

## Briefing Paper

### Assessing Preferential Trading Agreements using the Sussex Framework

**Preferential trading arrangements involving developing and developed countries are proliferating. These are both difficult to assess and call on scarce analytical and negotiating resources particularly but not only in developing countries. The Sussex Framework, developed with DFID support, is designed to cut through these difficulties. It is a logical framework which allows the user to set out the elements of any particular proposed agreement in a clear, rigorous and consistent way, derive a set of diagnostic statistics from readily available trade and trade barriers databases and use them to assess a set of policy ‘rules of thumb’ which will allow an over all judgement on the likely balance of economic welfare effects to be drawn. The framework deals with both shallow integration (removing border barriers) and deep integration (facilitating trade by dealing with trade-impeding factors operating behind the frontier); all in a way designed to make parsimonious use of scarce analytical and negotiating resources.**

#### Introduction:

Over the past fifteen years, there has been a dramatic rise in the number and range of regional or preferential trade agreements (PTAs).<sup>1</sup> There is evidence to suggest that market driven regional trading blocs are emerging in the European neighbourhood, the Americas and East Asia. The US is actively pursuing FTA in the Americas and East and South-East Asia. The European Union (EU) is currently in negotiations on Economic Partnership Agreements (EPAs) with a number of African, Caribbean and Pacific countries (ACP), and is exploring the possibility of a FTA with India, is deepening arrangements with its “neighbours”, as well as signing agreements in South America.

These EPAs are to replace earlier unilateral preferential access agreements, and the negotiations are proving to be difficult and contentious. To be WTO consistent, the EPAs must, at a minimum, include reciprocal market access covering “substantially all” trade. In addition to allowing for shallow integration (removal of frontier trade barriers), the EPAs may include elements of deep integration (see Box 2) at the suggestion of the EU; and development assistance at the suggestion of the ACP. Given the complexity of the EPAs, it is important to provide economic analysis of their likely outcomes to inform the negotiations and ensure that they meet the stated goals of being “development friendly”.

There are several standard methodologies in the economics toolkit, for assessing the impact of changes in trade policy. They include computable general equilibrium (CGE) or partial equilibrium (PE) market simulation models, and econometric analysis. These methodologies are useful but have a number of limitations for policy makers. Simulation

models require a high level of expertise and are very demanding in terms of data requirements. Cross-country econometric models have been useful in testing hypotheses about causal relationships, including links to policy changes in the past, but do not provide enough structural detail to support analysis of the impact of, for example, a given EPA.

At the University of Sussex, we have developed an analytical template, which we call the “Sussex Framework,” developed with DFID support, to identify the central questions in considering the potential benefits of a proposed PTA or EPA.<sup>2</sup> As part of the Framework, we have developed a set of diagnostic indicators, grounded in economic theory, that support analysis of the impact and viability of a proposed agreement. These indicators focus on elements of both shallow and deep integration. They reflect the current state of knowledge in economics about facilitating economic integration. The value added from the Framework arises from putting together existing knowledge in a coherent package, identifying and explaining the relevance of particular statistical indicators. The Framework has been applied to the Cariforum EPA negotiations, the EU-Egypt Association Agreement, and to a potential EU-India free trade area.

#### What’s in the Sussex Framework?

The conceptual basis of the Sussex Framework is to consider the political, social and economic viability of a given PTA. Its likely economic impact will depend on a number of key factors, and we provided a checklist of issues to be systematically evaluated. These are summarised in Box 1.

<sup>1</sup> Here we use the terms preferential, regional, and free trade agreements (PTA, RTA, and FTA) interchangeably.

<sup>2</sup> While the framework was developed with DFID support the usual disclaimers apply – the views expressed are those of the authors, and do not necessarily represent the view of DFID.

### Box 1: Identifying what needs to be evaluated

<i>Checklist</i>	<i>Issues</i>
1 Economic relationship between partners	size, asymmetry, tariff levels, cost differences...
2 FTA or Customs Union?	flexibility, rules of origin
3 Overlap with other agreements?	complementarities v spaghetti bowl
4 Expected difficulties in negotiation	depth & scope of PTA, sensitive sectors, exceptions
5 Barriers to trade	tariffs, NTBs - incidence, levels & range
6 Elements of deep integration?	Trade facilitating institutions and policies: investment rules, competition policy, labour mobility, standards, property rights, dispute resolution...
7 WTO compatibility?	important if third country may be affected
8 Role of aid donors	political motivation behind the agreements, presence of technical / development assistance

The first step in applying the Framework is to consider the importance of each element in the checklist with respect to the proposed agreement. In the context of the EPAs it is immediately clear that: there are substantial asymmetries between the EU and the proposed EPA country groupings; what is being proposed is a free trade area (FTA) where rules of origin will be important; the introduction of elements of deep integration and issues of trade-related development assistance complicate the negotiations, but the result may be potentially more beneficial and development friendly.

The second step is to consider the economic viability and consequences of a proposed agreement, including an assessment of the potential welfare consequences. Viability depends on the magnitude and distribution of benefits, both across and within countries. The overall welfare impact will depend on the extent of shallow integration, as well as on deep integration

In the first instance, any PTA involves a process of shallow integration. We have known for more than half a century that the potential net benefits from lowering trade barriers in a PTA are inherently ambiguous, because they involve both trade creation and trade diversion. Trade creation arises whenever more efficiently produced imported goods replace less efficient domestically produced goods. Trade is “created” and yields welfare gains. Trade diversion occurs when sources of supply switch away from more efficient non-partner countries to less efficient partner countries. Trade diversion reduces welfare, and the net welfare impact of a PTA will depend on the relative size of the two effects.

There are a number of rules of thumb, which are well grounded in economic theory, that help in evaluating the relative importance of trade diversion and trade creation:

- The higher are the initial tariffs, the greater is the likelihood of both trade creation and trade diversion.
- The greater the number of PTA partners, and the more similar is the product mix in the member economies, the more likely it is that there will be trade creation because there is more scope for specialisation.
- The wider the differences in comparative advantage between partners and the higher the initial share of trade between them, the more likely the PTA will be welfare improving.

In addition to the potential, but once and for all, efficiency gains and losses, there may be welfare gains arising from growth effects induced by economic integration. There might be faster technical change and total factor productivity growth and scale economies arising from increased specialisation, and/or positive externalities between firms and/or sectors. These dynamic gains are typically more likely to arise in the presence of deep integration.

We then use a range of diagnostic indicators that shed light directly and indirectly on the welfare consequences of a given PTA. A number of these indicators are directly related to the rules of thumb outlined earlier, and thus help in evaluating the shallow integration consequences as well as distributional implications. There are no easy rules of thumb for evaluating the implications of deep integration. The economics of the transmission mechanisms between deep integration and economic growth is an emerging field, and the relationships are more complex and less well understood than with shallow integration. Nevertheless, there are some indicators, which are useful in considering deep integration.

### Box 2: Shallow and Deep Integration

Shallow, or negative, integration involves the removal of border barriers to trade, typically tariffs and quotas.

Deep, or positive, integration involves policies and institutions that facilitate trade by reducing or eliminating regulatory and behind-the-border impediments to trade, where those impediments may or may not be intentional. These can include issues such as customs procedures, regulation of domestic services production that discriminate against foreigners, product standards that differ from international norms or where testing and certification of foreign goods is complex and perhaps exclusionary, regulation of inward investments, competition policy, intellectual policy protection and the rules surrounding access to government procurement.

These are exactly the issues that form the heart of the EU single market for goods and services and typically require a degree of harmonisation or convergence of norms and standards, or mutual recognition of each other's regulatory processes and standards.

### Shallow integration

Consider, for example, Box 3 below, which provides indicators for four countries involved in actual or proposed agreements with the EU. On the export side for the partner countries there will already be low tariffs on manufactures - except for a few special cases, which may differ for each partner, while sensitive agricultural products are no doubt excluded. Typically then there is little improved market access to the EU.

On the import side, most of the potential partner tariffs are high, particularly for India. If we link these measures to the pattern of trade, we see that the share of imports from the EU is lowest for the two Caribbean economies while the US is an important supplier. This suggests considerable scope for trade diversion (switching away from the US to the EU as a supplier for a PTA with the EU) - especially for Jamaica. India has a higher share of imports from the EU, and a much lower share of imports from the US. However, with an EU import share of 25% (and which has been rapidly declining) the majority of imports are sourced from third countries. If we add the low degree of similarity in production structures as proxied by the similarity of export structures (24%), this again suggests the likelihood of trade diversion over creation in a PTA with the EU. In comparison the similarity in the exports of the EU and the US is above 69%.

Box 3: Some diagnostic indicators <sup>3</sup>				
	Average tariff	Share of imports		Export similarity index <sup>4</sup>
		EU	US	
Jamaica	15.2%	8%	45%	8.2%
Trinidad & Tob.	12.6%	18%	34%	33.4%
Egypt	18.4%	27%	12%	34.4%
India	28.3%	25%	6%	24.0%

Similarly for Egypt the share of imports with the EU is only 27%, with the US accounting for 12%; the degree of export (production) similarity is higher than for India. These figures suggest perhaps slightly less trade diversion for Egypt than for India but nevertheless still considerable scope for this

Using the Sussex Framework we can explore these issues more fully by a more detailed and disaggregated examination of these indicators, by looking at further indicators, such as looking at the relative competitiveness of partner countries, examining indices of trade intensity; and importantly through looking at the evolution of these indices over time. It is also worth pointing out, that even when comparing two countries within a given grouping and proposed PTA — Jamaica, and Trinidad and Tobago – there are considerable differences

<sup>3</sup> The data is for Jamaica and Trinidad and Tobago is for 2003, for Egypt 2003, and India 2004.

<sup>4</sup> This is the Finger-Kreinin index and is a way of measuring the degree of similarity between a pair of countries trade or production structures. If they are identical the index is equal to 1, if they are completely different the index is equal to 0.

between them and therefore also of the likely impact. Within the CARIFORUM EPA grouping those differences then become much more pronounced when the other countries are added in ranging from the tiny OECS states, to the Dominican Republic. This suggests that the impacts are likely to differ widely across countries, and that countries priorities and agendas are thus likely to be different. Using the Sussex Framework these issues can be identified and analysed.

### Deep Integration

From the perspective of shallow integration our analysis indicates that the effects of PTAs between the EU and partner countries are complex, but that typically there is considerable scope for trade diversion. This result should make us cautious in concluding that the welfare effects are likely to be positive. The next step is to consider elements of deep integration.

Welfare gains from a successful process of deeper integration are likely to be considerably higher than losses from shallow integration. Deep integration is permits both more niche market specialisation and the creation of stable value chains. The possible range of further 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 and the greater use of intermediate inputs; the increased geographical dispersion of production through trade that supports the exploitation of different factor proportions for different parts of the production process and/or (ii) local economies of scale through finer specialization and division of labour in production; externalities arising from institutional changes that lead to a wide increases in productivity.

With the Sussex Framework, we argue that the potential for gains from deeper integration depends on the extent to which the FTA creates a “common economic space” among partners. This common economic space requires both removal of barriers to trade that operate behind borders (e.g. discriminatory taxes and regulations) as well as actions to undertake common policies needed for dealing with the existence of public goods and externalities. Of course, the impact of deep integration will clearly depend on whether the norms adopted are appropriate — generate positive externalities and promote trade. Broadly speaking, adopting appropriate standards is synonymous with finding the appropriate institutional framework for dealing with externalities. Some of these elements can be done by the market through private contracting, but they may require a facilitating environment.

Foreign direct investment (FDI) is an important channel for productivity-enhancing deep integration via technology and know-how transfer, quality improvement and specialisation. Hence any assessment of the potential for deep integration gains from a requires an analysis of the investment regimes in place, of the levels and patterns of existing FDI flows, and

of the possible clauses that could be negotiated in the context of a PTA which encourage further FDI.

A key indicator of existing and the potential for further deep integration is the degree to which intra-industry trade (IIT) is currently taking place. Broadly, IIT takes three forms. First, it is the exchange of similar but differentiated goods (the same trade heading) of broadly similar qualities and prices; secondly, it is the exchange of similar goods of different qualities and prices (first and second categories together are known as horizontal IIT); and thirdly it is the exchange of goods within a trade classification that represents a vertically integrated supply chain (parts for finished or part-finished goods). The last of these clearly includes the cases of global or regional supply chains, which have had a large positive impact on trade and growth in east Asia.

Each of these forms represents a way in which economic integration can encourage niche specialisation and generate productivity gains, as well as lead to trade induced technological change. Such gains can yield increases in trade, and more than compensate for any trade-diversion losses arising from shallow integration alone.

Our work on EU Egypt IIT<sup>5</sup> suggests that while IIT has been growing fast in Egypt it is still at a very low level and is unlikely to represent a high current potential for deep integration. Taken alongside FDI flows into Egypt, which seem focussed on energy and domestic market access, the scope for deep integration to offset the bias towards trade diversion (indicated by the diagnostic statistics noted above) is relatively low (although there may be niches where harmonisation of standards and conformity testing can generate substantial gains and our work includes a suggestive case study on new potatoes).

#### Box 4: IIT indicators for India & the EU

	% of Trade which is IIT	
	<i>India-World</i>	<i>EU-India</i>
1992	43	19
2004	52	39

  

	% of Trade which is vertical IIT	
	<i>India-World</i>	<i>EU-India</i>
1992	18	8
2004	35	18

India on the other hand shows relatively high levels of and growth in IIT indices. Levels and growth rates are below but comparable with China and Brazil. Overall 52% of Indian total trade in 2004 was in IIT and some two thirds of that was in vertically integrated IIT. India-EU IIT lags somewhat behind the India-world IIT shares. This suggests

<sup>5</sup> Technically measured by Grubel-Lloyd and CEPII indices (apply to the authors for more detail but means of calculating set out in the Framework document)

(particularly when taken with the fast growing totals of inward and outward FDI) that deep integration in an EU-India FTA could potentially generate substantial gains and compensate for any trade diversion losses.

#### Robustness

We have tested the Framework and the usefulness of the diagnostic statistics and the rules of thumb against more sophisticated and resource intensive analytical methods, notably general equilibrium and partial equilibrium modelling on a potential EU-Egypt FTA and an EU-Caribbean REPA. Overall the Sussex Framework gives very similar predictions of likely economic welfare effects of these proposed agreements to the modelling work with the added advantage of being able to drill down at sectoral or geographical level in a way that the models cannot do.

#### Conclusions:

- Bilateral and regional trade agreements are here to stay (and may represent the policy response to market led trade integration at a regional level notably in Europe, the Americas and east Asia)
- They are complex and human resource intensive to understand and negotiate particularly as each may have special characteristics
- For developing countries shallow integration - particularly where it is implementing reciprocal bilateral and regional liberalisation (notably REPAs and EU Neighbourhood FTAs) is likely to generate trade diversion losses and hence put a premium in identifying potential gains from deep integration
- The Sussex Framework is a clear, coherent, consistent and robust framework for analysing a given proposed agreement with relatively light human resource requirements.

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**Full details of the Sussex Framework can be found in:** Evans, et. al. (2006), "Assessing Region Trade Agreement with Developing Countries: Shallow and Deep Integration, Trade, Productivity and Economic Performance" Report for DFID.

See also: Gasiorek, M, et.al. "The impact of the Cotonou Agreement on trade, production and poverty alleviation in the Caribbean region", Report for DFID funded by the EC-PREP programme.