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Trade Agreements between Developing Countries: A Case Study of Pakistan – Sri Lanka FTAⁱ

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Abstract

This paper assesses the pre and post Free Trade Agreement (FTA) pattern in bilateral trade between Pakistan and Sri Lanka. Besides the usual direction of trade analysis we also use general and partial equilibrium approaches in order to evaluate the true potential of this FTA. Our results reveal an increase in welfare and efficiency for both countries. However export basket has not changed much since pre-FTA period. This calls for creating awareness about the FTA and putting in place a consultative mechanism with trade community that can identify the manner in which both countries can accrue maximum benefit from the free movement of tradable goods. Similar suggestions follow in our perception survey carried out for this study.

JEL Classification: F15, F17, C68.

I. Introduction and Background

In the wake of recent failures of multilateral trade negotiations, regional trade agreements have gained immense popularity. The later is not only viewed as an integral part of economic policy but also as an instrument of foreign policy (Mastel 2004). Over 50 percent of global trade now occurs within trading blocs and almost every country is a member of some regional trade agreement. While most FTAs still focus on the movement of goods, however deeper forms of integration such as common markets and economic unions allow for free movement of factors of production and harmonization of national economic policies respectively. Most regional agreements also put forward discriminatory stance for non-members and are certainly contradictory to the principles of the WTO^{vi}. The economic and in particular the development effects of regional agreements have to be understood in terms of trade creation^{vii}, trade diversion^{viii} and transfers^{ix}. Ironically in the political economy context the resistance is highest for (preferential) regional agreements that result in trade creation where imports replace domestic production.

The total number of agreements has grown from 1 in 1975 to 216 in 2009, the main rise taking place after late 1990s. Out of the total 216, around 45 FTAs presently stand proposed, 16 are at the signing stage, 46 are under negotiation, 27 are signed and concluded, and 82 are under implementation. The increase in the number of proposed and under implementation FTAs points towards an increased preference for regionalism at the global level^x. Out of the total 216 FTAs, 166 are bilateral i.e. preferential trading agreement involving only two parties and 50 are plurilateral i.e.

preferential trading agreement involving more than two parties. In South Asia the highest number of under negotiation and concluded FTAs by 2009 originated from India (32) followed by Pakistan (26).

This paper assesses the impact of Pakistan-Sri Lanka Free Trade Agreement (PSFTA) in stimulating trade performance. We provide a brief overview on quantitative evaluation of FTAs followed by a discussion on objectives of PSFTA and details on trade flows pre and post FTA. The explanation regarding data and methodology are then followed by results on the potential gains from PSFTA.

II. Regional Trade Agreements with Specific Reference to South Asia

South Asia is seen as one of the least integrated regions in the world. There is plenty of research to show that by reducing the inefficiencies at the borders of South Asian countries, significant trade gains can be achieved (Weerahewa 2009). The region despite of cherishing SAFTA and several independently driven FTAs lags behind in flaring regional commercial activity. It draws low volume of intra-regional trade under the sentry of high trade barriers. Larger countries like India and Pakistan have an approximate trading volume of 5% to 2.5% respectively with the South Asian countries.

Despite the lowering of tariffs over the past years the non-tariff barriers (NTBs) pose a challenge to the expansion in trade in this region. Examples include: transactions costs, long delivery time, payment delays, domestic taxes, differential tariff treatments, regulatory requirements and restrictive FTAs. There has been past research on potential gains from improved trade in South Asia^{xi}. See Govindan (1994), Srinivasan (1994), DeRosa and Govindan (1996), Bandra and Yu (2003) and Weerahewa (2007). For impact of improved facilitation on trade see Wilson *et al.* (2005). See also Wilson *et al.* (2003) and World Bank (2008). Within SAFTA, 53% of the items are subject to negative list. Weerakoon and Thenakoon (2006) argue that such a limited sectoral coverage would dissipate real essence of free trade. Regulatory framework in South Asia imposes NTBs that includes Para Tariffs^{xii} in addition to basic custom duties. Such measures give rise to cascading effect for imported products that in turn raise prices more than actually warranted.

The still high tariffs, NTBs, non-conducive MFN, odds of trade diversion, parallel comparative advantages and region's disproportionate size of economies instill pessimism in SAFTA literature. Studies conducted by Bandra and Yu (2003) used computable general equilibrium (CGE) model for evaluation of SAFTA to show that significant benefits are slanted in favor of India while Pitigala (2005) and Baysan *et al.* (2006) showed prevalent threat of trade diversion due to the relatively high barriers^{xiii}. These results are in contrast to Hirantha (2003) that showed trade creation while showing no signs of diversion with rest of the world^{xiv}.

Newfarmer (2004) and Kemal (2005) defend South Asian intra-regional trade to be an inevitable outcome given a set of limited range of products making up their export profile. Banik (2006) explains that similar export profiles in turn prompt industrial, services and agricultural sectors to cooperate in order to attain economies of scale. This necessity facilitates the overall integration process. Hirantha (2004) using gravity analysis showed trade creation while finding no evidence of trade diversion with rest

of the world provided tariff ceilings are brought down. Studies conducted by Srinivasan and Cananero (1993) and Batra (2004) suggest that tariff removal would lead to expansion in trade for India, Pakistan, Bangladesh, Sri Lanka and Nepal. The study also indicates benefits from unilateral trade liberalization that weighs more compared to preferential liberalization moves^{xv}.

Pigato *et al.* (1997) shows that benefits emanating from unilateral trade liberalization would go in favor of India while preferential liberalization being fruitful for the rest of South Asia. Batra (2004) while analyzing India's trade with 145 countries discovers her greatest potential in South Asian region exists with Pakistan. Govindan (1994) suggests an increase in welfare gains through food trade expansion within the region. De Rosa and Govindan (1995) predicted that trade-led welfare gains could be augmented by increased regional economic integration with the rest of world or Asia Pacific. Sengupta and Banik (1997) predict intra-SAARC trade to expand by 30 to 60% if all illegal trade through direct and indirect medium be routed through official channels.

As most of South Asian countries are dependent on the outside world for their imports thus a positive spillover effect would further promote SAARC's intra-regional trade. There lies a need for further gravity analysis by incorporating such elements like the logistics of this region and its effects on regional bilateral trade flows (Raihan 2008). There has yet to be some concrete research on the ex ante gains, if SAFTA is used as a common platform for negotiating collective FTAs with other regions. Examples of such arrangements exist in case of EU and ASEAN. For the latter see Calvo-Pardo (2009). See also Laurenceson (2003). The rise of trading blocs has also impacted the various industries differently. For the impact of regionalism on for example textile trade in the context of EU, NAFTA, AFTA, and SAPTA, see Tsang (2008).

The examples of FTAs within South Asia include India – Sri Lanka, Pakistan – Sri Lanka, Pakistan – Bangladesh (under negotiation), India – Bhutan, India – Nepal^{xvi}, and Pakistan – Nepal (under consultation). The India – Sri Lanka FTA signed in 1998 moved towards a Comprehensive Economic Partnership Agreement (CEPA) in 2002. This agreement is intended to boost the ties between the two countries in the areas of cooperation in investment and trade in services^{xvii}. The trade data since 2000 indicates that exports of Sri Lanka to India have substantially increased. However if one looks at the basket of exportable items that Sri Lanka has to offer to India, not much change has come about. The two main items i.e. vegetable fats/oils, and copper still remain the main exports of Sri Lanka. The negative lists still remain large, which will be an intensive topic of discussion as CEPA moves forward.

III. Objectives of Pakistan – Sri Lanka FTA

The PSFTA was signed in Colombo on 1st August 2002. The rules for this agreement came into force with effect from 12th June 2005. Both parties agreed on free movement of goods and services between their countries through elimination of tariffs. The parties agreed to eliminate all non-tariff barriers on the movement of goods and services and not to make any increase in the existing para tariffs or introduce new or additional para tariffs without mutual consent^{xviii}. All products

covered by the agreement shall be eligible for preferential treatment if they satisfy the Rules of Origin as defined in the agreement.

Since PSFTA became operational in 2005, trade between the two countries has exhibited an upward trend. The value of overall trade between the countries has increased from US \$ 170 million in 2005 to US \$ 270 million in June 2007. There is an ample of goodwill for expansion of trade and establishment of joint ventures between the two countries in various agriculture and industrial sectors. Pakistan and Sri Lanka are lucrative investment destinations for both countries as on the one hand Pakistan is a gateway to resource-rich Central Asian States while on the other hand Sri Lanka enjoys duty-free access to EU and Indian markets.

Since PSFTA has completed its 3 years in which tariffs were eliminated by Pakistan, the analysis of this FTA is relevant at this stage to analyze whether Pakistan has benefitted from this arrangement and what were the areas that were neglected. A longer timeframe has been established for the Sri Lankan side for tariff liberalization. Pakistan, as decided, has allowed complete duty free access from June 2008.

The PSFTA fully recognizes the asymmetries between the two countries and negotiations were finalized with Sri Lanka on a less than reciprocal basis. Sri Lanka only offered 102 items after the FTA on a duty-free basis compared to Pakistan's 206 items. The negative list set by Sri Lanka contains 697 items compared to Pakistan's 540 items. By the end of 2010, it is expected that the tariffs will be eliminated from 69 percent of the goods traded between the two countries. The Rules of Origin criterion has been applied in the agreement to prevent transshipment of goods. In order to get preferential duty rates under the FTA, exports from Sri Lanka require 35 percent domestic value addition. The agreement incentivizes the process of value addition in the manufacturing processes of the two countries by requiring 35 percent value addition and tariff lists at HS-6. This will increase the flexibility available for Sri Lankan and Pakistani investors to acquire their raw materials and related inputs from third countries and manufacture the product themselves for bilateral exports (see Masood 2009).

IV. Pre and Post – FTA Trade between Pakistan and Sri Lanka

In 2008 Pakistan's total exports at around \$20.2 billion were 12.2 percent of GDP. The imports at around \$35.1 billion were 21.5 percent of GDP. The share of Sri Lanka in overall Pakistani exports stood at 1.1 percent. The average tariff bound for all products was 52.4 percent. In case of agriculture and industrial products the rate was 97.1 and 35.3 percent respectively. The average tariff applied for all products was 11.4 percent which indicates that Pakistan is well below its bound limits.

Sri Lanka compared to other South Asian economies liberalized its trade regime much earlier. Recently exports grew largely on account of apparel and agricultural products such as tea. Like Pakistan, Sri Lanka's leading export destination is United States. The share of Pakistan in the overall exports of Sri Lanka stands around 0.8 percent. In 2008 the average tariff bound for all products was 29.8 percent. In case of agriculture and industrial products the rate was 49.7 and 19.3 percent respectively. The average tariff applied for all products was 8.9 percent. In case of agriculture and industrial

products the average tariff applied was 28.4 and 7.4 percent respectively. In comparison to Pakistan, Sri Lanka's applied rates are higher for agriculture and lower for industrial products.

Traditionally the trade volume between Pakistan and Sri Lanka has remained low, The balance of trade between the two countries is in favour of Pakistan, increasing annually every year since 2002. Pakistan's exports to Sri Lanka increased from \$76 million in 2003 to \$214 million in 2008. On the other hand Sri Lanka's exports to Pakistan increased from \$28.8 million in 2002 to \$72.2 million in 2008. The overall exports of Sri Lanka did show an impressive growth during this time period, increasing from \$4.7 billion to \$8.4 billion in 2008 (an increase of 78 percent).

Comparing the tariffs applied (2009) by Sri Lanka on imports from Pakistan and from leading trade partner i.e. US reveals that even after FTA, applied tariffs were still on the higher side for Pakistan in case of food and beverages (36 percent with 255 tariff lines), footwear and headgear (22.3 percent with 53 tariff lines), animal and vegetable fats/oils (15 percent with 57 tariff lines), and animal products (12.8 percent with 281 tariff lines). An overall sectoral comparison reveals that Pakistan faced an average applied tariff of 10.73 percent compared to 15.06 percent of US in agricultural products. For industrial products average applied tariffs was 4.3 percent for Pakistan compared to 6.78 percent on goods from US.

We now compare tariffs applied by Pakistan on imports from Sri Lanka and US. The tariffs still remain on the higher side for: a) transport equipment (35 percent with 287 tariff lines), footwear and headgear (19.3 percent with 53 tariff lines), food and beverages (13.8 with 229 tariff lines), animal or vegetable fats/oils (16.29 percent with 54 tariff lines), animal products (8.9 percent with 248 tariff lines). The similarities between the still relatively restricted product groups is representative of similarities in the product structure of the two countries. An overall sectoral comparison reveals that Sri Lanka faced an average applied tariff of 6.3 percent compared to 13.7 percent for US on agricultural products. For industrial products average applied tariff was 6.7 percent for Sri Lanka compared to 11.5 percent for US.

Despite Sri Lanka and Pakistan not being major trading partners, their respective export markets are crucial. Pakistan is an important export market for tea, followed by copra, rubber, betel leaves and tamarind. Similarly, for Pakistan, Sri Lanka is an important market for textiles, pharmaceuticals, machinery and agricultural items. All major Sri Lankan export sectors have been granted preferences in the FTA. For example this agreement allows duty free entry for 10,000 tons of tea per year and Pakistan happens to be the third largest tea importing nation in the world.

We now see the changes in product group shares for Pakistan's import from Sri Lanka (Table 1). The product group with the highest weight sees a decline between the period 2003 to 2008. The import of vegetable products had a percentage share of 63.8 percent (in overall imports of Pakistan from Sri Lanka) in 2003 which declined to 46 percent in 2008. On the contrary, rubber and plastics group had a share of 21.1 percent in 2003 which increased to 40.4 in 2008. Other products whose shares increased during the period include: textiles (from 3.4 percent in 2003 to 4.7 percent in 2008), wood and wood articles (from 1.0 percent in 2003 to 2.6 percent in 2008). These are also complimented by sectors presently not having a large share in the

overall imports. To some extent it can be claimed that as a result of this FTA the exports of Sri Lanka increased for some non-traditional exports.

We can also observe the overtime change in product group shares for exports of Pakistan to Sri Lanka (Table 2). The textile articles having the largest weight in Pakistan's exports to Sri Lanka registered an increase in export share from 50.7 percent in 2003 to 59.5 percent in 2008. Other groups whose share increased include: vegetable products (increasing from 18 percent in 2003 to 19.8 percent in 2008), prepared foods and beverages (increasing from 1.5 percent to 2 percent during the same period), base metals (increasing from 2.8 percent to 5.7 percent during the same period). Minor increases were also seen in the shares of machinery and appliances, pulp, paper and paper board. The product groups whose shares decreased include live animals, animal products, chemical products, rubber, plastics, and footwear.

For Sri Lanka's exports we see some change in the value terms as regards the importance of individual sectors. The vegetable products remained on top in the pre and post FTA period followed by plastics and rubber, textiles and textile articles. However base metal which out of all product groups had 4th largest share in Sri Lanka's total exports to Pakistan slid to 9th position. Similarly the machinery and appliances group declined from 5th to 7th in ranking. The chemical products that stood 6th in pre FTA ranking, came 5th in post FTA milieu. The wood and wood articles had 9th position earlier which improved to 4th in the post – FTA period. The mineral products improved from 10th to 6th in the overall ranking.

In case of Pakistan textile's share in Pakistan's exports to Sri Lanka remained on top, followed by vegetable products. The live animal and animal products group was 3rd before the FTA however slid to 5th by 2008. The chemical sector maintained its 4th position. The plastics and rubber group slipped from 5th to 7th. The exports of base metals improved and its ranking in export shares increased from 6th to 3rd.

V. Methodology and Data

In this paper we use a multi-pronged approach in order to evaluate the impact and potential of Pakistan – Sri Lanka FTA. Our approach uses descriptive analysis (seen in previous section), competitiveness and complimentary (indices based) analysis, general equilibrium impact, and calculation of total trade effect. This is followed by results from a perception survey of exporting and importing entities in Pakistan. For clarity we list these approaches below.

- Analysis on direction of pre and post – FTA trade
- Using trade indices in order to evaluate competitiveness and complementarities.
- Global CGE model (GTAP^{xix}) used to see the general equilibrium effects of FTA on Pakistan, Sri Lanka and rest of the world
- Using WITS-SMART model based on UNCTAD-TRAINS database to see the trade diversion / creation effects
- Conducting a perception survey of various stakeholders

At this point we may justify here the use of GTAP methodology which is used in order to see the potential general equilibrium impact of PSFTA. The GTAP consists of: a fully documented, publically available, global data base; a standard general equilibrium modelling framework; and software for managing the data and implementing the standard model. For a detailed description see Hertel (2007). The GTAP data base derives Pakistan's data from Social Accounting Matrix (SAM) prepared in Dorosh *et al.* (2006). For Sri Lanka the data base derives information from Input – Output table in Jeevika (2008).

The System of Market Analysis and Restrictions on Trade (SMART) a partial equilibrium model is a fully integrated module in World Integrated Trade Solutions (WITS). This model is used to simulate the partial equilibrium impact of a tariff reduction for a single market^{xx}. WITS by default allows the user to access data from COMTRADE^{xxi}, TRAINS^{xxii}, IDB^{xxiii} and CTS^{xxiv} datasets.

A perception survey was carefully designed to take in to account the stakeholders' views. Separate questionnaires were designed for exporters, importers and trade organizations. Most of the exporting firms interviewed were also producers and employed over 1500 employees with at least 5 percent of their total exports destined for Sri Lanka, for at least 5 years including the pre and post FTA period.

VI. Competitiveness Analysis

For competitive analysis we use disaggregated commodity-wise imports and exports data since 2003. The data available for such an analysis has certain limitations. For example the import and export data (disaggregated at HS-8 level) available for Sri Lanka (at the time of this study) was up to 2005 however for our analysis the post-FTA analysis would optimally require data for 2008^{xxv}. Since data for Pakistan's imports is available up to 2008 it was easy to use it as mirror data for unavailable period of Sri Lankan goods. The mirror statistics provide only a second-best solution, and need to be corrected in order to account for transshipment and inversion of reporting standards. The control totals are derived from UN COMTRADE database.

To analyze specialization levels of both countries trade specialization index (TSI) is used. The differences in the level of technology and human capital and the pursuit of economies of scale can lead to intra-industry trade even in products with identical factor input requirements. In order to check where there exists potential for intra-industry trade Grubel Lloyd Index (GLI) is used. For country-wise comparative advantage at the product - level Revealed Comparative Advantage (RCA) index is used. In this section due to availability of data, greater explanation is found for Pakistan's case.

G-L Index

This index ranges between zero (inter-industry trade) to one (intra-industry trade). In Table 3 we report Pakistani and Sri Lankan products having highest G-L index at HS-2 commodity classification. For Pakistan, among the top commodity groups with

significant intra-industry trade potential are: articles of ores slag and ash, fruits and nuts, tobacco, jewellery and precious stones, tools and cutlery of base metal, ropes and cables, headgear and other parts, ships and other floating structures, and man-made staple structure.

The intra-industry trade potential of Sri Lanka exists: in copper articles, stones, tobacco, precious stones, animal products, antiques and other art pieces, ceramic products, animal feed, miscellaneous edible preparations and mattresses and quilts. The intra-industry trade can provide new basis for enhancing bilateral trade between Pakistan and Sri Lanka. The prospects of vertical integration can flourish trade even between the countries that lacks strong complementarities (see Yeats 1998).

Trade Specialization Index

The index varies between -1 (high import specialization) and 1 (high export specialization). We may observe the TSI of Pakistan computed at HS-2 commodity classification and the change that occurred between 2003 and 2007. Most of the top products stood their ground over a period of time while maintaining specialization. The group of products holding ground before and after the PSFTA oscillates in a very narrow range while the rest of commodities either gained or lost their positions. Table 4 show products in which Pakistan substantially gained including iron and steel, live tress plants, bulbs, aluminum articles, salt, sulphur, earth, lime and cement, manmade staple fibers, optical and photo, mechanical apparatus, impregnated and laminated textile fabrics, inorganic chemicals, precious metal compound and glass and glassware. Table 5 shows the list of products in which Pakistan to some extent lost specialization over the same period that includes albuminoids, modified starches, glues and enzymes, cereal, flour, starch and milk preparations, carpets and other textile floor coverings, articles of apparel and accessories^{xxvi}.

Revealed Comparative Advantage (RCA)

An index value of $RCA > 1$ implies comparative advantage and $RCA < 1$ implies comparative disadvantage in exporting a specific product. Pakistani exports exhibiting strong RCA are mainly concentrated in the textiles, clothing, electrical equipments, telecommunication equipments, boilers and mechanical appliances and to a lesser degree in usually expected value added products. At HS-2 level Pakistan's RCA is low in base metals, optical and cinematographic apparatus and travel goods.

Almost all Pakistani products at the HS-2 level, having higher RCA with Sri Lanka in terms of trade volume enjoy static comparative advantage^{xxvii}. Highest comparative advantage lies in electrical machinery and parts containing recorders. Out of the 1000 products calculated at HS-4 level for RCA, almost half of them enjoy static comparative advantage whereas the dynamic comparative advantage of Pakistan over Sri Lanka is possessed by few products mainly in sugar, confectionaries, pharmaceutical, spices and some vegetables products.

The Pakistani products with static comparative advantage (in year 2007) over Sri Lanka include: agricultural products (meat; fish; dairy produce; vegetables; cereals; lac and gums, milling industry products; sugar and sugar confectionaries; fruits; tobacco), mineral products (ores; salt; sulphur; stone), chemicals and pharmaceuticals (organic/inorganic compounds of precious metals, plastic and plastic products,

photographic goods), leather (raw hides and skins, leather products, handbags), textiles (cotton yarn & fabrics, knitted fabrics, textile made-ups, clothing accessories; hand-made fabrics; special yarns & ropes).

VII. Survey Results

A detailed perception survey was carried out which included exporting and importing entities mainly from Pakistan. The stakeholder perceptions were sequenced in three different questionnaires designed for: exporters, importers and trade organizations. Around 35 exporters to Sri Lanka and same number of importers from Sri Lanka, who had been trading with Sri Lanka in the pre and post FTA period were interviewed. In Pakistan all government's trade promotion bodies including customs department were interviewed. We now look at the sector-specific responses below.

Exporters

While most firms reported some level of familiarity with PSFTA and recognized its importance for their future business. They however complained about the lack lustre role of public sector in creating awareness about the FTA. One of the main reasons cited for non – utilization of this FTA opportunity was the difficulty in obtaining certificate of origin. The average time taken for exporters for each stage that included: obtaining export codes, acquiring and revalidation of licences, processing of shipping bills, obtaining refunds, customs clearances, and final dispatch of export consignment, was around 10 days which is higher in comparison to competitor economies such as China and East Asia.

The exporters in yarn and fabric reported that many Sri Lankan importers place their orders with local bank guarantees which are difficult to obtain in Sri Lanka. This in turn forces the exporters not to take unnecessary risk. Several occasions were reported where Sri Lankan importers have yet to honour the accounts payable since the past 6 months (after the delivery of consignment). The fabric sector reported an average of mere 0.3 percent increase in export receipts in the post – FTA period. There is a need to further increase coordination between; a) trade associations of Sri Lanka and Pakistan, and b) governmental trade bodies of the two countries. This sector also expects rising competition from China and India in future for which increased government support is required.

The spinning and weaving enterprises interviewed had an average of 7 to 8 percent exports to Sri Lanka before the signing of FTA which has now decreased to 6 percent. This according to the respondents is due to a host of factors including an FTA which Sri Lanka has signed with India. The domestic regulatory requirements in Sri Lanka were termed complicated which ultimately act as non tariff barriers. Increased effort is required on part of Sri Lankan government trade bodies in order to create awareness about FTA with Pakistan and to help in illuminating domestic importers regarding the superiority of Pakistan's weaving industry over other regional competitors. The sea freight companies have long been overcharging. There is also a need to increase the frequency of sea vessels.

The enterprises dealing in leather were found very familiar with the terms and conditions laid out in the PSFTA. Those interviewed had an average 13.5 percent of

their total exports destined to Sri Lanka and most of them had branches abroad. However no changes were reported in the share of exports in the pre and post FTA period. It was demanded that Government should initiate its trade related diplomatic efforts with Sri Lanka in order to ease the strictness observed regarding the acquiring of certificate of origin. It was further emphasized that even errors related to punctuation cost greatly in the form of Sri Lanka charging penalties.

The enterprises falling in the category of food, beverages and tobacco reported an average 13 percent increase in their share of exports to Sri Lanka after the FTA. Apart from the concessions allowed under the immediate concession list of Sri Lanka the increase in food exports are also attributed to increased per capita incomes in the country and a projected rise in demand for future. This industry has however been facing increasing domestic costs owing to a general rise in container and handling charges in Pakistan. The items perishable in nature are required to be on the shelf with in a stipulated time period decided upon at the time of placement of import order.

The iron, steel, and metal products enterprises reported no change in their share of exports to Sri Lanka after FTA. This sector asked for a more aggressive effort on part of Trade Development Authority of Pakistan (TDAP) particularly as far as execution of initiatives such as foreign exhibitions is concerned. This sector was also due to gain from liberalization under SAFTA which however did not materialize in the manner in which it was earlier envisaged. There also exist prospects for regional vertical integration in this sector. The respondents felt that there is a need to lessen the burden of documentation on this sector. The various data clearance and supportive text materials required at the ports, airports, border crossing points and other official clearances inside Sri Lanka increase the costs to exporters.

The chemical and chemical products sector has been included in the immediate concession list of Sri Lanka. The respondents from this sector particularly those dealing in Benzene and Toluene reported no increase in the share of exports to Sri Lanka in the post FTA milieu. The main reasons for this sector in not utilizing the provision provided under the FTA include: a) Sri Lanka being a very small market, and b) difficulty in obtaining certificate of origin. Like the food and beverages sector this sector has special container and packaging requirements which in Pakistan are faced with rising costs and declining infrastructure. The Federal Board of Revenue (FBR) had previously been charging excess duty from this sector and it was decided in legal decree that FBR will refund the excess amount. However it took almost two years for the FBR to execute these court orders which cost the producers and traders in this sector dearly.

On the production side there are concerns about the rising input costs, excessively regulated markets and lack of standard information and information about changes in rules. In the textile sector, respondents who are producers as well as exporters reported closure of production units and factories due to the above mentioned issues. Major problems were also reported in case of moving freight with in Pakistan. The costs of railways and road transport were termed high in comparison to regional countries including India and Sri Lanka.

The occasions that included container vehicles were also termed risky in terms of the timely delivery of consignments. In sea transportation, with only one gate at Port Qasim, perishable items are often vulnerable for not meeting the quality standards desired by the importers particularly when under this FTA there is a limit of 40 containers only. The Karachi port electronic care system was termed frustratingly

slow. Rice stands exempted from customs care system, and it was felt by the respondents that other perishable items in the food category should also be exempted with a view to improve the shipment time of consignment.

In order to lessen the incidence of above mentioned costs, the small and medium enterprises in the textile sector tried to enter in joint venture with foreign firms that included investors from Dubai, China, and Bangladesh amongst other countries. This was also accompanied by a drive towards mergers in order to achieve some financial consolidation. However the prospects of joint ventures dried out in the wake of global financial crisis and there were no investment guarantees provided by the Government that could have reduced the risk factors and saved the future export prospects. Several exporters also reported financial loss due to non repayment of accounts receivables amid the liquidity crunch faced by foreign buyers.

Importers

Most of the importers interviewed while expressing a fair level of familiarity with the terms and conditions of this FTA stressed upon the need to create increased awareness about this FTA and observed that it will lead to increased trade volumes in future. They however stressed on the need to lessen the time required for filing of documentation and related paper work. The average time taken for each stage including: obtaining import codes, licences, processing of shipping bills, obtaining refunds, and customs clearances, comes to around 3 weeks.

The Pakistani importers in the food and beverages sector reported a 2 percent decrease in imports from Sri Lanka in the post – FTA period. The respondents felt that tariff preference in FTA is too small. The transport sector firms in Sri Lanka are still not properly equipped due to which occurrences of mishandling are common from warehouses to ports. The climate conditions of Sri Lanka also have a role to play in the decrease in imports. The transport firms do not properly safeguard food items against humidity which ultimately reduces the shelf life. One of the respondents reported a recent loss of 3 containers in which millions worth of consignment was lost due to moist copra. The efficiency of FTA is also lost to some extent when smuggling goes unchecked. It has been reported that copra is being smuggled from India which distorts the comparative advantage of Sri Lanka^{xxviii}.

The respondents from palm oil sector asked for increased interaction and coordination between trade bodies, Ministry of Commerce and importers in order to address the grievances of importers in this sector. There is an increased need for prior inspection and specimen validity at Sri Lankan ports and there should be a third party supported by Government in order to help, support and facilitate all along the completion of transaction.

The rubber and plastics product sector reported an increase of 5 percent in imports in the post – FTA period, however still asked for removal of certain items of this sector from the negative list. Many non – registered entities are involved in the import operations of this sector. There is an immediate need to only allow registered importers to operate and enjoy preferences under the FTA. The sector is charged a comparatively high sales tax rate at the import stage. Currently there is a no sales tax on this sector's imports in Malaysia, Indonesia and Vietnam which therefore become more lucrative business destinations for Sri Lankan exporters. Instances were also reported where due to low levels of checks and balances, substandard rubber was exported by Sri Lanka in violation of the consignment orders. In this regard it was

suggested that trade offices abroad should play an instrumental role in registering protests with local trade bodies. Similar reservations were observed from respondents of tyre, tube, and bicycle sector who reported no change in their import volume in the pre and post FTA period.

In the electrical and electronic equipment sector, importers reported an average of around 5 percent increase in their imports from Sri Lanka since 2005. The respondents informed that although the number of documents has decreased, there still exist complex filing requirement in the remaining documents. There is a need for increased simplification on part of both Sri Lanka and Pakistan. Increased trade diplomacy may also be required to decrease the items in negative list. For example in case of electrical imports while sockets are covered under FTA's immediate concession list, switches are not. Given that both these items are complimentary goods in many cases, there is ultimately very little decrease in preferences. The language used in FTA has been termed difficult in many cases.

The chemical and chemical products sector reported an average increase of 15 percent since the signing of FTA with Sri Lanka. However in this sector the freight forwarding companies are not as efficient as desired. The movement of several chemical products requires complete insurance against physical risks. However the documentation related to insurance is difficult to understand and complex to comply with. At times urgent orders cannot be entertained through sea transport due to the low frequency of vessels and therefore expensive means such as air transport are used which ultimately add to the overall product cost thus making it unattractive for the importer. There is also a need for improved customs facilitation, pre and post delivery checks at the port and at the same time facilitating better storage facilities at the port.

Trade Organizations

The various trade bodies / offices interviewed in Pakistan included: TDAP, Karachi Chamber of Commerce and Industry, Lahore Chamber of Commerce and Industry, Pakistan Commodities Importers and Traders Association and Counsel General of Sri Lanka. The FTA was perceived as a success for Pakistan as its exports to Sri Lanka increased. It is felt that Sri Lanka is an emerging market and Pakistani exporters must explore further possibilities to increase their market share. While trade counselling and facilitation is underway from both sides, there is however an increased need to improve the dispute settlement mechanism for which both Governments are also required to increase coordination of their relevant trade organizations. The arbitration process remains slow and related fees are high. The role of advocacy within the private sector cannot be ignored. The various trade associations need to arrange awareness programmes tailored according to their own needs for their members. The Government may in this regards play a supportive role.

The chambers of commerce and industry reported that there still remains a need to reconsider the tariff lines under this FTA. There is a need to increase the tariff lines for Pakistan which will require some future renegotiation. The Government should set up a facilitation bureau with regards to the operations under regional agreements. The chambers were not brought on board for a comprehensive consultative session during the days leading up to the final negotiation of FTA. In future the negotiation team sent by the Government should include representatives from the private sector (producers, exporters, and traders). The state carrier Pakistan International Airlines (PIA) does not

operate regular flights to Sri Lanka in all seasons. The issues of medium to long term visas need to be addressed by the foreign office on both sides.

From the Sri Lankan side the FTA has been termed a general success however there were some complaints on account of Pakistan not fulfilling its obligations in certain spheres. For example it was reported that coconut oil is still placed on the negative list where as Pakistan had agreed to provide concession. There has also been a delay in the agreed upon duty phase out (of 2007) on surgical gloves, soya meat, and chip board. There is an immediate desire that Pakistan should address all NTBs and at the same time create a general awareness about this FTA.

VIII. Comparative Static Analysis

a. Results from Global CGE Model

The results from the global CGE model are exhibited in Table 6, where the changes in macroeconomic variables under full trade liberalization between Pakistan and Sri Lanka are exhibited. This in our simulation implies slashing the tariff rate by 95 percent. The results indicate that the real GDP increases for Pakistan by 0.054 percent however decreases for Sri Lanka by -0.001 percent. While the volume and value of imports and exports increase for both countries, the terms of trade deteriorate for Sri Lanka by 0.013 percent. Similarly household consumption for Pakistan increases by 0.058 percent but decreases for Sri Lanka by 0.011 percent. The investment levels in Pakistan and Sri Lanka increase by 0.012 and 0.036 percent respectively.

The overall incidence of macroeconomic results translate in to greater welfare and allocative efficiency gains for both countries (Table 7). The welfare (as measured by equivalent variation^{xxix}) increases for Pakistan (\$10.8 million) and Sri Lanka (\$8.6 million) but decreases for the rest of the world (that does not enjoy the preferences allowed under this FTA) by \$4.7 million. The allocative efficiency not only increases for Pakistan (\$2.6 million) and Sri Lanka (\$8.74 million), but also for the rest of the world (\$3.3 million). This scenario in general explains that full liberalization of trade between the two countries will lead to welfare and efficiency gains.

In a second simulation only partial liberalization is allowed i.e. cutting all tariffs by 50 percent. In this case the real GDP increases for both Pakistan (0.027 percent) and Sri Lanka (0.004 percent). Under this scenario the decline in household consumption for Sri Lanka is lesser (-0.001 percent) in comparison to the first simulation. The increase in investment for Sri Lanka is greater than Pakistan i.e. 0.02 percent compared to 0.006 percent (Table 8). As seen in the previous simulation, welfare and allocative efficiency increase for both countries. The rest of the world has a declining welfare, terms of trade and investment (Table 9).

Finally in Table 10 we see the impact of full trade liberalization between two countries on the sector-wise exports. The sectors in which Sri Lanka gains in terms of increased export value include: vegetables and fruits, grain crops, animal products, cattle, livestock, food, textile, wood, metal products, chemical, rubber, plastics, mineral and mineral products. The sectors in which Sri Lanka loses include: paper products, manufacturing, mining and extraction.

Pakistan although has some similarities to Sri Lankan portfolio of exports but the cost structures and underlying determinants of competitiveness certainly differ. The

exporting sectors in which Pakistan gains include: heavy manufacturing, chemicals, rubber, plastics, textiles and clothing, wood, paper, food products, beverages, mining and extraction, animal products, grain crops, vegetables and fruits. The sectors in which Pakistan shows a loss include: cattle, livestock, processed food, metal products, and mineral products.

It is important to note that under our CGE simulations we have introduced across the board cuts in tariffs. This analysis has the limitation of not taking in to account the impact of negative lists which we try to address in the next section where we use a partial equilibrium model.

b. Trade Creation under PSFTA

Using the WITS – SMART model we calculate the partial equilibrium estimates for trade creation under PSFTA. An FTA is termed welfare enhancing if its net effect (i.e. after taking in to account any trade diversion) results in trade creation^{xxx}. Table 11 shows the potential changes in country – specific exports (based on 2004 data i.e. pre – FTA data) due to concessions given by Pakistan to Sri Lanka. These gains are only in HS codes included in the concession list by Pakistan. The highest gains are seen for Canada followed by South Africa. In case of Sri Lanka there is an increase in exports of 8.8 percent. Countries that lose their exports include Bangladesh (-3.7 percent), Malaysia (-1.7 percent), and Vietnam (-1.1 percent) amongst others. Sri Lanka's exports in the HS codes allowed under the concessions list were 28.5 million before the FTA which potentially rise to 31 million after 100 percent phasing out envisaged in the agreement.

There is a 3.2 percent increase in the imports of Pakistan from Sri Lanka for items allowed in the concession list. There is however a 20 percent loss to the government in the form of tariff revenue which declines by \$4.6 million. There is a positive incidence of lower tariffs and increased imports on the welfare as measured by consumer surplus which in turn rises by \$0.6 million. The highest gains are seen for copra, meat preparations, organic surface – active agents, rubber thread, twine, fabrics (knitted or crocheted), lighting equipment, lamps and sealed beam units. The total trade effect indicates an average decline of -20.4 percent in the overall weighted tariff rate by Pakistan on Sri Lankan goods. The concessions given by Pakistan under this FTA led to a trade creation effect amounting to \$6 million (Table 13).

The changes in exports as a result of concessions provided by Sri Lanka are exhibited in Table 12. Pakistan's exports under the allowed HS-codes increase by 24.3 percent. The countries that face a decline include: Australia, China, India, UAE, Turkey, USA and South Africa.

Sri Lankan imports under the specified HS codes increase by 0.7 percent and the loss of tariff revenue amounts to \$0.6 million. Due to a very large negative list still in place from the Sri Lankan side the consumer surplus (welfare) as a result of FTA only amounts to \$0.06 million. The highest gains are seen for oranges, juices, seeds, spices, mandarins, apples, chickpeas, and sanitary ware. The total trade effect as a result of Sri Lanka's decrease in tariffs amounts to \$0.4 million with weighted tariff rate declining from 13.7 percent to 11.3 percent. The trade creation effect is much lower as compared to Pakistan's case. The combined trade creation effect of this FTA amounts to \$6.4 million.

IX. Conclusion

There has been an increase in bilateral trade between Sri Lanka and Pakistan in the post – FTA milieu. Today Pakistan is the second largest trading partner of Sri Lanka amongst South Asian economies. There have been some concerns about the negative trade balance for Sri Lanka however the lower prices have resulted in an increase in welfare for both countries. The negative trade balance for Sri Lanka can also be justified on the account that a significant proportion of Sri Lankan imports from Pakistan constitute raw material and related intermediate inputs that in turn lead to efficiency gains. Most noticeable are the over 30 percent imports from Pakistan, currently being used as raw material in Sri Lankan apparel sector. This industry making use of cheaper imports from Pakistan, in turn exports apparel to destinations that include US and EU.

Some concerns have also been raised from Pakistan side asking for a revision of export quotas of agriculture products from Pakistan. Currently Sri Lanka is importing apples, apricots, dates and other fruits at much higher prices from destinations such as US and Middle East.

Both countries have also been slow to find out markets for non-traditional exports even after the concessions provided under the FTA. This amongst other factors, points towards the productive capacity of developing countries who find it challenging to pursue a policy of product diversification due to their own domestic structural constraints. Sri Lanka for example, continues to export primary commodities having marginal value added content in the post – FTA period. There is also an opportunity to regain lost markets. Sri Lankan tea is an example of how competitive advantages are lost over time. Around the signing of this FTA Sri Lanka's share in Pakistan's import of tea had fallen to around 3 percent compared to over 65 percent in early 1970s. However this will require efforts beyond the availing of concessions and moving pro-actively towards integrated supply chain systems.

Pakistan still has potential to fill in the demand in Sri Lanka particularly in sectors such as textile, leather, sports goods, surgical instruments, pharmaceuticals, iron, steel, kitchenware, and cutlery. There is a need to evaluate how Sri Lanka may be used as a lead destination to reach the potential Indian markets. Pakistani manufacturers may need to study the feasibility of having outlets in Sri Lanka in order to benefit from the regional preferential arrangements such as India – Sri Lanka bilateral FTA.

After the full implementation of this FTA and keeping in view the success achieved, both countries now need to move quickly towards a comprehensive economic partnership as there still exists further potential for cooperation in areas such as education, technology, tourism, and science. While Pakistan is at the cross-roads of key regional axis with close geographical proximity to Central Asian states, Sri Lanka enjoys duty free access in EU and India. While the trade balance is at this time in favour of Pakistan given the natural comparative advantages, Sri Lanka can gain further by promoting the FTA more at the national and local levels.

X. Tables

Table 1 Pakistan's Major Imports from Sri Lanka (US\$ Million)

| PRODUCT GROUP | Value 2003 | Share (%) | Value 2004 | Share (%) | Value 2005 | Share (%) | Value 2006 | Share (%) | Value 2007 | Share (%) | Value 2008 | Share (%) |
|--|---------------|-----------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|
| Vegetable products | 24.38 | 63.84% | 28.91 | 59.77% | 25.51 | 56.97% | 35.97 | 50.49% | 35.47 | 56.02% | 28.32 | 45.99% |
| Animal or vegetable fats and oils and their products; prepared edible fats; waxes. | 0.48 | 1.27% | 0.41 | 0.84% | 0.41 | 0.91% | 0.41 | 0.58% | 0.33 | 0.53% | 0.23 | 0.37% |
| Prepared foodstuffs; beverages, spirits and vinegar; tobacco and manufactured | 0.02 | 0.06% | 0.02 | 0.04% | 0.02 | 0.04% | 0.29 | 0.41% | 0.11 | 0.17% | 0.15 | 0.25% |
| Mineral products | 0.25 | 0.66% | 0.32 | 0.65% | 0.28 | 0.63% | 0.36 | 0.50% | 0.47 | 0.74% | 0.8 | 1.30% |
| Products of the chemical or allied industries. | 0.84 | 2.20% | 1.7 | 3.52% | 1.25 | 2.80% | 1.51 | 2.12% | 0.76 | 1.19% | 0.8 | 1.31% |
| Plastics and articles thereof; rubber and articles thereof | 8.05 | 21.08% | 12.84 | 26.55% | 10.51 | 23.48% | 19.15 | 26.88% | 21.38 | 33.76% | 24.86 | 40.38% |
| Raw hide and skins, leather, furskins; travel goods; Handbags; articles of animal guts | 0 | 0.00% | 0.04 | 0.08% | 0 | 0.00% | 0.06 | 0.08% | 0.1 | 0.16% | 0.22 | 0.36% |
| Wood and articles of wood; cork and articles of cork; manufactures of straw; basketware and wickerwork | 0.38 | 1.00% | 1.4 | 2.89% | 2.66 | 5.94% | 3.22 | 4.52% | 2.17 | 3.43% | 1.61 | 2.62% |
| Pulp of wood or of other fibrous cellulosic material; waste and scrap of paper; paper and paperboard | 0.45 | 1.19% | 0.5 | 1.03% | 0.48 | 1.08% | 0.42 | 0.59% | 0.52 | 0.82% | 0.45 | 0.72% |
| Textiles and textile articles | 1.31 | 3.44% | 0.99 | 2.05% | 0.69 | 1.55% | 1.38 | 1.93% | 1.03 | 1.63% | 2.87 | 4.67% |
| Articles of stone, plaster, cement, asbestos, mica, ceramic, glass | 0.02 | 0.06% | 0.01 | 0.02% | 0.01 | 0.03% | 0.05 | 0.07% | 0.1 | 0.15% | 0.08 | 0.13% |
| Base metals and articles | 1.02 | 2.67% | 0.14 | 0.30% | 0.22 | 0.50% | 0.35 | 0.49% | 0.26 | 0.41% | 0.34 | 0.55% |
| Machinery and appliances; electrical equipment; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories | 0.91 | 2.38% | 0.48 | 0.99% | 0.92 | 2.05% | 0.5 | 0.71% | 0.53 | 0.84% | 0.55 | 0.89% |
| Miscellaneous manufactured articles | 0.03 | 0.09% | 0.05 | 0.10% | 0.01 | 0.03% | 0.65 | 0.91% | 0.08 | 0.12% | 0.23 | 0.37% |

Source: FBS, Pakistan

Table 2 Pakistan's Major Exports to Sri Lanka (US \$ Million)

| PRODUCT GROUP | Value 2003 | Share (%) | Value 2004 | Share (%) | Value 2005 | Share (%) | Value 2006 | Share (%) | Value 2007 | Share (%) | Value 2008 | Share (%) |
|--|-----------------------|----------------------|-----------------------|----------------------|-----------------------|----------------------|-----------------------|----------------------|-----------------------|----------------------|-----------------------|----------------------|
| Live animals; animals products | 7.37 | 9.70% | 6.03 | 6.16% | 5.35 | 3.43% | 5.44 | 3.42% | 6.01 | 2.99% | 6.03 | 2.81% |
| Vegetable products | 13.65 | 17.97% | 11.71 | 11.97% | 30.77 | 19.73% | 12.69 | 7.97% | 22.9 | 11.42% | 42.39 | 19.77% |
| Prepared foodstuffs; beverages, spirits and vinegar; tobacco and manufactured | 1.16 | 1.52% | 2.51 | 2.56% | 1.62 | 1.04% | 1 | 0.63% | 2.26 | 1.12% | 4.34 | 2.03% |
| Mineral products | 0.16 | 0.22% | 0.08 | 0.09% | 0.05 | 0.04% | 0.39 | 0.25% | 1.37 | 0.68% | 2.29 | 1.07% |
| Products of the chemical or allied industries. | 5.79 | 7.62% | 6.55 | 6.70% | 8.06 | 5.17% | 7.7 | 4.84% | 9.26 | 4.62% | 9.3 | 4.34% |
| Plastics and articles thereof; rubber and articles thereof | 3.25 | 4.28% | 4.13 | 4.23% | 7.7 | 4.94% | 6.8 | 4.27% | 3.01 | 1.50% | 3.08 | 1.44% |
| Raw hide and skins, leather, furskins; travel goods; Handbags; articles of animal guts | 1.07 | 1.40% | 0.68 | 0.69% | 0.62 | 0.40% | 1.07 | 0.67% | 0.59 | 0.29% | 1.31 | 0.61% |
| Pulp of wood or of other fibrous cellulosic material; waste and scrap of paper; paper and paperboard | 0.01 | 0.01% | 0.03 | 0.03% | 0.1 | 0.07% | 0.07 | 0.04% | 0.07 | 0.04% | 1.75 | 0.82% |
| Textiles and textile articles | 38.53 | 50.72% | 60.23 | 61.60% | 89.51 | 57.40% | 111.28 | 69.92% | 134.94 | 67.27% | 127.52 | 59.47% |
| Articles of stone, plaster, cement, asbestos, mica, ceramic, glass | 0.16 | 0.21% | 0.18 | 0.19% | 0.17 | 0.11% | 0.18 | 0.11% | 1.07 | 0.53% | 0.81 | 0.38% |
| Base metals and articles | 2.1 | 2.76% | 3.58 | 3.66% | 7.25 | 4.65% | 8.4 | 5.28% | 11.47 | 5.72% | 12.21 | 5.69% |
| Machinery and appliances; electrical equipment; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories | 0.65 | 0.86% | 0.57 | 0.58% | 1.14 | 0.73% | 0.59 | 0.37% | 3.81 | 1.90% | 2.08 | 0.97% |
| Vehicles, aircraft, vessels and transport equipment | 1.04 | 1.37% | 0.81 | 0.83% | 1.59 | 1.02% | 2.08 | 1.31% | 2.66 | 1.32% | 0.79 | 0.37% |

Source: FBS, Pakistan

Table 3 G-L Index of Intra-Industry Trade (2007)

| HS | Commodities | Sri Lanka | Pakistan |
|----|--|-----------|----------|
| 26 | Ores slag & ash | 0.128 | 0.978 |
| 08 | Ed. Fruits & nuts, peel of citrus/melons | 0.486 | 0.961 |
| 24 | Tobacco & manuf. Tobacco substitutes | 0.941 | 0.925 |
| 71 | Pearls, stones, prec. Metals, imitation jewellery, coins | 0.934 | 0.910 |
| 82 | Tools, spoons & forks of base metal | 0.308 | 0.910 |
| 56 | Wadding, felt & nonwovens, special yarns, twine, cordage, ropes & cables & articles | 0.607 | 0.895 |
| 65 | Headgear & other parts | 0.160 | 0.860 |
| 20 | Preps of vegs, fruits, nuts, etc. | 0.776 | 0.858 |
| 89 | Ships, boats, & floating structures | 0.282 | 0.857 |
| 55 | Man-made staple fibers, inc. Yarns etc. | 0.204 | 0.841 |
| 94 | Furniture, bedding, cushions, lamps & lighting fittings nesoi, illuminated signs, nameplates & the like, prefabricated buildings | 0.828 | 0.679 |
| 21 | Misc. Edible preparations | 0.853 | 0.525 |
| 68 | Articles of stone, plaster, cement, asbestos, mica or similar materials | 0.943 | 0.502 |
| 74 | Copper & articles thereof | 0.951 | 0.461 |
| 97 | Works of art. Collectors' pieces, antiques | 0.894 | 0.263 |
| 69 | Ceramic products | 0.881 | 0.206 |
| 23 | Residues from food industries, animal feed | 0.831 | 0.151 |
| 05 | Products of animal origin | 0.914 | 0.130 |

Table 4 Pakistan: Improvement in TSI 2003 – 2007

| HS | Commodities | TSI 2003 | TSI 2007 |
|----|--|----------|----------|
| 72 | Iron and steel | -1.000 | 0.776 |
| 06 | Live trees, plants, bulbs, roots, cut flowers etc | -1.000 | -0.545 |
| 76 | Aluminium and articles thereof | -1.000 | -0.670 |
| 25 | Salt, sulphur, earth, stone, plaster, lime and cement | -0.688 | 0.575 |
| 55 | Manmade staple fibres | -0.552 | 0.957 |
| 90 | Optical, photo, technical, medical, etc apparatus | -0.361 | 0.990 |
| 59 | Impregnated, coated or laminated textile fabric | -0.333 | 0.980 |
| 28 | Inorganic chemicals, precious metal compound, isotopes | 0.368 | 1.000 |
| 70 | Glass and glassware | 0.375 | 0.998 |

Table 5 Pakistan: Deterioration in TSI 2003 – 2007

| HS | Commodities | TSI 2003 | TSI 2007 |
|----|---|-------------------|----------|
| 35 | Albuminoids, modified starches, glues, enzymes | 1 ^{xxx1} | -0.962 |
| 19 | Cereal, flour, starch, milk preparations and products | 1 | -0.337 |
| 57 | Carpets and other textile floor coverings | 1 | -0.091 |
| 61 | Articles of apparel, accessories, knit or crochet | 1 | 0.895 |
| 63 | Other made textile articles, sets, worn clothing etc | 1 | 0.902 |
| 68 | Stone, plaster, cement, asbestos, mica, etc articles | 1 | 0.923 |
| 17 | Sugars and sugar confectionery | 1 | 0.984 |
| 95 | Toys, games, sports requisites | 1 | 0.986 |

| | | | |
|----|--|---|-------|
| 20 | Vegetable, fruit, nut, etc food preparations | 1 | 0.994 |
|----|--|---|-------|

Table 6 Aggregate effects of Full Trade Liberalization between Pakistan and Sri Lanka (% Change)

| Variables | Pakistan | Sri Lanka |
|------------------------|-----------------|------------------|
| Real GDP | 0.054 | -0.001 |
| Volume of imports | 0.260 | 0.471 |
| Volume of exports | 2.194 | 0.678 |
| Value of Exports | 0.076 | 0.182 |
| Value of Imports | 0.062 | 0.213 |
| Terms of trade | 0.041 | -0.013 |
| Household consumption | 0.058 | -0.011 |
| Investment | 0.012 | 0.036 |
| Government expenditure | 0.032 | -0.049 |

Table 7 Welfare Decomposition under full trade liberalization (US \$ Million)

| Region | Welfare | Allocative Efficiency | Terms of Trade | Investment |
|-------------------|----------------|------------------------------|-----------------------|-------------------|
| Pakistan | 10.76 | 2.61 | 6.83 | 1.32 |
| Sri Lanka | 8.59 | 8.74 | -0.97 | 0.82 |
| Rest of the World | -4.7 | 3.3 | -5.85 | -2.14 |

Table 8 Aggregate effects of Partial Trade Liberalization between Pakistan and Sri Lanka (% Change)

| Variables | Pakistan | Sri Lanka |
|------------------------|-----------------|------------------|
| Real GDP | 0.027 | 0.004 |
| Volume of imports | 0.147 | 0.254 |
| Volume of exports | 1.160 | 0.392 |
| Value of Exports | 0.043 | 0.097 |
| Value of Imports | 0.034 | 0.113 |
| Terms of trade | 0.021 | -0.004 |
| Household consumption | 0.030 | -0.001 |
| Investment | 0.006 | 0.020 |
| Government expenditure | 0.160 | -0.022 |

Table 9 Welfare Decomposition under partial trade liberalization (US \$ Million)

| Region | Welfare | Allocative Efficiency | Terms of Trade | Investment |
|---------------|----------------|------------------------------|-----------------------|-------------------|
| Pakistan | 5.63 | 1.44 | 3.51 | 0.68 |
| Sri Lanka | 4.72 | 4.62 | -0.35 | 0.46 |
| ROW | -2.6 | 1.69 | -3.16 | -1.13 |

Table 10 Impact of full trade liberalization on exports from Sri Lanka and Pakistan (% change)

| Sectors | Sri Lanka | Pakistan |
|-----------------------------|------------------|-----------------|
| Vegetable and Frutis | 0.939 | 73.336 |
| Grains Crops | 1.850 | 130.908 |
| Animal Products | 0.767 | 19.683 |
| Cattle | 1.245 | -0.778 |
| Livestock and Meat Products | 0.933 | -1.048 |

| | | |
|--------------------------------|---------|--------|
| Mining and Extraction | -0.519 | 0.003 |
| Beverages and Tobacco Products | 0.149 | 69.542 |
| Food Products | 1.058 | 26.916 |
| Processed Food | 0.924 | -0.274 |
| Textiles and Clothing | 88.626 | 3.231 |
| Wood Products | 124.261 | 3.301 |
| Paper products | -0.188 | 50.463 |
| Metal Products | 116.219 | -0.097 |
| Light Manufacturing | -0.205 | -0.057 |
| Chemical, Rubber and Plastic | 47.955 | 29.843 |
| Mineral Products | 100.650 | -0.079 |
| Heavy Manufacturing | -0.223 | 0.016 |
| Utilities and Construction | -0.265 | 0.139 |
| Transport and Communication | -0.256 | 0.076 |
| Other Services | -0.220 | 0.049 |

Table 11 Change in Exports as a Result of Concession List of Pakistan for Sri Lanka

| Exporter | Exports (\$ '000) | | (\$ '000) Change | Percentage Change |
|------------|-------------------|----------|---------------------|----------------------|
| | Before | After | | |
| Bangladesh | 126.55 | 121.81 | -4.74 | -3.7 |
| Myanmar | 1933.45 | 1912.69 | -20.76 | -1.1 |
| Sri Lanka | 28460.26 | 30966.96 | 2506.71 | 8.8 |
| China | 38239.02 | 38593.87 | 354.85 | 0.9 |
| Malaysia | 4694.58 | 4616.81 | -77.77 | -1.7 |
| Vietnam | 1063.44 | 1051.38 | -12.06 | -1.1 |
| Others | 111014 | 114259 | 3246 | 2.92 |

Table 12 Change in Exports as a Result of Concession List of Sri Lanka for Pakistan

| Exporter | Exports | | Change (\$ '000) |
|-----------|------------------|-----------------|---------------------|
| | Before (\$ '000) | After (\$ '000) | |
| Australia | 2321.45 | 2239.12 | -82.32 |
| China | 8317.13 | 8275.03 | -42.09 |
| India | 6145.88 | 6055.37 | -90.51 |
| Pakistan | 3393.16 | 4218.20 | 825.04 |
| Others | 44622 | 44457 | 165 |

Table 13 Potential Trade Effect as a Result of Concessions under PSFTA

| HS Code ^{xxxii} | Trade Total Effect | Trade Diversion Effect | Trade Creation Effect | Old Duty Rate | New Duty Rate |
|---------------------------------------|-----------------------|---------------------------|--------------------------|------------------|------------------|
| | (\$ '000) | | | (%) | |
| Result of concessions by Pakistan | 5,991.8 | 0.0 | 5,991.8 | 19.3 | 16.6 |
| Result of concessions by Sri Lanka | 444.763 | 0.0 | 444.763 | 13.83 | 12.84 |

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^{vi} See Thrasher and Gallagher (2008).

^{vii} Trade creation takes place when a member country of the regional agreement (Country A) increases its imports from its partner country (Country B) without a reduction in Country A’s imports from the rest of the world.

^{viii} Trade diversion takes place when imports from the rest of the world are replaced in Country A by more expensive imports from Country B (because goods from Country B do not pay tariff while goods from the rest of the world do).

^{ix} Transfers occur between member countries of the trade bloc because removal of tariffs between them means that exports obtain better prices in the partner’s markets (positive transfer), while the costs of imports net of tariffs increase (negative transfer).

^x This may not be regarded as a generalized result over time. For further details on Asian FTAs see Kawai and Wignaraja (2009).

^{xi} Most of the trade literature on quantification of trade barriers focuses on static effects. However the dynamic effects are of more importance in the context of trade agreements and their potential to bring about economic development. Some of the key dynamic effects include: economies of scale, technology transfer, foreign direct investment (and capital accumulation) and structural policy reforms (ADB 2008).

^{xii} Para tariffs refer to duties and taxes that are over and above the ‘border tariffs’. Normally, these include domestic taxes charged either by the Central Government or the State Governments

^{xiii} Asserts positive outcome if regional barriers be lowered to five percent along with relaxing of the otherwise restraining rules of origin.

^{xiv} Mohanty (2003) rejects the perception that South Asian countries compete amongst themselves to export similar kind of products to the world market. The study suggests that there is significant level of trade potential in the region to promote intra-regional trade.

^{xv} Raihan (2008) calculated the stretch of trade creation versus trade diversion in SAARC region under the context of SAFTA. For a discussion on how FTAs bring about trade creation or diversion see also Girma (2008).

^{xvi} Indo – Nepal treaty of trade.

^{xvii} To see how investment decision change after bilateral FTAs see Bukley (2007).

^{xviii} The legal information is drawn from the agreement document. See Ministry of Commerce – Pakistan website.

^{xix} Global Trade Analysis Project (GTAP).

^{xx} See: http://wits.worldbank.org/witsweb/download/docs/Using_SMART_in_WITS.pdf

^{xxi} The Commodity Trade (COMTRADE) Data Base contains exports and imports by commodity and partner country. The Data Base includes information for over 130 countries

^{xxii} The Trade Analysis Information System (TRAINS) contains information on imports, tariffs, para-tariffs and non-tariff measures for 119 countries.

^{xxiii} The WTO’s Integrated Data Base (IDB) contain imports by commodity and partner country and MFN applied tariffs for over 80 countries at a detailed commodity level.

^{xxiv} The Consolidated Tariff Schedule Data Base (CTS) contains WTO bound tariffs, Initial Negotiating Rights (INR) and other indicators.

^{xxv} We used the data base on Sri Lanka’s tradable goods maintained by UN Comtrade.

^{xxvi} An important thing to mention here is that this paper provides results on G-L index and TSI based on 2-digit analysis, which is relatively aggregate and can increase the likelihood of intra-industry trade.

^{xxvii} Adams et al. (2004) explain that the RCAs are conventionally sector specific and static. However RCAs can be made dynamic by taking in to account the comparisons over time and in terms of rates of change. The relatively rapid export growth of a specific item in comparison to global growth of that item represents dynamic competitiveness of a country (in a specific item).

^{xxviii} This position has been reported for 2009.

^{xxix} The equivalent variation resulting from a policy shock is the difference between the expenditure required to obtain the new level of utility at initial prices and initial expenditure (Berritella 2004).

^{xxx} In case two low-cost producers of a tradable good enter in to a FTA, there will be no trade diversion effect. See Raihan (2008).

^{xxxii} Only those items have been considered which had TSI equal to unity in 2003.

^{xxxii} Potential effects calculated on 2004 data from COMTRADE.