or India is a small exporter or both. In some cases, India's export growth is also low and its RCA value is less than 1, indicating India's comparative disadvantage. Products in five groups, A, B, C, D and E1, fall in this category. We have also included six products from group H in this category. In 16 products under category E2, there will be moderate competition. In some products (not all) under Group F (52) and G (25), India has a higher RCA implying a competitive advantage. These products are mainly from the group of rubber products, mechanical and electrical components and vehicle parts. So, clearly, in a

¹⁰Revealed comparative advantage indices (RCA) use trade pattern to identify sectors in which an economy has a comparative advantage by comparing that country's trade profile with the world average. The RCA index is defined as the ratio of two shares. The numerator is the share of a country's total exports of the commodity of interest in its total exports. The denominator is share of world exports of the same commodity in total world exports.

The mathematical definition of RCA is given as

$$\frac{\sum_{\mathbf{d}} X_{\mathbf{isd}} / \sum_{\mathbf{d}} X_{\mathbf{sd}}}{\sum_{\mathbf{wd}} X_{\mathbf{iwd}} / \sum_{\mathbf{d}} X_{\mathbf{wd}}}$$

where \mathbf{s} is the country of interest, \mathbf{d} and \mathbf{w} are the setoff all countries in the world, \mathbf{i} is the sector of interest, \mathbf{x} is the commodity export flow and \mathbf{X} is the total export flow. The numerator is the share of good \mathbf{i} in the exports of country \mathbf{s} , while the denominator is the share of good \mathbf{i} in the exports of the world. For details see Mikic and Gilbert (2009) and UNCTAD (2012).

Table 12 Pakistan's import threat and India's competitive advantage in automobile products under negative list

Groups	Characteristics	Suggestion	No of products
A	Pakistan's current import is low (less than USD 100,000) and India's export to world is also low	These products do not face any immediate import threat	10
B	Pakistan's current import is low (less than USD 100,000) and India's export to world is more than USD1 million	As Pakistan's import demand is low and many of them have experienced negative growth rate, opening up of these products will not create any new risk. Only in two products India has $RCA > 1$	11
C	India's export to the world is less than Pakistan's import	India is an insignificant exporter to have an effect in Pakistan. India has $RCA > 1$ only in 3 products	24
D	Pakistan's current import is moderate (more than USD 100,000 but less than USD 1 million) and India's export to the world is also low (less than USD 1 million)	India's export is low in this segment and may not increase much even when Pakistan opens up	7
E	Pakistan's current import is moderate (more than USD 100,000 but less than USD1 million) and India's export to world is more than USD1 million	For some products, India's export growth is not much and hence relatively low impact on Pakistan's import (E1). India has $RCA > 1$ only in two products	16 + 16 = 32
		Rest may have some impact once MFN status is given (E2). India has a high RCA in some rubber components and engine parts	
F	Pakistan is a moderately large importer (less than USD 10 million) and India is also a major exporter	Opening up will provide a choice to Pakistani importers and it will intensify competition. Pakistan needs to develop a strategy through more investment and other trade defence tools. Further study is required. India has an advantage in some metal products and vehicle parts	52

(continued)

Table 12 (continued)

Groups	Characteristics	Suggestion	No of products
G	Pakistan is a very large importer and India is a large exporter	There are several critical products and vehicle parts in this segment. In many cases, assemblers have a tie up with OEMs and they cannot reduce imports from them. In a post-MFN situation, India will substitute other countries as source for some products but in others Pakistan will continue to import from earlier sources	25
H	There is no data for Pakistan's import in 2012	Following past data, it can be said that Pakistan is not a large importer of these products and there is no immediate threat	6

large number of products, either Pakistan does not face an immediate import threat or India's competitive advantage is not significant.

6 Summary and Recommendations

Bilateral trade between India and Pakistan has had a chequered history. Both the countries joined the WTO in 1995 and India accorded MFN status to Pakistan in 1996. By contrast, Pakistan allowed import from India on the basis of a 'positive list'. In November 2011, Pakistan decided to accord MFN status to India and in March 2012, it initiated the first step by shifting to a 'negative list' that listed products whose import from India was banned. Currently, Pakistan's negative list comprises 1209 items. It is important to note that India's automotive industry is unable to export because a large number of automotive components (385 under HS8-digit or 167 under the HS6-digit code) are still under Pakistan's negative list. There has been significant growth in the Pakistani automotive market in the recent past. With the normalisation of trade, there is scope for increasing exports from India to Pakistan. Pakistan has gained comparative advantage in some components too and they are interested in exporting to India. Currently, there is an apprehension that the Pakistani automobile sector will be hard hit in case automobile products move out of the 'negative list'.

This paper highlighted the fact that once India is granted NDMA/MFN status, Indian automotive products will mostly compete with other players such as Thailand, Japan, China, etc., and not directly with domestic suppliers. Pakistan will be able to substitute costly components currently imported from other countries by

relatively cheaper accessories from India, enabling it to reduce the consumer price for these products. Higher affordability by consumer will force competitors to introduce new models in the market. Lower price will unleash demand and hence manufacturing activity will increase, leading to the growth of the industry in general. The Pakistani government is also expected to gain through higher custom and excise revenue as lower vehicles price will drive the final demand up. This will open the gate for joint ventures between the manufacturers from the two countries. Besides, the two countries would also benefit from collaborations. This can increase their exports to Middle East, Central Asia and Africa.

India and Pakistan could also consider jointly setting up an auto park near the border for the smooth functioning of production networks in the automobile sector.

However, future expectations are mostly based on economic logic, not supported by data. Similarly, the apprehension of the negative impact on Pakistani automobile sector is also a visualisation based on industry experience. The lack of past bilateral trade data has fuelled this confusion. As there was minimal trade in the automobile sector in the past, it is difficult to develop a sector-level detailed simulation for projection. The communication gap among manufacturers in the two countries has also heightened fears. Hence, we require more interaction among auto sector players from both sides to discuss the possible way out and develop a future plan for collaboration and market development.

This paper has also made an attempt to group the automobile products into categories considering the import sensitivity as highlighted by Pakistani industry. It is noted that in a large number of products, India does not have a competitive edge, and in many products it is not a large exporter either. Hence, the mere removal of negative list may not be enough to stimulate Indian export of automotive products to Pakistan.

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Appendix

See Table 13.

Table 13 Pakistan's import from the World and India's export to the world of automobile items in the negative list in 2012

Groups	HS code	Pakistan's import from world			India's export to world			RCA 2012	RCA 2007
		Import	CAGR	Share 2012	Export	CAGR	Share 2012		
A	840731	18.23	187.08	0.001	38.4	35.73	0	0.01	0.15
	910610	23.58	-5.41	0.001	67.98	-37.1	0	0.08	0.08
	401036	92.7	24.71	0.004	127.88	-37.45	0.001	2.35	0.07
	701400	71.54	7.24	0.003	139.87	25.49	0.001	0.11	0.08
	910400	2.11	-80.76	0	284.06	-15.99	0.002	0	1
	871000	67.05		0.003	296.88	-89.66	0.002	0	0.08
	871190	1.33	-14.29	0	409.19	-24.31	0.002	0.07	0.22
	870710	68.07	47.78	0.003	559.74	-17.81	0.003	0.22	0.01
	870110	0.52	92.22	0	642.22	-39.52	0.004	2.07	0.26
	870895	18.96	90.55	0.001	721.77	1805.42	0.004	0.09	0.03
	870432	37.51		0.002	1030.96	-34.23	0.01	0	0.01
	871110	44.25	1.38	0.002	1558.49	-82.34	0.01	0.01	0.17
	400819	73.95	-38.2	0.003	2142.87	70.69	0.01	1.9	0.89
	830230	87.91	107.09	0.004	3863.98	-22.88	0.02	1.23	0.88
B	871492	94.19	-55.99	0.004	11,337.02	33.15	0.07	0.51	0.39
	940120	58.59	-16.11	0.002	12,435.56	129.83	0.07	0.73	0.13
	870892	54.78	-71.24	0.002	16,053.42	80.18	0.1	0.2	0.34
	871496	53.63	-24.79	0.002	18,402.3	52.26	0.11	0.65	0.96
	871494	27.72	-43.13	0.001	19,956.53	78.23	0.12	0.38	0.33
	870490	51.53	13.78	0.002	36,520.6	123.2	0.22	0	0.01
	871491	13.48	-74.9	0.001	40,149.64	79.73	0.24	0.48	0.18
	871390	188.19	85.44	0.01	111.52	25.88	0	0	0.27
	401035	197.35	27.26	0.01	59.68	33.77	0	0.11	0.02
	871150	222.59	105.76	0.01	94.49	58.14	0	0	0
	871500	330.47	-17.02	0.01	131.08	-78.89	0	0	0.01
	852721	370.6	-11.98	0.01	34.33	26.95	0	0.23	0

(continued)

Table 13 (continued)

Groups	HS code	Pakistan's import from world			India's export to world			RCA 2012	RCA 2007
		Import	CAGR	Share 2012	Export	CAGR	Share 2012		
	840733	461.93	448.68	0.02	291.73	-87.56	0	2.01	0
	871610	592.91	688.18	0.02	139.53	-21.09	0	0	0.01
	853910	863.78	-16.86	0.03	240.21	-43.2	0	0.09	0.33
	871639	1034.03	-4.41	0.04	1013.4	27.77	0.01	0.01	0
	720410	1188.21	10.45	0.05	878.98	58.81	0.01	1.48	0.95
	871631	1317.68	47.9	0.05	387.34	8.92	0	0.01	0.15
	871680	1848.91	62.11	0.07	618.54	-12.64	0	0.06	0.09
	840732	4315.28	10.11	0.17	66.8	28.81	0	0.03	0.08
	870510	8048.12	2.24	0.32	2167.74	138.04	0.01	0	0.15
	870333	13,873.29	137.26	0.56	12,054.14	36.25	0.07	0.01	0.04
	870120	14,628.79	2.98	0.59	14,512.36	-16.19	0.09	0.01	0.02
	842131	19,330.62	67.66	0.77	7621.77	56.29	0.05	0.78	0.15
	870324	30,587.57	83.92	1.23	4504.98	1.79	0.03	0	0
	870431	35,407.78	91.53	1.42	101.23	46.61	0	0	0.01
	870290	39,132.5	129.87	1.57	19,015.86	40.58	0.11	1.15	0.32
	870590	39,975.57	-26.54	1.6	30,637.67	77.69	0.18	0.05	0
	760200	46,430.6	5.19	1.86	8240.12	120.79	0.05	0.01	0.02
	870829	74,694.98	61.12	2.99	53,074.31	55.37	0.32	0.28	0.12
	720449	321,055.8	9.11	12.86	490.98	-17	0	0.04	0
D	841520	269.81	5.09	0.01	300.9	24.53	0	0.08	0.08
	731519	185.33	21.23	0.01	396.05	-28.04	0	2.49	1.73
	870310	302.33	62.66	0.01	412.31	-67.43	0	1.15	0.32
	401034	128.14	-15.48	0.01	494.86	22.63	0	0.18	2.17
	401033	136.25	-3.48	0.01	610.99	6.65	0	0.14	0.29
	961380	274.33	6.35	0.01	725.24	7.62	0	0.26	0.08
	853230	606.46	-54.4	0.02	819.75	-66.36	0	0.28	0.4

(continued)

Table 13 (continued)

Groups	HS code	Pakistan's import from world			India's export to world			RCA 2012	RCA 2007
		Import	CAGR	Share 2012	Export	CAGR	Share 2012		
E1	681320	857.56	25	0.03	7314.75	-31.1	0.04	0.8	1.81
	870331	508.58	9.04	0.02	39,177.55	-30.7	0.23	0.1	0.21
	851180	483.4	-1.7	0.02	2975.41	-15.26	0.02	0.47	0.32
	400829	628.21	51.51	0.03	17,675.64	-6.55	0.11	1.81	1.15
	831000	192.78	37.5	0.01	4373.87	-0.47	0.03	0.87	1.02
	871130	131.22	170.64	0.01	27,509.81	2.51	0.16	1.1	0.66
	850710	197.74	-32.53	0.01	35,558.56	7.99	0.21	0.02	0.24
	902910	1.38	-0.02	0.01	1899.65	9.2	0.01	0.41	0.15
	732010	520.22	-32.17	0.02	33,234.94	12.3	0.2	0.4	1.39
	871495	283.44	7.89	0.01	4853.33	17.6	0.03	0.06	0.27
	871420	761.95	1798.5	0.03	15,743.09	20.96	0.09	0.01	1.2
	400931	787.09	38.47	0.03	14,141.19	22.94	0.08	0.84	0.6
	830120	454.4	-1.66	0.02	17,337.47	23.99	0.1	0.43	0.16
	401290	339.95	132.65	0.01	31,505.05	24.46	0.19	0.81	1.14
	842549	152.41	-66.05	0.01	4958.25	26.5	0.03	0.57	0.26
	851230	878.67	4.84	0.04	19,940.89	33.13	0.12	0.76	3.36
	E2	851240	281.69	-30.12	0.01	7998.17	41.53	0.05	0.4
870840		439.34	-33.39	0.02	201,847.2	42.93	1.21	0.69	0.32
871493		451.46	2.08	0.02	25,993.3	44.42	0.16	0.88	1.63
902920		446.83	-4.48	0.02	10,133.47	45.3	0.06	0.46	0.23
700910		509.61	-9.78	0.02	14,814.6	46.35	0.09	0.21	0.18
871140		372.67	53.02	0.01	3733.39	48.93	0.02	0.02	0.02
731822		942.1	-14.24	0.04	34,246.84	54.1	0.2	0.9	1.29
851140		891.3	-56.23	0.04	104,293.2	56.09	0.62	1.83	1.98
852729		365.07	-10.21	0.01	2235.08	98.47	0.01	0.16	0.03
854590		392.83	-18.25	0.02	11,308.19	108.79	0.07	0.18	9.12

(continued)

Table 13 (continued)

Groups	HS code	Pakistan's import from world			India's export to world			RCA 2012	RCA 2007
		Import	CAGR	Share 2012	Export	CAGR	Share 2012		
	870821	745.52	-14.02	0.03	5233.6	140.51	0.03	1.33	0.07
	400941	640.41	2.15	0.03	4082.25	146.92	0.02	1.06	0.53
	400921	508.88	4.53	0.02	36,500.72	172.58	0.22	1.66	1.93
	871640	680.28	182.68	0.03	4187.85	175.07	0.03	0.71	0.01
	820600	436.86	76.81	0.02	7940.43	194.02	0.05	0.27	0.35
	870790	754.33	53.9	0.03	22,446.38	230.85	0.13	0.05	0.01
F	870810	1009.96	24.25	0.04	204,417.4	30.38	1.22	0.25	0.31
	700721	1174.98	39.36	0.05	7044.95	4.04	0.04	0.03	0.27
	870893	1261.53	-9.65	0.05	23,880.95	24.64	0.14	0.58	0.42
	871310	1328.5	46.67	0.05	12,671.34	74.77	0.08	0.01	0.74
	400811	1358.23	93.79	0.05	7835.75	10.54	0.05	0.33	0.38
	840734	1442.27	685.03	0.06	27,178.8	68.39	0.16	0.4	0.07
	851290	1535.45	147.74	0.06	9365.55	25.09	0.06	0.16	0.19
	854430	1564.81	7.44	0.06	113,832.6	101.64	0.68	0.16	0.3
	851120	1568.73	51.31	0.06	11,322.63	102.81	0.07	0.36	0.85
	681381	1675.59	31.77	0.07	43,339.04	-9.45	0.26	4.66	2.64
	401039	1728.44	-2.51	0.07	26,343.31	168.3	0.16	1.52	1.05
	830210	1782.42	52.79	0.07	63,201.96	28.22	0.38	0.66	0.77
	848350	1911.11	39.3	0.08	48,507.57	76.19	0.29	0.95	0.47
	730791	2104.63	-20.62	0.08	216,688.1	95.37	1.3	11.6	6.55
	903033	2139.59	1.1	0.09	9185.6	4.28	0.05	0.23	0.33
	870891	2180.98	-9.45	0.09	38,059.91	111.01	0.23	1.25	0.86
	400911	2185.25	57.17	0.09	3569.87	6.98	0.02	0.28	0.43
	870540	2405.26	-14.6	0.1	2685.46	72.43	0.02	0.09	0
	870830	2472.47	-9.65	0.1	115780	49.79	0.69	1.77	0.77
	851130	2567.09	13.46	0.1	10,100.31	97.08	0.06	0.3	0.46
	401032	2579.1	81.5	0.1	7186.48	29.41	0.04	0.7	1.35

(continued)

Table 13 (continued)

Groups	HS code	Pakistan's import from world			India's export to world			RCA 2012	RCA 2007
		Import	CAGR	Share 2012	Export	CAGR	Share 2012		
	401031	2626.59	8.86	0.11	4804.14	8.49	0.03	0.16	0.66
	870870	2731.11	3.36	0.11	96,585.73	95.84	0.58	0.56	0.58
	853921	2740.32	30.16	0.11	17,609.52	-33.68	0.11	0.2	1.27
	851190	2813.68	93.37	0.11	41,004.89	10.3	0.25	0.54	1.45
	732090	3016.39	8.28	0.12	19,842.64	0.12	0.12	1.19	0.51
	848390	3033.57	15.37	0.12	91,498.49	40.41	0.55	2.05	1.8
	840820	3551.2	-8.16	0.14	72,207.87	196.9	0.43	0.16	0.11
	853929	3585.5	11.2	0.14	23,496.66	132.49	0.14	0.25	0.27
	871200	3595.14	111.58	0.14	45,135.85	36.74	0.27	0.01	0.08
	848420	3686.24	1.2	0.15	13,809.27	25.78	0.08	0.47	0.46
	851150	4010.54	214.89	0.16	32,828.77	129.59	0.2	0.35	0.87
	842123	4026.11	19.21	0.16	32,597.38	83.61	0.19	0.58	0.39
	842890	4065.07	-49.23	0.16	18,195.16	73.44	0.11	0.24	0.05
	840790	4210.18	122.57	0.17	35,978.66	56.71	0.22	1.11	0.48
	482110	4253.25	-26.08	0.17	16,244.63	8.1	0.1	0.07	0.13
	570320	4616.79	-11.62	0.18	16,421.75	7.88	0.1	0.32	0.2
	870894	4698.51	3.85	0.19	25,223.1	50.85	0.15	1.04	0.82
	870332	4850.78	-30.36	0.19	19,345.73	-13.72	0.12	0.37	0.02
	871499	4949.18	82.1	0.2	85,166.29	27.46	0.51	0.34	0.59
	731511	5011.03	6.89	0.2	5700.98	-33.32	0.03	0.91	2.37
	400821	5150.38	19.76	0.21	52,081.1	27.67	0.31	3.75	1.97
	870850	5365.93	87.51	0.21	129,504.4	114.5	0.77	1.95	0.93
	848790	5504.41	-16.03	0.22	138,866.4	37.24	0.83	0.61	0.65
	848360	5796.88	18.41	0.23	47,348.95	23.53	0.28	0.95	0.82
	570330	6070.64	31.86	0.24	58,982.96	104.94	0.35	4.14	1.28
	940190	6739.9	30.23	0.27	23,806.48	204.98	0.14	0.29	0.12

(continued)

Table 13 (continued)

Groups	HS code	Pakistan's import from world			India's export to world			RCA 2012	RCA 2007
		Import	CAGR	Share 2012	Export	CAGR	Share 2012		
	870410	7005.06	-11.49	0.28	710,987.9	129.44	4.25	0.56	0.44
	853650	8059.98	2.06	0.32	94,054.42	41.58	0.56	0.34	0.31
	848410	8323.07	3.87	0.33	41,549.63	12.26	0.25	1.34	1.61
	870390	8348.64	5.49	0.33	30,381.57	81.22	0.18	0.03	0.46
	854442	8576.88	55.43	0.34	45,252.67	67.43	0.27	0.11	0.34
G	851220	10843.06	-3.48	0.43	47,921.12	15.73	0.29	0.39	0.21
	731815	14398.48	10.3	0.58	254,430.6	77.02	1.52	1.04	1.32
	870880	14701.7	8.15	0.59	76,491.4	124.79	0.46	0.84	0.63
	841330	15910.58	-25.46	0.64	80,636.64	28.74	0.48	0.8	1.25
	401699	16040.3	8	0.64	184,552	65.77	1.1	1.01	1.33
	903289	16568.5	-4.85	0.66	62,744.62	44.84	0.38	0.37	0.23
	848340	17286.8	5.76	0.69	89,392.74	46.7	0.53	1.28	0.57
	853710	18675.02	-19.62	0.75	179,487.8	28.84	1.07	0.36	0.41
	848330	19712.89	31.08	0.79	32,429.94	46.77	0.19	0.76	2
	848310	21503.11	-1.45	0.86	178,753.8	54.73	1.07	2.18	2.1
	841391	21941.22	11.8	0.88	194,289.5	27.54	1.16	1.53	1.2
	870423	24881.95	63.06	1	65,527.56	210.59	0.39	0.53	0.15
	870422	28803.44	-10.56	1.15	175,330.2	76.79	1.05	0.11	0.06
	841590	37580.87	36.04	1.51	48,596.8	26.48	0.29	0.13	0.15
	870190	37982.68	-29.88	1.52	784,811	75.89	4.69	5.04	1.94
	871419	39152.81	-6.77	1.57	125,442.1	22.58	0.75	0.69	1.12
	870899	60022.49	1.66	2.4	252,827.4	84.4	15.12	0.74	0.66
	848180	60408.01	-24.19	2.42	683,958.2	36.27	4.09	0.8	1.06
	840999	64148.71	14.64	2.57	483,309.4	18.18	2.89	2.04	1.43
	870421	79106.34	51.25	3.17	325,633	174.51	1.95	0.34	0.18
	871120	81309.45	32.31	3.26	1,284,825	65.8	7.68	3.15	1.8

(continued)

Table 13 (continued)

Groups	HS code	Pakistan's import from world		India's export to world		RCA 2012	RCA 2007		
		Import	CAGR	Share 2012	Export			CAGR	Share 2012
	840991	89438.05	112.18	3.58	223,782.8	35.22	1.34	0.67	0.54
	870323	151281.9	54.24	6.06	363,143.3	207.28	2.17	0	0.02
	870321	290441.3	59.8	11.63	1,135,018	21.32	6.79	3.94	2.57
	870322	400407.1	40.27	16.04	2,634,205	14.78	15.75	1.61	1.03
H	871411			0	1186.3	111.69	0.01	0	0.27
	870130			0	4423.8	-34.49	0.03	0.01	0.02
	902580			0	4924.64	103.92	0.03	0.23	0.39
	871620			0	4995.2	35.76	0.03	0.2	0.01
	871690			0	23,136.01	44.69	0.14	0.32	0.34
	870600			0	247,389.1	67.9	1.48	6.82	1.68

Value in US\$ thousand, CAGR of last 3 years and Share (%) of total import of these products in 2012

Source: Calculated from the data available in COMTRADE, WITS

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Chapter 5

India–Pakistan Trade: Perspectives from the Automobile Sector in Pakistan

Vaqar Ahmed and Samavia Batool

Abbreviations

AIDP	Auto Industry Development Programme
ACMA	Auto Component Manufacturers Association (India)
ATT	Afghan Transit Trade
BRCA	Bilateral Revealed Comparative Advantage
CBU	Completely Built Up
CCP	Competition Commission of Pakistan
CIF	Cost, Insurance and Freight
CKD	Completely Knocked Down
CPD	Convergent Parallel Design
CVD	Countervailing Duties
EDB	Engineering Development Board
FPCCI	Federation of Pakistan Chambers of Commerce and Industry
FTA	Free Trade Agreement
IPP	Institute of Public Policy
INR	Indian Rupee
ITC	International Trade Centre
JICA	Japan International Co-operation Agency
LCVs	Light Commercial Vehicle
MFN	Most Favoured Nation
MMR	Mixed Method Research
MNC	Multinational Corporation
NTB	Non-tariff Barrier
OEM	Original Equipment Manufacturer
PAAPAM	Pakistan Association of Automotive Parts Accessories Manufacturers
PACO	Pakistan Automobile Corporation
PAMA	Pakistan Automotive Manufacturers Association
PKR	Pakistani Rupee

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PSQCA	Pakistan Standards and Quality Control Authority
PTA	Preferential Trade Agreement
SAFTA	South Asian Free Trade Agreement
WHT	Withholding tax
TCI	Trade Complementarity Index
TDAP	Trade Development Authority of Pakistan

1 Introduction

The auto sector in both India and Pakistan has shown growth in terms of production, trade and employment. Improved global trade in auto parts has also allowed better supply chain opportunities for both countries. The trade diplomacy climate has improved sufficiently to push ahead with trade dialogues at both the track-I and II levels. This is seen in the increased number of cross-border meetings between government officials and the business community. At the time of writing this document, there had been non-stop trading activity at the Wagah-Attari border for the past 28 months. Trading hours and days have increased recently with better trade-related infrastructure (e.g. scanners and standards validation instruments) available on the land route. There is also a heightened debate now on opening up other land routes with India, e.g., Munabao-Kokhrapar border.

The Government of Pakistan has once again promised to revisit the grant of MFN status to India. According to the Pakistan government, it is crucial to adopt a sector-specific approach and identify sector-wise gains and losses as a result of liberalised trade. One of the key sectors in which the manufacturing community fears trade liberalisation would result in dumping from the Indian side is the auto sector. It is feared that high production subsidies in India, non-tariff barriers on the Indian side and a continuing energy crisis in Pakistan may imply greater relative gains for India in this sector. However, Pakistan has liberalised automobile trade with several other economies. It is now usual to see auto parts and even second-hand cars coming from Japan, the United Arab Emirates and the European Union. These imports have still not threatened the competitive advantage of local manufacturers because of their higher freight costs. However, in the case of China or India, such trade has not been allowed because of the cost advantages these two countries enjoy.

While India and Pakistan both potentially stand to gain enormously by liberalising trade, there have been divergent views in Pakistan on opening trade with India, especially in case of automobiles (Ahmed et al. 2013a, b, c, 2014). It is, therefore, crucial to investigate the relative gains and losses for Pakistan's automobile industry. Intuitively, any easing of trade barriers will imply gains in terms of reduced input costs as well as lower margins. Theoretically, trade-induced competition is likely to bring down domestic prices and increase consumer surplus.

This study has the following broad objectives:

1. To analyse the competitiveness of Pakistan's automobile industry
2. To explore the automobile import and export patterns of India and Pakistan, identifying the most exported and imported automobile products and major automobile trade partners
3. To identify the obstacles that impede cross-border trade in automobiles
4. To analyse if Indian auto parts can potentially substitute for imports of auto parts from the rest of the world to Pakistan
5. To explore the economic justifications of placing automobile products in Pakistan's negative list vis-à-vis India
6. To study trade and investment policies regulating the auto sector in the two countries.

The next section describes the methodology used in this study, followed by an overview of the automobile sector and the trade structure of the auto industry in Pakistan. It also looks at the price differential for automobile products across borders. We then calculate revealed comparative advantage and trade complementarity for the two neighbours to identify products with trade potential. This is followed by an analysis of views from various stakeholders, possible avenues of joint ventures and finally, the way forward and policy recommendations.

2 Methodology and Data

Our approach rests on both qualitative and quantitative survey tools and combines and interprets both types of analyses to arrive at policy relevant conclusions (Fig. 1). Earlier works by Ahmed (2013a, b), the Competition Commission of Pakistan (2013), IPP (2013), Hussain (2011), Japan International Co-operation Agency (2011), Veloso and Kumar (2002) were reviewed to identify the strengths, weaknesses, opportunities and challenges with respect to trade for the Indian and Pakistani automobile industries.

The key informant interviews (KIIs), and focus group discussions (FGDs) have helped to build the qualitative part of this study. We conducted 15 KIIs with officials representing automobile manufacturers, auto parts manufacturers, automobile/auto parts manufacturers association, Ministry of Commerce, Federal Board of Revenue (FBR), Engineering Development Board (EDB) and Trade Development Authority of Pakistan (TDAP).

We also conducted two FGDs, one each in India and Pakistan, with major stakeholders from both sides of the border. Unlike past efforts to study this subject, we have taken special care to include consumer groups. The representation by consumers has allowed us to study the welfare effects in both price and quality terms, if trade is liberalised.

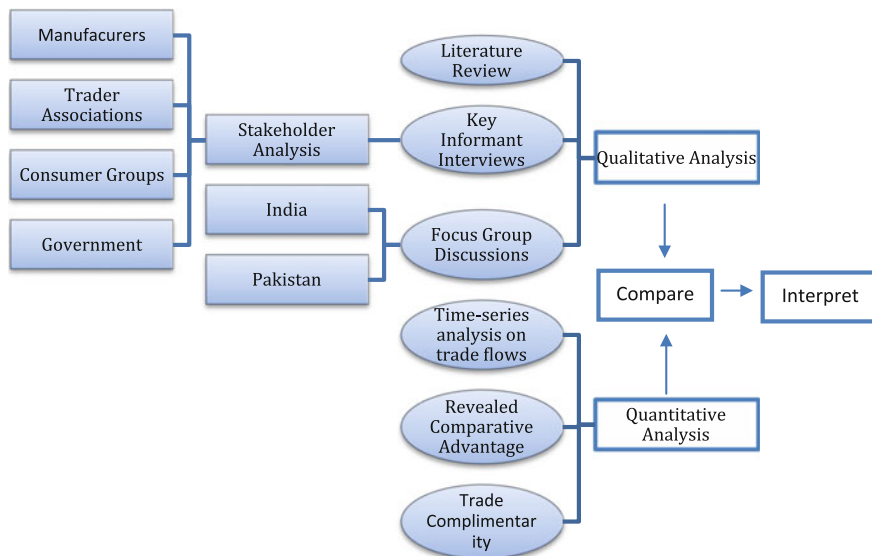


Fig. 1 Methodological framework

The bilateral revealed comparative advantage index (Serin and Civan 2008) and trade complementarity index (Michael 1996) for Chapters 84 and 87 of the HS classification were calculated. Time series data for the period 2005–2012 was extracted from the International Trade Centre database in order to carry out an in-depth descriptive analysis. Trade data for 2013 has been used to identify trade partners and the major traded items in the automobile sectors of the two countries. Other industry specific data was obtained from PAMA, PAAPAM, EDB, FBR and TDAP.

3 Automobile Industry in Pakistan

The automobile industry is the sixth largest manufacturing sub-sector in Pakistan. It has registered impressive growth in the last few years with an annual growth rate of above 7 % since 2007. The auto sector's annual contribution to GDP amounts to approximately US\$6 billion.¹ It also generates 215,000 direct job opportunities and contributes US\$0.82 billion to revenue collection through indirect taxes (CCP 2013). This sector also contributes 16 % to the manufacturing sector of Pakistan.

With substantial potential for job creation along with forward and backward linkages in allied industries, the auto sector in Pakistan is gradually becoming a key

¹Updated from Jalil (2012).

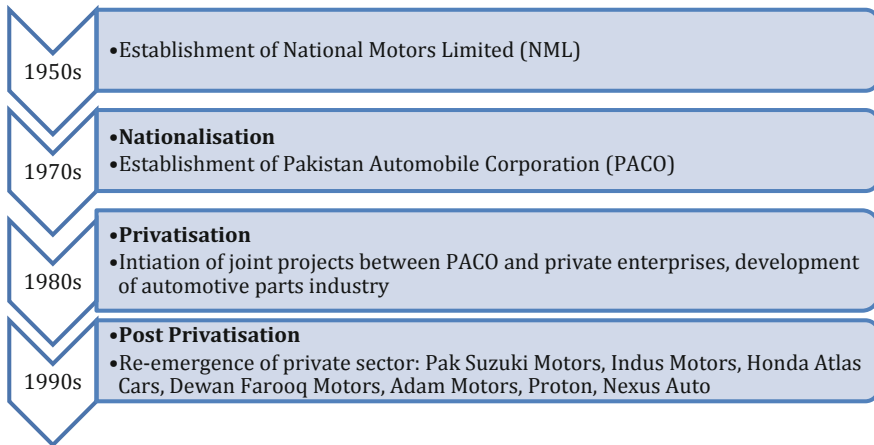


Fig. 2 Evolution of automotive industry in Pakistan. Based on JICA (2011) and CCP (2013)

player in economic growth and trade composition. The steady growth in domestic demand for automobiles has allowed Pakistan to become one of the few countries with specialisation in the production of all kinds of vehicles including 2/3 wheelers, motorcars, light commercial vehicles (LCVs), tractors, prime-movers and trucks. Local manufacturers cater to most of the automotive demand in the country except for a few categories of trucks and prime-movers, which are imported (AIDP 2006). A brief timeline of the automobile industry is presented in Fig. 2.

3.1 Evolution and Key Players

According to the CCP (2013), 11 models produced by 4 manufacturers account for most of the automobile sales in Pakistan. The major players in the Pakistani automobile industry are Suzuki, Toyota and Honda with a market share of 62, 28 and 9 % respectively. The remaining producers have a minor share of 1.4 % in the automobile market and include Dewan Farooque Motors Ltd, Sigma Motors Ltd, Hinopak Motors Ltd, and Gandhara Industries Ltd.

EDB (2013) reports that most automobile manufacturers in Pakistan have technical collaborations with Japanese automobile firms. In 2012–13, Pakistani companies that had collaborations with Japanese companies had the largest share in automobile sales (Table 1). Japanese collaboration is also dominant in the LCV, truck and bus industry.

Table 2 gives further details regarding the installed capacity, turnover and revenue contribution by automobile manufacturers in Pakistan. This table only includes PAMA member companies and excludes members for which data on the indicators mentioned is not available. The omitted categories include motorcycles,

Table 1 Market share (%) of local automobile companies in collaboration with Japan (2012–13)

Collaboration type	Car	Motorcycle	Truck	Buses	Tractors	Jeeps	LCVs/pick ups
Japanese	100	44	80	80	0	57	97
Non-Japanese	0	56	20	20	100	43	3

Source EDB (2013)

Table 2 Specifications of automobile manufacturers in Pakistan

Manufacturers	Products	Installed capacity (Units/annum)	Turnover (PKR million)	Contribution to exchequer (PKR million)
Pak Suzuki Motor Co. Ltd.	Cars, LCVs, Vans, motorcycles	150,000	58,531	17,302
Indus Motor Co. Ltd.	Cars, LCVs, SUV	54,800	77,000	24,700
Honda Atlas Cars (Pakistan) Ltd.	Cars	50,000	30,275	10,664
Dewan Farooque Motors Ltd.	Cars, LCVs	20,000	–	8
Sigma Motors Ltd.	Jeeps	1320	998	236
Hinopak Motors Ltd.	Trucks, buses, P. movers, LCVs	6000 + 1800	7528	650
Ghandhara Nissan Ltd.	Cars, trucks, buses	8500 (cars 6000 + trucks 2500)	1624	340
Master Motor Corporation Ltd.	Trucks, buses, pick ups	–	1150	289
Millat Tractors Ltd.	Tractors	–	20,133	1426
Atlas Honda Ltd.	Motorcycles	750,000	38,011.857	7700
DYL Motorcycles Ltd.	Motorcycles	200,000	3942	722
Ravi Automobile Pvt. Ltd.	Motorcycles	75,000	1027	46
Sazgar Engineering Works Ltd.	Rickshaws	20,000	2725.64	605

Source PAMA (2013) (PAMA members with missing data are not included here)

rickshaws, trucks and bus manufacturers. Indus Motors Ltd. has the highest turnover. Pak Suzuki Motors, however, has the highest installed capacity per annum.

Apart from manufacturers, Pakistan has a highly organised automotive vending industry. According to a representative of PAAPAM, there are nearly 2800 vending units in Pakistan of which 670 are organised and are classified as tier-I.² Around 900 belong to tier-II category while 1230 units come under small and cottage units. Nearly 950 different auto parts are manufactured by the local vending industry. In 2012, auto parts worth US\$128 million were exported by Pakistan to various European countries, US and to some South Asian countries, particularly Bangladesh.³

3.2 *Structure of the Industry*

The Pakistani automobile industry operates under various agreements of franchising and technical co-operation with leading global manufactures. Broadly, it can be categorised into the following segments: cars and LCVs, 2/3 wheelers, tractors, trucks and buses, and vendor industry (SBP 2007). The Board of Investment (2007) states that most automobile manufacturers in Pakistan produce 2/3 wheelers and LCVs. The number of organised vendors involved in the auto sector stands at 250.

A recent study indicates that in terms of a broader categorisation of automobile manufacturers, there are currently 10–12 four-wheeler manufacturers, 90–100 two-wheeler manufacturers, 40–50 rickshaw manufacturers and 5–7 tractor manufacturers in Pakistan. A total of 149–165 auto companies are involved in manufacturing across Pakistan (JICA 2011).

Classification on the basis of engine size reveals that currently there is only a single producer (Pak Suzuki) producing a car in the 800 cc engine segment. Production of 1000 cc engine cars is also carried out largely by Pak Suzuki. Honda Atlas, Pak Suzuki and Indus Motors (Toyota) compete with each other in the production of 1000+cc engine cars (CCP 2013).

Moreover, data provided by EDB shows that the local automobile industry is on its way to achieving high levels of local content. The tractor industry has achieved the highest level of local content with nearly 80–87 % of the parts being locally manufactured (Table 3). The commercial vehicle and trucks and buses industry has the lowest level of local content, highlighting their dependence on imported parts. The critics of the deletion programme⁴ have argued that despite decades of pro-

²Tier 3 companies supply small auto components to tier 2 vendors for assembling. These assembled parts are then supplied to tier 1 vendors for further assembling.

³The EU countries mainly included Germany and Italy.

⁴Deletion programme focused on progressively increasing the proportion of local parts in vehicle manufacturing.

Table 3 Percentage of local content

Auto sector categories	Local content level (%)
Tractors	88–87
Motor cycles	77–83
Cars	50–70
Buses/trucks	45–47
Commercial vehicles	30–40

Source EDB

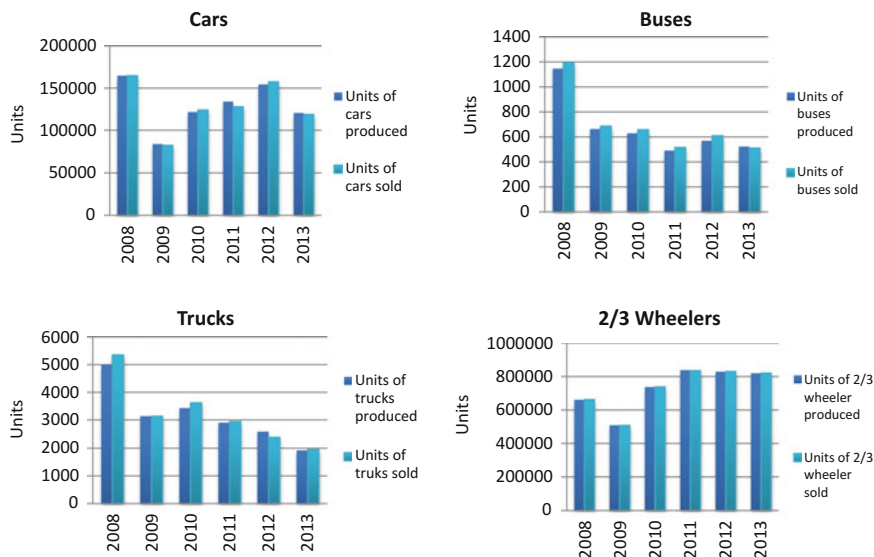


Fig. 3 Production and sales of various automobile products. *Data source* PAMA (2013)

tection to this industry, indigenous levels of production remain low. It is also argued that if the import of finished products is to remain high, there is a compelling case to import from the nearest neighbours, including China and India, to reduce the cost of production and improve consumer affordability.

3.3 Production Structure

Product-wise sales and production of various automobile products are given in Fig. 3. Although the domestic demand for automobiles is met by local manufacturers, in recent years, demand has outstripped supply. For example, in 2010, 121,647 units of cars were produced while 123,957 units of cars were sold, pointing towards a demand-supply gap. This gap seems to be more visible in the case of buses and trucks. Automobile import data reveals that the import of trucks and other

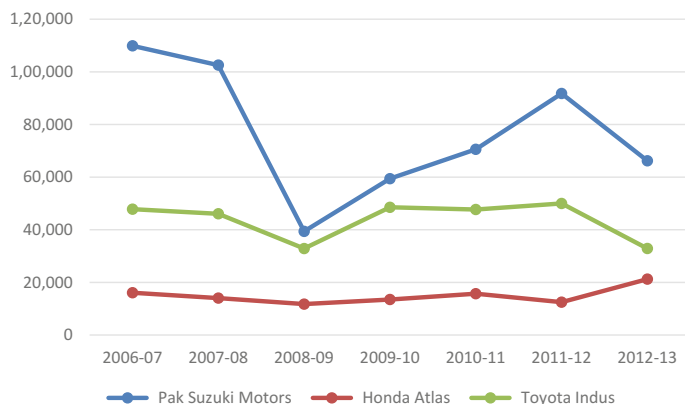


Fig. 4 Annual production of cars. *Source* PAMA and Industry via EDB (2013)

motor vehicles for the transport of goods forms the second largest category of Pakistan's automobile imports (US\$0.2 billion in 2012).

Annual production of cars by the top three manufacturers is shown in Fig. 4. We observe here that the industry is operating significantly below capacity. One major reason reported by representatives of PAMA and PAAPAM is the energy crisis in the country. Second, the production of small engine cars manufactured by Pak Suzuki Motors has declined in the year 2012–13. The production of Alto, of which 15,288 units were produced in 2011, was discontinued in 2012 by the manufacturer.

A further analysis of car production data based on engine size reveals that Pakistan's automobile market is pre-dominantly occupied by large engine cars, i.e., above 1300 cc, followed by 800 cc cars. They also indicate a decline in production in 2012 as compared to 2011.

3.4 Market Structure

Pakistan's automobile industry can be classified as a differentiated oligopoly (Friedman 1983). It is evident that the market is predominantly occupied by the top three auto manufacturers. Prices are also likely to be rigid in an oligopolistic market. This rigidity may be seen in a situation in which a price increase by one producer is not matched by others while a decrease in price by one producer leads to a price reduction by the whole industry. For example, after the rupee appreciation in March 2014, Indus Motors is reported to have decreased the price of GLi and XLi by PKR 50,000 and Altis by PKR 75,000. This was followed by Honda Atlas, which reduced the price of Honda Civic by PKR 30,000 and Honda City by PKR 40,000 (as reported by the representative from EDB). The market structure is also sensitive to government intervention (Box 1) through statutory regulatory orders (SROs) which provide exemptions, protection or preferential treatments to a sector or entity (for production or trade).

Box 1: SROs Related to Automobile Import

S.R.O. 577(I)/2005 provides for tax exemption (custom duty, sales tax and withholding tax) on the import of used automobiles (meant for transport of persons).

S.R.O. 655 (I)/2006 enables the automotive vending industry to import duty-free raw materials, sub-components and sub-assemblies not locally manufactured. Earlier, the import of these components was subjected to customs duty ranging from 5 to 20 %. This exemption is subject to conditions of importers having extensive in-house production facilities, etc.

Under **S.R.O. 656(I)/2006**, the government exempted some components of automobiles from custom duties, subject to certain conditions. The importer has to be a certified assembler or manufacturer having suitable in-house facilities. The in-house facilities are further defined in Annex-A of the SRO as having extensive assembling and manufacturing facilities. Moreover, a 10 % custom duty faced by CKD importers of motorcycles would be exempted if the importer complies with localisation policies.

Under **S.R.O. 693 (I)/2006**, the government levied additional custom duties of between 15 and 35 % on the import of auto parts listed in Appendix-I and II of the SRO notification. Various auto parts under Chapters 40, 57, 68, 70, 73, 82, 83, 84, 85, 87, 90, 94 and 96 were subject to the increased duties.

S.R.O 277 (I)/2010 provides for custom duty exemption on the import of new cars by a disabled Pakistani national.

S.R.O 172 (I)/2013 deals with tax amnesty on the seizing or voluntary submission of smuggled/duty free motor vehicles. The submission of such vehicles to custom authorities before a prescribed deadline would enable release of the vehicle on payment of a redemption fine.

Source Federal Board of Revenue (2013).

4 Automobile Trade of Pakistan

Figure 5 indicates that CBU imports have been on the rise since 2009 and peaked at US\$1.36 billion in 2012.⁵ By contrast, the import of auto parts declined in 2012. This decrease in auto parts can partly be explained by the increased import of used cars in 2011 as a result of an increase in the limit of the age of imported cars (from 3 to 5 years) during the year 2011.⁶

⁵Data of Chapter 87 of the Harmonised System (HS) of classification is used via ITC. HS Classification is the standardised system of classifying traded commodities.

⁶SRO 275 (I).

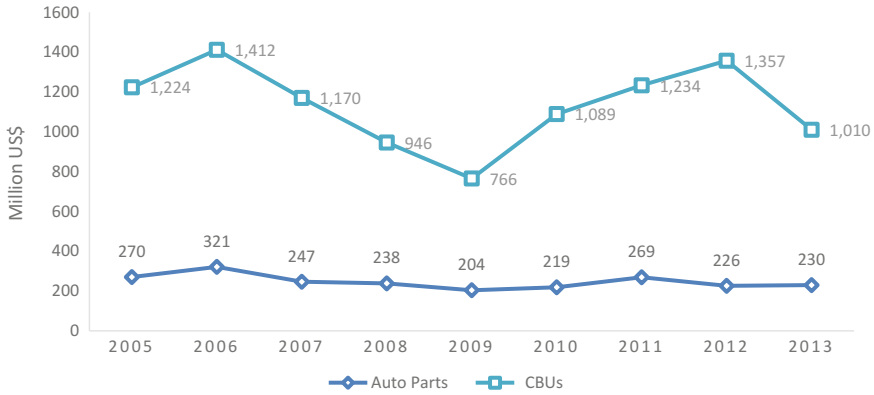


Fig. 5 Auto parts and CBU imports of Pakistan (Chapter 87). *Data Source* ITC (2014)

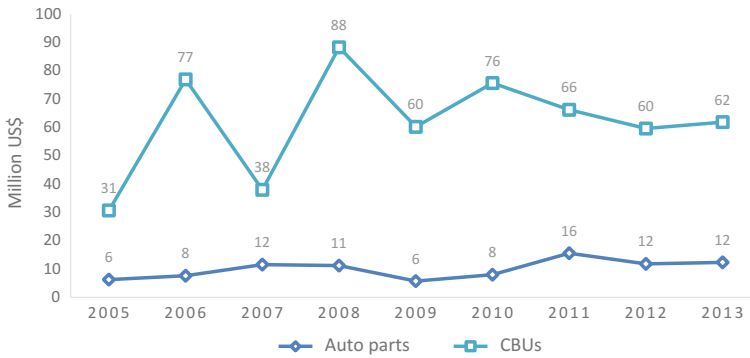


Fig. 6 Auto parts and CBU exports of Pakistan (Chapter 87). *Data Source* ITC (2014)

Export of CBUs had been volatile until 2010, and began to decline subsequently (Fig. 6). On the other hand, the export of auto parts shows a somewhat stable trend. Exports gradually increased after 2009 and began to decline in 2011. The declining trend in automobile exports might be explained by the energy shortage in the country. This is particularly evident in the case of CBUs, whose exports declined after 2010, the time when the energy crisis became acute. Some of the auto parts manufacturers also suffered from declining exports, mainly as a result of decreased global demand for automobiles that can be attributed partially to higher oil prices.

Rafique (2011) states that automobile exports declined in 2009 after having been stable for years because of rising global commodity prices and expensive lease financing (increased market interest rate). Interestingly, Pakistan’s imports and exports of CBUs are greater than that of auto parts, indicating a pattern of high intra-industry trade in CBUs.

Table 4 Fixed duty on the import of used cars

Category (cc)	Fixed duty on used cars (US\$)
Up to 800	4400
800–1000	5500
1001–1300	11,000
1301–1500	15,400
1501–1600	18,700
1601–1800	23,100

Source SRO. 577(I)/2005, Federal Bureau of Revenue, Government of Pakistan

Pakistan's exports under chapter 87 represent 0.01 % of world exports while imports represent 0.12 % of world imports (ITC 2014). The share of automobile imports in the country's total imports has been rising since 2008 and in 2012, it accounted for 3.6 % of the country's total imports. On the other hand, the share of automobile exports has remained stagnant at 0.2–0.3 % of the country's total exports.

Afghanistan, Nigeria and Italy were Pakistan's top 3 automobile export destinations in 2013 with shares of 9.5, 9.4 and 7.6 % respectively. The major countries from which Pakistan imported automobiles during that year were Japan (which accounted for 47.3 % of total Pakistani automobile imports), Thailand (22 % of auto imports) and China (11.7 % of auto imports).

4.1 *Import of Used Cars*

The import of used vehicles is allowed under the gift scheme, transfer of residence and personal baggage scheme (FBR 2013). Government usually changes the conditions on this import to control the flow of used cars into the country. SRO 577(I)/2005 provides the fixed duty rate on the import of used cars in Pakistan (see Table 4). These duty rates are much lower than the tariff rates imposed on the import of new cars.

5 **India-Pakistan Bilateral Trade in Automobiles**

Trade between India and Pakistan in automobile products has been volatile over the past decade (Fig. 7). There was a sharp decline in automobile trade between 2007 and 2010. Indian exports of automobile products could not find their way into Pakistani markets after 2007. Gopalan et al. (2013) attribute the decline in India's exports to Pakistan to the increase in ad valorem tariffs by the Government of Pakistan in 2006–07 on the import of automobile products. The government also

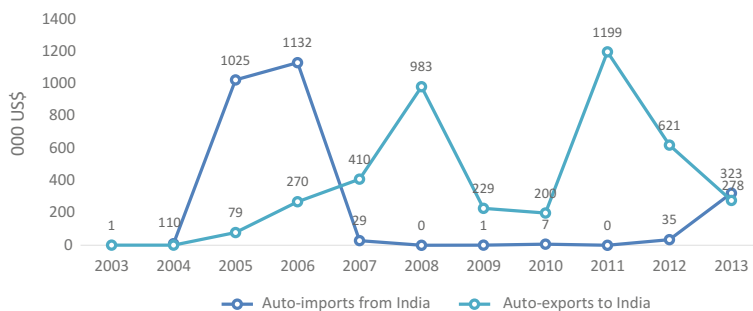


Fig. 7 India-Pakistan trade in vehicles (this chapter includes cars, trucks, tractors, motorcycles, bicycles, tanks and trailers. But trade with India only takes place in the few categories presented in Table 6) other than Tramway (Chapter 87). *Data source* ITC (2014)

launched the AIDP in 2006, under which a 30–35 % tariff was levied on the import of auto parts and 10–90 % duty was imposed on the import of CBUs (AIDP 2006). Unless these tariff barriers are removed, other trade enhancement measures are unlikely to deliver.

In 2013, auto imports from India stood at a meagre US\$278,000. On the export side, automobile exports to India increased from US\$79,000 in 2005 to US\$1.2 million in 2011. It again decreased to US\$0.3 million in 2013. Automobile exports to India were 0.4 % of Pakistan’s total automobile exports while automobile imports from India were 0.02 % of Pakistan’s total automobile imports in 2013.

5.1 Product-Wise Trade in Automobiles

India-Pakistan automobile trade is much below potential, a fact that has been highlighted in various studies including Hussain (2011) and Ahmed (2013a, b). Pakistan imports auto products in five product groups (at the 6-digit level) while it exports products to India from three product groups of the HS classification (Chapter 87). Table 5 shows that Pakistan mostly imports CBUs from India rather than auto parts. Work truck parts and motor vehicle parts are imported as auto parts.

Comparison of product-wise automobile imports of Pakistan (Chapter 87) with the rest of the world and India reveals that the difference in these two trade values is significant enough to revisit Pakistan’s trade policy with India (Table 6). Several consumer groups have pointed towards the welfare loss incurred due to expensive imports from the rest of the world.

A substantial difference also exists in Pakistan’s import of auto parts (Chapter 84) from the rest of the world and from India. India can provide similar auto parts at low freight costs, and Pakistan should consider importing auto parts from India in the interest of consumer welfare. The fact that these auto parts are exported in large amounts by India to the rest of the world is indicative of their competitiveness.

Table 5 Bilaterally traded automobile products Chapter 87 (2013)

Pakistan's imports from India			Pakistan's exports to India		
Product code	Product label	Value in 2013, (000US\$)	Product code	Product label	Value in 2013, (000US\$)
870590	Special purpose motor vehicles	179	870899	Motor vehicle parts	214
870120	Road tractors for semi-trailers (truck tractors)	86	870840	Transmissions for motor vehicles	63
870990	Work truck parts	46	871690	Trailer and other vehicle parts	1
870919	Work trucks not electrically powered	9			
870899	Motor vehicle parts	4			
Total		324	Total		278

Data source ITC (2014) (Pakistan's imports and exports have been reported by Pakistan (ITC))

Table 6 Auto parts imports from India compared with the rest of the World (2013)—Chapter 84 of HS classification

Product code	Product label	Pakistan's imports from India (000US\$)	Pakistan's imports from world (000US\$)	India's exports to world (000US\$)
845521	Hot or combination hot and cold metal rolling mills	1504	1880	7772
845590	Parts of metal rolling mills and rolls	228	772	77,225
845530	Rolls for metal rolling mills	139	1883	39,206
843149	Parts of cranes, work-trucks, shovels, and other construction machinery	135	27,200	293,987
840991	Parts for spark-ignition type engines	80	81,302	270,570
848210	Bearings, ball	36	30,527	57,694
840999	Parts for diesel and semi-diesel engines	35	59,675	527,760
848110	Valves, pressure reducing	14	34,401	43,641
848310	Transmission shafts and cranks, including cam shafts and crank shafts	9	18,524	272,344
841330	Fuel, lubricating or cooling medium pumps for internal comb piston engines	6	11,366	104,582
840890	Engines, diesel	3	8665	268,935

Data source ITC (2014)

There is some evidence of Indian auto parts coming to Pakistan through indirect trade, i.e., via third countries, particularly the United Arab Emirates. Weak evidence also exists of trade being routed through Thailand and Singapore (Ahmed et al. 2013a, b, c).

5.2 Automobiles as a Part of Negative and Sensitive List⁷ for India

In order to protect local industry, Pakistan maintains a negative list for India consisting of 1209 products. Out of these 1209 products, 181 automobile products belongs to Chapter 87 which accounts for 15 % of items on the negative list (India Pakistan Trade 2013). By contrast, India has put only one item of automobile products ('tanks and other armoured fighting vehicles, motorised, whether or not fitted with weapons, and parts of such vehicle' HS code: 87100000) in the negative list, which it maintains for all trading partners.

Pakistan also maintains a sensitive list under SAFTA. The items included in this list are subject to non-concessional tariffs. Out of a total of 936 products (at HS 6 digit level) in the sensitive list, 69 are from Chapter 87. Products under this chapter has also been listed in India's sensitive list. A duty of 8 % is imposed on auto parts imported by India; and in Pakistan the tariff rate ranges from 35 to 60 % (Ahmed 2013a, b).

5.3 Informal Trade in Automobiles

Ahmed et al. (2013a, b, c) highlight a large amount of informal trade in automobiles between India and Pakistan. Around 10 retailers in Rawalpindi, 18 in Karachi, and 22 in Lahore dealing in informally traded Indian auto parts have reported a monthly turnover of US\$0.12, US\$0.25 and US\$0.1 million respectively. As per our estimates, these auto parts command a 30 % market share in Pakistan.

Various auto parts, especially gear boxes, are brought in Pakistan through the Wagah-Attari border. Dubai and the Afghan Transit Trade (ATT) route are also used to bring in Indian auto parts to Pakistan. Tyres, in particular, are informally traded through the ATT route and the annual turnover in tyres is around US\$243 million. Differentials and windscreens are other Indian products identified by the authors as being easily available in Pakistani automobile markets. This study also

⁷Negative list includes products that are restricted to be imported from India whereas the sensitive list includes the products which are allowed from India but are conditional on the application of certain tariff rates. These items in the sensitive list are also exempted from concessions on the tariff rates under SAFTA..

states that some of the Indian automobile products are of a better quality than Chinese products.

Moreover, informal trade in rickshaw/motorcycle parts, worth US\$5 million, takes place via the Dubai-Karachi route; while products valued at US\$250 million enter Pakistan via the Delhi-Lahore route (Khan et al. 2007). The authors highlight about 6–7 brands of Indian trucks and tractor tyres that are smuggled to Pakistan via the Chaman-Noshki border. Although the import of tyres from India is legal, tariff rates make these products expensive, making it more profitable for traders to import them through informal means.

6 Price Differential

The basic prices of various Indian and Pakistani cars are compared in Table 7. The variance in basic price arises out of the difference in taxes levied on consumers across the border. The ex-factory price of Pakistani cars includes a 17 % GST while that of Indian cars includes 12.5 % VAT and 3 % cess. The engine size has been used as a base to compare automobile prices in the two countries. The landed price of Indian cars after import by Pakistan under the current tariff regime is also given for comparison. The calculations to compute the landed cost of Indian cars are given in Annexure. Table 7 further highlights that the import of Indian cars at the prevailing Pakistani tariff rate will raise the prices of Indian cars in Pakistan.

The following may be some other reasons for the price differential exhibited in the table above:

1. Pakistani auto manufacturers rely heavily on imported auto parts, which substantially increases the production cost, causing the price to rise.
2. The tax structure varies in the two countries and Indian manufacturers are paying greater taxes under excise duty, corporate tax, and education cess.

Analysis of car prices across the border reveals that small engine cars (engine size less than 1000 cc) in India are substantially less costly than in Pakistan. There is potential for Tata Motors (India) to export low-cost cars to Pakistan if trade is liberalised. Similarly, cars with engine size greater than 2000 cc are cheaper in India. It is likely that these cars would capture the local market for this segment because of their compliance with emission and safety standards, an area in which Pakistani cars are still lagging behind. On the other hand, the landed cost of Indian cars with engine size 1000–2000 cc is far greater than the price of local cars in Pakistan. Hence, it is likely that the import of these cars might not be able to ‘substitute’ locally manufactured cars. One of the reasons for this price hike in landed cost of Indian cars may be high the customs duty imposed on import of cars in Pakistan.

Table 7 Prices of selected Indian and Pakistani cars (2014)

Model	Ex-factory price (PKR)	Engine size (cc)	Basic price PKR: (ex-factory price-17 % GST)	Model	Ex-factory price (INR)	Engine size (cc)	Basic price INR: (ex-factory price-3 % cess-12.5 % VAT)	Basic price of Indian car in PKR (exchange rate: 1 INR = 1.63 PKR)	Landed price of Indian car in Pakistan in PKR (Tariff rate * CIF + WHT)
Suzuki Mehran VX	625,000	796	518,750	Tata Nano Std BS III	152,617	624	128,961	210,207	348,470
Suzuki Cultus VXR -Euro II	1,044,000	993	866,520	Hyundai Santro Xing (Non AC)	305,543	1086	258,184	420,840	794,261
Suzuki Swift DX 1.3L	1,221,000	1328	1,013,430	Tata Indigo eCS LS	540,994	1396	457,140	745,138	1,437,560
Suzuki Liana RXI (Petrol)	1,465,000	1328	1,215,950						
Corolla XLI standard	1,499,000	1300	1,244,170	Toyota Corolla Altis Diesel D4DJ	1,300,199	1364	1,098,668	1,790,829	3,424,373
Corolla GLI	1,729,000	1600	1,435,070	Toyota Etitos J	555,040	1496	469,009	764,484	1,474,318
CRZ-hybrid	3,269,000	1496	2,713,270						

(continued)

Table 7 (continued)

Model	Ex-factory price (PKR)	Engine size (cc)	Basic price PKR: (ex-factory price-17 % GST)	Model	Ex-factory price (INR)	Engine size (cc)	Basic price INR: (ex-factory price-3 % cess-12.5 % VAT)	Basic price of Indian car in PKR (exchange rate: 1 INR = 1.63 PKR)	Landed price of Indian car in Pakistan in PKR (Tariff rate * CIF + WHT)
Honda City Manual Transmission	1,548,000	1300	1,284,840	Honda City i DTec E	853,000	1498	720,785	1,174,880	2,254,069
Honda Civic i-VTEC Manual	2,051,000	1800	1,702,330	Honda CR V 2.0L 2WD MT	2,089,057	1997	1,765,253	2,877,363	6,184,556
Camry A/T Up-Spec	10,949,000	2494	9,087,670	Toyota Camry 2.5 G	2,526,540	2494	2,134,926	3,479,930	7,473,480
Fortuner	5,742,000	2694	4,765,860	Toyota Fortuner 4 × 2 Manual	2,270,435	2982	1,918,518	3,127,184	6,718,937
CR-V 2.4 Litre	7,900,000	2354	6,557,000						

Price data source Official Websites of Manufacturers/Assemblers and EDB (2013)

7 Consumers as Stakeholders

Any stakeholder analysis centres around four aspects: stakeholder's position, their level of power to exert (policy) influence, their level of interest and the group they are associated with. This analysis is central to trade policy as well for two reasons. First, trade confers potential gains to both producers and consumers, and producer welfare is inseparable from consumer welfare (Chatterjee and George 2012). Second, it is imperative to take account of the interests of each stakeholder (both primary and secondary) while formulating trade policy. In the case of bilateral automobile trade, the stakeholders generally identified in the literature are automobile manufacturers, auto parts vendors, auto-traders and the government. However, one group that is affected by changes in trade policies, and is often neglected, is that of consumers. While most research studies on trade do not consider consumers as primary stakeholders, we will particularly focus in this section on the gains to consumers.

According to Chatterjee and George (2012), consumer welfare gains would be around US\$203 million for Pakistan if it trades with India while India would gain in terms of consumer welfare to the tune of approximately US\$545 million by trading with Pakistan in items currently being imported from rest of the world.⁸

The following power-interest matrix (Fig. 8) can further elaborate the position of consumers with respect to trade policy. Consumers have a high interest in enhancing bilateral trade in automobiles but have little power to influence decision making; while auto manufacturers, vendors and traders' groups have a vested interest as well as the power to influence policy. Hence, trade policy is usually supplier-centric. The government has power but it usually prioritises trade policy on the basis of the domestic political economy, foreign policy and security considerations. This is particularly true in the case of Pakistan's trade with India.

The automobile industry continues to earn monopolistic profits due to excessive protection in Pakistan. With none or little competition, prices tend to rise and consumers end up paying high prices. Hence, there is potential for gain in consumer surplus through enhanced trade. With increased awareness of consumer rights, support for opening automobile trade with India is gaining strength. Consumers emphasise in particular the need to import small engine passenger cars from India. According to the Economist Intelligence Unit (2009), Pakistan is one of the expensive countries for automobiles (Table 8).

The middle-income group now forms the largest proportion in the country's overall population structure (Nayab 2011). High car prices have reduced the demand for automobiles by the middle-income group in Pakistan, resulting in a market that is skewed towards catering to the demands of elite. While there are commercial banks offering car financing schemes for low and middle income groups, the term structure of such hire purchase agreement has become harsher in the light of tightened prudential regulations by the Central Bank. Figure 9 compares

⁸These consumer welfare gains are calculated only for products in the sensitive list.

Fig. 8 Power-interest matrix of stakeholders for bilateral trade in automobiles

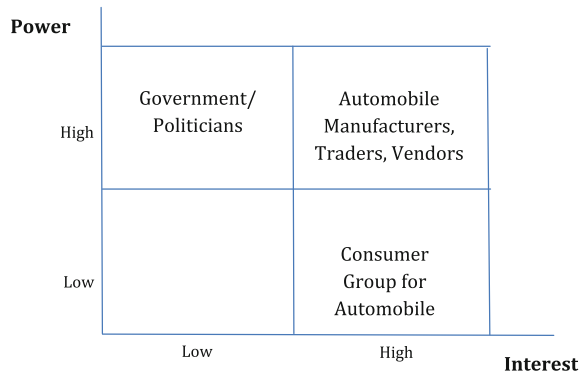


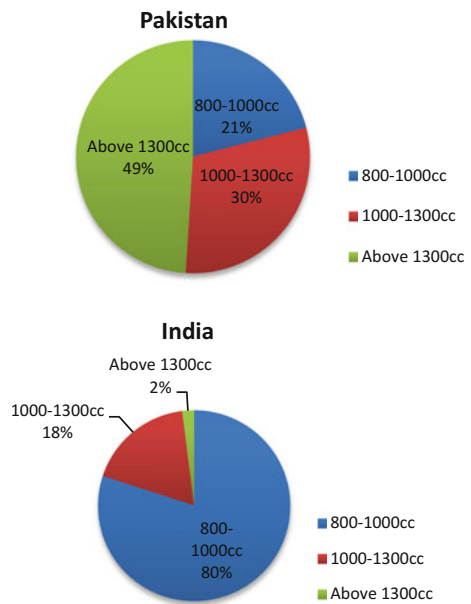
Table 8 Affordability ranking for automobiles in Pakistan

Item	Affordability rank ^a
Low priced car, 900–1299 cc (low)	55
Low priced car, 900–1299 cc(high)	54
Compact car, 1300–1799 cc (low)	57
Compact car, 1300–1799 cc (high)	56
Family car, 1800–2499 cc (low)	53
Family car, 1800–2499 cc (high)	57

Source Economist Intelligence Unit (2009) via CCP (2013)

^aHighest rank is 59, which shows extremely low affordability

Fig. 9 Auto sale structure of India and Pakistan. Source JICA (2011)



the sales composition of passenger cars in Pakistan and India with respect to engine size. The elite models form a large part of the automobile market in Pakistan. This also explains why auto manufacturers in Pakistan focus more on the production and product development of large engine cars. India can provide cost effective, small engine cars to Pakistan as India focuses more on developing low-priced models.

Consumers in Pakistan reportedly have a preference for used imported cars over locally manufactured cars. This is partly because of the better performance and safety features of imported cars. Automobile imports from India could increase competition and help improve the quality of locally manufactured cars. Some respondents also view Indian cars as more fuel efficient.

Given the unmet auto demand in Pakistan, consumers have to wait for delivery of cars for months. In some cases, the delivery could take as much 10–12 months. Importing from India is likely to reduce these time lags as well.

The entrance of new assemblers in the Pakistani auto industry in 2000 had increased employment opportunities. It is believed that liberalising automobile trade with India would generate a number of employment opportunities, at least in the long run. This applies to all three segments: manufacturing, vendor industries and the trading sector. Pakistan has liberalised the FDI regime for India, and going forward, Indian manufacturers may be invited to set up their own plants in Pakistan or enter into joint ventures.

The rapidly rising prices of automobiles have convinced consumer groups that trade liberalisation will bring down prices. Consumers realise that long-run positive gains would eventually make up for short-run negative effects (if any). Apart from this, consumers also view Indian automobile products as more environment friendly (based on their compliance with Euro-IV standards) and thus support their import. It is noteworthy that Pakistan has still not fully implemented Euro-II emission standards.

8 Quantitative Analysis

8.1 *Product-Based Trade Complementarity Index (TCI)*

Trade complementarity has been defined as how well import patterns of one country match the export patterns of another (Michaely 1996). The higher the complementarity (near 100), the greater the likelihood of enhancing trade (WTO 2012). We have modified the trade complementarity index (TCI) to determine product wise trade complementarity. Sectoral shares have been replaced with the share of individual products (at 6-digit level). Other specifications of the index remain the same.

TCI has been calculated only for Chapter 87 of the HS classification. The value of TCI (for Pakistan's automobile imports and Indian automobile exports for 2012) comes at 51.6, reflecting a medium degree of trade complementarity between the Indian and Pakistani automobile sectors. Pakistan imports a total of 70 automobile products (under the 6-digit category) from the world. India, on the other hand,

exports 74 automobile products (at 6-digit) to the world with 70 common items with Pakistan. Thus, the potential for Pakistan to import from India does exist.

By contrast, the TCI (Chapter 87) for India's automobile imports and Pakistan's automobile exports stands at 38, signifying lower trade complementarity. However, such low complementarity might be the result of the different demand structures in the countries to which Pakistan exports (Upendra et al. 2012). This calls for enhancing Pakistan's export base in automobiles.

Literature also suggests that a close match of the import and export mix of the two countries provides a ground to enhance trade 'without policy distortions or preferential trading agreements (Chow 2012). But FTAs with a country of high complementarity is more likely to yield positive economic outcomes than trading with one with low trade complementarity (Schiff 2001). Currently, India and Pakistan have FTAs and PTAs with other South Asian countries but no such bilateral trade agreement exists between the two neighbours.

8.2 Bilateral Comparative Advantage of Pakistan and India in Auto Parts

Bilateral Revealed Comparative Advantage (BRCA) is another widely used index in international trade and is based on Serin and Civan (2008). This index identifies the products of a country that enjoy a competitive edge as compared to other products.

We calculate this index based on data for the items in Chapter 84 'Machinery, Nuclear reactor, Boiler etc' and Chapter 87, 'Vehicles other than railway, tramway' of the HS classification. The 6-digit level data has been selected for the computation of this index because it consists of both auto parts and CBUs. A total of 22 auto parts were identified from Chapter 84. Products with BRCA > 1 (i.e., products that have comparative advantage) have been shown in the Table 9.

While BRCA provides for enhanced trade in products with comparative advantage, the level of trade between Pakistan and India in products having comparative advantage is very low. With regard to comparative advantages in CBUs (Chapter 87), India has a comparative advantage in 17 CBUs. Pakistan does not import any CBU in which Pakistan has a comparative advantage. India also does not import any CBUs from Pakistan, wherein the latter has a comparative advantage in the case of 6 CBUs.

Pakistan does not have comparative advantage in any auto parts in Chapter 87. India, on the other hand, has a comparative advantage in the case of 24 auto parts. Within this category, Pakistan only imports 'motor vehicle parts' from India.

In Chapter 84, some auto parts were identified for the calculation of BRCA. Pakistan has comparative advantage in 2 auto parts but none out of these is imported by India. India, on the other hand, has a comparative advantage in 20 auto parts of the same chapter but Pakistan imports only 6 of these products from India.

Table 9 BRCA for auto parts and CBUs

Chapter code/countries	Products with BRCA > 1
<i>Auto parts</i>	
Chapter 84 (Pakistan)	Outboard motors, spark-ignition reciprocating or rotary type (840721), Air conditioners used in vehicles (841520)
Chapter 84 (India)	Parts of cranes, work-trucks, shovels and other construction machinery (843149), oil or petrol-filters for internal combustion engines (842123), transporter or bridge cranes (842619), engines, diesel (840890), parts of lifting, handling, loading or unloading machinery (843139), parts for diesel and semi-diesel engines (840999), hydraulic power engines and motors (841229), parts of hydraulic and pneumatic and other power engines and motors (841290), parts for spark-ignition type engines (840991), transmission shafts and cranks, including cam shafts and crank shafts (848310), engines, diesel, for the vehicles of Chapter 87 (840820), bulldozers and angle dozers, crawler type (842911), gears and gearing ball screws, gear boxes, speed changers/torque converters (848340), moulds for rubber or plastics, (848079), clutches and shaft couplings (including universal joints) (848360), bearings, ball or roller, including combined ball/roller bearings (848280), engines, spark-ignition reciprocating displacing >250–1000 cc (840733), engines, spark-ignition type (840790), self-propelled works trucks (842720), engines, spark-ignition reciprocating, displacing not more than 50 cc (840731)
Chapter 87 (Pakistan)	None
Chapter 87 (India)	Motor vehicle parts (870899), transmissions for motor vehicles (870840), parts and accessories of bodies for motor vehicles 870829), radiators for motor vehicles (870891), BUMPERS and parts for motor vehicles (870810), motorcycle parts (871419), brakes and servo-brakes and their parts, for tractors and motor vehicles (870830), bicycle wheel rims and spokes (871492), wheels including parts and accessories for motor vehicles (870870), safety seat belts for motor vehicles (870821), bicycle parts (71499), work truck parts (870990), gas powered trucks with a GVW not exceeding five tonnes (870431), steering wheels, steering columns and steering boxes for motor vehicles (870894), drive axles with differential for motor vehicles (870850), wheelbarrows, hand-carts, rickshaws and other hand propelled vehicles (871680), trailer and other vehicle parts (871690), bicycle frames and forks, and parts thereof (871491), mufflers and exhaust pipes for motor vehicles (870892), clutches and parts for motor vehicles (870893), shock absorbers for motor vehicles (870880), bodies for tractors, buses, trucks and special purpose vehicles (870790), bicycle hubs and free-wheel sprocket wheels (871493), bicycle brakes, including coaster braking hubs, and parts thereof (871494)
<i>CBUs</i>	
Chapter 87 (Pakistan)	Special purpose motor vehicles (870590), road tractors for semi-trailers (truck tractors) (870120), mobile cranes (870510), trailers for the transport of goods (871639), trailers for housing or camping (871610) baby carriages and parts thereof (871500)

(continued)

Table 9 (continued)

Chapter code/countries	Products with BRCA > 1
Chapter 87 (India)	Wheeled tractors (870190), motorcycles with reciprocating piston engine displacing >50–250 cc (871120), bicycles and other cycles (including delivery tricycles), not motorised (871200), diesel-powered buses with a seating capacity of >nine persons (870210), automobiles with reciprocating piston engine displacing >1500–3000 cc (870323), buses with a seating capacity of more than nine persons (870290), motorcycles with reciprocating piston engine displacing >250–500 cc (871130), automobiles with reciprocating piston engine displacing not more than 1000 cc (870321), trailers for agricultural purposes (871620), diesel powered trucks with a GVW exceeding five tonnes but not exceeding twenty tonnes (870422), motorcycles with reciprocating piston engine displacing 50 cc or less (871110), motorcycles with reciprocating piston engine displacing >500–800 cc (871140), trailers and semi-trailers (871640), automobiles with diesel engine displacing not more than 1500 cc (870331), wheelchairs, mechanically propelled (871390), pedestrian controlled tractors (870110), motorcycles with other than a reciprocating piston engine (871190)

Data source ITC (2014)

9 Liberalising Auto Trade with India

Both Pakistan and India can benefit from liberalising bilateral trade in automobiles. For Pakistan, India offers a lucrative, large auto market. The Indian auto industry is expected to grow to US\$100 billion by 2020 (Foundry Review Magazine 2013). Capturing even 3–5 % of this market would allow Pakistan to increase its automobile exports by almost US\$5 billion. Low freight cost, low prices for consumers, employment creation and the possibility of developing value-chains with India are some of the major benefits for the Pakistani auto industry. India on the other hand, can import tractors, motorcycles and auto parts from Pakistan. Pakistan is able to manufacture motorcycles (with smaller engines like 70 cc) at a much lower cost because it sources its inputs from China. Tractors are also priced much lower in Pakistan as compared to India and China (Ahmed 2013a, b).

9.1 Quality Comparisons

Auto manufacturers welcome the opening of automobile trade with India but with some reservations. They view Pakistani automobile products as being as competitive as Indian products. The Pakistani auto industry is well-equipped and is gaining a cost advantage in many products. Pakistan also maintains international standards in producing automobile products as a result of which Pakistan is able to export to various western markets. However, only those Indian automobile products that are manufactured in collaboration with foreign manufacturers have the best quality.

Many auto importers based abroad (who earlier used to import from India) have pointed out that they are now importing from Pakistan because of quality issues with some Indian automobile items.

Auto importers point out that India produces automobile products of varying qualities. All high quality products are exported to foreign countries. Hence, there are concerns that opening of auto trade might result in the import of low quality products from India.

9.2 Indian Automobile Products as a Substitute

Indian products can be possible substitutes for Pakistan's automobile imports from the rest of the world. Pakistan would benefit from importing CKD items from India as it would help reduce the cost of production. Moreover, the policy of localisation had created problems for MNCs in the past. These MNCs are allowed to import auto parts only from their parent company. When the parent companies have to shift to some other country, as was the case of Pak Suzuki's Alto model, the production faced cut backs and ultimately, closure.

Pakistani auto manufacturers also fear that India is likely to gain more from liberalised trade in automobile products because of scale economies while Pakistan would not be able to increase its exports to India due to tariff and non-tariff barriers (including high environmental and safety standards). Hence, they advocate that Pakistan must negotiate the entry of its automobile products through a buy-back arrangement for value-added automobile products. Such an arrangement has been seen in the case of Argentina-Brazil auto trade (Ceravegna 2003).

9.3 Pre-requisites for Opening Automobile Trade

Some preliminary steps that need to be taken before liberalising automobile trade, as highlighted by the representatives of PAMA and PAAPAM, are the following:

1. The government first needs to invest in increasing the capacity of local automobile manufactures in Pakistan before opening trade in automobile products with India.
2. Pakistan should consider 'technology transfer' from India as this would also allow Pakistani manufacturers to achieve low-cost productivity. This can also take the form of FDI by Indian auto manufacturers. FDI will increase production capacity and exportable surplus.
3. Quality assurance tests for vehicles are needed at the time of landing at Indian ports, which is a cumbersome process. Pakistan currently follows the EU quality standards for testing, whereas India demands testing to be performed as per Indian standards only. A common quality standard procedure needs to be devised

in order to avoid unnecessary, extensive and repeated testing. Mutual recognition of standards between the two countries should be extended to the auto sector.

4. A stable duty structure needs to be put in place before opening up trade. A clear duty structure for a specified tenure may be agreed upon by both countries to avoid future complications. Moreover, an agreement can be chalked out following the Mercosur agreement framework.⁹
5. The Indian government must ensure buy-back of a significant amount of the automobile products it exports to Pakistan in order to assure mutual gains. India can identify the automobile products to be imported from Pakistan. As indicated by PAAPAM, all auto exporters exporting to Pakistan import a large amount of Pakistani automobile products as well.
6. There are also concerns that Indian auto manufacturers are more interested in importing CKDs from Pakistan rather than CBUs.
7. Auto import policy with India should be focused on 'selective buying' from India. Products not manufactured in Pakistan should be given priority.
8. An essential step in liberalising automobile trade with India is the bridging of the communication gap between the auto manufacturers of the two countries. There is little or no interaction between the auto manufacturers of India and Pakistan, giving rise to apprehensions and doubts, for instance, of possible dumping of poor quality products by India in Pakistan. Overcoming the communication gaps through Track-II cross-border meetings of auto manufacturers is needed to push the process of liberalising trade in automobiles.

9.4 Apprehensions of the Manufacturing Sector

Pakistani manufacturers are of the view that their Indian counterparts enjoy large volumes of production (nearly 10 times larger than Pakistan). The highly technology-driven Indian auto industry has allowed auto manufacturers to produce automobiles at a very low cost, whereas Pakistan has to import necessary auto related raw material, which has led to higher production costs. This takes away the level playing field in bilateral automobile trade, placing the Pakistani auto-industry at a disadvantage. However, technology transfer from India can enable Pakistan to become self-sufficient in the supply of raw materials in the long run by enhancing the productive capacity of automobile manufacturers.

⁹Mercosur is a trade bloc-based on a treaty signed by Argentina, Brazil, Paraguay, Uruguay and Venezuela to promote free trade. This was first signed by Argentina and Brazil. Under this treaty, automobile trade was quota based. For example, it was agreed that Brazil would export US\$265 worth of duty free automobile products to Argentina for every US\$100 of duty-free Argentine exports to Brazil. Each country negotiates annual bilateral import quotas for tariff free entry of automobiles. Economic conditions and the state of the auto industry in Argentina and Brazil resembled the current scenario of India and Pakistan and it proved to be a win-win situation for both countries (Ahmed 2013d).

They also feel that the removal of the negative list as a result of MFN status would result in the removal of Pakistan's sensitive list vis-à-vis India under SAFTA. This would ensure duty free access to Indian automobile products, which would wipe out Pakistani products. However, if only the negative list is to be removed, Indian products would be subjected to the same duty as imposed on Japanese products, which would thus eliminate the potential threat to the Pakistani auto industry.

While this view of Pakistani industry being driven out of the market as a result of trade liberalisation with India is often highlighted, Gopalan et al. (2013) present another optimistic dimension. They assert that the FTA with China signed in 2006 has not 'wiped out' a single auto manufacturer in Pakistan, despite China having a highly competitive industry. In fact, this initiative has allowed greater benefit to consumers and helped promote competition among Pakistani auto parts manufacturers.

9.5 Tariff Barriers Facing Pakistan's Two-Wheeler Exports

According to a representative of the TDAP, Pakistani two-wheelers in particular are subject to high tariff rates. Figure 10 shows that the freight cost works out to 34 % of the total cost of export of two-wheelers to India. The table excludes other additional charges such as port expenses (almost 3 %) and incidental costs of clearance (2 % of the cost, insurance and freight value). Even if custom duty is removed, other taxes account for duties of over 25 %. Export costs would rise further if one takes into account the excluded cost of approvals, permissions and certifications. This makes the export of two wheelers to India nearly impossible. In Fig. 11, we compare India's and Pakistan's tariff structures to that of some other select countries producing two-wheelers.

9.6 NTBs Facing Pakistan's Automobile Exports

According to PAAPAM representatives, some of the taxes imposed by the Indian customs department at the border and ports are not stated officially and are imposed arbitrarily at the discretion of the on-duty official. Moreover, Pakistani automobile exports to India are also subjected to state-specific levies, which are not explicitly documented.

The lack of fork lifters needed to unload the consignment at the Wagah border is also a setback as it increases the likelihood of damaging the product even before it reaches its destination. The Indian government also recognises the low handling capacity of their ports but no action has yet been taken to resolve these issues.

India has adopted strict policies with regard to the import of two-wheelers from Pakistan. Homologation¹⁰ certificate is needed for the export of bikes to India,

¹⁰Certification required to confirm that a product meets a specific standard.

Import Duty Calculator of Motor-cycles		
Enter Value	100	Calculate Duty
<input checked="" type="radio"/> CIF Value <input type="radio"/> Assess Value		
Formula	Duty Rates	Duty Amount
Assessable Value – (A) (CIF Value + 1% Landing Charge of CIF)		(A) 101.00
Basic Duty – (B) (A) x Basic Duty Rate	100.00%	(B) 101.00
Preferential Duty – (B) (A) x Pref. Duty Rate	0	(B) 0.00
CVD: Additional Duty – (C) (A+B) x CVD Rate	10%	(C) 20.20
Central Excise Edu Cess – (D) (C) x Central Excise Edu Cess rate	3 %	(D) 0.61
Customs Education Cess – (E) (B+C+D) x Customs Edu. Cess rate	3 %	(E) 3.65
Special CVD – Special Duty – (F) (A+B+C+D+E) x Spl. CVD rate	4%	(F) 9.06
Total Custom Duty	(A+B+C+D+E+F)	134.52

Fig. 10 Import duty calculator for motorcycles (Units). *Source* TDAP (2012)

Year	CBU Tariff	CKD Tariff	Excise Duty/ Withholding Tax	VAT	Corporate tax rate	Interior tax	Additional duty of customs to countervail local taxes (SPL)	Countervailing duty (CVD)	Educational cess (EDU)	National calamity contingent duty (NCD)
Pakistan	65%	15%	3% / 5%	16%	35%					
India	100%	10%	10%	12.5%	34.0%		4%	16%	3%	1%
Malaysia	30%	0% to 10%	20% to 50%	10%	25%					
For 50cc - 250cc Indonesia	35%	0%		10%	25%					
For 250cc to 500cc	150%	0%								
Thailand	60%	0%	35%	7%	30%	10% of excise tax				
Vietnam	100%	0% to 5%		5% ~ 10%	25%					

Thai Excise tax = (CIF value + import duty) * (Rate of excise tax / (1 - (1.1 * Rate of excise tax)))
 = (100+80) * (0.35 / (1 - (1.1 * 0.35)))
 = 180 * 0.5691057

Fig. 11 Comparison of tariff structure (two wheelers) of India and Pakistan with other countries. *Source* prepared by authors in consultation with TDAP

which is a time-consuming process (it takes at least 6 months) and involves excessive red tapism (FPCCI 2011; Ahmed et al. 2013a, b, c). The TDAP, however, claims that the time taken is much longer (more than 9 months) for obtaining the

homologation certificate. According to TDAP, problems related to homologation have been faced even by EU auto exporters. BMW has reportedly paid €200,000 for obtaining homologation certificate for the export of their model ‘minor’. Even after paying the fee, they had to face extensive delays due to complex bureaucratic procedures. Apart from two-wheelers, this certification is also needed for the export of tractors. Pakistani tractors fail to enter Indian markets due the lack of this certification.

Another representative from the public sector contended that Indian emission standards are set too high for two-wheelers, as compared to those of EU and Japan. India requires automobile products to comply with Bharat-II and Bharat-III standards of emission. These standards are different from the international standards, which acts as a barrier to imports. Several think tanks and consumer groups in Pakistan remain of the opinion that better emission standards set by India should be viewed as an opportunity by Pakistan to improve its environmental standards. This will enhance the chances of Pakistan’s exports reaching not just India, but other countries as well.

10 Way Forward

The recent Track-I cross border meetings on trade liberalisation is a welcome step. The opening of markets for Indian exporters and investors will boost economic activity in Pakistan and vice versa. In the case of automobiles, there exists substantial potential for bilateral trade that needs to be exploited. In order to liberalise automobile trade with India, a disaggregated, product-based approach may be adopted. The following institutions can play a critical role in this process.

The Ministry of Commerce can negotiate a uniform tariff across the border. For example, both India and Pakistan can allow the import/export of locally manufactured cars at a similar tariff rate. It will ensure mutual gains for auto manufacturers in both countries. Tariff structures should be properly documented in order to avoid any disguised tariffs. Similarly, tariff on the import of raw materials from India should be reduced to enable local manufacturers to produce cost-effective automobiles.

Commerce ministry can also collaborate with the National Tariff Commission (NTC) to simplify the tariff structure. MoC and NTC may eliminate items (especially auto parts) from the negative list for India and the ‘no concession list’ for China. Both countries can then compete with each other in the Pakistani automotive market.

The Ministry of Industries, more specifically the EDB, can establish automotive testing labs to ensure that only accredited products enter the Pakistani auto market from India. Such labs should in no manner act as a barrier to trade. Timely testing must also be ensured. This can also be done in collaboration with PSQCA. Moreover, these testing facilities should be standardised across the border.

The Board of Investment may reassess investment policies for the promotion of competition in the automobile industry. Liberalised policies are needed to foster a competitive environment in this industry. High localisation requirements are a deterrent to foreign investment and hence, must be relaxed.

In order to fully benefit from the supply chain potential in this sector, the State Bank of Pakistan can collaborate with the Reserve Bank of India to facilitate cross-border investment through banking channels and opening up of bank branches. This step is also important for enhancing bilateral trade in intermediate inputs.

The Ministry of Interior may work towards a relaxed visa regime for easy cross-border exchange of technical personnel. The ministry can also establish control cells on the borders to keep a check on informally traded products. Apart from this, PAMA can help devising a mechanism to check informal import of automobile products. PAMA can also collaborate with ACMA to negotiate trade terms to ensure mutual gain.

Automobile manufacturers on both sides of the border should take steps to overcome the communication gap. Bilateral Track-II meetings can help build the confidence of manufacturers and reduce apprehensions of auto manufacturers on both sides of the border. Moreover, bilateral meetings would encourage investors in India to invest in their counterparts in Pakistan. MoC can also help in facilitating these bilateral meetings.

Auto manufacturers, the Ministry of Environment, and the Hydrocarbon Development Institute of Pakistan can collaborate to upgrade emission standards for automobiles in Pakistan. Initially, the import of Euro III standard engine parts can be allowed duty free access to Pakistan to support the production process of automobiles. Importing these parts from India can help produce low-cost, environment friendly vehicles.

The Consumer Rights Commission of Pakistan can also collaborate with research think tanks to investigate consumer gains by liberalising trade and investment in the auto sector.

Lastly, the governments of Pakistan and India should focus on confidence building measures. Both sides should ensure that trade is not affected by political setbacks. Government of Pakistan should invest in the capacity development of local manufacturers. The Small and Medium Enterprise Development Authority (SMEDA) can play an important role in enhancing the productive capacity of auto parts manufacturers by extending financial and technical support.

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Chapter 6

India–Pakistan Trade: An Analysis of the Pharmaceutical Sector

Manoj Pant and Devyani Pande

1 Introduction

Trade and investment have been an integral link in improving the relations of South Asia's two heavy weights, India and Pakistan. However, the enormous trade potential that exists between the two nations due to the commonalities in culture and the sharing of an 1800-km long border is yet to be fully capitalised on. Since the delinking of political considerations and trade negotiations in 2004, when talks began at the commerce secretary level, trade between India and Pakistan has seen a rising trend. Efforts have been made to iron out the creases in India–Pakistan trade relations by integrating major sectors in the two economies. This has occurred over the years in phases, sometimes with interruptions and at other times with consensus over broadening trade relations between both the countries.

A restrictive trading environment prevailed between both the countries till 2005 as there was no road route, a positive list was maintained for imports from Pakistan and the maritime protocol allowed only Indian and Pakistani flagged vessels to carry cargo between the two countries while not permitting the same vessels to carry consignments to a third country (Taneja et al. 2013). As part of confidence building measures, in October 2008, the two governments permitted trade and travel across the Line of Control along Jammu and Kashmir. The fifth round of talks in April 2011 laid down the blueprint for normalising trade between India and Pakistan (Taneja et al. 2013). In a joint statement signed in March 2012, Pakistan made a transition from the positive list approach to a small negative list of 1209

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items. However, it continued to restrict road-based trade by allowing only 137 items to be imported from India via road, while India took a number of steps to address the issue of non-tariff barriers (NTBs). As part of the ongoing trade normalisation process, India is expected to reduce the list of items on the sensitive items from the present 614 items to 100 items as and when Pakistan accords India the MFN status.¹ Issues of protectionism and providing market access have been at the heart of this normalisation process. The asymmetry in giving mutual recognition in terms of regulatory regimes and grant of the MFN status has been a major stumbling block in improving economic relations of the two countries (John and Bhatnagar 2013). Even after partial liberalisation of trade between both countries, protection of vulnerable sectors is what hinders further expansion of India–Pakistan trade.

The pharmaceutical sector is one such segment in which India and Pakistan can integrate, given that it is a fast growing sector in world trade. The global pharmaceutical market has an annual growth rate of 8 % and, at that rate, it will cross the value of USD 1.1 trillion by 2014 (Aamir and Zaman 2011). The Indian pharmaceutical industry is the world's third largest in terms of volume and stands 14th in terms of value (Kalani 2011). It was estimated at USD 21.7 billion during 2011. According to the Organisation of Pharmaceutical Producers of India (OPPI), the industry is highly fragmented and is estimated to have over 25,000 pharmaceutical companies. The Indian pharmaceutical sector is dominated by national companies and consists of manufacturers of bulk drugs and formulations. Bulk drugs include active pharmaceutical ingredients (API's) that are used for the manufacture of formulations. Being the largest manufacturer of generic drugs, India's pharmaceutical industry is expected to grow by 12–13 % during the financial year 2014 (Business Standard July 11, 2013a, b). India imports pharmaceuticals mainly from Switzerland, Germany, United States and China. In 2012, 26 % of the total pharmaceutical imports of India were from Switzerland. India's main export markets in the pharmaceutical sector are in the United States, Russian Federation, United Kingdom and South Africa. In 2012, 31 % of the total pharmaceutical exports from India were to the United States.²

As opposed to the Indian pharmaceutical industry, the Pakistan pharmaceutical sector is still at a nascent stage. The industry is the tenth largest in Asia-Pacific and was valued at USD 1.63 billion in 2011 (Aamir and Zaman 2011). There are 600 companies operating and around 45 % of the companies are multinationals. In the current scenario, 80 % of the demand for pharmaceuticals is fulfilled domestically and the rest is covered by imports (Aamir and Zaman 2011). Switzerland, Germany, Denmark, France, United States, Italy and China are the main countries from which

¹In a meeting between Commerce ministers of India and Pakistan in January 2014, it was decided to change the WTO acronym—MFN to NDMA (non-discriminatory market access). The change in terminology will help in achieving the goal of increasing trade and investment between the countries. (BS Reporter, Its official now: No MFN between India, Pakistan. Business Standard. January 18, 2014).

²All figures on shares of countries in India's and Pakistan's exports and imports are the authors' calculations using data from UN COMTRADE.

Pakistan imports pharmaceutical items. In 2012, 25 % of Pakistan's total pharmaceutical imports from the world were from Denmark. Pakistan's major export markets are Afghanistan, Sri Lanka, Vietnam, Philippines, Myanmar, Nigeria and Kenya. In 2012, 28 % of the total pharmaceutical exports from Pakistan went to Afghanistan.

The contrast in terms of export markets for pharmaceuticals of the two countries is quite clear and interesting to note. Typically, India seems to have a look-west approach and Pakistan tends to look more towards the eastern part of the world in terms of where it exports pharmaceutical items. In terms of imports, one Asian country that has emerged recently as a common exporter of pharmaceuticals to both India and Pakistan has been China.

In this paper, we try to explore the current pharmaceutical trade and the possibilities for further expansion in pharmaceutical trade between India and Pakistan. The main focus would be on analysing the inherent trade complementarities in the pharmaceutical sector between the two countries and the consequences of removal of the negative list by way of Pakistan granting the NDMA status to India. Since China has been a major trade partner of both countries, we would also examine the India-China-Pakistan trade in pharmaceuticals with special focus on the Pakistan-China free trade agreement. We note that foreign direct investment (FDI) is a crucial link to assess the impact of trade integration and the possibility of this will be explored keeping in view India and Pakistan's pharmaceutical sector.

The paper is organised as follows. Section 2 describes the history of the Indian and Pakistan pharmaceutical industry and existing regulations governing the industry. Section 3 describes the theoretical methodology to be followed in the paper and the main data sources. The quantitative empirical results are then presented in Sect. 4 with a focus on Indo-Pakistan trade and regional trading agreements. In Sect. 5, we present a brief study of the free trade agreement between China and Pakistan along with some qualitative and quantitative comments on how this affects pharmaceutical trade between India and Pakistan. In Sect. 6, we throw some light on the insights obtained by discussions with some industry stakeholders in the two countries. Section 7 looks at the link between FDI and trade in the context of the pharmaceutical sectors in India and Pakistan. Finally, some policy recommendations are given in Sect. 8 to suggest the way forward in India–Pakistan trade in pharmaceuticals.

2 A Brief History of India and Pakistan's Pharmaceutical Industry

The Indian and Pakistan pharmaceutical industries have come a long way since the time of independence when multinational corporations dominated the industry. Over the years, under favourable policy regimes, the industries have grown phenomenally. A historical overview of the evolution of the pharmaceutical sector in

both countries will provide a background to the analysis on pharmaceutical trade between the two countries.

India has established itself as a major supplier of not only generic products but also new formulations. The Indian pharmaceutical industry, in addition to meeting domestic demand, is in a position to export significant volumes of pharmaceutical products to various destinations, including the developed markets of USA, EU and Japan.

The evolution of the Indian pharmaceutical industry can be traced over two epochs—pre-independence and post-independence. During the first epoch, from 1850 to 1945 (pre-independence phase), indigenous forms of medicine were in use. There were no production units in the country and foreign companies exported raw material from India, transformed them into finished products and sent them back to India. The indigenous industry received an impetus during World War II when there was a shortage in supply of drugs from foreign companies (Sahu 2014).

After independence, the evolution can be divided mainly into three phases

1945–1970—There was a major therapeutic revolution, with a shift in the structure of the industry resulting in the growth of the global pharmaceutical industry during this period. However, India could not capitalise on this growth due to the lack of technology, capital and support from the government. Concerned by the lack of manufacturing facilities and guided by the perception that ‘foreign technology’ was important for the growth of pharmaceutical sector, the Government of India brought out the New Industrial Policy Statement, 1948, to liberalise production and licensing of drugs for MNCs. This led to the free flow of foreign capital and there was rapid growth in the sector. Despite the liberal attitude towards MNCs, they did not establish any production units in India. They preferred to import bulk drugs for manufacturing formulations rather than setup production units in India because production required investment in plant and machinery and was less profitable than import of bulk drugs to transform into formulations (Mazumdar 2013). The government became aware of the reluctance of foreign firms to start manufacturing bulk drugs from the basic stage in India and the inability of the Indian private sector because of the limitations of the Indian patent law (Sahu 2014). Under the Industrial licensing policy of 1956, the government made it mandatory for foreign companies to produce drugs from the basic stage by establishing their production units in India. Hence, many foreign companies started their production in India and with government’s support, many domestic companies also entered the market leading to an increase in drug production.

1970–1995—Even though domestic companies had grown considerably, foreign MNCs still dominated the pharmaceutical industry until the 1970s. However, during this period, the public sector and indigenous companies contributed to a significant share of the bulk drug production. Most foreign companies were engaged in high pay-off formulation production, which resulted in high prices in India. Hence, the government’s efforts turned to curbing the monopolistic position of foreign firms. In 1970, the government withdrew the concessions it had granted to foreign firms (Sahu 2014). The Patent Act of 1970 recognised only process

patents. The life of a patent was also significantly reduced from 16 to 5 years from the date of sealing or date of filing a complete application, whichever was shorter. The Foreign Exchange Regulation Act (FERA), enacted in 1973, put further restrictions on foreign equity holdings and was implemented to compel MNC's to produce high technology bulk drugs. For FERA companies, licences were granted only when companies provided 50 % of the drugs to non-associated formulators and the ratio of value of bulk drugs to own manufacture was 1:5, which was set as 1:10 for domestic companies. The New Drug Policy, enacted in 1978, reserved production of various categories of drugs for domestic producers (Mazumdar 2013). Hence, with the Patents Act, New Drug Policy and FERA, the share of MNC's dropped and the industry embarked on a high growth path; simultaneously, there was a fall in medicine prices and a large number of generic versions of drugs were introduced.

1995 onwards—The pharmaceutical sector in India grew consistently from 1995 onwards. Indian companies also emerged as major players due to the competence gained in process engineering. The year 1995 was significant for the Indian pharmaceuticals industry due to two reasons: (a) India became a member of the World Trade Organisation and agreed to the requirements of the WTO intellectual property agreement, Trade Related Aspects of Intellectual Property Rights (TRIPS) and (b) the government incorporated Schedule M in the Drugs and Cosmetics Act in 1995 that lays down Good Manufacturing Practices (GMP) according to WHO standards. Under TRIPS, India received a 10-year transition period until January 2005, to put in place pharmaceutical patent recognition (Linton and Corrado 2007). There was also a shift in the foreign policy framework towards liberalisation and measures such as the abolishing of licensing requirement for entry and expansion of firms and 100 % inward foreign direct investment under automatic approval of RBI under the New Drug Policy of 1994 and 2002 were introduced (Mazumdar 2013). The year 2005 was a landmark in the history of the Indian pharmaceutical sector with India being fully TRIPS compliant with one of the implications being the grant of both product and process patents for inventions in all fields of technology. This was implemented in three successive phases with the implementation of the mail-box system³ in 1995, a second amendment in 2002 to extend the term of patent protection to 20 years and amend the compulsory licensing system and the third in 2005, with the introduction of the product patent regime (Fig. 1).

Similarly, the history of the Pakistan pharmaceutical industry can be divided into three phases (Asif and Awan 2005). The first phase is from 1948 to 1971. After independence, Pakistan had no pharmaceutical industry and traders, based primarily in India, were importing most of the medicines. Recognising the importance of this

³Under the mail box facility, mail box applications were not examined until 2004 and exclusive marketing rights could be granted to those mail box applications for which a patent had been granted in at least one member nation and the application was not rejected in the member nation where the patent protect was sought by the applicant for the reason of invention being not patentable. (TRIPS Agreement: An Overview, IPpro Services (India) P. Ltd., 2008).

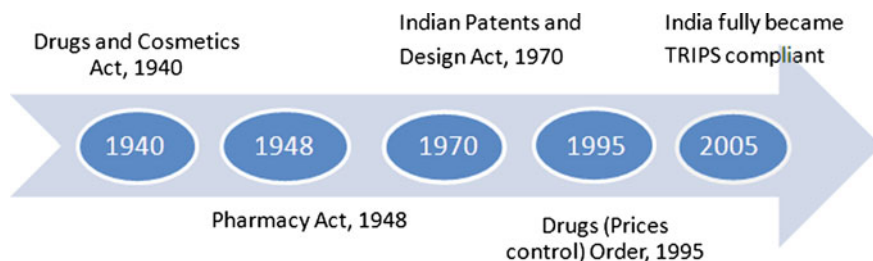


Fig. 1 Timeline of India's pharmaceutical industry

industry, the Government of Pakistan established two pharmaceutical units named “Khurram Chemicals Limited” (near Islamabad) and “Antibiotics Private Limited” (in Mianwali) through the Pakistan Industrial Development Board (PIDB). The pharmaceutical industry continued to grow till 1971. At that time, due to the conducive policies and the right entrepreneurial spirit, the pharmaceutical industry reached its peak and had a leadership position in Asia. In the second phase (1972–1991), due to discriminatory and restrictive policies (Drug Generic Act, 1972), national companies suffered a lot and lost the earlier created export markets. The generic drugs were of poor quality and low efficacy. Unfortunately, the subsequent lack of regulation or control of generics led effectively to the market being flooded by poor quality drugs and the scheme needlessly failed (World Health Organization 1997). In addition to that, completely manufactured drugs and medicines were imported largely with the permission of the government, which resulted in large scale flooding of imported drugs. The third phase is from 1991 to present. Kalani (2011) clearly bring out the dominance of MNCs in the Pakistan pharmaceutical market through an analysis of the top 100 medicines in terms of sales volume and value of sales (Basant 2007). In 1993, under the deregulation policy undertaken by the government, the prices of drugs rose by nearly 400 %. A study showed that prices were hiked by 30 % in the regulated era (1980–1990) while they increased by 87 % in the deregulated era (Umar 2011) As a result, the federal government had to reduce and then freeze prices of several drugs in the second half of the 1990s. The Ministry of Health also issued an ordinance indicating their intention to amend the Drug Act of 1976 to allow the government to fix prices of imported raw material to solve the perceived problem of transfer pricing by MNCs (Basant 2007). Due to this policy framework, the market share of national companies grew as compared to multinational companies. The national companies grew in size and also exploited possibilities in other regions (UNCTAD/WTO 2004) (Fig. 2).

Perhaps, due to the large scale of imports that the pharmaceutical industry witnessed in its second phase, industry stakeholders are sceptical of integrating with India. There is apparent concern that Pakistan pharmaceutical industry will not be able to compete with the well established Indian pharmaceutical companies because

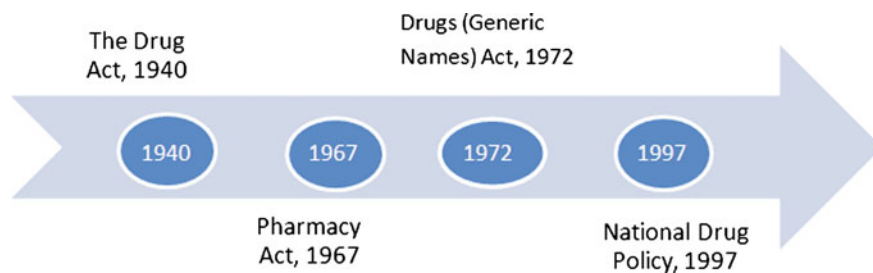


Fig. 2 The timeline of Pakistan's pharmaceutical industry

the latter possess economies of scale and are endowed with superior technological and human resources. Factors limiting output like inconsistent policy, lack of funds for upgrading plants, high duties imposed on the formulation industry, poor policy framework, lack of research and development facilities, unavailability of sophisticated machinery, high-input costs, discriminatory policies and stringent price control are the major factors that contribute to the poor performance of manufacturing in all sectors in Pakistan (Asif and Awan 2005).

3 Theoretical Framework

The quantitative analysis in the paper consists of examining the trade potential of India and Pakistan in pharmaceuticals. We have used three measures to examine this potential: the trade possibility approach, intra-industry trade index and trade complementarity index. The section also lists the type of data used for empirical analysis.

3.1 Trade Possibility Approach

To look at the trade potential in pharmaceutical trade, we have used the Trade Possibility Approach. Trade possibilities exist in items that two countries can import from each other instead of importing from elsewhere in the world. The Trade Possibility Approach is a simple, yet intuitive method, which yields practical results (Taneja et al. 2013). It is calculated as follows:

$$\text{Min (SE, MI) - ET,}$$

where SE, MI and ET are supplier's global exports, receiver's global imports and existing trade between the supplier and the receiver (Taneja et al. 2013).

3.2 Intra-industry Trade Index

The nature of trade between any two countries can be inter-industry or intra industry. Trade theory tells us that the former is normally a characteristic of trade between dissimilar countries in homogenous goods (for example, trade between developed countries and less developed countries). This is often called Ricardian or Heckscher–Ohlin (HOS) trade (Bhagwati et al. 1983). On the other hand, there can be trade between somewhat “similar countries” in differentiated goods and this is often referred to as IIT or intra-industry trade (Krugman 1979). Empirically, IIT is defined as the simultaneous export and import of goods in the same industry. It is also seen that IIT is typical of trade in manufactured goods where “product differentiation” is more likely. Here one must also distinguish between exchange of final goods for inputs (vertical IIT) and trade in differentiated final goods or inputs (horizontal IIT). It has also been argued that IIT is easier to expand as it does not lead to the kind of structural adjustments and consequent political costs associated with traditional inter-industry trade (Pant 2013). Although inter-industry trade still accounts for most trade, its share in overall trade is declining. Instead, intra-industry trade (IIT), which can be further divided into horizontal IIT and vertical IIT, is growing in importance.

A widely used measure of intra-industry trade is the Grubel–Lloyd (GL) index. To measure the extent of intra-industry trade between India and Pakistan in the pharmaceuticals sector, we have calculated the GL index from 2009 to 2012. It is calculated as an (un)weighted average to measure the degree of intra-industry trade for country j in product i . It is defined as

$$GL_{ij} = \frac{(X_{ij} + M_{ij}) - |X_{ij} - M_{ij}|}{(X_{ij} + M_{ij})} = 1 - \frac{|X_{ij} - M_{ij}|}{(X_{ij} + M_{ij})} \quad (1)$$

where X_{ij} are the exports of commodity i of country j and M_{ij} are the imports of commodity i of country j .

The GL index assigns pure intra-industry trade value of 1 and pure inter-industry trade a value of 0.

To calculate the average level of IIT for a country j we can rewrite (1) as a weighted average of the GL_j 's as

$$GL_{j=} = \frac{\sum \{(X_{ij} + M_{ij})\} - \sum |X_{ij} - M_{ij}|}{\sum (X_{ij} + M_{ij})} \quad (2)$$

where the summation in (2) is over commodities, i .

As is well known (for example, Greenaway and Tharakan 1986), the GL index is subject to two biases: (1) categorical (commodity) aggregation and, (2) trade imbalance. The aggregation bias occurs because the data aggregates across commodities which are not ‘similar’: for example, final goods and intermediate inputs. Excessive aggregation tends to bias the index upwards. In our formulae above, GL_j

would generally be greater than GL_{ij} . The trade imbalance bias occurs when one or the other country has an excessive trade surplus (deficit) and this tends to bias the index downwards. A high trade balance surplus (deficit) is reflected in the second term in the numerator of (2): the higher this term, the lower is GL_j .

One suggestion to eliminate the effect of a high trade surplus (deficit) is to subtract the absolute value of this trade balance from the denominator of (2) so that

$$GL'_j = \frac{\sum \{ (X_{ij} + M_{ij}) \} - \sum |X_{ij} - M_{ij}|}{\sum (X_{ij} + M_{ij}) - |\sum X_{ij} - \sum M_{ij}|} \quad (3)$$

where the summation is over the commodities, i . So, if there is no trade imbalance, (3) equals (2). GL'_j becomes the adjusted Grubel–Lloyd index.

The simple Grubel–Lloyd index (GL) thus needs adjustment to reduce the trade imbalance bias that results from countries being a net exporter in one subgroup of an industry and a net importer in another subgroup as well as the simple aggregation bias. While it is not possible to completely eliminate both biases, one can minimise these using the adjusted GL index, GL' (Andersen 2003). The adjusted Grubel–Lloyd index thus becomes

$$GL''_k = 1 - \sum_{i=1}^{nk} \frac{|X_i^k - M_i^k|}{(X_i^k + M_i^k)}, \quad (4)$$

where nk = number of commodities in the pharma sub-group, k . The advantage of (4) is that it reduces the bias due to aggregation by defining it separately over subgroups of the pharmaceutical sector. For our purpose, in the calculations below, we have looked at two subgroups—bulk and intermediaries and formulations. Since the overall trade in pharmaceuticals is broken up into two subgroups, the effect of the overall trade imbalance is also minimised.

Finally, another drawback of the Grubel–Lloyd index is that it does not recognize the direction of trade. In interpreting our calculations below, this must be kept in mind.

3.3 Trade Complementarity Index

A useful indication of the trade potential between India and Pakistan in pharmaceuticals will be the trade complementarity index (TCI). It measures the extent to which two countries are “natural trading partners”, i.e. the extent to which what one country exports overlaps with what the other country imports (United Nations and World Trade Organisation 2012). With perfect correlation between sectoral shares, the index is 100 and with perfect negative correlation, it is 0. The import TCI is

$$c^{ij} = 100 \left[1 - \sum_{k=1}^m |m_k^i - x_k^j| / 2 \right],$$

where m_k^i is the share of the k th industry (pharmaceutical) of India's imports from Pakistan in India's total pharmaceutical imports from the world and x_k^j is the share of Pakistan's total pharmaceutical exports to India in Pakistan's total exports to the world, i and j are India and Pakistan, respectively. Thus, if India imports 10 % of its total pharmaceutical imports from Pakistan and Pakistan exports 10 % of its total pharmaceutical exports to India the exports and imports are perfectly matched and the TCI would be 100. Obviously the index can be calculated in the same way for Pakistan's imports from India.

3.4 Data

For an empirical analysis, trade values and quantities have been extracted from WITS COMTRADE database. The data has been collected for two basic categories of pharmaceuticals: bulk and intermediaries, and formulations (Kallummal and Bugalya 2012). The production of pharmaceutical items entails use of organic, inorganic and other chemicals. Owing to this fact, our study uses data on 239 pharmaceutical items for selected HS (Harmonized system) codes 15, 17, 19, 23, 26, 27, 28, 29 and 30.⁴ The data work in the paper, therefore, is based on the available classification of products in the pharmaceutical industry by the Department of Pharmaceuticals (DOP), Indian Drug Manufacturers Association (IDMA) and the paper "Trends in India's Trade in Pharmaceutical Sector: Some Insights" by Kallummal and Bugalya (2013).

4 Empirical Results and Analysis

4.1 Indo-Pakistan Trade and RTAs

Trade between India and Pakistan, due to political and strategic issues, has been fraught with hindrances. The establishment of SAARC⁵ (South Asian Association

⁴HS 15 includes animal or vegetable fats and oils and their cleavage products, HS 17 includes sugars and sugar confectionery, hs 19 includes preparations of cereals, flour, starch or milk, hs 23 includes residues and waste from the food industries, hs 27 includes mineral fuels, mineral oils and products of their distillation, HS 28 includes inorganic chemicals, HS 29 includes organic chemicals and HS 30 includes pharmaceutical items.

⁵SAARC was founded by seven countries viz., Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka.

for Regional Cooperation) in 1985 can be remarked as the initiation of improving relations in the South Asian bloc, particularly between India and Pakistan. The launching of the South Asian Preferential trade Agreement (SAPTA) in 1995 was the first major political breakthrough for SAARC since it was India's first regional agreement on economic cooperation (Sawhney and Kumar 2007). Later, the signing of the SAFTA (South Asian Free Trade Area) Agreement in January 2004 was an attempt by SAARC countries to further integrate through trade and investment. Nepal, Bhutan, Maldives and Bangladesh comprised the least developed countries (LDCs) and Pakistan, India and Sri Lanka the non-LDCs (NLDCs).

The trade liberalisation programme of SAFTA has described the schedules of tariff reductions for LDCs and NLDCs. Along with this, the contracting states can maintain sensitive lists for which the tariff reduction schedules will not hold. Sensitive lists are lists of products of special interest to individual member countries that are exempted from low SAFTA tariffs. The use of sensitive lists allows countries to protect growing domestic industries or important sources of customs revenue. However, overuse of sensitive lists can make goods more expensive for consumers and reduce trade between countries.⁶

The LDCs and NLDCs have affirmed their existing rights and obligations with respect to each other under the Marrakesh Agreement establishing World Trade Organization (WTO). As members of the World Trade Organization (WTO), they are supposed to accord "most favoured nation" (MFN) status to each other. The MFN principle is a principle of non-discrimination embodied in the General Agreement on Trade and Tariffs (GATT), which means countries cannot discriminate between their trading partners. The MFN principle ensures that each country treats the 159 fellow-members of WTO equally. But there are some exceptions for preferential treatment of developing countries, regional free trade areas and customs unions (World Trade Organization). India accorded the MFN status to Pakistan in 1996 and Pakistan has assured it will grant India MFN status soon. However, because Pakistan has not granted MFN status to India, it maintains a negative list for India. Items in Pakistan's negative list are those which are not allowed to be imported from India.

Until 2011, Pakistan maintained a positive list for India specifying permitted items to be imported. It was when a joint statement was issued laying down full phasing-in of MFN in November 2011 that Pakistan shifted to a small negative list. Accordingly, India and Pakistan maintain a sensitive list for its SAFTA members and Pakistan, in addition, maintains a negative list for India. As of now, India has 6 pharmaceutical items in its sensitive list for NLDCs and Pakistan has 24 pharmaceutical items (Refer Annexure 2, Tables 5 and 7). In addition to the sensitive list, Pakistan also maintains a negative list for India. Pakistan's negative list consists of 35 pharmaceutical items⁷ (Refer Annexure 2, Table 6).

⁶Ministry of Commerce and Industries, Republic of Afghanistan.

⁷The number of items in the negative and sensitive lists is according to the classification of pharmaceutical items used in the paper.

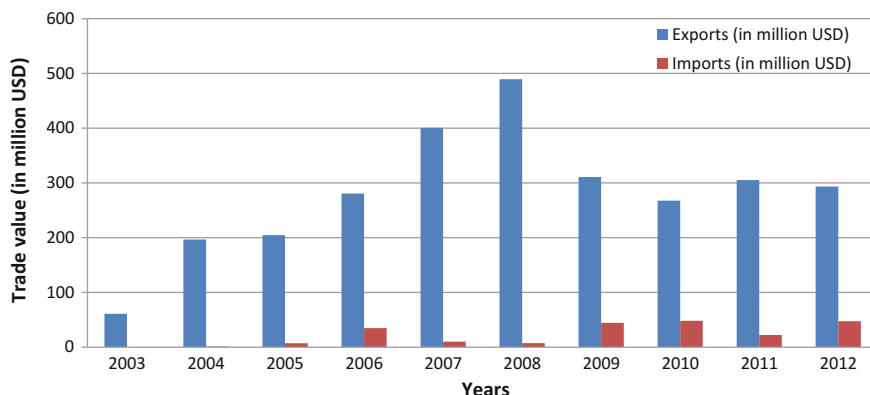
Box 1: MFN: A Hindrance to India–Pakistan Pharmaceutical Trade?

As mentioned earlier, Pakistan prohibits imports of certain commodities from India, known as the negative list and maintains a sensitive list (a list of products on which no preferential concessions are allowed) under the South Asian Free Trade Agreement (SAFTA). There are 35 pharmaceutical items in the negative list and 24 pharmaceutical items (at 6 digit level of HS codes) in the sensitive list (Refer Annexure 2, Tables 5 and 6). Most of the items fall in the category of medicaments, dextrose and antibiotics containing penicillin and its derivatives thereof. If Pakistan gives the MFN status to India, it will do away with the negative list. Although most of the pharmaceutical items in the negative list command a 2–3 % share in Pakistan's total imports from the world, their importance cannot be undermined. In 2012, some of the items such as medicaments had a 36 % share in Pakistan imports of pharmaceutical items from the world and a 27 % share in Indian exports of pharmaceutical items to the world, with a similar trend in the previous years. This clearly implies that there is a possibility for Pakistan to import these items from India.

4.2 Indo-Pakistan Trade in Pharmaceuticals: Potential and Trends

The focus of this section will be to examine the pharmaceutical items which are currently traded between India and Pakistan and those which are on the sensitive and negative lists. Looking at pharmaceutical items other than those in the sensitive and negative lists, we will examine the trend of their share in total trade over the years. The share of Indian exports to Pakistan in India's trade with the world in pharmaceutical items has ranged between just 1 and 3 % over the years 2009–12. The trade balance in these items has been in favour of India, possibly because of the fact that Pakistan's pharmaceutical sector is still in the developing stage. Consequently, possibilities for both countries to integrate are untapped and yet to be taken advantage of (Graph 1).

Barring a few years, exports of pharmaceutical items from India to Pakistan have been increasing. The compound annual growth rate of the exports was 19 % over the nine-year-period from 2003 to 2012. While, exports show a reasonably stable trend, imports have been very volatile. Imports in the years 2003 and 2004 were negligible (USD 0.047 million and USD 1.195 million). Unlike exports, which started showing an increasing trend 2005 onwards, imports from Pakistan actually started growing from 2009 to 2010. This can be attributed to the fact that both India and Pakistan engaged in a bilateral dialogue that started in 2004 and has continued. The four rounds of talks concluded during 2004 and 2007 resulted in an expansion of the positive list, opening of the road route and an amendment of the maritime



Graph 1 Indian pharmaceutical exports to and imports from Pakistan (2003–12). *Source* Based on data from UN COMTRADE

protocol, which could have led to the increasing trade between both countries (Taneja et al. 2013).

Examining items which are in the sensitive and negative lists will throw light on the potential for trade and competitiveness. To examine the trade potential between India and Pakistan of pharmaceutical goods, we have used the trade possibility approach. Since current trade in pharmaceuticals between India and Pakistan is limited, this measure will throw light on the trade potential in pharmaceuticals between the two countries. The results of the trade possibility exercise show that in 2012, there was an untapped trade potential of USD1635.5 million in pharmaceutical items between India and Pakistan. The quantum of export potential from India to Pakistan is much more than the import potential. Of the trade potential—USD1635.5 million—the export potential of India is USD1534.6 million and import potential is USD102.8 million. These figures are negligible when compared to the current Indian pharmaceutical exports to Pakistan, of USD 16.99 million and import of USD 0.07 million in 2012. Clearly, pharmaceutical trade of both countries with the rest of the world is much greater than the bilateral trade.

An overview of the trends and potential for trade in pharmaceutical items reveals that current trade is not zero between India and Pakistan. Markets definitely exist in both countries and there would be gains for both India and Pakistan from greater trade integration. As regards trade within the pharmaceutical sector, an insight into intra-industry trade would yield a better picture of the trade potential between the two countries. Bulk and intermediaries, and formulations form two major categories of pharmaceutical items and the extent to which there is exchange of these similar pharmaceuticals will provide a snapshot for future integration in trade between both countries.

4.3 *Intra-industry Trade Between India and Pakistan*

It is quite possible that trade between India and Pakistan would lie in the intra-industry trade category given that they are developing countries and have somewhat “similar” industry structures. The growth in the Indian pharmaceutical industry is mainly driven by contract manufacturing. The sourcing of APIs for patented drugs is maintained in-house by most innovator companies in order to maintain greater flexibility and quality control (Dun and Bradstreet). The Pakistan pharmaceutical industry is similar. Leading multinationals companies have their products manufactured by the national companies under contract manufacturing arrangements (International Trade Centre, UNCTAD/WTO 2007). Domestic pharmaceutical manufacturing industries have acquired the latest technologies and have been involved in contract manufacturing in both countries. The Grubel–Lloyd index calculations would help validate the intra-industry trade in pharmaceuticals between India and Pakistan. Indian exports and imports of pharmaceuticals along with three intra-industry trade indices (simple, adjusted and group-wise) are shown in Table 1.

The GL index value ranges from 0.001 to 0.04. This would imply that intra-industry trade in pharmaceuticals is not very high between India and Pakistan considering a value of 1 indicates pure intra-industry trade. The simple GL index, GL, shows a chequered pattern from the years 2009–2012, increasing from 2009 to 2010 and decreasing between 2010 and 2011. We have already noted that this index is affected by trade imbalances. In this case, the trade imbalance is in favour of India. The adjustment for trade imbalance is shown in the index GL' in Table 1. However, comparison of the changes over time in the either of the two indices

Table 1 Pharmaceutical exports and imports of India, simple Grubel–Lloyd index, Adjusted Grubel–Lloyd index and group-wise adjusted GL indices (2009–12)

	2009	2010	2011	2012
Exports (in 1000 US \$)	315310.2	272628.7	313274.6	303894.2
Imports (in 1000 US \$)	44317.52	48174.89	2138.41	47186.31
Simple Grubel–Lloyd index (GL)	0.04	0.0015	0.0062	0.0057
Adjusted Grubel–Lloyd (GL')	0.48	0.69	0.55	0.25
Group-wise GL indices				
Bulk and intermediaries adjusted GL index, GL''	0.049	0.0015	0.0069	0.0057
Formulations adjusted GL index, GL''	0.0017	0.0026	0.00003	0.0084

Source Authors calculations using data from COMTRADE

reveals that IIT in general is very limited. As an inspection of GL' above shows, there was some increase in IIT between 2009 and 2010 but subsequently, IIT has shown a secular decline. The results of group-wise GL indices (GL'') seem to indicate that even the limited IIT is occurring mainly in bulk and intermediaries and IIT in formulations, in particular, is almost non-existent. This can be because the Indian pharmaceutical industry, being an established one, has spent much more on R&D and therefore, can produce formulations for which it needs bulk drugs. The strength of the Indian pharmaceutical industry lies in reverse engineering (Lalitha 2002) and its competitive advantage lies in its lower production and research costs, its large pool of low cost technical and scientifically trained personnel, and the large number of US FDA certified plants. Besides, only a few companies manufacture good quality APIs in Pakistan and most are dependent on imports from other countries for the raw material requirements of API. The lack of competitiveness of Pakistan's formulations industry largely explains why IIT in this sector has not increased over the years. It also explains resistance to opening up to imports of Indian formulations, which are mostly in Pakistan's negative list. Since Grubel and Lloyd (1975), many studies stressed that there is strong empirical support for the hypothesis that countries that have common borders and have eliminated or lowered barriers on trade with each other will have relatively high levels of intra-industry trade. Moreover, the extent of intra-industry trade will be positively correlated with trade intensity. That is, as the trade volume with trade partners increases, there will be more opportunity for more differentiated products to be traded (Koçyiğit and Şen 2013). While it is still too early to tell, it is clear that increase in IIT between India and Pakistan is also probably limited by small trading volumes in general. We also see that IIT in formulations is hindered by the unequal R&D capabilities of the two countries.

4.4 Trade Complementarity

A useful indication of the trade potential between India and Pakistan in pharmaceuticals will be the trade complementarity index (TCI). The two TCI values are shown in Table 2.

The results for the TCI between India and Pakistan in the year 2012 show that India's demand for pharmaceuticals was partially matched by Pakistan's offer and

Table 2 Trade complementarity index between India and Pakistan

	2012	
	India's trade complementarity with Pakistan	Pakistan's trade complementarity with India
Trade complementarity index	67.91	72.03

vice versa. The measure of adequacy of Pakistan's export supply to India's import demand is about 68 % whereas, in the case of India's exports, it is 72 %. Hence, there seems to be a fair degree of complementarity between the two countries. Expanded trade should exploit this complementarity. Our discussion of the IIT between the two countries shows that this is not happening at present.

Box 2: Biopharmaceuticals: The Link to Strengthening Indo-Pak Pharmaceutical Trade

In the recent years, the biopharmaceuticals sector has assumed increasing importance in the light of patent regimes and increasing expenditure on research and development in the world. In 2010, worldwide R&D spending by the pharmaceuticals and biotechnology sector grew by 6.2 %, strengthening its position as the top R&D investing sector. The rise of this sector must be exploited to improve trading relations between India and Pakistan.

The current trade between the two countries in biopharmaceuticals has been negligible as compared to that in other pharmaceutical categories. The main trade items of biopharmaceuticals have been antisera and other blood fractions and modified immunological products, medicaments containing hormones or steroids used as hormones but not antibiotics, human/animal blood prepared for therapeutic, prophylactic or diagnostic uses; toxins and cultures of microorganisms, vaccines for veterinary medicine and extracts of glands/other organs. Biochemical medicines and a few items from the toxins category like Saxitoxin and Ricin are part of Pakistan's negative list (Refer Annexure 2, Table 6). Most of the bilateral trade is in the form of Indian exports to Pakistan. Even then, the share of biopharmaceuticals in total Indian pharmaceutical exports to Pakistan is a mere 0.02 %. The indicative potential trade in biopharmaceuticals was 31 times the current trade for the year 2012 (ITC Trade Map).

Collaborative efforts like technology transfer and promoting entrepreneurial know-how will enhance trade in the bio-pharmaceutical sector which is the upcoming sector in the pharmaceuticals segment.

5 Pakistan-China Trade: The Bottleneck in India-Pak Trade?

For both India and Pakistan, the United States is a major trading partner in pharmaceuticals. Also, most of the major pharmaceuticals trading partners of both countries are from Europe. In the Asian region, China is the largest pharmaceuticals exporter to both Pakistan and India. In fact, China is the only Asian country from which Pakistan gets a major chunk of its pharmaceutical imports. According to a 2010 KPMG report, the Chinese pharmaceutical industry is the fifth largest in the



Graph 2 Share (per cent) in pharmaceutical imports of Pakistan of top 12 suppliers. *Source* Trade Map, International Trade Centre

world with domestic growth projected at about 20 % per annum. It is characterised by both major and minor players comprising about 5000 units. China has been an important producer of bulk drugs (raw material or bulk drugs and intermediaries). The Chinese pharmaceutical industry has three subpharmaceutical industries: (1) chemical medicine (2) traditional Chinese medicine (TCM) and (3) biological products (Kallummal and Bugalya 2012). The traditional Chinese medicine and chemical raw materials sectors have enhanced the global competitiveness of the Chinese pharmaceutical industry. An analysis of the countries from where Pakistan imports pharmaceutical items shows that the top importing partners of Pakistan—European countries (Denmark, Switzerland, Germany, Belgium, and Italy) and the United States of America—are outside the Asian region. China is the only Asian country that features in its list of top 10 import partners (Graph 2).

Despite the trade complementarities that exist between India and Pakistan in terms of geographical proximity and other similarities, Pakistan imports more pharmaceuticals from China than from India (Refer Annexure 2, Tables 8 and 9). Consequently, the potential for trade in pharmaceuticals between India and Pakistan has remained untapped. Whether this is because of desire to protect domestic industry or because of political considerations is what will be looked into in the following sections. The position of China as regards its pharmaceutical trade with Pakistan will be a crucial link to explain why India–Pakistan trade in pharmaceuticals remains small.

The theory of customs unions and RTAs tells us that any RTA can lead to trade diversion away from the non-RTA partners to members of the RTA. This is classified as trade diversion since it is only the tariff preferences that make member countries lower cost suppliers to other RTA members. If tariffs did not exist, the

lower cost supplier countries would actually lie outside the RTA (Viner 1978). Here we look at the issue of such trade diversion for India as a consequence of the Pakistan–China FTA. Since Pakistan has not given MFN status to India but does give preferential trade access to China, this issue is worth investigating.

5.1 Are Indian Pharmaceutical Items Substitutes for Chinese Exports to Pakistan?

The global economy has been virtually dominated by Chinese exports in nearly all manufacturing sectors (Kallummal and Bugalya 2012). China has been increasing its presence in the bulk drugs and formulations segments in the pharmaceutical sector. As the world's fastest growing economy, China's pharmaceutical market will definitely have implications for India–Pakistan trade given that both countries trade with it. The main issue involved with respect to China–Pakistan and India–Pakistan trade is that being a major trade partner of Pakistan in pharmaceutical items, it is possible that Chinese exports to Pakistan might counter India–Pakistan pharmaceutical trade particularly if Chinese exports to Pakistan are given preferential tariff access. Therefore, it becomes imperative to undertake a detailed analysis of the current pharmaceutical trade between China and Pakistan keeping in view the China–Pakistan free trade area (CPFTA) agreement along with the substitutability and complementarity of Indian and Chinese exports to Pakistan.

China and Pakistan announced the launch of the negotiations on an FTA in 2005. The two countries signed the FTA in November 2006 and it took effect from July 2007. An Early Harvest Programme (EHP) for the Free Trade Agreement was implemented in 2006. It covered the lists for zero-tariff and preferential tariff items along with their margin of preference (MOP) and also included a tariff reduction modality of zero-tariff items. According to the FTA, the tariff reduction modality of Pakistan was supposed to be as follows (Table 3):

Table 3 Tariff reduction modality of Pakistan under the CPFTA

Category	Track	No. of tariff lines	Percentage of tariff lines at 8 digit
I	Elimination of tariff (3 years)	2423	35.6
II	0–5 % (5 years)	1338	19.9
III	Reduction on margin of preference from 50 % (5 years)	157	2.0
IV	Reduction on margin of preference from 20 % (5 years)	1768	26.1
V	No concession	1025	15.0
VI	Exclusion	92	1.4

Source Free Trade Agreement between the Government of People's Republic of China and The Government of the Islamic Republic of Pakistan

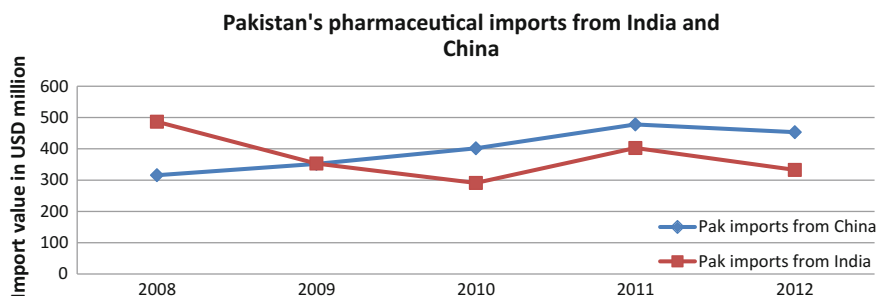
The term “margin of preference” here defines the tariff preference to Chinese imports as compared to the MFN rate applicable on those items. Hence, import duties were to be eliminated or reduced to less than 5 % in about 56 % of tariff lines in 3 years (Categories I and II above). In Category III, tariff was to be reduced to 50 % of the prevailing MFN tariff in 5 years while this figure was 20 % for Category IV (Refer Annexure 1 for details).

In the overall package, Pakistan was to get market access at zero duty on industrial alcohol, cotton fabrics, bed-linen and other home textiles, marble and other tiles, leather articles, sports goods, mangoes, citrus fruit and other fruits and vegetables; iron and steel products and engineering goods. Pakistan has given market access to China mainly in sectors like machinery, organic and inorganic chemicals, fruits and vegetables, medicaments and other raw materials for various industries including engineering sector, intermediary goods for engineering sectors, etc.

Graph 3 shows the pharmaceutical imports of Pakistan from India and China over the years from 2008 to 2012.

It is quite evident that for Pakistan, imports from India show a downward trend and imports from China show an upward trend. After 2009, the value of Pakistan’s pharmaceutical imports from China has been increasing and the gap between the value of imports from India and China has also been on the rise. This could perhaps point towards trade diversion since before 2009, the value of Pakistan’s pharmaceutical imports from India was substantially higher than from China. It is clear that Pakistan’s imports from India have shown a downward trend since 2008 when the Pakistan-China FTA became fully operational giving substantial tariff advantages to Chinese imports. While a proper evaluation of trade diversion requires a much more detailed analysis, the decline in India’s exports of pharmaceutical items immediately following the full application of the China–Pakistan FTA cannot be completely coincidental.

From another perspective, it is useful to evaluate the zero-tariff and preferential rates list of items under CPFTA and the negative and sensitive lists maintained under SAFTA. Under the CPFTA, the zero-tariff list comprises 74 pharmaceutical



Graph 3 Pakistan’s pharmaceutical imports from India and China. *Source* Based on data from UN COMTRADE

items and the preferential tariff products list offered by Pakistan comprises 25 pharmaceutical items (Refer Annexure 2, Table 10 and 11). Matching these items with the pharmaceutical items in the negative and sensitive list maintained by Pakistan for India reveals that no favourable tariff treatment is given to China over India. The very fact that the items in the zero-tariff and preferential tariff products are completely different from the negative list implies that Pakistan does not give preferential treatment to China over India at least in items on the negative/sensitive list of imports from India. It may be noted that Pakistan has no negative list of items imported from China.

5.2 Competitiveness of Chinese Pharmaceuticals


The issue of global competitiveness becomes important to see how countries perform in a global setting. Clearly, China and India both have a certain degree of overall competitiveness in the global pharmaceutical industry. However, the origin of this competitiveness differs greatly. Since 2004, in the global pharmaceutical value chain production link, China has specialised mainly in raw medicine, while India has specialised in prepared medicine. It was also observed that China exported raw medicine while it imported manufactured formulations (Kallummal and Bugalya 2012). Pakistan assumes importance in this trilateral, not only as a major importer of pharmaceuticals but also as a foreign collaborator, owing to its proximity with India and it being a chief importer from China. In 2012, the share of Pakistan's pharmaceutical imports, from China was 17 and 12 % from India. As regards competitiveness, considering the geographical proximity, ease of transportation to India and competitiveness of Indian drugs, the share of imports from India could be higher.

Are Indian imports competitive? Has the CPFTA diverted trade from India to China? Does Pakistan need to maintain a negative list for India? A proper analysis of the trade diverting/creating potential of the CPFTA requires calculation of demand elasticities, etc. This is not possible given the limited data available. We have followed a simpler, yet indicative, procedure of comparing landed prices in Pakistan for Chinese and Indian pharmaceutical products for the year 2012.

Unit values are calculated by dividing the trade value by the quantity. Since CIF (cost, insurance, freight) cost is the actual cost of the imported goods, trade value of Pakistan's pharmaceutical imports from China and India have been used to calculate the unit values. The unit values have been used as proxies for the prices of items in this exercise. Although they suffer from the quantity bias, this is the closest estimation of prices possible with the data on trade value and quantity. Table 4

Table 4 Unit value comparison—top 13 Pakistan pharmaceutical imports from China, their share and their respective unit values (2012)

Sr. no.	Product description	Share of items in Pakistan's imports from China (%)	Pak-China unit values	Pak-India unit values	Unit values comparison (greater unit value)
1.	Antibiotics & their derivatives	9	0.071	0.153	India
2.	Nucleic acids & their salts	6	0.034	0.053	India
3.	Nitrile-function comps.	6	0.007	0.007	India
4.	Lysine & its esters; salts thereof	6	0.001	0.003	India
5.	Organo-sulphur compounds	4	0.008	0.006	China
6.	Heterocyclic comps.	4	0.026	0.036	India
7.	Amino-acids, other than those containing more than one kind of oxygen function	3	0.008	0.017	India
8.	Glutamic acid & its salts	3	0.001	0.006	India
9.	Heterocyclic compounds with oxygen	3	0.016	0.025	India
10.	Sulphonamides	2	0.023	0.045	India
11.	Medicaments (excluding goods of healing)	2	0.012	0.016	India
12.	Disodium carbonate	2	0.001	0.0009	China
13.	Cyclic amides	2	0.008	0.020	India

 - Category of pharmaceutical items comprising items in the negative list maintained by Pakistan for India

Source Calculations done using data from UN COMTRADE

shows the unit values of top 13 Pakistan imports from China and the respective unit values of Pakistan imports of those items from India.⁸

In 2012, out of the top 13 Pakistan imports of pharmaceutical items from China, unit values of 11 items are lesser than that of India. Moreover, 5 out of the 10 categories, viz., antibiotics and their derivatives, sulphonamides, medicaments, disodium carbonate and cyclic amides have items in Pakistan's negative list for India. Antibiotics and their derivatives and sulphonamides particularly command shares of 8.9 and 2.2 %, respectively in Pakistan's imports from China. Some major arguments that can be made, looking at the figures in the table, are as follows: First, Pak-India unit values are greater than Pak-China unit values for the categories

⁸This exercise has been carried out using data at the HS 6-digit level from UN COMTRADE rather than at HS 8-digit level to facilitate comparison and make the results discernible. Hence, wherever applicable, we talk about categories and not specific items.

comprising negative list items. Retaining these items in Pakistan's negative list for India is thus needless. The very fact that Indian pharmaceuticals are more expensive than their Chinese counterparts would mean that even after removing the items from negative list, Indian items would have to compete with Chinese items. So, the fear of Indian pharmaceutical items flooding the Pakistan pharmaceutical industry is misplaced since free competition in the market would lead to survival of the cheapest and best quality products. The potential gains of increased market competition are very apparent; lower prices and better quality for consumers, greater discipline on producers/suppliers to keep their costs down, improvements in technology with positive effects on production methods and costs and a faster pace of innovation are some of them. Second, the landed prices of Indian pharmaceutical products would also reflect tariffs payable. Given the tariff advantage to China (as much as 15 % or more in some items), it is possible that the extension of similar tariff advantages to India could well reduce the landed prices of Indian goods to the Chinese level or lower. However, a more precise answer would require data not available at this point. In any case, the argument for maintaining a negative list seems weak given the open access in these items to China.

An important advantage of opening up trade in pharmaceuticals by eliminating the negative list would be an increase in consumer surplus. It is also important to note that Pakistan's imports from China might be merely replaced by those from India if this happens for common items that Pakistan imports from India and China. The increased consumer welfare would be a consequence of increased market competition that would have other spill over benefits in the pharmaceutical sector. It is worth noting that of the top 15 formulations that are exported from India to Pakistan, 12 figure in India's major exports of formulations to the world. Given India's predominant position in the world market for formulations, there is no doubt that both in terms of quality (tested in the world market) and price, consumers in Pakistan could benefit enormously by pruning its negative list for Indian exports.

6 Industry Insights

6.1 View from Pakistan

An interaction with pharmaceutical industry stakeholders in Pakistan revealed that as opposed to the general view of the Pakistan pharmaceutical sector not willing to open up; there are a few big players which are proponents of competition and welcome integration with the Indian pharmaceutical industry. The arguments of the supporters of granting MFN status to India and hence opening up pharmaceutical trade with India revolve mainly around the following issues:

- Gain to the Pakistan pharmaceutical industry from the research and development experience of India
- Direct trade as opposed to indirect trade of bulk drugs and intermediaries (raw materials) that are currently being routed from Dubai to Pakistan
- Larger market access for Pakistan pharmaceutical companies
- Possibility of a better drug regulatory framework with greater exposure of the Pakistani pharmaceutical industry to the Indian market

The R&D profile of Indian pharmaceutical industry includes development of generics, new drug delivery systems and new drug development (Joseph 2011). The benefits of this can accrue to the Pakistan pharmaceutical industry also. Pakistan pharmaceuticals manufacturers are also looking at getting packaging material from India due to existence of a monopoly in Pakistan. This direct trade will save costs and improve efficiency. The existence of a weak regulatory structure (for instance, the herbal medicines division of the Pakistan pharmaceutical sector is completely unregulated) has also worked to the disadvantage of the pharmaceutical industry in Pakistan. Liberalising trade will lead to the enhancement of the regulatory framework enabling producers to compete with Indian suppliers.

Many smaller Pakistan pharmaceutical companies have apprehensions regarding the opening up of the sector to India. The “fear of competition” and influx of pharmaceutical items from India are the main reservations of the section of the pharmaceutical industry opposing MFN status to India. They also need time to prepare and establish themselves to face competition. However, the Pakistan pharmaceutical sector, due to its “Look East” policy, has been able to compete with the Indian pharmaceutical items in South-Asian markets such as Vietnam and Philippines. Hence, providing market access to India with appropriate trigger mechanisms (like imposing quotas, if necessary) to prevent flooding of Indian pharmaceutical items in the Pakistan pharmaceutical market will facilitate integration of the sectors in both countries.

As regards Pakistan trade with China, it has flourished in the recent past, mainly due to the CPFTA. This can be attributed to the fact that Chinese companies can produce generic versions of branded drugs for lower prices. With reference to China in India–Pakistan trade, the issue of non-discriminatory access with non-tariff barriers being country-specific comes to the fore.

6.2 View from India

India has substantial comparative advantage over Pakistan in pharmaceuticals (Ahmad 2013). Keeping this in view, consultations with Indian exporters held in India were helpful in corroborating the quantitative exercises undertaken and views from stakeholders in Pakistan. Interviews with Indian exporters of pharmaceuticals to Pakistan brought to light a few ground issues that need attention

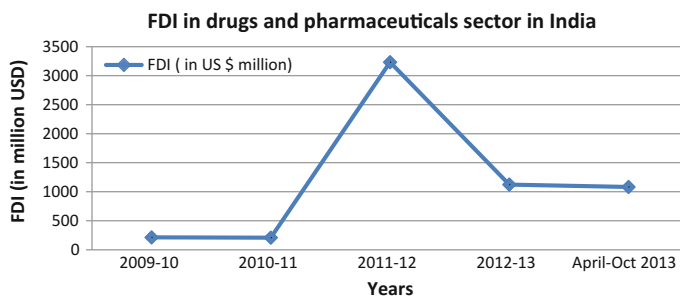
- Weak drug regulatory framework in the Pakistan
- Competitive nature of the Pakistan pharmaceutical market—prices of pharmaceuticals items are quite low
- Logistical issues of banking and visa
- Inclusion of formulations in the negative list as a protectionist measure

The regulations for pharmaceutical items are not very stringent in Pakistan and registration for exports is very easy. In fact, Indian traders are of the opinion that regulations in other partner countries like Bangladesh are stricter. This had resulted in easy exports of pharmaceutical items to Pakistan. However, issues related to payments and visas still hamper trade. Banking has to be carried out through a third party overseas bank, which is costly and time consuming. The Indian exporters were also concerned with the pricing in the Pakistan pharmaceutical market. They find the market very competitive and get low prices for their pharmaceutical items. Although most of the exporters denied any competition from Chinese pharmaceuticals in the pharmaceutical items exported from India, for a few items, Chinese prices are much lower than Indian drugs. This has led to the suspension of pharmaceutical trade with Pakistan by a few exporters. Indian exporters are also unable to export formulations since most of the formulations are in the negative list. This is attributed to protectionism in Pakistan. Out of the 35 items in Pakistan's negative list maintained for India, 14 fall under the category of formulations (Refer Annexure 2, Table 6). As regards competition with China in the Pakistan pharmaceutical market, Indian exporters said that even though Chinese pharmaceuticals are priced lower, their quality does not match Indian pharmaceutical items. Even importers from Pakistan prefer the quality and potency of Indian drugs compared to Chinese imports.

Despite the concerns, Indian traders who have discontinued trade in pharmaceuticals are more than willing to resume trade provided trade is facilitated via an improvement in banking and finance. The outlook of stakeholders, both in Pakistan and in India of enhancing trade in pharmaceuticals is very positive and encouraging.

7 FDI in Pharmaceutical Sector

Traditionally, issues of trade and FDI have generally been discussed separately. Standard trade theory, in fact, did not throw much light on FDI and the process of integration of the two did not start until as late as 1980. The link between the two arises because it is now recognised that FDI and trade can be complements or substitutes. FDI, in fact, is simply another way of doing trade particularly when the technology component of trade is high (Treffer 1995; Markusen 2002; Pant 2013). The role of FDI in promoting trade becomes particularly important today when declining transport costs and tariffs have led to the fragmentation of world production (Krugman 2008). In general, a firm in one country can interact with the



Graph 4 FDI in drugs and pharmaceuticals in India (2009 to Oct 2013). *Source* DIPP

market of another country via exports (imports), via licensing the sale/production of its commodities (input purchases) in that country or via locating its own physical production units abroad. It is this last stage that is normally classified as FDI. While in all cases, the objective is export or import of commodities, fixed costs are the highest in the case of FDI. The internalisation theory of FDI thus argues that FDI is generally the last stage for companies engaging in trade (Pant 1995).

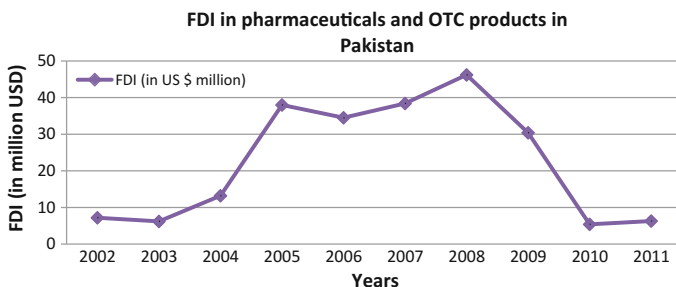
In the context of the pharmaceutical industry, it is useful to look at how policy of the two countries on FDI differs. India had allowed 100 % FDI in the pharmaceutical sector through the automatic approval route in greenfield⁹ investments and 100 % FDI in the brownfield category, subject to approval from the Foreign Investment Promotion Board (FIPB). Pakistan allows 100 % foreign equity in the manufacturing sector along with 5 % customs duty on plant and machinery and 25 % tax relief (Board of Investment, Prime minister's office, Govt of Pakistan). Hence, FDI norms in both countries are very liberal and provide incentives to invest in the pharmaceutical sector.

Yet, there is a vast difference in the nature of foreign involvement in the pharmaceutical industry in the two countries. In India, drugs and pharmaceuticals are among the top five sectors which attract FDI after the services, construction, telecommunications and computer software sectors. Its share in the total FDI inflows over the last 10 years from 2000 to 2010 has been 6 %.

As is evident from Graph 4, FDI in drugs and pharmaceuticals sector experienced a boom in 2011–12 when the Indian government liberalised FDI regulations. But thereafter, FDI in pharmaceuticals has remained sluggish.

On the contrary, in Pakistan, the share of FDI in pharmaceuticals and OTC products has ranged around 1–2 % only. Graph 5 shows that FDI in pharmaceuticals rose from 2003 onwards and this increase continued till 2008. From there on, there has been a decline in FDI inflows in the sector.

⁹While brownfield investment implies purchase or sale of existing investment, Greenfield investments refer to altogether new investments. (OECD Benchmark Definition of Foreign Direct Investment, Fourth Edition 2008).



Graph 5 FDI in pharmaceuticals and OTC products in Pakistan (2002–2011). *Source* State Bank of Pakistan

While the Pakistan pharmaceutical industry is largely controlled by foreign ownership, this is not true in the case of India where Indian pharmaceutical companies have themselves become multinationals over time, particularly in the generic pharmaceutical segment. In fact, the role of foreign firms in the Indian pharmaceutical industry has declined over time as Indian companies have become highly competitive with a very high share of R&D expenditure as compared to other sectors. Multinational companies have a 30 % market share in the Indian pharmaceutical industry while the top 20 domestic companies in India have a 50 % market share. As opposed to the dominance of national companies in India, multinational pharmaceutical companies have a 53 % share in Pakistan's pharmaceutical market (Business Recorder 2012, September 29).

India's pharmaceutical sector currently spends 6–8 % of revenues on R&D (Business Standard, 2013a, b, January 03). Stakeholders in Pakistan recognised the benefits of collaborating with the Indian pharmaceutical industry in research and development. The Indian pharmaceutical industry has become an important hub in the production of generic drugs over the last few decades and the Pakistan pharmaceutical industry could take advantage of India's production and R&D in this segment. Further, pharmaceutical industrialists also mentioned the lack of FDA approved laboratories for testing purposes in Pakistan. Through collaborations with the Indian pharmaceutical industry, units in Pakistan's pharmaceutical sector could use FDA approved laboratories in India and save on costs.

There is currently little FDI flow between Pakistan and India; this is also true of the pharmaceutical industry. Yet literature shows that, in general, high bilateral trade tends to be associated over time with high bilateral FDI (Hejazi and Safarin 1999; Brainard 1997). The issue is that with trade today being mainly of the intra-industry type, and this type of trade is normally driven by FDI (Blomstorm 1991). Moreover, it is now recognised that transnational corporations (TNCs) base their decisions on regional rather than country policies towards FDI (Clausing 2000). Thus, it is argued that in South Asia, it is necessary for countries to harmonise FDI policies as competition for the same FDI can be harmful, particularly for smaller countries (Das and Pant 2006).

Given the current political situation, it is unlikely that high volumes of FDI will flow from India to Pakistan or vice versa in the immediate future. The possibilities of third country FDI driving India–Pakistan is worth exploring. Here it is worth noting that most of the RTAs being contracted today allow for an investment component. This is missing from the SAFTA agreement. The issue of harmonisation of the FDI policies of India and its neighbours surely deserves a second look, especially as India has included an investment component in its RTAs with Singapore, South Korea and Japan.

8 Summary and Policy Recommendations

The pharmaceutical industry is an important component of healthcare system in an economy. India's pharmaceutical sector has been predominantly a producer of generic products and has a large global presence, particularly in the large markets of the developed world. On the other hand, the Pakistan pharmaceutical sector is still at a developing stage but has been able to gain a small foothold in the Asia-Pacific region. There are some obvious complementarities here. An industry sector like pharmaceuticals, with "high social value" and having direct relation to the health and well being of consumers, would be an ideal segment to enhance trade and improve relations between the two countries.

There is substantial trade complementarity and high trade potential of USD 1635 million in trade of pharmaceuticals between India and Pakistan. Consultations with stakeholders on both sides revealed that firms realise the possibility of huge benefits from increased trade and investment. However, there have been apprehensions among the small players in Pakistan regarding the influx of pharmaceuticals from India once trade opens up. Since Pakistan imports a substantial amount of pharmaceuticals from China, the CPFTA is a significant free trade agreement signed between China and Pakistan in terms of market access. The matching of the negative list maintained by Pakistan for India and the sensitive lists of both India and Pakistan under SAFTA with the zero-tariff and preferential lists reveal that Pakistan gives no favourable treatment to China over India. Out of the top 13 Pakistan imports of pharmaceuticals from China, unit values of 11 items are lesser than those in which Pakistan trades with India. This points to the fact that when Pakistan opens its pharmaceutical market to India, competition would eventually lead to survival of best quality pharmaceutical items in the Pakistan pharmaceutical market. Consequently, this would have a positive impact on the consumer surplus in the pharmaceutical sector.

Specific to the pharmaceuticals sector, the following policy recommendations are suggested to propel trade and investment

1. **Removal of pharmaceutical items from the negative list:** To give a push to trade in pharmaceuticals, it is imperative that the negative list maintained by Pakistan for India should be done away with. Currently, with 35 items at the

6-digit level according to the HS classification, the negative list contains pharmaceutical items of critical importance such as penicillin and its derivatives, erythromycin and its derivatives, ingredients for pesticides, vaccines for veterinary medicine and surgical tapes. Pakistan already trades in these items with China under the Pakistan-China free trade agreement. Hence, it seems illogical to continue to maintain a negative list for India in these items. Incorporation of trigger mechanisms from Pakistan's side would help combat the apprehensions of smaller pharmaceutical manufacturers about being flooded with imports from India. In fact, competition from Indian products can only benefit consumers and this is critical in the health sector, particularly in developing economies. It may be noted that *in this critical sector, consumer gains should be given greater weightage than temporary production losses.*

2. **Removal of pharmaceutical raw materials from the sensitive list:** Another channel to enhance trade in pharmaceuticals would be the removal of raw materials from the sensitive list maintained by Pakistan. *The high import duties on raw materials actually reduce the effective rate of protection¹⁰ of final products and this would defeat the purpose of protecting the Pakistan pharmaceutical industry, if that is the intent.* We, therefore, suggest that protection to final products in Pakistan could be increased by bringing raw materials under a zero or low duty regime.
3. **FDI in pharmaceuticals:** Theory recognises that FDI is another way of doing trade, and traversing this path would certainly give a boost to bilateral trade between India and Pakistan. However, the internalisation theory of trade establishes that FDI is the last stage of engagement between countries/companies that trade with each other. So, *the prospects of FDI in pharmaceuticals will come later in the future after trade integration between the two countries happens.* However, some groundwork in harmonising policies towards FDI in this sector seems necessary.
4. **Tapping the traditional medicine segment to enhance trade:** Traditional medicine is another significant area with large potential requiring substantial policy interventions. *Herbal, ayurvedic, Sihdha and Unani medicines are common to both India and Pakistan.* Although the Government of India has realised Good Manufacturing Practices (GMPs) for the pharmaceutical manufacturing, the need to establish regulatory mechanisms to regulate herbal medicines is obvious. In India, new rules came into force from June 2000 as an amendment to the Drugs and Cosmetics Act, 1940. These rules give details regarding essential infrastructure, personnel and quality control requirements for herbal drug manufacturing. Implementing GMP requirements is mandatory for the industry. Pakistan also faces challenges in the traditional medicine system. Challenges such as unknown market demand, absence of a regulatory

¹⁰Effective rate of protection = $(T_f - T_i)/VA_{int}$ where T_f is the total tariff theoretically or actually paid on the final product, T_i is the total tariffs paid on importable inputs and VA_{int} is the international value added.

environment and framework, i.e. traditional medicines act, R&D facilities, infrastructure and allocation of appropriate financial resources need to be worked upon.

5. **Potential for trade in biopharmaceuticals:** Biopharmaceuticals, an upcoming field, has a lot of scope in the pharmaceutical sector. It has been the top R&D investing sector in the world in recent times. The fact that both India and Pakistan have companies that are engaged in the manufacture and sale of biopharmaceuticals is another reason for the countries to integrate and collaborate in setting up R&D facilities.
6. **Harmonising Regulatory Regimes in pharmaceutical sector:** *Harmonisation of regulatory regimes is a prerequisite for smooth and uninterrupted trade.* The lack of a standardised regulatory framework with respect to manufacturing and the lack of FDA approved laboratories¹¹ in Pakistan have acted as barriers to trade in pharmaceuticals products. A constitutional amendment in 2010 dissolved the Ministry of Health and shifted the responsibility to the country's provincial governments. The Drug Regulatory Authority of Pakistan (DRAP) was set up only in 2012 to provide for effective coordination and enforcement of The Drugs Act 1976 and to bring harmony in inter-provincial trade in therapeutic goods. Pakistan's counterpart in India, the Central Drugs Standard Control Organisation (CDSCO) was established under the Drugs and Cosmetics Act, 1940, to regulate the pharmaceutical sector. The devolution of powers is such that state authorities are responsible for the manufacture, sale and distribution of drugs while the central authorities are responsible for approval of new drugs. However, the pricing of drugs is the purview of the central government's National Pharmaceutical Pricing Authority (NPPA), which periodically issues Drug Prices Control Orders (DPCO) that specifies maximum retail prices, particularly of bulk drugs and essential formulations, and hence keep down prices to consumers.
7. **Mutual Recognition Agreements:** Lastly, if pharmaceutical trade between India and Pakistan is to expand, it will be necessary to sign mutual recognition agreements (MRAs) that specify standards to be enforced on the drug industry in both countries. *Any fears on either side of sub-standard drugs flooding the markets can be addressed via these MRAs.* Another issue that is critical in the development of the pharmaceutical sector is research and development (R&D). The 30 leading Indian pharmaceutical companies spend almost 20 % of their turnover on research and development (Pingle 2013). Collaborations in research and development of pharmaceuticals would yield returns for both countries. In fact, Pakistan can take advantage of India's world-class R&D facilities through collaborations and joint ventures.

¹¹Stakeholders in Karachi claimed having only 2 FDA approved laboratories for testing in Pakistan—one in Islamabad and another in Karachi.

In the near future, prospects of economic integration seem substantial considering the trade potential between India and Pakistan. The pharmaceutical sector assumes importance by virtue of having a direct association with consumers, as regards their health and welfare. The importance of pharmaceuticals industry also stems from the objective of safeguarding life and enhancing healthcare. It is regarded as the mainstay of public health in any country (International Trade Centre, UNCTAD/WTO, 2007). The “Healthcare in India—Vision 2020” document remarks that ‘Health is best understood as the indispensable basis for defining a person’s sense of well-being’. The National Drug Policy of Pakistan also states that the government is committed to the goal of health and is taking all possible measures in the field of health services at large and drugs in particular. As such, governments all over the world are committed to the goal of health and well being of its citizens. Trade in pharmaceuticals can be one of the means to indirectly resolve healthcare issues and meet related objectives in both countries.

At the production level, the pharmaceutical industries of both India and Pakistan are growing at a satisfactory rate. Addressing issues that are holding back trade and providing market access are major steps that need to be taken to integrate the sectors of both countries. Infusing confidence in manufacturers on both sides to collaborate will help the two countries avail of the obvious trade complementarities between their pharmaceutical sectors. The prospects of greater trade flows and investment between India and Pakistan seem bright and the time for this opportune, given the giant leap that the global pharmaceutical industry has taken.

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Annexure 1

Elimination of Import Customs Duties under the China–Pakistan Free Trade Agreement

The categories which are applicable to imports into Pakistan from China are the following:

1. **“Category I”**: Import customs duties shall be removed in four stages beginning on the date this Agreement enters into force, and such goods shall be duty-free, effective January 1st of year three. Each year’s Margin of Preference (MOP) is as follows:

Category	Entry into force	01.01.08	01.01.09	01.01.10
I	25 %	50 %	75 %	100 %

2. “**Category II**”: Import customs duties shall be reduced to or below 5 % in five years after entry into force of this Agreement. The MOP is as follows:

Category	Entry into force	01.01.08	01.01.09	01.01.10	01.01.11	01.01.12
II	$(X - 5)$ 6X	$2(X - 5)$ 6X	$3(X - 5)$ 6X	$4(X - 5)$ 6X	$5(X - 5)$ 6X	$6(X - 5)$ 6X

X refers to applied MFN tariff rates of the current year

3. “**Category III**”: Import customs duties shall be reduced by the margin of preference of 50 % within five years of entry into force of this Agreement. Each year’s MOP is as follows:

Category	Entry into force	01.01.08	01.01.09	01.01.10	01.01.11	01.01.12
III	8 %	16 %	25 %	33 %	41 %	50 %

4. “**Category IV**”: Import customs duties shall be reduced by the margin of preference of 20 % within five years of entry into force of this Agreement. Each year’s MOP is as follows:

Category	Entry into force	01.01.08	01.01.09	01.01.10	01.01.11	01.01.12
IV	3 %	6 %	10 %	13 %	16 %	20 %

5. “**Category V**”: No concession.

Annexure 2

See Tables 5, 6, 7, 8, 9, 10 and 11.

Table 5 Pharmaceutical items in Pakistan's sensitive list under SAFTA

Sr. no.	HS code (at 6 digit level)	Categorisation	Items
1	283620	Bulk and intermediary	Disodium carbonate
2	283630	Bulk and intermediary	Sodium hydrogen carbonate (sodium bicarbonate)
3	284910	Bulk and intermediary	Calcium Carbide
4	291511	Bulk and intermediary	Formic acid
5	291521	Bulk and intermediary	Acetic acid
6	291531	Bulk and intermediary	Ethyl acetate
7	291533	Bulk and intermediary	<i>n</i> -Butyl acetate
8	291570	Bulk and intermediary	Palmitic acid, stearic acid, their salts and esters
9	291639	Bulk and intermediary	Aromatic monocarboxylic acids and their derivatives, nes
10	291732	Bulk and intermediary	Diethyl orthophthal
11	291735	Bulk and intermediary	Phthalic anhydride
12	291736	Bulk and intermediary	Terephthalic acid and its salts
13	291822	Bulk and intermediary	O-Acetylsalicylic acid, its salts and esters
14	292429	Bulk and intermediary	Cyclic amides and their derivatives, nes; salts thereof
15	293359	Bulk and intermediary	Heterocyclic comps
16	293500	Bulk and intermediary	Sulphonamides in bulk
17	293941	Bulk and intermediary	Ephedrine and its salts
18	293942	Bulk and intermediary	Pseudoephedrine (INN) and its salts
19	294110	Bulk and intermediary	Penicillins and their derivatives, in bulk; salts thereof
20	294190	Bulk and intermediary	Antibiotics nes, in bulk
21	300490	Formulation	Medicaments, nes, in dosage
22	300510	Formulation	Dressings and other articles having an adhesive layer
23	300610	Formulation	Suture materials, sterile; laminaria, sterile; haemostatics, sterile
24	300691	Formulation	Appliances identifiable for ostomy use

Table 6 Pharmaceutical items in Pakistan's negative list^a

Sr. no.	HS code (at 6-digit level)	Categorisation	Items
1	283630	Bulk and intermediary	Sodium hydrogen carbonate (Sodium bicarbonate)
2	290544	Bulk and intermediary	D-glucitol (sorbitol)
3	290545	Bulk and intermediary	Glycerol
4	290549	Bulk and intermediary	Other
5	291521	Bulk and intermediary	Acetic acid
6	291531	Bulk and intermediary	Ethyl acetate
7	291533	Bulk and intermediary	<i>n</i> -Butyl acetate
8	291639	Bulk and intermediary	Ibuprofen
9	292429	Bulk and intermediary	Paracetamol
10	293349	Bulk and intermediary	Other
11	293500	Bulk and intermediary	Sulphamethazole
12	293941	Bulk and intermediary	Ephedrine and its salts
13	293942	Bulk and intermediary	Pseudoephedrine (INN) and its salts
14	293949	Bulk and intermediary	Other
15	293969	Bulk and intermediary	Other
16	294110	Bulk and intermediary	Penicillins and their derivatives with a penicillanic acid structure; salts thereof
17	294130	Bulk and intermediary	Tetracyclines and their derivatives; salts thereof
18	294140	Bulk and intermediary	Chloramphenicol and its derivatives salts thereof
19	294150	Bulk and intermediary	Erythromycin and its derivatives; salts thereof
20	294190	Bulk and intermediary	Cephalexin
21	300230	Formulation	Vaccines for veterinary medicine
22	300290	Formulation	Human blood; animal blood prepared for therapeutic or diagnostic uses; toxins, cultures of microorganisms
23	300310	Formulation	Medicaments containing penicillins or derivatives thereof, with a penicillanic acid structure, or streptomycins or their derivatives
24	300320	Formulation	Medicaments containing other antibiotics
25	300340	Formulation	Medicaments containing alkaloids or derivatives thereof but not Medicaments containing hormones or other products of heading 29.37 or antibiotics
26	300410	Formulation	Ampicillin, Amoxicillin and Cloxacillin capsules/syrup
27	300420	Formulation	Medicaments containing other antibiotics
28	300431	Formulation	Medicaments containing insulin
29	300432	Formulation	Medicaments containing corticosteroid hormones, their derivatives or structural analogues

(continued)

Table 6 (continued)

Sr. no.	HS code (at 6-digit level)	Categorisation	Items
30	300450	Formulation	Medicaments Medicaments containing provitamins, vitamins, incl. natural concentrates and derivatives thereof
31	300490	Formulation	Medicaments consisting of mixed or unmixed products for therapeutic or prophylactic purposes, in measured doses or put up for retail sale
32	300510	Formulation	Adhesive dressings and other articles having an adhesive layer, impregnated or covered with pharmaceutical substances or put up for retail sale for medical, surgical, dental or veterinary purposes
33	300590	Formulation	Wadding, gauze, bandages and the like, e.g. dressings, adhesive plasters, poultices, impregnated or covered with pharmaceutical substances or put up for retail sale for medical, surgical, dental or dental haemostatics
34	560110	Formulation	Diapers of waddings
35	960200	Bulk and intermediary	Gelatin capsules

^aNegative List provided by the Ministry of Commerce, Pakistan at the 8-digit level has been compressed at the 6-digit level

Table 7 Pharmaceutical items in India's sensitive list

Sr. no.	HS code	Categorisation	Items
1	28170010	Bulk and intermediary	Zinc Oxide
2	30039011	Formulation	Medicants of Ayurvedic system
3	300410	Formulation	Containing penicillins or derivatives thereof, with a penicillanic acid structure, or streptomycins
4	300420	Formulation	Containing other antibiotics
5	300610	Formulation	Sterile absorbable surgical or dental yarn; sterile surgical or dental adhesion barriers, whether or not absorbable
6	300691	Formulation	Appliances identifiable for ostomy use

Table 8 China's exports of pharmaceutical items to Pakistan in 2012

Sr. No.	Product code	Product description	Categorisation	Chinese pharmaceutical exports to Pakistan (Trade value in USD million)
1	294190	Antibiotics & their derivatives (excl. of 2941.10-2941.50); salts thereof	Bulk and intermediary	38.5217
2	293299	Heterocyclic compounds with oxygen heteroatom(s) only (excl. of 2932.11-2932.95)	-	21.9612
3	300490	Medicaments (excluding goods of heading 30.02/30.05/30.06/3004.10-3004.50) consisting of mixed/unmixed products for therapeutic/prophylactic uses, put up in measured doses (including those in the form of transdermal administration systems)/in forms/packi	Formulation	20.5659
4	293399	Heterocyclic comps. with nitrogen heteroatom(s) only (excl. of 2933.11-2933.91)		19.8916
5	293339	Heterocyclic comps. containing an unfused pyridine ring (whether/not hydrogenated) in the structure (excl. of 2933.31-2933.33)	Bulk and intermediary	19.8517
6	293090	Organo-sulphur compounds (excl. of 2930.20-2930.50)	Bulk and intermediary	19.5629
7	292429	Cyclic amides (incl. cyclic carbamates) & their derivatives (excl. of 2924.21-2924.24); salts thereof	Bulk and intermediary	16.0548
8	292242	Glutamic acid & its salts	Bulk and intermediary	15.7747
9	293499	Nucleic acids&their salts, whether/not chemically defined,n.e.s.; other heterocyclic compounds,n.e.s.	-	13.6552
10	291814	Citric acid	Bulk and intermediary	12.6573
11	292910	Isocyanates	Bulk and intermediary	10.9235
12	292249	Amino-acids, other than those containing > one kind of oxygen function, & their esters (excl. of 2922.41-2922.44); salts thereof	Bulk and intermediary	10.4709
13	293349	Heterocyclic comps. containing in the structure a quinoline/isoquinoline ring-system (whether/not hydrogenated), not further fused, other than levorphanol (INN) & its salts	Bulk and intermediary	9.0405
14	300431	Medicaments containing insulin, put up in measured doses/forms/packings for RS	Formulation	8.89529
15	300420	Medicaments containing other antibiotics (excl. of 3004.10), put up in measured doses/forms/packings for RS	Formulation	8.73515
16	290611	Menthol	Bulk and intermediary	8.41645
17	292250	Amino-alcohol-phenols, amino-acid-phenols & other amino-comps. with oxygen function	Bulk and intermediary	8.28442
18	291620	Cyclanic/cylenic/cycloterpenic monocarboxylic acids, their anhydrides, halides, peroxides, peroxyacids & their derivatives	Bulk and intermediary	8.16303
19	290349	Halogenated derivatives of acyclic hydrocarbons containing 2/more different halogens (excl. of 2903.41-2903.47)	-	7.38842
20	300210	Antisera & other blood fractions & modified immunological products, whether/not obt. by means of biotechnological processes	Formulation	6.76002

21	290339	Fluorinated/brominated/iodinated derivatives of acyclic hydrocarbons (excl. of 2903.31)	-	6.74451
22	294130	Tetracyclines & their derivatives; salts thereof	Bulk and intermediary	6.33184
23	293500	Sulphonamides	Bulk and intermediary	6.02983
24	293329	Heterocyclic comps. containing an unfused imidazole ring (whether/not hydrogenated) in the structure, other than hydantoin & its derivatives	Bulk and intermediary	5.99395
25	293020	Thiocarbamates & dithiocarbamates	Bulk and intermediary	5.68032
26	294110	Penicillins & their derivatives with a penicillanic acid structure; salts thereof	Bulk and intermediary	5.65925
27	294150	Erythromycin & its derivatives; salts thereof	Bulk and intermediary	4.7482
28	291539	Esters of acetic acid (excl. of 2915.31-2915.36)	Bulk and intermediary	4.65472
29	292229	Amino-naphthols&other amino-phenols, other than those containing more than one kind of oxygen function(excl. of 2922.21), their ethers&esters; salts thereof	Bulk and intermediary	4.453
30	292241	Lysine & its esters; salts thereof	Bulk and intermediary	4.43298
31	292690	Nitrile-function comps. (excl. of 2926.10-2923.30)	-	4.26749
32	293361	Melamine	Bulk and intermediary	4.13179
33	292990	Compounds with other nitrogen function, other than isocyanates	-	4.12432
34	293627	Vitamin C & its derivatives	-	4.11594
35	300410	Medicaments containing penicillins/derivatives thereof with a penicillanic acid structure/streptomycins/their derivatives, put up in measured doses/forms/packings for RS	Formulation	3.9834
36	291614	Esters of methacrylic acid	Bulk and intermediary	3.89433
37	293359	Heterocyclic comps. containing a pyrimidine ring (whether/not hydrogenated)/piperazine ring in the structure (excl. of 2933.52-2933.55)	Bulk and intermediary	3.8848
38	291512	Salts of formic acid	Bulk and intermediary	3.42881
39	292700	Diazo- /azo- /azoxy-comps.	Bulk and intermediary	3.17808
40	293722	Halogenated derivatives of corticosteroidal hormones	Bulk and intermediary	3.09492
41	300390	Medicaments (excluding goods of heading 30.02, 30.05/30.06/of 3003.10-3003.40) consisting of two/more constituents which have been mixed together for therapeutic/prophylactic uses, not put up in measured doses/in forms/packings for retail sale	Formulation	3.07361
42	293229	Lactones (excl. coumarin, methylcoumarins & ethylcoumarins)	Bulk and intermediary	2.96202
43	292511	Saccharin & its salts	Bulk and intermediary	2.96021
44	292419	Acyclic amides (including acyclic carbamates, excl. of 2924.11& 2924.12)&their derivatives; salts thereof	-	2.87346
45	292159	Aromatic polyamines & their derivatives (excl. of 2921.51); salts thereof	Bulk and intermediary	2.85007

46	291639	Aromatic monocarboxylic acids, their anhydrides, halides, peroxides, peroxyacids & their derivatives (excl. of 2916.31-2916.36)	Bulk and intermediary	2.80787
47	300320	Medicaments consisting of 2/more constituents, containing other antibiotics (excl. of 3003.10), not put up in measured doses/forms/packagings for RS	Formulation	2.58086
48	291529	Salts of acetic acid	Bulk and intermediary	2.4449
49	291511	Formic acid	Bulk and intermediary	2.44436
50	293721	Cortisone, hydrocortisone, prednisone (dehydrocortisone) & prednisolone (dehydrohydrocortisone)	Bulk and intermediary	2.27173
51	293628	Vitamin E & its derivatives	-	2.20104
52	293625	Vitamin B6 & its derivatives	-	2.18552
53	292221	Aminohydroxynaphthalenesulphonic acids & their salts	Bulk and intermediary	2.17832
54	290619	Cyclanic/cyclenic/cycloterpenic alcohols & their halogenated/sulphonated/nitrated/nitrosated derivatives (excl. of 2906.11-2906.13)	Bulk and intermediary	2.14926
55	293100	Organo-inorganic compounds, n.e.s. in Ch.29	-	2.04703
56	300439	Medicaments containing hormones/other products of 29.37 but not containing antibiotics, put up in measured doses/forms/packings for RS	Formulation	1.99771
57	290532	Propylene glycol (propane-1,2-diol)	Bulk and intermediary	1.95724
58	293319	Heterocyclic comps. containing an unfused pyrazole ring (whether/not hydrogenated) in the structure (excl. phenazone & its derivatives)	Bulk and intermediary	1.94676
59	290542	Pentaerythritol	Bulk and intermediary	1.85693
60	291612	Esters of acrylic acid	Bulk and intermediary	1.75475
61	293420	Compounds containing in the structure a benzothiazole ring-system (whether/not hydrogenated), not further fused	Bulk and intermediary	1.65822
62	290960	Alcohol peroxides, ether peroxides, ketone peroxides & their halogenated/sulphonated/nitrated/nitrosated derivatives	Bulk and intermediary	1.62236
63	293369	Heterocyclic comps. containing an unfused triazine ring (whether/not hydrogenated) in the structure, other than melamine	Bulk and intermediary	1.58555
64	290219	Cyclanes, cyclenes & cycloterpenes other than cyclohexane	-	1.55794
65	291899	Carboxylic acids with additional oxygen function & their anhydrides/halides/peroxides/peroxyacids; their halogenated/sulphonated/nitrated/nitrosated derivatives(excl. 2918.11-2918.91)	-	1.52555
66	290312	Dichloromethane (methylene chloride)	Bulk and intermediary	1.48377
67	291714	Maleic anhydride	Bulk and intermediary	1.47148
68	292390	Quaternary ammonium salts & hydroxides; lecithins & other phosphoaminolipids, whether/not chemically defined (excl. of 2923.10 & 2923.20)	Bulk and intermediary	1.46409
69	291631	Benzoic acid, its salts & esters	Bulk and intermediary	1.41838

70	294200	Organic comps. n.e.s. in Ch.29	Bulk and intermediary	1.40601
71	293626	Vitamin B12 & its derivatives	-	1.39079
72	292149	Aromatic monoamines & their derivatives (excl. of 2921.41-2921.46); salts thereof	Bulk and intermediary	1.3195
73	291815	Salts & esters of citric acid	Bulk and intermediary	1.27834
74	291822	O-Acetylsalicylic acid, its salts & esters	-	1.25438
75	290930	Aromatic ethers & their halogenated/sulphonated/nitrated/nitrosated derivatives	Bulk and intermediary	1.12765
76	300590	Wadding, gauze, bandages & similar articles (eg. dressings, adhesive plasters, poultices), impregnated/coated with pharmaceutical substances/put up in forms/packings for retail sale for medical, surgical, dental/veterinary purposes(excl. of 3005.10)	Formulation	1.09948
77	293930	Caffeine & its salts	Bulk and intermediary	1.06079
78	291711	Oxalic acid, its salts & esters	Bulk and intermediary	1.02187
79	293622	Vitamin B1 & its derivatives	Bulk and intermediary	1.01868
80	294120	Streptomycins & their derivatives; salts thereof	Bulk and intermediary	0.96723
81	292151	o-, m-, p-Phenylenediamine, diaminotoluenes, & their derivatives; salts thereof	Bulk and intermediary	0.96335
82	291570	Palmitic acid, stearic acid, their salts & esters	Bulk and intermediary	0.95304
83	292145	1-Naphthylamine (alpha-naphthylamine), 2-naphthylamine (beta-naphthylamine) & their derivatives; salts thereof	Bulk and intermediary	0.95015
84	300450	Medicaments containing vitamins/other products of 29.36 (excl. of 3004.10-3004.40), put up in measured doses/forms/packings for RS	Formulation	0.94564
85	292620	1-Cyanoguanidine (dicyandiamide)	Bulk and intermediary	0.94352
86	291241	Vanillin (4-hydroxy-3-methoxybenzaldehyde)	Bulk and intermediary	0.94133
87	291531	Ethyl acetate	Bulk and intermediary	0.88927
88	300510	Adhesive dressings & other articles having an adhesive layer	Formulation	0.8667
89	293629	Vitamins & their derivatives, unmixed (excl. of 2936.10-2936.28)	-	0.86025
90	291619	Unsaturated acyclic monocarboxylic acids, their anhydrides, halides, peroxides, peroxyacids & their derivatives (excl. of 2916.11-2916.15)	Bulk and intermediary	0.83403
91	291816	Gluconic acid, its salts & esters	Bulk and intermediary	0.7843
92	290323	Tetrachloroethylene (perchloroethylene)	Bulk and intermediary	0.78256
93	294140	Chloramphenicol & its derivatives; salts thereof	Bulk and intermediary	0.77639
94	290290	Xylenes (excl. of 2902.41-2902.70)	Bulk and intermediary	0.75218
95	291219	Acyclic aldehydes without other oxygen function (excl. of 2912.11&2912.12)	Bulk and intermediary	0.73049
96	290899	Halogenated/sulphonated/nitrated/nitrosated derivatives of phenols/phenol-alcohols (excl. of 2908.11-2908.91)	-	0.70308

97	290543	Mannitol	Bulk and intermediary	0.6606
98	300220	Vaccines for human medicine	Formulation	0.63543
99	300432	Medicaments containing corticosteroid hormones, their derivatives & structural analogues, put up in measured doses/forms/packings for RS	Formulation	0.62833
100	300310	Medicaments containing penicillins/derivatives thereof with a penicillanic acid structure/streptomycins/their derivatives, not put up in measured doses/forms/packagings for RS	Formulation	0.61302
101	292219	Amino-alcohols other than those containing > one kind of oxygen function (excl. of 2922.11-2922.14), their ethers & esters; salts thereof	Bulk and intermediary	0.5841
102	291830	Carboxylic acids with aldehyde/ketone function but without other oxygen function, their anhydrides, halides, peroxides, peroxyacids & their derivatives	-	0.5684
103	290322	Trichloroethylene	Bulk and intermediary	0.52632
104	293719	Polypeptide hormones, protein hormones & glycoprotein hormones, their derivatives & structural analogues (excl. of 2937.11 & 2937.12)	Bulk and intermediary	0.49744
105	291469	Quinones other than anthraquinone	Bulk and intermediary	0.49217
106	291990	Phosphoric esters&their salts, including lactophosphates; their halogenated, sulphonated, nitrated/nitrosated derivatives(excl. of 2919.10)	Bulk and intermediary	0.47479
107	291829	Carboxylic acids with phenol function but without other oxygen function, their anhydrides, halides, peroxides, peroxyacids & their derivatives (excl. of 2918.21-2918.23)	-	0.46379
108	292143	Toluidines & their derivatives; salts thereof	Bulk and intermediary	0.45128
109	292142	Aniline derivatives & their salts	Bulk and intermediary	0.44445
110	291712	Adipic acid, its salts & esters	Bulk and intermediary	0.43336
111	290729	Polyphenols (excl. of 2907.21-2907.23); phenol-alcohols	Bulk and intermediary	0.43116
112	300190	Glands&other organs for organo-therapeutic uses, dried, whether/not powdered; heparin&its salts; other human/animal substances prepared for therapeutic/prophylactic uses, n.e.s./inclcd.	Formulation	0.43069
113	293379	Lactams (excl. of 2933.71 & 2933.72)	Bulk and intermediary	0.41854
114	292529	Imines&their derivatives (excl. of 2925.21); salts thereof	-	0.41345
115	293723	Oestrogens & progestogens	Bulk and intermediary	0.37575
116	290919	Acyclic ethers other than diethyl ether, & their halogenated/sulphonated/nitrated/nitrosated derivatives	Bulk and intermediary	0.37198
117	293729	Steroidal hormones, their derivatives & structural analogues (excl. of 2937.21-2937.23)	Bulk and intermediary	0.37112
118	290920	Cyclanic/cyclic/cycloterpenic ethers & their halogenated/sulphonated/nitrated/nitrosated derivatives	-	0.37064
119	291590	Saturated acyclic monocarboxylic acids & their anhydrides, halides, peroxides&peroxyacids; their halogenated/sulphonated/nitrated/nitrosated derivatives (excl. of 2915.11-2915.70)	Bulk and intermediary	0.36795

120	293959	Theophylline & aminophylline (theophylline-ethylenedia-mine) & their derivatives (excl. of 2939.51); salts thereof, n.e.s.	Bulk and intermediary	0.36593
121	294000	Sugars, chemically pure, other than sucrose, lactose, maltose, glucose&fructose; sugar ethers, sugar acetals&sugar esters,& their salts (excl. of 29.37/29.38/29.39)	Bulk and intermediary	0.35705
122	292090	Esters of inorganic acids of non-metals (excl. esters of hydrogen halides) & their salts (excl. of 2919.00&2920.10); their halogenated/sulphonated/nitrated/nitrosated derivatives, n.e.s.	Bulk and intermediary	0.35099
123	292130	Cyclanic/cyclenic/cycloterpenic mono-/polyamines, & their derivatives; salts thereof	Bulk and intermediary	0.35073
124	291429	Cyclanic/cyclenic/cycloterpenic ketones without other oxygen function (excl. camphor, cyclohexanone & methylcyclohexanones, ionones & methylionones)	Bulk and intermediary	0.34599
125	293890	Glycosides, other than rutoside (rutin) & its derivatives, natural/reproduced by synthesis, & their salts, ethers, esters & other derivatives	Bulk and intermediary	0.34412
126	293212	2-Furaldehyde (furfuraldehyde)	Bulk and intermediary	0.33976
127	290949	Ether-alcohols & their halogenated/sulphonated/nitrated/nitrosated derivatives (excl. of 2909.41-2909.44)	Bulk and intermediary	0.33787
128	291812	Tartaric acid	Bulk and intermediary	0.33127
129	291260	Paraformaldehyde	Bulk and intermediary	0.32123
130	300630	Opacifying preparations for X-ray examinations; diagnostic reagents designed to be administered to the patient	Formulation	0.31002
131	291811	Lactic acid, its salts&esters	Bulk and intermediary	0.29073
132	291550	Propionic acid, its salts & esters	Bulk and intermediary	0.28376
133	293621	Vitamins A & their derivatives	Bulk and intermediary	0.28243
134	291560	Butanoic acids, pentanoic acids, their salts & esters	Bulk and intermediary	0.23146
135	290519	Saturated monohydric alcohols (excl. of 2905.11-2905.17)	Bulk and intermediary	0.22452
136	293623	Vitamin B2 & its derivatives	Bulk and intermediary	0.22168
137	290621	Benzyl alcohol	Bulk and intermediary	0.20266
138	290559	Halogenated/sulphonated/nitrated/nitrosated derivatives of acyclic alcohols, other than ethchlorvynol (INN)	-	0.1987
139	292129	Acyclic polyamines (excl. ethylenediamine & hexamethylenediamine) & their derivatives; salts thereof, n.e.s.	Bulk and intermediary	0.19431
140	292320	Lecithins & other phosphoaminolipids	Bulk and intermediary	0.19354
141	292800	Organic derivatives of hydrazine/of hydroxylamine	Bulk and intermediary	0.1902
142	293219	Heterocyclic comps. containing an unfused furan ring (whether/not hydrogenated) in the structure (excl. of 2932.11-2932.13)	Bulk and intermediary	0.17811

143	300440	Medicaments containing alkaloids/derivatives thereof but not containing hormones/other products of 29.37/antibiotics, put up in measured doses/forms/packings for RS	Formulation	0.16782
144	292421	Ureines & their derivatives; salts thereof	-	0.16599
145	290629	Aromatic cyclic alcohols & their halogenated/sulphonated/nitrated/nitrosated derivatives (excl. of 2906.11-2906.21)	Bulk and intermediary	0.16217
146	292144	Diphenylamine & its derivatives; salts thereof	Bulk and intermediary	0.15687
147	291242	Ethylvanillin (3-ethoxy-4-hydroxybenzaldehyde)	Bulk and intermediary	0.15461
148	292243	Anthranilic acid & its salts	Bulk and intermediary	0.15067
149	291819	Carboxylic acids with alcohol function but without other oxygen function, their anhydrides, halides, peroxides, peroxyacids & their derivatives (excl. of 2918.11-2918.18)	Bulk and intermediary	0.13546
150	291821	Salicylic acid & its salts	Bulk and intermediary	0.13349
151	290715	Naphthols & their salts	Bulk and intermediary	0.12474
152	292519	Imides & their derivatives other than saccharin & glutethimide (INN); salts thereof	Bulk and intermediary	0.12387
153	291611	Acrylic acid & its salts	Bulk and intermediary	0.12107
154	290490	Sulphonated/nitrated/nitrosated derivatives of hydrocarbons, whether/not halogenated (excl. of 2904.10 & 2904.20)	Bulk and intermediary	0.11882
155	291823	Esters of salicylic acid & their salts, other than salicylic acid & its salts/O-acetylsalicylic acid & its salts & esters	-	0.11844
156	291229	Cyclic aldehydes without other oxygen function, other than benzaldehyde	Bulk and intermediary	0.11696
157	292310	Choline & its salts	Bulk and intermediary	0.11635
158	290124	Buta-1,3-diene & isoprene	Bulk and intermediary	0.1163
159	293391	Alprazolam (INN), camazepam (INN), chlordiazepoxide (INN), clonazepam (INN), clorazepate, delorazepam (INN), diazepam (INN), estazolam (INN), ethyl loflazepate (INN), fludiazepam (INN), flunitrazepam (INN), flurazepam (INN), halazepam (INN), lorazepam(IN)	-	0.11508
160	290531	Ethylene glycol (ethanediol)	Bulk and intermediary	0.1073
161	293410	Compounds containing an unfused thiazole ring (whether/not hydrogenated) in the structure	Bulk and intermediary	0.10522
162	290950	Ether-phenols, ether-alcohol-phenols & their halogenated/sulphonated/nitrated/nitrosated derivatives	Bulk and intermediary	0.10228
163	290522	Acyclic terpene alcohols	Bulk and intermediary	0.10195
164	291412	Butanone (methyl ethyl ketone)	Bulk and intermediary	0.0982
165	290719	Other monophenols	Bulk and intermediary	0.09261
166	290420	Sulphonated/nitrated/nitrosated derivatives of hydrocarbons, whether/not halogenated, containing only nitro/nitroso groups	Bulk and intermediary	0.08897

167	291719	Acyclic polycarboxylic acids, their anhydrides, halides, peroxides, peroxyacids & their derivatives (excl. of 2917.11-2917.14)	Bulk and intermediary	0.08278
168	290544	D-glucitol (sorbitol)	Bulk and intermediary	0.07508
169	293321	Hydantoin & its derivatives	Bulk and intermediary	0.07335
170	293430	Compounds containing in the structure a phenothiazine ring-system (whether/not hydrogenated), not further fused	Bulk and intermediary	0.07233
171	300640	Dental cements & other dental fillings; bone reconstruction cements	Formulation	0.07154
172	300660	Chemical contraceptive preparations based on hormones/other products of 29.37/spermicides	Formulation	0.06977
173	291632	Benzoyl peroxide & benzoyl chloride	Bulk and intermediary	0.06791
174	291513	Esters of formic acid	Bulk and intermediary	0.06653
175	290722	Hydroquinone (quinol) & its salts	Bulk and intermediary	0.06391
176	290359	Halogenated derivatives of cyclanic/cyclenic/cycloterpenic hydrocarbons (excl. of 2903.51 & 2903.52)	Bulk and intermediary	0.0571
177	291521	Acetic acid	Bulk and intermediary	0.05517
178	293712	Insulin & its salts	Bulk and intermediary	0.05302
179	290613	Sterols & inositols	Bulk and intermediary	0.05294
180	290361	Chlorobenzene, o-dichlorobenzene & p-dichlorobenzene	Bulk and intermediary	0.05229
181	291439	Aromatic ketones without other oxygen function other than phenylacetone (phenylpropan-2-one)	Bulk and intermediary	0.05055
182	300120	Extracts of glands/of other organs/of their secretions	Formulation	0.05011
183	291613	Methacrylic acid & its salts	Bulk and intermediary	0.04939
184	292141	Aniline & its salts	Bulk and intermediary	0.0489
185	300610	Sterile surgical catgut, similar sterile suture materials (including sterile absorbable surgical/dental yarns)&sterile tissue adhesives for surgical wound closure; sterile laminaria&sterile laminaria tents; sterile absorbable surgical/dental/veterinary p	Formulation	0.0481
186	290110	Saturated acyclic hydrocarbons	-	0.04767
187	290721	Resorcinol & its salts	Bulk and intermediary	0.04565
188	293790	Hormones, prostaglandins, thromboxanes & leukotrienes, natural/reproduced by synthesis(excl. of 2937.11-2937.50); derivatives & structural analogues thereof, including chain modified polypeptides, used primarily as hormones	Bulk and intermediary	0.04417
189	293624	D- /DL-Pantothenic acid (Vitamin B3/Vitamin B5) & its derivatives	-	0.04327
190	293311	Phenazone (antipyrin) & its derivatives	Bulk and intermediary	0.0423
191	291533	n-Butyl acetate	Bulk and intermediary	0.04081
192	291461	Anthraquinone	Bulk and intermediary	0.03402

193	300620	Blood-grouping reagents	Formulation	0.03011
194	290819	Halogenated derivatives of phenols/phenol-alcohols containing only halogen substituents & their salts (excl. of 2908.11)	-	0.02879
195	292121	Ethylenediamine & its salts	Bulk and intermediary	0.02866
196	291470	Halogenated/sulphonated/nitrated/nitrosated derivatives of ketones & quinones	Bulk and intermediary	0.02813
197	290260	Ethylbenzene	Bulk and intermediary	0.02711
198	291422	Cyclohexanone & methylcyclohexanones	Bulk and intermediary	0.02648
199	293353	Allobarbital (INN), amobarbital (INN), barbital (INN), butalbital (INN), butobarbital, cyclobarbital (INN), methylphenobarbital (INN), pentobarbital (INN), phenobarbital (INN), secbutobarbital (INN), secobarbital (INN) & vinylbital (INN); salts thereof	-	0.02567
200	300650	First-aid boxes & kits	Formulation	0.0247
201	293371	6-Hexanelactam (epsilon-caprolactam)	Bulk and intermediary	0.02376
202	290944	Monoalkylethers of ethylene glycol/diethylene glycol (excl. of 2909.43)	Bulk and intermediary	0.02336
203	290516	Octanol (octyl alcohol) & isomers thereof	-	0.02146
204	293332	Piperidine & its salts	Bulk and intermediary	0.01989
205	291450	Ketone-phenols & ketones with other oxygen function	-	0.01899
206	300290	Human blood; animal blood prepared for therapeutic/prophylactic/diagnostic uses; toxins, cultures of micro-organisms (excl. yeasts) & similar products	Formulation	0.01893
207	290529	Unsaturated monohydric alcohols other than acyclic terpene alcohols	-	0.01806
208	291615	Oleic/linoleic/linolenic acids, their salts & esters	Bulk and intermediary	0.01739
209	290545	Glycerol other than crude	Bulk and intermediary	0.0171
210	293030	Thiuram mono- /di- /tetrasulphides	Bulk and intermediary	0.01696
211	291734	Esters of orthophthalic acid, other than dioctyl/dinonyl/didecyl orthophthalates	Bulk and intermediary	0.01618
212	291739	Aromatic polycarboxylic acids, their anhydrides, halides, peroxides, peroxyacids & their derivatives (excl. of 2917.31-2917.33)	-	0.01503
213	291713	Azelaic acid, sebacic acid, their salts & esters	Bulk and intermediary	0.01446
214	290319	Saturated chlorinated derivatives of acyclic hydrocarbons (excl. of 2903.11-2903.15)	-	0.01415
215	290244	Mixed xylene isomers	Bulk and intermediary	0.01228
216	292019	Thiophosphoric esters (phosphorothioates)&their salts; their halogenated, sulphonated, nitrated/nitrosated derivatives (excl. of 2920.11)	-	0.01204
217	290712	Cresols & their salts	Bulk and intermediary	0.01191
218	290410	Sulphonated/nitrated/nitrosated derivatives of hydrocarbons, whether/not halogenated, containing only sulpho groups, their salts & ethyl esters	Bulk and intermediary	0.0117

219	292239	Amino-aldehydes, amino-ketones & amino-quinones, other than those containing > one kind of oxygen function (excl. of 2922.31); salts thereof	-	0.00987
220	291440	Ketone-alcohols & ketone-aldehydes	-	0.00854
221	290369	Halogenated derivatives of aromatic hydrocarbons (excl. of 2903.61 & 2903.62)	Bulk and intermediary	0.00828
222	292119	Acyclic monoamines & their derivatives (excl. of 2921.11); salts thereof	Bulk and intermediary	0.00822
223	293040	Methionine	Bulk and intermediary	0.00753
224	290941	2,2'-Oxydiethanol (diethylene glycol, digol)	Bulk and intermediary	0.00738
225	290517	Dodecan-1-ol (lauryl alcohol), hexadecan-1-ol (cetyl alcohol) & octadecan-1-ol (stearyl alcohol)	Bulk and intermediary	0.0069
226	291736	Terephthalic acid & its salts	Bulk and intermediary	0.00659
227	293949	Ephedrine & their salts, other than ephedrine, pseudoephedrine (INN) & cathine (INN)	Bulk and intermediary	0.00645
228	291540	Mono- /di- /trichloroacetic acids, their salts & esters	Bulk and intermediary	0.0064
229	293999	Vegetable alkaloids, natural/reproduced by synthesis, & their salts, ethers, esters & other derivatives (excl. of 2939.11-2939.91)	Bulk and intermediary	0.00555
230	290711	Phenol (hydroxybenzene) & its salts	Bulk and intermediary	0.00536
231	290539	Diols other than ethylene glycol (ethanediol) & propylene glycol (propane-1,2-diol)	Bulk and intermediary	0.00513
232	300670	Gel preparations designed to be used in human/veterinary medicine as a lubricant for parts of the body for surgical operations/physical examinations/as a coupling agent between the body & medical instruments	Formulation	0.00465
233	291419	Acyclic ketones without other oxygen function (excl. of 2914.11-2914.13)	Bulk and intermediary	0.00456
234	291221	Benzaldehyde	Bulk and intermediary	0.00406
235	290129	Unsaturated acyclic hydrocarbons (excl. of 2901.21-2901.24)	Bulk and intermediary	0.00389
236	291634	Phenylacetic acid & its salts	Bulk and intermediary	0.0036
237	290943	Monobutyl ethers of ethylene glycol/of diethylene glycol	Bulk and intermediary	0.00292
238	291300	Halogenated/sulphonated/nitrated/nitrosated derivatives of products of 29.12	Bulk and intermediary	0.0029
239	293690	Provitamins&vitamins, natural/reproduced by synthesis (including natural concentrates), derivatives thereof used primarily as vitamins,&intermixtures of the foregoing, whether/not in any solvent,n.e.s.in Ch 29.36	-	0.0024
239	293690	Provitamins&vitamins, natural/reproduced by synthesis (including natural concentrates), derivatives thereof used primarily as vitamins,&intermixtures of the foregoing, whether/not in any solvent,n.e.s.in Ch 29.36	-	0.0024
240	293331	Pyridine & its salts	Bulk and intermediary	0.0022
241	293810	Rutoside (rutin) & its derivatives, natural/reproduced by synthesis	Bulk and intermediary	0.00204
242	290549	Polyhydric alcohols (excl. of 2905.41-2905.45)	Bulk and intermediary	0.002

243	291411	Acetone	Bulk and intermediary	0.00142
244	293750	Prostaglandins, thromboxanes & leukotrienes, their derivatives & structural analogues	Bulk and intermediary	0.0009
245	291090	Epoxides, epoxyalcohols, epoxyphenols & epoxyethers, with a three-membered ring, & their halogenated/sulphonated/nitrated/nitrosated derivatives (excl. of 2910.10-2910.40)	-	0.00011
246	290512	Propan-1-ol (propyl alcohol) & propan-2-ol (isopropyl alcohol)	Bulk and intermediary	0.000092

Pharmaceutical items that are in the negative list maintained by Pakistan for India

Table 9 Indian pharmaceutical exports to Pakistan (2012)

Sr. no.	Product code	Product description	Classification	Indian pharmaceutical exports to Pakistan (trade value in million USD)
1	290243	p-Xylene	Bulk and intermediary	134.50925
2	294200	Organic comps. n.e.s. in Ch. 29	Bulk and intermediary	25.520969
3	290241	o-Xylene	Bulk and intermediary	20.500756
4	290242	m-Xylene	Bulk and intermediary	17.293253
5	283110	Dithionites and sulphoxylates, of sod	Bulk and intermediary	8.080369
6	300490	Medicaments	Formulation	6.853115
7	300220	Vaccines for human medicine	Formulation	6.01916
8	293339	Heterocyclic comps. containing an u	Bulk and intermediary	4.390977
9	294190	Antibiotics and their derivatives	Bulk and intermediary	4.369815
10	294150	Erythromycin and its derivatives; sal	Bulk and intermediary	3.823499
11	290944	Monoalkylethers of ethylene glycol/	Bulk and intermediary	3.184117
12	293920	Alkaloids of cinchona and their derivat	Bulk and intermediary	3.162503
13	290544	D-glucitol (sorbitol)	Bulk and intermediary	2.886178
14	293329	Heterocyclic comps. containing an u	Bulk and intermediary	2.545641
15	293499	Nucleic acids and their salts, whether/	#N/A	2.464177
16	293999	Vegetable alkaloids, natural/reprod	Bulk and intermediary	2.162072
17	293359	Heterocyclic comps. containing a py	Bulk and intermediary	2.107157
18	293299	Heterocyclic compounds with oxygen	#N/A	1.939862
19	281830	Aluminium hydroxide	Bulk and intermediary	1.641946
20	300390	Medicaments	Formulation	1.630958
21	291711	Oxalic acid, its salts and esters	Bulk and intermediary	1.616305
22	292429	Cyclic amides	Bulk and intermediary	1.386621
23	293729	Steroidal hormones, their derivativ	Bulk and intermediary	1.381149
24	290919	Acyclic ethers other than diethyl e	Bulk and intermediary	1.356035
25	293719	Polypeptide hormones, protein hormo	Bulk and intermediary	1.327827
26	292250	Amino-alcohol-phenols, amino acid-p	Bulk and intermediary	1.263074
27	292221	Aminohydroxynaphthalenesulphonic ac	Bulk and intermediary	1.197322

(continued)

Table 9 (continued)

Sr. no.	Product code	Product description	Classification	Indian pharmaceutical exports to Pakistan (trade value in million USD)
28	292219	Amino-alcohols other than those con	Bulk and intermediary	1.121603
29	293311	Phenazone (antipyrin) and its derivat	Bulk and intermediary	1.104435
30	293942	Pseudoephedrine (INN) and its salts	Bulk and intermediary	1.05183
31	293712	Insulin and its salts	Bulk and intermediary	0.986508
32	291816	Gluconic acid, its salts and esters	Bulk and intermediary	0.969148
33	291734	Esters of orthophthalic acid, other	Bulk and intermediary	0.962677
34	300210	Antisera and other blood fractions &	Formulation	0.962238
35	293500	Sulphonamides	Bulk and intermediary	0.937647
36	293319	Heterocyclic comps. containing an u	Bulk and intermediary	0.82594
37	294140	Chloramphenicol and its derivatives;	Bulk and intermediary	0.821753
38	290410	Sulphonated/nitrated/nitrosated der	Bulk and intermediary	0.815018
39	293721	Cortisone, hydrocortisone, predniso	Bulk and intermediary	0.693584
40	280800	Nitric acid; sulphonitric acids	Bulk and intermediary	0.596639
41	293349	Heterocyclic comps. containing in t	Bulk and intermediary	0.529549
42	292159	Aromatic polyamines and their derivat	Bulk and intermediary	0.524545
43	300450	Medicaments containing vitamins/oth	Formulation	0.504108
44	293100	Organo-inorganic compounds, n.e.s.	#N/A	0.495744
45	290514	Butanols other than butan-1-ol	Bulk and intermediary	0.479323
46	292320	Lecithins and other phosphoaminolipid	Bulk and intermediary	0.446339
47	291590	Saturated acyclic monocarboxylic ac	Bulk and intermediary	0.432061
48	293959	Theophylline and aminophylline	Bulk and intermediary	0.428335
49	300431	Medicaments containing insulin, put	Formulation	0.384095
50	291440	Ketone-alcohols and ketone-aldehydes	#N/A	0.339565
51	290539	Diols other than ethylene glycol	Bulk and intermediary	0.335909
52	292142	Aniline derivatives and their salts	Bulk and intermediary	0.333312
53	281610	Hydroxide and peroxide of magnesium	Bulk and intermediary	0.313999
54	292229	Amino-naphthols and other amino-phenols	Bulk and intermediary	0.300046
55	290949	Ether-alcohols and their halogenated/	Bulk and intermediary	0.296347
56	291614	Esters of methacrylic acid	Bulk and intermediary	0.292259
57	291560	Butanoic acids, pentanoic acids, th	Bulk and intermediary	0.286352
58	291719	Acyclic polycarboxylic acids, their	Bulk and intermediary	0.284704
59	290290	Xylenes (excl. of 2902.41–2902.70)	Bulk and intermediary	0.281325
60	292421	Ureines and their derivatives; salts	#N/A	0.275041
61	300440	Medicaments containing alkaloids/de	Formulation	0.270224
62	292119	Acyclic monoamines and their derivati	Bulk and intermediary	0.269757
63	290319	Saturated chlorinated derivatives o	#N/A	0.255297
64	285200	Compounds, inorganic/organic, of me	#N/A	0.2505
65	290629	Aromatic cyclic alcohols and their ha	Bulk and intermediary	0.246794

(continued)

Table 9 (continued)

Sr. no.	Product code	Product description	Classification	Indian pharmaceutical exports to Pakistan (trade value in million USD)
66	293722	Halogenated derivatives of corticos	Bulk and intermediary	0.246645
67	282110	Iron oxides and hydroxides	Bulk and intermediary	0.244468
68	281122	Silicon dioxide	#N/A	0.24202
69	292145	1-Naphthylamine	Bulk and intermediary	0.221519
70	291450	Ketone-phenols and ketones with other	#N/A	0.22051
71	283650	Calcium carbonate	Bulk and intermediary	0.220416
72	293623	Vitamin B2 and its derivatives	Bulk and intermediary	0.211031
73	283319	Sodium sulphates other than disodiu	Bulk and intermediary	0.210711
74	281410	Anhydrous ammonia	#N/A	0.210671
75	293219	Heterocyclic comps. containing an u	Bulk and intermediary	0.210163
76	291811	Lactic acid, its salts and esters	Bulk and intermediary	0.208309
77	290420	Sulphonated/nitrated/nitrosated der	Bulk and intermediary	0.208184
78	292249	Amino acids, other than those conta	Bulk and intermediary	0.208156
79	292141	Aniline and its salts	Bulk and intermediary	0.204081
80	292241	Lysine and its esters; salts thereof	Bulk and intermediary	0.199614
81	293930	Caffeine and its salts	Bulk and intermediary	0.197414
82	283525	Calcium hydrogenorthophosphate	#N/A	0.193903
83	291639	Aromatic monocarboxylic acids, thei	Bulk and intermediary	0.191244
84	293369	Heterocyclic comps. containing an u	Bulk and intermediary	0.179368
85	283329	Sulphates other than Sodium sulphat	Bulk and intermediary	0.1741
86	290941	2,2'-Oxydiethanol	Bulk and intermediary	0.169508
87	291539	Esters of acetic acid	Bulk and intermediary	0.163421
88	291813	Salts and esters of tartaric acid	Bulk and intermediary	0.158057
89	292800	Organic derivatives of hydrazine/of	Bulk and intermediary	0.156408
90	291421	Camphor	Bulk and intermediary	0.156244
91	292143	Toluidines and their derivatives; sal	Bulk and intermediary	0.153449
92	281420	Ammonia in aqueous solution	#N/A	0.146816
93	284329	Silver comps. other than silver nit	Bulk and intermediary	0.135707
94	294110	Penicillins and their derivatives wit	Bulk and intermediary	0.130682
95	291631	Benzoic acid, its salts and esters	Bulk and intermediary	0.121254
96	282739	Chlorides	Bulk and intermediary	0.120628
97	281121	Carbon dioxide	#N/A	0.117852
98	290490	Sulphonated/nitrated/nitrosated der	Bulk and intermediary	0.117396
99	292151	o-, m-, p-Phenylenediamine, diamino	Bulk and intermediary	0.112538
100	282760	Iodides and iodide oxides	Bulk and intermediary	0.11218
101	293740	Amino-acid derivatives	Bulk and intermediary	0.109285
102	293711	Somatotropin, its derivatives and str	Bulk and intermediary	0.10927
103	290729	Polyphenols	Bulk and intermediary	0.108783

(continued)

Table 9 (continued)

Sr. no.	Product code	Product description	Classification	Indian pharmaceutical exports to Pakistan (trade value in million USD)
104	300420	Medicaments containing other antibi	Formulation	0.107321
105	282300	Titanium oxides	Bulk and intermediary	0.103628
106	293410	Compounds containing an unfused thi	Bulk and intermediary	0.102499
107	294000	Sugars, chemically pure, other than	Bulk and intermediary	0.096824
108	300660	Chemical contraceptive preparations	Formulation	0.095833
109	291990	Phosphoric esters and their salts, incl	Bulk and intermediary	0.095427
110	290719	Other monophenols	Bulk and intermediary	0.091712
111	290722	Hydroquinone (quinol) and its salts	Bulk and intermediary	0.090982
112	291529	Salts of acetic acid	Bulk and intermediary	0.089421
113	292419	Acyclic amides	#N/A	0.089317
114	293333	Alfentanil (INN), anileridine (INN)	#N/A	0.088017
115	280519	Alkali/alkaline-earth metals other	Bulk and intermediary	0.086492
116	283090	Sulphides (excl. of 2830.10); polys	Bulk and intermediary	0.085534
117	280421	Argon	Bulk and intermediary	0.085364
118	290930	Aromatic ethers and their halogenated	Bulk and intermediary	0.085047
119	291570	Palmitic acid, stearic acid, their	Bulk and intermediary	0.083672
120	281820	Aluminium oxide	Bulk and intermediary	0.083108
121	290611	Menthol	Bulk and intermediary	0.082975
122	292700	Diazo-/azo-/azoxy-comps.	Bulk and intermediary	0.077848
123	292129	Acyclic polyamines	Bulk and intermediary	0.073585
124	293229	Lactones	Bulk and intermediary	0.073206
125	281119	Inorganic acids other than hydrogen	#N/A	0.071567
126	293379	Lactams	Bulk and intermediary	0.071511
127	290619	Cyclanic/cyclenic/cycloterpenic alc	Bulk and intermediary	0.069031
128	291815	Salts and esters of citric acid	Bulk and intermediary	0.068933
129	291819	Carboxylic acids with alcohol funct	Bulk and intermediary	0.067132
130	283990	Silicates other than of sodium; com	#N/A	0.061717
131	292111	Methylamine, di-/trimethylamine and	Bulk and intermediary	0.058288
132	282710	Ammonium chloride	Bulk and intermediary	0.057655
133	281520	Potassium hydroxide	#N/A	0.057281
134	290899	Halogenated/sulphonated/nitrated/ni	#N/A	0.055063
135	291010	Oxirane (ethylene oxide)	#N/A	0.053196
136	280120	Iodine	Bulk and intermediary	0.05255
137	290313	Chloroform (trichloromethane)	Bulk and intermediary	0.051493
138	284800	Phosphides, whether/not chemically	Bulk and intermediary	0.05143
139	300410	Medicaments containing penicillins/	Formulation	0.050614
140	292149	Aromatic monoamines and their derivat	Bulk and intermediary	0.05016
141	293919	Alkaloids of opium	#N/A	0.050047

(continued)

Table 9 (continued)

Sr. no.	Product code	Product description	Classification	Indian pharmaceutical exports to Pakistan (trade value in million USD)
142	291470	Halogenated/sulphonated/nitrated/ni	Bulk and intermediary	0.049841
143	300439	Medicaments containing hormones/oth	Formulation	0.047936
144	291512	Salts of formic acid	Bulk and intermediary	0.043319
145	300692	Waste pharmaceuticals	Formulation	0.042742
146	293790	Hormones, prostaglandins, thromboxa	Bulk and intermediary	0.042145
147	291221	Benzaldehyde	Bulk and intermediary	0.040124
148	293321	Hydantoin and its derivatives	Bulk and intermediary	0.038856
149	290950	Ether-phenols, ether-alcohol-phenol	Bulk and intermediary	0.038171
150	293420	Compounds containing in the structu	Bulk and intermediary	0.035175
151	293090	Organo-sulphur compounds	Bulk and intermediary	0.035131
152	292910	Isocyanates	Bulk and intermediary	0.033636
153	291821	Salicylic acid and its salts	Bulk and intermediary	0.033594
154	281111	Hydrogen fluoride	#N/A	0.032435
155	291419	Acyclic ketones without other oxyge	Bulk and intermediary	0.032412
156	293391	Alprazolam (INN), camazepam (INN),	#N/A	0.032389
157	281990	Chromium oxides	Bulk and intermediary	0.032079
158	291733	Dinonyl/didecyl orthophthalates	Bulk and intermediary	0.032041
159	291412	Butanone (methyl ethyl ketone)	Bulk and intermediary	0.0317
160	291511	Formic acid	Bulk and intermediary	0.03079
161	291550	Propionic acid, its salts and esters	Bulk and intermediary	0.03036
162	292310	Choline and its salts	Bulk and intermediary	0.029669
163	293890	Glycosides, other than rutoside	Bulk and intermediary	0.029308
164	290712	Cresols and their salts	Bulk and intermediary	0.028079
165	292239	Amino-aldehydes, amino-ketones and am	#N/A	0.027914
166	290351	1,2,3,4,5,6-Hexachlorocyclohexane	Bulk and intermediary	0.027353
167	291615	Oleic/linoleic/linolenic acids, the	Bulk and intermediary	0.025339
168	283421	Nitrates of potassium	#N/A	0.02461
169	282490	Lead oxides (excl. of 2824.10);red	Bulk and intermediary	0.023798
170	293622	Vitamin B1 and its derivatives	Bulk and intermediary	0.023679
171	290517	Dodecan-1-ol (lauryl alcohol), hexa	Bulk and intermediary	0.023542
172	283220	Sulphites (excl. of sodium)	Bulk and intermediary	0.022868
173	292242	Glutamic acid and its salts	Bulk and intermediary	0.022623
174	283330	Alums	Bulk and intermediary	0.019821
175	290522	Acyclic terpene alcohols	Bulk and intermediary	0.019291
176	292090	Esters of inorganic acids of non-me	Bulk and intermediary	0.018555
177	292519	Imides and their derivatives other th	Bulk and intermediary	0.018441
178	290359	Halogenated derivatives of cyclanic	Bulk and intermediary	0.018178
179	291219	Acyclic aldehydes without other oxy	Bulk and intermediary	0.01767

(continued)

Table 9 (continued)

Sr. no.	Product code	Product description	Classification	Indian pharmaceutical exports to Pakistan (trade value in million USD)
180	291524	Acetic anhydride	Bulk and intermediary	0.017587
181	293040	Methionine	Bulk and intermediary	0.016944
182	293941	Ephedrine and its salts	Bulk and intermediary	0.016222
183	284610	Cerium comps.	#N/A	0.015953
184	281129	Inorganic oxygen comps. of non-meta	#N/A	0.015292
185	290329	Unsaturated chlorinated derivatives	Bulk and intermediary	0.015097
186	291634	Phenylacetic acid and its salts	Bulk and intermediary	0.014261
187	292390	Quaternary ammonium salts and hydroxi	Bulk and intermediary	0.014012
188	290559	Halogenated/sulphonated/nitrated/ni	#N/A	0.013501
189	280490	Selenium	Bulk and intermediary	0.01314
190	300290	Human blood; animal blood prepared	Formulation	0.01229
191	294130	Tetracyclines and their derivatives;	Bulk and intermediary	0.012082
192	293430	Compounds containing in the structu	Bulk and intermediary	0.011737
193	290721	Resorcinol and its salts	Bulk and intermediary	0.011732
194	282751	Bromides of sodium/potassium	Bulk and intermediary	0.011716
195	291540	Mono-/di-/trichloroacetic acids,	Bulk and intermediary	0.011038
196	282010	Manganese dioxide	Bulk and intermediary	0.010228
197	291439	Aromatic ketones without other oxyg	Bulk and intermediary	0.009013
198	282731	Magnesium chlorides	Bulk and intermediary	0.008939
199	292243	Anthranilic acid and its salts	Bulk and intermediary	0.008882
200	284290	Salts of inorganic acids/peroxoacid	Bulk and intermediary	0.008853
201	284990	Carbides	Bulk and intermediary	0.008824
202	284700	Hydrogen peroxide, whether/not soli	#N/A	0.00821
203	290532	Propylene glycol (propane-1,2-diol)	Bulk and intermediary	0.007761
204	284210	Double/complex silicates, incl. alu	Bulk and intermediary	0.007619
205	293911	Concentrates of poppy straw; bupren	Bulk and intermediary	0.007543
206	300590	Wadding, gauze, bandages and similar	Formulation	0.007473
207	293491	Aminorex (INN), brotizolam (INN), c	#N/A	0.007244
208	280910	Diphosphorus pentaoxide	#N/A	0.007071
209	282749	Chloride oxides and chloride hydroxid	Bulk and intermediary	0.007054
210	283322	Sulphates of aluminium	Bulk and intermediary	0.006265
211	290819	Halogenated derivatives of phenols/	#N/A	0.005977
212	284170	Molybdates	Bulk and intermediary	0.005911
213	293969	Alkaloids of rye ergot and their deri	Bulk and intermediary	0.005693
214	290621	Benzyl alcohol	Bulk and intermediary	0.005643
215	292690	Nitrile-function comps.	#N/A	0.005608
216	282720	Calcium chloride	Bulk and intermediary	0.005199
217	290612	Cyclohexanol, methylcyclohexanols &	Bulk and intermediary	0.004967

(continued)

Table 9 (continued)

Sr. no.	Product code	Product description	Classification	Indian pharmaceutical exports to Pakistan (trade value in million USD)
218	290711	Phenol (hydroxybenzene) and its salts	Bulk and intermediary	0.00472
219	283620	Disodium carbonate	Bulk and intermediary	0.004239
220	281390	Sulphides of non-metals	#N/A	0.004065
221	291532	Vinyl acetate	Bulk and intermediary	0.003519
222	281290	Halides and halide oxides of non-metals	#N/A	0.003422
223	293750	Prostaglandins, thromboxanes and leukotrienes	Bulk and intermediary	0.003387
224	292130	Cyclanic/cyclenic/cycloterpenic monoterpenes	Bulk and intermediary	0.003162
225	283325	Sulphates of copper	Bulk and intermediary	0.00312
226	290549	Polyhydric alcohols	Bulk and intermediary	0.002931
227	300340	Medicaments containing alkaloids/derivatives	Formulation	0.002891
228	291260	Paraformaldehyde	Bulk and intermediary	0.002592
229	282580	Antimony oxides	Bulk and intermediary	0.002536
230	300339	Medicaments containing hormones/other	Formulation	0.002514
231	291423	Ionones and methylionones	Bulk and intermediary	0.002473
232	292211	Monoethanolamine and its salts	#N/A	0.002402
233	292990	Compounds with other nitrogen functions	#N/A	0.002271
234	291712	Adipic acid, its salts and esters	Bulk and intermediary	0.002168
235	283510	Phosphinates (hypophosphites) and phosphonates	#N/A	0.002165
236	283526	Phosphates of calcium other than hydroxyapatite	#N/A	0.002141
237	290219	Cyclanes, cyclenes and cycloterpenes	#N/A	0.002048
238	291720	Cyclanic/cyclenic/cycloterpenic polyterpenes	Bulk and intermediary	0.001934
239	292144	Diphenylamine and its derivatives; secondary amines	Bulk and intermediary	0.001886
240	290519	Saturated monohydric alcohols	Bulk and intermediary	0.001813
241	291229	Cyclic aldehydes without other oxygen	Bulk and intermediary	0.001782
242	300620	Blood-grouping reagents	Formulation	0.001732
243	293221	Coumarin, methylcoumarins and ethylcoumarins	Bulk and intermediary	0.001481
244	291812	Tartaric acid	Bulk and intermediary	0.001466
245	283539	Polyphosphates (excl. of 2835.31)	#N/A	0.001366
246	283529	Phosphates	#N/A	0.001202
247	280300	Carbon	#N/A	0.00084
248	300510	Adhesive dressings and other articles	Formulation	0.000687
249	282590	Inorganic bases other than hydrazine	Bulk and intermediary	0.000663
250	281511	Sodium hydroxide (caustic soda), sodium hydroxide	#N/A	0.000554
251	290361	Chlorobenzene, o-dichlorobenzene & m-dichlorobenzene	Bulk and intermediary	0.000474
252	283324	Sulphates of nickel	Bulk and intermediary	0.00045
253	283210	Sodium sulphites	Bulk and intermediary	0.000315
254	282741	Chloride oxides and chloride hydroxides	Bulk and intermediary	0.00009
255	283429	Nitrates other than of potassium	#N/A	0.000085

Table 10 Zero tariff list under Pakistan-China free trade agreement

Sr. no.	HS code	Item	Categorisation
1	290211	Cyclohexane	Bulk and intermediary
2	290219	Cyclopentane	–
3	290219	Other	–
4	290220	Benzene	Bulk and intermediary
5	290230	Toluene	Bulk and intermediary
6	290241	O-Xylene	Bulk and intermediary
7	290242	M-Xylene	Bulk and intermediary
8	290243	P-Xylene	Bulk and intermediary
9	290244	Mixed Xylene Isomers	Bulk and intermediary
10	290250	Styrene	Bulk and intermediary
11	290260	Ethyl-Benzene	Bulk and intermediary
12	290270	Cumene	Bulk and intermediary
13	290290	Naphthalene	Bulk and intermediary
14	290290	Limonene	Bulk and intermediary
15	290290	Other	Bulk and intermediary
16	290311	Methyl	Bulk and intermediary
17	290311	Saturated	Bulk and intermediary
18	290311	Other	Bulk and intermediary
19	290312	Dichloromethane	Bulk and intermediary
20	290313	Chloroform	Bulk and intermediary
21	290314	Carbon	Bulk and intermediary
22	290315	1,2-Dichloroethane	Bulk and intermediary
23	290319	Other	–
24	290321	Vinyl	Bulk and intermediary
25	290322	Trichloroethylene	Bulk and intermediary
26	290323	Tetrachloroethylene	Bulk and intermediary
27	290329	Other	Bulk and intermediary
28	290330	Methyl	Bulk and intermediary
29	290330	Difluoromethane	Bulk and intermediary
30	290330	Tetrafluoroethane	Bulk and intermediary
31	290330	Ingredients	Bulk and intermediary
32	290330	Other	Bulk and intermediary
33	290341	Trichlorofluoromethane	Bulk and intermediary
34	290342	Dichlorodifluoromethane	Bulk and intermediary
35	290343	Trichlorotrifluoroethanes	Bulk and intermediary
36	290344	Dichlorotetrafluoroethanes	Bulk and intermediary
37	290345	Penta-Chlorofluoromethane	Bulk and intermediary
38	290345	Chlorofluoroethane	Bulk and intermediary
39	290345	Tetrachlorodifluoroethanes	Bulk and intermediary
40	290345	Heptachlorofluoropropanes	Bulk and intermediary

(continued)

Table 10 (continued)

Sr. no.	HS code	Item	Categorisation
41	290345	Hexachlorodifluoropropanes	Bulk and intermediary
42	290345	Trichloropentafluoropropanes	Bulk and intermediary
43	290345	Dichlorohexafluoropropanes	Bulk and intermediary
44	290345	Other	Bulk and intermediary
45	290346	Bromochlorodifluoromethane	Bulk and intermediary
46	290347	Other	Bulk and intermediary
47	290349	Chlordifloromethane	–
48	290349	Other	–
49	290351	Other	Bulk and intermediary
50	290359	Other	Bulk and intermediary
51	290361	Chlorobenzene	Bulk and intermediary
52	290361	O-Dichlorobenzene	Bulk and intermediary
53	290361	P-Dichlorobenzene	Bulk and intermediary
54	290362	Hexachlorobenze	–
55	290369	Other	Bulk and intermediary
56	290410	Benzene	Bulk and intermediary
57	290410	Other	Bulk and intermediary
58	290420	Nirobenzene	Bulk and intermediary
59	290420	Other	Bulk and intermediary
60	290490	Other	Bulk and intermediary
61	290711	Phenol	Bulk and intermediary
62	290712	Cresols	Bulk and intermediary
63	290713	Octylphenol	Bulk and intermediary
64	290714	Xylenols	Bulk and intermediary
65	290715	Naphthols	Bulk and intermediary
66	290719	Other	Bulk and intermediary
67	290721	Resorcinol	Bulk and intermediary
68	290722	Hydroquinone	Bulk and intermediary
69	290723	4'-Isopropylidenediphenol (Bisphenol)	Bulk and intermediary
70	290729	Other	Bulk and intermediary
71	290810	4-Chloro	Bulk and intermediary
72	290810	Other	Bulk and intermediary
73	290820	Derivatives	Bulk and intermediary
74	290890	Other	Bulk and intermediary

Table 11 Preferential tariff list of pharmaceutical items under Pakistan China free trade agreement

Sr. no.	HS Code	Product description	Categorisation
1	280461	containing by weight not less than 99.99 % of silicon	Bulk and intermediary
2	280470	Phosphorus	Bulk and intermediary
3	280300	Carbon (carbon blacks and other forms of carbon not elsewhere specified or included)	–
4	281810	Artificial corundum, whether or not chemically defined	Bulk and intermediary
5	282010	Manganese dioxide	Bulk and intermediary
6	282530	Vanadium oxides and hydroxides	Bulk and intermediary
7	282560	Germanium oxides and zirconium dioxide	Bulk and intermediary
8	282570	Molybdenum oxides and hydroxides	Bulk and intermediary
9	282580	Antimony oxides	Bulk and intermediary
10	282590	Other	Bulk and intermediary
11	282690	Other	Bulk and intermediary
12	282749	Other	Bulk and intermediary
13	283510	Phosphinates (hypophosphites) and phosphonates (phosphites)	–
14	283525	Calcium hydrogenorthophosphate (“dicalcium phosphate”)	–
15	290110	Acyclic Hydrocarbons-saturated	–
16	290219	Other	–
17	290290	Other	Bulk and intermediary
18	290330	Fluorinated, brominated or iodinated derivatives of acyclic hydrocarbons	Bulk and intermediary
19	290349	Other	–
20	290369	Other	Bulk and intermediary
21	290545	Glycerol	Bulk and intermediary
22	291241	Vanillin (4-hydroxy-3-methoxybenzaldehyde)	Bulk and intermediary
23	291249	Other	Bulk and intermediary
24	291429	Other	Bulk and intermediary
25	291450	Ketone-phenols and ketones with other oxygen unction	–
26	291469	Other	Bulk and intermediary
27	291550	Propanoic acid, and its salts and esters	Bulk and intermediary
28	291590	Other	Bulk and intermediary
29	291612	Esters of acrylic acid	Bulk and intermediary
30	291619	Other	Bulk and intermediary
31	291639	Other	Bulk and intermediary
32	292145	1-Naphthylamine (a-naphthylamine), 2-naphthylamine (naphthylamine) and their derivatives; salts thereof	Bulk and intermediary
33	292221	Aminohydroxynaphthalenesulphonic acid and their salts	Bulk and intermediary
34	292249	Other	Bulk and intermediary
35	292620	1-cyanoguanidine (dicyandiamide)	Bulk and intermediary
36	292690	Other	–
37	293090	Other	Bulk and intermediary
38	293399	Other	–
39	293499	Other	–

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Chapter 7

India–Pakistan Trade: A Case Study of the Pharmaceutical Sector

Vaqar Ahmed and Samavia Batool

List of Abbreviations

APIs	Active pharmaceutical ingredients
BoI	Board of investment
DRAP	Drug regulatory authority of Pakistan
FDGs	Focus group discussions
FDI	Foreign direct investment
GDP	Gross domestic product
GoP	Government of Pakistan
HS Classification	Harmonised system of classification
IBM	Institute of Business Management
INR	Indian rupee
ITC	International trade centre
MFN	Most favoured nation
MNCs	Multi-national companies
MoC	Ministry of Commerce, Pakistan
n.e.s	Not elsewhere specified
NHSRC	National Health Services Regulation and Coordination Division
OICCI	Overseas Investors Chamber of Commerce and Industry
PKR	Pakistani rupee
PPA	Pakistan Pharmacist Association
PPMA	Pakistan Pharmaceutical Manufacturers Association
QC	Quality control
R&D	Research and development
RCA	Revealed comparative advantage
SMEDA	Small and Medium Enterprise Development Authority
TDAP	Trade Development Authority of Pakistan

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1 Introduction¹

There have already been numerous studies on the gains from enhanced bilateral trade between India and Pakistan (Taneja 2013a, b; Taneja et al. 2013; Hussain 2011; Chatterjee and George 2013; Ahmed 2012a, b; Ahmed et al. 2013a, b, c). Moreover, there is evidence from empirical literature of gains for a small country when it unilaterally liberalises its trade with a large country (Carsten 2000; Alesina et al. 2005). While both countries are poised to gain in overall terms, there are sectors that are still apprehensive about their capacity to compete under the current milieu. In the case of Pakistan's industrial sector, these include the pharmaceutical and automobile sectors. In this study, we take a close look at the prospects of India-Pakistan bilateral trade in the pharmaceutical sector. We will present a Pakistani perspective, highlighting the views of both consumers and producers.

According to International Trade Centre (ITC) data, Pakistan's pharmaceutical trade stood at 0.08 % of the global pharmaceutical trade in 2013. While global trade increased from US\$804.2 billion in 2008 to US\$988.6 billion in 2013, Pakistan's pharmaceutical trade rose from US\$551.8 to US\$844 million during the same period. In the case of India, the pharmaceutical sector had a 1.35 % share in global trade in 2013. India's pharmaceutical trade stood at US\$5.9 billion in 2008, rising to US\$13.3 billion in 2013.²

With a new national government in Pakistan, there have been renewed hopes about enhancing India-Pakistan trade through the grant of non-discriminatory market access (NDMA) status to India (Ahmed et al. 2013a, b). In this context, sector-specific comparative advantages with regard to India form the basis of the trade discourse in Pakistan. While India has made a mark in the pharmaceutical sector owing to FDA compliance, advanced R&D and cheaper inputs, Pakistan has also experienced impressive growth in the sector. It, therefore, has become important to look at the potential for trade in pharmaceuticals between the two countries on a mutually beneficial basis.

The next section provides the methodology followed in this paper. This is followed by an overview of the pharmaceutical sector and the trade structure of the pharmaceutical industry in Pakistan. We then calculate the revealed comparative advantage (RCA) index for the two neighbours. This is followed by an assessment of the protection measures for the industry and a qualitative analysis of the possible impact of liberalising pharmaceutical trade with India. The final section examines the way forward and makes recommendations.

¹This paper has been written as part of research studies conducted under the project "Strengthening Research and Promoting Multi-level Dialogue for Trade Normalisation between India and Pakistan" led by Dr. Nisha Taneja. The authors are thankful to Dr. Nisha Taneja, Dr. Aradhna Aggarwal and Dr. Aparna Sawhney for comments.

²The statistics here pertain to Chap. 30, i.e. pharmaceutical products, only.

2 Methodology

In our analysis, we have used both qualitative and quantitative research tools to gain insights into the Indian and Pakistani pharmaceutical industry and trends in trade in pharmaceutical products. A desk review of literature, key informant interviews, and focus group discussions (FGDs) were conducted for the qualitative section of this study. These were undertaken to analyse pharmaceutical industry specifications, restrictions and barriers to trade, the impact of liberalising trade in pharmaceuticals, and possible avenues for collaboration among pharmaceutical manufacturers in the two countries. Fifteen key informant interviews were conducted with pharmaceutical manufacturers, representatives of the pharmaceutical manufacturers' association, the Ministry of Commerce (MoC) and Intellectual Property Organization (Pakistan). Two FGDs were also conducted with various stakeholders, including manufacturers, government authorities, consumer groups and regulators.

On the quantitative side, an analysis of trade data for products under Chaps. 15, 28, 29 and 30 along with the computation of RCA (Balassa 1965) index was carried out to assess the underlying features of India's and Pakistan's pharmaceutical trade. Trade data was extracted from the ITC's data repository for the period 2008–2013. Moreover, 2013 data was used for in-depth analysis of the trading partners and the products traded between the two countries.

3 Overview of the Pharmaceutical Industry in Pakistan

Pakistan's pharmaceutical industry is the 10th largest in the Asia-Pacific region and has shown significant growth over the last two decades (Institute of Business Management (IBM) 2013). According to a representative of the Pakistan Pharmaceutical Manufacturers Association (PPMA), the pharmaceutical industry in Pakistan has experienced an impressive growth of 17 % during 2013, which is more than the global pharmaceutical average annual growth rate of 8 % (Aamir and Zaman 2011). The number of operational manufacturing firms in the sector increased from a mere 5 in 1990 to 700 in 2005. However, after a consolidation phase in the industry, this number came down to 500 by the year 2011 (Hussain 2011).

According to statistics provided by the PPMA, there are 806 pharmaceutical companies in Pakistan. Of these, 780 are domestic firms while 26 are MNCs. Local and multinational companies have a total share of 43.8 and 56.2 %, respectively, in annual sales in the pharmaceutical sector (Board of Investment (BoI) 2012). Both, the number as well as the market share of domestic firms in the pharmaceutical industry, have been growing over the last few years.

According to a recent estimate, nearly 600 of the pharmaceutical firms in Pakistan are licensed (Lillah 2012). These firms meet about 80 % of the country's pharmaceutical demand, of which MNCs have a major share. The remaining 20 %

of demand is met by foreign products, which are mostly imported from US, UK, Germany, Switzerland, Japan, Netherlands and France.

The pharmaceutical industry in Pakistan is the 4th largest in the large-scale manufacturing sector of the country, with an average growth rate (in the past 5 years) higher than that of the automobile, chemical, and electronics industries. According to a representative of PPMA, Pakistani pharmaceutical exports amount to US\$200 million annually. Most of the pharmaceutical plants in the country are ISO certified. This sector attracts up to PKR21.1 billion worth of investment (both domestic and foreign) every year. The total sales volume of medicines increased from PKR123 billion in 2009 to PKR192.9 billion in 2012. In the same year, i.e. 2012, 2956 new products were launched by local firms while 193 new products were launched by MNCs in the country.

According to a BoI (2012) report, the pharmaceutical industry in Pakistan contributes nearly 1 % to the country's GDP. This sector employs approximately 150,000 people and provides indirect employment opportunities to an additional 300,000 through the cardboard manufacturing industry, the printing press industry, plastic and glass bottle industries, etc.

Currently, 47,000 drugs have been registered with the Ministry of Health. Recent research shows that the pharmaceutical industry generates three to four times more employment indirectly (upstream and downstream) than it does directly. A significant proportion of this employment consists of high value-added jobs (e.g. clinical sciences, universities, etc.) (IBM 2013).

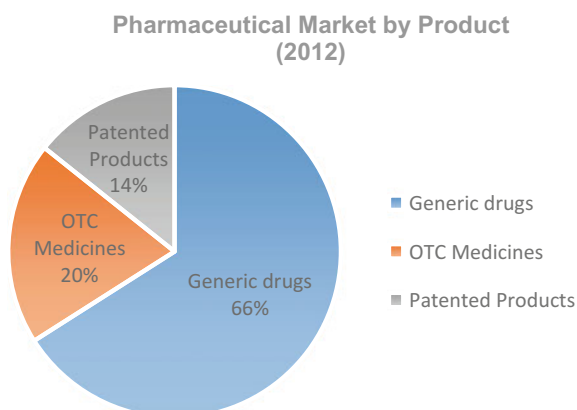
Demand for pharmaceutical products has also increased by 15 % in the last 5 years (BoI 2012). Despite increased demand, annual per capita pharmaceutical consumption in Pakistan is less than US\$ 10. The unavailability of medicines, particularly in rural areas, has forced people to rely on alternative medicines (Overseas Investors Chamber of Commerce and Industry (OICCI) 2011).

Total local pharmaceutical production/consumption was estimated at US \$2 billion in 2011 (Hussain 2011). BMI (2010) further divides the pharmaceutical market in Pakistan on the basis of the share of major pharmaceutical products in total sales (shown in Fig. 1). The sale of generic drugs accounted for 66 % (US \$1.067 billion) of total pharmaceutical sales in 2009; patented products recorded sales worth US\$0.231 billion and OTC medicines US\$0.319 billion during the same year.

Apart from the mainstream pharmaceutical industry, the medical and biological products industry is progressing in Pakistan on the back of an educated labour force in this sector. The number of PhDs in biological and medical sciences has increased from an annual number of 83 in 2005 to 143 in 2010 (HEC 2010–11), which indicates the availability of sophisticated human capital in the main and peripheral pharmaceutical industry.

Pakistan's pharmaceutical industry is dominated by multinationals. GlaxoSmithKline Pakistan leads the pharmaceutical industry with the largest market share of 11.59 % and an average annual growth rate of 8 % (2008–09) while Getz Pharma Pakistan (Pvt.) Ltd. has the largest market share of 3.76 % among local pharmaceutical manufacturers with a growth rate of nearly 70 %

Fig. 1 Pharmaceutical market overview. *Source* BMI (2010) and PPMA



(Aamir and Zaman 2011). According to BoI (2012), antibiotics, vaccines, analgesics, tranquilisers and drugs for cardiovascular diseases and cancer are the major imported products while pain killers, anti-stress, anti-infective, penicillin, etc., are the major locally produced goods.

4 Pharmaceutical Trade in Pakistan

The productive capacity of local pharmaceutical manufacturers seems to have increased over time, which is evident from a rise in exports, especially of pharmaceutical products (Fig. 2). Export of inorganic chemicals, however, has been declining since 2011. Moreover, the export of organic chemicals, and animal, vegetable, oils, etc., has significantly reduced after 2011 and 2012, respectively.

Even though pharmaceutical exports continued to experience positive growth in the last few years, the share of pharmaceutical exports in Pakistan's total exports is still less than 1 %.

4.1 Chapterwise Pharmaceutical Export and Import Partners of Pakistan

(a) Trade Partners—'Pharmaceutical Products' (Chap. 30)

According to ITC, Pakistan's export of Chap. 30 products represent 0.03 % of total world export of these product while Pakistan's imports of products under the same chapter represent 0.14 % of total world imports of these products. Table 1 presents the major pharmaceutical export and import partners of Pakistan for 'pharmaceutical products' in the year 2013. Export partners refer to the countries to

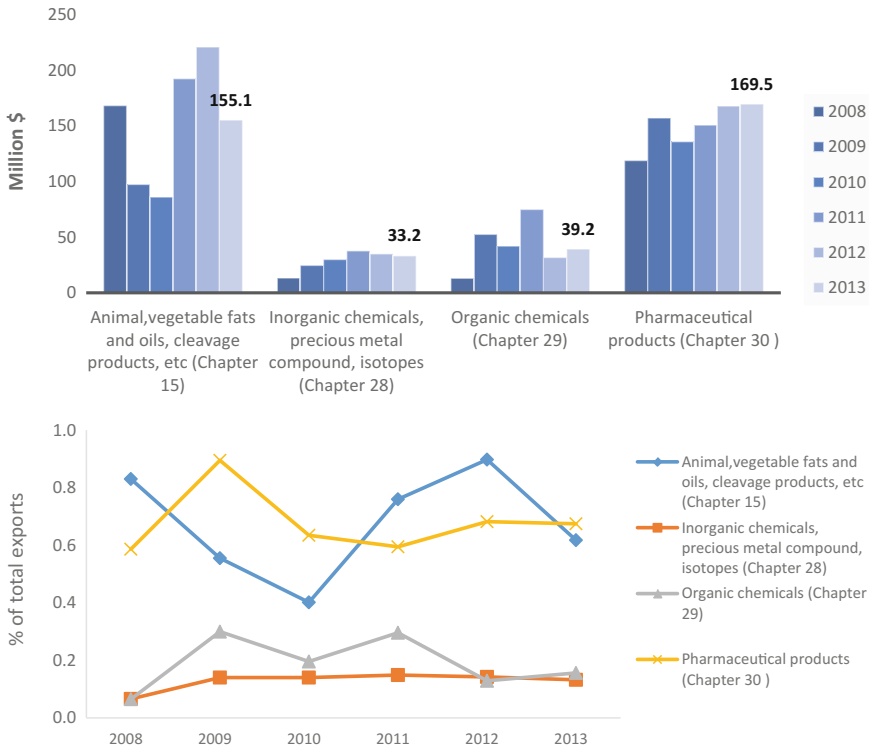


Fig. 2 Exports of selected pharmaceutical products and chemical raw materials and their percentage share in total exports of Pakistan (2008–13). *Data Source* ITC, trade map (2014)

which Pakistan exports and import partners are the countries from which Pakistan imports.

Pakistan imported most of its pharmaceutical product requirements from Denmark, which accounted for a 28.5 % share in total pharmaceutical imports in 2013. Because of the geographical distance between the two countries, freight and trade-related costs tend to be high. It would be far more cost-effective for Pakistan to import these products from its neighbours. According to Qamar (2005) and Chatterjee and George (2013), Pakistan can save between US\$400 and US \$900 million on its import bill if the same products are imported from India rather than from other parts of the world.

Moreover, only three out of the ten major pharmaceutical import partners are Asian economies with nearly 9 % share in total pharmaceutical import. An analysis in depth of the data indicates that there exists little diversification of export and import markets for products under Chap. 30. In short, the top two or three import and export partners account for most of the import and export share while the rest of the partners have a share of 2 % or even less. The top five import and export partners have remained the same over the last 5 years. The share of Switzerland in

Table 1 Major trading partners of Pakistan in pharmaceutical products

Export partners	Exported value 2013 (Million US \$)	Percentage share in Pakistan's pharmaceutical exports	Import partners	Imported value 2012 (Million US \$)	Percentage share in Pakistan's pharmaceutical imports
Afghanistan	42.52	25.1	Denmark	191.97	28.5
Sri Lanka	17.49	10.3	Switzerland	93.67	13.9
Viet Nam	13.85	8.2	Germany	51.77	7.7
Philippines	11.94	7.0	Belgium	46.62	6.9
Lithuania	8.90	5.3	Italy	36.31	5.4

Data Source ITC, trade map (2014)

total pharmaceutical imports has significantly increased during this period. Similarly, exports to Vietnam have also increased twofold in the last 5 years. Contrary to this, pharmaceutical exports to Afghanistan declined sharply from US \$59 million in 2009 to US\$23 million in 2010.

Pakistan exports nearly 38 products (at the 8-digit level) of Chap. 30 to nearly 122 countries in the world. Each of the three major items, ‘medicaments consisting of mixed or unmixed products for therapeutic or prophylactic uses (HS Code: 30049099)’, ‘medicament hormone antibiotic (HS Code: 30033900)’ and ‘medicament hormone not antibiotic (HS code: 30043900)’ occupies an 18.9 % share in the overall exports under this category. The value of exports in this category amounted to US\$32 million in 2013.

On the import side, ‘medicaments consisting of mixed or unmixed products for therapeutic or prophylactic uses (HS Code: 30049099)’ forms the largest part of pharmaceutical imports (26.6 %), thus indicating high intraindustry trade in this product category. The ‘vaccine for human medicines (HS Code: 30022090)’, ‘medicament antibiotics (HS Code: 30042000)’ and ‘Vaccine veterinary medicine (HS code: 30023000)’ are other imported pharmaceutical products with import shares of 10, 4.4 and 3.7 % in the country’s total pharmaceutical (Chap. 30) imports.

Pharmaceutical manufacturers indicate that raw materials (chemicals) are also major imports for local industry. Nearly 90 % of raw materials, such as aluminium used for manufacturing, are imported. Around 50–60 % of paper and box board are imported. PVC, capsule shells, glass bottles, vials and ampoules are imported as well as produced locally.

(b) Trade Partners—‘Inorganic Chemicals’ (Chap. 28)

Pakistan’s exports of ‘inorganic chemicals, precious metal compound, isotopes’ represent 0.03 % of the world’s exports of this product (ITC 2013). Pakistan exported US\$33 million worth of inorganic chemicals in 2013. The value of imports under the same chapter is US\$431 million.

Table 2 shows Pakistan's top 5 export and import partners for 'inorganic chemicals'. Morocco is Pakistan's largest import partner (i.e., from which Pakistan imports) with a share of 48.1 % in total imports of inorganic chemicals. China follows with a share of nearly 22.6 %.

Similarly, there was some export of inorganic chemicals to India in 2013. India accounted for nearly 40 % of Pakistan's total export of inorganic chemicals. Pakistan's export market in the case of top ten export partners for this chapter is equally divided between western countries and South Asian countries. India, Malaysia, Afghanistan, Sri Lanka and Indonesia are among the top ten export partners (i.e., to which Pakistan exports) for inorganic chemicals.

Fifty-five products at 8-digit level were exported by Pakistan to 85 countries while it imported 181 products from 86 different countries. The top 5 exported products from this chapter includes 'carbonates—28362000 (19.5 %)', 'chlorides—28272000 (13.7 %)', 'hydrogen chloride—28061000 (13.4 %)' and 'hydrogen peroxide—28470000 (9.2 %)'. 'Phosphoric acid—28092010 (56.8 %)', 'carbonates—28362000 (4.5 %)', 'dithionites of sodium—28311010 (2.8 %)' and 'sulphates—28331100 (2.5 %)' formed the top 5 imported products from Chap. 28.

(c) Trade Partners—'Organic Chemicals' (Chap. 29)

Pakistan's exports of Chap. 29 represent 0.01 % of world exports under this chapter (ITC 2013). Nearly US\$2 billion worth of organic chemicals were imported by Pakistan in 2012 whereas export of this chapter stood at US\$39 million during the same year. The top five countries to which Pakistan exports organic chemicals are India (77.4 %), Afghanistan (9.4 %), UAE (5.7 %), Oman (5.6 %), and Turkey (0.8 %) while the countries from which Pakistan imports organic chemicals are Kuwait (20.3 %), China (18.8 %), Saudi Arabia (15.6 %), India (12.9 %), and UAE (5.2 %) (Table 3). These shares imply that the top four trade partners hold a substantial share of total imports of organic chemicals while exports are unequally divided between the top five exporting countries.

Further analysis of trade data reveals that 51 products from Chap. 29 (at 8-digit level) are exported by Pakistan to nearly 66 countries in the world. On the contrary, as much as 438 items were imported by Pakistan in 2013 from 71 countries. Pakistan's major imports under this chapter are 'Cyclic hydrocarbons: Xylenes: p-Xylene—29024300 (24.1 %)', 'Acyclic alcohols and their halogenated—29053100 (14.8 %)', 'Acyclic hydrocarbons: Unsaturated: Ethylene—29012100 (5.1 %)' and 'Cyclic hydrocarbons: Styrene—29025000 (4.6 %)'. 'Pure terephthalic acid (pta)—29173610 (49.2 %)', 'Halogenated derivatives of hydrocarbons—29032100 (38.5 %)', 'Polycarboxylic acids, their anhydrides, halides, peroxides and peroxyacids—29173500 (6.9 %)' are a few of the most exported products under Chap. 29.

Table 2 Major trading partners of Pakistan in inorganic chemicals

Export partners	Exported value 2012 (Million US\$)	Percentage share in Pakistan's inorganic chemicals exports	Import partners	Imported value 2012 (Million US\$)	Percentage share in Pakistan's inorganic chemicals imports
India	13.24	40	Morocco	207.57	48.1
United Arab Emirates	3.93	12	China	97.68	22.6
Malaysia	2.81	8	India	13.99	3.2
Afghanistan	2.80	8	Germany	13.91	3.2
Canada	2.55	8	New Caledonia	12.73	3

Data Source ITC, trade map (2014)

Table 3 Major trading partners of Pakistan in organic chemicals

Export partner	Exported value 2012 (Million US\$)	Percentage share in Pakistan organic chemicals exports	Import partner	Imported value 2012 (Million US\$)	Percentage share in Pakistan's organic chemicals imports
India	30.375	77.4	Kuwait	408.26	20.3
Afghanistan	3.685	9.4	China	378.28	18.8
United Arab Emirates	2.23	5.7	Saudi Arabia	314.31	15.6
Oman	2.181	5.6	India	259.12	12.9
Turkey	0.324	0.8	United Arab Emirates	104.42	5.2

Data Source ITC, trade map (2014)

(d) **Trade Partners—‘Animal, vegetable fats and oils, cleavage products, etc.’**
(Chap. 15)

According to ITC, Pakistan's export of ‘animal, vegetable fats and oils’ represent 0.16 % of the world's total exports in this category. In 2013, Pakistan exported US \$155 million worth of products under Chap. 15 while it imported nearly US \$1.97 billion worth of products. The export market for this product category, however, remained small in 2013 (35 countries) and only 1 country accounted for nearly 98.7 % of the total import of animal, vegetable fats and oils from Pakistan. Afghanistan was the largest export partner of Pakistan for this product group, followed by UAE (01.1 %), Iran (0.23 %), Togo (0.2 %) and Saudi Arabia (0.2 %) (Table 4).

Table 4 Major trading partners of Pakistan in animal, vegetable fats etc.

Export partners	Exported value 2012 (Million US\$)	Percentage share in Pakistan's animal, vegetable fats etc. exports	Import partners	Imported value 2012 (million US\$)	Percentage share in Pakistan's animal, vegetable fats etc. imports
Afghanistan	218	98.7	Malaysia	1163.80	58.8
United Arab Emirates	1.1	0.5	Indonesia	708.34	35.8
Iran (Islamic Republic of)	0.23	0.1	Argentina	55.54	2.8
Togo	0.2	0.1	Australia	16.27	0.8
Saudi Arabia	0.2	0.1	United States of America	8.89	0.4

Data Source ITC, trade map (2014)

On the import side, Pakistan imported products from 43 different categories of products under Chap. 15 from 50 different countries in 2013. Malaysia was the largest import partner of Pakistan with a share of 58.8 %.

The top imports of Pakistan in 2013 included 'palmolein—15119030 (41.4 %)', 'Rbd palm oil—15119020 (39.5 %)', 'palm oil and its fractions—15111000 (12 %)', 'soya bean oil and its fractions—15071000 (3.1 %)' and 'palm stearin—15119010 (2.2 %)', whereas the top five exported products under Chap. 15 include 'vegetable fat and its fractions—15162010 (73.2 %)', 'vegetable oils and its fractions—15162020 (7 %)', 'fixed vegetable oils/fract—15159000 (0.6 %)' and 'fixed vegetable fats and oils including jojoba oil—15152900 (0.1 %)'.

5 India-Pakistan Bilateral Trade in Pharmaceuticals

The level of bilateral trade between India and Pakistan in pharmaceutical products remains low. Figure 3 shows that the level of Pakistan's exports of pharmaceutical products (Chap. 30) to India has been extremely volatile during the last five years. Exports of this product category significantly declined in 2008 and remained below US\$33,000. It was only in 2012 that exports rose to US\$372,000, after which they again reduced to US\$107,000 in 2013. This is in sharp contrast to informal trade volumes between the two countries. It was estimated that in 2013, pharmaceutical items worth US\$59.4 million entered Pakistan (from India) through informal channels, primarily because of lower prices and better quality (Ahmed et al. 2013a, b, c).

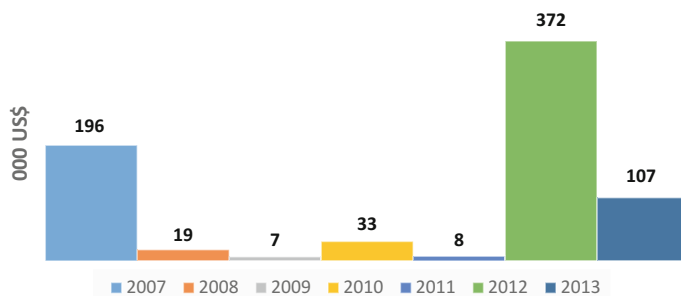


Fig. 3 Pakistan's exports of Chap. 30 products to India (2013). *Data Source* ITC, trade map (2014)

In the case of Chap. 15 products (animal, vegetable fats and oils), Pakistan's exports to India remained as low as US\$1000–2000 between 2008 and 2012. Moreover, Pakistan did not export any product under Chap. 15 to India in 2013. Further analysis of the data also suggests that Pakistan's export of 'animal, vegetable fats and oils' and 'pharmaceutical products' to India is less than 1 % of its total export of these products.

Figure 4 shows Pakistan's exports of organic and inorganic chemicals to India, from 2007 to 2013. Exports of inorganic chemicals and organic chemicals had shown a rising trend until 2012 and 2011, respectively. Pakistan's exports of 'organic chemicals' to India was 33.7 % of Pakistan's total export of organic chemicals while the average export share of 'inorganic chemicals' to India was 39.8 % in 2013.

On average, 19 % of organic chemicals imported by Pakistan come from India (Fig. 5). However, this share has been on the decline since 2008. Imports of pharmaceutical products also seem to be declining after 2010, except for the last year when imports increased from US\$13.6 million in 2012 to US\$15.5 million in 2013. Imports of inorganic chemicals from India is on the rise since 2009 whereas imports of animal, vegetable fats and oils has not undergone any significant change during the last few years.

5.1 Productwise Trade in Pharmaceuticals

This analysis has been carried out on the lowest possible denomination available ('000 US\$) in order to clearly identify the level of productwise bilateral trade. We use 8-digit level trade data for this analysis. One of the limitations of this data is that it does not provide the value for most of the products exported by Pakistan to India.

Figure 6 shows that in the bilateral trade for 'pharmaceutical products (Chap. 30)', 'vaccine for human medicine' and 'medicaments for therapeutic uses' constitute a large share in the pharmaceutical imports from India.

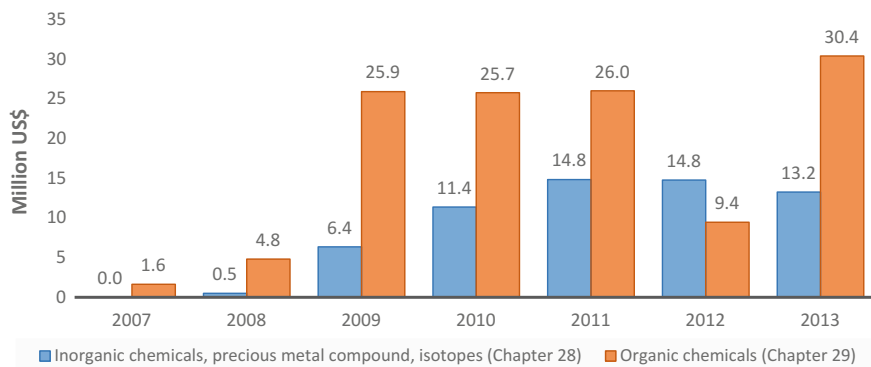


Fig. 4 Pakistan's export of organic and inorganic chemicals to India (2013). *Data Source* ITC, trade map (2014)

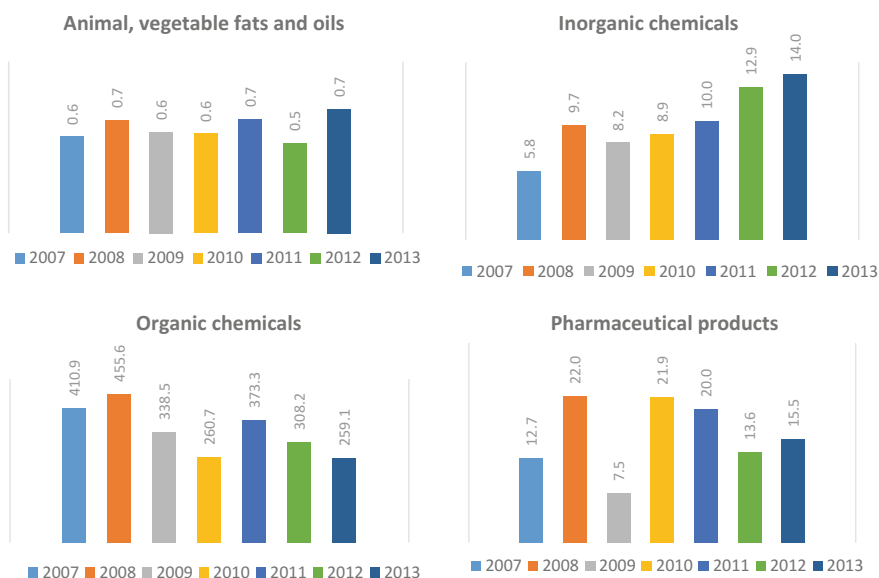


Fig. 5 Pakistan's imports from India—Million US\$ (2013). *Data Source* ITC, trade map (2014)

In the case of 'animal, vegetable fats and oils' (Chap. 15), ITC data shows that Pakistan exported only 'fixed vegetable oils/fraction (HS Code: 15159000)' worth US\$0.377 million to India in 2013, whereas imports from India in this product group is much higher. Figure 7 projects the products traded under Chap. 15 between India and Pakistan.

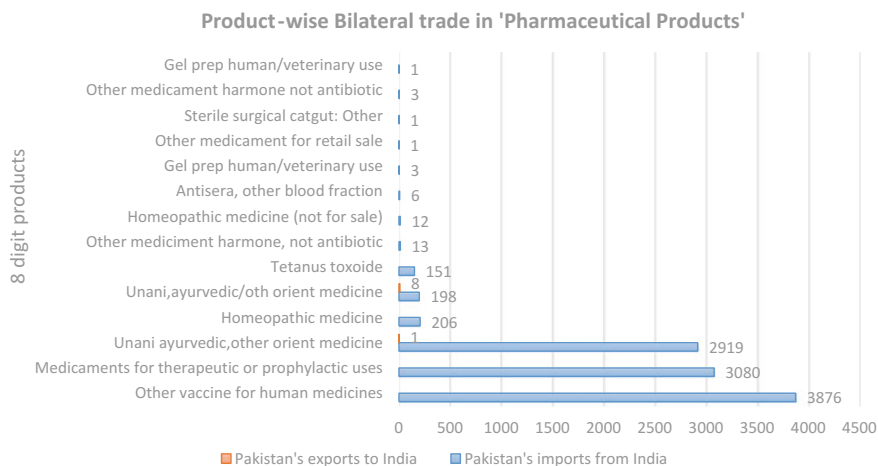


Fig. 6 Productwise bilateral trade (Chap. 30). *Data Source* ITC, trade map (2014)

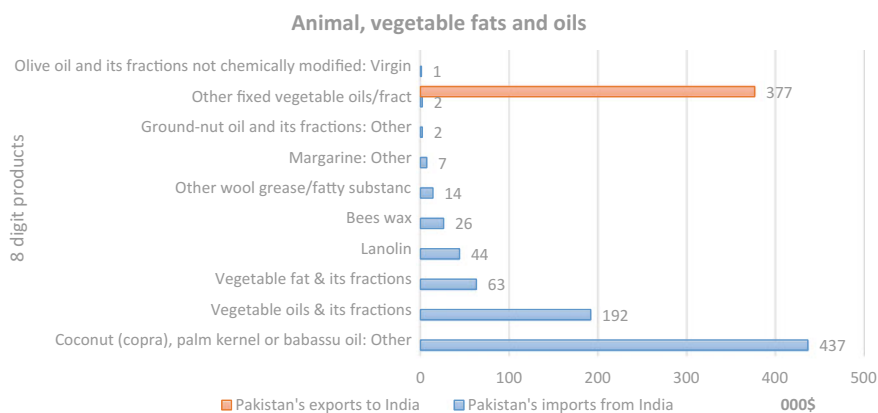


Fig. 7 Product wise bilateral trade (Chap. 15)

As for trade in 'inorganic chemicals', Pakistan imported 65 products (at the 8-digit level) from India while it exported 11 products to India in 2013. Figure 8 presents major traded products under Chap. 28 (inorganic chemicals).

When analysed in terms of trade shares, 14 products out of 65 have an import share of more than 26 % and seven products have an import share of more than 50 %. This figure also suggests that Pakistan needs to enhance its export base to export other products (inorganic chemicals) to India.

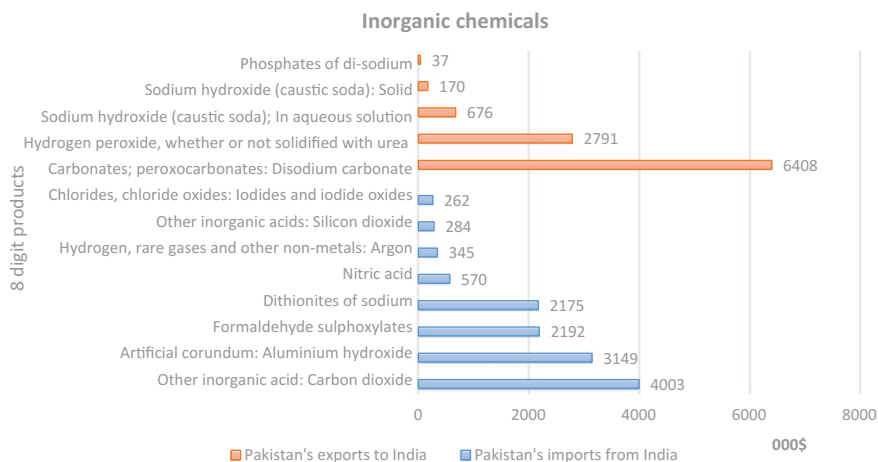


Fig. 8 Productwise bilateral trade (Chap. 28). *Data Source* ITC, trade map (2014)

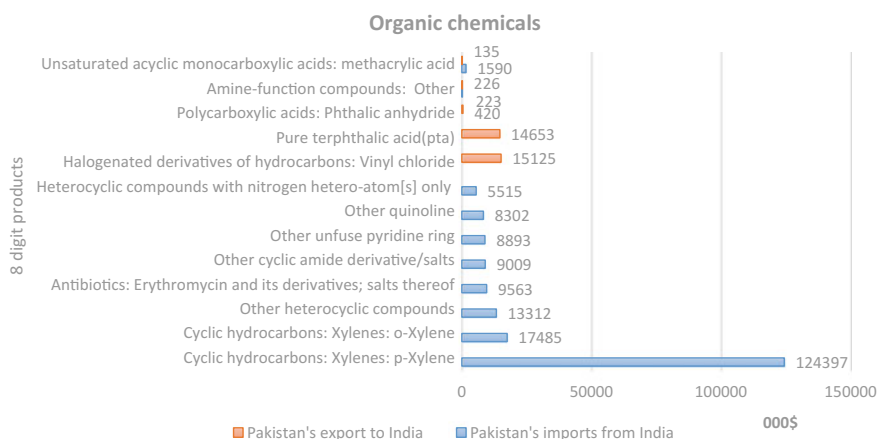


Fig. 9 Productwise bilateral trade (Chap. 29). *Data Source* ITC, trade map (2014)

Trade figures for major traded products under Chap. 29 (organic chemicals) are shown in Fig. 9. Pakistan only exports four product categories to India but imports 221 products under this chapter from India. Moreover, 82 products imported from India had an import share of more than 30 % in 2013.

The analysis of bilateral trade in pharmaceutical products and chemical raw materials suggests that the trade balance is tilted predominantly in favour of India, except for inorganic chemicals trade. Having said this, there are a number of product categories in which India-Pakistan trade can be enhanced for mutual gains.

6 Protection Measures

6.1 *Negative List: Pharmaceutical Products and Chemical Raw Materials*

Currently, out of the 1209 items in the negative list, 49 are from the pharmaceutical sector, with restriction on imports from India. This step was taken in order to provide protection to the local pharmaceutical sector of Pakistan. It also arose out of the fear that Indian pharmaceuticals would establish a dominating presence in the Pakistani market, which might drive locally manufactured drugs out of the Pakistani market.

At present, out of the total pharmaceutical products on the negative list (MoC 2013a, b), four products fall under Chap. 15, eight under Chaps. 28, 31 under Chaps. 29 and 24 products under Chap. 30. While the local pharmaceutical industry is highly dependent on trade (particularly import of inputs), it is important to note that most of the pharmaceutical inputs are included in the negative list for India.

Besides, Pakistan has allowed the import of pharmaceutical products, and chemical ingredients for the preparation of medicines from China; while these have been placed under the negative list for India. Putting pharmaceutical products under the negative list for India might be due to the concern of Pakistani authorities of possible dumping of substandard Indian medicines into Pakistan. There are three products under Chap. 15 ‘animal or vegetable fats, oils & waxes’, 175 products under Chap. 28 ‘inorganic chemicals, org/in-org compounds of precious metals, isotopes’, 446 products of Chap. 29 ‘organic chemicals’, and 10 products of Chap. 30 ‘pharmaceutical products’ on which tariff has been completely abolished in the first three years under the China–Pakistan free trade agreement.³ Moreover, many other products from these chapters are also subject to a tariff reduction of 0–5 % in five years under the same agreement.

India, on the other hand, maintains a list of restricted items, which includes 428 products. This list is not specific to Pakistan alone and is applicable to all trading partners of India. There is one product under Chap. 15 ‘Fish body oil (crude) (HS Code: 15042010)’, 12 products under Chaps. 28, 59 products under Chap. 29 and one product under Chap. 30, i.e. ‘waste pharmaceuticals (HS code: 30069200)’, whose imports are restricted in India (India–Pakistan trade 2013).

6.2 *Sensitive List: Pharmaceuticals*

Under the SAFTA agreement, South Asian countries maintain a sensitive list, which includes items that can be imported but without any tariff concession.

³All these products are listed at the 8-digit level.

Each South Asian country was supposed to decrease its sensitive list by 20 % by the year 2011. Pakistan reduced the number of items in the sensitive list from 1169 to 936 (20 %) in 2011 (MoC 2013a, b). India excluded 455 items from the sensitive for the least developed countries (LDCs) and 254 items from the sensitive list for the non-least developed countries (NLDCs) (SAARC Secretariat 2013).

Under the same agreement, India and Pakistan have to reduce their sensitive list to 100 items by 2013 and 2017, respectively. India has made cutting down the sensitive list conditional upon Pakistan's grant of the MFN status. Since Pakistan has not yet done so, India has not reduced its sensitive list for Pakistan either (Mishra 2013).

Currently, there are 15 products under Chap. 15, six products under Chaps. 28, 17 products under Chap. 29 and four products under Chap. 30 in Pakistan's sensitive list (MoC 2013a, b). Such a large sensitive list (at the 6-digit level) acts as a major hindrance to trade enhancement.

India also maintains a sensitive list for Pakistan, which includes 614 items. Each product under Chap. 30 is subject to tariff of 5 % (India-Pakistan Trade 2013). Other chapters are also included in the sensitive list at the 4-digit level, which are also subject to a tariff rate of 5 %.

6.3 Customs Duty Exemptions

Despite the high protection extended to the pharmaceutical industry, Pakistan frequently changes its customs duty structure, especially when there is a need to support local industry, or in the case of a natural disaster. The following are some of the tax exemptions given to the import of pharmaceutical products and raw materials:

S.R.O. 741(I)/2013: Pakistan eliminated custom duties on the import of the following products from Indonesia: crude oil, palm stearin, RBD palm oil, pal-molein, others, crude oil of palm kernel, other.

S.R.O.567(I)/2006: Eliminated custom duty on the import of silicon dioxide, sulphur, zinc oxide, zinc peroxide, calcium chloride, BHT, and compounds containing in the structure of a benzothiazole ring system (whether or not hydrogenated, not further fused of Chap. 28) only to be imported by football manufacturers. Import of poultry vaccines, anticoccidial n, sulphadimerzine and sulphaquinoxaline, packing material and various completed drugs were also given tax exemptions. Moreover, imports of nearly 50 active pharmaceutical ingredients were given tax exemption if imported for in-house manufacturing.

S.R.O. 565 (I)/2006: Extensive exemption given on the import of certain products in Chap. 29 for pesticide manufacturers

According to our respondents from the PPMA, the exemptions help support these industries for a short period of time when no imported medicines can fill the demand–supply gap in the local market for a sustained time (PPMA).

It should be mentioned here that the above exemptions for pharmaceutical imports have come under scrutiny. The Ministry of Finance in its Economic Coordination Committee meeting of January 2014 was not entirely convinced that these exemptions were justified. The ministry has asked a tax advisory committee to review these SROs. Furthermore, consumer groups have suggested that any future SRO should be thoroughly debated in Parliament before an exemption is allowed.

7 Comparing Price Structure in India and Pakistan

A desk review and on-sight examination of prices of medicines across the border reveals some contradictory price comparisons. A few studies highlight that medicines in Pakistan are comparatively more expensive than those in India. For example, Zinetac-Glaxo costs INR7.20 (per 10 tablets) in India while a similar quantity of this medicine is sold at PKR80 in Pakistan (Wajid 2003).

Picazo (2011) while comparing the price differential of medicines in India, Pakistan and Philippines notes that prices of Ventolin and Imodium were lower in Pakistan as compared to the other two countries. Ventolin and Imodium are priced at PKR62 and PKR1.8 in Pakistan while in India these are priced at INR123 and INR3, respectively.

According to Shahrukh (2011), the top 30 Pakistani medicines in the export basket are 53 % cheaper than Indian medicines and nearly 42 % of Pakistani medicines are priced at less than PKR 5. It also highlights that prices of only a few drugs in India are controlled by regional authorities while others are left to compete, which results in higher prices. Moreover, 108 (61 %) items out of 178 common essential drugs marketed by MNCs across the border are cheaper in Pakistan whereas only 70 (395) of them are cheaper in India (Times of Pakistan 2011).

Table 5 shows the price comparison of some medicines between India and Pakistan for the year 2014. The data has been provided by ICRIER in India and D. Watson Chemist in Pakistan. These medicines are sold under different names across the border but have the same underlying chemical formula.

This price comparison reveals that most of the Pakistani medicines are highly priced in comparison to Indian medicines, at least for our sample. We understand that this price variation can be due to the difference of ‘innovator brand’ or ‘generic brand’ medicines. It is equally possible that prices of medicine in Pakistani have recently shot up due to the rising domestic costs of energy, transportation, distribution and insurance. The large price differential has also been highlighted as one of the reasons for the rising informal flow of Indian medicines in Pakistani markets (Ahmed et al. 2013a, b, c).

The point regarding the price differential between the two countries has been emphasised by consumer groups in Pakistan. They believe that opening up trade with India should bring down the prices. Currently, prices in Pakistan are open to

Table 5 Comparison of medicine prices in India and Pakistan (2014)

Medicine (chemical name)	Strength	Dosage form	Quantity	Price in India (Indian rupee, INR)	Adjusted price (equivalent to Pkr)	Price in Pakistan (Pakistani rupee, PKR)
Amoxicillin	250 mg	cap/tab	15	43.50	73.1	47
Atenolol	50 mg	cap/tab	14	30.38	51	86
Ciprofloxacin	500 mg	cap/tab	10	93.30	157.7	505
Co-trimoxazole	40 mg	cap/tab	10	6.30	10.6	26
Ranitidine	150 mg	cap/tab	20	12	20.2	176
Salbutamol	0.1 mg/dose	inhaler	1	108	181.4	200
Ceftriaxone	1 g/vial	injection	1	30.09	50.6	597
Fluoxetine	20 mg	cap/tab	7	36.40	61.2	77

Author's calculation based on the data provided by D. Watson and ICRIER

negotiation with government authorities. The negotiation power of local manufacturers will weaken once more economical (and standards compliant) pharmaceuticals are allowed entry into Pakistan. This, in turn, will enhance the consumer surplus.⁴

8 Revealed Comparative Advantage

The computation of RCA helps assess the comparative advantage of a country for a specific sector or a commodity relative to the world (Balassa 1965). The RCA reflects the relative trade performance of the country in a particular commodity (Batra and Khan 2005).

An RCA value greater than one implies comparative advantage for a country, while less than one means that there is no comparative advantage for a sector or product for a particular country. In this study, RCA is based only on the data for products under Chaps. 15, 28, 29 and 30 of the HS classification. The RCA analysis undertaken in this study is based on the ITC dataset, 2013.

The RCA analysis for the Indian and Pakistani pharmaceutical sectors shows that the maximum number of products in which Pakistan has a comparative advantage are under Chaps. 28 and 30 while India has a comparative advantage in the case of products under Chaps. 28 and 29 (at 6-digit level). Two possibilities emerge and should be pursued (in theory) simultaneously: (i) there is potential for trade-in products that one of the two countries has a comparative advantage and hence, focus should be on importing those items in which the trading partner has a

⁴Leading consumer groups from Islamabad and Karachi participated in our focus group discussion.

comparative advantage, and (ii) given that many of the items exhibiting comparative advantage are amongst intermediate inputs, there seems potential for supply chain integration.

9 Impact of Liberalising Pharmaceutical Trade Between India and Pakistan

Despite a number of tariff and non-tariff barriers facing pharmaceutical trade (Table 6), there is a need to analyse likely impact of liberalising pharmaceutical trade between India and Pakistan.

To assess the possible impact of liberalising pharmaceutical trade with India, the analysis takes into account the perspectives of the pharmaceutical manufacturing community and pharmaceutical consumers in Pakistan. Segregating both perspectives would allow us to observe underlying demand-side and supply-side views with regard to liberalised trade, and also put on the table a more balanced view on this subject.

9.1 Perspective of Pakistani Pharmaceutical Manufacturers

Most pharmaceutical manufacturers in Pakistan view liberalisation of trade with India as an opportunity to expand Pakistan's nascent pharmaceutical industry. They believe that the industry has a lot to gain from knowledge and skill transfer from India that would help enhance the quality of locally produced medicines. However, these manufacturers favour 'selective buying' from India and believe that opening of trade should be planned in several phases. For instance, raw material import can be allowed in the first phase.

Raw materials are currently imported in bulk from western countries, resulting in substantial transport, freight and insurance costs. MNCs in Pakistan are restricted to importing raw materials only from their native countries, which results in high cost of locally manufactured pharmaceutical products. In contrast, India has a comparative advantage in raw materials, which makes for an excellent avenue of trade between the two countries for mutual gain. This will not only help Pakistani manufacturers reduce their production costs, the import of raw materials from India will also strengthen incentives for future supply chain integration. Apart from raw materials, medical equipment and packaging material can also be imported from India.

Pharmaceutical manufacturers in Pakistan have also favoured the import of medicines, not locally produced, from India. These include medicines for cancer, HIV/AIDS, thalassemia and vaccines for polio, BCG (Bacillus Calmette–Guérin),

Table 6 Barriers to pharmaceutical trade between India and Pakistan

Barriers facing Pakistani pharmaceutical exports to India	Barriers facing Indian pharmaceutical exports to Pakistan
NTBs	
Despite compliance with ISO norms, none of the pharmaceutical units in Pakistan is FDA approved, while India has 74. Such issues on product quality make pharmaceutical products non-exportable to India or to any other country with strict regulations (Ahmed 2012a, b)	Many pharmaceutical products are listed in the negative list making Indian pharmaceutical products non-importable in Pakistan
Pakistani pharmaceutical exports to India have been subject to testing and registration with Central Drug Standard Control Organization in India, which are extensively arduous and time-consuming processes (Ahmed 2012a, b)	Indian pharmaceutical products are also subjected to the approval of Ministry of Health, Pakistan (Ahmed 2012a, b)
Tariff Barriers	
Basic duty of 10–12.5 % is imposed while other additional duties including CVD (6–16 %) and SPL. CVD (4 %) (Cybex Exim Solutions 2013)	10 % customs duty imposed on pharmaceutical imports into Pakistan. For some products like ampicillin, amoxicillin and cloxicillin, (capsules or syrups), the imposed duty rate is 25 % (State Bank of Pakistan 2014)

tetravalent, etc. Moreover, India specialises in semi-basic manufacturing of active pharmaceutical ingredients while there are only three such manufacturers in Pakistan. These can be imported from India at lower prices.

According to the key respondents, liberalisation of pharmaceutical trade with India also has demerits. First, India has a price advantage over Pakistani pharmaceutical products. A complete liberalisation of trade with India in pharmaceutical products is likely to drive locally manufactured medicines out of Pakistani markets owing to the cost advantage Indian medicines have over Pakistani medicines.

Further, the Indian pharmaceutical industry not only enjoys the advantage of lower labour costs, but also advantages in terms of infrastructure and government support. Pakistan, on the other hand, still lacks these facilities. The subsidies to Pakistani manufacturers discussed above and reported on TDAP's website were not mentioned by these respondents.

Second, there are concerns that liberalising pharmaceutical trade with India might lead to the import of low quality medicines from India. According to a representative of pharmaceutical importers in Pakistan, there is an inherent weakness in Indian quality control (QC) standards, which varies from province to province because of their decentralised system.

On the contrary, QC is centrally regulated by the Drug Regulatory Authority in Pakistan, ensuring higher quality. Moreover, only a few Indian pharmaceutical firms are foreign accredited and there is no certainty that only those companies will

export their products to Pakistan. It was also reported that nearly 50–60 % of the counterfeit drugs (fake medicines that could be contaminated or contain the wrong amount of the active ingredient) used in the world are manufactured in India. The export of such spurious drugs to Pakistan would affect health conditions in the country.

On the flow of substandard medicines from India, certain regulatory checks at the border were recommended by the survey team. However, PPMA representative contended that border checks cannot be put in place and the formal way of quality testing is inspection of the exporting manufacturer. It was reported that Pakistani importers were denied Indian visas for inspection purposes, making it difficult to conduct such quality checks.

Third, the pharmaceutical industry is strategically important to a country, as it provides for health and support to the poor and the population in general during times of natural disasters. Given India's and Pakistan's political history, dependencies in a sector as important as health (and pharmaceuticals) can have unforeseen repercussions. Conversely, some also thought that opening up trade in the sector, with gains for both India and Pakistan, could lead to an economic buy-in that would help prevent political conflicts between the two countries.

Another demerit of liberalising pharmaceutical trade with India is that MNCs in Pakistan would then outsource the manufacturing process to lower cost counterparts in India. At present, 40 % of the leading brands of medicines are manufactured by local firms under contract manufacturing (production of goods by one firm, under the label or brand of another firm). There is also the likelihood that MNCs would shift their production processes to Indian subsidiaries for supplies to Pakistan.

9.2 Perspectives of Pakistani Consumer Groups

Consumers are a potential stakeholder when it comes to medicines and cannot be ignored while devising any policy related to pharmaceuticals. Currently local manufacturers meet 80 % of the medicinal demand in the country while the rest is met by imports (BoI 2012), as already mentioned in the study. Having said this, a substantial proportion of the population still does not have access to licensed medicines in Pakistan, mainly because of high prices.

According to Zaidi et al. (2013), despite the regulation of drug prices in Pakistan, medicines are still unaffordable for large segments of the population. Since input costs are a major factor in determining the price of a medicine, the dependence on imported, high-cost raw materials is a major cause of high drug prices in Pakistan. These raw materials are available at lower prices in India but are not allowed to enter the Pakistani market.

A key example cited by one of the consumer groups was regarding the chick-enpox vaccine required for children less than 2 years of age. This vaccine is not locally produced. After several appeals to the government, import was allowed from China. However, the price of the Chinese vaccine is not affordable by an

average consumer. If this vaccine was importable from India, it would have cost half as much as the Chinese vaccine (due to lower transportation costs and margins).

This study also highlights that the affordability index (defined by WHO) exceeds the ‘per day income’ in Pakistan, especially for those below the poverty line. Even with the current level of minimum wage under law, a person cannot afford to purchase medicines either for chronic illness or for a single episode of acute illness. Medicines particularly for the treatment of hypertension, depression, diabetes, epilepsy, arthritis and peptic ulcer are unaffordable; and the wage equivalent of a month-and-a-half is required to purchase medicines for chronic illness.

In order to roughly estimate the number of poor households that will benefit from increased access to medicines, as a result of liberalised pharmaceutical trade with India, data from Pakistan Social and Living Standards Measurement-PSLM (2010–11) was used.

This database covers 76,546 households in Pakistan with an average of 6–7 persons per household. According to an estimate from the health section of the PSLM report, nearly 101,355 individuals visit doctors twice every 2 weeks, of which 26,759 people belong to urban areas while 74,596 belong to rural areas. This estimate gives a rough idea of people regularly visiting doctors and buying prescribed medicines. Estimates also reveal that most of these individuals fall under the low-income category, thus making a huge number of poor ‘potential consumers’ of medicines in Pakistan.

Based on the PSLM data discussed above, we estimated that around 28.6 million people will benefit from increased trade with India in terms of both price and quality. These are mostly persons falling under various categories of the poor—as defined by the Planning Commission of Pakistan.

10 Way Forward

In this section, we discuss recommendations with regard to India-Pakistan bilateral trade in the pharmaceutical sector.

The MoC in Pakistan should grant MFN status to India, which will result in reducing the items on the sensitive lists of both countries. Various studies have shown that a substantial amount of Indian pharmaceutical items find their way into Pakistani markets through informal channels. Thus, it is important for the MoC to recognise the domestic availability of Indian medicines and gradually allow the deletion of these items from the negative list.

The MoC should also collaborate with the BoI to strategically capitalise on the investment-trade nexus that Pakistan can harness with regard to the pharmaceutical sector. As we have shown in this paper, instances of trade in inputs is a sign that supply chain integration can take place and be beneficial for both countries.

Ahmed et al. (2013a, b, c) identifies various Indian medicines (like aspirin, amoxicillin, ampicillin, vasograin, pramipexole dihydrochloride, etc.) that are

brought informally into Pakistan and are easily available in the domestic market. It is thus important for the Drug Regulatory Authority of Pakistan (DRAP) to identify and test these medicines on the basis of centrally managed QC systems to ensure that no substandard medicine enters the domestic market. DRAP can also establish liaison with standards associations in India to maintain uniformity of testing standards. This would facilitate easier mobility of goods across borders.

Apart from informally traded medicines, under-invoicing of imported products is also threatening the local industry. This has been a persistent issue that hurts the local pharmaceutical industry. This needs to be taken care of before liberalising pharmaceutical trade with India.

The Ministry of Interior should take serious note of customs clearance check-points, which facilitate informal trade in pharmaceutical products. Once that is done, cumbersome and irregular procedures at the customs department should be revised to allow easier flow of goods across borders. This would ensure that these medicines pass through the required quality assurance tests. Complicated customs procedures have often been identified as significant contributors to non-tariff barriers preventing India-Pakistan trade. The Ministry of Interior should also consider a relaxed visa regime for the Indian business community to help ease trade and investments.

As trade theory suggests, intraindustry trade and vertical specialisation can minimise cost and enhance product quality with each country focusing on the product/service in which it has a comparative advantage. In this regard, one can look at numerous examples globally where industrial joint ventures have benefitted both trading partners. The BoI can thus facilitate joint ventures in pharmaceutical research and development between India and Pakistan. Investment policies need to be conducive to those products in which Pakistan has a comparative advantage. The Central Bank in Pakistan should now consider facilitation for cross-border bank branches that allow letters of credit for both traders and investors. This would help in enhancing trade and investment opportunities on both sides of the border.

Information and knowledge management at the business associations' level remains weak. Traders' associations in Pakistan should focus on importing products from India that are not included in the negative list, and particularly those in which India has a comparative advantage, such as active pharmaceutical ingredients (APIs). Similarly, they should identify markets in India for export of products in which Pakistan has gained a reputation. These include herbal and veterinary medicines and surgical goods.

Given that as neighbours, both India and Pakistan have been experiencing growth in their pharmaceutical sectors, it is time for manufacturers to shift their focus on products in which they have a comparative advantage. For example, Pakistani manufacturers can consider importing raw materials from India, which would allow them to produce low cost medicines. On the other hand, Pakistan has a lucrative opportunity in the export of alternative medicines to India. These products from Pakistan are highly sought after by both the Indian and Pakistani diaspora overseas. There can also be cross-border collaboration between various medical research institutes, especially those working on alternative/herbal medicines, plant

biotechnology, etc. Both the countries have similar demographics and a similar consumer base, allowing research from one country to be replicated in the industry of the other.

Given the prospects for enhancing pharmaceutical trade and cross-border investment, consumer groups in Pakistan can voice their support to importing from India. This would be beneficial in terms of providing cheaper medicines in the country. As already noted, there are a number of items that are not on the negative list, whose prices can be lowered if they are imported from India instead of other countries.

Think tanks should now undertake joint research with regard to common challenges in the health and pharmaceutical sectors. Track-II meetings between pharmaceutical manufacturers, service providers and traders must take place to identify specific areas of comparative advantage. This will help each country to focus on specialised products and services. It will also boost the confidence of Pakistan's pharmaceutical sector, which is at present apprehensive of the MFN status being considered for India. Development partners can play an important role in this context by supporting such research avenues and track-II and track-III meetings.

Lastly, PPMA and other pharmaceutical sector associations need to develop strong databases in order to promote evidence-based policymaking. Unfortunately, no recent research on the industry's competitiveness could be found and most of the discourse relied on estimates by consulting organisations. This creates confusion as various data sources, when compared with each other, are contradictory.

Unless a single body is responsible for collecting and organising data related to the pharmaceutical sector's inputs, outputs, trade patterns, cost and price trends, it becomes a near impossible task to assess comparative advantages across borders. Another major platform known as 'Pharma Bureau of Information and Statistics', which seems to be the body responsible for maintaining data, is nearly inaccessible.⁵ Even information as simple as the pharmaceutical sector's labour statistics, for instance, the number of students who graduated in D-Pharmacy, is not maintained either by the Higher Education Commission or Pakistan Pharmacy Council, under which pharmacy educational institutes are registered.

Disclaimer Opinions and recommendations in the paper are exclusively of the author(s) and not of any other individual or institution including ICRIER.

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⁵The organisation does not even have a website.

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Chapter 8

India's Informal Trade with Pakistan

Nisha Taneja and Samridhi Bimal

1 Introduction

The *informal economy* is an important issue in most countries and has often been subject to interpretations and debates in international development circles. Many observers subscribed to the notion that the informal economy was marginal and peripheral and not linked to the formal sector or to modern capitalist development. Some continued to associate informal economic activity with developing countries (De Soto 1989; Fields 1975) and believed that the informal economy in developing countries would disappear once these countries achieved sufficient levels of economic growth and modern industrial development. Despite the debates and critiques, the informal economy has continued to prove a useful concept to many policymakers, activists, and researchers because its presence is so large and significant. Across the world, informal economy is growing; is a permanent, not a short-term phenomenon; and is a feature not just traditional economies but of modern capitalist economies as well, associated with both growth and global integration. For these reasons, the informal economy should be viewed not as a marginal or peripheral sector but as a basic component of the total economy (Chen 2007).

The concept of informal is also evident in the analyses of international trade. These related mainly to border areas, undeclared overland trade between neighboring countries [India and Bangladesh (Pohit et al. 2000); Mali and Algeria (Scheele 2009); Benin and Nigeria (Flynn 1997)]. The phenomenon of informal trade is most apparent in Africa, the Caribbean, Eastern Europe, former Soviet Union, and South Asia (Cheru 1989; Mac Gaffey 1991; Epstein 1993; Nuggent 1996; Taneja 2001). For instance in Africa informal trade is common where borders were drawn by colonial powers in a way that cut across preexisting trade routes,

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political units, and cultural areas. The economic interactions in borderland increased after independence both because borders were not “natural” and because they were not policed adequately due to weakness of central authority. Today, a significant amount of international trade in sub-Saharan Africa is not official. It has been stated that informal trade is a result of debt crisis and the bankruptcy of nation states (Cheru 1989; MacGaffey 1991). The goods bought and sold through informal trade are not always African made. A substantial amount of goods from Europe and Asia also circulates in Africa through cross-border trade (Ellis and MacGaffey 1996). Amy Meyer (2015) points out that informal trade has always been a part of the South African economy and its persistence is closely related to the policies and declining capacities of states. With an unemployment rate of 25.2 %, the informal trade for many is the “alternative to unemployment.”

Informal trade is increased by globalization and migration across regions which have extended kinship, linguistic and community networks to a wider geographical area (Cantens 2012). Studies have found cases of goods being sent by air through relatives or travelers carrying large quantities of clothing for resale, parallel financial systems, arrangements between networks of money changers, and importers authorized to export currency (Benouziid 1999). When informal trade moves beyond shared borders between countries, it can be characterized by a wide geographical spread, availability of substantial capital, network of intermediaries, and mixture of informal and formal practices among other things.

In South Asia, informal trade has been a persistent feature of the region and continues to thrive despite unilateral trade liberalization in these countries and regional trade liberalization under the South Asian Free Trade Agreement (SAFTA). Analysts regard this growing informal trade to be one of the key reasons for low intra-regional trade in South Asia making this issue an important subject of study in the region.

During 1998–2005 several studies examined the issue of informal trade in South Asia (Pohit and Taneja 2000, 2002; Taneja et al. 2005; Rahman and Razzaque 1998; Rao et al. 1997; Sarvananthan 1994). The focus of the studies was on estimating informal trade, identifying factors that determine these flows, and examining the institutional framework which supports it. These studies considered it important to understand the functioning of informal trading markets so that measures could be suggested to improve the functioning of formal markets enabling informal trade to shift to formal channels.

The most interesting country pair in South Asia on this issue is India and Pakistan. India and Pakistan have had a history of strained and restrictive bilateral trade and transport agreements. Even though in recent years measures have been taken to normalize trade and reduce transport impediments, informal trade continues to persist between the two countries. In earlier studies, informal trade between India and Pakistan has been estimated in the range of US\$ 250 million to US\$2 billion per year (Kugelman and Hathaway 2013; Taneja 2004; State Bank of Pakistan 2006; Ahmad et al. 2014). If such trade is brought within the ambit of official trade, a significant increase in total trade could be witnessed. Studying the informal aspect of the trading relationship would give deep insights into the

functioning of the bilateral economic relationship and help provide policy inputs into the trade normalization process.

In this context the present study (i) identifies factors determining informal trade, (ii) prepares estimates of India's informal trade with Pakistan, (iii) examines the modalities of informal trade, (iv) analyzes the transaction cost incurred in trading formally and informally, and (v) proposes recommendations needed to shift informal trade to formal channels.

2 Framework for Analysis and Methodology

For the purpose of the study, informal trade is broadly defined to include all trade between the two countries that should be included in the national income statistics, according to conventional national income accounting, but is not. Measuring informal trade involves preparing estimates of India's informal trade with Pakistan in terms of its value, and pattern. Such estimates are important because they would reflect the potential for trade that exists between the two countries.

The study attempts to understand the elements underlying the vitality of informal trading arrangements as well as to identify the bottlenecks of formal trading arrangement between India and Pakistan. Factors influencing informal trade can be classified under three broad categories—(i) those that are related to the policy environment, (ii) institutional factors, and (iii) non-economic factors. Policy-related factors would include those related to trade and transport policies. Trade measures that could encourage informal trade would include high tariffs, non-tariff barriers, and restriction on commodities to be traded (Pakistan does not permit imports of 1209 items from India). Transport policies that could impede formal trade and provide an incentive for informal trade include limited number of items permitted by the road route from India to Pakistan, limited number of land routes, and restriction on movement of containerized cargo by the land route. Institutional bottlenecks in the formal channel could also drive potential formal trade to informal channels. For instance, officially traded goods might be subject to complex, and non-transparent regulatory requirements and customs procedures. The infrastructure supporting formal trade could be weak, adding to the transaction costs. Inadequacy in the payments mechanism would also raise transaction costs of trading formally. Information asymmetries in formal trading markets restrict the development of business relationships. On the other hand informal trading markets may offer better institutional support. Payments can be made quickly without using banking channels. Informal markets may also provide a network that not only facilitates information flows but also helps build business partnerships. India and Pakistan trading is also influenced by non-economic factors like political tensions between the two countries, fear of trading officially or possible harassment of official agencies which inhibit businesses from using formal channels.

As and when inadequacies in the formal channel of trading are corrected informal trade is expected to shift to the formal channels. In the present context it is

also argued that while both institutional arrangements, i.e., the formal and informal, facilitate trade in goods across countries, they are carried out at a cost, viz., transactions cost. A rational behavior would imply that a more efficient institution (in terms of lower costs) should be preferred over less-efficient one (Coase 1960).

To prepare estimates of the value of unrecorded trade flows, analysis based on secondary data may not be very meaningful and the only method left to estimate informal trade flows is through primary surveys. Some studies have attempted to estimate the value of illegal trade activities through Partner country data comparison (Sarvanathan 2001). In practice, this form of informal trade is carried out by under/over invoicing of exports/imports. Basically, the method is to compare the export/import data of the trading partners concerned. The important point is that this method uses recorded trade statistics. A country's export of a particular good should equal the import of the same good by its trading partner and vice versa. If not, then it may be inferred that false invoicing is taking place. The extent of informal trade is hence measured by the degree of fake invoicing. However, there are several caveats to this method. For instance there could be errors in measuring freight and insurance costs because of which trade estimates could be inaccurate. Partner country data comparisons may not be accurate because one country's export may be accounted in one fiscal year and its trading partner's import of the same good may be accounted in another fiscal year. Also such comparisons may also be less effectual when faking of invoices takes place at both ends of the international trade (Taneja 2002). This is more likely the case when both the trading partners are developing countries. In the case of India and Pakistan, where trade recording systems are poor partner country data comparisons may not reveal the real extent of fake invoicing.

Thus, international trade data present considerable difficulties for partner country data comparison. Moreover, if trade is not recorded at both ends, which is a prominent feature in the South Asian countries including India and Pakistan, then partner country data comparison is not a valid method. As our present study defines informal trade as unrecorded trade flows that are not captured by official national statistics, we need to use primary data generated through a survey for quantification of such flows.

The magnitude and pattern of India's informal trade with Pakistan was estimated through primary surveys covering both formal and informal traders in India and Dubai using Delphi technique, which is essentially a set of procedures for eliciting and refining the opinions of a group of respondents over successive rounds of interviews. The responses from the first round of interviews with a group of respondents are synthesized and the results presented to each respondent of the group in a second round of interviews, to enable respondents to reconsider their responses. The responses obtained in successive rounds are based on feedback provided to the group from previous rounds. The iterations continue until a consensus emerges or until reasons for a lack of convergence are documented. The basic characteristics of this technique are as follows:

- Structured questionnaire-based interrogation of experts (knowledgeable people) on the issues being probed.
- Providing summarized responses of the first round to the respondents of the group to enable them to review their response in the second round.
- Repeat iterations till broadly converging responses are received or reasons for lack of convergence are documented.
- Anonymity of responses.

For the purpose of the study, some modifications of the Delphi technique were carried out. First, semi-structured format of direct/informal discussion was carried out with the respondents where they were asked identical questions based on pre-designed guidelines. The survey was designed to capture the volume and aggregate and item-wise value of informal trade, characteristics of business, trade features, custom process and transaction procedures involved in the trade. Respondents were asked to give an estimate of their perception of the value of commodity-wise informal trade and commodity-wise value of trade carried out on a particular route. Some respondents in the primary survey were hesitant to share some information, for example, regarding their personal identity, routes through which specific goods are being traded and the overall mechanism of these trades. This information was solicited through loosely structured conversation with people who had specialized knowledge about the informal trading mechanism hereby referred to as “knowledgeable persons” and formal traders. Moreover, the rounds of iterations among participants were limited to just two, as there was very little divergence in the responses collected over the two rounds and the respondents exhibited unwillingness to answer the questions a third time around.

The Delphi technique was then complemented with *monitoring techniques*. Movement of cargo was tracked at different ports. The team observed traders at “active” border crossing points, airports, and railway stations. This is a popular technique for collecting primary data on informal trade (Ackello-Ogutu 1996; Peberdy 2002; Azam 2006). Tracking the movement of cargo was sometimes difficult and drew considerable suspicion because the team was mistaken for either policemen, or customs personnel. To avoid this, the team maintained a minimal level of contact and identification with the police and customs personnel in order to win the confidence of the traders.

3 Sample Design

A total of 247 respondents were covered across 8 Indian cities—Ahmadabad, Amritsar, Chennai, Delhi, Hyderabad, Kolkata, Mumbai, Surat, and Dubai. The number of respondents in each city and in each category is shown in Table 1.

Of the total respondents, 45 % were formal traders, another 43 % were informal traders, and remaining 12 % constituted the ‘Knowledgeable Persons’ category. For obtaining estimates of informal trade some information was elicited from the

Table 1 City-wise break up of respondents

City	Formal trader	Informal trader	Knowledgeable person	Total respondents
Ahmedabad	5		4	9
Amritsar	11	22	12	45
Chennai	4	3	5	12
Delhi NCR	5	21	1	27
Dubai	28	25		53
Hyderabad	4		4	8
Kolkata	4	1	3	8
Mumbai	41	27	2	70
Surat	8	7		15
Total	110	106	31	247

Source ICRIER survey September 2013–March 2014

‘Knowledgeable Persons’ category which comprised officials at the ports, customs officials, and other knowledgeable persons.

The sample of formal traders was selected on the basis of information provided by the chambers of commerce in selected cities in India and Dubai. On the basis of consultations, formal traders who had knowledge about informal trade were selected. Some of these traders were engaged in informal trade as well but did not want to be classified as informal traders. The sample of formal traders also included logistics service providers who were transporting informally traded goods.

Subsequently, the list of informal traders to be interviewed in different cities was prepared on the basis of discussions with knowledgeable persons. Such a selection procedure may lead to a biased sample.

The study also has limitations. First, estimates are based upon knowledge of respondents. Second, the sample selection in the study may be biased. Third, given the nature of the sample of respondents, the survey estimates may only be *indicative*. Fourth is the exclusion of unofficial capital transfers between India and Pakistan. As capital transfers are not allowed officially (unless for investment in joint ventures) between India and Pakistan, there is a thriving informal market for capital transfers between the two countries (usually in the form of *hawala*).¹

4 Why Informal Trade Takes Place?

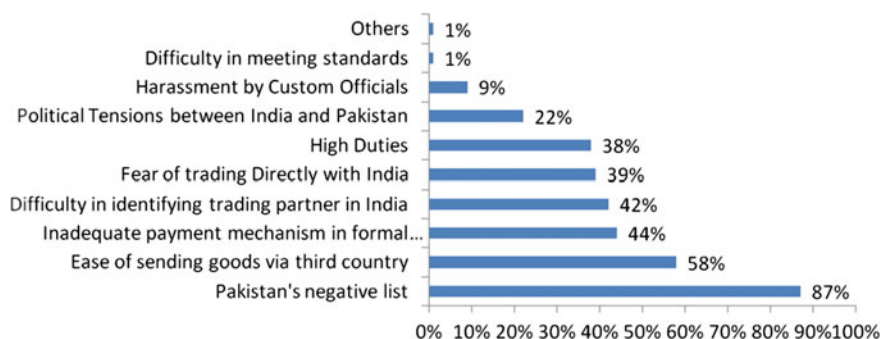
Based on the analytical framework, the questionnaire was designed to elicit responses on the reasons for informal trade. Respondents were allowed to give multiple responses which meant that each respondent could give more than one

¹*Hawala* by definition is a traditional system of transferring money used in Arab countries and South Asia, whereby the money is paid to an agent who then instructs an associate in the relevant country or area to pay the final recipient.

reason for informal trade. An examination of factors that influence informal trade is important to understand the bottlenecks of formal trading arrangements between India and Pakistan. The survey included responses on factors influencing informal exports from India to Pakistan and informal imports to India from Pakistan.

The survey revealed that 89 % of traders in India found Pakistan's negative list of 1209 items as the most important factor behind India's informal exports to Pakistan (Graph 1). Pakistan maintains a list of 1209 items on the negative list. These are items that are not allowed to be imported from India. Moreover, there is a restriction on the Wagah road route—only 137 items are allowed to be exported from India to Pakistan via the road route. This impediment is clearly related to the policy environment. These restrictions give a strong incentive for negative list goods to be traded informally from India to Pakistan largely through third countries. The survey showed that more than 50 % of the products being exported informally from India to Pakistan were on the negative list.

The second most important factor for informal exports to Pakistan, identified by 58 % traders, was the ease of sending goods via third country. This reflects the weakness of the infrastructure supporting formal trade which often results in high transport costs in the region and creates a strong incentive for trade to take place through informal channels. Even though India and Pakistan share a long land border, trading between India and Pakistan is allowed only by road and rail along the Attari/Wagah border in Punjab. The Attari/Wagah road route being the only operational route limits the number of items permitted for export from India to just 137 items. The exports which cannot be exported by the road route are being exported at a much higher cost by sea instead of the alternative rail route. In case of India–Pakistan trade, surface transport should be the most convenient and least costly option for moving cargo across the border but this is not the case because the rail route operating between India and Pakistan is in a deteriorating state. There are issues of non-availability of wagons, lack of warehousing, no-fixed schedule of running of trains, pilferage, etc. In addition, customs efficiency in terms of processing time of documents, time taken for lab testing, and checks for security is also a problem at mostly all ports currently operational for trading with Pakistan (Taneja et al. 2016). Thus the land route becomes an unattractive option for traders.



Graph 1 Reasons for India's informal exports to Pakistan (percent of respondents). *Source* ICRIER survey September 2013–March 2014

The sea route has fewer problems. It has been reported that in India a 100 % security check is conducted on all consignments from Pakistan at sea ports. This makes trading through the direct route more cumbersome. As a result traders prefer sending their goods via third country. Traders have also developed efficient mechanisms through their contacts in third countries for obtaining information on quantities and commodities to be traded and mitigating risks that might arise in the unofficial transacting environment (Taneja et al. 2013).

The third most important factor for informal exports to Pakistan, identified by 44 % traders, was inadequate payment mechanism in formal channel. Traders often find it difficult to send payments directly to the other country since India and Pakistan do not have presence of domestic banks in the each other's country. There is no formal mechanism for dispute resolution too. Several traders pointed out that some Indian banks do not recognize L/Cs from all Pakistani banks. Also confirmation of L/Cs takes up to a month. Sometimes payments are delayed as the banks point out discrepancies in the L/Cs. As a result of these problems, payments are usually routed through third country banks which take 4–7 days to remit the payment. To avoid this delay, traders prefer to use the informal channel which is faster and more secure. What is not commonly known is the fact that even if India and Pakistan do not have domestic banks in the other country, transactions can easily take place through *corresponding bank arrangements* via *Nostro* accounts. Corresponding bank arrangement is an arrangement under which one bank (correspondent) holds deposits owned by other banks (respondents) and provides payment and other services to those respondent banks (IMF 2008). When banks have such an arrangement with each other, then payment transfer can take place without the interaction or involvement of an intermediary bank. If Indian and Pakistani banks have *Nostro* accounts in the banks of the other country,² payments can be made within a day or two. Lack of awareness of such options by traders is an indication of large information asymmetries which increases the cost of direct trading between the two countries.

Difficulty in identifying trading partner in Pakistan was identified as another reason for informal trade by 42 % of the respondents. India and Pakistan follow a restrictive visa regime. Granting city-specific visa, requirement of police reporting on arrival and before departure, requirement of exit from the port of entry, and delays in granting visas are some of the restrictions that limit market access for aspiring traders.³ Additionally, limited channels of communication, lack of transparency, market imperfections, and information asymmetries raise transaction costs and further restrict market access for traders.

Fear of trading directly was also reported as a reason for informal trade by 39 % of the respondents. This is linked to the strained political relations between the two

²Nostro Account: Bank account established in a foreign country usually in the currency of that country for the purpose of carrying out transactions there. For example, most commercial banks maintain US dollar accounts with their correspondent banks in USA in order to facilitate settlement of interbank and customer transactions in US dollar.

³Taneja et al. (2011).

countries. Traders in India reported harassment and questioning from officials which prevented them from entering into direct formal trading relationship.

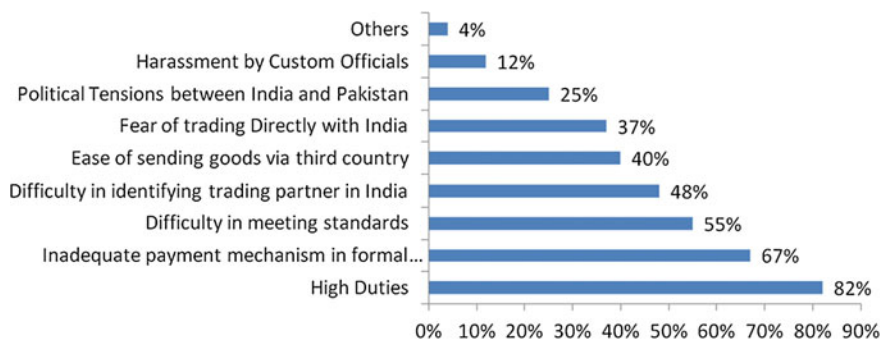
Imposition of high tariffs was also reported as a reason for informal exports by 38 % of the respondents. High tariff rates create a strong incentive to avoid the formal channel in order to evade tariffs. With compliance to the tariff liberalization plan of SAFTA, a phase out and cut down in tariffs is expected. To the extent that high tariffs encourage the use of informal channels a shift from informal to formal trade can reasonably be expected to occur.

Twenty-two percent of the respondents also reported the political tension between India and Pakistan as another reason for the existence of informal exports. This is a non-economic factor but it has to be kept in mind that prior to the 1947 partition of the sub-continent, India and Pakistan were in fact a single country politically, economically, and monetarily. This historical fact continues to be relevant since some part of the informal trade flourishes because of the traditional, historical, and ethnic links. Perhaps what lie at the core of informal trading markets between India and Pakistan are the close ethnic ties. A common language, religion, culture, etc. play a crucial role in facilitating informal trading across the border.

Harassment by custom officials was also reported as a reason for informal trade by 9 % of the respondents. Finally, only a few traders reported difficulty in meeting standards as a problem.

On India's informal imports from Pakistan, the survey shows that high duties imposed by India were the most important factor influencing informal trade. While this was not amongst the top reasons for India's informal exports to Pakistan, it was reported as the most important reason for informal imports from Pakistan. Over the last few years, India has reduced tariffs under SAFTA to a maximum of 5 %. However, it continues to maintain a sensitive list of 614 items on which no tariff concessions are granted.

Other reasons reported for informal imports from Pakistan are inadequate payment mechanism in formal channel (67 %), difficulty in meeting standards (55 %), difficulty in identifying trading partners in India (48 %), ease of sending goods via third country (40 %), fear of trading directly with India (37 %), political tensions (25 %), and harassment by customs officials (12 %) (Graph 2).



Graph 2 Reasons for India's informal imports from Pakistan (percent of respondents). *Source* ICRIER survey September 2013–March 2014

The essence of our study is that policy and institutional factors play an important role in influencing informal trade flows. With more liberal, non-discriminatory, and transparent policies and improvements institutional functioning of formal markets, a shift from informal to formal channels can be expected to occur.

5 How Does Informal Trade Take Place?

5.1 Major Routes and Modalities of Informal Trade

Most of India–Pakistan informal trade flows through third country, in particular Dubai. One can broadly outline seven routes through which informal trade between India and Pakistan takes place:

1. India–Dubai–Pakistan
2. India–Dubai–Iran (Bandar Abbas)–Afghanistan–Pakistan
3. India–Dubai–Pakistan (Karachi)–Afghanistan–Pakistan (sea and land route)
4. India–Pakistan (Karachi)–Afghanistan–Pakistan (sea and land route)
5. India–Afghanistan–Pakistan (air route)
6. Delhi–Amritsar–Lahore (passenger bus/rail)
7. Cross-LoC trade routes (Uri–Salamabad and Poonch–Rawalkote)

The first route, i.e., India–Dubai–Pakistan, is the main channel for quasi-legal trade. Trade is recorded between India and UAE and between Pakistan and UAE but is unrecorded between India and Pakistan. At Dubai, the goods are stamped with a country of origin other than India. There are some cases when trade modality is conducted through a “switch bill of lading.” In such an arrangement, ships containing items not allowed for import in Pakistan are supposed to travel to Karachi via a third port (e.g., Dubai). In reality, however, the ships travel directly from an Indian port to Karachi (Khan et al. 2007; Taneja 2006). The bill of lading of that ship, which shows its origin, is switched in the documentation to Dubai. This process is completed even before the ship has left the Indian port.

The second, third, and fourth routes are basically the Afghan transit routes, wherein goods are destined for Afghanistan (either directly or through Iran or Pakistan) but make their way into Pakistan informally en-route or through the North-western parts of Pakistan. The goods reaching Pakistan enter with an origin change (Fig. 1).

In route 2, goods move officially from India to Dubai. The containers are shipped to Dubai and from Dubai to Bandar Abbas (in Iran) from where goods are transported overland by trucks to Afghanistan and finally to Pakistan.

In route 3, goods move by sea from an Indian port to Karachi port in Pakistan via Dubai and then move to Afghanistan by road and further on enter into Pakistan informally. In route 4, goods move by sea from an Indian port to Karachi port in Pakistan, and then move to Afghanistan by road and further on enter into Pakistan informally. In both routes 3 and 4, sometimes goods are deflected en-route.

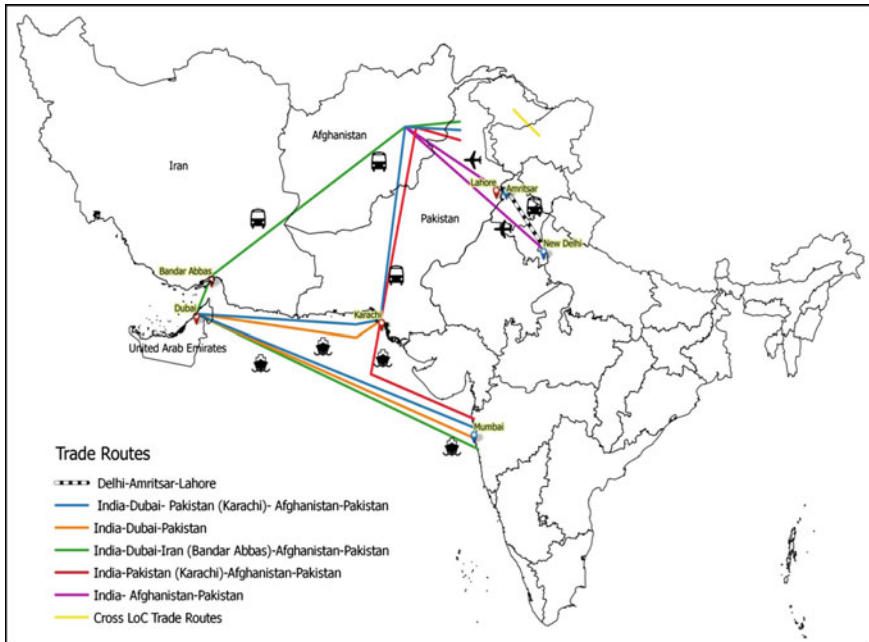


Fig. 1 Major informal trading routes between India and Pakistan

In route 5, goods are destined for Afghanistan but come back to Pakistan informally by the land route.

The survey reflected interesting insights into the three sub-routes through Dubai, namely routes 2, 3, and 4. An important aspect is that traders selected the routes because of different reasons. Even though India–Dubai–Iran (Bandar Abbas)–Afghanistan–Pakistan (route 2) was the longest and most expensive in terms of transportation cost, the customs point at Iran/Afghanistan border has weak enforcement and hence no duties are charged when goods enter into Afghanistan. This makes the route attractive for goods with *high duties*. Goods drawing duties in the medium range are sent through India–Dubai–Karachi–Afghanistan–Pakistan (route 3). Finally, goods that have very low duties are sent directly through Dubai to Karachi (route 1).

Box 1: Dubai as a trading hub for India–Pakistan Trade

For several years, Dubai has been used as a common ground for conducting trade between India and Pakistan. Dubai is easily accessible from both India and Pakistan in terms of travel and logistics, and has a significant number of Indian and Pakistan diaspora. Dubai has duty-free zones, a business friendly environment for trade, no direct taxes on corporate profits or personal income, 100 % repatriation of capital and profits, and no foreign exchange controls, trade quotas, or barriers.

Since channels of communication are weak between India and Pakistan, traders from both sides have often relied on agents or middlemen of Indian or Pakistani origin in Dubai who bring together the buyers and sellers in both countries and facilitate trade transactions. A strong network of traders and a large ethnic community from the two countries enables free flow of information on commodities to be traded between the two countries. Advertisements aired on television in Dubai are also an important source for identifying the possible products that can be traded between the two countries. Such market forces do not exist in India and Pakistan due to a restrictive media regime. The trade contract is executed in two legs: the middleman/agent in Dubai signs a contract with the buyer and separately with the seller and takes responsibility for quality, procurement, documentation, and delivery. He is a guarantor and bears the risk in the transaction.

Most agents import the products into free zones in Dubai and re-export it within the stipulated time with fresh documentation and in this way evade duties. Indian bill of lading shows Dubai as the destination and the product is re-exported to Pakistan. In cases where there is evidence that the product is from India, a huge penalty is imposed. In such circumstances, the consignment is either returned or accepted on payment of bribe. Such trade is usually financed through letters of credit (entered separately between importer–agent and agent–exporter), cash transactions, or *hawala*.

In sum, Dubai has facilitated trade by bringing buyers and sellers together, bridging the information gap, and playing the role of a risk guarantor, ensuring that goods reach their destination and payments are made.

Case Study 1: Informal Trade of Machinery

During our survey, we came across an instance where a machine that was exported from Kolkata to Pakistan via Dubai with fresh documentation and different countries of origin was caught at the destination port in Pakistan port since it was wrapped in a leading Indian daily. The documentation of the consignment was complete and reflected a different country of origin but the wrapping in an Indian newspaper led to suspicion among officials and finally the exporter was levied a huge fine.

Trade on the Amritsar–Lahore route is conducted through the “Samjhauta Express” train, which operates twice a week. Informally traded items are brought by genuine passengers looking to cover the cost of their trip or by professional informal traders (called “Khepias”), who travel on the train on a frequent basis and

carry large quantities of goods from India to Pakistan and vice versa. The goods are taken to established wholesale markets in Lahore and Delhi from where they are either distributed to retail markets within the city or transported to other cities.

The seventh route is the cross-LoC route under which barter trade is allowed through Uri–Muzzafarabad trade route and the Poonch–Rawalakot trade route on an agreed upon list of 21 items that are of Kashmiri origin. The list is ambiguous leaving room for a number of items to be traded. Since no duties are charged on cross-LoC trade, this route becomes very attractive for informal traders especially in products where import duty is high. Transactions get reconciled between both sides on trade books but payment transactions get reconciled through *hawala*.⁴

6 Survey-Based Estimation of India–Pakistan Informal Trade

The survey-based estimates of India–Pakistan informal trade show that total informal trade is US \$4.71 billion. Of this, India's exports to Pakistan are estimated to be USD 3.99 billion (Table 2) and imports from Pakistan are USD 0.72 billion (Table 3). The estimates are for the year 2012–13. Similar to formal trade, the balance of informal trade is also tilted in favor of India.

The survey estimates show that real jewelry including gold, diamonds, and precious stones is the single largest commodity traded informally from India to Pakistan accounting for 23 % of India's informal exports to Pakistan. This high-value jewelry is hand carried either by air through Dubai or even with passengers in Samjhauta Express. Artificial jewelry is also exported informally to Pakistan. Though this amount is not very significant and comprises just 1 % of our informal exports, the survey has reported informal exports of artificial jewelry which includes bridal sets, bangles, and lockets. Ahmed et al. (2014) point out that there are 150 shops in Karachi, Lahore, and Rawalpindi, which deal in artificial Indian Jewelry.

Textiles is the second largest item being exported informally even though it is allowed to be exported formally in the positive list. There is demand for Indian synthetic fabric, silk-based fabrics, and salwar kameez dupatta in Pakistan. Majority of these textiles are going from Surat, Gujarat, and South India.

⁴The uniqueness of this system is that there is no physical transfer of currency. This mechanism, referred to as the 'hawala' in India and Pakistan, operates on the same principles. Thus an Indian exporter, who exports goods to Pakistan, gets his payment through the 'hawala.' The dealer in Pakistan sends an 'I owe you' to the dealer in India and the requisite equivalent amount is paid to the exporter. The 'I owe you' is analogous to cash or cheque in the modern banking system.

Table 2 India's informal exports to Pakistan—estimated value (2012–13)

Products	Value (in million \$)	Share (%)	Average duty ^a (%)	Negative list ^b	Sensitive list ^c
Real jewelry (diamond, gold, precious stones, etc.)	910	23	5	✓	✓
Textiles	780	20	12.5	✓	✓
Machinery and machine parts	305	8	20	✓	✓
Electronic appliances	220	6	17.5	✓	✓
Scraps	193	5	17.5	✓ (Scrap of auto parts)	
Paper	190	5	15	✓	✓
Chemicals	187	5	17.5	✓	✓
Tyres	187	5	15		✓
Packaged food items	170	4	30		
Spices	160	4	10		
Pulses	156	4	7.5		
Consumer durable items	150	4	30		✓
Industrial additives	133	3	15	✓	✓
Pharmaceutical products	83	2	15	✓	✓
Jewelry (artificial)	28	1	7.5		✓
Pan leaves/betel leaves	26	1	Rs. 200/kg		
Alcohol	22	1	90		✓
Coconut oil	20	1	Rs. 10800/MT		
Tea	16	0	25	✓	
Shaving blades	15	0	10		✓
Fruits and vegetables	12	0	15		✓
Pan masala	8	0	30		
Tobacco products	6	0	30	✓	✓
Leather	5	0	22.5	✓	
Auto components	4	0	35	✓	✓
Stone	3	0	27.5	✓	
Furniture	2	0	20	✓	✓
Aam papad	0.5	0	30		
Soda bottles	0.5	0	25		✓
Total informal exports from India to Pakistan	3992	100			

Source ICRIER survey September 2013–March 2014

^aAverage duty calculated from customs tariff manual 2012–13, Federal Board of Revenue, Government of Pakistan

^bPakistan maintains a negative list of 1209 items that are prohibited from being imported from India

^cCorresponds to Pakistan's sensitive list under SAFTA. Sensitive list comprises products that are exempted from tariff concessions offered under SAFTA

Table 3 India's informal imports from Pakistan—estimated value (2012–13)

Products	Value (in million \$)	Share (%)	Average duty (%) ^a	Sensitive list ^b
Textiles	350	49	12	✓
Dry fruits	230	32	8	
Spices	75	10	8	✓
Cement	15	2	6	
Carpets	28	4	10	
Fruits and vegetables	12	2	8	✓
Leather	9	1	6	
Electronic goods (Chinese Cameras, ICs, etc.)	1	0	6	✓
Leather chemicals	1	0	8	
Total India's informal imports from Pakistan	721	100		

Source ICRIER survey September 2013–March 2014

^aAverage duty calculated from Central Board of Excise and Customs, 2012–13, Government of India

^bCorresponds to India's sensitive list under SAFTA applicable to Pakistan (Non-Least Developing Country). Sensitive list comprises products that are exempted from tariff rates offered under SAFTA

Case Study 2: New Textile Market, Surat

The New Textile Market is a major textile hub in Surat with about 50,000 members. About 42,000 of its members are exporting overseas. The main export items of these exporters are Salwar Kameez Dupatta (SKD) and dyed and other fabrics. About 90 % of these exporters export to Pakistan via Dubai and only 10 percent do it directly. The ones exporting directly are mainly exporting dyed fabric through the road route.

Other items like Salwar Kameez Dupatta and polyester and synthetic fabrics are traded via Dubai. Traders from Dubai come to Surat and place orders for goods to be sent to Dubai. Traders in Surat then send their goods to Mumbai and further to Dubai and finally Karachi. Traders ensure that there is no *Made in India* label on the fabric before exporting to Dubai.

Traders have to incur huge transaction cost and the consignment takes a long time to reach its final destination. But, because of lack of awareness about the possibility of direct trading, lack of information on trade policies, and the difficulty in identifying trading partners in Pakistan, traders in Surat rely on the Dubai route rather than on formal direct trading route.

High-value machinery is another important item being exported to Pakistan informally. Industrial, textile, packaging, printing, and pouch-making machinery were reported to be exported to Pakistan informally via Dubai. Traders use interesting methods to export machinery. For instance, printing machinery is sometimes sent along with a copper scrap consignment and reported as export of scrap to Dubai.

In a recent trend, Indian packaged food products have found an entry into Pakistan markets informally. The demand for Indian tyres, both new and refurbished, has also witnessed a surge in the Pakistan market.

Real jewelry, textiles, machinery and machine parts, electronic appliances, scraps, paper, chemicals, tyres, and packaged food items together account for nearly 80 % of India's informal exports to Pakistan. The combined share of remaining items which includes spices, pulses, consumer durable items, industrial additives, pharmaceutical products, artificial jewelry, pan masala, tobacco products, etc. was 20 %.

Indian consumer durable products like cosmetics, deodorants, perfumes, and soaps are very popular and are preferred both for their better quality and affordability, compared to the Pakistani and foreign cosmetic products.

Several Indian pharmaceutical products are exported informally to Pakistan either via Dubai or Afghanistan. Medicines such as Aspirin, Amoxicillin, Ampicillin, Cimetidine, Famotidine, Co-trimoxazole, Ciprofloxacin, Lexotanil, and Ranitidine manufactured by Indian companies (Liv 52, Serpina, Mentat, Herbdax) are available in the local Pakistani markets. Some of the negative list drugs such as Aspirin and Paracetamol are also reported to be easily available in the local markets (Ahmed et al. 2014).

During the survey, it was also observed that Indian alcoholic products are exported to Pakistan primarily by the road route. It was reported that border officials on both sides were the main conduit for this trade.

Tobacco, pan masala, and pan/betel leaves were also found to be exported to Pakistan informally. There is demand in the Pakistan market for Indian *gutka* and pan masala. Import of *gutka* in Pakistan is banned yet Indian *gutka* and tobacco products can be seen openly in the Pakistan market. Most of these items are exported informally as accompanied baggage in Samjhauta Express.

Case Study 3: Export of Indian Pan/Betel Leaves Indian pan or betel leaves are carried by *khepias* or *carries* in bulk through the Samjhauta Express. These carriers purchase pan leaves from old Delhi market located near the railway station at a price of INR 50–60 per kg. The pan leaves are put in sacks and carried to Pakistan along with their own baggage. These carriers make 2–3 visits a year and on an average carry 2–3 sacks filled with pan leaves to Pakistan. Discussions with some of these carriers revealed that it was easy to locate customer/trader in Pakistan. There is a difference in the selling price of these pan leaves depending on the location of the market. Products sold at the station itself are priced at about INR 200–300 per kg and if sold in some markets located further off the price increases to about INR 400–500 per kg.

An examination of Pakistan's negative and sensitive list indicates that a substantial proportion of products being exported informally from India to Pakistan are on the negative list (52 %) or on Pakistan's sensitive list under SAFTA (62 %) or on both Pakistan's negative and sensitive lists (72 %). Further, the maximum number of tariff lines in Pakistan's sensitive list fall under the category of textile items (24 %) providing the incentive to trade informally in this category. Other

important informally traded items such as jewelry, machinery and machine parts, electronic appliances, and pharmaceuticals also fall either on the negative or sensitive lists (Table 2). However, there are items that neither come under the sensitive list nor on the negative list and are also subjected to low tariffs. This indicates that a number of factors other than those related to trade policy are at play which influence informal trade flows. If we also look at the import duty structure for the identified products that were reported to being exported informally from India to Pakistan, we find that other than jewelry (both real and artificial), import duty for all the products is over 10 % in Pakistan.

India's informal imports from Pakistan amount to US\$ 0.72 billion. The composition of informal trade in terms of value from Pakistan to India, as estimated in the survey, shows that textiles is the single largest commodity traded informally from Pakistan into India. The share of textile products is about 49 % of India's informal imports from Pakistan (Table 3). This is not surprising since there is a huge demand for Pakistan textiles in India particularly in cotton lawn salwar kameez dupatta. Indian traders import textiles informally via Samjhauta Express, cross-LoC trade routes, and sometimes also through Dubai. An examination of India's sensitive list under SAFTA applicable to Pakistan indicates that 44 % of the products informally imported into India from Pakistan fall under India's sensitive list. India's sensitive list under SAFTA has the largest number of items in the textiles sector accounting for 30 % of the total number of items on the sensitive list, providing the incentive to trade informally in this category. If we also look at the import duty structure for the identified products that were reported to being imported informally from Pakistan into India, we find that other than textiles, import duty for all the products is below 10 % in India.

A striking feature of the origin of goods traded informally is that while informal trade in goods traded from India to Pakistan comprise wholly of locally produced goods in India, informal trade in goods moving from Pakistan to India includes both goods domestically produced in Pakistan and goods that originate in third countries. Notable amongst third country informal imports into India are Afghanistan-made carpets, electronic goods manufactured in China, and California almonds.

Majority of India's informal exports to Pakistan are routed via third country. About 68 % of India's informal exports to Pakistan are routed via Dubai (detailed route-wise breakup given in Table 4). Informal trade through Delhi–Amritsar–Lahore passenger bus/rail accounts for 26 % of the total informal exports. Informal exports through Afghanistan accounts for 4 % and cross-LoC trade route accounts for 2 % of India's total informal exports to Pakistan (Table 4).

Survey results on route-wise estimates of India's informal imports from Pakistan show that 59 % is accounted for by passengers traveling by bus or rail. Informal imports via the cross-LoC trade routes and Dubai account for 24 and 17 %, respectively (Table 5). About 30 % of textile items flow into the Indian market through the cross-LoC route primarily to evade tariffs. A detailed examination of India's sensitive lists shows that textiles account for 30 % of items on India's

Table 4 Route-wise estimates of India's informal exports to Pakistan (2012–13)

Routes Products	India– Dubai– Pakistan (route I)	India–Dubai–Iran (Bandar Abbas)– Afghanistan–Pakistan (route II)	India–Dubai– Karachi– Afghanistan– Pakistan (route III)	India– Afghanistan– Pakistan (route IV)	India–Pakistan (Karachi)– Afghanistan– Pakistan (route V)	Delhi– Amritsar– Lahore ^a (route VI)	Cross-LoC trade routes ^b (route VII)	Value (in million \$)
Real jewelry	518		222			170		910
Textiles	246		164	31		285	54	780
Machinery and machine parts		110	164			31		305
Electronic appliances	41	62	104			13		220
Scraps	25	42	101			24		193
Paper	80	10	19		67	14		190
Chemicals	45	60	43			39		187
Tyres	20	75	30	21		41		187
Packaged food items	170							170
Spices	12					138	10	160
Pulses						156		156
Consumer durable items	120	5	25					150
Industrial additives	15	32	70			12	4	133
Pharmaceutical products	25		25	33				83
Jewelry (artificial)	19		2			7		28
Pan leaves/betel leaves						26		26

(continued)

Table 4 (continued)

Routes Products	India– Dubai– Pakistan (route I)	India–Dubai–Iran (Bandar Abbas)– Afghanistan–Pakistan (route II)	India–Dubai– Karachi– Afghanistan– Pakistan (route III)	India– Afghanistan– Pakistan (route IV)	India–Pakistan (Karachi)– Afghanistan– Pakistan (route V)	Delhi– Amritsar– Lahore ^a (route VI)	Cross–LoC trade routes ^b (route VII)	Value (in million \$)
Alcohol	5					17		22
Coconut oil						16	4	20
Tea					8	8		16
Shaving blades	2	1	2			10		15
Fruits and vegetables						4	8	12
Pan masala	3		2			3		8
Tobacco products	3					3		6
Leather	1	1	2			1		5
Auto components	1	1	2			1		4
Stone	1					2		3
Furniture	2							2
Aam papad						0.5		0.5
Soda bottles						0.5		0.5
Estimated value of India's informal exports to Pakistan	1354	399	977	85	75	1022	80	3992
Percent share (%)	34	10	24	2	2	26	2	100

Source ICRER survey September 2013–March 2014

^aCorresponds to passenger bus/rail^bCorresponds to Uri–Salamabad and Poonch–Rawalkote trade routes

Table 5 Route-wise estimates of India's informal imports from Pakistan (2012–13)

Routes Products	Via Dubai ^a	Lahore– Amritsar– Delhi ^b	Cross-LoC trade routes (Uri–Salamabad and Poonch–Rawalkote) ^c	Trade value
Textiles	96	153	101	350
Dry fruits		167	63	230
Spices		75		75
Carpet		20	8	28
Cement	15			15
Fruits and vegetables		9	3	12
Leather	9			9
Electronic goods (Chinese Cameras, ICs, etc.)		1		1
Leather chemicals		1		1
Rough value of informal exports from Pakistan to India	120	426	175	721
Overall (%)	17	59	24	100

Source ICRIER survey September 2013–March 2014

^aCorresponds primarily to import route Pakistan–Dubai–India

^bCorresponds to passenger bus/rail

^cCorresponds to Uri–Salamabad and Poonch–Rawalkote trade routes

current sensitive list of 614 items (Taneja et al. 2013). This is an indication of that fact that once India liberalizes its tariffs, a shift from informal to formal channels can be expected in textiles.

7 Transaction Cost of Trading

A key question posed in the study is what are the transaction costs being incurred by traders on alternative routes? The two routes selected for the analysis are the road route through which only a limited number of items are permitted and Dubai route which offers a conducive environment for trade between India and Pakistan.

To understand the trade logistics and transaction costs incurred in trading with Pakistan, information was sought from freight forwarders and customs house agents. Transport and other transaction costs, which included official charges (loading and unloading charges at ports and land customs station), were obtained for a 20 ft. ship container load of 18 tons of soy meal. This item was selected because it is a homogenous commodity. Transaction costs include transportation costs, official charges related to documentation and port charges, and other informal charges.

Table 6 provides a comparison of total transaction costs both in terms of absolute costs and in terms of efficiency measured by costs incurred per container

Table 6 Route-wise transaction cost (TC) per container (US \$)

Route	Transaction cost per ton (INR)	Distance (kms)	Transaction cost per ton per km (INR)
(1) Delhi–Lahore	3050	507	6.01
(2) Delhi–Mumbai–Dubai–Karachi–Lahore	12600	5756	2.18

Source ICRIER survey

per km—(i) costs per container which allows cost comparisons in absolute terms as traders often do not have the option of transporting goods through the most desirable/direct route and (ii) cost per container per kilometer, which is used as a performance/efficiency indicator for alternative indirect routes.

The two routes under study are the Delhi–Lahore direct road route and the Delhi–Mumbai–Dubai–Karachi–Lahore land-cum-sea route. Under the first route, goods are transported by road from Delhi to Amritsar from where they are transported by trucks across the Attari/Wagah border. Under the second route, goods are transported by road from Delhi to Mumbai from where they are transported by sea to Karachi via Dubai (with switch bill of lading).

Expectedly, absolute costs are higher on the indirect trade route. On the Delhi–Mumbai–Dubai–Karachi–Lahore route transport and transaction costs are 4 times more than the cost of trading directly between Delhi and Lahore. Freight costs on the Mumbai–Dubai–Karachi route are around US\$ 535 for the Mumbai–Dubai leg and US\$ 175 for the Dubai–Karachi leg.⁵ The difference in the freight costs for these two legs is because freight costs are often determined by the freight trade balance between two countries. Since Pakistan has a trade surplus with Dubai, containers moving back from Dubai to Karachi are not fully loaded and are therefore offered to Indian exporters at concessional rates.

But if we were to measure the extent of efficiency in terms of transaction cost incurred per container–kilometer between the direct and indirect route, than the Delhi–Mumbai–Dubai–Karachi–Lahore route, is 2.75 times more efficient than the direct Delhi–Lahore route. Thus, the indirect route is more efficient in terms of transport/transaction cost incurred per container–kilometer (see Table 6 Column 4). The high transaction cost per ton per km at the direct route is because of several factors like limited number of items that can be exported via road route, cumbersome customs checks at Attari/Wagah customs station, some transaction costs are also in the form of bribes incurred in getting customs clearances, physical examination of goods, poor infrastructure, etc.

The key inference to be drawn from the above analysis is that the *indirect route is 11 times longer than the direct route; 4 times more expensive than the direct route; but is almost 3 times more efficient*. Another useful insight is that to overcome barriers posed by the trade and transport regimes, traders have developed alternative routes where markets in trade and transport allowed for greater

⁵ICRIER Survey in Dubai in December 2014.

efficiency. There is not much incentive, then, for traders to use the direct inefficient routes for trade between India and Pakistan. This also explains the persistence of trade through indirect routes for almost seven decades. The switch to direct routes can happen only if there are substantial improvements in efficiency.

8 Major Findings and Policy Recommendations

As India and Pakistan move toward improving their trade relations, it is important to recognize the functioning of informal trade markets and the inadequacies of the formal trading channel. This study makes an attempt to prepare estimates of informal trade between India and Pakistan and provides an in-depth analysis of the factors supporting informal trade, major routes, and modalities through which informal trade takes place, institutional mechanism that enables informal trade to take place between the two countries and transaction costs incurred while trading formally and informally.

The study estimates informal trade between India and Pakistan to be US \$4.71 billion in 2012–13. Of this, India's exports to Pakistan are estimated to be USD 3.99 billion and imports from Pakistan USD 0.72 billion. The main informal export items are jewelry, textiles, machinery and machine parts, electronic appliances, chemicals, paper, betel leaves, and tyres. India's informal imports from Pakistan mainly consist of textiles, dry fruits, cement, and spices.

The major reason for informal exports is the presence of a negative list of 1209 items and imposition of high duties is the main reason for informal imports. These impediments are related to the policy environment and give a strong incentive for negative list and high duty goods to be traded informally between India and Pakistan, largely through third country ports like Dubai.

Third country traders, particularly from Dubai, have played a key role as facilitators for informal exports by getting buyers and sellers together and providing guarantee for trade transactions between Indian and Pakistani traders. Until business partnerships can materialize through market forces, payments can be ensured, and trust in business relationships can be established, informal trade may not shift to formal channels. Interestingly, for imports the land routes are more important, with majority of informal imports coming through passenger bus/rail and cross-LoC trade routes.

A comparison of transaction costs between the direct Delhi–Lahore route and indirect and informal Delhi–Mumbai–Dubai–Karachi–Lahore route shows that the indirect route is 11 times longer than the direct route; 4 times more expensive than the direct route; but is almost 3 times more efficient. This results from the restrictive trade regime and inadequate transport system operating between the two countries.

It is clear that unless the environment of the formal trade improves, informal trade will not only continue to coexist with formal trade, but it will also impact its potential magnitude in the coming years. Since most of the total trades being outside the purview of formal trade relations, both governments lose out a

significant revenue stream. We propose the following recommendations which may be useful in the shift from informal to formal trade:

- Elimination of the negative list of 1209 items would allow export of many items that are currently routed via Dubai and other informal channels of trade. Pakistan government can switch to trading in all tradable goods while maintaining some level of protection for its sensitive constituencies.
- Enhancing and strengthening communication among traders of both countries to bridge information gap and asymmetries. More dialogs among traders in both countries would not only help the two countries in understanding each other's trade procedures and regulations but would also lead to a more conducive business environment. Online portals hosting trade-related information and discussions on trade, trade fairs, exhibitions, and multilevel dialog are some possible ways for increasing trader's awareness regarding policies that govern trade between India and Pakistan.
- Information on regulatory regimes should be made easily available to traders. For key commodities, flow charts exhibiting the import and export process covering procedures and documents, regulatory requirements, and relevant authorities should be displayed on the web portal.
- Currently, India offers market access to its SAARC partners at a maximum of 5 percent customs duty on all items except for those on the sensitive list. India offers duty-free access to imports from the Least Developing Countries in SAARC (Nepal, Bhutan, the Maldives, Bangladesh, and Afghanistan) and to Sri Lanka as well under the bilateral-free trade agreement. Since imposition of high tariffs is one of the important reasons for informal trade, India should extend this offer of zero duty to Pakistan as well, the only remaining Non-Least Developing Country. Lowering of tariffs would reduce the incidence of informal trade and induce a shift of trade flows from informal to formal trade channels. Pakistan should also bring down its SAFTA sensitive list to 100 tariff lines (from the existing 936 items) within the next 5 years, with the peak tariff rate for all other tariff lines not more than 5 %.
- Connectivity is an important aspect of strengthening formal trading ties. The inadequate transport and transit systems that have been in existence between India and Pakistan have been a major constraint in enhancing trade through formal channels. Establishment of better connectivity through improvement of cross-border physical infrastructure and amending transport protocols would encourage seamless transportation of goods across land borders. Unless infrastructure development is undertaken on an urgent basis informal trade will continue to be more attractive.
- Transaction costs can be lowered by removing bottlenecks on the direct trading routes. Measures such as simplifying border procedures and introduction of EDI facilities at the land borders would also reduce transaction costs of trading, both in terms of time and money. Containerized cargo by road and rail will improve efficiency of surface transportation. Random security checks should be carried

out on import consignments coming into India. A system of authorized trader status could be introduced to reduce security checks at sea and land ports.

- New rail and road links like the Khokrapar–Munabao link and the Ferozepur–Hussainiwala link would reduce transaction costs of trading further.
- In addition to physical transport connectivity, there is a need to improve connectivity through easier visa processes, cellular services, and courier facilities.
- Simplification or reduction of documentation requirements and formalities for export and imports would significantly reduce transaction costs. This would incentivize formal trade. This could be complemented with a ‘single window’ clearance of all trade-related documents which would further help in reducing direct transaction costs related to compliance with document requirements and indirect costs related to long customs clearance times.
- Setting up cross-border banking facilities would be an important step toward faster payments for traders. Easier access to formal credit and banking systems may encourage traders to use formal channels of trade.

To conclude, informal trade is unlikely to be totally eliminated because ethnic networks between India and Pakistan would continue to facilitate it by reducing transaction costs through minimization of risks, market information, and search costs. However, if appropriate measures are taken a substantial proportion of informal trade can be channelized to the formal route. Until all such measures are fully implemented, informal and formal trades between India and Pakistan are likely to coexist.

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Chapter 9

India–Pakistan: Second Trade Perception Survey

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Trade Perception Survey was first undertaken by ICRIER (Taneja et al. 2014) in 2014 to gather the perception of stakeholders engaged in India–Pakistan trade on the extent of impediments faced by them in realizing the trade potential. A second round of survey was conducted in 2015 to assess any changes in the extent of impediments faced by stakeholders in India–Pakistan trade and improvements in the business environment, if any.

1 Key Questions, Survey Design and Sampling

The question naturally arises as to what are the major impediments that one should focus on in this kind of a survey. While it is possible to consider a plethora of indicators for impediments, it would make the size of the questionnaire too large and would lead to a poor response rate. Thus, one has to make a judicious choice keeping in mind the size of the questionnaire. While taking forward the design of the first Trade Perception Survey (Taneja et al. 2014); the second Trade Perception Survey has been conducted with the objective to gather perceptions on the impediments faced by traders involved in India–Pakistan trade on a set of indicators, viz.: awareness of India–Pakistan trade policies, ease in meeting product standards, market access, business facilitation, customs and documentation processes and infrastructure at ports. These indicators have been chosen on the basis of existing studies, consultations and focus group discussions held by the authors in India, Pakistan and Dubai.

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India and Pakistan are in the process of normalizing their bilateral trade relations, in the pursuit of which trade policies are under ongoing review. Until bilateral trade is fully normalized and restrictions concerning trade remain, specifically those via different modes of transport, it is important that traders are aware of these policies considering that lack of information can raise transaction costs, and pose as an impediment to trade and realization of the bilateral trade potential. A major finding of our previous survey was the significantly lower trade policy awareness in Pakistan than in India.

Non-tariff measures (NTMs), especially those relating to Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) standards for agricultural and manufactured goods, respectively, are reported to have continued to restrict trade between India and Pakistan despite the governments taking measures and signing mutual agreements to address grievances arising out of difficulties in meeting these product standards. Pakistan has, for several years, been extremely concerned about non-tariff barriers that it faces in accessing the Indian market (Taneja 2006, 2007; Husain 2011; TDAP 2012) even though the standards applied by India are non-discriminatory. Within South Asia, of the 50 NTMs notified against India under a SAFTA subcommittee, Pakistan had notified the maximum NTMs (31) which it found restrictive in entering the Indian territory, followed by those notified by Nepal and Bangladesh (14 each). The survey thus tries to gather the traders' perceptions of ease in meeting standards, especially for Pakistani exporters exporting to India, keeping in mind that the previous survey had highlighted this aspect as being especially difficult.

Questions like, whether the Indian goods will be received well in Pakistan and about the acceptability of Pakistani goods in India have been a cause of concern for traders in both the countries, and have led to inhibitions in engaging in bilateral trade. Such perceived barriers go beyond the realm of NTMs as defined by WTO and are seen to impact trade to such a large extent between no other pair of countries but India and Pakistan. Previous studies on India–Pakistan trade have highlighted the use of country labels as having a negative impact on market access in the importing country (Taneja 2006). In the past, there have been instances of Pakistani bed linen being sold in India under European and Indian labels (TDAP 2012); and Indian businesses, too, have been advised to not use the “Made in India” label when exporting their goods to Pakistan. The survey thus tries to gauge the traders' perceptions on market access and to assess if there have been any perceived changes after the measures taken by the two governments in recent years. The previous survey found importers on both sides of the border perceiving a higher market access than the exporters; with traders in neither country perceiving country labels as having any negative impact on trade flows. The impact of political events was mixed.

India–Pakistan trade can be sustained if the business environment is conducive to trade, and traders are allowed to freely travel to the other country and communicate with one another to forge lasting business partnerships. The logistics and banking network also play an integral role in facilitating business transactions. It thus becomes important to gather traders' views on whether the visa regime,

communication channels, logistics operators and banks are efficient and facilitate business between India and Pakistan (Khan 2009; TDAP 2012; Taneja 2007). Our first survey showed that traders had difficulties getting visas and had problems with banking.

The role of the Customs in expediting trade is important since they control the point of entry, for any international cargo. The survey gathers and compares the perceptions of traders on the efficiency and competence of customs at all land ports, and the sea and air ports. In our previous survey, the time taken to process documents, for laboratory testing and security checks was the most at the rail port: less time was taken at the road, sea and air ports in India.

Infrastructure at all trading ports needs to be constantly upgraded to keep up with the demands of the globalizing world and expanding trade. It is essential to know-how traders perceive the availability and quality of infrastructure services. The land ports deserve special attention because infrastructure is absent. In our previous survey, warehousing at the road port was found to be a problem for Indian traders while Pakistani traders found warehousing a problem at both the rail and road Customs stations. Availability of rail wagons was perceived to be a problem on the Indian side but not as much on the Pakistan side.

Our previous survey found that traders were optimistic about improvements in the bilateral trade scenario in the next year. This survey will gauge if these positive expectations have been met and if trade between India and Pakistan has been facilitated. It will also assess any changes in the perceptions of traders.

The Trade Perception Survey used a structured questionnaire. The framework used to construct global indices such as the Enabling Trade Index (World Economic Forum 2012) and Logistic Performance Index (World Bank 2012) was adapted to the specificities of the India–Pakistan trade and business environment.

1.1 Sampling Frame

We surveyed 450¹ firms in all, 225 firms each in India and Pakistan engaged in bilateral trade. In India, the firms were spread across Ahmedabad, Amritsar, Chennai, Delhi, Hyderabad, Kolkata and Mumbai. In Pakistan, firms in Lahore, Faisalabad, Gujranwala, Islamabad, Karachi, Peshawar and Sialkot were surveyed (Table 1).

The firms were largely involved in the trade of agricultural products, cement, chemicals, granite, gypsum, leather, machinery, minerals/metals, pharmaceuticals, processed food items, surgical goods and textiles (Table 2).

The sample distribution between exporters, importers, manufacturers, and freight forwarders and clearing agents is given in Table 3.

¹The sample size is not representative of the population because of time and resource constraints. The results obtained in our survey are only indicative.

Table 1 City-wise distribution of firms

India			Pakistan		
City	No. of firms	Percent	City	No. of firms	Percent
Ahmedabad	18	8	Lahore	47	20.9
Amritsar	50	22.2	Faisalabad	11	4.9
Chennai	20	8.9	Gujranwala	36	16.0
Delhi NCR	40	17.8	Islamabad	30	13.3
Hyderabad	21	9.3	Karachi	60	26.7
Kolkata	12	5.3	Peshawar	6	2.7
Mumbai	64	28.4	Sialkot	35	15.6
Total	225	100	Total	225	100

Source ICRIER survey (January–March 2014)

Table 2 Sector-wise distribution of respondents

Sector	India				Pakistan			
	Exporter		Importer		Exporter		Importer	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Agriculture	20	16.0	24	31.2	32	26.4	58	48.3
Cement		0.0	11	14.3	10	8.3		
Chemicals	22	17.6		0.0	10	8.3	8	6.7
Granite	5	4.0		0.0				
Gypsum		0.0	7	9.1	1	0.8		
Leather	6	4.8	3	3.9				
Machinery ^a	9	7.2		0.0	5	4.1	22	18.3
Metals	5	4.0		0.0				
Mineral		0.0	4	5.2				
Pharmaceutical	11	8.8	9	11.7	1	0.8	7	5.8
Processed Food	6	4.8	1	1.3				
Surgical items		0.0		0.0	13	10.7		
Textile	35	28.0	17	22.1	23	19.0	14	11.7
Other	6	4.8	1	1.3	26	21.5	11	9.2
Total	125		77		121		120	

^aEngineering/Machinery for Pakistan

Note A respondent may be trading in more than one commodity belonging to different sectors

Source ICRIER survey (January–March 2014)

Table 3 Distribution of firms by type of activity

Activity	India		Pakistan	
	No.	Percent	No.	Percent
Exporter/Manufacturer	125	53.2	121	49.0
Importer/Manufacturer	77	32.8	120	48.6
Freight forwarder/clearing agent	33	14.0	6	2.4

Note A respondent may be involved in more than one trade related activity

Source ICRIER survey (January–March 2014)

Table 4 Mode-wise distribution of firms

Trading route	India				Pakistan			
	Exporter		Importer		Exporter		Importer	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Sea	114	91.2	11	14.3	62	31.3	53	34.0
Air	28	22.4	12	15.6	30	15.1	23	14.7
Rail	23	18.4	25	32.5	45	22.7	31	19.8
Road	32	25.6	56	72.7	61	30.8	49	31.4
Total	197		104		198		156	

Note A respondent (an exporter/importer) may be trading via more than one trading route

Source ICRIER survey (January–March 2014)

Trade between India and Pakistan takes place by road, rail, sea and air. It may be noted that at present, formal trade via road and rail is allowed only via the Wagah–Attari route with no other border points open to movement of goods. The distribution of firms trading via the different modes of transport is given in Table 4.

Tables 5 and 6 categorize firms according to their size and the number of years they have been trading with the neighbouring country. The definition of size of firm is as specified in the small and medium enterprise (SME) policies of India and Pakistan.

1.2 Methodology for Analysis

Similar to the methodology used in the First Trade Perception Survey, the respondents were asked to evaluate their responses on a *Likert scale* of 1–5, categorized as follows:

Current Scenario

- Very low
- Low
- Average
- High
- Very high

Table 5 Distribution of firms by size

India			Pakistan		
Size of firm (based on size of investment in INR lakh ^a)	Frequency	Per cent	Size of firm (based on Size of investment in PKR million ^b)	Frequency	Percent
Micro	34	15.1	Micro	70	31.1
Small	104	46.2	Small	63	28.0
Medium	64	28.4	Medium	39	17.3
Large	23	10.2	Large	53	23.6
Total	225	100	Total	225	100

^aFirm size definitions for Indian companies:

– Based on investment in plant and machinery for manufacturing sector (in INR lakh)—up to 25L = Micro; 25–500L = Small; 500–1000L = Medium; more than 1000L = Large

– Based on investment in equipment for service sector (in INR lakh)—up to 10L = Micro; 10–200L = Small; 200–500L = Medium; more than 500L = Large

^bFirm size definition for Pakistani companies:

– Based on investment in plant and machinery for manufacturing sector; and investment in equipment for service sector (in PKR million)—up to 5Mn = Micro; 5–50Mn = Small; 50–250Mn = Medium; more than 250Mn = Large

Source ICRIER survey (January–March 2014)

Table 6 Number of years of trading with neighbouring country (India/Pakistan)

India			Pakistan		
Years	Frequency	Percent	Years	Frequency	Percent
Up to 5 years	78	34.7	Up to 5 years	58	25.8
6-10 years	62	27.6	6-10 years	68	30.2
11 years and above	85	37.8	11 years or above	99	44.0
Total	225	100	Total	225	100

Source ICRIER survey (January–March 2014)

Expected Changes

- Drastically reduce
- Reduce
- No change
- Increase
- Significantly increase

The responses were analyzed by examining their distribution by exporters/importers from both India and Pakistan. The response distributions are represented using bar diagrams or tables.

1.3 Approach

The Trade Perception Survey was conducted independently in India and Pakistan during January–March 2014. The study team in India was led by Indian Council for Research on International Economic Relations, New Delhi and in Pakistan by Lahore University of Management Sciences, Lahore. ICRIER conducted the survey in collaboration with the Bureau of Research on Industry and Economic Fundamentals (BRIEF). The survey in Pakistan was conducted by the Faizan Data Collection and Research Center.

In the study we have analyzed perceptions of traders in India and Pakistan by taking one indicator at a time, starting with the level of awareness of India–Pakistan trade policies. By assessing the perception of traders on each of the indicators we are able to provide pertinent policy recommendations to the respective governments.

2 Awareness of Trade Policy

Knowledge of trade policies that govern India–Pakistan bilateral relations is crucial for traders.

Binary responses were obtained on whether or not respondents were aware of various policy measures taken by the Indian and Pakistani governments. The sub-indicators included

- Pakistan maintains a negative list of 1209 items (items not allowed to be imported from India)
- Pakistan is moving towards granting MFN status to India; India has already conferred MFN status to Pakistan
- India permits the import of all items from Pakistan
- India offers concessional duty rates to imports from Pakistan under SAFTA
- India has removed specific duty under SAFTA
- Only 137 items are allowed to be exported to Pakistan by road
- All items are allowed to be imported from Pakistan by road
- There are no restrictions on commodities to be traded by rail

While eliciting responses on the level of awareness of these sub-indicators, the following questions were posed

- Does awareness level on each of the sub-indicators vary between India and Pakistan?
- Is overall awareness higher in India than in Pakistan?
- Are traders using different modes of transport equally aware of trade policies?
- Are large firms more aware than small and medium firms?

2.1 Awareness of Sub-indicators

Of the eight sub-indicators, level of awareness amongst traders in India is higher than Pakistan on policies concerning Pakistan’s move to grant MFN status to India, permit to import all items from Pakistan into India, availing concessional duty rates for imports under SAFTA, and India’s removal of specific duty on all items except for those on the sensitive list. In Pakistan there is greater awareness of policies permitting all items to be traded by rail, permitting export of all items to India by road while restricting India’s exports to 137 items, and of the negative list of 1209 items that Pakistan does not allow to be imported from India (Fig. 1). In India, 94 % of firms surveyed were found to be aware of the pending grant of MFN status by Pakistan to India, relative to 64 % Pakistani firms who expressed awareness of the policy. 91 % of Pakistani firms were aware that there were no restrictions on commodities traded by rail while only 57 % of Indian firms were aware of this policy. 91 % of Pakistani firms were aware that there were no restrictions on commodities traded by rail while only 57 % of Indian firms were aware of this policy. Given that India–Pakistan trade policy permits only 137 items to be exported from India to Pakistan by road, a larger number of traders, especially exporters, on the Indian side must be made aware of the freedom trade via rail in order to allow them to benefit from the cost and time advantages offered by the rail route over sea or air.

2.2 Overall Awareness

Overall awareness has been calculated by summing the responses of all traders across all awareness sub-indicators. As Fig. 1 indicates, in four out of eight sub-indicators, Indian respondents are less aware than the Pakistani respondents. The awareness level in both countries thus is more or less at par, with 74 %

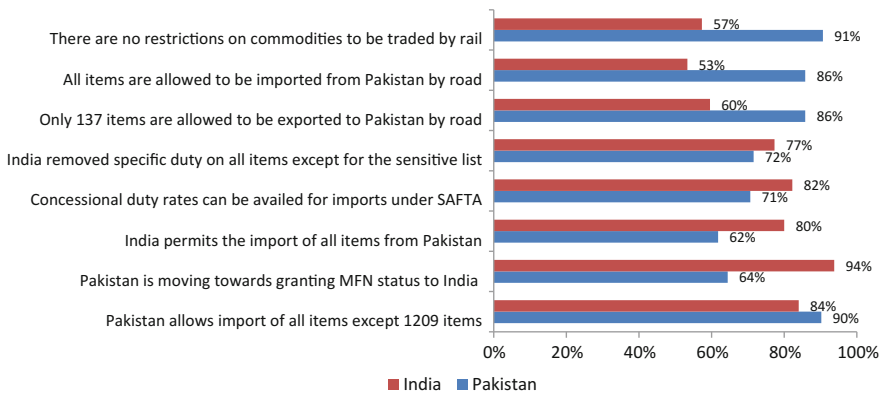


Fig. 1 Awareness sub-indicators (percent of traders aware of trade policy). *Source* ICRIER survey (January–March 2014)

respondents in India being aware of trade policy measures vis-a-vis 78 % in Pakistan.

2.3 Awareness of Policies Related to Land Routes

More traders in Pakistan are aware of policies concerning India–Pakistan trade via land routes [that there are no restrictions on commodities to be traded by rail, all items are allowed to be imported from Pakistan by road, and only 137 items are allowed to be exported to Pakistan by road (Table 7)].

At the individual level, in India, traders trading via the road route are more aware of trade policies concerning land routes, while Pakistani respondents trading via the rail route are more aware of trade policies related to the land route. Traders trading via the sea and air modes, in both India and Pakistan, are less aware of trade policies concerning road/rail ports (Table 7).

2.4 Awareness Among Firms of Different Sizes

Small and medium firms are expected to be less aware than larger firms since they have fewer resources to gather information. While a relatively large proportion of small/medium firms in India (72 % of respondents), are aware of India–Pakistan trade policies the large firms in Pakistan (89 % of respondents) are more aware of trade policies (Fig. 2). This higher awareness among smaller firms in India may be the result of their greater engagement in trade with Pakistan and other developing neighbours; while the larger Indian firms concentrate on bigger markets in the West.

Table 7 Mode-wise awareness of policies related to road and rail routes (per cent of respondents trading via different modes)

	Only 137 items are allowed to be exported to Pakistan by road		All items are allowed to be imported from Pakistan by road		There are no restrictions on commodities to be traded by rail	
	India	Pakistan	India	Pakistan	India	Pakistan
Sea	53	75	45	80	50	82
Air	48	68	60	73	58	77
Rail	60	91	54	90	69	97
Road	82	87	73	86	72	88

Source ICRIER survey (January–March 2014)

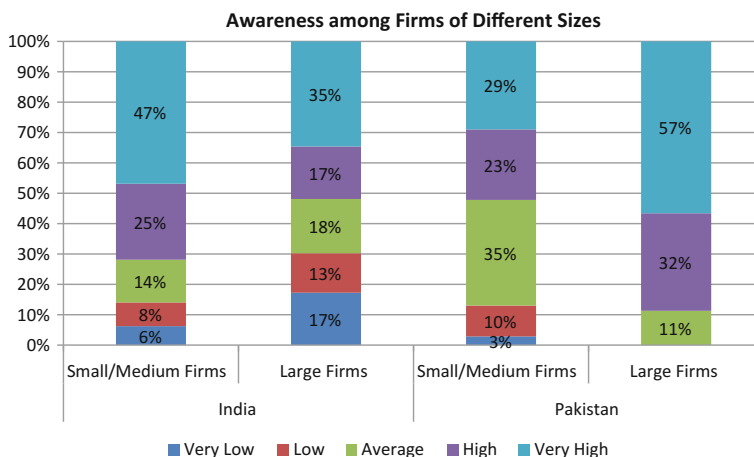


Fig. 2 Trade policy awareness among firms of different sizes (percent of respondents). *Source* ICRIER survey (January–March 2014)

3 Meeting Product Standards

It is important for imported goods to meet product standards. To an exporting country, application of these product standards may be seen as a barrier to trade. However, any WTO compliant product standard will only be imposed to protect plant, animal and human life across all countries. Thus, it is important that economies gain the necessary technological know-how and develop competence in manufacturing and exporting goods to overcome any such perceived barriers.

India and Pakistan have taken the initiative to implement all the WTO-compatible procedures related to standards, testing and labelling and certification requirements. The TBT Agreement applies to manufactured items and requires these measures to be applied in a manner that does not restrict international trade. The SPS Agreement applies to agricultural items. Members apply these measures only to the extent necessary based on scientific principles and with sufficient scientific evidence. In India, the Bureau of Indian Standards (BIS), under the purview of the Ministry of Food and Consumer Affairs is the main standards setting body. In Pakistan the only standards setting body is the Pakistan Standards and Quality Control Authority (PSQCA).

The national accreditation bodies for testing and inspection in India and Pakistan are members of the International Laboratory Accreditation Cooperation (ILAC). The ILAC arrangement is a global network of accredited testing and calibration laboratories and inspection bodies that are assessed and recognized as being competent. Pakistan became a full member of ILAC in 2009. Thus, an awareness of the recognition of accreditation bodies in both countries by ILAC can help in meeting the requirements of standards set for each other.

In this chapter, responses relating to the difficulty in meeting SPS and TBT standards laid down by the two partner countries are analyzed. Results of earlier studies suggest that Pakistani exporters find it more difficult to meet standards than their Indian counterparts (Taneja 2007; Taneja and Kalita 2011). Since both these countries are focussing on improving the enabling environment to allow meeting each other's standards, we have also sought responses on the expected change in the ease of meeting standards in the coming year.

3.1 Meeting SPS and TBT Standards—Current Scenario

Between India and Pakistan, ease of meeting standards among Indian exporters is higher than those of Pakistani exporters (Fig. 3), with the latter eliciting particular difficulty in meeting SPS standards for exporting goods to India. This is evident upon comparing responses of the maximum proportion of respondents on their ease in meeting SPS and TBT standards when exporting to the neighbouring country.

While 73 % of Indian exporters find it relatively easy to meet the SPS standards set by Pakistani authorities, 57 % of Pakistani exporters find it difficult to meet SPS standards for exporting goods to India. In the case of TBT standards, although 62 % of Pakistani exporters find them relatively easy to meet for exporting to India, the percentage of respondents who find meeting TBT standards easy on the Indian side is 85 %.

3.2 Meeting SPS and TBT Standards—Expected Changes

Even though a large proportion of Pakistani exporters report a difficulty in meeting SPS standards, they are much more optimistic than the Indian exporters about the future; 97 and 88 % of Pakistani exporters perceive that the ease of meeting SPS

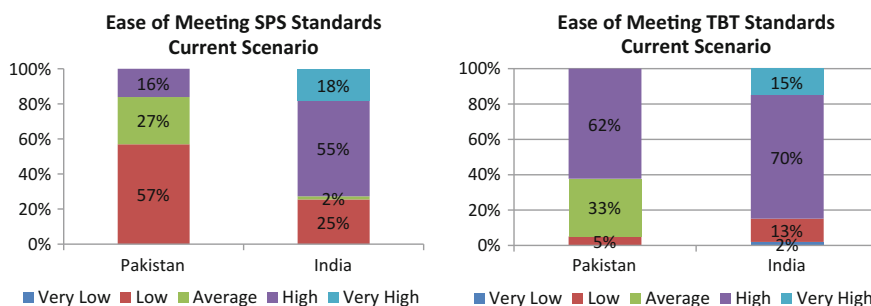


Fig. 3 Meeting SPS and TBT standards in India and Pakistan—current scenario (percent of exporters). *Source* ICRER survey (January–March 2014)

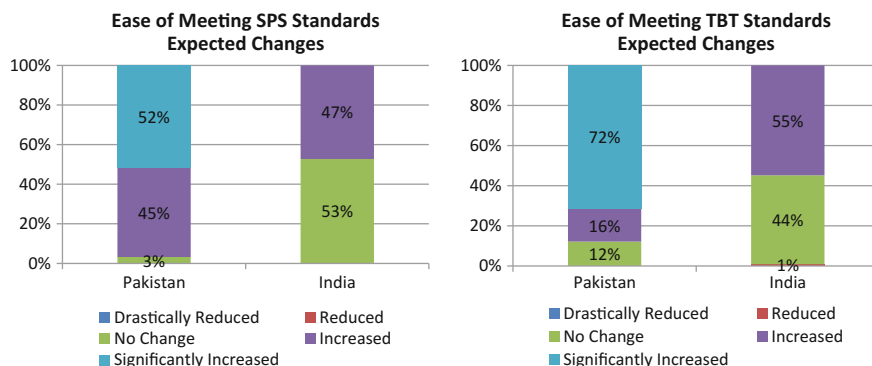


Fig. 4 Meeting SPS and TBT standards in India and Pakistan—expected changes (percent of exporters). *Source* ICRIER survey (January–March 2014)

and TBT standards, respectively, will increase/significantly increase (Fig. 4). The majority of traders in India perceive that there will be no change in ease of meeting SPS standards, while their ease in meeting TBT standards for exporting to Pakistan will increase in the future.

4 Market Access

For trade expansion between India and Pakistan, it is important for traders in both countries to perceive a high market access in the other country—both in terms of being able to export their products easily to the other country, and being able to import them.

In the case of India and Pakistan, despite having similarities in traditions and tastes, perceptions of market access in the neighbouring country have dwindled and have affected bilateral trade.

Here, perceptions of Indian exporters and Pakistani importers have been compared to assess whether there is any difference in the perception of traders about market access on both sides of the border for the same flow of goods. Similarly, perceptions of market access for Indian importers and Pakistani exporters have been compared. Thus the key questions being asked were: (i) Do Indian importers perceive that market access is better than Pakistani exporters, and, (ii) Do Indian exporters perceive that market access is better than Pakistani importers.

A concern that has often been raised by businesses in both countries is that the Made in India/Pakistan label affects market access negatively. Businesses are not sure about the acceptability of their products in each other's markets due to the hostility between the two countries. Respondents were asked how they perceived the extent to which the country labels affect their trade and how they expect market access to be affected by these labels in the next year.

Political events between the two countries are a key factor governing the trading environment. Events at the Line of Control and the subsequent public statements by the two governments could create uncertainty for trading businessmen. The survey was designed to capture the perceptions of such incidents on trade. Respondents were also asked whether they perceived that the impact of such incidents on trade would increase or decrease in the next year.

4.1 Market Access in India and Pakistan

While assessing whether Indian and Pakistani exporters and importers differed in terms of their perceptions of market access in the neighbouring country, it was found that the importers on both sides of the border perceived a higher market access for goods than the exporters.

For market access of Pakistani goods imported by India, while 80 % of Indian importers perceived market access for Pakistani goods to be high, the perception was shared by 73 % of Pakistani exporters (Fig. 5). For Indian goods exported to Pakistan, 73 % of Pakistani importers perceived market access to be high, in comparison to 64 % of Indian exporters (Fig. 6).

Future expectations regarding market access were highly positive, with 92 % of Indian importers and 86 % of Pakistani exporters perceiving the market access for Pakistani goods exported to India to increase or significantly increase (Fig. 5); and 82 and 81 % of Indian exporters and Pakistani importers perceiving that market access for Indian goods exported to Pakistan would increase or significantly increase (Fig. 6).

An improvement in perception of market access for goods coming from the neighbouring country can provide an impetus for building closer trade relations and enhanced trade between India and Pakistan. Such perceptions should thus be regarded as important inputs into trade policy formulations, and the analysis must

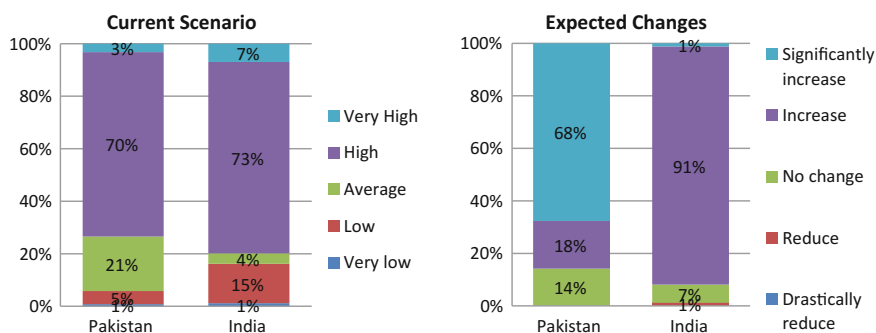


Fig. 5 Market access for Indian importers and Pakistani exporters (percent of respondents). Source ICRIER survey (January–March 2014)

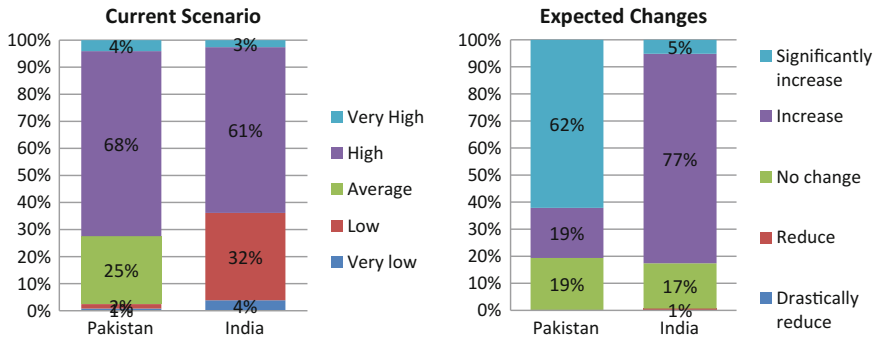


Fig. 6 Market access for Indian Exporters and Pakistani importers (percent of respondents). *Source* ICRIER survey (January–March 2014)

play an integral role in the process of normalization of trade relations between India and Pakistan.

4.2 *Made in India/Pakistan Labels*

One may expect that products with a ‘Made in Pakistan’ label and products with a ‘Made in India’ label would reduce market access in India and Pakistan, respectively. However, the majority of respondents in India and Pakistan perceived little impact of country labels on demand for their products. An analysis of responses collected from India and Pakistan revealed that the perception of market access for a Pakistani export good labelled ‘Made in Pakistan’ was high/very high among 83 % of Pakistani exporters, and 81 % of Indian importers (Fig. 7). Market access for

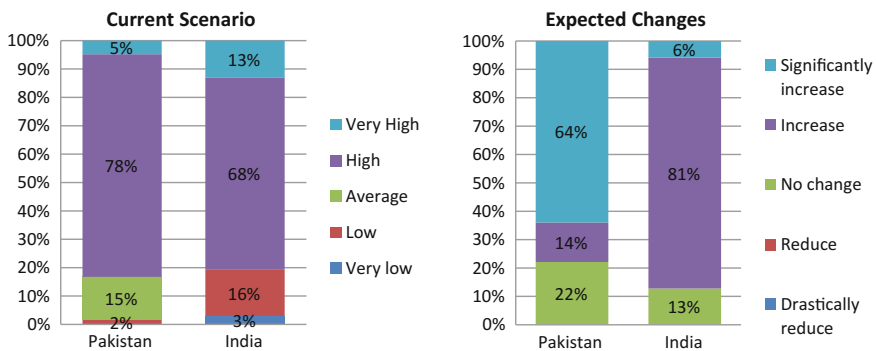


Fig. 7 Impact of Pakistani label on market access in India—Indian importers and Pakistani exporters (percent of respondents). *Source* ICRIER survey (January–March 2014)

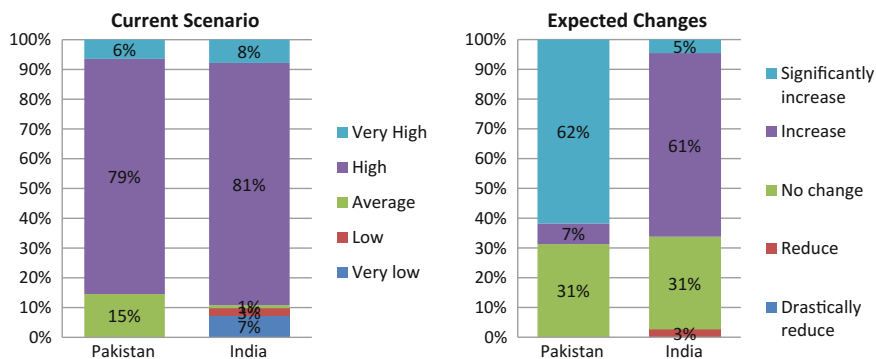


Fig. 8 Impact of Indian label on market access in Pakistan—Indian exporters and Pakistani importers (percent of respondents). *Source* ICRIER survey (January–March 2014)

such goods is likely to increase even further among 78 % of Pakistani exporters and 87 % of Indian importers.

In the case of Indian goods exported to Pakistan with a ‘Made in India’ label, the perception on market access was equally positive with 85 % of Pakistani importers and 89 % of Indian exporters reporting market access for Indian goods in Pakistan to be high/very high (Fig. 8). Market access is expected to rise in the future; with a majority of Pakistani importers (69 %) and Indian exporters (66 %) perceiving that market access of goods carrying an Indian label would increase/significantly increase.

4.3 Impact of Negative Political Events

Unfavourable political events are likely to create uncertainties for traders trading between India and Pakistan. However in recent years, the two governments have made an effort to delink trade restrictions with political events. It was expected that the survey would indicate a large proportion of respondents perceiving that political incidents do not have a high negative impact on trade. An assessment of perceptions between India and Pakistan (Fig. 9) revealed that while a major proportion (42 %) of traders in Pakistan perceived a debilitating impact of negative political events on bilateral trade; 54 % of traders in India perceived a low/very low impact of negative political events on trade, indicating that trade can carry on despite having negative political events.

Regarding perceptions about the future, while a majority of traders from Pakistan (43 %) felt that the impact of political events on trade would reduce, in India the perceptions were mixed with 36 % of traders perceiving that their impact would reduce, 26 % expecting their impact to increase, and 37 % perceiving no change.

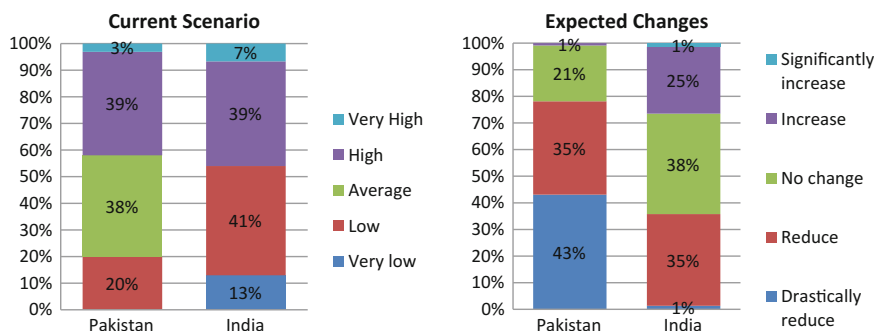


Fig. 9 Impact of political events on trade—Indian and Pakistani traders (percent of respondents). Source ICRIER survey (January–March 2014)

5 Business Facilitation

Bilateral trade, which is primarily ‘business’ between any two countries, can be facilitated by a wide range of factors, which in the case of India–Pakistan trade, primarily includes ease in obtaining visas, ease of communication with traders across the border, competence of logistics operators and efficiency of banking operations.

5.1 Ease in Obtaining Visas

The visa regime between India and Pakistan has been very restrictive. The impact on genuine traders, who may wish to visit their trade partners or conduct meetings across the border, is worse. Travelling to meet the trade partner and visiting the country helps overcome inhibitions and misconceptions; and, more importantly, generates a sense of comfort and confidence which is necessary for building long lasting trade relations. It is unfortunate that in the case of India and Pakistan is a significant hindrance to trade.

It was expected that Indian businessmen would be found showing greater ease in obtaining visas than their Pakistani counterparts, but 85 % of Pakistani traders and 90 % of Indian traders reported difficulties obtaining visas (Fig. 10). With regard to future expectations, Pakistani traders were a lot more optimistic than Indian traders, of liberalization in the India–Pakistan visa regime, with 91 % of Pakistani traders and 64 % of Indian traders expecting the ease in obtaining Indian and Pakistani visas to improve.

A comparison between firms of different sizes revealed that the ease in obtaining visas in both India and Pakistan partially increased with increasing firm size (Fig. 11). Among small/medium firms, while 8 % in India and 17 % in Pakistan found it easy to obtain visas among the large firms, 13 % in India and 23 % in

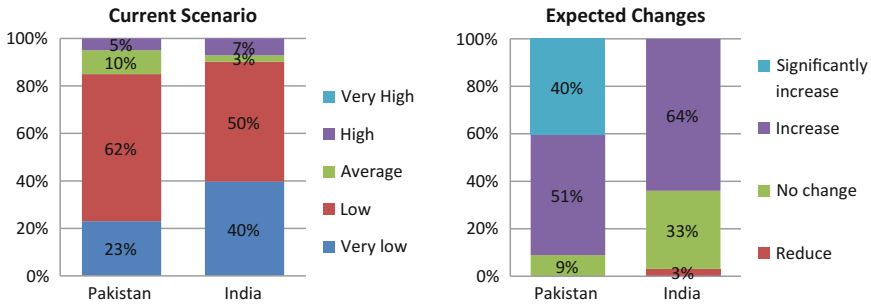


Fig. 10 Ease of obtaining visas (percent of respondents). *Source* ICRIER survey (January–March 2014)

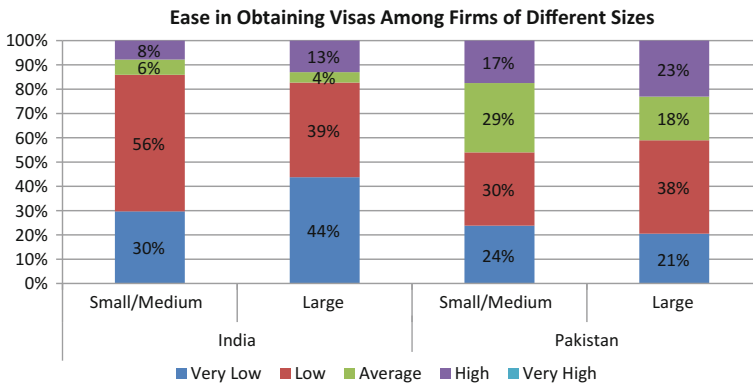


Fig. 11 Ease in obtaining visas among firms of different sizes (percent of respondents). *Source* ICRIER survey (January–March 2014)

Pakistan found it easy to obtain visas. However, a major proportion of small/medium and large firms in both countries reported the ease in obtaining visas being low/very low, highlighting the fact that the resources available with large firms do not necessarily help them acquire a visa or circumvent the stringent visa policy.

5.2 Ease of Communication

Communication via the internet, email and mobile phones has greatly eased communication across the border, although roaming facilities for mobile phones from Pakistan and India, and messaging facilities on Indian networks in Pakistan are still not available.

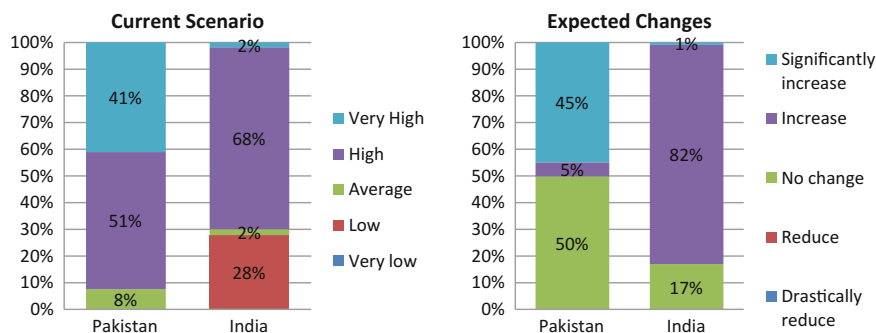


Fig. 12 Ease of communication (percent of respondents). *Source* ICRIER survey (January–March 2014)

In the survey, 92 % of Pakistani traders and 70 % of Indian traders reported their communication with traders across the border to be high/very high (Fig. 12). Future expectations are also optimistic with 50 % of Pakistani traders and 83 % of Indian traders expecting the ease in communication to increase.

Most traders in both countries have a handful of distributors in the partner country with whom they are in touch regularly. During the survey, traders on both sides stated that they find it difficult to establish new contacts and to be in direct contact with consumers to assess demand patterns. Hence, further expansion of trade between India and Pakistan would require greater ease of access to communication facilities.

5.3 Competence of Logistics Industry

Seamless transportation of goods is integral to facilitating trade. However, despite sharing land borders, neither India nor Pakistan is a member of any international road or rail transport convention which may allow goods to travel from one country to another without unnecessary checks or transshipment, and under full customs control and guarantee for payment of applicable duties. At present, any consignment moving between India and Pakistan is offloaded at the border, and inspected and loaded onto domestic carriers which then carry the goods to their destinations. Hence, the role of logistics operators is a crucial link in the transport chain.

The logistics industry provides a range of services including customs clearance, transportation and freight forwarding. Large logistics firms provide end-to-end logistics chain management. A competent logistics industry can help in the expansion of trade through better supply chain management; both while delivering goods to the end consumer and procuring intermediate products for industries. In India and Pakistan, respondents stated that the large logistics operators operate only on the sea and air routes. The rail and road routes specifically used for

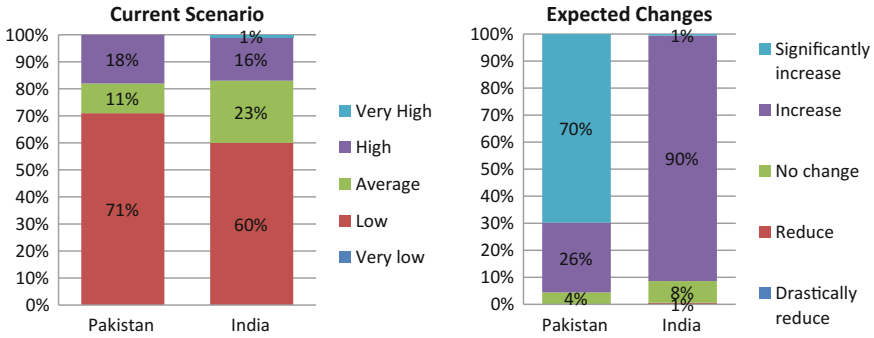


Fig. 13 Competence of small logistics operators (percent of respondents). *Source* ICRIER survey (January–March 2014)

India–Pakistan trade are largely dominated by small/medium logistics operators or sub-contracted agents of large operators.

In both India and Pakistan, a large proportion of traders—60 % in India and 71 % in Pakistan—perceived the competence of small logistics operators as being low (Fig. 13). The competence is expected to increase further with 96 and 91 % of Pakistani and Indian traders, respectively, perceiving an improvement in competence of small logistics industry in the future.

In Pakistan, 62 % of traders and 91 % of Indian traders perceive the competence of large operators as being high (Fig. 14). They feel that the competence of logistics operators will increase further (90 % of Pakistani and 92 % of Indian traders, respectively).

Respondents in India stated that trade is expected to expand considerably in the future with new commodities entering the market. The logistics requirements too would be different which could be met more efficiently by large logistic service providers. Pakistanis pointed out that currently only the National Logistics Cell was

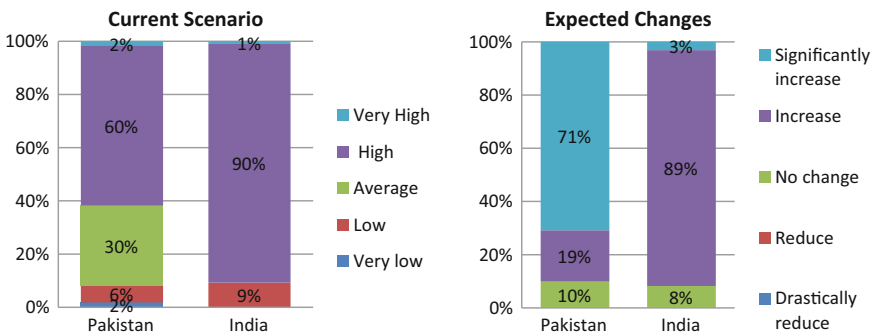


Fig. 14 Competence of large logistics operators (percent of respondents). *Source* ICRIER survey (January–March 2014)

operating in Pakistan and that the presence of private operators would increase competition and improves logistics services.

5.4 Efficiency of Banks

Banks which process documents, letters of credit, and realize payments efficiently can significantly reduce transaction costs and time. Between India and Pakistan, a conspicuous absence of national banks across the border has most often been pointed out as a major deterrent to business trade. Although alternative mechanisms of transferring funds have been devised, via bank-to-bank transfer via third countries, letters of credit (L/Cs) or through nostro-vostro accounts, the efficiency of banks involved in carrying out India–Pakistan trade related financial transactions is of immense importance.

Between India and Pakistan, 51 % of Pakistani traders perceived efficiency of banks as being high, and a larger proportion of traders in India (72 %) shared this perception (Fig. 15). The traders are optimistic about the future, with efficiency of banks perceived to increase further among 87 % of Pakistani traders and 85 % of Indian traders in the next year.

6 Customs and Documentation

Tedious customs formalities and lengthy documentation requirements hinder trade. All such procedures have been reviewed with the finalization of the WTO Trade Facilitation Agreement (2014) which aims to clarify and improve all relevant aspects of GATT Articles V, VIII and X to expedite the movement, release and

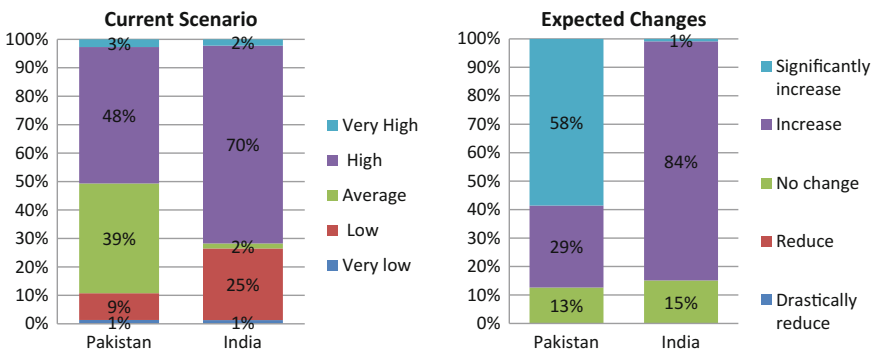


Fig. 15 Efficiency of banks (percent of respondents). *Source* ICRIER survey (January–March 2014)

clearance of goods, including goods in transit. India and Pakistan, as signatories to the WTO, are in the process of acceding to clauses in the Trade Facilitation Agreement for streamlining processes and reducing formalities and documentation requirements to the minimum.

To ensure effective facilitation of trade, there has been an increasing recognition of the importance of improving regulatory processes at the border. To assess the Customs' efficiency at the different trading ports, we conduct a mode-wise assessment of responses on sub-indicators such as processing time of documents by Customs, time taken for laboratory testing, and excessive security checks.

6.1 Time Taken by Customs to Process Documents

We have defined time taken by Customs to process documents as the average time elapsed from the time documents are filed until the goods are processed for release. The important documents requiring processing include an invoice, packing list, waybill, quality control certificate, bill of export/import, etc.; and these documents remain the same for trade with all countries.

In our survey, a mode-wise comparison of the time taken by customs to process documents reveals that 96 % of Indian exporters perceived time taken to be least at the air port—making it the most efficient, followed by rail, sea and road ports. In the case of Pakistan, the sea port was perceived as the most efficient with 89 % of exporters reporting the time taken to process documents as low/very low; followed by road, rail and air ports (Fig. 16).

Regarding future expectations, Pakistani exporters were a lot more optimistic than Indian exporters about improvements in Customs efficiency with more than 90 % of exporters expecting the time taken by the Customs to process documents to reduce/dramatically reduce at all trading ports (Fig. 16). A significant number of Indian exporters perceived the time taken by Customs as having increased on the road and rail routes (41 and 30 % respectively).

Unlike the majority of exporters who perceived the time taken by Customs to process documents as low at all ports, the trend for importers is rather different—74 % of Indian importers at rail port and 55 % at sea ports perceived the time taken by Customs to process documents as being high. The air port again emerged as the most efficient followed by road ports, with 92 and 55 % of importers perceiving the time taken by Customs as being low (Fig. 17).

The mode-wise responses for Pakistan were quite similar with more than 65 % importers perceiving the time taken to process documents as being low/very low on all four trade routes. The future expectations were again optimistic with a majority of importers from India and Pakistan perceiving that the time taken by Customs would reduce or drastically reduce (Fig. 17).

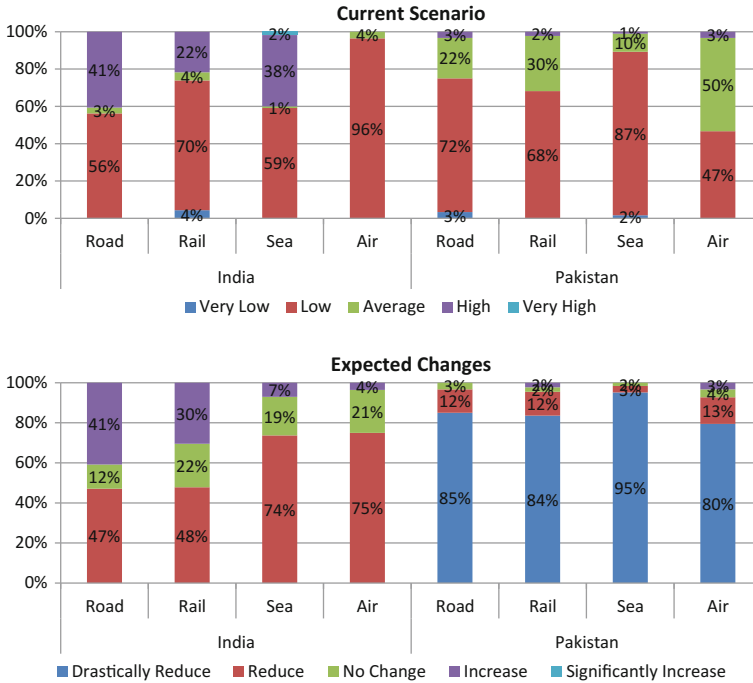


Fig. 16 Time taken by customs to process documents for exporters (percent of respondents). Source ICRIER survey (January–March 2014)

6.2 Time Taken for Laboratory Testing

Imported goods must be subjected to laboratory checks/tests before they are cleared and released. This is important for two reasons: first, to determine whether the goods comply with standards; and second, to assess the specifications so as to determine the applicable duty. However, this is a time-consuming part of the chain of trade formalities and increases a country’s average ‘time taken to import’. Interviews with some traders on the Indian side revealed that testing could sometimes take up to two months, with the testing agencies only collecting the sample after about a month from arrival. This delay increases ‘time taken’, and also ‘cost of trade’ due to subsequent warehousing/storage charges.

A comparison between India and Pakistan revealed that the time taken for laboratory testing was reported to be high among a large proportion of Indian importers—70 % at sea, 69 % at rail, and 43 % at road (Fig. 18). All importers using the air mode perceived that the time taken for testing was low at air ports.

By contrast, none of the Pakistani respondents rated the time taken for testing ‘high’ at any of the trading ports. Rather, 69 % at road, 59 % at rail, 64 % at sea, and 57 % at air rated the time taken ‘low’ or ‘very low’. Irrespective of the situation

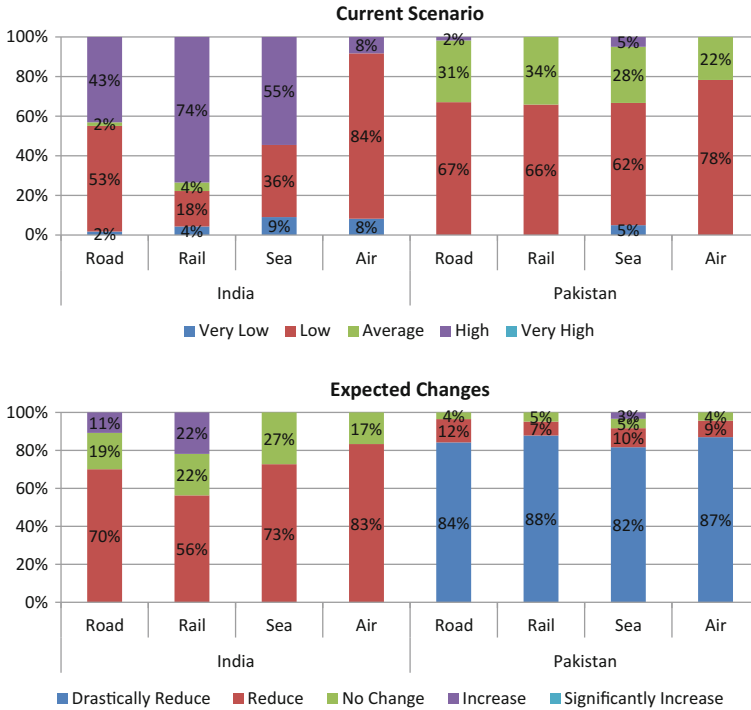


Fig. 17 Time taken by customs to process documents for importers (percent of respondents). *Source* ICRIER survey (January–March 2014)

at present, Indian and Pakistani importers expect that the time taken for laboratory testing will reduce/significantly for trade via all the four modes (Fig. 18).

6.3 Excessive Checks Due to Security Measures

Given the political tensions and the ensuing security issues between India and Pakistan, the expectation is that excessively strict checking of consignments by Customs may hinder trade between the two countries. Security checks are more relevant to imports. Different mechanisms such as scanners and risk management systems (RMS) have been established at trading ports to ensure the safety of traded goods. But manual checking of import consignments is a regular feature at the Indian and Pakistani ports. The present security situation between the two countries has even led to excessive checking of imported goods.

Our survey results indicate that the practice of excessive checking may be prevalent to a larger extent at the Indian ports than at Pakistani ports (Fig. 19). Among the Indian importers, 82 % perceived security checks at sea port as being

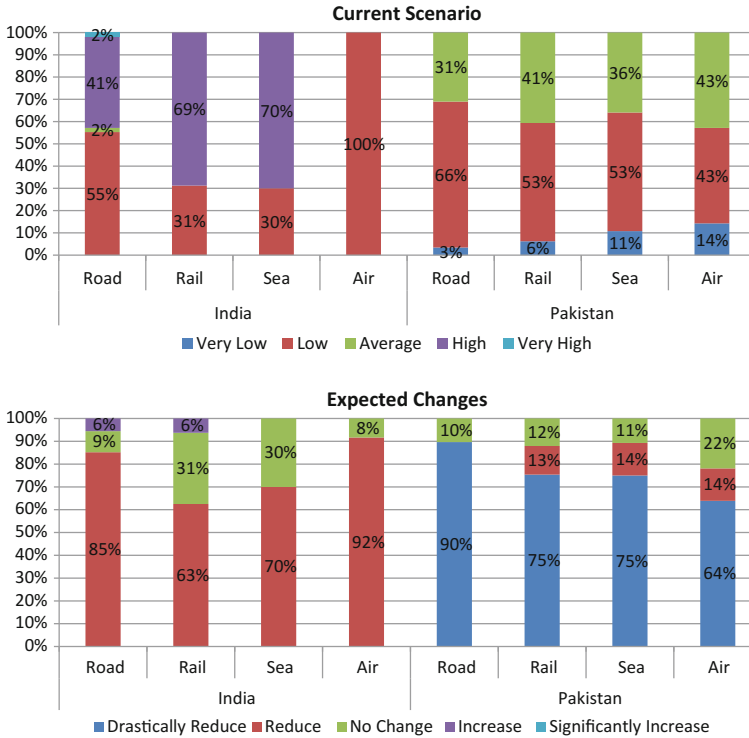


Fig. 18 Time taken for lab testing for importers (percent of respondents). *Source* ICRIER survey (January–March 2014)

high, 66 % at rail port and 53 % at road port. No importer perceived checks to be excessive at the air port.

On the other hand, for all modes, security checks were perceived to be low among 73 % of Pakistani importers trading via rail, 64 % via sea, 61 % via air and 49 % via road. At the road port, only 18 % of Pakistani importers reported checks to be excessive.

Security checks are expected to reduce even further in future among a majority of Pakistani importers trading via any of the four modes. Among Indian importers, checks are expected to reduce for a majority of traders trading via the air, sea and rail modes. However, the perception of those trading via road is mixed, with 43 % expecting checks to reduce, and 38 % expecting them to increase/significantly increase (Fig. 19).

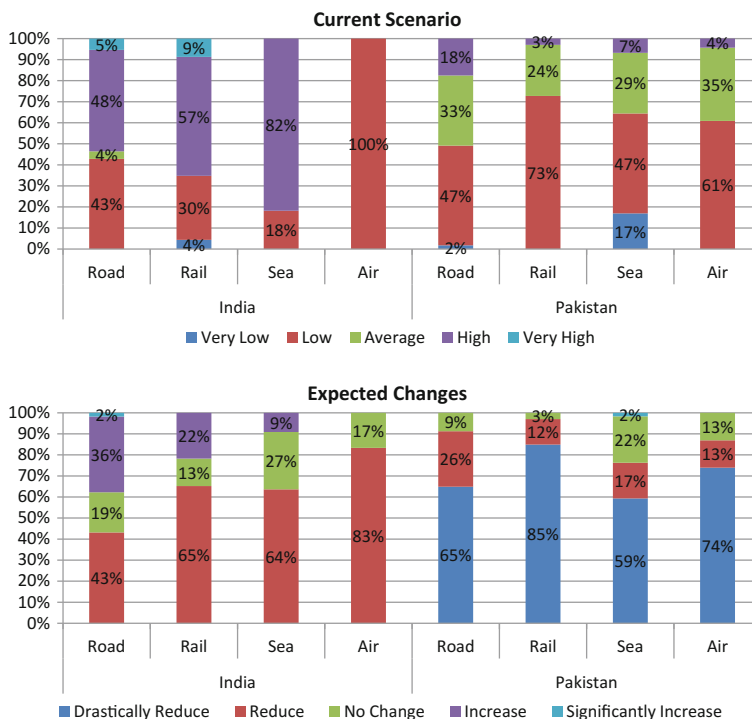


Fig. 19 Excessive checks due to security measures for importers (percent of respondents). *Source* ICRIER survey (January–March 2014)

6.4 Competence of Customs Officials

For sound fulfilment of Customs formalities, the competence of Customs officials is relevant, be it their ability to provide sufficient information to traders, their efficiency with respect to processing export/import documents, delivering duties in an unbiased manner, or abiding by the rules of the Customs Act and prevailing laws.

On the Indian side, a large majority of traders perceived competence of Customs officials to be high, with the competence perceived to be the highest at the air port, followed by road, sea and rail ports (Fig. 20). This is indicated by 95 % traders perceiving the competence of Customs officials as being high at the air port, 85 % at road ports, 78 % at sea ports, and 70 % at rail ports.

In Pakistan, competence of officials was perceived to be high at the sea and road ports, by the majority of traders—65 % at sea and 53 % at road (Fig. 20). Competence of Customs officials was perceived to be average among a major proportion of Pakistani respondents at the air and rail ports, standing at 68 and 51 % of traders, respectively. The competence of officials is expected to increase/significantly increase in the future among both Indian and Pakistani traders trading via any of the four modes of transport (Fig. 20).

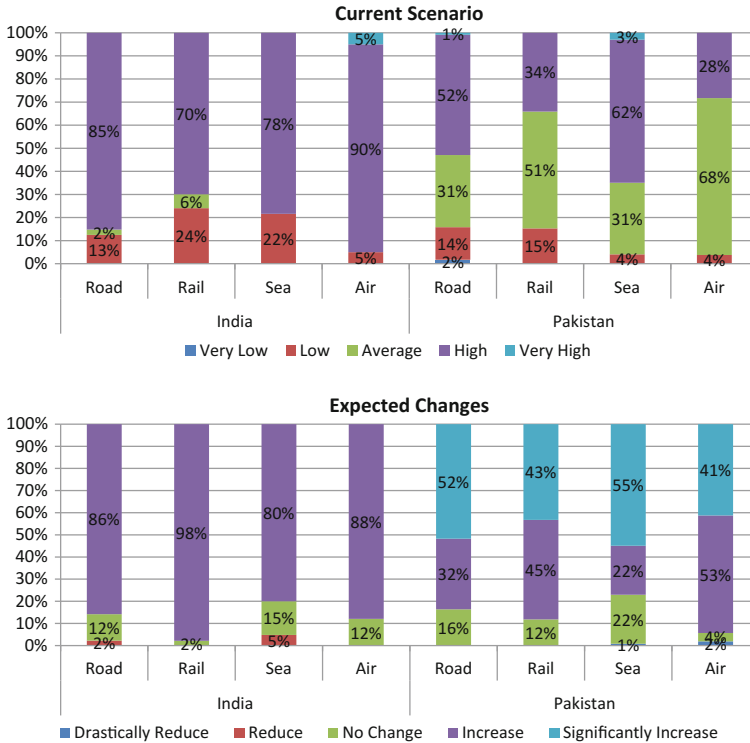


Fig. 20 Competence of customs officials (percent of respondents). *Source* ICRIER survey (January–March 2014)

7 Infrastructure at Ports

Port infrastructure is instrumental in facilitating and enhancing trade and also keeps the costs of trading in control. While the infrastructure at sea and air ports caters to traders trading with all countries, the infrastructure at land ports affects only those trading between the two contiguous countries.

Poor infrastructure at ports has repeatedly come up as an issue affecting bilateral trade between India and Pakistan. This may not just be the availability of services at ports—such as warehouses, scanners, banks, or IT facilities—but also their quality. Even if there are infrastructure facilities available at ports, they may not be adequate, and improving so as to keep up with the rising volumes of trade. Non-availability of rail wagons is a problem specific to India–Pakistan trade; since it is only the Pakistani rail wagons which ply on the Wagah–Attari rail route and India’s exports via rail can only be accommodated in the wagons which carry Pakistani exports into India.

For this analysis, three parameters, namely, availability of services at ports, quality of services at ports and availability of wagons (for rail) are considered.

7.1 Availability of Services at Ports

Adequate warehousing, holding areas, IT and banking facilities are important for facilitating both imports and exports. The availability of safe and secure warehouses and holding areas are important to protect goods against pilferage and damage.

Of all Indian ports, availability of services was reported to be good at the air port and extremely poor at the sea, rail and road ports (Fig. 21). Among Indian exporters, services at rail port appeared to be the worst, with 92 % of them reporting their availability low/very low; while the same held true among all Indian importers trading via sea. Traders also perceive the availability of services as increasing in future in all four modes of trade (Fig. 21). However, this expectation can only be met if the infrastructure is enhanced in a committed manner commensurate with the increasing volumes of trade.



Fig. 21 Availability of services at Indian ports (percent of respondents). *Source* ICRER survey (January–March 2014)

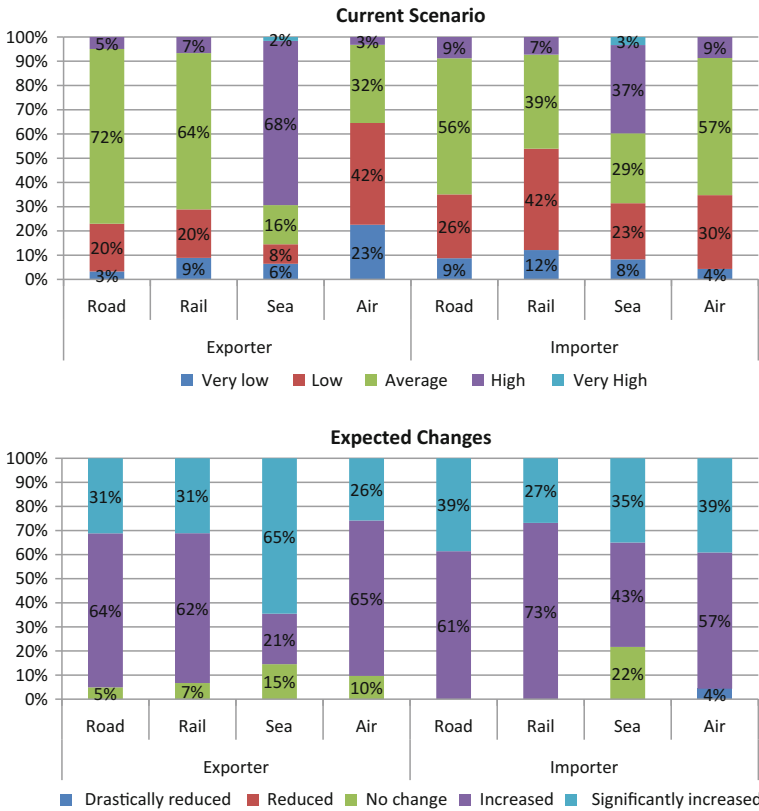


Fig. 22 Availability of services at Pakistani ports (percent of respondents). *Source* ICRIER survey (January–March 2014)

In the case of Pakistani exporters and importers, a majority perceived the availability of services as being about average at the road port and relatively high at the sea ports (Fig. 22). However, 65 % of Pakistani exporters using air port and 54 % importers using the rail port perceived the availability of services as being low/very low. Common problems cited have been non-availability of scanners and warehouses at the rail port, lack of regular direct flights to Delhi and Mumbai, and no flight connectivity with any other major city in India. Both Pakistani exporters and importers perceived the availability of services at ports as increasing in the future (Fig. 22).

7.2 Quality of Services at Ports

The quality of service at trading ports is of immense relevance. The quality of service is rated as low, and availability of services, poor, at sea, rail and road ports in India. This is perceived by the majority of exporters and importers; 78 % of exporters and 93 % of importers at road ports, 96 % of exporters and 72 % of importers at rail ports, and 67 % of exporters and 100 % of importers at sea ports. All importers and 96 % of exporters perceived the quality of services high/very high at the air ports (Fig. 23). Congestion is a problem repeatedly reported at sea ports in India.

Why the availability and quality of services is perceived as being good at the air ports and not at the other kinds of ports needs analysis. Is it reflective of the involvement of private players, and associated competence of custodians who are responsible for provision of services at ports? These questions require in-depth

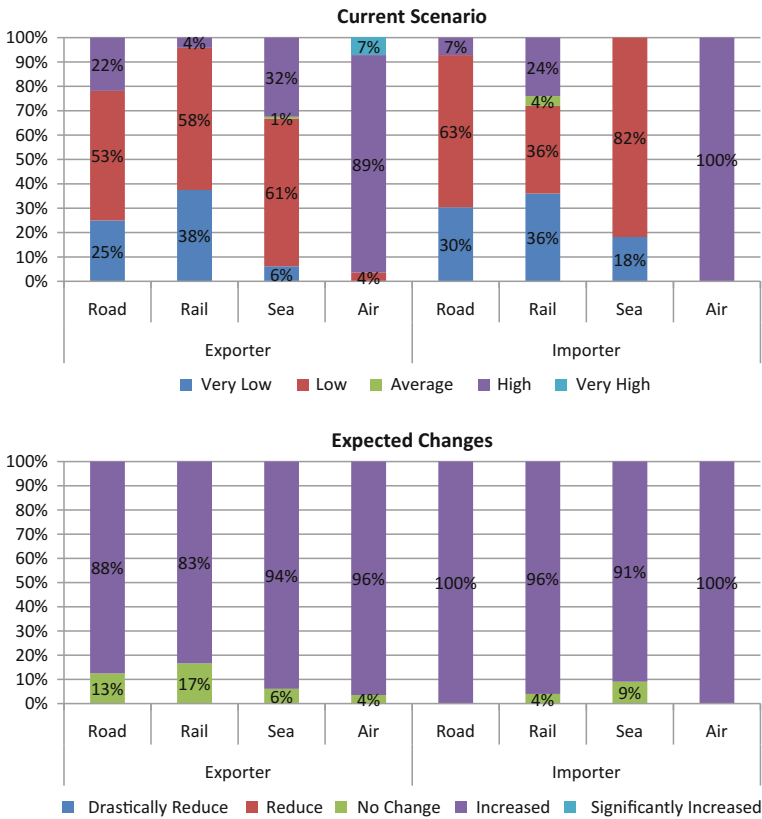


Fig. 23 Quality of services at Indian ports (percent of respondents). *Source* ICRIER survey (January–March 2014)

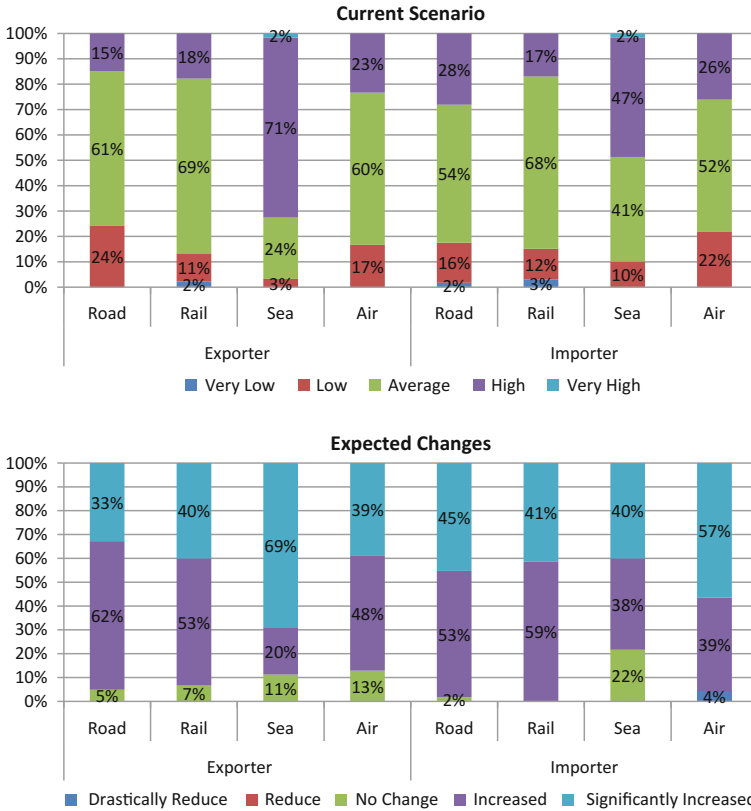


Fig. 24 Quality of services at Pakistani ports (percent of respondents). *Source* ICRIER survey (January–March 2014)

research into the mechanisms supporting the perceived success of air ports in facilitating trade, over road, rail and sea ports.

On the Pakistan side, quality of services was perceived as being average among 61 % of exporters and 54 % of importers at road ports, 69 % of exporters and 68 % of importers at rail ports, and 60 % of exporters and 52 % of importers at air ports. The quality of services appeared to be good at the sea ports, with the availability of services also being perceived as high among a majority of Pakistani traders (Fig. 24).

A noteworthy inference from the above analysis is that the availability and quality of services both depend on each other. Only services of a good quality will be recognized by traders as useful and adequate. Infrastructure including X-ray scanners, loading/unloading equipment, warehousing and cold storage facilities are lacking at the rail port, indicating an urgent need to upgrade and modernize ports.

7.3 Availability of Rail Wagons

Freight wagons are attached to the biweekly passenger train running between India and Pakistan. Along with the poor frequency of rail service, the poor availability of wagons which bring Pakistani exports to India and carry back Indian exports to Pakistan is recognized as being another ‘trade limiting factor’.

The results clearly indicate that a large majority of exporters from India (at 92 %) and Pakistan (at 57 %) perceived the availability of rail wagons for exporting goods to the other country as being rather low (Fig. 25). Indian exporters, who cannot export their goods via road route due to the restriction to 137 items, are also unable to export via the rail route due to the inadequacies of this mode of transport; and have to therefore rely on costlier modes of air or sea transport. On the Pakistan side, poor rail facilities have led exporters to choose the road route leading to congestion, long waiting times and insufficient warehousing at the road port.

Despite the continuing scarcity of wagons, the exporters on the Indian and Pakistani side were optimistic, with 98 % of Pakistani exporters and 87 % of Indian exporters expecting the availability of wagons to increase or significantly increase in future.

7.4 Capacity Expansion at Ports

In light of the rising volumes of trade, Indian and Pakistani ports are in dire need of capacity expansion. Respondents were asked to indicate, in percentages, how much they thought capacity at border points needed expansion. On the Indian side, the majority of traders felt that the capacity at sea, air, rail and road ports should be expanded by 26–50 % (Fig. 26).

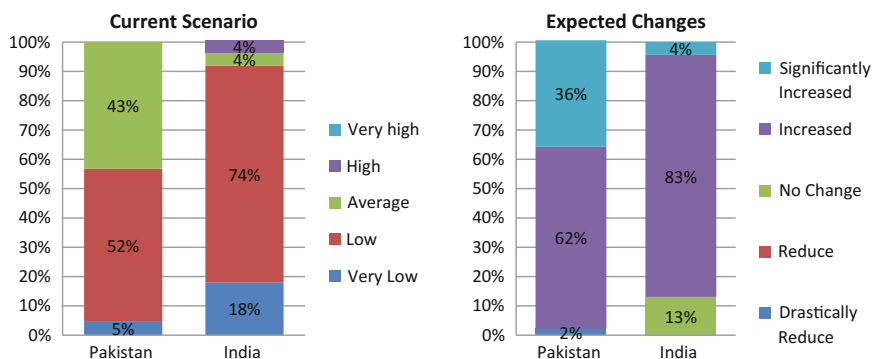


Fig. 25 Availability of wagons (percent of respondents). *Source* ICRIER survey (January–March 2014)

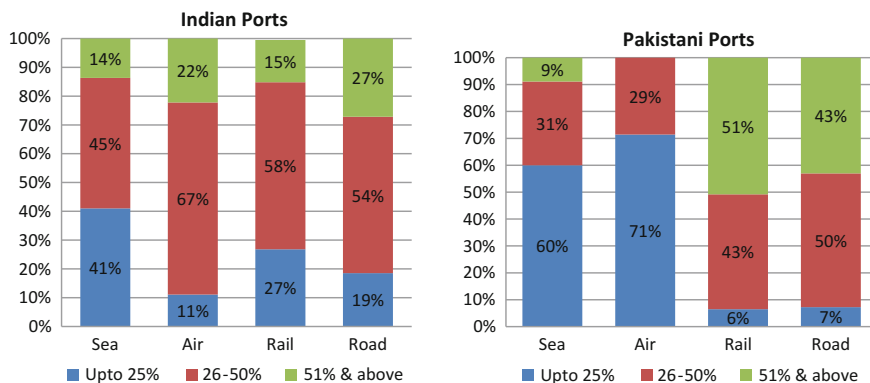


Fig. 26 Capacity expansion at ports (percent of respondents). *Source* ICRIER survey (January–March 2013 and 2014)

On the Pakistan side, the majority of traders perceived a capacity expansion of up to 25 % at the sea and air routes as being necessary while need for capacity expansion at the road and rail ports was felt to be 26–50 %, and more than 51 %, respectively (Fig. 26).

8 Expected Trends

One of the major outcomes of the Trade Perception Survey is that there is a general optimism about improvements in the key indicators that will enhance trade in the next year. Based on expectations of improvements on key indicators such as market access, business facilitation, and customs and infrastructural reforms, respondents were asked to give their views on

- Extent of increase in trade
- Commodities in which trade is expected to increase, and by how much, and,
- Extent of increase in capacity at ports to handle additional trade volumes.

8.1 Expected Increase in Trade

The highest proportion of respondents in both India and Pakistan felt that exports and imports will increase by up to 25 %, which is greater than the average annual growth of bilateral trade between India and Pakistan over the last few years (Fig. 27). The average annual growth of Indian exports to Pakistan in the last three years (over 2011–2014) has been 10 %, and the average annual growth of Indian

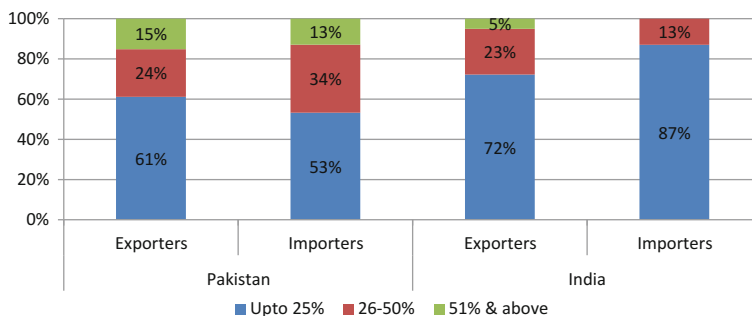


Fig. 27 Expected increase in exports and imports (percent of respondents). *Source* ICRIER survey (January–March 2013 and 2014)

imports from Pakistan during the same period has been 19 % (UNCOMTRADE WITS database).

Despite the tremendous potential for trade and positive perceptions within the trading community, bilateral trade between India and Pakistan has continued to remain low. Reasons cited repeatedly by Indian traders for the inability to expand business include political tensions, uncertainty of payments, and visa restrictions. Obtaining visa clearances from Pakistan’s Ministry of Interior is a lengthy procedure which can take up to two months. A lack of trust, travel restrictions, absence of national banks, informal trade and other non-tariff barriers are pointed out by Pakistani traders as factors which inhibit bilateral trade and their access to India’s markets.

8.2 *Expected Demand for Commodities to Be Traded*

- (i) *Indian Exports to Pakistan:* Export of the following commodities is expected to increase by more than 20 %, by the majority of Indian exporters: agricultural commodities, auto parts, electronics, machinery, minerals, processed food items and tea (Table 8). According to the majority of Pakistani importers imports of agricultural commodities, auto parts, chemicals, machinery, minerals, pharmaceuticals, processed food stuffs and textiles are likely to increase by more than 20 % from India (Table 8). For the rest of the items, export growth was expected to be less than 20 % in the next year.
- (ii) *Indian Imports from Pakistan:* The majority of Indian importers expect an increase of more than 20 % in imports of cement and gypsum from Pakistan. For Pakistan’s exports to India, agricultural products, cement, electronics, granite/marble, machinery, metal products, minerals, pharmaceuticals, processed food items, sports goods and textiles are expected to rise by more than 20 %, according to the majority of Pakistani exporters (Table 9). Import of other items was expected to rise by less than 20 % by the largest proportion of traders in both countries.

Table 8 Expected growth rate in commodities for export from India to Pakistan (percent of respondents)

Commodities	Indian exporters		Pakistani importers	
	Up to 20 % (%)	More than 20 % (%)	Up to 20 % (%)	More than 20 % (%)
Agricultural products	44	56	37	63
Auto parts	33	67	0	100
Chemicals	67	33	38	62
Electronics	33	67		
Granite ^a	53	47	63	37
Leather	73	27		
Machinery	41	59	31	69
Metals	50	50	50	50
Minerals	33	67	29	71
Pharmaceuticals	64	36	33	67
Polymers (plastic, rubber etc)			43	57
Processed foods	40	60	30	70
Tea	43	57		
Textiles	69	31	18	82
Others	64	36	31	69

^aGranite/Marble for Pakistani importers

Source ICRIER survey (January–March 2014)

8.3 *Expected Increase in Trade Through Different Transport Modes*

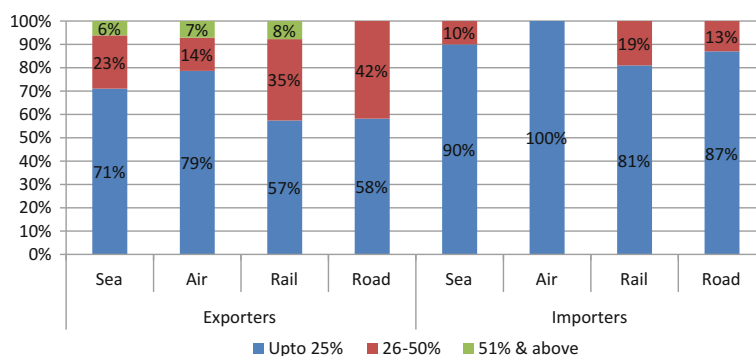
In order to identify which modes of transport would need the largest increase in investment to increase trade capacity at these ports, respondents were asked about their expectations of the modes of transport that would expand the most in bilateral trade. Given the facilities at trading ports and the trend in India–Pakistan bilateral trade, the majority of Indian exporters and importers expect an increase of up to 25 % in trade across all four modes (Fig. 28).

The perceptions of Pakistani exporters and importers, with respect to increase in trade via different modes of transport vary. While the majority of exporters expect trade to increase by up to 25 % for all four modes, a large proportion of importers expect a 26–50 % increase in trade at the air, rail and road ports. The perception with respect to sea ports is mixed, with 46 % of importers perceiving an increase of up to 25 % in trade, and 44 % expecting trade to increase by 26–50 % (Fig. 29).

Table 9 Expected growth rate in commodities for imports into India from Pakistan (percent of respondents)

Commodities	Indian importers		Pakistani exporters	
	Up to 20 % (%)	More than 20 % (%)	Up to 20 % (%)	More than 20 % (%)
Agricultural products	55	45	19	81
Cement	47	53	34	66
Chemicals			100	0
Electronics			33	67
Glass	67	33		
Granite/Marble			30	70
Gypsum	46	54		
Leather	100	0	52	48
Machinery			0	100
Metal products	60	40	0	100
Minerals	100	0	41	59
Pharmaceuticals	86	14	19	81
Processed foods	100	0	32	68
Sports goods			17	83
Textiles	67	33	45	55
Wood products/wool	100	0		
Others			44	56

Source ICRIER survey (January–March 2014)

**Fig. 28** Expected increase in trade through different modes of transport in India (percent of respondents). Source ICRIER survey (January–March 2014)

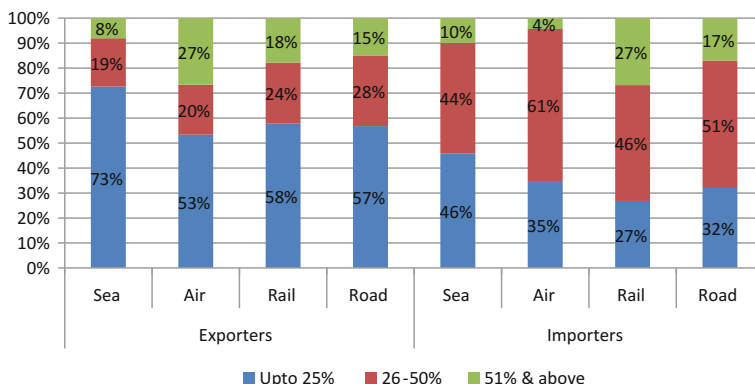


Fig. 29 Expected increase in trade through different modes of transport in Pakistan (percent of respondents). *Source* ICRIER survey (January–March 2014)

9 Summary and Policy Recommendations

ICRIER has surveyed trade perception in two rounds in an attempt to understand and analyze impediments faced by businesses engaged in India–Pakistan trade. In this book, we report the findings of the second Trade Perception survey.

Although our sample size is not very large, an analysis of traders' perceptions on the key indicators of—awareness of trade policy, ease of meeting standards, market access, business facilitation, customs and documentation and infrastructure at ports represents a broad picture of the impediments, and in some cases improvements, in India–Pakistan bilateral trade. Based on our perception analysis, we present a set of recommendations for policymakers and government bodies.

The overall awareness of policy with respect to trade in India and Pakistan was found to be almost the same. However, awareness levels in Pakistan were found to be much higher especially in the case of policies specific to India–Pakistan trade via the land routes. Given that any restriction on items to be traded are only applicable to exports from India to Pakistan; and that India–Pakistan trade policy allows only 137 items to be exported from India to Pakistan by road, a *larger number of traders, especially exporters, on the Indian side must be made aware of the absence of restrictions to trade via rail in order to allow them to benefit from the cost and time advantages offered by land routes.* We found trade policy awareness among firms surveyed in both, India and Pakistan to have increased over the previous year, in agreement with the previous year's expectations.

Ease of meeting standards among Indian firms was found to be higher than that of Pakistani firms, whether the Sanitary and Phytosanitary (SPS) standards for agricultural commodities or the Technical Barriers to Trade (TBT) standards for manufactured goods were being considered. When compared with the perception results of our first survey, ease of meeting standards has improved for Indian firms. However, this is not the case for Pakistani firms, indicating their rising difficulties in

meeting standards for exporting goods to India. However, it must be noted that India imposes the same standards on imports from all countries in the world, and no additional standards are applied to the imports coming from Pakistan. Yet, these are perceived barriers which need to be identified and addressed. Interactions between consumers, businesses and governments of the two countries will help overcome these barriers. Exporters from both India and Pakistan expect the ease in meeting SPS and TBT standards to improve in future.

Importers on both sides of the border reportedly have a perception of higher market access than the exporters—with Indian importers perceiving a higher market access for Pakistani goods in India than the Pakistani exporters, and Pakistani importers perceiving a higher market access for Indian goods in Pakistan than the Indian exporters. In our study, market access is one indicator which has recorded a remarkable improvement in traders' perceptions over the last round of survey; so much so that the perceptions in the current survey have exceeded the traders' positive expectations of change in market access reported last year. Traders expect market access to improve even further next year. Market access is also perceived to be high for goods carrying the country label and is expected to increase in the next year. The debilitating impact of negative political events is perceived to be even higher in the current survey than it was in the last round in both India and Pakistan. However, a larger proportion of traders now expect the impact of such political events to decline in future, indicating optimism.

Higher market access in India and Pakistan, and the high acceptability of products labelled 'Made in India' or 'Made in Pakistan' are an indication to policymakers of the affinity between the two countries for trade bolstering the case for normalizing economic relations and enacting policies which favour bilateral trade.

It is important to note that in line with the findings of the previous survey, the large majority of traders continue to report difficulties in obtaining visas to either country, even though traders expected the visa regime to improve this year. Communication facilities on the other hand are good, having improved over the previous year and are expected to improve further next year. It may be noted that small logistics operators in both India and Pakistan are not competent. However, the perceptions on competence of large operators and efficiency of banks are high and have improved compared to those in the previous survey round, among both Indian and Pakistani traders. The competence of logistic operators and efficiency of banks is higher on the Indian side than on the Pakistani side. Overall business facilitation has improved over our last round of survey and is expected to improve even further in future.

The continuing difficulties in obtaining visas must be brought to the knowledge of the Home and Interiors Ministries of India and Pakistan. Positive perceptions of market access and increase in bilateral trade back the case for liberalizing the visa regime which will allow traders to travel to the neighbouring country and build business relationships. Another factor necessary to bolster bilateral trade is the presence of national bank branches in the partner country to facilitate financial

transactions, and competent large logistics operators to facilitate movement of goods.

The perceptions of Indian and Pakistani traders of the efficiency of the Customs in processing documents, laboratory testing, security and competence of customs officials was seen to be largely *average* or *poor* and despite positive expectations for the future, traders do not perceive much of an improvement this year. Among Indian traders, air ports are perceived to be the best performing ports, followed by the road, sea and rail ports, in terms of the time taken by the Customs to process documents, time taken for lab testing, excessive checking for security purposes and competence of Customs officials. Sea, road and rail ports perform relatively better than the air ports on the aforementioned indicators on the Pakistani side.

It has been felt that the infrastructure at ports is in dire need of expansion, especially the rail and road ports at Wagah–Attari. However, the perception results put forward a much broader picture. Except for the air port in India, infrastructure at all other modes of transport has been perceived as *poor* or *average* during both of our survey rounds in India and Pakistan. Even though the traders were optimistic about improvements in infrastructure this year, perceptions have worsened at all trading ports, except for the road and sea ports in Pakistan. Infrastructure is perceived to be the worst at the rail port in India, and at the air port in Pakistan. Considering the availability and quality of services at trading ports, the air port again emerges as having the best quality infrastructure among Indian traders, followed by the sea, road and rail ports. The sea port is perceived to be the best in terms of availability and quality of infrastructure in Pakistan. Availability of rail wagons continues to be low among a large majority of Indian and Pakistani exporters despite expectations of improvement reported in the last survey.

It may be noted that the physical and non-physical trade facilitating measures are lacking at rail port in India and at air ports in Pakistan, both of which emerge as the poorest performing ports. Steps must be taken to improve the functioning of these ports and, most importantly, to increase the number of freight wagons plying on the India–Pakistan rail route. A shortage in rail wagons, reported by exporters time and again, affects bilateral trade and trade potential.

Citing shortage of infrastructure at ports and rising trade volumes, the majority of Indian traders felt that capacity expansion at all four ports—sea, air, road and rail—must be of the order of 26–50 %. For Pakistani traders, a large proportion of respondents felt the capacity expansion at sea and air ports should be up by 25 %, at road ports up by 26–50 %, and at rail ports by more than 50 %.

Exports and imports between India and Pakistan are expected to increase up to 25 % as perceived by a majority of Indian and Pakistani traders. The commodities likely to see a growth of more than 20 % in exports from India to Pakistan are agricultural commodities, auto parts, chemicals, electronics, machinery, minerals, pharmaceuticals, processed food items, textiles and tea. Commodity exports from Pakistan to India which are expected to increase by more than 20 % are agricultural products, cement, electronics, granite/marble, gypsum, machinery, metal products, minerals, pharmaceuticals, processed food items, sports goods and textiles.

10 Policy Recommendations

1. Negative list of 1209 items must be abandoned

A large number of auto parts are included in the negative list. The majority of Indian exporters and Pakistani importers expect an increase of more than 20 % in the exports of auto parts from India to Pakistan in the future and this is an indication that automotive products can become important traded items.

- Informal trade continues to restrict formal trade and trade potential. Presence of a negative list is a major reason for the export of a large number of goods from India to Pakistan via informal channels.

2. Awareness of Trade Policy

- Trade related rules and procedures must be made publically available.
- Government bodies should ensure that revisions or changes in any policy reach traders in a timely manner. A dedicated web portal should be designed for India–Pakistan trade tracking the latest developments in trade policy.

As traders in both countries find it difficult to identify new trading partners, encouraging interaction of traders via a web portal could prove to be mutually beneficial.

- The governments should establish a point of enquiry to address questions on trade related matters by traders, businessmen and other interested parties.

3. Visa regime must be liberalized

The visa regime must be liberalized to facilitate movement of traders. City specific visas; the requirement of supporting documents (invitation letter from trade partner, confirmation from Chambers of Commerce, and clearance from Ministry of Interior in Pakistan or Ministry of Home Affairs in India); police reporting; designating ports of entry and exit; delays uncertainties with grants of visas are all particular problems.

- The government must consider widening the scope of the SAARC Business visa regime, on the lines of the APEC business travel card, to allow unrestricted access to prospective markets in South Asia, and, more importantly, to Pakistan. At present, the SAARC business visa has been reported to be costly (US\$5000), of a short validity (3 months), and difficult to acquire.

4. Financial mechanisms supporting trade between India and Pakistan must be devised

- Methods must be devised to conduct India–Pakistan trade in domestic currencies. At present, bilateral trade is conducted in US dollars. However, this leads to losses when the domestic currencies depreciate against US dollar.

- Given the integral role of banks in conducting trade transactions, branches of Indian and Pakistani banks must be opened in Pakistan and India, respectively.

5. Improvement of infrastructure at trade ports must be a priority

- The availability and quality of services at trading ports are closely related. The adequacy and quality of facilities at ports must be assessed and addressed.
- There are still complaints of long waiting hours for trucks outside the Integrated Check Post; this leads to pilferage and rotting fruits and vegetables.
- Testing centres must be available at the ports, to help cutting down the time taken for the release/clearance of goods.
- Pre-arrival processing of documents should be permitted for import cargo.
- It is important to provide telecommunication facilities at the land ICP which can facilitate the opening of bank branches, and communication between Customs officials.

6. Opening new land routes for trade between India and Pakistan must be considered

Between India and Pakistan, the road and rail routes at Wagah–Attari are in high demand and so capacity falls short rising trade volumes. However, poor facilities at the rail port lead to a shift in trade to the road port which, in turn, congests the ICP on the Indian and Pakistani sides. Those unable to export via road from India (given the restriction to 137 items only) are at a loss.

7. The SAARC trade agreement must be liberalized

- SAFTA: Due to the presence of a large negative list and sensitive list of items, and high duties, India often uses Afghanistan as base to re-export goods to Pakistan.
- Impact of Pakistan–China Trade Agreement on SAFTA: Pakistan prefers to import cheaper goods from China instead of India, because many Indian goods attract higher duties.

8. Accession to international conventions by both India and Pakistan

- Adoption of the TIR convention of the UNECE can facilitate seamless road transport and transit of goods without the need for transshipment at border or additional security checks. Along with facilitating trade between India and Pakistan, the convention could also connect the two countries with those in Central Asia.
- The WTO Trade Facilitation Agreement must be adopted and both India and Pakistan should undertake WTO+ measures to ease movement of goods across borders benefitting both nations.

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Chapter 10

Facilitating India–Pakistan Trade Through the Land Route

Nisha Taneja, Isha Dayal and Samridhi Bimal

1 Introduction

India and Pakistan have had a restrictive trade and transport arrangement for several decades. Until 1996 both countries traded in a limited number of items often referred to as the positive list. Upon the countries' accession to WTO, India granted Most Favoured Nation (MFN) status to Pakistan in 1996. Transport policies included—a maritime protocol until 2005 which allowed only Indian and Pakistani flagged vessels to carry cargo between the two countries and did not permit the same vessels to carry consignments to a third country from the ports of either; presence of only one rail route for cargo movement between the two countries; and absence of road-based trade route until 2005 (Taneja et al. 2014).

In 2011 the two countries laid down a blue print for normalizing trade between the two countries; the agenda for which was very detailed covering *inter alia* the MFN issue. Pakistan completed the first phase of granting MFN status to India and made a transition from the positive list approach to a small negative list of 1209 items in March 2012. However, it continued to restrict road-based trade by allowing only 137 items to be imported from India via road. Since then the trade normalization process has not made much progress.

Recognizing the importance of the land route several studies have highlighted its impediments. Taneja (2006, 2007, 2013, 2014), have pointed out the impediments of the road and rail route. More recently TAF et al. (2016) and BRIEF (2016) have identified impediments but the focus has been only on the road route.

The trade normalization process completed so far is likely to unleash the untapped trade potential between the two countries. Taneja et al. (2013) estimate bilateral trade potential between the two countries to be US\$ 19.8 billion. The most feasible and cost-effective way of moving goods between the two countries is

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through the land route. Unless the land route is improved substantially, transaction costs of trading between the two countries will remain high which will deter trade realization.

Trade facilitation between the two countries has to be placed in a larger context. Both countries are members of the South Asian free Trade Agreement. India and Pakistan failed to agree on a SAARC Motor Vehicles Agreement. However, as members of the WTO and signatories to the WTO Trade Facilitation agreement there is a new window for both countries to address their trade facilitation concerns.

Connecting India and Pakistan by the land route offers gains that would spread over a wide geography covering several countries. Connecting India and Pakistan would ultimately mean connecting Pakistan to East Asia through India and connecting India to Central Asia through Pakistan.

With the vision of connecting India and Pakistan to Central Asia and East Asia, this paper makes an attempt to examine trade between India and Pakistan by different modes of transport, identify physical and non-physical impediments to transporting goods by rail and road while taking into account the implications of trade policy for transporting goods; suggests measures to address these constraints which are also in compliance with the provisions in the recently signed WTO Agreement on Trade Facilitation (WTO 2014). The paper also suggests how acceding to international conventions will make it easier for the two countries to connect with the rest of the world.

This paper is based on secondary data analysis; an examination of regulations, and international agreements; and survey and stakeholder consultations conducted in during 2014-16.

2 Changing Modes of Trade Between India and Pakistan

Until two decades ago, rail was the predominant mode of transport between India and Pakistan. This was on account of the restrictive maritime protocol between the two countries and the absence of road route for trade until 2005. In 1995–96, share of trade by rail route was 63 % and share of sea route was 33 %—the remaining was by air. With the amendment of the maritime protocol and opening of the road route at Wagah-Attari in 2005 the shares of trade by sea and road in total India–Pakistan trade saw a massive rise. Sea has become the dominant mode accounting for 65 % of total bilateral trade between India and Pakistan in 2014–15; while the share of road in total trade has seen a rise from nil in 1995–96 to 23 % in 2014–15.

The above changes have been accompanied with a sharp decline in share of rail which accounts for only 8 % of total bilateral trade in 2014–15.

Even though substantial trade liberalization has taken place in recent years, between 2011–12 and 2014–15 the share of rail declined from 15 to 8 % whereas that by road increased from 17 to 23 %, and that of sea also increased from 60 to 65 % during the same period (Fig. 1).

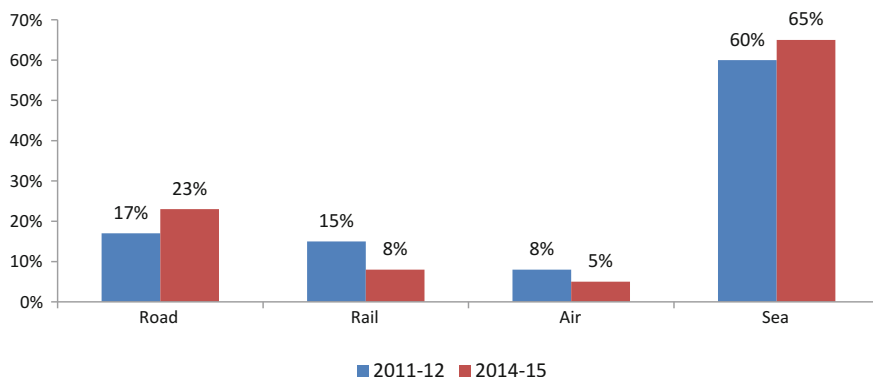


Fig. 1 Mode wise share of India's total trade with Pakistan. *Source* DGCIS, Ministry of Commerce and Industry, Govt. of India

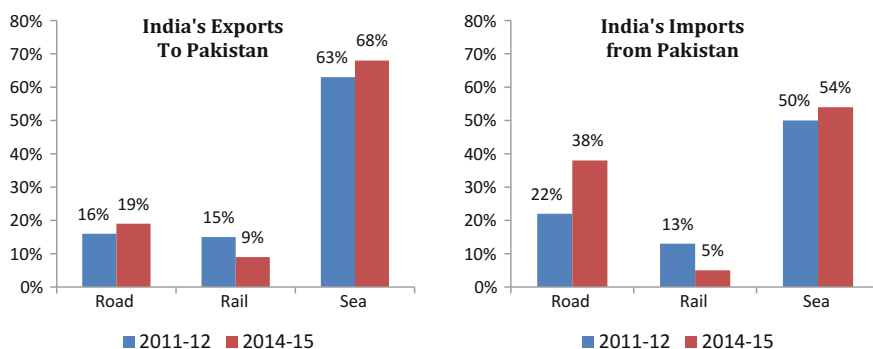


Fig. 2 Mode wise export and import share of India–Pakistan trade. *Source* DGCIS, Ministry of Commerce and Industry, Govt. of India

In 2014–15, the top commodities exported from India to Pakistan by road included agricultural items such as soya bean, tomatoes, and potatoes; by rail included capsicum, isobgul husk, and vegetable seeds; and by sea included chemicals like polypropylene, and p-xylene. In the same year, India's major imports from Pakistan by road included dates, cement and gypsum; by rail included hides/skins, denim, cement and surgical instruments; and by sea included naphtha, cotton and oils (Appendix 1).

Data on mode-wise exports and imports indicates that over 2011–12 and 2014–15, the share of road in India's exports to Pakistan increased from 16 to 19 %, while that of rail fell from 15 to 9 % (Fig. 2). This is despite the fact that the trade policy allows export in only 137 items from India to Pakistan by the road route. Clearly, exports which cannot be exported by the road route (because of a restrictive positive list of only 137 items) are being exported at a much higher cost

by sea instead of the rail route. In fact in the last one year, exports to Pakistan have declined by 17 % from US\$ 2.3 billion to US\$ 1.7 billion. There is thus an urgent need to address the impediments on the rail route, as for Indian exports this is the only cheap mode of transport available for the items on the positive list. This is perhaps one major reason for a decline in India's exports from US\$ 2.3 billion in 2013–14 to US\$ 1.9 billion therefore requiring urgent attention.

Imports from Pakistan on the other hand have seen an even bigger shift from rail to road. During 2011–12 and 2014–15, share of rail declined to a mere 5 % while that of road increased massively from 22 to 38 %. With Pakistan's share of rail in its exports being meagre, the rail authorities in Pakistan do not have much interest in this mode of transport.

Under such circumstances, informal trade through third countries, notably Dubai, is likely to continue with little incentive for traders to shift to the formal channel. An ICRIER study estimates informal trade to the tune of US\$ 4.71 billion (Taneja and Bimal 2016). Of this, India's exports to Pakistan are estimated to be USD 3.99 billion and imports from Pakistan USD 0.72 billion. The main informal export items are jewellery, textiles, machinery and machine parts, electronic appliances, chemicals, paper, betel leaves and tyres. India's informal imports from Pakistan mainly consist of textiles, dry fruits, cement and spices. The route not only makes trading inconvenient and un-competitive due to escalating time and cost of trade, but the circumvention is also not accounted for in the formal bilateral trade statistics.

3 Impediments to Transporting Goods by Rail Through Attari

Goods move either by the goods train often referred to as “interchange train” or by parcel wagons which are attached to the Samjhauta Express- the passenger train which runs on a bi-weekly basis carrying 6–10 parcel wagons. Since the capacity of Samjhauta Express is limited, most of the rail cargo is carried by the interchange train.

The study identifies the following impediments encountered by businesses while transporting goods by rail through Attari-Wagah border:

3.1 Availability, Type and Movement of Wagons

There is inadequacy in the number of wagons allocated to Indian exporters. Also there is no transparency in the allocation of wagons as allocation of wagons is done manually and is not computerized. Information related to wagons is available only to some local agents who obtain this information at a cost/bribe. Large logistic firms are not aware of local practices and refrain from carrying cargo between the two countries.

Only BCX covered wagons are allowed. There is no provision for sending liquid cargo, or uncovered cargo. Also, temperature controlled wagons and refrigerated wagons are not permitted. Goods requiring containerisation also cannot be traded. Thus even though there is no restriction on commodities that can be traded through the rail route, the restriction on the type of wagons permitted restricts the type of commodities that can be traded.

Trade by rail is largely one way from India to Pakistan. The rail wagons that go to Pakistan return from Pakistan only after they are loaded with Pakistani export cargo. However, since most of the export cargo from Pakistan has shifted to the road route there is not much cargo movement by rail from Pakistan that can be loaded. This leads to a long waiting time on the Pakistani side and a delay in return of wagons. Railway wagons carrying export cargo should be permitted to return empty instead of waiting in Lahore to get loaded. Indian exporters should be given the option of bearing the freight of return journey of empty wagons.

The goods train does not have a fixed schedule. As a result there is uncertainty about the arrival and departure of trains. Only the Samjhauta express passenger train has a fixed schedule but it has limited parcel wagons (6–10) capacity for carrying goods.

3.2 Railway Receipt from Origin to Destination

Until 2010, railway receipts were endorsed from the point of origin in India to the point of destination. Thus the same wagon could be transported from the point of origin to the point of destination (uptil Lahore). Since 2010, this practice has been stopped. According to the current practice wagons from Indore reach Amritsar where they are loaded onto different wagons for onward movement to Lahore. At Lahore again goods are unloaded and loaded to a different wagon for onward movement to another destination in Pakistan. This adds to costs substantially.

It is not understood by the trading community why the practices change frequently. Also, there is no circular/public notice which would either put in place or change such practices.

CONCOR is issuing its own in-house document-Inland Way Bill in lieu of Railway Receipt quoting an all-inclusive lump sum tariff. These Inland Way Bills are treated and dealt with as local/through goods invoice.

3.3 Infrastructure

The rail port is located at Amritsar where no space is allocated for stacking of goods prior to export, leading to deterioration of goods and unnecessary demurrage charges.

There are no lab testing facilities at Amritsar railway port. Several items have to be sent outside Amritsar or to Amritsar Airport for testing purposes. The test reports

are referred to government labs only. These result in delays in releasing the consignments from the land port.

There are no bank branches at Amritsar rail port making it difficult for traders.

There is also no facility for mechanized loading and unloading of goods.

Even though there is a protocol for movement of containerized cargo it is still not operational. While this may be so because of political reasons, Amritsar is a dry port but it does not qualify to be an inland container depot (ICD) as it lacks facilities for a container terminal.

There is no custodian of cargo at the railway station. The goods are left in the open and are extremely vulnerable to theft. Outdated paper seals are being used which are easy to tamper with and this often results in pilferage as wagons have multiple idling spots in transit from Attari to Amritsar.

There is no designated enquiry point at the land customs station.

3.4 Loading and Unloading

No free time is given for unloaded cargo. Demurrage charges are levied from the time the goods are unloaded.

There is no government or private agency that is approved for provision of labor for loading and unloading at the LCS. Traders are permitted to bring in their own labour that is issued passes by the Railway authorities to do the loading and unloading. However there are security issues with regard to the unorganized labor working at the port. These emanate from lack of identification/ID cards and security checks.

3.5 Trade Procedures

Trade documents are submitted manually as submission through Electronic Data Interchange (EDI) for exports and imports is still not operational for rail cargo. There is no Risk Management System (RMS) in place that would allow random checking of consignments. Due to lack of EDI, there is no provision for pre-arrival processing of documents. Also, the exact steps involved in conducting trade at the LCS are erratic, adhoc and not made public.

3.6 Co-ordination Between Different Government Agencies and Consultations

A key reason for impediments not being addressed is that there are multiple agencies that include railways, road transport and highways, customs, external

affairs, defense, agriculture, law and justice which lack co-ordination amongst themselves at the centre and with the local agencies at the state level. There is lack of coordination in the functions of different agencies and non-synchronization in their procedures.

At the same time it is extremely important for the representatives of trade and industry bodies to be able to engage in consultations with government agencies at the state and central level. This vertical and horizontal constellation of all stakeholders needs to be brought under one umbrella for trade impediments to be addressed effectively.

Stakeholder consultations suggest that under the existing system there is absence of any institutional mechanism for the trade and industry representatives to meet with railway officials at the border. Even though industry representatives meet with officials, due to lack of an institutional mechanism, these are informal in nature. Also there is no system whereby follow up action on impediments pointed out by industry can be undertaken. In particular it was pointed out that there is no institutional mechanism whereby these complaints from industry to the local railway offices can be taken to the railway board or other relevant bodies at the Centre which have the final authority to address several of these impediments.

Under the provisions of the Land Port Authority Act (LPAI) the LPAI has to convene an inter-ministerial meeting once in three months along with a representative from each of the 9 states (bordering India (Chief Secretary) and a representative from a recognized workers body and a recognized trade body (Appendix 2 and 3). However, it is not clear whether this meeting takes place or not. Also it appears from the notification S.O. 329 (E) dated 24th February 2012 (Appendix 3) that while 9 Chief Secretaries will be represented from each of the bordering states there will be only one representative from a recognized body of traders and one from a recognized body of workers. It is important to clarify that there will be a representative from each state having international borders because each state has its own unique features. Also, there should be a provision for more representatives from the State and at the Government/worker/trade level if additional routes are opened through other states which have international borders.

Cross border meetings between the two countries are equally important for smooth rail based trade. There is absence of any mechanism for railway officials from India and Pakistan to meet, identify roadblocks in facilitation of trade and collaborate to address them.

4 Impediments to Transporting Goods by Road Through Wagah

A major step taken in 2012 was the opening up of the Integrated Check Post (ICP) at the land customs station at Wagah for transportation by the road route. The ICP functional at Wagah has state of the art facilities and is fully operational.

However, there are several impediments. Perhaps, at the time that the ICP was conceived, trade normalization was not on the horizon. Also, the poor functioning of the rail route has put additional pressure on the ICP. The following impediments have been reported by trade representatives while transporting goods by road through Attari-Wagah border.

4.1 Infrastructure

Warehousing capacity at the ICP is not equipped to handle existing trade volumes. The warehouses are already operating at full capacity and a large number of consignments are kept in the open area - prone to damages. Storage charges by ICP are also reported to be high by traders. Lack of competition from private bonded warehouses is perhaps the reason for high charges. At sea ports the presence of private bonded warehouses and public warehouses provides a competitive and more efficient environment for traders.

There are no full body truck scanners. Each truck is checked manually and at several points by various agencies which add to time and cost.

Loading and unloading bays are uncovered. Goods are exposed to elements of nature during loading and unloading resulting in damages and losses to exporters and importers. The cargo holding area is unpaved. Water logging in the holding area leads to loss for traders during loading and unloading. Also there is no container handling facility and no cross-border movement of containerized cargo.

There are no lab testing facilities at the ICP. For many mineral products such as gypsum, if testing is required then samples are sent to Delhi to government laboratories. Similarly if testing is required for of textile products then samples have to be sent to Ludhiana.

Also there are no bank branches at the ICP. Thus even though the purpose of the ICP was to have all facilities in the same complex- several of them are lacking.

4.2 Loading and Unloading

Demurrage charges are levied from the time of landing. This is unlike seaports where free time is given after unloading of consignments before demurrage charges can be levied.

The trade representatives find labour charges at the ICP to be 2.5 times higher compared to other dry ports such as Ludhiana. Currently labour is being provided by the Central Warehousing Corporation which is also the custodian of goods at the ICP. CWC enters into a contract with a private contractor which provides these

services for loading and unloading. Since the contract is with one firm, it has a monopoly which leads to high costs.

The labour charges are levied even in cases where loading and unloading is done mechanically and no labour is involved.

For several decades, transportation of goods across India's land borders with Nepal and Bangladesh has been adversely affected by truck unions. It has been reported that the truck unions at Attari do not allow imported goods to be transported by any other trucking firm. For instance, a truck unloading its goods for export to Pakistan cannot load imported goods because the union does not permit. The truck unions can charge up to 40 % higher than the market rates.

Timings for trade have been increased to 12 h every day on all days of the week from 7 AM to 7 PM. However the trade representatives report that the timings are changed erratically without any circular. Until recently the ICP was functioning from 7 AM to 5 PM.

4.3 Trade Procedures

Trade representatives have pointed out that there are multiple agencies and multiple steps involved in conducting trade. CUTS et. al. (2016) point out that at the ICP, the Border Security Force, Customs, Land port authority of India, Plant Quarantine department, Bureau of Immigration, and Central Warehousing Corporation follow their own procedures. Importing a food consignment involves 14 steps against an ideal of 6 steps. The practical steps involved in conducting trade are not made public and are also changed frequently. Even though EDI is operational, there are frequent breakdowns and RMSs are not functional. Also, despite EDI being operational, pre-arrival processing is not being done by importers. It is not clear, why the traders are not using this facility.

4.4 Coordination Among Agencies and Consultations

Under the existing system, there is a Customs Liaison Border Committee led by the Customs Commissioner Amritsar (includes customs for road and rail) which meets its counterpart in Lahore, once in 2 months. These meetings have been held at regular intervals. The meetings have continued despite uncertainties in political relations during this period.

The Customs coordination committee meeting is held with all stakeholders from government agencies operating at the border and trade representatives. The stakeholders include BSF, immigration, plant quarantine, health officer, CWC and

representatives from trade. Railway officials are not included in these consultations. However, there is no institutional mechanism to implement the recommendations of the committee.

There remains an absence of an institutionalized consultative mechanism between different agencies at the border, and between the border agencies and the agencies at the centre.

There is no representative from LPAI, at the LCS. As a result when there are problems at the port, there is no officer that the trade can report to.

5 Recommendations

Table 1 list down some recommendations for facilitating trade by rail and road through Attari-Wagah.

6 Way Forward

To realise the vision of connecting India and Pakistan not only to each other but to East Asia and Central Asia we propose the following.

6.1 Urgent Attention to Railways

Currently, Indian exports can only be moved by rail and not by road because only 137 items are permitted to be sent by road. Till such time that trade is normalized between India and Pakistan, urgent attention is needed to improve rail transportation. An immediate measure that can be taken is to permit Indian rail wagons to go up-to Lahore and return empty the freight for which can be borne by trade. This will improve the frequency of movement of rail wagons.

6.2 Comprehensive Land Transport Policy

A comprehensive and integrated international land transport policy needs to be put in place not only to provide rail and road services to the two countries but also to service other countries as well by linking sea ports through land borders so that the two countries can connect with each other as well as the rest of the world.

Currently there are only two operational land routes through Attari/Wagah and two through the land borders of Jammu and Kashmir. There are 10 notified routes

Table 1 Recommendations for rail and road route

Rail route	Road route
<p><i>Infrastructure</i></p> <p>(i) Upgrade infrastructure facilities (warehousing, cargo holding area, container handling facilities, lab facilities for testing, bank branches, provision for mechanized loading and unloading, utilities for human resource working at port)</p> <p>(ii) EDI for exports and imports should be made operational for rail cargo. Risk Management System needs to be introduced. There should be provision for pre-arrival processing of documents for imports</p> <p>(iii) Trade-related rules and practical steps involved should be made publically available</p> <p>(iv) Free time should be given for import cargo</p> <p>(v) Designated custodian of cargo at Amritsar railway station</p> <p>(vi) Ensuring safety by replacing cargo paper seals by more modern seals such as metal band seals, bolt security seals etc.</p> <p>(vii) An authorized agency (either government or private) for provision of labor involved in loading and unloading at LCS</p> <p>(viii) Dry port should be constructed for containerized cargo near Attari</p> <p>(ix) Cross-border movement of containerized cargo should be permitted</p>	<p>(i) Upgrade infrastructure facilities (warehousing, cargo holding area, container handling facilities, lab facilities for testing, bank branches, provision for mechanized loading and unloading, full body truck scanners, utilities for human resource working at port)</p> <p>(ii) Introduce Risk Management System. There should be provision for pre-arrival processing of documents for imports</p> <p>(iii) Trade-related rules and practical steps involved should be made publically available</p> <p>(iv) Free time should be given for import cargo</p> <p>(v) Labour charges should not be levied when loading and unloading is done mechanically</p> <p>(vi) Permit private bonded warehouses to operate at the ICP</p> <p>(vii) Cross-border movement of containerized cargo should be permitted</p>
<p><i>Co-ordination among agencies and consultations</i></p> <p>(i) Meetings between railway officials of the two countries should be institutionalized and should take place on a regular basis</p> <p>(ii) Meetings between industry representatives and government agencies should be institutionalized</p> <p>(iii) The LPAI authority should include more members from trade bodies; with at least one from each bordering state</p> <p>(iv) Regular consultations should also be held between customs officials of the two countries</p> <p>(v) Set up an enquiry point at the LCS</p>	<p>(i) Meetings between LPAI involving all members from different ministries and representatives from the workers body and trade body should be institutionalized and should take place on a regular basis</p> <p>(ii) Meetings between industry representatives and government agencies should be institutionalized</p> <p>(iii) The LPAI authority should include more members from trade bodies; with at least one from each bordering state</p> <p>(iv) Regular consultations should also be held between customs officials of the two countries</p> <p>(v) Set up an enquiry point at the ICP</p>

(continued)

Table 1 (continued)

Rail route	Road route
<p><i>Others</i></p> <ul style="list-style-type: none"> (i) Increase rolling stock of wagons, diversify type of rolling stock (ii) Introduce IT driven systems for booking of wagons to ensure greater transparency (iii) Permit Indian railway wagons carrying export cargo to return empty (iv) Indian exporters should be given the option of bearing the freight of return journey of empty wagons (v) Put in place a fixed weekly schedule for the goods train (vi) Put in place a monitoring system and an evaluation system so that the schedule is adhered to (vii) Railway receipts should be endorsed from the point of origin of goods to the point of destination 	

by customs.¹ The Khokrapar Munabao route is operational for movement of passengers but not cargo. This can be opened up to cargo movement if both countries agree.

The transport protocols between the two countries need to be implemented to allow seamless transportation of containerized cargo in each other's territory without the requirement of transshipment of cargo at the land borders.

6.3 *IT Driven Systems*

For both road and rail there should be fully automated systems in place. Currently, the level of automation at Attar-Wagah is less automated than at other land routes between India and Bangladesh and India and Nepal. This will improve transparency, reduce rent seeking and bring about greater efficiency in conducting trade across the land border.

6.4 *Logistic Service Providers*

One way to overcome rigidities and bottlenecks of operating through road and rail would be to encourage large logistic service providers and logistic service providers from other states to operate. Currently only logistic firms around Amritsar are operating. These are essentially local businessmen who have served this trade for several decades now and are familiar with the local systems which are opaque. Other logistic firms are reluctant to step in because they are unfamiliar with local systems and therefore tend to subcontract to local firms in Amritsar. With expanding trade between the two countries the trade basket is likely to get more diversified and the logistic needs would be more sophisticated. If more transparent systems are put in place then other operators will not be hesitant to step in. This would help in bringing in better practices and increase in scale of operations.

6.5 *Infrastructure Requirements*

A separate fund would be required to upgrade infrastructure for rail LCS and the ICP. A public private partnership (PPP) model can be considered for building the infrastructure at the land ports. The facilities at ICP have not kept pace with the growing demand. If the trade dialogue is resumed and Pakistan allows all items to be transported by the road route, the ICP facilities would not be adequate.

¹Notification No. 45/2010—Customs (N. T.) dated 04.06.2010, CBEC, India.

Also so far the facilities at the land ports are provided solely by the public sector. It is important to permit private bonded warehouses to operate along with the CWC as is done at sea ports. This will create a more competitive and efficient environment.

Similarly traders are not aware that lab testing services can be provided by recognized private laboratories. This information should be made widely available to industry bodies. Using the services of private and public laboratories will lead to a more competitive and efficient environment and will reduce transaction costs.

So far banking facilities are lacking at the land ports. When they are introduced, both public and private banks should be permitted so that there is greater efficiency.

6.6 *Compliance with the Trade Facilitation Agreement*

Many of the problems related to land transport can be addressed by meeting the requirements of the Trade Facilitation Agreement. The problems related to *co-ordination between different agencies* can be addressed by setting up a National Trade Facilitation Committee as envisaged under Article 23 Para 1 and Para 2 of the Trade facilitation Agreement (Appendix 9). The Government is currently in the process of setting up the Committee and is seeking inputs from stakeholders. Models adopted by different countries to set up a National Trade Facilitation Committee suggest that countries tend to co-opt an equal number of representatives from the public and private sectors.² Thus, the LPAI should have an equal number of representatives from the public and private sector especially when selecting members from states which have international trade borders. This model has been followed by several countries in setting up their National Trade Facilitation Bodies.

The Trade facilitation Agreement has a provision for *consultative mechanism* in Article 2 Para 2 whereby Members have to provide for consultations between its border agencies and traders/stakeholders within its territory (Appendix 5). Meeting the requirements of these provisions will automatically ensure that there are consultations between border agencies and traders, and also between border agencies of the two countries. Also the provisions require countries to hold such consultations at regular intervals. These measures would make the consultative process more sustainable. Similarly, Article 2 Para 1 requires member countries to provide an opportunity and an appropriate time frame to traders to comment on any new laws or regulations before they are introduced or amended (Appendix 5).

For trade to be conducted smoothly across borders the Trade Facilitation Agreement has a provision under Article 8 Para 1 and Para 2 for *cooperation with countries with whom they share a common border* with a view to coordinating procedures at border crossings (Appendix 7). Such cooperation could include

²Taneja et al. (2016).

alignment of working days and hours; alignment of procedures and formalities; joint controls and establishment of one stop border post control.

The problems related to adhoc procedures being followed by different agencies can also be addressed by adhering to the provisions laid down in Article 1 Para 1 and Para 2 which requires countries to make available on the internet not only procedures related to trade but also the *practical steps needed for importation, exportation and transit* (Appendix 4). Even though documents required for exportation and importation are published and are easily available to traders and other stakeholders, the practical steps are not made available on the internet.

There is also a provision under Article 1 Para 3 whereby countries can maintain *enquiry points* to answer trade related queries and also provide forms and documents (Appendix 4). Such a provision will also be useful for traders as there are multiple agencies having several procedures which change frequently without any notice.

Adhering to the provisions laid under Article 7 Para 1 and Para 2 will allow Indian and Pakistani traders to lodge trade documents in advance for *pre-arrival processing* using electronic methods; as well as make electronic payment of duties, taxes, fees and charges (Appendix 6). Such systems of EDI will help expedite procedures at the border, eliminate manual lodging of documents, and most importantly allow for RMS to be put in place at land borders. RMS, as envisaged under Article 7 Para 4, would greatly reduce burden arising out of manual checking of consignments and the pressure on scanning and other security equipment. Having an electronic RMS will also help deal with arbitrary and excessive checking of goods, as is often reported for trade between India and Pakistan (Appendix 6).

The Trade Facilitation Agreement under its Article 11 also encourages members to allow *transit of cargo*, thereby permitting goods from the neighbouring country to enter one's territory without any need for transshipment at the border, nor repeated loading/unloading of goods, and reliance on specific logistics operators (Appendix 8). Facilitating movement of goods without transshipment would also make way for India and Pakistan to abide by the provisions laid under Article 11 Para 5 which encourages members to make available *infrastructural facilities for traffic in transit*; given the poor infrastructural conditions at land ports. As per Article 11 Para 16, coordination and cooperation on charges, formalities, and practical operation of transit would help in rationalizing charges. Appointment of a *national transit coordinator* as envisaged under Article 11 Para 17 will help achieve the aim of having a comprehensive land transport policy, connecting all land ports between India and Pakistan, as well as land ports to the sea ports to connect with the rest of the world.

Table 2 maps the impediments faced by businesses in trading through Attari-Wagah and the provisions of the Trade Facilitation Agreement (TFA).

Table 2 Relevance of TFA for India–Pakistan trade through Attari–Wagah

Issue	Provisions in trade facilitation agreement (TFA) to address the issues
Lack of coordination between different agencies at land ports	<p><i>Article 23 Para 1 and Para 2:</i> The issue can be addressed by setting up a national trade facilitation committee (Appendix 9). LPAI should have an equal number of representatives from the public and private sector especially when selecting members from states which have international trade borders. This model has been followed by several countries in setting up their national trade facilitation bodies</p>
Absence of consultations between traders and border agencies	<p><i>Article 2 Para 2:</i> TFA has a provision for consultative mechanism whereby Members have to provide for consultations between its border agencies and traders/stakeholders within its territory (Appendix 5). Also the provisions require countries to hold such consultations at regular intervals, making the consultative process more sustainable</p> <p><i>Article 2 Para 1:</i> This provision of the TFA requires member countries to provide an opportunity and an appropriate time frame to traders to comment on any new laws or regulations before they are introduced or amended (Appendix 5); thereby leading to a more inclusive policy formulation process</p>
Lack of cooperation and coordination between the border agencies of India and Pakistan	<p><i>Article 8 Para 1 and Para 2:</i> This provision of the TFA envisages cooperation between countries sharing a common border with a view to coordinate procedures at border crossings (Appendix 7). Such cooperation could include alignment of working days and hours; alignment of procedures and formalities; joint controls and establishment of one stop border post control</p>

(continued)

Table 2 (continued)

Issue	Provisions in trade facilitation agreement (TFA) to address the issues
Practice of adhoc procedures followed by different agencies	<p><i>Article 1 Para 1 and Para 2:</i> This provision requires countries to make available on the internet not only procedures related to trade but also the practical steps needed for importation, exportation and transit (Appendix 4). Even though documents required for exportation and importation are published and are easily available to traders and other stakeholders, the practical steps are not made available on the internet</p> <p><i>Article 1 Para 3:</i> This provision requires countries to maintain enquiry points to answer trade related queries and also provide forms and documents, which will be useful for traders as there are multiple agencies having several procedures which change frequently without any notice (Appendix 4)</p>
Absence of electronic systems for facilitating trade at land borders that facilitate pre-arrival processing of documents, risk management system	<p><i>Article 7 Para 1 and Para 2:</i> Systems of electronic data interchange, allowing Indian and Pakistani traders to lodge trade documents in advance for pre-arrival processing as well as make electronic payment of duties, taxes, fees and charges (Appendix 6), will help expedite procedures at the border, eliminate manual lodging of documents, and most importantly allow for risk management system (RMS) to be put in place at land border</p> <p><i>Article 7 Para 4:</i> RMS would greatly reduce burden arising out of manual checking of consignments and the pressure on scanning and other security equipment. Having an electronic risk management system will also help deal with arbitrary and excessive checking of goods, as is often reported for trade between India and Pakistan (Appendix 6)</p>

(continued)

Table 2 (continued)

Issue	Provisions in trade facilitation agreement (TFA) to address the issues
Transshipment of goods at border	<p><i>Article 11:</i> TFA under its Article 11 requires members to allow transit of cargo, thereby permitting goods from the neighbouring country to enter one's territory without any need for transshipment at the border, repeated loading/unloading of goods, nor reliance on specific logistics operators (Appendix 8)</p> <p><i>Article 11 Para 5:</i> Facilitating movement of goods without transshipment would encourage India and Pakistan to make available infrastructural facilities for traffic in transit; given the poor infrastructural conditions at land ports</p> <p><i>Article 11 Para 16:</i> Coordination and cooperation on charges, formalities, and practical operation of transit would help curb the monopoly power of the existing logistics operators at Attari</p> <p><i>Article 11 Para 17:</i> Appointment of a national transit coordinator will help achieve the aim of having a comprehensive land transport policy, connecting all land ports between India and Pakistan, as well as land ports to the sea ports to connect with the rest of the world</p>

6.7 *Acceding to International Conventions*

If granted transit rights, India could link up with Central Asia through Afghanistan and Pakistan could link up with South and South-East Asia. Acceding to international conventions allows countries to use best global harmonized practices.

The two most important legal instruments in this regard are the International Road Transport (TIR) Convention and Convention Concerning the International Transport of Goods by Rail (COTIF). These international conventions not only encourage participating countries to provide transit facilities, but also streamline procedures and guarantee the security of goods in transit. It is important to note here that while Pakistan has acceded to both of these conventions; India has not acceded to either of the two. Interestingly, Afghanistan has also acceded to the TIR Convention. Both Afghanistan and Pakistan are also members of the six-member Economic Cooperation Organization (ECO) of the Central Asian region.³ The ECO member countries are all signatories to the TIR convention thereby enabling Afghanistan and Pakistan greater access and connectivity with Central Asia. The ECO secretariat has also taken up the initiative to set up a rail link connecting Islamabad, Tehran and Istanbul; in order to allow continuous containerised movement of freight between Pakistan, Iran and Turkey using a common consignment note. Therefore, a move towards ratifying the TIR and COTIF conventions which permit seamless transport connectivity across national borders would be a landmark initiative for India as it would automatically connect it with Central Asia.

6.7.1 **TIR Convention**

The TIR Convention administered by the International Road Transport Union (IRU) supports multimodal movement of goods and transport over multiple borders, provided one leg of the journey is by road.

The TIR Convention has two key features. First, it allows goods to transit through countries in safe vehicles with minimum border checks using a single customs document called the TIR Carnet, which is recognized by all member countries. Second, the Carnet provides evidence of an international guarantee for customs duties and taxes that may become due at the destination country. As soon as a consignment enters into a territory it becomes liable for customs duties and taxes of that country. The international guarantee ensures that these taxes will be paid at the final destination.

The TIR system, through a series of contractual arrangements, empowers the national associations, typically representing the interests of the transport sector in a particular country, to undertake the TIR operation. The national association is

³ECO member countries include Tajikistan, Uzbekistan, Turkmenistan, Iran, Afghanistan and Pakistan.

authorized to use the TIR Carnet, and is also authorized by the Customs administration of that country to guarantee payment within that country of any duties and taxes which may become due in the event of any irregularity occurring in course of the TIR transport operation. This national guaranteeing association thus guarantees the payment of duties and taxes on national and foreign carriers under TIR Carnets, which have been issued by this national guaranteeing association itself or by an association in some other country. Every country therefore has the benefit for all TIR transport operations within its territory, and of a guarantee provided in its territory. There is always a national partner to which the Customs authorities can address themselves in cases of irregularity, irrespective of whether this irregularity was caused by a national or foreign transport operator. The TIR transit system may therefore be considered as a succession of national transit movements relying on international rather than national guarantees. However, the arrangements governing the establishment of the guarantee are based on national law and are usually contained in an agreement between the national Customs authorities and the national associations. All national guaranteeing associations constitute a guarantee chain linking all TIR operational countries. The guarantee chain is backed-up by several large international insurance companies and is supervised by the TIR Executive Board.

6.7.2 Convention Concerning the International Transport of Goods by Rail (COTIF)

Just as the TIR convention is the international best practice applicable to transit of goods via road; to simplify and streamline the movement and transit of goods via rail, the COTIF convention was brought into place at Bern, Switzerland, in 1980. The convention is managed by the Intergovernmental Organisation for International Carriage by Rail (OTIF) which is committed towards developing *uniform systems of law that may apply to carriage of freight between countries through rail networks*. The focus of activities of OTIF primarily lies in the development of rail transport law in the areas of: Contracts of carriage for the international carriage of passengers and goods (CIV and CIM), Carriage of dangerous goods (RID), Contracts of use of vehicles (CUV), Contract on the use of railway infrastructure (CUI), Validation of technical standards and adoption of uniform technical prescriptions for railway material (APTU), and Procedure for the technical admission of railway vehicles and other railway material used in international traffic (ATMF).

In order to facilitate international trade and movement of goods through the regional railway networks, the convention enables production and presentation of a *common consignment note* at borders to allow transit of freight via multiple territories, all of which are ratified to the CIM component of COTIF.

The convention also has the provision whereby the costs (the carriage charge, incidental costs, customs duties and other costs incurred from the time of the conclusion of the contract to the time of delivery) shall be paid by the consignor (unless otherwise agreed between the consignor and carrier).

The convention allows for multi-modality, since under a single contract, uniform rules of international containerized transit under COTIF apply even if a part of journey is covered by road, sea, or inland-waterways, in additional to carriage by rail.

Thus, for carriage of freight by rail between India and Pakistan, not only must India accede to COTIF (especially the CIM component) and develop uniform laws governing rail transit, but also ensure technical uniformity as per the rules laid out under COTIF's APTU and ATMF components to ascertain certain technical standards and uniform technical provisions for railway equipment and railway vehicles for use in international rail transport.

Appendix 1

Top Commodities Traded via Road Route

Top 5 commodities exported from India to Pakistan by Road (2014–15)

HS Code	Commodity	Value (US\$ million)
23040030	Meal of soyabean, solvent extracted (defatted) variety	142.2
07020000	Tomatoes fresh or chilled	54.5
07019000	Potatoes fresh or chilled other than seeds	50.3
52010015	Indian cotton of staple length 28.5 mm (1.4/32") and above	32.5
39012000	Polyethylene, specification 0.94/more	20.7

Source DGCIS, Ministry of Commerce and Industry, Govt. of India

Top 5 commodities imported by India from Pakistan by Road (2014–15)

HS Code	Commodity	Value (US\$ million)
08041030	Dry dates hard (chhohara or kharek)	85.9
25232910	Ordinary Portland Cement, dry	37.5
25201010	Natural gypsum and anhydrite	19.5
70052990	Other non-wired glass	13.7
28362020	Disodium carbonate light	10.5

Source DGCIS, Ministry of Commerce and Industry, Govt. of India

Top Commodities Traded via Rail Route

Top 5 commodities exported from India to Pakistan by Rail (2014–15)

HS Code	Commodity	Value (US\$ million)
09042219	Crushed or ground; other fruits of genus capsicum	10.3
12119032	Psyllium husk (isobgul husk)	9.2
32041610	Reactive yellows	7.2
12099190	Vegetable seeds for planting n.e.s.	6.9
13019099	Other oleoresins	5.6

Source DGCIS, Ministry of Commerce and Industry, Govt. of India

Top 5 commodities imported by India from Pakistan by Rail (2014–15)

HS Code	Commodity	Value (US\$ million)
41071900	Other whole hids/skins	9.5
41041900	Other grain of bovine in wet state including wet-blue	5.9
52094200	Denim	1.4
25232910	Ordinary Portland cement, dry	1.3
90189022	Surgical knives, scissors and blade	1.0

Source DGCIS, Ministry of Commerce and Industry, Govt. of India

Top Commodities Traded via Sea Route

Top 5 commodities exported from India to Pakistan by Sea (2014–15)

HS Code	Commodity	Value (US\$ million)
39021000	Polypropylene	83.7
29024300	p-xylene	81.6
07132000	Chickpeas (garbanzos) dried and shelled	46.5
54071039	Other dyed polyester fabrics	43.7
08011920	Coconut, dried excl. desiccated and endocarp	31.6

Source DGCIS, Ministry of Commerce and Industry, Govt. of India

Top 5 commodities imported by India from Pakistan by Sea (2014–15)

HS Code	Commodity	Value (US\$ million)
27101290	Naphtha	75.9
52010020	Foreign cotton of all staple lengths	35.6
27101990	Other petroleum oils and oils obtained from bituminous minerals	17.5
27101960	Base oil	12.8
08041030	Dry dates hard (chhohara or kharek)	12.4

Source DGCIS, Ministry of Commerce and Industry, Govt. of India

Appendix 2

THE LAND PORTS AUTHORITY OF INDIA ACT, 2010 NO. 31 OF 2010 [31st August, 2010].

An Act to provide for the establishment of the Land Ports Authority of India to put in place systems which address security imperatives and for the development and management of facilities for cross border movement of passengers and goods at designated points along the international borders of India and for matters connected therewith or incidental thereto.

Be it enacted by Parliament in the Sixty-first Year of the Republic of India as follows:—

CHAPTER 2

THE LAND PORTS AUTHORITY OF INDIA 3. Constitution of Authority.—

(1) With effect from such date as the Central Government may, by notification in the Official Gazette, appoint, there shall be constituted an Authority to be known as the Land Ports Authority of India. (2) The Authority shall be a body corporate by the name aforesaid, having perpetual succession and a common seal, with power, subject to the provisions of this Act, to acquire, hold and dispose of property both movable and immovable, and to contract and shall by the said name sue and be sued. (3) The Authority shall consist of—(a) a Chairperson; (b) two Members, out of whom one shall be Member (Planning and Development) and other shall be Member (Finance); (c) not more than nine members, ex officio, to be appointed by the Central Government from amongst the officers, not below the rank of the Joint Secretary to the Government of India, representing the ministries or departments of the Government of India dealing with Home Affairs, External Affairs, Revenue, Commerce, Road Transport and Highways, Railways, Defence, Agriculture and Cooperation, Law and Justice; (d) the Chief Secretary or his nominee not below the rank of the Secretary to the Government of the respective State where the integrated check posts are located; (e) two representatives, one of whom shall be from recognised bodies of workers and the other shall be from traders, to be appointed by the Central Government; and (f) such other representatives as the Central Government may co-opt for functional purposes. (4) The Chairperson and the members referred to in clause (b) shall be appointed by the Central Government and shall be whole-time members. (5) The Chairperson shall be chosen from among persons who have special knowledge and experience in the field of security, transport, industry, commerce, law, finance or public administration.

8. Meetings.—(1) The Authority shall meet at such times and places, and shall observe such rules of procedure in regard to the transaction of business at its meetings (including the quorum at such meetings) as may be provided by regulations. (2) The Chairperson, or, if for any reason, he is unable to attend any meeting of the Authority, any other member chosen by the members present at the meeting shall preside at the meeting. (3) All questions which come up before any meeting of the Authority shall be decided by a majority of the votes of the members present and voting, and in the event of an equality of votes, the Chairperson, or in his absence the person presiding, shall have and exercise a second or casting vote

Appendix 3

The Gazette of India

MINISTRY OF HOME AFFAIRS (Department of Border Management) NOTIFICATION

New Delhi, the 24th February, 2012

S.O. 328(E).—In exercise of the powers conferred by sub-section (2) of Section (1) of the Land Ports Authority of India Act, 2010 (31 of 2010), the Central Government hereby appoints the 1st day of March, 2012 as the date on which the provisions of the said act shall come into force.

[F.No.13/1/2010-BADP]

K. K. MITTAL, Jt. Secy.

NOTIFICATION

New Delhi, the 24th February, 2012

S.O. 329 (E).—In exercise of the powers conferred by Sect. 3 of the Land Ports Authority of India Act, 2010 (31 of 2010), the Central Government hereby constitutes the Land Ports Authority of India with effect from 1st day of March, 2012 consisting of the following, namely:-

- (a) Shri Anil Goswami, Additional Secretary, Ministry of Home Affairs—Chairperson
- (b)
 - (i) Shri Rajvir Singh, IA and AS (1991), Member (Finance)
 - (ii) Shri Mehendra Ranga, IRS (Customs and Central Excise) (1990), Member (Planning & Development)
- (c)
 - (iii) Joint Secretary, Department of Border Management, Ministry of Home Affairs—Member, *ex-officio*
 - (iv) Joint Secretary (Bangladesh, Srilanka and Maldives Division), Ministry of External Affairs—Member, *ex-officio*
 - (v) Joint Secretary (General Staff), Ministry of Defence—Member, *ex-officio*
 - (vi) Joint Secretary & Legislative Counsel, Legislative Department—Member, *ex-officio*
 - (vii) Joint Secretary (National Resources Management and Rain fed Farming System Division) Department of Agriculture & Cooperation—Member, *ex-officio*

- (viii) Commissioner (Customs), Central Board of Excise and Customs, Department of Revenue—Member, *ex-officio*
 - (ix) Joint Secretary, Department of Commerce (South Asia)—Member, *ex-officio*
 - (x) Executive Director, Traffic Transportation (Steel), Ministry of Railways, Railway Board—Member, *ex-officio*
 - (xi) Joint Secretary, Ministry of Road Transport and Highways—Member, *ex-officio*
- (d) Chief Secretary or his nominees not below the rank of the Secretary to the State Government of the each of the following States:-
- (i) Assam,
 - (ii) Bihar,
 - (iii) Manipur,
 - (iv) Meghalaya,
 - (v) Mizoram,
 - (vi) Punjab,
 - (vii) Tripura,
 - (viii) Uttar Pradesh,
 - (ix) West Bengal.
- (e)
- (i) One representative from recognized bodies of workers (to be appointed by Central Government),
 - (ii) One representative from recognized bodies of traders (to be appointed by Central Government).

1. The Head Office of the Authority shall be at New Delhi.

(F. No. 13/1/2010-BADP)

K.K. MITTAL, Jt. Secy

Appendix 4

ARTICLE 1: PUBLICATION AND AVAILABILITY OF INFORMATION

1. Publication

1.1 Each Member shall promptly publish the following information in a non-discriminatory and easily accessible manner in order to enable governments, traders, and other interested parties to become acquainted with them:

- (a) procedures for importation, exportation, and transit (including port, airport, and other entry-point procedures), and required forms and documents;
- (b) applied rates of duties and taxes of any kind imposed on or in connection with importation or exportation;
- (c) fees and charges imposed by or for governmental agencies on or in connection with importation, exportation or transit;
- (d) rules for the classification or valuation of products for customs purposes;
- (e) laws, regulations, and administrative rulings of general application relating to rules of origin;
- (f) import, export or transit restrictions or prohibitions;
- (g) penalty provisions for breaches of import, export, or transit formalities;
- (h) procedures for appeal or review;
- (i) agreements or parts thereof with any country or countries relating to importation, exportation, or transit; and
- (j) procedures relating to the administration of tariff quotas.

1.2 Nothing in these provisions shall be construed as requiring the publication or provision of information other than in the language of the Member except as stated in paragraph 2.2.

2. Information Available Through Internet

2.1 Each Member shall make available, and update to the extent possible and as appropriate, the following through the internet:

- (a) a description¹ of its procedures for importation, exportation, and transit, including procedures for appeal or review, that informs governments, traders, and other interested parties of the practical steps needed for importation, exportation, and transit;
- (b) the forms and documents required for importation into, exportation from, or transit through the territory of that Member;
- (c) contact information on its enquiry point(s).

- 2.2 Whenever practicable, the description referred to in subparagraph 2.1(a) shall also be made available in one of the official languages of the WTO.
- 2.3 Members are encouraged to make available further trade-related information through the internet, including relevant trade-related legislation and other items referred to in paragraph 1.1.

3. Enquiry Points

- 3.1 Each Member shall, within its available resources, establish or maintain one or more enquiry points to answer reasonable enquiries of governments, traders, and other interested parties on matters covered by paragraph 1.1 and to provide the required forms and documents referred to in subparagraph 1.1 (a).
- 3.2 Members of a customs union or involved in regional integration may establish or maintain common enquiry points at the regional level to satisfy the requirement of paragraph 3.1 for common procedures.
- 3.3 Members are encouraged not to require the payment of a fee for answering enquiries and providing required forms and documents. If any, Members shall limit the amount of their fees and charges to the approximate cost of services rendered.
- 3.4 The enquiry points shall answer enquiries and provide the forms and documents within a reasonable time period set by each Member, which may vary depending on the nature or complexity of the request.

Appendix 5

ARTICLE 2: OPPORTUNITY TO COMMENT, INFORMATION BEFORE ENTRY INTO FORCE, AND CONSULTATIONS

1. Opportunity to Comment and Information before Entry into Force

- 1.1 Each Member shall, to the extent practicable and in a manner consistent with its domestic law and legal system, provide opportunities and an appropriate time period to traders and other interested parties to comment on the proposed introduction or amendment of laws and regulations of general application related to the movement, release, and clearance of goods, including goods in transit.
- 1.2 Each Member shall, to the extent practicable and in a manner consistent with its domestic law and legal system, ensure that new or amended laws and regulations of general application related to the movement, release, and clearance of goods, including goods in transit, are published or information on them made otherwise publicly available, as early as possible before their entry into force, in order to enable traders and other interested parties to become acquainted with them.

- 1.3 Changes to duty rates or tariff rates, measures that have a relieving effect, measures the effectiveness of which would be undermined as a result of compliance with paragraphs 1.1 or 1.2, measures applied in urgent circumstances, or minor changes to domestic law and legal system are each excluded from paragraphs 1.1 and 1.2.

2. Consultations

Each Member shall, as appropriate, provide for regular consultations between its border agencies and traders or other stakeholders located within its territory.

Appendix 6

ARTICLE 7: RELEASE AND CLEARANCE OF GOODS

1. Pre-arrival Processing

- 1.1 Each Member shall adopt or maintain procedures allowing for the submission of import documentation and other required information, including manifests, in order to begin processing prior to the arrival of goods with a view to expediting the release of goods upon arrival.
- 1.2 Each Member shall, as appropriate, provide for advance lodging of documents in electronic format for pre-arrival processing of such documents.

2. Electronic Payment

Each Member shall, to the extent practicable, adopt or maintain procedures allowing the option of electronic payment for duties, taxes, fees, and charges collected by customs incurred upon importation and exportation.

3. Risk Management

- 3.1 Each Member shall, to the extent possible, adopt or maintain a risk management system for customs control.
- 3.2 Each Member shall design and apply risk management in a manner as to avoid arbitrary or unjustifiable discrimination, or a disguised restriction on international trade.
- 3.3 Each Member shall concentrate customs control and, to the extent possible other relevant border controls, on high-risk consignments and expedite the release of low-risk consignments. A Member also may select, on a random basis, consignments for such controls as part of its risk management.
- 3.4 Each Member shall base risk management on an assessment of risk through appropriate selectivity criteria. Such selectivity criteria may include, *inter alia*, the Harmonized System code, nature and description of the goods, country of origin, country from which the goods were shipped, value of the goods, compliance record of traders, and type of means of transport.

Appendix 7

ARTICLE 8: BORDER AGENCY COOPERATION

1. Each Member shall ensure that its authorities and agencies responsible for border controls and procedures dealing with the importation, exportation, and transit of goods cooperate with one another and coordinate their activities in order to facilitate trade.
2. Each Member shall, to the extent possible and practicable, cooperate on mutually agreed terms with other Members with whom it shares a common border with a view to coordinating procedures at border crossings to facilitate cross-border trade. Such cooperation and coordination may include:
 - (a) alignment of working days and hours;
 - (b) alignment of procedures and formalities;
 - (c) development and sharing of common facilities;
 - (d) joint controls;
 - (e) establishment of one stop border post control.

Appendix 8

ARTICLE 11: FREEDOM OF TRANSIT

1. Members are encouraged to make available, where practicable, physically separate infrastructure (such as lanes, berths and similar) for traffic in transit.
2. Members shall endeavour to cooperate and coordinate with one another with a view to enhancing freedom of transit. Such cooperation and coordination may include, but is not limited to, an understanding on:
 - (a) charges;
 - (b) formalities and legal requirements; and
 - (c) the practical operation of transit regimes.
3. Each Member shall endeavour to appoint a national transit coordinator to which all enquiries and proposals by other Members relating to the good functioning of transit operations can be addressed.

Appendix 9

ARTICLE 23: INSTITUTIONAL ARRANGEMENTS

1. Committee on Trade Facilitation

- 1.1 A Committee on Trade Facilitation is hereby established.
- 1.2 The Committee shall be open for participation by all Members and shall elect its own Chairperson. The Committee shall meet as needed and envisaged by the relevant provisions of this Agreement, but no less than once a year, for the purpose of affording Members the opportunity to consult on any matters related to the operation of this Agreement or the furtherance of its objectives. The Committee shall carry out such responsibilities as assigned to it under this Agreement or by the Members. The Committee shall establish its own rules of procedure.
- 1.3 The Committee may establish such subsidiary bodies as may be required. All such bodies shall report to the Committee.
- 1.4 The Committee shall develop procedures for the sharing by Members of relevant information and best practices as appropriate.
- 1.5 The Committee shall maintain close contact with other international organizations in the field of trade facilitation, such as the WCO, with the objective of securing the best available advice for the implementation and administration of this Agreement and in order to ensure that unnecessary duplication of effort is avoided. To this end, the Committee may invite representatives of such organizations or their subsidiary bodies to:
 - (a) Attend meetings of the Committee; and
 - (b) Discuss specific matters related to the implementation of this Agreement.
- 1.6 The Committee shall review the operation and implementation of this Agreement four years from its entry into force, and periodically thereafter.
- 1.7 Members are encouraged to raise before the Committee questions relating to issues on the implementation and application of this Agreement.
- 1.8 The Committee shall encourage and facilitate ad hoc discussions among Members on specific issues under this Agreement with a view to reaching a mutually satisfactory solution promptly.

2. National Committee on Trade Facilitation

Each Member shall establish and/or maintain a national committee on trade facilitation or designate an existing mechanism to facilitate both domestic coordination and implementation of the provisions of this Agreement.

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Chapter 11

Munabao–Khokhrapar Land Route and India–Pakistan Relations

Tridivesh Singh Maini

Abbreviations

DGCIS	Directorate General of Commercial Intelligence and Statistics
FCL	Full container load
FOB	Free on board
ICP	Integrated check post
INR	Indian rupee
LCS	Land customs stations
MSME	Micro, Small, and Medium Enterprises
PKR	Pakistani rupee

1 Introduction

Over the past decade, there has been a significant thrust on increasing bilateral trade and improving connectivity between India and Pakistan (Saran 2008). Former Prime Minister Dr. Manmohan Singh repeatedly spoke of making borders irrelevant, emphatically stating, ‘I do not have the mandate to change borders; but I do have the mandate to make these borders irrelevant over a period of time’. As a consequence, India’s border regions, which for long were neglected, have become important as connectors between not just India and Pakistan, but with other neighbouring countries as well (Dixit 2014). The commencement of bus services between Srinagar–Muzaffarabad and Amritsar–Nankana Sahib and train service between Munabao and Khokhrapar have been important in this context.

If one were to specifically look at the case of Indo-Pak ties, the two Punjab and Kashmirs have received substantial media attention, and there is a reasonable amount of research on them. In the case of Punjab, a variety of factors, including

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cultural affinities, economic lobbies and political consensus in the state for better relations with Pakistan, have helped in increasing economic linkages, even though the level of bilateral trade through the land crossing is nowhere near its actual potential. It would be pertinent to point out though that the inauguration of the integrated check post (ICP) at Attari has given a boost to bilateral trade. In 2005, bilateral trade was estimated at US\$869 million; in 2013, this figure had risen to US \$2.6 billion (DGCIS and Ministry of Commerce, India).

The potential for greater connectivity and economic ties between Rajasthan and Sindh has not received as much attention in contemporary intellectual discourse on India–Pakistan trade. There is little work on the connectivity linkage established over the last decade and the steps which need to be taken to give a further fillip to not just connectivity, but also trade. There is, however, a significant body of literature on historical linkages between Rajasthan and Sindh.

This paper seeks to examine the potential for greater connectivity between Rajasthan and Sindh via the Munabao–Khokhrapar land crossing in the backdrop of a brief historical background on the links between the two regions. The paper examines the potential for trade via the land route, and also lists the measures taken by the central and state governments towards opening the route. In this context, it would be pertinent to look at the efforts of the business community of the state, as well as the political leadership of the state. The paper will then flag some of the crucial stumbling blocks to the opening of the land route for trade and suggest appropriate measures.

2 Approach and Research Questions

2.1 Approach to the Study

The study is based on primary surveys including interviews with customs and security officials, Jodhpur-based businessmen, politicians, passengers and central government officials (Table 1). One of the major challenges, encountered during the research, was that there was no research on trade potential via the Munabao–Khokhrapar land route. In fact, there is limited literature on the train service between Rajasthan and Sindh and the problems in providing the service. Interviews with passengers, railway officials and customs officials were particularly useful in getting relevant information and insights. One of the challenges faced during the survey was the difficulty in locating businessmen who had links with Pakistan, in the areas selected for conducting the survey. The survey was conducted in Jodhpur, Barmer and Delhi.

In addition to the primary survey, secondary commodity-wise data on trade conducted between India and Pakistan via the various Indian ports is used to estimate the *possible trade* that may shift to Munabao–Khokhrapar upon opening of this land border for trade. Considering that overall India–Pakistan trade potential is much higher (Taneja et al. 2013), this estimate of trade diversion has the potential to

Table 1 Details of primary survey

Category	Place	Number of interviewees
Businessmen	Jodhpur	7
	Barmer	2
Officials (customs)	Jodhpur	1
	Barmer	2
State CID (police)	Barmer	2
Politicians	Barmer	2
	Jodhpur	1
	Delhi	1
Railway officials	Jodhpur	2
Rail passengers	Jodhpur	5
Members of business chambers	Jodhpur	3
Local journalists	Jodhpur	2

Source Primary survey conducted by the author during his field visit to Jodhpur, May 2014

increase many folds once trade between the two countries is normalised and made less restrictive.

At the same time, this exercise helps identify the commodities which may be traded via the land border.

2.2 *Research Questions*

The research explores various aspects of connectivity between India and Pakistan via the Munabao–Khokhrapar land border including the background of passengers travelling on the Thar Express and their purpose of travel; efforts made by the business community, including Chambers of Commerce, towards opening up the land route; and opportunities and challenges to trade via this land route. It is necessary to understand whether benefits of the train service extend beyond the Barmer region (Western Rajasthan) to the adjoining states, such as Gujarat which is home to a number of separated families; and the purpose of travel is important for understanding whether any of the passengers utilise the train service for economic reasons. Although it was not possible to get information on informal trade, yet, information with regard to whether or not passengers use the train service for learning about business opportunities on both sides was obtained. There were complaints of difficulties faced by passengers travelling on the Munabao–Khokhrapar train service, which included visa and logistical issues and stringent security checks.

Considering that trade and commerce can no longer be pushed only by the political class, there has to be constant pressure from business groups to push for an environment conducive to trade. The issues explored in this context involve the

institutional linkages which Chambers in Rajasthan have established with those in Sindh, and the efforts they have made to persuade the political leadership to facilitate the commencement of trade via the Munabao–Khokhrapar land route. In addition, based on the local economy of Rajasthan and its strengths, it was important to understand the potential for trade via the land route, as well as possible roadblocks to the same.

Based on the above issues, some of the questions this paper seeks to answer are as follows:

1. Which Indian state do the travellers of train service belong to and what is their purpose of travel?
2. What is the estimated trade potential and the major commodities that are likely to be traded via this route once trade opens up?
3. Has the state government lobbied enough for opening up the Munabao–Khokhrapar land border for trade?
4. Have the business chambers lobbied for opening this route for trade?
5. Would the benefits of opening the land crossing for trade only accrue to the Marwar belt of the state or to other neighbouring states as well?
6. What are the key reasons for the land route to have remained closed for trade purposes this long?

3 Historical Links Between Rajasthan and Sindh

Close links between Rajasthan in India and Sindh in Pakistan are age old. This route was famous for its strategic location and the fact that in the British period, opium trade with Sindh was carried out through this route.¹

With regard to one of the important towns of western Rajasthan, Jaisalmer, Alexander Burnes (1834, p. 108) in one of his writings emphasised how its central location was its biggest asset:

The little wealth which it does possess springs from its central situation, as being a place of note between India and the Indus...

Ties within the Dhat region (extending from Jodhpur to Interior Sindh) were strong both culturally as well as economically, with the complementary factor being that the soil of Sindh was more fertile, and Western Rajasthan more drought prone. Consequently, agricultural productivity in Sindh was much higher. This was one of the reasons why a large number of Hindu castes migrated to Sindh before partition for the cultivation of rice.

¹Markovits (2008). Also see Burnes (1834).

Some of the important castes which reside on both sides and have close ties include Sodha Rajputs, Charans, Brahmins, Maheshwaris and Meghwals. Amongst the Muslims, some of the important sub-castes are Nohari, Rahuma and Bhaiya.

It was in the late nineteenth century that the Barmer region began to emerge as an important commercial hub with the commencement of a train service along the same line where the Thar Express runs today. The train began at Jodhpur and ended at Hyderabad in Sindh; it was run by Jodhpur rail and was called *Rajaji Ki Rail*. A part of the Jodhpur rail went to Pakistan in the aftermath of partition. These include the Hyderabad–Khokhrapar, Mirpur Khas–Nawabshah and Pithoro–Jamrao sections with a total length of over 500 km (Mughal 2009).

In addition to the train link between the two sides, the Western Rajasthan–Sindh trade route was important, since Karachi was the closest port (less than 650 km from Jodhpur, and 400 km from Barmer) and was utilised by businessmen from Jodhpur, as well as other parts of western Rajasthan leading to the region being termed as the ‘golden necklace’ of North Western India.

Another important link between western Rajasthan and Pakistan, right until 1965, was the close link between Dhaka (then part of Pakistan) and Balotra (100 km South West of Jodhpur). Balotra is an important centre for dyeing fabric. Muslin cloth from Dhaka was sent to Balotra for dyeing and processing.

Even after the war in 1965, links between Rajasthan and Sindh stayed intact due to cross-border marriages. Besides, unlike other borders, this section of the border was not fenced until the 1990s, thereby allowing for free movement of people. Cross-border marriages are especially prevalent among the Sodha Rajputs from Sindh, who cannot marry in their own sub-caste and have to find matches in Rajasthan. As a consequence of this, the Government of India made an exception, and since 2009, members of the Sodha community are issued visas for a period of up to 6 months, as opposed to the 1-month period for which they earlier received visas (Ramachandran 2009).

In the aftermath of 1971 and even later, large-scale migration took place from Sindh to Rajasthan and vice versa. The migrants from Sindh have contributed significantly to the development of hand embroidery in Barmer district. Some of the important clusters of the Meghwal caste, whose women specialise in such work, are located in Chautan and Barmer (Choudhary and Agarwal 2004).

3.1 Resumption of the Cross-Border Train Service

A weekly train service connecting Rajasthan and Sindh, known as the Thar Express, resumed operation in February 2006, after a hiatus of four decades, even though trade and commerce is still yet to begin.

The former Pakistan Prime Minister, Mohammed Khan Junejo, first mooted the idea of opening this route in 1985, but the idea was shelved. Later, the issue of linkages was raised by the former Chief Minister of Rajasthan, Mr. Ashok Gehlot in 2001, who wrote a letter to the then Prime Minister, Atal Bihari Vajpayee. It was

the efforts of the former finance minister in the Vajpayee government, Mr. Jaswant Singh, which actually resulted in the commencement of the train service, inaugurated in 2006.

The train service, run by North Western Railways, between Munabao and Khokhrapar, actually begins at Bhagat Ki Kothi (Jodhpur). Munabao is part of Barmer district, and is 325 km from Jodhpur. While the train departs at 1 a.m. on Saturday, it reaches Munabao at 7 a.m. in the morning (The Hindu 2014). There are a number of stoppages on the way, but passengers can only board at Bhagat Ki Kothi (Jodhpur), while customs and security checks are carried out at Munabao.² The infrastructure at Munabao was upgraded in 2008, and amenities like a waiting room, shops and currency exchanges have been provided. The number of customs counters too has been increased—there are 10 counters each at arrival and at the exit. Some of the important stops are Looni Junction, Samdari, Balotra, Barmer and Gadra Road. On the Pakistan side, the major stops are Mirpurkhas, Hyderabad and Karachi.

While for 6 months of the year (September–February), the Thar Express is run by the Pakistani side, for the other 6 months (March–August) it is run by the Indian side. The fare of the ticket on the Indian side is considerably lower at INR 185. On the Pakistani side the fare is 68 % higher at PKR 500; or INR 311 at an INR vs. PKR conversion rate of 1.61.

The resumption of the Thar Express in 2006 revived links between Western Rajasthan and Sindh, especially the Dhat belt, and the number of passengers has been reasonably consistent as is evident from Table 2. Peak season is the holiday season of May–July, during which there are about 700–800 passengers per week, which is despite the fact that the maximum number of passengers has been fixed at 400.³ While a large number of passengers are from separated families, a substantial number travel for pilgrimages to religious sites like Haridwar. A substantial number of passengers also travel by this train to attend the annual Urs Festival in Ajmer, Rajasthan.

Apart from western Rajasthan, passengers from India are mostly from Gujarat (Table 3), and there are some from other states like Madhya Pradesh, Hyderabad and Mumbai. A majority are from divided families. From Pakistan, most of the passengers belong to Sindh (Mirpur Khas) and Karachi. This includes Hindus as well as Muslims, belonging to divided families.

Upon questioning, passengers from Barmer complained about the logistical problems, especially the fact that they had to travel a long way to board the train,

²A land customs station (LCS) was set up at Munabao, after the commencement of the train. Many of the interviewees complained about logistical problems, especially the fact that they have to travel all the way from Barmer to Jodhpur to board the train. There have been repeated demands to allow boarding at Munabao, since this would be convenient for passengers who hail from the Barmer Region. On the Pakistani side, passengers do not board at just one point.

³There has been a rise in the number of passengers coming from Pakistan in recent months. This has been attributed to a number of reasons. While customs officials attribute the increase to the summer vacations, some interviewees made the point that Hindus from Sindh have begun to leave their homes out of fear.

Table 2 Number of passengers travelling by Thar Express

Year	Number of passengers	
	Arrival	Departure
2009–2010	19,734	17,932
2010–2011	16,045	15,580
2011–2012	14,596	14,088
2012–February 2013	12,171	11,483
February 2013–February 2014	27,075	21,839

Source Customs Commissionerate, Jodhpur

Table 3 Background of passengers

Indian cities	Pakistani cities	Communities
Barmer (Rajasthan)	Mirpurkhas	Sindhi Muslims
Jaisalmer (Rajasthan)	Karachi	Meghwal
Jodhpur (Rajasthan)	Rahimyar Khan	Bhil
Godhra (Gujarat)	Hyderabad	Sodha Rajputs
Bhuj (Gujarat)		Maheshwari
Kutch (Gujarat)		Bohra Muslims
Bharuch (Gujarat)		

Source Interview with railway (security officials) and customs officials in Jodhpur and Barmer (for communities) during field visit in May 2014

and also that securing a Pakistani visa is a tedious procedure.⁴ While passengers travelling from India to meet their relatives did say that they were carrying gifts, they did not disclose whether any items were for sale. One of the passengers from Karachi did mention that he had used this trip to explore potential business opportunities in India.

3.2 Trade via the Land Route: Current Status and Opportunities

3.2.1 Current Status

Currently, there is no trade via the Munabao–Khokhrapar route or direct trade between Rajasthan and Sindh (Table 4). Of late, however, the pressure for opening the land route for trade as well as starting a goods train via this route has been growing. First, during the commerce secretary-level meetings in 2012, this issue was discussed along with the possibility of commencing a goods train connecting Munabao and Khokhrapar. Second, during the Parliamentary elections in May 2014

⁴As the passengers have to travel all the way to New Delhi to obtain visa, which is at a distance of almost 900 km from the border region.

Table 4 Routes used by Jodhpur-based businessmen for trade with Pakistan

Indirect routes	<ul style="list-style-type: none"> • Via Dubai and Singapore • Goods first transported to Kandla, Pipavav and Mundra • Distances from Jodhpur 550, 750 and 610 km, respectively
Land route (unofficial trade)	Wagah–Attari

Source Interviews with businessmen and customs officials in Jodhpur during field visit in May 2014

former minister, Mr. Jaswant Singh, raised the issue of not just beginning trade via the land route, but also addressing the logistical problems that passengers face. The Jodhpur industrial association has also been pursuing the issue with the state government in Rajasthan. Interestingly, a new political outfit in the state, ‘The Nationalist Unionist Zamindaraa Party’ has spoken in favour of officially opening the border between Rajasthan and Sind, while also advocating a free trade zone at the Munabao–Khokhrapar border (Sebastian 2014). A political consensus in the state for trade via the land route is evolving.

On the Pakistani side, senior government officials have spoken in favour of opening up the land route for trade as a consequence of pressure from the Chambers of Commerce in Sindh (Rizwi 2013). It has however been argued that there is more emphasis on trade via Wagah–Attari due to Punjab’s political lobby being much stronger (Mathrani 2013).

With regard to the role of Sindh Government in lobbying for trade via the Munabao–Khokhrapar land crossing, Mr. Majyd Aziz, Ex-President, Karachi Chamber of Commerce and Industry, argues that the Sindh government has often raised the subject of Munabao–Khokhrapar and there have been instances of debate and questions in the Sindh Assembly. However, a planned, concrete and workable position paper has not been formulated yet that would provide the required impetus to create a decision on this sensitive matter.

Interestingly, local traders in Jodhpur do not depend only upon the Munabao–Khokhrapar route for the supply of commodities from Pakistan. In one such case, a supplier who owns an auto parts shop sells about 70–80 Pakistan made horns in a month in different parts of the country including Gujarat, which do not come via the Munabao–Khokhrapar land route.⁵

3.2.2 Potential Benefits from Trade Accruing to Western Rajasthan

The biggest beneficiary of trade via the Munabao–Khokhrapar land crossing on the Indian side is western Rajasthan, which includes Jodhpur, Jaisalmer and Bikaner.

⁵It is likely that he procures horns through the Wagah–Attari route or via the Samjhauta Express because he gets these from Delhi.

Table 5 Limestone and granite production in Jodhpur

Mineral	Year	Production in tonnes
Limestone	2008–2009	923,433
	2009–2010	1,761,420
	2011–2012	551,179
Granite	2008–2009	6935
	2009–2010	7934
	2011–2012	7267

Source Brief Industrial Profile of Jodhpur, p. 5

The city of Jodhpur itself could benefit immensely from the opening up of the land route. Some of the goods in demand in Pakistan are handicrafts and furniture. Jodhpur is an important handicraft and furniture centre in India, and exports goods to many different parts of the world.⁶ Traders have evinced an interest in developing closer business linkages with Pakistan, but cite political, security and logistical issues as major stumbling blocks.

(i) Trade in Inorganic Chemicals and Stones

Over the past few years, the city of Jodhpur has observed an increase in production of commodities like limestone and granite (Table 5). The huge demand in Pakistan for these commodities could be fulfilled if trade via the border crossing is opened up.⁷

(ii) Guar Gum Processing

There is immense potential for guar gum processing in Jodhpur. Guar is an agricultural product grown in both India and Pakistan. For the year 2013–14, global production of guar was estimated at 23.5 lakh tonnes, with India accounting for a share of 80 % (NCDEX Guar Industry Outlook 2015, p. 7). Within India, Rajasthan accounts for over 60 % of guar production, and Barmer is one of the major guar-seed-producing districts (ibid, p. 9).

Pakistan produces about 15 % of total guar production, cultivated mostly in the provinces of Punjab and Sindh (Hasan 2014). Of this, guar production in Punjab is approximately 80 %, and Sindh accounts for an approximate share of 17 % (Sharma 2010).

While the guar plant was earlier only used as fodder for animals, guar gum is now used for multiple purposes, such as in pharmaceuticals, textiles, food stuffs and more recently, in oil drilling. The global demand for guar has increased due to its use in shale fracking (Sharma 2013).

⁶According to A.K. Agarwal who has earlier headed CII Jodhpur, trade with Pakistan would help the whole of Rajasthan to improve its GDP by 2 %, while the town of Jodhpur would benefit to the extent of approximately 6 %.

⁷An interesting point to note is that a lot of granite exported to countries like Hong Kong ultimately ends up in Pakistan.

Although guar is grown in different parts of India and Pakistan, most of the guar gum processing takes place in Jodhpur and Bikaner. There is immense scope and potential for increasing the scale of guar processing facilities in western Rajasthan for Pakistani producers. Jodhpur has a specific cluster for guar gum powder comprising about sixty units. While its annual turnover is Rs. 1000 crore, exports are estimated at Rs. 950 crore (Brief Industrial Profile of Jodhpur, Ministry of MSME).

With Sindh producing a substantial amount of guar, there is a strong case to transport guar through the Munabao–Khokhrapar land route for its processing in India. The processed guar can then be re-exported and sold in the Pakistani market. Some of the interviewees had exported guar to Pakistan a couple of years back. However, due to an unpredictable relationship and logistical problems, such as difficulties in receiving payments and high costs of trade, they had not engaged with Pakistan in any further business transactions.

(iii) Petroleum Products and Development of Rajasthan and Sindh as an Energy Hub

The Barmer Oil Refinery was inaugurated in 2013. However, due to the massive domestic demand for crude oil in India, there are little exports from the country. At the same time, in Pakistan, there is demand for both petroleum products and crude petroleum that is strongly re-enforced by the point that as of February 2013, Pakistan imported petroleum products worth PKR 59,864 million and crude petroleum to the tune of PKR 32,773 million (Bureau of Statistics, Government of Pakistan). Over the past few years, Rajasthan has emerged as an important energy hub. Western Rajasthan, especially Jaisalmer, has taken the lead in harnessing solar and wind energy. In Gujarat, the Kutch region is emerging as an energy hub. If relations between the two countries improve, Rajasthan, Gujarat and Sindh can jointly emerge as an energy hub (The Daily Times, December 16, 2008).

(iv) City of Jodhpur as a Medical Hub

With a large number of medical institutions including an AIIMS set up at Jodhpur, the city has the potential to emerge as a medical hub. For patients in interior Sindh, it will be more convenient to come for treatment to Jodhpur than to other parts of India, if the land route is officially opened.

(v) Benefits to the Tertiary Sector

In western Rajasthan, the economy of Barmer has developed rapidly in the past few years, with potential for further growth. The opening of the land route for trade and increased cross-border movement of people would also give a boost to the tertiary sector, which includes not just hotels but also local transportation.

Table 6 Trade costs for export from Rajasthan to Pakistan via Dubai

Cost head	Cost description	Cost per kg (INR)
Inland haulage charges	Between INR 1–2, per kg	1.5
Terminal handling charges and customs clearing at the port	INR 25,000; per 20' full container load (fcl) [20' fcl ~ 20 tonne = 20,000 kg]	1.25
Ocean freight through Dubai	US\$700; per 20' fcl ~ 20,000 kg = INR 45,500 for 20' fcl [Exchange rate conversion @ 65 INR per USD]	2.28
Total export cost (INR per kg)		5.03

3.3 *Links Established Between Businessmen of Western Rajasthan with Pakistan*

While businessmen from Rajasthan have already established links with their counterparts in Pakistan, they have to use the circuitous route via Dubai. These businessmen first transport goods to ports in Gujarat, mostly Kandla or Mundra, and then to Dubai from where it reaches Karachi. This is a tedious process, involving escalating costs, with the export cost estimated to be approximately INR 5 per kg (Table 6).

Given that the distance covered for exporting goods from Jodhpur–Kandla–Dubai–Karachi is about 3560 km⁸; opening the Munabao–Khokhrapar border for trade could substantially reduce trade costs and save on ocean freight considering that the distance between Jodhpur–Munabao–Khokhrapar–Hyderabad is only about 560 km,⁹ saving on about 3000 km of the distance covered under the present trading route. Another advantage from opening the land crossing lies in the time taken for export, which could come down to 1 day from the current transaction time of 1 week.

The survey indicated that there is tremendous scope for India to export products like inorganic chemicals, stones, handicrafts and food items to Pakistan (Table 7). In addition, there is also potential for mutton export from western Rajasthan. Over the past few years, there has been an increase in meat production in Jodhpur, Jaisalmer, Barmer and Jalore. With distance not being a problem, there is significant scope for exporting meat products to Pakistan, and to the major overseas markets in Central Asia.

⁸Jodhpur–Kandla ~ 600 km; Kandla–Dubai ~ 1680 km; Dubai–Karachi ~ 1282 km.

⁹Jodhpur–Munabao ~ 350 km; Khokhrapar–Hyderabad ~ 210.

Table 7 Indian and Pakistani goods in demand across the border

Indian goods (western Rajasthan) which are in demand in Pakistan	Pakistani goods which are in demand in Rajasthan
Handicrafts	Dry fruits
Bangles	Onyx
Garments	Garments
Marble	Leather products
Granite	
Lime	
Calcium carbonate	
Soapstone	
Household utensils	
Foodstuffs	
Furniture	
Mutton	
Edible oil	

Source Interviews with businessmen and Customs official in Jodhpur during field visit in May 2014

3.4 Trade Potential Through Munabao–Khokhrapar

Trade via the land crossing will benefit not just western Rajasthan, but other surrounding states as well. Currently, businessmen from different parts of North India have to conduct trade with Pakistan via the Attari land crossing at Punjab border. With the opening of Munabao–Khokhrapar land route, businessmen from states like Madhya Pradesh and Gujarat will be spared considerable time and money in transporting their goods.

If one were to look beyond north-western India, the land crossing could also be useful for fulfilling the demand for certain commodities in southern and eastern India. In this context, the survey observed that there is demand for Pakistani chrome ore by ferro-alloy plants based in West Bengal and other cities in Eastern India. Pakistan has become a major chrome ore exporter. Indian chrome ore exporters can concentrate on China, and through swap agreements with Pakistani counterparts, develop a common marketing system to China, while Pakistan can ship chrome ore via the land route to Eastern parts of India. Potential trade in chrome ore is a manifestation of how to take favourable advantage of geographical proximity.

In addition to chrome ore, there is tremendous demand for Pakistani cement in India. At present, the cement is transported through Wagah–Attari land route or by sea. Considering that the price per container of cement transported via sea is in the range of US\$57–60 per mt (FOB), a direct trade channel through Munabao–Khokhrapar could provide a reasonable alternative to import Pakistani products, especially to those cities and towns in southern India where there is demand but the cost via Wagah–Attari is very high. Indian and Pakistani textile-related items could also be transported through this route at a much lower cost.

3.4.1 Estimate of Trade Diversion to Munabao–Khokhrapar

Once trade via the Munabao–Khokhrapar border is officially opened, the cities of Rajasthan and surrounding states—that presently rely upon the sea ports, air ports or the Wagah–Attari land route for goods from Pakistan—are likely to observe a shift in their imports coming through the new border route. Given the India–Pakistan port-wise trade data collected by Directorate General of Commercial Intelligence and Statistics (DGCIS) for the year 2013–14, we can estimate the extent of trade diversion that may occur, and therefore the potential level of trade that may flow through the Munabao–Khokhrapar land crossing once it is opened for trade.

As per our estimate, upon opening of the Munabao–Khokhrapar trade route, Indian exports to Pakistan worth US\$23.3 million and imports from Pakistan worth US\$5.3 million are expected to see a diversion in the route by which they presently reach the cities of Rajasthan, Madhya Pradesh, western Uttar Pradesh and northern interior cities of Maharashtra. That is, as per the Indian port-wise data for the year 2013–14, the Munabao–Khokhrapar land crossing has the potential to transport US \$28.6 million worth of goods between India and Pakistan (Table 8).

Although the share of trade diversion, or the potential trade through Munabao–Khokhrapar, is very small in comparison to the total trade conducted between India and Pakistan (Table 7), it has the potential to increase many folds. The potential increase will stem from closer proximity to trade route, increased interaction between businessmen, substantial decline in trade costs and the revival of linkages and complementarities once shared between Western India and Sindh.

The associated commodity structure stemming from this trade diversion to Munabao–Khokhrapar land crossing is likely to include exports from India to Pakistan of agricultural products (chickpeas, coconut, groundnut, vegetables, milk, corn starch, tamarind), chemicals (lead oxide, palmitic/stearic acid, diazo dyes/azoxy compounds), synthetic products (polypropylene articles, polyester fibres), cotton, pharmaceuticals and homoeopathic medicines, and construction material (Table 9).

Diverted imports coming from Pakistan to India via Munabao–Khokhrapar are likely to include commodities such as precious stones (emeralds, ruby, sapphire, semi-precious uncut stones), surgical goods (scissors, knives, blades) and cotton (Table 10).

Table 8 Estimate of trade diversion to Munabao–Khokhrapar (2013–14)

April 2013– March 2014	Trade diversion	Overall trade	Share of diverted trade
	Selective ports in Rajasthan, MP, UP and Maharashtra (US\$ million)	All Indian ports (US\$ million)	As percentage of overall trade (%)
Export	23.3	2128	1.1
Import	5.3	401	1.3
Total trade	28.6	2529	1.1

Source Directorate General of Commercial Intelligence and Statistics (DGCIS), Author’s calculations

4 Barriers to Expanding Trade

While the opening of Munabao–Khokhrapar land crossing for trade holds enormous opportunities for not just Barmer, Jodhpur and the state of Rajasthan but the whole of north-western India, there are a number of obstacles that need to be addressed as well.

The major stumbling blocks are the following:

1. The potential beneficiaries of bilateral trade via the Munabao–Khokhrapar land route—in particular the business community of Jodhpur, the city closest to Barmer—have not lobbied in an effective manner for the opening of the land crossing.¹⁰ Even though the Jodhpur Industrial Association has been lobbying with both the state and central government for opening the land route, this has not received much attention. One of the major shortcomings has been the lack of initiative in building institutional linkages between the Chambers of Commerce in Rajasthan and Sindh, unlike the Chambers of Commerce in other border regions like Punjab and Gujarat which have developed linkages with their counterparts in Punjab (Pakistan) and Karachi, respectively.
2. The political class of Rajasthan has not been pro-active in pushing for the opening of the land crossing despite having a substantial presence in Parliament. This is in stark contrast with Punjab, where the political class along with the Chambers of Commerce and local businesses have pressurised the central government to open land routes for trade. The chief ministers of the two Punjabs have also had several meetings, while there has been no interaction between the chief ministers of Rajasthan and Sind (Mehta 2014).
3. Chambers of Commerce and other stakeholders have not made any serious effort to study the tangible benefits of trade via the land crossing. As a result, there is not enough awareness and knowledge about how bilateral trade will benefit the two sides.
4. The security situation in Pakistan and the strained ties between India and Pakistan are a major concern for businessmen in Rajasthan. To a large extent, apprehensions regarding bilateral trade stem from negative perceptions. As a consequence, even certain political lobbies are wary of lobbying for greater connectivity and trade ties.
5. There is substantial smuggling of fake currency via this route.
6. There are problems in receiving payments due to the lack of banking ties between the two countries.
7. It is felt that the Punjabis on both sides of the border, especially in Pakistan where the Punjabi lobby is strong, are averse to the prospect of trade via the Munabao–Khokhrapar route since this may impact trade via the Wagah–Attari

¹⁰This point was highlighted by a majority of respondents. So far, the pressure for opening up the route has emerged more from businesses and political leaders from Barmer and Jaisalmer, and the business community and political class in Sind. There have been no serious efforts by the business community or the Chambers of Commerce of Jodhpur.

border. This perception exists even in Sindh, where it is believed that trade between the Punjabs is given more importance and the two provincial governments are allowed to interact freely.

8. The stringent visa regime between the two countries is an important reason for businessmen to have not shown the enthusiasm to push for trade via the Munabao–Khokhrapar route. While a number of respondents spoke about enquiries being made via email, they found it difficult to follow up due to the rather stringent visa regime in place.

It is unfortunate that the economic rationale for trade via the Munabao–Khokhrapar land crossing is seldom discussed. Some of the lobbies which are in favour of opening up the Munabao–Khokhrapar route from Barmer have argued for closer linkages between the two regions. However, their inability to carry out a sustained campaign has meant that their demand has gone virtually unheard.¹¹ So far the pressure has come more from political lobbies, rather than business lobbies of the region.

4.1 Overcoming Barriers to Trade

1. There is an urgent need for the business lobby in Rajasthan to be more pro-active in pitching for the opening of Munabao–Khokhrapar land crossing for trade. Regional Chambers of Commerce can join hands with National Chambers of Commerce, and lobby with both the state and central governments for not just trade via the land crossing, but also a goods train; an issue which had been discussed during the commerce secretary-level meeting in September 2012, but on which there has not been much follow up. A goods train would be economically viable, and could save up to 30 % on transportation costs.
2. While there are immense benefits for both the Barmer region and Jodhpur, there has been no co-ordination between the stakeholders from the two districts in India. For Barmer, the major concern is the rail link between Munabao and Khokhrapar. The spurt in Barmer’s economic growth over the past few years has led to a growing realisation that bilateral trade could play a crucial role in further strengthening the economy of the Barmer belt.
3. It is important to organise more Indo-Pak Expos in Jodhpur and other parts of Rajasthan to showcase potential opportunities for bilateral trade and to increase the level of interest. Such interactions will help not only in increasing links between businessmen on both sides, but will also help in removing the apprehensions and misconceptions which currently exist. Sectors which are likely to benefit the most, such as the handicraft or inorganic chemicals sector, could take the lead in building ties between organisations and individuals in Rajasthan and Sindh. In the case of the two Punjabs, events such as expos have gone a long

¹¹Sindhi Muslims, Bhils, Rajputs and Lohanas of Dhat Region.

way to not only intensify business linkages between the business communities on both sides, but also led to increased awareness among potential consumers of the benefits of bilateral trade.

4. While some of the respondents recommended that a goods train between Munabao and Khokhrapar would save considerable time and expenditure, a senior customs official made the point that a direct goods train up till Jodhpur is a more feasible alternative since there are adequate logistics and facilities for conducting passenger security checks in Jodhpur. This would also save customs officials the effort of travelling to Barmer.
5. There are also some major drawbacks in the current train service that need to be addressed. As discussed earlier, there is need for another stop on the Indian side, from where passengers should be able to board the train. The second is the need to set up a Pakistani consulate in Jodhpur and an Indian one in Karachi, so that passengers from Rajasthan and Sind do not have to travel or mail their documents to the embassies in New Delhi and Islamabad, respectively. Setting up these two consulates will go a long way in increasing the speed with which visas are issued. Passengers from both sides also complained of the lack of proper civic amenities at Bhagat Ki Kothi.

5 Conclusion

The opening of the land crossing at Munabao–Khokhrapar will not only help Barmer and parts of Rajasthan, but also other parts of India, especially the northern and western regions. All stakeholders, including the state government, business community and civil society, have to work in tandem and in a cohesive manner to generate support in favour of opening up this route for cross-border trade. There is also a need for greater interaction between the provincial governments of Rajasthan and Sindh, as also between Chambers of Commerce of both regions. This has clearly been missing hitherto.

Disclaimer Opinions and recommendations in the paper are exclusively of the author(s) and not of any other individual or institution including ICRIER.

Appendix

See Tables 9 and 10.

Table 9 Estimate of export diversion to Munabao–Khokhrapar (export from India to Pakistan)

HS code	Commodity description	Port	Name	State	Export value 2013-14 (INR)
68159990	Others	Jaipur A.C.	Jaipur	Rajasthan	6181
07132000	Chickpeas (Garbanzos) dried and shld	ICD Kanakpura	Jaipur– Kanakpura	Rajasthan	1,432,302
08011920	Coconut, dried EXCL. desiccated and endocarp	ICD Kanakpura	Jaipur– Kanakpura	Rajasthan	26,913,587
12024190	Other groundnut in shell	ICD Kanakpura	Jaipur– Kanakpura	Rajasthan	7,947,529
20081100	Ground nuts, PRPD/PRSVD	ICD Kanakpura	Jaipur– Kanakpura	Rajasthan	7,543,488
20081940	Other roasted and fried vegetable products	ICD Kanakpura	Jaipur– Kanakpura	Rajasthan	1,518,409
23064100	Low erucic acid of rape or colza seeds	ICD Kanakpura	Jaipur– Kanakpura	Rajasthan	24,550,803
23064900	Other residues of rape or colza seeds	ICD Kanakpura	Jaipur– Kanakpura	Rajasthan	42,472,747
28249000	Other lead oxides	ICD Kanakpura	Jaipur– Kanakpura	Rajasthan	2,410,278
32064990	Other preparations	ICD Kanakpura	Jaipur– Kanakpura	Rajasthan	6,015,410
52051310	Grey	ICD Kanakpura	Jaipur– Kanakpura	Rajasthan	4,408,620
78019100	Other unwrought lead	ICD Kanakpura	Jaipur– Kanakpura	Rajasthan	1,467,068
71039990	Other stone cut(topaz aquamarine etc)	FPO Jaipur	Jaipur– Sitapura	Rajasthan	95,248
99930010	Samples	FPO Jaipur	Jaipur– Sitapura	Rajasthan	85
04021010	Skimmed milk	ICD Thar Dry Port	Jodhpur– Thar	Rajasthan	47,871,000
39269080	Polypropylene articles, N.E.S.	ICD Thar Dry Port	Jodhpur– Thar	Rajasthan	1,845,467
52010020	Foreign cotton of all staple lengths	ICD Thar Dry Port	Jodhpur– Thar	Rajasthan	94,894,023
68022190	others	ICD Thar Dry Port	Jodhpur– Thar	Rajasthan	1,112,607
72224020	Angles etc. of less than 80 mm	ICD Thar Dry Port	Jodhpur– Thar	Rajasthan	4,700,239
04021010	Skimmed milk	ICD Thar dry port, Jodhpur	Jodhpur– Thar	Rajasthan	36,816,310
11081200	Starch of maize (corn)	ICD Thar dry port, JODHPUR	Jodhpur– Thar	Rajasthan	2,275,075
39231090	Box case crate and SMLR articles of plastics N.E.S.	ICD Thar Dry Port, Jodhpur	Jodhpur– Thar	Rajasthan	647,733

(continued)

Table 9 (continued)

HS code	Commodity description	Port	Name	State	Export value 2013-14 (INR)
39269080	Polypropylene articles, N.E.S.	ICD Thar Dry Port, Jodhpur	Jodhpur- Thar	Rajasthan	5,442,486
52010020	Foreign cotton of all staple lengths	ICD Thar Dry Port, Jodhpur	Jodhpur- Thar	Rajasthan	221,108,634
68022190	Others	ICD Thar Dry Port, Jodhpur	Jodhpur- Thar	Rajasthan	5,349,244
23064900	Other residues of rape or colza seeds	ICD Kota	Kota	Rajasthan	79,467,404
				Total	628,311,977
HS code	Commodity description	Port	Name	State	Export value 2013-14 (INR)
04021010	Skimmed milk	ICD Agra	Agra	UP	116,182,611
56079090	Other twine, cordage, rope and cables	ICD Chakeri Kanpur	Kanpur	UP	521,361
29157090	OTHER PALMITIC ACID, STEARIC ACID and THEIR SALTS and ESTRS	ICD Juhi Railway Yard Kanpur	Kanpur	UP	910,679
55032000	STAPLE FIBRES of POLYESTER NT CRD/CMBD	ICD Juhi Railway Yard Kanpur	Kanpur	UP	1,551,737
84440090	OTHERS	ICD Juhi Railway Yard Kanpur	Kanpur	UP	7,565,520
84454090	OTHR TXTL FBRS WINDING and REELING MACHINES	ICD Juhi Railway Yard Kanpur	Kanpur	UP	4,319,998
84462990	Others	ICD Juhi Railway Yard Kanpur	Kanpur	UP	33,981,195
84482000	PRTS and ACCSSRS of MCHNS of HDG NO. 8444	ICD Juhi Railway Yard Kanpur	Kanpur	UP	228,946
84483100	Card clothing	ICD Juhi Railway Yard Kanpur	Kanpur	UP	56,579

(continued)

Table 9 (continued)

HS code	Commodity description	Port	Name	State	Export value 2013-14 (INR)
84484990	OTHR PRTS and ACCSSRS of OTHER WEAVING MCHNS	ICD Juhi Railway Yard Kanpur	Kanpur	UP	852,271
84779000	PARTS OF MACHNS OF WORKING RBR/PLASTIC	ICD Juhi Railway Yard Kanpur	Kanpur	UP	2,173,186
84798999	Other	ICD Juhi Railway Yard Kanpur	Kanpur	UP	14,421,575
29157090	Other palmitic acid, stearic acid and their salts and ESTRS	ICD Panki, UP	KLPL-ICD/Panki	UP	1,700,427
29159090	OTHER SATRTD ACYLC MNOCRBIXYLC ACDS ETC and THR DRVTVS	ICD Panki, UP	KLPL-ICD/Panki	UP	2,543,672
29270090	Other DIAZO-AZO-OR AZOXY compounds	ICD Panki, UP	KLPL-ICD/Panki	UP	1,527,308
34049033	Poly-chlorinated terphenyls	ICD Panki, UP	KLPL-ICD/Panki	UP	929,097
84462990	Others	ICD Panki, UP	KLPL-ICD/Panki	UP	5,260,528
84798999	Other	ICD Panki, UP	KLPL-ICD/Panki	UP	1,739,272
				Total	196,465,962
HS code	Commodity description	Port	Name	State	Export value 2013-14 (INR)
38249090	Other chemical products NES	ICD Dhannad	Dhannad/Indore	MP	1,180,215
52052110	Grey	ICD Dhannad	Dhannad/Indore	MP	1,792,572
29095090	OTHER ETHR-PHNLS, ETHR ALCHL-PHNLS	Indore AIR	Indore	MP	85,717
29332990	OTHER COMPNDNS CNTNG AN UNFUSED IMIDAZOLE RING (W/N HYDRGNTD)	Indore AIR	Indore	MP	179,929

(continued)

Table 9 (continued)

HS code	Commodity description	Port	Name	State	Export value 2013-14 (INR)
29333990	OTHER CMPNDS CNTNG AN UNFUSED PYRDN RING (W/N HYDRGNTD)	Indore AIR	Indore	MP	1,612,964
29415000	Erythromycin and ITS DRVTVS SLTS thereof	Indore AIR	Indore	MP	55,477,249
29420090	Other dioxanide furoate, cimetidine, famotidine NES	Indore AIR	Indore	MP	1,440,861
30041030	Amoxicillin in capsules, injections ETC.	Indore AIR	Indore	MP	9,102,946
29232010	Lecithins	SEZ Indore	Indore	MP	3,627,187
29372900	OTHR STEROIDAL HORMONS THR DRVTVS and STRCTL ANLGES	SEZ Indore	Indore	MP	5,973,176
35079069	Other enzymes of microbial origin NES	SEZ Indore	Indore	MP	59,274
63053200	Flexible intermediate bulk containers of man made textile	SEZ Indore	Indore	MP	356,715
84137010	Others centrifugal pumps primarily designed	SEZ Indore	Indore	MP	2,111,166
84139120	Parts for centrifugal pumps	SEZ Indore	Indore	MP	219,360
99930010	Samples	SEZ Indore	Indore	MP	157
04021010	Skimmed milk	ICD Malanpur	Malanpur	MP	98,397,625
04021090	OTHER MLK and CRM in PWDR, GRANL or SOLID FRM of FAT CONTNT	ICD Malanpur	Malanpur	MP	100,263,881
04022990	Others (e.g. milk cream)	ICD Malanpur	Malanpur	MP	25,470,490
04021010	Skimmed milk	ICD Pithampur (Indore)	Pithampur	MP	441,092
07132000	Chickpeas (garbanzos) dried and shld	ICD Pithampur (Indore)	Pithampur	MP	1,769,775
09092190	Other seeds of coriander; neither crushed nor ground	ICD Pithampur (Indore)	Pithampur	MP	3,282,252

(continued)

Table 9 (continued)

HS code	Commodity description	Port	Name	State	Export value 2013–14 (INR)
28352500	Calcium hydrogenorthophosphate	ICD Pithampur (Indore)	Pithampur	MP	4,241,245
29062100	Benzyl alcohol	ICD Pithampur (Indore)	Pithampur	MP	144,453
29232010	Lecithins	ICD Pithampur (Indore)	Pithampur	MP	1,692,655
52051190	Others	ICD Pithampur (Indore)	Pithampur	MP	3,829,220
83099010	Pilfer proof caps for packaging	ICD Pithampur (Indore)	Pithampur	MP	499,943
84388090	Others	ICD Pithampur (INDORE)	Pithampur	MP	1,057,735
				Total	324,309,854
HS code	Commodity description	Port	Name	State	Export value 2013–14 (INR)
08109020	Tamarind fresh	ICD Nagpur	Nagpur	Maharashtra	7,129,337
25262000	NATRL steatite crushed/powdered	ICD Nagpur	Nagpur	Maharashtra	1267930
30039014	Medicants of homoeopathic system	ICD Nagpur	Nagpur	Maharashtra	347,787
38013000	CRBNCEOUS PSTS FR ELECTRDS and FURNCE LINEGS	ICD Nagpur	Nagpur	Maharashtra	3,806,869
38160000	Refractory cement-cortars-concretes and SMLRCMPSTNS other	ICD Nagpur	Nagpur	Maharashtra	3,768,892
38241000	PRPD binders FR foundry moulds/cores	ICD Nagpur	Nagpur	Maharashtra	2,396,124
39219099	OTHR PLTS, SHTS, FILM FOIL, STRIP ETC NES	ICD Nagpur	Nagpur	Maharashtra	8,682,044
52010015	Indian cotton of staple length 28.5 mm (1.4/32") and above	ICD Nagpur	Nagpur	Maharashtra	14,058,772
52051110	Grey	ICD Nagpur	Nagpur	Maharashtra	13,022,219
52051190	Others	ICD Nagpur	Nagpur	Maharashtra	26,784,348

(continued)

Table 9 (continued)

HS code	Commodity description	Port	Name	State	Export value 2013-14 (INR)
52051310	Grey	ICD Nagpur	Nagpur	Maharashtra	24,882,467
52051410	Grey	ICD Nagpur	Nagpur	Maharashtra	10,846,557
68061000	Slag Wool Rock Wool and SMLR MNRL Wool	ICD Nagpur	Nagpur	Maharashtra	1,385,702
69022020	BRICKS AND SHAPES, HIGH Alumina	ICD NAGPUR	NAGPUR	Maharashtra	33,269,791
69022030	Bricks and shapes, alumina carbon	ICD Nagpur	Nagpur	Maharashtra	47,690
69039010	Zircon/Zircon mullite refractories	ICD Nagpur	Nagpur	Maharashtra	1,242,604
69039040	Monolithics/Castables (fire clay basic silica high alumina)	ICD Nagpur	Nagpur	Maharashtra	8,110,889
72021100	Ferro-manganese, carbon containing >2 % by weight	ICD Nagpur	Nagpur	Maharashtra	26,080,169
72021900	Other Ferro-manganese	ICD Nagpur	Nagpur	Maharashtra	4,402,249
72023000	Ferro-silico-manganese	ICD Nagpur	Nagpur	Maharashtra	141,799,760
76042920	Other wire rods	ICD Nagpur	Nagpur	Maharashtra	2,165,616
83111000	COAT ELCTRD OF BS MTL FR ELCTRC ARC WLDNG	ICD Nagpur	Nagpur	Maharashtra	463,431
84313910	PRTS OF ELVTRS, CNVEYRS and MVNG PVMNTS	ICD Nagpur	Nagpur	Maharashtra	28,902,150
84451910	CTN PRCSNG MCHNS (INCL CTN GNNG MCHN)	ICD Nagpur	Nagpur	Maharashtra	3,035,135
84679900	Parts of other tools for working in hand	ICD Nagpur	Nagpur	Maharashtra	297,729
				Total	368,196,261
				Grand Total (INR)	1,517,284,054
				Grand Total (US\$)	23342831.6
				India's Exports to Pakistan	US\$ 23.3 Million
				Diversion to Munabao- Khokhrapar	@1 USD = 65 INR

Table 10 Estimate of import diversion to Munabao–Khokhrapar (import into India from Pakistan)

HS code	Commodity description	Port	Name	State	Import value 2013–14 (INR)
71031029	Other semi-precious stone UN CUT	AC Jaipur (gems and jewellery)	Jaipur	Rajasthan	12,979
71031011	Emerals, UN CUT	Jaipur A.C.	Jaipur	Rajasthan	8,032,702
71031012	Ruby and Sapphire, UN CUT	Jaipur A.C.	Jaipur	Rajasthan	148,027
71031029	Other semi-precious stone UN CUT	Jaipur A.C.	Jaipur	Rajasthan	720,213
90189022	Surgical knives, scissors and blade	FPO Jaipur	Jaipur–Sitapura	Rajasthan	4171
99930090	Special transactions N.E.S.	FPO Jaipur	Jaipur–Sitapura	Rajasthan	100
52010020	Foreign cotton of all staple lengths	ICD Thar Dry Port	Jodhpur–Thar	Rajasthan	283,652,243
				Total	292,570,435
HS code	Commodity description	Port	Name	State	Import value 2013–14 (INR)
52051210	GREY	ICD Mandideep	Mandideep	MP	4,033,520
				Total	4,033,520
HS code	Commodity description	Port	Name	State	Import value 2013–14 (INR)
25292200	FLUORSPAR CNTNG BY WT MORE THAN 97 % OF CALC	ICD Nagpur	Nagpur	Maharashtra	766,237
52010020	FOREIGN COTTON OF ALL STAPLE LENGTHS	ICD Nagpur	Nagpur	Maharashtra	27,973,211
52052410	GREY2401	ICD Nagpur	Nagpur	Maharashtra	5,745,850
52052790	OTHR	ICD Nagpur	Nagpur	Maharashtra	11,693,327
				Total	46,178,625
				Grand total (INR)	342,782,580
				Grand total (US\$)	5,273,578.154
				India's Imports from Pakistan	US\$5.3 million
				Diversion to Munabao–Khokhrapar	@1USD = 65 INR

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 Fateh Khan, District President, Indian National Congress, Barmer.
 Manvendra Singh, MLA Barmer (BJP).
 Mevaram, MLA Barmer (INC).
 Meghraj Lohia, CEO Niki Chemicals, Jodhpur.
 Nirmal Bhandari, Promoter Bhandari Exports.
 Paresh Modi, Prakash Handicrafts, Jodhpur
 Rahul Singhvi, Director, Chemical and Mineral Industries, Jodhpur.
 Swarup Chand, Advocate and Local BJP leader, Barmer.
 Tejdhani Charan, Local Businessmen of Barmer who migrated in 1984 from Sind to India.
 On condition of anonymity
1. Senior customs official based in Jodhpur.
 2. Customs official in Barmer.
 3. A Rajasthan police official.
 4. A railway police official in-charge of security of the Thar Express.
 5. A senior official with Cairn India.
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Chapter 12

Media Underreporting as a Barrier to India–Pakistan Trade Normalization: Quantitative Analysis of Newsprint Dailies

Rahul Mediratta

Abbreviations

BS	Business Standard
CDP	Composite Dialogue Process
CV	Coefficient of Variation
ET	Economic Times
MFN	Most Favored Nation
NDMA	Non-Discriminatory Market Access
NTB	Nontariff barrier
NYT	New York Times
SAARC	South Asian Association for Regional Cooperation
SAPTA	South Asian Preferential Trading Arrangement
SD	Standard Deviation
TOI	Times of India
WSJ	Wall Street Journal
WTO	World Trade Organization

1 Introduction

Is trade captured in popular discourse on India–Pakistan relations? Over the past two decades, officials in India and Pakistan’s industry and Governments have been involved in several activities regarding bilateral trade normalization. These developments have been concentrated around three periods: the late-1990s, mid-2000s, and early-2010s. Activities have ranged from conducting roundtables and negotiating agreements, to coordinating trade expos and enhancing trade facilities at border crossings.

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Are these waves of trade-related activity reflected in popular media coverage? This question comes at a time when popular media is being increasingly evaluated for its breadth of coverage on India–Pakistan relations. A longstanding and important criticism of media coverage on India–Pakistan relations is it tends to be preoccupied with developments in the security realm, to the exclusion of developments in non-security areas. Among these works, there is consensus that media tend to favor reporting on negative events in order to improve viewer ratings. For example, in her analysis of the press’ reaction to the Indo-Pak People’s Conference in Delhi in 1995, Bannerji (1995) finds that Indian mainstream press quoted hostile opinions expressed by Pakistani officials and no positive comments which appeared in Pakistani newspapers. This conference brought together Indian and Pakistani delegates from many professional backgrounds, such as politicians, activists, lawyers, scientists, trade union representatives, journalists, and artists. Pattanaik’s (2004) examination of coverage on Kashmir, nuclear arms, and trade in India and Pakistan’s English language print media reveal that “there are limitations in expressing opinions... the commercial aspect is paramount—news has to sell... [and] newspapers are sometimes reluctant to publish material which would unnecessarily drag them into controversy... the opinion page, though maintaining a certain degree of autonomy, generally avoid confrontation with the official stand” (p.178). Sarwar’s (2009) analysis of coverage on more recent events such as the 2008 Mumbai attacks showcases the media’s ongoing bias in favor of negative statements. Since no other string of events between India and Pakistan are more frequently negative than developments in the security context, this may partly explain the media’s seemingly lackluster reporting on events beyond conflict, such as with trade-related activity. A recent volume on *Media Practice in Twenty-first Century India* thus characterizes Kashmir as a “media mecca;” denoting that “Kashmir dominates media and analytical spheres” (Ninan and Chatterji 2013, p. xv, p. 21).

These criticisms imply that information on non-security issues such as trade, has limited penetration into popular discourse on India–Pakistan relations. A dearth of popular awareness on trade-related activities between India and Pakistan may limit the extent to which it is politically feasible for governments to invest further resources towards trade normalization, or perhaps the extent to which the public necessarily pressure politicians to do so. Communication studies scholars label the effect of mass media on influencing public opinion and the public agenda as “agenda-setting.” The foundational study in this literature by McCombs and Shaw (1972) purports that though the media cannot necessarily tell the public *what* to think, it can influence its readers on *what to think about*, by divesting more coverage to certain issue areas and less coverage to other areas. Greater coverage can powerfully influence the select issues that public opinion focus on, and thus determine the public policy agenda (McCombs 2005).¹ Consequently,

¹The concluding section of this paper engages more robustly with agenda-setting theory in the context of reporting on India–Pakistan trade.

underreporting on trade-related activity can amount to an important impediment to trade normalization between India and Pakistan which can be labeled as an “informational barrier.” Dr. Arvind Gupta, Director General of the Institute for Defense Studies and Analyses, thusly commented the following at the 7th South Asia Conference:

Adversarial and negative perceptions come in the way of regional cooperation and integration. Hyperactive 24 × 7 media plays a role in perpetuating cynicism. A cooperative approach to resolving regional issues remains elusive. But this need not be so. An effort to forge positive perceptions about each other must be made (2013, October 30).

Similarly, Dr. Pratap Bhanu Mehta, President of the Centre for Policy Research, pointed out the following in an article in the *Indian Express*

Even simple things like trade and investment involve large assumptions about what you will let people do, how you will let them travel, how much presumed trust you repose in them and so forth... They have to make reference to a larger story towards which we are driving (2013, October 13)

India–Pakistan trade normalization is especially pertinent in the wake of India’s spring 2014 elections. Pakistan has indicated they plan to grant Non-Discriminatory Market Access (NDMA)² to India, with the entry of India’s new Prime Minister Narendra Modi (Nigam 2014). Industry voices such as Zubair Ahmed Malik, the President of the Federation of Pakistani Chambers of Commerce and Industry, urge that “MFN [Most Favored Nation] status must be given to India” regardless of the electoral results (“Pakistan should grant MFN” 2013). India’s past Prime Minister Dr. Manmohan Singh responded that he hoped to visit Pakistan should MFN be granted to India (“Manmohan may visit Pakistan” 2013). These discussions intimate a future vision of India–Pakistan relations anchored on greater cooperation and less animosity, but does this discourse reach the newsstands? Recent scholarship on Indian public opinion and the country’s foreign policy suggests that “with the spread of education and media, the Indian public is becoming increasingly aware of India’s foreign policy options and the issues at stake” (Blarel and Pardesi 2012). Thus, to the extent that media coverage on India–Pakistan exercises a security bias, this trend may constitute an informational barrier to normalizing India–Pakistan trade.

The paper continues as follows. The next section reviews barriers to trade, which are typically categorized as tariffs or nontariff barriers. Examples are cited for each barrier type in the India–Pakistan context. Overall, the literature on informational barriers is least developed. The subsequent section summarizes trade-related activities between India and Pakistan over the past two decades, which has been concentrated around three periods: the late-1990s, mid-2000s, and early 2010s. This summary serves as a baseline for evaluating if news dailies capture these periods of activity. Methods for measuring quantum of coverage among five newspapers are described, which are the *Times of India* (TOI), *Economic Times* (ET), *Business*

²NDMA is the nomenclature that Pakistan is adopting in place of Most Favored Nation (MFN).

Standard (BS), *New York Times* (NYT), and *Wall Street Journal* (WSJ). The results reveal that the ET, BS, and WSJ capture the dynamism of trade-related activities over the past two decades between India and Pakistan. The TOI and NYT, by contrast, do not. The paper concludes with an in-depth discussion on why under-reporting in the TOI and NYT is problematic, and future research directions. Subsequent research work may entail a qualitative content analysis to evaluate biases in reporting, agenda-setting in India's Internet age, agenda-setting in India's cognitive and social contexts, and the "media agenda" which refers to the political economy of media production as it relates to the *Aman ki Asha*³ peace initiative between the TOI Group and the Jang Group of Pakistan.

2 Barriers to Trade

Barriers to trade are typically categorized as tariff barriers or nontariff barriers. Tariffs are essentially taxes, such as "customs duties on merchandise imports" (World Trade Organization [WTO] 2014). Para-tariffs also fall under this category, such as countervailing duties. Nontariff barriers (NTBs) constitute nontax measures that obstruct trade. These are numerous in variety, ranging from more tangible impediments that are legal, financial, and structural, to less tangible ones that are cultural and informational. Literature on NTBs has tended to focus predominantly on more tangible impediments, perhaps because corresponding policy implications are more concrete. Literature specific to NTBs between India and Pakistan has also concentrated on more tangible varieties, although new research work by ICRIER examines cultural impediments between professionals in both countries through a trade perception survey (2013). Table 1 organizes the aforementioned barriers to trade and cites empirical examples from the India–Pakistan context.

3 Baseline: India–Pakistan Trade-Related Activities in the Last Two Decades

What trade-related activities have occurred between India and Pakistan? Looking over the past two decades, activity has been concentrated around three periods: the late-1990s, mid-2000s, and early 2010s. A summary of these activities follows, which serves as a base line to assess whether these are captured in media coverage.

³Translates as 'Hope for peace', see <http://amankiasha.com/>.

Table 1 Barriers to trade

Examples				India–Pakistan ^a
Tariff barriers		Tariffs	Duties	NDMA awaits ^b
		Para-tariffs	Countervailing duties	Interferes with identifying MRP
Nontariff barriers	More tangible	Legal	Licenses; quotas; standards; country of origin ban; restrictive visa	Positive list regime; city-specific visa
		Structural	Infrastructure for rail, road, sea, air	Scarcity of rail wagons; transport protocols ^c
	Financial	Obstructions to currency exchange, payment clearance	Indian banks do not recognize Pakistani L/Cs; bilateral branches not permitted	
	Less tangible	Cultural	Norms, taboos	Incongruent professional culture ^d
		Informational	Unclear rules; inadequate media coverage	Unclear regulatory policies ^e ; media preoccupied with security

^aTaneja 2007 unless noted otherwise; ^bTaneja et al. 2011a; ^cTaneja et al. 2011b; ^dICRIER 2013; ^eTaneja et al. 2013

3.1 Late-1990s

In 1993, the South Asian Association for Regional Cooperation (SAARC) signed its Preferential Trading Arrangement (SAPTA) to promote regional trade within the South Asia region. SAPTA became operational in 1995. In 1996, India granted MFN status to Pakistan as both countries became members of the WTO. Pakistan did not reciprocate MFN status back to India, though bilateral delegations among industrialists took place. These delegations did not include government officials. The following year in 1997, both countries agreed to a Composite Dialogue Process (CDP) which would cover eight issue areas including economic and commercial developments. In 1998, however, the political climate became tense as both countries tested nuclear arms. The following year as the Kargil War broke out, trade-related activities were curbed (Padder 2012).

3.2 Mid-2000s

In 2003, India initiated a “step-by-step” process to resume the CDP with Pakistan. Following, diplomatic and transport channels were reopened and a ceasefire at the Line of Control was agreed to. The following year in 2004, SAPTA was subsumed

into the South Asia Free Trade Area (SAFTA) agreement. Former Prime Minister Atal Bihari Vajpayee visited Pakistan, after which four rounds of bilateral CDP talks took place (Mehmood 2013). Bilateral business delegations took place soon after in 2005 and 2006. Unlike in the previous decade, these delegations included industry representatives along with government officials. In 2006, SAFTA became operational. In 2008, however, the Mumbai attacks prompted India to suspend further trade talks.

3.3 *Early 2010s*

By 2011, trade talks were back in swing as the CDP resumed. A Pakistani business delegation visited Delhi that year, and the following year in 2012 an Indian delegation visited Lahore. Further in 2012, India's former Commerce Minister Anand Sharma visited Pakistan—the first ever visit of an Indian Commerce Minister to Pakistan—during which time Pakistan abolished its positive list regime against India which had permitted 1946 of her items. In accordance with WTO membership rules, Pakistan replaced this with a negative list that permits all Indian imports except for about 200 items. Bilateral trade expos have since occurred in Mumbai and Lahore. India legalized foreign investment from Pakistan, and the first India–Pakistan joint venture has been incorporate. A massive Integrated Check Post has been constructed at the Attari-Wagah land border to facilitate greater trade. Finally, a trade post was opened at the Line of Control in Uri.

4 **Method: Measuring Quantum of Coverage, “What to Think About”**

To assess if trade-related activities are captured in popular discourse on India–Pakistan relations, a quantitative content analysis was conducted on newsprint media of the last 17 years from 1997 to 2013. Ideally, this study would examine coverage from the last 20 years in order to extend back to when SAPTA was signed in 1993. However, digital archives of newsprint media tend to reach no further back than 1997. Five English newspapers were examined to capture different audience categories: (i) one national Indian daily with a broad focus; (ii) two Indian national dailies, each with a narrow economic focus; (iii) one international daily with a broad focus; and, (iv) one international daily with a narrow economic focus. TOI ranks as the highest-read English daily in India (Indian Readership Survey 2012). ET (Auletta 2012) and BS rank among the highest-read English dailies with a more narrow economic focus, both of which are based in India and read predominantly by “serious business readers,” (Business Standard 2013) such as members of industry and policymakers. NYT and WSJ are the most widely read international

dailies for a broad popular paper and an economic one, respectively (“Top 10 Newspapers” 2013). Ideally, English dailies from Pakistan would also have been analyzed (Mustafa 2004), such as the country’s chief economic daily *Business Recorder* and their leading broad news dailies *The News International*, *The Nation*, and *Dawn* (Shah 2010). However, these dailies are unavailable in digital format for the period examined here, except these are unavailable in digital format for the period examined here.

Digital archives of the five aforementioned news dailies were accessed using the *Factiva* database owned by Dow Jones and Company, which aggregates content from more than 36,000 sources from nearly 200 countries in 28 languages. Three keyword searches were conducted on each newspaper for each year between 1997 and 2013. These searches were “India,” “India AND Pakistan,” and “India AND Pakistan AND trade.” The “India” search results provided a base line of content that was presumed to regard India. Results from the subsequent “India AND Pakistan” search were divided by the number of results from the “India” search for each newspaper year. The same equation was conducted for results from the “India AND Pakistan AND trade” search—dividing these by the number of results for the “India” search and “India AND Pakistan” search for each country year. Microsoft Excel was used to record results for each search, calculate proportions of content over time, and generate line graphs. Standard deviations and coefficients of variation were calculated to identify periods during when the proportion of coverage on “India AND Pakistan AND trade” varied most between different news dailies.

This quantitative content analysis enables us to ascertain the *quantum* of coverage regarding trade, as in the media’s influence on *what to think about* based on which issue areas receive more prominent coverage. These methods do not enable us to decipher the *quality* of coverage regarding trade, as in the media’s influence over *what to think* such as biases in reporting. This latter inquiry requires qualitative content analysis which I discuss in the conclusion.

5 Results

Table 2 displays the volume of keyword search results on each newspaper year from 1997 to 2013. Metrics indicate these keyword search results are reliable to use for further analysis.

For each newspaper, the “India” search generated the greatest results out of all three keyword searches, followed by “India AND Pakistan” and then “India AND Pakistan AND trade.” This order is expected since each subsequent search includes an additional term, which thus narrows the number of results. TOI generated the largest results on all metrics for each keyword search, which reflects the fact that this newspaper has the most dedicated coverage on India-related issues than the other news sources examined. ET ranked second in volume of results under the “India” search, which makes sense since ET is based in India. BS, NYT, and WSJ were roughly equal on narrower keyword searches. This probably reflects that while

Table 2 Keyword search results on Times of India (TOI), Economic Times (ET), Business Standard (BS), New York Times (NYT) and Wall Street Journal (WSJ) from 1997 to 2013

Newspaper					
Keyword searches	TOI	ET	BS	NYT	WSJ
<i>'India'</i>					
Min	25,583	8328	7961	1242	1160
Max	186,513	24,883	14,749	5822	15,089
Mean	67,973	16,416	11,223	2599	5885
Median	46,800	17,370	11,289	2319	3870
<i>India AND Pakistan'</i>					
Min	1510	383	238	180	203
Max	11,762	1022	509	821	1580
Mean	4281	635	364	429	730
Median	2932	575	363	418	489
<i>India AND Pakistan AND trade'</i>					
Min	168	74	47	29	66
Max	1505	200	136	133	351
Mean	439	127	85	66	164
Median	294	129	79	58	152

Source Compiled by author using *Factiva* database owned by Dow Jones and Company

BS is more dedicated to India-related issues than NYT and WSJ, the latter two are larger presses (Auletta 2012).

Figure 1 displays results generated by an “India AND Pakistan” search and an “India AND Pakistan AND trade” search, as a proportion of results generated by an “India” search of TOI, ET, BS, NYT, and WSJ. These results may be interpreted as illustrating that proportion of content regarding India which also touches on Pakistan, and on Pakistan and trade. Overall, “India AND Pakistan” results account for around 5 % of “India” results, and “India AND Pakistan AND trade” results account for around 2.5 % of “India” results among Indian dailies. As for the two international dailies, NYT and WSJ, it is interesting to note that proportion of content containing “India AND Pakistan” among “India” results is much higher and more dynamic than is the case with Indian dailies. This variation may reflect that when news is less local (as with international dailies), coverage centers on a smaller number of issue areas and mostly on “big” stories. Unsurprisingly, the “India AND Pakistan” results for NYT and WSJ in Fig. 1 peak at security events: 1999 when the Kargil War broke out, 2003 when the Indian Parliament was attacked, and 2008 when Mumbai was attacked.

Figure 2 illustrates an interesting narrative. Figure 2 displays results generated by an “India AND Pakistan AND trade” search as a proportion of results generated by an “India AND Pakistan” search in TOI, ET, BS, NYT, and WSJ. These results may be interpreted as illustrating that proportion of content regarding India and

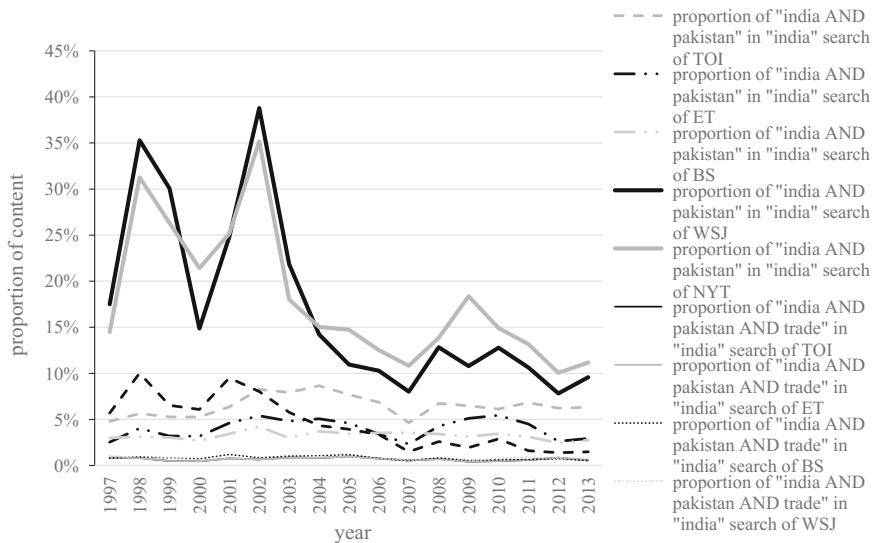


Fig. 1 Proportion of news content for “India AND Pakistan” and “India AND Pakistan AND trade” in “India” search of *Times of India*, *Economic Times*, *Business Standard*, *New York Times*, and *Wall Street Journal* from 1997 to 2013. *Note* Some results are difficult to view which remain around 1 % for the entire period examined, and these are “India AND Pakistan AND trade” in “India” search of TOI, ET, BS, and WSJ. *Source* Based on compilation by author using Factiva database owned by Dow Jones and Company

Pakistan which also touch on trade. The interesting observation from Fig. 2 is not to compare the volume of “India AND Pakistan AND trade” as a proportion of “India AND Pakistan” results, between different newspapers. Instead, the interesting takeaway is to compare how these proportions vary over time. The ET, BS, and WSJ exhibit waves over time with proportions of coverage that rise and fall around similar periods. The TOI, by contrast, exhibits a relatively flatter line throughout the same period. The pattern of coverage in the NYT is a middle ground, which hovers between 15 and 20 % throughout the period examined, but also exhibits considerable waviness during the late-2000s. This contrast in proportion of coverage over time—between a wavier line, versus a flatter one—suggests that two different narratives are appearing among the newspapers examined. The ET, BS, and WSJ seem to offer a narrative that captures the dynamism of trade-related activities in the past two decades between India and Pakistan. Notice that among these three dailies, Fig. 2 displays three peaks during when content reaches a high proportion—the late-1990s, the mid-2000s, and the early-2010s. These peaks parallel those periods highlighted earlier during when the largest concentrations of trade-related activity took place between India and Pakistan. In light of this dynamism, the flatness of the TOI’s proportion of content over time suggests this newspaper fails to capture

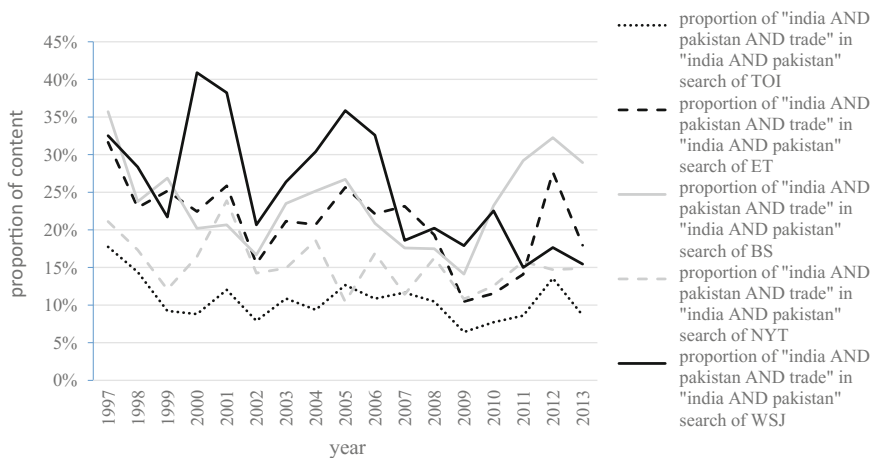


Fig. 2 Proportion of news content for “India AND Pakistan AND trade” in “India AND Pakistan” search of *Times of India*, *Economic Times*, *Business Standard*, and *Wall Street Journal* from 1997 to 2013. Source Based on compilation by author using *Factiva* database owned by Dow Jones and Company

trends in trade-related activity between India and Pakistan. Even if proportion of content on India–Pakistan trade is smaller in a popular daily like the TOI as compared with an economic daily, the dynamism of an issue should at least be captured in both types of platforms. That is, the lines in Fig. 2 should all be wavy or all flat, rather than exhibiting a dichotomy between a cluster of wavy lines among the economic dailies and a far flatter line for the popular daily.

Variation in coverage displayed in Fig. 2 can be examined mathematically by deriving the Coefficient of Variation (CV)⁴ for each newspaper period, and then calculating the Standard Deviation (SD) of CVs for each period. The analysis below identifies periods with some of the larger SD of CVs, which is basically periods with some of the widest variations in proportion of content for keyword searches. Overall, these periods tend to overlap with times when India and Pakistan have had high concentrations of trade-related activity, which are the late-1990s, mid-2000s, and early-2010s as indicated earlier.

Table 3 displays that for the keyword search “India AND Pakistan AND trade” among all five newspapers, the periods with some of the widest variation in proportion of content are 1999–2000, 2001–2008, and 2009–2012. These periods overlap with the aforementioned times with higher concentrations of trade-related activity. Although these periods do not correspond precisely with the aforementioned times, the overlaps arguably lend further support that among the dailies

⁴Coefficient of Variation (CV) is a function of Standard Deviation (SD), divided by mean.

Table 3 Variation in proportion of content containing “India AND Pakistan AND trade” in “India AND Pakistan” search of *Times of India* (TOI), *Economic Times* (ET), *Business Standard* (BS), *New York Times* (NYT) and *Wall Street Journal* (WSJ)

Newspaper							
Period	Metric	TOI	ET	BS	NYT	WSJ	Overall
1999–2000	SD ^a	0.00	0.02	0.05	0.03	0.14	
	Mean	0.09	0.24	0.24	0.14	0.31	
	CV ^b	0.03	0.08	0.20	0.22	0.43	
	SD of CVs						0.16
2001–2008	SD	0.02	0.03	0.04	0.04	0.08	
	Mean	0.11	0.22	0.21	0.16	0.28	
	CV	0.14	0.16	0.18	0.27	0.27	
	SD of CVs						0.06
2009–2012	SD	0.01	0.02	0.08	0.03	0.04	
	Mean	0.08	0.12	0.22	0.13	0.18	
	CV	0.15	0.15	0.34	0.19	0.21	
	SD of CVs						0.08

^aSD = standard deviation; ^bCV = coefficient of variation

Source Based on compilation by author using *Factiva* database owned by Dow Jones and Company

examined in this paper, coverage regarding India–Pakistan trade in the ET, BS, and WSJ is far more dynamic—and thus in line with events summarized earlier—in contrast to the more stable proportion of said coverage in the TOI. For all three periods listed in Table 1, the TOI exhibits the smallest CV which affirms that variation in its proportion of content containing “India AND Pakistan AND trade” was far more narrow than ET, BS, NYT, and WSJ; respectively, 0.03 as compared with 0.08, 0.20, 0.22, and 0.43 from 1999 to 2000, 0.14 as compared with 0.16, 0.18, 0.27, and 0.27 from 2001 to 2008, and finally 0.15 as compared with 0.15, 0.34, 0.19, and 0.21 from 2009 to 2012.

How do proportions of coverage compare between the two broad news dailies, TOI and NYT? On the whole, these news dailies do not exhibit large variations in the proportions of their coverage for keyword “India AND Pakistan AND trade.” There is one exception, however, which is from 1999 to 2001, the NYT exhibits a far more dynamic pattern of coverage than the TOI—indicated by a wavier pattern—which generates a relatively large SD of CVs at 0.12.

How do proportions of coverage compare between the narrow economic dailies, ET, BS, and WSJ? Table 4 displays that these news dailies exhibit large variations in the proportions of their coverage from 1999 to 2001 which overlaps with the late-1990s, and from 2009 to 2013 which overlaps with the early-2010s. As for the mid-2000s, proportion of coverage is roughly constant rather than wide-ranging and is thus omitted from Table 4. In the late-1990s, the WSJ increased their proportion of content containing “India AND Pakistan AND trade” far more than ET and BS. Table 4 substantiates this based on the rank ordering of CVs of ET and BS at 0.07

and 0.17 respectively, as compared with WSJ much higher at 0.34. As of the early-2010s, by contrast, stories containing these keywords are carried in greater proportion by ET and BS, and decreasingly so by WSJ. Table 4 substantiates this based on the rank order of CVs of ET and BS at 0.43 and 0.28 respectively, as compared with WSJ much lower at 0.15.

Finally, how do proportions of coverage compare among Indian dailies? Table 5 displays that these news dailies exhibit large variations in the proportions of their coverage from 1999 to 2002, from 2003 to 2009, and from 2009 to 2011. These times overlap with the three aforementioned periods of higher trade activity, namely the late-1990s, mid-2000s, and early-2010s respectively. As with Tables 3 and 4 although these times do not correspond precisely, the substantial overlap lends support that coverage was more dynamic during when trade-related activity was higher. In the late-1990s, as the ET and BS were increasing coverage the TOI was lagging behind somewhat. Table 5 substantiates this based on the rank ordering of CVs of ET and BS at 0.21 and 0.20 respectively, as compared with TOI at 0.19. The mid-2000s displays a similar pattern, with ET and BS leading at 0.24 and 0.22 and TOI behind at 0.18. Finally, as of the early-2010s, the variation in proportion of coverage is quite large at 0.11. Coverage in BS rapidly jumps, as evidenced by a CV of 0.34. Although ET and TOI have the same CV of 0.15, it is interesting to note from Fig. 2 that, in this period proportion of coverage in ET is rising, while TOI coverage was rapidly falling.

Time periods that appear in Tables 3, 4 and 5 are those which exhibit the largest SD of CVs. While these periods generally correspond to one another between different tables, they are not precisely the same since SD of CVs vary with the inclusion versus exclusion of different dailies. In Table 3 for example, the first period listed is 1999–2000 whereas in Table 4 the first period listed is 1999–2001.

Table 4 Variation in proportion of content containing “India AND Pakistan AND trade” in “India AND Pakistan” search of *Economic Times* (ET), *Business Standard* (BS), and *Wall Street Journal* (WSJ)

Newspaper					
Period	Metric	ET	BS	WSJ	Overall
1999–2001	SD ^a	0.02	0.04	0.06	
	Mean	0.24	0.23	0.17	
	CV ^b	0.07	0.17	0.34	
	SD of CVs				0.14
2009–2013	SD	0.07	0.07	0.02	
	Mean	0.16	0.26	0.14	
	CV	0.43	0.28	0.15	
	SD of CVs				0.14

^aSD = standard deviation; ^bCV = coefficient of variation

Source Based on compilation by author using *Factiva* database owned by Dow Jones and Company

Table 5 Variation in proportion of content containing “India AND Pakistan AND trade” in “India AND Pakistan” search of *Times of India* (TOI), *Economic Times* (ET), and *Business Standard* (BS)

Newspaper					
Period	Metric	TOI	ET	BS	overall
1999–2002	SD ^a	0.02	0.05	0.04	
	Mean	0.09	0.22	0.21	
	CV ^b	0.19	0.21	0.20	
	SD of CVs				0.01
2003–2009	SD	0.02	0.05	0.05	
	Mean	0.10	0.20	0.21	
	CV	0.19	0.24	0.22	
	SD of CVs				0.02
2009–2011	SD	0.01	0.02	0.08	
	Mean	0.08	0.12	0.22	
	CV	0.15	0.15	0.34	
	SD of CVs				0.11

^aSD = standard deviation; ^bCV = coefficient of variation

Source Based on compilation by author using *Factiva* database owned by Dow Jones and Company

We might be concerned that since these periods are not precisely the same, then the base SDs, means, and CVs vary and these results are thus not comparable. For example, in Table 3 the WSJ exhibits a mean and CV of 0.31 and 0.43, respectively, whereas in Table 4 with the inclusion of an additional year these measures drop to 0.17 and 0.34. This comparison illustrates how the means and CVs can be highly sensitive to change in number of years covered in a subperiod, however these base measures are less meaningful on an individual basis as compared to the rank ordering of CVs. In Table 3 for the period 1999–2000 and in Table 4 for the period 1999–2001, the rank ordering of WSJ relative to the other dailies is constant; positioned with the largest of CVs, which affirms more dynamic coverage. In sum, evaluating the ranking ordering of CVs among a group of dailies across periods and tables is more meaningful and easier to interpret, as compared with assessing the CVs of an individual daily across periods and tables.

6 Discussion and Implications

First and as mentioned earlier, holding constant the proportion of content on an issue area in a broad popular daily versus an economic one, the dynamism of such an issue should be captured across both types of newspapers. That is to say that proportion of coverage across such dailies should generally rise and fall in tandem

with one another, rather than being disconnected as the TOI appears to have been (and less so NYT) compared with the ET, BS, and WSJ regarding India–Pakistan trade. This disconnect may indicate that users of one daily are largely shielded from the issue areas covered by a different daily. Since the TOI and NYT cater to a wide and popular audience base (as compared to the more select and politically and economically influential users of the ET, BS, and WSJ), an implication of such a dichotomy is that a large voting public is under informed on the comings and goings of a small decision-making elite. In the context of India–Pakistan trade, a dearth of awareness on this issue in popular discourse may limit the extent to which politicians can feasibly invest further resources towards trade normalization, or perhaps the extent to which the public necessarily pressure governments on whether or not to do so.

Second, it is expected that as an issue area becomes more salient to broad interests, then the proportion of coverage on such an issue will grow among dailies and especially among popular dailies. Though trade should sensibly receive more coverage in an economic daily like ET, BS, and WSJ than in a broader popular daily, the security implications of India–Pakistan trade arguably merit greater coverage in a popular daily like the TOI and NYT. Consider that the economic benefits of India–Pakistan trade liberalization will be far greater for Pakistan, and thus for India the benefits are disproportionately more concentrated on improved political relations which are topics of great popular interest. Expanding coverage on India–Pakistan trade can thus correct a concerning imbalance relative to media’s seeming preoccupation with these countries’ relations in security.

6.1 *Second-Level Agenda-Setting*

This study is a *quantitative* content analysis that establishes the *quantum* of coverage regarding trade, and thus suggests how the media influences *what to think about* with regards to India–Pakistan relations. In communications literature, the media’s influence on *what to think* based on *quantum* of coverage is labeled first level agenda-setting. By focusing on select issues, the media transfers salience to said issues (also referred to as “objects”) (McCombs 2005). My results substantiate a long-held claim that media coverage contains a focal bias on security to the exclusion of other issues areas, such as trade. Extant literature contains at least one other example of quantitative content analysis of coverage on India–Pakistan relations, which is a study that measures the frequency of editorial commentary on security issues from 1965 to 1966 in the TOI and *Times of Pakistan* (Rao 1971). Thus, there is much opportunity to make new and important studies on India–Pakistan media coverage of this quantitative variety.

Subsequent research can perform a *qualitative* content analysis on the *quality* of coverage regarding trade, as in the media's influence over *what to think* such as with biases in reporting. The media's influence on *what to think* based on *quality* of coverage is labeled second level agenda-setting, in which the media focus on select attributes that comprise an object (i.e., an issue) powerfully frame how the public understands these objects (McCombs 2005). A qualitative content analysis would be akin to Pattanaik's (2004) examination of opinions expressed in news dailies. For example, does coverage on India–Pakistan trade contain a negative bias or perhaps a positive one? A promising approach might be to examine for bias on a temporal basis by comparing periods with higher concentration of trade-related activity (i.e., the late-1990s, mid-2000s, and early 2010s), and also moments when trade activities are curbed by security events (e.g., 1999 Kargil War, 2003 Indian Parliament Attack, 2008 Mumbai attacks).

Digital access to Pakistani news dailies would invariably enhance research on media coverage of the region. The *Factiva* database used in this study enables powerful analysis, and particularly so for quantitative work. Unfortunately, Pakistani dailies do not extend very far back in this database (nor in the *Access World News Bank* database) requisite for this study, if at all. Serious efforts were made to source these through university library subscriptions in India, Pakistan, and the US, but none turned up access to a substantial enough digital archive of Pakistani dailies. These data gaps demand concerted attention among media groups, research universities and institutes, and database administrators in the South Asia region and beyond.

6.2 *Internet Age*

The seminal work on agenda-setting by McCombs and Shaw (1972) emerged within an environment with relatively fewer media outlets as compared with the present Internet era. Some scholars have questioned whether the Internet has introduced so many new informational channels so as to spell the end of agenda-setting as audiences fragment and “virtually everyone has a unique external media agenda that is a highly individualized composite constructed from this vast wealth of online news and information” (McCombs 2005). In other words, does the Internet significantly diminish agenda-setting? Across India, the Internet may have a limited diminishing effect on agenda-setting insofar as 90 % of the country's population remains offline (McKinsey 2013). Furthermore, research suggests that with online news, consumers converge on a fewer number of dailies as compared with newsprint dailies (Hamilton 2004). Still, as Internet news technologies continue to evolve rapidly and access in India continues to grow, this represents an important frontier for future research in the Indian context.

6.3 *Cognitive and Social Effects*

A section of agenda-setting literature examines the interactive effect between media coverage and people's preexisting attitudes and worldviews (Ha 2002; Takeshita 1993; Weaver 1977). Related work examines how social communication immediately following news exposure can powerfully shape and possibly override agenda-setting effect (Goldenburg and Miller 1980). The cognitive and social communication components of agenda-setting theory assign a more active role to the public in forming their opinion about public affairs vis-à-vis media effects. These factors are particularly relevant to consider in the Indian context where identity attributes powerfully shape public opinion according to region, language, religion, caste, income, and education, among other attributes (Chandra and Wilkinson 2008; Chandra 2006). Certainly with respect to India–Pakistan relations as one of the country's most political sensitive and longstanding issues, we would expect the Indian public to have strong and varied preexisting opinions that interact with media effects.

6.4 *Media Agenda*

Finally, an important stream of agenda-setting theory asks “if the press sets the public agenda, who sets the media agenda?” (McCombs 2005, p. 548). Extant literature examines how relations among news organizations, journalistic norms, and corporate relations shape the media agenda. Much of this is famously explored in Edward S. Herman and Noam Chomsky's (1988) *Manufacturing Consent: The political economy of the mass media*. Media agenda is particularly relevant to India–Pakistan relations given the *Aman ki Asha* peace campaign launched in 2010 by the Jang Group of Pakistan in collaboration with The TOI Group. These media groups are striving to expand debate on issue areas affecting India–Pakistan peace, including commercial ones such as trade normalization (Tere 2012). The results in Table 5 for the period 2009–2011 are especially ironic since content in the TOI containing keywords “India AND Pakistan AND trade” rapidly dropped as *Aman ki Asha* was launched (and simultaneously, such content rose in the ET, BS, and WSJ). One explanation might be that *Aman ki Asha* siphons away trade content from TOI's mainstream broadsheet, and thus inadvertently isolates coverage on this issue from readers. An alternative explanation is that in spite of *Aman ki Asha*, TOI's proportion of content on India–Pakistan trade has indeed fallen in recent years. Either scenario is concerning and deserves some rectification.

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