Chapter 1

Trade similarity

In terms of changes in the volume of trade, the negative impact of the EU–India agreement on excluded countries can arise in two circumstances. The first negative impact is the well known trade diversion effect which occurs when non-preferential imports are replaced by preferential imports solely due to the preferences granted. The second negative impact arises through the 'correction' of existing trade diversion. This happens when the EU was importing from a preferential partner due solely to the preferences granted. Reducing tariff barriers with a new partner could re-orientate trade towards this new partner if it is more efficient in producing the given good. This is a gain for the EU in terms of efficiency, but a negative effect for preferential countries, who now lose their trade diversion advantage. An example of this is that if an agreement such as the EU-South Africa was already trade diverting, and if India were the least-cost producer, the EU–India FTA would change the direction of trade in favour of the latter, and although this would be to the EU's advantage, it would still harm South Africa. We refer to such outcome as the trade re-orientation effect.

Due to its reciprocal nature, the EU–India agreement is likely to have trade diversion and trade re-orientation effects from both the removal of EU tariff on India and Indian tariff on the EU.

The degree of import similarity by country of origin can shed light on the scope for both trade diversion and trade re-orientation. The more similar are import structures from proposed preferential partners to those that are non-preferential, the higher the risk of trade diversion or trade re-orientation. Hence, for example, if the structure of exports of India and Sri-Lanka to the EU were very similar, and India obtained preferential access, then this is more likely to impact on Sri-Lanka, than if the structure of their exports was quite different.

Table II.1 investigates this issue. The first column examines the similarity between imports from India and imports from the identified key partners by use of Finger-Kreinin indices of trade similarity for EU imports across all product categories at the HS 6-digit level of disaggregation[30]. The FK index ranges between zero (no similarity in trade structures) and one (identical structure of trade). The degree of similarity between EU imports from India and those from selected partners is in most cases low. We find a maximum FK of 0.269 for Sri Lanka which implies that Sri Lanka could suffer some loss of market share in the EU which could be due to either trade diversion and/or trade re-orientation. Similarly the similarity between the EU's imports from India and Pakistan is 0.259, and China 0.247[31].

In the second column we calculate the FK index for all tariff lines in which India faces a positive tariff and hence will receive a competitive boost from the FTA[32]. This will give us an indication of the similarity of composition of EU imports from India with those from excluded countries in which there is a potential for *any* adverse effect arising from the agreement. In the third column, we calculate the FK index, but where we now take into account only those HS 6-digit industries where both India and the excluded country export to the EU, and where both India and the excluded country currently face a positive tariff. This in turn gives us an indication of the similarity of import composition of the EU from partners in lines which are likely to suffer from trade diversion possibly accompanied by some trade re-orientation. Hence, here we are identifying all those cases, where an EU–India FTA would improve India's access to the EU vis-à-vis the tariff currently being faced by the excluded country. This therefore covers both the possibility of trade diversion and/or trade re-orientation.

Take the case of Bangladesh, for example. Here we see that the overall FK index (column 1) suggests a low degree of similarity equal to 0.179. However, if we look at the second column, we can see that the degree of overlap between Indian exports to the EU and Bangladeshi exports to the EU in those cases where India currently faces a positive tariff, and thus excluded countries may be affected, is somewhat smaller (0.173). The third column then shows that there is no overlap between the exports of India and Bangladesh where both countries trade with the EU and face positive tariffs. This arises because Bangladesh's exports in principle already enter the EU duty-free under EBA preferences.

Table II.1. F-K index of import similarity between EU imports from India and imports from selected partners (2004)

	1	2	3
Afghanistan	0.058	0.052	0.000
Bangladesh	0.179	0.173	0.000
Bhutan	0.046	0.038	0.000
Maldives	0.016	0.013	0.000
Nepal	0.138	0.126	0.000
Pakistan	0.259	0.241	0.200
Sri Lanka	0.269	0.180	0.152
Brazil	0.161	0.105	0.046
Russia	0.073	0.039	0.008
China	0.247	0.205	0.106
South Africa	0.122	0.070	0.012
CARICOM	0.101	0.074	0.001
Central Africa	0.037	0.018	0.000
Eastern and Southern Africa	0.182	0.140	0.001
Pacific – EPA	0.031	0.013	0.002
SADC (less South Africa)	0.044	0.023	0.001
West Africa	0.056	0.034	0.001

Source: Author's calculations using Comtrade

This suggests that there is very little scope for trade diversion impacting negatively on Bangladesh. In turn, this suggests that any impact on Bangladesh's trade will thus arise from trade re-orientation. From the point of view of the EU's welfare this is positive, but nevertheless the impact on Bangladesh may still be substantial. This issue is explored in more detail later on. Overall, Columns 2 and 3 indicate that the scope for negative effects is greatest with regard to Pakistan, Sri Lanka and China.

Table II.2 carries out the same exercise as Table II.1 but looks at the degree of similarity between Indian imports from the EU and imports from excluded countries. The first column shows us that, except with regard to China, India imports very different goods from the EU than from the other excluded countries considered here. The FK indicators are all below 0.1, except with respect to China where there is considerably more overlap (FK = 0.242). This would suggest *a priori* that the scope for both trade diversion or trade re-orientation is small. It also suggests that the country that could be worst hit from Indian preferences granted to the EU would be China. The second and third panels show strong similarity between total import tariff lines and tariff lines that could be affected by trade diversion and/or trade re-orientation (this is seen from the similarity of FK between panels 1, 2 and 3). This occurs because India tends to have little zero tariff access from different countries in 2004 and has extended very few preferences.

Table II.2. F-K index of import similarity between Indian imports from the EU and imports from selected partners (2004)

	1	2	3
Afghanistan	0.008	0.008	0.008
Bangladesh	0.020	0.020	0.020
Bhutan	0.003	0.003	0.003
Maldives	0.014	0.014	0.014
Nepal	0.033	0.033	0.033
Pakistan	0.031	0.031	0.031
Sri Lanka	0.072	0.072	0.072
Brazil	0.085	0.085	0.085
Russia	0.095	0.094	0.094
China	0.242	0.239	0.239
South Africa	0.074	0.073	0.073
CARICOM	0.029	0.029	0.029
Central Africa	0.043	0.043	0.043
Eastern and Southern Africa	0.047	0.046	0.046
Pacific – EPA	0.010	0.010	0.010
SADC (less South Africa)	0.025	0.025	0.025
West Africa	0.031	0.031	0.031

Source: Author's calculations using Comtrade

Overall, the trade similarity indicators, which are based on the overall *structure* of trade, suggest that there is some scope for trade diversion to impact negatively for certain countries (Pakistan, Sri Lanka and China), and that there may be more scope for trade re-orientation (Bangladesh, Nepal, Brazil, South Africa, and Eastern and Southern Africa). The preceding, however, does not take into account country size effects. Given the size of the Indian economy and its trade with the EU, it is possible that size effects could dominate the structure effects. Hence, there may be products which are relatively unimportant in the structure of India's trade, but where the volume of that trade is sufficiently high that improved access to the EU market for India could impact significantly on the trade of other small or less developed countries. These issues are explored in more detail below, where we investigate, across tariff lines, the amount of excluded country exports that could be negatively affected as a result from improved market access between the EU and India.

Notes

29 Many of the trade effects discussed in the text will have investment implications – you can't expand production to take advantage of new opportunities from trade policy changes without investment – but popular discussion often presupposes that there are further, additional effects because an FTA changes the credibility of policy stances, the cost of investment goods etc. It is only to these that we are referring here, for otherwise we would be double-counting effects.

30 The F-K index of import similarity between country *m* and *n* can be defined, in general, as $FK_{mn} = \sum_i \min(\delta_{im}, \delta_{in})$. Where δ_{im} and δ_{in} are the share of imports from country *m* in product *i* and the share of imports from country *n* in product *i*, respectively. This index essentially captures the minimum share of trade by tariff line and then gives us an aggregate measure of the similarity of composition of imports from two different partners into one economy. As a point of reference, the FK index of export similarity between EU and US exports to the world stands at 0.61, which is considered high. At the other end of the spectrum, the FK index of export similarity between what the EU and the Central African region export to the world is 0.08 which is considered as being quite low.

31 The reader is warned that this is based on the assumption that trade patterns are not going to change and that 100 per cent of tariff lines are going to be liberalised in the EU–India agreement. If the latter condition does not hold, our number provides an upper estimate of such effect.

32 FK indices over a subset of headings have a maximum of below 1, so the interpretation is a little more tenuous. It is best to read them relative to the full FK in column (1) – i.e. how far does the commodity restriction discussed reduce similarity.