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Impact of Sensitive Lists under SAFTA: Quantitative Assessment using a Partial Equilibrium Modeling



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Abstract

The long list of product in sensitive list maintained by the member countries is one of the major weaknesses of South Asia Free Trade agreement for its effectiveness. Present study analyzes the impact of sensitive list (Phase II) under the SAFTA at disaggregate level (HS6 digit) by using partial equilibrium modeling. This paper more specifically looked at consumer surplus, trade creation, trade diversion as well as impact on tariff revenues among India, Pakistan, Sri Lanka and Bangladesh as a result of removal of sensitive list.

The study indicates positive effect on consumer surplus and trade flows; and negative effect on tariff revenues. RCA index indicated comparative advantage in textiles, machinery/ electric product, chemicals and allied products and metal products and different categories of textile products. The simulation results shows that aggregate total trade effect is US\$ 902.82 million and a surge in export of crude oil, technically specified natural rubber, cotton, smoked sheets, articles of apparel and clothing accessories etc. Finally, the study recommended that each country should reduce the sensitive list.

JEL Classification: - F13, F17

Keywords: SMART Model, Trade Creation, Trade Diversion, Welfare Effects

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I. Introduction

The trade theory argues that trade liberalisation enhances economic efficiency, promotes growth and helps to correct domestic market failures in imperfectly competitive markets (Dayal et al. 2008). Until 1951, total intra-regional trade in South Asia as a percentage of the region's total trade was in the double digits. However, as South Asia became progressively more closed relative to the world market and also by the political rivalry between India and Pakistan intensified over time, intra-regional trades fell to just two percent of the region's total trade by 1967. The share began to recover during the 1990s and by 2002 it rose to 4.4 percent (Baysan et al. 2006). During 2006, intra-regional export comprised US\$ 9.6 billion, which was 4.4 percent of export to the world; the respective figures for 2010 were US\$ 13.9 billion and 5.2 percent.

South Asian Free Trade Agreement (SAFTA) was signed by South Asian countries to promote trade but failed to show expected results so far. The poor trade performance of SAFTA is attributed to a number of aspects, including the slow pace of tariff liberalization programme, huge size of sensitive lists, and prevalence of non-tariff barriers. The total intra-regional import trade excluded from the tariff liberalization programme under SAFTA was 53 percent. India is restricted up to 52 percent of its total imports by value from SAFTA member under the sensitive list category (Weerakoon, 2010) It is argued that long sensitive list maintained by member countries is the major stumbling block for effective operation of SAFTA (Rahman et al. 2006)

This has created an important bottleneck towards the establishment of a South Asian free trade entity.

The Agreement on South Asian Free Trade Area (SAFTA) signed in January 2004, entered into force January 1, 2006, with the provisions of its trade liberalization program (TLP) scheduled to be fully implemented in January 2016. Whereas the agreement is an important step toward regional integration, each member country has announced a list of products that would be exempted from the tariff reductions. Government enacts these lists called "sensitive" lists as a mean to protect domestic industries from foreign competition and preserve tariff revenues. The lists represent between 13 and 25 percent of harmonized tariff lines across SAFTA countries, a large enough proportion of products to limit significantly the potential gains from the trade liberalization process (Bouet et al. 2010).

In this context, the main objective of this paper is to analyze the sensitive list of India, Bangladesh, Sri Lanka and Pakistan with a view to identify and select products for pruning. If member countries agree on short sensitive list or fully liberalised, SAFTA will be effective trade block from economic point of view. The present article examines the economic benefit of abolishing or pruning the sensitive list of SAFTA member counties from an importing country's point of view.

The article comprises of six sections. The second section presents a review of literature. The third section

presents a brief overview of India, Bangladesh, Sri Lanka and Pakistan's existing sensitive lists applicable on the least developed countries and non-least developed countries of SAFTA member. The fourth section reviews the methodology and data base used. Section five presents various simulation outcomes while section six provides concluding remarks. Finally, seventh section describes limitations of present paper.

2. Review of Selected Literature

The importance of trade for economic development has long been recognized by economists such as Ricardo, Smith, Mill, Marshall, Lewis among others. Trade has been described as the engine of growth by Nurske, (1961). There has been intense theoretical exposition by trade theories on the impact of regionalism and bilateralism on the international trade flows of commodities. The earliest work on the theory of regional integration was presented by Viner (1950) in his seminal work "The customs union issues" where he used two concepts namely 'trade creation' and 'trade diversion' to explain the economic outcome of the regional integration and demonstrated that trade diversion is harmful to world trade. Subsequently Meade (1955), Vanek (1965), Ohyama (1972) and Kemp & Wan (1976) made substantial improvement in the theory of regional integration (Ahmed, 2010). Economic theory suggests that the most desirable trading bloc is global. Such a bloc comprises countries with the most diverse range of comparative advantage, which affords the greatest scope for trade creation and least scope for trade diversion (Schott 1991). The

granting of trade preferences to developing countries was first publically promoted during the 1960s by development economist such as Raul Prebisch and Hans Singer.

Taneja et al. (2011) analysed the sensitive list of India under SAFTA by using pair wise revealed comparative advantage for India each of the exporting countries in South Asia and suggest that India should remove sensitive list gradually in phased manner over a period of three to five years. DeRosa et al. (1995) used the partial equilibrium and analysed that welfare gains were higher when all member countries of South Asia go for unilateral tariff liberalisation. Pursell (2004) analysed the cement industry between India and Bangladesh by used partial equilibrium and suggested that preferential liberalisation of cement industry between the two countries would lead to a substantial gain through increased competition within the regional market

Govindan (1996) computed trade creation and trade diversion effects of a SAPTA for food commodities using a partial equilibrium framework. The study found that such a preferential regime would expand intra-regional trade in food and thus generate welfare gains. Dayal et al. (2008) analyzed the revenue and welfare implications of SAFTA by partial equilibrium analysis. The result of SMART model indicated that revenue losses to all member countries of SAFTA. It was also indicated that revenue loss by countries can be recovered by increasing trade and welfare (consumer surplus).

Raihan (2009) pointed out that when full SAFTA liberalization takes place, trade creation effects for India were estimated at US\$ 143 million but after excluding the commodities in the sensitive list results in reduced trade creation of about US\$ 79 million. India's revenues forgone due to preferences to other South Asian countries were US\$ 139 million and Moazzem et al. (2013) suggested that pruning of sensitive list should be based on their competitiveness, trade potential and extent of revenue collected from products.

3. Sensitive list under SAFTA

The SAARC preferential trading arrangement (SAPTA) which came into being in 1993 marked the first major step towards regional economic integration in South Asia. Because it was built on a positive list, with products with high trade potential being outside the list, SAPTA failed to increase intra-regional trade significantly. SAPTA was amended by replacing the South Asia Free Trade agreement in 2004. SAFTA was theoretically better than SAPTA in that former was based on a negative list approach. According to the SAFTA accord India, Bangladesh, Sri Lanka and Pakistan are maintaining two sensitive lists. One list for least developed member countries and another one is for non-least developed countries. A broad objective to put these products in the sensitive list is to provide support to related domestic industries as well as ensure revenue earning at the import stage in the form of import duty, supplementary duty and other taxes.

Except for Bhutan, all other countries have reduced the number of products on their sensitive list. Both for least developed countries (LDCs) and non-least developed countries (NLDCs). India has reduced its sensitive list for LDCs from 480 items to 25 items and granted zero basic customs duty access to all other items. It has also decreased peak tariff rates to eight percent for NLDCs under SAFTA.

Pakistan has cut its sensitive list by 20 percent, which will allow duty –free import of more than 200 products from India, Bangladesh and Sri Lanka. After the removal of 233 tariff lines, Pakistan's sensitive list has shortened from 1169 to 936 tariff lines (see table 1). Despite improvement in 8 years of the establishment of SAFTA, South Asia is still considered to be the least integrated.

4. Research Methodology and Data Base

4.1 Theoretical Framework of SMART Model

The quantitative analyses in this paper are based on the SMART model and followed the procedure used by Ahmed (2011). SMART model is a computable partial equilibrium model and is widely used for the trade policy analysis. It is developed by World Bank/UNCTAD. The main advantage of the partial equilibrium approach to market access analysis is its minimal data requirement. In fact, the only required data for the trade flows, the trade policy (tariff), and a couple of behavioural parameters (Elasticity's). This can therefore make use of the rich WITS datasets which contain all of those. Another advantage (which follows

directly from the minimal data requirement) is that it permits an analysis at a fairly disaggregate level. This also resolves a number of aggregation biases.

The underlying analytics of the theory are clearly defined in Laird and Yeats (1986) and ECA (2000). The derivation begins with a basic trade model composed of simplified import demand and export supply functions and an equilibrating identity:

The importing country j (A) import demand function for commodity i produced in country k (B) is expressed in equation (1)

$$M_{ijk} = f(Y_j, P_{ij}, P_{ik}) \quad (1)$$

The k's partner country (exporting country, B) export supply function for commodity i may be expressed in equation (2)

$$X_{ijk} = f(P_{ikj}) \quad (2)$$

The Partial equilibrium position between two countries (A and B) is expressed in equation (3)

$$M_{ijk} = X_{ijk} \quad (3)$$

In a South Asia reduction of tariff under sensitive list trade environment, the domestic price of commodity i in j (A) from k (B) would change with change in an ad valorem tariff as follows:

$$P_{ijk} = P_{ikj}(1 + t_{ijk}) \quad (4)$$

The export revenue earned k (B) can be simplified as expressed equation (5) :

$$R_{ikj} = X_{ikj} \times P_{ikj} \quad (5)$$

4.1.1 Trade Creation

The trade creation effect is the increased demand in country j (A) for commodity i from exporting country k (B) resulting from the price decrease (Tariff reduced in this case)

To derive the trade creation formula, following Laird and Yeats (1986), the price equation 4 is totally differentiated to get

$$\partial P_{ijk} = P_{ikj} \partial t_{ijk} + (1 + t_{ijk}) \partial P_{ikj} \quad (6)$$

Equations (4) and (6) are then substituted into elasticity of import demand equation³ to get

$$\partial M_{ijk} / M_{ijk} = E_m \{ \partial t_{ijk} / (1 + t_{ijk}) + \partial P_{ikj} / P_{ikj} \} \quad (7)$$

The standard expression for the elasticity of export supply with respect to the world price can be rearranged as follows:

$$\partial P_{ikj} / P_{ikj} = (\partial X_{ikj} / X_{ikj}) / Ex \quad (8)$$

From expression (3) it follows that:

$$\partial M_{ijk} / M_{ijk} = \partial X_{ikj} / X_{ikj} \quad (9)$$

Substituting expression (9) into (8) and the result into (7) produces the expression that can be employed to compute the trade creation effect. From equation (3), this is equivalent to exporting country k's (B) growth of exports of commodity i to country j (A) . The expression for trade creation as expressed in equation (10).

³ The elasticity of import demand is $(\Delta M_{ijk} / M_{ijk}) = E_m (\Delta P_{ikj} / P_{ikj})$

$$TC_{ijk} = M_{ijk} \times E_m \times \partial t_{ijk} / \{(1+t_{ijk}) \times (1-(E_m/E_x))\} \quad (10)$$

4.1.2 Trade diversion

Trade diversion as opposed to trade creation can expand or contract trade globally. Trade diversion is the phenomenon that occurs in a trade preferences area for example whereby efficient producer from outside the preference area is displaced by less efficient producers in the preferential area. Consider the reduction of tariff on sensitive list between A and B for instance trade diversion would result if as a result of the establishment of the sensitive list more efficient suppliers from the rest of world into A are displaced by inefficient producers from the B. Trade diversion in SMART is also explained in laird and yeats (1986).

Define the elasticity of substitution the percentage change in relative share associated with a one percent change in the relative prices of the same product from alternative sources:

$$E_s = \frac{\Delta(\Sigma M_{ijk} / \Sigma M_{ijk}) / (\Sigma M_{ijk} / \Sigma M_{ijk})}{\Delta(P_{ijk} / P_{ijk}) / (P_{ijk} / P_{ijk})} \quad (11)$$

$$TD_{ijk} = \frac{M_{ijk}}{\Sigma M_{ijk}} \frac{\Sigma M_{ijk} \times \Sigma M_{ijk} \times E_s \times \frac{\Delta(P_{ijk} / P_{ijk})}{P_{ijk} / P_{ijk}}}{\Sigma M_{ijk} + \Sigma M_{ijk} + \Sigma M_{ijk} \times E_s \times \frac{\Delta(P_{ijk} / P_{ijk})}{P_{ijk} / P_{ijk}}}$$

Where k denotes imports from B and K denotes imports from the rest of the World. Equation (11) can be expanded and through substitutions and rearrangements be used to obtain the expression for trade diversion which is expressed as: (12)

The term in expression (12) for the relative price movement is specified in term of the movement of the tariff.

4.1.3 Total Trade Effect

The total trade effect is obtained simply by summing together the trade creation and trade diversion effects. Results can be summed up for groups of suppliers either for individual products or across product groups.

4.1.4 The Revenue effect

The quantification of the revenue effect in WITS/SMART model is simple. The tariff revenue is given as the product of the tariff rate and the value of imports. Taking expression (5) above the total differential of revenue with respect to export price and the volume of export:

$$\partial R_{ikj} = P_{ikj} \times \partial X_{ikj} + X_{ikj} \times \partial P_{ikj} \quad (13)$$

Dividing the Left-Hand side (LHS) of (13) with the LHS of expression (5) and right- hand side (RHS) of (13) with the RHS of (5) gives:

$$\partial R_{ikj} / R_{ikj} = (P_{ikj} \times \partial X_{ikj} + X_{ikj} \times \partial P_{ikj} / P_{ikj} \times X_{ikj}) \quad (14)$$

Reducing and substituting from expression 9 gives:

$$\partial R_{ikj} / R_{ikj} = (\partial M_{ikj} / M_{ikj}) + (\partial P_{ikj} / P_{ikj}) \quad (15)$$

4.1.5 The Welfare effect

The SMART model estimation of welfare effects is quite simple. This is unlike the equivalent variations measurement in general equilibrium models.

Essentially, the welfare effect is mainly ascribed to the consumer benefit in importing country as a result of lower import prices⁴. This allows them to substitute more expensive domestic or imported products with the cheaper imports that are affected by the relevant tariff reduction. Increased imports lead to a net welfare gain that can be thought as the increase in consumer welfare and is measured as follows:

$$w_{ijk} = 0.5(\partial t_{ijk} \times \partial M_{ijk}) \quad (16)$$

The coefficient of 0.5 captures the average between the ad valorem incidence of the trade barriers before and after their reduction. Equation (16) is assumed that the elasticity of export supply is infinite.

Where: M = Imports, X = Exports, P = Price, W = Welfare, Y = National Income, R = Revenue, t = tariff rate, Em = Elasticity of imports demand with respect to domestic price, Ex = elasticity of export supply with respect to export piece, Es = Elasticity of substitution with respect relative prices of the same product from different sources of supply, TC = Trade creation, TD = Trade diversion, 'i' = subscript denoting commodity, 'j' = (A) subscript denoting domestic/ Importing country data, 'k' = (B) subscript denoting foreign/ exporting country data (K is denote data for an alternative foreign/ exporting countries), ' ' = prefix denoting change.

⁴ As emphasized in Laired and Yeats (1986), in the case of pre-existing level of imports, there is no net welfare in the country as the tariff reduction simply means a reallocation/ transfer of revenue from the government to the consumers

4.2 Revealed comparative Advantage (RCA)

The analysis of RCA has been carried out for recent two year using World Integrated Trade Solution software jointly developed by World Bank and UNCTAD data were available (i.e., 2011 and 2012). Theoretically, if the value of RCA is greater than one, the product of the export country is considered to be competitive, basically RCA value gives only an indicative view, since competitiveness of a particular product depends on a number of other factors, including unit price of product, shipment cost, etc (Moazzem et al. 2013) .

4.3 Data sources

The study has been prepared using data from multiple sources. Trade data of India, Sri Lanka, Bangladesh and Pakistan are taken from UNCOMTRADE and tariff rate data from TRAINS database (MFN applied rates). This data has been extracted from WITS software. Most of our calculations are on the HS 6 -digit level.

5. SMART Simulation Outcomes

The results of the simulated scenarios pertain to the effect on trade, welfare and revenue in India, Pakistan, Bangladesh and Sri Lanka. The trade effect is the impact on the flow of imports. The welfare effect is the variation in the consumer surplus, given the increased quantities of goods consumed, and the revenue effect is the reduction in revenue collected from import tariffs. The trade effect is the combined result of trade creation and trade diversion. Trade creation stems from the direct increase in imports resulting from the reduction

in tariffs on imports (any South Asian countries) from the beneficiary country (any South Asian countries).

5.1 Sri Lanka's, Pakistan's and Bangladesh's Export as Result of India's Tariff Reduction

The table 2 shows the total trade effect, trade creation and trade diversion effect (see appendix). The impact of tariff reduction (sensitive product under SAFTA) in India on imports from Sri Lanka would generate an increase in imports equivalent to US\$ 33.97 million, implying the trade creation of US\$20.65 million and US\$13.31 million in trade diversion. The first 25 tariff lines on the basis of total trade effects in ascending order are presented in table 2. The maximum gain of Sri Lanka in HS product at 6 digit level is 151110 (crude oil), 400122 (technically specified natural rubber (TSNR), 620342 (of cotton), 400121 (smoked sheets), 392620 (articles of apparel and clothing accessories (including gloves, mittens and mitts), and 620462 (of cotton women or girl suits etc). In case of Pakistan total trade effect is US\$ 5.52 million out of this trade creation is US\$ 4.24 million and trade diversion is US\$ 1.27 million. The tariff line on the basis of total trade effects in ascending order are 611692 (of cotton gloves mittens and mitts knitted), 220710 (un denatured ethyl alcohol of an alcoholic strength by volume of 80 % vol. or higher), 620462 (of cotton), 551311 (of polyester staple fibres, plain weave), 392020 (of polymers of propylene) and 600621 (unbleached or bleached), as result of India's 100 % tariff reduction on Imports from Pakistan. India's sensitive list for Bangladesh is 25 products out of these commodities Bangladesh exported

one commodity HS 240120 (tobacco partly or wholly stemmed or stripped). The total trade effect will be US\$ 0.07 million.

5.1.2 Sri Lanka, Pakistan and Bangladesh's Export Interest in India:

The 25 HS products listed in table 3 (see appendix) capture 95.55% of Sri Lanka's export gains. The maximum gain is in HS code 15110 (crude oil), 400122 (technically specified natural rubber (TSNR), 620342 (of cotton), 400121 (smoked sheets), 392620 (articles of apparel and clothing accessories (including gloves, mittens and mitts), and 620462 (of cotton). The top 25 products capture 72.13% in case of Pakistan. The maximum gain is in HS code 252390 (other hydraulic cements), 611692 (of cotton), 220710 (undenatured ethyl alcohol of an alcoholic strength by volume of 80 % vol. or higher), 620462 (of cotton), 551311 (of polyester staple fibres, plain weave) and 392020 (of polymers of propylene). The maximum gains are concentrated in high tariff products in India's market. The top product of Bangladesh with maximum gain is in HS 240120 (tobacco partly or wholly stemmed or stripped).

5.1.3 Consumer Surplus gain and Revenue loss as a result of tariff reduction

SMART simulation results reveal positive consumer's surplus gains for India. India's consumer surplus will be increasing by US\$ 4.72 million with Sri Lanka, US\$1.48 million in Pakistan and US\$ 0.02 million with Bangladesh. Tariff revenue foregone due to Sri Lanka and Pakistan's export not being levied duties. The total

tariff revenue loss is US\$ -20.30 million with Sri Lanka, US\$-1.60 million with Pakistan and US\$ -0.002 million with Bangladesh.

5.2.1 India, Bangladesh and Sri Lanka's export as result of Pakistan's Tariff Reduction

The table 4 shows the total trade effect, trade creation and trade diversion effect (see appendix). The impact of tariff reduction (sensitive product under SAFTA) by Pakistan on imports from India, Sri Lanka and Bangladesh is US\$ 46 million, US\$ 4.8 million and US\$ 2.12 million respectively. If we see the total trade creation and diversion, Pakistan trade diversion with India is US\$ 21.57 million and trade creation is US\$25.09 million. The total trade effects in ascending order of first 25 tariff lines are presented in table 4.

The maximum gain of India in HS product at 6 digit level is 320416 (reactive dyes and preparations based thereon), 340211(anionic), 90420 (fruits of the genus capsicum or of the genus pimentel, dried or crushed or ground), 401120 (of a kind used on buses or lorries), 841989 (other machinery, plant or laboratory equipment), 293359 (other heterocyclic compounds with nitrogen), 320412 (acid dyes, whether or not prime allied, and preparations based thereon; mordant dyes and preparations based thereon), 401161(of a kind used on agricultural or forestry vehicles and machines) and 294190 (other labels badges of textile materials not embroidered). , with Sri Lanka 140490 (other), 90240 (couscous) , 441112 (giber board of wood or other ligneous materials) , 580790 (other),401511(surgical) ,

690890 (other), 401120 (of a kind used on buses or lorries), with Bangladesh 90240 (other black tea (fermented) and other partly fermented tea), 90220 (other green tea (not fermented), 140490 (other vegetable products) , 854590 (other carbon electrodes carbon brushes) , 610990 (of other textile materials) and 650590 (other) etc.

5.2.2 India, Sri Lanka and Bangladesh's Export Interest in Pakistan

It is clear from the table 5 (see appendix) shows that India's export interest in Pakistan. The value of export in the Pakistan market is US\$ 44.40 million. The study has taken first 25 products for this analysis these contributed near about 67.23% in total export of India to Pakistan. The most benefited product is as like 320416 (reactive dyes and preparations based thereon), 340211(anionic), 90240 (other black tea (fermented) and other partly fermented tea), 401120 (of a kind used on buses or lorries), 841989 (other apparatus for treatment of materials by temperature), 293359 (other other nitrogen compounds containing a pyramiding ring), and 320412 (acid dyes, whether or not prime tallised, and preparations based thereon; mordant dyes and preparations based thereon).

In the same way, Sri Lanka's export interest in Pakistan is near about US\$4.82 million. Change in the export revenue in the first 25 tariff lines is 96.86%. If we take account product wise, the most benefited product are HS code 140490 (other vegetable products), 90240 (couscous), 441112 (giber board of wood or other

ligneous materials) 580790 (other labels, badges of textile materials, not embroidered), 401511(surgical), 690890 (other), 401120 (of a kind used on buses or lorries) and 760719 (other aluminium foil, rolled but not further worked of a thickness not exceeding 0.15 mm).

It is also interesting to know that Bangladesh export interest in Pakistan the total change in export revenue is near about US\$ 2 million. Share of first 25 tariff lines in change in export revenue is 97.73 percent of total. The product wise analysis shows that export gains lies in 90240 (other black tea (fermented) and other partly fermented tea), 90220 (other green tea (not fermented), 140490 (other vegetable products), 854590 (other lamp carbons, battery carbons), 610990 (of other textile materials) and 731815 (other screws and bolts, whether or not with their nuts or washers)

5.2.3 Consumer Surplus gains and Revenue loss as a result of tariff reduction

In case Pakistan removes its sensitive list with India, Bangladesh and Sri Lanka from SAFTA, the consumer surplus gains for Pakistan is US\$ 3.01 million, US\$0.13 million and US\$0.35 million respectively. Pakistan's revenue loss is US\$ 64.57 million with India, US\$ 2.81 million with Sri Lanka and US\$0.75 million with Bangladesh due to tariff elimination by Pakistan.

5.3.1 India, Pakistan and Sri Lanka's export as result of Bangladesh's Tariff Reduction

The table 6 (see appendix) shows that Bangladesh tariff reduction on the sensitive list under SAFTA results in

the total trade creation, diversion and total trade effect with India. Total trade effect is US\$ 318.67 million, out of this trade creation is US\$ 219.87 million and total trade diversion effect is equal to US\$ 98.80 million. If we see the product wise gain of the trade, maximum trade gains lies in HS code 350691 (adhesives based on polymers of headings 39.01 to 39.13 or on rubber), 271011 (light oils and preparations), 252310 (cement clinkers), 520942 (denim), 520521 (measuring 714.29 de citex or more (not exceeding 14 metric number), 871120 (with reciprocating internal combustion piston engine of a cylinder capacity exceeding 50 cc but not exceeding 250 cc) and 870422 (g.v.w. exceeding 5 tonnes but not exceeding 20 tonnes).

Bangladesh total trade effect with Sri Lanka is US\$ 2.56 million, out of this US\$ 1.39 million is trade creation and US\$ 1.17 million is trade diversion and most benefited products are HS code 350621 (products suitable for use as glues), 621710 (accessories), 151319 (other coconut oil and its fractions), 520931 (plain weave), 520842 (plain weave, weighing more than 100 g/m²), 690890 (other glazed ceramic flags), and 621790 (parts).

Bangladesh total trade effect with Pakistan is US\$ 32.25 million, out of this US\$ 17.85 million and trade diversion is US\$ 14.39 million. The most benefited product is HS code 551311(of polyester staple fibres, plain weave), 520942 (denim), 521142(denim), 392330 (carboys, bottles, flasks and similar articles), 520521 (measuring 714.29 deci tex or more (not exceeding 14

metric number) and 871120 (with reciprocating internal combustion piston engine of a cylinder capacity exceeding 50 cc but not exceeding 250 cc).

5.3.2 India, Sri Lanka and Pakistan's Export Interest in Bangladesh

It is clear from the table 7 that India's export interest in Bangladesh market is US\$ 314.07 million. The first 25 product contributed nearly to 61.64% in total export of India to Bangladesh. The most benefited products are HS code 350691 (adhesives based on polymers of headings 39.01 to 39.13 or on rubber), 271011 (light oils and preparations), 252310 (cement clinkers), 520942 (denim), 520521 (measuring 714.29 dec itex or more (not exceeding 14 metric number), 871120 (with reciprocating internal combustion piston engine of a cylinder capacity exceeding 50 cc but not exceeding 250 cc), and 870422 (g.v.w. exceeding 5 tonnes but not exceeding 20 tonnes).

Examining the Pakistan's export interest in Bangladesh it is near about US\$32.91 million. If we take account product wise, the most benefited product are HS code 551311 (of polyester staple fibres, plain weave), 520942 (denim), 521142 (denim), 392330 (carboys, bottles, flasks and similar articles), 520551 (cotton, not carded), 871120 (with reciprocating internal combustion piston engine of a cylinder capacity exceeding 50 cc but not exceeding 250 cc), 520849 (other fabrics) and 520811 (plain weave, weighing not more than 100 g/m²)

It is also interesting to know that Sri Lanka's export interest in Bangladesh market is near about US\$ 2.56

million. Share of first 25 tariff lines in change in export value is 93.63% of total. The product wise analysis shows significant gains in 350691 (adhesives based on polymers of headings 39.01 to 39.13 or on rubber), 621710 (accessories), 151319 (other), 520931 (plain weave), 520842 (plain weave, weighing more than 100 g/m²), 690890 (other), 621790 (Parts) and 350790 (other).

5.3.3 Consumer Surplus gains and Revenue loss as a result of tariff reduction

As a result of tariff removal from sensitive list by Bangladesh, the consumer surplus gains for Bangladesh is US\$ 88.99 million with India, US\$3.23 million with Pakistan and US\$ 0.31 million with Sri Lanka. Bangladesh's revenue loss is US\$ -133.35 million with India, US\$ -20.94 million with Pakistan and US \$ -1.25 million with Sri Lanka.

5.4.1 India, Pakistan and Bangladesh's export as result of Sri Lanka's Tariff Reduction

The table 8 (see appendix) shows that Sri Lanka's tariff reduction on the sensitive list under SAFTA results in the total trade creation, diversion and total trade effect. Total trade effect is US\$ 491.70 million, out of this trade creation is US\$ 410.24 million and total trade diversion effect is equal to US\$ 81.46 million. If we see the product wise gain of the trade, it is in HS code 271019 (other petroleum oils and oils obtained from bituminous minerals.), 271011 (light oils and preparations), 90240 (other black tea (fermented) and other partly fermented tea), 870321 (of a cylinder

capacity not exceeding 1,000 cc), and 90240 (other black tea (fermented) and other partly fermented tea).

Sri Lanka's total trade effect with Pakistan is US\$ 5.39 million, out of this US\$ 3.04 million is trade creation and US\$ 2.34 million is trade diversion and most benefited products are HS code 30559 (other fish, salted but not dried or smoked), 392330 (carboys, bottles, flasks and similar articles), 30374 mackerel (*scomber scombrus*, *scomber australasicus*, *Scomber japonicus*) and 480519 (other test liner recycled liner board).

Sri Lanka's total trade effect with Bangladesh is US\$ 1.09 million out of this US\$ 0.46 million and trade diversion is US\$.062 million. The most benefited products are HS code 721049 (other), 392620 (articles of apparel and clothing accessories (including gloves, mittens and mitts), 90920 (seeds of coriander) and 482110 (printed).

5.4.2 India, Bangladesh and Pakistan's Export Interest in Sri Lanka

It is clear from the table 9 (see appendix) shows that India's export interest in Sri Lankan market is US\$ 491.70 million. The study has taken first 25 products for this analysis. These products contributed nearly of 91.26% of total export of India to Sri Lanka. The most benefited products are HS code 271019 (other), 271011(light oils and preparations), 90420 (derivatives containing only nitro or only nitroso groups), 870321 (of a cylinder capacity not exceeding 1,000 cc), 90240 (other black tea (fermented) and other partly fermented

tea) and 870210 (with compression-ignition internal combustion piston engine (diesel or semi-diesel)).

Examining Pakistan's export interest in Sri Lankan market, it is near about US\$5.39 million. If we take account product wise, the most benefited product are HS code 30559 (other), 392330 (carboys, bottles, flasks and similar articles), 30374 (mackerel (*Scomber scombrus*, *Scomber australasicus*, *Scomber japonicus*), 480519 (other), and 411200 (leather further prepared after tanning or crusting, including parchment dressed leather, of sheep or lamb, without wool on, whether or not split, other than leather of heading 41.14).

It is also interesting to recognise that Bangladesh's export interest in Sri Lankan market is near about US\$ 1.95 million. The product wise analysis shows that 721049 (other), 392620 (articles of apparel and clothing accessories (including gloves, mittens and mitts), 90920 (seeds of coriander), 482110 (printed) and 560790 (other) are most benefit product.

5.4.3 Consumer Surplus gains and revenue loss as a result of tariff reduction

As a result of tariff liberalisation of sensitive list, consumer surplus gains for Sri Lanka US\$ 25.55 million with India, US\$ 0.33 million with Pakistan and US\$ 0.067 million with Bangladesh. As a tariff liberalisation, Sri Lanka's revenue loss is US\$ -166.87 million with India, US\$ -2.61 million with Pakistan and -1.25 million with Bangladesh.

5.5 Revealed Comparative Index

The present paper has also calculated RCA indices to capture relative competitiveness. The use of RCA captures competitiveness of a country's export products via each other in the international market. This is very much in line with the Ricardian concept of comparative advantage which proposes that by producing the good in which it is relatively efficient and importing the other good, each country can gain. Export competitiveness of South Asian countries in term of RCA in India, Bangladesh, Pakistan and Sri Lanka. India has the 19 product has a comparative advantage with Pakistan, 17 product with Bangladesh, and 11 product with Sri Lanka (out of top 25⁵) (see table 10). Pakistan has comparative advantage 19 products (out of top 25 products) in India's sensitive lists, 20 with Bangladesh and 10 products with Sri Lanka. Sri Lanka has the comparative advantage of 19 products out of top 25 with Indian sensitive list and 13 with Pakistan and 14 with Bangladesh. Bangladesh has the comparative advantage of 14 products with Pakistan sensitive list and 12 products with Sri Lanka and Bangladesh has no comparative advantage in Indian sensitive list.

6. Conclusion

The paper investigated the impact of sensitive list (Phase II) under the SAFTA at disaggregate level (HS 6 digit) by using partial equilibrium modelling and RCA index. The results indicate a positive effect on consumer surplus and trade; though negative effect on

tariff revenues of South Asian countries (India, Bangladesh, Pakistan and Sri Lanka). The results shows that total trade effect will be near about one billion dollar. The most benefited product will be crude oil, natural rubber, cotton, textile, polyester staple fibers, plain weave, chemicals, electric products, and metal products.

Finally, the study suggested that major economies of South Asia should remove the item under the sensitive list and make South Asia a more trade integrated bloc. It is safe to argue that removal of tariff from sensitive list of SAFTA member countries will enhance trade flows and strengthen trade integration of this region. It is expected that trade liberalisation process will enhance growth rate by efficient utilisation of resources and trade induced learning and technology spill over's (Chuang, 2002 and Ismail, 2012).

7. Limitations

The assessment in this paper is made on what is known as 'ex ante' basis. Therefore the estimated effects are predictions and no efforts have been made to compare with actual 'ex post,' outcomes. Second, in this paper only tariff barriers have been considered as the factor determining trade flows. It is important to keep in mind that in many cases non-tariff barriers can be an important determinant of trade flows. Third, the empirical model used in this paper is partial in nature, therefore the general equilibrium effect could not be captured, despite the use of highly disaggregated data

⁵These top product cover the 90 to 95 percent of total trade

used here which are usually not possible with general equilibrium frameworks.

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Appendix

Table 1, Sensitive lists under SAFTA (Phase II)

Country	Number of sensitive products in the initial list	Number of sensitive products in the revised lists
Afghanistan	1072	850
Bangladesh	1233 (LDCs), 1241 (NLDCs)	987 (LDCs), 993 (NLDCs)
Bhutan	150	150
India	480 (LDCs); 868 (NLDCs)	25 (LDCs); 695 (NLDCs)
Maldives	681	152
Nepal	1257 (LDCs), 1295 (NLDCs)	998 (LDCs); 1036 (NLDCs)
Pakistan	1169	936
Sri Lanka	1042	845 (LDCs); 906 (NLDCs)

Source: SAARC Secretariat (10/12/2013)

Table 2, Sri Lanka's and Pakistan's Export as Result of India's Tariff Reduction (Total trade effect)

Sri Lanka's Export as Result of India's Tariff Reduction				Pakistan Export as Result of India's Tariff Reduction			
HS Code	Trade Total Effect (\$000)TTE	Trade Creation Effect(\$000)	Trade Diversion Effect (\$000)	HS Code	Trade Total Effect (\$000)TTE	Trade Creation Effect(\$000)	Trade Diversion Effect (\$000)
Total	33971.75	20655.60	13316.16	Total	5520.03	4243.32	1276.72
151110	10562.08	3117.50	7444.58	611692	896.74	883.77	12.98
400122	5113.38	3742.22	1371.16	220710	758.75	723.99	34.76
620342	4076.93	3956.42	120.51	620462	491.80	488.57	3.22
400121	3785.75	1609.59	2176.16	551311	485.24	476.44	8.80
392620	2682.92	2616.20	66.72	392020	360.68	91.69	268.99
620462	2033.44	2020.28	13.17	600621	179.58	176.67	2.91
610821	828.38	806.30	22.08	120740	148.98	127.69	21.29
151790	573.92	278.10	295.82	392112	124.91	90.72	34.19
400821	427.78	253.65	174.13	100610	104.54	14.86	89.68
482110	401.96	14.35	387.61	392410	92.38	65.11	27.27
611790	322.18	313.41	8.77	392390	88.58	31.45	57.13
481710	238.03	225.57	12.46	570190	79.65	75.61	4.04
611090	209.72	207.61	2.11	392330	68.16	61.87	6.29
621210	192.72	80.04	112.68	611610	56.49	42.99	13.50
850440	174.20	72.82	101.38	570110	55.78	24.88	30.91
610990	111.32	45.15	66.17	70320	49.17	19.50	29.67
610620	110.55	109.03	1.52	610419	40.73	38.49	2.24
392330	109.92	99.80	10.12	392690	37.10	20.55	16.56
854420	102.31	31.57	70.74	520511	36.93	32.90	4.03
600621	68.09	66.96	1.13	120799	35.88	18.21	17.67
610910	67.15	21.11	46.03	251512	32.33	20.59	11.74
620332	65.63	63.54	2.09	590390	28.57	14.79	13.78
621710	64.85	20.56	44.29	621132	28.21	9.15	19.06
401693	59.85	11.26	48.59	551341	25.42	24.36	1.06
391590	50.71	22.22	28.49	621600	21.96	17.85	4.11

Source: WITS (access date 12/10/2013)

Table 3, Sri Lanka and Pakistan's Export Interest in India

Sri Lanka's Export Interest in India				Pakistan's Export Interest in India			
Tariff Line Code	Exports	Exports	Exports	Tariff Line Code	Exports	Exports	Exports
	Before (\$'000)	After (\$'000)	Change in Export Revenue (\$'000)		Before (\$'000)	After (\$'000)	Change in Export Revenue (\$'000)
151110	7726.57	18288.65	10562.08	252390	903.43	1883.28	979.85
400122	6668.87	11782.24	5113.38	611692	115.17	1011.92	896.74
620342	995.72	5072.64	4076.93	220710	38.22	796.96	758.75
400121	10735.93	14521.68	3785.75	620462	23.71	515.51	491.80
392620	531.89	3214.81	2682.92	551311	67.18	552.42	485.24
620462	98.04	2131.49	2033.44	392020	2020.40	2381.08	360.68
610821	322.59	1150.98	828.38	600621	22.09	201.67	179.58
400821	1412.85	1840.63	427.78	120740	63.16	212.14	148.98
482110	3016.91	3418.87	401.96	392112	255.15	380.06	124.91
611790	67.69	389.86	322.18	740819	943.66	1061.87	118.22
481710	168.53	406.56	238.03	100610	40.78	145.33	104.54
611090	16.95	226.67	209.72	392410	201.89	294.27	92.38
621210	1004.59	1197.31	192.72	392390	426.48	515.06	88.58
850440	848.40	1022.60	174.20	640320	7.12	90.92	83.81
610990	529.84	641.16	111.32	570190	29.87	109.53	79.65
610620	11.30	121.85	110.55	392330	46.20	114.36	68.16
392330	74.52	184.44	109.92	611610	106.81	163.30	56.49
854420	1253.55	1355.86	102.31	570110	333.58	389.36	55.78
600621	8.37	76.46	68.09	80620	42.09	93.58	51.49
610910	349.17	416.31	67.15	70320	32.90	82.07	49.17
620332	15.56	81.18	65.63	71220	13.75	57.64	43.89
621710	351.98	416.82	64.85	610419	64.05	104.78	40.73
401693	703.72	763.58	59.85	392690	121.44	158.54	37.10
391590	257.68	308.39	50.71	520511	521.26	558.19	36.93
620452	15.16	65.82	50.66	120799	52.07	87.95	35.88
Change in Export Revenue in First 25 Tariff lines			31910.49	Change in Export Revenue in First 25 Tariff lines			5469.32
Total			33397.83	Total			7582.31
% of total			95.55	% of total			72.13

Source: WITS (access date 14/10/2013)

Table 4, India, Bangladesh and Sri Lanka's Export as Result of Pakistan's Tariff Reduction

India's Export as Result of Pakistan's Tariff Reduction				Sri Lanka's Export as Result of Pakistan's Tariff Reduction				Bangladesh's Export as Result of Pakistan's Tariff Reduction			
HS Code	Trade Total	Trade Creation	Trade Diversion	HS Code	Trade Total	Trade Creation	Trade Diversion	HS Code	Trade Total	Trade Creation	Trade Diversion

	Effect (\$000)TTE	Effect(\$000)	Effect (\$000)		Effect (\$000)TTE	Effect(\$000)	Effect (\$000)		Effect (\$000)TTE	Effect(\$000)	Effect (\$000)
Total	46666.63	25095.62	21570.99	Total	4820.30	2608.31	2211.98	Total	2129.53	1247.95	881.56
320416	5800.39	3577.29	2223.10	140490	1954.67	1053.41	901.26	90240	1284.54	748.93	535.61
340211	4946.28	2784.02	2162.26	90240	1550.37	905.21	645.16	90220	205.64	189.53	16.11
90240	2633.83	1546.83	1086.99	441112	440.38	254.75	185.62	140490	114.50	43.51	71.00
401120	2329.65	831.78	1497.87	580790	158.00	48.76	109.24	854590	82.23	53.66	28.56
841989	2016.38	1337.95	678.43	401511	111.29	57.73	53.57	610990	70.54	29.27	41.28
293359	1810.23	1220.73	589.50	690890	82.85	53.00	29.85	650590	58.97	35.55	23.42
320412	1167.50	743.52	423.98	401120	72.14	23.96	48.17	392690	43.42	19.72	23.70
401161	1123.86	562.94	560.92	760719	71.49	28.97	42.52	482190	30.35	10.47	19.87
294190	987.95	300.99	686.96	854449	31.19	9.76	21.43	731815	27.26	7.51	19.76
292429	892.76	453.33	439.43	441114	28.58	16.37	12.21	531090	26.00	24.49	1.51
840211	762.68	728.15	34.53	401161	28.26	9.61	18.65	392329	13.66	3.96	9.69
320417	747.36	217.33	530.03	871620	21.18	21.18	0.00	580790	13.49	4.05	9.45
293500	745.92	388.31	357.61	620349	14.43	7.19	7.24	610910	12.88	3.99	8.88
140490	736.12	300.37	435.75	610990	14.39	5.62	8.78	300490	10.95	3.57	7.37
300490	479.33	157.31	322.02	640319	12.27	4.85	7.43	611120	10.85	3.42	7.43
481910	422.78	362.05	60.74	401199	10.93	3.87	7.06	620342	10.00	5.95	4.05
320420	354.40	210.56	143.84	320417	9.86	2.59	7.27	611090	8.46	6.33	2.13
294110	327.37	142.92	184.45	441113	9.34	5.36	3.98	620520	8.13	5.59	2.54
291639	235.45	104.69	130.76	691110	7.50	4.23	3.27	630510	6.88	3.24	3.65
401390	230.53	126.12	104.41	401140	7.38	3.38	4.01	481910	6.86	5.86	1.01
320411	227.45	93.71	133.73	732690	7.07	2.56	4.51	620920	5.03	1.53	3.51
390319	226.52	132.02	94.50	481910	6.95	5.93	1.02	401320	4.39	1.42	2.96
40210	223.03	77.34	145.69	841869	6.62	2.56	4.07	620462	4.37	3.43	0.94
320290	222.08	92.26	129.82	853669	6.14	1.44	4.70	611490	4.27	1.28	2.99
340213	205.29	96.50	108.79	330510	5.68	2.03	3.65	481920	4.09	2.29	1.80

Source: WITS (16/10 /2013)

Table 5, India, Sri Lanka and Bangladesh Export Interest in Pakistan

India's Export Interest in Pakistan				Sri Lanka's Export Interest in Pakistan				Bangladesh 's Export Interest in Pakistan			
Tariff Line Code	Exports	Exports	Exports	Tariff Line Code	Exports	Exports	Exports	Tariff Line Code	Exports	Exports	Exports
	Before (\$'000)	After (\$'000)	Change in Export Revenue (\$'000)		Before (\$'000)	After (\$'000)	Change in Export Revenue (\$'000)		Before (\$'000)	After (\$'000)	Change in Export Revenue (\$'000)
320416	16650.75	22451.13	5800.39	140490	7259.62	9214.29	1954.67	90240	3991.99	5276.53	1284.54
340211	17078.71	22024.99	4946.28	90240	4824.97	6375.34	1550.37	90220	126.21	331.85	205.64
90240	8244.99	10878.81	2633.83	441112	763.56	1203.94	440.38	140490	299.83	414.33	114.50
401120	10063.15	12392.79	2329.65	580790	380.79	538.79	158.00	854590	174.23	256.46	82.23
841989	2762.76	4779.14	2016.38	401511	224.92	336.21	111.29	610990	156.07	226.61	70.54
293359	5735.15	7545.38	1810.23	690890	76.89	159.74	82.85	731815	79.56	106.82	27.26
320412	4016.26	5183.76	1167.50	401120	289.92	362.06	72.14	531090	13.32	39.32	26.00
401161	4405.89	5529.75	1123.86	760719	279.18	350.66	71.49	392329	32.38	46.04	13.66
294190	4842.64	5830.59	987.95	854449	85.93	117.12	31.19	580790	31.61	45.10	13.49

292429	4530.24	5423.00	892.76	441114	49.08	77.66	28.58	610910	30.01	42.88	12.88
840211	166.03	928.70	762.68	401161	75.18	103.44	28.26	300490	40.96	51.91	10.95
320417	3119.41	3866.77	747.36	871620	39.57	60.75	21.18	611120	25.59	36.44	10.85
293500	2538.35	3284.27	745.92	620349	23.90	38.33	14.43	620342	14.10	24.10	10.00
140490	2070.03	2806.15	736.12	610990	29.94	44.34	14.39	611090	7.04	15.50	8.46
300490	1803.08	2282.40	479.33	640319	24.68	36.95	12.27	620520	11.17	19.29	8.13
481910	207.18	629.96	422.78	401199	52.90	63.83	10.93	630510	14.39	21.27	6.88
320420	667.27	1021.67	354.40	320417	37.20	47.05	9.86	481910	3.35	10.22	6.86
294110	727.83	1055.20	327.37	441113	16.07	25.42	9.34	620920	12.69	17.72	5.03
291639	1071.11	1306.56	235.45	691110	8.34	15.83	7.50	401320	9.63	14.02	4.39
401390	711.69	942.22	230.53	401140	13.27	20.65	7.38	620462	3.19	7.56	4.37
320411	716.15	943.59	227.45	732690	19.61	26.68	7.07	611490	10.08	14.36	4.27
390319	707.38	933.89	226.52	481910	3.39	10.34	6.95	481920	6.04	10.13	4.09
40210	494.19	717.22	223.03	841869	20.81	27.44	6.62	611020	9.32	13.26	3.94
320290	713.51	935.59	222.08	853669	28.52	34.66	6.14	620349	6.05	9.69	3.64
340213	444.61	649.90	205.29	330510	9.39	15.07	5.68	620341	3.70	6.53	2.83
Change in Export Revenue in First 25 Tariff lines			29855.11	Change in Export Revenue in First 25 Tariff Lines			4668.95	Change in Export Revenue in First 25 Tariff lines			1945.44
Total			44406.58	Total			4820.30	Total			1990.69
% of total			67.23	% of total			96.86	% of Total			97.73

Source: WITS (access date 18/10/2014)

Table 6, India, Pakistan and Sri Lanka's Export as Result of Bangladesh's Tariff Reduction

India's Export as Result of Bangladesh's Tariff Reduction				Sri Lanka's Export as Result of Bangladesh's Tariff Reduction				Pakistan's Export as Result of Bangladesh's Tariff Reduction			
HS Code	Trade Total Effect (\$000)TTE	Trade Creation Effect(\$000)	Trade Diversion Effect (\$000)	HS Code	Trade Total Effect (\$000)TTE	Trade Creation Effect(\$000)	Trade Diversion Effect (\$000)	HS Code	Trade Total Effect (\$000)TTE	Trade Creation Effect(\$000)	Trade Diversion Effect (\$000)
Total	318675.52	219873.13	98802.42	Total	2568.53	1398.93	1169.60	Total	32250.96	17852.85	14398.12
350691	53835.98	53617.60	218.39	350691	525.41	521.18	4.23	551311	5549.36	3916.65	1632.71
271011	32361.37	23493.97	8867.40	621710	502.24	194.49	307.75	520942	2481.03	1142.33	1338.70
252310	31824.26	15996.61	15827.64	151319	436.91	223.41	213.50	521142	1925.68	841.28	1084.40
520942	15285.08	9269.77	6015.31	520931	333.37	127.49	205.89	392330	1924.44	1788.53	135.91
520521	6849.95	5102.75	1747.20	520842	122.57	60.32	62.25	520521	1684.56	687.53	997.04
871120	5906.41	3124.86	2781.55	690890	104.56	63.32	41.24	871120	1225.52	473.10	752.41
870422	5875.72	4912.30	963.42	621790	57.23	18.54	38.69	520849	1110.97	807.01	303.96
481092	4822.06	3221.33	1600.74	350790	52.31	18.98	33.33	520811	832.65	302.09	530.56
401120	4430.05	2577.37	1852.67	520951	42.33	17.27	25.06	520819	824.57	314.95	509.62
870210	3619.25	2754.57	864.68	401120	37.74	11.79	25.95	520843	817.13	411.97	405.16
390210	3485.52	1723.25	1762.27	340290	36.03	10.08	25.95	841451	666.89	533.64	133.25
720839	3236.04	612.36	2623.68	540233	20.13	8.31	11.82	520931	631.87	244.28	387.59
170111	2690.88	761.29	1929.59	340391	17.26	7.05	10.21	520812	493.35	162.95	330.40
480257	2569.86	1611.37	958.49	960629	17.03	7.43	9.60	551691	429.75	193.75	236.00
90420	2450.76	2450.42	0.34	392690	12.02	5.43	6.59	520929	374.38	174.76	199.61
271019	2432.94	1664.32	768.62	520811	11.39	4.07	7.32	521215	367.19	155.46	211.73
854460	2084.17	1196.44	887.73	550922	11.13	7.03	4.10	520851	338.49	161.85	176.64

100630	1960.52	1755.91	204.61	852990	9.96	2.70	7.26	521211	334.05	136.32	197.73
620443	1763.87	1757.08	6.80	551349	9.69	3.62	6.07	520613	237.96	151.75	86.21
40210	1654.27	643.54	1010.73	340319	8.56	4.49	4.06	580190	235.97	141.64	94.34
841581	1506.20	1348.66	157.54	520611	8.27	1.29	6.98	520852	223.18	115.71	107.47
850432	1491.52	1062.58	428.94	540341	7.57	3.34	4.24	520922	221.52	85.36	136.16
870390	1353.21	976.94	376.27	481910	7.54	6.70	0.84	841490	203.35	108.86	94.50
283620	1305.94	1035.11	270.83	391990	7.28	2.48	4.79	520842	185.66	91.71	93.95
210690	1167.66	419.92	747.73	380991	6.50	2.70	3.79	520951	179.33	74.64	104.69

Source: WITS (access date 10/11/2013)

Table 7, India, Sri Lanka and Pakistan Export Interest in Bangladesh

India's Export Interest in Bangladesh				Pakistan's Export Interest in Bangladesh				Sri Lanka's Export Interest in Bangladesh			
Tariff Line Code	Exports	Exports	Exports	Tariff Line Code	Exports	Exports	Exports	Tariff Line Code	Exports	Exports	Exports
	Before (\$'000)	After (\$'000)	Change in Export Revenue (\$'000)		Before (\$'000)	After (\$'000)	Change in Export Revenue (\$'000)		Before (\$'000)	After (\$'000)	Change in Export Revenue (\$'000)
350691	1456.22	55292.21	53835.98	551311	16194.29	21743.65	5549.36	350691	14.16	539.57	525.41
271011	46977.98	79339.35	32361.37	520942	4714.40	7195.43	2481.03	621710	1030.79	1533.03	502.24
252310	13806.38	45630.63	31824.26	521142	4476.96	6402.64	1925.68	151319	1019.30	1456.21	436.91
520942	38256.43	53541.51	15285.08	392330	2192.64	4117.08	1924.44	520931	699.48	1032.85	333.37
520521	45834.72	52684.66	6849.95	520521	6175.59	7860.15	1684.56	520842	210.35	332.92	122.57
871120	17718.65	23625.05	5906.41	871120	2682.60	3908.12	1225.52	690890	144.18	248.74	104.56
870422	15897.21	21772.93	5875.72	520849	1312.71	2423.68	1110.97	621790	129.66	186.89	57.23
481092	6711.73	11533.79	4822.06	520811	1809.02	2641.67	832.65	350790	502.68	554.99	52.31
401120	18942.37	23372.41	4430.05	520819	1738.72	2563.29	824.57	520951	84.36	126.70	42.33
870210	7720.14	11339.39	3619.25	520843	2057.12	2874.25	817.13	401120	86.68	124.42	37.74
720839	23049.35	26285.38	3236.04	841451	715.93	1382.83	666.89	340290	88.08	124.11	36.03
170111	6633.35	9324.23	2690.88	551319	2442.71	3106.93	664.22	540233	39.54	59.67	20.13
480257	8174.07	10743.93	2569.86	520931	1340.31	1972.18	631.87	340391	60.03	77.29	17.26
90420	14890.08	17340.84	2450.76	520812	1524.02	2017.37	493.35	960629	56.33	73.35	17.03
271019	3606.08	6039.02	2432.94	551691	972.05	1401.79	429.75	392690	43.24	55.26	12.02
854460	4371.71	6455.88	2084.17	520929	707.97	1082.35	374.38	520811	24.39	35.78	11.39
100630	60462.81	62423.32	1960.52	521215	799.53	1166.72	367.19	550922	24.14	35.27	11.13
620443	2773.26	4537.14	1763.87	520851	745.70	1084.19	338.49	852990	38.92	48.88	9.96
40210	3487.71	5141.98	1654.27	521211	694.46	1028.50	334.05	551349	20.28	29.97	9.69
841581	801.06	2307.26	1506.20	520613	4289.18	4527.14	237.96	340319	23.89	32.45	8.56
850432	5420.58	6912.10	1491.52	580190	379.10	615.08	235.97	520611	84.89	93.17	8.27
870390	7165.52	8518.73	1353.21	520852	518.85	742.03	223.18	540341	26.02	33.59	7.57
283620	10263.78	11569.72	1305.94	520922	721.88	943.40	221.52	481910	2.82	10.36	7.54
210690	3629.03	4796.68	1167.66	841490	477.87	681.22	203.35	391990	16.08	23.36	7.28
760720	2420.10	3533.40	1113.29	520842	319.79	505.45	185.66	380991	49.61	56.10	6.50
Change in Export Revenue in First 25 Tariff lines			193591.23	Change in Export Revenue in First 25 Tariff lines			23983.72	Change in Export Revenue in First 25 Tariff lines			2405.03
Total			314075.21	Total			32915.18	Total			2568.53
% of total			61.64	% of total			72.87	% of total			93.63

Source: WITS (access date 16/11/2013)

Table 8 India, Pakistan and Bangladesh's Export as Result of Sri Lanka's Tariff Reduction

India's Export as Result of Sri Lanka's Tariff Reduction				Pakistan's Export as Result of Sri Lanka's Tariff Reduction				Bangladesh's Export as Result of Sri Lanka's Tariff Reduction			
HS Code	Trade Total Effect (\$000)TTE	Trade Creation Effect(\$000)	Trade Diversion Effect (\$000)	HS Code	Trade Total Effect (\$000)TTE	Trade Creation Effect(\$000)	Trade Diversion Effect (\$000)	HS Code	Trade Total Effect (\$000)TTE	Trade Creation Effect(\$000)	Trade Diversion Effect (\$000)
Total	491708.80	410242.15	81466.65	Total	5395.05	3049.78	2345.25	Total	1095.65	468.28	627.37
271019	228592.19	184940.20	43651.98	30559	1139.44	483.19	656.25	721049	592.13	238.37	353.76
271011	155310.38	153799.53	1510.86	392330	588.36	435.50	152.86	392620	65.62	28.30	37.32
90420	9224.00	8924.78	299.21	30374	421.24	403.18	18.06	90920	59.49	23.24	36.25
870321	6047.93	4292.22	1755.71	480519	361.91	298.92	62.99	482110	36.48	14.48	22.00
90240	5617.63	3317.84	2299.79	411200	326.51	189.51	137.00	560790	26.26	10.43	15.83
870210	5396.06	4917.98	478.08	721491	213.77	116.17	97.59	630510	24.26	13.97	10.30
870421	4866.52	2387.65	2478.88	611692	204.07	114.45	89.62	720711	23.64	9.27	14.37
870322	3545.13	1259.03	2286.10	252329	193.25	78.97	114.28	411200	22.99	11.78	11.21
730820	3265.39	1858.36	1407.03	90420	184.24	70.40	113.84	650700	20.89	9.35	11.54
190190	3248.92	1735.32	1513.60	392020	168.49	38.52	129.97	620342	19.86	9.34	10.52
480257	2645.92	1765.94	879.99	210690	125.28	49.36	75.93	210690	19.35	7.47	11.88
680293	2539.01	2533.77	5.24	611610	111.54	62.13	49.42	410799	17.92	15.34	2.58
240220	2365.84	2094.21	271.63	300590	100.75	46.95	53.80	481930	13.98	9.26	4.71
71320	2185.71	1404.14	781.57	611699	94.26	42.44	51.83	330690	11.89	5.52	6.37
480255	2126.68	1753.92	372.76	410791	91.78	91.76	0.02	620349	11.30	4.87	6.42
852872	1597.33	752.96	844.37	761090	41.36	32.74	8.62	392690	10.88	4.58	6.30
854449	1578.54	764.74	813.80	120750	39.80	16.53	23.27	482390	9.34	4.85	4.49
721049	1135.89	617.97	517.92	480524	39.72	33.44	6.29	411310	9.27	2.84	6.43
100590	1110.13	1087.75	22.38	330510	38.98	8.29	30.69	620462	9.11	5.24	3.87
80131	1094.56	1078.79	15.77	721720	38.65	15.87	22.78	392321	8.21	3.28	4.94
151110	1083.18	245.05	838.13	380891	37.12	14.59	22.53	611120	6.71	2.64	4.07
140490	1062.17	932.61	129.56	230120	36.81	16.67	20.14	110100	5.69	2.51	3.18
480256	1049.13	688.26	360.87	480511	36.55	14.50	22.05	482190	5.67	2.23	3.44
481092	1022.51	866.73	155.78	701090	32.29	7.61	24.68	620791	5.66	2.78	2.88
400121	1015.02	612.05	402.97	700529	32.21	14.15	18.07	620332	5.53	4.59	0.94

Source: WITS (Access date 18/11/2013)

Table 9 India, Bangladesh and Pakistan Export Interest in Sri Lanka

India's Export Interest in Sri Lanka				Pakistan's Export Interest in Sri Lanka				Bangladesh's Export Interest in Sri Lanka			
Tariff Line Code	Exports	Exports	Exports	Tariff Line Code	Exports	Exports	Exports	Tariff Line Code	Exports	Exports	Exports
	Before (\$'000)	After (\$'000)	Change in Export Revenue (\$'000)		Before (\$'000)	After (\$'000)	Change in Export Revenue (\$'000)		Before (\$'000)	After (\$'000)	Change in Export Revenue (\$'000)
271019	712146.9	940739.1	228592.2	30559	5502.4	6641.83	1139.44	721049	2202.28	2794.41	592.13
271011	259263.1	414573.4	155310.4	392330	1253.78	1842.14	588.36	392620	173.43	239.06	65.62
90420	40536.34	49760.34	9224	30374	294.25	715.49	421.24	90920	232.33	291.82	59.49
870321	69520.49	75568.42	6047.93	480519	825.05	1186.96	361.91	482110	67.25	103.73	36.48
90240	14726.76	20344.38	5617.63	411200	2137.12	2463.62	326.51	560790	53.56	79.82	26.26
870210	23030.25	28426.31	5396.06	721491	779.4	993.16	213.77	630510	156.82	181.08	24.26

870421	19500.5	24367.02	4866.52	611692	1866.3	2070.37	204.07	720711	491.5	515.14	23.64
870322	7827.83	11372.97	3545.13	252329	3362.98	3556.23	193.25	411200	70.2	93.19	22.99
730820	13159.29	16424.69	3265.39	90420	319.76	504	184.24	650700	48.88	69.77	20.89
190190	14170.3	17419.23	3248.92	392020	681.76	850.26	168.49	620342	67.38	87.24	19.86
480257	15689.98	18335.91	2645.92	210690	389.6	514.88	125.28	210690	57.14	76.49	19.35
680293	270.15	2809.16	2539.01	611610	1077.77	1189.31	111.54	410799	25.88	43.8	17.92
240220	490.69	2856.53	2365.84	300590	353.86	454.62	100.75	481930	16.1	30.08	13.98
71320	11093.93	13279.65	2185.71	611699	749.92	844.18	94.26	330690	23.18	35.07	11.89
480255	15583.21	17709.88	2126.68	410791	18.99	110.77	91.78	620349	40.45	51.75	11.3
852872	5768.8	7366.12	1597.33	761090	26.51	67.87	41.36	392690	121.69	132.57	10.88
854449	5264.77	6843.31	1578.54	120750	188.39	228.19	39.8	482390	53.31	62.65	9.34
721049	5709.51	6845.39	1135.89	480524	184.48	224.2	39.72	411310	41.18	50.45	9.27
100590	22153.11	23263.24	1110.13	330510	93.8	132.78	38.98	620462	25.46	34.57	9.11
80131	181.5	1276.06	1094.56	721720	386.42	425.07	38.65	392321	19.27	27.48	8.21
151110	2798.96	3882.13	1083.18	380891	154.4	191.52	37.12	611120	36.94	43.65	6.71
140490	6165.88	7228.05	1062.17	230120	251.96	288.77	36.81	110100	16.5	22.2	5.69
480256	3060.91	4110.04	1049.13	480511	272.29	308.84	36.55	482190	10.5	16.16	5.67
481092	12949.47	13971.98	1022.51	701090	128.75	161.04	32.29	620791	27.72	33.38	5.66
400121	4286.79	5301.81	1015.02	700529	225.36	257.57	32.21	620332	32.03	37.56	5.53
Change in Export Revenue in First 25 Tariff lines			448725.8	Change in Export Revenue in First 25 Tariff lines			4698.39	Change in Export Revenue in First 25 Tariff lines			1042.12
Total			491708.8	Total			5395.05	Total			1095.65
% of total			91.26	% of total			87.09	% of total			95.11

Source: WITS (access date 13/12/2013)

**Table 10
Revealed Comparative Index**

India						Pakistan					
Pakistan		Bangladesh		Sri Lanka		India		Sri Lanka		Bangladesh	
Product Code	RCA	Product Code	RCA	Product Code	RCA	Product Code	RCA	Product Code	RCA	Product Code	RCA
320416	15.74	520521	43.04	90420	24.3	70320	0.06	30374	4.97	392330	0.09
90240	15.71	90420	24.3	90240	15.71	120799	5.08	30559	1.26	520521	20.18
320412	11.54	100630	17.07	71320	7.26	220710	17.05	90420	2.24	520613	23.82
320420	6.72	871120	8.55	870321	4.73	251512	22.61	120750	1.31	520811	41.47
294110	6.42	520942	4.81	271011	4.47	392020	0.34	210690	0.37	520812	78.39
340211	6.28	271011	4.47	730820	4.11	392330	0.09	230120	2.3	520819	86.76
320417	6.12	620443	4.13	140490	3.89	392390	1.58	300590	1.51	520842	0.34
294190	4.02	170111	3.61	271019	2.85	392410	0.31	330510	0.04	520843	0.03
140490	3.89	271019	2.85	870322	2.32	392690	0.12	380891	0.07	520849	0.25
840211	3.78	390210	2.09	721049	2.12	520511	177.68	392020	0.34	520851	53.17
291639	2.84	854460	1.46	100590	2.01	551311	91.05	410791	0.53	520852	10.39
401161	2.44	401120	1.39	480257	1.34	551341	235.92	611610	7.09	520922	40.34
401390	2.12	480257	1.34	870210	1.1	570110	60.43	611699	85.04	520929	24.19

320411	1.98	252310	1.16	190190	0.73	570190	1.66	700529	1.2	520931	12.18
300490	1.52	870210	1.1	480255	0.6	590390	0.47	701090	0.41	520942	66.7
401120	1.39	850432	1.06	680293	0.44	600621	5.5	721720	0.01	520951	36.39
841989	1.11	720839	0.91	870421	0.42	610419	23.41	761090	0.01	521142	59.32
340213	1.06	40210	0.82	400121	0.4	611610	7.09			521211	379.48
320290	0.98	870422	0.54	480256	0.31	611692	75.86			521215	194.67
390319	0.9	870390	0.49	240220	0.24	620462	15.36			551691	4.02
40210	0.82	350691	0.34	481092	0.1	621132	9.26			841451	7.22
292429	0.51	210690	0.27	854449	0.1	621600	16.6			841490	0.33
293500	0.48	481092	0.1	80131	0.06						
293359	0.47	841581	0.02	852872	0.03						

Source: Source: WITS (access date 05/07/2014)

Sri Lanka						Bangladesh			
India		Pakistan		Bangladesh		Pakistan		Sri Lanka	
Product Code	RCA	Product Code	RCA	Product Code	RCA	Product Code	RCA	Product Code	RCA
391590	0.27	90240	514.49	151319	2.07	90220	0.31	90920	1.98
392330	0.17	140490	63.09	340290	0.19	90240	10.38	210690	0.13
392620	2.21	320417	0.47	340319	0.05	300490	0.05	330690	0.02
400121	20.71	330510	0.25	340391	0.01	392329	0.15	392321	2.82
400122	0.75	401120	1.2	350691	0.02	392690	0.26	392620	1.54
400821	5.57	401140	0.29	350790	1.27	481910	1.57	392690	0.26
401693	4.23	401161	0	380991	1.55	481920	0.03	481930	0.01
481710	2.12	401199	144.9	391990	0.03	482190	0.06	482110	0.15
482110	4.57	401511	55.92	392640	1.26	531090	334.98	482190	0.06
600621	0.25	441112	13.11	401120	1.2	580790	0.05	482390	0
610620	11.89	441113	6.51	481910	0.4	610910	75.36	611120	2.53
610821	74.99	441114	6.63	520811	0.01	610990	16.53	620332	35.1
610910	16.11	481910	0.4	520931	1.12	611090	187.04	620342	59.87
610990	23.14	580790	5.57	520951	5.13	611120	2.53	620349	111.14
611090	7.98	610990	23.14	540233	0.01	611490	2	620462	27.43
611790	2.38	620349	61.85	551349	0.04	620342	59.87	620791	1.94
620332	13.4	640319	0.8	621710	2.65	620462	27.43	630510	446.42
620342	22.99	690890	0.62	621790	10.06	620520	60.73	650700	4.42
620452	20.77	691110	10.31	690890	0.62	620920	25.26	721049	0.67
620462	13.78	732690	0.07	852990	0.1	630510	446.42		
621210	79.36	841869	0	960629	3.25	650590	26.98		
621710	2.65	853669	0.26			854590	1.54		
850440	0.01	854449	0.38						
854420	0.25	871620	0.54						

Source: Source: WITS (access date 05/07/2014)