

# **INDO – SRI LANKA FREE TRADE AGREEMENT: A CRITICAL APPRAISAL OF INFLUENCE ON TRADE BETWEEN TWO COUNTRIES**

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## ***Abstract***

*The Indo – Sri Lanka Free Trade Agreement (ISFTA) was a significant milestone in the trade relations between India and Sri Lanka, the objective of which was to boost the economies of the two countries through bilateral tariff concessions. Completing 13 years in operation since its implementation in 2000, several studies that have been made regarding the ISFTA have brought evidence to suggest that the Agreement has brought mixed results in terms of trade expansion between the two countries. However, the majority of these studies have been based on analyses of overall trade data which do not distinguish between trade patterns of goods receiving ISFTA concessions from those that do not.*

*This paper is an attempt to assess the effectiveness of the ISFTA by evaluating the trends of imports and exports of items receiving concessions under the ISFTA with those do not, for the pre and post Agreement periods and to compare those patterns with Sri Lanka's trade with countries other than India.*

*The findings of the study suggest that the ISFTA has not been effective in significantly promoting trade between the two countries. Also, it is evidenced that Sri Lanka has not been able to secure benefits as expected from the ISFTA. The outcomes of the study therefore suggest that the drawbacks of the present Free Trade Agreement be resolved prior to considering further deepening of the bilateral liberalisation of trade between India and Sri Lanka. The study also produces lessons which are potentially useful in negotiating free trade agreements with other countries.*

**Keywords:** *Free trade agreement, international trade, bilateral trade agreements, tangential shift analysis, trade substitution effect*

**JEL Codes :** *F13, F14, F15, N75, O24*

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## INTRODUCTION

The Indo Sri Lanka Free Trade Agreement (ISFTA) was the culmination of several endeavours made by India and Sri Lanka to expand the trade ties between the two countries. After a series of negotiations, the Agreement was signed in 1998 which came into effect in 2000. The ISFTA offers concessions for trade between India and Sri Lanka and it is thereby intended that the trade pushed by the ISFTA would boost the economies of the two countries.

A few years since coming into effect of the Agreement, the two countries were in the process of negotiating a much closer trade partnership through further liberalisation of bilateral trade. This deepening of bilateral trade liberalisation, intended through the Comprehensive Economic Partnership Agreement (abbreviated by CEPA), is construed based on the implicit premise that the preferential trade facilitation between India and Sri Lanka, enabled through the ISFTA has been beneficial for the two countries, and thus, a furtherance of bilateral trade liberalisation would be justified.

However, this view is not without opposition. While some have claimed that trade between the two countries has experienced significant expansion since signing of the ISFTA<sup>1</sup>, many others (Wickremasinghe, 2007; Kelegama and Mukherjee, 2007 and De Mel, 2009) have found mixed results with the more beneficial effects of the ISFTA being biased towards India. According to those, Sri Lanka should first try and correct the position with the existing bilateral agreement so that it would have its due share of advantage before venturing into furthering trade liberalisation through preferential agreements with India<sup>2</sup>. This view being espoused by leading Sri Lankan entrepreneurs who fear of an “invasion” of the Sri Lankan market by Indian goods and services if a further liberalisation is implemented, has negatively affected the progress towards arriving at a consensus on the CEPA.<sup>3</sup>

A different dimension has been exposed by Abeyratne (2013) having studied the ISFTA, when commenting on the ill-effects of bilateral or multi-lateral preferential trade agreements pursued under greater degree of protectionism. According to him, greater the degree of protectionism, greater would be the specialisation and trade

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<sup>1</sup> Joint Study Group Report on CEPA (2003)

<sup>2</sup> According to De Mel (2009) the reservations expressed by critics of the CEPA were based on two broad concerns; the first, about the nature of CEPA itself and, the second that the drawbacks in the FTA should be dealt with first, prior to embarking on CEPA.

<sup>3</sup> This is due to reservations expressed by a group of local industrialists and a left-oriented political party, the CEPA was not signed during the Summit, and it has remained shelved since then (De Mel, 2009).

distortion effects of such bilateral trade agreements<sup>4</sup>.

Overall, these different studies appear to have been unable to shed light on the effectiveness of the Agreement, for their apparent incongruence with regard to the outcomes, as well as for their inadequate comparative reference to trade patterns prior to the implementation of the ISFTA. Besides, it is the general trade patterns between the two countries that have been analysed in these studies, and not the data segregated into those affected by the Agreement and those not. In other words, the pattern of trade of the items in the negative list under the Agreement, for which the ISFTA concessions were not applicable, should have been taken out before the analysis, in order to identify any trend that may have resulted by the ISFTA. Therefore, the outcome of these studies cannot be considered conclusive on to the overall effectiveness of the ISFTA though such have yielded a number of useful findings with regard to several “sub-sectors” or products.

Hence, the present research was conducted in an attempt to evaluate the performance of the ISFTA as revealed through international trade data. For this, trends of trade between India and Sri Lanka during the periods before and after the implementation of the ISFTA were compared with those between Sri Lanka and the rest of the world, while categorising the products into two groups, namely, those benefitted from the ISFTA and those did not. Thereby, the research sought finding answers with regard to the issues pertaining to the ISFTA, its beneficial effect to Sri Lanka in comparison to India, and the causes behind any such differences, while attempting to emerge policy relevant conclusions.

### **Indo – Lanka trade and its evolution**

The trade relations between India and Sri Lanka date back to times immemorial. Being neighbouring nations, the exchange between them was inevitable, in political, social, cultural and economic aspects, the evidence for which could be found in the Great Chronicles<sup>5</sup> as well in the writings of the travellers and tradesmen throughout the history<sup>6</sup>. India was a major trading partner of Sri Lanka<sup>7</sup> during the days when

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<sup>4</sup> The bilateral FTAs are not the ‘first best’ solutions to derive benefits of free trade when the region or the world is not free for trade, as they lead to distortions in specialization and trade. The higher the overall protectionism, the greater will be the specialization and trade distortions under which FTAs, because the partners of the multilateral or bilateral FTAs would be given an uncompetitive advantage. And as such, distortions will be even greater when the FTAs are limited to a smaller number of partners, while the smallest would be the bilateral agreements between two countries only.

<sup>5</sup> The Mahavamsa speaks of South Indian Traders in pre-Christian times who were also politically powerful and who in fact dominated the region (Seneviratne, 2008)

<sup>6</sup> According to the records of the ancient Greek writer, Megasthenes, elephants were traded from Sri Lanka to India even as far back as the 3<sup>rd</sup> century B.C. (Suraweera, 1962).

long sea voyages were rare, and the goods traded from Sri Lanka basically consisted of rice, spices, pearls, tusks, precious stones and textiles.

However, during the rule of the Dutch and the British governments, in the 17<sup>th</sup> and 18<sup>th</sup> centuries, the trade and commercial activities of India and Sri Lanka were managed together, firstly by the Dutch East India Company and thereafter by the British East India Company, and the exchanges between the two territorial units expanded beyond goods to cover administrative and commercial services as well<sup>8</sup>. During the Dutch administration of the littorals, and during the British colonial regime of the then Ceylon, there also have been substantial labour migration from India to Sri Lanka for the purposes of tobacco, coffee and tea plantations.

Since independence, however, both India and Sri Lanka underwent long spells of import substitution oriented politico-economic administrations, which at times were very “protectionist”, resulting in limited trade between the two countries and between them and the rest of the world. These “inward-looking” spells promoted the establishment of large scale industries oriented towards the local markets, and the consumption of locally manufactured goods were granted policy encouragements. In Sri Lanka, these policies were discontinued with the liberalisation of the economy in 1977, while it took India another decade and a half until her liberalisation came into effect in early 1990s.

Sri Lanka’s trade with India improved substantially since liberalisation of the Indian economy. Relaxation of import-export regulations in India, the close proximity between the two countries, the development of transport links as well as the enhanced competitiveness of Indian industries could possibly have been behind this effect, while it could be hypothesised that the ISFTA also would have fuelled this trend.

In the recent past, many countries and blocks in the world experimented bilateral and multi-lateral attempts to promote mutual trade under “economic integration”.<sup>9</sup> The will to lower the costs of production through achieving higher economies of scale

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<sup>7</sup>Many other countries also have had trade and exchange with ancient “Sinhadeepa” or “Serendib”, including China, Siam, Burma, Arabia, Greece and Persia, which are countries situated along the silk route.

<sup>8</sup><http://www.swaen.com/east.html> and <http://www.britannica.com/EBchecked/topic/176643/East-India-Company> viewed on 19.06.2013

<sup>9</sup>As the multilateral trading system of the World Trade Organization (WTO) expects equal treatment in terms of tariffs on imports to all WTO member countries, the question has arisen whether bilateral/regional trade agreements that offer preferential treatment only to the participating States is contrary to the “Most Favoured Nation (MFN)” principle of the WTO or its multilateral trading system. However, under the Article 24 of the General Agreement on Trade and Tariff (GATT), Regional Trade Agreements are allowed as a special exception subject to strict criteria. Hence, bilateral and regional trade agreements have been entered into by several countries/regions in the world.

was behind this drive pursued (Todaro and Smith, 2009) and expanded market base for exports through “economic integration” was perceived as the strategy to be, particularly by countries with smaller or limited domestic market base.<sup>10</sup> Regional integration of countries, mirrored by the formation of the organisations such as SAARC and ASEAN, emerged out of this trend of search for mutual cooperation in social, political and economic perspectives that took place during the 1980s and 1990s. The fact that both India and Sri Lanka had opened up their economies by early 1990s would have influenced the two countries to sign the ISFTA in the lookout for benefits of closer bilateral integration.

In entering into the Agreement, India would have been contemplating on expanding her exports to the Sri Lankan market. Being a producer of low cost consumer goods for which Sri Lanka has a continuous demand, India would have wanted to secure an increased share, assisted by the low freight cost associated owing to the physical nearness of the two countries. On the other hand, Sri Lanka’s objective in entering into a Free Trade Agreement would have been to exploit the large and growing middle class population in India, in addition to attracting Foreign Direct Investment to Sri Lanka from third countries for the manufacture of goods that have an export potential to India under the preferential tariff rates on offer by the Agreement, and also to integrate with the Indian supply chains.

### **The Agreement: Key Features**

It was with the objective of promoting economic relations between India and Sri Lanka through the expansion of trade, that the Agreement was entered into, setting out fair conditions for trade in addition to contributing to world trade through the removal of barriers to trade.

The ISFTA consists of a phased elimination process to liberalise trade through a gradual reduction of the customs duties of the importing country, over an agreed span of years. The Agreement has been formulated through a negative list approach, in which, the two countries agreed to liberalise a selected set of items, while the rest of the items, which were known as the “Negative List items” of the two countries, attract the general Customs duty rates (MFN rates) also applicable to non-partner countries to the ISFTA.

Under the ISFTA, Sri Lanka has been granted special and differential treatment, taking into consideration the several asymmetries between the two countries. Hence, Sri Lanka has been allowed to retain a much higher number of items in its Negative List, more than double the number of items in the Negative List of India and a longer period of time has been granted to Sri Lanka, than to India, to phase out the tariffs of those items which were not included in the Negative List under the Agreement.

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<sup>10</sup> According to Todaro and Smith (2009) the basic economic rationale for the gradual integration of less developed economies is production made possible by expanded markets. In the absence of integration, each separate country may not provide a sufficiently large domestic market to enable local industries to lower production costs through economies of scale.

The Rules of Origin<sup>11</sup> of the ISFTA, on the other hand, required at least 35% domestic value addition within the exporting country, in addition to a four-digit HS transformation and a substantial manufacturing process in order to qualify for tariff concessions.

## **METHODOLOGY AND DATA**

The study looked at the problem of “effectiveness” of the ISFTA (in promoting bi-lateral trade) from a Sri Lankan view point. For this purpose, annual data for a period of over 10 years under the influence of the ISFTA were appraised against those prior to implementing the ISFTA. Data pertaining to pre-ISFTA period, however, had to be limited to post-1993 period, mainly because of constraints encountered in obtaining data in the required format from the sources. Besides, it was also felt appropriate to exclude the immediate aftermath of India’s economic liberalisation intervened in 1991, which corresponds to adjustment period following a “structural break” in the data series.

Hence, trade data at HS six-digit level for the period from 1994 to 2010, primarily sourced from the Department of Customs of Sri Lanka, were used in this research. In addition, macroeconomic data and trade indices, sourced from the Annual Reports of the Central Bank of Sri Lanka, also were used.

The data were classified into (a) ISFTA-neutral and ISFTA-favoured categories, and (b) into imports from, and export to, India and the rest of the world. The items which did not receive preferential treatment under the Agreement were classified under the “ISFTA Neutral” category, as trade of these items between Sri Lanka and India would not be influenced by the ISFTA. These consist of the items in the negative lists of the two countries, and those items for which the general import duty was zero (Duty Free items), with regard to which items there would be no distinction between India and the rest of the world in terms of duty structure. The “ISFTA Favoured” items, on the other hand, were those that could be traded at preferential duty rates between Sri Lanka and India under the Agreement. Data so categorised are presented in the Annexes I and II.

The trade data so categorised were thereafter appraised, within each category, to reflect their comparative trends before and after the coming into effect of the ISFTA. The “deviation” of trade patterns after the intervention of the ISFTA, as against the patterns before its coming into effect, was used to “indicate” the effectiveness of the intervening conjuncture.

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<sup>11</sup>The Rules of Origin are an integral part of any Free Trade Agreement (FTA), which outlines / lays out the criteria that the exporting country has to comply with, in order to receive preferential access to the market of the partner country. These rules have been incorporated into an FTA with the objective of encouraging domestic value addition and to prevent non partner countries from taking undue advantage of the preferential duties offered through re-export.

In order to capture the real effect of the ISFTA on the trade patterns any “price-based effects” had to be screened off. This was pursued by analysing the data in “real terms”. Data on trade values were thus divided by the average import or export price index, as the case may be. Similarly, the “GDP push” the imports and exports of Sri Lanka would anyway have had, regardless of the ISFTA, was removed by appraising the trade data and their trends as against their corresponding real GDP values.

Graphical representation, regression, appraisal of trends and comparison of tangential deviations of trends before and after the implementation of the ISFTA were used as analytical methods, in order to assess the effectiveness of the ISFTA in influencing trade between Sri Lanka and India, and to derive conclusions.

## RESULTS AND DISCUSSION

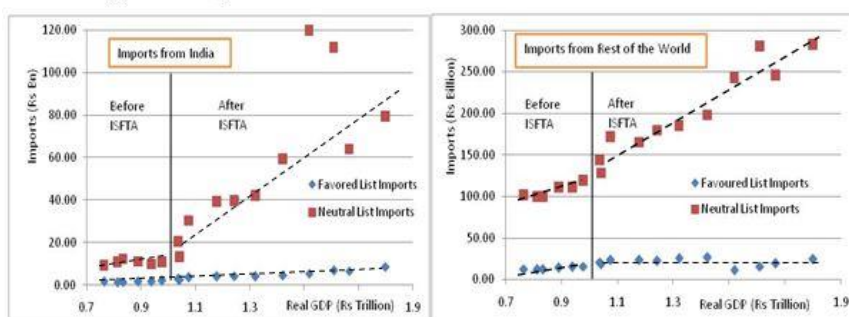
In order to distinguish the impact of the ISFTA on Indo-Lanka trade, trends of trade between Sri Lanka and India, as well as between Sri Lanka and the rest of the world, were appraised separately in their respective categories, namely those in the “ISFTA Favoured” list and the “ISFTA Neutral” list.

First, the real values of imports and exports (in the Y-axis) were plotted separately against the corresponding real GDP values (in the X-axis) for the pre and post agreement periods (i.e., from 1994 to 2000 and 2000 to 2010 respectively). The trends were thus perceived as to how trade patterns evolved in relation to GDP before and after coming into effect of the ISFTA. Next, linear regression analyses were performed to statistically test whether the post-ISFTA period showed a significantly accelerated Sri Lankan trade with India in the ISFTA favoured category compared to the period before and also compared to other categories.

### Impact on Imports

The graphs in the Figure 1 represent the evolution of imports to Sri Lanka from India and from the rest of the world vis-à-vis Sri Lanka’s GDP during the period under study.

**Figure 1: Imports to Sri Lanka from India and from Rest of the World**



Source : Authors’ Estimations based on data obtained from the Sri Lanka Customs

A few interesting observations could be made using these graphs. First, the ISFTA-Neutral imports from India (graph on the left hand side) appear to have had a visible upward tangential shift after the implementation of the ISFTA, while no such clear shift could be observed with regard to ISFTA-favoured imports from India. This observation points to a preliminary hypothesis that the ISFTA has not been effective in promoting Indian imports to Sri Lanka. This is because, the apparent “up-ward push” experienced by the imports in the “ISFTA-Neutral” category cannot be associated with the ISFTA<sup>12</sup>, and the relatively sluggish trend observed in the “ISFTA-Favoured” imports during the post-ISFTA period would not be a normally expected observation had the ISFTA been “effective” in promoting Indo-Lanka trade.

Second, the imports from India of “ISFTA Neutral” items seem to have undergone a sharper tangential shift compared to the imports of items in the same category coming from the rest of the world. This could be perceived as a reflection of India’s ability in general to secure increased share of Sri Lankan market, possibly through its comparative advantages, because concessions granted to India through ISFTA could not have had any effect on the imports in the “ISFTA Neutral” category. Third, when the evolution of ISFTA-Favoured imports is examined, the imports from the rest of the world show somewhat a negative tangential deviation after the implementation of the ISFTA compared to before, while imports from India in this category appear to have maintained the tangent throughout. However, this observation is no sufficient evidence to conclude whether such difference of evolution, if significant, was owing to any positive effect of the ISFTA concessions on the imports of Indian origin or because the (above mentioned) general competitive edge India would have been developing compared to the rest of the world.

In view of investigating these patterns in detail, linear fits were estimated to quantify the tangents corresponding to each category of imports separately for pre and post ISFTA periods.<sup>13</sup> The tangents of the linear fits,  $d(M)/d(GDP)$ , represents the import intensity of Sri Lanka’s GDP in each of the respective categories. The estimated tangents are summarised in the Table 1 below, together with their indicative statistical significance.

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<sup>12</sup>With regard to the ISFTA-Neutral category, same tariff rates applicable to imports from any other country would apply to imports from India as well, and therefore, the ISFTA cannot have any bearing on trade patterns in this category.

<sup>13</sup> This approach was adopted as there was no other reasonable means of quantitatively assess the trends, in spite of their obvious limitations associated with the limited number of available observations.



**Table 1 : Import Intensities of GDP 1994 -2010 (Rs per Rs 000 of GDP)**

Origin of Imports \ d(M)/d(GDP)	ISFTA-Neutral List		ISFTA-Favoured List	
	Pre-ISFTA (1994-1999)	Post-ISFTA (2000-2010)	Pre-ISFTA (1994-1999)	Post-ISFTA (2000-2010)
India	1.26 # (0.84)	73.41*** (0.000)	2.13 (0.14)	6.82*** (0.000)
“Rest of the world”	89.27*** (0.01)	174.18*** (0.000)	17.83*** (0.008)	3.41 (0.40)

Notes : (i) \*\*\* denotes 1% level of significance  
(ii) Figure in parentheses are P-values  
(iii) # - Overall fit being very weak weak

Source : Authors’ Estimations

The above results indicate that there have been no significant trends pertaining to import intensity of GDP in both types of imports from India prior to the implementation of the ISFTA. The tangents  $[d(M)/d(GDP)]$  were insignificant, implying that the null hypothesis of those being not equal to zero would be statistically rejected. With regard to post-ISFTA period, the trends pertaining to imports from India turned out to be positive and significant (at 1% level); the tangent corresponding to ISFTA neutral category (73.41) being much steeper than that (6.82) of the ISFTA favoured category. These quantified estimations appear providing further evidence to support the preliminary observations made through graphical representation of trends that Sri Lankan GDP has become more intensive in imports from India, irrespective of the category, after the implementation of ISFTA, and that this apparent increased Indian penetration is more likely to be owing to factors other than the coming into effect of the ISFTA.

With respect to the imports from the rest of the world, on the other hand, the positive and significant tangent (17.83) of the ISFTA-Favoured imports during pre-ISFTA period appeared to have almost disappeared (statistically insignificant tangent of 3.41) with the implementation, while the tangent associated with the ISFTA-Neutral category of imports has had an up-word push from 89.27 (before ISFTA) to 174.18 (after ISFTA). These estimations, together with the positive up-ward turn the imports from India of ISFTA-Favoured items have had, could indicate the possibility of the ISFTA having enabled India to secure a greater share of Sri Lankan market compared to the rest of the World; thus, a possible “trade substitution effect” in favour of India.

In order to comparatively evaluate the “up-word pushes” observed in different categories of imports and thereby to shed light on the “effectiveness” of the ISFTA, an attempt was made to estimate their tangential deviations. Tangential deviation,

defined as the tangent of the angle between the trend lines before and after the implementation of the ISFTA<sup>14</sup>, would be a measure of “relative deviation” each category of imports underwent; thus, enabling diagnosis of any supplementary “upward push” the ISFTA would have given to the ISFTA-Favoured imports from India over and above other categories. The estimated tangential deviations are presented in the Table 2.

In this analysis, the “angle of deviation” is considered the measure of an “impact” which changes the path of evolution of import intensity of GDP. Since ISFTA-Neutral category with “no effect” from ISFTA could constitute the referral evolution (which cover any influence from other developments including the comparative advantage changes between India and the rest of the World), any “effect” attributable to the ISFTA should be reflected in ISFTA-Favoured imports from India gaining a much larger angle of deviation compared to those pertaining to the imports in the other categories.

**Table 2: Tangential deviations of Import Intensities of GDP**

Deviation of $d(M)/d(GDP)$	ISFTA-Neutral Category	ISFTA-Favoured Category
Imports of Indian Origin	+ 0.772	+ 0.269
Imports from Rest of the World	+ 0.005	- 0.233

Source : Authors' Estimations

For instance, the difference between the angles of deviation experienced by the imports from India and that by the imports from the rest of the world in the ISFTA-Neutral category ( $\Delta\theta M_N = \theta M_N^I - \theta M_N^{RW}$ ) and ISFTA-Favoured category ( $\Delta\theta M_F = \theta M_F^I - \theta M_F^{RW}$ ), respectively, could be expressed in their tangent forms as follows :

$$\tan \Delta\theta M_N = \tan (\theta M_N^I - \theta M_N^{RW}) = (\tan \theta M_N^I - \tan \theta M_N^{RW}) / [1 + (\tan \theta M_N^I) * (\tan \theta M_N^{RW})]$$

$$\tan \Delta\theta M_F = \tan (\theta M_F^I - \theta M_F^{RW}) = (\tan \theta M_F^I - \tan \theta M_F^{RW}) / [1 + (\tan \theta M_F^I) * (\tan \theta M_F^{RW})]$$

Where,  $\theta M$  denotes the angle of deviation of Imports, N and F stand for ISFTA-Neutral and ISFTA-Favoured categories of imports respectively, while I and RW denote India and Rest of the World.

<sup>14</sup> Tangential Deviation =  $(m_2 - m_1)/(1 + m_1 m_2)$ , where  $m_1$  and  $m_2$  are tangents of the trend lines corresponding to each category of imports before and after the implementation of the ISFTA, respectively.

Thus, any “supplementary deviation” the ISFTA would have caused in the ISFTA-Favoured category should be mirrored in the difference between  $\Delta\theta M_F$  and  $\Delta\theta M_N$ . Tangent of this “supplementary angle of deviation” could be used as an “ISFTA Effectiveness Indicator”  $[\Theta]$ , which could be worked out using the above formulated  $\tan \Delta\theta M_F$  and  $\tan \Delta\theta M_N$  as follows:

$$\Theta = \tan (\Delta\theta M_F - \Delta\theta M_N) = [\tan \Delta\theta M_F - \tan \Delta\theta M_N] / [1 + \tan \Delta\theta M_F * \tan \Delta\theta M_N]$$

Where, the larger the positive value of  $\Theta$  would indicate the greater the effectiveness of ISFTA in promoting the relevant categories of imports of Indian origin to Sri Lanka.

Using the inter-period tangential deviations estimated in the Table 2, the tangent values of the angles of deviation pertaining to the ISFTA-Neutral and ISFTA-Favoured categories of imports to Sri Lanka, and thereby the “ISFTA Effectiveness Indicator”  $[\Theta]$ , could be worked out, as presented in the Table 3.

**Table 3 : Tangents of Deviation Angles and the ISFTA Effectiveness Indicator**

Category	Parameter	Estimated Value
ISFTA Neutral Imports	$\tan \Delta\theta M_N$	0.766
ISFTA Favoured Imports	$\tan \Delta\theta M_F$	0.518
ISFTA Effectiveness Indicator	$\Theta$	- 0.178

Source : Authors’ Estimations

It is noteworthy that the  $\Theta$  value is “negative”. This indicates that the ISFTA has not been effective in enabling India to penetrate into the Sri Lankan market in the designated ISFTA-favoured items of trade. Even though the ISFTA-Favoured imports from India appeared to have substituted the imports from the rest of the world to a certain extent, the relative boost the ISFTA favoured items have had appears inadequate to match the general up-ward push the products of Indian origin in general have had (as also reflected in the high tangential deviation corresponding to the ISFTA-Neutral imports from India) vis-a-vis Sri Lankan market. There is no reason why such general up-ward push, possibly owing to developing competitive position of Indian products, would not help ISFTA-favoured imports as well. Therefore, the acceleration of import intensity of Sri Lanka’s GDP in ISFTA-Favoured category of imports from India cannot be attributed to the ISFTA, and there does not appear any “supplementary boost” of ISFTA-favoured imports, over and above the other corresponding categories, for ISFTA to be inferred as having been “effective”.

This inference was further investigated using an OLS analysis over the entire period<sup>15</sup> from 1994 to 2010, where an attempt was made to model the evolution of the relative position of ISFTA-Favoured imports from India vis-a-vis other categories of imports. The ratio between the relative share of ISFTA-Favoured imports from India and the relative share ISFTA-Neutral imports from India, was thus tested against the real GDP as the main explanatory variable, together with dummy variables to represent the post-ISFTA period and the years of “intensive internal conflict” [2007 and 2008]. Results obtained are summarised in Table 4.

**Table 4 : Summary of Regression analysis**

Model Tested : $(M_F^I / M_F^N) / (M_N^I / M_N^N) = A + B(\text{GDP}) + C(\text{D1}) + D(\text{D2})$				
Form tested	With “Conflict Dummy” (D2)		Without “Conflict” Dummy (D2)	
Parameter	Coefficient	P-Value	Coefficient	P-Value
Constant	0.99***	0.001	0.98***	0.001
GDP	0.24	0.378	0.25	0.308
ISFTA Dummy (D1)	-0.34*	0.056	-0.34**	0.045
Conflict Dummy (D2)	0.01	0.935	---	---
R <sup>2</sup>	0.28		0.28	
Std Error	0.21		0.20	
F- Value	1.73		2.79*	

Note : \*, \*\*, \*\*\* indicates 10%, 5% and 1% significance respectively.

Source : Authors’ Estimations.

The above analysis leads to a number of observations of importance. Firstly, both regressions appear very weak. They both have small R<sup>2</sup> values, even though the F-value marginally qualifies within 10% significance level in the model tested without the conflict dummy. Thus, one cannot say that there is a significant systematic evolution of the ratio of relative imports from India of ISFTA favoured items to relative share of imports from India of ISFTA neutral items. Secondly, even if a comment is made using the model with rather weakly significant F-value (that is, the model without the “conflict dummy variable”), one would perceive that the variable GDP does not become significant at all. This would mean that any evolution of the

<sup>15</sup>Number of data points is not adequate to perform a rigorous time series analysis. Thus, the present effort is not to draw conclusive results but to derive suggestive evidence as to whether the outcomes obtained using other methods of analysis would be further supported or negated through this analysis.

dependent variable tested would have no significant correlation with the GDP. Besides, the Dummy variable bears a negative and significant (at 5% level) coefficient, implying that the pattern, if any, would be towards reducing relative importance of ISFTA-Favoured imports from India after the implementation of the ISFTA than before.

The averages of the ratio of relative imports from India of ISFTA favoured items to that of ISFTA neutral items [or,  $(M_F^I / M_F) / (M_N^I / M_N)$ ] before the implementation of the ISFTA and thereafter, also would yield similar results, as summarised in the Table 5.

**Table 5: Comparison of mean values of  $(M_F^I / M_F) / (M_N^I / M_N)$  before and after the ISFTA**

	Before ISFTA	After ISFTA
Mean Value	1.195	0.977
Variance	0.037	0.044
Degrees of Freedom		11
t- value		2.167 **
Critical t-value (at 1% level)		2.718
Critical t-value (at 5% level)		1.800

Source : Authors' Estimations

Conforming to the results obtained before, the difference between the means of the ratio of relative imports from India to Sri Lanka of ISFTA-Favoured imports to that of ISFTA-Neutral imports before and after the implementation of the ISFTA turn out to be significant at 5% level, but not at 1% level. Even if the 5% level of significance is considered adequate to accept that there has effectively been a difference, such is to the negative side; meaning that the average ratio of relative imports from India to Sri Lanka of ISFTA-Favoured items to that of ISFTA-neutral items has become less in the aftermath of the implementation of the ISFTA.

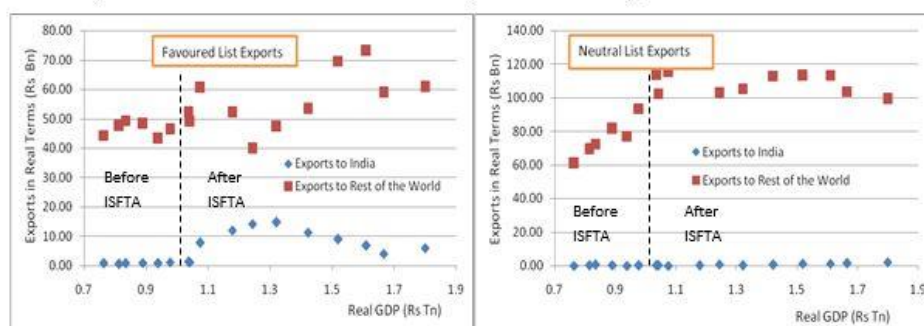
The results obtained from all the above examinations appear to be converging in pointing at one inference; that is, the ISFTA cannot be concluded as having had a significant positive impact in promoting the relevant categories of imports of Indian origin to Sri Lanka.

### Evolution of Sri Lanka's Exports

Similar analysis was performed using Sri Lankan export data having classified them into their respective groups (Annexure II) in order to examine the ISFTA's bearing on the evolution of Sri Lankan exports. The behaviour of exports in their respective categories and destination blocks with the evolution of Sri Lanka's GDP is depicted in the Figure 2.

Unlike in the case of imports, these graphs do not indicate any clear trend differences before and after the implementation of the ISFTA; except in the case of ISFTA-Favoured exports to India which appear to have undergone an up-surge immediately after the implementation of the ISFTA followed by a decline, and also in the case of ISFTA-Neutral exports to the rest of the world which apparently have undergone a negative tangential shift.

**Figure 2: Evolution of Sri Lankan Exports to India against Sri Lanka's GDP**



Source : Authors' Estimations based on data obtained from the Sri Lanka Customs

The positive effect, represented by the “export hat” in the ISFTA-Favoured category in Figure 2 above, could be attributed to the large volume of Vanaspathi (palm oil) and copper exported to India during 2002 to 2005, having benefitted by the concessions offered under the ISFTA<sup>16</sup>. However, this “surge” completely disappeared by 2008 when Indian authorities took counter-measures, and therefore, the exceptional export peak, which could not be sustained.

The trends of evolution before and after the ISFTA were calculated, using the same methodology as explained when analysing the case of imports, and the summary results are depicted in the Table 6. As visible in the graphs, the linear fits are very weak with rather low  $R^2$  values in most of the cases, except ISFTA-favoured exports to India and ISFTA-Neutral exports to rest of the world during the pre-ISFTA period, and the ISFTA-Neutral exports to India after its implementation. Further, the coefficients of the GDP variable turned out to be significant pertaining to the categories of exports with satisfactory linear fits. It is note-worthy also that the statistical acceptability of the model for ISFTA-Favoured exports to India in the post-ISFTA period becomes better if a dummy variable is introduced to capture the

<sup>16</sup>De Mel (2009) has made a comparison between the growth of trade between the two countries during the pre and post Agreement periods and has observed a six fold growth in exports between the countries. However, the study reveals that the majority of exports of Sri Lanka to India have consisted of Vanaspathi (palm oil) and copper.

temporary up-surge corresponding to Vanaspathi and copper exports, but the coefficient of the GDP variable would still not become significant.

**Table 6 : Sri Lanka's Exports as a ratio of GDP 1994 -2010**

d(X)/d(GDP) Destination	ISFTA-Neutral category		ISFTA-Favoured category	
	Pre-ISFTA (1994-1999)	Post-ISFTA (2000-2010)	Pre-ISFTA (1994-1999)	Post-ISFTA (2000-2010)
India	-0.73 <sup>@</sup> (0.65)	2.40 <sup>***</sup> (0.00)	1.66 <sup>*</sup> (0.09)	0.97 <sup>@</sup> (0.87) 2.31 <sup>#</sup> (0.52)
Rest of the world	128.56 <sup>***</sup> (0.1)	-10.11 <sup>@</sup> (0.28)	-4.31 <sup>@</sup> (0.78)	20.18 <sup>*@</sup> (0.08)

Note : (a) # indicates coefficients of the tangential variable if Vanaspathi and Copper effect is screened off using a dummy variable

(b) \*, \*\* and \*\*\* indicate 10%, 5% and 1% levels of significance, respectively; and figures in parentheses are P-values

(c) @ stands for very weak overall fits

Source : Authors' Estimations

As visible in the graphs, the linear fits are very weak with rather low  $R^2$  values in most of the cases, except ISFTA-favoured exports to India and ISFTA-Neutral exports to rest of the world during the pre-ISFTA period, and the ISFTA-Neutral exports to India after its implementation. Further, the coefficients of the GDP variable turned out to be significant pertaining to the categories of exports with satisfactory linear fits. It is note-worthy also that the statistical acceptability of the model for ISFTA-Favoured exports to India in the post-ISFTA period becomes better if a dummy variable is introduced to capture the temporary up-surge corresponding to Vanaspathi and copper exports, but the coefficient of the GDP variable would still not become significant.

These results did not enable the researchers to perform a reliable tangential deviation analysis as conducted with regard to the analysis of imports. However, it could be noted from the above results that Sri Lanka's GDP, after the implementation of the ISFTA, has been able to push more exports to India of ISFTA-Neutral items, while it appears to have lost the significant positive push of exports in the ISFTA-favoured category it had prior to the implementation of the ISFTA. At the same time, the potential of Sri Lankan GDP to generate exports of ISFTA-Neutral category items to the rest of the world also appears to be lost ever since the implementation of the ISFTA.

The above observations, therefore, bring sufficient evidence to suggest that the ISFTA has not been effective in promoting Sri Lankan exports to India of relevant

category of items. This is because, an effective ISFTA would have pushed the ISFTA-Favoured exports to India in the aftermath of the implementation of the ISFTA, further strengthening (and not disappearing) the positive tangent that category had before the implementation of the ISFTA. Such would have given an additional push to ISFTA-favoured category of exports to perform better than the ISFTA-Neutral category (the latter showing a significant positive trend during the post-ISFTA period).

An OLS regression analysis was performed<sup>17</sup> in order to confirm the above findings where the ratio of relative exports to India of ISFTA favoured items to that of ISFTA neutral items [or,  $(X_F^I / X_F^N) / (X_N^I / X_N^N)$ ] before the implementation of the ISFTA and thereafter, the results of which analysis are summarised in the Table 7.

**Table 7 : Summary Statistics of the OLS regression on Exports**

Model Tested : $(X_F^I / X_F^N) / (X_N^I / X_N^N) = A + B(\text{GDP}) + C(\text{D1}) + D(\text{D2})$				
Form tested		With “Vanaspathi-Copper Dummy” (D2)		Without “Vanaspathi-Copper Dummy” (D2)
Parameter		Coefficient	P-Value	Coefficient P-Value
Constant		110.74*	0.06	119.48* 0.06
GDP		-115.45*	0.07	-125.51* 0.07
ISFTA Dummy (D1)		61.68	0.18	105.76** 0.02
Vanaspathi-Copper Dummy (D2)		61.59*	0.07	
R <sup>2</sup>		0.48		0.32
Std Error		49.49		54.40
F- Value		3.96**		3.29*

Note : \*, \*\*, \*\*\* indicates 10%, 5% and 1% significance respectively

Source : Authors' Estimations

It could be observed in these results that the overall acceptability and the explanatory power of the model is enhanced when a second dummy variable is introduced to represent the Vanaspathi and Copper trade, and that the coefficient of the dummy variable representing the ISFTA becomes insignificant in the presence of this second dummy.

<sup>17</sup> Number of data points is not adequate to perform a rigorous time series analysis. Thus, the present effort is not to draw conclusive results but to derive suggestive evidence as to whether the outcomes obtained using other methods of analysis would be further supported or negated through this analysis.



It could therefore be inferred that the ISFTA has not significantly facilitated Sri Lankan exports to India, over and above any comparative gain the country may have secured owing to reasons other than the ISFTA (which may be applicable to all export categories), excepting the Vanaspathi-Copper temporary up-surge. The ISFTA has not been able to provide a sustainable additional export impetus to the Sri Lankan economy in order to penetrate into the Indian market, not even to the levels to which she has managed to enter into the Indian market with other export items not benefitted by the ISFTA concessions.

## CONCLUSIONS

The results of the present analysis do not bring sufficient evidence to conclude that the ISFTA has been “effective” in promoting Indian exports to Sri Lanka or Sri Lankan exports to India, over and above any evolution of trade driven by the relative export competitiveness of the respective supplier country vis-a-vis different characteristics of the destination markets. At a Sri Lankan view point also the ISFTA cannot be considered as having produced significant benefits. Sri Lankan exports to India have been lagging behind except some potential shown in the ISFTA-Neutral category (though the positive ISFTA concessions were in the Favoured category) while Indian exports have increasingly and significantly penetrated into the Sri Lankan economy (in both the ISFTA-Favoured” and the “ISFTA-Neutral” categories). This puts in question the “advantage” of such a Free Trade Agreement. Any structural, factor endowment driven or policy oriented causes of this less than satisfactory performance need careful and strategic address prior to considering any further deepening of bilateral trade facilitation. Such assessment would also provide useful insight when negotiating free trade agreements with other countries.

If ventured into, the reasons behind such an outcome could possibly be found multi-faceted. Firstly, it could well be possible that each country had taken much care to avoid risk of their own production base being opened for competition, and thereby the “ISFTA-Favoured” list being made “difficult to exploit” right from its conception. India having offered concessions for products such as machinery and vehicles in which Sri Lanka does not have an export potential, while categorising the items such as apparel, rubber and coconut based products, in which Sri Lanka has the greatest competitive advantage for exports in India’s Negative List of the Agreement, could constitute examples. Secondly, the will to make use of the ISFTA as a vehicle to get the other’s market open as much as possible, while trying to protect their own market, and the lack of genuine interest in promoting bilateral trade, could also have made the ISFTA “handicapped”. Indian intervention to “correct” their domestic tariff structure nullifying the advantage Indian investors in Vanaspathi and Copper industry gained as a result of ISFTA concessions to manufacture on Sri Lankan soil and to export to India could mirror this attitude, even though such an intervention while foregoing tax revenue to the public coffers could

be rational (in view of arresting both loss of local value added and increased imports) from an Indian view point. Next, the lack of awareness among the stake-holders regarding the terms of the Agreement and the areas favoured by it, as well as regarding the benefits it offers, also could have been behind this apparent “ineffectiveness”. The under-utilisation of the ISFTA by Sri Lankan traders could have been caused by this inadequate awareness.

It is important to explore ways and means of addressing these issues. First of all, bilateral negotiations should be used as a vehicle to establish trust, and also to iron out any “policy-based” imbalances which are perceived as unfavourable. The non-tariff barriers and restrictions<sup>18</sup>, for example, which could have been major constraints for exports from Sri Lanka to India, could possibly be resolved through inter-governmental discussions (removal, since of late, of port restrictions may be an example). A mechanism should be introduced to report and channel to the attention of policy makers any issues which are hitherto unknown to the relevant Governmental authorities.<sup>19</sup> Next, the problem of inadequacy of awareness could be addressed by developing a network of information flows and a series of awareness campaigns, including seminars and workshops conducted for the current as well as potential exporters to India. In a Sri Lankan view point, the fact that the capital and intermediate inputs could be sourced at competitive prices from India due to ISFTA concessions could be made known to the Sri Lankan industrialists who could make use of such avenue to enhance the global competitiveness of their finished products. Similarly, the possibility of penetrating into the Indian manufacturing value chain could be pursued. Semi-processed items, such as components for the manufacture of vehicles and machinery, which could be exported duty free under the ISFTA (Abeyratne: 2013), could be supplied to the Indian product chain. Foreign Direct Investment to Sri Lanka from third countries also could be sought in the sectors possessing an export potential to India, making use of the window of opportunity offered by the ISFTA. Such strategies could help Sri Lanka benefit from technical transfer as well.

The results of the research also enable inference that the Sri Lankan economic growth process in general has become increasingly import intensive, much more than becoming export generating. This invites attention of the Sri Lankan policy makers as this general trend of worsening “terms-of-trade imbalance” would mean further import dependence when the economy seeks accelerated growth, resulting in

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<sup>18</sup> “One reason for lopsided trade in Sri Lankan perception is that many export items are subjected to para-tariffs such as port charges and non tariff barriers (NTBs) such as discriminatory sales taxes, which more or less erode the preferential margins granted by the FTA.” (Kelegama and Mukherji, 2007, p21)

<sup>19</sup>Kelegama and Mukherji (2007) have studied the impact of the ISFTA during the period of 1998 to 2004, in that, they have identified that the exports of value added goods to India has increased. However, the writers have observed that Tariff Rate Quotas and Non Tariff Barriers imposed by India have eroded the possibility of Sri Lanka reaping the maximum benefits of the Agreement.

medium-term balance of payment and external financial implications on the country's economy. It can therefore be concluded that there is an urgent necessity to enhance the economy's overall "competitiveness" with policy priority,<sup>20</sup> so that both import substitution and export promotion objectives would be supported, regardless of any bilateral concessionary trade agreements.

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<sup>20</sup>This might be pursued through raising the general level of efficiency of the economy and its institutions, reduction of wastage and leakages, provision of assistance to producers and exporters to meet the international quality standards, and enabling fast and accurate access to market information. As Abeyratne (2012) states, the issue of trade facilitation involves the procedures, the processes, the institutions and logistics through which, a commodity reaches from the producer in one country to the end user in another country; and when the issue of total mobility of a traded commodity is taken into consideration, the facilitation through tariff concessions seems inadequate.

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