

Are textile and clothing the doorway in India -EU FTA?

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Abstract:

India and the EU have been trading partners since many decades now. Both India and the EU have comparative disadvantages in a few sectors and they are known to employ protectionist measures to safeguard those sectors because of which they have not been able to sign the FTA officially called Broad-based Trade and Investment Agreement (BTIA). The past researches have estimated the impact of removal of sectoral NTMs and tariffs or at HS 6-digit level for all 5111 products while this paper concentrates only on the top 74 Textile and Clothing products exported by India to the EU. It has made use of cross-sectional data covering the year 2013 and it estimates the impact of partial as well as complete removal of NTMs and Tariffs on India's T&C exports to the EU. Five different scenarios have been taken considering various combinations of NTMs and Tariffs using SMART (Single Market Partial Equilibrium Simulation Tool). The results illustrate the Trade Creation and Trade Diversion effect of removal of tariffs and NTMs on India's Textile and Clothing exports to the EU along with the Trade Diversion effect on India's competitors viz. China, Bangladesh, Vietnam, Pakistan and Sri Lanka.

JEL: F51, F53, P45.

Keywords: FTA, BTIA, India, EU, Textile and Clothing, Tariff and NTMs

1. 1.Introduction

The world has witnessed globalisation and on-going liberalization of trade barriers which has manifested in rapid growth of international trade in the bygone three and a half decades. The financial crisis of 2008 brought with it a spate of protectionist measures in the global trade arena. The business sentiment dipped, both at national and at firm level and it manifested in the global slowdown that has persisted till the latter half of 2022. There has been an alarming rise in the number of protectionist measures being used both by the developed and the developing nations in the form of tariff and non-tariff measures, thus giving rise to the risk of beggar-thy-neighbour trade policies. The proof lies in the pudding, most of the nations and economic regions have refused to honour their promise to uphold the virtues of liberal trade environment and desist from protectionism in all forms.

EU has been a vital trading partner for India as its majority of exports and imports are with the EU nations. EU's interest mainly lies in having easy access to India's markets especially in automobiles, dairy, tobacco, wines, etc. and the procurement done by the Indian government. Indian government has not acceded to these demands as these industries in India are not well developed and/or they are not competitive enough to stand against the imports from the EU. As a counteractive measure the EU has increased the number of NTMs on India's exports to the EU

markets, especially the Textile and Clothing.

Protectionism has been the key factor which has annulled all the efforts by India and the EU to negotiate and sign the Broadbased Trade and Investment Agreement (BTIA)¹. The FTA between India and the EU represents one of the most potent and important development in the global trade, but unfortunately it has been stalled for more than 15 years without much progress. The initial dialogues were held in 2007 and so far, the FTA has not come to fruition. It is yet to be seen how India and the EU will resolve the matter and sign the BTIA.

1.1 India, EU and BTIA

BTIA will be very interesting and challenging due to the fact that the FTA is going to be between two very dissimilar parties. EU and India have been important trade partners since many decades. EU has been the most important destination for India's exports and EU is also the most important source for India's imports. The Indo-EU trade stood at USD50.13 bn. in 2005 which increased to USD100.69 bn. in 2021. The EU was India's third largest trading partner while India was EU's tenth largest trading partner. India may not be the most important partner but it is one of the rare few partners which have a trade surplus with the EU since 2011.

Based on international trade data from World Bank, India's total exports stood at USD 99.62 billion and USD 395.43 billion in 2005 and 2021 respectively with a CAGR of 8.45 percent. Its total imports stood at USD 142.87 billion and USD 572.91 billion in 2005 and 2021 respectively with a CAGR of 8.51 percent. EU's total exports stood at USD 3.69 trillion and USD 6.63 trillion in 2005 and 2021 respectively with a CAGR of 3.51 percent. Its total imports stood at USD 3.64 trillion and USD 6.47 trillion in 2005 and 2021 respectively with a CAGR of 3.44 percent. The world trade grew at a CAGR of only 3.11 percent between 2005-2021.

In terms of Trade Openness² India stood at 42% in 2005 which peaked in 2012 at 56% and stands at 45% in 2021. EU's trade openness stood at 74 percent in 2005 which peaked at 93 percent in 2021.

Measured at the current market prices, Indian economy was the sixth largest in the world with a GDP of USD 3.17 tn. while the EU GDP stood at USD 17.09 tn. holding 17.8 percent of the world economy. Amongst the large economies, India grew the fastest at 8.9 percent while the EU grew by 5.4 percent. While India's population stands at 1.41 billion, the EU is a home to only 447 million people (World Bank). India is still considered a developing nation by the World Bank, with a GNI per capita (constant 2015 US\$) of US\$1930 which falls into the lower-middle income bracket while the EU stood at US\$31,231 in 2021.

The signing of the BTIA is expected to create significant gains for both the parties involved. Following are some of the key questions related to BTIA that this paper tries to answer:

- (i) What are the potential trade creation and trade diversion gains that India stands to benefit from the reduction in tariff and NTMs?
- (ii) Would such reduction lead to significant losses to the EU or to India's competitors viz. China, Bangladesh, Vietnam, Pakistan and Sri Lanka?
- (iii) How will the tariff and NTM reduction affect India and the EU internally?

2. Literature review

Adam Smith had forewarned about the 'interested sophistry' of the business houses whose main goal was to generate profits that was to be paid for by the consumers. Trade Protectionism, is a government's policy of creating barriers for the imported products from foreign nations by way of applying tariffs on imported merchandise and services, quantitative restrictions and various other regulations. The key objective of protectionism is to safeguard the domestic firms and their workforce from the international competition. Protectionism ultimately leads to higher prices in the home markets which are ultimately paid by the consumers. Studies on protectionism in international trade³ reveal the interesting behavior of those who espouse protectionism and those who advocate liberalism. In the years that followed after the war witnessed both the choices being sought by different manufacturers. The firms which rooted for protection were those who were catering only to their domestic markets and who faced serious competition from imports. The firms which had the capability to

¹ The FTA between India and the EU also called Broadbased Trade and Investment Agreement (BTIA)

² Trade Openness is measured as the sum of exports and imports as a ratio of GDP.

³ See Timothy McKeown, "Firms and Tariff Regime Change: Explaining the Demand for Protection," *World Politics* 36 (January 1984), pp. 215-33; Milner, H. V., & Yoffie, D. B. (1989). Between free trade and protectionism: strategic trade policy and a theory of corporate trade demands. *International Organization*, 43(2), 239-272. <https://doi.org/10.1017/s0020818300032902>; Wang. (2013). *The European Union Trade Liberalization in the Textile and Clothing Sector (1995-2005): Rhetoric or Reality?* [MA Thesis]. University of Groningen.

supply goods to the international markets at competitive prices voted in favour of free trade.

Gawande and Bandyopadhyay (2000), in case of MERCOSUR, have found that the more an industry is politically organized in Argentina, the higher is their chance of being excluded from an FTA. Grossman and Helpman (1994) have also found that in a home country there can be a case where large size domestic firms (competing with the foreign imports) with political clout, can create enough pressure on the government to the effect that the government does not sign the FTAs. The political rents can be sufficiently high to lead to such eventuality. Cadot et al. (2014) presented that some of sectors of India which have comparative advantage are those which are very well coordinated in the industrial nations to the effect of protectionist lobbying, especially textile and clothing sector. Thus, it seems that the losers (a country's uncompetitive sectors) are well organized and wield political clout as compared to the winners (the sectors which are competitive in the global markets).

The international trade data clearly reveals that protectionism has been harmful, the benefits that it generates is far less than the costs incurred and it is one of the main reasons responsible for slow economic growth and it has resulted in deadweight loss. As per an estimation by Magee (1976) the gains accrued by way of free trade outweighs the loss by a factor of 100.

Friedman and Krugman⁴ believed that free trade is favourable for the labour in the poor nations, even though they don't have to face the strict health and labour, even though they are not subject to the stringent health and labor standards prescribed by the rich nations. But due to massive use of protectionist tariff and non-tariff tools in trade, the benefits of tariff liberalization in general remains a matter of investigation.

2.1 Protectionism in global textile and clothing trade

Before the Uruguay Round, the USA and the EU had created the rule based Multi-fiber Agreement (MFA), which was in the form of quantitative restrictions, to arrest the sudden flooding of the American and the EU markets with cheap textile and clothing products from the developing nations, especially the Asian countries. MFA was in contradiction to the spirit of GATT. It was well crafted to shield the developed nations from the developing nations. (Heron, 2007)

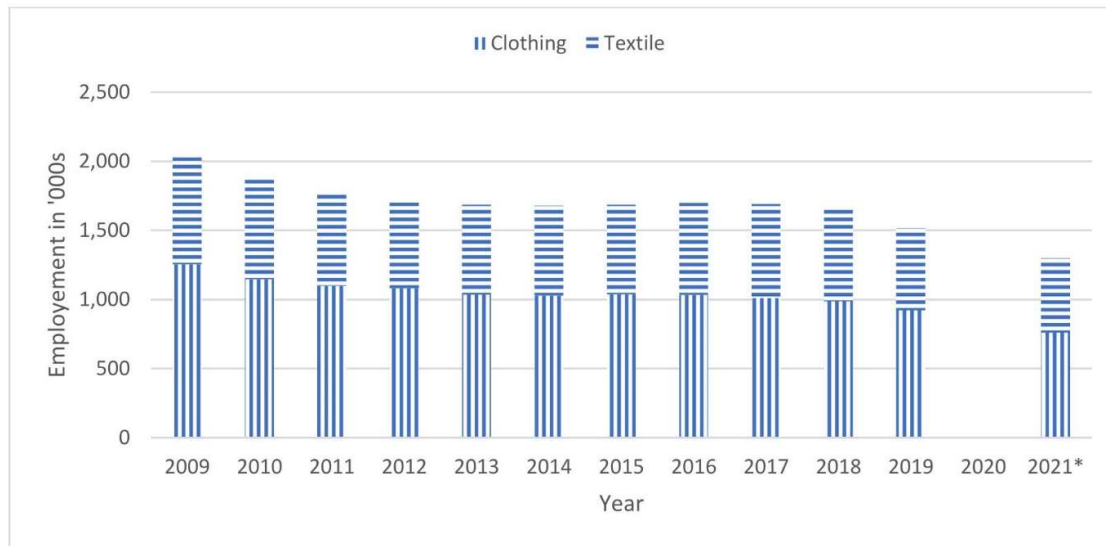
On 1 January 1995, MFA was replaced by the WTO Agreement on Textiles and Clothing (ATC) which set out a transitional process for the ultimate removal of the QRs. This time the EU used 'back loading' method to provide protection to the Textile and Clothing manufacturers in its member nations. In 'back loading' the EU kept 83 percent of the most imported products till the last phase and waived off the QRs on 70 percent of the products only on 1st January 2005. (Malaga and Mohanty, 2003)

Despite the protection, many factories closed and hundreds of thousands of people lost their jobs. During the upheaval, the member nations of the EU got divided into two groups – one group which wanted the quotas to be removed as envisaged in ATC and the other group which wanted the QRs and other protectionist measures to continue (Wang, 2013).

01 January, 2005 the quota system (quantitative restriction) was removed by the USA and the EU on the Textile & Clothing imports from the developing nations like India, China, Bangladesh, etc. The removal of quotas led to a sudden spurt in the Textile & Clothing exports from developing nations. Simultaneously, the employment in Textile & Clothing industry of the EU and USA started declining (Figure 1) as the cheap Textile & Clothing imports from the developing nations flooded the European and American markets.

Figure 1 *Employment in the textile and clothing manufacturing industry in the European Union from 2009 to 2021, by segment (in 1,000s)*

⁴ See Milton and R. Friedman, *Free to Choose*, New York: Harcourt Brace Jovanovich, Inc., 1980, pp. 40–41; P. Krugman, *Is Trade Passe? Economic Perspective*, pp. 131-144, 1987, *A Raspberry for Free Trade*, Nov. 21, 1997, *In Praise of Cheap Labor*, Mar.21, 1997.



Source: Eurostat, EURATEX.

The employment level in textile fell from 778,000 in 2009 to 537,000 in 2021 while in clothing it fell from 1,255,000 in 2009 to 761,000 in 2021. Clothing was hit more severely maybe because clothing manufacturing is more labour intensive and the labour cost in the EU nations had become prohibitive during the said period.

As a counteractive measure, the EU started using NTMs against the low-priced imports while keeping the tariffs unchanged or reducing them gradually. The trade data on tariff and NTM (WTO, 2012) clearly illustrate the fact that while the tariffs were reduced by the EU, it was followed by a somewhat corresponding increase in the use of NTMs in the form of technical barriers to trade (TBT) and sanitary and phytosanitary (SPS) in merchandise trade thereby creating unprecedented and pressing difficulties in the route towards global integration.

The same NTMs can affect different partner countries with different intensities (Dolabella, 2020 and Bratt, 2017). The EU has been applying NTMs uniformly on all its trade partners but India has been more adversely affected as compared to its Asian competitors. It can be seen that in the period that followed after 2004 was favorable for China, Bangladesh and Vietnam but not favorable for India.

According to the world trade data, India's exports to the world has been increasing faster than the international trade but its exports to the EU have been slowing down during the period 2011-2020. As per Eurostat, the trade stood at Euro 65.3 bn in 2020 making India the 10th largest trading partner with a share of 1.8% of EU's total bilateral trade of Euro 3645.9 bn.

The impending FTA between India and the EU is heavily entrenched in politico-economic problems. It has been long known to both the parties that the FTA will result in net gains, and there is bound to be losers as well. In case of India, sectors like motor vehicles, minerals, machinery, metals, etc. will be losers as they have a comparative disadvantage while their counterparts in the EU will be winners as they have a comparative advantage. In case of the EU, it is the textile and clothing sector which will be the loser as it has a comparative disadvantage while Indian textile and clothing sector will be the gainer as it has a comparative advantage.

2.2 Impact of NTMs

One of the earliest were Kee et al. (2009) who undertook the exercise to estimate the impact of NTMs at product level. The study employed quantity-based measures. First the NTMs were estimated in terms of ad-valorem equivalents (AVEs) for 78 nations at the tariff line level. They used externally estimated import elasticities to transform the NTM effects (on trade value) into AVEs. The scope of the work allowed for the country specific effect of NTMs based on their factor endowments. The purpose of the exercise was to put in place a universal basis which could allow comparison of the nations in terms of the level of trade protection exercised by them.

Kee et al. (2013) made use of indices based on MFN tariff rates and antidumping measures to estimate the protection level in the period 2008-2009. The study was undertaken for a broad array of nations of which the conclusion was that the increased levels of protection were the reason for only a small proportion of the decrease

in trade that occurred in the wake of post-financial crisis.

Kee and Nicita (2016) concentrated on SPS and TBT measures to evaluate bilateral product specific AVEs to find out the explanation for significant inconsistencies in the product trading volumes between importing and exporting countries. A reduced sample size of nations was taken for the analysis and 50 bootstraps of different models were employed for the cross-sectional tariff line data.

The identification strategy of Kee et al. (2009) was altered by Bratt (2017) in that an NTM interaction term was added to the partner country's factor endowments. Cross-sectional data was then used to estimate the product specific bilateral AVEs. The result of the analysis of the impact of NTMs on trade values reveals both the positive and negative effects of NTM. Statistically, a large proportion of the AVEs estimated were not found significant so the significance level of 20% was used. The work did not consider the different types of NTMs.

Ghodsai et al. (2017) analysed the effects of NTMs on actual volume traded in terms of multilateral product volume effects. They used panel data for the period 1995-2014 and they made use of number of NTMs as a country dummy to calculate the importer specific impact of various measures on trade. The analysis was done for the entire tariff lines. Their results show that the impact of NTMs and the direction have a large variation.

Felbermayr (2017) has considered various scenarios in which different levels of shallow and deep economic integration between India and the EU have been taken and the reference year is 2011. For each level of integration, different levels of NTMs and Tariffs levied by the EU on imports from India have been taken. Partial equilibrium model has been used to estimate the corresponding effect of removal of tariff/non-tariff barriers on major export sectors of India. The results show that the India-EU FTA may generate significantly large gains for India's Textile and Clothing sector (7-43%) while causing a miniscule loss to the EU's Textile and Clothing sector (0.1 – 3%). Reduced tariffs and NTMs will significantly boost exports from India to the EU with major increase in the textile exports by 14 percent and in clothing exports by 43 percent. The loss to the EU's customs revenue will be miniscule while the welfare effect for the citizens of the EU will be much larger. The Indo-EU FTA is likely to increase the trade twofold over a decade.

Cadot et al. (2018) took a fresh take on estimation of NTM effects by considering both the quantity and price effect. They took a cross-sectional sample of eighty nations. On one hand the change in volumes was used to gauge the strength of market-creating effects with respect to cost incurred towards compliances, while on the other hand the variation in the prices were used to extract the AVEs of NTMs. With regard to the volume regression the export and import share in the world trade was employed to identify the bilateral associations.

Dolabella and Durán (2020) used gravity framework to assess the impact of NTMs on bilateral trade. Instead of the trade value, the variation of trade quantities was used to identify AVEs of NTMs by making use of GTAP import demand elasticities. For each of the tariff lines regressions were performed, and thereafter they were estimated employing PPML estimator. The panel data was used for the years 2001 to 2015. Each NTM was interacted with specific variables of each of the chosen nations. The multiplication of the variable of NTM with the percentage share of the importing country and the exporter of the total value of imports and exports of that product.

The past researches have estimated the impact of removal of NTMs and tariffs at sector level or at HS 6-digit level for all 5111 products. This paper takes a micro view approach by considering only 74 key Textile and Clothing products which constitute nearly 80% of the total value of the 809 Textile and Clothing product exports from India to the EU. The cross-sectional data has been taken for the year 2013 using unilateral approach and the effect of removal of Tariffs and NTMs by the EU on India's Top 74 Textile and Clothing exports to the EU have been estimated. The impact has been estimated using SMART (Single Market Partial Equilibrium Simulation Tool), a partial equilibrium-based simulation tool developed by WITS World Bank, in different scenarios constituting various combinations of tariffs and NTMs.

3. Data and Methodology

This paper uses SMART to estimate the potential benefits that would have accrued to India as a result of reduction of tariffs and NTMs by the EU on T&C imports from India. The tool has been used to estimate the price effect, trade creation and trade diversion effect on India while also considering the effects on the key competitors of India viz. China, Bangladesh, Vietnam, Pakistan and Sri Lanka. Different scenarios have been taken to evaluate the benefits in each scenario, and the corresponding impacts on the India's competitors and on the EU.

The data for tariff equivalent of NTMs has been taken from Data Catalog, World Bank. The data on trade, supply elasticity, substitution elasticity and import demand elasticity was combined with the tariff equivalent of NTMs for the respective Top 74 Textile and Clothing products and used as input in the SMART Model. The main focus of this paper was to analyse the impact of reducing the NTMs and tariffs applied by the EU on its imports of Textile and Clothing from India. It is precisely the reason why SMART was chosen as it considers one importing market (EU) and its exporting partners (India, China, Bangladesh, Vietnam, Pakistan and Sri Lanka) and gauges the impact of various tariff change scenarios by estimating the new values for a given set of variables viz. supply elasticity, substitution elasticity and import demand elasticity.

Data was taken from WITS World Bank regarding the export value, applied duty and the import demand elasticity for Top 74 Textile and Clothing products at HS 6-digit level. Out of 74 products, there are only 19 products which fall under textiles while the remaining 55 products fall under clothing category. The supply elasticity was taken as 99 for the fact that there is more than enough additional Textile and Clothing manufacturing capacity available and if there is any significant increase in demand, the same can be fulfilled by these capacities within a limited time frame. The substitution elasticity has been set at the default value of 1.5 since the competition in international trade for Textile and Clothing sector is very high and thus is the propensity for substitution.

The SMART model was then used, taking the trade data for 2013. Five scenarios were taken in which different levels of AVE of NTMs for Textile and Apparel were considered in which no change was made to the existing tariff levels.

The following scenarios were taken for consideration in the SMART model analysis.

Table 1 Scenario description for undertaking SMART model analysis

| SCENARIO | NTM CLOTHING | NTM TEXTILES | APPLIED TARIFF |
|-----------------|-----------------|-----------------|-------------------|
| ACTUAL SCENARIO | FULL | FULL | ACTUAL |
| 1 | HALF | FULL | ACTUAL |
| 2 | FULL | HALF | ACTUAL |
| 3 | HALF | HALF | ACTUAL |
| 4 | ZERO | ZERO | ACTUAL |
| 5 | ZERO | ZERO | ZERO |

When using SMART, the applied duty was taken as the sum of existing applied duty plus tariff equivalent of NTM applicable to the particular textile or clothing item at HS 6-digit level. The new duty was set according to the scenario specification. For example, if the tariff equivalent of NTM of a clothing item is 10, FULL means 10%, HALF means 5% and ZERO means 0%. The same is applicable to tariff. NTMs on Top 74 Textile and Clothing products at HS 6-digit level used by the EU on all the countries have been kept constant combining it with the actual applied tariff which are different for different countries.

4. Results of Empirical Estimation

The data related to Trade Value, Applied Duty Rate, Supply Elasticity, Substitution Elasticity and Import Demand Elasticity at HS 6-digit level has been taken from WITS World Bank. The same can be seen in Table 2.

Table 2 Trade value, Applied Duty Rate and Import demand elasticity for Top 74 Textile and Clothing exports from India to the EU

| S.N. | Product Code | Trade Value in 1000 USD | Applied Duty Rate | Import Demand Elasticity |
|------|-----------------|----------------------------------|-------------------------|--------------------------------|
| 1 | 520299 | 34882.6 | 0 | 0.91 |
| 2 | 520522 | 80853.5 | 4 | 0.42 |
| 3 | 520523 | 96074.4 | 4 | 0.95 |
| 4 | 520524 | 47796.9 | 4 | 0.56 |
| 5 | 520527 | 21531.4 | 4 | 0.60 |

| S.N. | Product Code | Trade Value in 1000 USD | Applied Duty Rate | Import Demand Elasticity |
|------|-----------------|----------------------------------|-------------------------|--------------------------------|
| 41 | 611420 | 51757.3 | 12 | 0.58 |
| 42 | 611430 | 13485.7 | 12 | 0.76 |
| 43 | 611490 | 3956.4 | 12 | 0.62 |
| 44 | 611599 | 406.7 | 12 | 0.49 |
| 45 | 620342 | 268704.6 | 12 | 1.09 |

| | | | | | | | | | |
|----|--------|----------|-------|------|----|--------|----------|------|------|
| 6 | 520532 | 30442.1 | 4 | 0.54 | 46 | 620349 | 8952.4 | 12 | 1.25 |
| 7 | 520548 | 16053.8 | 4 | 0.49 | 47 | 620442 | 259230.8 | 12 | 0.76 |
| 8 | 530500 | 17678.6 | 0 | 3.31 | 48 | 620443 | 269949.0 | 12 | 1.08 |
| 9 | 531010 | 25502.3 | 4 | 0.56 | 49 | 620444 | 83049.8 | 12 | 0.33 |
| 10 | 540233 | 74268.1 | 4 | 1.50 | 50 | 620449 | 25282.1 | 12 | 1.73 |
| 11 | 550320 | 116721.8 | 4 | 0.87 | 51 | 620452 | 75758.3 | 12 | 1.22 |
| 12 | 550410 | 17664.4 | 4 | 2.67 | 52 | 620453 | 34336.4 | 12 | 0.96 |
| 13 | 550953 | 27647.2 | 4 | 3.70 | 53 | 620462 | 180970.2 | 12 | 1.28 |
| 14 | 570110 | 65471.1 | 7.15 | 0.95 | 54 | 620463 | 43445.2 | 12 | 0.88 |
| 15 | 570190 | 22326.3 | 5.75 | 2.88 | 55 | 620469 | 20491.9 | 12 | 0.79 |
| 16 | 570231 | 6046.4 | 8 | 1.15 | 56 | 620520 | 468039.2 | 12 | 1.16 |
| 17 | 570330 | 31745.4 | 8 | 1.08 | 57 | 620590 | 8889.4 | 12 | 0.98 |
| 18 | 570390 | 43373.8 | 8 | 0.44 | 58 | 620630 | 499472.0 | 12 | 1.01 |
| 19 | 570500 | 74172.3 | 8 | 2.34 | 59 | 620640 | 435552.5 | 12 | 1.02 |
| 20 | 581092 | 31718.1 | 6.5 | 0.91 | 60 | 620690 | 13757.6 | 12 | 0.52 |
| 21 | 610342 | 32385.6 | 12 | 0.48 | 61 | 620920 | 95422.3 | 10.5 | 0.59 |
| 22 | 610442 | 100008.0 | 12 | 0.60 | 62 | 621142 | 74313.1 | 12 | 1.27 |
| 23 | 610443 | 39784.9 | 12 | 3.11 | 63 | 621143 | 73968.8 | 12 | 0.89 |
| 24 | 610449 | 4546.7 | 12 | 0.53 | 64 | 621149 | 5539.8 | 12 | 0.55 |
| 25 | 610462 | 183582.9 | 12 | 0.81 | 65 | 621420 | 44870.9 | 8 | 1.14 |
| 26 | 610469 | 4414.5 | 12 | 1.23 | 66 | 621430 | 100884.7 | 8 | 1.10 |
| 27 | 610510 | 198322.2 | 12 | 0.72 | 67 | 621490 | 102685.8 | 8 | 2.15 |
| 28 | 610610 | 112527.5 | 12 | 0.55 | 68 | 630231 | 89030.7 | 12 | 1.12 |
| 29 | 610690 | 3313.1 | 12 | 0.43 | 69 | 630260 | 204204.2 | 12 | 0.86 |
| 30 | 610711 | 120645.6 | 12 | 0.82 | 70 | 630391 | 71104.4 | 12 | 0.85 |
| 31 | 610721 | 100202.0 | 12 | 0.65 | 71 | 630419 | 50165.2 | 12 | 1.48 |
| 32 | 610729 | 252.9 | 12 | 0.52 | 72 | 630492 | 60929.9 | 12 | 1.17 |
| 33 | 610821 | 67033.7 | 12 | 1.15 | 73 | 630520 | 3485.0 | 7.2 | 2.37 |
| 34 | 610831 | 198483.2 | 12 | 1.20 | 74 | 630532 | 251512.2 | 8.16 | 0.46 |
| 35 | 610839 | 661.2 | 12 | 0.62 | 75 | 630790 | 58542.5 | 7.25 | 0.99 |
| 36 | 610910 | 943634.5 | 12 | 0.70 | | | | | |
| 37 | 610990 | 128867.6 | 12 | 0.98 | | | | | |
| 38 | 611020 | 264434.9 | 12 | 0.86 | | | | | |
| 39 | 611120 | 293913.3 | 10.45 | 0.81 | | | | | |
| 40 | 611190 | 2303.3 | 11.38 | 3.26 | | | | | |

Source: WITS, World Bank

Tariff equivalent for the Top 74 Textile and Clothing products at HS 6-digit level was extracted from Data Catalog, World Bank and the same can be seen in Table 3.

Table 3 AVEs of NTMs for Top 74 Textile and Clothing exports from India to the EU

| S.N. | Product Code | AVE of NTMs | S.N. | Product Code | AVE of NTMs | S.N. | Product Code | AVE of NTMs | S.N. | Product Code | AVE of NTMs |
|------|--------------|-------------|------|--------------|-------------|------|--------------|-------------|------|--------------|-------------|
| 1 | 520299 | 0.06 | 21 | 610442 | 0.00 | 41 | 611430 | 12.15 | 61 | 621142 | 101.41 |
| 2 | 520522 | 0.92 | 22 | 610443 | 4.18 | 42 | 611490 | 2.36 | 62 | 621143 | 3.04 |

| | | | | | | | | | | | |
|----|--------|-------|----|--------|--------|----|--------|-------|----|--------|-------|
| 3 | 520523 | 0.92 | 23 | 610449 | 7.75 | 43 | 611599 | 6.12 | 63 | 621149 | 6.84 |
| 4 | 520524 | 0.75 | 24 | 610462 | 3.24 | 44 | 620342 | 0.00 | 64 | 621420 | 0.00 |
| 5 | 520527 | 2.47 | 25 | 610469 | 45.95 | 45 | 620349 | 6.92 | 65 | 621430 | 0.00 |
| 6 | 520532 | 0.67 | 26 | 610510 | 1.31 | 46 | 620442 | 0.00 | 66 | 621490 | 2.95 |
| 7 | 520548 | 0 | 27 | 610610 | 465.34 | 47 | 620443 | 98.66 | 67 | 630231 | 18.24 |
| 8 | 531010 | 0.95 | 28 | 610690 | 59.55 | 48 | 620444 | 2.17 | 68 | 630260 | 1.46 |
| 9 | 540233 | 0.76 | 29 | 610711 | 275.36 | 49 | 620449 | 2.75 | 69 | 630391 | 0.94 |
| 10 | 550320 | 0.44 | 30 | 610721 | 32.29 | 50 | 620452 | 0.00 | 70 | 630419 | 3.85 |
| 11 | 550410 | 0.07 | 31 | 610729 | 0.00 | 51 | 620453 | 0.00 | 71 | 630492 | 0.00 |
| 12 | 550953 | 13.02 | 32 | 610821 | 67.12 | 52 | 620462 | 1.29 | 72 | 630520 | 3.31 |
| 13 | 570110 | 2.29 | 33 | 610831 | 3.68 | 53 | 620463 | 1.06 | 73 | 630532 | 0.00 |
| 14 | 570190 | 0.00 | 34 | 610839 | 1.89 | 54 | 620469 | 4.49 | 74 | 630790 | 4.54 |
| 15 | 570231 | 0.00 | 35 | 610910 | 0.00 | 55 | 620520 | 29.40 | | | |
| 16 | 570330 | 1.10 | 36 | 610990 | 0.00 | 56 | 620590 | 6.02 | | | |
| 17 | 570390 | 1.10 | 37 | 611020 | 0.00 | 57 | 620630 | 4.34 | | | |
| 18 | 570500 | 2.61 | 38 | 611120 | 4.07 | 58 | 620640 | 0.00 | | | |
| 19 | 581092 | 22.84 | 39 | 611190 | 4.57 | 59 | 620690 | 0.00 | | | |
| 20 | 610342 | 0.00 | 40 | 611420 | 14.06 | 60 | 620920 | 11.24 | | | |

Source: Data Catalog, World Bank

5. Data Analysis

The results of reducing the NTMs on Textile and Clothing using SMART model are as follows:

The data related to actual trade value is illustrated in the Table 4 below and is a constant input for each scenario.

Table 4 Trade value of Top 74 Textile and Clothing products for India and its competitors for the year 2013.

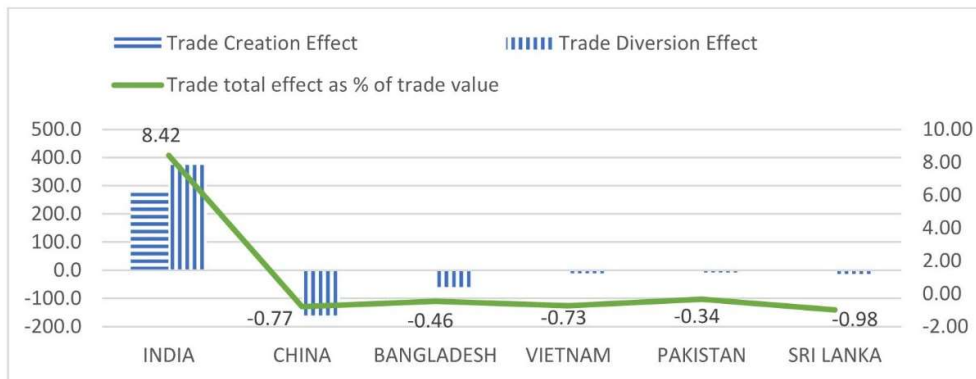
| Country | INDIA | CHINA | BANGLADESH | VIETNAM | PAKISTAN | SRI LANKA |
|-----------------------|--------|---------|------------|---------|----------|-----------|
| Trade Value (USD Mn.) | 7715.8 | 20799.8 | 12987.9 | 1533.2 | 2436.8 | 1305.4 |

Source: WITS, World Bank

5.1 Scenario 1.

In this scenario, the tariff and the NTM on textile remains unchanged while the NTM on clothing has been reduced by the EU to half. The impact of reducing the NTM on Clothing by half can be seen in the Figure 2 below.

Figure 2 Simulation results for Scenario 1



Source: Authors' simulation results based on the data from WITS World Bank and Data Catalog World Bank

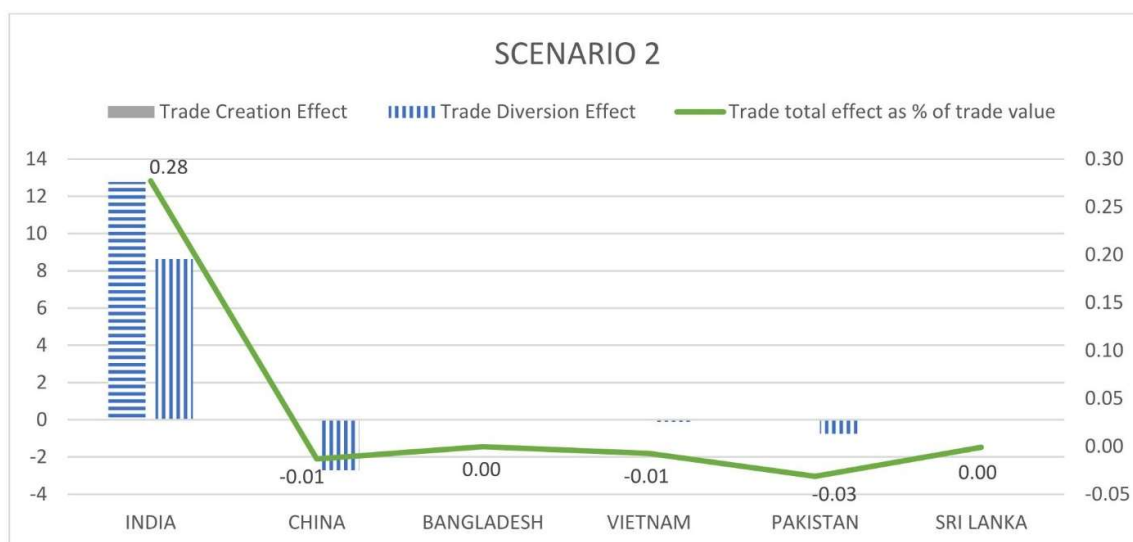
It can be seen that for India the Trade Creation Effect is USD 275.5 Mn. while the Trade Diversion effect is USD

374.3 Mn. In total India stands to experience trade total effect of USD 649.8 Mn. which is 8.42% of the value of India's exports of the Top 74 Textile and Clothing products. In the case of countries like China, Bangladesh, Vietnam, Pakistan and Sri Lanka who are the closest competitors of India, they are not likely to experience any trade creation, but they are likely to experience trade diversion away from them. In this scenario, China is estimated to experience a negative trade diversion effect of USD 161.1 Mn. whereas for Bangladesh it is expected to be minus USD 59.1, Vietnam (-USD 11.2 Mn.), Pakistan (-USD 8.3 Mn.) and Sri Lanka (-USD 12.8 Mn.). The effects when taken as a percentage of the existing export values, India, as mentioned above, stands to gain by 8.42% while the rest of the competitors losing by miniscule proportions, China losing by -0.77%, Bangladesh (-0.46%), Vietnam (-0.73%), Pakistan (-0.34%) and Sri Lanka losing by -0.98%. It seems that for a reduction of NTMs on clothing can fairly improve the exports from India to the EU while not really making any serious dent in the exports from the competing nations. In absolute terms, about 60% of the India's trade diversion gain will come from China and Bangladesh, while the remaining will come from the rest of the nations the impact of which will be barely perceptible.

5.2 Scenario 2.

The impact of reducing the NTM on textile by half (leaving clothing unchanged) can be seen in Figure 3.

Figure 3 Simulation results for Scenario 2



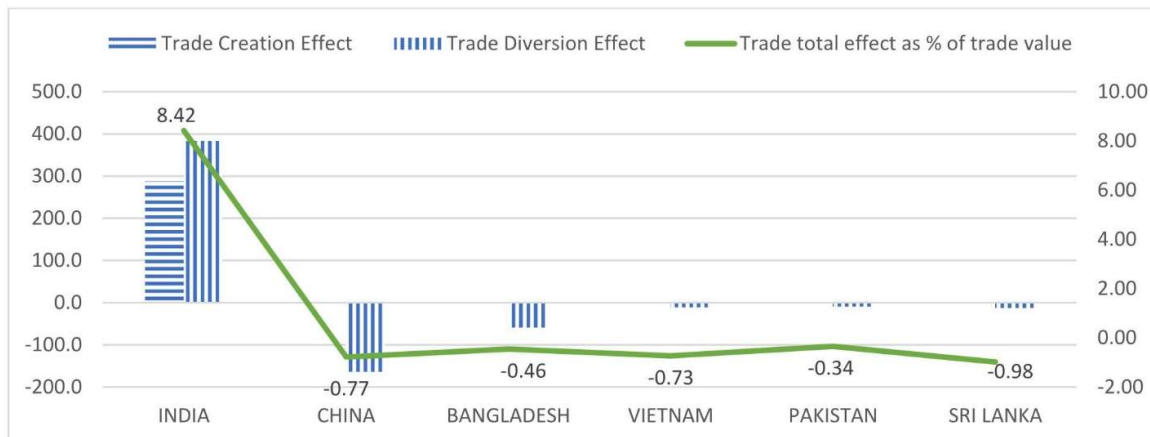
Source: Authors' simulation results based on the data from WITS World Bank and Data Catalog World Bank

It can be seen that for India the Trade Creation Effect is mere USD 12.77 Mn. while the Trade Diversion effect is USD 8.63 Mn. In total, India stands to experience trade total effect of USD 21.40 Mn. while it has experienced a trade total effect of USD 649.8 Mn. when the NTM on Clothing was reduced to half. This clearly means that India does not stand to gain upon reduction of NTMs on Textile products. The trade diversion effect and trade total effect as % of trade value stands at China (-USD 2.71 Mn, -0.013%), Bangladesh (-USD 0.04, -0.003%), Vietnam (-USD 0.114 Mn, -0.0074%), Pakistan (-USD 0.762 Mn, -0.76%) and Sri Lanka (-USD 0.013 Mn, -0.001%). While India is expected to gain by 0.27% the competing nations are expected to suffer by less than 0.03%.

5.3 Scenario 3.

The impact of reducing the NTM on Textiles and Clothing by half can be seen in Figure 4.

Figure 4 Simulation results for Scenario 3



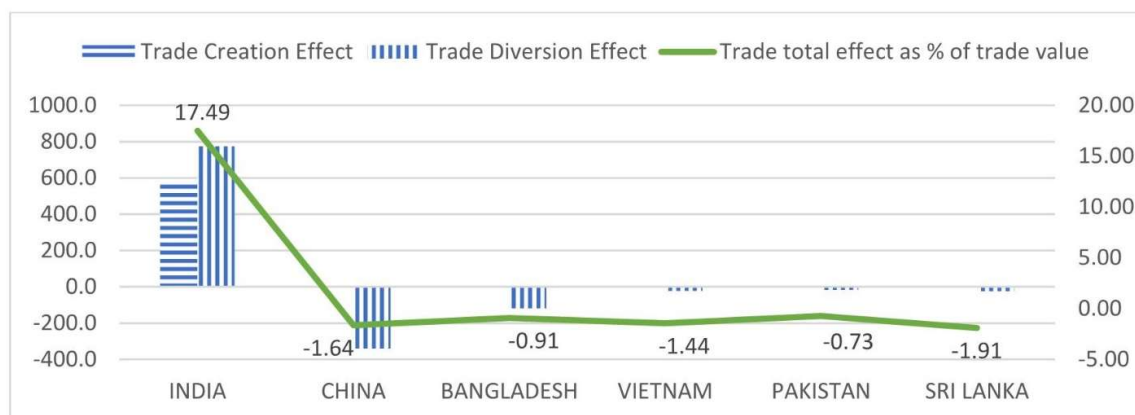
Source: Authors' simulation results based on the data from WITS World Bank and Data Catalog World Bank

It can be seen that for India the Trade Creation Effect is USD 288.3 Mn. while the Trade Diversion effect is USD 382.9 Mn. In total, India stands to experience trade total effect of USD 671.2 Mn. which is 8.69% of the Total Export value of Top 74 Textile and Clothing products when the NTM on both Textile and Clothing was reduced to half. From the results it is evident that the results of Scenario 3 are the sum total of the effects of scenario 1 and scenario 2. The trade diversion effect and trade total effect as % of trade value stands at China (-USD 163.8 Mn, -0.79%), Bangladesh (-USD 59.2, -0.46%), Vietnam (-USD 11.4 Mn, -0.74%), Pakistan (-USD 9.1Mn, -0.37%) and Sri Lanka (-USD 12.8Mn, -0.98%).

5.4 Scenario 4

The impact of total removal of the NTM on Textiles and Clothing can be seen in Figure 5.

Figure 5 Simulation results for Scenario 4



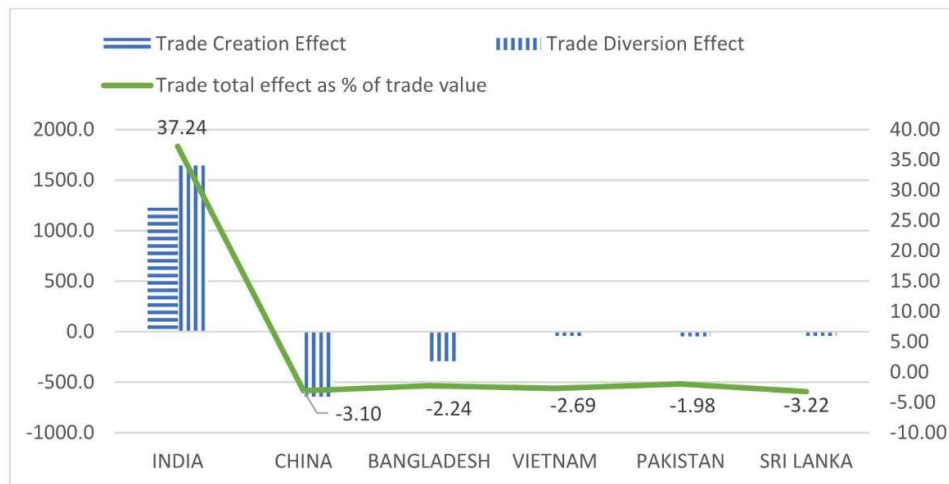
Source: Authors' simulation results based on the data from WITS World Bank and Data Catalog World Bank

It can be seen that for India the Trade Creation Effect is USD 576.6 Mn. while the Trade Diversion effect is USD 773.1 Mn. In total, India stands to experience trade total effect of USD 1349.7 Mn. which is at significantly high level of 17.49% of the Total Export value of Top 74 Textile and Clothing. The trade diversion effect and trade total effect as % of trade value stands at China (-USD 341.2 Mn, -1.64%), Bangladesh (-USD 118.4, -0.91%), Vietnam (-USD 22.2 Mn, -1.44%), Pakistan (-USD 17.9 Mn, -0.73%) and Sri Lanka (-USD 24.9 Mn, -1.91%).

5.5 Scenario 5

The impact of total removal of Tariff and the NTMs on Textiles and Clothing can be seen in the Figure 6.

Figure 6 Simulation results for Scenario 5



Source: Authors' simulation results based on the data from WITS World Bank and Data Catalog World Bank

It can be seen that for India the Trade Creation Effect is USD 1227.3 Mn. while the Trade Diversion effect is USD 1646 Mn. In total, India stands to experience trade total effect of USD 2873.3 Mn. which is 37.24% of the existing export value of Top 74 Textile and Clothing exported by India to the EU. The trade diversion effect and trade total effect as % of trade value stands at China (-USD 643.9 Mn, -3.10%), Bangladesh (-USD 291.3, -2.24%), Vietnam (-USD 41.2 Mn, -2.69%), Pakistan (-USD 48.2 Mn, -1.98%) and Sri Lanka (-USD 42.0 Mn, -3.22%).

6. CONCLUSION

The key results show that on one hand there will be a healthy growth in India's T&C sector while on the other hand, there will be a minor loss of revenue to the EU's customs revenue. The results also indicate that India's competitors will also not be severely affected due to the lowering of tariffs and NTMs by the EU on T&C imports from India.

It is suggested that instead of using 'backloading' methods used earlier during MFA and ATC, rather the tariffs and NTMs be reduced across all the textile and clothing categories in order to bring about the changes without causing any upheaval in the EU markets and without shocking the competing exporting nations like China, Bangladesh, Vietnam, Pakistan and Sri Lanka. It will also provide enough time and manoeuvring space to the involved parties to handle any unforeseen challenges that the FTA may bring.

The lowering of tariff and NTMs by the EU on India's exports of Textile and Clothing will play a pivotal role in the India-EU negotiations. If the FTA envisages a liberal environment provided by the EU to Textile and Clothing imports from India, it will lead to a significant boost to India's exports and lead to generation of additional employment for hundreds of thousands of workers in India. A long-standing bone of contention shall be removed which has been there since the MFA and ATC and still exist in the post-ATC era. Further, the FTA is expected to reduce the trade costs due to tariff elimination or reduction in costs of NTMs. This will encourage the involved parties – India and the EU member nations to concentrate on their areas of comparative advantage. There is tariff loss but it is more than offset by the much higher gains experienced by the nations while the consumers enjoy lower prices. The FTA will also result in India losing more in terms of tariff income while the EU will suffer a minor revenue loss. On the other hand, lowering of NTMs on Textile and Clothing imports from India will not cause any financial loss to the EU, while their citizens will enjoy significantly higher welfare effect due to lower NTMs.

It seems that the textile and clothing might be the doorway to the path that could lead to the signing of the FTA, notwithstanding the fact that, both India and the EU may have to accede to each other's demands in the subsequent phases in the form of exclusions of a few sectors.

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