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**ASSESSING REGIONAL TRADE AGREEMENTS WITH
DEVELOPING COUNTRIES: SHALLOW AND DEEP
INTEGRATION, TRADE, PRODUCTIVITY, AND ECONOMIC
PERFORMANCE**

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OUTLINE OF THE REPORT

The central purpose of this project was to produce a framework or handbook for officials and their advisers in order to be able to assess the economic implications and desirability of specific RTAs. In this report we refer to this as the RTA framework. The goal is to ensure that a detailed assessment of RTAs can be carried out by officials and desk officers without recourse to complex analytical tools and without being overly demanding in terms of underlying data requirements but nevertheless well grounded in economic theory. The RTA framework provides the basis for such assessments, which are then based on readily available information and statistics, including information on institutions and policies.

Central to the RTA framework which has been developed as part of this project is the distinction and interaction between what is commonly referred to as shallow and deep integration. As is well known from the existing literature the net welfare effects from (preferential) shallow integration are inherently ambiguous. Multilateral or unilateral non-preferential trade liberalisation would typically yield higher static welfare gains than preferential/regional integration. A key conclusion emerging from this report and the RTA framework, is that there are potentially significantly higher welfare gains possible from integration if the process of regional integration includes appropriate elements of deep integration. Indeed, *inter alia*, this may help to explain the manifest rise in the popularity of regional trade agreements.

The framework that is developed here, therefore, focusses both on shallow and deep integration, and offers the means for officials to undertake *prima facie* analyses, either *ex post* or *ex ante*, of regional integration arrangements. As well as developing the RTA framework itself, the project applies then applies the framework to two “country” case studies: Egypt and the Caribbean. Hence we use the framework in order to provide an actual assessment of existing RTA policies in the context of the Association Agreement between the EU and Egypt, and the proposed Economic Partnership Agreement between the EU and the Caribbean region. As well as applying the framework itself to these two case studies, we check on the usefulness and robustness of the methods and results obtained by undertaking and drawing upon more formal and sophisticated empirical analysis. The aim of the latter is in order to check on, and validate the conclusions derived from the RTA framework itself. The

more formal empirical analysis is based principally upon partial and general equilibrium modelling. The major conclusion from the more formal work is that the partial and general equilibrium analysis corroborate the results derived from the framework, albeit with more detail on the size of likely welfare effects.

The report is structured in the following fashion:

Chapter 1 of the report provides an executive summary in which we highlight both the key conceptual issues and conclusions arising from this report, as well the conclusions arising from the application of the framework to two case studies – the Caribbean-EU EPA process, and the Egypt-EU association agreement.

Chapter 2 explores in some detail the historical development of regional trading arrangements, and focusses on the importance of both shallow and deep integration in terms of both explaining the emergence of RTAs as well as understanding the likely welfare implications.

Chapter 3 details the framework itself. It is here that we present the list of key issues / aspects which we believe are pertinent to the analysis of most regional trade agreement, and we indicate the measures which can shed analytical light on those issues.

Chapter 4 and 5 are focussed respectively on the cases of the Egypt-EU Association Agreement, and the EPA negotiations between the EU and the Caribbean region. Each of these chapters both applies the framework itself, as well as considers the results obtained from the more formal modelling procedure.

CHAPTER 1: EXECUTIVE SUMMARY

1.1. KEY CONCEPTUAL ISSUES:

1. Recent years have seen an explosion in the number of regional trade agreements. Our analysis of these agreements suggests that typically RTAs can be characterised as being primarily one of three types: *bloc creating*, *bloc expanding*, or focussed on *market access*
2. In assessing any regional trade agreement it is important to consider the impact not just of shallow integration measures, but also measures which may lead to “deeper” integration.
3. “Shallow” integration: Involves the lowering or elimination of barriers to the movement of goods and services across national borders within the region. Within this context “negative” integration entails the lowering barriers created by national policies.
4. “Deep” integration: Involves establishing or expanding the institutional environment in order to facilitate trade and location of production without regard to national borders. Within this context “positive” integration suggests policies designed to encourage trade and facilitate segmentation of production processes and value chains. Elements of deep integration may include:
 - Regulatory harmonization
 - Competition policy
 - Financial/banking regulation
 - Industrial policy
 - Establishment of common standards and technical regulations
 - Established and enforced by private, national, regional, or international institutions
 - Commodity/industry specific or broader
 - Harmonization of institutional structures
 - Legal systems, commercial law
 - Dispute resolution
 - Harmonization of domestic tax and subsidy policies
 - Coordination of macro policies
 - Monetary union
 - Creation of institutions to manage and facilitate integration
 - Regional investment funds
5. International trade theory and evidence suggests that the consequences arising from a regional trade agreement are a mix of: trade creation, trade diversion, and changes in terms of trade (international prices). The welfare results of an RTA will depend on the net impact of these effects and the magnitude of the results will depend heavily on the size of the initial tariff barriers. There is a potential for an overall negative impact if trade diversion is large. This occurs if demand is

“diverted” away from lower-cost producers outside the RTA towards higher-cost producers within the RTA.

6. Standard theoretical analyses of the welfare impacts of trade diversion apply to a Customs Union, where members agree to common regional external tariffs. In a Free Trade Agreement, members are free to set their own external tariffs. The analysis then becomes more complex:
 - There are issues of rules of origin and the “spaghetti bowl” effects of membership in multiple RTAs.
 - In a FTA, there is “policy space” for countries to mitigate or eliminate trade diversion effects. For example, since the country is free to set tariffs to non-FTA members, it can offset trade diversion effects by unilaterally lowering its tariffs to non-FTA members, perhaps on an MFN basis
7. International trade theory base on the concept of “new regionalism” suggests that there could be significant gains arising from deep integration. The potential chain of relations linking integration to economic performance is: shallow integration → deep integration → expanded trade (both exports and imports) → externalities and scale economies → productivity increases → improved economic performance.
8. With regard to these linkages it is worth noting that:
 - Shallow integration is probably a necessary precursor to successful deep integration.
 - Some of the links are “broad”, involving externalities that affect much economic activity.
 - Some of the links are commodity/sector specific. Examples can be found across agriculture, manufacturing, and services.
9. In considering the potential chain of relations identified in the preceding point, the question arises as to the extent to which that chain is specific to regional integration (RTAs), and why it could not arise via a process of global integration and liberalisation:
 - Some important elements necessary for deep integration are not part of the agenda of global trade negotiations. In particular the global agenda tends to focus on shallow (negative) integration —removal of existing policy barriers — rather than on positive integration.
 - Hence, we argue in the report that many of the elements necessary for deep integration are easier to achieve through a regional agreement.
10. Achieving shallow integration is part of the process of achieving deep integration. There is a possible trade-off between initial negative impact of trade diversion from a shallow-integration RTA and potential gains from deep integration that follows the RTA. There are thus strong arguments for linking shallow integration in an RTA to achieving elements of deep integration. This in turn raises issues of dynamics and phasing. There is some evidence that more recent RTA negotiations do involve elements of deep integration.

11. We suggest that some of the gains from deep integration may be easier to achieve within a South-South regionally integrated framework, though considerably more evidence on this is required. Such integration can usefully be seen as being complementary to North-South integration. In principle such integration could achieve:
- Regional economies of scale.
 - “public good” externalities from certain aspects of deep integration (accreditation and some aspects of certification), and associated externalities (e.g. establishment of “pest free zones”).
 - Associated flexibility of production structures (either to do with labour mobility e.g. in the Caribbean, or to do with being able to source inputs from more competitive suppliers, hence importance of rules of origin).
 - In the context of the EU’s RTAs with third countries to the extent that these negotiations are complemented by the promotion of South-South regional integration, it is more likely that there could be positive gains.
12. The case studies undertaken in this report of EU RTAs with both Egypt and the Caribbean clearly indicate the risk of a negative welfare impact. These conclusions are derived both from the application of the RTA framework, and from the more formal modelling employed.
- In both cases the agreements are, in principle, asymmetric, requiring more reform (trade liberalisation) by the developing countries than by the EU. Hence, in this case, the RTAs do not result in much expanded market access by the developing countries into EU markets.
 - In both cases, imports from other, non-EU, sources represent a significant proportion of total trade. These are trade flows, which risk being *diverted* to the EU. With relatively high tariffs in both Egypt and the Caribbean, trade diversion effects are therefore potentially large.
 - An analysis of the structure of trade and the evolution of patterns of trade over time, also suggest that there is strong potential for trade diversion arising from each of these RTA arrangements.
 - The scope for long-term gains from deep integration may well be there, but it is hard to identify the mechanisms in the current EU-Egypt agreement and the likely shape of a Caribbean EPA.
13. The checklist test of trade diversion using descriptive statistics is complemented by formal partial-equilibrium and general equilibrium analysis. That analysis again indicates that the agreements are likely to result in considerable trade diversion and the potential for either very small welfare gains or even net welfare losses. These results are consistent with a related study of the EU-Morocco RTA undertaken by members of the team.

1.2. THE RTA FRAMEWORK

14. A central part of this report is the RTA framework itself which identifies the key areas which we suggest ought to be examined in the analysis of the impact of any

given regional trading arrangement. The eight key aspects which the framework identifies are:

- a) the need to identify the nature of the economic relationship between the partner countries. Issues, which are of importance here include: size, degree of asymmetry (eg. in structure or GDP per capita), tariff levels, cost differences.
 - b) Is the agreement an FTA or Customs Union? The welfare effects may be quite different. This can arise because of the hidden protective and administrative costs associated with rules of origin, but also because with a free trade area countries have greater individual flexibility with regard to the tariff levels.
 - c) The extent to which the agreement may overlap with other agreements which the country may be party too. This can either introduce complementarities or impediments to the country concerned, and this again is likely to depend on asymmetries in the agreements for example on rules of origin, or with regard to elements of deeper integration.
 - d) How easy / difficult are the negotiations expected to be? This raises a number issues which are likely to impact on the depth and scope of any agreement which can be reached, as well as on exceptions which may be granted.
 - e) The nature of barriers to trade. Here it is important to identify both tariff and non-tariff barriers to trade, and to consider the incidence, and the range, as well as the overall levels.
 - f) Are there any elements of deep integration (eg. investment rules, competition policy alignment, rules on labour mobility) in the proposed or actual agreement? Are these elements likely to be appropriate to the developmental needs of the countries concerned?
 - g) Is the agreement likely to be WTO compatible? This is potentially significant if there is a third party affected, for example via trade diversion, since it could then be possible to challenge the RTA at the WTO.
 - h) The role of donors: it is important to identify the political motivation driving the agreement. Are donors facilitating the negotiations (e.g., through technical assistance)? If donors are acting as the major force behind the agreement there may be less likelihood of domestic ownership, and potentially a greater pressure for effective implementation from donors/partners.
15. We then identify a range of key descriptive statistical indicators which can be usefully employed to provide a detailed but accurate prima facie analysis of the likely impact of given regional trading agreement. The statistics that we suggest can be usefully employed include: patterns of trade by commodity and country over time, patterns of FDI over time, indices of revealed comparative advantage, indices capturing the degree of similarity in production / trade structures, measures which capture the extent of any changes in production structure, intra-industry trade indices. Most of these indices are principally useful for understanding the impact of shallow integration, though we do also consider and discuss what light might be shed on the extent of any deep integration.

1.3. THE EGYPT-EU ASSOCIATION AGREEMENT

16. EU-Egypt preferential relationship can be characterised as having being initially concerned with market access, but the new arrangements under the Association Agreement are suggestive of a bloc formation process between the EU and the Mediterranean region. Egypt however is still on the margins of such an EU-Euromed “bloc”.
17. With regard to the Egypt-EU Association Agreement, a key feature is that Egypt starts from an asymmetric preferential position in the EU market. The new FTA requires reciprocity which primarily involves Egypt opening its market to the EU, though there is a degree of potentially important EU market opening in textiles and clothing and possibly also in agriculture.
18. Our analysis suggests that Egypt’s high external tariffs create a genuine danger that there may be trade diversion and terms of trade losses, especially in sectors where there are few EU producers. The reduction of MFN tariffs (or an FTA with the US) would be a pre-condition for maximising the gains from the EU FTA.
19. The descriptive statistical evidence suggests that Egyptian and EU trade and production structures are already broadly complementary so there is probably little scope for further inter-industry specialisation, though there may be scope for intra-industry specialisation. Potential benefits could thus come from deeper integration via intra-industry niche specialisation in products or processes, to exploit “Smithian” gains from economies of scale due to finer division of labour .
20. Theory and empirical evidence suggests that there may be a positive correlation between openness to international trade, and productivity levels and hence growth. That correlation can arise with respect to both importing and exporting activity. These trade-productivity links are strongly related to elements of deep integration.
21. Work undertaken by members of the team in the context of Egypt and Morocco corroborates these conclusions. It is important to note that the extent of any such effects or linkages will depend on key underlying characteristics such as the industry in questions, on the distinction between private-public ownership, or on the size class of firms.
22. However, the EU-Egypt agreement provides for little regulatory integration that could lead to upgrading, except by subsequent negotiation. Egypt could gain from agreement on conformity assessment but this is not envisaged yet. The evidence also suggests that intra-industry trade is rising but is at a very low level and so there is little to build on in this area.
23. Similarly, EU Foreign Direct Investment in Egypt is mainly “market seeking” so foreign investors in Egypt are unlikely to be a powerful lobby for removing regulatory non-tariff barriers in the EU.
24. We find one example in the potato case which shows how regulatory upgrading, niche specialisation, value chains and deep integration can interact positively, but more work is needed to find other cases.

1.4. AN EPA BETWEEN THE EU AND THE CARIBBEAN

25. It is clear that the precise form of an EPA is still uncertain. With regard to market access, there are issues to do with timing, product coverage, and special differential treatment, which remain to be resolved. With regard to some of the other areas of negotiation it is still unclear the extent to which de facto and concrete measures will be agreed upon.
26. An examination of trade patterns indicates considerable diversity across the Caribbean region. Nevertheless, it is clear that while the EU is an important trading partner accounting for between 15%-20% of regional imports, it is not the most important. For many of the economies as a source of imports the US is a significantly more important trading partner. Intra-regional trade is also high, and the Caribbean region is an important destination market for a number of the economies.
27. Consequently, when considering a shallow-integration style EPA while there may be some trade creation and trade reorientation, which typically lead to welfare gains, there is also considerable scope for trade diversion which mitigates against those gains.
28. In the analysis from which these conclusions derives we have (a) focussed on the implications of the impact of shallow integration; and (b) largely focussed on goods trade. A justification for the former is that it is highly likely that the main focus of the EPAs in the first instance will be on the liberalisation of tariffs, and hence principally focused on issues of shallow integration. Similarly, justification for the latter derives from the observation that it is an agreement on the symmetric liberalisation of substantially all trade in goods which is required in order to transform the existing Lomé style arrangements into one which is WTO compatible.
29. This is not, however, intended to suggest that issues of deeper integration or of the role of services are unimportant in considering EU-Caribbean trade. Indeed we would argue that the reverse is likely to be the case. However, these issues are not a core part of the current EPA negotiations. For example, while services liberalisation is on the agenda, it is not yet clear if any agreement on this will be reached and, if so, if it will incorporate significant elements of deep integration.
30. Our expectation, therefore, is that preferential trade liberalisation with the EU which focusses largely on shallow integration is unlikely to yield significant welfare gains to the Caribbean region and may even lead to welfare losses. Conversely multilateral trade liberalisation is likely to lead to significantly higher welfare gains.
31. These conclusions are reinforced by the results of both partial and general equilibrium modelling which reveals trade diversion losses, which would not occur if the Caribbean countries were to liberalise in a non-discriminatory manner. This also underlines the advantages of negotiating an FTA rather than a customs union.
32. In addition to this, the countries of the region typically exhibit a very high degree of export and production concentration both by country and by sector, though there is some evidence of underlying structural change in this regard. The concentration of exports is also reflected in the comparatively limited number of

industries, which exhibit a revealed comparative advantage. Here it is important to underline that in many cases this indicator is, in turn, likely to be heavily determined by the underlying trade preference structures.

33. This suggests that the combination of the liberalisation of the trade for many of these economies, as well as the ongoing changes to the banana and sugar regimes, as well as the ongoing preference erosion is likely to result in quite significant structural changes. This is important in terms of addressing the development needs of the region, as well as in considering the degree of political support for the EPA process within the region.
34. The implications of the preceding are potentially quite pessimistic. Taken at face value, the analysis suggests small or negative welfare gains, and the possibility of considerable structural adjustment. An alternative view, however, is possible. That alternative depends, to some degree, on the precise nature of the agreement, which is signed, as well as on other developments in policy. The more optimistic scenario is hence one in which the shallow integration in an EPA is part of a broader package which involves for example elements of deep integration, the appropriate liberalisation of services, appropriate levels of adjustment and assistance aid, and progress on multilateral trade liberalisation.
35. In this context, the EPA could be seen as an important stepping-stone towards the greater integration of the countries of the Caribbean with themselves and with the world economy. Which outcome obtains will depend on the nature of the agreement(s) themselves, and on the appropriate political and social support.

1.5. POLICY CONCLUSIONS

36. Shallow integration RTAs are likely to lead to both trade diversion and trade creation. The net welfare effects are therefore ambiguous, and therefore any such agreement needs to be treated with considerable caution. Our analysis suggests that engaging in a shallow-integration RTA with the EU is unlikely to be beneficial for either the Caribbean countries or Egypt. Evaluation of the RTA using a simple checklist based on descriptive statistics is confirmed by more complete analysis using more formal modelling techniques.
37. In the case of a Free Trade Area, the trade diversion effects of an RTA can be mitigated by unilateral policy action on the part of the FTA members, who are free to lower tariffs to non-FTA members. Pursuing a shallow-integration FTA might generate additional market access, and the trade-diversion effects could be handled through simultaneous unilateral liberalisation with regard to non-FTA members.
38. Therefore, in negotiating a shallow-integration RTA, developing countries need to (a) explore the potential trade diversion effects and (b) the possibilities of achieving externalities and trade-productivity links through deep integration, whether or not explicitly part of the FTA agreement.
39. If only shallow integration is involved, MFN liberalisation is better, and these countries would probably gain more from multilateral reform under the auspices of the WTO rather than through a bilateral RTA.

40. Note that we do not conclude that RTAs should be avoided. RTAs that only involve shallow integration should indeed be viewed with extreme caution. Nevertheless (a) they may be an important stepping stone to more multilateral liberalisation, (b) they may engender higher rates of growth which neither the static analysis nor the RTA framework directly capture, and (c) if combined with elements of deeper integration than both the static and growth effects are likely to be considerably higher.
41. Hence, North-South RTAs need to facilitate deep integration, as well as expanded market access for the South, if potential trade-productivity links are to be realised. South-South integration may also be an important part of deep integration, and can complement and strengthen the process of North-South integration. The achievement of deep-integration RTAs need not hinder the process of expanded global trade liberalisation (shallow integration) under the auspices of WTO negotiations.
42. The importance of different elements of deep integration requires much more research. The links are complex and depend on initial conditions as well as on country/sector/market characteristics. The picture on deep integration is inevitably hard to assess either from the framework or from the more sophisticated analysis based on case studies. This is likely to be in part because the descriptive statistics employed to assess deep integration may not be sufficiently fine grained, and in part, because there is comparatively little deep integration in the agreements considered. Nonetheless certain important institutional conditions can be identified if productivity gains are to be realised.

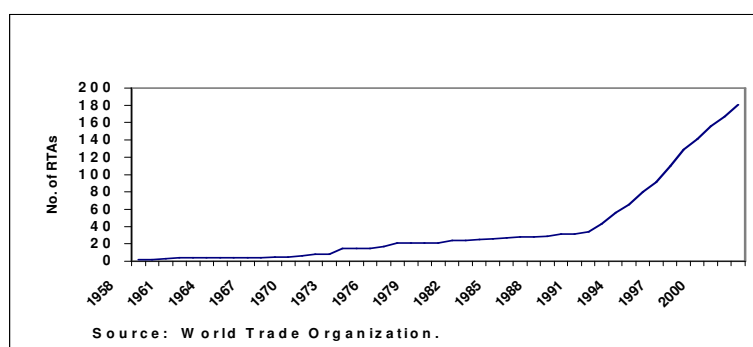
CHAPTER 2: DEEP INTEGRATION AND NEW REGIONALISM

**David Evans
Peter Holmes
Leonardo Iacovone
Sherman Robinson**

2.1. INTRODUCTION

The world economy after World War II has become much more integrated. Eight successive rounds of negotiations under the General Agreement on Tariffs and Trade (GATT) have resulted in significant global trade liberalization and there has been an accelerating trend toward regional integration in every part of the world. Most of the early attempts at regional trade agreements (RTAs) in the 1950's and 1960's, many of them among developing countries, met with little success.¹ This “first wave” of regionalism has been eclipsed by the exponential growth in the number of RTAs formed over the past 10 years (figure 1). As of May 2003, 184 RTAs were in force. Almost every WTO member has now joined at least one RTA and some have entered 20 or more.² The most dramatic policy-driven exercise in regional integration has been the establishment of the European Common Market in 1958 and its evolution into the European Union (EU).

Figure 2.1 – RTAs in force by year of entry into force



In the U.S., former Special Trade Representative Zoellick has described the U.S. pursuit of regionalism as a strategy to achieve short-term economic goals, help break the logjam in the multilateral negotiations, and achieve longer term, strategic objectives that can be fostered by trade liberalization.³ The EU has pursued

¹ We will use the term “regional trade agreement” to include preferential trade agreements *(PTAs) between countries, including those between countries not geographically contiguous or even nearby.

² Facts about RTAs are available and regularly updated by the World Trade Organization (WTO) at its web site: http://www.wto.org/english/tratop_e/region_e/region_e.htm. See also World Trade Organization (2002).

³ The U.S. has also established criteria for deciding which partners to engage in free trade agreements (FTAs). These include the size and importance of the economy to the U.S., the country's willingness to negotiate a comprehensive agreement that includes topics such as intellectual property protections, and whether the RTA will help advance WTO or FTAA (Free Trade Agreement of the Americas) negotiations (Inside U.S. Trade, January 10, 2003).

regionalism aggressively as a means of encouraging investment and competition, and to reinforce a multipolarity in the international system (Lamy, 2001 and 2002). Even Japan, Korea, and China are now engaged in regionalism—with their first agreements signed at the end of 2002.⁴

Economists have traditionally analysed RTAs within the framework of neoclassical trade theory, and have focused on the reduction of border policies affecting trade and the impact of their removal on within-bloc trade compared to trade between the bloc and other countries. An RTA that considers only border protection measures is described as involving only “shallow integration”. Such an RTA generates “trade diversion” as countries within the bloc trade more with one another and less with potentially lower-cost countries outside the bloc, which will potentially lower welfare within the bloc. The lower barriers also generate new trade, or “trade creation,” which should be welfare enhancing. Whether the RTA is net welfare, increasing or decreasing depends on the relative strengths of these two effects, and requires empirical analysis to determine the outcome.⁵

Most of the new wave of RTAs have involved much more than removing border policies that limit the sale of commodities across international borders. The analysis of these new RTAs requires consideration of the elements of “deep integration” they incorporate, and what is their potential effect on trade and welfare. The fact that the new RTAs involve much more than border policies has led to a number of questions and research challenges for trade economists:

What are the empirical characteristics of these new RTAs that distinguish them from earlier “shallow” RTAs?

- To what extent do the elements of “deep integration” incorporated in new RTAs lead to economic impacts of the RTA that go beyond the “gains from trade” considered by standard trade theory?
- Can we draw on insights from recent work on “new trade theory”, on “Smithian trade induced division of labour” and on “new regionalism” to analyse these new RTAs?

⁴ Japan signed an agreement with Singapore in November 2002, and is now negotiating agreements with Mexico, South Korea, the Philippines and Thailand. China signed its first agreement with ASEAN (Association of South East Asian Nations), while Korea’s first agreement was with Chile.

⁵ There is a great deal of theoretical analysis of RTAs. See Panagarayia (2000) for an excellent survey of the theoretical literature. This literature concludes that whether an RTA is net welfare enhancing or reducing cannot generally be determined analytically, but requires empirical analysis to sort out the countervailing effects at work.

- In particular, are there elements of “deep integration” that generate links between expanded trade and productivity growth?
- What are the major knowledge gaps, both empirical and theoretical, that need to be addressed for better analysis of new regionalism?

In this paper, we consider the characteristics of the new RTAs that involve elements of deep integration.⁶ We provide a framework for defining various typologies of RTAs and suggest how beneficial or harmful they might be, using criteria that draw on new trade theory and go beyond standard analysis of trade creation and trade diversion.

We start with a description of historical trends in trade among countries in the last forty years, focusing on the emergence of trade blocs. This historical analysis identifies emerging trends in the formation of trade blocs and provides a background for the analysis of RTAs, and an initial classification scheme. We then consider the nature of “deep integration” that has recently emerged and explore potential links between deep integration and productivity growth, drawing on insights from new trade theory. This analysis, which focuses on potential externalities generated through deep integration, provides a richer framework for defining typologies of RTAs and for suggesting standards by which RTAs can be evaluated.

2.1. HISTORY OF TRADE PATTERNS 1960-1990

Chapter 2 of the World Bank publication, *Global Economic Prospects: Trade, Regionalism and Development 2005* (World Bank, 2005) provides an analysis of the historical trends in trade patterns over the past forty years and of the emergence of different trade blocs during that period. We summarize the results from that publication.⁷

⁶ See Burfisher, Robinson, and Thierfelder (2004) for a discussion of “new regionalism” and “new trade theory” in the analysis of RTAs.

⁷ This section draws on historical analysis done for the World Bank by Sherman Robinson and Carolina Diaz-Bonilla.

2.2.1. TRENDS IN REGIONAL INTEGRATION: 1960-1990.

The analysis of historical trends in regional integration is based on UN COMTRADE data for each of 67 trading regions for the 1960s, 1970s, 1980s and 1990s. The data were aggregated into three-year averages of export and import shares centred on 1967, 1977, 1987 and 1997. A mathematical clustering technique was used to analyse the data to find regional groupings or trade blocs that maximise the trade flows within blocs and minimise the trade flows between blocs.⁸ The bloc memberships for each period are given in tables below, and a summary visual representation of the changing patterns of regionalisation is shown in Figure 1, which also includes charts showing average trade shares between blocs.

2.2.1.1 THE 1960S: EUROPE AND THE US IN A BIPOLAR WORLD

Table 2.1: Trade Blocs in the 1960s

1960s			
Europe +	US +	Asia-UK	Asia-US
Switzerland	CA&Carib	Australia	Japan
Rest EFTA	Colombia	New Zealand	Korea
Hungary	Peru	China	Taiwan
Poland	Venezuela	Hong Kong	Indonesia
Turkey	Rest Andean	Malaysia	Phillipines
Morocco	Argentina	Singapore	Thailand
Rest N Afr	Brazil	India	
SAfrica+	Chile	Sri Lanka	
Malawi	Uruguay	Rest S Asia	
Mozambique	Paraguay+	Rest MENA	
Zambia	N America	Uganda	
Zimbabwe		ROW	
Rest S Afr			
Rest SSA			
EU-15			

The world trading system in the 1960s reflected a bipolar world, with Europe and the US forming blocs with some of their close neighbours, former colonies, and/or cold-war partners; and with hub-and-spoke links to the rest. Europe and the US dominate their blocs—the other countries, both within their blocs and in the two Asian groups, trade far more with the US or Europe than among themselves.

2.2.1.2 THE 1970S: RESTRUCTURING WORLD TRADE

Table 2.2: Trade Blocs in the 1970s

1970s				
Europe +	N America +	E&SE ASIA	S America	Rest
Switzerland	CA&Carib	China	Colombia	Australia
Rest EFTA	Venezuela	Hong Kong	Peru	New Zealand
Hungary	N America	Japan	Rest Andean	Bangladesh
Poland		Korea	Argentina	India
Morocco		Taiwan	Brazil	Sri Lanka
EU-15		Indonesia	Chile	Rest S Asia
		Malaysia	Uruguay	Turkey
		Philippines	Paraguay+	Rest N Afr
		Singapore		SAfrica+
		Thailand		Malawi
		Vietnam		Mozambique
		Rest MENA		Zambia
				Zimbabwe
				Rest S Afr
				Uganda
				Rest SSA
				ROW

In the 1970s, a realignment of world trade began. The clustering analysis found three distinct blocs and two other clusters, with more fragmentation in trading arrangements (Map 2). In summary, the 1970s were characterized by major changes in world trading patterns, with splintering of the earlier European and US-centred blocs and increasing diversification of trade by countries formerly closely linked to either Europe or the US. Both the European and North American blocs became more focused on their core countries and immediate peripheries. East and Southeast Asia emerged as a new trade bloc—a major force in world markets, with a larger share of total world trade than North America. These changes were contemporary with (and perhaps triggered by) the continuing GATT rounds of global trade negotiations and the onset of unilateral trade policy liberalisation in many countries.

⁸ The technique, which involves integer programming, is described in Robinson and Diaz-Bonilla (forthcoming). See also Evans, Kaplinsky, and Robinson (2006) for a brief summary description.

2.2.1.3 THE 1980S: CONSOLIDATION

Table 2.3: Trade Blocs in the 1980s

1980s				
Europe +	N America +	E&SE ASIA	S America	Rest
Switzerland	CA&Carib	Australia	Colombia	Bangladesh
Rest EFTA	Venezuela	New Zealand	Peru	India
Hungary	N America	China	Rest Andean	Sri Lanka
Poland		Hong Kong	Argentina	Rest S Asia
Morocco		Japan	Brazil	Turkey
Rest N Afr		Korea	Chile	Rest MENA
EU-15		Taiwan	Uruguay	SAfrica+
		Indonesia	Paraguay+	Malawi
		Malaysia		Zambia
		Philippines		Zimbabwe
		Singapore		Rest S Afr
		Thailand		Uganda
		Vietnam		Rest SSA
		Mozambique		
		ROW		

In the 1980s, the realignment of world trade continued and the various trade blocs solidified. As in the 1970s, the clustering analysis found three blocs and two additional clusters. In addition to the EU and North America, the new East and Southeast Asian (E&SE Asia) bloc expanded and solidified, with growing links to the US. The within-bloc trade shares for Europe and North America rose, while the European bloc expanded by one region to include Mediterranean countries in North Africa (“rest of MENA”). The North American bloc did not change composition.

The East E&SE Asia bloc, however, both consolidated, increasing the share of within-bloc trade, and expanded membership from 12 to 15 members (adding Australia, New Zealand, and Mozambique). The within-bloc trade share remained high, even with increased membership. Its export share shifted toward the US (36.2 percent in the 1980s compared to 26.4 percent in the 1970s). It also represented a growing share of total world trade—23 percent in the 1980s compared to 16 percent in the 1970s (not tabulated).

Detailed analysis of country trade data in the 1980s shows two new blocs starting to form. First, Argentina, Paraguay, and Uruguay increased their trade shares with one another and with Brazil. Brazil also increased its trade share in the region.

Second, there was increased trade with South Africa by its near neighbours, Malawi, Mozambique, and Zimbabwe.

2.2.1. 4 THE 1990S: CONSOLIDATION AND DIVERSIFICATION

Table 2.4: Trade Blocs in the 1990s

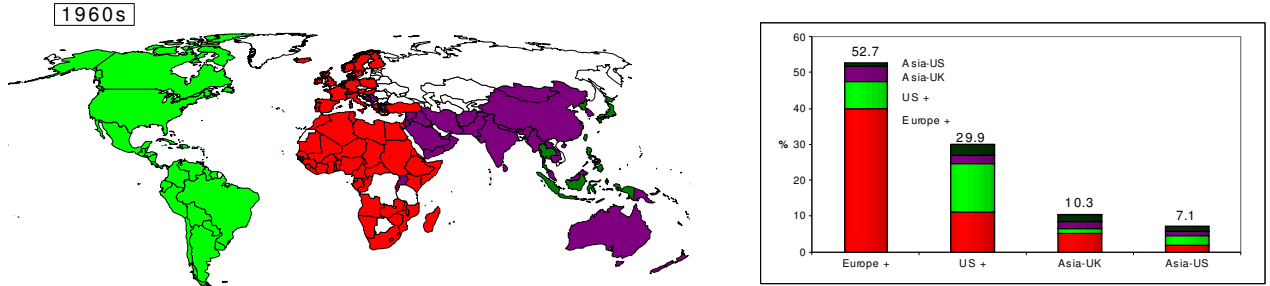
1990s				
Europe +	N America +	MERCOSUR	E&SE ASIA	Rest
Switzerland	CA&Carib	Argentina	Australia	SAfrica+
Rest EFTA	Colombia	Brazil	New Zealand	Malawi
Hungary	Venezuela	Uruguay	China	Mozambique
Poland	N America	Paraguay+	Hong Kong	Zimbabwe
Rest USSR			Japan	Peru
Turkey			Korea	Rest Andean
Morocco			Taiwan	Chile
Rest N Afr			Indonesia	Bangladesh
Uganda			Malaysia	India
EU-15			Philippines	Sri Lanka
			Singapore	Rest S Asia
			Thailand	Rest MENA
			Vietnam	Tanzania
			ROW	Zambia
				Rest S Afr
				Rest SSA

By the 1990s, the bipolar world of the 1960s evolved into a tri-polar world, with the emergence of the E&SE Asia trading giant. This bloc accounts for a larger share of world trade than North America, and diversified its exports over time away from the US. Two new nascent blocs appeared, Mercosur and a group around South Africa, but no other significant blocs seem to be forming within Latin America, Africa, or Asia. While the European bloc appears to be expanding to include more of its periphery, the North American bloc is essentially stable, and has been since the 1970s.

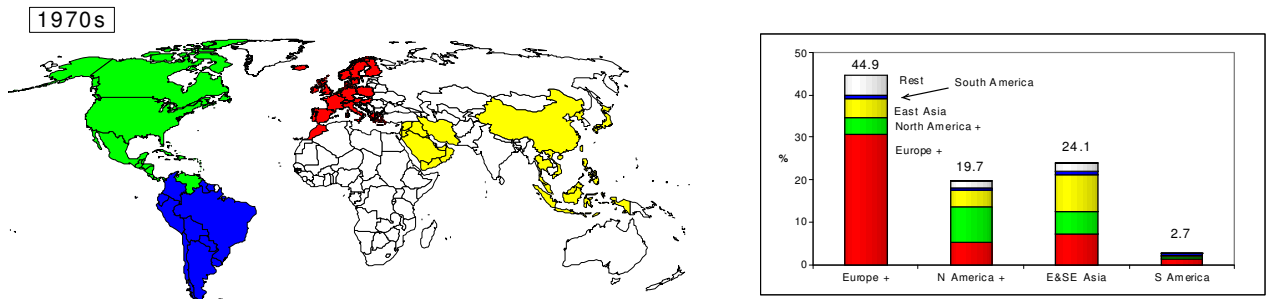
The emergence of the E&SE Asia trading bloc in a tri-polar world trading system does not signify that the world is evolving into three disparate, autarchic trading blocs. In the 1990s, even with the emergence of a new major trading bloc, between-bloc trade was very large. In addition, the emergence of Mercosur and South Africa indicates that the process of segmentation and new bloc formation in world trade is still evolving.

Figure 2.2. Emerging Patterns of Regionalisation Summarised

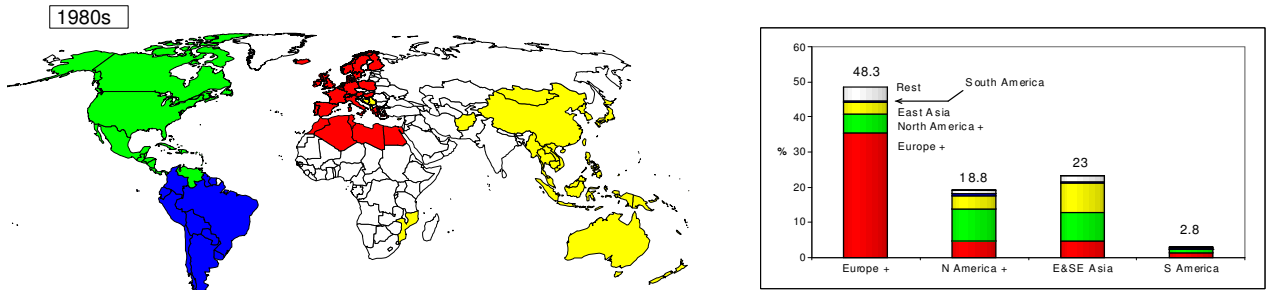
In the 1960s, the European Union and United States dominate trade...



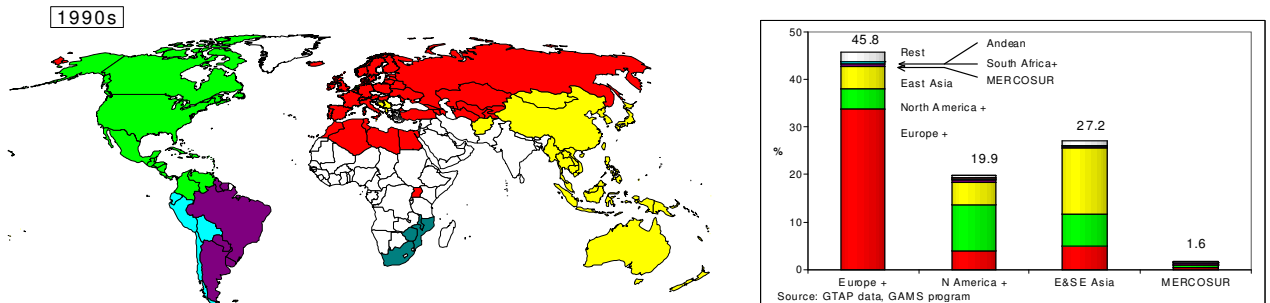
... but by the 1970s, Japan and Korea begin to lead an East Asian bloc...



... a decade later, the East Asian Tigers, ASEAN countries, and Australia consolidate the East Asia bloc...



and in the 1990s, ECA emerges and East Asia trades more with itself than with the U.S. and EU.



2.2.2. HISTORICAL CLASSIFICATION OF REGIONAL TRADE AGREEMENTS

A number of patterns emerge from this historical analysis:

- In the early periods, the US and the EU formed the dominant trading blocs, with the addition of a number of closely linked developing countries. Most of world trade was centred on these two blocs, who traded largely with one another.
- The clustering analysis indicates that NAFTA as a trade bloc was formed by the 1970s. This development is well in advance of either the US-Canada free trade agreement or NAFTA, which can thus be viewed as essentially continuing a process that had been going on for decades.
- Mercosur also started early, in the 1970s, and is a distinctive bloc with a large intra-block trade share in the 1990s.
- The emergence of the third major trading pole, the East and Southeast Asia bloc, starts in the 1970s and accounts for a larger share of world trade than NAFTA in the 1980s and 1990s.
- In all cases, the formation of blocs predated any explicit RTA
 - Mercosur and NAFTA are good examples.
- Integration of the European periphery into the EU preceded formal expansion of the EU.
- The E&SE Asia bloc formed without any formal RTA. APEC and ASEAN are not yet really trade agreements.
- The US started the period linked to the EU, but gradually became more closely linked to the emerging E&SE Asia bloc.
- Other than Mercosur, no bloc formed in Latin America. There is some evidence of an emerging bloc in southern Africa centred on South Africa, but no other blocs appear to be forming there. Similarly, no blocs are forming in South Asia.
- These trends lead to a distinction between “bloc expansion” and “bloc creation.”
- Expansion of the EU involves new countries joining an existing bloc.
- NAFTA actually shrinks as a distinct bloc over the period. The Latin American countries separate from NAFTA and diversify their trade.
- The development of the E&SE Asia bloc came about from the coalescence of a number of countries into a bloc, rather than expansion of a bloc from an initial centre or pole.
- Mercosur is an example of bloc creation, the coalescence of the members into a bloc.

This historical analysis leads to a classification of RTAs into three categories:

Bloc formation agreements. Examples include the European Union (EU), NAFTA, and Mercosur. Such agreements have followed the establishment of major trade among members of the bloc, often by decades, and can be seen as validating strong underlying economic trends rather than driving the process. Such integration involves much more than removing tariffs within the bloc. In the case of South Africa, the regional customs union SACU (consisting of South Africa, Botswana, Lesotho, Swaziland, and Namibia) was originally formed in 1911. With the opening of South Africa, and increased trade in the region, SACU has become potentially more important as a focus of trade expansion.

Bloc expansion agreements. The major example is expansion of the European Union to include new members in its periphery. The proliferation of regional agreements between the EU and countries in Eastern Europe were clearly part of the process of preparing these countries for integration into the EU, and should be viewed as part of the process of EU expansion. The NAFTA agreement has not been expanded to include new members, but the recent Central American Free Trade Agreement (CAFTA) can be seen as part of the process of consolidating the North American bloc. However, the North American bloc has not yet evolved into deeper integration—for example; there is little discussion even of forming a customs union in the region. EU expansion has invariably involved many elements of deeper integration that go far beyond issues of commodity trade, including major regional investment programs to integrate less developed regions into the regional economy. There has been some tentative discussion about expanding Mercosur, and there has been growing interest in expanding SACU to include other neighbouring countries in the region.

Market access agreements. Most of the recent trade agreements under discussion, many of them involving bilateral agreements between either the US or EU and particular developing countries, are not part of expansion of an existing bloc, but instead are designed to provide additional access to markets. As such, they are potentially competitive with (and damaging to) efforts to achieve continued global trade liberalization. For example, countries such as Chile are negotiating many such agreements, and are explicitly doing so to get increased access to large markets in the

US, Europe, and Asia. Chile is not pursuing a strategy of joining one of the existing trade blocs. The recent negotiations for a Free Trade Area of the Americas (FTAA) appear to be part of this pattern, and do not appear to be designed to widen NAFTA into an integrated “American” economy.

2.3. TYPOLOGY OF RTA'S

2.3.1. RTA'S DEFINED

“Regional trade agreement” (RTA) is a general term that refers to a whole spectrum of levels of economic integration. The lowest level of integration is represented by trade preferences, or partial scope agreements, which liberalize trade in specific commodities or sectors.

At the next level of integration, the most common type of RTA is a free trade area (FTA) in which members liberalize internal trade but retain their independent external tariffs. Seventy percent of the RTAs that have been notified to the WTO are free trade agreements. Examples of free trade agreements include NAFTA, and U.S. agreements with Israel, Jordan, Singapore, and Chile. Since free trade agreements allow members to retain different tariffs against the rest of the world, they must include detailed rules of origin (ROOs). ROOs prevent goods that enter the member country with the lower external tariff from being transhipped duty free to members with higher tariffs. ROOs require that some proportion of products traded within the free trade area be of domestic content. ROOs can become complex because they can specify domestic content thresholds on a commodity basis and can in themselves become a focus of market access negotiations.

The GATT/WTO does not place any discipline on the rules of origin used in free trade areas. These are being increasingly recognized as an insidious form of trade protection. By increasing the domestic content requirement, ROOs can increase demand for local inputs, and divert trade from lower-cost, non-member suppliers. Krueger (1995) has argued that special-interest pressures on the content requirements in ROOs gives them the potential to be used as non-tariff barriers on imported

intermediates, causing them to become an important but hidden source of trade diversion in RTAs.⁹

Deeper than an FTA, a customs unions (CU) liberalize internal trade and its members adopt common external tariffs against the rest of the world, eliminating the need for ROOs. About 8 percent of the RTAs currently in force are customs unions, including MERCOSUR, the Andean Pact, and the Central American Common Market (CACM). This is the type of RTA at which the second criteria of GATT article 24 is aimed. The prohibition against RTAs raising their common external tariff is, like the first criteria, an attempt to minimize trade diversion. Low external tariffs reduce the margin of preference offered to pact members, and therefore the price incentives that lead to trade diversion. Kemp and Wan (1976) showed that it is possible to eliminate trade diversion entirely if a customs union adopts a sufficiently low set of common external tariffs at the same time that they liberalize internal trade.¹⁰

In a common market, members move beyond a customs union, and beyond shallow integration or commodity trade reforms, to allow the free movement of labour and capital within the union. The European Economic Community (EEC) by the early 1990's had achieved a common market. With the decision to become the European Union, in which members adopted compatible fiscal and monetary policies, and (many) a common currency (the Euro), the Europeans are achieving full economic or deep integration—or an economic union.

Going beyond a customs union always involves more than border measures, incorporating elements of deep integration. “New regionalism” can be characterized as involving elements of deep integration, and may include (in rough order of increasing depth):

⁹ Analysis of trade data seems to support the negative views on ROOs. In a review of textile trade in NAFTA, Burfisher et al. (2001) and James and Umemoto (1999) both found strong evidence that NAFTA ROOs led to trade diversion. In the EU, Brenton and Manchin (2003) found a low level of utilization of EU trade preferences, which they attributed to ROOs.

¹⁰ MERCOSUR is an example of an RTA that simultaneously lowered its external tariffs when internal trade barriers were removed. Analyses of MERCOSUR related to agriculture show that the RTA therefore created trade for both members and non-members (Gelhar (1998), Zahniser et al. (2002)). Yeats (1998) found that MERCOSUR is net trade-diverting. However, his analysis is based on a partial-equilibrium study of individual sectors, excluding agriculture, and so cannot yield conclusions on the aggregate impact of the RTA, which requires an economywide analysis. Using a CGE framework, Robinson et al. (1998) found MERCOSUR to be net trade-creating and welfare enhancing.

- facilitating financial and foreign direct investment flows (real and financial capital mobility) by establishing investment protocols and protections;
- regulatory harmonisation and the removal of non-tariff barriers to trade; facilitating the movement of goods and integration of production processes across national borders in the RTA;
- liberalizing movement of labour within the RTA;
- harmonizing domestic tax and subsidy policies, especially those that affect production and trade incentives;
- harmonizing macro policies, including fiscal and monetary policy, to achieve a stable macroeconomic environment within the RTA, including coordinated exchange rate policy;
- establishing institutions to manage and facilitate integration (e.g., regional development funds, institutions to set standards, dispute resolution mechanisms);
- improvements of communications and transportation infrastructure to facilitate increased trade and factor mobility;
- harmonizing legal regulation of product and factor markets (e.g., anti-trust law, commercial law, labour relations, financial institutions); and
- Monetary union—establishment of a common currency and completely integrated monetary and exchange rate policy.

The introduction of measures of deep integration extends the historical classification of RTAs to include a new dimension. We can classify RTAs both by their intent (bloc formation, bloc expansion, and market access) as well as by measures of depth of integration, as shown in the table below:

Table 2.5: Typology of Trade Blocs

Typology of Trade Blocs		
	Shallow	Deep
Bloc formation	Yes	Evolutionary
Bloc expansion	Yes	At time of accession
Market access	Yes	Likely to be limited to “negative integration” (e.g. removal of technical barriers to trade)

In a survey of CGE studies of RTAs around the world, Robinson and Thierfelder (200x) found virtually all of them to be net trade creating and welfare enhancing.

In addition to these categories, one can add a dimension regarding the level of development of RTA members: “North” denotes developed countries, while “South” denotes less developed countries. In this approach, RTAs can be categorized as:

1. North-North
2. North-South
3. South-South

Here, the critical differences relate to the level of economic development. “North” refers to developed OECD countries and “South” to developing countries. South-South RTAs typically involve only shallow integration, while North-North RTAs involve deep integration. North-South RTAs often involve an element of deep integration and therefore potentially offer more gains to the South members than South-South RTAs.

The discussion of depth of integration above focuses on market integration. The concept, however, is not easy to measure and involves more than facilitating the operation of markets. Of particular relevance for developing countries is the role of deep integration in facilitating the integration of production processes across national borders, which in turn potentially facilitates transferring technology, achieving scale economies, widening markets, and increasing productivity. These issues broaden the scope of potential gains from trade well beyond the usual approach in trade theory that focuses on border barriers to commodity trade.

2.3.2. ANALYTICAL ASPECTS OF SHALLOW AND DEEP INTEGRATION

The standard arguments for gains from trade, and therefore potential gains from RTAs, are from the Ricardian and Heckscher-Ohlin (H-O) theories of comparative advantage. Ricardian gains from trade arise because of between-country differences in technology, whilst H-O theory points to between-country differences in factor endowments. For example, Feenstra (2004, p. 61) suggests some sources of Ricardian differences in technology—scale (economy wide), endogenous growth driven by differences in R&D, climate, colonial institutions, social capital, efficiency of labour utilisation. While Feenstra's description of the possible sources of Ricardian

differences in technology is extensive, he and most of the conventional literature do not go back to Adam Smith's arguments about a trade-induced division of labour at a high degree of disaggregation of goods and processes. Smith's high degree of disaggregation is important in the search for sources of gains from trade, and therefore potential gains from RTAs.

In essence, Adam Smith argued that specialisation of work increases job-specific skills due to improved dexterity, concentration on a particular task, and even invention of new machinery by workmen specialised in a particular field. This produced local economies of scale and externalities arising from the need to coordinate highly disaggregated parts of production processes. Later, the argument was developed to show that entrepreneurs could in some circumstances separate skilled from unskilled tasks, thus making it unnecessary to pay for skilled workers to execute the integrated task when by a division of labour into skilled and unskilled components could lower wage payments. the organisation of work. These arguments are developed in Evans (1989, sections 4.1 and 4.2). One possible outcome might be a “de-skilling” of the workforce with work organised in a hierarchical manner. In this case, job-specific skilled labour would only be required at the top of the hierarchy that controlled the production process and also the application of new machinery through investment, an argument similar to Feenstra's observations for technical change and H-O trade in intermediates. Alternatively, it might generate the acquisition of very specific skills for highly specialised tasks that may involve the re-organisation of work generating technical change at constant factor prices or through H-O trade in intermediates. Both cases are potentially of importance for RTAs.

“Old trade theory” refers to Ricardian and Heckscher-Ohlin theory, focussing on commodity trade and prices. “New trade theory” considers a variety of other effects of trade and mechanisms other than more efficient inter-sectoral allocation of factors of production. New trade theory considers trade-productivity links (e.g. “new growth theory”), imperfect competition, and rent-seeking behaviour, especially in considering the issue of regionalism versus multilateralism. Characteristics of new regionalism suggest that the welfare impacts of regional integration cannot be

adequately explained using old trade theory. Features of new regionalism that have been prominent in recent literature include:¹¹

- technology and knowledge transfers, and technology diffusion, especially from developed countries to developing countries, that increase productivity;
- dynamic comparative advantage and “learning by doing” efficiency gains through increased demand from expanded trade;
- elimination of wasteful rent seeking activities through trade liberalization;
- pro-competitive gains from increasing import competition in an environment of imperfect competition, allowing exploitation of potential economies of scale in production;
- increased geographical dispersion of production through trade that supports (1) exploitation of different factor proportions for parts of the production process (Ricardian efficiency gains) and/or (2) local economies of scale through finer specialization and division of labour in production (“Smithian” efficiency gains);
- increased foreign direct investment that carries with it advanced technologies and hence increases in productivity;
- “challenge-response” increases in efficiency through increased competition due to expanded involvement in world markets;
- Schumpeterian innovation and “creative destruction” induced by increased competition arising from expanded trade; and
- externalities arising from institutional changes that lead to a wide increase in productivity.

There may be synergies among these different aspects of new regionalism. For example, as production processes are segmented, the resulting international value chains may involve efficiency gains through simultaneous exploitation of: Ricardian differences in relative technologies, differences in factor proportions (Heckscher-Ohlin comparative advantage), and economies of scale through finer specialisation (Smithian gains). From the list of attributes of new regionalism, a common element is that all these attributes involved elements of externalities—gains arising from factors beyond the control of individual producers. A critical dimension is the potential role of policies that facilitate or generate positive externalities through deep integration, and the consequences for the analysis of the gains from RTAs.

¹¹ This list comes from Burfisher, Robinson, and Thierfelder (2004), who cite references to the literature.

Externalities have long been regarded as central in the development literature, and in trade policy arguments such as infant industry protection. However, partly in reaction to the failure of import substitution industrialisation in developing countries and to the pervasive presence of rent-seeking behaviour in protectionist policy regimes, arguments about the potential benefits from externalities have by and large been regarded as either too imprecise or too open to abuse to be of guidance in trade policy analysis. Where externalities are seen to arise, it is tempting to leave them to firms to handle, assuming that they will recognise and work to internalise externalities that are external to the firm but internal to the industry or other parts of the production chain. However, in the context of deep integration, many of these externalities arise from institutional changes that cannot be expected to be handled by the private sector alone.

Many activities generate no externalities: e.g. much single-consignment “ship and forget” trade. However, externalities that arise in deep integration through RTAs can be classified into a number of categories:

1. External to firm but internal to industry: e.g. standards;
2. External to firm, external to industry, but internal to country: e.g. legal system;
3. External to firm, external to industry, external to country, but internal to region: e.g. compatibility of transport infrastructure; and
4. International externalities: e.g. establishing and maintaining a rule-based international trading system.

Consider a simple example of an industry standard. Imagine a country where there was no single standard for nuts and bolts. With adoption of such a standard, separate businesses making either nuts or bolts, or using them, can assume that everything will fit together. The case of *screws* is used by Best (1990) to illustrate the need to set standards in order to achieve market integration within the USA in the 19th century. Setting a standard for screws was a pre-condition for producing interchangeable rifle parts, made in unrelated workshops, and then assembled in another plant. Such standardisation is an essential part of the process of achieving

Smithian gains from regional and national segmentation of production processes, allowing vertical and horizontal specialisation.¹²

The role of private versus government intervention to deal with standards is illustrated by the intervention of the government of Taiwan to upgrade standards for export promotion. Exporters were predominantly small firms, and government coordination enabled them to internalise within export industries externalities that were external to the firm. In contrast, the Korean government did not need to intervene to upgrade standards for export promotion since the exporting firms were large enough to be able to internalise the externalities, both in terms of internal network effects and reputational externalities.

Achievement of phytosanitary standards in agriculture is crucial for entering export markets, and these standards often involve externalities. For example, Egypt expanded its exports of new potatoes to the EU at the end of the 1980s. Such potato exports had to meet EU standards for brown rot, which can infect potatoes in the ground. If a single Egyptian farmer ignores EU rules and a significant consignment of potatoes is found to be contaminated, the entire Egyptian potato crop may be banned from export. The potato industry and the Egyptian government have an enormous incentive to ensure that these standards are met by all potato farmers. Government action was a necessary part of the process of establishing and enforcing standards¹³. (Ghoneim, Holmes, and Iacovone)

There are also potential problems and costs associated with setting standards. For example, EU requirements for upgrading water quality in Egypt under the EU-Egypt free trade agreement may involve setting environmental standards in Egypt, unrelated to trade, that are more stringent than Egyptian tax payers feel are necessary or desirable.

Whilst the above analysis and examples are suggestive of large potential productivity gains from externalities that might be generated in RTAs, the focus of most traditional analysis of RTAs is on the tradeoff between trade creation versus trade diversion, rather than on the potential productivity gains arising from deep

¹² These kinds of Smithian gains have long been appreciated, but the link to regional integration and external effects is more recent (See Robinson et al., Dluhosch, Stolberg).

integration. For example, the World Bank (e.g. Schiff and Winters) has argued that the trade regime can and should logically be separated from other regional cooperation activities, such as standards harmonization and infrastructure investment. Deep integration is not an analytical category in standard trade theory. It is, however, part of “new” trade theory and “new” regionalism, which consider potential links between deep integration, productivity, and trade.

The difficulties that can arise in finding the appropriate form of analysis of RTAs is illustrated by Chen and Mattoo (2004) in a study, which uses a standard trade model framework developed at the World Bank. Considering countries excluded from such arrangements they conclude on the basis of an extensive empirical analysis of the harmonisation of standards versus Mutual Recognition Agreements (MRAs) that:

“Our evidence broadly confirms the conclusions drawn from the model. Regional harmonization significantly increases intra-regional trade in affected industries. Exports to the region of excluded developed countries also increase, but exports of excluded developing countries decline. These asymmetric effects may arise because developing country firms are hurt more by an increase in the stringency of standards and benefit less from economies of scale in integrated markets.”

For participants in such agreements, the model looks at the relative impact of upward harmonisation of standards within a trading bloc on the exports of countries/firms, which find it *harder or easier* to comply with tough standards. Unsurprisingly, they find that the effect is more positive on firms, which have less difficulty complying with higher norms:

“Intra-regional imports of countries that were likely to have raised their standards during harmonization increase by 29%, considerably less than the 43% increase for countries with initially stricter standards.”

Chen and Mattoo may well be correct in the policy conclusions that they draw from their analysis—harmonisation in RTAs is restrictive compared with MRAs, with the cost of restriction being borne by excluded developing countries. However, their analysis ignores any potential links between establishing standards and productivity—a “new” trade theory mechanism. Chen and Mattoo use changed trading patterns—trade diversion and trade creation—to determine the welfare impact of setting

¹³ See Ghoneim at al.

standards. However, this analytic framework ignores potential gains arising from achieving alternative standards that generate production externalities such as Smithian gains.

2.3.3. STANDARDS AND EXTERNALITIES: RIGHT AND WRONG NORMS?

The impact of deep integration will clearly depend on whether the norms adopted are appropriate—i.e., generate positive externalities and promote trade. Broadly speaking, adopting appropriate standards is synonymous with finding the appropriate intuitional framework for dealing with externalities. For example, as Taiwan embarked on its open, export-led development strategy, the government intervened to upgrade standards for export promotion because exporters were predominantly small firms, successfully internalising within export industries externalities that were external to the firm. In contrast, the Korean government did not need to intervene to upgrade standards for export promotion since the exporting firms were large enough to be able to internalise the externalities, both in terms of internal network effects and reputational externalities.

The premise of our analysis is that there are cases where either national or bilateral action is needed: A recent OECD report on environmental measures acting as barriers to trade notes:

“Compliance can also reveal other barriers. For example, it is becoming more and more common among developing-country farmers, when faced with a stringent pesticide residue limit, to respond by converting to organic production methods. Although in some cases integrated pest management (IPM) would suffice, the cost and knowledge of applying IPM may be out of reach of the farmer, who can more easily understand and apply organic methods. However, farmers who undertake the steps to convert to organic production expect to receive higher prices for their produce than they did previously, and that requires being certified to sell under an organic label. Yet in many countries, local certification bodies are not accredited to the importing countries’ authorities. That leaves them with no choice but to pay the high cost of certification by a certifying body recognised by, and usually based in, the importing country.”¹⁴

¹⁴ OECD [Environmental Requirements and Market Access](#) 27 Nov 2003

The externality and market failure component of this problem is highlighted by the following:

“As several of the case studies show, it is not uncommon for awareness of an environmental measure within the exporting country to remain meagre, and violations therefore to continue to occur, years after the measure went into effect. Contributing factors seem to be: an industry structure in the exporting country that is dominated by SMEs; products that involve numerous components that can be purchased from any number of suppliers; and weaknesses in the importing country’s monitoring and enforcement system. Lack of awareness also seems to be a problem, ironically, when the measure in question (usually a residue limit) is not all that difficult to comply with—e.g., through a small modification in the production process, or more careful attention to the way that the offending substance is used. One explanation could be that, where chains of responsibility are diffuse and fragmented, the risk to a particular producer of being financially harmed by an enforcement action is small enough to ignore. As shown in the case studies on cadmium in plastics and formaldehyde in textiles, these factors, in combination, may frustrate efforts by importers acting in good faith to obtain assurance that all segments of their supply chain are in compliance”¹⁵.

2.4. TOWARD A CHECKLIST FOR EVALUATING RTAS

The first step is to identify what kind of RTA is being considered, starting from the historical typology of three broad types of RTA:

- Bloc formation
- Block expansion
- Market access

Historically, these three types have had different implications for deep integration. The first two are likely involve much more than border issues, as discussed above. In the case of bloc enlargement, new entrants have to accept the standards of the existing bloc as given, and adjust their own domestic economies to be compatible. On the other hand, issues of deep integration in market access agreements tend to involve only provisions that enable goods from RTA members to be sold across borders within the RTA. Such provisions, while often involving questions of meeting domestic standards, can be viewed as removing barriers to commodity movements across borders, and hence can usually be measured in terms of entry costs,

¹⁵ *ibid.*

or the equivalent of a tariff. They can be seen as removing technical barriers to trade (or “negative integration”— discussed further below).

Evaluating any RTA requires, in the first instance, an examination of whether the border barriers between RTA partners are likely to be seriously reduced. Issues of deep integration, while involving more than trade, are nonetheless predicated on the desire to facilitate increased trade. Given that, the nature of border barriers cannot simply be summarised in terms of MFN tariffs, one needs to analyse how far the RTA goes to fulfil the spirit of GATT Article XXIV (and GATS Art V). Evaluating the extent of such barriers, and how they are reduced in an RTA, requires consideration of the characteristics of the RTA.

2.4.1 RTA CHARACTERISTICS

In considering key RTA characteristics it is important to assess both the underlying institutional features, and then how those features may interact with trade flow, levels of production and consequently welfare. Below, we provide a schematic checklist of some of the key features, which can be seen to characterize an RTA, and which we argue are crucial in considering the likely impact of a RTA:

- 1. Who are the key partner countries in the agreement:** issues here concern the number of partner countries, the disparity / similarity between the countries (for example is the agreement between developed countries, or between developing and developed countries¹⁶, or between developing countries), is the agreement bilateral, regional, or hub-and-spoke.
- 2. Is the agreement an FTA or a Customs Union:** if it is the latter, how harmonised is the proposed CET tariff? what is the nature of the underlying rules of origin and how “protective” are they?
- 3. Overlap with other agreements:** Key issues would include - how many other preferential trade agreements is the country a party to? How compatible are the provisions/protocols regimes across the different agreements (eg. with respect to rules of origin)? Does the agreement erode existing preferences or create new ones?
- 4. Expected ease of negotiation:** Is there a leading partner? Are there large numbers of opponents either domestic or in the partner country? What is the expected negotiation time? What is the expected implementation time? How skilled / experienced are the negotiating teams?

¹⁶ World Bank studies argue S-S cause trade diversion but empirics cast doubt, Robinson et al, Cernat

5. **Nature of barriers to trade:** If the RTA is a customs union do MFN tariffs rise or fall? Does tariff escalation increase? What agreement is being reached on other barriers to trade (non-tariff barriers such as quotas, contingent protection, safeguard clauses, anti-dumping duties, regulatory norms etc.)? What is the coverage of the agreement in terms of sectors, numbers of product lines, exclusion of sensitive products...?
6. **Elements of deep integration:** Key issues here are investment rules, degree of competition policy alignment / agreement, rules on subsidies, extent of services trade liberalisation, and rules on movement of natural persons.
7. **Is the RTA WTO compatible (GATT Art XXIV & GATS Art V)?¹⁷:** Important here is the extent to which the agreement (a) Covers “substantially all” trade; and (b) ensures that there is no rise in average level of MFN tariff?
8. **Role of Donors:** Questions to be asked here include: Whose initiative is behind the RTA? Is there technical assistance available? If so, is it only from the other party, and is it coming as “untied” assistance? What are the most sensitive areas? How transparent is donor decision-making.

In the first instance it is important to consider the impact of an agreement on trade. However, the fact that going through such a checklist we can envisage an increase in trade does not necessarily mean that this increase is beneficial. We need to distinguish between trade creation and trade diversion, reflecting the welfare analysis in standard trade theory, which was discussed above. There are number of classic tests for trade creation and trade diversion. These are not necessarily simple to apply, and have been somewhat oversimplified in some analysis. At the heart of the conventional analysis is the idea that trade creation in a customs union is likely to dominate when the common external tariff is low and when there are unexploited potential complementarities between partners, creating opportunities for specialisation and increased trade.

If an RTA involves externalities, however, the standard analysis is no longer valid. It is certainly possible that trade diversion could be economically beneficial to the partners concerned, if it were accompanied by externalities that generated increases in productivity. With potential productivity-generating externalities, border measures may only constitute a part of the story, and be much less important than policies of deep integration that exploit the potential externalities.

The potential for “Smithian” productivity gains discussed earlier can only be achieved if a genuine “common economic space” can be created in the RTA, along the lines of the EU’s internal market. This common economic space requires both removal of barriers to trade that operate beyond borders (e.g. discriminatory taxes and regulations)—negative integration—and common action to undertake common policies needed for dealing with the existence of public goods and externalities. The key test is to determine whether, when common norms are devised, they are “appropriate,” as Mattoo and Chen have observed.

The key issue that we are trying to focus on is to go beyond the simple notions of trade creation and trade diversion to ask whether there are identifiable market failures that the collective action represented by the RTA can actually correct. For this purpose, it is necessary to analyse the structure of an RTA in order to identify the following impacts for each individual element:

1. Does the provision address factors which are purely assimilable to border measures and which therefore can be represented as a tariff equivalent? If so, the elimination of such a barrier constitutes negative integration. There is no externality effect created and traditional trade analysis applies.

2. Does the provision address, and have a positive impact on, a market failure of some kind? In this case, the agreements may create a positive externality and traditional analysis is insufficient. Addressing such problems is likely to require some form of positive integration.

3. Assuming that the provision does address a market failure and consequently that there is scope for policies to promote positive externalities, we need to assess what are the benefits in terms of cost reduction or productivity enhancement that may result.

In the case of all these, the analysis would ideally need to assess:

1. The overall contribution to total output and growth.

2. Who receives the benefits and who incurs the costs. In particular, we may find that productivity increases, changes in the structure of output, and increased trade have a positive impact on certain social groups, while others lose. For example, large producers, versus small, intersectoral differences, urban versus rural, consumers versus producers. These benefits and costs will change over time, as the adjustments work through the economy:

- a) Initially and in any transitional period
- b) After all adjustments are complete

¹⁷ from our original template

2.4.2. DEEP INTEGRATION

In the above checklist, we included factors that are usually associated with deep integration. In this section we discuss these in some more detail.

It is important to identify the list of provisions that have been included in many RTAs under discussion or already implemented. These include:

(1) Investment rules¹⁸

(2) Degree of regulatory harmonisation (product standards or process standards) with an approach to Harmonisation, National Treatment, or Mutual Recognition¹⁹

(3) Anti dumping as industrial barrier²⁰

(4) Subsidies discipline more than WTO²¹?

(5) Competition policy alignment?²²

(6) Services schedule relative to GATS commitments. Since, in many cases, GATS does not impose serious constraints, systematic evaluation of costs and benefits of mutual market access may depend on provisions such as visa rules for temporary workers that may be excluded from the RTA.

(7) “Harmonisation” etc of issues going beyond even behind border concerns , e.g. general legal norms other than TBTs, etc.—if so, what?

(8) Revenue sharing (necessary to make a customs union effective)²³

(9) Rules on movement of natural persons²⁴

(10) Institutional framework²⁵:

Supra-national rule making system: yes/no?

Autonomous secretariat for the group?

Ex post binding dispute settlement?

¹⁸ Strictly speaking we might include pure cross border FDI provisions under the previous head. If present, is there any evidence that the absence of a common legal framework has discouraged FDI.

¹⁹ This is a key issue: the EU approach unlike NAFTA has been to stress the need for harmonisation at least of minimum standards. Here the clear trade off is between the domestic costs and the prospect of market access

²⁰ Uncertainty if not disciplined

²¹ Ditto

²² Much dispute about this but for LDC need is to ensure that cost of compliance is not disproportionate and that there is not an asymmetry of obligations

²³ Identification of winners and losers in trade regime needed and need to ensure that no repetition of Kenya in EACM problem. Tariff revenue is main source of potential for redistribution

²⁴ See e

²⁵ E.g. if nothing, then there is no credibility

(11) Political integration, political benefits, and non-trade political conditionality?

(12) Financial budgetary arrangements: (a) if CU, customs revenue sharing? (b) If not, any budget transfers?

In examining the scale of deep integration, in order to apply the test on standards upgrading versus importing the wrong norms, we need to examine whether the importing of norms is capable of addressing externalities or other market failures.

Such market failures could in principle be addressed through:

- 1. A multilateral agreement, e.g. by ISO norms supported by the WTO**
- 2. A regional/bilateral agreement, e.g. RTA**
- 3. Autonomous government decisions of the individual countries**
- 4. The market, e.g. through FDI, detailed sub-contracting arrangements through the value chain, or by purely voluntary standards.**

We need to identify whether the kinds of deep integration we witness are capable of dealing with particular externalities and market failures in the regional/bilateral context. There may also be synergy between market arrangements and elements of deep integration. Institutional frameworks may be needed to handle existing market failures involving lack of coordination. Some of these market failures can be overcome by private firms, whether through intra-firm FDI or inter-firm contracts. Others, especially in developing countries, may require government action.

In table 2.6 we summarise the role of standards and regulatory norms, which are susceptible to being harmonised in a “deep integration” RTA and may determine new types of specialisation. The key point is that “intra-industry trade” allows producers to specialise in a particular product or process for which a premium price can be extracted and specific expertise gained. We distinguish between traditional, (so-called Ricardian) gains, and two types of intra-industry “Smithian” gains from trade.

In “Ricardian trade” commodities are homogenous, or the quality is instantly recognisable and differs only in a non-stochastic quantitative way, such as in the percentage content of a certain material. In this model no supplier can ever command a quality premium and comparative advantage is based on cost of inputs and cost-efficiency alone. In the Smithian model, the assumption is that there are substantial

economies of scale and there are big gains from fine specialisation arising from chopping up the production chain. The phenomena we are analysing here have to do with intra-industry trade in two ways, which we define as “horizontal Smithian trade” and “vertical Smithian trade”.

In the first type, producers market a finished product that fits into a highly differentiated niche where reputation, brand and quality allow a price premium to be obtained that cannot easily be eroded by new entrants. This process is sustained by what economists call “love for variety”, a typical feature characterizing new trade theory models as well as recent models of industrial organization and heterogeneous firms. In this type of trade, standards work as “amplifiers” and “catalysts” by allowing the creation of recognizable “brands” and types, developing new niches that consumers can identify and reducing screening and search costs.

The second type of intra industry trade is where the “value chain” is broken up and, in an extension of Adam Smith’s example, different parts of the pin production process are located all over the world. For this segmentation to happen, we need a mechanism for the contracts between upstream and downstream producers to be able to be very carefully and reliably monitored and enforced. This depends on the capacity of the producers to guarantee quality, which depends both on the market and public standards and regulations at national or regional level. The second row of the table identifies the different products that are traded, and also reflects the assumptions of the different theoretical models used to analyse these different types of trade. Traditional trade models assume homogenous goods, which leaves no scope for intra-industry trade. More advanced models of intra-industry trade assume heterogeneous goods and firms. Horizontal intra-industry trade tends to be in final goods differentiated by brands or quality attributes, including the “food niche products” and some special high-value horticultural products. Examples of vertical intra-industry trade include intermediate goods and outsourcing.

Most trade models focus on countries as their unit of analysis, but it is firms that conduct trade. Therefore it is important to identify the types of firms involved in these different types of trade. “Ricardian trade” can in theory involve any firms. However traditional trade models are characterized by a couple of important assumptions: perfect competition and no economies of scale, internal or external. The

firms involved in horizontal intra-industry trade are not necessarily internationally integrated, while the ones involved in vertical intra-industry trade will normally be firms linked to foreign firms through long-term affiliations, or because they are part of “global value chains” (Humphrey and Schmitz). What is important from a theoretical point of view is that these firms are characterized by economies of scale and learning processes which introduce increasing returns and the possibility of specialization.

The next row of the table focuses on relevant policy instruments. When considering “Ricardian trade” typically we focus on tariffs and tariff-like barriers (e.g. quotas);. These can include standards and regulations to the extent that these act “as a tariff” and so their tariff-equivalent can be calculated. But for intra-industry trade the importance of tariffs is smaller and the relevant policy instruments are standards, regulations, testing, and conformity assessment (i.e. policy tools for market integration). Due to their differentiated nature it is crucial to be able to assess their characteristics. In certain cases these are information diffusion devices implicitly imposed within the production chain, as in the case of global production chains (e.g. cars). Consequently, when analyzing standards and regulations, we will shift the focus to “Smithian trade”. However, standards can also act as a trade barrier and be a tariff-like trade policy instrument, as we have already discussed, and this possibility is included in our theoretical framework when analyzing “Ricardian” trade.

Lower in the table we consider externalities and market failures associated with these kinds of trade, linking the concept of Smithian trade gains to the relationships between standards and public goods. We argue that when considering traditional trade gains and “Ricardian” trade, it is often assumed that there are neither market failures nor externalities. On the other hand, when considering “Smithian” trade, these are much more likely. In particular, “horizontal” intra-industry trade is clearly affected by information externalities (e.g. just one potato affected by brown rot causes all the shipment to be destroyed), reputation mechanisms, and learning effects (e.g. farmers can learn from their neighbours how to take care of certain pests). Similarly, a number of spillovers affect also vertical intra-industry trade, in particular the establishment of quality assurance systems, the fixed costs involved in setting up a system of standardisation, and coordination among trading partners.

Next, the table addresses lessons for public policy and collective action that we can derive from the distinction between “Ricardian” and “Smithian trade. When considering “Ricardian” trade, we focus on traditional public policy measures involving elimination of barriers or “negative integration.” The main achievement of the various GATT rounds, negative integration can be promoted by removal of such barriers multilaterally or in RTAs. The promotion of deep integration in the sense of the creation of markets that function as social institutions raises different issues for trade policy. Sometimes the market is able to create, for example, subcontracting links. In other cases, some forms of regulatory harmonisation and coordination may be needed — and an RTA may be able to play a part in this process.

Finally, the table summarises ways to determine likely beneficiaries of different kinds of trade. The poorest people are unlikely to be in a position to profit immediately and directly from “Smithian” trade and deep integration, but indirect and longer term impacts could be important if, for example, poor farmers can learn how to meet EU standards, or get employed as wage workers on farms that can.

2.5. CONCLUSIONS

The arguments in this chapter can be summarized in a few key points:

- The post war period has seen the disintegration of the earlier bi-polar world economy based on colonial and dependency links, and the emergence of a number of trade blocs. These include the EU and its periphery, North America and its periphery, Mercosur in Latin America, and a major bloc in East and Southeast Asia.
- The formation of these blocs preceded formal agreements and institutional arrangements such as RTAs, often by decades. In the past twenty years, however, there has been a proliferation of regional trade agreements.
- The historical analysis suggest a classification of regional trade agreements into three types:

- Bloc creation
 - Bloc expansion
 - Market access
-
- Early RTAs and GATT Rounds facilitated shallow integration (the reduction of barriers to the movement of goods across borders), while more recent RTAs have involved elements of deep integration. Deep integration is a multi-faceted concept, involving modalities to facilitate and encourage trade (positive integration), rather than simply lower border barriers.

 - Deep integration often involves various types of externalities, and there are potential links from the formation of an RTA → deep integration → externalities → increased productivity
 - This increased productivity arises largely from Smithian gains generated by local scale economies
 - Different from Ricardian gains in standard trade theory

 - Using the notion of deep integration, it is possible to provide ways to classify RTAs by their potential for generating externalities and various kinds of productivity gains.

 - The analysis of deep integration and potential links to productivity gains is very new, and current research relies heavily on case studies, especially analysis of firm-level data. This approach is appropriate, since it is difficult or impossible to develop new theories without a better understanding of the mechanisms at work at the micro level.

Table 2.6: Trade and productivity links: a role for RTAs? A summary of the concepts

TRADE FLOWS>			
	<i>1. Traditional trade creation and trade diversion issues</i>	<i>2. “Smithian” productivity enhancing gains from trade driven by fine specialisation and economies of scale, internal and external</i>	
<i>Type of trade></i>	1. Inter industry trade	2a. Niche specialisation in fine product classes	2b Specialisation in processes along the production chain
<i>shows up in data as></i>	changes in inter-industry trade patterns	increase in new products trade due to horizontal & vertical variety and quality differentiation, niches etc	increase in intra-industry trade due to vertical disintegration of value chain, intermediate goods trade
<i>Driving forces (economic determinants)></i>	H-O comparative advantage: endowments, income	Productivity gains driven by product innovation and specialisation (including advertisement), scale economies. Learning.	Productivity gains driven by process innovation and thinner division of labour (slicing up production chain, e.g. Mexico-US). Scale economies; learning
<i>type of product affected></i>	homogeneous (either final or intermediate), characteristics/quality assumed to be highly transparent.	mostly final, differentiated by variety and by quality Includes more agricultural niche products. (process of ‘de-commodification’ of commodities)	Trade growth is in intermediate goods – may be homogenous/interchangeable but quality needs monitoring and differentiation along production chain; mostly industrial but not only. Services outsourcing
<i>Type of firms and markets involved in this type of trade></i>	any firm, sales easily can be arms’ length into the market, “ship and forget”.	may be internationally integrated or subcontracting; fine specialisation more profitable if market guaranteed by long term contracts	more likely to be integrated; long term affiliation or subcontracting likely
<i>Relevant policy instruments></i>	tariffs QRs etc. Any standards, regulations that are purely tariff-equivalents (especially time consuming controls done at port of import).	Standards, regulations, conformity assessment Monitoring can be done on import but quality assurance reduces transactions costs	Standards mostly Monitoring must be done along the whole product chain
POSSIBLE SPILLOVERS ASSOCIATED			
<i>Market failures or externalities associated with this kind of trade></i>		reputation, health, learning effects,	lack of quality assurance systems, standardisation, general issues of business environment
<i>Action needed to remove barriers: Public vs Private></i>	public policy measures need to be addressed	More scope for public intervention here (especially in case of market failures: e.g. health issues that individual consumers cannot ‘detect’ – these interests may require public intervention i.e. driven by public welfare); NB avoid ‘raising rivals’ costs standards	Much scope for intra-firm resolution and private coordination; public policies needed for favourable environment;
RTAs			
<i>ROLE FOR RTAS></i>	eliminate border barriers and equivalent	quality standards ensuring protection of consumer and environment	as 2b but above all quality and compatibility for process
<i>gains from trade if RTA successful></i>	traditional	higher profitability from niche products plus learning about value chain + economies of scope	economies of scale and technology transfer

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CHAPTER 3: A FRAMEWORK FOR EVALUATING REGIONAL TRADE AGREEMENTS INVOLVING DEVELOPING COUNTRIES

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3.1. INTRODUCTION

The purpose of this section is to set out a logical checklist and analytical framework to help governments and other interested parties to assess the issues at stake in negotiating a specific Regional Trade Agreement (RTA).

Before turning to the checklist, it is important to clarify the baseline for any analytical work. What, in the jargon, is the counterfactual against which we will compare the baseline? In much economic theory, the counterfactual is free trade compared to a distorted baseline. Most countries, however, have active trade policy and ongoing negotiations with trading partners, both within and outside the World Trade Organisation (WTO) framework. Therefore, RTA negotiations always take place in the context of a network of existing trade policy. Any counterfactual analysis must start from the existing situation, including WTO commitments, and consider partial liberalisation under the potential RTA.

Existing commitments are relatively easy to identify when WTO negotiations are not underway — it is the last set of WTO commitments entered into. It is more difficult if the negotiations are underway and the likely shape of the next set of national WTO commitments is still not settled. This uncertainty may be settled if the RTA is likely to enter into force before the next WTO agreement — the current WTO commitments are then part of the baseline for the RTA, which is then in turn (part of) the baseline for the next WTO negotiation. The most difficult situation is when the shape and timetable for the WTO negotiations is becoming clear, in which case the correct baseline is a forecast of the expected outcome and the changes in trade and activity driven by that change in WTO commitments. That double forecast (of the impact of the WTO negotiations on the economy and society and then of the changes from that deriving from the RTA) will make assessment doubly uncertain. As a simplifying assumption, using current policy as a baseline is likely to be correct in most circumstances and should give a reasonable sense of the direction and degree of change even when WTO negotiations are in train. Assuming policy inertia is likely to be valid for developing countries with “special and differential treatment” in the WTO with less need and incentive to change current policy.

The logical checklist can be seen as covering three key sets of issues:

What type of agreement?

Here we look at the institutional shape of agreements, and offer a range of criteria ranging from the most basic “Is it WTO compatible?”, “Is it a Free Trade Area (FTA), or is it a Customs Union (CU)?” to more detailed ones such as “What are the cumulation requirements in the underlying rules of origin?”

We suggest whilst the extent of internal tariff removal in a proposed RTA and the level of any common external tariff (CET) are vital, we also argue that the degree of removal of non-tariff barriers (NTBs) is important. Answers to these questions will be both quantitative and qualitative.

Assessing the impact of shallow integration.

Here we identify the main factors that will lead to trade creation between partners and minimize the chances of trade diversion, suggesting indices that may be indicative of likely trade creation and trade diversion.

Assessing the impact of deep integration²⁶.

The estimates of the impact of deep integration builds on indices already developed to analyse shallow integration, especially those that may be indicative of specialisation of the newer types that typically involves:

- exploiting special niche product variety markets, as opposed to pure “commodity” exports
- participation in the vertical chopping up of processes and “value chains” and
- Exploiting local scale economies and externalities through a variety of institutional channels including regulatory agreements.

A case study approach is suggested to draw together the many elements of deep integration for the final assessment of a RTA.

Inevitably a number of the factors to be identified in the check list overlap across these three issues. Hence, the impact on both shallow and deep integration is likely to depend significantly on the answers given with respect to the type of

²⁶ This term was coined by Lawrence (1996). See also Hoekman and Konan (1999).

agreement that is being considered. However, the logic behind our checklist can be summarised as follows:

- What sort of agreement is it and how much does it liberalise trade?
- What benefits are likely to spring directly from the removal of border barriers or shallow integration?
- If the gains from shallow integration are worthwhile, is there also likely to be scope for developing new types of trade from deep integration? In particular,
- How much trade is there already of the type that looks as if it can benefit from removal of the protective component of regulatory barriers?
- Does the RTA facilitate the rationalisation of regulatory agreements so that they are consistent with deep integration?
- What channels exist in this RTA for the ensuing trade expansion to lead to productivity improvements?

The reason for focusing on both shallow and deep integration within an RTA is based on four important considerations:

- Regulatory barriers and market access have been a central focus of global trade negotiations. Such global trade integration and market access impinges increasingly on domestic sovereignty, requiring a purposeful effort towards “positive integration” whilst recognising that regulatory rapprochement can lower costs where the regulatory norms are protective and raise benefits where they facilitate deep integration. In this context, a successful outcome requires some form of common policy. However, it is normally very costly to deal with regulatory rapprochement at multilateral level whilst it is often faster and more efficient to do it at a regional and bilateral level. This is evident for trade negotiations e.g. over services, Sanitary and Phyto Sanitary (SPS) provisions, Technical Barriers to Trade (TBT), “Singapore issues”²⁷.
- Embedding the regulatory rapprochement within an RTA is likely to give to this a mutually agreed contractual basis that leads to increased stability and a stronger impact on potential investors’ expectations.
- A general agreed principle against “narrow” negotiations is that it is normally necessary build up a coalition of “export oriented” actors that will benefit from the liberalization in order to counterbalance the pressure of anti-liberalization lobbies representing interests of import-competing sectors. Regulatory rapprochement embedded it in a wider negotiation for a RTA can increase the chances of success. The case of regulatory rapprochement can be well thought as a special case of liberalization, for this reason, embedding it in a wider negotiation for a RTA can increase the chances of success.

²⁷ The “Singapore issues” are defined in the list of acronyms.

- In Part IV we identify the circumstances in which it is likely that regulatory rapprochement is mutually beneficial.²⁸

It is important to note that while we have emphasised the potential importance of deep integration considerations and have argued that the presence of deep integration can significantly impact on the welfare effects arising from an RTA, many RTAs do not include effective deep integration provisions. Our view is that there is evidence that a number of RTAs are increasingly moving in this direction but that movement is relatively slow. It is also important to note that in drawing up the checklist we have attempted to include all the issues which *may* be of relevance in evaluating an RTA. However, this does not mean that any RTA evaluation will be able to deal with all of the issues posed by the checklist. This may not be possible, simply because of a lack of data-availability, but also because some of the issues will not be of relevance to given RTA's. The checklist therefore provides a framework to assist the analyst / policy maker in being clear about the sort of questions that could be asked of the data, and of the underlying reasons for the posing of those questions / issues.

3.2. WHAT TYPE OF AGREEMENT?

3.2.1 THE PARTNER COUNTRIES

The World Bank cautions against South-South (S-S) RTAs in favour of North-South (N-S) RTAs, although empirical studies suggest S-S RTAs are on average trade creating.²⁹ The varieties of N-S and S-S RTAs include bilateral, regional, and hub-and-spoke agreements that may incorporate elements of N-S and S-S agreements. For present purposes, it is important to disaggregate some typical characteristics of S-S and N-S RTAs in order to identify a number of key characteristics, which are likely to affect the benefits of a RTA. Normally economic theory suggests a RTA will be more beneficial the greater the size of the created market and the lower the height of the final tariff levels, achieving the synergies of closer integration and avoiding trade

²⁸ We should enter a caveat that not all regulatory approximation is necessarily desirable. In Part IV we try to identify the circumstances in which it will be mutually beneficial and our remarks here should be seen in this context.

²⁹ See for example Robinson and Thierfelder (2002) and Evans (2000, 2003).

diversion. Achieving this outcome in a S-S or N-S context is not straightforward. A RTA partners between with diverging initial height and structure of tariffs, divergent initial regulatory structures, diverging initial size of market and Gross Domestic Product per capita (GDP per capita) will require careful negotiation and will tend to make convergence difficult.

A number of criteria are likely to help sort out the issues:

- I. How many partners?
- II. What is the initial size of population and GDP amongst members?
- III. Are the partners with a large population and GDP also in the South, or in the North, or both?
- IV. What is the initial height and structure of tariff levels of partners?
- V. What is disparity of GDP per capita among partners?
- VI. How large is the total market of the larger partners in the South or North for your exports?
- VII. What is the potential for market expansion measured for example by GDP, imports and exports of goods and services; by stocks of inward and outward investment in the RTA as indicated by the past performance of larger Southern or Northern partners? Is that potential likely to increase as a result of the RTA? Is the potential market expansion likely to benefit smaller partners as well as larger partners?
- VIII. Is there a strong divergence in the cost structure amongst partners?
- IX. Is the agreement, bilateral regional, or hub-and-spoke.

3.2.2. FTA OR CUSTOMS UNION?

Theory and experience suggest that if integration is beneficial benefits are greater when the agreement is in the form of a CU rather than a FTA with the hidden protective and administrative costs of rules of origin. However, a CU can be much harder to negotiate, so it is important to strike the appropriate trade-off. A full CU with a truly common CET requires tariffs collected at the union's external frontiers to be fairly reassigned among the countries who would be able to collect the tariffs directly at internal borders in a FTA. A FTA in the short-run leading to an eventual CU in the long run could make most sense provide the final CET is low. Rules of origin (RoO) are required in a Free Trade Area in order to distinguish goods originating in partner countries from those coming from third countries. Rules of

origin are thus necessary to deter “trade deflection”. ROOs however can act as a constraint on the sourcing of inputs by domestic producers. Generally speaking that constraint is likely to be lessened to the extent that the underlying rule itself (eg. value content rule) minimises the amount of domestic content required, and to the extent that the rules of origin allow for “cumulation”.

Tests

- I. FTA or Customs Union
- II. If formally a CU, how harmonised is the proposed CET tariff?
- III. What customs measures will remain at internal borders between partners?
- IV. What arrangements are there for collecting/sharing customs revenues?
- V. How protective is the structure of the RoO in a FTA? (see below).
- VI. If an FTA what is the nature of the rules of origin:
 - Number of RoO?
 - How many sector specific RoO?
 - Degree of complexity of RoO?
 - How much cumulation with partners?
 - Are there sector specific RoO in key exporting sectors?
 - Where local content rules are required what is the standard percentage, and how much trade is subject to >60% requirement?

3.2.3. OVERLAP WITH OTHER AGREEMENTS

A country can be in multiple FTAs but only one CU. Many African countries for example belong to overlapping FTAs. However even a single FTA implies need for strict rules of origin, and the more complex arrangements are the more scope for red tape at frontiers to disrupt the RTA.

Tests:

- I. Type/extent of overlap - how many other RTA does country have, and with whom.
- II. Compatibility - are there any mutually incompatible provisions in the agreements.
- III. Differences in protocols
- IV. Differences in IPR regimes

- V. Does it change the characteristic of an existing agreement (i.e. improve or reduce the benefits of existing agreements)?
- VI. Is there any inconsistency with existing agreements?
- VII. Does the agreement erode existing preferences or create new ones?
- VIII. Are the ROOs the same or different as those in the existing RTA

3.2.4. EXPECTED EASE OF NEGOTIATION

The effect of rapid negotiation facilitated by automaticity vs. slow implementation with protracted negotiation requires qualitative analysis since there is no immediate answer as to desirability: if there is a great deal of negotiation then there may be many exceptions but large gains, or perhaps easy negotiations with a short timescale may suggest no gain. Ease of negotiations may be determined by small number of partners or asymmetric partners. It may also be determined by availability of knowledgeable negotiators for the smaller or developing country partners. Overlap with other agreements also complicate the negotiating process. A country can be in multiple FTAs but in only one CU. Many African countries for example belong to overlapping FTAs. However even a single FTA requires RoO whose complexity increase the more scope for red tape at frontiers and disrupt the RTA.

Tests are:

- I. Is there a leading partner?
- II. Are there lots large numbers of opponents, domestic or in partner countries, on the import or export side?
- III. Are there a small number of large exporters who are supportive?
- IV. What is expected negotiation time?
- V. What is expected ratification time?
- VI. What is expected implementation time for finalisation of details such as the RoO and SPS regulations?
- VII. Are these timescales already specified?
- VIII. Do you have a sufficiently experienced and large negotiating team? If not is there technical assistance available.
- IX. Overlap with other agreements: How many other RTAs does country have and, with whom? Are there any mutually incompatible provisions in the agreements of in existing preference arrangements? Does it improve or reduce the benefits of existing agreements? Are the RoO the same or different as those in the existing RTA?

3.2.5. NATURE OF BARRIERS TO TRADE

3.2.5.1. TRADITIONAL BARRIERS

Economic theory is ambiguous but experience suggests that if RTA is beneficial it should be complete: excessive exceptions are likely to be harmful. From a political perspective asymmetric tariff reductions with less or slower obligations on the less developed partner have an appeal, but for economists the gains from specialisation require both sides to liberalise. Moreover, WTO Article XXIV requires symmetry.

(1) Full Removal of bilateral tariffs?

Tests are:

- I. If the RTA is a CU do MFN tariffs rise or fall?
- II. Does it remove or increase tariff escalation?
- III. Is the RTA going to abolish all bilateral tariffs? If not all, then:
- IV. Which tariff lines are excluded e.g. agriculture?
- V. Are the excluded sectors important for the domestic economy or do they imply e.g. remaining tariff escalation?
- VI. What, if any, asymmetries are there in tariff reduction obligations?

(2) Removal of bilateral non-tariff barriers - full or partial?

The distinction between border and regulatory barriers may be hard to make, but economists suggest that regulatory barriers largely serve to increase transactions costs of trade and raise no tariff revenue. Unless such regulatory arrangements help overcome some sort of market imperfection arising for example from externalities, such barriers are usually harmful.

(3) What is the coverage of agreement?

The wider the coverage the better the agreement is likely to be, but the “substantially all” rule is vague and leaves scope for significant exceptions that must be examined.

Tests:

- I. How much is excluded in terms of agriculture, raw materials, industrial goods, services, capital, and labour markets?
- II. What sensitive products are excluded?

(4) Tariff-like measures

Quantitative restrictions and variable levees are the most common examples. Removal of tariffs can have no effect if quotas, administrative measures, or onerous tax burdens remain.

Tests:

- I. Do certain quota or import-licensing rules remain in place, or are new ones introduced and if so are they binding?
- II. Are minimum prices introduced, or remain in place? If so, are these in important import/export sectors?
- III. Are there rules for domestic taxes?

3.2.5.2 CONTINGENT PROTECTION

Economists regard contingent protection as likely to frustrate the aim of trade liberalisation. However, a political judgement is needed as to whether retention of some such instruments is necessary to avoid adjustment costs. Therefore, a good agreement may retain scope for use of such measure but put strict limits on their use and should make them predictable.

(1) Safeguard clauses

Test:

- I. Does the RTA include an agreement-specific, non-MFN safeguard clause in addition to the WTO clause? If so, does it impede the use of WTO safeguard clauses between signatory parties?
- II. Are safeguard measures:
 - Excluded from the agreement?
 - More strictly controlled than by the WTO?
 - Banned?

(2) Anti dumping

Tests:

- I. Is anti dumping excluded from the agreement?
- II. Is anti dumping more strictly controlled than WTO?
- III. Is anti dumping banned?

3.2.5.3. RULES OF ORIGIN

Rules of origin are required in a FTA to prevent imports from third countries being routed through a partner country that has a lower tariff on a particular commodity or less onerous customs procedures than the home country, called “trade deflection”. Were this to happen when transport and transactions costs are low, third country imports pay a tariff in the importing partner country regardless of partner country of final destination. Indirectly, the lowest tariff on any particular good in the FTA is the one that prevails and the FTA becomes a CU. Domestic content rules are designed to prevent this outcome by requiring third country imports that move across intra FTA borders to have local content rules. This is usually achieved by one of three ‘rules’: the value content rule (which requires a minimum local content or “value added”) the tariff-classification rule (which requires that the intermediate input has to be of a different tariff classification line to the final good); or the specific product processes rule (which requires that certain production techniques or process have to be used in the production of the final good). In principle, a CU has no trade barriers within the union and third country goods pay a common external tariff when they first enter the CU, though in practice this is not always the case.

RoO can frustrate regional trade in a number of ways:

By introducing a constraint on the sourcing of intermediates they potentially raise firms' costs. Where the underlying ROO is restrictive in this fashion than this can result in additional trade suppression and trade diversion.

Their complexity requires bureaucratic customs procedures. This can impact on trade in a number of ways. First, there are costs of obtaining the necessary information as to the correct procedures which need to be undertaken. Secondly, there are costs of compliance with the procedures; and thirdly their complexity can provide customs officials with an excuse to delay goods that actually have the right to move freely (and there is anecdotal evidence to suggest that this does occur).

Generally speaking, RoO are less protectionist when they allow for "cumulation", which essentially means that inputs from other regional partners can be counted as "local" inputs. RoO are also less protective when the local content percentage required on duty free imports from third countries is low - though of course interpretations of what qualifies as low or high may differ.

Tests:

- I. How many RoO are there? RoO regulations can often form the bulk of the documentation of a FTA or RTA.
- II. How many of the RoO are sector specific? How many of these affect exporting sectors?
- III. What is the degree of complexity of RoO?
- IV. How much cumulation with partners is allowed?
- V. Where local content rules are required, what is the standard percentage what is the range of local content rules around this %. How much trade is subject to the local content requirement?

3.2.5.4. REGULATORY NORMS: BARRIERS TO TRADE?

The main justification for an RTA is often said to be the ability to deal with regulatory norms that govern trade that cannot be easily dealt with multilaterally. Such regulatory norms are controversial because they can be used as regulatory barriers to trade, as well as to facilitate beneficial "deep integration". A key factor often neglected is the issue of testing and certification. For example, adoption of EU standards into partner norms will be of little benefit if there is no mutual recognition of testing and certification. In many cases, "deep integration" requires governmental action to harmonise regulatory norms though in some cases this can be done by via

contracts, proprietary standards and other measures that affect the operation of market. Thus, there is scope for regulatory integration that limits regulatory barriers to trade and facilitates beneficial “deep integration”.

(1) Standards and norms

Tests:

- I. How many new standards are to be introduced?
- II. Will new conformity and testing facilities be created?
- III. What are the costs and benefits to producers of implementing or upgrading the standard?
- IV. What are the costs and benefits to consumers?
- V. What are the market access gains and productivity impacts?
- VI. Who is likely to gain, who may lose?
- VII. Are there likely to be externalities?
- VIII. Are donors committed to financing costs of implementation?

(2) Product standards

Tests:

- I. Does this go beyond existing WTO provisions?
- II. Does it repeat or strengthen commitment to existing WTO obligations (i.e. national treatment, testing and certification at the border);
- III. Does it provide for mutual recognition with minimum harmonisation?
- IV. Is there harmonisation of norms? If so, on what scale?
- V. Is this in the agreement or will it require further negotiations?
- VI. Does it require changes to standards and regulations for products not involved in trade?

(3) Testing and certification

Tests:

- I. Does the agreement provide for mutual recognition of conformity assessment systems once ratified?

(4) Process standards

Tests:

- I. Mutual recognition (minimal harmonisation)?
- II. Harmonisation?
- III. Is this in the agreement or does it require further negotiations?

3.2.6. ELEMENTS OF DEEP INTEGRATION

Our concept of deep integration, for which we develop quantitative indicators below, does not merely refer to domestic regulations that are the internal equivalent of border barriers, but rather we suggest that an evaluation of an RTA should examine how it creates a “common market place” in the broadest sense of this term.

3.2.6.1. INVESTMENT RULES

There is little evidence that bilateral investment treaties raise FDI, but considerable evidence that investment follows trade.

Tests:

- I. Does a specific investor’s dispute settlement system exist?
- II. Is there preferential national treatment?
- III. If so...does this discriminate against major present investors?

3.2.6.2. COMPETITION POLICY ALIGNMENT

The benefits of free trade between partners can sometimes be inequitably distributed if trade is carried out by firms or cartels able to exploit market power.

Tests:

- I. Is it in the agreement or to be discussed?
- II. Does the country have a competition law? If not, do they recognise it as useful or necessary?
- III. Is there cooperation or substantive harmonisation/change of rules?
- IV. Are there trade related competition issues among partners such as:

- A cartelised distribution system?
- Dominant firms from partner country?
- Private barriers to market access?

3.2.6.3. RULES ON SUBSIDIES IN ADDITION TO WTO RULES

Tests: Implications of subsidy rules will depend on whether country:

- I. has genuine reasons for believing it can use subsidies positively for development purposes,
- II. is experiencing subsidised imports from partner?

3.2.6.4. SERVICES SCHEDULES RELATIVE TO GATS COMMITMENTS

Many RTAs do little more than reaffirm GATS schedules

Tests:

- I. Does the agreement include liberalization of preferential services? Alternatively, does it simply confirm GATS commitments?
- II. Are the details for implementation agreed (e.g. visa when liberalising movement of natural persons? or mutual recognition of professional qualification when respective services are liberalised)?
- III. If the EU is involved, are the relevant rules at the MS or EU level?

3.2.6.5. RULES ON MOVEMENT OF NATURAL PERSONS

In many cases, even scheduled services cannot be supplied across borders if visa requirements are such as make personnel movement impossible.

Test:

- I. In which manner is the movement of natural persons facilitated (e.g. Visa or special agreements)?

3.2.6.6. HARMONISATION OF ISSUES BEYOND BORDER CONCERNS

Test:

- I. Are there other non-trade obstacles that one party claims frustrate liberalisation (e.g. enforceability of contracts, differences in tax systems)?

3.2.6.7. CHANGE IN REVENUE SHARING (IN A CUSTOMS UNION)

See above on Rules of origin and CU vs. RTA. This issue is often forgotten.

Tests:

- I. What system is in place:
- II. Common budget?
- III. Revenue sharing?
- IV. If neither, how is this going to be addressed?
- V. Is trade deflection a real issue?

3.2.6.8. INSTITUTIONAL FRAMEWORK

An RTA without credibility will not affect investment decisions. Hence, an institutional framework is needed to provide technical support for implementation and to ensure commitments are adhered to.

Tests:

- I. Is there a supra-national rule making system (yes/no)?
- II. Is there an autonomous secretariat for the group?
- III. Is there ex-post binding dispute settlement? If so, how is it to be enforced?

3.2.6.9. POLITICAL INTEGRATION/BENEFITS/CONDITIONALITY

This is qualitative, but the political context of an RTA is of critical importance.

Tests:

- I. What are the political motivations and interests?
- II. Is this RTA designed to improve difficult political relations or consolidate good ones?
- III. What political pressure is being put on junior partners to sign?

3.2.6.10 FINANCIAL BUDGETARY ARRANGEMENTS

It is widely believed that an integrated financial framework is highly desirable; firstly for technical reasons so that an FTA can become genuine Customs Union; and secondly so that compensation mechanisms can occur, even if only via tariff revenues (as in SACU but not Mercosur).

Tests:

- I. If a CU, is there formal system for revenue sharing?
- II. If not a CU, are there any other budget transfers?
- III. Is there any mechanism to compensate possible losers, other than through the sharing of tariff revenues?
- IV. Are tariff revenues to be shared so as to compensate for possible trade diversion costs?
- V. If there are regulatory implementation costs, is there a mechanism to assist with adjustment costs?

3.2.7. IS THE RTA WTO COMPATIBLE?

The key requirement for an RTA is whether it is likely to be WTO compatible. This is potentially significant if there is a third party affected, for example via trade diversion, since it is possible to challenge an RTA at the WTO - clearly to be avoided.

As well as notifying the WTO under Article XXIV it is possible to give notification under the "enabling clause"³⁰. Moreover, developing countries are not

³⁰ Recent AB decisions have clarified meaning of the "Enabling Clause": developed countries may give non-reciprocal preferences to developing countries, but these must be non-discriminatory in the sense of treating all countries that are in the same position alike. It should be noted that there is some leeway in setting "objective" criteria for what is, or is not, the same position.

subject to the same strict non-discrimination rule. Given that any RTA that does not satisfy WTO Article XXIV is likely to be very limited in scope and therefore of limited value, satisfying Article XXIV (and not simply WTO compatibility) should be considered as a benchmark. We would however not automatically consider an RTA to be of limited value merely if it fails to gain formal approval by the WTO Committee on RTAs, since this could be due to the tightness of the WTO consensus rule.

For rules on services look at (d) below.

If it has already been approved then skip to question 2, otherwise:

(a) What is the status current at the WTO?

Test

- I. has the agreement been notified or will it be notified under GATT Art. XXIV/GATS V or the Enabling clause
- II. If it has been notified have any comments been made by other parties?
- III. An applicable test could be:” Under what article do you intend to notify the agreement? Under Art. XXIV GATT and Art V GATS or under Enabling Clause. What is the general agreement at negotiating level?”

(b) Does the RTA cover substantially all trade?

At present however there is no legally agreed definition of “substantially all trade”. Therefore alternative measures should be collected. Tests looking at the share of actual trade covered should be complemented by others such as the share of tariff headings since the use of prohibitive tariffs may reduce trade and therefore test based on trade may be biased downwards. The EC suggest that 90% of trade is "substantially all trade".

Tests:

- I. Percentage of trade (imports and exports) covered;
 - II. Percentage of tariffs lines covered;
 - III. Does it satisfy the rule that in a CU or an FTA there should be no rise in the average level of the MFN tariff/tariffs?
-

GATT Article requires that for a Customs Union: “the duties and other regulations of commerce imposed at the institution of any such union or interim agreement in respect of trade with contracting parties not parties to such union or agreement shall not on the whole be higher or more restrictive than the general incidence of the duties and regulations of commerce applicable in the constituent territories prior to the formation of such union or the adoption of such interim agreement, as the case may be”. As a legal test, this is somewhat loosely defined. From an economic perspective, this is one of the most important elements in determining whether an RTA is likely to be trade diverting. When considering an average tariff it may be important to consider not only a simple average but also a weighted average. Weighting according to imports is fairly popular. One should note that a simple average often suffers an upward bias and an import weighted average often a downward bias. Therefore, to be confident in your conclusions you should hope to find the value of both averages to be of similar magnitude.

Tests:

- I. The simple average pre and post applied tariff rates
- II. Import weighted pre and post applied tariff rates
- III. The standard deviation of applied tariffs
- IV. The pre and post tariff peaks
- V. Are tariff peaks removed?
- VI. Are there any new tariff peaks introduced in major imports?

(c) GATS

The GATS provides that there must be no increase in” the overall level of barriers to trade in services within the respective sectors or sub-sectors compared to the level applicable prior to such an agreement”. GATS rules essentially cover domestic regulation, and vary slightly from those rules under the GATT. The GATT requires that the average level of MFN barriers for goods must not rise. In addition, GATS Article VII deals with mutual recognition of service providers between similar WTO members, which may be partial and not part of an RTA. It is of note that RTAs rarely schedule more than what is in the GATS. Hence, fulfilment of the GATS rules should be tested.

Unfortunately, the rules for WTO compliance under the GATS are somewhat complex and not easily understood by non-specialists. Therefore, we propose the following:

Tests:

- I. Needs to satisfy GATS Article V requires that such regional agreements have substantial sectoral coverage in terms of the number of sectors and volume of trade. No mode of supply must be excluded a priori.
- II. Needs to satisfy requirement that within covered sectors substantially all measures that discriminate in favour of services and service suppliers of national origin vis-à-vis those of other parties to the agreement must be removed.
- III. Do barriers against 3rd countries for any service sector rise as a result of common regulations of proposed RTA?
- IV. Do any mutual recognition provisions, not notified under Article V, comply with Article VII in not discriminating against 3rd parties who also met the same standards?

3.2.8. ROLE OF DONORS

It is important to identify the political motivation driving the agreement. Are donors facilitating the negotiations (e.g., through technical assistance)? If donors are acting as the major force behind the agreement there may be less likelihood of domestic ownership, and potentially a greater pressure for effective implementation from donors/partners.

Tests:

- I. Whose initiative is behind the RTA?
- II. Is there technical assistance available? If so, is it only from the other party, and is it coming as “untied” assistance?
- III. What are the most sensitive areas?
- IV. How transparent is donor decision-making process?

3.3. ASSESSING SHALLOW AND DEEP INTEGRATION

Shallow integration is characterized by the removal of border barriers in a regional trade agreement (RTA). The most obvious starting point for a discussion of the economic impact of RTAs is Viner's seminal article on customs unions,³¹ which generalizes to RTAs that do not require uniform external barriers. His key insight was that a customs union or RTA is not necessarily welfare increasing because it is a step on the road to an optimal situation of free trade, but represents a distorted equilibrium, with costs and benefits, and must be analysed using "second best" welfare analysis. An RTA reduces trade barriers among members, which generates benefits through trade creation by driving down costs to consumers and partner trade replaces high cost domestic production. It also leaves barriers to trade with non-RTA countries, which may divert trade from low cost producers outside the RTA to higher cost producers inside the RTA. This can reduce welfare within the RTA and will certainly reduce it for non-members globally, but note that some countries in the RTA may benefit more from trade diversion on their exports inside the RTA than they lose from trade diversion on imports from inside the RTA). A RTA increases welfare when it creates trade within the RTA so that member countries shift production to realise their comparative advantage. On the other hand, a RTA can divert trade from low-cost producers outside the RTA toward higher-cost producers within the RTA, which will reduce welfare. The overall welfare effect generally depends on whether the RTA is net trade creating or net trade diverting.³²

In assessing the possible impact of regional integration, four key issues need to be born in mind. First, what is the initial economic structure including the pattern of comparative advantage of the proposed RTA members? Second, what is the initial framework of agreements to which the proposed RTA partners are already members? Third, what changes in the pattern of tariff, regulatory and other incentives governing trade and economic structure will be introduced by the RTA? Fourth, out of the large

³¹ See Viner (1950).

³² The determination of the welfare effect from trade creation and trade diversion is not always so clear if the RTA leads to significant changes in world prices, with possible terms-of-trade gains. A trade-diverting RTA can improve welfare if the prices facing domestic consumers fall sufficiently. Developing countries are generally small in world markets, so these terms-of-trade effects should be negligible when such countries consider an RTA. The overall framework is described in more detail in the appendix.

set of changes proposed in the RTA, what are the most important variables or issues upon which the analysis should focus? These concerns can be boiled down to the initial conditions, the impact of the proposed RTA on incentives and structure, and the identification of key issues, and variables and analytical framework to be used.

It can be useful to use a partial equilibrium trade model to capture the major forces through which an RTA affects welfare, distinguishing four sources of supply — the home country (H), other suppliers in the region (R), the partner country (P) within the new RTA, and the rest of the world (ROW).³³ Distinguishing the region is relevant when the home country is already part of an existing RTA, and is considering an RTA with a third country. This applies for example to the Caribbean countries where R would apply to the other CARICOM countries; and to Egypt, where R would apply to the other Agadir countries. In general, a new RTA will generate trade creation or trade diversion according to which group/country is the principal supplier, the elasticities of supply and demand, the height of the tariff, and on the extent to which tariff reductions translate into price reductions. This framework, including examples, is discussed in detail in the appendix. to this chapter

3.3.1 INITIAL CONDITIONS - SHALLOW INTEGRATION

Harnessing the chosen analytical framework and the rules of thumb requires the careful assembly of statistical information and indicators. The principal indicators that can be used in conjunction with the simple partial equilibrium framework and chosen rules of thumb to help shed light on the welfare impact of RTAs are described below.

(a) Summary of economic structure: To assess the likely welfare impact of an RTA, it is essential to have an accurate picture of existing and where possible historical patterns of trade, production, GDP and of trade policy for the partner countries of an RTA and for key ROW trading partners. The trade policy information needs to be disaggregated into information on tariffs, tariff peaks, quotas, non-tariff barriers, derogations etc. The degree of disaggregation of the data on economic

³³ See for example Gasiorok and Winters (2004).

structure is partly dependent on data availability, but generally speaking, the more disaggregated the source data, the better. Evidence of historical trends in key structural variables, for example changing patterns of production and trade, can provide valuable pointers to future patterns of trade. Ideally, also one would like to have detailed information on market structure, which can help assess the extent to which tariff reductions will translate into price reductions. However, it is typically hard to obtain such information and reliance on stylised information may be possible via local knowledge may be all that can be obtained.

(b) Measures of initial comparative advantage: A readily measurable indicator of the pattern of comparative advantage is the index of revealed comparative advantage or RCA.³⁴ The original measure of RCA and subsequent variants are based on initial trade flows, providing a summary measure of comparative advantage” revealed” by the trade flows. Hence, typically an index greater than 1 for a given product suggests that a country has a revealed comparative advantage in a given product, and an index of less than one a comparative disadvantage. This index can be useful as a description of the initial comparative advantage and for assessing the potential for future trade flows. Of course it has to be borne in mind, however, that the RCA index is based on existing trade flows - to the extent that those trade flows are distorted by trade barriers / preference arrangements than this will impact on the RCA indices.

(c) Detailed information on the share of trade by source: Aggregate trade data may mask potential trade diversion and trade creation, but there may be very little information as to the extent of either. It is therefore important to compile information on the share of trade by source at a very disaggregated commodity level.

(d) Price-dispersion: Indicators of unit-value differences between member country and trading country suppliers can help provide evidence of differences in comparative advantage of member countries and or the degree of complementarity between countries.

(e) Extent of similarity in exports across different supplying countries: This is again, trying to establish the extent to which the exports to the home market —

from the partner, the region, or from the ROW are similar in structure. The greater the degree of similarity in export structures between the partner and the region, the greater the scope for trade creation or trade reorientation; the greater the similarity in export structures between the partner and the ROW the greater the likelihood of trade diversion. There are several indicators that are useful here. The first is the Finger-Kreinin index of similarity of the export structure between any pair of countries. If one is looking at trade flows, for example, than the FK index provides a summary measure of how similar are the export structures to a given market between a pair of countries. If the index is 100, this means that the share of exports out of total exports going to the destination markets is identical across the two countries concerned; and if the index is 0 than the structures are completely divergent.

(f) Extent of similarity in production structures across partner countries:

The discussion earlier suggested that the greater the similarity in production structures between the home economy and the proposed partner the more likely it is that there would be trade creation. Here again, one can use FK indices to assess the extent of any similarity. Ideally, this should be carried out on the basis of detailed production data. Typically, however, this is not available. The most detailed data, only available for some countries are at the ISIC 4-digit, but typically data is only available at the ISIC 3-digit level. On balance this is too aggregated a level for a meaningful comparison of production structures. It is probably therefore better to use detailed export data instead. Given information on relative production structures, it would then be useful to also have information on cost structures across countries. Clearly, for a given overlap in production bundles between the home economy and a prospective partner, the greater the degree difference in costs structures, the greater the potential for trade creation. However, this sort of information is unlikely to be easily available in most cases.

(g) Trade intensity indices: A fairly common method for assessing the distortion impact of preferential agreements is to look at shares of intra-regional trade.³⁵ Various forms are possible, but essentially involves examining the share of a given country's exports going to a partner divided by the share of world exports going

³⁴ See Balassa (1965).

³⁵ See Andersen and Nordheim (1992), and Lapadre (2004).

to that partner. Hence, if the index is greater than 1, than the region's trade is specialised or biased towards the region.

(h) Trade propensity indices: The trade intensity indices are based on a country's trade flows, so that such an index cannot really capture trade creation. To shed light on this Lapadre proposes an "index of propensity to intra-regional trade", which is the product of the trade intensity index and the region's relative degree of openness. It is important to note however, that these indices are useful in assessing ex-post the possible impact of integration, as opposed to for an ex-ante analysis. It is also important to highlight that these are summary indicators and do not take into account other possible explanatory factors.

(i) Herfindahl indices of concentration: These indices provide a summary measure of "concentration" of the variable of interest. Originally used in the industrial organisation literature for calculating the number of equivalent sized firms in an industry, they are now being increasingly used for assessing trade policy. For example, the index can be used to calculate the number of equivalent sized export industries that a given country has. This is given by the reciprocal of the index, which itself ranges between 0 and 1. Hence, an index of 1 would suggest that a given country only exports a single product, whereas an index of 0.25 that the economy's exports are diversified into four equivalent sized export sectors. This index is useful for obtaining information on the degree of export (or indeed import) specialisation of a given country, and therefore how dependent it may be on certain key products. To the extent that this is the case, this then suggests that further analysis needs to focus on those sectors. The index is also useful for potentially identifying political economy considerations which may be important for the governments concerned. Note that this index can of course be calculated either with respect to the direction of trade, or to the product composition of trade. The former may indicate whether trade with a potential partner country is particularly concentrated in comparison to trade with the region or with the rest of the world, whereas the latter sheds light on the degree to which exports are concentrated in particular sectors.

(g) Tariff and non-tariff barriers in own country and partners. Available from own customs authorities and from WTO/partners. Look for high average and sectoral peaks in protection.

3.3.1.1. RULES OF THUMB

The analysis of trade creation and trade diversion described above and elaborated in the Appendix can draw on the available data assembled to describe the economic structure. A key approach then to empirically assessing the likely impact of an RTA is to focus on the standard (partial equilibrium) framework which identifies the impact of preferential liberalisation. That standard framework typically focusses on the likelihood for trade creation and trade diversion, with other effects such as trade suppression or trade reorientation also considered. To be useful, the partial equilibrium analysis should choose a level of disaggregation of countries and sectors that highlights key aspects of the RTA, cutting out unnecessary detail. The rules of thumb described below come into their own when trying to assess the importance of a large number of statistical indicators.

i) The effects will be greater the higher are the initial RTA tariffs. The required indicators to assess this rule of thumb should be in the data assembled on economic structure, namely the initial protective measures and their historical evolution for member countries and for key trading partners. These should normally include the height of own tariff or non-tariff barriers (the higher these are the more likely it is there will trade creation as well as significant trade diversion losses); tariff peaks or significant non-tariff barriers on important import sectors (again the higher the barriers the more likely it is there will be trade diversion); average height of partner tariff or non-tariff barriers (the higher these are the more likely that there might be trade diversion gains on exports to partners); tariff peaks or significant non-tariff barriers in partners on important export sectors (the higher the more likely trade diversion gains on exports to partners).

ii) The greater the number of RTA partners the more likely it is that there will be trade creation as opposed to trade diversion. The required indicators to assess this rule of thumb should be in the data assembled on economic structure.

iii) Wide differences in comparative advantage likely to lead to a welfare improving RTA provided the initial tariffs are not too high. Assessment of this rule of

thumb can be facilitated with data from the RCA estimates, unit cost differences, and economic structure data.

iv) The more similar is the product mix in the economies concerned and the higher the elasticities of supply the more likely there is to be trade creation. The key indicators for this is the Finger-Kreinin index, though the trade intensity and trade propensity indices can help shed light on the degree of domestic substitution in production by partner countries that is likely under the RTA.

v) The higher the percentage of trade with potential partners the more likely the RTA is to be welfare enhancing. The data needed to assess this rule of thumb should be included in the data on economic structure.

vi) Finally, if trade is initially a small share of GNP, an RTA can be considered more likely to be welfare improving. This rule of thumb can be assessed from data included under economic structure.

3.3.2 INITIAL CONDITIONS - DEEP INTEGRATION

Features of proposed or existing RTAs that reflect characteristics of deep integration were listed in section II above. There is no standard theoretical framework for measuring degrees of deep integration or for sorting out its effects on RTA members and on the rest of the world. The existing body of “new trade theory” that considers issues of deep integration, is diffuse and incomplete, which reflects the current state of theoretical and empirical knowledge. Statistical indicators of deep integration need to focus on more than trade creation, trade diversion, and terms of trade—the focus of analysis of shallow integration.

Deep integration is important largely because of potential links to productivity gains that go beyond standard analysis of comparative advantage. There is evidence in some countries of beneficial synergy between increased trade, deep integration, increases in productivity, and growth. Analysis of these links requires disaggregated study of products and processes, focusing on sectoral, institutional, and regulatory detail.

Our suggested approach to measuring deep integration combines standard quantitative measures of shallow integration (discussed in detail above) with selected detailed sectoral information, both quantitative and qualitative. Much of this analysis has to be country specific, and it is difficult to generalise, given the current state of knowledge.

The number of sectors for which it will be possible to assemble evidence of deep integration is likely to be limited, but ideally it should be done across agriculture, industry, and services. Analysis should start with standard indicators of the structure of production, trade, and employment to focus on the most important sectors producing exportables and import-competing goods. Estimates of revealed comparative advantage might be of particular use because they summarize the past patterns of comparative advantage, but none of the indices discussed above under shallow integration should be left out. Analysis of deep integration will focus on these sectors.

i) Foreign Direct Investment (FDI): An easy first step is to determine the importance of FDI by sector/product group within a sector. FDI may affect deep integration in a positive way, where it internalises externalities in the firm — a common phenomenon with multi-national firms which integrate production across international boundaries. There may also be negative effects of FDI — for example, negative environmental externalities in extraction industries, or adverse consequences from the exercise of monopoly power. Assembling measures of FDI in the key sectors is the first step. Policy analysis will follow identification. For example, the application of private standards by foreign firms through FDI may be evidence of positive gains from deep integration — for example, the spread of supermarkets in developing through FDI has led to major productivity gains in the retail distribution system. The presence of trade in intermediates within a sector, often within a firm engaged in FDI, may also be evidence of productivity-enhancing technical transfer.

ii) Standards/SPS: Knowledge of standards/SPS that apply within the RTA to particular sectors as identified above will help make concrete the importance of such standards/SPS in the over-all scheme of the RTA. The establishment of standards can generate positive externalities to firms, by expanding their markets. Alternatively, standards/SPS can be an indicator of hidden protection if they are designed to keep

foreign suppliers out of a domestic market. Linking standards/SPS measures to sectors/product groups, and surveying any secondary literature on the importance of particular standards/SPS measures, will support analysis of potential positive or negative effects.

iii) Local scale economies: In a wide variety of production and distribution activities, there are potential local scale economies arising from market expansion through deep integration. Identifying such activities may require specialist sector and process knowledge based on case study material. While difficult to assemble, and hard to generalize, such case study information is likely to be useful in the analysis of deep integration.

iv) Facilitating institutions: Markets are institutions, and deep integration involves improving the way markets operate through creation and/or extension of facilitating institutions. For example, creating approved standard certification and testing facilities in an RTA for important traded sectors is a necessary requirement for facilitating trade. Analysis of the need for and provision of such institutions must be based on detailed sectoral studies. The generation of such studies is often part of the background work for the RTA negotiation.

v) Public/private ownership: In many RTAs, the issue of public/private ownership and privatisation is very important. Where the public sector is involved in direct production, there are often major issues of poor productive efficiency. Privatisation may or may not be the best way to deal with productivity issues. Equally, the social benefits to employees (health, housing, education of children, pensions) under public ownership may not be easily catered for in a new institutional environment when privatisation takes place. Here, country case study evidence is crucial when available.

vi) Product variety and intra-industry trade: New trade theory suggests two important channels by which deep integration affects economic performance — increased product variety and intra-industry trade. Trade, by increasing market size, supports profitable increases in product variety for both final and intermediate goods, which potentially increases consumer welfare and producer productivity through specialisation. Increased trade also supports finer segmentation of production

processes and increases trade in intermediate goods, with potential productivity increases.

Both endogenous growth theory and new trade theory suggest a positive correlation between the expansion of product varieties with sectoral productivity gains and consumer welfare. The intuition behind the welfare gains from an expansion of product variety is similar to the intuition behind the gains from trade. Typically, the opening of trade is gainful because it allows consumers to choose between imported and domestic sources of supply which have different relative costs. That is, the opening of trade introduces variety into sources of goods on the supply side. In an analogous fashion, welfare can increase when new varieties of goods that are imperfect substitutes in demand can also increase welfare. The argument holds for goods that directly enter into consumption and for intermediate inputs when new varieties of inputs become available. This intuition is elaborated in the Technical Appendix and a standard measure of the degree of product variety that can usually be calculated from available data is set out.

The importance of intra industry trade was realised in the 1970s when it was realised that the most dynamic components of the growth of trade between OECD countries was intra industry, often within multi national firms. Analysis of intra industry trade requires indicators of the extent of two-way trade flows within sectors for the study of the underlying products and processes. The available indicators of intra industry trade are sensitive to the degree of sectoral disaggregation chosen for measurement. Thus, the selection of the degree of disaggregation when measuring the extent of intra industry trade requires sensitivity to the observation that there is no ideal measure.

A standard measure, the Grubel-Lloyd (G-L) index³⁶ measures the extent to which exports and imports overlap. Attempts have been made to refine the original G-L measure by distinguishing between horizontally and vertically differentiated goods. The suggested CEPII index described in the appendix seeks to deal with the principal empirical problems found in applying the G-L index. The CEPII index classifies trade

³⁶ See Grubel and Lloyd (1975),

into 3 groups: (1) two-way trade horizontally differentiated; (2) two-way trade vertically differentiated; and (3) one-way trade as shown in the table below.

Figure 3.1: Classification of intra industry trade
How to define bilateral trade types at the product level?

Degree of Overlap between Export and Import Values Does the minority flow represent at least 10% of the majority flow?	Similarity of Export and Import Unit Values: Do export and import unit values differ less than 15%?	
	Yes (horizontal differentiation)	No (vertical differentiation)
Yes	<i>Two-way trade in similar products</i>	<i>Two-way trade in vertically differentiated products</i>
No	<i>One-way trade</i>	

Source: Appendix

3.3.3. TRADE-DRIVEN PRODUCTIVITY CHANGE

Increased product variety and intra-industry trade generate productivity increases through resource reallocation and the more efficient use of resources given existing technologies.³⁷ The quantitative analysis of these effects is a natural extension of the framework of standard trade theory. Other aspects of “new trade theory” focus on issues of links between trade and changes in technology. Elements of new trade theory have also been incorporated into the analysis of regional trade agreements, and this “new regionalism” focuses on a number of issues:³⁸

- technology and knowledge transfers, and technology diffusion, especially from developed countries to developing countries, that increase productivity;
- dynamic comparative advantage and “learning by doing” efficiency gains through increased demand from expanded trade;
- elimination of wasteful rent seeking activities through trade liberalization;

³⁷ There is a large literature on summary measures of aggregate and sectoral total factor productivity (TFP). The measurement of TFP is discussed in detail in the appendix.

³⁸ This list starts from the list in Burfisher, Robinson, and Thierfelder (2004).

- pro-competitive gains from increasing import competition in an environment of imperfect competition, allowing exploitation of potential economies of scale in production;
- increased geographical dispersion of production through trade that supports:
- exploitation of different factor proportions for parts of the production process;
- local economies of scale through finer specialization and division of labour in production; and/or
- increased foreign direct investment that carries with it advanced technologies and hence increases in productivity;
- “challenge-response” increases in efficiency through increased competition due to expanded involvement in world markets; and
- Schumpeterian innovation and “creative destruction” induced by increased competition arising from expanded trade.

All these channels identified in “new regionalism” are linked to deep integration, not just lowering border barriers to trade. Through these mechanisms, deep integration generates externalities associated with widening and deepening of regional markets, and permits producers to exploit potential economies of scale from increased specialisation. These efficiency gains can be seen as “Smithian” because they correspond closely to Adam Smith’s classical analysis of efficiency gains through specialisation supported by market expansion.

We will now discuss how various elements of productivity-enhancing trade arising from deep integration can be identified and measured.

3.3.3.1. INCREASED VARIETY AND SPECIALISED INPUTS

An important driver of new and improved technology is the expansion of the variety of inputs. This driver has been considered in endogenous growth models and new trade theory.³⁹ Deeper integration that expands the menu of intermediate inputs available to firms may drive increases in productivity either because it allows individual firms to choose more productive inputs, or because these inputs embody

³⁹ See (Wilfred Ethier, 1982); (J. De Long et al., 1991); (Gene Grossman and Elhanan Helpman, 1991); (L. A. Rivera-Batiz and P.M. Romer, 1991).

technical knowledge that can now be incorporated into the production process. The same argument would apply to imported capital goods, which embody foreign technology.

To exploit these potential gains, foreign and domestic firms can enter into joint ventures or other forms of partnerships allowing for finer segmentation of production processes, a process often seen in the development of complex value chains. For example, an analysis of Korean chaebols found that when a new intermediate input supplier was integrated into the industrial conglomerate, TFP among final goods producers, also part of the chaebol, increased.⁴⁰

3.3.3.2. FOREIGN DIRECT INVESTMENT (FDI)

FDI is often recognised as a crucial driver of adoption of new technology, influencing firm-level productivity. It is useful to distinguish three types of knowledge transfer: (1) international technology transfers, (2) horizontal spillovers, and (3) vertical spillovers. Different institutional arrangements are more compatible with the different kinds of technology transfer. For example, international technology transfers across distinct national firms are different from transfers within multinational corporations to their domestic subsidiaries. Some kinds of technology transfer require proprietary linkages, while others can be managed without proprietary linkages—issues of differences between vertical and horizontal spillovers.⁴¹

In particular, deeper integration can be an important trigger of international technology transfers when regulatory burdens are removed and coordination is facilitated by the RTA. In these cases, we should observe increased intra-firm trade accompanied by a simultaneous increase of FDI and IIT in the same sectors.

⁴⁰ See Robert Feenstra et al. (1992).

⁴¹ The theoretical and empirical literatures are vast and recent surveys are available. See (H. Gorg and D. Greenaway, 2003, Blomstrom Kokko and Globermann, 2000., A. J. Saggi, 2000, A. J. Saggi and Glass; K., 1999, E. Xiaoquin Fan, 2002).

3.3.3.3. MOVING CLOSER TO THE PRODUCTION FRONTIER

A typical argument that is often put forward to justify the importance of productivity gains deriving from trade integration is linked to the so called X-efficiency. It is observed that firms can tend to be less than “optimally efficient” when shielded from competition with foreign producers. In this perspective, trade works as “competition policy”.⁴²

In general, the X-efficiency argument has been used to support either unilateral or multilateral liberalisation. We agree that this is correct but possibly incomplete and consider that deeper integration driven by an RTA can be an important trigger because, unlike unilateral or multilateral liberalisation, partners focus on domestic rules and laws that can be used to frustrate market integration.

3.3.3.4 LEARNING THROUGH EXPORTING

When breaking into foreign markets, domestic firms are, at the same time, exposed to a higher degree of competition and also, often, able to create linkages with buyers that provide them with technical assistance and product design, improving the quality of their goods. In some cases, foreign buyers can also transmit to their suppliers knowledge developed through other suppliers located in other countries. This type of integration often requires a degree of harmonisation and regulatory rapprochement that go well beyond the simple reduction or elimination of tariffs, and involves coordination between private entrepreneurs as well as a regulatory framework that facilitates integration.

Yet the learning-through-exporting channel has often proved elusive to empirical verification since firms exporting tend to be more efficient when initially entering the foreign markets. However, recent empirical work using more advanced

⁴² The X-efficiency argument is formally developed by Martin and Page (1983) and well explained by Corden (1997), who lays out four important assumptions: (1) the increased protection imply an income effect larger than the substitution effect and therefore raises real income of managers; (2) the income elasticity of demand for managerial leisure is positive; (3) there is a positive and direct causal relationships between effort and efficiency; (4) the effect of the tariff only are concentrated in one, import-competing, sector and don't have any other effect in other, export-oriented, sectors. To what extent these assumptions hold is eminently an empirical question.

econometric techniques shows positive causal influence on productivity from entry in foreign markets.⁴³

3.3.3.5. FIRM SELECTION AND COMPETITION

Trade integration will often have a double effect on domestic firms. From one side it will create new markets and expand present ones, opening up new, or expanding present, business opportunities that more productive firms will normally capture, expanding their market shares and weight. In order to do so, firms will be forced to pursue efficiency gains and move closer to the “production frontier”. Such mechanisms will be more common among firms active in export-oriented sectors.

At the same time, trade integration will normally increase competitive pressures and reduce market power of less productive and inward-oriented firms. These firms will either be pushed toward exiting the market or reducing their market shares. This process will result in higher aggregate productivity and increased turnover among less efficient firms. This mechanism will be more evident among firms active in import-oriented sectors.

Such a dynamic can also be seen as leading not only to efficiency gains but also to increasing innovation and growth. Trade integration tends to expand markets for more innovative and competitive firms, whilst increasing pressures and shrinking markets for less advanced and innovative ones.⁴⁴

3.3.3.6. SMITHIAN GAINS 1: SCALE ECONOMIES AND MARKET EXPANSION

The expansion of markets allows firms to expand production, permitting exploitation of any economies of scale, and so reduce unit costs. Trade-focused CGE models that incorporate such effects suggest that scale-based efficiency gains can range between 1–5% of GDP. Econometric studies that focus on export sectors found

⁴³ See David Greenaway and Richard Keller, 2004a, b.

smaller effects due to scale efficiency. Similarly, contractions are found among firms in import-competing sectors. These findings are consistent with the hypothesis that the market expansion, and therefore the opportunity to exploit economies of scale, is not the same for all firms, but mostly concentrated among export-oriented firms.⁴⁵

The classic historical example of a firm which continues producing the same product as before but can take advantage of potential economies of scale given a larger market is the famous Smithian pin factory.

3.3.3.7. SMITHIAN GAINS 2: SPECIALISATION ALONG VALUE CHAINS

Firms can also achieve scale economies through specialisation in the production of intermediate inputs arising from fragmentation of the production/value chain. Firms can achieve expanded markets through such specialisation, and can then reap potential scale economies. Two different “productivity trajectories” can yield major gains. Firms might become global suppliers of particular, specialized, inputs. Alternatively, firms might move up the value-added chain, either producing higher-value goods or producing more stages. In all these cases, the gains are due to links between expanded markets and cost reductions achieved through increased production.

In essence, foreign trade allows the Smithian pin factory either to produce parts of pins for the global market, or to expand its range of products for the global market to include many different kinds of pins or higher-valued products using pins. In either case, productivity gains come from economies of scale in production.

3.3.3.8. SMITHIAN GAINS 3: EXTERNALITIES AND REGULATION

Achieving economies of scale can be driven by sector-specific externalities arising from establishing standards. Consider, for example, the introduction of industry standards for components. The adoption of such standards permits

⁴⁴ Philippe Aghion et al., 2002, Andrew B. Bernard et al., 2000, Marc Melitz, 2000.

specialisation between firms in the production of particular components, allowing firms to exploit local scale economies.

There is a potential role for government in establishing such industry standards in an RTA, since they have to be harmonised across RTA partners. Achieving such harmonisation may well be part of the RTA negotiating process, necessarily involving member governments. It is also feasible in many cases to achieve such coordination through the private sector alone. Much depends on the institutional arrangements and differences in regulatory structures across member countries.

For example, achievement of phyto sanitary standards in agriculture is crucial for entering export markets, and these standards often involve externalities. In this case, government involvement is crucial to enforce compliance.⁴⁶

3.4.3. A CASE-STUDY APPROACH

As discussed above, there are quantitative and qualitative measures of many of the characteristics of deep integration. It is more difficult, however, to provide measures of the links between these characteristics and productivity change. The task is to identify the links and the channels at work in particular cases, if any, and to provide measures that describe their impact. This analysis must necessarily focus on producers and must be based on micro data such as producer surveys and case studies. It is also necessary to assess the quantitative and qualitative impact of RTA-induced productivity changes on aggregate economic performance. Micro analysis must be linked to economy-wide analysis.

While “new trade theory” and “new regionalism” provide insights into linkages between deep integration and economic performance, they do not provide a simple set of rules for evaluating the potential impacts. Policy analysts must draw on available data and incomplete theoretical models for insights. In this environment, case studies and “analytic narratives” that examine potential links from the

⁴⁵ See XXX

⁴⁶ See Ghoneim at al., which provide examples of such standard setting in the case of Egypt selling to EU agricultural markets.

perspective of producers are important, as is descriptive analysis of the macro environment in which producers operate.

Economy-wide analysis of the macro environment should start with the national accounts and data on the sectoral structure of production, trade, and employment, and also include data on the links between employment, factor income, and household income. Economy-wide data organized into a social accounting matrix (SAM) provides the best statistical framework for such descriptive data analysis. Such SAMs are available for many countries, at varied levels of sectoral and household aggregation, but are usually not available as a consistent time series. A SAM for a single year needs to be supplemented by available time-series data on national aggregates and sectoral production, employment, and trade.

For most countries, it is feasible to do an adequate analysis of the structure of the economy using a single SAM, since economic structure changes slowly. Various SAM-based comparative-static models, including simple multiplier models and more elaborate computable general equilibrium (CGE) models, have been used to analyse the impact of many proposed and actual RTAs.⁴⁷

Economy-wide analysis using a multi-sectoral SAM framework requires data that are not available for many countries. As suggested above, much can be learned from partial-equilibrium analysis of the structure of trade, production, and employment for the key important traded sectors. In addition, time-series data for important sectors is often available, and supports analysis of trends.

Many of the potential benefits of deep integration in an RTA are based on externalities and potential links between expanded trade and productivity. Case studies that seek to explore such links will focus on analysis of these externalities. In economics, a typology of externalities includes those:

external to firm but internal to industry: e.g. standards;

external to firm, external to industry, but internal to country: e.g. legal system;

external to firm, external to industry, external to country, but internal to region: e.g. compatibility of transport infrastructure; and

⁴⁷ For a survey of CGE-based analysis of RTAs, see Robinson and Thierfelder (200x).

International externalities: e.g. establishing and maintaining a rule-based international trading system.

In analysing the potential impact of a particular RTA, given limited time and resources, case studies should be designed to reflect the different types of externalities at work, and their links to elements of deep integration that are part of the RTA. The goal is to identify the nature and scope of potential links, and to use the case studies both to evaluate the RTA and to provide a basis for suggesting improvements.

3.4. WINNERS AND LOSERS

Joining an RTA, like any change in trade policy (or indeed other forms of intervention in markets), changes outcomes for producers and consumers. Achieving gains in welfare involves changing the structure of production, trade, and employment. In a growing economy, these shifts in structure can occur over time, changing the composition of production without requiring any sector to shrink absolutely. If the change is rapid, there are likely to be sectors that shrink absolutely and resources that will be redeployed to more productive uses. Such changes involve adjustment costs and unemployment as workers shift jobs, or remain unemployed for long periods because they are unable to move.⁴⁸ Successful growth and structural change always involves relative winners and losers, and may well involve absolute losers for some period of adjustment.

The social and private costs of such shifts, particularly for labour, may be high. While overall welfare gains may be large, the losers need to be compensated and flanking policies need to be designed to minimize and share the adjustment burden. In developing countries, such adjustment costs may be especially onerous since the poor are not well positioned to manage adjustment. If political support is to be marshalled for policy changes that are beneficial in the aggregate but that incur serious

⁴⁸ There may be increased costs of eg housing and other physical or social infrastructure if labour moves from rural to urban areas. Increased migration may add to family stress with particular difficulties for women and children. If resources move from industries that predominately employ eg women or unskilled workers to those that employ men or more skilled workers or from poorer regions to richer regions that may lead to significant adjustment costs.

adjustment costs, Governments — possibly in conjunction with donors — need to design safety-net policies and support for labour to facilitate changing employment

Policy analysis must focus on identifying potential gainers and losers from the proposed changes. In an RTA, the losers are likely to be found in industries where domestic tariffs or other border barriers and measures of comparative costs/relative prices are high. Highly concentrated industries (either regionally or economically e.g. only a few large firms) may also be vulnerable. Other relevant indicators may be structure of employment in the industry (skills and gender particularly relevant).

Winners are likely to appear in industries where the cost of imported inputs fall and/or where border barriers in RTA partners are high and local relative costs low and/or the there are significant potential economies of scale and or market power for home firms within the RTA. These can be identified from the structural and other measures identified above.

In general, expansion of trade favours commercial activities and production of tradable goods. Deep integration and trade-linked productivity growth accentuates these trends. Producers of non-traded goods or non-marketed goods will tend to lose, while consumers will tend to gain. Many poor people in developing countries live in rural areas and produce for domestic markets, or for home consumption. Trade expansion is likely to benefit urban poor through lower prices and harm poor rural producers of non-traded goods. Anti-poverty programs and “pro-poor” trade strategies need to take these trends into account. Analysis of potential winners and losers should focus on examining the “livelihood strategies” of the poorest groups to determine how they will be affected by structural changes in production, wages, and prices arising from changes in trade.

Complete analysis of the distributional impacts of changes in trade policy, including implementing an RTA, requires both economy-wide analysis and detailed analysis at the household level. Analytic tools and data frameworks for such complete analysis are available, but require major resources to implement.⁴⁹ In the absence of such resources, much can be done with selective, partial-equilibrium analysis based on sectoral data. Analysis must focus on major causal chains, using detailed

knowledge of the nature of the RTA under consideration, and tracing through changes in economic structure to changes in livelihoods of vulnerable groups.

⁴⁹ For a description of such analytic and data frameworks, see Bourguignon and da Silva (2004).

TECHNICAL APPENDIX: SHALLOW & DEEP INTEGRATION

A3.1. INDICATORS OF SHALLOW INTEGRATION

The principal indicators that can be used in conjunction with the a simple partial equilibrium framework and chosen rules of thumb to help shed light on the welfare impact of RTAs are described below.

(a) Summary of economic structure: To assess the likely welfare impact of an RTA, it is essential to have an accurate picture of existing and where possible historical patterns of trade, production, GDP and of trade policy for the partner countries of an RTA and for key ROW trading partners. The trade policy information needs to be disaggregated into information on tariffs, tariff peaks, quotas, non-tariff barriers, derogations etc. The degree of disaggregation of the data on economic structure is partly dependent on data availability, but generally speaking the more disaggregated the source data, the better. Evidence of historical trends in key structural variables, for example changing patterns of production and trade, can provide valuable pointers to future patterns of trade. Ideally, also one would like to have detailed information on market structure, which can help assess the extent to which tariff reductions will translate into price reductions. However, it is typically hard to obtain such information and reliance on stylised information may be possible via local knowledge may be all that can be obtained.

(b) Measures of initial comparative advantage: A readily measurable indicator of the pattern of comparative advantage is the index of revealed comparative advantage or RCA, extended in recent literature to take into account intra industry trade. The original RCA index was measured on the export side, but with extension to deal with intra industry trade has been called the RXA for the export index, RMA for the import index, and RNTA for the relative net trade advantage. Thus,

$$RCA = RXA = \frac{X_{i,j} / X_{i,t}}{X_{n,j} / X_{n,t}}$$
$$RMA = \frac{M_{i,j} / M_{i,t}}{M_{n,j} / M_{n,t}} \text{ and}$$
$$RNTA = RXA - RMA$$

Where i is a country, j is a commodity, t is a set of commodities, and n is a set of countries.

The RCA, RMA, and RNTA measures are all based on initial trade flows, and provide summary measures of comparative advantage “revealed” by the trade flows. The various forms of the RCA indexes can be calculated for all partners in a potential RTA and countries or regions in the rest of the world (ROW), for a potential RTA as a whole and the ROW, or for potential partner countries and the RTA as a whole.

(c) Detailed information on the share of trade by source. Aggregate trade data may mask potential trade diversion and trade creation, but there may be very little information as to the extent of either. It is therefore important to compile information on the share of trade by source at a very disaggregated commodity level.

(d) Price-dispersion: Indicators of unit-value differences between member country and trading country suppliers can help provide evidence of differences in comparative advantage of member countries and or the degree of complementarity between countries.

(e) Extent of similarity in exports across different supplying countries: This is again, trying to establish the extent to which the exports to the home market – from the partner, the region, or from the ROW are similar in structure. One of the best known indicators is the Finger-Kreinin index of similarity of the export structure between any pair of countries. If one is looking at trade flows, for example, then the FK index provides a summary measure of how similar are the export structures to a given market between a pair of countries applied using the most disaggregated trade data available, e.g. at HS4 or HS6 level. It can shed light on issues of complementarity / competitiveness across trading partners. If the two countries share identical import bundles, the index 1. In the same manner, if the ratios of the two

countries import bundles are totally different then the FK index tends to 0. The mathematical formula is as follows

$$FK = \sum_i \min ([X_{ia} / \sum X_{ia}], [X_{ib} / \sum X_{ib}])$$

Where $X_{ia} / \sum X_{ia}$ is the share of product i in country's a total exports, $X_{ib} / \sum X_{ib}$ is the share of product i in country's b total exports. The same basic approach to the measurement of the similarity of production structures can be applied using ISIC4 or ISIC3 production data. The most detailed data, only available for some countries are at the ISIC 4-digit, but typically data is only available at the ISIC 3-digit level. On balance this is too aggregated a level for a meaningful comparison of production structures. It is probably therefore better to use detailed export data instead. Given information on relative production structures, it would then be useful to also have information on cost structures across countries. Clearly, for a given overlap in production bundles between the home economy and a prospective partner, the greater the degree difference in costs structures, the greater the potential for trade creation. However, this sort of information is unlikely to be easily available in most cases.

(f)Trade intensity indices: A trade intensity index, of which various forms are possible, but which essentially give the share of a given country's exports going to a partner divided by the share of world exports going to that partner. Hence, if the index is greater than 1, than the region's trade is specialised or biased towards the region.

(g)Trade propensity indices: The trade intensity indices are based on a country's trade flows, so that such an index cannot really capture trade creation. To shed light on this Lapadre proposes an "index of propensity to intra-regional trade".

(h)Herfindahl indices of import competing and exportable production concentration over time have traditionally been used in economics as a measure of concentration in a particular industry. Formally, it is defined as the sum of the squares of the market shares s_i of each firm i in an industry, and is calculated as:⁵⁰

$$\sum_i s_i^2.$$

⁵⁰ Sawyer (1985, pp. 29).

The Herfindahl index ranges from zero, indicating that there a large number of equally sized firms in the industry, to unity, indicating that there is only one firm in the industry. Ideally, the Herfindahl index should be applied to the most disaggregated production data possible, for example at the HS6 level for trade and ISIC4 for production. This measure of concentration can also be used to compare the level of diversification between different countries' trade regimes. The index can be calculated based on two different datasets. Firstly, Herfindahl indices could be calculated based on the products imported and exported respectively for each country over the time-period relevant for our study. The change in the value of the index would indicate whether there has been any change in the in the proportional content of a country's imports and exports. Alternatively, the index can be calculated using data on origin of imports and destination of exports to assess the changes in a country's dependence on a particular market over time. One would expect that countries in a customs union, or in bilateral free trade agreements to have less trading partners than countries that have multilaterally liberalised their trading regime.

A3.2. PARTIAL EQUILIBRIUM ANALYSIS

Given the potential importance of these effects, and given that a priori whether the net effect will be welfare improving or not cannot be determined, it is then important to identify both the circumstances under which these net welfare effects are likely to be positive, and secondly appropriate empirical techniques for providing a prima-facie conclusion as the likelihood of the different effects.

The incidence of trade creation, trade reorientation, and trade diversion will depend on key features of the economies in question, such as any existing trade agreements, and consequently also on their existing patterns of trade and production. This can be seen in the discussion that follows which explores a number of different scenarios. For this discussion (adapted from Gasiorok and Winters 2004), we distinguish four sources of supply – the home country (H) or region (R) , the partner country (P), and the rest of the world (ROW)⁵¹. Distinguishing the region applies

⁵¹ The outcome of any analysis will differ according to whether we assume that these sources provide a homogeneous good or competing differentiated products. Greenaway and Milner assume the

where the home country is already part of an FTA, and is considering an FTA with a third country. This applies for example to the Caribbean countries where R would apply to the other CARICOM countries; and to Egypt, where R would apply to the other Agadir countries. In the discussion below we focus on the import of goods by a target home economy (H). For some of the cases discussed we assume (H) to have no domestic production. Domestic production can easily be included but complicates the diagrams somewhat, and does not materially impact on the conclusions regarding the likelihood of trade creation, trade reorientation, or trade diversion. In addition, for many small economies, the lack of domestic production is likely to be the case for a large range of their imports and so making this assumption does not seem unreasonable. The classical trade effects of an RTA then depend on which group/country is the principal supplier, the elasticities of supply and demand, and the height of the tariff and on the extent to which tariff reductions translate into price reduction. A number of different possible scenarios can be identified:⁵²

(A) A SOLE SUPPLIER TO THE DOMESTIC MARKET:

i) Suppose the partner country, P, is the sole supplier of a given good (fig.1a): If P's supply curve is horizontal, the initial quantity supplied would be q_1 . Assuming the tariff reductions translate into price reductions this would result in a new quantity supplied at a lower price, and hence pure trade creation and a net welfare gain. The amount of trade creation is given by shaded triangle "b" in the figure. If there were domestic production of the good in question then there would be additional trade creation from the switch in sources supply away from home firms, to the partner country. If P's supply curve to the home economy is upward sloping (fig. 1b) there will be both trade creation and a terms of trade loss as the increase in domestic demand pushes up the price of the imported good. In this case, the welfare impact is ambiguous. Trade creation is once again given by the shaded triangle, while the terms of trade loss is given by the dotted rectangle, "c". The flatter is P's supply schedule the more likely it is that trade creation will dominate. If the tariff reductions do not

differentiated good model in their quantitative analysis using assumed values of the elasticities of substitution between varieties. So too do the various Computable General Equilibrium modelling analyses of the EPAs (e.g., Rutherford & Martinez, 2000). Here we take the opposite tack, following Winters (2001), and assume homogeneous goods. We do not hold this to be literally true, but feel that it is an appropriate assumption for highlighting the key issues.

⁵² Panagariya (2001) provides a broader menu of possibilities.

translate into price changes, as could arise for example the export market is imperfectly competitive, there would be a welfare loss arising from the loss of tariff revenue – the rectangle “a”, in figure 1a or areas “a+c” in figure 1b.⁵³

ii) Alternatively suppose that the rest of the world (ROW) is the initial sole supplier with a horizontal supply curve (fig.2): If SROW represents the tariff-inclusive ROW supply, and if the reduction in tariffs P’s imports results in the replacing of ROW imports by P imports (SP), then there will be both trade creation and trade diversion as given by the shaded triangle (“b”), and dotted rectangle (“c”) respectively. If there is simply a switch in import supply and no change in the domestic price than there would be pure trade diversion (“a+c”) represented by the consequent loss of tariff revenue. It is thus the extent to which the partner country tariff-free price is below the ROW tariff-inclusive price that determines trade creation, which in turn depends on the cost differences between the partner country and the ROW, the initial height of the tariff, and the nature of competitive interactions in the market in question.

Suppose SROW represents either exports by other countries within the region, which face no tariff in the home economy, or home production. In both cases, there is now a redirection of imports towards a more efficient supplier. If this replaces regional imports than this undoes previous trade diversion arising from the regional preferences. This is trade reorientation and is given by areas “a+b”. Note also that this means that a domestic producer elsewhere in the region is losing the market. If that producer were making any surplus / profits on those sales, their welfare therefore declines (see Chang & Winters, 2001). Note that if the imports replaces home production than this is the classic case of pure trade creation, again given by areas “a+b”. Finally, if the partner country supply curve is upward sloping then the same effects as outlined above will be present, but there will also be negative terms of trade effects.

⁵³ A monopoly supplier of imports would drop his price slightly because his costs would be reduced by his tariff exemption.

(B) BOTH THE PARTNER AND ROW SUPPLY THE DOMESTIC MARKET

Suppose the ROW supplied the market with an upward sloping supply curve and the partner supply curve is horizontal (fig 3). In the initial situation, q_{1ROW} is supplied by the rest of the world, and $q_{1ROW}-q_{1P}$ by the partner country. In this case, the marginal import price is determined by P suppliers. Any reduction in this arising from tariff reductions would result in a welfare gains either from trade creation or from trade reorientation, although there may also be losses from trade diversion. The net outcome will depend on whether the ROW supplier is subject to tariffs or not. In the former case, we have losses because the pre-tariff ROW price was below the pre-tariff partner price for the displaced trade ($q_{1ROW}-q_{2ROW}$); the welfare loss from that trade diversion is the lost revenue ($b+c$). However, there are consumer surplus gains from the lower price (area “a”), as well as trade creation gains (area “e”), hence the net welfare gain is ambiguous.

If instead SROW emanated from within the region (i.e. from R) and so does not include tariffs, we would have trade reorientation with gains of “ $a+b+c$ ” as the price paid for imports falls. Area “ $a+b$ ”, however, was producer surplus accruing to another R producer, so the net gain to the region is area “c” as well as trade creation gains represented by area “e”. Again, if the P producers did not pass the tariff changes through to consumers, there would be a welfare loss from foregone tariff revenue equal to area “d”.

Suppose now that it is the partner supply curve, which is upward sloping, while the ROW supply schedule is horizontal (fig 4a). Now the marginal import price is fixed by world markets, and tariff liberalisation with respect to the EU will not change the import price but simply switch imports away from the rest of the world to the EU. When the ROW supply is subject to tariffs this results in the loss of tariff revenue (“ $a+b+c+d$ ”) of which “ $a+b$ ” is foregone on imports that initially came from the partner, P, and ($c+d$) is from trade diversion. Where the ROW supply is tariff-free (i.e. from within the region, R) the revenue loss is just “ $a+b$ ”, for imports ($q_{2P}-q_{1P}$) did not pay tariffs in the first place. A variant of the preceding is where, following the tariff reduction, the partner, P, can supply the entire domestic market, and ROW imports are eliminated (fig. 4b). As well as the previous effects there is now some

trade creation (“e”), which depends on the extent to which the new domestic price is below the initial price.

Both the EU and ROW have upward sloping supply curves and share the market between them. This case combines cases 3 and 4 with a terms of trade change, resulting in a combination of trade diversion, creation and reorientation (if ROW includes regional imports), revenue loss and terms of trade change. A graphical exposition is given in Winters (1991). Qualitatively, revenue loss will be greater the larger the partner country initial share and trade creation and trade diversion will be larger and the terms of trade losses smaller the more elastic is the partner country supply curve.

Figure 1a

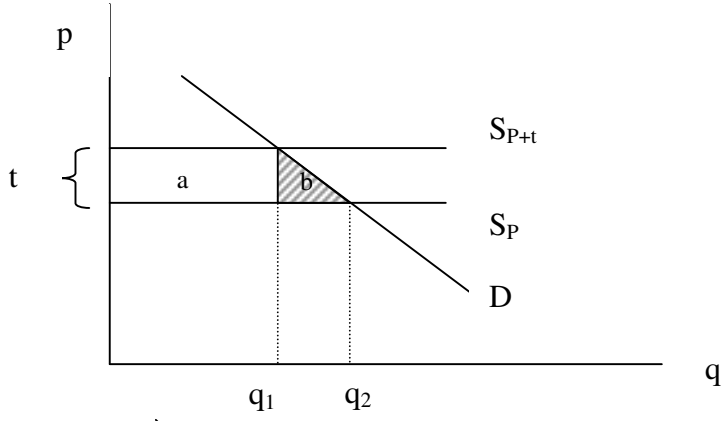


Figure 1b

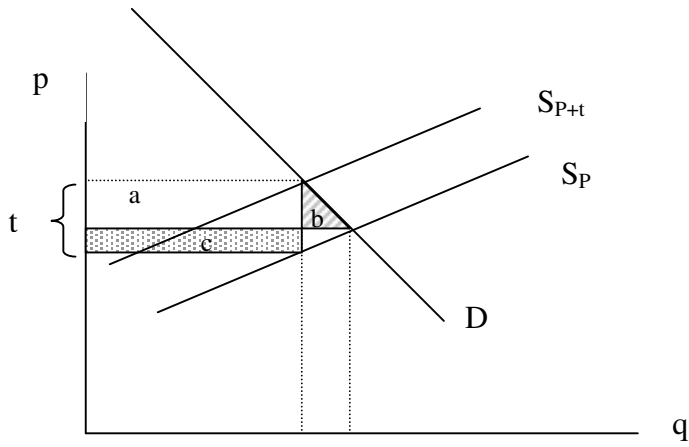


Figure 2

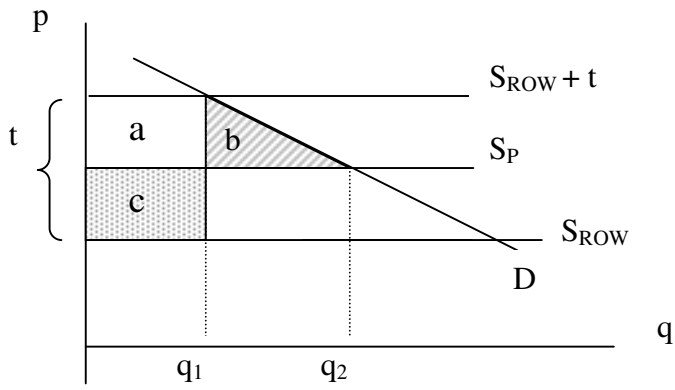


Figure 3

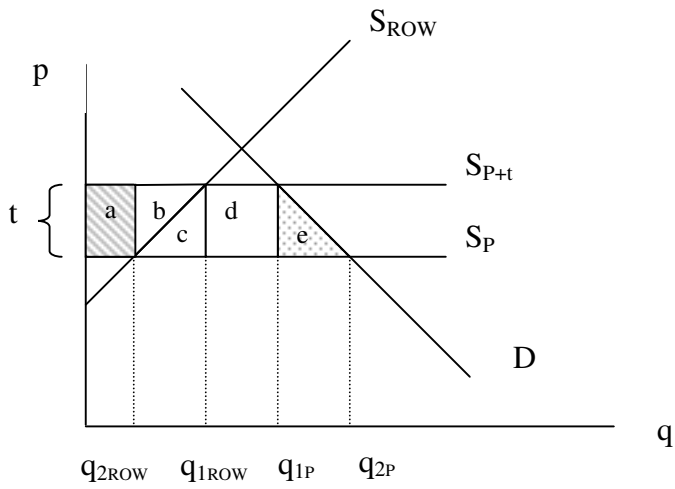


Figure 4a

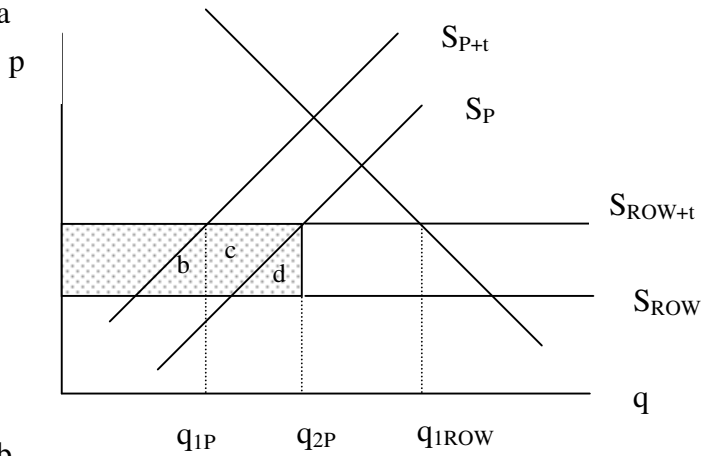
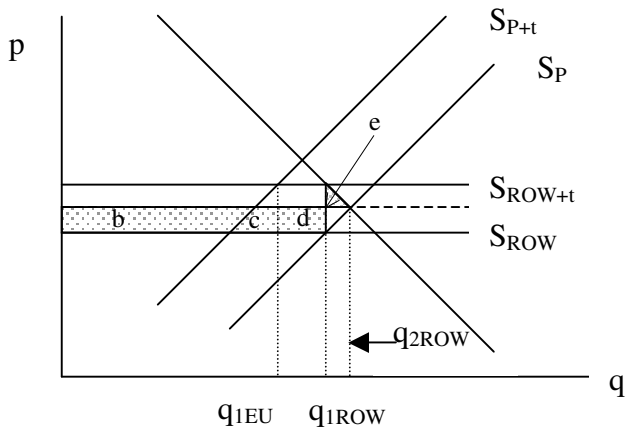


Figure 4b



A3.3. PRODUCT VARIETY

Both endogenous growth theory and new trade theory suggest a positive correlation between the expansion of product varieties with sectoral productivity gains and consumer welfare.⁵⁴ A simple diagram can be used to show the intuition behind this approach, and there is a standard measure of the degree of product variety that can usually be calculated from available data.

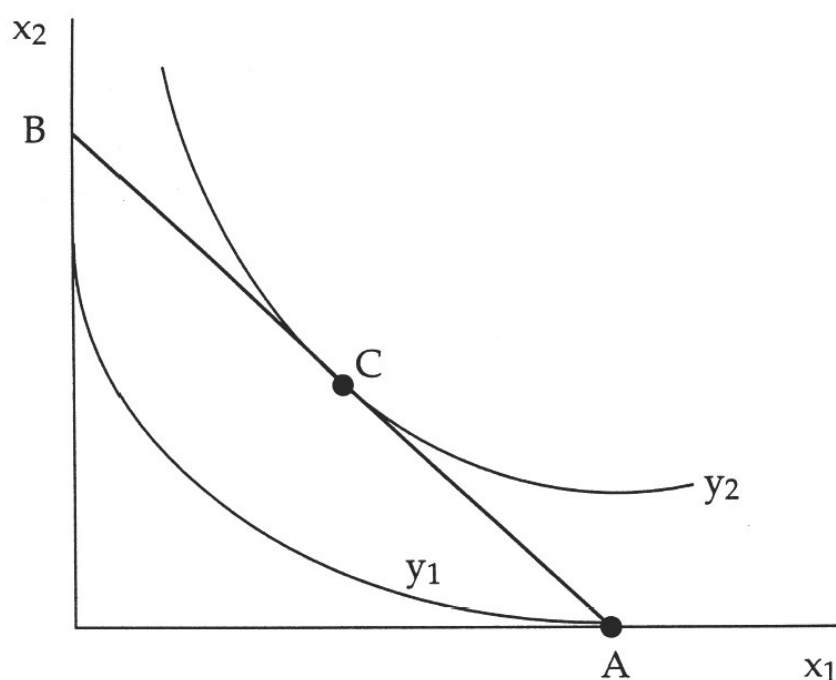


Figure 3.2: Effect of input variety on productivity

Figure 1 shows isoquants for a production function at two production levels, Y_1 and Y_2 . In period 1, production use only input X_1 , producing at point A . In period 2, perhaps due to trade, input X_2 becomes available and, with the same costs, (expenditure line AB), efficient production is now at point C where output is now Y_2 , greater than Y_1 . The increase in total factor productivity (TFP) is equal to Y_2/ Y_1 .

Analogously, we can use a similar argument to show how the expansion of output variety has a positive impact on productivity based on figure 2, which gives the production possibility frontier for a country. Initially, only output X_1 is produced and

production occurs at point A, given the budget line AB. When a second output becomes feasible to produce, perhaps because of opening up to trade, the economy moves to C, and the value of aggregate production is given by the new budget line passing through C. The increase in the value of aggregate production provides a measure of TFP gain arising from increased variety of production.

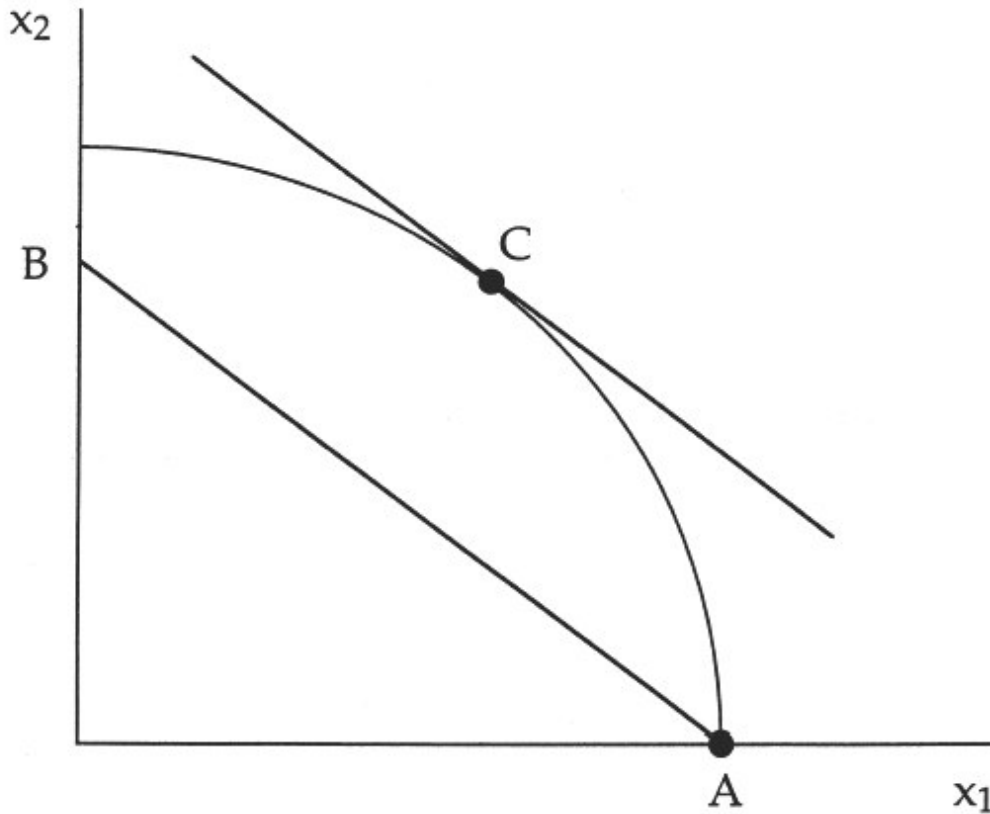


Figure 3.3: Effect of output variety on productivity

Based on Feenstra's work, the formula to calculate the change of product variety between T and T-1 is the following (which should be calculated at the 6-digit level):

$$\Delta VAR_{t,t-1} = \ln \left[\frac{\sum_{i \in I_t} p_{it} x_{it} / \sum_{i \in I} p_{it} x_{it}}{\sum_{i \in I_{t-1}} p_{it-1} x_{it-1} / \sum_{i \in I} p_{it-1} x_{it-1}} \right]$$

⁵⁴ See, for example, Feenstra (Robert C Feenstra et al., 1999, Robert Feenstra and Hiau Looi Kee, 2003, Robert Feenstra et al., 1992).

Where I_t is the set of products (inputs or outputs) available in “t”

$I = I_t \cap I_{t-1}$ is the set of products available both in “t” and “t-1”

p_{it} is the price of product “i” (variety “i”)

As explained by Feenstra, to interpret this result, consider the case where the set of inputs is growing, and denote these sets $I_{t-1} = \{1, 2, \dots, N_{t-1}\}$ $I_t = \{1, 2, \dots, N_t\}$ with $N_{t-1} < N_t$. Then the common set of inputs supplied in both periods is equal [$I = I_t \cap I_{t-1} = I_t = I_{t-1}$], and the denominator is unity. The numerator will exceed unity, indicating that product variety has increased [$N_t/N_{t-1} > 1$].

This indicator is a measure of the change of product varieties through time and can be applied to both inputs and outputs. A slightly different version has to be used when comparing different countries and their different changes through time.

A3.4. INTRA-INDUSTRY TRADE (IIT)

There are various ways that can be used to measure IIT.⁵⁵ The original measure, the Grubel-Lloyd (G-L) index, measures the extent to which exports and imports overlap. A general problem with this type of index concerns choosing the correct level of aggregation—the measures are sensitive to sector definition. Comparing the measures across countries or time requires that the data are comparable in definition of sectors.

Given that the definition of IIT is “simultaneous import and export of differentiated goods” it is important to distinguish between goods that are “horizontally differentiated” (different varieties) from goods that are “vertically differentiated” (different qualities). The G-L index aggregates these two dimensions, but the problem can be solved using the index applied by Abd-el-Rahman (1991).⁵⁶

⁵⁵ See Lionel Fontagné and Michael Freudenberg, 1997, David Greenaway and Chris Milner, 2003).

⁵⁶ See appendix for more details

This index is based on the assumption that differences in quality must be reflected in prices much more than differences in varieties.

We suggest the use of the CEPII index, which deals with the principal problems of the G-L index: (1) aggregation sensitivity; (2) geographic aggregation (considering only bilateral trade); (3) considers, depending on the degree of overlapping, both exports and imports as being part of either two-way trade or one-way trade; (4) distinguish between vertically and horizontally differentiated goods.

Use the Eurostat classification Combined Nomenclature at 8 digits

Trade is considered “two-way” when the value of a minority flow (e.g. import) is equal to at least 10% of the majority flow (e.g. export).

$$\frac{\text{Min}(x_{ijkt}, m_{ijkt})}{\text{Max}(x_{ijkt}, m_{ijkt})} > 10\%$$

Traded products are considered to be similar (horizontally differentiated) if their unit values differ by less than 15%.

$$\frac{1}{1.15} \leq UVR_{bp} = \frac{UVx_{bp}}{UVm_{bp}} \leq 1.15$$

Otherwise, they are considered to be vertically differentiated.

According to this classification, all trade can be divided into 3 groups: (1) two-way trade horizontally differentiated; (2) two-way trade vertically differentiated; and (3) one-way trade.

Figure 3.3: Bilateral trade types

How to define bilateral trade types at the product level?

Degree of Overlap between Export and Import Values Does the minority flow represent at least 10% of the majority flow?	Similarity of Export and Import Unit Values: Do export and import unit values differ less than 15%?	
	Yes (horizontal differentiation)	No (vertical differentiation)
Yes	<i>Two-way trade in similar products</i>	<i>Two-way trade in vertically differentiated products</i>
No	<i>One-way trade</i>	

Source Fontagné, L., and M. Freudenberg (1997) "Intra-Industry Trade: Methodological Issues Reconsidered", CEPII Working Document, N. 97-01

Analytically, the indicators of industry trade are:

A) Grubel-Lloyd index of intra-industry trade (normally calculated at 3 or 4 digit⁵⁷)

$$GL_{ijk} = 1 - \frac{|x_{ijk} - m_{ijk}|}{x_{ijk} + m_{ijk}} \quad \text{or} \quad GL_{ijk} = \frac{(x_{ijk} + m_{ijk}) - |x_{ijk} - m_{ijk}|}{x_{ijk} + m_{ijk}}$$

$$GL_{ij} = \frac{\sum_{k=1}^n (x_{ijk} + m_{ijk}) - \sum_{k=1}^n |x_{ijk} - m_{ijk}|}{\sum_{k=1}^n (x_{ijk} + m_{ijk})}$$

This is based on the definition of IIT as balanced two-way trade in goods produced by the same industry

This indicator has direct inverse relationships with the Balassa index

$$B_{ijk} = \frac{|x_{ijk} - m_{ijk}|}{x_{ijk} + m_{ijk}} \quad \text{being} \quad GL_{ijk} = 1 - B_{ijk}$$

The G-L index varies between zero (no products are both imported and exported) and 1 (all trade is IIT)

B) Adjusted G-L Index. A variant of the G-L is the one used by (Greenaway et al., 2004)

$$GL_{ijk} = \frac{2 \min(x_{ijk}, m_{ijk})}{(x_{ijk} + m_{ijk})}$$

C) Vona Index of intra-industry trade (normally calculated at 3 or 4 digit) 58

$$V_{ij} = \frac{\sum_{k=1}^m (x_{ijk} + m_{ijk})}{\sum_{k=1}^n (x_{ijk} + m_{ijk})}$$

This is based on the definition of IIT as two-way trade in goods produced by the same industry (the balance of trade is not important what matter is the overlapping!) –

D) The CEPII index (Based on Fontagné and Freudenberg, 1997). The CEPII Index is identical to Vona index but only calculated for products for which the index has a value above a certain minimum threshold (10% but in other paper it has been used 20%). Or a variant of this formulation (as in the original formulation of Fontagné and Freudenberg, 1997)

$$CEPII_{ijkt} = \frac{\text{Min}(x_{ijkt}, m_{ijkt})}{\text{Max}(x_{ijkt}, m_{ijkt})}$$

Here, X and M represent exports and imports, indices i referring the declaring country, j the partner country and k the product in year t. In addition, as already said, this has to be higher than a certain threshold (10-20%). The positive consequence of this index is that it would allow us to distinguish between one-way and two-way trade.

E) Distinguishing between horizontal and vertical IIT. (Based on Abd-el-Rahman, 1991)

$$UVR_{bp} = \frac{UVx_{bp}}{UVm_{bp}}$$

⁵⁷ Notice that level of aggregation is crucial!

⁵⁸ See Vona (1991).

Where UVR is ratio of unit value of exports (UV_x) and unit value of imports (UV_m). In addition, “b” indicate a couple of bilateral partners whilst “p” indicate the product (at 3, 4 or 6 digit levels).

Horizontal IIT if: $UVR_{bp} \in [1 - \alpha, 1 + \alpha]$

Vertical IIT if: $UVR_{bp} \notin [1 - \alpha, 1 + \alpha]$

Where α is an arbitrary threshold level (in the literature normally used between 0.15 and 0.25). This second step is to be applied to the trade already detected as IIT using one of the previous indicators.

Basically, this approach assumes that differences in prices (unit values) reflect quality differences. Therefore, products with close unit value are considered to be similar and we assume that products are considered to be similar if export and import unit values differ by less than α %. When this is not the case, products are considered to be vertically differentiated.

A3.5. DECOMPOSING TOTAL FACTOR PRODUCTIVITY (TFP)

Analytically, one can distinguish sectoral productivity gains due to intra-firm changes from productivity gains due to intra-sectoral turnover and changes in market shares.

$$\Delta TFP_{it} = \underbrace{\sum_{j \in \Psi} \Delta TFP_{ij} \bar{\omega}_{it-1j}}_{\text{INTRA-FIRM_CHANGES}} + \underbrace{\sum_{j \in \Psi} \overline{TFP}_{it-1j} \Delta \omega_{ij}}_{\text{INTRA-SECTOR_REALLOCATION}} + \underbrace{\sum_{j \in \Omega} \overline{TFP}_{ij} \bar{\omega}_{ij}}_{\text{ENTRY}} - \underbrace{\sum_{j \in \Theta} \overline{TFP}_{it-1j} \bar{\omega}_{it-1j}}_{\text{EXIT}} - \underbrace{\sum_{j \in \Theta} \overline{TFP}_{it-1j} \bar{\omega}_{it-1j}}_{\text{TURNOVER}}$$

Where “i” is the sector, “t” is the period, Ψ indicates the set of incumbent firms in “t-1” that still operate in “t”, Ω is the set of new firms that entered the market in period “t” and were not existing before, and Θ is the set of firms that existed in period “t-1” but exit in “t”.

TFP growth arising from “Smithian” gains would appear in the first and third terms of this decomposition equation. Such gains are difficult to distinguish and measure directly, but some indirect measures are feasible with commonly-available data. The next sections elaborate on measuring these trade-productivity links.

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3.6 KEY DEFINITIONS AND ACRONYMS

Customs Union (CU): Partners to a CU typically have FT between members, a CET and a centralised institution for collecting and distributing tariff revenues.

Free Trade Area (FTA): Partners to a FTA typically have FT between members but each partner has its own tariff structure, supporting tariff revenue collection, and Rules of Origin to prevent imports to a partner routed by the third party partner with the lowest border tariff for that product net of transport costs.

Regional Trade Agreement (RTA): Partners to a RTA have either a CU, FTA with RoO, or some hybrid mix such as continuing trade barriers between members.

Rules of Origin (RoO): Partners to a FTA have a supporting structure of RoO that provide administrative controls to prevent imports to a partner being routed into and through the partner country with the lowest border tariff net of transport costs. Rules of origin define an “FTA good” as originating within the FTA and free to move within the FTA with no tariff.

Singapore issues: Investment policy, competition policy, transparency in government procurement, and trade facilitation

Acronyms

FTA:	Free trade area (or agreement)
CU:	Customs union
WTO:	World Trade Organization
GATT:	General Agreement on Tariffs and Trade
GATS:	General agreement on trade in services
RTA:	Regional trade agreement
PTA:	Preferential trade agreement
IIT:	Inter industry trade
FDI:	Foreign direct investment
TFP:	Total factor productivity
CET:	Common external tariff
NTB:	Non-tariff barrier
SPS:	Sanitary and phyto-sanitary measures
TBT:	Technical barriers to trade
S-S:	South-South trade
N-S:	North-South trade
GDP:	Gross domestic product
FT:	Free trade

CHAPTER 4: APPLYING THE RTA FRAMEWORK: EGYPT CASE STUDY

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4.1. OVERVIEW OF THE EU-EGYPT AGREEMENT

The main aim of the proposed EU-Egypt agreement impact is to end the asymmetry in the previous bilateral agreement by providing for industrial tariff reductions by Egypt towards the EU. The EU had earlier removed tariffs against Egyptian industrial goods other than some textiles and clothing. The EU will now also remove quotas on textiles and clothing but would probably have had to do that anyway as the MFA ended. However, the removal of quota will be accompanied by removal of some residual tariffs, which will give the Egyptian textiles and ready made garments a preferential edge when compared to competitors such as India, Bangladesh and China who will enjoy the absence of quota but will be faced by tariffs.

Agriculture is not included on a general basis. There is however a positive list of very specific reductions in tariffs and increases in quotas. There is a very short list that allows Egyptian agricultural exports to enter duty free. Most of the agricultural products are subject to seasonal quotas and/or price levies and/or tariffs and/or a mixture of these.

The agreement has a very limited impact on other forms of trade barrier. It retains WTO rules for contingent protection. The agreement makes reference to a number of areas of policy harmonisation that could reduce NTBs but the commitments are all very loosely worded and their implications are unclear (eg “best endeavours” to approximate laws.)

Therefore, it seems unlikely that at the agreement in its present form will have an impact on deep integration on the Egyptian export side without further development. The existing agreement could be a platform to build some deep integration but it does not explicitly provide mechanisms for this.

The agreement has the potential to affect trade with third countries in a way which is as yet uncertain due to the complex character of the rules of origin in the various other RTAs Egypt is in, and in the course of the EU neighbourhood policy.

The likely impact is that the direct impact of this agreement is likely to be increased imports of industrial goods by Egypt from the EU. Economic theory tell us that this is likely to lead to an economic adjustment that will increased exports in those sectors that are already strong or of products where the price of imported inputs fall. The agreement itself does not appear to be likely to have much effect on the structure of exports.

4.2. WHAT TYPE OF AGREEMENT?

4.2.1. THE PARTNER COUNTRIES?

The World Bank cautions against S-S RTAs in favour of N-S RTAs, although empirical studies suggest S-S RTAs are on average trade creating. The key criterion is likely to be the level of trade protection. If there is high protection this can lead to harmful trade diversion.

Tests:

What is disparity of income per capita among partners? If Egypt is compared with EU (15), we find that Egypt has the lowest per capita income with a difference of \$9444 US current dollars between it and the Portugal which has the lowest GDP per capita in the EU (15), and with a difference of \$40530 US current dollars between it and Luxembourg which has the highest GDP per capita in the EU (15). If EU (25) is included, the differences are reduced sharply since a number of them have the range of \$3000 US current dollars as per capita income. As shown in Table 4.1. the situations worsens if constant GDP per capita is taken in consideration where the deviation of the Egyptian per capita income from the average of the EU (15) widens, however it does not change much if the PPP per capita is the measure considered. When EU (25) is considered we observe that the deviation in general narrows down with the best case when current GDP per capita is the measure used followed by the PPP and then constant per capita.

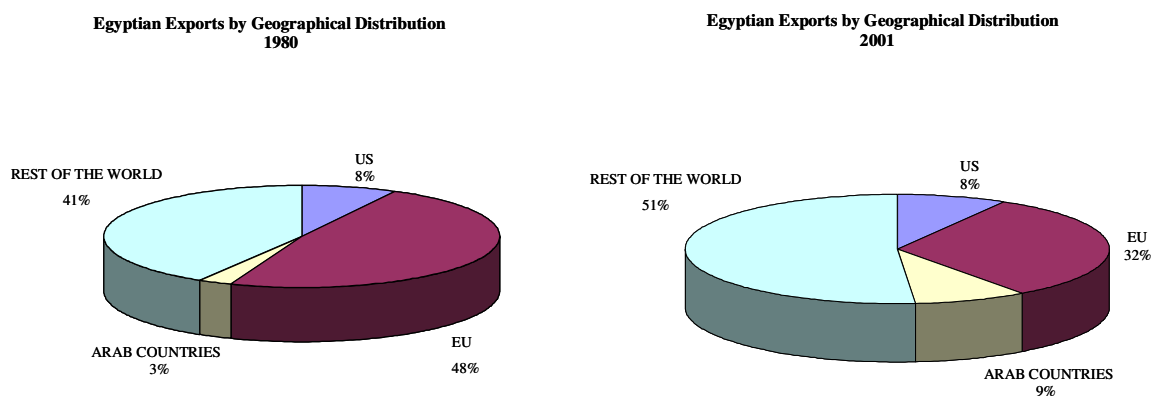
Table 4.1: GDP Per Capita amongst Egypt and EU Members in 2001:

Country	GDP per capita, PPP (thousand current international \$)	GDP per capita (in thousand constant 1995 US\$)	GDP per Capita (in current US\$)
Egypt, Arab Rep.	3,520	1,229	1510.902
Austria	26,730	33,172	23185.69
Belgium	25,520	31,218	22322.57
Denmark	29,000	38,710	30144.06
Finland	24,430	32,121	23295.1
France	23,990	30,492	22128.63
Germany	25,350	32,813	22421.97
Greece	17,440	13,669	11063.21
Ireland	32,410	29,401	26907.53
Italy	24,670	21,144	18788.47
Luxembourg	53,780	56,382	42040.82
Netherlands	27,190	31,333	23700.79
Portugal	18,150	13,109	10954.01
Spain	20,150	17,595	14150.42
Sweden	24,180	31,627	23590.51
United Kingdom	24,160	22,697	24219.29
<i>Average EU (15 Members)</i>	<i>26,477</i>	<i>29,032</i>	<i>22,594</i>
Cyprus	21,190	14,592	12004.21
Czech Republic	14,720	5,583	5553.991
Estonia	10,170	4,707	4050.587
Hungary	12,340	5,540	5097.281
Latvia	7,730	2,816	3200.085
Lithuania	8,470	2,308	3443.998
Malta	13,160	10,098	9172.152
Poland	9,450	3,716	4561.373
Slovak Republic	11,960	4,405	3785.899
Slovenia	17,130	11,984	9442.771
<i>Average EU (25 Members)</i>	<i>20,939</i>	<i>20,049</i>	<i>15,969</i>

Source: World Bank, *World Development Indicators*, CD-ROM, 2003.

For a developing country partner how large is the total market in the richer partner for your exports? The EU has been historically the largest market for Egyptian exports. In recent years it has sometimes been second in importance after the US market. Figure 1. below shows the relative importance of the EU market for Egyptian exports in 1980 and 2001. For the period 1999-Jan-August 2004 (which includes EU 25 starting 2004), EU absorbed around 40% of Egyptian total exports (calculated from the Ministry of Foreign Trade and Industry, Aggregate Foreign Trade Report, February, 2005).

Figure 4.1: Egyptian Exports Geographical Distribution, 1980 and 2001



Source: Authors' Calculations based on International Monetary Fund, *Trade Statistics Yearbook*, 1987 & 2002

The latest national data available (the period January- September 2004) indicate that the largest EU markets represented 32% of the Egyptian exports in this specific period. Italy absorbed 13% of the Egyptian exports, followed by Spain (6%), The Netherlands (5%), France (2%), UK (2%), Germany (2%), and Greece (2%).

Table 4.2 below shows some interesting facts about the importance of the EU as a trading partner to Egypt.

Table 4.2: Characteristics of Egyptian-EU merchandise trade (1999-2004)

	1999	2000	2001	2002	2003	January-September 2004*
Exports to EU (million US \$), Percentage of Egyptian total exports according to Egyptian Sources	1236 (34%)	1900 (40%)	1311 (32%)	1304 (28%)	2026 (32%)	1847 (33%)
Imports from EU (million US \$), Percentage of Egyptian total imports according to Egyptian Sources	5668 (35%)	4803 (35%)	3773 (30%)	3339 (27%)	2801 (26%)	2286 (25%)

* includes the new 10 EU members as of May 2004

Source: Ministry of Foreign Trade and Industry (2005), Aggregate Bulletin of Foreign Trade, February 2005

How big?

Normally economic theory suggests that an RTA will be more beneficial the greater the size of the created market. However, more members with diverging tariff and regulatory structures will make convergence difficult. So simple measures such as number of members or size of market are not enough to give a sense of potential for benefits or complexity.

Number of members: The number of members is two, Egypt on the one hand and the EU (15, now 25) on the other hand. However, Egypt signed the Agadir Agreement in 2004 with Morocco, Tunisia, and Morocco. According to the Agadir Agreement (initiated in 2001 and signed in February 2004), a free trade area is established with a common set of rules of origin with the EU, which allows duty free access for goods produced via the accumulation of inputs among the four countries to the EU. The Agadir Agreement was a joint initiative brought by the EU and the four countries to enhance the South-South Cooperation. The agreement faced several problems as a result of the reluctance of certain countries over the applicable rules of origin. Finally the agreement entered into force in January 2006 (although it had been scheduled to start its transitional period of 2 years in 2005, this was delayed as the Moroccan and Jordanian Parliaments delayed in ratifying the agreement). This agreement in itself widens the market and does not confine it to the borders of the EU and is a step

towards achieving the Free Trade Area announced in the Barcelona conference (November, 2005) which aimed at creating a wide free trade area (the largest in the world) to encompass the 15 members of the EU together with the 12 Southern Mediterranean countries (Egypt, Morocco, Jordan, Tunisia, Syria, Lebanon, Israel, Malta, Cyprus, Turkey, Algeria, and Palestine). The agreement allows for diagonal cumulation (see below), however it is inoperable, as it based on the condition that the set of rules of origin is similar in the set of the 12 South Mediterranean countries, which is not yet the case.

Moreover, the EU has currently expanded to 25 members and there are further issues of enlargement on the horizon. With each enlargement, a side agreement is signed with Egypt (there were three side agreements that were signed with Egypt since EU started its enlargement process) to increase the quota allowed for Egypt in the EU market regarding its agricultural and processed agricultural exports.

Size of market expansion (measured by imports and exports of goods and services; by stocks of inward and outward investment and; by GDP: There are different measures of market size. Among such measures is GDP per capita (see Table 4.1.) or the size of population, which reached 378 million for the EU (15) in 2001 compared to 65 million in Egypt. If the EU (25) is considered, the size of the total population increases from 378 million to 453 million. If other measures are considered, we find that the EU (15) is a large importer of goods and services and larger exporter of FDI as shown in Table 3. The enlargement of the EU does not add significant changes to the size of the market being an importer of goods and services. Regarding FDI inflows the new 10 members are net importers of FDI in comparison with the old EU (15) which were net exporters of FDI.

Table 4.3: Exports and Imports of Goods and Services, and Stocks of Inward and Outward FDI amongst Members in 2000: (Current US\$) (mn)

Country	Exports	Imports	FDI Inward Flow	FDI Outward Flow
Egypt, Arab Rep.	16,175	22,780	19589	655
Austria	94,610	96,415	30431	24820
Belgium	197,417	190,014
Denmark	70,193	60,795	66701	66217
Finland	51,884	40,570	24272	52109
France	372,625	355,593	259772	445091
Germany	629,509	622,166	470933	483942
Greece	27,967	36,863	12499	5861
Ireland	90,441	76,915	136921	32253
Italy	304,346	293,860	113047	180275
Luxembourg	29,384	25,424	23492	7927
Netherlands	248,430	230,436	241328	302448
Portugal	33,815	45,922	29040	17170
Spain	168,203	180,790	144934	159904
Sweden	108,062	95,830	93970	123230
United Kingdom	401,820	426,397	438631	897845
<i>Total EU (15 Members)</i>	<i>2,828,706</i>	<i>2,777,990</i>	<i>2,085,971</i>	<i>2,799,092</i>
Cyprus	3591	715
Czech Republic	35,799	37,517	21644	738
Estonia	4,819	5,029	2645	259
Hungary	28,541	30,415	22870	1280
Latvia	3,273	3,883	2084	241
Lithuania	5,109	5,833	2334	29
Malta	3,668	4,059	2374	203
Poland	46,245	57,139	34227	1025
Slovak Republic	14,172	14,652	3738	325
Slovenia	10,719	11,363	2894	768
<i>Total EU (25 Members)</i>	<i>2,981,051</i>	<i>2,947,880</i>	<i>2,184,372</i>	<i>2,804,675</i>

Source: - UNCTAD, *World Investment Report*, 2004; World Bank, *World Development Indicators*, CD-ROM, 2003.

Existence of low cost producers: Table 4.4 shows that Egypt has the lowest unit labour cost (ULC) when compared with the EU (15)⁵⁹.

Table 4.4: Unit Labour Cost amongst Members in 1997:

Country	ULC
Austria	0.54
Cyprus	0.47
Finland	0.43
Greece	0.37
Hungary	0.41
Italy	0.41
Netherlands	0.48
Poland	0.37
Slovenia	0.67
Sweden	0.42
<i>Egypt</i>	<i>0.35</i>

Source: Author's Calculations based on UNIDO, *Industrial Statistics Database 3-Digit ISIC Rev.2*, CD-ROM, 2002.

How different are tariff levels of partners? There is wide gap between the average tariffs in the EU when compared to Egypt. According to the latest published data by the World Bank, the simple mean tariff in 1998 was 20.5% for Egypt and the weighted mean tariff was 13.8%. The EU, in 2001 had a simple tariff rate of 3.9% and weighted tariff rate was 2.6. The simple applied mean tariff in 2002 as stated by the WTO for Egypt was 19.9% (WTO Country Profile, available on the WTO website). In 2004, the Government of Egypt undertook a unilateral tariff reduction which resulted in reducing the weighted mean tariff from 14.6% to 9% (Ministry of Finance, 2004). Hence, according to the data from different sources, which are mostly consistent (with the exception of the weighted mean tariff from Egyptian and World Bank sources), the gap between Egypt and the EU is still wide with an average of 6.5 percentage points if the weighted tariff is taken in consideration and more if the simple mean is the one considered. See table 4.5. for a comparison between Egypt and the EU tariff rates.

⁵⁹ UNIDO data suggests that Ireland actually has lower ULC than Egypt but we have some doubts as to the

Table 4.5: Tariff Barriers in Egypt and European Union:

	Year	All Products		Primary Products		Manufactured Products	
		Simple Mean Tariff (%)	Weighted Mean Tariff (%)	Simple Mean Tariff (%)	Weighted Mean Tariff (%)	Simple Mean Tariff (%)	Weighted Mean Tariff (%)
Egypt, Arab Rep.	1995	23.3	17.1	25.9	7.6	24.0	22.2
	1998	20.5	13.8		7.5	20.2	17.5
	2002	18.4	13.4	18.2	6.6	19.0	16.4
European Union	1988	2.6	3.0	5.8	2.7	2.6	4.3
	2002	3.1	2.4	3.4	1.5	2.9	2.9

Source: World Bank, *World Development Indicators*, CD-ROM, 2003, 2004.

Bilateral, regional or hub-and-spoke:

Hub-and-spoke RTAs are generally regarded as less desirable, unless rules of origin diagonally cumulate.

The agreement is a bilateral one. Following the agreement, bilateral cumulation and diagonal cumulation are allowed. Bilateral cumulation implies that materials originating in the EU shall be considered originating in Egypt when incorporated into a product obtained there. Diagonal cumulation with Southern Mediterranean countries of the Barcelona Process (including Algeria, Cyprus, Israel, Jordan, Lebanon, Malta, Morocco, Syria, Tunisia, Turkey with a restricted list, and West bank And Gaza Strip) shall be considered originating in Egypt when incorporated into a product obtained there. However, cumulation may be only applied where the materials used have acquired the status of the originating products by an application of rules of origin identical to the rules of the Protocol of the Egypt-EU Partnership Agreement. This implies in reality that only Jordan, Morocco and Tunisia (under the auspices of the Agadir Agreement) can apply the diagonal cumulation which is in fact using another system of rules of origin slightly different from that mentioned in this agreement. In other words diagonal cumulation is redundant as no country, with the exception of Jordan, applies the same system of rules of origin.

accuracy of this estimate

4.2.2. FTA OR CUSTOMS UNION

Theory and experience suggest that if integration is beneficial benefits are greater when the agreement is in the form of a customs union (CU) rather than an FTA.⁶⁰

Tests:

If formally a CU, how harmonised is the CE tariff? Not a Customs Union but a Free Trade Agreement.

What customs measures will remain at internal borders? Not a Customs Union but a Free Trade Agreement.

What arrangements are there for collecting/sharing customs revenues? Not a Customs Union but a Free Trade Agreement.

Rules of Origin:

Rules of origin (RoO) are required in a Free Trade Area in order to distinguish goods originating in partner countries from those coming from third countries. Rules of origin are thus necessary to deter “trade deflection”. ROOs however can act as a constraint on the sourcing of inputs by domestic producers. Generally speaking that constraint is likely to be lessened to the extent that the underlying rule itself (eg. value content rule) minimises the amount of domestic content required, and to the extent that the rules of origin allow for “cumulation”.

Number of RoO? 576 rules of origin applied on the heading (4 digits) or parts of.

⁶⁰ If third country imports cross partner A in bond without paying tariffs until reaching eventual destination country B then RTA is de facto a FTA even if called a CU.

How many sector specific RoO? Numerous including textiles and clothing. Annex II to Protocol 4 “List of working or processing required to be carried out on non-originating materials in order that the product manufactured can obtain originating status” is more than 100 pages long.

Degree of complexity of RoO? High, as it is a mixture of changes of tariff heading, value added and specific process. In some cases either one of the methods can be applied whereas in others only one method has to be applied.

How much cumulation with partners? Allowed bilateral and diagonal as mentioned before. However diagonal is irrelevant in practice

Are there sector specific RoO that are in important exporting sectors? The textiles and ready made garments are considered restrictive

Where local content rules are required what is the standard percentage, and how much trade is subject to >60% requirement? Not applicable

4.2.3. OVERLAP WITH OTHER AGREEMENTS

A country can be in multiple FTAs but only one CU. Many African countries for example belong to overlapping FTAs. However even a single FTA implies need for strict rules of origin, and the more complex arrangements are the more scope for red tape at frontiers to disrupt the RTA.

Tests:

Type/extent of overlap - How many other RTAs does country have and, with whom? Egypt has signed many bilateral/regional trade agreements. Table 4.6. below indicates how many agreements Egypt has.

Table 4.6: Membership of Egypt in Regional Trade Agreements (RTAs)

Year	Name of Agreement
1998 (entry into force), fully implemented in 1/1/2005	GAFTA ⁶¹ (free trade area to be reached by 2007)
1998 (entry into force), 2000 fully implemented	COMESA ⁶² (free trade area already taking place, aim to reach a customs union by 2004)
2002 (signature and ratification), starting entry into force in 1/1/2004	EU-Med Partnership Agreement (free trade area to be reached after 12 years from entry into force of the agreement, with one exception)
2001 (Initiated), 2004 signed	Agadir Declaration (free trade area with similar rules of origin to be reached soon)
1999 (signing and entry into force)	TIFA (agreement to enhance trade and investment)
Potential under negotiations or discussion*	Free trade area with EFTA, Turkey, South Africa, Nigeria, and Australia, India, Tanzania, and Sri Lanka, EMUWA
In the 1990s	A number of bilateral preferential trade agreements with Arab countries including Lebanon, Syria, Morocco, Tunisia, Libya, Jordan, and Iraq

Source: Ministry of Foreign Trade (2003), *Aggregated Foreign Trade Report*

* Based on newspaper sources and interviews with officials.

Compatibility - Are there any mutually incompatible provisions in the agreements? The agreements have different rules of origin. For example, EU-Partnership rules of origin are different from GAFTA, COMESA, and Agadir. Agadir rules of origin are very similar to the EU-Partnership agreement but not identical. GAFTA and COMESA use value added rules of origin with 40% and 45% thresholds respectively.

Differences in protocols: The main difference lies in protocols of rules of origin. For example under the COMESA there is a value added approach across the board without product by product identification. Under the GAFTA, there is a value added approach and Arab countries have been negotiating the detailed rules of origin for more than 10 years, still with no success. The EU uses a hybrid system of value added, specific processes, and change of tariff heading. This is dealt with in more detail below.

IPRs: The rules concerning Intellectual Property Rights (IPR) are different: EU-Partnership calls for the “highest international levels prevailing”, while Agadir calls for WTO rules, and in contrast GAFTA which does not include this issue.

⁶¹ Greater Arab Free Trade Area

Does it change the characteristics of an existing agreements (i.e. improve or reduce the benefits of existing agreements)? The answer to this question is not clear, however, what is sure is that it burdens the limited human capacity concerned with negotiating. Whether it affects customs officials negatively the or not, is not clear. Interviews revealed that they follow what the exporters ask for in terms of which system he wants to be treated under. However interviews revealed that customs officials do suffer problems related to identifying the origin of products in general terms (it was not confined to EU-Partnership).

Is there any inconsistency with existing agreements? The levels of compliance to some rules and regulations differ (e.g. IPR). Also the system of tariff dismantling differs from one agreement to the other.

Does the agreement erode existing preferences or create new ones? The agreements erodes the main preference under the Cooperation Agreement that governed trade relationship between the EU and Egypt since 1977. This allowed Egyptian industrial exports to enter duty free to the European market without the need for reciprocity. The EU-Partnership agreement asks for reciprocity. However, the agreement re-creates a preferential access in the textiles and ready made garments sector, which was governed by quotas following the ATC of the WTO. In 2005 the ATC was abolished but tariffs were imposed, so following the EU-Partnership Agreement, Egyptian exports are allowed to enter the EU market duty free which gives it preference over similar products of main competitors as China, India and Bangladesh.

Are the RoO the same or different as those in the existing RTA? They are different. See above

⁶² Common Market for Eastern and Southern Africa

4.2.4. EXPECTED EASE OF NEGOTIATION

Important issues are whether there is to be rapid or slow implementation (automaticity versus need for further negotiation)? These questions require qualitative analysis since there is no immediate answer as to desirability: if there is a great deal of negotiation then there may be many exceptions, or perhaps easy negotiations suggest no gain. Timescale is also important: ease of negotiations may be determined by a small number of partners or asymmetric partners. It may also be determined by availability of knowledgeable negotiators for the smaller or developing country partners.

Tests:

Number of partners? Two teams of negotiators: a European team and an Egyptian team. The EU has chosen the path of negotiating on bilateral basis with the South Mediterranean countries and not with all of them or a group of them collectively.

Is there a leading partner? Not relevant, but the EU, by nature had more bargaining power.

Are there lots of opponents, or are there supporters domestically? The EU-Partnership Agreement provoked a lot of debate in Egypt. During the negotiations process, debate arose among different ministries (or rather to be more precise ministers in charge). For example, the Ministry of Industry in 1998-2000 was against the agreement, whereas the Ministry of Foreign Affairs was for the Agreement. The position of the Minister of Economy changed; he was against the agreement until he was appointed as a Minister of Foreign Trade, when he changed his position to be for the agreement. Most of such positions reflect a domestic political position in capturing power than having a clear objective point of view. The negotiating team held several meetings with the different stakeholders (including the Federation of Egyptian Industries, The Chambers of Commerce, etc.). Reviewing the newspapers over the period 1998-2002 shows that private sector opinion changed their positions several times sometimes claiming that they

are for the agreement and in other cases criticizing the agreement. This implies that the debate was rather based on personal point of views of the heads of private associations and did not reflect the position of stakeholders or the community he or she represents. Since the negotiations were spread over a long period, the persons in charge of representing the view of a certain segment changed and hence the views changed. Moreover, during the negotiation period, Tunisia and Morocco signed their agreements with the EU, which affected the positions undertaken by both the Egyptian Government and the different stakeholders in the society, as they felt that they were rather late in signing the agreement. Towards the end of the period, before signing the agreement there was more of a consensus among both the government and the private stakeholders on the urgency of signing the agreement. This was even reflected in the signature of an interim agreement to start implementing the trade part of the EU-Partnership Agreement in 1/1/2004, till the ratification of the agreement is finished by the 15 parliaments of the EU which finally took place in 1/6/2005. The interim agreement, which activates the trade part of the EU-Partnership agreement, does not require ratification because it falls under the auspices of the European Commission on the EU side.

Are there a small number of large exporters who are supportive? Most of the agricultural exporters were supportive to the extent that the Minister of Foreign Trade proposed implementing agricultural provisions even before the ratification process was complete on both sides. But this proved impossible for two main reasons: the EU would not accept the activation of the agricultural part while postponing the manufacturing part, and such an agreement would have required a lengthy ratification by the Egyptian parliament..

What is the negotiation time? The negotiation started in January 1994 and ended in year June 1999 with 10 drafts. A meeting was held in April 2001 for a final review, which brought the number of drafts to 11.

What is the ratification time? Ratification on the Egyptian side took around two years; the agreement was initialled in January 2001, signed in June 2001 and it was ratified in 2003. Egypt ratified the agreement faster than the EU. As a result, Egypt asked

for implementation of an interim agreement till all EU members ratify the agreement. The trade side of the agreement (which does not require ratification on the EU side as it falls under the power of the European Commission) started to be implemented in January 2004. The agreement as a whole with its political and social aspects entered into force in June 2004.

What is expected implementation time (e.g. finalisation of details such as the Rules of Origin⁶³ and SPS, etc.)? They were finalized by the signing of the agreement. However, the advisor of the Minister of Foreign Trade and Industry recently announced (19/04/2005) that further negotiation on rules of origin issues might take place with the EU.

Are these timescales already specified? The time scales specified are those for abolition of tariffs, which takes place as follows. On the Egyptian side the treatment of the EU imports differs between types of products;

- For European raw materials and industrial equipment duties will be abolished over 4 years from Jan 1 2004 in 25% steps.
- For European industrial supplies, semi-manufactured goods and construction materials, tariffs are to be reduced to zero between 2007 and 2013 in steps of initially 10% then 15%.
- For European clothes, electrical domestic appliances, cosmetics, furniture and motor vehicles for the transport of goods, tariffs will gradually be reduced to zero in steps on Jan. 1st each year from 2009 to Jan 2016; in steps of 5% then 15% annually.
- Finally, European motor vehicles designed for the transport of persons are to be subject to a 10% customs duty reduction each year till their eventual removal, over the period 2010 and 2019. Most agricultural and processed agricultural products were not liberalized. However, increased quotas were included in the agreement (see below). Protocol 1 is a “positive list” of products where tariffs are to be reduced or quotas increased

Do you have a sufficiently experienced and large negotiating team? If not is there technical assistance available? The negotiating team consisted of 278 negotiators representing around 30 ministries. There were 13 domestic working group and 491

⁶³ NB see below

hearing sessions were held for the different Egyptian stakeholders. Almost all private sector representatives were met. In the negotiating team four main private sector representatives were there: The Federation of Egyptian Industries, the Federation of Chambers of Commerce, Union of Business Associations, and Union of Cooperatives.

Technical assistance from the EU in the form of missions explaining different issues or technical papers. In addition Egyptian missions were sent to different places such as EU commission, WTO secretariat to learn more about different issues⁶⁴.

4.2.5. NATURE OF BARRIERS TO TRADE

4.2.5.1 TRADITIONAL BARRIERS

Economic theory is ambiguous but experience suggests that if RTA is beneficial it should be complete: excessive exceptions are likely to be harmful. From a political perspective asymmetric tariff reductions with less or slower obligations on the less developed partner have an appeal, but for economists the gains from specialisation require both sides to liberalise. Moreover WTO Article XXIV requires symmetry.

(1) Full removal of bilateral tariffs?

Does it remove or increase tariff escalation? It increases tariff escalation significantly as it starts by eliminating tariffs on inputs in the first four years and then moves to intermediate goods in the second phase and finally to the final products in final phase.

Is the RTA going to abolish all bilateral tariffs? No, only for industrial products (excluding agricultural and processed agricultural products)

⁶⁴ Answers to this question are based on an interview with the leader of the Egyptian team negotiating the agreement, former Ambassador Gamal Bayoum.

If not all which tariff lines are excluded e.g. agriculture? The majority of agricultural and processed agricultural products are excluded.

For Agricultural goods:

Regarding products originating in Egypt, EU excludes: 22 tariff Heading (4 digits) and 26 HS code (6 digits). Such products are subject to different kinds of treatment whether price wise (tariff reduction, import levies, etc) and quantity wise (tariff quota).

Regarding products originating in EU, Egypt excludes: 10 tariff Headings (4 digits) and 33 HS codes (6 digits). Such products are subject to different kinds of treatment whether price-wise (tariff reduction, import levies, etc) and quantity-wise (tariff quota). However, within this list, Egypt agreed to reduce tariffs to zero rate with unlimited quotas on 4 tariff Headings and 10 HS codes (6 digits).

Regarding processed agricultural products Egypt has specified three lists for products originating in the EU: The first list contains products that will be subject to a zero rate after 2 years from entry into force of the agreement. This list contains 15 heading and 53 HS codes on 6 digits or more disaggregated. The second list contains products that will be subject to 15% reduction, on gradual basis starting the second year of entry into force of the agreement. The list contains 13 Heading and 54 HS codes on 6 digits or more disaggregated. The third list contains products that will be subject to a 25% reduction, on a gradual basis starting the second year of entry into force of the agreement. The list contains 19 heading and 17 HS codes on 6 digits or more disaggregated.

The EU prepared three lists: The first list includes immediate abolition of tariffs with no quantitative restrictions. The list contains 21 Heading and 113 HS code on 6 digits or more disaggregated. The second list includes products where its industrial part will be subject to zero tariff rate, but not its agricultural component. The list contains 12 Heading and 110 HS code on 6 digits or more disaggregated. The third list includes products where the industrial part will be subject to zero tariff rate, but not its agricultural component which will be subject to extra 30% tariff reduction however under a certain

annual quota. The list contains 5 Headings and 2 HS code on 6 digits or more disaggregated.

Are the excluded sectors important for the domestic economy or do they imply e.g. remaining tariff escalation? The issue of excluding agricultural and processed agricultural products was based on the demand of the EU. As a result Egypt prepared its own list of treatment of agricultural and processed agricultural products which is not the same as that of the EU.

What, if any, asymmetries are there in tariff reduction obligations? The agreement by its nature is asymmetric as EU has allowed duty free access for Egyptian industrial products since 1977. Agriculture and processed agricultural products do not follow as well symmetric liberalization and the same list of liberalization.

If the RTA is a CU, do MFN tariffs rise or fall? Not a CU

(2) Removal of bilateral non-tariff barriers - full or partial

The distinction between border and regulatory barriers may be hard to make, but economists suggest that barriers that exist only at borders largely serve to increase transactions costs of trade and raise no tariff revenue. Therefore, generally such barriers are harmful

The agreement has been described as of the shallow type as it only extends to tariff and traditional non-tariff measures. A number of the provisions of the agreement call for further liberalization in services and agriculture without identifying a specific date. It calls as well for harmonization of standards and regulations; however it is vague and did not identify schedules for implementation (See Galal and Hoekman (eds), 1998).

(3) What is the coverage of agreement?

The wider the coverage the better the agreement is likely to be, but the “substantially all” rule is vague and leaves scope for significant exceptions that must be examined.

Tests:

How much is excluded in terms of agriculture, raw materials, industrial goods, services, capital and labour markets? The agreement excludes agriculture, services, and labour movements. Article 46 of the Agreement calls for cooperation to increase the flow of capital, expertise, and technology to Egypt. Moreover Article 32 ensures that from the time of entry into force of the Agreement, the EU and Egypt will allow the free circulation of capital for direct foreign investments. In addition the parties will hold consultations with a view to facilitating the movement of capital between EU and Egypt and achieve its complete liberalization as soon as conditions (without specifying what are the conditions) are met. Chapter 2 of the Agreement is devoted to Agriculture and Fisheries. It classifies agricultural products into two protocols: a protocol that lists the treatment of agricultural products of EU origin when entering Egypt and a Protocol that lists the agricultural products of Egyptian origin when entering the EU. They are not symmetrical. There is a third Protocol that identifies the treatment of processed agricultural products with additional provisions for products with Egyptian origin. Article 13 of the Agreement calls for establishing greater liberalization of trade in agricultural, fisheries, and processed agricultural products of interest to both parties). Article 15 calls for a review with the aim of further liberalization during the third year of implementation of the Agreement. Article 50 calls for cooperation in the field of agriculture and fisheries with the aim of modernization of the sector, diversification of products, and “the promotion of cooperation” in veterinary and sanitary and phyto-sanitary (SPS) matters. As for services, the Agreement confines the liberalization to the GATS commitments; however it includes a provision in Article 30 that calls for a review after five years from entry into force of the Agreement with the aim of further liberalization.

What sensitive products are excluded? Most of agricultural and processed agricultural products are subject to either quantitative restrictions, variable levies, or seasonal restrictions, or a mixture of all of them. Such restrictions have been relaxed in

the EU-Partnership Agreement when compared with the status under the Cooperation Agreement.

(4) Tariff-like measures:

Quantitative restriction and variable levees are the most common examples. Removal of tariffs can have no effect if quotas, administrative measures or onerous tax burdens remain.

Tests:

Do certain quota or import-licensing rules remain in place, or are new ones introduced and if so are they binding? Yes in the field of agricultural and processed agricultural products.

Are minimum prices introduced, or remain in place? If so, are these in important import/export sectors? Yes they remain in place in a large set of agricultural and processed agricultural products and they negatively affect the competitiveness of Egyptian products.

Are there rules for domestic taxes? No, but duty draw back is forbidden after 6 years from entry into force of the agreement. However there are some exceptions allowing duty draw back in the range of 5 or 10% for some products which will be reviewed by the Association Council.

4.2.5.2. CONTINGENT PROTECTION

Economists regard this as likely to frustrate the aim of trade liberalisation. However a political judgement is needed as to whether retention of some such instruments is necessary to avoid adjustment costs. Therefore a good agreement may retain scope for use of such measure but put strict limits on their use and should make them predictable.

(1) Safeguard clauses

Tests:

Does the RTA include an agreement-specific (non-MFN) safeguard clause in addition to the WTO clause? If so, does it impede the use of WTO safeguard clauses between signatory parties? Article XXIV of the Agreement calls for application of the provisions of the Article XIX of the GATT when needed, requires the Association Council be informed before such action to allow for consultation. The agreement, in line with the WTO, allows for antidumping duties and countervailing measures. In the case of countervailing measures, the Agreement allowed for eventual elimination the application of such Article if the necessary provisions related to competition and state aids (as stated in one of its Articles) are adopted. Finally, the Agreement includes a provision that allows both parties to undertake the necessary measures to restrict imports if their balance of payments faces or may face serious difficulties.

Are safeguard measures:

Excluded from the agreement? No

More strictly controlled than WTO? No, but in some cases as safeguard provision allow for consultation before imposing the measure

Banned? No

(2) Anti dumping

These are included specifically in the agreement following GATT rules.

Tests:

Is anti dumping:

Excluded from the agreement? No

More strictly controlled than WTO? No

Banned? No. Antidumping is included in the agreement and it follows the WTO rules and regulations

4.2.5.3 RULES OF ORIGIN: see section 4.2.3.

4.2.5.4. REGULATORY BARRIERS TO COMMODITY TRADE

The main justification for an RTA is often said to be the ability to address regulatory barriers to trade that cannot be easily dealt with multilaterally. Yet, the key factor often neglected is the issue of testing and certification. Adoption of EU standards into partner norms will be of little benefit if no mutual recognition of testing and certification. Our study suggests that in many cases “deep integration” requires governmental action to harmonised norms though in some cases this can be done by the market, e.g. via contracts and proprietary standards. The extent for regulatory integration does not automatically indicate degree of benefit. However if agreement does not enter into these areas it suggests that economic impact will be limited.

(1) Standards and norms

How many new standards to be introduced? None, but the agreement Article 47 calls for reducing differences in standards and that cooperation in this regard should take place.

New conformity and testing facilities to be created? None, but Article 47 aspires to upgrading of the level of conformity assessment bodies in Egypt, with a view to the eventual establishment , of mutual recognition agreements in the field of conformity assessment.

What is the cost of upgrading/implementing the standard? Cannot be answered, but it is important to note that the Industry Modernization Program (IMP) has been working on harmonizing a large number of standards with European ones (they reached 4000 standards in the field of food and engineering industries) and has been working to help a significant number of laboratories to be internationally, or at least European accredited.

What is the costs to consumers? Cannot be determined

What are the market access gains and productivity impacts? Cannot be determined

Who likely to gain, who to lose? If all exporters and producers meet higher standards than it will be generally beneficial for Egyptian producers, exporters, and consumers but where the costs of harmonization and meeting the high standards are high which discriminate against Egyptian producers and exporters of not being able to meet such standards.

Are there likely to be externalities? There is likely to be positive externalities where meeting high standards will benefit producers and exporters as the method of harmonization, testing, etc become a common knowledge.

Are donors committed to financing costs of implementation? As mentioned above the EU through the Industry Modernization Program has been engaged in this area

(2) Product standards

Does this go beyond existing WTO provisions? No

Does it repeat or strengthen commitment to existing WTO obligations (i.e. national treatment, testing and certification at the border)? No mention of WTO in this regard, but it is agreed de facto that WTO rules and regulations apply

Does it provide for Mutual recognition (with minimum harmonisation)? As mentioned above, the agreement calls for the upgrading of the level of Egyptian conformity assessment bodies, with a view to the eventual establishment of mutual recognition agreements in the area of conformity assessment.

Harmonisation of norms? if so on what scale? None

Is this in the agreement or require further negotiations? The agreement is not specific

Does it require changes to standards and regulations for products not involved in trade? No

(3) Testing and certification

Does the agreement provide for:

Mutual recognition of conformity assessment systems once ratified? No

Eventual MR? Maybe as mentioned above in the due time when Egyptian conformity assessment bodies met the required standards

(4) Process Standards

Mutual recognition (minimal harmonisation)? No

Harmonisation? No

Is this in the agreement or does it require further negotiations? The agreement calls for cooperation with the aim in the future of establishing a mutual recognition system. It is worth noting that the agreement did not differentiate between product and process conformity assessment. It mentions only “conformity assessment”.

4.2.6. ELEMENTS OF DEEP INTEGRATION

Our concept of deep integration, for which we develop some quantitative indicators below, does not merely refer to domestic regulations that are the internal equivalent of border barriers, but rather we suggest that an evaluation of an RTA should examine how it creates a “common market place” in the broadest sense of this term.

4.2.6.1. INVESTMENT RULES

There is little evidence that bilateral investment treaties raise FDI, but considerable evidence that investment follows trade.

Does a specific investors dispute settlement system exist? No, it falls under the general dispute settlement mechanism. The investment provisions (art 46) contain no hard obligations. The dispute settlement mechanism is considered weak as it has no court (cf. the European Court of Justice). It depends more on the diplomatic good will.

Is there preferential national treatment? No

If so...Does this discriminate against major present investors? Not relevant

4.2.6.2. COMPETITION POLICY ALIGNMENT

The benefits of free trade between partners can sometimes be inequitably distributed if trade is carried out by firms or cartels able to exploit market power.

Is it in the agreement or to be discussed? Chapter 2 is partially devoted to this (3 articles). Article 34 identifies the types of anticompetitive structures that can influence negatively competition. This includes agreements between undertakings, abuse of dominant position and public aid distortions.

Does the country have a competition law? If not, do they recognise it as useful or necessary? Egypt has just adopted a competition law in late 2004, which still not enacted. More than 17 drafts have been circulated since 1995.

Is there cooperation or substantive harmonisation/change of rules? No. The agreement implies but does not state an obligation for Egypt to introduce competition law provisions comparable to those of the EU Treaties (Art 81 and 82). It does not provide for enforcement cooperation.

Are there trade related competition issues among partners such as: A cartelised distribution system? Dominant firms from partner country? Private barriers to market access? No to all.

4.2.6.3. RULES ON SUBSIDIES IN ADDITION TO WTO RULES

Implications of subsidy rules may depend on whether the country has genuine reasons for believing it can use subsidies positively for development purposes.

Is the country experiencing subsidised imports from partner? In fact, this issue is controversial. The agreement in its Articles allows the parties to undertake countervailing measures against state aids . In addition it restricts public aid. However, Egypt following the WTO rules, is allowed to subsidize exports as it falls under Annex 7 of the Agreement on Subsidies concluded in the Uruguay Round. During the Uruguay Round, Egypt had GDP per capita less than \$1000, which allowed it to subsidize exports together with the group of less developed countries. However, Egypt afterwards graduated and it passed the threshold of \$1000 per capita. In the NAMA working group, Egypt raised the issue of its ability to subsidize exports and the Chairman of NAMA allowed it. So it is not clear how this issue is to be resolved as here there is contradiction between WTO waiver for Egypt and EU-Partnership Agreement clear refusal of such waiver.

4.2.6.4. SERVICES SCHEDULES RELATIVE TO GATS COMMITMENTS

Many RTAs do little more than reaffirm GATS schedules

Does the agreement include liberalization of preferential services? Or does it simply confirm GATS commitments? It simply confirms GATS commitments but calls for review with intention of further liberalization after five years from entry into force of the agreement.

Are the details for implementation agreed (e.g. visa when liberalising movement of natural persons? or mutual recognition of professional qualification when respective services are liberalised)? No, not relevant

If the EU is involved are the relevant rules at the MS or EU level? It is simply confined to GATS commitments

4.2.6.5. RULES ON MOVEMENT OF NATURAL PERSONS

In many cases even scheduled services cannot be supplied across borders if visa requirements are such as make personnel movement impossible.

In which manner is the movement of natural persons facilitated (e.g. Visa or special agreements)? None

4.2.6.6. HARMONISATION OF ISSUES BEYOND BORDER CONCERNS

Are there other non-trade obstacles that one party claims frustrate liberalisation (e.g. enforceability of contracts, differences in tax systems)? Not until now

4.2.6.7. CHANGE IN REVENUE SHARING (IN A CUSTOMS UNION)

See above on Rules of origin and CU vs. RTA. This issue is often forgotten. It is not relevant in this case.

What system is in place:

Common budget? No

Revenue sharing? No

If neither, how is this going to be addressed? It is a FTA, hence there is no need to be addressed

Is trade deflection a real issue? This did not appear yet , since the agreement has just started to be implemented on the Egyptian side. On the EU side, there were no cases raised regarding rules of origin, with the exception of one case been raised by the EU where an Egyptian exporter did not follow the right type of rules of origin⁶⁵. The EU reaction was that it is the fault of the exporter. But another exporter of ready-made garments mentioned that the EU turns a blind eye towards testing the origin of Egyptian products.

4.2.6.8. INSTITUTIONAL FRAMEWORK

An RTA without credibility will not affect investment decisions. Hence, an institutional framework is needed to provide technical support for implementation and to ensure commitments are adhered to.

Is there a supra-national rule making system (yes/no)? No

⁶⁵ Source: private information .

Is there an autonomous secretariat for the group? No

Is there ex-post binding dispute settlement? If so, how is it to be enforced?

The Association Council is in charge of overseeing the agreement and may settle disputes by means of a decision; each party shall be bound to take the measures to implement the decision. In the event of it not being possible to settle the dispute in accordance with the aforementioned procedure, either Party may notify the other of the appointment of an arbitrator; the other party must then appoint a second arbitrator within two months. For the application of this procedure, the Community and the Member States shall be deemed to be one party to the dispute. The association Council shall appoint a third arbitrator. The arbitrators' decisions shall be taken by majority vote.

4.2.6.9. POLITICAL INTEGRATION/BENEFITS/CONDITIONALITY

This is qualitative, but the political context of an RTA is of critical importance.

What are the political motivations and interests? There are political motivations on the EU side, which are different from the Egyptian side. The EU is concerned with enhancing democracy and controlling migration from the South Mediterranean (especially illegal migration). The Egyptians could not refuse a proposal from the largest trading partner, even if they did not like the agreement. The General Cooperation Agreement was more beneficial for Egyptians as it did not ask for reciprocity and certain aid allocations were predetermined under the Financial Protocols, whereas the Partnership Agreement calls for reciprocity which implies loss of tariff revenue and threatening Egyptian products in their own market, and the aid allocations are not predetermined, but are rather based on economic performance and efforts to transit to market economy, which is rather vague). However, politically, Egypt had no choice but to sign.

Is this RTA designed to improve difficult political relations or consolidate good ones? There are no difficulties on the political level between Egypt and the EU; the

agreement consolidates good relations. Under Article 3 of the Agreement, Title I “Political Dialogue”, the agreement provides for a regular political dialogue with the aim of strengthening the Egyptian-EU relationship, contributing to the development of “lasting partnership” and increasing “mutual understanding and solidarity”. The political dialogue is to cover subjects of common interest as peace, security, democracy, and regional development.

What political pressure is being put on junior partners to sign? Mentioned in 2.11i.

4.2.6.10. FINANCIAL BUDGETARY ARRANGEMENTS

It is widely believed that an integrated financial framework is highly desirable; firstly for technical reasons so that an FTA can become genuine Customs Union; and secondly so that compensation mechanisms can occur, even if only via tariff revenues (as in SACU but not Mercosur).

If a CU, is there formal system for revenue sharing?

If not a CU, are there any other budget transfers? There are budget transfers that take place under the MEDA scheme which is a new scheme that substituted the Financial Protocols scheme. Under the MEDA scheme a four year budget is allocated for the whole Southern Mediterranean countries. The first MEDA scheme started from 1996 till 1999. It covered 12 Southern Mediterranean countries and included grants and loans. Under the MEDA scheme several aid programmes and/or projects are initiated or continued to be financed.

Is there any mechanism to compensate possible losers, other than through the sharing of tariff revenues? The upgrading of the Egyptian industry through the Industry Modernization Program or the Social Fund for Development (where the EU is a major contributor) which acts as a social safety net for laid off workers as a result of privatization may be seen as such a mechanism.

Are tariff revenues to be shared so as to compensate for possible trade diversion costs? No

If there are regulatory implementation costs, is there a mechanism to assist with adjustment costs? See 2.11c.

4.2.7. IS THE RTA WTO COMPATIBLE?

The first requirement for an RTA is whether it is likely to be WTO compatible. This is potentially significant if there is a third party affected, for example via trade diversion, since it is possible to challenge an RTA at the WTO - clearly to be avoided.

(a) What is the status current at the WTO?

Has the agreement been notified or will it be notified under GATT Art. XXIV/GATS V or the Enabling clause⁶⁶? It has been notified to the WTO in October 2004 under GATT Article XXIV.

If it has been notified have any comments been made by other parties? No

(b) Does the RTA cover substantially all trade?

At present however there is no legally agreed definition of “substantially all trade”. Therefore alternative measures should be collected. Tests looking at the share of actual trade covered should be complemented by others such as the share of tariff headings since the use of prohibitive tariffs may reduce trade and

⁶⁶ Recent AB decisions have clarified meaning of the “Enabling Clause”: developed countries may give non-reciprocal preferences to developing countries, but these must be non-discriminatory in the sense of treating all countries that are in the same position alike. It should be noted that there is some leeway in setting “objective” criteria for what is, or is not, the same position.

therefore test based on trade may be biased downwards. The EC suggest that 90% of trade is "substantially all trade".

Tests:

Percentage of trade (imports and exports) covered: Services are not included. As for merchandise trade, on the Egyptian exports side we find that based on the calculations from the Ministry of Foreign trade and Industry published data and taking the average of 1999-Jan-Aug 2004 (where in 2004 25 EU countries are included), Egypt exports 33% of its total exports to the EU. The percentage of agricultural and processed agricultural exports to the EU out of total exports to the EU is around 7% which increases to 13% if oil and oil derivatives exports are excluded (i.e. non oil exports) as oil and its derivatives represent around 40% of the value of Egyptian exports to the EU. This means that for total exports to the EU around 7% is subject to different kinds of restriction, however this is an upper bound. For non-oil exports the percentage increases to 12% (upper bound). It should be taken in consideration that this upper bound is biased downwards since a number of Egyptian exports in the categories of agricultural and non agricultural products cannot enter the EU due to SPS or quota restrictions.

On the imports side, using the same method of calculation taking the average imports from 1999-Jan-Aug 2004, Egypt imported around 28% of its total imports from the EU. Out of its total imports from the EU around 10% were subject to restrictions being agricultural or processed agricultural, however this percentage is an upper bound since some of the products belonging to agricultural and processed agricultural are, or will be, free of any restrictions. We may conclude that the FTA agreement does cover "substantially all" *actual* trade, even if an argument could be made that without the restrictions on agriculture, trade in this area would be higher.

Number of tariff lines covered by the agreement: In agriculture and processed agriculture: 6 HS codes (6 digits) and 22 Headings (4 digits). In the first 4 years: 2508 HS codes (6 digits). In the second 4 years: 2616 HS codes (6 digits). In the third 4 years:

3566 HS codes (6 digits). In the final 4 years (mainly cars): 13 HS codes (6 digits). The total of 6 digits HS codes: 8703, and 22 heading (4 digits)

Does it satisfy the rule that in a CU or an FTA there should be no rise in the average level of the MFN tariff/tariffs? In general, there is no increase in the average level of MFN tariff level.

Tests:

The simple average pre and post applied tariff rates: According to the latest data available from the WTO, the simple average of Egyptian tariffs in 2002 was 19.9 (according to WDI, 2004 the simple average tariff rate was 18.4 in 2002), which was reduced as a result of the unilateral tariff reductions undertaken in 2004. The agreement is not likely to affect the simple average tariff.

Import weighted pre and post applied tariff rates: This is an FTA. The simple weighted average tariff level before the agreement was 14.6 % which was down in late 2004 to 9%. The FTA is not likely to affect the simple non weighted tariff, but can affect the weighted tariff downwards especially that EU is the largest exporter to Egypt. The standard deviation of applied tariffs is as follows as shown in Table 4.7

Table 4.7: Standard Deviation of Tariff Rates:

	Year	Standard Deviation of Tariff Rates
Egypt, Arab Rep.	1995	33.2
	1998	39.5
European Union	1988	5.9
	2001	4.9

Source: World Bank, *World Development Indicators*, CD-ROM, 2003.

The pre and post tariff peaks: According to the the World Bank definition of tariff peaks (higher than 15%), Egypt had 44% of tariff peaks in 2002. The agreement will remove all the industrial tariff peaks for the EU; however it is not the case in agriculture and processed agricultural products.

Are tariff peaks removed? See above

Are there any new tariff peaks introduced in major imports? No

(c) GATS

The GATS provides that there must be no increase in “the overall level of barriers to trade in services within the respective sectors or sub-sectors compared to the level applicable prior to such an agreement”. GATS rules essentially cover domestic regulation, and vary slightly from those rules under the GATT. The GATT requires that the average level of MFN barriers for goods, must not rise. In addition, GATS Article VII deals with mutual recognition of service providers between similar WTO members, which may be partial and not part of an RTA. It is of note that RTAs rarely schedule more than what is in the GATS. Hence, fulfilment of the GATS rules should be tested. Unfortunately, the rules for WTO compliance under the GATS are somewhat complex and not easily understood by non-specialists. Therefore, we propose the following tests.

Needs to satisfy GATS Article V requires that such regional agreements have substantial sectoral coverage in terms of the number of sectors and volume of trade. No mode of supply must be excluded a priori. Services are not covered by the EU-Egypt FTA agreement. Articles 29 and 30 of the Agreement reaffirm GATS commitments; further liberalization will be considered first after five years after entry into force of the agreement.

Needs to satisfy requirement that within covered sectors substantially all measures that discriminate in favour of services and service suppliers of national origin vis-à-vis those of other parties to the agreement must be removed. See above

Do barriers against 3rd countries for any service sector rise as a result of common regulations of proposed RTA? No

Do any mutual recognition provisions, not notified under Article V, comply with Article VII in not discriminating against 3rd parties who also met the same standards? No

4.2.8. ROLE OF DONORS

It is important to identify the political motivation driving the agreement. Are donors facilitating the negotiations (e.g., through technical assistance)? If donors are acting as the major force behind the agreement there may be less likelihood of domestic ownership, and potentially a greater pressure for effective implementation from donors/partners.

Tests:

Whose initiative is behind the RTA? The EU

Is there technical assistance available? If so, is it only from the other party, and is it coming as “untied” assistance? Technical assistance has been available. It comes only from the EU. It started during the negotiations period and is still ongoing.

What are the most sensitive areas? In general, political dialogue and the issue of democracy are sensitive. In the field of trade, agricultural and processed agricultural goods are sensitive.

How transparent is donor decision-making process? MEDA aid is based on the performance of the recipient countries in terms of adjusting to market reforms (which is not defined). The recipient needs are then translated in a National Strategy Paper which is discussed among the EU and the Egyptian officials and aid is benchmarked according to the issues stressed in the national Strategy paper. In many cases, priorities are not clear, and have been set according to EU discretionary decision. The problem with technical and financial assistance is that bureaucracy on both sides lowers the level of disbursement. Moreover, the mechanism of aid disbursement, whether in the form of

program or project aid, does not necessarily reflect the recipient needs. In other words, the devil is in the details. Finally, the way the assistance is administrated implies that about 60-70% returns to the EU in terms of fees of technical European experts or overhead costs for European subcontractors.

4.3. ASSESSING THE IMPACT OF EU-EGYPT INTEGRATION ON SHALLOW INTEGRATION

As noted in the institutional analysis above, the EU already offers close to free access for industrial goods to Egypt. The main exceptions are quotas on textiles and apparel, which will disappear as part of the next stage in the agreement, as will residual tariffs in the sector. This gives Egypt the possibility of some trade diversion gains at the expense of other developing countries in the post MFA world. Agriculture and food products, apart from a short positive list, remain, however, subject to MFN tariffs and non-tariff barriers. Manufactured exports to the EU may also face contingent protection.

The key next step is that Egypt moves to remove its tariff barriers against the EU. Thus, Egypt has already obtained such benefits as are available from more open access to the EU market. The impacts of shallow integration are therefore mainly the classical ones of trade creation and trade diversion on the domestic Egyptian market with the consequent pattern of gainers and losers domestically and among trading partners. The overall question whether the impact on welfare is positive or negative. What might change this would be the inclusion of agricultural liberalisation or a simultaneous liberalisation towards other countries in the region and perhaps the cumulation of rules of origin across the region both of which are under discussion but are not on the same timescale as the liberalisation of EU imports from the EU. This suggests that the EU will have a significant first mover advantage in some sectors where its competitive advantage coincides with Mediterranean countries on the Egyptian market.

4.3.1. ASSESSING THE LIBERALISATION OF THE EGYPTIAN MARKET: INFERENCES FROM THE DESCRIPTIVE STATISTICS

This section draws on the rules of thumb set out in the section on shallow integration in Chapter 3.

4.3.1.1. TARIFFS

The three main insights on tariffs from chapter 3 are

- That the higher the level of tariffs the larger the likely effects of preferential liberalisation, whether on trade diversion or trade creation.
- In the EU- Egypt agreement, the higher the average tariff is the more likely there is to be trade diversion since the more opportunity there is for the EU to have products that can take advantage of the tariff preferences and displace lower cost third country suppliers which cannot surmount the high MFN tariff.
- In the EU-Egypt agreement, the higher tariffs (or non-tariff barriers) are on important import sectors the more likely there will be trade diversion to the EU. Tariff peaks are therefore likely to lead to trade diversion

As Table 4.5 in the institutional section above shows, the average Egyptian tariff on goods was 18.4% (simple mean tariff) in 2002 (18.2% on primary products and 19.0% on manufactures). These are high levels of average tariff even by developing country standards (though lower than average Moroccan and Tunisian tariffs against the EU). The implication is that a preferential liberalisation will have significant effects on domestic consumers and producers where there is trade creation (consumption increases and domestic production falls as prices fall) and on third country suppliers where there is trade diversion with more muted effects on consumers and domestic producers depending on how far EU suppliers pass the tariff preference through to consumers.

The high level of average tariffs also increases the probability that EU access will be improved across a wide range of products where it is not the most efficient producer. Thus the inference is that there will be trade diversion as a result of preferential liberalisation in favour of the EU.

As Table 4.8 shows, not only are average tariffs high but so also are tariff peaks. There were over 700 tariff peaks (measured as more than twice the average unweighted tariff) in 1998. These offer EU producers highly privileged access against competitors facing tariffs of 40% or more. This is likely to induce trade diversion.

Table 4.8: Egyptian MFN Tariff Rates

SITC Rev. 2	1995		1997		1998	
	Simple	Weighted	Simple	Weighted	Simple	Weighted
00	32.5	5.29	20	7.36	19.17	6.44
01	30.83	5.88	25.73	5.72	28.33	29.49
02	25.15	16.61	20.83	14.75	20.27	14.25
03	12.95	5.27	15.63	5.3	22.67	5.52
04	25.72	3.38	21.8	2.22	20.34	2.47
05	45.64	6.85	29.23	11.05	30.63	8.83
06	31.75	14.66	22.95	10.42	22.27	10.33
07	34.77	25.54	26.74	30.14	25.94	30.49
08	16.33	18.39	10.42	14.55	14.69	15.57
09	37.4	19.94	28.2	16.7	29.38	15.63
11	352.5	276.68	504	284.29	13.14	4.15
12	63.33	27.9	63.33	23.68	85	85
21	5	5	5	5	17.5	17.61
22	4.25	1.03	7.6	4.84	5.92	2.82
23	8.85	9.29	8.67	9.73	8.21	7.75
24	9.87	5.01	8.1	5.02	8.96	7.76
25	5	5	5	5	5	5
26	12.79	10.05	12.02	10.16	11.85	17.16
27	15.11	21	13.04	19.56	12.97	21.09
28	6.82	5.32	5.92	4.02	4.78	3.24
29	13.73	10.52	14.09	11.07	15.51	10.72
32	7	5.05	5.8	6.2	3.5	4.35
33	15.5	12.82	15.57	12.59	14.85	13.47
34	11.25	17.44	11.25	15.98	9.17	17.47
41	22.5	35.49	21.25	18.12	19.17	18.14
42	11.09	9.55	11.27	11	11.73	11.43
43	14.63	23.77	13.13	19.4	12.22	12.44
51	10.52	9.09	10.41	9.56	10.31	9.17
52	11.92	11.42	12.19	11.82	11.86	12.16
53	18.51	17.89	17.22	17.43	17.4	17.65
54	7.23	5.49	6.64	5.16	7.08	5.94
55	44.24	32.6	31.32	27.66	30.48	29.97
56	11.11	5.17	11.15	6.88	13.08	6.11
57	27.5	25.7	30	30	31	29.7
58	13.84	10.9	13.22	10.79	12.44	8.95
59	14.13	15.33	12.89	14.2	12.68	14.24
61	35.3	35.61	27.5	29.25	25.67	27.25
62	23.11	24	22.93	22.14	22.35	24.71
63	40.13	17.67	27.7	21.05	27.52	24.92
64	32.25	19.54	25	18.26	25.13	18.4
65	45.06	32.56	39.58	29.38	39.66	37.19
66	35.78	26.67	26.37	20.83	26.47	23.12
67	18.87	18.16	17.26	20.09	16.05	15.83

68	18.53	18.47	17.24	16.75	16.63	21.71
69	30.29	33.09	23.97	24.25	23.93	26.7
71	14.63	23.72	10.11	16.51	10.02	12.78
72	7.98	16.99	6.82	8.05	6.98	8.11
73	8.31	8.86	8.76	8.24	8.48	6.83
74	15.39	15.66	11.36	14.59	11.3	13.41
75	16.67	10.31	12.19	10.27	10.58	6.79
76	39.78	13.15	20	12.32	24.42	9.69
77	27.55	31.83	15.72	24.03	18.92	19.91
78	42.14	33.74	33.97	39.82	33.36	41.57
79	15.42	10.27	13.92	9.61	9.4	7.44
81	38.78	54.54	26.28	28.39	25.11	31.5
82	61.96	55.04	36.43	29.22	36.3	35.05
83	51.11	54.62	31.15	31.3	42.77	42.99
84	65.9	64.42	38.93	37.19	32.66	30.86
85	70	70	40	40	43	43
87	6.77	5.62	6.2	5.55	6.72	5.01
88	25.44	23.27	23.15	22.93	22.62	21.84
89	34.91	27.28	24.76	19.61	23.1	21.09
94	10	10	10	10	10	10
95	31.25	24.29	15	15	23.93	17.74
97	20	20	10.5	1.1	20	20
Average Tariff	24.71	15.94	20.27	14.55	19.75	14.76
Number of Tariff Peaks	565	849	300	1311	730	1444

Source: UNCTAD Trade Analysis and Information System

Note: Tariff peaks are defined as twice the simple or weighted average tariff.

Sectors that look particularly vulnerable to increased competition from the EU among manufactures are: essential oils etc (SITC 55); leather, cork and wood, paper etc, textiles and other non-mineral manufactures (SITC 61-66); miscellaneous metal manufactures (SITC 69); telecoms equipment etc (SITC 76); road vehicles (SITC 78); buildings and fittings (SITC 81); furniture (SITC 82) travel goods (SITC 83); apparel (SITC 84); footwear (SITC 85). These all have average tariffs that are 25% or more above the average for all products and some are more than double.

4.3.1.2. TRADE PARTNERS IN THE RTA

The higher the number of trade partners the more likely there will be trade creation as the more likely the lowest cost producer in the world will be included. The

EU-Egypt agreement is bilateral. Unless and until other Mediterranean countries become part of the preferential partnership, the probability of trade creation is reduced. However, the countries in the region trade largely with the EU, and not with one another. Expansion of the RTA to include more countries may not lead to more integrated regional trade, but to increased hub-and-spoke trade with the EU with similar scope for trade diversion..

4.3.1.3. DIFFERENCES IN COMPARATIVE ADVANTAGE

In general terms the wider the differences in comparative advantage the more likely an RTA is to be welfare increasing. On the export side, Egypt already has low or no tariff access to the EU market and exports have already shifted in response. In so far as the RCA index reflects actual comparative advantage, the correlation between the EU's revealed comparative advantage with the world and Egypt's in 2003 gives some indication of the possibility of gains that might be exploited from the new stage in the EU-Egypt agreement. The correlation coefficients between EU and Egypt's RCA's at the 2 digit level (correlation coefficient of 0.18 – Table 4.9 below) is weak, which implies some potential for welfare gains from liberalisation on the import side for Egypt - especially given that Egyptian average tariffs on EU imports are high. However, given the high MNF tariffs on imports into Egypt, as already noted, the potential for trade diversion is also high.

Table 4.9: Revealed Comparative Advantage, 2003

SITC Rev. 2	Egypt – world	EU- world
00	0.3354449	0.9035723
01	0.0155952	0.9242349
02	0.2638297	1.01185
03	0.0593523	0.5869964
04	0.1987912	1.089618
05	1.53017	0.7898265
06	1.092232	0.835895
07	0.2787799	0.7712087
08	0.0038703	0.6334448
09	0.6785568	1.076058
11	10.06966	1.382013
12	0.0091703	0.9468714
21	0.492296	1.0301

22	0.2138197	0.2228707
23	0.1078509	0.545913
24	0.0079591	0.7176341
25	0.0963112	0.6473375
26	9.684275	0.8642653
27	9.632308	0.8446962
28	0.0435367	0.6221287
29	1.864111	0.974162
32	2.525741	0.1350254
33	32.22079	0.5706643
34	0.5526273	0.3248141
35		0.8831601
41	0.674261	1.120707
42	0.1014806	0.8015842
43	1.742597	0.7022544
51	0.0697805	1.120411
52	2.818922	0.8975214
53	0.0443298	1.2761
54	0.2168879	1.169556
55	1.12348	1.225501
56	4.493551	0.9829176
57		0.6665418
58	0.6281356	1.186683
59	0.3024367	1.221364
61	4.210514	1.126254
62	0.1658459	0.9539769
63	0.0353144	0.8682684
64	0.2057105	1.133552
65	1.997683	1.04978
66	3.796832	1.229836
67	1.432475	1.078787
68	1.327577	0.7804374
69	0.2549549	1.127283
71	0.1470397	1.062392
72	0.0323351	1.596009
73	0.0538359	1.425731
74	0.0718741	1.281045
75	0.0081987	0.7764422
76	0.0206065	0.9140269
77	0.0317975	1.080051
78	0.0222015	1.023817
79	0.017106	0.8393975
81	4.24252	1.060027
82	1.287675	0.9855639
83	0.1259145	1.26835
84	75.51256	0.6420602

85	0.2405491	1.017003
87	0.0146448	1.166285
88	0.0085577	1.013073
89	0.393142	1.095147
94	0.6645005	0.8513774
95	0.017561	0.939002
96		1.882723
97		0.410164

Correlation Coefficient: -0.183991532

4.3.1.4. OPPORTUNITIES FOR PARTNERS TO SUBSTITUTE IN EACH OTHERS PRODUCTION STRUCTURE

The more similar the product mix in the partner economies is the more likely there is to substitution in production and the more likely there will be trade creation. Detailed data for production structures is not readily available. We therefore use trade data as a proxy for the underlying production structure of the economy, and thus as a means of examining degrees of similarity. Three main applications of this are Herfindahl indices of concentration, Finger-Kreinin indices and trade intensity indices. These are shown in Tables 4.10, 4.11 and 4.12.

The Herfindahl indices (Table 4.10) shows Egypt diversifying its commodity structure of imports and exports between 1980 and 2003 indicated by the fall in the index from just under 0.2 to around 0.04. The 2003 level is however three times higher than the EU or the US on both imports and exports and around two or three times higher than its Mediterranean neighbours. This suggests not much overlap on trade and production structures with the EU or other potential partners in an RTA.

Table 4.10: Herfindahl Indices

Export						
Year	Egypt	EU	Morocco	Tunisia	Turkey	US
1980	-	0.007401	0.129664	0.042658	-	0.011022
1981	0.190385	0.005959	0.132335	0.041245	-	0.011785
1982	0.176351	0.006473	0.10958	0.043919	-	0.011478
1983	0.162245	0.006785	0.088603	0.041532	-	0.012185
1984	0.17604	0.006627	0.104208	0.050319	-	0.012584
1985	0.186731	0.006998	0.084761	0.050743	0.015724	0.013528
1986	0.160392	0.007783	0.064396	0.053643	0.016746	0.013005

1987	0.155078	0.008284	0.056805	0.047197	0.016916	0.01573
1988	0.122319	0.00769	0.06241	0.0439	0.016654	0.015365
1989	0.105432	0.007873	0.044665	0.039103	0.014605	0.015524
1990	0.078275	0.00827	0.039414	0.035488	0.016563	0.011273
1991	0.050875	0.008283	0.040095	0.040694	0.015924	0.011626
1992	0.04274	0.008729	0.038302	0.038938	0.01623	0.011873
1993	0.039034	0.008436	0.039186	0.039369	0.017432	0.011292
1994	0.055139	0.008693	0.041873	0.039786	0.015332	0.010895
1995	0.039561	0.009211	0.044949	0.038396	0.013988	0.010152
1996	0.034617	0.009294	0.045687	0.043723	0.013826	0.010436
1997	0.031863	0.009387	0.045742	0.0411	0.013394	0.010884
1998	0.03158	0.00859	0.033438	0.041603	0.014703	0.012105
1999	0.033165	0.010863	0.033585	0.039445	0.01426	0.012717
2000	0.037391	0.010967	0.035243	0.03614	0.014045	0.012183
2001	0.033983	0.011687	0.033004	0.035963	0.012889	0.011456
2002	0.042035	0.012524	0.032414	0.032721	0.01491	0.012269
2003	0.04214	0.013239	0.031168	0.028963	0.014957	0.011964
Import						
Year	Egypt	EU	Morocco	Tunisia	Turkey	US
1980	-	0.006335	0.017077	0.008548	-	0.01641
1981	0.019532	0.005453	0.024084	0.008081	-	0.01521
1982	0.018006	0.005715	0.01613	0.008985	-	0.018376
1983	0.014834	0.00595	0.017802	0.008605	-	0.019317
1984	0.015405	0.00568	0.025654	0.008777	-	0.018142
1985	0.016428	0.005859	0.020347	0.010298	0.010229	0.021568
1986	0.015774	0.006135	0.014987	0.01116	0.00857	0.024368
1987	0.012352	0.006335	0.012926	0.011079	0.007864	0.023387
1988	0.01192	0.006262	0.013596	0.010012	0.008735	0.019988
1989	0.016017	0.006454	0.010373	0.009828	0.00931	0.01715
1990	0.016829	0.006805	0.009985	0.011994	0.007716	0.017716
1991	0.010805	0.007166	0.008662	0.009893	0.00682	0.017531
1992	0.010417	0.007664	0.009282	0.010216	0.007079	0.01635
1993	0.011562	0.007721	0.009926	0.01099	0.008806	0.016912
1994	0.01298	0.007352	0.008272	0.011559	0.008029	0.017366
1995	0.013229	0.007632	0.009029	0.011683	0.007126	0.017346
1996	0.013814	0.008273	0.009498	0.012067	0.006795	0.016621
1997	0.01086	0.008379	0.008754	0.01197	0.007395	0.016312
1998	0.013956	0.006403	0.009117	0.012591	0.006858	0.016514
1999	0.011647	0.009787	0.009314	0.01296	0.007809	0.018322
2000	0.013323	0.009995	0.01125	0.011939	0.010878	0.017924
2001	0.015074	0.009803	0.010454	0.012529	0.010758	0.017936
2002	0.021465	0.010422	0.009901	0.012874	0.009402	0.019186
2003	0.031061	0.011264	0.010586	0.013787	0.012271	0.017401

Note: Oil products (3330, 3342, 3343, 3344, 3310, 3322, 3324 and 3326) have been dropped

Similarly, the Finger-Kreinin index is shown in Table 4.11 for Egypt and the EU . Recalling the discussion in Chapter 3, the closer the F-K index is to 1, the more identical the structure of imports or exports and the closer the F-K index is to 0, the more dissimilar is the structure of imports or exports. Thus, the F-K index for the EU and Egypt for exports between 1985 and 2003 decreases from around .4 to around .34, suggesting increasing dissimilarity and possibly the exploitation of comparative advantage. On the import side, the index increased from around .42 to around .47 suggesting increasing similarity in the pattern of imports by the EU and Egypt.

Table 4.11: Finger-Kreinin Index, EU- Egypt for Exports and Imports

	EU-Egypt Export	EU-Egypt Import
1985	0.410	0.423
1990	0.296	0.397
1995	0.346	0.485
2000	0.371	0.514
2001	0.370	0.491
2002	0.339	0.470
2003	0.344	0.469

The trade intensity indices (Tables 4.12a and 4.12b) show the degree to which the share of trade with a partner in a product is greater or than less than the share of trade in that product with the world. Ratios of more than 1 suggest that trade is more intensive with the partner than with the rest of the world.

Table 4.12a shows only 14 categories at 2-digit level where Egyptian exports intensively to the EU compared with 10 sectors where it exports intensively to the US and 46 where it exports intensively to neighbours. This suggests not much benefit from the EU trade preferences already granted, which may not be surprising given the exclusion of agriculture, food and textiles and clothing from the EU list.

Table 4.12a: Egyptian Export Intensity Indices

SITC Rev. 2	2003				
	EU	Morocco	Tunisia	Turkey	US
00	0.02	-	-	-	0.07
01	0.04	3.00	-	-	-
02	0.00	0.40	1.64	-	0.40
03	0.02	3.22	61.63	16.46	0.01
04	0.14	0.05	0.01	26.96	0.01
05	0.71	2.04	8.47	3.99	0.21
06	1.03	18.16	2.13	20.31	0.08
07	0.19	15.19	19.59	0.85	0.69
08	0.84	-	-	-	-
09	0.21	38.67	9.74	1.22	0.33
11	0.14	5.13	-	6.45	0.02
12	0.05	1.32	4.89	0.12	1.46
21	0.60	-	-	-	-
22	1.96	5.96	80.62	-	0.30
23	0.07	-	-	-	-
24	0.96	12.12	-	-	0.04
25	0.21	-	-	-	-
26	0.83	1.71	0.00	0.79	2.31
27	0.64	1.84	0.66	3.68	0.71
28	1.06	3.44	-	0.20	0.06
29	0.94	0.46	13.77	4.34	1.10
32	1.91	10.04	277.19	3.92	1.90
33	1.10	13.13	1.17	1.26	0.27
34	3.21	-	-	-	-
35	-	-	-	-	-
41	-	-	-	-	-
42	0.61	0.96	-	0.36	0.41
43	0.00	1.01	-	0.19	-
51	1.06	47.81	9.13	14.81	0.02
52	1.29	9.84	26.94	16.31	1.17
53	0.15	1.31	-	3.14	0.01
54	0.10	37.11	1.55	0.81	0.01
55	0.29	6.04	6.50	0.16	0.22
56	1.90	3.07	8.96	-	1.70
57	-	-	-	-	-
58	1.55	43.19	7.32	5.13	0.05
59	0.67	39.52	2.88	6.45	0.08
61	2.25	0.23	0.04	3.40	0.01
62	0.39	2.87	17.54	0.29	0.02

63	0.13	75.81	37.25	0.49	0.07
64	0.20	43.01	17.00	0.22	0.00
65	1.89	0.05	0.06	2.35	2.42
66	0.74	11.88	1.63	6.87	0.25
67	0.81	8.12	3.42	2.38	1.96
68	1.95	24.03	10.90	0.43	0.02
69	0.45	18.75	5.96	4.22	0.21
71	0.02	-	-	0.37	-
72	0.70	2.11	2.45	0.82	0.00
73	0.00	-	0.29	-	0.00
74	0.28	4.78	1.73	0.02	0.04
75	0.60	15.32	-	-	0.11
76	0.08	38.25	-	-	0.01
77	0.63	8.45	0.29	0.43	0.24
78	0.39	0.21	3.47	0.33	0.00
79	-	-	-	-	-
81	1.53	10.23	0.11	0.27	0.03
82	0.60	16.50	11.87	1.69	0.74
83	0.78	-	-	-	0.07
84	0.72	0.03	-	0.03	2.93
85	0.90	-	23.05	-	-
87	0.71	0.91	4.35	1.32	0.03
88	0.06	9.30	-	-	-
89	0.88	17.29	3.76	1.24	0.05
94	0.07	-	-	-	0.06
95	-	-	-	-	-
96	-	-	-	-	-
97	0.03	-	-	-	0.00

The EU exports intensively to Egypt on 33 categories at 2-digit level (Table 4.12b), which might suggest room for trade creation.

Table 4.12b also shows however, that Egypt imports intensively from the EU in 24 out of the 33 categories where the EU exports intensively to the Egypt. These overlapping sectors might suggest areas where trade creation is possible. Of these 24 sectors, however 12 are sectors where Egypt imports even more intensively from Turkey, which suggests a risk of trade diversion at Turkey's expense.

Table 4.12b: Trade Intensity Indices

SITC Rev. 2	Egypt from EU	EU to Egypt	Egypt from Turkey
00	0.45	1.18	-
01	0.01	0.01	-
02	0.61	0.76	0.85
03	2.62	1.52	-
04	0.30	0.35	0.11
05	1.28	1.03	4.41
06	0.09	0.45	1.15
07	0.31	0.26	0.61
08	0.11	0.08	19.90
09	0.99	1.35	25.48
11	0.69	1.31	-
12	0.38	0.39	0.35
21	-	0.29	-
22	0.03	0.80	-
23	1.16	1.38	-
24	1.19	1.14	0.71
25	0.99	1.14	-
26	1.85	1.78	2.58
27	0.77	1.42	5.29
28	0.52	1.14	0.68
29	0.67	0.66	1.37
32	0.40	0.22	11.72
33	1.23	1.77	0.31
34	0.04	0.01	-
35	-	-	-
41	2.75	0.39	-
42	0.09	0.05	-
43	0.53	0.35	4.75
51	0.82	1.17	6.29
52	0.88	0.52	8.57
53	0.71	1.12	5.69
54	0.92	1.07	0.54
55	0.90	1.08	6.90
56	2.57	1.64	-
57	1.43	0.73	-
58	0.61	0.94	6.72
59	1.22	1.26	38.93
61	0.22	0.85	3.71
62	0.51	0.63	4.54
63	0.21	0.39	24.55
64	0.74	0.81	0.94

65	0.26	0.52	2.12
66	1.12	1.18	5.84
67	0.48	0.96	4.20
68	0.87	1.84	1.16
69	1.09	0.98	5.77
71	1.03	1.20	1.95
72	1.06	1.08	6.74
73	1.35	1.52	15.21
74	1.08	1.02	6.06
75	1.44	1.95	45.24
76	2.28	1.54	0.49
77	2.24	1.85	6.45
78	0.51	0.58	3.94
79	1.21	1.15	0.04
81	1.02	0.96	0.66
82	0.94	1.18	5.36
83	0.22	0.32	0.00
84	1.55	0.48	0.05
85	0.38	0.45	1.51
87	1.59	1.43	5.81
88	0.80	1.18	27.44
89	1.10	1.08	4.46
94	0.00	0.03	-
95	0.27	0.04	-
96	-	-	-
97	-	11.66	-

Overall, this section does not give strong grounds to expect very significant substitution in Egyptian production and hence trade creation from liberalising preferentially to the EU.

4.3.1.5. DEGREE OF TRADE WITH PARTNER(S)

The higher the share of trade with partners the more likely a preferential agreement is to be welfare enhancing. If trade is flourishing at MFN tariffs the partners are likely to be efficient suppliers to each other and hence tariff reductions are more likely to lead to trade creation.

The EU is both Egypt's largest source of imports and destination for exports. After peaking at 48% of Egypt's exports in 1980 (after the break with the USSR) and 47% of Egypt's imports in 1985, the EU's share has fallen to 32% and 25% of total exports and imports respectively by 2003. Adding in trade with neighbours round the Mediterranean adds 10% to export shares but only 4½% to import shares in 2003. So, on the basis of existing levels of trade flows, expanding coverage of any FTA to the region would indicate little trade creation, however any regional agreement could of course result in the greater promotion of regional trade, hence resulting in more trade creation (as well as trade diversion).

Since only imports from the EU are being liberalised and these are on a downward trend this suggests that the EU is losing competitiveness on the Egyptian market and hence that a preferential liberalisation is unlikely to be trade creating.

4.3.2. THE IMPORTANCE OF TRADE

The lower trade is as a share of GDP (normalised for population and level of development) the greater the expected benefits from any liberalisation that increases trade volume. Egypt has a trade (imports+ exports of goods and services divided by 2) share in GDP of 29% in 2003. This compares with 30% for Morocco and 45% for Tunisia and Turkey in the same year. As a country with a low income per head and a relatively undiversified production and trade structure, trade might be expected to be higher even though population is high. In fact as the falling Finger-Kreinin index indicates (Table 4.11), commodity diversity of imports and exports has increased significantly since 1985, as has the range of suppliers. And there are significant values of trade in all 2-digit sectors.

4.3.3. MULTI-COUNTRY CGE ANALYSIS OF SHALLOW INTEGRATION

4.3.3.1. BACKGROUND

A survey of over 100 computable general equilibrium (CGE) model studies of RTAs established in the last 15 or so years by Robinson and Thierfelder (2003) found overwhelming evidence that trade creation dominates trade diversion. Broadly speaking, the studies were of RTA's facilitating shallow integration arising from the removal of barriers to trade in commodities. Changes in trade barriers affecting services were usually outside of the RTA's studied or outside the analyses with CGE models considered. In Egypt, several authors have used CGE models for the analysis of Egypt's regional trading relationships using static and dynamic, single and multi-country models of MENA countries, but not including specific modelling of Egypt's major trading partners such as the USA and the EU. This rich Egyptian literature has been surveyed recently by El-Said (2005). The findings of the static CGE models on Egypt's regional trading relations in the 1990s do not always support the general finding of Robinson and Thierfelder, that for shallow integration, trade creation dominates trade diversion. For example, Hoekman and Konan (1998) find that shallow integration under the EU-Egypt Agreement produces net trade diversion with welfare effects are negative. Hoekman and Konan also extended the analysis of shallow integration to include deep integration where trade barriers in services are removed and efficiency benefits of liberalisation of domestic and foreign capital in services are considered (see also Konan and Kim (2004)).

Compared with the welfare benefits of shallow integration for goods trade, these studies show an estimated benefit from deep integration of well over 10% of GDP. The economic mechanism that produces this very large result are the high estimated initial barriers to trade in services and liberalisation of both domestic and foreign investment in services that has large efficiency effects without any net new foreign investment. It is difficult to tell how plausible the findings on services liberalisation are without stronger micro empirical evidence. The estimated efficiency gains to services from the removal of

barriers to services trade are highly speculative and the suggested benefits from liberalisation of domestic and foreign investment without new capital inflows seems somewhat high.

4.3.3.2. MENA CGE MODEL

Our own recent research on MENA countries explored the impact of trade liberalisation in the context of trade induced technical change. This research was part of a larger research project reported in Gasiorek, Augier, Evans and Robinson (2005). An overview of the MENA CGE model can be found in Evans, Gasiorek, McDonald and Robinson (2006).⁶⁷ The Cariforum_EPA CGE model reported in the Caribbean case study in chapter 5 is based on the same family of CGE models.

Since the Barcelona Declaration of 1995, the EU and the countries of the Southern Mediterranean have been engaged in a more active process of integration and trade liberalisation. Whereas prior to 1995 the relationship was primarily asymmetric, the Barcelona process envisaged trade relations becoming both more symmetric as well as deeper than heretofore. Our research:

- explored the relationship between productivity and trade liberalisation by looking at data over time using firm level data for Morocco over the 1990-2002 time period, and on sectoral level data for Egypt over the 1983-1994 time period.
- examined trade and productivity linkages for more detailed firm level data set for Morocco for the years 1997-1998.
- used the econometrically estimated linkages between changes in shares of output traded and productivity in a comparative static CGE model including Morocco and Egypt in a model of the MENA region in the world economy specified for medium to longer run applications. This facilitated estimates of the impact of changes in tariffs and trade-induced technical change on from FTA's with the EU. In the case of Morocco, a direct estimate of poverty impacts was also possible.

⁶⁷. See Gasiorek, Michael, Patricia Augier, David Evans and Sherman Robinson, *Analysis of the Effective Economic Impact of Tariff Dismantling (under the Euro-Med Association Agreements) – Middle East*, Contract no. CNTR 04 5801 Final Report: Report prepared for DFID by the University of Sussex and CEFII and Evans, D., M. Gasiorek, S. McDonald and S. Robinson, 2006, "Trade Liberalisation with Trade Induced Technical Change in Morocco and Egypt", paper presented to the Middle East Economic Association Conference, January 6-8 2006 Boston Massachusetts, USA.

- The choice of a comparative static CGE model facilitated exploration of potential “brakes” to the realisation of the benefits of trade induced technical change such as trade diversion. This study drew attention to such potential negative effects on the benefits of trade induced technical change but was not designed to study those effects or counteracting policy changes in detail.

The multi-region CGE model included Egypt, Morocco and the EU. The MENA model is based on the global CGE model described in McDonald, Robinson and Thierfelder (2005) and uses the GTAP v6 dataset for 2001. The model has ten regions and thirteen commodities. The model for Egypt is in fact based on the aggregate region “Other North Africa” in the GTAPv6 dataset made up of Egypt, Libya and Algeria of which 60% of the aggregate region is Egypt in terms of GDP.⁶⁸ A comparison of the trade shares with Egypt proper and the EU and our “Egypt” suggest that the aggregate shares of exports to the EU and imports from the EU into “Egypt” are over-stated, especially on the export side. (Compare Evans et al (2006, Table 2.3a and 2.3b) with EU-Egypt trade shares discussed in section 4.3.1.5). Also, the average tariffs in our “Egypt” somewhat over state the height of tariffs in Egypt as shown in Table 4.8. Thus, on account of error in trade shares and height of tariff, our “Egypt” CGE model will tend to over-state the benefits of the EU-Egypt agreement and understate any resultant trade diversion.⁶⁹

The central findings drawn on here concern the over all welfare gains for Egypt and Morocco from the FTAs with the EU. These gains were driven by:

- lower tariffs on the MENA import side
- the estimated trade induced technical change linkages
- alternative labour market assumptions
- the impact of stylised “deep integration”.

⁶⁸ It is our understanding that data for Egypt proper is under preparation for the GTAP dataset at the time of writing .

⁶⁹ The application of tariff changes the EU-Egypt agreement on manufactured imports into Egypt began in June 2004. MFN tariff changes under the auspices of the WTO began in September 2004, with a heavy emphasis on cuts in tariffs on intermediate inputs and much lower reduction of tariffs on textiles and cars. The analysis of the interaction between the time-phasing of the EU-Egypt manufacturing tariff reductions and the MFN tariff reductions would require separate and detailed analysis.

- The model contains certain conditions that must be satisfied – government account balance, external balance, factor market balance and savings-investment equality. These closure rules represent important assumptions on the way institutions operate in the economy and can substantively influence model results.
- Land, Skilled Labour, Capital, and Natural Resources are assumed to be perfectly mobile across sectors and fully employed; hence these factor markets are treated as competitive, producing market-clearing wage and rental rates. This is also the case for Unskilled labour in the first experiment, but thereafter the wage rates for unskilled labour are fixed at institutionally determined rates, and the market is cleared from a pool of unemployed or underemployed unskilled labour. In 2000-2002 total unemployment in Morocco was estimated at 12% of the total labour force while for Egypt total unemployment was 9%.⁷⁰ With about 70% of wage payments going to unskilled workers in both economies, this implies that unemployment amongst unskilled labour is around 16% in Morocco and 12% in Egypt. Hence the assumption of underemployed Unskilled labour appears reasonable.
- Exchange rates are assumed to flexible for all regions with the external balance cleared with fixed real balances on the current account.
- The savings-investment account is cleared by fixing the (value) share of investment in domestic final demand and allowing the savings rates for the households to adjust to clear the account. There is an interaction with the government and external accounts since both these accounts contribute to savings within a region.
- Trade liberalisation will cause reductions in tariff revenues. In this study these are replaced by equiproportionate increases in factor use taxes for all factors except unskilled labour, which faces no factor use tax. Tariff reform will change commodity prices, with complex indirect impacts on income distribution, but the replacement tax on factors will have a direct, pro-poor impact, since unskilled workers are relatively poor.

The closure rules adopted are summarised in the upper and the details of the seven experiments are summarised in the lower part of Table 4.13 below

⁷⁰ World Bank, *World Development Indicators*, Table 2.4

Table 4.13: MENA Model Experiments

All experiments have :							
Exogenous: foreign savings, investment, government expenditure, government savings							
Lost tariff revenue replaced with factor tax except on unskilled labour							
Tariff cuts: FTA with EU_15							
Details of differentiated experiments:							
Experiments	1	2	3	4	5	6	7
Factor markets							
Unskilled labour	neoclassical	wage fixed	wage fixed	wage fixed	wage fixed	wage fixed	wage fixed
other	neoclassical	neoclassical	neoclassical	neoclassical	neoclassical	neoclassical	neoclassical
TFP response elasticity							
import competing							
Food products	0	0	0	0.4	0.4	0.4	0.4
Textiles	0	0	0	0.4	0.4	0.4	0.4
Other manufacturing	0	0	0	0.4	0.4	0.4	0.4
Heavy manufacturing	0	0	0	0.4	0.4	0.4	0.4
Export							
Food products	0	0	0.07	0.07	0.4	1	0.4
Textiles	0	0	0.07	0.07	0.4	1	0.4
Other manufacturing	0	0	0.1	0.1	0.4	1	0.4
Heavy manufacturing	0	0	0.07	0.07	0.4	1	0.4
Deep integration	none	none	none	none	none	none	see below
EU15 imp. elasticities							
Food products	5	5	5	5	5	5	7.5
Textiles	5	5	5	5	5	5	7.5
Other manufacturing	5	5	5	5	5	5	7.5
MENA export elasticities							
Food products	2	2	2	2	2	2	2.5
Textiles	2	2	2	2	2	2	2.5
Other manuf.	2	2	2	2	2	2	2.5

The experiments have three key differentiating features.

- Experiment 1 is the standard neo-classical closure of factor markets.
- Experiment 2, and then all the other experiments have a fixed wage for unskilled labour so that the level of employment of unskilled labour can vary. Given the significant levels of unemployment in the MENA countries in the base year of over 10%, this specification aims to capture an important structural characteristic of both countries.
- Trade induced technical change is included in Experiments 3-7 starting from lower bound and an upper bound estimate in Experiment 6.
- Stylised deep integration is included in Experiment 7.

The results for Morocco and Egypt are shown in Tables 4.14 and 4.15 below. The results for both countries are included because the contrast between the two cases is of relevance to the Egypt case study. All results are shown as % changes over base levels.

Table 4.14: Experiment Results for Morocco

	Base	M1	M2	M3	M4	M5	M6	M7
	2001	%	%	%	%	%	%	%
Exports	1.15	11.90	14.01	14.36	16.41	18.93	23.81	24.13
Imports	1.44	11.42	13.33	13.64	15.48	17.80	22.27	22.74
GDP expenditure	3.17	-0.54	1.05	1.34	2.61	3.45	4.79	4.18
Absorption	3.46	0.29	1.85	2.12	3.37	4.26	5.72	5.26
Change in:								
GDP/Absorption	0.00	-0.50	0.97	1.23	2.39	3.16	4.39	3.84
(M-E)/Absorption	0.00	0.79	0.88	0.89	0.98	1.10	1.33	1.42
Total Absorption	0.00	0.29	1.85	2.12	3.37	4.26	5.72	5.26
E+M for Morocco								
Global	-	12.15	14.46	14.79	16.77	19.21	23.93	24.28
FTA	-	34.34	36.98	37.32	39.75	43.50	50.95	51.18
ROW	-	-19.84	-19.66	-19.33	-18.05	-17.58	-17.02	-16.49
Real Exchange Rate	1.00	3.91	3.73	3.66	3.12	-0.21	1.99	1.60
Disposable factor income								
Land	0.06	4.68	5.78	6.10	7.65	8.51	9.95	9.62
UnSkld	1.31	2.55	3.77	3.98	5.04	5.94	7.47	6.95
SkLab	0.45	-1.48	0.37	0.73	2.28	3.24	4.70	4.23
Capital	0.86	-0.55	1.39	1.69	3.06	4.01	5.57	5.07
NatRes	0.02	-8.00	-6.57	-6.26	-5.81	-8.11	-12.71	-8.90
% Change Headcount poverty	19.04	-5.99	-10.29	-11.13	-13.29	-14.71	-17.44	-16.44
Elasticity poverty wrt income	0.00	-0.77	-0.65	-0.63	-0.46	-0.40	-0.34	-0.35
TFP								
Food	2.43	0.00	0.00	2.51	14.88	20.60	29.75	29.39
Textiles	2.37	0.00	0.00	0.25	2.24	6.02	13.61	7.89
Other Manuf	2.23	0.00	0.00	1.54	6.00	7.38	7.60	10.45
Heavy Manuf	2.10	0.0	0.0	0.5	2.9	3.0	2.1	3.0

Notes:

Column 1 is the base value. Experiment columns are percent change from base, except headcount poverty, which is the percentage point change from the base values.

Financial variables are in \$US billions for 2001.

The “elasticity of poverty wrt income” is the change in headcount poverty divided by the change in total household disposable income.

The upper panel of Table 4.14 details the results for Morocco for exports, imports, GDP, absorption, household expenditure and real exchange rate. By choice of import and export substitution elasticities affecting the regional composition of trade, the international terms of trade hardly change in each experiment (the small country assumption holds) and are not reported. The middle panel shows impacts on factor incomes, headcount poverty, and the elasticity of the change in the headcount poverty rate with respect to percent change in total household income. Finally the bottom panel of

the table shows the trade-induced changes in TFP generated by the experiments. In summary the key findings are:

Experiment M1: The Morocco-EU FTA has a strong effect on total exports and imports and leads to a depreciation of the real exchange rate of nearly 4%. Real GDP measured in base-year prices falls slightly, largely as a result of the small adverse international terms of trade effect (not shown). A measure of the over-all welfare benefits of the Morocco-EU FTA when there is no change in foreign savings is given by the change in absorption, which equals GDP plus imports minus exports. There is a small increase in absorption (0.3%), which is due to the improvement in the real trade balance (real imports minus real exports).

Since over half of Morocco's imports of manufactures are included in the FTA, one would expect significant trade diversion to occur. Within-FTA trade expands by 34%, while trade with the rest of the world (ROW) declines by 20%. There is, however, a net increase in total trade for Morocco of 12%, so the FTA is net trade expanding. It is important to note that net trade expansion does not measure net trade creation. The cost of trade diversion is included within real imports less real exports and is not netted out.

The changes in the structure of production leads to an increase in the demand for unskilled labour, with a resulting increase in the unskilled wage of 2.55%, and an increase in returns to agricultural land. While there is a slight decline in the skilled wage, the net impact is pro-poor. The poverty head count falls by 6%.

Experiment M2: Experiment M2 repeats Experiment M1, except unskilled wages are fixed and unskilled employment can increase or decrease, depending on labour demand.

As in Experiment M1, there is a substantial increase in overall trade, but now unskilled employment increases (by 3.8%) and GDP increases (by 1.1%). The result is a larger increase in aggregate absorption than in Experiment M1 (1.9 % compared to 0.3%).

The changes production structure and increase in GDP lead to increases in all factor returns except for Natural Resources, with land and unskilled labour gaining the

most. The result is a significantly larger reduction in head count poverty by just over 10%.

Experiment M3: Here we now allow for trade-induced productivity changes linked to changes in manufacturing exports, but not linked to changes in imports. With these trade-linked technical changes, the competitiveness of Moroccan industry increases by more than in the preceding experiment. The pattern of changes is overall similar to that in earlier experiments, but the GDP response is larger. Compared with Experiment M2, there is a small increase in employment of unskilled labour. There is a larger increase in exports and imports, a slightly smaller change in the exchange rate (in order to maintain external balance). The rise in aggregate absorption is also larger, due entirely to the increase in GDP.

This experiment reduces headcount poverty, but only slightly compared to Experiment M2. The productivity gains are shared across all factors, and the increase in employment of unskilled labour is small. With the fixed wage, the small increase in employment does not suffice to generate much more poverty reduction.

Experiments M4 to M7: These experiments explore the impact of varying assumptions about the links between increased trade and productivity. Experiment M6 is the most dramatic, yielding very large productivity increases, especially in food and textiles. The results are generally larger increases in trade, GDP, employment, and absorption. The employment effects lead to dramatic decreases in head count poverty, with Experiment M6 yielding a decrease of 17.4% — the most optimistic result in all the experiments.

Experiment M7 repeats Experiment 5, but adds assumed results from elements of deep integration. The EU-Morocco FTA is assumed to lead to easier trade penetration in both directions, with increases in the trade substitution elasticities in Morocco between domestic and traded goods (both imports and exports).

Compared to Experiment M5, the results are dramatic. Trade increases a lot (exports increase 24% compared to 19% in Experiment M5). Employment, GDP, and absorption all increase by about a percentage point more than in Experiment M5, and head count poverty falls by about 1.5 percentage points more.

The results from the deep integration experiment are only slightly less beneficial than those from the optimistic trade-productivity link Experiment M6. These results emphasize the potential importance of achieving deep integration, which are also likely to be associated with increased trade-productivity links. There may well be a virtuous synergy between trade liberalisation, deep integration, and trade-productivity links. While these experiments do not explore such causal links, they do indicate that, if present, their impact would be large.

In order to facilitate comparison across the results, we ran exactly the same sequence of experiments for our “Egypt”, and the results are given in Table 4.15.

Table 4.15. Experiment Results for Egypt

	Base	E1	E2	E3	E4	E5	E6	E7
	2001	%	%	%	%	%	%	%
Exports	3.82	5.42	4.99	5.08	5.63	6.15	8.08	7.07
Imports	4.68	1.45	1.09	1.16	1.57	1.99	3.52	2.86
GDP expenditure	17.47	-0.20	-0.94	-0.74	-0.01	0.89	3.45	1.32
Absorption	18.34	-0.95	-1.66	-1.47	-0.78	0.07	2.50	0.52
Change in: GDP/Absorption	-	-0.19	-0.90	-0.71	-0.01	0.85	3.28	1.26
(M-E)/Absorption	-	-0.76	-0.76	-0.76	-0.77	-0.77	-0.79	-0.74
Total Absorption	-	-0.95	-1.66	-1.47	-0.78	0.07	2.50	0.52
E+M for Egypt								
Global	3.85	5.17	4.76	4.84	5.39	5.88	7.73	6.75
FTA	7.55	28.35	27.98	28.02	28.35	28.67	29.97	29.63
ROW	3.70	-18.99	-19.33	-19.20	-18.54	-17.77	-15.44	-17.09
Real Exchange Rate	0.00	6.57	6.15	6.20	6.13	6.33	6.35	6.32
Disposable factor income								
Land	0.00	-0.77	-1.20	-0.90	-0.04	1.33	4.99	2.02
UnSkld	0.00	-1.62	-2.11	-1.90	-1.06	-0.10	2.65	0.42
SkLab	0.00	-2.87	-3.60	-3.35	-2.41	-1.30	1.82	-0.73
Capital	0.00	-1.93	-2.83	-2.62	-1.73	-0.74	2.08	-0.21
NatRes	0.00	16.41	15.00	15.10	14.24	14.48	13.26	14.11
TFP								
Food	0.00	0.00	0.00	1.93	1.19	10.22	33.52	12.06
Textiles	0.00	0.00	0.00	0.94	11.89	17.85	44.14	23.44
Other Manuf	0.00	0.00	0.00	1.10	3.13	6.61	16.41	8.39
Heavy Manuf	0.00	0.00	0.00	0.19	0.77	1.63	2.76	1.64

Note: Financial variables are in \$US billions for 2001.

The results are significantly different. The differences in the results stem largely from the differences in the underlying trade patterns of the Morocco and our “Egypt” economies and the initial height of tariff protection. In particular, the EU is a much more important trading partner for Morocco than for our “Egypt”. Once the findings for our “Egypt” have been discussed, an assessment of the bias introduced by the differences in the trade patterns and tariff rates between “Egypt” and the real Egypt will be made.

From the top panel of Table 4.15, import liberalisation leads to much smaller net changes in trade flows across all the experiments, with exports and imports increasing between 4% and 8%, about a third of the values for Morocco. Given the high initial protection rates in Egypt, the EU-Egypt FTA causes much more trade diversion than in the case of Morocco. The net impact on welfare is negative, with declines in GDP and absorption for the first four experiments. In the cases where the unskilled wage is fixed, the result is a decline in employment, compared to increases in Morocco. Only in

Experiments E5, E6, and E7 do the increases in trade-induced productivity serve to offset the impact of trade diversion, leading to increases in GDP. Employment only increases in Experiments E6 and E7, the most optimistic scenarios in the series. Compared with the real Egypt, our “Egypt” calculations overstate the impact of the EU-Egypt Agreement on account of the overstated trade shares with the EU and overstate the potential welfare cost of trade diversion because of the overstatement of the height of tariffs. However, in broad terms, the EU-“Egypt” results provide a basis for a preliminary assessment of the relative size of impacts on welfare of the experiments E1 to E7.

The results for both Morocco and Egypt on trade diversion are worst-case; because we have only taken into account long-run tariff changes for EU-Morocco and EU-Egypt which aim to reduce import tariffs to zero, by 2016 in the case of Egypt. We have not taken into account actual or potential changes in MFN tariffs under the auspices of the WTO or any terminal MFN tariff that might be negotiated in the future. In a similar calculation for Egypt, Hoekman and Konan (1998, Table 3 column (1)) also find a small negative welfare impact (- 0.14% of GDP) arising from the trade diversion from the Egypt-EU agreement.

To explore the impact of trade diversion further, we also ran experiments where we combined the EU-Egypt FTA with wider trade liberalisation in Egypt, lowering tariffs against all countries. The results are dramatically different. In this case, the unilateral liberalisation coupled with the EU FTA for “Egypt” leads to much greater increases in trade and the welfare gains are over 2% in the neoclassical case without TFP change. A similar experiment for Morocco yielded a welfare gain of nearly 3%, illustrating the larger initial trade links between Morocco and the EU compared with Egypt and the greater opportunities to expand exports to the EU. These results underscore the importance for both Egypt and Morocco of accompanying an EU FTA with broader trade liberalisation. For Egypt such broader trade liberalisation, a process taking place under the auspices of the WTO, appears to be driven by considerations relating to the speed of reduction of tariffs on sensitive industries, considerations already present in the differential rates of reduction of tariffs under the Egypt-EU Agreement, rather than economic efficiency ie removing trade diversion. The net effect of the EU-FTA agreement and the WTO tariff cuts on trade diversion including transitional effects

requires further study which will be greatly facilitated by the inclusion of Egypt proper in the GTAP dataset by May this year.

In conclusion, the findings of the MENA CGE model of the MENA-EU FTAs are of interest for several reasons:

- Looking only at tariffs, shallow integration of Morocco into an EU-Morocco FTA leads to small gains for Morocco, but significant reductions in poverty.
- Applying econometrically estimated elasticities to trade-linked technical change makes the FTA much more beneficial. Sensitivity analysis concerning the nature and size of the trade-productivity links indicates that there are great potential gains from an EU-Morocco FTA.
- Further increased benefits to a Morocco-EU FTA could be achieved by deep integration involving removal of non-tariff barriers and by improving the quality and standards of domestic goods for potential export sales.
- The impact of a EU-Egypt FTA is less favourable than for Morocco, given Egypt's high initial levels of import protection and consequent strong trade diversion. Only with trade induced productivity change and elements of deep integration are the gains for a FTA with the EU positive. If Egypt liberalises tariffs on import from all sources, the gains are highly favourable but less that for Morocco.

The overall conclusions are that when initial general protection levels are high, an RTA that only achieves lowering of border barriers to trade (shallow integration) leads to trade diversion and a loss of aggregate welfare. Where the RTA partner is initially a major trading partner, and general protection levels are moderate, trade diversion are weaker and the RTA is beneficial. With trade-productivity links and benefits from deep integration, gains from trade creation are magnified, including distributional improvements and reduction in poverty in the case of Morocco. For Egypt, only with high estimates of TFP change and deep integration measures are the negative welfare effects of trade diversion offset. There is a need for further research into these links to refine the econometric estimates of TFP change, and at the micro and economy wide level to decompose the sources of welfare change into trade creation/diversion effects, terms of trade effects and productivity effects.

The strong policy conclusions of the analysis of the MENA-EU FTAs are:

- Shallow integration with the EU in Morocco and Egypt risks either lower welfare gains or significant welfare loss through trade diversion. Current WTO MFN

tariff reductions for Egypt need to be assessed for the extent that they reduce trade diversion arising from the EU-Egypt agreement.

- Deep integration measures such as encouraging trade induced TFP change and improved quality and standards for exports have strong positive welfare benefits.
- Where poverty effects could be measured, the combined effects of the Morocco FTA with the EU had strong poverty reducing benefits, in contrast with Egypt where overall welfare improvement and improved factor income distribution only came with powerful deep integration measures.

4.3.4. OVERVIEW ON SHALLOW INTEGRATION

Overall the statistics described here suggest that trade creation is not the most likely outcome of a preferential opening of the Egyptian to the EU. However, the CGE model results do suggest RTA scenarios where net trade creation is significant, although there is trade diversion. An opening to a wider group, including but going beyond the Agadir Agreement countries (Turkey should be added at a minimum), might help reduce potential trade diversion losses. A hub-and-spoke model, with the EU acting as the hub, is not in the best interests of the countries in the region. Both the statistical and model analysis indicate that the increased access for Egyptian goods to the European market will have less impact on Egypt than opening its more protected markets to imports from the EU. Given the high level of Egyptian protection, such partial liberalisation will have potential trade diversion losses at home. Cumulation of Rules of Origin with the Agadir Agreement countries will help increase access and integration into Euro-Med supply chains and hence exports and possibly technology transfer. More important by far would be EU liberalisation beyond the current positive list for agriculture and food products.

4.4. DEEP INTEGRATION

In the discussion above and in Chapters 2 and 3 we developed the notion of “deep integration” and how this was linked to “Smithian” gains from specialisation. In developing our institutional framework we argue that it is important to examine the contribution that a proposed RTA can make to help firms to specialise in very specific product niches, or parts of the production chain, in order to obtain the economies of scale from the division of labour and “learning-by-doing”, that Adam Smith and others have stressed. “Deep integration” is something that involves both policy cooperation to create a genuinely common economic space, with common rules of the game, and also the steps firms themselves take in the market place.

In the earlier section of this Chapter we looked at the extent to which the EU-Egypt FTA was likely to have an effect on deep integration from a policy perspective and in section 4.4 we look at what the market is already doing. The two most obvious manifestations of deep integration that show up in the marketplace are, firstly, foreign direct investment by EU firms linked to supplying the EU market, and, secondly, the development of specialisation by Egyptian firms in finely distinct product or production process niches. The notion of “intra-industry” (IIT) trade captures the second effect reasonably well. We examine whether in trade between the EU and Egypt we find simultaneous exports and imports of goods falling into the same statistical category. The higher is this Egyptian intra-industry trade, the more Egyptian firms are specialising in very specific products (shoes of a particular style, cotton apparel of certain types etc) or in particular production processes, (making one set of parts only, or assembly of components made elsewhere). We surmise that both these kinds of specialisation generate scope for long term contracts, and both intra-firm learning and transfer of know-how between specialised buyers and producers.

We therefore proceed to examine what kind of FDI enters Egypt and what IIT there is. We illustrate the potential significance of this with the case of new potatoes, where Egypt has a product niche, specialises in one part of the production chain (it imports seed potatoes), and where the harmonisation of water quality standards is an issue.

4.4.1 FDI

Up-to-date data on FDI in Egypt, especially by sector is hard to find. There were some studies in the late 1990s and early 2000's that do suggest some tentative conclusions however.⁷¹

Egypt has a share of inward investment slightly below the developing world in general. UNCTAD WIR 2004 estimates that the FDI stock was equal to 26.2% of GDP in 2003 as compared to 31.4% for “developing economies” as a whole⁷². Data suggests however that Egypt's share of inward FDI in the Mediterranean region has been falling since the mid 1980s.⁷³ This FDI appears to be differently distributed than is the case in other developing economies. Studies by the London Business School suggest that whilst the EU is the major source of inward investment, Egypt is also characterised by a large inflow of investment from the middle eastern region, some of it in small businesses⁷⁴. The Central Bank reports regularly on Foreign investment by country. Its data suggest that in 2002/3 The EU accounted for \$584m of \$892m (USA \$277m).⁷⁵

Sources differ as to the sectoral composition. Sullivan suggests, “Most of Egypt's FDI stock is to be found in petroleum and natural gas joint ventures with the Egyptian General Petroleum Corporation (EGPC).”⁷⁶ However, the LBS study and a 1999 UNCTAD survey estimated that services and manufacturing are the main sectors involved. The LBS study compares motives for investment in Egypt, India, South Africa and Vietnam. The basic conclusion is that investment in Egypt is “market seeking”. The main asset reported by firms is their brand. “Brands are seen as the most important resource for success by foreign affiliates in Egypt, India and South Africa.”⁷⁷ p.27. It is

⁷¹ For an earlier study see A.A.Mahboub Foreign Direct Investment in Egypt How to encourage and maximize the benefits, <http://www.iceg.org/NE/projects/policypapers/investment.pdf>

⁷² UNCTAD WIR 2004 Annexe Table .6 .

⁷³ See Alessandrini, Sergio (2000) "[FDI in the Mena Region](#)" Paper prepared for presentation at the third Mediterranean Development Forum, Cairo, 5-8 March 2000 esp Table 18.

http://www.aucegypt.edu/src/globalization/referencesA_M.htm

⁷⁴ See below

⁷⁵ see <http://www.cbe.org.eg/public>.

⁷⁶ Paul Sullivan, “Globalization: Trade And Investment In Egypt, Jordan And Syria Since 1980” , Arab studies Quarterly, Summer 1999 .(http://www.findarticles.com/p/articles/mi_m2501/is_3_21/ai_57476491)

⁷⁷ Foreign Direct Investment in Egypt, India, South Africa and Vietnam: Comparative Empirical Results Saul Estrin and Klaus E. Meyer p.27, www.london.edu/assets/documents/PDF/empirical_results.pdf

the local market that is primarily targeted. The authors note that levels of exports from foreign firms in Egypt at 26% of sales in 2000 is significantly lower than is the case for their sample of firms in Vietnam (50%) and India (37%) though comparable to South Africa (25%).

A 1999 UNCTAD study concludes there has as yet been very little of the FDI-Intra-Industry and intra firm deep integration linkages that occur in other trade relationships:

“An inter-industry trade index⁷⁸ has been calculated to estimate Egypt’s degree of industrial specialization. The index is low:0.17 in 1992-1994, compared to 0.89 for the European Union and 0.58 for Israel, 0.30 for Tunisia and an average of 0.25 for 13 Arab countries. However, the index is rising fairly rapidly: it was 0.10 in 1984-1986, compared to 0.88 for the European Union, 0.47 for Israel, and an average of 0.16 for the 13 Arab countries. Thus, while Egypt’s inter-industry trade is still limited, there appears to be potential for expanding trade and investment linkages (as the index is low but rising rapidly)”⁷⁹

This study refers mainly to Havrylyshyn, Oleh and Peter Kunzel (1997), “Intra-Industry Trade of Arab Countries: An Indicator of Potential Competitiveness, IMF Working Paper No. WP/97/47. UNCTAD summarises their findings:

“While current FDI inflows have met the objectives of job creation and output expansion, most industrial projects have so far failed to boost exports. One reason stems from limited involvement by TNCs in manufacturing sectors with export potential such as food, garments and electronics. The lack of FDI in such sectors also suggests the difficulty of achieving good supply chain management when Egypt is part of the international value chain.”⁸⁰

On the reasons for the relatively low level of investment integration in Egypt the LBS authors comment:

“Good governance and transparent and efficient institutions are key issues to promote and encourage investment. The 1990s in Egypt marked tremendous government efforts to orient economic policies towards an open free market. However, this positive record has been slowed by a lack of institutional reforms. One important reason why Egypt has been slow to achieve its economic

⁷⁸ This would appear to be a typo!

⁷⁹ UNCTAD Investment Policy Review Egypt p. 19

<http://www.unctad.org/Templates/webflyer.asp?docid=155&intItemID=1773&lang=1>

⁸⁰ summary at <http://www.unctad.org/Templates/webflyer.asp?docid=155&intItemID=1773&lang=>

objectives is due to the cumbersome and ineffective character of the structural and institutional systems”⁸¹.

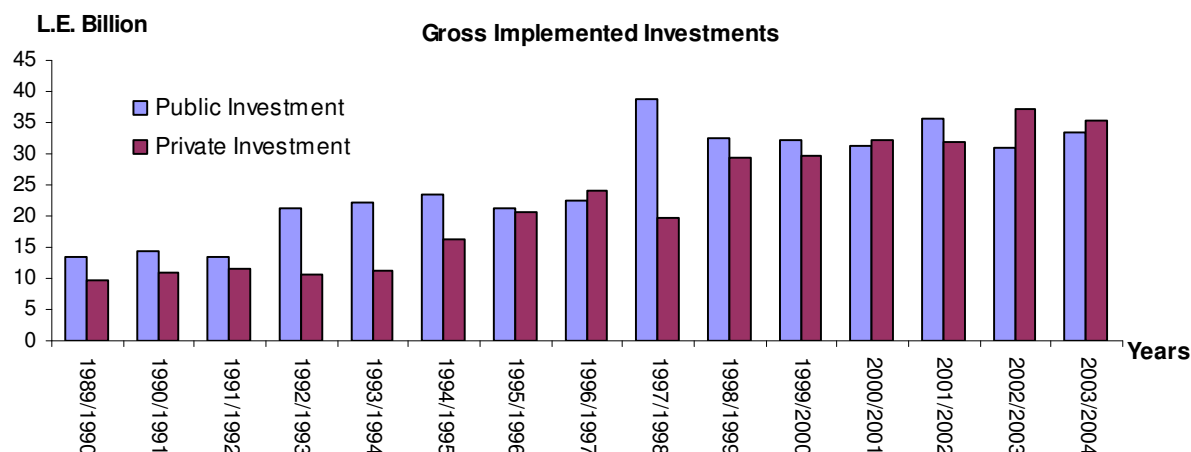
We can only speculate if deep integration policies can assist. The evaluation we have made of the Agreement suggests that there is as yet little to expect from its direct effects.

In 1952, the private sector had the largest share of investment, 76% of the total. By 1960, the situation changed completely, and the public sector handled 94% of total investment where it has attained a dominant position till the early 1970s. In 1971, the first Law introduced to enhance private investment (Law 65 of 1971) identified certain fields of investment and offered foreign investors in those domains generous benefits. Such sectors included tourism, banking, agriculture and several industrial activities (Abdel Hamid and Bahaeddin, 2003). The year 1974 witnessed the start of the “Open Door” policy (Infetah), where many laws and regulations were incorporated to encourage the private sector. The most important was Law 43 of 1974 and its amending Law 32 of 1977. It is worth mentioning that at the time, the public sector was undertaking almost 90% of total investment. By the end of the period from 1974 - 1983, the public sector was responsible for 81% of total investment, while the private sector share increased to 19%. By 1990, the public sector’s share was 68% against 32% for the private sector, although of a much higher total (Carana, 2002, IMF, 1998).

The percentage public share in implemented investment decreased by one percentage point between 1991/1992 (54%) and 2001/2002 (53%) (see Figure 1). A privatization programme began in 1991.

⁸¹ Foreign Direct Investment in Egypt by Maryse Louis, Alia El Mahdy and Heba Handoussa.
www.london.edu/assets/documents/PDF/drc01_egypt.pdf

Figure 4.2: Gross Implemented Investments (1991-2003)



Source: Central Bank of Egypt (2004)– Annual Time Series

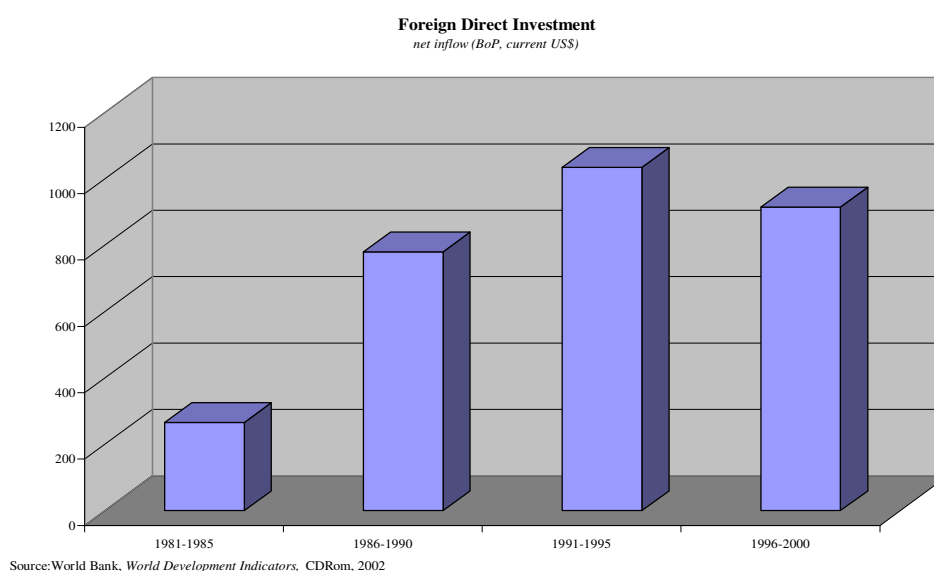
There are continuous efforts to attract FDI to Egypt by trying to establish a conducive business environment, nevertheless, they remain short of reaching their targets due to administrative and red tape measures which increases the transaction costs of doing business in Egypt, political circumstances affecting the whole Middle East North Africa (MENA) region and lagging macroeconomic reforms. However, Egypt still remains one of the major recipients of FDI in the MENA region. Figure 2 identifies the 5 years average of FDI inflows in Egypt in the period 1981 to 2000. The years starting 2001 and ending 2003 witnessed a decline in the FDI inflows to reach a minimum of 237 million US dollars in 2003 (UNCTAD, 2004). Most of the FDI is concentrated in the oil sector. Table 4.16 shows the activities where FDI is concentrated outside the oil sector and it is interesting to note that, mainly, foreign capital participation did not change significantly in the different sectors between 1999 and 2005. The exception is Finance where the foreign share of company investment rose by about 30% from 29% to 37%. To the extent that this transfers more effective and cheaper financial intermediation and perhaps project appraisal this may be an area where FDI is having an impact on the TFP of domestic firms and perhaps exports.

Table 4.16: Foreign Participation in Investment Companies by Activity until December 31, 1999

Activity	December 1999				March 2005			
	Capital	Investment Costs	Foreign Participation	Percentage of Foreign Participation to Capital	Capital	Investment Costs	Foreign Participation	Percentage of Foreign Participation to Capital
Textile	2,708	5,134	652	24.1%	5,241	8,628	1,276	24%
Food & Beverages	5,268	9,330	2,047	38.9 %	10,707	17,105	3,896	36%
Chemicals	9,571	17,789	1,801	18.8 %	16,027	27,468	3,162	20%
Wood Production	468	792	52	11.1%	894	1,404	80	9%
Engineering	5,583	9,981	1,096	19.6%	11,490	17,515	2,690	23%
Building Materials	4,777	10,847	911	19.1%	6,495	21,197	1,810	28%
Metallurgical	4,581	9,839	748	16.3%	6,064	10,862	1,066	18%
Pharmaceuticals	2,044	3,400	595	29.1%	5,404	7,113	1,453	27%
Mining	393	722	41	10.4%	512	9,050	51	10%
Total Industry	35,348	67,834	7,943	22.5%	62,837	112,200	15,487	25%
Agriculture	4,085	11,245	678	16.6%	5,938	10,889	1,120	19%
Construction	7,005	17,046	2,110	30.1%	8,653	20,221	2,457	28%
Tourism	25,938	47,708	4,478	17.3%	38,952	69,190	7,773	20%
Finance	17,191	17,191	4,919	28.6%	25,506	25,679	9,451	37%
Services	6,928	13,061	803	11.6%	9,345	15,968	1,557	17%
Grand Total	115,042	222,569	27,764	24%	151,234	254,148	36,847	24%

Source: General Authority For Investment (GAFI) database, 2005

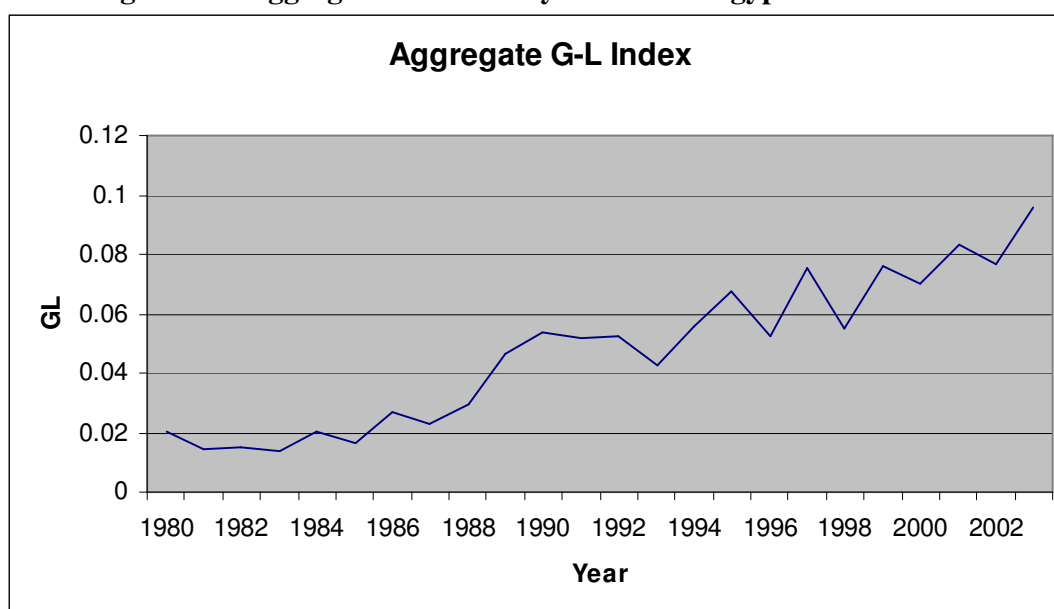
Figure 4.3: Foreign Direct Investment in Egypt (1981-2000), five-year averages



4.4.2. INTRA INDUSTRY TRADE AND DEEP INTEGRATION IN EGYPT

As noted above one possible indicator of the potential for deep integration is the degree of intra-industry trade. The Grubel-Lloyd index (see annex to Chapter 3 for definitions) measures overlaps between imports and exports by category (in the case of Figure 2, at 6 digit level).

Figure 4.4: Aggregate Grubel-Lloyd index for Egypt 1980-2003



The Egyptian levels of the index are very are very low. Admittedly they have grown almost 5 fold since 1980 but at under 0.1 in 2003 the index suggests that intra industry trade is almost absent in Egyptian trade and that the immediate potential for deep integration is low. This further suggests that looking for vertical or horizontal integration of the international supply chain is not worthwhile at this stage. This underlines the story that FDI is about market access or capital goods for energy and domestic production for domestic consumption. On the basis of this indicator, deep integration is at a very early stage despite Egyptian intra industry trade growing at 7% pa over the last quarter of a century.

4.4.3 A CASE STUDY APPROACH TO THE POTENTIAL FOR DEEP INTEGRATION IN EGYPT: THE IMPACT OF EU SPS REGULATIONS ON EGYPTIAN POTATO EXPORTS

4.4.3.1. BRIEF BACKGROUND AND HISTORY

In the late 1990s, the EU introduced a series of measures, which affected Egypt's exports of potatoes, an important element in its trade. Egypt exports potatoes to 12 markets, five of which take 97 per cent of the total. Egypt exports "new potatoes". The price difference can be up to 100% in favour of Egyptian quality exports. The average value of Egypt's potatoes in 2000 was higher than the average potato import unit value into the EU. This case is a rare example of two aspects of deep integration, in that the seed potatoes used for the export crop in Egypt have been imported from the Netherlands. We thus have the makings of an integrated supply chain, and the Netherlands have been promoting technical assistance for Egypt to sustain their part. It illustrates the interaction of domestic regulations and trade integration.

However, in 1995 brown rot, a potato disease, was identified in the Netherlands and measures were introduced to restrict the movement and export of Dutch potatoes. In 1996 the disease was found in Egypt and an EU directive was introduced provisions potentially restricting trade in potatoes from affected areas. It was tightened in 1998 and again in 2000.

4.4.3.2. THE DETAILS OF THE CASE: PROTECTION OR PROTECTIONISM?

Brown rot is a serious risk to plants (although not to humans) wherever contaminated water is used for irrigation.⁸² However, Egyptian exporters argue that the problems with the EU started as a political matter, as Egyptian potatoes threatened EU potato growers. Egyptian growers argued that while the outbreak of brown rot in Egypt is undeniable, the severity and timing with which EU import restrictions were imposed indicate protectionist intent. The EU denies this.

The original EU regulations imposed very tough testing and certification rules on Egypt, demanding that potatoes must be shown to come from disease-free areas. In 1998, as a result of finding more potatoes with brown rot, the EU strengthened the rules. It banned Egyptian potatoes from entry into the EU unless they met stringent requirements that included identifying specific areas declared never to have had brown rot, in addition to several additional measures for testing and packaging. Further measures were applied later in the same year where the concept of “qualified areas” (those in which outbreak brown rot was not known to have occurred) was replaced by the concept of “pest free” areas (areas in which such an outbreak was known not to have occurred). No imports of potatoes were allowed which did not come from these certified “pest free areas”. Egyptian potatoes imported into the EU were also to be grown from potatoes directly of EU origin or “once grown from such potatoes, produced in an approved pest free area tested for latent infection immediately prior to planting...”. Even imports from “pest free areas” would be banned if more than five interceptions of brown rot were found in lots imported into the EU during the season. Article 1.3 of Decision 98/503 is the provision that provides for the cutting off of shipments after five interceptions.

The Egyptian government responded with measures to improve the harvesting, handling and packing regime administered by the central administration for plant quarantine. The EU then re-allowed imports of Egyptian potatoes provided they met the conditions set in 1998. In 1999/2000 season, only one interception was found and exports increased by 17 per cent between 1999 and 2000.

However, during 2000/2001, there were more interceptions. The EU reintroduced its stringent conditions, reassessed its position and obtained new assurances from Egypt about strict control measures within “pest free areas” and confirmation of measures against exporters who violated regulations on EU potato exports. In addition, Egypt submitted a detailed contingency plan explaining the measures applied when brown rot is found in Egypt or in consignments of Egyptian potatoes at EU entry points (see below). Based on this information, the EU allowed imports of potatoes in the 2001/2002 season from designated “pest free areas” in Egypt on the same substantive terms as contained in Decision 2000/568/EC.

⁸² <http://www.potato.org.uk/upload/pdf/researchReports/report191.pdf>

4.4.3.3. LESSONS LEARNED

Egypt has at times contested the legitimacy of the EU measures, accusing the EU of protectionism. This is an example of a developing country being part of a vertically disaggregated value chain: importing seed potatoes, re-exporting high value new potatoes. However, in order to ensure that the trade stays viable Egypt needs substantially to upgrade its conformity assessment procedures to ensure no contaminated potatoes enter the supply chain. This illustrates the framework developed in Section 4 of Chapter 2 and exemplifies the concept of “Smithian gains” from trade.

Second, this case is exemplary as it shows the limits of markets in dealing with standards and regulations because of the existence of externalities and market failures. Egypt has no indigenous accreditation infrastructure and without this, its conformity assessment system cannot easily develop further. Once it is in place the certification of a disease free area takes the form of a local public good for farmers in that district. This market is characterized by major externalities, both environmental and reputational. If one farmer seeks to save money on hygiene, the adverse impact can be devastating for the whole national crop. This is clearly an example where some public intervention and some regulatory approximation is appropriate and the EU does give technical assistance to Egypt on this.

Third, the case shows how difficult it can be to ascertain if a specific regulation is purely protective or disguisedly protectionist, and the difficulty of assessing how far a demand for Egypt to accept EU domestic norms (in this case on water quality) should be seen as enhancing productivity and market access.

4.4.4 OVERVIEW ON DEEP INTEGRATION

It has proved very difficult to find useful indicators of actual deep integration in Egypt. The FDI figures suggest that most FDI is for resource investment or for market access in Egypt. The high degree of public sector investment and the difficulties in expanding FDI suggest that Egypt is not integrating into global supply chains in the way that is happening in south and East Asia. These conclusions are confirmed by the Grubel-Lloyd indices, which show growth in intra-industry trade but still by 2003 to only very

low levels. This suggests that trying to identify actual or potential benefits from benefits from deep integration in an Egypt-EU RTA requires profound firm-level knowledge of export industries in Egypt, beyond what can be garnered from published statistics.

The potato case study shows both the dangers and opportunities of regulatory integration. Clearly, EU regulatory requirements can be obstacles to trade even if not intended to be protectionist. However credible compliance with them allows higher quality production, higher prices and more reliable access to EU and to third markets which also have plant health restrictions thus allowing both productivity gains and gains from product differentiation/specialisation that allow high price niche markets to be exploited. This suggests that there may be gains for Egypt in areas such as conformity assessment from a degree of deep integration with the EU under the auspices of an RTA.

4.5. CONCLUSIONS

In terms of the characterisation used earlier in Chapter 2 - market access, bloc formation and bloc enlargement, the EU-Egypt FTA sits in an intermediate category. From Egypt's point of view, the earlier cooperation agreement could be described as a pure "market access" arrangement. However the new FTA brings little further by way of market access, and so really only makes sense politically if it can be seen as a form of "bloc expansion". However, realistically the Egypt is not going to join the EU and so we cannot see it in such direct terms. The EU is, however, trying to create a new form of trade bloc around it with its European Neighbourhood Policy, and specifically in the formation of a Euro-Med Free Trade Area. If we consider this to be already in place we can see Egypt's participation as a form of bloc expansion or else it is bloc formation designed to bring it about. The original analysis implies that the benefits of this depend on the potential degree of integration that can be fostered. The EU is currently Egypt's leading trade partner but the level and trend are not as markedly EU oriented as, for example is the case for Morocco and Tunisia.

Any prediction of the future is necessarily speculative, and both model and non-model based work are obliged to adopt the method of observing, and extrapolating more strongly, existing tendencies and assuming that trade liberalisation will reinforce the

evolution of existing patterns of specialisation. We assume that if Egypt is a net exporter of a certain product despite the obstacles, this must be because it has a comparative advantage, and therefore such sectors are likely to be the beneficiaries from additional trade.

On the export side, our checklist suggests that this FTA agreement will bring limited benefits to Egypt in terms of shallow integration. There will be a very limited increase in market access into the EU, hence limited opportunity for transfer of resources into sectors with higher comparative advantage. Textiles and clothing, and agriculture will benefit a little. On the import side, the effects will be the traditional ones of exposure of Egyptian firms to more competition, as well as allowing access to cheaper imported inputs. And the pro-competitive import competition effect, runs the risk of being offset by trade diversion and terms of trade losses, if the relatively high Egyptian tariffs cause Egyptian demand to switch away from US suppliers to EU suppliers. In addition there is the risk that in imperfect markets, EU firms could try raise prices to take advantage of the tariffs faced by US firms.

A qualification to this is that theory and the modelling work suggests that if there are significant productivity gains associated with additional exports the gains could well outweigh the losses. Our analysis of existing patterns of trade suggests that, to oversimplify, EU and Egyptian trade patterns are already so different that at a broad level there is limited scope for additional specialisation, unless Egypt can take advantage of “Smithian” specialisation, by investing in niche products or steps in the value chain, in which case productivity gains are possible.

On this deep integration front, one can argue that in the long run there is so little to be seen of this phenomenon, that there must be big scope for its enhancement. However on the basis of the data we have there is very little to build on. The most striking direct indicators with respect to current economic relations relate to intra-industry trade and FDI. EU-Egypt trade is characterised by a very low level of intra-industry trade. This is rising, but from a very low base, and there is little sign of a pent-up wave of specialisation waiting to be unleashed. This view is reinforced by our observation that FDI into Egypt is mainly market seeking and does not represent the creation of “value chains” for re-export.

The FTA has the potential to foster *eventual* regulatory harmonisation that can reduce NTBs, especially with regard to conformity assessment. But will have very little direct or immediate effect. The pre-conditions for there to be eventual gains from policy induced deep integration are that there are a large number of domestic producers prepared to incur the costs of upgrading standards to get access to the EU market, and that the agreement contains substantive provisions to make this happen if they do. Neither condition is yet satisfied. The example of new potatoes, however, illustrates the potential link between upgrading domestic standards and the creation of value chains, involving Egypt moving into a specialised product niche and a special position in the production chain. More detailed case study analysis would be needed to identify other possibilities.

Our analysis is therefore very cautious about the potential gains to Egypt. But it may eventually form the basis of deeper integration.

CHAPTER 5: APPLYING THE RTA FRAMEWORK: AN EU-CARIBBEAN ECONOMIC PARTNERSHIP AGREEMENT:

Case Study⁸³

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Karen Jackson
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⁸³ In parallel to this project a team of University of Sussex economists has been working on another DFID funded project entitled “The impact of the Cotonou Agreement on trade, production and poverty alleviation in the Caribbean region”. There are direct synergies between the two projects and hence the discussion in this section should be seen as drawing from the work undertaken on both projects.

5.1. OVERVIEW OF THE EU-CARIBBEAN EPA PROCESS

5.1.1. INTRODUCTION

Existing trade relations between the EU and the African, Caribbean and Pacific countries are highly asymmetric. The ACP countries have preferential access to EU markets for almost all goods, while these countries have been free to maintain their tariff regimes on exports by the EU. This asymmetric relationship with the ACP countries is WTO incompatible, and under the Cotonou Agreement signed in 2000 the ACP countries and the EU are committed to negotiating WTO-compatible, symmetric Economic Partnership Agreements which are then due to come into force from January 2008. It is this proposed EPA between the Caribbean region and the EU, which this part of the report now focuses on.

The stated aims of the proposed EPAs are that of: fostering and supporting greater regional integration; allowing for a flexible liberalisation of trade in goods and services; the building up of institutional capacities in the ACP countries; the establishment of simple and transparent rules for business in the ACP countries; as well as the provision of development assistance by the EU. Of these aims, it is clear that the one, which is undoubtedly required is that concerned with the liberalisation of trade in goods. This is simply because it is the asymmetric nature of the existing arrangements with regard to trade in goods which is the source of the WTO incompatibility. If agreement on this is not achieved, and the ACP countries, or groups of ACP countries fail to sign an EPA with the EU, then the existing preferential arrangements will come to an end. The alternative for the ACP countries is then to become part of the EU's GSP (Generalised System of Preferences), and for certain of the countries part of the EBA (Everything but Arms) initiative. Hence, for an EPA to be signed it is essential that agreement is achieved on goods trade liberalisation. It is less clear then to what extent agreement on concrete measures dealing with the other stated aims of the EPA will, de facto, be agreed upon.

It is also worth noting that an important feature of the negotiating process is that the ACP countries are not negotiating individually with the EU but are negotiating in six

regional groups. These groups are: West Africa, Central Africa, East-South Africa, Southern Africa, the Caribbean, and the Pacific (see Appendix for a full list of countries in each group). The negotiation in groups is inevitably also tied into one of the key objectives of the EPA process stated above - that of the promotion of greater regional integration among groups of the ACP countries themselves. It is clear from the Cotonou agreement and from discussions with European Commission officials, that there is a strong desire to encourage further regional integration among appropriate groups of countries. The underlying motivation for this is the belief that enhanced regional integration will enable the ACP countries to become more efficient and competitive, and thus ultimately to be able to integrate more successfully into the world economy.

Where relevant then in our discussion below we also consider the issue of intra-Caribbean regional integration. It is important to highlight at the outset that the process of intra-Caribbean regional integration, and its' relationship to the EPA process is made more complex by the long-standing distinction in the region between the more developed countries of the region (the MDC) and the less developed countries in the region (the LDCs). Relevant here too is the presence of a sub-regional grouping within CARICOM, the Organisation of Eastern Caribbean States, as well as the free trade agreement between the Dominican Republic and CARICOM.

Finally, it is important to point out that in Chapter 3 of this report we outlined a detailed framework to be used in the evaluation of regional trade agreements. That framework is designed to be as comprehensive as possible, and thus to cover a wide range of possible circumstances and agreements. The evaluation of any given agreement will not therefore necessarily entail dealing with each of the elements in that framework. This arises from the differential nature of agreements, as well as because of in-built data constraints.

5.2 WHAT TYPE OF AGREEMENT?

5.2.1 THE PARTNER COUNTRIES

The World Bank cautions against S-S RTAs in favour of N-S RTAs, although empirical studies suggest S-S RTAs are on average trade creating. The key criterion is likely to be the level of trade protection. If there is high protection, this can lead to harmful trade diversion.

How Many Partners? Negotiation of an EPA between the EU and the Caribbean region is taking place with the The Caribbean Forum of ACP States (CARIFORUM). This comprises 14 of the 15 Caricom member countries (ie excluding Montserrat) and includes the Dominican Republic. However, because CARIFORUM is not a political entity in its' own right, negotiating teams could in principle include persons from each of the CARIFORUM states speaking for their own countries.

The 14 CARIFORUM's members, which are also members of the Caribbean Community (CARICOM) include: Antigua and Barbuda, The Bahamas, Barbados, Belize, Commonwealth of Dominica, Grenada, Guyana, Haiti, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, and Trinidad and Tobago. Within the CARICOM grouping, there is a subregional grouping of the Organisation of Eastern Caribbean States (OECS) comprising of Antigua and Barbuda, Commonwealth of Dominica, Grenada, St. Kitts and Nevis, St. Lucia, and St. Vincent and the Grenadines. The British Virgin Isles, while a member of the OECS, is not a CARICOM member. The level of integration at the OECS level is much deeper than that at the CARICOM level as the OECS islands share a single currency and have their own central bank.

Within CARICOM, there is also a long-standing distinction between the less developed countries (LDCs) and the more developed countries (MDCs). It is important to note that classification between MDCs and LDCs does not depend on per capita income levels. The MDCs are: Barbados, Guyana, Jamaica, Suriname and Trinidad and Tobago. The remaining countries are considered as LDCs. Hence, the LDCs are those countries, which are seen as being particularly vulnerable either due to their size, or due to their levels of economic development. All the OECS economies are thus LDCs.

The non-CARICOM state that is also a CARIFORUM member is the Dominican Republic. The Dominican Republic is linked with CARICOM through an asymmetric free trade agreement in which the less developed CARICOM members (LDCs) are not required to reciprocate on market access. At the Second CARIFORUM-EC Technical Session on Regional Market Access Issues wheld in Brussels, March 30 to 31, 2005, The CARIFORUM updated the meeting on the state-of-play of the implementation of the CARICOM-Dominica Republic Free Trade Agreement. They noted that technical meetings were scheduled for April 12 to 14⁸⁴, and would involve two committees: a) the Rules of Origin committee which would conclude the outstanding rules; b) the agricultural experts committee, which would review the list of agricultural products that were subject to special trade arrangements, with a view to putting it on a more objective footing in light of actual experience. The next meeting of the Joint Council is expected to take place by mid-2006. Following the Joint Council meeting, and in view of the recent ratification by Suriname's Parliament, the Free Trade Agreement would be able to move from partial application to full entry into force.

While Cuba gained membership to the ACP in December 2000, it did not sign the Cotonou Agreement and is therefore not presently involved in the EC-CARIFORUM EPA negotiations. However, there is an Agreement on Trade and Economic Cooperation between CARICOM and the Government of the Republic of Cuba, which was signed on 5 July, 2000.

As CARIFORUM has no legal personality that confers upon it the right to enter into international negotiations, negotiations thus far with EU representatives, seem to have been coordinated and led by the Caribbean Regional Negotiating Machinery. The Caribbean Regional Negotiating Machinery (RNM) was established CARICOM Governments with the function of developing, coordinating and executing overall negotiating strategies for various external trade negotiations in which the Region is involved.

⁸⁴ Still to locate information regarding outcome of the meeting

How Big?

Normally economic theory suggests that an RTA will be more beneficial the greater the size of the created market. However, more members with diverging tariff and regulatory structures will make convergence difficult. So simple measures such as number of members or size of market are not enough to give a sense of potential for benefits or complexity.

The number of partners for an EU-Caribbean EPA is therefore quite large. While there is notionally a common negotiating body for the Caricom region (the CRNM), there are clearly differences with the Cariforum grouping over priorities and over the form and content of an EPA. Those differences can arise either because of the different position of the DR, but also because of the differences between the Caricom member states themselves. Notable here is the position of the OECS states which consider themselves more vulnerable than some of the non-OECS economies.

What is the initial size of population and GDP amongst members? Are the partners with a large population and GDP also in the South, or in the North, or both?

Table 5.1. GDP and Population Statistics for CARIFORUM Members (2002)

CARIFORUM Member	Population	GDP US \$ Millions	GDP Per Capita (US \$)
Antigua and Barbuda	76,485	720.96	9,426.20
Bahamas, The	313,988.7	5050.00	16,083.38
Barbados	269,384	2534.78	9,409.53
Belize	265,200	926.00	3,491.70
Dominica	71,079	252.04	3,545.87
Dominican Republic	8,612,860	21595.22	2,507.32
Grenada	103,500	414.15	4,001.43
Guyana	765,592	722.46	943.66
Haiti	8,286,491	3465.26	418.18
Jamaica	2,621,043	8442.77	3,221.15
St. Kitts and Nevis	46,710	356.26	7,627.05
St. Lucia	159,133	676.41	4,250.58
St. Vincent and the Grenadines	109,164	361.11	3,307.97
Suriname	433,456	945.40	2,181.08
Trinidad and Tobago	1,303,976	8860.34	6,794.86

Source: World Bank World Development Indicators <http://www.worldbank.org/data/dataquery.html>

Table 5.2. GDP and Population Statistics for EU Members (2002)

EU Member	Population (millions)	GDP US \$ Millions	GDP Per Capita
Austria	8.066	205,470.40	25,473.64
Belgium	10.333	244,693.20	23,680.75
Cyprus* [^]	0.765	10,105.68	13,210.61
Czech Republic*	10.201	73,761.88	7,230.85
Denmark	5.374	172,357.40	32,070.67
Estonia*	1.358	7,040.30	5,184.32
Finland	5.199	131,566.90	25,306.19
France	59.485	1,436,873.00	24,155.22
Germany	82.508	1,986,072.00	24,071.27
Greece	11.005	133,007.70	12,086.12
Hungary*	10.159	64,884.16	6,386.86
Ireland	3.93	121,723.90	30,973.00
Italy	57.690	1,186,174.00	20,561.13
Latvia*	2.338	9,208.88	3,938.79
Lithuania*	3.469	14,056.38	4,052.00
Luxembourg	0.444	21,180.31	47,757.18
Malta*	0.397	4,054.98	10,214.05
Netherlands	16.144	418,453.80	25,920.08
Poland*	38.232	191,310.10	5,003.93
Portugal	10.368	121,924.20	11,759.66
Slovak Republic*	5.379	24,184.05	4,496.01
Slovenia*	1.994	22,121.17	11,093.87
Spain	40.917	655,192.90	16,012.61
Sweden	8.924	241,077.90	27,014.56
United Kingdom	59.229	1,563,708.00	26,401.05

Source: World Bank, World Development Indicators <http://www.worldbank.org/data/dataquery.html>

[^]Only Greek Cyprus is a member of the EU, the data from the World Bank may not distinguish this.

* Member of the EU since May 2004.

Tables 5.1 and 5.2 above show the GDP and population statistics for all members of CARIFORUM and the EU for 2002. On a whole, members of the EU are larger and richer than their CARIFORUM counterparts. However, a few of the members which recently joined the EU in 2004 have lower GDP per capita than some of the CARICOM members. This could impact upon the level of preferences offered to the CARIFORUM group.

It is also noteworthy that there are considerable size disparities within the Cariforum grouping. The largest economy, the Dominican Republic is 60 times bigger than the smallest, St. Kitts and Nevis. The poorest country is Haiti with a per capita income level in 2002, of \$418 (US), and the richest, Bahamas, is over 38 times richer with a per capita income level of, \$16083 (US). This indicates considerable diversity

across the CARIFORUM grouping and consequently a high likelihood of varying needs and objectives linked to the EPA process.

5.2.2 FTA OR CU?

If formally a CU, how harmonised is the proposed CET tariff? The negotiations between CARIFORUM and the EU should lead to an FTA. At present CARICOM is in the final stages of implementing the CET. In principle then across the CARICOM countries, there is a common external tariff, although derogations from this are allowed for under specific circumstances.

What custom measures will remain at internal borders between partners? We have little information on this, and this is the sort of information, which a desk officer would typically be able to obtain from discussions with officials in the regions/countries concerned. However, currently each member has its own more and responsibility for the collection of tariff revenue, and this is almost certainly going to continue. There are a number of reasons for this. First, a number of the countries introduce additional charges at the border (usually applicable to all countries), and this is often seen as an important source of revenue. These arrangements are likely to continue for the foreseeable future. Secondly, given the distinction between MDCs and LDCs in the region, the tariffs, which are levied on third countries are allowed to vary. Finally, and perhaps most obviously, given that the majority of the economies are islands all borders are both internal and external hence necessitating customs measures.

What arrangements are there for collecting/sharing customs revenues? Presently, there is no revenue sharing procedure in CARICOM or between CARICOM and the Dominican Republic. Every member has its own port and therefore responsibility/authority to collect customs revenues.

Rules of Origin:

Rules of origin (RoO) are required in a Free Trade Area in order to distinguish goods originating in partner countries from those coming from third countries. Rules of origin are thus necessary to deter “trade deflection”. ROOs

however can act as a constraint on the sourcing of inputs by domestic producers. Generally speaking that constraint is likely to be lessened to the extent that the underlying rule itself (eg. value content rule) minimises the amount of domestic content required, and to the extent that the rules of origin allow for “cumulation”.

The legal framework for the rules of origin is given in Protocol No.1 to Annex V of the Cotonou Agreement. The applicable rules of origin for individual products are for most products very similar if not identical to the Community rules of origin applying to GSP countries. There are some differences however, for example with respect to textiles and clothing. The underlying list of applicable rules by sector is extremely long and detailed as it specifies the rules applicable at the HS 4 digit level. The rules are highly sector specific and vary from rules based on the tariff transformation principle, the value content principle, or with specific production processes being specified. Where the value content rule is applied the % of allowable imported inputs typically ranges from 20%-60%

Cumulation of rules of origin is allowed for under the agreement. For imports deriving from other ACP states, the “territories of the ACP are considered as one territory”. For imports originating from other Overseas Countries or Territories (OCT), or from other countries in the European Union bilateral, diagonal and full cumulation apply. There are also cumulation possibilities with regard to “neighbouring” countries. This applied to “materials originating in a neighbouring developing country, other than an ACP state, belonging to a coherent geographical entity”. Finally there are specific arrangements in place with South Africa where both diagonal and full cumulation will in principle be possible once certain conditions have been satisfied.

There is little direct evidence on the extent to which rules of origin for the Caribbean countries are considered as restrictive or constraining. Casual empiricism based on discussions with stakeholders and officials suggests that ROOs are perceived of as being problematic but it is unclear the extent to which this is reflected by the administrative difficulties of proving origin, or by the constraining nature of the underlying ROOs themselves. There is clearly an urgent need for more detailed work in this area.

It is also important to point out that in December 2004 the EU published a green paper on the future development of its' rules of origin regime, and then in March 2005 adopted a Communication (COM(2005) 100) on the future of rules of origin in preferential trade arrangements. In these documents the EU has committed itself to simplifying its' rules of origin regimes in order to make them more "development friendly". Currently all three rules (change in tariff classification, value content, specific production processes) are used by the EU. For example textile ROOs are typically based on a (double) change in tariff classification rule, while many other industries are based on the value content rule. In principle the EU has now decided to move towards a system of ROOs which will be based entirely on the value content rule. The new rules of origin are due to be announced some time in the summer of 2006.

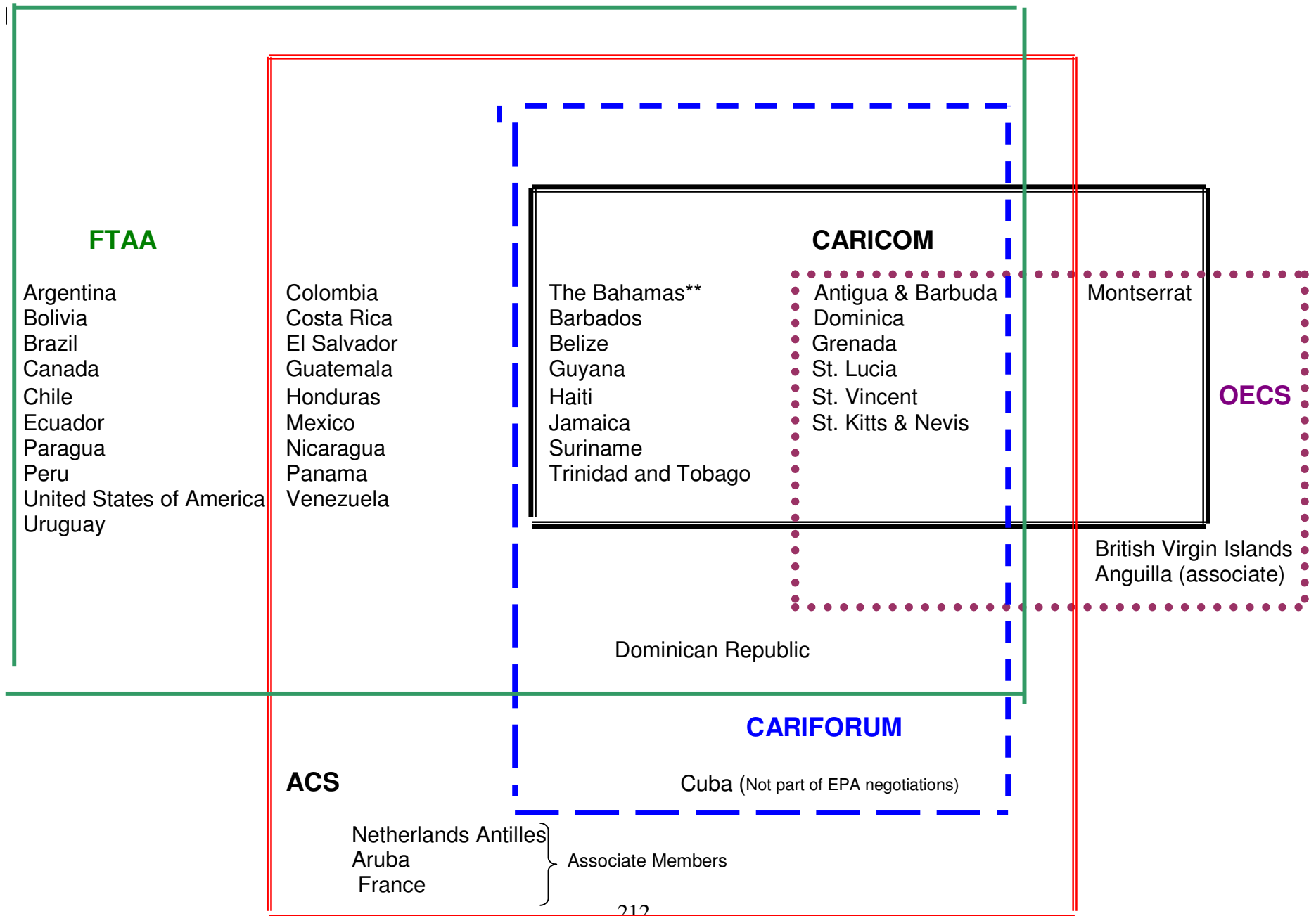
5.2.3 OVERLAP WITH OTHER AGREEMENTS:

See also section 5.2.1.

How many other RTAs does the country have and with whom? Are there any mutually incompatible provisions in the agreements? Does it improve or reduce the benefits of existing agreements? Are the RoO the same or different as those in the existing RTA?

A diagrammatic representation of the regional groupings in the Caribbean is presented below.

Figure 5.1: Regional groupings in the Caribbean



In addition to the regional groupings above, CARICOM members have bilateral free trade agreements with Canada, Costa-Rica, Cuba, Colombia, Dominican Republic (as mentioned previously), and Venezuela. A decision is to be made at the next CARICOM ministerial meeting in May whether to enter into an FTA with Mercusor. The Dominican Republic recently signed an FTA with the CACM and the United States in 2004 (CAFTA-DR). The Agreement still needs to be ratified in the respective Members. More information on this Agreement can be found at <http://ita.doc.gov/cafta/index.asp>.

5.2.4. EXPECTED EASE OF NEGOTIATION.

Is there a leading partner? Formally, there is no lead partner to the negotiations. At the Ministerial level, the Barbados Minister of Foreign Affairs and Deputy Prime Minister, Dame Billie Miller, is the lead Ministerial spokesperson and is assisted by representatives from the Dominican Republic, St. Lucia and Belize. See below for more discussion of this. Our understanding is that the negotiations are being coordinated by the Caribbean Regional Negotiating Machinery. Formally, however, in principle, each of the countries could send its own delegation to each of the negotiations.

Clearly, however there are important issues of institutional capacity here. Many of the small islands simply do not have the personnel or expertise to fully engage in all the relevant trade negotiations (bilateral, intra-regional, extra-regional, WTO). It is perhaps also worth noting that there is sometimes a feeling amongst the LDCs in the region, that the position taken in the negotiation does not always reflect their special circumstances.

While the EU has been the propelling force behind the changes made from Lomé to Cotonou, the second phase of the CARIFORUM-EPA negotiations, which are presently ongoing, calls for CARIFORUM regional integration. This is primarily concerned with two tasks (1) implementing the CARICOM Single Market Economy (CSME), taking into account the circumstances of Haiti who has not finished implementing the revised CARICOM treaty which is the basis for the CSME, and Bahamas who has never been a member of the Common Market and is yet to sign the revised treaty; and (2) Reviewing the CARICOM-Dominican Republic FTA especially its asymmetric

implementation. Formally, Barbados has been given the responsibility for the implementation of the CSME.

Are there large numbers of opponents, domestic or in partner countries, on the import or export side? Changes to be made to the sugar, banana and rice regimes have incited protests from the respective sectors in the Caribbean region. Of course, with regard to these sectors it is not simply within the region or the EU that there is protest. The changes in the banana and sugar regimes have come about because of complaints brought to the WTO concerning these protocols by third parties.

In terms of differences in opinion across countries, the general perception appears to be that on balance negotiating an EPA is important for the EPA. However, that this will depend to some degree on the nature of that EPA. Two issues are of importance here which if not satisfactorily dealt could lead to some opposition to an EPA by individual governments. The first concerns the parallel negotiations, which are taking place with the EU with regard to development assistance and aid. From the perspective of the EU, this is considered to be separate to the EPA negotiations, and indeed is something, which the EU would wish to negotiate and offer to the region in principle irrespective of the EPA process. Within the region however, there is more of a desire to link the two sets of negotiations, and that if the region agrees for example to liberalise its' markets that the provision of appropriate development assistance and aid to manage the induced structural change will be guaranteed. The second issue concerns the distinction between the LDC/OECS economies and the MDCs. The former are keen to ensure that any agreement takes into account their special circumstances, and thus to ensure that an EPA comes with some form of special and differential treatment. In the absence of this, it is likely that opposition to the process would grow.

Are there a small number of large exporters who are supportive? No readily available information on this.

What is the expected negotiating time? Table 8 below shows the schedule for negotiations as provided for by the European Commission in 2004.

Table 5.3: Calendar of CARIFORUM-EU Trade Negotiations within the Cotonou Framework

April 2004-September 2004	Establishing the priorities of EPA negotiations
September 2004- September 2005	Convergence on strategic approach to CARIFORUM regional integration
September 2005- December 2006	Structuring and consolidation of EPA negotiations
January 2007 - December 2007	Completion of EPA process, final phase
January 2008	Entry into force of EPA
2008-2018/20	Transitional period for implementation of economic partnership agreements
2018/20	Establishment of WTO compatible free trade

Sources: European Commission Plan and Schedule for CARIFORUM EC Negotiation of an Economic Partnership Agreement, (April 2004) and Pantin and Hosein Repas or Rip-off? A Critical Review of the Cotonou Agreement from the Perspective of the ACP Member Countries (February 2004).

The Second CARIFORUM-EC Technical Session on Regional Market Access Issues was held in Brussels, March 30 to 31, 2005. Discussions covered customs issues applicable within the CARICOM Single Market and Economy (CSME), technical barriers to trade (TBT) matters and SPS issues. In discussions on customs issues, the CARIFORUM team provided an update on ongoing work relating to harmonised customs legislation and highlighted the fact that all CARICOM Member States, save one, were using the ASYCUDA system for customs data and that two are currently moving towards the “ASYCUDA ++” system, that incorporates risk analysis tools.

The third phase of negotiations for an Economic Partnership Agreement (EPA) between CARIFORUM countries and the European Union was launched on September 30, 2005 in Saint Lucia.

What is the expected ratification time? See Table 5.3 above.

What is the expected implementation time for the finalisation of details such as the RoO and SPS regulations? No information found indicating the negotiating time for specific issues

Are these timescales already specified? See Table 5.3 above.

Do you have sufficiently experienced and large negotiating teams? If not, is there technical assistance available? The negotiating of the EPA is occurring on three separate tiers. At the Ministerial level, the Barbados Minister of Foreign Affairs and Deputy Prime Minister, Dame Billie Miller, is the lead Ministerial spokesperson and is assisted by representatives from the Dominican Republic, St. Lucia and Belize. The

Director-General of the Caribbean Regional Negotiating Machinery, Ambassador Dr. Richard Bernal is the Principal Negotiator. The third level of negotiations are technical and are conducted by the EPA College of Negotiators.

It is apparent that the negotiating team is experience and knowledgeable. Dame Miller is a qualified lawyer and has been a member of the Barbados parliament since 1976 and a Foreign Affairs Minister since 1994; Dr. Bernal, an economist, was the Jamaican ambassador to the United States for 10 years. However, the support provided to the EPA negotiating team has been hampered by the number of parallel negotiations being conducted by the region at the bilateral, hemispheric, (the FTAA and the ACS), and multilateral level (WTO). The regional negotiating machinery is the leading organisation in providing trade research for the region, and while it has received funding to support research, training, and communications, there is concern that it still does not have the capacity to properly inform negotiations at all these levels.

How large is the total market of the large partners in the South or North for your exports? In terms of market size, it is useful to refer back to Tables 5.1 and 5.2 which gave information on GDP and GDP per capita for the CARIFORUM and EU countries. From this table it can be seen that for the CARIFORUM countries the EU in principle represents potentially a very substantial market, whereas the converse is not true. For the EU, the Caribbean region is a small destination market, and CARIFORUM exports are a negligible part of the EU's total imports. This can be readily seen from Table 5.4. .

Table 5.4: Share of CARICOM +DR in EU15 Trade

Partner		1994 %	1995 %	1996 %	1997 %	1998 %	1999 %	2000 %	2001 %	2002 %
EU15	Exports	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1
	Imports	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3

The relative importance of the EU for the Caricom countries can be seen from Table 5.5 below, which indicates the share of imports and exports for each of the countries for which data was available, averaged over 2000-2003. What is clear from this table is that as a source of imports while the EU is important with a share ranging from 2% for the Bahamas and 29% for Suriname, the share of the US, and indeed that of the region itself is in most cases significantly higher. The principal supplier to the region is

therefore the US. As a destination market, the EU is more important, and this is particularly the case for certain economies such as St. Lucia, and St. Vincent and the Grenadines where the share of the EU in total exports is 54% and 36% respectively. What is also interesting from this table is the importance of the CARIFORUM region as a destination for a number of countries.

Table 5.5: Share of Trade by source: 2000-2003

	Share of imports by source			Share of exports by source		
	CARIFRM	EEC15	USA	CARIFRM	EEC15	USA
Antigua and Barbuda	0.13	0.10	0.49	0.77	0.05	0.06
Bahamas	0.01	0.02	0.83	0.00	0.28	0.68
Barbados	0.20	0.17	0.42	0.48	0.20	0.18
Belize	0.04	0.08	0.46	0.07	0.25	0.51
Dominica	0.28	0.16	0.36	0.60	0.29	0.06
Grenada	0.25	0.12	0.47	0.17	0.38	0.40
Guyana	0.18	0.12	0.38	0.14	0.25	0.33
Jamaica	0.12	0.08	0.45	0.03	0.30	0.39
Montserrat	0.18	0.10	0.60	0.60	0.08	0.27
St. Kitts and Nevis	0.18	0.13	0.51	0.03	0.23	0.73
St. Lucia	0.24	0.16	0.42	0.30	0.54	0.15
St. Vincent & the Gr.	0.27	0.21	0.35	0.60	0.36	0.01
Suriname	0.20	0.29	0.27	0.06	0.32	0.21
Trinidad and Tobago	0.03	0.18	0.34	0.20	0.09	0.42

Source: UN Comtrade database

What is the potential for market expansion measured for example by GDP, imports and exports of goods and services, by stocks of inward and outward investment in the RTA as indicated by the past performance of larger Southern or Northern partners? Is that potential likely to increase as a result of the RTA? Is the potential market expansion likely to benefit smaller partners as well as larger partners?

The information presented below on CARIFORUM trade and investment with the EU15 has been reproduced from the III EU-LAC Summit: Special Issue on Latin American and Caribbean Economic Relations with the European Union Periodic Note, May 2004.

In terms of changes in trade flows what is clear from the table below is that total Caricom + DR trade with the world, as well as with the EU15 and with Canada expanded dramatically over the period 1994-1999 in nominal terms, but that after 1999 there was a

small decline reversing the previous trend. In terms of the historical trend therefore it appears that for the CARIFORUM region there is considerable scope for expanding their exports (and consequently then their imports) to the EU. This is not surprising given the small share of CARIFORUM exports as percentage of total EU imports. Even quite substantial changes then in Caribbean flows simply do not have a significant impact on the EU markets.

Table 5.6 Caricom + DR Trade 1994-2002

Partner	US\$ Mn	1994	1995	1996	1997	1998	1999	2000	2001	2002	Avg Annual Growth (%) 94-99 99-02	
World	Exports	6,249	6,839	8,747	10,199	9,936	11,069	13,637	11,968	10,520	12.1	-1.7
	Imports	7,834	8,783	12,873	18,264	18,745	20,000	22,751	18,710	19,299	20.6	-1.2
EU15	Exports	664	791	1,157	1,479	1,359	1,451	1,814	1,205	1,380	16.9	-1.7
	Imports	563	713	1,041	1,722	1,851	1,878	2,115	2,008	2,499	27.2	10.0
US + Canada	Exports	1,564	1,756	2,693	6,456	6,622	7,164	8,838	7,666	6,815	35.6	-1.7
	Imports	2,460	2,622	3,878	10,876	11,374	11,702	12,622	10,233	9,000	36.6	-8.4

Two further points on this, however, are worth making. The potential for market expansion is not simply a question of the extent to which any changes in exports impact on the partner market – in this case the EU. The potential for market expansion also depends on the particular products being exported and on changes in trade policy with regard to those products. Of key relevance, here are the banana and sugar industries. These are clearly important industries for a number of the Caribbean economies (e.g. St.Lucia, Barbados, Dominca....) but their ability to expand their exports into the EU market is not constrained by the size of the EU market itself, but by the changes in the sugar and banana regimes which are progressively granting more competitive world producers access to the EU market. Given the lack of competitiveness of much of the Caribbean in these products, this is clearly already having a major impact on their ability to export to the EU. Secondly, it is worth pointing out that one has to be extremely careful in looking at aggregate statistics for the Caribbean region because of the diversity within the region, and because of the relative economic dominance of Trinidad and Tobago. Hence, much of the rise in exports and imports identified in the table below derives from changes in the trade of Trinidad and Tobago, as opposed to being a general picture across all the Caribbean islands.

This can be seen from Figures 5.2 and 5.3 below which give the real change in exports for selected Caribbean economies. Figure 5.2 gives the change in the real value of exports for non-OECS Caricom economies, and Figure 5.3 for the OECS economies.

Figure 5.2: Real Change in Total Real Exports

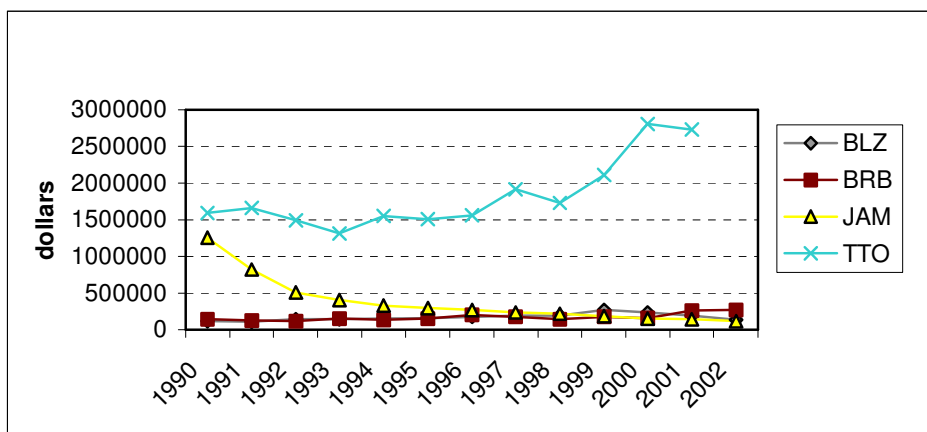


Figure 5.3: Change in Total Real Exports

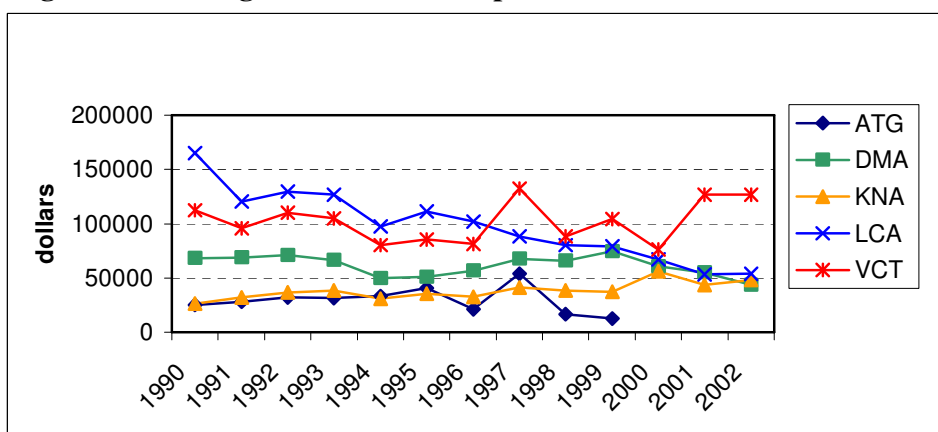


Table 5.7 : FDI Flows from the EU15 to selected CARIFORUM members

Net Outflow (US \$ MN)	1990-1995	1996	1997	1998	1999	2000	2001
Dominican Republic	12	14	39	42	32	-13	50
Guyana	5	6	-2	2	-4	-9	-3
Haiti	0	0	0	0	1		-1
Jamaica	65	60	115	0	1	-88	-
Suriname	0	5	7	-2	2	-2	-
Trinidad and Tobago	30	45	57	194	9	21	562

Source: Andrew Crawley, Christopher Vignoles and Anneke Jessen , "Integration and Trade in the Americas: EU-LAC Summit: Special Issue on Latin American and Caribbean Economic Relations with the European Union" Periodic Note, May 2004, Table 28.

Is there a strong divergence in the cost structure amongst partners? Relevant information on CARICOM/CARIFORUM countries was not available.

5.2.5 NATURE OF BARRIERS TO TRADE

5.2.5.1 TRADITIONAL BARRIERS

Existing trade relations between the EU and the CARIFORUM countries are asymmetric and this derives from the long-standing trade relations between the EU and the ACP states. Essentially, the ACP countries have duty free access to the EU on almost all goods (indeed in terms of the EU's hierarchy of preferences it is the ACP states that have the greatest access to the EU market), while they have been able to retain their tariffs on EU imports. Hence, the traditional barriers in place are the CET in terms of CARICOM, and the tariffs levied by the DR.

(1) Full removal of bilateral tariffs

What is the initial height and structure of tariff levels of partners? Imports into the Caribbean region from the EU face varying tariff levels which depend not only on the product being imported but the destination of the product within the Community. The Caribbean Community is in the process of implementing the CET.

Taking Caricom as the key actor the simple average common tariff in 2003 was 11.4% and the trade weighted average tariff was 8.4% (see table A1 in the Appendix for a detailed list of tariffs by product). There were 332 tariff peaks where the applied tariff was more than twice the average simple average tariff. High tariffs are concentrated in agriculture, food, alcohol, tobacco, oils and fats and manufactures (road vehicles, travel goods, sanitary and electrical fittings, apparel, footwear) where average tariffs at the SITC 2 digit level often exceed 20%. There is some evidence then that the structure of CARICOM's Common External Tariff (CET) differs between competing and non – competing imports, as well as between input, intermediate, and final goods, forming a hierarchy in which non-competing goods bear the lowest tariff, while competing final goods bear the highest tariff⁸⁵.

⁸⁵ See also, CARICOM Secretariat, 2001 for a discussion of this.

Table 5.8 below, gives more information on tariffs by country, across a range of years, and across product aggregates. This again reinforces the message above concerning the differential structure of tariffs across competing and non-competing imports, as well as between intermediate and final goods. What is also interesting from the table is the difference in average tariffs across the CARIFORUM countries despite the fact that all but one is a member of CARICOM where a common external tariff applies. The difference in the tariffs across countries is thus driven by differences in the goods which are imported by these countries. Those differences again point to the diversity in the region with regard to both consumption and production patterns.

Table 5.8: Caribbean Tariff structure

	FBT	Industrial Supplies	Fuels & Lubricants	Capital Goods	Transport Equipment	Consumer goods	Goods nes	
Antigua and Barbuda	1996	27.0	17.8	4.7	15.3	25.1	23.3	36.3
	2003	19.9	7.5	4.2	6.4	13.8	18.1	20.5
Bahamas, The	1999	22.8	31.8	32.8	35.4	37.9	27.6	54.2
	2002	22.0	31.4	32.7	34.2	36.9	27.4	45.8
Barbados	1996	25.3	16.2	5.1	12.1	19.8	23.2	31.7
	2003	41.7	7.7	6.0	6.4	12.6	20.3	28.2
Belize	1996	26.4	16.7	5.0	12.4	20.2	23.3	47.5
	2003	23.2	7.6	3.6	6.1	12.1	18.8	28.2
Dominica	1996	23.7	16.9	2.2	14.7	19.3	23.3	35.0
	2003	26.9	8.6	3.8	5.1	12.2	18.1	21.3
Dominican Republic	1997	23.2	12.4	8.3	9.6	11.2	23.8	22.5
	2004	17.3	5.9	4.1	3.8	9.3	17.8	17.6
Grenada	1996	25.9	17.3	7.8	14.3	21.1	23.1	27.5
	2003	21.8	7.9	5.0	6.3	13.6	17.9	27.5
Guyana	1996	28.2	18.0	4.6	13.6	22.4	24.1	37.9
	2003	25.2	7.2	4.5	6.2	11.8	18.8	23.3
Jamaica	1996	27.0	16.5	6.0	12.2	17.9	22.9	22.5
	2003	21.4	2.9	2.7	1.8	9.0	17.6	13.1
St. Kitts and Nevis	1996	24.5	17.6	4.3	14.8	29.7	23.0	34.0
	2003	17.3	7.9	4.4	6.3	15.7	21.2	27.0
St. Lucia	1996	23.7	17.4	2.2	14.2	24.8	23.1	47.5
	2003	19.6	6.4	2.0	2.3	18.8	19.8	48.8
St. Vinc. & the Grenadines	1996	23.1	17.9	5.7	13.4	18.7	23.0	30.0
	2003	20.1	7.7	4.8	6.1	11.2	18.1	18.3
Suriname	1996	26.3	16.9	3.7	12.3	16.4	23.0	18.8
	2000	25.2	12.2	7.3	6.2	13.5	16.0	25.0
Trinidad and Tobago	1991	31.4	13.2	8.6	10.8	14.5	33.2	52.5
	1996	21.4	6.1	3.9	4.4	10.9	21.1	16.1
	2003	21.7	3.9	2.3	2.9	11.2	17.8	14.7

If the RTA is a CU do MFN tariffs rise or fall? Not a CU.

Does it remove or increase tariff escalation? As discussed earlier when looking at the tables of tariffs there is clear evidence of tariff escalation in the CARIFORUM existing tariffs. The removal of these tariffs would thus de facto eliminate that tariff escalation. However, the removal of tariffs will take place over a lengthy and negotiated time period. The details of this, and the tariff lists have yet to be determined. Hence, it is possible that in the process of tariff dismantling that tariff escalation could rise or fall.

Is the RTA going to abolish all bilateral tariffs? If not all, then: In order for an EPA to be WTO compatible it will need to abolish bilateral tariffs on “substantially all” trade. This term is not clearly defined but is typically taken to mean to refer to the total value of trade (as opposed to the number of tariff lines), and the amount of such trade which constitutes “substantially all” in previous EU agreements (eg. with South Africa) has been taken to mean 90%. Hence, as a working hypothesis the EPA is likely to liberalise 90% of the value bilateral trade between the EU and the CARIFORUM countries.

There are however additional complexities. First, the above does not necessarily mean that both sides to the agreement liberalise 90% of trade. In the EU-South Africa agreement for example, the EU liberalised all of it’s’ trade, while South Africa liberalised 80% of it’s’ trade. Hence, the figure of 90% of all trade was arrived at via an average of the two. Secondly, even assuming the above, this does not necessarily mean that each of the CARIFORUM countries will liberalise 80% of their trade. It is possible that there could be differentiation among the CARIFORUM countries. Thirdly, given that the agreement is between the EU and a number of other countries, there is the issue of whether there will be a common list of products, which are to be liberalised or will differentiation across countries be allowed.

Which tariff lines are excluded e.g. agriculture? Currently, and as discussed above there is no information as to which tariffs lines are likely to be excluded or not.

One possible source of information would be to look at the other FTA Agreements to which the CARIFORUM members are party. For example, Tables 5.9 and 5.10 give details arising from the CARICOM-Dominican Republic agreement:

Table 5.9: Caricom-DR FTA: List and schedules of selected agricultural products which shall be subject to special arrangements

TARIFF HEADING NUMBER	DESCRIPTION	CET RATE
0701.90	Potatoes, fresh or chilled	40%
07.02	Tomatoes, fresh or chilled	40%
0703.10	Onions and shallots, fresh or chilled	40%
0704.10	Cauliflower and headed broccoli, fresh or chilled	40%
0704.90	Cabbages, fresh or chilled	40%
0705.11	Cabbage lettuce (head lettuce), fresh or chilled	40%
0705.19	Other lettuce, fresh or chilled	40%
07.06.10	Carrots and turnips, fresh or chilled	40%
Ex 0706.90	Radishes, fresh or chilled	40%
07.07	Cucumbers and gherkins, fresh or chilled	40%
07.08	Leguminous vegetables, shelled or unshelled, fresh or chilled	40%
0709.60	Fruits of the <i>genus capsicum</i> or of the <i>genus pimenta</i>	40%
0709.70	Spinach, New Zealand spinach and orache spinach (garden spinach)	40%
Ex 0709.90	Ochro, pumpkin and sweet corn	40%
07.13	Dried leguminous vegetables, shelled, whether or not skinned or split	40%
0714.10	Manioc (cassava)	40%
0714.20	Sweet potatoes	40%
Ex 0714.90	Dasheen and yams	40%
08.03	Bananas, including plantains, fresh or dried	40%
0804.30	Pineapples, fresh or dried	40%
0804.40	Avacados, fresh or dried	40%
Ex 0804.50	Guavas and mangoes, fresh or dried	40%
08.05	Citrus fruit, fresh or dried	40%
08.07	Melons (including watermelons) and papaws (papayas), fresh	40%
Ex 0810.90	Sapodillas, golden apples and carambolas fresh	40%

Table 5.10: Schedule for List of Selected Agricultural Products to be Subject to Special Trading Arrangements when Imported into CARICOM's MDC's from the Dominican Republic as Provided for in Article III of the Protocol

COMMODITY	TARIFF	MONTHS											
	HEADING	JAN	FEB	MAR CH	APRI L	MAY	JUNE	JULY	AUG UST	SEPT.	OCT	NOV.	DEC
POTATO	O701.90		2	2	2	2	2	2					
TOMATO	O702.00	3	2, 3	1, 2, 3	1, 2, 3	1, 2, 3	1, 2	2	2	2			3
ONION	O703.10	1	1	1	1								
CABBAGE	O7.04	1, 2, 3	1, 2, 3	1, 2, 3	1, 2, 3	1, 2	1, 2			2	2		3
CAULIFLOWER	O7.04	1, 2, 3	1, 2, 3	1, 2, 3	1, 2, 3	1, 2, 3	1, 3				1	1	1
LETTUCE	O7.05	1, 2, 3	1, 2, 3	1, 2	1, 2	1, 2	1, 3	3	3	3	1, 3	1, 3	1, 3
CARROT	O7.06		2	2	2	2	2				1	1	1
CUCUMBER	O7.07	1, 3	1, 3	1, 2, 3	1, 2	1, 2	2	3	3	2, 3	2, 3	3	3
PEPPER - HOT	O709.60			1, 2	1, 2	1, 2	1, 2	1, 2	1, 2	1, 2	1, 2		
- SWEET	O709.60			1, 2	1, 2	1, 2	1, 2	1	1	1, 2	1, 2		
OCHROES	O709.902			2	2	2	2	1	1	1	1, 2	1, 2	1
PUMPKIN	O709.903	1	1	1		2	2	2	2	2	1, 2	1	1
RED KIDNEY BEANS	O7.13			2	2	2	2	2	2	2			
RED PEAS	O7.13												
PIGEON PEAS	O7.13	2	2	2									2
SWEET POTATOES	O7.14					2	2	1, 2	1, 2	1, 2	1, 2	1	1
COMMODITY	TARIFF	JAN	FEB	MAR CH	APRI L	MAY	JUNE	JULY	AUG UST	SEPT.	OCT.	NOV.	DEC.
	HEADING												
CASSAVA	O7.14	1	2	2	2	2	2	2	2			1	1

DASHEEN	07.14				2	2	2	2	2	2	2		
YAM-NEGROE	07.14	1	1					2	2	2	2	1, 2	1
-YELLOW	07.14	1, 2	1, 2	2	2	2					2	1, 2	1, 2
-SWEET	07.14	1, 2	1, 2	2								1, 2	1, 2
PLANTAIN	08.03					1, 2	1, 2	1,2	1,2	1,2	1,2		
BANANA	08.03					1, 2	1, 2	1,2	1,2	1,2	1,2		
PINEAPPLE	08.04					2	2	2	2	2	2		
AVOCADO	08.04							2	2	2	2	2	
GUAVA	08.04	2	2	2								2	2
MANGO	08.04				2	2	2	2	2	2			
CITRUS	08.05	2	2	2	2	2						2	2
MELON	08.07	1				2	2	2	2	1, 2	1, 2	1	1
PAPAYA	08.07			2	2	2	2	2	2	2	2		

Note: The shaded area represents months of highest production and during which the country concerned may seek to apply the MFN rate of duty. Key: 1 Barbados; 2 Jamaica; 3 Trinidad and Tobago; \3 - represents first half of the month; 3\3 - represents second half of the month

These tables suggest considerable sensitivity over agricultural trade within the region, and this is also borne out by the level of Caricom CET on agricultural and food commodities. It would appear therefore likely that these are also products, which may be excluded when considering the dismantling of tariffs on EU imports. However, it may also be the case that the goods, which are exported from the EU are largely manufactured or processed goods, and that the issue of agriculture will thus be less sensitive.

It is difficult a priori to provide a clear picture on which industries are likely to be excluded. One possible way of approaching this issue for desk officers is to look at a number of possible criteria to try and identify the sensitive industries. Stevens and Kennan, for example, take the existing tariff levels as indicators of the extent to which

countries desire to protect certain industries and use this as a basis for their analysis⁸⁶. Alternatives include looking at the high tariff-revenue generating industries, or examining which industries are most likely to be impacted upon as a result of the liberalisation of tariffs. This is something, which is explored in Gasiorek et.al⁸⁷.

Are the excluded sectors important for the domestic economy or do they imply e.g. remaining tariff escalation? As discussed above there is no agreement yet on which sectors are to be excluded nor on the timing of any tariff reductions.

What, if any, asymmetries are there in tariff reduction obligations? See above.

(2) Removal of bilateral non-tariff barriers - full or partial?

Likely to be partial at best

(3) What is the coverage of the agreement?

As above, the agreement is in the process of being negotiated and hence there is no real information on this issue yet.

How much is excluded in terms of agriculture, raw materials, industrial goods, services, capital and labour market? To be decided but parts of agriculture likely to be excluded on EU side as under the previous ACP arrangements.

What sensitive products are excluded? No information as yet.

(4) Tariff-like measures

Do certain quota or import-licensing rules remain in place, or are new ones introduced and if so are they binding?

⁸⁶ Stevens, C and Kennan, J (2005), "EU-ACP Economic Partnership Agreements: The effects of reciprocity", IDS Briefing Paper.

⁸⁷ Gasiorek et. Al (2006), "The impact of the Cotonou Agreement on trade, production and poverty alleviation in the Caribbean region", Final Report submitted to DFID and prepared under the EC-PREP programme.

Are minimum prices introduced, or remain in place? If so, are there in important import/export sectors?

Are there rules for domestic taxes?

The three tests above concerning tariff-like measures could be answered from the information provided in the 2001 report “Inventory of Non-tariff, trade restricting measures applied by member states of the Caribbean Community” submitted by the Caribbean Export Development Agency. The report identifies the para-tariff measures used by members in the Community as follows:- (i) customs surcharges; (ii) additional taxes and charges; (iii) internal taxes and charges levied on imports. These are all additional measures used by various Caricom countries, in certain circumstances and on certain products. More detail is provided below:

Customs surcharges

Customs service charges exist mainly in the LDCs. The rate varies from a minimum of 2 per cent in Dominica to 5 per cent in Antigua and Barbuda, Grenada and St. Kitts and Nevis respectively and a maximum of 8 per cent in Montserrat. In all cases, it is calculated as a percentage of the c.i.f. value of all imported goods. The WTO’s Trade Policy Review of OECS-WTO Members noted with the exception of St. Kitts and Nevis, OECS-WTO Members have not recorded the customs service charge in their WTO Tariff Schedules. In Jamaica a customs user fee ranging from JM\$600.00 to JM\$3,000.00 is charged on all customs transactions.

In addition, customs/import surcharges are applied in two countries on selected imports. Dominica levies a customs surcharge of 15 per cent on local and imported motor vehicles, motorcycles and some fruits. Trinidad and Tobago imposes import surcharges ranging from 60 to 93 per cent on the c.i.f. value of selected meats and sugars of non-CARICOM origin. This surcharge will be subject to reductions by 2004, but will still remain in place beyond 2004.

Belize imposes a revenue replacement duty at varying rates on selected imports from all countries.

Additional taxes and charges

This category includes the foreign exchange tax; stamp duty, environmental tax, inspection, statistics and consent fees.

Foreign Exchange Tax

Antigua and Barbuda, Belize, Montserrat and St. Vincent and the Grenadines are the countries, which continue to levy taxes on foreign exchange transactions. In Antigua and Barbuda, Montserrat and St. Vincent and the Grenadines the rate is 1 per cent respectively in Belize it is 1.25 per cent.

Stamp Duty

Jamaica levies stamp duties ranging from 32 per cent to 77 per cent on a limited range of non-CARICOM imports such as alcohol, tobacco, vegetables and fruits.

Environmental Tax

The environmental tax and/or bottle deposit levy exists in all Member States with the exceptions of Jamaica, Montserrat, Suriname and Trinidad and Tobago. The tax is not levied in a uniform manner in terms of the rates, affected products and manner of application in the respective countries.

Statistics, Consent and Inspection Fees

In 1999, when Suriname greatly liberalised its import regime system it kept the statistics and consent fees. The statistics fee is levied at 0.5 per cent and the consent fee at 1.5 per cent respectively of the c.i.f. value of all imports. Exports are also required to pay these fees, but not products produced for internal consumption.

Inspection or compliance fees are levied on imports in Grenada, Guyana, Jamaica, and Trinidad and Tobago respectively, for the inspection and monitoring services of the respective bureaus of standards.

Antigua and Barbuda has also indicated that a standard inspection fee is to be placed on used pneumatic tyres during 2002. There are plans in Jamaica to introduce an export certification fee on local products.

Internal Taxes and Charges Levied on Imports

This category includes the consumption tax, value added tax (VAT), and excise tax. The majority of CARICOM Member States apply these taxes on both imported and locally produced products. In all instances, Member States permit certain categories of goods, for example basic foodstuff, medicines etc. to be either zero rated or exempted from payment of these taxes.

Consumption Tax

Antigua and Barbuda imposes a consumption tax of 15 to 30% cent on goods. St Kitts and Nevis imposes a consumption tax of varying levels from 5-20% on imports. In St. Lucia, the consumption tax ranges from 0 to 45% while in St. Vincent and the Grenadines it ranges from 0 to 65%. In Dominica, there is a standard rate of 25% with some exceptions. In Grenada, consumption tax ranges from 0 to 75%, however, domestically produced goods and most CARICOM goods are taxed at 10%. The rate of tax in Montserrat ranges from 5 per cent to 45 per cent, and in the absence of local production is imposed only on imports.

In the case of Jamaica, all items are assessed a 15% general consumption tax, except where they are zero-rated or exempted. There is also a special consumption tax on some petroleum products, alcoholic beverages and tobacco products that do not pay the general consumption tax. In Guyana, the rate varies from 0 per cent to 85 per cent

Value Added Tax (VAT)

Barbados and Trinidad and Tobago apply a 15 per cent VAT respectively on all goods. In both countries a number of items have been exempted or zero-rated. In Suriname it is called a consumers tax and is applied at the rate is 7 per cent on goods and

5 per cent on services. In Belize and Dominica, there is a sales tax applied at a rate of 8 per cent and 5 per cent respectively.

Excise Tax

Excise duties applied at varying rates on selected imports and locally produced products, such as alcoholic beverages, tobacco and cigarette products, motor vehicles and petroleum products exist in Barbados, Saint Lucia, St. Vincent and the Grenadines, Suriname, and Trinidad and Tobago. In Grenada, there is a petrol levy that is levied on petrol on the point of sale.

Price Control Measures

These are measures intended to control the prices of imported articles. These prices are either fixed or calculated as a percentage mark-up on wholesale and retail prices.

Price controls are used in the majority of OECS Member States and Barbados for a wide range of products, generally encompassing beverages, staples, salt, sugar, rice, poultry products, construction materials, fuels, and soaps and detergents. In some cases, prices are controlled directly by setting maximum prices. In other cases, maximum wholesale mark-ups are set on the landed costs or maximum retail mark-ups are set on the wholesale price. Landed costs are calculated as the c.i.f. value plus the import duty and consumption tax generally, plus a certain margin on the c.i.f. value. Wholesale mark-ups vary according to the country and product: they range between 5 per cent and 15 per cent, while retail mark-ups range between 10 per cent and 30 per cent.

The prices of gasoline and diesel in all OECS countries and Barbados are adjusted only by regulation. A buffer system is operated: the tax on the fuels is adjusted as international prices change to bring their domestic price to administratively set levels.

Countervailing Measures

Barbados charges countervailing duties at BD\$0.33 per kilogram on the imports of milk, cheese and butter from Trinidad and Tobago.

Import Licensing Measures

The Ministry of Commerce or Trade in each country generally administers the import-licensing regime. The list of products subject to licensing is contained in a negative list, or in an external trade restricted imports order, which are published in the official gazettes of the respective countries.

In the LDCs, goods are divided between products that require an import licence when imported from any country that is not an LDC and goods that require an import licence when imported from any non-CARICOM country. Generally, the MDCs differentiate only between CARICOM and non-CARICOM products. There are no special provisions for Colombia, Cuba and the Dominican Republic despite the existence of the bilateral agreements and their provisions for dismantling non-tariff barriers as previously described.

In keeping with their regional, bilateral and international obligations as outlined in the Revised Treaty, the various Bilateral Agreements and the WTO Agreement on Import Licensing Procedures, CARICOM countries are dismantling or have partially dismantled their licensing regimes, and freely grant approval of the application for imports in several instances. Barbados, Dominica, Jamaica, and Trinidad and Tobago for example, have tariffed some of the products on their negative lists, and Antigua and Barbuda, Saint Lucia, St. Vincent and the Grenadines and St. Kitts and Nevis are also working towards this goal. Belize has committed (to the WTO) to the removal of import licences on t-shirts, brooms and bleach. However, this commitment has not been effected.

Several CARICOM Member States (Antigua & Barbuda, Barbados, Dominica, Grenada, Jamaica, Saint Lucia, St. Kitts and Nevis, and Trinidad and Tobago) have notified the WTO of their licensing requirements under the Agreement on Import Licensing Procedures and the Decision on Notification Procedures for Quantitative Restrictions. Guyana proposes to do so by April 2002, and Belize is in the preparatory stage of so doing.

Automatic Licences

These are measure of a formal character only, which do not involve a restriction and are found in all CARICOM countries.

Quantity control measures

These are measures intended to restrain the quantity of imports of any particular good, from all sources or from specified sources of supply, either through restrictive licensing, fixing of a predetermined quota or through prohibitions.

Several CARICOM Member States continue to make use of quantity control measures such as non-automatic licensing, quotas and prohibitions usually to protect local industry in contravention in some instances of the Revised Treaty and the WTO Agreement on Import Licensing Procedures Article 3.

Non-automatic Licensing

Non-automatic licensing is generally applied on products whose importation is restricted for sanitary, phytosanitary or safety reasons. These are generally: live animals; poultry, plants, vegetables, fruit and plant products; pesticides; controlled drugs; and arms, ammunition, and explosives, for which permits are required to obtain a licence.

Under Schedule III of the Revised Treaty, Member States are allowed to regulate the imports of oils and fats from all sources. Barbados, Grenada, Saint Lucia, Guyana, St. Vincent and the Grenadines and Trinidad and Tobago have instituted such licensing measures.

Under Article 164 (previously Article 56) of the Revised Treaty the LDCs can apply quantitative restrictions (non-automatic licences and quotas) on a number of products, to promote the development of industry. These restrictions apply to both the MDCs of CARICOM as well as non-CARICOM countries. The products affected are: curry powder, pasta products, candles, oxygen, carbon dioxide, acetylene, wheat flour, aerated beverages, solar water heaters, chairs and furniture of wood and upholstered fabric, and beer.

Some of the affected products are included in Annex I of the WTO Agreement on Agriculture and thus are subject to the WTO's tariffication process.

Quotas

Import quotas are quantitative restrictions, which establish a ceiling or a limit to the quantity of or value of products to be imported into the country. Antigua and Barbuda, Belize, Montserrat, Saint Lucia, and Trinidad and Tobago apply import quotas mainly on agricultural and food products. Saint Lucia also applies a quota on liquid bleach with the sanction of the Council for Trade and Economic Development (COTED).

Prohibitions

Generally, CARICOM Member States prohibit imports (in accordance with international conventions) that are hazardous to health or safety such as drugs, chemicals, counterfeit coins and stamps, arms and ammunition etc.

Prohibitions are also in place on some plants and animal products to prevent the introduction of plant pests and diseases, and animal diseases into the respective Member States. In addition, some (mainly agricultural) products that are in competition with local goods are prohibited in some countries.

Monopolistic Measures

These are measures, which create a monopolistic situation, by giving exclusive rights to one or a limited group of economic operators, for social, fiscal or economic reasons.

Most LDCs, Barbados and Guyana have state enterprises that perform the function of marketing boards. They have the monopoly on the importation of basic staples in bulk such as rice, sugar and flour, or of certain vegetables and poultry products.

WTO members are required to notify their state trading enterprises to the WTO annually, in accordance with Article XVII: 4(a) of the GATT 1994 and paragraph 1 of the

WTO Understanding on the Implementation of this article. Only Dominica has notified the WTO of its state trading enterprise.

Technical Measures

These are measures referring to product characteristics such as quality, safety, packaging, labelling etc. Such technical regulations and standards can become obstacles to trade when arbitrarily set and enforced not in accordance with the WTO's Agreement on Technical Barriers to Trade.

Barbados, Belize, Grenada, Guyana, Jamaica, St. Kitts and Nevis, Saint Lucia, St Vincent and the Grenadines, and Trinidad and Tobago all administer national and compulsory standards and technical regulations on local product and imports. However, only Guyana indicated that the monitoring of compliance to the compulsory standards was restricted only to imports in contravention of Article 5 of the Agreement on Technical Barriers to Trade. Other Member States without compulsory standards, reported adherence to the CARICOM standard.

The following countries reported notification to the WTO under the Agreement on Technical Barriers to Trade: Barbados, Belize, Grenada, Guyana, Jamaica, Saint Lucia, and Trinidad and Tobago.

5.2.5.2 CONTINGENT PROTECTION

(1) Safeguard Clauses

Does the RTA include an agreement-specific, non-MFN safeguard clause in addition to the WTO clause? If so, does it impede the use of WTO safeguard clauses between signatory parties? At present, the CARICOM Agreement only considers safeguards to remedy balance of payments difficulties. The Revised Treaty of Chaguaramas, in Chapter III on "Establishment, Services, Capital and Movement of Community Nationals", contemplates in Article 43 the right of CARICOM Member States to adopt, or maintain, restrictions in the event of serious balance-of-payments and

external financial difficulties or threat thereof. The allowable restrictions include quantitative restrictions, restrictions on the right of establishment, restrictions on the right to provide services, restrictions on the right to move capital or repayments and transfers for transactions. Also, Article 47 recognizes the right to apply restrictions when the obligations under the Chapter “create serious difficulties in any sector of the economy of a Member State or occasions economic hardships in a region of the Community”.

Are safeguard measures excluded from the agreement; more strictly controlled than by the WTO; banned? No information as this with regard to the EPA negotiations.

(2) Antidumping

No information on this with regard to the EPA negotiations.

5.2.5.3 RULES OF ORIGIN: see section 5.2.2

5.2.5.4 REGULATORY NORMS: BARRIERS TO TRADE

At present, CARICOM is trying to harmonise laws relating to Customs Legislation and Regulation, Consumer Protection, Standards and Technical Regulations, Labelling of Food and Drugs etc. Some of these laws are still in draft stage and being reviewed by the Chief Parliamentary Counsels (CPCs) and Legal Affairs Committee (LAC). To date there is little information on the extent of these issues that will be actually dealt with as part of the EPA negotiations.

5.2.6. ELEMENTS OF DEEP INTEGRATION

As discussed earlier the focus in the EPA negotiations to date has largely been on the issues of intra-regional integration, goods and services liberalisation. There has been little discussion or progress with regard to issue of deep integration.

Some aspects of deep integration are now being implemented in the CARICOM region through the CSME. A draft model of a regional Competition Law has been approved by the LAC and Barbados, Jamaica, St. Vincent have taken action. However, it seems like there has been no discussion to date on subsidies, and intellectual property rights. Elements of deep integration in the agreement with the EU still to be clarified but the ACP group have strongly expressed their belief that issues applicable to deep integration be kept out of EPA negotiations.

In discussions on TBT matters, the CARIFORUM team indicated that the Caribbean Regional Organisation for Standards and Quality (CROSQ) was at an early stage of development, but would benefit from the support that was due to be provided under the EC's Caribbean Regional Indicative Programme. To date, 12 members of CARICOM have signed the Agreement establishing the CROSQ and is being provisionally applied in these Members. In Belize, Jamaica and Suriname, the Agreement has been enacted into domestic law. The key functions of CROSQ are to lead the process of promoting and applying harmonised international standards across the region, and to provide technical advice to CARICOM Ministerial Councils, including in matters concerning TBT measures affecting trade. Currently, the system is mixed with some national and some regional standards in application. While CROSQ coordinates the activities of Member States, but the obligations under the WTO TBT Agreement (e.g. on notification) are still under national responsibility.

At the core of CARIFORUM's approach to SPS issues is The establishment and operationalization of the Caribbean Agricultural Health and Food Safety Agency (CAHFSA). The CARIFORUM team explained that a major challenge was ensuring the sustainability of CAHFSA. Both sides agreed that additional support for the development of a CARIFORUM regional SPS regime could provide early harvest results from the negotiations.

5.2.7 IS THE RTA WTO COMPATIBLE?

As the agreement is still in the process of being negotiated, this is a question, which cannot yet be answered. However, of relevance here is that the existing trade

relations between the EU and the ACP countries are WTO incompatible. Hence, a key motivating factor behind negotiating the EPA is precisely to make them WTO compatible. An issue which will naturally arise here, is that of “substantially all” trade, which has already been discussed earlier in this report.

5.2.8. ROLE OF DONORS

Under existing EU-ACP relations the EU provides considerable financial assistance to the region via technical assistance, direct aid, grants and loans. It is also clear that the EU intends to continue to provide financial support to the region in the future. There is considerable debate however as to the precise form which future funding will take (eg programme support v budgetary support), and the extent of any conditionality, which may be introduced. The Cariforum approach is also to request direct linkage between the EPA negotiations and implementation and financial assistance and aid. The position of the EU on this has been to firmly separate the two aspects. From the perspective of the EU, the negotiations over the EPAs are something, which the EU is negotiating with the region. Financial assistance and aid is not something that the EU wishes to negotiate over. This distinction / division from the point of view of the European Commission is perhaps strengthened by the separation of these functions across different Commission Directorates. Within the region, there has been for some time discussion of the need for a regional fund intended to assist those countries / producers / sectors who may be experiencing adverse consequences as a result of changes in trading relations. However, at present this is largely something which is under discussion and few countries have been prepared to commit resources to this.

5.3. AN ASSESSMENT OF AN EU-CARICOM EUROPEAN PARTNERSHIP AGREEMENT: SHALLOW INTEGRATION

5.3.I. INTRODUCTION

The aim of this section of the report is to apply the descriptive statistical indicators detailed earlier to a proposed process of regional trade integration – in this case an EPA between the EU and the Caribbean region. In several respects, this discussion is considerably more complicated than our discussion of the Egypt-EU Association Agreement. Firstly, this is because the Egypt-EU Association Agreement has already been agreed upon and ratified, and hence the nature of the regional agreement itself is clear, as well as being already operational. In contrast, the EPA negotiations are ongoing, and there is much less clarity about the form these will take with respect to a number of key issues. Secondly, the countries in the Caribbean region, which are negotiating with the EU – known as the CARIFORUM group – comprise a number of quite diverse economies. Hence, the impact of a proposed EPA may well be quite different depending on the country being considered. It is worth recalling that the CARIFORUM grouping represents those countries making up CARICOM plus the Dominican Republic. Within CARICOM itself, there are then two groupings – the less developed countries (LDCs), which are largely the countries comprising the Organisation of Eastern Caribbean States – OECS, and the more developed countries (MDCs). The needs, position in the negotiations, and ultimately the impact of an EPA may well differ between these different sub-groups.

A key component of any EPA is that the CARIFORUM economies will be expected to remove tariff on ‘substantially all’ imports from the EU during the implementation period. A key question to answer in this assessment is then whether the preferential liberalisation of ‘substantially all’ trade barriers by the Caribbean economies, with regards to the EU under the EPA, will bring positive welfare effects to these economies and the EU. In the first instance, we approach this question through an analysis of appropriate descriptive statistical indicators. Later on in this report, we then

corroborate our key conclusions with reference to more formal partial and general equilibrium modelling.

Prior to discussing the descriptive statistical indicators it is first necessary to give some context to the discussion and in particular to give consideration both to the possible form that an EPA might take and of the options available to the CARIFORUM group of countries. This section of the report is thus divided up into two sub-sections. In the first of these, we discuss some key issues concerning the possible form of an EPA and then in the second we see what light our descriptive statistical indicators shed on the possible welfare impact of an EPA process.

5.3.2. EPAS: SOME BACKGROUND ISSUES

The Caribbean economies along with other African, Caribbean and Pacific (ACP) countries have enjoyed preferential trade access to the EU market for many decades under the Lome Agreements. The basic principal of the Lome Convention was that of non-reciprocal duty and quota-free access for most of the ACP countries exports to the EU. In order to bring conformity with WTO rules the Convention was replaced in 2000 by the Cotonou Agreement. The latter agreement envisages establishing, by 2007, a European Partnership Agreement (EPA), which will be more reciprocal in nature, increase regional integration and have a sizeable aid and development assistance component attached to it. Apart from integration of the ACP countries into world economy, the principal aims of the EPA emphasis economic growth and poverty eradication.

Hence, existing arrangements between the EU and the ACP countries are such that the ACP countries have preferential access to the EU market. That preferential access is greater than the EU affords via its' GSP system of preferences mainly with respect to the number of tariff lines which have duty free access, but also because of the special protocols on Bananas, Sugar and Rum. However, existing arrangements are WTO incompatible, hence the need for renegotiation. This also means that the ACP countries do not have a choice between negotiating an EPA with the EU, or remaining with the status quo.

The options open to the ACP countries are therefore:

1. Negotiate and sign an EPA with the EU. Under this scenario, the new negotiated arrangements would start to come into force on the 1st of January 2008. A key feature of any EPA is the reciprocal liberalisation of “substantially all trade”.
2. Choose not to do the above, in which case the countries would then have access to the EU via its’ GSP preferences or via EBA (note that in the Caribbean region the only country, which qualifies for EBA preferences is Haiti).
3. For the Caribbean, parallel to the above, are the trading relations with the Americas, and in particular the FTAA. Currently the Caribbean countries have access to the US market via the Caribbean Basin Initiative, but there is also on-going talk about the FTAA process. As with the EPA’s this would imply reciprocal market access.

The EU has in principle committed itself to offering ACP countries an alternative to the EPA process if that is so desired. However, de facto all ACP countries are actively engaged in the EPA negotiations, and there is no active discussion of alternatives with no country has indicating that it wants to go down route (2). This is possible for two reasons. First, this is probably because route (2) is likely to offer poorer access to EU markets than the EPA alternative. Secondly, there is probably a perception that the EPA process offers additional benefits. These include the technical assistance and aid which derives directly as part of the negotiation process, and because under Cotonou there is an explicit development dimension with various forms of aid and assistance on offer. It should be stressed however, that even if a given country chose not to sign an EPA they would still, in principle, have the same access as before to EU development aid and assistance. Nevertheless, it is also clear that the ACP countries, and in particular the CARIFORUM grouping are keen to link the negotiations on trade with development and assistance aid, while the Commission are strongly resisting this.

Under the proposed EPA preferences the European Commission has indicated that it intends to offer completely free market access to the ACP countries – in return of course of a “substantial” opening up of their markets to the EU. Hence, there is little doubt that EPA preferences would be broader and deeper than GSP preferences. However, it should be noted that that the EU has very recently (April 05) revised its GSP preferences, which implies some further erosion of the ACP preference margin. The EU is also committed to simplifying further the GSP rules of origin.

In principle then, the EPA negotiations are meant to cover six thematic areas, which are listed below:

1. *Market Access*: this includes negotiations over rules of origin, customs procedures, trade facilitation, safeguards, WTO compatibility, product coverage, and discussions over the nature of any transitional arrangements.
2. *Agriculture, including fisheries*: There is agreement on the importance of agriculture, of export diversification on the side of the ACP states and of tackling SPS issues in the negotiations. However, there is a lack of consensus on sequencing. The EU would like negotiations on agricultural trade liberalisation and on the concomitant provision of support for agriculture in the ACP countries to proceed in parallel, whereas the ACP states think assistance should precede negotiations.
3. *Trade in services*: While services are mentioned in the Cotonou agreement, there is no obligation for liberalisation of trade in this sector. In principle however, both sides have agreed to include services liberalisation in the EPAs, based on the positive list approach and taking into account the specific circumstances of countries / regional groupings. The ACP countries have requested more access to the EU market under mode 4 of the GATS (temporary movement of workers), which the EU has agreed to consider.
4. *Trade related issues*: Both sides recognise the importance of non-tariff issues (competition policy, IPRs, technical regulations and standards, trade and the environment and trade and labour standards) but differ with regard to matters of both coverage and sequencing. For the ACP states there appear to be two prior conditions: first, the need to improve legal and institutional capacities before embarking on negotiations, and second the need to reach multilateral (WTO) agreement prior to EPA-based negotiations. The EU's position is that of these issues are already in the Cotonou Agreement, and that capacity building and negotiations should proceed simultaneously.
5. *Development cooperation*: The need to support capacity building and infrastructure development is recognised by both sides. The difference is over the levels of support.
6. *Other / Legal issues*: E.g., dispute settlement. This includes a range of other issues such as dispute settlement, the legal status of the Agreements, as well as institutional matters.

In practice, it is probably three key areas, which are likely to dominate: First, issues of market access. At stake, here will be differing interpretations of “substantially all trade”, the length of the transition period, and possibly also special and differential treatment. Any EPA has to come to an agreement on tariff liberalisation, which is WTO compatible – after all this is why the EPA process was launched. While both sides have

accepted the need for flexibility and asymmetry in terms of timing, product coverage, and possibly also rules of origin, the actual length of the transition periods and the degree of product coverage are very much still under discussion. For example, The ACP countries typically want a longer transition period than the standard period of 12 years, while the European Commission appears less enthusiastic. From the Caribbean perspective as well as for the other regional groupings there will be important issues concerning the degree of uniformity in the application of the rules across countries, and the extent to which the agreements might allow for any special and differential treatment.

Secondly, there are important issues concerning development co-operation. As mentioned above the ACP countries would like negotiations on this to be linked to the market access negotiations but the Commission is determined to keep them separate. The view appears to be that aid and assistance is something which the Commission offers to the ACP countries and therefore is directly under the control of the Commission, while issues of market access are something which need to be negotiated between the two parties.

The third key issue is the role of regional integration between ACP countries. Hence encouraging or fostering greater links between the ACP countries themselves. In the Caribbean context, this is also typically seen as being important. There is a long history of regional integration in the region, as seen in the establishment and implementation of CARICOM, and in the current moves towards the establishment of the Caribbean Single Market and Economy (CSME). However, while this process is seen as important within the region, there are also strong views concerning the need to allow for asymmetries in rules and their application across countries principally according to the distinction between LDCs and MDCs.

5.3.3. EVALUATING AN EPA USING DESCRIPTIVE STATISTICAL INDICATORS

From the preceding discussion, it is very clear that the precise form of an EPA is still very uncertain. With regard to market access, there are issues to do with timing, product coverage, and special differential treatment, which remain to be resolved. In this

section, and despite this ambiguity outlined above, we provide a prima-facie analysis of the possible impact of an EPA on the Caribbean region.

We do so in the following manner. We take the reasonable assumption that the EPA involves reciprocal access to markets (though not necessarily completely symmetrical), which at a minimum is going to require the Caribbean region to significantly reduce its' trade barriers with respect to the EU. We then consider what light the descriptive statistical indicators we have identified shed light on the welfare implications of that preferential reduction in trade barriers.

For the purposes of this section, we set aside issue of deep integration. In terms of shallow integration from the Caribbean countries' point of view, it is important to distinguish between two dimensions here. First, the implications of opening up their domestic markets to EU exports; secondly, the issue of access to EU markets. The former is concerned with changes in domestic market access and analytically in terms of the first order effects primarily raises issues of trade creation, trade diversion, and trade reorientation. Hence the concern is both with the impact on domestic production capacities and with regard to the impact on domestic prices. Changes in domestic production, especially in a highly specialised economy, can have (serious) distributional implications. Changes in prices can lead to overall welfare gains if they arise from trade creation, though not if this is a result of trade diversion. The focus of the latter is more to do with the impact on highly specialised domestic production and export structures of changes in preferences in their export markets.

It is also important to highlight that in this analysis we have focussed on the implications of the liberalisation of goods trade for the countries of the region. The principal reason for this is that it is agreement on the symmetric liberalisation of substantially all trade in goods which is in the first instance required in order to ensure the WTO compatibility of trading arrangements between the EU and the ACP countries. We do, however, recognise the importance of services for the region which as a share of GDP ranges from 55% for Trinidad and Tobago to nearly 75% for Antigua and Barbuda, Barbados and St.Lucia.

In considering the descriptive statistical indicators, we focus on the following issues:

- How distorted are market initially? This involves looking at the tariff and non-tariff barrier structures, where clearly the greater the presence of distortions the greater the possibility of welfare gain.
- For a given tariff structure what is the likelihood that trade creation, or trade diversion are likely to dominate over trade diversion or vica versa? The conceptual basis behind this was discussed in more detail earlier in this report.
- There are then other issues to do with vulnerability, size and diversification which need to be borne in mind?

These are the issues to which we now turn.

5.3.3.1: TARIFFS, NON-TARIFF BARRIERS AND THE EXISTING STRUCTURE OF PROTECTION

The CARICOM economies grant at least MFN treatment to all their trading partners including the EU and the US. The organization has signed preferential trade agreements with Colombia, Venezuela, Cuba and Dominican Republic, and is a participant in the Free Trade of the Americas negotiations. As shown in Table 5.3 earlier and A3 in the appendix, the CARICOM economies have made some progress to liberalize their trade regime in the 90's. The simple average tariff has fallen from 17.6% in 1991 to 12.25% in 2002 and by further 0.9 of a percent in the following year.

The structure of CARICOM's Common External Tariff (CET) differs between competing and non – competing imports, as well as between input, intermediate and final goods, forming a hierarchy in which non-competing goods bear the lowest tariff, while competing final goods bear the highest tariff (CARICOM Secretariat, 2001). In 2002, the agricultural and beverages and tobacco sectors remained most protected with average tariffs of 19.55% and 37.7% respectively. Crude materials and mineral fuels had an average tariff of just above 5%, while the tariffs on manufactured goods and machinery were around 9%. The highest manufacturing tariffs were imposed on miscellaneous manufacturing goods under SITC rev.2 classification, such as textiles and apparel or footwear which averaged around 20%.

The level of protection in Dominican Republic is broadly similar to other Caribbean economies but is of a slightly smaller magnitude. The average tariff in 2002 was 9.55%, down from roughly 15% in 1997. The highest tariffs are imposed on beverages and tobacco, 26% and on agricultural products and “Miscellaneous manufacturing products” 16%. Other product categories, such as chemicals, mineral fuels and lubricants or machinery and transport equipment have an average tariff of 5-6%. The only exceptions are “Manufactured goods classified by material” with tariffs of 9%.

The preceding suggests that there is some evidence of tariff escalation, and that CARIFORUM tariffs are on average still medium to high. High tariffs in turn suggest greater distortions to international trade, and hence the reduction in tariffs on a preferential basis suggests that there is likely to be both trade creation and trade diversion with the extent of each of these being determined in good part by the base pattern of trade.

However, first, it is also important to consider tariff peaks, information on which is given in Table A1. From the table we can see that there were over 1000 tariff peaks in 2002. This suggests that whereas on average CARICOM tends to have a tariff ceiling of 20%-30% there exist a large number of products where tariffs are significantly higher, and where hence the underlying distortions are that much higher.

Secondly, it is also important to note that while in principle, there is a common external tariff in place, in practice, a number of the countries have derogations from this CET and de facto there may be differential tariffs charged. These derogations or exceptions appear to apply largely to the LDCs, and not surprisingly typically concern those sectors, which are particularly sensitive. Those derogations can however go in either direction – hence in certain cases the applied tariff maybe higher than the CET, and in other cases, it may be lower.

For example with respect to thirty-five, mostly agricultural, commodities CARICOM has suspended the CET for an indefinite period with individual members free to determine their own tariff rates. Among these items are such commodities like: meat, milk, eggs, potatoes, maize, sugar. For a further, 200 products CARICOM determines the minimum tariff which is applied mostly to tobacco and alcohol, fuels and oils, cars, car

parts and other transport equipment and arms. Higher tariffs for these products are applied most often by Belize, Grenada, St. Kitts and Nevis, St Lucia, and Trinidad and Tobago. Other exemptions are targeted towards the OECS which usually apply rates lower than the agreed CET. For example, St. Kitts and Nevis applies lower tariffs on a significant share of agricultural and processed food items while Dominica has lower duties on textiles. Finally, Antigua and Barbuda, Dominica and Jamaica apply lower tariffs on rice than the CET.

With regard to intra-Caribbean regional integration, the CARICOM region has completely abolished intra-CARICOM tariffs, and hence in principle the region comprises a tariff-free integrated area. In practice while tariffs may have been abolished there are a number of non-tariff barriers, which remain in place. Indeed, as mentioned in the institutional analysis, these tariff rates still understate the true extent of protection in CARICOM economies, as they continue to apply significant amount of additional trade charges and non-tariff barriers both on intra-CARICOM trade and also on trade with third countries. These measures vary a great deal for different countries and include custom surcharges, stamp duties and consumption taxes. The report submitted by The Caribbean Export Development Agency (2001) called 'Inventory of non – tariff, trade restriction measures applied by CARICOM member states' argues that the existing non-tariff barriers that have recently been imposed, have served to counter the market access improvements derived from the reduction in CET, and thus the actual degree of liberalization has been much smaller than the tariff reduction would suggest.

The CARICOM countries are also committed to the full implementation of the Caribbean Single Market and Economy as of January 2006, where the CSME is in good part concerned more with issues of deep integration. Agreement on this was achieved in 1992, when the Caricom members agreed in principle to implement the Caribbean Single Market Economy (CSME), with the OECS States being given longer adjustment periods in implementing the CSME measures. Progress in implementation has been somewhat slow with the CSME due to come into force from January 2006. As of the latest update, 12 of the CARICOM have signed and ratified the revised treaty. The Bahamas has still to decide if it wants to join the CSME, Haiti has been given considerable flexibility with

implementing the Treaty given its economic circumstances and Montserrat, a British territory, is awaiting entrustment from the UK

In conclusion, the overall applied tariffs in the Caribbean economies can be characterised as medium to high, which in turn suggest three immediate concerns

1. Because the existing trade regime is quite highly distorted, there is concern that key sectors in these economies are not actually sectors in which the economies have a true comparative advantage. Hence, any change in trade policy, which impacts upon this is likely to have severe distributional implications.
2. Linked to the preceding, the high tariff levels suggests that preferential liberalization is likely to have significant effects, be it on trade diversion or trade creation. The liberalization will be trade creating to the extent that Caribbean consumers gain due to price falls and as EU producers will expand their market share. The liberalization will be trade diverting to the extent that the EU supplies displace other third country supplies. For example, in many low-tech industries, the EU is regarded as high-cost producer, which suggests the possibility that EU manufacturers will displace efficient suppliers from outside the EPA, for which the tariffs are set too high. In addition, the losers from the liberalization might be domestic producers as the price falls. For the Caribbean economies, the net welfare effect will depend on whether the trade creation outweighs trade diversion effects, and this is addressed in the following section.
3. Another important implication of the future EPA are potential adjustment costs that Caribbean will have to bear as a result of revenue shortfall. Given that the Caribbean countries are small or very small economies that heavily rely on tariff revenue, and given that the EU is the second largest exporter into the region, the dismantlement of tariffs will result in significant revenue shortfalls. For example, Jamaican tariffs make an important contribution to government revenue, which in 2003/04 reached J\$12 billion (9.3% of total taxation revenue and 4.3% of total revenue) (World Trade Organization, 2005).

5.3.3.2. ASSESSING THE LIKELIHOOD OF TRADE CREATION V TRADE DIVERSION

Trade creation is more likely where the partner countries already trade substantially with each other, and hence in this context where the Caribbean economies already import a high proportion of their imports from the EU. Consider the hypothetical case where all Caribbean imports currently derive from the US where the US faces the same tariffs as the EU. Clearly then the US is the more efficient supplier, and any switch to EU imports following an EPA would thus be trade diverting. Hence the first

descriptive statistic to consider is the extent to which the Caribbean economies trade (import) substantially with (from) the EU.

A) Evaluating the existing pattern of trade

A key feature that distinguishes the Caribbean economies from the rest of ACP countries and from Egypt, is their relative proximity to the US (and distance from the EU) and consequently their strong dependence on both export and imports from the US and other countries in the wider region. This can be seen from Table 5.5 given earlier, and from Table A2 in the Appendix.

Hence, if we take the CARICOM countries as a group, for 2001, of their total imports only 14% came from the EU. In contrast, the US supplied more than 39% of imports, and the combined total for Venezuela, Japan, Brazil, Canada, Mexico and Japan was over 20%. There are also of course significant variations across countries but even Trinidad and Tobago, and Suriname which have the lowest share of imports coming from the US, have an average share respectively over 2000-2003 of 34% and 27% respectively. Their share of imports coming from the EU over the same time period was 18% and 29% respectively. The highest share of imports coming from the EU over this period was that for Suriname given above while the lowest share was for the Bahamas at 0.02%. The key import shares for the Dominican Republic for 2002 were the US (with a share of 44.8%), Venezuela (13.4%), the EU (10.7%), and Mexico (6.7%).

These statistics clearly suggest that there would appear to be considerable potential for trade diversion. That possibility for trade diversion arises because although the EU is an important supplier to the region, it typically only supplies approximately 20% of the region's imports. The preferential liberalisation of trade with the EU then carries with it the possibility that trade will switch from other suppliers (currently accounting for approximately 80% of imports) towards the EU.

As argued earlier ultimately the extent to which this is likely to occur depends on how the marginal import price is determined. Welfare losses are more likely via trade diversion, revenue loss or terms of trade effects where the non-EU suppliers comprise the sole or principal supplier. Welfare losses are also more likely when the marginal import

price is determined by an elastic ROW supply schedule but the EU has a larger share. In order shed light on this we can explore in considerable detail the share of imports by individual tariff lines and establish the extent to which these imports are supplied by a sole country supplier or not. This information is provided in Table 5.11 which is based on Gasiorok and Winters (2004) as is the discussion of the results in the table.

From the preceding discussion, it is clear that on the import side the welfare effects of any proposed EPA will depend in good measure on who is supplying given goods to the market, and on the extent to which different suppliers are the principal suppliers to the Caribbean market. Table 11 is based on nine of the Caricom economies. For these economies and for the year 2002, we have calculated the share of imports for each HS 6-digit product from each of four sources – CARICOM, EU15, USA and the Rest of the World. In the table, we report the number of product categories for which each of the suppliers has a share of 20%-80%, 80%-90% and over 90%. We also give the percentage of imports falling in each category and, in column (1), the total number of 6-digit headings in which imports are recorded. We interpret 20%-80% shares as indicating a shared market and over 90% as being effectively a sole supplier.

Hence, the first row of Table 5.11 shows that for Trinidad and Tobago, the US supplies between 20% and 80% of the market for 1256 products, which account for 10.8% of total imports. For 775 products, the US is virtually the sole supplier with over 90% of all imports, and these goods account for 6.41% of Trinidad and Tobago's total imports.

There are several important messages which emerge from this table. First, it is only for Antigua and Barbuda that the EU is a significant "sole" supplier, where for 27.21% of total imports the EU supplies more than 90% of the market. In fact, this figure is dominated by two import categories – motor-boats and sail-boats – which between them comprise 53% of all EU exports to Antigua and Barbuda. For the remaining economies the number of headings for which the EU is the "sole" supplier ranges from 8 (covering 0.03% of the total trade) for the Bahamas to 196 (0.83% of total trade) for Trinidad and Tobago; the largest share of trade with the EU as sole supplier is 4.8% for St. Kitts and Nevis, followed by 3.4% for Dominica. The un-weighted average across all

the economies listed here is 4.9% and if Antigua and Barbuda is excluded the average declines to 2.19%. These numbers suggest that there is little scope for pure trade creation.

If we turn to imports from either the USA or the rest of the world (ROW) we see a much higher number of products where these are dominant suppliers. For the US, the figures for the share of total trade so covered range from 6.05% for Antigua and Barbuda to 62.15% for the Bahamas (and in this case, there are no particular industries which dominate). The average across all the countries included is 16.27%. Given the high number of headings, and the high share of trade covered by those headings this would suggest considerable scope for trade diversion arising from an EPA.

It is also instructive to look at the shares of trade coming from within CARICOM. Here we see that for the three larger economies – Jamaica, the Bahamas, and Trinidad and Tobago the share of trade where other CARICOM producers are dominant suppliers is extremely small (in each case less than 0.5%). In contrast for the six small OECS economies there is a more significant proportion of total trade for which the CARICOM countries supply more than 90% of the imports: St. Kitts & Nevis, 8.6%; St. Lucia 4.29% and Antigua & Barbuda 6.21%, Grenada 1.85%, Dominica 7.16% and St. Vincent and the Grenadines 1.99%. Thus, there may be a little more scope for trade reorientation here. For the remaining CARICOM economies, however, the regional share is very low. It may be that in the OECS, we are observing the transshipment from a CARICOM location of small consignments from elsewhere, but it might be that in the absence of direct transport links to the EU and USA, CARICOM output looks competitive in these economies.

Table 5.11: Share of CARICOM imports by supplier – 2002

Country	%	detail	CARICOM	EEC15	USA	ROW
Trinidad & Tobago	20% - 80%	no of products	61	733	1256	1028
		% of total trade	0.570	9.192	10.803	8.276
	80%-90%	no of products	13	58	272	171
		% of total trade	0.216	0.827	3.045	2.234
	> 90%	no of products	37	196	775	801
		% of total trade	0.110	0.830	6.410	52.320
Bahamas	20% - 80%	no of products	11	82	198	93
		% of total trade	0.606	0.800	14.859	12.031
	80%-90%	no of products	1	5	160	3
		% of total trade	0.000	0.003	5.440	0.004
	> 90%	no of products	2	8	3743	12
		% of total trade	0.000	0.030	62.150	0.650
Jamaica	20% - 80%	no of products	128	498	1469	1048
		% of total trade	9.220	5.516	24.998	14.327
	80%-90%	no of products	5	34	376	109
		% of total trade	0.079	0.438	6.276	5.544
	> 90%	no of products	15	106	1445	218
		% of total trade	0.300	2.480	10.120	11.930
St. Kitts and Nevis	20% - 80%	no of products	227	308	814	394
		% of total trade	7.378	4.388	21.787	7.714
	80%-90%	no of products	18	26	283	40
		% of total trade	0.221	0.880	8.480	5.875
	> 90%	no of products	78	96	1368	97
		% of total trade	8.600	4.800	18.450	2.250
St. Lucia	20% - 80%	no of products	282	530	1090	495
		% of total trade	13.805	11.900	27.519	10.124
	80%-90%	no of products	28	55	215	37
		% of total trade	2.500	1.075	4.281	0.657
	> 90%	no of products	84	167	987	155
		% of total trade	4.290	1.300	8.910	4.450
Antigua & Barbuda	20% - 80%	no of products	204	279	297	188
		% of total trade	2.009	10.131	5.309	27.033
	80%-90%	no of products	34	48	79	25
		% of total trade	1.270	0.805	3.097	0.689
	> 90%	no of products	469	352	403	266
		% of total trade	6.210	27.210	6.050	3.560
Grenada	20% - 80%	no of products	267	343	843	387
		% of total trade	8.545	7.718	23.402	11.976
	80%-90%	no of products	41	30	152	27
		% of total trade	6.108	0.881	3.732	3.053
	> 90%	no of products	78	118	757	134
		% of total trade	1.847	2.786	10.808	3.339
Dominica	20% - 80%	no of products	195	253	660	436
		% of total trade	7.513	8.386	19.742	17.237
	80%-90%	no of products	30	33	125	50

	> 90%	% of total trade	3.221	1.206	3.801	1.016
		no of products	78	109	684	184
		% of total trade	7.158	3.436	8.591	5.118
St Vincent	20% - 80%	no of products	267	330	788	409
		% of total trade	11.696	8.288	18.138	14.039
	80%-90%	no of products	32	37	163	38
		% of total trade	2.946	2.513	3.337	2.440
	> 90%	no of products	81	86	802	113
		% of total trade	1.994	1.881	15.038	2.686

Table 5.12 cross-classifies some of the information in table 5.11. Classifying headings by reporting country share between 40%-80%, we ask what are the typical shares of other suppliers. Thus if we take the first row, the products for which the EU share lies between 40%-80% account for 12.41% of total imports by Trinidad and Tobago. Of this, the EU accounts for 7.29%, CARICOM 0.03%, the US 3.55% and the ROW 1.54%. That is, where the EU has a “material share” of Trinidad and Tobago’s markets, it is almost exclusively sharing with tariff-paying suppliers. The same applies to the other countries. Thus for these industries, trade diversion is more likely than trade creation, and, because of the small Caribbean share, there is little prospect for trade reorientation. Conversely, where the USA has a material share, the EU typically supplies a quarter or less of the US amount. The data also suggest that liberalising trade with the USA may be better than an EPA because the relative importance of local Caribbean supplies in the USA’s “material-share” products opens up the prospect of trade reorientation.

Table 5.12: Shares of trade for those industries where the reporting country share is between 40-80%

Country	Reporting country	CARICOM	EEC15	US	ROW	TOTAL
Trinidad & Tobago	EU	0.03	7.29	3.55	1.54	12.41
	US	0.23	1.65	6.57	2.37	10.81
	CARICOM	0.30	0.03	0.07	0.09	0.49
Bahamas	EU	0.00	0.18	0.18	0.01	0.37
	US	0.63	1.23	9.10	2.42	13.38
	CARICOM	0.34	0.04	0.22	0.01	0.61
Jamaica	EU	0.02	1.97	1.05	0.49	3.53
	US	6.36	3.97	20.31	6.38	37.02
	CARICOM	0.23	0.23	1.16	0.49	2.11

St Kitts	EU	0.07	1.90	1.36	0.20	3.53
	US	3.46	3.61	18.62	4.29	29.98
	CARICOM	5.49	0.33	2.07	1.35	9.24
St Lucia	EU	0.40	5.33	2.05	1.35	9.13
	US	2.51	5.45	19.80	5.30	33.06
	CARICOM	11.98	1.05	5.24	0.79	19.06
Antigua & Barbuda	EU	0.38	2.97	0.80	0.83	4.98
	US	0.72	0.96	3.96	0.60	6.24
	CARICOM	1.56	0.33	0.49	0.30	2.68

B) Finger-Kreinin Indices

Another approach to exploring this issue via the use of descriptive trade statistics is the Finger-Kreinin indices of export (import) similarity. This provides a single measure, which summarises the extent to which countries export or import structures are similar. The index ranges from 0-1, and where the index is equal to 1 this means that the export (import) structures of the pair of economies being considered is identical, and where it is equal to zero the export (import) structure has no overlap whatsoever.

Suppose the FK export index is equal to 0 and suppose that export structure can be taken as a reasonable proxy for a given country's production structure. An index equal to zero suggests no overlap in the countries' production and export bundles which in turn suggest no possibility for trade creation on the production side. There remains some possibility for trade creation on the consumption side. Equally, suppose the FK index = 1. This would mean that there is a very high degree of overlap in the two countries export and production bundles, which in turn suggests a higher possibility for trade creation on both the production and consumption side. However, with regard to each of these extreme cases the possibilities for trade creation will depend on from whom the importing country is initially importing. If, initially the Caribbean is importing heavily from the EU, and the EU-Caribbean FK index is high this suggest more scope for trade creation. If however, the Caribbean is initially importing heavily from the US, and the EU-Caribbean FK index is high this suggests that there is likely to be considerable trade diversion. Where the FK index is low, then the only possibility for trade creation is on the consumption side, and again this will only occur where EU exports to the Caribbean are high.

Table A4 in the appendix gives the FK export index for all our bilateral pairings for the year 2000. Consider first the bottom right hand corner of the table where we see the FK index between the EU and the US. The index is 0.691, which suggests a high degree of overlap between the US and the EU, therefore considerable scope for gains from trade between this pair of countries. Note also that high index of similarity also suggests that these countries exports are likely to be substitutes and again suggests the possibility for trade diversion. The fifth column, along the bottom two rows of the table, then give the FK index between CARICOM and the EU and the US respectively. We see that the index is now 0.286 with respect to the EU, and 0.266 with respect to the US. This is considerably lower and suggests less scope for trade creation on the production side.

However, this average figure masks considerable diversity among the Caribbean economies themselves. If we consider the individual FK indices by country, we see that for the majority of the Caribbean economies there is extremely little overlap in export (and therefore probably production) bundles. For many of the economies the index is considerably below 0.1. If we couple this with the statistics earlier on imports by source we can see that there is very little evidence to suggest that for many of these economies there is much scope for trade creation either on the production or consumption side. This is not always the case. Trinidad and Tobago for example have a higher share of imports coming from the EU, and have an FK export index with the EU of 0.334. Similarly Barbados has one of the higher shares of imports accounted for by the EU (17.4%), and has an FK index of 0.225. For these two economies, there is perhaps a greater likelihood of trade creation than for the other economies, but the figures nevertheless suggest that the extent of this is likely to be low.

In summary, the descriptive indicators clearly suggest that on the import side there appears to be considerable potential for an EPA between the Caribbean and the EU to be trade diverting as opposed to trade creating.

5.3.3.3. FURTHER CONSIDERATIONS:

The preceding analysis has suggested that tariffs in the region are medium to high which suggests that on the import side there are significant distortions in place. We have

also shown that the EU is typically not the most important supplier to the region, and the comparatively low level of the share of the EU in most of the Caribbean markets together with the higher tariffs in place suggest that an EPA based on shallow integration is likely to be trade diverting.

In this part of the analysis, we turn to examining a number of other descriptive statistical indicators which are also useful when considering the likely impact of a regional trading arrangement such as an EPA.

A) Caribbean Exports

If we first turn to export flows, it can be seen that in 2000, the US was the top export destination for many of the CARICOM countries in almost all cases followed by EU (refer to Table A3 in the appendix, as well as Table 5.5 given earlier). This is not invariable true. Hence, the EU tends to be the most important export market for Barbados, Surinam and the OECS microstates such as St. Lucia, St. Vincent and the Grenadines, as well as for Montserrat and Grenada. The OECS microstates and Barbados have long lasting trade relations with the UK which go back to the colonial period. On average, the share of CARICOM exports going to the EU has tended to be somewhat stable over the last 20 years, with the range varying between 15%-20%, while the share of exports going to the US has fluctuated somewhat more, with 54.7% of exports going to the US in 1980, and 40.8% in 2001. However, these aggregate changes mask significant changes at the level of individual countries. For example the EU has been consistently an important export market for Jamaica (around 30% of exports), while less for other countries such as Trinidad and Tobago (varying between 9%-14% over 1980-2001). For the Bahamas, the share of EU exports has risen from 9% in 1995 to 17.8% in 2001. Conversely, for St. Kitts, the share of exports going to the EU has declined from 40% in 1995 to 21% in 2000, to a reported 1.2% in 2001.

Under the Lome Convention, the Caribbean ACP economies enjoyed duty free access to the EU for agricultural products not covered by the EU's Common Agricultural Policy (CAP). Products covered by CAP, which include the majority of agricultural goods in which CARICOM and EU are competitors, are restricted by a case-by-case regime (Nielsson, 2002). The agreement also specified special trade protocols for trade in

bananas, beef and veal, as well as rum and sugar, which guaranteed that the EU would buy an agreed quantity of these commodities at a price significantly above world price. In order to insure WTO's compatibility, the future EPA is likely to have significant erosion of these preferences. Although for CARICOM in 2001, sugar, bananas and rum comprise only 5% of total exports, they constitute a third of exports to the EU (refer to Tables A6 and A7). If one excludes the two biggest CARICOM economies – Jamaica and Trinidad and Tobago, which are major exporters of natural resources, such as aluminium ores and oil respectively, the goods under special protocols are important export commodities for the remaining countries. The export of bananas comprises nearly half of exports of St. Lucia and St. Vincent and the Grenadines and almost a quarter in Dominica. For Barbados, Belize, Dominican Republic, Jamaica and St. Kitts and Nevis in 2000, sugar was one of the top three export commodities with a total export share from 6.3% to 18.8%.

The removal of these special protocols is, thus likely to have a significant negative effect on the CARICOM producers of these commodities in favour of low cost producers in countries like Brazil or Thailand. In most of the Caribbean economies the total exports share of bananas, sugar, or rum has declined in the past 20 years suggesting that some degree of diversification has taken place. This is reassuring as the adjustment costs faced by CARICOM countries from the removal of special protocols might be mitigated by the structural changes, already taking place, as the majority of economies in the region move away from high dependence on agricultural commodities to specialisation in tourism and financial services.

In terms of the most important export products, the economies of the Caribbean states would appear to have, in aggregate, exhibited relatively little change in the past 20 years. The top 3 commodity exports were the same in 1980 as in 2000, and were dominated by, natural resource exports from Trinidad and Tobago - "Fuel and fuel products" and Jamaica - "Aluminum ores and concentrates". However, the share of these commodities in total Caricom export has, fallen from 66.4% to a 33.8% in that period indicating some structural changes taking place. The aggregate data also masks considerable variation across countries. Agriculture exports, some of which are part of the EU's special protocols, such as bananas, spirits and liqueurs (predominantly rum),

sugar beats or crustaceans and mollusks remain an important source of significant export revenue for a number of the economies. Some of emerging manufacturing industries are in textiles, especially for Jamaica, or “Electrical appliances” and “Other electrical machinery” for St. Kitts and Nevis. Overall, there seem to be little evidence of strong new manufacturing industries emerging as the majority of Caricom economies tend to specialize in tourism or financial services rather than industry.

Tables 5.13 and 5.14 then provide further complementary information on the changing structure of trade. Table 5.13 is for selected MDCs as well as for the Dominican Republic, while Table 5.14 provides the same information for the OECS economies. For these tables we have taken each country’s trade at the 4-digit level of aggregation for a given year, and calculated the share of each 4-digit category in total trade. For a given base year, we have then divided up the data into deciles. Hence, each decile contains approximately 10% of the value of trade. However, because certain product groups form a significant part of total trade certain decile groupings get dropped. Take the first panel of Table 5.13, which considers Barbados. Here we see that the base year is 1990 and the 10th “decile” accounts for 15.2% of trade. This is entirely accounted for by SITC category 0611 (Sugars, beet etc). Similarly, “decile” 8 is accounted for by the exports of SITC category 3342 (Kerosene and other medium oils).

For the years preceding and after the base year we then calculate the share of trade accounted for by the same product groups that formed the base year deciles. Hence, if we take the 10th decile row for Barbados, we see that where Sugars, beet etc, accounted for just over 15% of trade in 1990, the corresponding share of trade in 1986 was 21.7% and their share of trade in 2003 was 12.7%. Hence, here we see clear evidence of structural changes with a marked decline in the share of the 10th decile industries. Looking along each row then gives an indication of the degree of structural change across the different deciles. For example, take the first decile row for Barbados. The industries included here in the base are all the small export industries, which together accounted for 9.8% of exports in 1990. By 2003, these industries had increased their share of trade to 16.8% of total exports. The other big change is in decile 8 where the product or products, which formed just over 15% of trade in 1990, appear to be no longer exported in 2003.

It is also possible that there are products, which are not exported at all in the base year, but are exported in any of the other years. The extent to which this is the case is captured in the last row of the panel for each country, entitled “new products”. This is, for example particularly important for Barbados where we see that by 2003 10% of Barbadian exports are in products, which were not exported at all in the year 1990. This suggests a fair degree of change and possibly diversification over time. If we compare this to the other countries in this table we see that for the Dominican Republic over 1997-2001 there was just 1% of trade covered in new products, for Jamaica over the 1990-2001 period less than 1% of trade, and similarly for Trinidad and Tobago

All the economies show some evidence of structural change over the period in question. For example if we take the Dominican Republic and consider the 8th and 10th deciles together we see that in the base year (1997) the relevant industries accounted for over 40% of total trade, yet a few years later, by 2001, they only accounted for approximately 25% of trade. The big increase here appears to have occurred in the first decile. Similarly, if we look at Trinidad and Tobago, the industries in the 10th decile accounted for over 36% of trade in 1990, and by 2001, the corresponding figure is 8.7%.

Once again, the biggest positive changes appear to have taken place in the first decile where in 1990 the industries in this decile accounted for just under 10% of trade, and this had increased to 37% of trade by 2001. Again therefore, this suggests considerable structural change. Finally, if we look at Jamaica we see much more stability in the trade shares across all the decile categories.

Table 5.13: Decile analysis for selected MDCs

Barbados		1990 base			
Decile	1986	1990	1999	2003	
1	0.186	0.098	0.137	0.164	
2	0.129	0.099	0.101	0.099	
3	0.157	0.090	0.164	0.082	
4	0.123	0.106	0.072	0.067	
5	0.078	0.099	0.082	0.111	
6	0.069	0.070	0.121	0.135	
7	0.040	0.135	0.129	0.111	
8	0.000	0.152	0.000	0.000	
10	0.217	0.152	0.143	0.127	
New Products	0.001	0.000	0.051	0.105	
Dominica Rep.		1997 base			
Decile	1993	1997	1999	2001	
1	0.667	0.100	0.377	0.361	
2	0.036	0.093	0.115	0.129	
3	0.037	0.098	0.127	0.140	
4	0.040	0.082	0.032	0.014	
5	0.068	0.093	0.026	0.027	
6	0.034	0.132	0.057	0.064	
8	0.000	0.171	0.086	0.076	
10	0.072	0.232	0.176	0.178	
New Products	0.045	0.000	0.004	0.010	
Jamaica		1990 base			
Decile	1986	1990	1999	2002	
1	0.153	0.099	0.094	0.114	
2	0.141	0.097	0.189	0.107	
3	0.072	0.081	0.065	0.066	
4	0.110	0.066	0.073	0.050	
10	0.521	0.657	0.568	0.654	
New Products	0.003	0.000	0.011	0.009	
Trinidad & Tobago		1990 base			
Decile	1986	1990	1999	2003	
1	0.070	0.099	0.273	0.370	
2	0.066	0.079	0.098	0.099	
3	0.100	0.113	0.109	0.078	
4	0.048	0.053	0.077	0.072	
5	0.064	0.078	0.002	0.000	
6	0.091	0.082	0.105	0.089	
7	0.161	0.131	0.202	0.202	
10	0.399	0.365	0.130	0.087	
New Products	0.001	0.000	0.005	0.001	

Source: own calculations based on UN Comtrade data

If we then turn to Table 5.14 here, we focus on the same analysis but for selected OECS countries. The first panel of the table considers Dominica, and the base year here is 1999. Once again, we see evidence of considerable change taking place. There is one industry in 1999, which accounted for 32% of exports, and that industry accounted for just over 50% of exports in 1995. By 2003, the share of that industry in exports had declined to 19%. As with the Dominican Republic, and Trinidad and Tobago, the largest increases in shares appear to have occurred in the first and second deciles who increased their shares from 9% to 13.7% and from 10.3% to 15.9% respectively. There are very few new products being exported.

There is also interesting non-monotonic evidence of change for St. Lucia. We see that 54.9% of trade is accounted for by the 10th decile (bananas) in the base year 1993. This increased to 62.6% in 1999 and then subsequently declined to 42.1% in 2003. Here it is largely the products in the 1st and 4th deciles who have seen their share of exports rise. There is also some evidence of new products being exported as these account for 5.5% of trade in 2003. St.Kitts is also interesting as we see reverse movement in the 8th and 10th deciles. Hence the 8th decile industry accounted for 55.6% of trade in 1995, this declined to 24.1% in 1999, and 16% in 2003. Conversely, the 10th decile industry accounted for 12.4% of trade in 1995, 45.3% in 1999 and 40.8% in 2003. Finally, for St.Vincent and the Grenadines we see much more stability in the decile shares with comparatively little change over time.

Table 5.14: Decile analysis for selected OECS economies

Dominica		1999 base		
Decile	1995	1999	2003	
1	0.089	0.090	0.137	
2	0.044	0.103	0.159	
3	0.048	0.069	0.071	
4	0.016	0.135	0.158	
7	0.280	0.282	0.284	
10	0.501	0.320	0.190	
New Products	0.021	0.000	0.001	
St Lucia		1993 base		
Decile	1986	1993	1999	2003
1	0.077	0.098	0.091	0.158
2	0.123	0.098	0.085	0.109
3	0.056	0.080	0.009	0.002
4	0.026	0.118	0.184	0.254
5	0.002	0.057	0.000	0.000
10	0.708	0.549	0.626	0.421
New Products	0.009	0.000	0.004	0.055
St Kitts		1999 base		
Decile	1995	1999	2003	
1	0.162	0.099	0.039	
2	0.000	0.035	0.372	
4	0.033	0.172	0.003	
6	0.556	0.241	0.160	
10	0.124	0.453	0.408	
New Products	0.125	0.000	0.018	
St Vincent		1998 base		
Decile	1994	1998	2003	
1	0.141	0.097	0.105	
2	0.078	0.101	0.148	
3	0.027	0.044	0.023	
4	0.137	0.156	0.158	
6	0.184	0.147	0.155	
10	0.367	0.453	0.409	
New Products	0.066	0.000	0.002	

Source: own calculations based on UN Comtrade data

Overall then the discussion in this section has shown that, while there clearly are changes for individual countries, it is also clear that the EU is an important, though not necessarily the most important export market for many of the Caribbean economies. Given the importance of the EU, changes in the degree of preferential access to those markets are likely to have significant impact on the Caribbean economies. The extent of that preference erosion will thus depend in part on the new GSP regime, on any new rules

of origin, which are put into place, and for many of the economies on the future evolution of the banana, sugar and rum protocols. However, unavoidably the changes taking place in these protocols are reducing the degree of preferential access granted to the Caribbean. Partly as a result of that preference erosion, but no doubt also arising from trade agreement and changing trade relations with other countries we have also shown evidence of some degree of on-going structural change taking place.

B Indices of revealed comparative advantage

A commonly used statistical indicator is the Balassa index of revealed comparative advantage. This index helps to indicate at the level of an individual product whether a given country has a revealed comparative advantage in that product. This can be seen by an examination of the trade data. The index calculates the share of a given product in a given country's export bundle, and compares it to the share of that product in another "country's" export bundle. The comparator country is typically is the rest of the world. Hence, if the share of exports for a given country is greater than the share of exports for the product for the rest of the world, then the index is greater than 1, and the country is said to have a revealed comparative advantage in that product. There are two features about this index, which it is important to highlight. The first is that the index can be calculated at different levels of aggregation and direct use of the index sheds light on the degree of revealed comparative advantage for individual products or sectors. The index does not, in and of itself provide a summary measure of the degree of competitiveness of a given economy. Secondly, trade flows are of course influenced by trade policy and trade agreements. Hence, to the extent that tariffs, regional agreements distort trade, than this will also be reflected in the index. For example, if a given country is artificially supporting a given industry via export subsidies, than the data may well "reveal" that the country has a comparative advantage in that product. However, in reality it may be the case that without the subsidy the country would not be competitive in that given product.

Table 5.15 provides some summary information arising from the detailed calculation of revealed comparative advantage indices at the 2-digit SITC level of aggregation. Detailed RCA information is also given in table A12 Here we have

calculated the index for Caribbean country exports both for 1985, and for 2002. In each case, also we have calculated the index for two “comparator” countries – the world and the EU. For each of these comparator countries we have then examined the degree of correlation in the index over time. Here we are interested in seeing the extent to which there have been changes over time.

Table 5.15: Revealed Comparative Advantage Correlation Coefficients

	World	EU
	1985-2002	1985-2002
CARICOM	0.898	0.757
Barbados	0.682	0.800
Dominica	0.930	0.853
Grenada	0.777	0.896
Jamaica	0.919	0.971
St Kitts	0.075	0.078
St Lucia	0.886	0.930
T&T	0.776	0.472
St Vincent	0.997	0.997

Source: UN Comtrade, calculated at the 2-digit SITC level.

Note: For St.Kitts and Nevis, and for St. Vincent the base year was 1995.

If we look at the Caricom in aggregate we see that with respect to the World there is quite a high correlation over 1985-2002, whereas somewhat less with respect to the EU. This indicates a greater degree of change with regard to the EU than with regard to the world, and clearly, this can occur either because of changes taking place within the Caribbean or because of changes taking place in the EU. Turning to individual countries, we see that the highest degree of correlation with respect to both the world and the EU is for St.Vincent and the Grenadines where the correlation coefficient is close to 1. However, note that due to data constraints the base year here is 1995, so we are looking at changes over a much shorter time period. There is also a higher degree of correlation for Jamaica at over 90% in both cases, and this time over the entire time period. Staying with the remaining MDCs, we see that there have been quite substantial changes for Trinidad and Tobago. The correlation coefficient with regard to the world is 0.776, whereas with respect to the EU it is only 0.472. This clearly indicates that overtime the degree of “competitiveness” at the individual product level between the EU and Trinidad and

Tobago has changed quite significantly. Conversely, for Barbados, the coefficient is lower with respect to the world (0.682), than it with respect to the EU (0.8).

For the OECS islands, the picture is also somewhat mixed. The biggest change is clearly for St. Kitts, where the correlation coefficient with respect to both the world and the EU is extremely low (0.078). A closer examination of the data reveals, not surprisingly, that this is being very much driven by the changing pattern of trade in sugar. It is worth also pointing out here, that for St. Kitts, as for St. Vincent the base year is 1995, hence the change is taking place over a very short time span. St. Lucia has a high correlation over the time period (principally driven by importance of banana exports), in particular with regard to the EU. For Dominica, the degree of correlation with the EU (0.853) is lower than with respect to the rest of the world (0.93).

Tables 5.16 and 5.17, then provide more detailed information for each of the islands. In Table 5.16, we focus on the Caricom average, and also for individual MDCs. For each island, we give the index of revealed comparative advantage for those cases where the index is greater than 1, and we do this for the base year, 1985 and for 2002. The bottom row of the table gives the number of industries for which the index is greater than 1 for each year. Both tables include the entire list of industries for which any of the Caricom islands were seen to have a revealed comparative advantage in either of the two years. The purpose of including all the industries is that it facilitates comparison across the tables, and across the islands.

There are a number of interesting features, which emerge from these tables. First, the tables identify those industries, which the data suggest the Caribbean has a “revealed” comparative advantage. However, here it is important to stress the point made earlier, that preferential trading arrangements distort trade flows, and to the extent that they do so are likely to incorrectly identify true comparative advantage. Secondly, we see that the number of industries for which the index is greater than 1 is relatively small. For the Caricom average, there are 17 industries in 2002, and for the individual countries, the highest number of industries is 18, which is for Barbados. Thirdly, for the three MDCs included in Table 5.16 there is comparatively wide spread of industries. This indicates considerable diversity across the three islands.

Table 5.16: RCA indices greater than 1 – MDCs

	Caricom		Barbados		Jamaica		T&T	
	1985	2002	1985	2002	1985	2002	1985	2002
LIVE ANIMALS				2.4				
MEAT, MEAT PREPARATIONS				1.6				
DAIRY PRODUCTS,BIRD EGGS						1.1		
FISH,CRUSTACEANS,MOLLUSC		1.8						
CEREALS, CEREAL PREPRTNS.		2.0		3.9		1.2		1.0
VEGETABLES AND FRUIT	2.1	2.2			4.0	4.1		
SUGAR,SUGR.PREPTNS,HONEY	11.2	15.4	44.4	46.6	31.2	19.4	3.4	3.0
COFFEE,TEA,COCOA,SPICES	1.2	2.4			3.7	7.8		
ANIMAL FEED STUFF								
MISC.EDIBLE PRODUCTS ETC		2.6		33.8	2.7	4.1		1.2
BEVERAGES	1.9	4.8	3.2	18.4	5.7	7.5		3.5
TOBACCO,TOBACCO MANUFACT					4.2			
PULP AND WASTE PAPER								
TEXTILE FIBRES				1.1				
CRUDE FERTILIZER,MINERAL						1.2		
METALLIFEROUS ORE,SCRAP	7.8	15.9			43.7	81.2		
CRUDE ANIMAL,VEG.MATERL.					1.0			
PETROLEUM,PETROL.PRODUCT	5.6	4.4					7.6	6.4
GAS,NATURAL,MANUFACTURED		7.4						11.1
FIXED VEG. FATS AND OILS				1.7				
ORGANIC CHEMICALS		1.6				1.4		2.0
INORGANIC CHEMICALS	5.4	10.3					7.5	15.3
DYES,COLOURING MATERIALS				4.9				
MEDICINAL,PHARM.PRODUCTS				1.1				
ESSENTL.OILS,PERFUME,ETC	1.4	1.1			3.0			
FERTILIZER,EXCEPT GRP272	4.3	5.1					6.0	7.7
PLASTIC,NON-PRIMARY FORM								
CHEMICAL MATERIALS NES				5.5				
RUBBER MANUFACTURES, NES								
CORK, WOOD MANUFACTURES								
PAPER,PAPERBOARD,ETC.				1.6				
NON-METAL.MINERAL MANFCT				3.7				
IRON AND STEEL		2.3						3.4
METALS MANUFACTURES,NES				3.0				
POWER GENERATNG.MACHINES								
TELECOMM.SOUND EQUIP ETC								
ELEC MCH APPAR,PARTS,NES	1.1		15.0	1.0				
TRAVEL GOODS,HANDBGS ETC								
CLOTHING AND ACCESSORIES			3.5		2.5			
PHOTO.APPARAT.NES;CLOCKS				1.9				
MISC MANUFCTRD GOODS NES				1.3				
Animals	1.4	5.9	19.5	90.9				
GOLD,NONMONTRY EXCL ORES		5.4						
Total	11	17	5	18	10	10	4	10

The fourth feature emerges in considering each island separately. If we take Barbados, we see that in 1985 there were only 5 industries/sectors with a revealed comparative advantage, with a rise to 18 by 2002. Of the five 1985 industries, two of them had seen a decline in the degree of revealed comparative advantage. These are Electrical Machinery, and Clothing and Accessories. The remaining industries have experienced an increase in the index, which in certain cases (Beverages, and animals) is quite substantial. For Jamaica, the number of industries is the same in both years, although the composition has slightly changed with a change from a revealed comparative advantage, to a comparative disadvantage in Tobacco, Crude Animal and Vegetable materials, Essential Oils, and Clothing and accessories. The industry experiencing the biggest increase in the index is metalliferous ores. Finally, we see quite a substantial change in the composition of the industries for Trinidad and Tobago with a number of new industries emerging over the time period in question.

Table 5.17 gives the same information - this time for the OECS economies. Here we see that the number of industries for which the index is greater than 1 is typically smaller with the highest number being for St. Vincent & the Grenadines for 2002. For each country, there are less than 10 industries with a positive index of revealed comparative advantage. This highlights the degree of export concentration generally in the Caribbean, but particularly for the OECS economies. This issue of export concentration is dealt with in more detail below. The table also shows a degree of commonality across the OECS islands in the importance of fruit and vegetable, processed foodstuffs, and beverages – though precise sectors differ across countries.

As earlier, the table is interesting in the degree of information it gives for individual islands. For example, for Dominica we see a strong revealed comparative advantage in Essential Oils, Perfumes etc, a strong but declining revealed comparative advantage in vegetables and fruit, as well as a number of new products emerging – Coffee, tea and spices, Crude Fertilisers, and Chemical Materials. For St. Lucia the sector with the biggest revealed comparative advantage is that Vegetables and Fruit. This is of course dominated by the banana industry, and we can see the decline in this index as the changes in preferences start to impact upon trade and the extent of specialisation.

Table 5.17: RCA indices greater than 1 - OECS

	Dominica		Granada		St.Kitts		St. Lucia		St Vincent	
	1985	2002	1985	2002	1995	2002	1985	2002	1995	2002
LIVE ANIMALS			1.3							
MEAT, MEAT PREPARATIONS										
DAIRY PRODUCTS,BIRD EGGS										
FISH,CRUSTACEANS,MOLLUSC				14.3					2.0	2.4
CEREALS, CEREAL PREPRNTS.				12.6	1.3				21.4	24.7
VEGETABLES AND FRUIT	41.1	28.5	31.7				46.0	41.0	34.8	44.1
SUGAR,SUGR.PREPTNS,HONEY					119.4					
COFFEE,TEA,COCOA,SPICES		1.9	45.9	96.3				2.3		2.1
ANIMAL FEED STUFF			1.1	9.0					7.4	8.7
MISC.EDIBLE PRODUCTS ETC	2.5	11.3			14.4	3.1	4.0	2.4		
BEVERAGES	1.4			1.1	6.7	1.9	8.1	29.6	2.5	5.3
TOBACCO,TOBACCO MANUFACT		1.2								
PULP AND WASTE PAPER							1.1			
TEXTILE FIBRES										
CRUDE FERTILIZER,MINERAL		16.1								
METALLIFEROUS ORE,SCRAP										
CRUDE ANIMAL, VEG.MATERL.										
PETROLEUM,PETROL.PRODUCT										
GAS,NATURAL,MANUFACTURED										
FIXED VEG. FATS AND OILS	8.4						4.4			
ORGANIC CHEMICALS										
INORGANIC CHEMICALS										
DYES,COLOURING MATERIALS	3.2	5.0		1.8						
MEDICINAL,PHARM.PRODUCTS										
ESSENTL.OILS,PERFUME,ETC	56.8	51.3	2.0	8.8						
FERTILIZER,EXCEPT GRP272										
PLASTIC,NON-PRIMARY FORM										
CHEMICAL MATERIALS NES		3.6								
RUBBER MANUFACTURES, NES						1.7				
CORK, WOOD MANUFACTURES										1.0
PAPER,PAPERBOARD,ETC.				3.3			6.4			1.2
NON-METAL.MINERAL MANFCT								5.0		
IRON AND STEEL										1.0
METALS MANUFACTURES,NES										
POWER GENERATNG.MACHINES					6.0					
TELECOMM.SOUND EQUIP ETC						1.1				
ELEC MCH APPAR,PARTS,NES					1.9	9.6				
TRAVEL GOODS,HANDBGS ETC			1.5					1.5		
CLOTHING AND ACCESSORIES			1.1				3.7	1.8	1.4	
PHOTO.APPARAT.NES;CLOCKS						1.2				
MISC MANUFCTRD GOODS NES										
Animals					12.4	16.6				
GOLD,NONMONTRY EXCL ORES										
Total	6	8	7	8	7	7	7	7	6	9

Finally, it is important to emphasise again that for many Caribbean countries their access to EU markets arises from the EU's preferential trade regime, which may not bear much resemblance to underlying comparative advantage. For example, if you take the share of each product out of total exports being exported to the EU, and correlate this with the share of each product being exported to the US, the correlation coefficients for St. Lucia, St. Kitts and Dominica respectively are: -0.001, 0.008, and 0.038. Hence, the pattern of exports to the EU is substantially different to that with respect to the US. The differences in preferences granted is likely to be playing an extremely important role here.

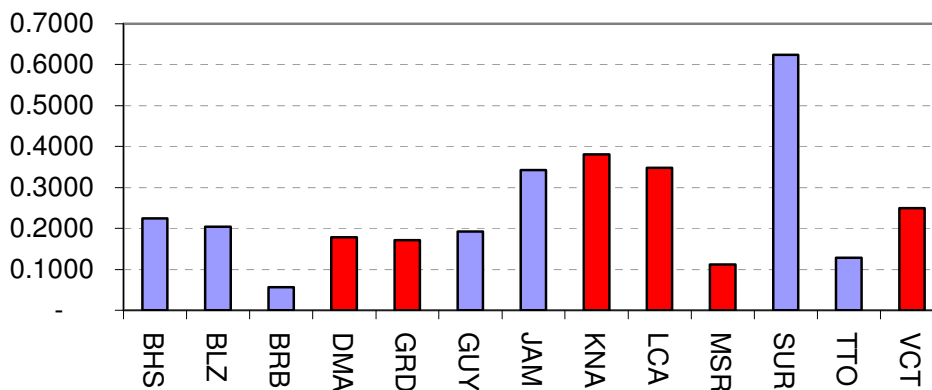
c) The concentration of exports and production

The impact of changing preferences, such as those implied by an EPA is potentially compounded by the fact that the Caribbean economies are typically highly specialised into a few export sectors. Hence, Table A7 shows that for the CARICOM countries as a whole the top three export commodities comprise over 50% of their exports. In aggregate, these figures are of course dominated by the larger economies such as Trinidad and Tobago, and by the sectors important to the larger economies, such as Fuel and Fuel products. However, the high degree of specialisation is true also of the smaller islands. For example if you look at the average over the four year period 2000-2004 for three of the OECS economies: over 90% of all exports by St.Lucia, and 63% of all Dominican exports to the EU were in bananas, and 93% of St Kitts exports were in raw sugars. Looking at the larger Caribbean economies over 2000-2003, 63% of Barbados exports to the EU were raw sugars and a further 14% in distilled alcoholic beverages (presumably rum); 66% of Jamaican exports are in "other organic bases and metallic oxides, and a further 19% in raw sugars; 44% of Granadan exports are in spices, followed by 14% in each of "apparatus for electrical circuits", "office machines n.e.s.", and "electrical insulating equipment"; Trinidad and Tobago are more diversified with the biggest export category to the EU, "alcohols, phenols...." comprising only 21% of exports.

The concentration of exports can also be seen in Figure 5.4 below, which gives the Herfindahl index for the Caricom countries for the year 2000. The reciprocal of this

index gives the number of equivalent sized export industries in each country or country grouping. The data for the OECS countries is given in red, and for the rest of the Caribbean in blue. The figure indicates the high degree of export concentration of the Caribbean region. The index is highest for Suriname where the data suggests that there are less than two equivalent sized export industries, and the lowest is for Barbados which suggests just under 18 equivalent size industries. The unweighted average across all the economies represented here is less than 6 equivalent size export industries. Overall then, this figure therefore serves to confirm that there is comparatively little export diversification in the Caribbean, and that most of the islands are highly dependent on a few export commodities. Interestingly, there is little evidence here that the degree of export concentration is more pronounced for the OECS islands in comparison to the other economies.

Figure 5.4: Levels of export concentration in the Caribbean - 2000



The high degree of export concentration for each of these economies is also reflected in Table A8, which gives the Herfindahl index of export concentration by country and year. Hence, if we take the figures for CARICOM as a whole we see that the index has fallen from 0.217 in 1980, to 0.096 in 2003. This indicates that the number of equivalent sized export industries for the region as a whole has risen from 4.6 in 1980 to 10 in 2003. This suggests that the CARICOM economies as a whole have diversified their exports structure in the past 20 years, although the degree of concentration remains high.

If we then consider individual countries, not surprisingly, we see some variation around this average. Typically, the small OECS economies tend to be more specialised

than the larger MDCs. Hence, the index for St Kitts rose from 1986-2003 from 0.206 to 0.519 in 2002, with a decline to 0.331 in 2003. For St. Lucia, the index has slightly fallen over time, but remains at 0.235 in 2003, and for Grenada, it is at 0.227. Other islands are more diversified such as Trinidad and Tobago (0.151 in 2003), Dominica (0.152) and Guyana 0.135. Nevertheless, these figures represent a highly significant extent of export concentration.

What is also interesting is that export concentration is by no means in the same sectors. Hence if you take the top three export industries by country, there is little pattern to the industries, which emerge as being significant. Moreover, their access to EU markets arises from the EU's preferential trade regime, which may not bear much resemblance to underlying comparative advantage. If you take the share of each product out of total exports being exported to the EU, and correlate this with the share of each product being exported to the US, the correlation coefficients for St. Lucia, St. Kitts and Dominica respectively are: -0.001, 0.008, and 0.038. Hence, the pattern of exports to the EU is substantially different to that with respect to the US. The differences in preferences granted is likely to be playing an extremely important role here.

From the preceding, we have identified that many of the Caribbean economies are highly specialised, and therefore potentially vulnerable to dramatic changes in the international economic trading environment. Certain of the smaller economies are also highly dependent on products for which traditionally they have had preferential access to the EU. Nevertheless, what is also clear is that the structure of production and exports is changing quite significantly over time. The formulation and negotiation over the EPAs will thus need to take this into account.

5.3.4. A CGE ANALYSIS OF THE IMPACT THE EU-CARIBBEAN RTA PROCESS

5.3.4.1. INTRODUCTION

This chapter explores the impact of proposed EU-Caribbean trade agreements on the Caribbean. The analysis uses a multi-country global trade model that parallels work

done with a similar model used to analyse the impact of EU trade agreements with Egypt and Morocco. The analysis for the Caribbean is necessarily more limited because there are no specific country data available (only two aggregate Caribbean regions can be distinguished) and there is less detailed econometric work on links between trade liberalisation and sectoral performance on which to draw. The analysis explores the impact of alternative forms of an Economic Partnership Agreement (EPA) between the EU and the Caribbean economies.

5.3.4.2 THE GLOBE CGE MODEL AND DATA

The study uses an application of the (comparative static) Globe computable general equilibrium (CGE) model (see McDonald et al., 2005), referred to here as the Cariforum_Globe model. The Globe model is a multi region development of the single country/region CGE model first described by Dervis, et al., (1982), and subsequently development models reported by Robinson et al., (1990) and Kilkenny (1991). The multi region formulation is a direct descendant of a multi-country model first developed to evaluate NAFTA (see Robinson, et al., 1993). The model is also a member of the class of Social Accounting Matrix (SAM) based CGE models (see Pyatt, 1998) and is calibrated using a SAM representation of the GTAP v6 dataset for 2001 (see McDonald and Thierfelder, 2005).

a) The Model

The Globe model consists of a set of single country/region CGE models that are linked by commodity trade and solved simultaneously. Trade is modelled following the Armington ‘insight’; namely domestically produced and consumed commodities are imperfect substitutes for both imports and exports. Import demand is modelled via series of nested constant elasticity of substitution (CES) functions; imported commodities from different source regions are treated as imperfect substitutes and aggregated into ‘composite’ import commodities that are then treated as imperfect substitutes for their counterpart domestic commodities. The ‘composite’ imported commodities and their counterpart domestic commodities are then combined to produce composite consumption commodities. These are the commodities demanded by domestic agents as intermediate inputs and for final demand.

Export supply is modelled via series of nested constant elasticity of transformation (CET) functions; the ‘composite’ export commodities are treated as imperfect substitutes for domestically consumed commodities, and exported commodities from a source region to different destination regions are treated as imperfect substitutes for each other. Total domestic commodity production is an aggregation of the composite exported commodities and their counterpart domestic commodities.⁸⁸

The production structure is a two-stage nest. Intermediate inputs are used in fixed proportions per unit of output (Leontief technology), while primary inputs are combined as imperfect substitutes, according to a CES function, to produce value added. The combination of aggregate value added and aggregate intermediate inputs to produce output is also specified by fixed input-output coefficients.⁸⁹

Final demand by the household is modelled under the assumption that households are utility maximisers who respond to changes in relative prices and their incomes. The utility function in the model are Cobb-Douglas, with fixed expenditure shares.⁹⁰ Final demand by the government and for investment is modelled under the assumption that the relative quantities of each commodity demand by these two institutions are fixed. The Globe model is formulated to allow a wide range of alternative market and macro closure rules. The alternatives used in this study are defined below when the policy experiments are specified.

The model solves for domestic wages and prices that equilibrate factor and product markets within each region and also for world prices of all trade goods that equilibrate supply and demand globally. The model also assumes that trade balances for each country/region are fixed, and the model solves for equilibrium real exchange rates

⁸⁸ An important difference between the Globe model and the standard GTAP model arises from the use of CET functions for export supply, whereby domestic producers adjust export supplies in response to changes in the relative prices of exports and domestic commodities. In the GTAP model, goods sold by producers on the domestic and export markets are assumed to be identical and carry the same price. At the level of aggregation at which we are working, this assumption leads to large terms of trade effects from trade policy reform even from small regions and is therefore unrealistic. With a choice of large elasticities of substitution between different regional sources of demand for imports and destinations of exports, the small Cariforum region the Cariforum_Globe model behaves close to the desired small country with very small terms of trade effects from trade policy reform.

⁸⁹ The model allows specification of CES technology between aggregate intermediates and primary factors.

for each country/region so that aggregate exports and imports for each region are consistent with the exogenous trade balances. Since trade balances globally must sum to zero, the US is specified as the numeraire country against which real exchange rates are calculated, and all trade balances are measured in US dollars.

⁹⁰ Given the choice of the consumer price index as the numeraire price index in each country/region, changes in aggregate household consumption expenditure measure the equivalent variation in welfare arising from the change, and provide a summary measure of the welfare effects of policy simulations.

Table 5.18: Regional Composition of GTAP v6 dataset and Caribbean Forum EPA

	GTAP V6 Regions	Caribbean Forum
	xfa: Other Free Trade Area of the Americas	Caribb_EPA
1	Antigua & Barbuda	yes
2	Bahamas	yes
3	Barbados	yes
4	Dominica	yes
5	Dominican Republic	yes
6	Grenada	yes
7	Haiti	yes
8	Jamaica	yes
9	Puerto Rico	no
10	Saint Kitts and Nevis	yes
11	Saint Lucia	yes
12	Saint Vincent and the Grenadines	yes
13	Trinidad and Tobago	yes
14	Virgin Islands, U.S.	no
	xcb: Rest of the Caribbean	
1	Anguilla	no
2	Aruba	no
3	Cayman Islands	no
4	Cuba	no
5	Guadeloupe	no
6	Martinique	no
7	Montserrat	no
8	Netherlands Antilles	no
9	Turks and Caicos	no
10	Virgin Islands, British	no

Source: GTAP V6 Dataset and Caribbean Forum documents.

Table 5.19: Sectors, Factors and Regions

Commodities	Activities	Description	Factors	Description		Description
cv_n	av_n	Vegetables fruit nuts	Land	Land	usa	United States
cc_b	ac_b	Sugar cane sugar beet	UnSkLab	Unskilled labour	onafta	Other NAFTA
co_a	ao_a	Other agriculture	SkLab	Skilled labour	la	Latin America
cf_f	af_f	Forestry and fishing	Capital	Capital	xfa	Rest FTA Americas
cmin	amin	Minerals	NatRes	Natural Resources	xcb	Rest Caribbean
cb_t	ab_t	Beverages and tobacco			eu15	EU15
csgr	asgr	Sugar			asia	Asia
co_f	ao_f	Other food products			oet	Other Europe and transition
cowl	awl	Textiles apparel leather			glo	Residual category for trade margins
co_f	ao_f	Petroleum coal products				
carp	carp	Chemicals rubber plastic				
camp	amp	Metals and products				
cut	vat	Transport equipment and machinery				
celled	alee	Electronic equipment				
co_a	ao_a	Other manufactures				
cutil_c	autil_c	Utilities and construction				
ctrd_trp	atrdrp	Trade and transport				
cc_f_s	ac_f_s	Communication and financial services				
cros	aros	Recreational and other services				

Source: GTAP V6 dataset

B) Data

Table 17 shows the country composition of the two Caribbean regions in the GTAP data set. These are residual regions in the data set, for which there are no detailed country data. Their aggregate trade flows are largely determined residually, given data from their trade partners. The first, “xfa”, includes most of the Caribbean Forum (“Cariforum”) countries (with the exception of the inclusion of Puerto Rico), and hence is the region of greatest interest in the EU-Caribbean EPA. The second region, “xcb”, is the “rest of the Caribbean”.

Table 18 shows the commodity and regional aggregate of the Cariforum_Globe model used for this analysis. There are 19 commodities, with some focus on agriculture, 5 factors of production, and 9 regions. The regions are chosen to reflect the major trading partners for the Caribbean. There is one dummy region, “glo”, which is used to allocate demand for trade and transportation margins for internationally trade commodities.

The appendix to the chapter includes a number of tables providing data on the structure of production, trade, and tariffs in the Cariforum region.

5.3.4.5. MODEL EXPERIMENTS

The formulation of the experiments involves specifying both the shocks and appropriate set of market and macro closure rules. These are discussed in turn.

Market and Macro Closure Rules

The model contains a number of market and macro equilibrium conditions that must be satisfied — product and factor markets, government account balance, external balance, and savings-investment balance. How these conditions are satisfied, reflect important assumptions about the way institutions operate in the economy. Table 3 sets out assumptions about factor markets and macro balances for the different experiments.

Product markets. In all cases, supply and demand must be equal in all product markets, and prices are assumed to vary to equilibrate the markets.

Factor markets. Land, Skilled Labour, Capital, and Natural Resources are assumed to be perfectly mobile across sectors and fully employed. These factor markets are treated as competitive, with the model solving for market-clearing wages and rental rates.

Real exchange rates are assumed to be flexible for all regions, with the external balance (current account) assumed to be fixed exogenously.

Aggregate savings and investment are balanced by fixing the (value) share of investment in domestic final demand (absorption) and allowing the savings rates for an aggregate household to adjust to clear the account. There is an interaction with the government and external accounts since both these accounts contribute to savings within a region.

Trade liberalisation will cause reductions in tariff revenues. In these experiments, the revenue lost is replaced by equiproportionate increases in taxes on factor income, except for unskilled labour, which faces no factor income tax. Tariff reform will change commodity prices, with complex indirect impacts on income distribution, but the replacement tax on factor income will have a direct, pro-poor impact, since unskilled workers are relatively poor.

5.3.4.6. TRADE LIBERALISATION EXPERIMENTS

The results from four experiments are reported and the experiments are summarised in Table 19. Experiment C1 creates an EU-Cariforum RTA, with the EU cutting tariffs on imports from Cariforum by 80 percent, except for sugar and bananas which are left unchanged since they are already covered under special agreements. Experiments C2, C3, and C4 add to C1, with additional unilateral tariff cuts by Cariforum against all countries, combining the RTA with further general tariff liberalisation.

Table 5.20: Experiments EU-Cariforum EPA and MFN Tariff Cuts

All experiments have:				
Exogenous: foreign savings, investment, government expenditure, government savings				
Lost tariff revenue replaced with factor tax except on unskilled labour				
Details of differentiated experiments:	C1	C2	C3	C4
Factor markets				
unskilled labour	neoclass	neoclass	neoclass	neoclass
other	neoclass	neoclass	neoclass	neoclass
Tariff cuts %:				
EPA1 - Cariforum-EU15	EPA1	EPA1	EPA1	EPA1
- no change in bananas or sugar regime as result of EPA				
- other tariffs cut to 20% of base				
MFN tariff cuts in Cariforum except bananas and sugar	0%	20%	50%	80%

5.3.4.7. RESULTS

Table 5.21: Macro Results for Caribbean Forum Countries for Experiments

	Base value	C1	C2	C3	C4
		Percent change from base			
Exports (E)	2.80	2.00	2.96	4.79	7.41
GDP	11.90	-0.01	0.00	-0.01	-0.07
Imports (M)	3.48	1.14	2.35	4.45	7.19
Absorption	12.58	-0.14	-0.01	0.15	0.28
GDP/Absorption	0.00	-0.01	0.00	-0.01	-0.07
(M-E)/Absorption	0.00	-0.13	-0.01	0.16	0.34
Total Absorption	0.00	-0.14	-0.01	0.15	0.28
Imports					
Global	3.06	1.66	2.80	4.28	6.12
Cariforum + EU15	0.74	45.98	31.53	9.84	-11.03
ROW	2.32	-12.45	-6.35	2.51	11.58
Exports					
Global	2.80	1.99	2.94	4.77	7.37
Cariforum + EU15	0.85	1.51	1.43	1.58	2.29
ROW	1.96	2.20	3.60	6.15	9.57
Real Exchange Rate	1.00	1.00	1.56	2.60	4.05
International terms of trade	1.00	-0.43	-0.44	-0.58	-1.01

Note: Financial variables are in \$US billions for 2001.

Table 20 presents the macro results for the various experiments. In all cases, the terms of trade effects are small and have no bearing on the results reported - “Cariforum” behaves as a small country. Lower tariffs in the EU-Cariforum RTA in experiment C1 yields a large increase in imports from the EU, decline in imports from the rest of the world, a modest net decrease in aggregate imports, and a real depreciation of the exchange rate with a corresponding increase in exports. The experiment also yields a small decrease in aggregate absorption, and hence welfare— the trade-diversion effect of the opening to EU trade is significant.

In experiments C2, C3, and C4, Cariforum adds increasing reductions in tariffs against imports from non-EU countries, which serve to offset the trade-diversion effects of the RTA with the EU. With a 20% cut in tariffs (C2), the trade-diversion effects of the RTA still dominate, and welfare still declines. With a 50% cut in non-EU tariffs (C3),

trade diversion is much lower and the bias against exports inherent in the high levels of tariff protection is significantly lowered. The RTA yields net trade creation and a modest increase in aggregate welfare. When all tariffs are lowered uniformly in experiment C4, Cariforum achieves the highest increases in both trade and welfare, even though the improvement in the terms of trade are less than in the other EU-Cariforum RTA experiments.

In conclusion, if initial general protection levels are high, an RTA that only achieves lowering of border barriers to trade (shallow integration) leads to trade diversion and a loss of aggregate welfare. Where the RTA partner is initially a major trading partner, and general protection levels are moderate, trade diversion is weaker and the RTA is beneficial. However, if Cariforum combines the RTA with the EU with a policy of generally lowering tariffs against non-EU imports, trade expands much more, trade diversion is eliminated, and the welfare gains are much larger. In such an RTA, the country always has the “policy space” to lower tariffs against non-RTA trading partners, and hence offset the trade-diversion effects of the RTA.

The policy lessons are clear: (1) If entering a customs union with tariffs much higher than in the new member, trade diversion is likely to be significant. (2) If joining an RTA where the new member has initial high tariff rates against all countries, the RTA is likely to be trade-diverting for the new member. (3) The advantage of joining an RTA rather than a customs union is that the new member has the ability to offset any trade diversion by unilateral tariff cuts on trade with non-members.

5.2.4. SUMMARY AND CONCLUSIONS

In this part of the report, we have focussed on a range of descriptive statistical indicators in order to shed light on the possible implications of an EPA for trade, production and welfare in the Caribbean region. There are a number of conclusions, which emerge from this analysis.

It is clear that the precise form of an EPA is still very uncertain. With regard to market access, there are issues to do with timing, product coverage, and special differential treatment, which remain to be resolved. With regard to some of the other areas of negotiation it is still unclear the extent to which de facto and concrete measures will be agreed upon.

An examination of trade patterns indicates considerable diversity across countries. Nevertheless, it is clear that while the EU is an important trading partner accounting for between 15%-20% of regional imports, it is not the most important. For many of the economies as a source of imports the US is a significantly more important trading partner. Intra-regional trade is also high, and the Caribbean region is an important destination market for a number of the economies.

Consequently, when considering a shallow-integration style EPA while there may be some trade creation and trade reorientation, which typically lead to welfare gains, there is also considerable scope for trade diversion which mitigates against those gains. Our expectation therefore is that preferential trade liberalisation with the EU which focuses largely on shallow integration is unlikely to yield significant welfare gains to the Caribbean region and may even lead to welfare losses. Conversely multilateral trade liberalisation is likely to lead to significantly higher welfare gains. These conclusions are reinforced by the results of the CGE modelling which reveals trade diversion losses which are eliminated if the Caribbean countries were to liberalise in a non-discriminatory manner. This also underlines the advantages of negotiating an FTA rather than a customs union.

In addition to this, the countries of the region typically exhibit a very high degree of export and production concentration both by country and by sector, though there is

some evidence of underlying structural change in this regard. The concentration of exports is also reflected in the comparatively limited number of industries, which exhibit a revealed comparative advantage. Here it is important to underline that in many cases this indicator is in turn likely to be heavily determined by the underlying preference structures. This suggests that the combination of the liberalisation of the trade for many of these economies, as well as the ongoing changes to the banana and sugar regimes, as well as the ongoing preference erosion are likely to result in quite significant structural changes. This is important in terms of addressing the development needs of the region, as well as in considering the degree of political support for the EPA process within the region.

It is important to stress two features of this analysis. First, the analysis focuses on the implications of the impact of shallow integration. Secondly, the impact analysis is largely focused on goods trade. Justification for the former is given by the fact that it is highly likely that the main focus of the EPAs in the first instance will be on the liberalisation of tariffs, and hence principally focused on issues of shallow integration. Similarly, justification for the latter derives from the observation that it is an agreement on the symmetric liberalisation of substantially all trade in goods which is required in order to transform the existing Lome style arrangements into one which is WTO compatible. This is not, however, intended to suggest that issues of deeper integration or of the role of services are unimportant. Indeed the reverse is the case.

The implications of our analysis are potentially quite pessimistic. Taken at face value the analysis suggests small or negative welfare gains, and the possibility of considerable structural adjustment. An alternative view, however, is possible. That alternative depends, to some degree, on the precise nature of the agreement which is signed, as well as on other developments in policy. The more optimistic scenario is hence one in which the shallow integration in an EPA is part of a broader package which involves for example elements of deep integration, the appropriate liberalisation of services, appropriate levels of adjustment and assistance aid, and progress on multilateral trade liberalisation. In this context, the EPA could be seen as an important stepping-stone towards the greater integration of the countries of the Caribbean with themselves and

with the world economy. Which outcome obtains will depend on the nature of the agreement(s) themselves, and on the appropriate political and social support.

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Table A1: CARICOM MFN Tariff Rates

SITC Rev. 2		2002		2003	
		Simple	Weighted	Simple	Weighted
00	Live animals chiefly for food	21.48	22.28	24.26	30.19
01	Meat and meat preparations	24.62	25.55	26.33	26.09
02	Dairy products and birds'eggs	13.81	10.17	13.13	10.5
03	Fish,crustaceans,mollucs,preparations thereof	22.76	15.26	22.84	16.43
04	Cereals and cereal preparations	13.81	8.44	13.09	7.63
05	Vegetables and fruit	23.18	18.78	23.18	18.89
06	Sugar,sugar preparations and honey	22.78	27.28	22.68	26.3
07	Coffee,tea,cocoa,spices,manufactures thereof	21.78	17.59	22.5	16.99
08	Feeding stuff for animals,not incl.unmil.cereals	12.75	12.62	10.73	12.44
09	Miscel.edible products and preparations	18.53	17.68	18.6	17.44
11	Beverages	36.95	27.18	38.72	31.95
12	Tobacco and tobacco manufactures	40.54	24.02	28.93	18.62
21	Hides,skins and furskins,raw	2.5	4.45	3.33	4.86
22	Oil seeds and oleaginous fruit	5.45	7.68	5.07	2.77
23	Crude rubber (including synthetic and reclaimed)	2.67	0.23	2.5	0.14
24	Cork and wood	9.38	9.57	9.04	5.96
25	Pulp and waste paper	1.67	4.84	0	0
26	Textile fibres (except wool tops) and their wastes	8.15	9.68	6.22	5.18
27	Crude fertilizers and crude materials (excl.coal)	4.84	3.25	3.29	3.22
28	Metalliferous ores and metal scrap	5.71	8.37	6.15	7.82
29	Crude animal and vegetable materials,n.e.s.	6.25	4.74	5.71	5.38
32	Coal,coke and briquettes	3.44	4.32	0.91	4.32
33	Petroleum,petroleum products and related materials	10	13.3	8.93	13.42
34	Gas,natural and manufactured	2.81	26.38	0.67	2.95
41	Animal oils and fats	2	3.92	1.36	2.08
42	Fixed vegetable oils and fats	32.14	35.96	34.05	34.97
43	Animal-vegetable oils-fats,processed,and waxes	14.42	31.93	14.77	28.13
51	Organic chemicals	3.63	2.99	2.87	2.38
52	Inorganic chemicals	3.78	2.4	3.34	1.77
53	Dyeing,tanning and colouring materials	13.22	5.95	12.09	6.15
54	Medicinal and pharmaceutical products	4.42	9.44	4.05	9.8
55	Essential oils & perfume mat.;toilet-cleansing mat	18.77	15.63	17.79	15.54
56	Fertilizers,manufactured	0.56	0.01	0.79	0
57	Explosives and pyrotechnic products	10.56	13.38	8.97	7.8
58	Artif.resins,plastic mat.,cellulose esters/ethers	7.42	6.58	6.82	6.32
59	Chemical materials and products,n.e.s.	7.51	4.81	6.15	4.33
61	Leather,leather manuf.,n.e.s.and dressed furskisg	12.77	10.76	10.29	4.97
62	Rubber manufactures,n.e.s.	9.34	11.14	8.51	10.4
63	Cork and wood manufactures (excl.furniture)	11.55	9.13	10.53	7.4
64	Paper,paperboard,artic.of paper,paper-pulp/board	11.79	5.36	10.05	5.37
65	Textile yarn,fabrics,made-upart.,related products	10.34	7.28	9.64	7.16
66	Non-metallic mineral manufactures,n.e.s.	11.25	8.29	10.06	6.62
67	Iron and steel	5.71	5.18	4.9	5.09
68	Non-ferrous metals	4.85	2.11	3.99	2.08
69	Manufactures of metal,n.e.s.	8.94	7.72	7.59	6.74
71	Power generating machinery and equipment	5.41	2.97	4.53	2.73
72	Machinery specialized for particular industries	3.31	1.82	2.74	1.72
73	Metalworking machinery	3.5	1.39	2.84	1.09
74	General industrial machinery & equipment,and parts	6.82	1.57	5.42	1.26
75	Office machines & automatic data processing equip.	4.03	2.8	3.07	1.95
76	Telecommunications & sound recording apparatus	17.88	4.64	16.16	5.34
77	Electrical machinery,apparatus & appliances n.e.s.	11.86	9.64	10.53	8.93
78	Road vehicles (incl. air cushion vehicles	16.03	21.05	15.09	20.08
79	Other transport equipment	7.87	2.65	8.15	2.48

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81	Sanitary,plumbing,heating and lighting fixtures	19.3	21.48	18.24	21.39
82	Furniture and parts thereof	20.21	18.78	19.24	18.51
83	Travel goods,handbags and simlair containers	19.38	9.71	20.34	20.01
84	Articles of apparel and clothing accessories	20.43	20.11	19.71	18.36
85	Footwear	19.59	18.88	21.08	19.74
87	Professional,scientific & controlling instruments	5.22	3.24	4.12	2.06
88	Photographic apparatus,optical goods,watches	17.46	11.56	17.52	11.25
89	Miscellaneous manufactured articles,n.e.s.	15.67	11.48	14.82	12.33
94	Animals,live,zoo animals,dogs,cats etc.	34.15	35.7	36.51	39.2
95	Arms,of war and ammunition therefore	38.03	41.91	37.89	38.92
96	Do you see gold???	0	0	0	0
97		5	5	5	5
Average Tariff		12.25	8.71	11.4	8.37
Number of Tariff Peaks		347	1134	332	1107

Table A2: CARICOM principal import destinations

1980			
	Country Name	Trade Value (\$ '000)	% share
	All --- All countries	4872790	
1	United States	1397118	28.7
2	Saudi Arabia	965155.3	19.8
3	EEC15 --- EEC15	737841.1	15.1
4	Venezuela	297064.2	6.1
5	Japan	257758.9	5.3
6	Canada	233675	4.8
7	Netherlands Antilles	175936.5	3.6
8	Indonesia	146017.8	3.0
9	Panama	45823.79	0.9
10	Taiwan, China	40349.46	0.8
1985			
	Country Name	Trade Value (\$ '000)	% share
	All --- All countries	3527897	
1	United States	1407136	39.9
2	EEC15 --- EEC15	591873.7	16.8
3	Japan	279300.4	7.9
4	Canada	197219.3	5.6
5	Venezuela	177268.5	5.0
6	Netherlands Antilles	128410.4	3.6
7	Brazil	57890.93	1.6
8	Mexico	53136.18	1.5
9	Taiwan, China	46055.83	1.3
10	Ecuador	28650.62	0.8
1990			
	Country Name	Trade Value (\$ '000)	% share
	All --- All countries	4377211	
1	United States	1862913	42.6
2	EEC15 --- EEC15	680736.3	15.6
3	Canada	250633.1	5.7
4	Venezuela	225027.9	5.1
5	Japan	205356.4	4.7
6	Brazil	137805.6	3.1
7	Mexico	103119.2	2.4
8	Netherlands Antilles	68096.31	1.6
9	New Zealand	42956.34	1.0
10	Taiwan, China	39651.73	0.9
1995			
	Country Name	Trade Value (\$ '000)	% share
	All --- All countries	7583026	

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1	United States	4186993	55.2
2	EEC15 --- EEC15	968972.8	12.8
3	Japan	332607.6	4.4
4	Canada	271842.9	3.6
5	Venezuela	145908.6	1.9
6	Brazil	127762.5	1.7
7	Mexico	120235.6	1.6
8	Korea, Rep.	71538.55	0.9
9	China	58860.18	0.8
10	Netherlands Antilles	46840.96	0.6

2000

	Country Name	Trade Value (\$ '000)	% share
	All --- All countries	1.21E+07	
1	United States	5965672	49.3
2	EEC15 --- EEC15	1176432	9.7
3	Venezuela	879320.1	7.3
4	Japan	478515.8	4.0
5	Canada	332737.5	2.7
6	Colombia	294619.3	2.4
7	Mexico	266354	2.2
8	Brazil	182065.5	1.5
9	China	146911.2	1.2
10	Netherlands Antilles	145171.6	1.2

2002

	Country Name	Trade Value (\$ '000)	% share
	All --- All countries	1.03E+07	
1	United States	4036292	39.2
2	EEC15 --- EEC15	1443062	14.0
3	Venezuela	586509.1	5.7
4	Japan	488111.1	4.7
5	Brazil	328665.3	3.2
6	Canada	327734.4	3.2
7	Mexico	217733.4	2.1
8	China	195245.9	1.9
9	Congo, Rep.	144806.7	1.4
10	Gabon	117776.2	1.1

Table A3: CARICOM principal export destinations

1980			
	Country Name	Trade Value (\$ '000)	% share
	World	5237978.448	
1	United States	2867397.836	54.7
2	EEC15 --- EEC15	783128.798	15.0
3	Norway	104850.755	2.0
4	Canada	74904.56	1.4
5	Netherlands Antilles	50172.905	1.0
6	Soviet Union	49856.304	1.0
7	Guatemala	47790.087	0.9
8	Ghana	43335.089	0.8
9	Guinea	37818.764	0.7
10	Honduras	36549.878	0.7

1985			
	Country Name	Trade Value (\$ '000)	% share
	World	3154459.792	
1	United States	1723289.887	54.6
2	EEC15 --- EEC15	529273.653	16.8
3	Canada	130985.85	4.2
4	Guadeloupe	32570.796	1.0
5	French Guiana	31884.908	1.0
6	Soviet Union	28310.798	0.9
7	Netherlands Antilles	17355.4	0.6
8	Ghana	16464.19	0.5
9	India	16310.777	0.5
10	Norway	13332.883	0.4

1990			
	Country Name	Trade Value (\$ '000)	% share
	World	3645685.185	
1	United States	1590793.351	43.6
2	EEC15 --- EEC15	659967.407	18.1
3	Canada	165061.013	4.5
4	Norway	133652.819	3.7
5	Netherlands Antilles	66080.871	1.8
6	Ghana	52704.184	1.4
7	Soviet Union	49328.666	1.4
8	Venezuela	44621.474	1.2
9	French Guiana	42532.798	1.2
10	Cuba	37780.457	1.0

1995			
	Country Name	Trade Value (\$ '000)	% share
	World	4720002.222	

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1	United States	1878380.43	39.8
2	EEC15 --- EEC15	922618.244	19.5
3	Canada	223945.975	4.7
4	Norway	110742.006	2.3
5	Colombia	60563.636	1.3
6	Brazil	55605.654	1.2
7	Mexico	53901.928	1.1
8	Ghana	49640.279	1.1
9	French Guiana	47056.999	1.0
10	Netherlands Antilles	43270.295	0.9

2000			
	Country Name	Trade Value (\$ '000)	% share
	World	7408975.049	
1	United States	3327500.307	44.9
2	EEC15 --- EEC15	1316104.809	17.8
3	Canada	323469.666	4.4
4	Norway	120278.492	1.6
5	Mexico	74764.036	1.0
6	Venezuela	69687.702	0.9
7	Netherlands Antilles	64859.157	0.9
8	Honduras	48839.388	0.7
9	Guatemala	44563.483	0.6
10	Japan	44266.503	0.6

2001			
	Country Name	Trade Value (\$ '000)	% share
	World	7858085.238	
1	United States	3206728.727	40.8
2	EEC15 --- EEC15	1151094.821	14.6
3	Canada	412943.011	5.3
4	Mexico	386476.769	4.9
5	Japan	199466.03	2.5
6	Switzerland	108715.903	1.4
7	Norway	83516.947	1.1
8	Netherlands Antilles	75343.34	1.0
9	Venezuela	65679.281	0.8
10	Guatemala	59270.147	0.8

Table A4: Finger Kreinin Index of Export Similarity for the CARICOM Economies, the EU and the US

2000	ATG	BHM	BLZ	BRB	CARICOM	DMA	DOM	GRD	GUY	JAM	KNA	LCA	MSR	SUR	TTO	VCT	EEC	USA
ATG	1	0.181	0.053	0.158	0.205	0.065	0.046	0.028	0.071	0.054	0.050	0.062	0.012	0.082	0.249	0.080	0.059	0.033
BHM	0.181	1	0.184	0.117	0.211	0.012	0.037	0.004	0.076	0.046	0.012	0.007	0.003	0.109	0.237	0.018	0.046	0.036
BLZ	0.053	0.184	1	0.197	0.249	0.144	0.159	0.011	0.290	0.113	0.220	0.131	0.003	0.127	0.236	0.124	0.034	0.022
BRB	0.158	0.117	0.197	1	0.340	0.135	0.213	0.086	0.232	0.187	0.245	0.138	0.123	0.085	0.352	0.109	0.225	0.202
CARICOM	0.205	0.211	0.249	0.340	1	0.200	0.297	0.185	0.407	0.464	0.223	0.194	0.158	0.362	0.740	0.218	0.286	0.266
DMA	0.065	0.012	0.144	0.135	0.200	1	0.113	0.027	0.016	0.074	0.005	0.305	0.003	0.049	0.246	0.330	0.053	0.036
DOM	0.046	0.037	0.159	0.213	0.297	0.113	1	0.051	0.123	0.214	0.102	0.096	0.035	0.058	0.293	0.096	0.159	0.121
GRD	0.028	0.004	0.011	0.086	0.185	0.027	0.051	1	0.045	0.029	0.201	0.017	0.004	0.039	0.237	0.133	0.068	0.069
GUY	0.071	0.076	0.290	0.232	0.407	0.016	0.123	0.045	1	0.259	0.235	0.016	0.009	0.400	0.256	0.124	0.072	0.056
JAM	0.054	0.046	0.113	0.187	0.464	0.074	0.214	0.029	0.259	1	0.088	0.061	0.008	0.639	0.312	0.064	0.082	0.058
KNA	0.050	0.012	0.220	0.245	0.223	0.005	0.102	0.201	0.235	0.088	1	0.043	0.015	0.040	0.253	0.059	0.067	0.055
LCA	0.062	0.007	0.131	0.138	0.194	0.305	0.096	0.017	0.016	0.061	0.043	1	0.009	0.048	0.249	0.507	0.058	0.051
MSR	0.012	0.003	0.003	0.123	0.158	0.003	0.035	0.004	0.009	0.008	0.015	0.009	1	0.032	0.238	0.007	0.236	0.201
SUR	0.082	0.109	0.127	0.085	0.362	0.049	0.058	0.039	0.400	0.639	0.040	0.048	0.032	1	0.257	0.085	0.062	0.062
TTO	0.249	0.237	0.236	0.352	0.740	0.246	0.293	0.237	0.256	0.312	0.253	0.249	0.238	0.257	1	0.260	0.334	0.305
VCT	0.080	0.018	0.124	0.109	0.218	0.330	0.096	0.133	0.124	0.064	0.059	0.507	0.007	0.085	0.260	1	0.067	0.048
EEC	0.059	0.046	0.034	0.225	0.286	0.053	0.159	0.068	0.072	0.082	0.067	0.058	0.236	0.062	0.334	0.067	1	0.691
USA	0.033	0.036	0.022	0.202	0.266	0.036	0.121	0.069	0.056	0.058	0.055	0.051	0.201	0.062	0.305	0.048	0.691	1

Table A5: Kreinin Index of Import Similarity for the CARICOM Economies, the EU and US

2000	ATG	BHM	BLZ	BRB	CARICOM	DMA	DOM	GRD	GUY	JAM	KNA	LCA	MSR	SUR	TTO	VCT	EEC	USA
ATG	1	0.676	0.517	0.676	0.682	0.642	0.588	0.653	0.560	0.611	0.684	0.704	0.609	0.558	0.528	0.656	0.490	0.453
BHM	0.676	1	0.561	0.706	0.736	0.633	0.541	0.646	0.572	0.656	0.683	0.703	0.611	0.592	0.565	0.638	0.534	0.504
BLZ	0.517	0.561	1	0.588	0.661	0.626	0.531	0.618	0.607	0.610	0.587	0.622	0.547	0.598	0.585	0.611	0.463	0.425
BRB	0.676	0.706	0.588	1	0.797	0.674	0.576	0.694	0.624	0.744	0.696	0.740	0.603	0.618	0.623	0.677	0.619	0.565
CARICOM	0.682	0.736	0.661	0.797	1	0.710	0.626	0.712	0.690	0.814	0.699	0.749	0.610	0.665	0.747	0.705	0.638	0.579
DMA	0.642	0.633	0.626	0.674	0.710	1	0.571	0.718	0.630	0.671	0.686	0.772	0.626	0.618	0.599	0.721	0.489	0.446
DOM	0.588	0.541	0.531	0.576	0.626	0.571	1	0.532	0.584	0.637	0.502	0.555	0.476	0.579	0.574	0.541	0.543	0.503
GRD	0.653	0.646	0.618	0.694	0.712	0.718	0.532	1	0.622	0.655	0.713	0.756	0.640	0.593	0.564	0.734	0.494	0.456
GUY	0.560	0.572	0.607	0.624	0.690	0.630	0.584	0.622	1	0.668	0.576	0.634	0.516	0.619	0.621	0.614	0.518	0.462
JAM	0.611	0.656	0.610	0.744	0.814	0.671	0.637	0.655	0.668	1	0.632	0.685	0.560	0.634	0.657	0.658	0.590	0.535
KNA	0.684	0.683	0.587	0.696	0.699	0.686	0.502	0.713	0.576	0.632	1	0.740	0.666	0.582	0.546	0.697	0.501	0.466
LCA	0.704	0.703	0.622	0.740	0.749	0.772	0.555	0.756	0.634	0.685	0.740	1	0.664	0.622	0.601	0.765	0.519	0.480
MSR	0.609	0.611	0.547	0.603	0.610	0.626	0.476	0.640	0.516	0.560	0.666	0.664	1	0.597	0.503	0.614	0.460	0.459
SUR	0.558	0.592	0.598	0.618	0.665	0.618	0.579	0.593	0.619	0.634	0.582	0.622	0.597	1	0.573	0.610	0.513	0.503
TTO	0.528	0.565	0.585	0.623	0.747	0.599	0.574	0.564	0.621	0.657	0.546	0.601	0.503	0.573	1	0.570	0.628	0.561
VCT	0.656	0.638	0.611	0.677	0.705	0.721	0.541	0.734	0.614	0.658	0.697	0.765	0.614	0.610	0.570	1	0.479	0.444
EEC	0.490	0.534	0.463	0.619	0.638	0.489	0.543	0.494	0.518	0.590	0.501	0.519	0.460	0.513	0.628	0.479	1	0.788
USA	0.453	0.504	0.425	0.565	0.579	0.446	0.503	0.456	0.462	0.535	0.466	0.480	0.459	0.503	0.561	0.444	0.788	1

Table A6: CARICOM Top 20 Export Commodities

2000				
	Product Name	Product	Trade Value (\$ '000)	% share
	Total Trade	Total	4273447.168	
1	Fuel oils,n.e.s.	3344	1097420.928	25.7
2	Petrol.oils & crude oils obt.from b	3330	571364.736	13.4
3	Petroleum gases and other gaseous h	3413	554671.872	13.0
4	Oth.inorg.bases & metallic oxid.,hy	5225	359904.192	8.4
5	Motor spirit and other light oils	3341	343295.712	8.0
6	Acyclic alcohols & their halogenate	5121	267171.264	6.3
7	Kerosene and other medium oils	3342	198847.984	4.7
8	Wire rod of iron or steel	6731	154904.976	3.6
9	Iron or steel powders,shot or spong	6713	73274.136	1.7
10	Mineral or chemical fertilizers,nit	5621	60980.964	1.4
11	Non alcoholic beverages,n.e.s.	1110	42418.14	1.0
12	Sugars,beet and cane,raw,solid	0611	36112.496	0.8
13	Spirits;liqueurs, other spirituous	1124	24765.044	0.6
14	Art.of paper pulp,paper,paperboard,	6428	24403.176	0.6
15	Lubricating petrol.oils & other hea	3345	18728.48	0.4
16	Portland cement,ciment fondu,slag c	6612	16836.232	0.4
17	Edible products and preparations n.	0980	16770.323	0.4
18	Organic surface-active agents,n.e.s	5542	16664.218	0.4
19	Boxes,bags & oth.packing containers	6421	15887.418	0.4
20	Bakery products (e.g.,bread,biscuit	0484	15538.789	0.4

Table A7: CARICOM Top 20 import Commodities

2000				
	Product Name	Product	Trade Value (\$ '000)	% share
	Total Trade	Total	12136905.63	
1	Petrol.oils & crude oils obt.from b	3330	1259551.772	10.4
2	Passenger motor cars,for transport	7810	457447.42	3.8
3	Motor spirit and other light oils	3341	313397.36	2.6
4	Fuel oils,n.e.s.	3344	260208.411	2.1
5	Gas oils	3343	231502.915	1.9
6	Medicaments(including veterinary me	5417	201038.881	1.7
7	Motor vehicles for transport of goo	7821	176356.619	1.5
8	Aircraft not exceeding an unladen w	7923	164492.905	1.4
9	Edible products and preparations n.	0980	162778.175	1.3
10	Miscellaneous art.of materials of d	8939	129613.844	1.1
11	Wood of coniferous species,sawn,pla	2482	121157.104	1.0
12	Elect.app.such as switches,relays,f	7721	120935.004	1.0
13	Other furniture and parts	8219	117314.575	1.0
14	Kerosene and other medium oils	3342	113858.678	0.9
15	Perfumery,cosmetics and toilet prep	5530	101135.549	0.8
16	Art.for the conveyance or packing o	8931	91963.92	0.8
17	Elect.line telephonic & telegraphic	7641	88695.95	0.7
18	Milk & cream,preserved,concentrated	0224	83064.379	0.7
19	Jewellery of gold,silver or platinu	8973	79501.521	0.7
20	Radiotelegraphic & radiotelephonic	7643	79037.784	0.7

Table A8: CARICOM Top 20 Export Commodities to the EU

2000				
	Product Name	Product	Trade Value (\$ '000)	% share
	Total Trade	Total	1316104.809	
1	Sugars,beet and cane,raw,solid	0611	277090.886	21.1
2	Aluminium ores and concentrates (in	2873	255305.817	19.4
3	Fuel oils,n.e.s.	3344	128703.438	9.8
4	Petroleum gases and other gaseous h	3413	122245.004	9.3
5	Acyclic alcohols & their halogenate	5121	105021.412	8.0
6	Bananas,fresh or dried	0573	92725.563	7.0
7	Kerosene and other medium oils	3342	45162.29	3.4
8	Spirits;liqueurs, other spirituous	1124	41415.281	3.1
9	Crustaceans and molluscs,fresh,chil	0360	23973.069	1.8
10	Motor spirit and other light oils	3341	23677.782	1.8
11	Juices;fruit & veget.(incl.grape mu	0585	19128.467	1.5
12	Rice semi-milled or wholly milled,	0422	17980.26	1.4
13	Wire rod of iron or steel	6731	10588.749	0.8
14	Oth.inorg.bases & metallic oxid.,hy	5225	10217.168	0.8
15	Spices (except pepper and pimento)	0752	8731.683	0.7
16	Other organo-inorganic compounds	5155	5570.318	0.4
17	Other parts & accessories of motor	7849	4942.373	0.4
18	Parts of and accessories suitable f	7599	4361.631	0.3
19	Elect.app.such as switches,relays,f	7721	4318.91	0.3
20	Wood of non-coniferous species,sawn	2483	4250.343	0.3

Table A9: Herfindhal Indicators for the Caribbean Economies: Exports

Year	ATG	BHS	BLZ	BRB	CARICOM	DMA	DOM	GRD	GUY	HTI	JAM	KNA	LCA	MSR	SUR	TTO	VCT
1980	-	-	-	0.146	0.217	-	-	-	-	-	0.418	-	-	-	-	0.271	-
1981	-	-	-	0.071	0.195	0.410	-	-	0.328	0.095	0.424	-	0.201	-	-	0.174	-
1982	-	-	-	0.050	0.136	-	-	-	-	-	0.267	-	0.209	-	-	0.223	-
1983	-	-	-	0.148	0.114	0.276	-	-	-	-	0.286	-	0.248	-	-	0.180	-
1984	-	-	-	0.283	0.153	-	-	0.228	-	-	0.262	-	-	-	-	0.173	-
1985	-	-	-	0.299	0.090	0.349	-	0.231	-	-	0.223	-	0.433	-	-	0.144	-
1986	-	-	-	0.175	0.081	0.471	-	0.291	-	-	0.194	0.206	0.510	-	-	0.119	-
1987	-	-	-	0.087	0.077	0.549	-	0.386	-	-	0.155	0.153	0.358	-	-	0.111	-
1988	-	-	-	0.060	0.081	0.539	-	0.317	-	0.101	0.187	0.166	0.402	-	0.655	0.104	-
1989	-	-	-	0.047	0.110	0.406	-	0.299	-	0.110	0.284	-	0.354	-	0.644	0.101	-
1990	-	-	-	0.061	0.130	-	-	0.206	-	0.160	0.346	-	0.395	-	0.650	0.090	-
1991	-	-	-	0.057	0.115	-	-	0.136	-	0.131	0.310	-	0.365	-	0.606	0.092	-
1992	-	-	0.201	0.078	0.087	-	0.041	-	-	0.116	0.242	-	0.398	-	0.574	0.081	-
1993	-	-	0.192	0.059	0.071	0.382	0.038	0.098	-	0.210	0.236	0.274	0.313	0.421	-	0.074	0.270
1994	-	-	0.177	0.073	0.088	0.332	0.040	0.132	-	0.159	0.289	0.334	0.343	-	0.533	0.115	0.186
1995	-	0.432	0.203	0.055	0.078	0.287	0.046	0.113	-	0.163	0.282	0.246	0.377	-	0.460	0.099	0.235
1996	-	-	0.192	0.069	0.071	0.290	0.118	0.150	-	0.132	0.281	0.442	0.481	-	0.435	0.090	0.232
1997	-	0.410	0.182	0.059	0.066	0.246	0.101	0.161	0.165	0.162	0.307	0.411	0.390	-	0.422	0.084	0.185
1998	-	0.237	0.183	0.049	0.061	-	0.075	0.139	0.161	-	0.308	-	0.427	-	0.293	0.070	0.245
1999	0.210	0.220	0.181	0.051	0.058	0.206	0.089	0.304	0.176	-	0.340	0.295	0.415	0.058	0.671	0.079	0.253
2000	0.177	0.203	0.194	0.053	0.061	0.168	0.113	0.156	0.158	-	0.354	0.376	0.345	0.096	0.513	0.116	0.225
2001	-	0.230	0.377	0.057	0.058	0.159	0.075	0.150	0.127	-	0.397	0.420	0.324	0.251	0.622	0.095	0.186
2002	-	-	0.398	0.060	0.066	0.155	-	0.209	0.123	-	0.336	0.519	0.303	0.170	-	0.099	0.247
2003	-	-	0.389	0.059	0.096	0.152	-	0.227	0.135	-	-	0.331	0.235	0.237	-	0.151	0.210

Table A10: Herfindhal Indicators for the Caribbean Economies: Imports

Year	ATG	BHS	BLZ	BRB	CARICOM	DMA	DOM	GRD	GUY	JAM	KNA	LCA	MSR	SUR	TTO	VCT
1980	-	-	-	0.017	0.007	-	-	-	-	0.012	-	-	-	-	0.010	-
1981	-	-	-	0.018	0.007	0.017	-	-	-	0.012	-	0.011	-	-	0.009	-
1982	-	-	-	0.014	0.009	-	-	-	-	0.009	-	0.013	-	-	0.015	-
1983	-	-	-	0.046	0.008	0.016	-	-	-	0.008	-	0.011	-	-	0.013	-
1984	-	-	-	0.049	0.007	-	-	0.013	-	0.008	-	-	-	-	0.008	-
1985	-	-	-	0.032	0.007	0.016	-	0.012	-	0.010	-	0.011	-	-	0.008	-
1986	-	-	-	0.033	0.007	0.017	-	0.012	-	0.007	0.010	0.011	-	-	0.009	-
1987	-	-	-	0.017	0.005	0.020	-	0.010	-	0.006	0.011	0.011	-	-	0.009	-
1988	-	-	-	0.013	0.006	0.017	-	0.011	-	0.007	0.009	0.010	-	-	0.009	-
1989	-	-	-	0.012	0.005	0.013	-	0.011	-	0.007	-	0.010	-	-	0.011	-
1990	-	-	-	0.016	0.006	-	-	0.011	-	0.010	-	0.010	-	0.032	0.009	-
1991	-	-	-	0.007	0.006	-	-	0.010	0.014	0.012	-	0.009	-	0.025	0.007	-
1992	-	-	0.011	0.006	0.006	-	-	-	0.014	0.011	-	0.009	-	0.054	0.008	-
1993	-	-	0.011	0.007	0.008	0.010	-	0.010	-	0.016	0.010	0.008	-	-	0.013	0.011
1994	-	-	0.009	0.007	0.007	0.010	-	0.011	-	0.013	0.012	0.009	-	0.018	0.013	0.010
1995	-	0.015	0.010	0.009	0.008	0.012	-	0.011	-	0.013	0.011	0.010	-	0.025	0.023	0.010
1996	-	-	0.011	0.009	0.008	0.011	-	0.012	-	0.013	0.010	0.010	-	0.014	0.011	-
1997	-	0.012	0.010	0.008	0.012	0.009	-	0.012	0.011	0.014	0.011	0.010	-	0.013	0.066	0.012
1998	-	0.011	0.011	0.010	0.009	-	0.019	0.014	0.009	0.011	-	0.009	-	0.017	0.028	0.010
1999	0.021	0.011	0.014	0.010	0.008	0.010	0.020	0.013	0.012	0.010	0.010	0.008	0.017	0.022	0.009	0.010
2000	0.023	0.012	0.017	0.009	0.008	0.011	0.028	0.016	0.010	0.011	0.011	0.009	0.016	0.015	0.012	0.011
2001	-	0.011	0.017	0.009	0.010	0.009	0.023	0.013	0.010	0.010	0.011	0.009	0.017	0.016	0.037	0.013
2002	-	-	0.015	0.008	0.009	0.010	-	0.010	0.010	0.016	0.012	0.011	0.016	-	0.021	0.010
2003	-	-	0.014	0.010	0.011	0.010	-	0.013	0.013	-	0.015	0.014	0.037	-	0.020	0.012

Table A11: Trade in goods (% of GDP) for Caribbean Economies

Country Name	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Antigua and Barbuda	107	121	116	84	86	91	92	86	79	56	70
Bahamas, The	637	215	319	277	187	89	73	65	59	83	90
Barbados	87	60	82	89	91	80	66	46	49	50	54
Belize	134	84	122	101	106	104	94	83	88	85	79
Dominica	98	76	100	90	93	84	88	90	99	99	104
Dominican Republic	48	47	34	32	28	60	54	67	49	82	73
Grenada	80	61	59	56	67	72	80	72	68	60	60
Guyana	126	139	112	86	97	95	90	143	108	128	143
Haiti	41	42	38	37	35	30	24	28	23	17	17
Jamaica	77	82	65	61	80	80	57	59	59	64	67
St. Kitts and Nevis	144	127	73	116	103	91	93	99	96	91	87
St. Lucia	136	115	114	129	85	96	107	106	122	123	100
St. Vincent and the Grenadines	119	110	114	118	127	126	118	106	126	114	110
Suriname	114	105	92	85	73	64	66	55	58	178	298
Trinidad and Tobago	116	98	83	64	57	50	57	56	56	65	66
CARICOM	138	99	102	95	88	81	77	78	76	86	95

Table A12: RCA and RMA for CARICOM

SITC Rev. 2	CAR_WLD_RXA	CAR_EU_RXA	CAR_USA_RXA	CAR_WLD_RMA	CAR_EU_RMA	CAR_USA_RMA
0	0.0661969	0.0486572	0.0815326	0.2007887	0.1540545	0.1808058
1	0.1514864	0.1155353	0.107461	2.787601	2.257993	6.049708
2	0.3163021	0.1639174	1.443216	3.849366	2.281349	19.34091
3	3.433967	6.072975	7.034456	0.9345283	0.9898074	0.9873879
4	1.708269	1.651829	0.9481593	2.969732	3.777513	10.69355
5	3.011234	2.602764	3.258706	1.749817	1.245823	2.377973
6	19.60398	18.97953	50.59457	3.237886	3.339047	5.42288
7	2.163105	2.35033	7.875773	0.8609703	0.6610497	0.9708238
8	0.5397092	0.5940896	0.3245827	1.967382	1.519123	12.30659
9	2.62105	2.020359	1.81935	5.061439	4.556852	14.14944
11	4.583584	2.336109	12.5244	2.453378	1.879348	1.895993
12	0.97294	0.8726984	0.4478034	0.5858284	0.5210693	1.951731
21	0.0630183	0.058324	0.0270593	0.0086834	0.0076568	0.0615328
22	0.0248382	0.1013838	0.0073135	0.3866766	0.3982412	3.197344
23	0.0004399	0.0008663	0.0003641	0.1513466	0.1701477	0.2001743
24	0.4547978	0.781745	0.4197295	1.878227	2.074144	1.771884
25	0.0342666	0.0592078	0.0199479	0.1005142	0.0872914	0.1500013
26	0.0489934	0.085707	0.0346442	0.2248167	0.2721827	1.404583
27	1.617032	1.692062	1.477804	1.016635	0.9312199	2.080082
28	14.00348	26.09283	19.27354	0.2637959	0.2618987	0.7430053
29	0.2778321	0.1948355	0.3907331	0.8266978	0.5908668	1.062878
32	0.0000391	0.0002314	0.0000418	0.3835816	0.4245218	1.952827
33	3.709678	9.642004	23.15369	2.142401	2.552386	1.869923
34	5.734528	17.59565	42.65075	0.3697779	0.4325255	0.4454275
35				0.0239909	0.0244695	0.0138442
41	0.0185495	0.0199139	0.0086185	2.756107	3.315671	14.77178
42	0.3164361	0.3730767	0.6761424	1.034944	1.118369	2.382551
43	0.0442234	0.0394098	0.0702956	1.811472	1.463997	6.099532
51	2.195913	1.594874	1.906967	0.299823	0.2659628	0.3050977
52	9.753286	9.944297	7.052312	1.163669	1.173045	1.402636
53	0.37674	0.269091	0.3699022	1.321644	1.217202	3.190588
54	0.1115201	0.0642944	0.1096906	1.025304	0.7608916	1.495804
55	1.215821	0.7250046	1.175775	2.563088	2.001707	5.782994
56	3.55835	5.895243	2.660171	0.9727891	1.359731	1.759569
57	0.0996825	0.2019688	0.0458363	1.727806	1.867694	1.658691
58	0.4311769	0.3330868	0.3410659	0.6203035	0.5474287	1.528888
59	0.3769824	0.2758661	0.239067	1.395231	1.28955	3.175483
61	0.0031036	0.0028805	0.0059829	0.0502521	0.0528159	0.1222978
62	0.0082861	0.0068818	0.0082559	1.369536	1.191342	1.494408
63	1.023787	1.030619	1.85917	2.543881	2.304861	2.076216
64	0.5942037	0.4006871	0.6476532	1.58742	1.301326	1.939634
65	0.0661212	0.0703854	0.1139533	0.7004334	0.7824846	1.278873
66	0.3370785	0.2622234	0.6172363	1.295453	1.229165	1.197681
67	1.450664	1.235809	3.791557	0.9307482	0.866811	1.400869
68	0.025241	0.0294887	0.0448646	0.2344882	0.2265721	0.2597728
69	0.2775651	0.2347486	0.2660657	1.808057	1.729322	1.943733
71	0.0156981	0.0134193	0.0088337	0.6168637	0.5820417	0.560474
72	0.0299974	0.0237485	0.0194683	0.8378057	1.013069	1.153371
73	0.0100025	0.0093855	0.0083419	0.2450731	0.2794951	0.2528422
74	0.1025078	0.0753526	0.0792441	1.301423	1.259587	1.60618
75	0.039931	0.0503543	0.0359261	0.3257545	0.3147281	0.2593752
76	0.0063127	0.0065086	0.0073912	0.5750583	0.6365374	0.4627163
77	0.1114204	0.1543567	0.0876837	0.3779991	0.525093	0.432884
78	0.0038164	0.0030454	0.0043427	0.7981837	0.6907886	0.5198147
79	0.0747389	0.0674919	0.0327026	1.471467	1.148117	1.564167
81	0.2028669	0.1363914	0.3905907	1.477639	1.243602	1.104837
82	0.1378109	0.1144651	0.1922876	1.397633	1.280941	0.8436419
83	0.0601703	0.0586992	0.2343431	0.4759936	0.6009968	0.3790636
84	0.9570952	1.340399	2.468012	0.7257343	0.701917	0.4364102

85	0.0263744	0.0222453	0.3037249	0.7902838	0.7816864	0.4654549
87	0.0558509	0.0557814	0.0246705	0.4121577	0.4367122	0.4327039
88	0.0932377	0.1070456	0.1125365	0.7142453	0.8202268	0.6896819
89	0.2223542	0.1946345	0.1848764	1.21423	1.239286	0.9976206
94	4.20769	4.374437	4.970366	2.315146	2.198523	2.925113
95	0.0328849	0.047991	0.008302	0.4254607	0.7126823	0.4087014
96	0.0005203	0.0030002	0.0107224	0.4015572	6.370322	0.0843927
97	5.566205	16.92195	2.33619	0.0326154	0.045919	0.0578316

Table A.13 Value Added Shares 2001 %

Activity	%
Vegetables fruit nuts	0.99
Sugar cane sugar beet	0.13
Other agriculture	3.72
Forestry and fishing	0.42
Minerals	1.10
Beverages and tobacco	1.31
Sugar	0.23
Other food products	2.48
Textiles apparel leather	3.56
Petroleum coal products	0.07
Chemicals rubber plastic	2.81
Metals and products	2.08
Transport equipment and machinery	3.76
Electronic equipment	0.65
Other manufactures	4.83
Utilities and construction	6.74
Trade and transport	17.30
Communication and financial services	14.35
Recreational and other services	33.49
Total	100.00

Source: GTAP V6 dataset for 2001

Table A.14a: Factor shares in economy %

Activity	Land	UnSkLab	SkLab	Capital	NatRes
Vegetables fruit nuts	20.39	1.30	0.04	0.53	0.00
Sugar cane sugar beet	2.78	0.18	0.01	0.07	0.00
Other agriculture	76.84	4.92	0.14	1.99	0.00
Forestry and fishing	0.00	0.29	0.01	0.41	29.37
Minerals	0.00	0.98	0.37	0.83	70.63
Beverages and tobacco	0.00	1.03	0.33	1.91	0.00
Sugar	0.00	0.11	0.05	0.39	0.00
Other food products	0.00	2.49	1.07	3.05	0.00
Textiles apparel leather	0.00	2.30	0.75	5.61	0.00
Petroleum coal products	0.00	0.08	0.03	0.08	0.00
Chemicals rubber plastic	0.00	3.20	1.59	3.05	0.00
Metals and products	0.00	2.72	1.03	2.04	0.00
Transport equipment and machinery	0.00	3.72	1.78	4.61	0.00
Electronic equipment	0.00	0.73	0.38	0.70	0.00
Other manufactures	0.00	4.82	1.73	6.09	0.00
Utilities and construction	0.00	4.25	2.05	10.50	0.00
Trade and transport	0.00	17.01	7.50	21.58	0.00
Communication and financial services	0.00	9.22	15.22	18.43	0.00
Recreational and other services	0.00	40.66	65.91	18.11	0.00
Total	100	100	100	100	100

Source: GTAP V6 dataset for 2001

Table A.14b: Factory shares by activity %

Activity	Land	UnSkLab	SkLab	Capital	NatRes	Total
Vegetables fruit nuts	28.00	46.39	0.61	25.00	0.00	100
Sugar cane sugar beet	28.00	46.39	0.61	25.00	0.00	100
Other agriculture	28.00	46.39	0.61	25.00	0.00	100
Forestry and fishing	0.00	23.85	0.32	45.68	30.16	100
Minerals	0.00	31.30	5.51	35.52	27.67	100
Beverages and tobacco	0.00	27.63	4.06	68.31	0.00	100
Sugar	0.00	17.35	3.81	78.84	0.00	100
Other food products	0.00	35.23	7.06	57.72	0.00	100
Textiles apparel leather	0.00	22.72	3.43	73.85	0.00	100
Petroleum coal products	0.00	39.01	7.88	53.12	0.00	100
Chemicals rubber plastic	0.00	39.91	9.24	50.84	0.00	100
Metals and products	0.00	45.95	8.09	45.96	0.00	100
Transport equipment and machinery	0.00	34.76	7.70	57.53	0.00	100
Electronic equipment	0.00	39.64	9.60	50.76	0.00	100
Other manufactures	0.00	35.05	5.84	59.11	0.00	100
Utilities and construction	0.00	22.10	4.96	72.95	0.00	100
Trade and transport	0.00	34.50	7.07	58.44	0.00	100
Communication and financial services	0.00	22.54	17.29	60.17	0.00	100
Recreational and other services	0.00	42.60	32.07	25.33	0.00	100

Source: GTAP V6 dataset for 2001

Table A.15a: Export Shares 2001 %

From/to	wusa	wonafta	wla	wxfa	wxcb	weu15	wEU10	wasia	woet	wglo	Total
usa	0.00	25.85	5.62	0.96	0.21	27.91	1.00	24.70	11.71	2.05	100
onafta	75.46	1.91	2.15	0.71	0.28	8.39	0.35	6.58	3.08	1.07	100
la	26.00	4.20	20.06	1.37	0.96	22.05	0.93	13.88	8.45	2.05	100
xfa	31.53	10.15	3.88	3.33	0.52	26.87	1.04	12.42	9.02	1.03	100
xcb	20.11	5.72	9.09	1.66	0.13	32.67	1.52	10.54	15.55	3.16	100
eu15	11.12	2.26	2.06	0.26	0.17	50.60	4.26	10.43	15.47	3.53	100
EU10	6.42	1.12	1.02	0.16	0.07	54.88	10.91	5.10	15.49	4.83	100
asia	23.36	2.79	2.11	0.33	0.11	17.79	0.93	39.85	8.70	3.61	100
oet	12.39	1.73	1.74	0.20	0.22	35.67	3.40	21.52	18.20	4.10	99
glo	16.74	4.20	3.86	0.60	0.29	27.97	4.10	26.08	16.16		100

Source: GTAP V6 dataset for 2001

Table A.15b: Import Shares 2001 %

From/to	wusa	wonafta	wla	wxfa	wxcb	weu15	wEU10	wasia	woet	glo	Total
usa	0.00	26.61	4.43	0.71	0.13	22.52	0.93	34.91	9.74	0.00	100
onafta	61.25	2.19	2.32	0.75	0.12	14.86	0.53	13.56	4.42	0.00	100
la	23.76	4.39	19.79	0.51	0.34	24.12	0.86	18.30	7.92	0.00	100
xfa	28.40	10.11	9.50	3.06	0.44	21.08	0.93	20.16	6.31	0.00	100
xcb	13.64	8.91	14.68	1.05	0.08	30.51	0.87	14.72	15.54	0.00	100
eu15	10.56	1.53	1.95	0.31	0.11	53.11	4.13	13.77	14.53	0.00	100
EU10	4.76	0.81	1.04	0.15	0.06	56.30	10.34	9.07	17.46	0.00	100
asia	14.85	1.91	1.95	0.23	0.06	17.41	0.61	49.06	13.93	0.00	100
oet	11.83	1.50	1.99	0.28	0.14	43.36	3.11	17.99	19.79	0.00	100
glo	7.98	2.02	1.87	0.12	0.11	38.17	3.75	28.77	17.22	0.00	100

Source: GTAP V6 dataset for 2001

Table A16a: % Tariffs on Caribbean EPA imports from EU15, 2001

Vegetables fruit nuts	19.45
Sugar cane sugar beet	0.00
Other agriculture	9.04
Forestry and fishing	21.98
Minerals	4.01
Beverages and tobacco	33.19
Sugar	24.76
Other food products	15.52
Textiles apparel leather	11.65
Petroleum coal products	10.52
Chemicals rubber plastic	8.20
Metals and products	7.93
Transport equipment and machinery	8.66
Electronic equipment	7.13
Other manufactures	14.38
Utilities and construction	0.00
Trade and transport	0.00
Communication and financial services	0.00
Recreational and other services	0.00

Source: GTAP V6 dataset for 2001

Table A.16b: % Tariffs on EU15 imports from Caribbean, 2001

Vegetables fruit nuts	30.61
Sugar cane sugar beet	0.00
Other agriculture	0.23
Forestry and fishing	0.00
Minerals	0.00
Beverages and tobacco	0.13
Sugar	163.62
Other food products	6.48
Textiles apparel leather	0.00
Petroleum coal products	0.00
Chemicals rubber plastic	0.00
Metals and products	0.00
Transport equipment and machinery	0.00
Electronic equipment	0.00
Other manufactures	0.00
Utilities and construction	0.00
Trade and transport	0.00
Communication and financial services	0.00
Recreational and other services	0.00

Source: GTAP V6 dataset for 2001. Estimated sugar tariff equivalent by Chris Stevens for 2001 was 67-71%. The cut in EU15 sugar tariff equivalent of 50% used in model experiments based on the Stevens estimate

Table A.16c: Potential trade diversion EU15 less other tariffs %

xfa-EU15 FTA	wusa	wonafta	wla	wxfa	wxcb	wEU15	wEU10	wasia	woet
Vegetables fruit nuts	-5.25	10.07	4.69	19.13	1.89	0.00	-11.24	1.98	-3.33
Other agriculture	3.52	4.17	1.63	8.68	-7.01	0.00	6.90	-4.24	3.20
Forestry and fishing	10.57	8.65	12.54	21.52	12.63	0.00	21.74	15.04	16.52
Minerals	-2.25	1.82	1.14	3.50	-2.20	0.00	3.31	2.37	-1.49
Beverages and tobacco	1.74	-75.09	5.43	32.80	-67.66	0.00	17.37	-36.33	-10.96
Sugar	3.95	11.29	7.40	24.76	-12.74	0.00	24.76	24.76	24.23
Other food products	-0.74	3.79	1.85	15.21	-0.70	0.00	-3.36	-2.88	3.85
Textiles apparel leather	-1.85	-6.43	-3.05	10.76	-8.59	0.00	-0.15	-1.71	-2.78
Petroleum coal products	-7.31	-27.92	1.88	9.84	-7.73	0.00	1.73	4.54	-13.49
Chemicals rubber plastic	-1.52	-1.03	0.80	7.18	2.97	0.00	-1.96	-3.44	-4.32
Metals and products	-2.93	1.01	2.10	5.96	2.02	0.00	3.54	-1.40	0.83
Transport equipment and machinery	-0.85	-8.82	3.30	4.67	-0.88	0.00	0.17	-5.59	0.55
Electronic equipment	1.40	1.10	-8.64	7.07	-1.96	0.00	-4.88	-1.83	1.41
Other manufactures	0.56	4.79	6.79	13.15	4.93	0.00	0.73	-3.44	-2.24

