Chapter 3

# The effects of a potential EU–India FTA on the EU and India[17]

## Introduction

As is well known, the potential net benefits from the process of preferential liberalisation are inherently ambiguous even for the partners undertaking the integration. This arises because PTAs typically involve both trade creation[18] (which is welfare increasing) and trade diversion[19] (which is welfare reducing). In addition, there may be further welfare gains arising from the induced growth effects stimulated by, for example, productivity growth, increased specialisation, and/or positive externalities between firms, sectors or across sectors (e.g. between manufacturing and services) which are typically more likely to arise in the presence of deeper integration. This chapter will briefly look at these in the context of a potential EU–India FTA, first in terms of partial equilibrium analysis of shallow integration, then in terms of qualitative analysis of deep integration and finally, by looking at some quantitative results from general equilibrium modelling.

## Shallow integration

In assessing the likely shallow integration impact of an EU–India FTA on the two partners, we focus on a series of diagnostic indicators from which one can draw analytical conclusions well-grounded in economic theory. The aim of this analysis is to identify: (i) the potential welfare effects by assessing the scope for trade creation and trade diversion; (ii) whether there are any particular sectoral issues which arise from the preferential trade liberalisation between the EU–India. The analysis is based on a number of important rules of thumb, as identified in the Sussex Framework – see Evans et al. (2006).

The Sussex Framework uses simple models of the trade effects of preferential trade to derive indicators of the likely welfare effects of a particular agreement in terms of *observable data*. Thus, whereas the alternative approach to assessing regional integration schemes – computable general equilibrium modelling, which we turn to later in this chapter – uses a lot of theory but relatively little data to produce precise estimates of the effects of a trade agreement, the Sussex Framework uses the simple theory of trade creation and trade diversion and a lot of data to make broad and plausible, but, inevitably, not precise, predictions of its likely effects. The analytical thinking behind the Framework is discussed briefly as we introduce the various results below. It is also discussed in Part II, as well as in Evans et al. (2006).

***The higher are the initial tariffs/barriers**, the greater the likely levels of both trade creation and trade diversion.* While Indian tariffs have declined considerably, the average manufac-

turing tariff is still quite high at around 12 per cent. Certain sectors are still considerably more protected (food, beverages and tobacco, and animal and vegetable oils) and several others exhibit significant tariff peaks[20]. These tariff peaks are important as they not only indicate the potential for trade diversion (and even trade creation if no trade is taking place) but they also indicate which products are sensitive (and which would therefore most likely not be liberalised in a trade agreement). Of the 4,119 goods that India imported in 2005, tariff peaks existed on only 38 tariff lines, which represented approximately 1 per cent of the tariff lines. However, the tariff peaks themselves were quite high ranging from 15 per cent for HS47 to 160 per cent for HS21.

All this suggests that the existing levels of distortion are quite high, and that therefore, in liberalising its tariffs on EU exports, there is considerable likelihood of there being both trade creation and trade diversion into the Indian economy.

**Table I.2. Tariff peaks on Indian imports from the EU in 2004**

| Cat. (HS2) | Description | No. prod. cat. | Av. tariff in cat. | Peaks | Av. tariff in peaks |
|---|---|---|---|---|---|
| 87 | Vehicles o/t railw/tramw roll-stock, pts & acc | 58 | 34.05 | 13 | 100 |
| 47 | Pulp of wood/of other fibrous cellulosic mat; | 17 | 7.35 | 5 | 15 |
| 55 | Man-made staple fibres. | 82 | 17.20 | 3 | 75 |
| 26 | Ores, slag and ash. | 15 | 6.33 | 3 | 15 |
| 17 | Sugars and sugar confectionery. | 14 | 46.07 | 2 | 100 |
| 16 | Prep of meat, fish or crustaceans, molluscs et | 12 | 41.67 | 2 | 100 |
| 39 | Plastics and articles thereof. | 124 | 15.00 | 1 | 70 |
| 52 | Cotton. | 82 | 14.94 | 1 | 30 |
| 38 | Miscellaneous chemical products. | 62 | 16.90 | 1 | 50 |
| 33 | Essential oils & resinoids; perf, cosmetic | 35 | 23.43 | 1 | 100 |
| 41 | Raw hides and skins (other than furskins) | 34 | 11.47 | 1 | 30 |
| 8 | Edible fruit and nuts; peel of citrus fruit | 19 | 31.05 | 1 | 100 |
| 7 | Edible vegetables and certain roots and tubers | 18 | 35.00 | 1 | 100 |
| 21 | Miscellaneous edible preparations. | 14 | 39.29 | 1 | 160 |
| 6 | Live tree & other plant; bulb, root; cut flowers | 6 | 21.67 | 1 | 60 |
| 10 | Cereals | 1 | 0.00 | 1 | 30 |
| Total | | 593 | | 38 | |

Source: Gasiorek et al. (2007)

In comparison, the tariffs faced by Indian exports to the European Union are lower but there are far more tariffs peaks. Fifty-nine out of the 100 2-digit sections of the HS have tariff peaks, with a total of 371 tariff peaks. This corresponds to 10 per cent of the EU's import tariff lines. However, those peaks are quite different from the Indian ones, the average tariff in the peak is much lower, and ranges from 0.21 per cent for HS27 to 52.4 per cent for HS24.

**Table I.3. Tariff peaks on Indian exports to the EU in 2004**

| Cat. (HS2) | Description | No. prod. cat. | Av. tariff in cat. | Peaks | Av. tariff in peaks |
|---|---|---|---|---|---|
| 24 | Tobacco & manuf. tobacco substitutes | 8 | 21.61 | 1 | 52.40 |
| 4 | Dairy, eggs, honey, & ed. products | 7 | 4.25 | 1 | 17.30 |
| 3 | Fish & crustaceans | 37 | 6.69 | 2 | 14.23 |
| 19 | Preps. of cereals, flour, starch or milk | 14 | 2.35 | 1 | 14.10 |
| 7 | Edible vegetables | 36 | 5.73 | 1 | 14.02 |
| 21 | Misc. edible preparations | 12 | 5.74 | 1 | 12.80 |
| 8 | Ed. fruits & nuts, peel of citrus/melons | 26 | 3.51 | 6 | 10.22 |
| 6 | Live trees & other plants | 10 | 3.55 | 1 | 8.25 |
| 53 | Veg. textile fibres nesoai, yarns & woven etc. | 24 | 2.41 | 5 | 7.34 |
| 87 | Vehicles o/t railw/tramw roll-stock | 55 | 2.33 | 14 | 7.19 |
| … | | … | … | … | … |
| 27 | Mineral fuels, oils, waxes & bituminous sub | 13 | 0.02 | 1 | 0.21 |
| Total | | 2767 | | 371 | |

Source: Gasiorek et al. (2007)

Since EU tariffs are already typically low, there would appear to be less scope for significant trade creation and trade diversion in the EU. This would, however, also depend on the underlying elasticities of supply and substitution between suppliers, and also on the extent to which small tariffs can have a big impact on differences in competitiveness across countries and on the tariff peaks.

***The greater the number of FTA partners****, the more likely it is that there will be trade creation as opposed to trade diversion.* Looking at the number of countries involved in the FTA, from the perspective of the EU there is clearly only one partner country – India. In contrast, India would be signing an agreement, which involves 27 countries even if they have a single trade policy. The more countries which are included in the FTA, the greater is the likelihood of including more efficient suppliers. This in turn reduces the probability of trade diversion, and simultaneously increases the likelihood of trade creation.

***The more similar is the product mix*** *in the economies concerned and the higher the elasticities of supply, the greater would be the possibility of trade creation.* The degree of similarity

between two countries is measured by the Finger-Kreinin index[21] (with regard to trade flows)[22]. Comparing EU and Indian exports to the world as proxies for production structures, the FK index is relatively low at 0.24, which suggests that, in terms of the export structure, the EU and India are fairly dissimilar[23]. This would, therefore, appear to suggest that on the production side there is not much evidence of scope for trade creation.

***Wide differences in comparative advantage*** *between partner countries are likely to lead to a welfare improving FTA.* It is thus also important to consider the relative competitiveness of producers across the countries in the FTA, which is done through indices of revealed comparative advantage[24].

However, the preceding needs to be counterbalanced by the possibility of trade diversion. Despite being the single biggest supplier to India the EU still accounts for only 25 per cent of Indian imports, so the majority of India's imports are still sourced from outside the EU. This suggests that there is also considerable scope for trade diversion. Clearly it is unrealistic to suppose that the EU is competing here with all the other country suppliers. It is only in a subset of products where the EU has a comparative advantage, but across a range of other products and suppliers (e.g. oil) there will be little trade diversion. Nevertheless, the US already supplies more than 6 per cent of India's imports, and many other OECD countries and increasingly China are likely to be competing with EU producers. The degree of similarity across India's imports from the EU with India's imports from the rest of the world through the FK index is above 0.42. This suggest that there is a reasonably large amount of overlap – at a very disaggregated level – between what India imports from the EU and what it imports from the rest of the world. This again would appear to suggest scope for trade diversion.

There is another interesting feature of EU–India trade which re-inforces our conclusions with regard to trade diversion. This concerns the decline in the EU share of India's imports from 32 per cent in 2000 to 25 per cent in 2004. This suggests that under an MFN regime India's pattern of imports was shifting away from the EU towards other countries. To the extent that the signing of an FTA decelerates or reverses this trend in any commodity, one might presume that it is trade diverting.

To begin with, we focus on a comparison of the RCAs for the top fifteen exporting sectors for each country. Although focusing only on a small number of sectors, it appears that there is little similarity in patterns of comparative advantage between the EU and India, if one calculates a correlation coefficient between the EU and India RCAs across all sectors the result is –0.18. From this, one can conclude that the pattern of underlying comparative advantage differs considerably between the EU and India. If there were overlap in their production bundles, this would appear to suggest that there is some scope for trade creation on the production side. However, as discussed above, there does not appear too much overlap in this regard.

The overall conclusion from this discussion, therefore, is that with regard to the possible changes in Indian imports from the EU arising from a future FTA, there are clearly some possibilities for trade creation but that there is also considerable scope for trade diversion and the net welfare effect for India is therefore clearly ambiguous. To the extent that such

trade diversion occurs, from the EU's perspective, this implies an increase in demand for EU goods arising from the expansion of the EU's exports to India. As discussed earlier, whether this entails a net positive welfare effect for the EU will depend on whether the expanding sectors are being matched by contracting sectors elsewhere, or whether the expansion is using previously unemployed resources. Of course there is gain for the sectors which experience a trade-diverting increase in demand.

## Deep integration

As we noted above, deep integration refers to a process of removing barriers to trade and investment that are *behind the border*, notably regulatory barriers or even mere differences that make it harder to do business across borders than within jurisdictions. The range of possible gains associated with deeper integration include: technology transfer and diffusion both through trade and FDI; pro-competitive gains from increasing import competition in an environment of imperfect competition, which may also allow greater exploitation of economies of scale in production; the increased geographical dispersion of production through trade that supports (i) exploitation of different factor proportions for different parts of the production process (Ricardian efficiency gains) and/or (ii) local economies of scale through finer specialisation and division of labour in production ('Smithian' efficiency gains); externalities arising from institutional changes that lead to a wide increases in productivity.

A key indicator of existing deep integration is the degree to which intra-industry trade (IIT) is taking place. Equally, the rate of growth of IIT might be thought of as an indicator of the potential for further deep integration. Broadly IIT takes three forms. Firstly, it is the exchange of similar goods (the same trade heading) of broadly similar qualities and prices; secondly, it is the exchange of similar goods of different qualities and prices; thirdly, it is the exchange of different goods at different prices within a trade classification that represents a vertically integrated supply chain (parts for finished or part finished goods). Each of these represent ways in which economic integration can encourage the niche specialisation that can generate the productivity gains that represent the main advantages of deep integration and can compensate for any losses to trade diversion from shallow integration.

Analysis suggests that intra-industry trade between India and the world started a good way behind that of China and Brazil in 1992 but had caught up and, indeed, may have overtaken both of them by 2004. All three, however, lag well behind the US. The low level of EU–India Grubel-Lloyd Index[25] (GLI) confirms the story of little direct overlap between Indian and EU trade patterns and competiveness. On one hand, this reinforces the inference that tariff cutting in an EU–India FTA could induce trade diversion losses for India given its high tariffs. On the other, it also underlines the potential for increased IIT, especially if TBT and SPS barriers were reduced as part of the FTA.

On the question of horizontal versus vertical integration, it is noticeable that, the EU apart, vertical differentiation greatly exceeds horizontal. This is not surprising in the case of India, China and Brazil since they are likely to export, say, low quality apparel and

import high quality, or to be part of globally or regionally integrated supply chains. It is, equally, not surprising that the EU is the exception where horizontal differentiation exceeds vertical, because it represents the most integrated market of national economies at broadly similar level of development in the world where the cross-hauling of differentiated, but similar, goods of equivalent qualities is likely. It is also worth noting that the share of horizontally differentiated trade grew faster than vertical in India between 1992 and 2004 perhaps representing improved quality of Indian goods.

EU trade with India is predominantly vertically differentiated, and, while the share of horizontally differentiated trade has grown faster, it is still at a very low level. Once more this suggests that there is potential for preferential liberalisation towards the EU to generate productivity-increasing specialisation particularly on vertically differentiated trade.

It is important to note that the domestic impact of deep integration is complex: there will be losers as well as winners. We might distinguish:

- Firms that are currently exporting who will have an improved home business environment;
- Firms able to enter export markets;
- Consumers who like products made to international (or FTA partner) standards;
- Home firms who cannot meet higher standards and go out of business;
- Consumers who do not want to pay for the international (or FTA partner) standards;
- And in the context of the present study – excluded country firms.

An obvious issue arises in the case of pressures to liberalise Indian retailing. It seems likely that opening to foreign competition will increase efficiency, but not only will many small shopkeepers suffer, so too will those consumers who will then be unable to access new retail outlets so easily[26].

## General equilibrium modelling results

In addition to results from partial equilibrium and qualitative analysis above, results from a CGE study done by the Carnegie Endowment[27] simulating the effects of an EU–India FTA suggest that Indian exports would increase by $3.5 billion (5.5 per cent), with the largest increases seen in exports of apparel and textiles, which would increase by $1.9 billion, followed by increases in the category 'other manufacturing', notably leather and footwear (an increase of $520 million), chemicals ($220 million), and services ($230 million). India's imports would increase by $2.6 billion (3.4 per cent), concentrated overwhelmingly in manufactured goods, particularly capital goods ($2.1 billion), followed by smaller increases in imports of minerals and metals ($420 million) and chemicals ($360 million). India's imports of vehicles would increase by $120 million, while its exports of vehicles would increase by $60 million. Because the overall increase in imports would be less than the increase in exports, India's existing bilateral trade deficit with the EU would narrow. The criterion for economic policy is welfare, and in this dimension, India would

experience a very small loss (–$250 million): while exporting more, India would consume slightly less domestically, at least in the short run.

The impact of the trade agreement on India varies depending on the sector that is liberalised. The country would see little overall change as a result of agricultural liberalisation. Although agricultural production is a very important part of the Indian economy, trade in agricultural goods constitutes only a small portion of India's total trade. Its agricultural exports to the EU amount to 6.9 per cent of exports to the bloc, whereas imports of agricultural goods make up only 0.5 per cent of Indian imports from the EU. The liberalisation of agricultural trade with the EU would reduce India's overall domestic production very slightly (by $50 million), as increased imports of $70 million outstrip a $20 million increase in exports, and domestic consumption in India is largely unchanged. Liberalisation of trade in processed food has a slightly larger and more positive impact on India, with domestic production increasing by $200 million. As with agricultural liberalisation, imports increase more than exports ($120 million and $70 million, respectively) as a result of the liberalisation of trade in processed food; household consumption in India increases by $150 million. The impact on India of manufacturing liberalisation, by contrast, is larger and more varied. Bilateral elimination of tariffs on manufactures has a relatively large negative impact on Indian households, whose consumption declines by $1.5 billion (–0.5 per cent) despite a modest positive impact from EU liberalisation. Government tariff revenue also declines slightly. Investment increases by $1.1 billion (1 per cent). These results are dominated in each case by India's own manufacturing liberalisation measures, including the loss of tariff revenue that must be offset by increases in other taxes.

In contrast to the mixed results for India, the European Union would benefit unambiguously from the agreement, although to a very modest extent. Exports would increase by $1.3 billion, a gain of 0.05 per cent of total EU exports. A gain of $1.6 billion in exports of machinery, electronic equipment, and other durable manufactures would be offset by moderate losses in exports of textiles, apparel, and services. Imports would increase by $3.2 billion (0.12 per cent), with the largest increases in apparel and textiles ($750 million), chemicals ($230 million), minerals and metal ($250 million), vehicles ($190 million), other manufacturing ($710 million), and services ($510 million). The EU's existing bilateral trade surplus with India would decrease.

The impact on the EU of the bilateral liberalisation of agricultural goods and processed foods and of the EU's own liberalisation of manufactures trade is extremely small. The EU gains arise almost entirely from India's opening of its market for manufactured goods to its exports. The EU gains $2.4 billion in total consumption as a result of India's liberalisation of manufactured goods, offset by a slight loss of $220 million from the EU's own manufacturing liberalisation.

In another CGE study[28] on a potential EU–India FTA, two scenarios have been simulated. While these are identical with regard to protection in goods (95 per cent of tariffs are removed on both sides), the difference lies in the treatment of services. In the first scenario, protection in services is cut by 10 per cent, while in the second scenario a 25 per

cent cut is considered. In both scenarios, the tariff dismantling begins in 2007 and is fully implemented in 2013, with a shorter transition period for the EU. The impact of trade liberalisation on foreign direct investment is taken into account in the simulations. Given that the Carnegie Study does not involve services, we look at the simulation results for services from the CEPII-CIREM Report.

EU exports to India increase in all services sectors and in both scenarios. Overall, they increase by 5 per cent and 16 per cent in scenarios 1 and 2, respectively (+ US$0.5 bn and + US$1.6 bn, resp.). Yet, because India still represents a small market, bilateral trade flow increases do not translate for the EU into major positive impact at the level of its domestic economy. It is also worth noticing that services liberalisation is not sufficient to counteract the appreciation of the EU real exchange rate caused by goods liberalisation, so that total exports outside the EU decreases, except in the Business services sector.

India increases its export of services in all sectors, in both scenarios. This emanates from the overall gain in competitiveness of the Indian economy due to a depreciation of the real exchange rate. Overall, total Indian exports of services increase by US$0.6 bn in scenario 1 and US$1.2 bn in scenario 2 (+ 3.3 per cent and + 6.5 per cent respectively). The highest export increases are found in Trade and Business services (+ $201 mn and + $291 mn in scenario 1, + $434 mn and + $570 mn in scenario 2) but significant increases are also expected in transport, communication, other services, finance and insurance, with an increase between 1 per cent and 4 per cent of Indian exports in each of these sectors.

The conclusions for welfare are actually similar to those of the Carnegie study: the EU appears to be a small gainer in both scenarios, whereas India records small gains in one scenario and losses in the other. Some commentators have argued that anything that increases exports – as most EU trade agreements appear to do – must be a 'good thing'. We also agree that increases in trade in a relatively undistorted environment are likely to be beneficial, but preferential trade agreements not only take place in a distorted context, but generally increase the degree of distortion, so the conclusion that they are *prima facie* welfare enhancing is quite unwarranted. Rather one needs to examine each agreement specifically and add into the calculation the possibility that each increases the incentives for the next. When we look at arrangements between the EU and relatively low income developing countries (with what are admittedly rather weak tools), the general conclusion is that they reduce welfare. And if they do indeed then foster further moves towards regionalism, we may have cause to worry. We return to this issue briefly in Part IV.

## Conclusion

To summarise, the outcome of a possible EU–India agreement would depend on the coverage of sectors and on the extent to which the agreement can look at the harmonisation of issues of deep integration. Both partial and general equilibrium analysis point to ambiguous benefits for India and at best, modest benefits for the EU, from a potential agreement especially if services are not covered. Thus, a potential agreement would have to go beyond the traditional tariff cuts of shallow integration to beyond-the-border issues of deep integration for it to have realistic positive implications for the two trading partners.

## Notes

17 This chapter draws heavily on CEPII-CIREM (2007), Gasiorek et al. (2007) and Polaski et al. (2008).

18 There are two possible sources of trade creation. First, this can arise when more efficiently produced imported goods replace less efficient domestically produced goods. Thus, on the production side, trade is 'created' and this yields welfare gains. Second, even assuming no changes in domestic production a reduction in tariffs, leading to a reduction in prices increases demand for imported goods. This too leads to welfare gains as consumers have access to cheaper goods than previously. Here trade is 'created' on the consumption side.

19 Trade diversion occurs when the source of imports switches away from non-FTA partner suppliers to the new FTA partner.

20 These refer to tariff impositions on specific commodities which are three times higher than the average for the entire sector. There is no universal definition of peaks, but the factor of three has fairly widespread use – e.g. Deardorff (2006).

21 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 $\delta_{im}$ and $\delta_{in}$ 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 was computed at the 6-digit level of disaggregation. The FK index is equal to one when the structure of trade (defined by the share of each sector in total trade) across the two countries being compared is identical and is equal to zero when the structure of trade is completely different.

22 Ideally, one would like to be able to compute the index on patterns of production. However, data are simply not available at an appropriate level of disaggregation. Following common practice, therefore, the index is computed on the basis of trade flows, and one uses trade flow similarity as an imperfect proxy for production structure similarity.

23 For comparison, the FK index for EU and US exports is equal to 0.6.

24 An RCA is a way of measuring the competitiveness of a given country in each good compared to another country. It measures a country's exports of a commodity relative to its total exports and then compares this to the comparator countries' exports of a commodity relative to its total exports. A comparative advantage is 'revealed', if RCA > 1. If RCA is less then unity, the country is said to have comparative disadvantage in that commodity. The formula for RCA = $(X_{ij}/X_{it})/(X_{nj}/X_{nt})$ where $X_{ij}$ represents exports of commodity $j$ by country $i$; $t$ represents all commodities and $n$ all countries.

25 The GLI measures the overlap between the industrial structure of imports and exports (here measured at HS4) between any pair of trading partners. The higher the index, the greater the intra-industry trade overlap with an index of 1 representing total overlap. For an industry $i$ with exports $X_i$ and imports $M_i$ the index is:
GLI $= [\{(X_i + M_i) - |X_i - M_i|\}*100]/(X_i + M_i)$.

26 Though with retail outlets mushrooming in every nook and cranny of the country, this may become less of a concern.

27 Polaski et al. (2008). This study covers just goods trade liberalisation.

28 CEPII-CIREM (2007), which covers both goods and services trade liberalisation, but no other aspects of deep integration.

## References

CEPII-CIREM (2007). 'Economic Impact of a Potential FTA between the European Union and India', Framework Contract No TRADE/05/H3/01/1c, Commission of the European Union – Directorate-General for Trade.

Deardorff, A. (2006) *Deardorff's Glossary of International Economics* http://www-personal.umich.edu/~alandear/glossary/t.html.

Evans et al. (2006). 'Assessing Region Trade Agreement with Developing Countries: Shallow and Deep Integration, Trade, Productivity and Economic Performance'. Report for DFID. http://www.sussex.ac.uk/Units/caris/CARIS/DFIF-RTA-REPORT.pdf

Francois, J., Hoekman, B. and Manchin, M. (2005). 'Preference Erosion and Multilateral Trade Liberalization', The World Bank, Policy Research Working Paper No. WPS 3730.

Gasiorek, Michael, Holmes, Peter, Robinson, Sherman, Rollo, Jim and Shingal, Anirudh (2007). 'Qualitative Analysis of a Potential Free Trade Agreement between the European Union and India', the European Commission and CARIS, Department of Economics, University of Sussex, UK, February.
http://trade.ec.europa.eu/doclib/docs/2007/june/tradoc_135101.pdf

Polaski, Sandra, Ganesh-Kumar A., McDonald, Scott, Panda, Manoj and Robinson, Sherman (2008). 'India's Trade Policy Choices: Managing Diverse Challenges'. Carnegie Endowment for International Peace.

Part II

# Excluded countries and the markets for goods

A trade agreement between the EU and India is likely to have trade creating, trade diverting, and trade re-orientating effects with attendant implications for excluded countries. This part of the report focuses on the possible scope for the negative effects on excluded countries arising from the EU–India agreement. In so doing we identify sensitive product lines and the countries that are most likely to be affected by the preferences granted by the EU to India and by India to the EU (bearing in mind existing preferential arrangements).

The analysis is based on diagnostic statistical indicators and rules of thumb as developed by the Sussex Framework (Evans et al., 2006). Trade diversion and trade re-orientation are more likely to occur when tariff differentials between partner and non-partner countries are high, and the composition of imports from preferential partners is similar to that of non-preferential partners. Using these simple rules of thumb across the spectrum of trade between the EU and other partners we approximate the possible degree of trade diversion and trade re-orientation by origin. The aim is to identify *who* might suffer negative impacts from the EU–India Agreement and to approximate the magnitude of these effects.

This part is composed of four separate chapters. The first analyses the degree of similarity of excluded country exports to partner exports to a given market. This gives us an indication of the similarity of exporting structures across excluded countries which allows us to conjecture about the possible magnitude of trade diversion or trade re-orientation that can result from the EU–India agreement. The second chapter looks at tariffs (at 8 or 10 digit level depending on data availability) faced by excluded countries in the target markets and investigates how EU–India preferences might affect excluded country exports. Here we differentiate across four possible scenarios; (i) no change in preferences, (ii) trade diversion effects, (iii) trade re-orientation effects, and (iv) combined trade diversion and trade re-orientation effects. Chapter 3 provides a more sectoral analysis of the likely impact of trade diversion and re-orientation. Here we use HS 6-digit data to identify, across SITC categories, the potential negative effects by sector and excluded country. The final chapter then looks at the possible impact of terms of trade changes stemming from the FTA, as discussed in Part I.

Overall, we find that:

- The dissimilarity of composition of export structures between the partners' exports to each other and excluded countries' exports to them suggests that the scope for negative effects arising from the EU–India agreement is relatively limited.

- The SAARC countries are, by a long way, the most vulnerable to negative impacts from the FTA. Their exports to the EU are more similar to India's and they are more dependent on the Indian market than are other countries. Among them, Bangladesh is the most exposed in the EU market, followed by Pakistan and Sri Lanka. However, the extent of the competitive edge that India gains from the FTA is, at least on average, relatively small. In the Indian market the most exposed are India's two landlocked neighbours, Bhutan and Nepal, at least if their varieties of export products compete directly with the EU's falling in the same heading. Here, the EU receives a huge competitive advantage, of about 20 per cent from the FTA, so the changes to trade patterns could be quite large.

- The BRICS (excluding India, of course) will generally experience trade diversion rather than trade re-orientation in the EU market, especially in manufacturing. Since the tariff preference for India is relatively small and the EU is not a predominant market for them, however, the effects will not be unmanageable. In the Indian market they suffer considerable competitive pressures from the improved access for the EU, but since they trade little with India, it is not of great significance in aggregate.

- ACP countries will mainly suffer from trade re-orientation as India receives preferences from the EU as deep as their own. They may also suffer from some form of trade diversion as a result of the EU getting enhanced access to India and possibly also in the EU market because, to the extent that they *de facto* face GSP rather than Cotonou tariff rates because they cannot satisfy the rules of origin for the latter. Again, with the exception of the Eastern and Southern Africa region, the effects of this will be small, given the extent to which their trade is concentrated in products for which India already receives zero tariffs in the EU and because their exports to either partner are relatively small.

- In both the EU and India the majority of the tariff lines that 'could' be affected by trade diversion or re-orientation are in the manufacturing sector, although in the EU the extent of diversion is likely to be larger in agriculture because protection is higher in this sector.

- In general the trade impacts are sufficiently small that excluded countries are unlikely to suffer serious terms of trade declines. The most vulnerable in this regard are India's neighbours – Bhutan, Nepal and Sri Lanka – in the Indian market, and Pakistan in the EU market.

A fifth possible section for this part would concern foreign direct investment – the extent to which the EU–Indian FTA might affect flows of investment to the member countries and, in particular, the extent to which it might influence (adversely) the flow of investment to excluded countries[29]. These effects are discussed in the literature to only a limited extent, and there are few concrete results or theorems on which to draw. Our estimate is that the effects are not likely to be very large – for the sort of reasons outlined in Schiff and Winters (2003) – and so we postpone discussion of investment effects until the next part on services trade. Even for services, we do not expect major effects, but they are arguably more important there than for goods.