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An Assessment of the Overall Implementation and Adjustment Costs for the ACP Countries of Economic Partnership Agreements with the EU

Chris Milner

Introduction

Non-reciprocal, preferential access to the EU for ACP countries under the Lomé provisions was challenged under the rules of the WTO. Preferences granted to specific developing countries can only be maintained, in a GATT-consistent manner, on a basis of reciprocity. In the Cotonou Agreement, the successor to Lomé, the EU proposed negotiating a series of Economic Partnership Agreements, under which the EU and regional groupings of ACP countries offer reciprocal trade preferences to each other. In order to continue to gain preferential access to the EU, each ACP regional trading group would have to give the EU preferential access to their own regional market. The questions facing ACP countries are whether the benefits of an EPA outweigh the costs of granting preferential access to the EU and how the issue of adjustment costs should be addressed in negotiations. The certain benefits are continued preferential access for ACP exports[1] and there are possible benefits from discriminatory liberalising of imports. The costs arise from the adjustment to liberalisation of ACP countries' domestic markets to imports from the EU.

The Cotonou Agreement between the EU and 71 ACP partner states was concluded in February 2000, covering various dimensions including economic relations, aid and trade co-operation. On trade co-operation, the general principle of a WTO-compatible EPA arrangement for the future was agreed. The EU applied to the WTO for an eight-year waiver to provide a transition period for any new arrangement; this was granted at Doha. Over this period the EU and ACP states planned to negotiate and try to agree a new WTO-compliant trade agreement, which would then be implemented over a transitional period starting at the latest by 2008. Such an arrangement could allow asymmetry, in other words more gradual liberalisation by ACP countries (the EU proposed a further 10- to 15-year transition period before the EU could export duty free to ACP countries under an EPA).

Although most ACP countries have indicated they would like to negotiate with the EU as a block (some are inclined to negotiate alone), the EU has been adamant that negotiations should be with regional groupings of ACP countries. In fact, when the proposal was first discussed in the latter half of the 1990s, the term Regional Economic Partnership Agreement (REPA) was used. Negotiations between the EU and various ACP regional groupings were supposed to start in late 2003, but stalled and were delayed until April 2004.

The terms of reference for this study require that:

- the nature of the implementation and adjustment costs are identified and approximated for individual ACP countries and for the ACP grouping of countries as a whole;
- the above costs are decomposed into their components, that is negotiating, legislative, fiscal and sectoral adjustment costs; and
- given the above two points, a negotiating target is established for the European Development Fund for ACP adjustment to EPAs, including guidance on the mechanisms of disbursement of adjustment assistance over time, across countries (according to the degree of adjustment involved) and between the public and private sectors of the adjusting ACP countries.

Nature and costs of EPAs: An overview

The EU's long-term aim is to establish free trade areas with each of the three ACP regions as a replacement for the Lomé agreements. GATT Article XXIV allows for the negotiation of customs unions or free trade areas that offer preferential treatment to member countries, subject to certain conditions. The most important of these is that the free trade area should 'eliminate duties and other restrictive regulations of commerce ... on substantially all the trade between constituent territories in products originating in such territories' (GATT Article XXIV, para. 8(b)). There does not appear to be an agreed definition of what 'substantially all the trade' means in practice. It appears that both qualitative and quantitative aspects are important. On the former, exclusion of whole sectors (for example agriculture) is likely to be prohibited. On the latter, full liberalisation of 80–90% of trade between the partners is likely to be required, but even this raises a number of complex questions (for example whether it is the volume or value of trade and whether this should occur before or after liberalisation).

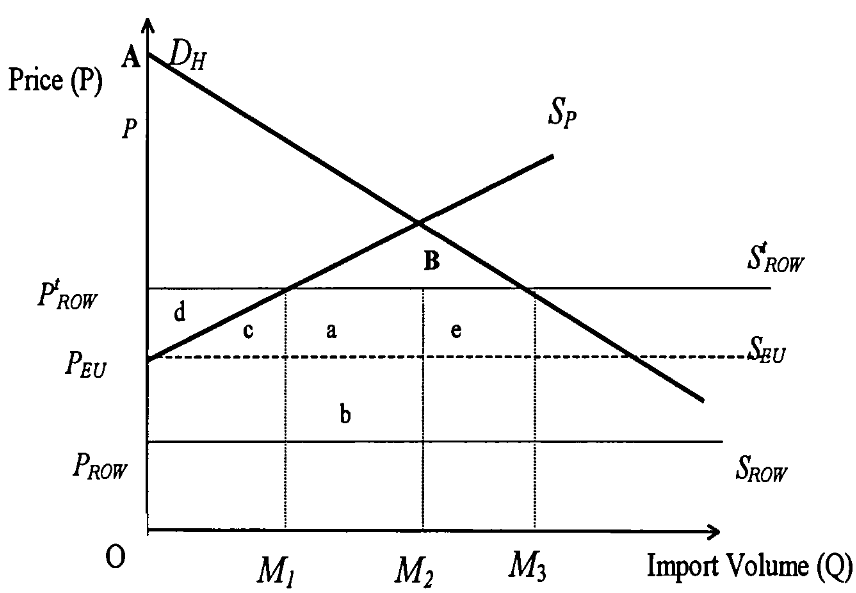
Any interim arrangements leading to the full establishment of the free trade areas 'shall include a plan and schedule for the formation of such a customs union or such a free trade area within a reasonable length of time' (GATT Article XXIV, para. 5(c)). In this context 'a reasonable length of time' is likely to mean not more than ten years. This would mean that if an EPA is to begin in 2008, full liberalisation of 'substantially all the trade' would need to be achieved by 2018. Within this time period, though, there do not appear to be any symmetry requirements; the ACP partner countries can liberalise much more slowly than the EU, subject to their meeting the 'reasonable length of time' criterion. Given the present non-reciprocity of trade relations between the EU and ACP countries, some asymmetry is likely to be desirable (and has been accepted in principle by the EU).

Conceptual framework

The key effects of introducing reciprocity by an ACP (home) country member (*H*) can be illustrated by Figure 1 (see also McKay, Milner and Morrissey, 2005). The partner country's (*P*) supply curve is upward sloping and the supply for two (initial) outside suppliers (here the EU and the rest of the world (ROW)) is assumed to be infinitely elastic. The analysis is partial equilibrium in nature, markets are assumed to be perfectly competitive, and there is perfect substitutability between both imports from alternative sources and imported and domestically produced import substitutes.

Assume that *H* and *P* have already formed a pref-

Figure 1. Effect of an EU–ACP EPA



erential trading area (PTA), and that small developing countries can be viewed jointly as being small relative to the EU and ROW who supply at constant cost (prices P_{EU} and P_{ROW} respectively). In the case of Figure 1 we assume for expositional convenience that $P_{EU} > P_{ROW}$; therefore subsequent discriminatory trade policies by the PTA towards the outside countries can have both trade creating and diverting effects. The line D_H represents the home country's demand for imports, S_P the partner's supply of exports, and S_{EU} and S_{ROW} are the respective export supply functions for the two outside country groupings. We start with a PTA and a non-discriminatory (*ad valorem*) tariff (t) on extra-regional imports (where $Pt_{ROW} = P_{ROW}(1 + t)$ but P_{tEU} is not shown in the case of the higher cost EU supplier). The home country imports OM_2 in total, with OM_1 coming from the partner country and M_1M_2 from the rest of the world. By ruling out domestic production capability we can define welfare (W) by reference to consumer surplus with respect to the import demand function, D_H. Thus W for the home country is given by the triangle $ABP_{t\,ROW}$ plus the tariff revenue on extra-regional imports (area $a + b$).

Now assume that the PTA introduces a discriminatory tariff policy towards extra-regional countries, and as a result of an EPA with the EU continues to impose tariff t on imports from the rest of the world but allows in imports from the EU duty free. The relevant supply price is now P_{EU}, with the total quantity of imports expanding from OM_2 to OM_3 and imports coming now wholly from the EU. There are strictly three components of this trade effect of the EPA: a consumption expansion effect M_2M_3; a 'trade diversion' effect M_1M_2; and a 'trade creation' effect OM_1. The last two of these effects need more careful explanation.

In the case of standard PTA analysis, trade diversion usually relates to diverting trade from more efficient extra-regional suppliers to less efficient intra-regional suppliers. The EPA, however, diverts between extra-regional suppliers; M_1M_2 is imported from the less efficient EU rather than from the rest of the world. The resource cost of this is represented by the area b, with total tariff revenue lost by the home country government being area ($a + b$).[2] Similarly, in terms of standard PTA analysis, trade creation usually describes the displacement of less efficient home production by globally efficient extra-regional production. In this case, however, the EPA involves the replacement of intra-regional imports by more (but here not globally) efficient extra-regional imports from the EU. The global resource-saving on this 'trade creation' (or trade-source substitution) effect is shown by area c in Figure 1. This, and the loss in producer surplus for partner country exporters (area d), allows consumer surplus on this component of the trade effect of the EPA to increase by area ($c + d$). Thus the welfare implications for the home country of shifting from the PTA to the EPA are ambiguous, the consumption and trade-creation effects increasing welfare and the trade-diverting effect reducing welfare, i.e. $W = (c + d + e) - b$. Clearly, the more efficient the EU is, the smaller the costs of trade diversion and the greater the probability of a welfare-improving EPA. In the extreme, as S_{EU} tends towards S_{ROW} then the EPA tends toward the free trade outcome.

Adjustment issues

The net welfare benefits or costs on the import side of introducing reciprocity need to be added to the benefits of continued preferential access for ACP exports to the EU in order to evaluate the overall long-term implications of EPAs for ACP countries. But this is still not a complete evaluation, since the issue of short- to medium-term adjustment costs is abstracted from completely in the above analysis. These adjustment costs will differ across ACP countries depending on initial characteristics and policy conditions, but can be considered under the following headings:

(i) Fiscal adjustment

In order to replace any tariff revenue losses associated with the EPA an ACP country will need to either revise or reform the structure of taxation from non-trade tax sources in order to increase revenue from these alternative sources.

(ii) Trade facilitation and export diversification

If the benefits of reallocating resources (capital, labour, skills and land) away from import competition towards new export activities (under the stimulus of greater competition on the home market from EU exporters) are to be reaped, actual and potential countries will need support with developing export products and gaining knowledge about export-market opportunities.

(iii) Production and employment adjustment

In Figure1 the displacement of imports from the pre-EPA regional supplier by EU exports will tend to induce falls in production and employment in the partner ACP country. However, where the home country has a production capability (which was for convenience not considered in Figure 1), there will be a similar displacement to production and employment in the import-competing sector by the growth of EU exports to ACP countries. Since the reallocation of displaced resources from current (pre-EPA) activities to export sectors will not be immediate and smooth, then the ACP countries will need assistance with the adjustment experienced by workers (compensation for unemployment, support for relocation and retraining) and by firms (closure, production line restructuring, etc.).

(iv) Skills development and productivity enhancement

The costs of adjustment (contraction of import-substitution activities and expansion of export sectors) will fall over time and scope for dynamic benefits from export development will be increased by increasing productivity levels in ACP countries. Increasing competitiveness and productivity levels in preparation for the full implementation of EPAs requires support through the enhancement of workers' skills, the improvement of firms' organisation and management structures, and the development of supportive economic policies and infrastructures.

(v) Negotiation and legislation

In addition to the direct economic and financial costs that will fall on individuals, and on private and public-sector organisations in ACP countries, the ACP countries will need to negotiate and implement EPAs. Indeed, some negotiation costs have already been incurred, but more negotiations are required. Once the EPAs are agreed, there will be a need to implement the agreements through legislative reform, administrative change, public-sector training and adjustment assistance programme support. These will all involve additional public administrative costs in ACP countries.

Note that the focus above is on the process of domestic structural changes associated with the introduction of reciprocal import liberalisation in ACP–EU relations. It does not seek to deal with all aspects of the costs of an EPA. For example, if import liberalisation induces a rapid growth of imports in excess of growth of exports to the EU, then the EPA may induce balance-of-payments or foreign-exchange problems. This study does not consider issues of macroeconomic policy management in a post-EPA environment. Similarly it does not attempt to incorporate any costs imposed on ACP countries resulting from changes in the special regimes for specific export commodities (for example for sugar and bananas).

Methodology for assessing costs

The present study does *not* seek to set up a precise methodology to identify and quantify the country-specific adjustment costs that each ACP country might experience as part of the process of implementing an EPA. A number of studies of this nature exist, for example CREDIT (1998, 2004) and Greenaway and Milner (2000). There are both methodological, resource, and data constraints on doing so. Whether formal partial or general equilibrium methods were applied, there would be difficulties in capturing the dynamics of the adjustment and growth processes involved. There would also be enormous data requirements for detailed tariff, trade, production and employment statistics for each country; for some countries these may not be available. This would, if feasible, constitute a very large, long-term research project. Rather than adopt a formal and comprehensive economic modelling approach, a more concise (albeit less formal) methodology to approximate the adjustment costs across the ACP grouping will be adopted. By matching up project costs from the implementation of earlier policy-reform programmes (drawn up by the

World Bank) with the expected implementation of EPA reform programmes, we are able to provide guidance as to the scale of adjustment costs involved. Note that this methodology offers advantages over an economic modelling approach. An economic modelling approach might estimate the changes in economic variables such as imports, tariff revenue, domestic production and employment. But the economic changes associated with the adjustment to an EPA do not provide a direct indication of the adjustment costs. Those costs relate either to other aspects of the economic adjustment process that are difficult to quantify (i.e. the length of time that unemployed workers are unemployed and the loss of income experienced by those workers), or to aspects associated with the implementation of policy reforms within the government administration (for example introduction of tax reforms to replace falls in customs duty) and the private sector (for example the introduction of skills retraining or business organisation enhancement). The actual costs of adjustment incurred by ACP countries are in any case dependent on the pace and degree of adjustment that they experience. This will in turn be fashioned by what exactly is negotiated on EPA implementation (trade coverage, phasing, etc.), and also by what is put in place to help the ACP countries to become more adaptable and able to adjust to trade liberalisation in a less costly manner. The focus therefore of the ACP negotiations should not be to try to identify a level of compensation for the uncertain and rather unpredictable costs of adjustment to an EPA. It should, by contrast, be to consider what is required (and what it will cost) to bring about adjustment to an EPA in a less costly manner; in other words to identify the costs of making the EPA countries more adjustable and adaptable. Indeed, with a compensating-for-adjustment approach the danger is that the funds will be used to give offsetting policy interventions (subsidies, etc.) to sectors subject to greater competition post-EPA, which will serve to avoid or resist adjustment. By contrast, the ACP countries need support with increasing adaptability and the capacity to adjust so that they can benefit from an EPA and thereby reap its development benefits.

Categorising countries

For each of the types of adjustment costs identified in the previous section, namely fiscal adjustment costs, trade facilitation and export diversification

Table 1. Illustration of classification methodology

Degree of Adjustment / Country Size[a]	Low Adjustment (1)	Medium Adjustment (2)	High Adjustment (3)	Other[b] (4)
Micro (1)	C_{11}	C_{12}	C_{13}	C_{12}
Small (2)	C_{21}	C_{22}	C_{23}	C_{22}
Medium (3)	C_{31}	C_{32}	C_{33}	C_{32}
Large (4)	C_{41}	C_{42}	C_{43}	C_{42}
Very Large (5)	C_{51}	C_{52}	C_{53}	C_{52}

[a]Population size: micro <1 million; small 1–5 million; medium 5–15 million; large 15–100 million; very large >100 million.
[b]Unavailability of data on proxy adjustment indicator makes it impossible to classify the country.

costs, production and employment adjustment costs, and skills development and productivity enhancement costs, we identify a proxy indicator of potential adjustment required under that category of adjustment cost (for example dependence on trade tax revenue for government revenue for fiscal adjustment). This allows us to classify each ACP country according to country size and degree of each type of adjustment.

Table 1 illustrates this classification process. The broad classification into low, medium and high adjustment inevitably introduces a qualitative assessment, but avoids trying to measure the inter-country adjustment needs in a precise, continuous manner. The table further distinguishes between countries on the basis of size, for which we use population size as a proxy. Other size proxies could have been used, for example GDP, but population is a widely used measure of country size. Again, we group rather than measure size on a continuous basis. Although the extent of the adjustment costs will include elements that are fixed or invariant with country size and will be fashioned by other country characteristics, we can accommodate this in part through the non-linearity of the setting of the cost (C) estimates for each cell in the table.

The methodology, therefore, is in several stages. ACP countries are allocated to cells for each type of adjustment cost. The costs for each cell are set on the basis of programme costs from World Bank reform programmes (either by exact matching or by interpolation), with costs increasing with the degree of adjustment (i.e. $C_{13}>C_{12}>C_{11}$) and with the size of country (i.e. $C_{51}>C_{41}>C_{31}>C_{21}>C_{11}$). (Note that in the case of the other or unclassified column we set costs at the medium level on the principle of offsetting errors.)

Fiscal adjustment

The amount of direct fiscal loss for any one ACP country that results from the EPA-induced lowering of tariffs on imports from the EU will depend on a range of factors. They include the level of current tariffs on imports from the EU, the amount of imports from the EU prior to the tariff reduction, and the amount of imports that are diverted from non-EU sources as a result of the discriminatory liberalisation of tariffs.[3] Given the need for simple criteria for classifying countries, the share of trade tax revenue in each country's tax revenue will be used as the indicator of the degree of potential fiscal adjustment cost associated with an EPA. There are good grounds for taking this more general indicator. Firstly, more specific indicators, such as the current average tariff on imports from the EU or the share of current imports from the EU, may be misleading. The tariff revenue effects may not be well indicated by these specific indicators, since the revenue-maximising tariff rate varies across countries as does the scope for import source substitution from non-EU sources of supply. Secondly, it is not the revenue effect itself that captures the cost of fiscal adjustment. The decline in customs revenue is a domestic redistribution from the government to consumers of imported goods. For the governments of some countries, any decline in customs revenue can be relatively easily offset by increasing tax collection from other sources (for example sales and income taxes). For others, the absence or underdevelopment of the tax regime makes this switch of revenue generation more difficult and more costly to resolve. The adjustment costs may be associated with a range of legislative and administrative changes, hiring and retraining costs, or infrastructure developments required to extend or develop tax revenue generating capacity in the non-trade tax domain.

Classifying countries according to trade tax dependence

Using the information set out in Table A1 in Annex 1 on trade tax dependence (the percentage share of trade taxes in total government revenue), ACP countries have been classified using the methodology described in the previous chapter. This classification is summarised in Table 2, taking <20% trade tax dependence as an indicator of relatively low adjustment cost, 20–40% as medium adjustment cost and >40% as high adjustment cost.

Approximating the costs of fiscal adjustment

Table 3 summarises the aims and components of a number of World Bank projects aimed at fiscal reform and/or tax administration reform. These illus-

Table 2. Potential degree of fiscal adjustment required

	Low adjustment		Medium adjustment		High adjustment		Other	
Country size	Country	% trade tax	Country	% trade tax	Country	% trade tax	Country	% trade tax
Micro	São Tomé & Principe	19	Suriname	37	Seychelles	47	Bahamas, The	–
	Djibouti	17			Comoros	42	Barbados	–
	Equatorial Guinea	15			Cape Verde	41	Belize	–
	Guyana	12					Dominica	–
							Fiji	–
							Grenada	–
							Kiribati	–
							Micronesia, Federated States	–
							Palau	–
							Samoa	–
							Solomon Islands	–
							St Kitts and Nevis	–
							St Lucia	–
							St Vincent & the Grenadines	–
							Tonga	–
							Vanuatu	–
Small	Eritrea	14	Lesotho	39	Gambia, The	60	Liberia	–
	Congo, Republic	13	Guinea-Bissau	35	Swaziland	52	Trinidad and Tobago	–
	Mauritania	11	Mauritius	35	Togo	45		
	Botswana	10	Namibia	30	Central African Republic	45		
	Jamaica	29						
	Gabon	22						
Medium	Zimbabwe	17	Sierra Leone	40	Niger	52	Haiti	–
	Guinea	15	Dominican Republic	32	Mali	50	Somalia	–
	Malawi	13	Chad	30	Benin	43		
	Angola	8	Burundi	29				
	Senegal	27						
	Burkina Faso	26						
	Papua New Guinea	25						
	Zambia	25						
	Rwanda	24						

Table 2 (continued)

	Low adjustment		Medium adjustment		High adjustment		Other	
Country size	**Country**	**% trade tax**	**Country**	**% trade tax**	**Country**	**% trade tax**	**Country**	**% trade tax**
Large	Mozambique	18	Ivory Coast	34	Madagascar	54		
	Cameroon	17	Congo, Democratic Rep.	32	Uganda	50		
	Kenya	12	Tanzania	29	Sudan	44		
	South Africa	4	Ghana	28				
	Ethiopia	26						
Very large	Nigeria	49						

Key: Low adjustment: trade tax/total revenue <20%; Medium adjustment: <20%–40%; High adjustment: >40%; Other: data not available (–)

Table 3. Fiscal adjustment projects

Country	Project title	Aims/objectives	Components
Mauritania (F1)	Fiscal reforms support operation	To undertake a substantial harmonisation of tax and administration tariffs policies and investment incentives to facilitate its integration into the regional and world economies	1. Strengthening tax 2. Broadening the tax base 3. Reducing/eliminating tax and customs duty exemptions
Tanzania (F2)	Tax Administration Reform	To support the Tanzania Revenue Authority (TRA) in increasing revenues accruing to Government, without increasing tax rates	1. Capacity building/institutional development 2. Provision of infrastructure and equipment to TRA tax offices and customs facilities 3. Training and computerisation 4. Support to public awareness/ education programmes 5. Support to review/amend laws and regulations
Pakistan (F3)	Tax Administration Reform	To redress major short- comings in tax administration	1. Management and institutional development 2. Improving revenue operations (direct tax, sales tax, customs excise and customs duty) 3. Strengthening revenue services (audit, voluntary and enforced collection, appeals and dispute resolution, national intelligence and risk management, and customs and tax frauds) 4. Creating a tax-compliant culture 5. Adopting responsive IT systems 6. Infrastructure up-gradation and development 7. Project management and implementation

trate the type of institutional, infrastructural, training and outreach activities that are likely to be involved with the non-trade tax reforms and tax administration reforms required to offset the fiscal declines associated with EPA implementation. The dates of these projects and the project costs (in US$) are set out in Table A2. The countries are also classified according to country size and degree of trade tax dependence.

From these data it is possible to map cost estimates directly into the cell or category (as illustrated in Table 1). To do so the dollar valuation has to be converted into euros (at the current conversion rate of $1 = €0.828) and re-valued with an adjustment for inflation from the start of the project date identified in Table A2 to 2005 (at an assumed inflation rate of 2.5%). Table 4 sets out the resulting grid of fiscal adjustment cost estimates. The codes for illustrative projects from Table 3 (for example F1 represents the fiscal reforms support operation for Mauritania) are used to label the actual cost of these projects (in euros at 2005 equivalent prices).

For the purposes of recording the costs, the relevant cost estimates are crudely 'rounded' and interpolated to ensure the ranking of costs explained above (i.e. increasing costs with country size and with the degree of adjustment). Note, however, that there is also a significant degree of non-linearity,

Table 4. Fiscal adjustment cost estimates (million €)

		Degree of adjustment		
		Low	Medium	High
Country size	Micro	15	20	30
	Small	(29.5) 30 (F_1)	40	50
	Medium	40	50	70
	Large	60	€ 72.6 (F_2) 70	90
	Very large	€ 126.5 (F_3) 125	135	155

given the population bands used to define country size types; for a given category of the degree of adjustment involved, the recorded adjustment cost falls much more slowly than population sizes. This captures the important fixed cost element of adjustment costs, i.e. costs that are invariant with country size.

Trade facilitation and export diversification

Accumulated experience of exporting across a wide range of export products is usually regarded as an indication that countries have institutions (private and public sector) and an infrastructure that are conducive to exporting. Many developing countries have an undiversified export structure, having acquired experience and understanding of exporting a narrow range of traditional exports, either from natural resources or land-based activities. The diversification of exports into non-traditional manufacturing activities may require knowledge of different markets (new commercial contacts, etc.) and market access conditions (for example product standard requirements), and require improved customs procedures to speed up access to intermediate inputs and changes in transport facilities (for example refrigeration facilities at airports). The actual requirements will vary across countries as the pattern of comparative advantage and export potential and initial conditions vary. It should be noted that this is a quite narrow view of trade facilitation. Major infrastructure developments to improve transportation systems may require much larger and more expensive trade facilitation programmes. The proxy used for the degree of trade facilitation support and export diversification required to support the expansion of ACP exports to the EU is the share that manufactured exports make up of total exports; the lower the proportion, the greater the presumed need for support with export diversification.

Classifying countries according to degree of export diversification required

Taking the information in Table A1 in Annex 1 on the percentage share of manufactured exports in total commodity exports, we classify ACP countries (see Table 5) as low adjustment (>25%), medium adjustment (10–25%), and high adjustment (<10%) countries.

Estimating costs of trade facilitation and export diversification

In Table 6 the aims and components of a number of World Bank projects aimed at trade facilitation and export development are summarised. Again, these illustrate a range of activities to reduce international transaction costs and accelerate the export supply response to trade policy reform (though as indicated above they illustrate projects where trade facilitation is relatively narrowly defined). The dates of these projects and the project costs are set out in Table A2, which also gives information on countries' size and degree of export diversification. This provides a basis for matching and establishing the approximate costs of diversification in the context of adjusting to an EPA. (Again, we adjust the project costs from Table A2 for inflation effects and convert into euros.)

Table 7 records the resulting grid of export diversification adjustment costs. The actual costs of TF1,

Table 5. Degree of export diversification required

	Low adjustment		Medium adjustment		High adjustment		Other	
Country size	Country	Manufac. X%	Country	Manufac. X%	Country	Manufac. X%	Country	Manufac . X%
Micro	St Lucia	26	Suriname	14%	Seychelles	1	Comoros	–
	Dominica	31	Belize	18%	Cape Verde	3	Djibouti	–
	Bahamas, The	31			Grenada	4	Equatorial Guinea	–
	Fiji	35			Solomon Islands	4	Kiribati	–
	Barbados	59			Tonga	4	Micronesia, Fed. Sts.	–
	St Kitts and Nevis	73			Guyana	9	Palau	–
	Samoa	81			St Vincent & the Grenadines	10	São Tomé and & Principe	–
					Vanuatu	–		
Small	Central African Republic	40	Gambia, The	17%	Liberia	1	Eritrea	–
	Togo	43			Gabon	2	Lesotho	–
	Trinidad and Tobago	46			Guinea-Bissau	3		
	Namibia	52			Congo, Republic	3		
	Jamaica	64			Mauritania	6		
	Mauritius	73						
	Swaziland	76						
	Botswana	91						
Medium	Guinea	28	Malawi	10%	Burundi	1	Angola	–
	Sierra Leone	32	Zambia	14%	Mali	2	Somalia	–
	Dominican Republic	34	Chad	18%	Papua New Guinea	2		
	Zimbabwe	38	Burkina Faso	19%	Niger	3		
	Senegal	51			Rwanda	3		
	Haiti	85			Benin	6		
Large	South Africa	63	Ethiopia	14%	Sudan	3		
	Congo, Dem. Republic	75	Madagascar	14%	Cameroon	7		
			Ghana	16%	Mozambique	8		
			Tanzania	17%	Uganda	8		
			Ivory Coast	21%				
			Kenya	24%				
Very large					Nigeria	0%		

Key: Low adjustment: % Manufactures exports (MX%)>25%; Medium adjustment: 10%–25%; High adjustment: <10%; Other: data not available (–)

Table 6. Trade facilitation projects

Country	Project title	Aims/objectives	Components
Moldova (TF1)	Trade and transport facilitation	1. To reduce non-tariff costs to trade and transport 2. To increase revenue and compliance, and reduce smuggling and corruption	1. Improve operations at pilot sites by assisting in preparing automated procedures to collect management data; to implement new border processing procedures and practices, and providing technical assistance and training and computerise the Customs Department 2. Install and implement an Automated System for Customs Data) clearance system, support technical assistance and training, training equipment, at border crossings 3. Implement a transit and inland control system through mobile intervention squads 4. Improve border crossing facilities and setting up secondary inspection areas 5. Facilitate trade by strengthening the private-public partnership
Cambodia (TF2)	Trade facilitation and competitiveness	1. To reduce trade and investment transaction costs 2. To introduce transparency in investment processes, and facilitate access to export markets	1. Application of appropriate IT to border management activities to streamline operations, improve transparency and accountability 2. Finance technical support to establish the exporter assistance window; a technical assistance matching grant facility that would cover 50 percent of the cost of achieving market standards 3. Financing a program of capacity building to implement the Law on Concessions and the Amended Law on Investment
Ecuador (TF3)	International trade and integration	To promote increased socio-economic growth through international trade development and integration with the global economy	1. Modernise international trade management and increase market access through human resource training, renovate office facilities, and implement unfair trade practices safeguards and make regulations WTO-consistent 2. Facilitate entrepreneurial learning and innovation in smaller firms through private-public partnership institutions, and financing of an eco-export programme to assist firms in export market penetration
Colombia (TF4)	Export development	To accelerate the export supply response to Colombia's trade reform programme	1. Adjusting existing government trade policy and administration in the areas of duty exemptions and indirect tax rebates, anti-dumping, and customs so as to facilitate exporter competitivenessand be GATT-consistent 2. Increasing the quality of export promotion, restructuring the Government's public promotion organisation and deregulating and developing trading companies 3. Building export financing capacity by establishing new export finance services and policies in the Foreign Trade Bank, establishing private/public joint venture pre-shipment export credit guarantee and export credit insurance facilities, and providing trade finance training to local banks 4. Initiating capital markets development with regulatory and institutional improvements

TF3 and TF4 are shown in the appropriate cells, with estimated costs (in € million at 2005 equivalent prices) allocated to the other cells, 'rounding' and using the ordering principles referred to above. Again although the amounts are non-linear in absolute costs (increasing with country size), they imply significant non-linearities (decreasing with country size) on a per capita basis.

Production and employment adjustment

The extent of the displacement of domestic production (and the resulting dislocation of workers) following the liberalisation of imports from the EU in each ACP country will depend upon a range of factors. It will, of course, be fashioned by the speed of the lowering of tariffs and the extent to which sensitive sectors are excluded (temporarily or permanently) from the liberalisation. It will also depend on the scale of the domestic tradables or import-competing sector; the larger and more diversified this sector is, the greater the potential dislocation of production and employment. It is probably unwise for governments to attempt to compensate directly all factors of production (owners of capital and workers) for all shocks (irrespective of whether they are caused by policy change or by exogenous factors). Many areas will have to adjust, and the existence of compensation mechanisms is likely to encourage a general resistance to change. Instead, economies need to develop greater capacity to change and adjust, especially in a more open and globalised world. It would also be unfair to develop adjustment-assistance schemes that are directed at compensating for dislocation or assisting relocation from only one specific source, for example trade-adjustment assistance or, in the specific case of EPA trade adjustment, assistance at the expense of developing adjustment assistance in general. The experience of trade-adjustment assistance schemes in the developed countries (for example in the USA and Sweden) has not been a good one, with limited evidence of facilitating adjustment and of cost effectiveness. Instead, emphasis should be given to the development of schemes and programmes that increase the willingness to adjust (for example through the provision of a safety net for all displaced workers or improved employment services) and that encourage mobility (for example through support for retraining or upgrading of skills). It might have been appropriate to assess the extent of the need for employment support and promotion measures through a review of labour-market policies across the ACP countries. The data for this were not readily and comprehensively available and this was beyond the scope of the present work. Instead, therefore, it is presumed that there is a broad need for strengthening provision in this area, and an attempt is made to proxy the degree of potential adjustment within the tradable or import-competing sectors of the ACP countries by the share of industrial production in GDP; the greater the share the greater the potential for

Table 7. Trade facilitation cost estimates (million €)

		Degree of adjustment		
		Low	Medium	High
Country size	Micro	5	10	30
	Small	12 € 8.4 (TF_1)	25	45
	Medium	20	45 € 43 (TF_3)	65
	Large	50	65	90
	Very large	100 96.4 (TF_4)	130	140

employment and production adjustment from an EPA.

Classifying countries according to degree of industrialisation

Using the information in Table A1 on the percentage share of industrial production in GDP, we repeat the grouping of ACP countries by size and degree of industrialisation: countries with >40% share of industrial production are classified as high adjusters, 20–40% as medium adjusters, and <20% as low adjusters. The resulting groupings are set out in Table 8.

Approximating the costs of production and employment adjustment

Table 9 summarises two World Bank projects aimed at improving employment support and promotion services; their main aim is to support policy and institutional development within the public sector. (Note that the support measures for skills and productivity enhancement to be discussed in the next section will have a much greater private sector focus, and in many senses are not separate from the adjustment support measures discussed here.) The characteristics (size and degree of industrialisation) of the two countries in Table 9 (PE_1 and PE_2) are provided in Table A2, as are the project costs (in US$) and project start dates. Converting into euros and adjusting for inflation as indicated earlier, we have project PE_1 costed at €11.9 million as an example of a small country with medium adjustment needs and project PE_2 as a medium-sized country with medium adjustment needs costed at €22 million. We again, therefore, use these as our guides for the costing of ACP-focused (EPA) employment-adjustment projects, and interpolate the cost grid for the other categories. This cost grid is given in Table 10.

Skills development and productivity enhancement

The opening of the ACP countries to more intense competition from EU producers will increase the pressure to both increase competitiveness in existing areas of production and shift resources towards new areas of production. Increasing competitiveness of existing production is likely to require increases in productivity: improvements in the organisation of production processes, better utilisation of capital and labour, innovation in product design and characteristics, improvements in management, financial and marketing methods, and enhancements in human capital and skills. The shift of resources is likely to require new employment skills and the entry of new businesses into these markets. If EPA is to bring the benefits of increased growth, it will be necessary to enhance public and private sector capacity to deliver training for workers and managers, and to induce greater private sector involvement in training and the innovation process. Again, this is a multi-faceted aspect of the adjustment process, and capacity and conditions will vary considerably across the ACP countries. We take a crude indicator of human capital or education system development, namely secondary school enrolment rates, as our indicator of the degree of adjustment in the capacity of each country that will be required to respond to the EPA-induced need to improve skills and productivity. The lower the enrolment rate, the greater the need for adjustment support.

Classifying countries according to coverage of secondary education

Gross secondary enrolment rates across the ACP are set out in Table A1. Using the same criteria as in previous sections for grouping countries according to country size, we further subdivide countries according to enrolment rates in secondary education; enrolment rates over 60% are classified as low adjusters, between 30% and 60% as medium adjusters and less than 30% as high adjusters. The resulting grouping of countries is given in Table 11.

Approximating costs of enhancing skills and productivity

Table 12 summarises a number of World Bank projects in specific countries on skills and competitiveness development. These illustrate the type of policy, institutions and public/private sector projects that might be needed in ACP countries to enable

Table 8. Degree of employment adjustment required

	Low adjustment		Medium adjustment		High adjustment		Other	
Country size	Country	% Indus. prod/ GDP	Country	% Indus. prod/ GDP	Country	% Indus. prod/ GDP	Country	% Indus. prod/ GDP
Micro	St Lucia	18	Bahamas, The	36	Equatorial Guinea	89	Comoros	–
	Tonga	15	Seychelles	36			São Tomé and Principe	–
	Djibouti	14	Guyana	29			Kiribati	–
	Palau	13	St Kitts and Nevis	28			Micronesia, Fed. Sts	–
	Vanuatu	9	Fiji	27			Samoa	–
	St Vincent & the Grenadines	24					Solomon Islands	–
			Grenada	23				
			Dominica	21				
			Barbados	21				
			Cape Verde	20				
			Belize	20				
			Suriname	20				
Small	Gambia, The	14	Jamaica	31	Congo, Republic	63	Liberia	–
	Guinea-Bissau	13	Namibia	31	Swaziland	50		
			Mauritius	31	Trinidad and Tobago	49		
			Mauritania	29	Botswana	48		
			Eritrea	25	Gabon	46		
			Central African Republic		22	Lesotho	43	
			Togo	22				
Medium	Burundi	19	Guinea	37	Angola	68	Somalia	–
	Burkina Faso	19	Dominican Republic	33	Papua New Guinea	42		
		Chad	17	Sierra Leone	32				
	Niger	17	Mali	30				
	Haiti	17	Zambia	26				
	Malawi	15	Zimbabwe	24				
	Benin	14	Senegal	22				
			Rwanda	21				

Table 8 (continued)

	Low adjustment		Medium adjustment		High adjustment		Other	
Country size	**Country**	**% Indus. prod/ GDP**	**Country**	**% Indus. prod/ GDP**	**Country**	**% Indus. prod/ GDP**	**Country**	**% Indus. prod/ GDP**
Large	Congo, Dem. Republic	19	Mozambique	34				
	Kenya	19	South Africa	32				
	Sudan	18	Ivory Coast	30				
	Tanzania	16	Ethiopia	30				
	Madagascar	13	Ghana	24				
	Uganda	22						
	Cameroon	20						
Very large			Nigeria	29				

Key: Low adjustment: Industrial production/GDP <20%; Medium adjustment: 20–40%; High adjustment: >40%; Other: data not available (–)

Table 9. Production and employment adjustment

Country	Project title	Aims/objectives	Components
Bosnia-Herzegovina (PE_1)	Employment Support II	1. To provide employment services for an estimated 10,000 people who are either recently retrenched and above 45 years of age and/or those who have been actively seeking jobs for two or more years 2. To bring behavioural change and business change in the employment services	1. Improving the employment services on matching employers with job services vacancies to appropriately skilled active job seekers; and on providing, through private sector service providers, income earning opportunities to active job seekers and to the hardcore unemployed based on the experience of the Pilot Emergency Labour Redeployment Project 2. Upgrading and strengthening the Public Employment Services (PES) capacity to provide and outsource job brokerage and employment services programmes through the development of effective procedures, clear guidelines and regulations, staff training and the piloting of analytical labour market information systems, including introducing labour market research units in the Ministries of Labour 3. Supporting project implementation and coordination between all partners in the Second Employment Support Project (SESP)
Serbia and Montenegro (PE_2)	Employment promotion	To improve the efficiency of labour programmes by piloting and testing new approaches and putting in place innovative labour redeployment programmes, offering employment services in selected areas	1. Design of labour redeployment activities to reintegrate displaced workers into the labour market and mitigate the social costs of enterprise restructuring, through the development of new policies, institutional arrangements and labour 2. Piloting reforms in Public Employment Services, which will design, pilot, and redeployment programmes, evaluate cost-effective public employment services to assist the unemployed to re-enter the labour market through improved employment services, search assistance programmes and small business advisory services 3. Labour market information and evaluation – social impact of restructuring and effects of Active Labour Market Programmes, developing a comprehensive system of labour market information to assess the effects of labour market programmes through the provision of training, services and goods 4. Assistance to the Ministry of Labour and Employment (MOLE) in project management through the provision of training, and goods and services, including the audit of accounts and financial statements

them to adjust to and benefit from an EPA. The dates of these projects and the project costs are recorded in Table A2, as are the characteristics (size and secondary school enrolment rates) of the countries involved. Again, these data are used to anchor the estimated costing for all the cells in the cost grid, taking into account the currency of valuation and inflation. The resulting cost estimates are summarised in Table 13. There is some inconsistency in the ranking of costings. Projects SP1 and SP3 have been taken as base reference costings for the 'micro–small' combination and 'medium–medium' combination. This may, but only may, upwardly bias the estimates for 'micro' states (<1 million population). But it should be noted that the interpolated values for the very large category are considerably smaller than the actual costings for SP5.

Table 10. Production and employment adjustment cost estimates (million €)

		Degree of adjustment		
		Low	**Medium**	**High**
Country size	Micro	4	6	15
	Small	10 € 11.9 (PE_1)	12	25
	Medium	20 € 22 (PE_2)	25	40
	Large	40	50	65
	Very large	80	100	125

Negotiation and legislative costs

The methodology for identifying adjustment costs (as set out above) implicitly incorporates the costs of the changes in legislation needed in each area.[4] We do not therefore seek here to identify the specific legislative costs separately; doing so would in any case be extremely difficult. As argued above, the process of negotiating an EPA also imposes training, capacity building and direct negotiating time and costs. The 9th EDF provided funds for supporting capacity building and EPA negotiations. To the extent that some of the support for ACP trade capacity contributes to easing the adjustment costs of an EPA, the contribution could be deducted from earlier cost estimates. But if the final negotiation costs exceed the EDF funding that has been provided so far, then there will be a need for additional funding.

Current trade-related assistance to the ACP

Trade-related assistance (TRA) for the ACP has so far been provided mainly under the 9th EDF (2003–2007). This amounted to €650 million. TRA sought to support the ACP countries in their efforts to deal with trade policy issues (relating to the WTO, EPAs, regional groupings, etc.), to mainstream trade into their development policies and to create the conditions under which they would benefit from trade opportunities. TRA to the ACP has been provided at three different and complementary levels:

1. At an all-ACP level several facilities have covered mostly short-term needs or needs in specific trade-related areas (for example sanitary and phytosanitary requirements). These facilities are accessible to all ACP countries upon submission of requests.

(a) Facility to support EPA negotiations (€24 million): funded EPA-related studies, technical support, meetings and training throughout the ACP.

(b) Facility to support ACP countries in WTO negotiations (€12 million): has supported ACP with WTO-related technical assistance, training and meetings.

(c) Trade.Com (€50 million): a major general capacity-strengthening measure funding a network of 55 regional and national trade advisors throughout the ACP. Further components are helping ACP countries to identify their needs, strengthening local research capacity and helping to implement pilot projects, including projects in the area of sanitary and phytosanitary requirements.

(d) Pesticides initiative (€29 million): has assisted ACP companies and professional organisations since 2003 in the specific area of compliance with EU rules on pesticides residues. The programme has also helped ensure that the specific needs of ACP countries are taken into account in EU phytosanitary regulations.

Table 11. Degree of skills/productivity enhancement required

Country size	Low adjustment		Medium adjustment		High adjustment		Other	
	Country	% secondary school enrolment	Country	% secondary school enrolment	Country	% secondary school enrolment	Country	% secondary school enrolment
Micro	Cape Verde	68.60	Equatorial Guinea	31.20	Djibouti	14.70	Bahamas, The	–
	Belize	71.60	Suriname	50.70	Comoros	20.60	Dominica	–
	Samoa	76.00	Vanuatu	28.50	Fiji	–		
	Guyana	81.00					Grenada	–
	St Lucia	94.30					Kiribati	–
	Barbados	100.00					Micronesia, Federated States	–
							Palau	–
							São Tomé and Principe	–
							Seychelles	–
							Solomon Islands	–
							St Kitts and Nevis	–
							St Vincent & the Grenadines	–
							Tonga	–
Small	Namibia	59.80	Togo	36.20	Mauritania	18.40	Central African Republic	–
	Swaziland	60.00	Gabon	54.40	Guinea-Bissau	20.40	Congo, Republic	–
	Trinidad and Tobago	78.40			Liberia	22.50		
	Botswana	81.80			Gambia, The	27.00		
	Jamaica	83.60			Lesotho	28.00		
	Mauritius	100.00			Eritrea	28.20		
Medium	Dominican Republic	66.40	Malawi	45.20	Niger	6.50	Haiti	–
	Zimbabwe	45.30	Burundi	7.10	Somalia	–		
					Burkina Faso	10.00		
					Chad	11.50		
					Rwanda	12.10		
					Guinea	13.80		
					Mali	15.00		
					Angola	15.50		
					Senegal	19.50		
					Papua New Guinea	21.20		
					Benin	21.80		

Table 11 (continued)

	Low adjustment		Medium adjustment		High adjustment		Other	
Country size	**Country**	**% secondary school enrolment**	**Country**	**% secondary school enrolment**	**Country**	**% secondary school enrolment**	**Country**	**% secondary school enrolment**
					Sierra Leone	23.90		
					Zambia	25.50		
Large	South Africa	90.20	Ghana	37.30	Ethiopia	5.20	Uganda	–
					Tanzania	5.30		
					Mozambique	13.90		
					Madagascar	14.30		
					Congo, Dem. Republic	18.40		
					Cameroon	19.60		
					Ivory Coast	21.70		
					Sudan	28.80		
					Kenya	29.90		
Very Large							Nigeria	–

Key: Low adjustment: Enrolment ratio >60%; Medium adjustment: 30%–60%; High adjustment: <30%; Other: data not available (–)

Table 12. Skills/productivity enhancement projects

Country	Project title	Aims/objectives	Components
Cape Verde (SP_1)	Growth and competitiveness	To increase private sector's competitiveness and participation in economic growth	1. Financial sector reform, including pension reform 2. Investment climate reform, which includes, but is not limited to: tax reform, alleviation of administrative barriers, improved supply chains, and legal reform 3. Post privatisation and divestiture reforms 4. Private sector and institutional capacity building.
Croatia (SP_2)	Technical assistance project for institutional and regulatory reform for private sector development	Encouragement for private sector development, as specified by the Country Assistance Strategy (CAS), through business improvement, conducive to private sector growth	1. Creation of regulatory and institutional frameworks for public utilities, to include advisory services for the design of a new organisational structure, and development of detailed regulations, to assist the Office for the Restructuring and Economics of State-owned Enterprises (ORESE) 2. Strengthening of the Agency for the Protection of Market Competition (APMC), will be accomplished through the provision of advisory services, for the development of secondary legislation for the 1995 Competition Law. Assistance will support the development plan for the APMCin compliance with the Competition Law 3. Institutional strengthening assistance for financial and statistical agencies.
Honduras (SP_3)	Enhancing competitiveness: Trade facilitation and productivity improvement	To improve the investment climate and local firms' capacity to export	1. Improving critical elements of the investment climate 2. Promoting private sector innovation 3. Improving the skills of the labour force 4. Promoting local development in selected pilot areas 5. Developing a communication campaign on themes related to competitiveness 6. Financing the Project Implementation Unit (PIU)
Egypt (SP_4)	Skills development project	To stimulate demand for skills training development among private small and medium-sized private sector enterprises (SMEs)	1. Implement awareness programmes, provide technical advisory services to promote outreach programmes; monitoring and evaluation surveys and assessments; enable beneficiary firms to undertake training needs assessments, plans, develop training proposals 2. Finance a demand-driven training programme on a cost-shared basis with beneficiary small and medium size enterprises, and strengthen the institutional capacity of project intermediaries; support short term production-related in-service training and training for prospective employees 3. Finance goods and technical advisory services to strengthen the institutional capacity of the Project Management Unit
Mexico (SP_5)	Innovation for competitiveness: 1st Phase	To improve the competitiveness of the Mexican economy	1. Strengthening the innovative capacity of the private sector 2. Accelerating advanced human capital formation 3. Increasing the international integration of the innovation system

(e) Fisheries programme (€42 million): has provided specific support since 2003 to improve the sanitary conditions of fish exports.

(Total €150 million)

2. A larger amount of TRA support has been provided under the RIPs in line with the ACP–EU priority attached to regional integration. Funding under the regional programmes has served

Table 13. Skills enhancement and productivity adjustment cost estimates (million €)

		Degree of adjustment		
		Low	Medium	High
Country size	Micro	10 € 11.7 (SP_1)	15	30
	Small	15	20 € 7.7 (SP_2)	35
	Medium	20	30 € 28.7 (SP_3)	45
	Large	40 € 10.9 (SP_4)	50	65
	Very large	80 € 308.6 (SP_5)	100	130

mainly to support regional trade and economic integration, participation of the regions in the EPA process, and capacity building. Allocations for regional integration and trade to the individual regions are as follows:

Caribbean: €50 million

Eastern Africa: €111 million

Southern Africa: €40 million

West Africa: €120 million

Central Africa: €15–20 million

Pacific: €9 million

(Total €350 million)

3. At a national level, several ACP countries have additional funding earmarked for projects which complement funding under the all-ACP and regional programmes.

   (Estimated total amount: €150 million)

Contribution to adjustment costs

Of the €626 million (i.e. the total TRA funding listed above less the facility to support EPA negotiations), some should be viewed as supporting specific aspects of EPA adjustment, in particular trade facilitation and export diversification (i.e. items (c), (d) and (e) above). However, some of the other funding was clearly directed at other issues (e.g. item (b) for WTO negotiations). On other items there is some ambiguity. The regional programmes are to support regional trade and integration, as well as regional participation in the EPA process. To the extent that this latter feature of the regional programmes has more to do with capacity building for the EPA negotiations than EPA adjustment assistance, it should be excluded from the present calculation of adjustment costs. One might conclude therefore that only €121 million of the 9th EDF should be viewed as contributing to the trade facilitation costs of EPA adjustment.

Overall implementation and adjustment costs

The final step in the methodology of this study is to aggregate the costs of adjustment across individual components. A summary of the classifications for each ACP country according to size and whether they are classified as relatively low, medium or high potential adjusters (or 'other' where data have prevented classification) are set out in Table 14. The classification is given for each of the four broad

Table 14. ACP countries by type and extent of adjustments required

No.	Country		Fiscal Adjustment				Trade Facilitation/ Export Diversification				Production/ Employment Adjustment				Skills/ Productivity/ Enhancement			
			Low	Medium	High	Other	Low	Medium	High	Other	Low	Medium	High	Other	Low	Medium	High	Other
1	Benin	MEDIUM			x				x		X						x	
2	Burkina Faso	MEDIUM		x				x			X						x	
3	Burundi	MEDIUM		x					x		X						x	
4	Cameroon	LARGE	x						x			x					x	
5	Central African Rep.	SMALL			x		x					x						x
6	Chad	MEDIUM		x				x			X						x	
7	Comoros	MICRO			x					x				x			x	
8	Congo, Dem. Rep.	LARGE		x			x				X						x	
9	Congo, Rep.	SMALL	x						x				x					x
10	Côte d'Ivoire	LARGE		x				x				x					x	
11	Eritrea	SMALL	x							x		x					x	
12	Ethiopia	LARGE		x				x				x					x	
13	Gambia, The	SMALL			x			x			x						x	
14	Ghana	LARGE		x				x				x				x		
15	Guinea	MEDIUM	x				x					x					x	
16	Guinea-Bissau	SMALL		x					x		x						x	
17	Haiti	MEDIUM				x	x				x							x
18	Kenya	LARGE	x					x			x						x	
19	Lesotho	SMALL		x						x			x				x	
20	Liberia	SMALL				x			x					x			x	
21	Madagascar	LARGE			x			x			x						x	
22	Malawi	MEDIUM	x					x			x					x		
23	Mali	MEDIUM			x				x			x					x	
24	Mauritania	SMALL	x						x			x					x	

Table 14 (continued)

			Fiscal Adjustment				Trade Facilitation/ Export Diversification				Production/Employment Adjustment				Skills/ Productivity/ Enhancement			
No.	**Country**		**Low**	**Medium**	**High**	**Other**	**Low**	**Medium**	**High**	**Other**	**Low**	**Medium**	**High**	**Other**	**Low**	**Medium**	**High**	**Other**
25	Mozambique	LARGE	x						x			x					x	
26	Niger	MEDIUM			x				x		x						x	
27	Nigeria	V. LARGE			x				x			x						x
28	Papua New Guinea	MEDIUM		x					x				x				x	
29	Rwanda	MEDIUM		x					x			x					x	
30	São Tomé and Principe	MICRO	x							x				x				x
31	Senegal	MEDIUM		x			x					x					x	
32	Sierra Leone	MEDIUM		x			x					x					x	
33	Somalia	MEDIUM				x				x				x				x
34	Sudan	LARGE			x				x		x						x	
35	Tanzania	LARGE		x				x			x						x	
36	Togo	SMALL			x		x					x				x		
37	Uganda	LARGE			x				x			x						x
38	Zambia	MEDIUM		x				x				x					x	
39	Zimbabwe	MEDIUM	x				x					x				x		
40	Angola	MEDIUM	x							x			x				x	
41	Cape Verde	MICRO			x				x			x			x			
42	Djibouti	MICRO	x							x	x						x	
43	Dominican Republic	MEDIUM		x			x					x			x			
44	Fiji	MICRO				x	x					x						x
45	Guyana	MICRO	x						x			x			x			
46	Jamaica	SMALL		x			x					x			x			
47	Kiribati	MICRO				x				x				x				X
48	Micronesia, Fed. Sts.	MICRO				x				x				x				X

Table 14 (continued)

No.	Country		Fiscal Adjustment				Trade Facilitation/ Export Diversification				Production/ Employment Adjustment				Skills/ Productivity/ Enhancement			
			Low	Medium	High	Other	Low	Medium	High	Other	Low	Medium	High	Other	Low	Medium	High	Other
49	Namibia	SMALL		x			x					x			x			
50	Samoa	MICRO				x	x							x	x			
51	Solomon Islands	MICRO				x			x					x				X
52	Suriname	MICRO		x				x				x				x		
53	Swaziland	SMALL			x		x						x		x			
54	Tonga	MICRO				x			x		x							X
55	Vanuatu	MICRO				x				x	x						x	
56	Barbados	MICRO				x	x					x			x			
57	Belize	MICRO				x		x				x			x			
58	Botswana	SMALL	x				x						x		x			
59	Dominica	MICRO				x	x					x						X
60	Equatorial Guinea	MICRO	x							x			x			x		
61	Gabon	SMALL		x					x				x			x		
62	Grenada	MICRO				x			x			x						X
63	Mauritius	SMALL		x			x					x			x			
64	Palau	MICRO				x				x	x							X
65	Seychelles	MICRO			x				x			x						X
66	South Africa	LARGE	x				x					x			x			
67	St. Kitts and Nevis	MICRO				x	x					x						x
68	St. Lucia	MICRO				x	x				x				x			
69	St. Vincent and the Grenadines	MICRO				x			x			x						x
70	Trinidad and Tobago	SMALL				x	x						x		x			
71	Bahamas, The	MICRO				x	x					x						x

categories of adjustment costs (fiscal adjustment, trade facilitation/export diversification, production/employment and skills/productivity enhancement). (Note that South Africa has been classified, but it is not included in the cost estimates because it has already negotiated a free trade arrangement with the EU.)

Given the crude nature of the proxies for classifying the degree of adjustment and for the interpolation of costings for the differentiation of countries by degree of adjustment, we do not place much weight on the aggregation of costs for each individual ACP country. These are reported in Table A3 for completeness. It should be recalled also that countries that were unclassified by degree of adjustment because of lack of data were allocated to the medium adjustment category. The recorded country total may therefore understate or overstate the adjustment cost for that specific country. When we aggregate across countries, however, it is probable that this bias will be reduced on the principle of offsetting errors. The total costs estimates for each category of costs and the overall estimates should therefore be more reliable. These are summarised in Table 15.

Table 15. Summary of estimated adjustment costs for ACP countries (million € at 2005 equivalent prices)

	Gross	Net[a]
Fiscal adjustment	3,025	3,025
Trade facilitation/ export diversification	2,401	2,280
Production/employment	1,454	1,454
Skills/productivity enhancement export diversification	2,265	2,265
Overall cost	9,145	9,024

[a]Less €121 million provided by EDF9 – see earlier section on 'Negotiation and legislative costs'

The overall cost of EPA adjustment is estimated at about €9 billion at current prices. This is a substantial figure, when compared with the typical estimates of the net welfare gains of trade liberalisation episodes. These estimates abstract, however, from adjustment cost considerations, and there is relatively little empirical work that sheds light on the appropriateness of this estimate. Table 16 breaks down the ACP-wide adjustment costs by negotiating region. It should be noted that this is a breakdown of the gross cost estimates in Table 15, since we do not know the precise breakdown of the €121 million spending that was netted off for spending under the 9th EDF. For completeness Table 15 also disaggregates the costs by type of adjustment costs for each region.

To assess the credibility of this estimate, an alternative approach to assessing the adjustment assistance issue is described in Annex 2. There we ask how much subsidy to domestic producers would be needed to avoid the adjustments that will be experienced as a result of EPA tariff liberalisation. The subsidy equivalents reported are based on earlier detailed work done for Mauritius. If the same subsidy equivalent in proportional terms (i.e. as a proportion of GDP) as Mauritius would require in order to avoid EPA adjustment costs was applied across all the ACP countries, the overall cost would be about €6 billion. It is not unreasonable to imagine that rational governments would pursue policy interventions that cost less than the costs of adjusting to an alternative policy regime. The ordering of the magnitudes of the cost of adjustment and of the cost of avoiding adjustment is therefore relevant. It should of course be acknowledged that both the subsidy equivalent and adjustment cost estimates are based on a presumed full adjustment. The exclusion of sectors from EPA liberalisation would reduce the need for adjustment and accordingly reduce the costs of adjustment that will fall on firms, workers, etc. in the ACP regions. The costs of the adjustment support programmes identified in this study, however, are unlikely to fall in proportion to any reduction in the trade coverage of the EPA liberalisation, given the fixed cost elements of such programmes.

Table 16. Estimated adjustment costs by region

Region	Fiscal adjustment	Export diversification	Employment adjustment	Skills/ productivity enhancement	Total adjustment costs
Pacific[a]	210	175	82	175	642
CEMAC[b]	270	257	153	200	880
ECOWAS[c]	955	712	422	700	2789
ESA	825	752	415	695	2687
SADC	340	261	217	255	1073
Cariforum[d]	375	199	140	210	924
Gross total[e]	2,975	2,356	1,429	2,235	8,995

[a]Excludes Cook Islands, Nauru, Niue and Tuvalu, for which data were not available for earlier analysis
[b]Plus São Tomé & Principe
[c]Plus Cameroon and Chad
[d]Plus Dominican Republic, but excluding Cuba and Antigua and Barbuda
[e]Somalia is excluded from the above groupings, but was included in earlier analysis

Annex 1. Additional tables

Table A1. ACP countries showing income group, population size, GDP, share of manufactured exports in total exports and trade tax dependence

No.	Country	Population (2004) ('000)	Size	GDP (2004) ($ million)	Trade tax as % of total revenue (2001)	Manufactured exports as % of total exports (2002)	Industrial Output as % of GDP	Gross Secondary School Enrolment (1999/2000) (%)	Net Secondary School Enrolment (1999/2000) (%)
Low income									
1	Benin	6,890	Medium	4,075	43.3	6.0	14.37	21.80	17.40
2	Burkina Faso	12,387	Medium	4,824	26.0	19.0	18.91	10.00	8.30
3	Burundi	7,343	Medium	657	28.7	1.0	19.00	7.10	-
4	Cameroon	16,400	Large	14,733	16.8	7.0	20.00	19.60	-
5	Central African Republic	3,947	Small	1,331	44.8	40.0	22.00	-	-
6	Chad	8,823	Medium	4,285	29.8	17.5	17.00	11.50	7.70
7	Comoros	614	Micro	367	41.8	-	-	20.60	-
8	Congo, Dem. Republic	54,775	Large	6,571	32.0	75.0	19.00	18.40	11.70
9	Congo, Republic	3,855	Small	4,384	12.9	3.1	63.00	-	-
10	Ivory Coast	17,142	Large	15,286	34.3	21.0	30.00	21.70	-
11	Eritrea	4,477	Small	925	14.1	-	25.00	28.20	22.50
12	Ethiopia	69,961	Large	8,077	26.4	14.0	30.00	5.20	-
13	Gambia, The	1,449	Small	415	60.2	17.0	14.00	27.00	23.40
14	Ghana	21,053	Large	8,620	28.4	16.0	24.00	37.30	26.10
15	Guinea	8,073	Medium	3,508	14.5	28.0	37.00	13.80	11.90
16	Guinea-Bissau	1,533	Small	280	34.6	2.7	13.00	20.40	-
17	Haiti	8,592	Medium	3,535	-	85.0	16.77	-	-
18	Kenya	32,447	Large	15,600	12.2	24.0	19.00	29.90	-
19	Lesotho	1,809	Small	1,375	39.3	-	43.00	28.00	19.60
20	Liberia	3,449	Small	448	-	1.3	-	22.50	20.30
21	Madagascar	17,332	Large	4,364	54.4	14.0	13.00	14.30	11.50
22	Malawi	11,182	Medium	1,813	13.0	10.0	15.00	45.20	-
23	Mali	11,937	Medium	4,863	50.0	2.0	30.00	15.00	-

Table A1 (continued)

No.	Country	Population (2004) ('000)	Size	GDP (2004) ($ million)	Trade tax as % of total revenue (2001)	Manufactured exports as % of total exports (2002)	Industrial Output as % of GDP	Gross Secondary School Enrolment (1999/2000) (%)	Net Secondary School Enrolment (1999/2000) (%)
Low income (continued)									
24	Mauritania	2,906	Small	1,357	10.9	5.5	29.00	18.40	–
25	Mozambique	19,129	Large	5,548	17.9	8.0	34.00	13.90	7.30
26	Niger	12,095	Medium	3,081	52.4	3.0	17.00	6.50	5.80
27	Nigeria	139,823	Verylarge	72,106	48.5	0.0	29.00	–	–
28	Papua New Guinea	5,625	Medium	3,909	25.4	2.0	42.00	21.20	21.30
29	Rwanda	8,412	Medium	1,845	23.9	3.0	21.00	12.10	–
30	São Tomé and Principe	161	Micro	62	18.6	–	–	–	–
31	Senegal	10,455	Medium	7,665	26.7	51.0	22.00	19.50	–
32	Sierra Leone	5,436	Medium	1,075	39.8	32.3	32.00	23.90	23.90
33	Somalia	9,938	Medium	–	–	–	–	–	–
34	Sudan	34,356	Large	19,559	44.2	3.0	18.00	28.80	–
35	Tanzania	36,571	Large	10,851	29.2	17.0	16.00	5.30	4.80
36	Togo	4,966	Small	2,061	45.0	43.0	22.00	36.20	23.10
37	Uganda	25,920	Large	6,833	50.0	8.0	22.00	–	–
38	Zambia	10,547	Medium	5,389	25.2	14.0	26.00	25.50	20.70
39	Zimbabwe	13,151	Medium	17,750	16.7	38.0	24.00	45.30	42.30
Lower middle-income									
40	Angola	13,963	Medium	20,108	8.1	–	68.00	15.50	–
41	Cape Verde	481	Micro	948	40.6	2.9	19.72	68.60	–
42	Djibouti	716	Micro	663	17.3	–	14.20	14.70	–
43	Dominican Republic	8,861	Medium	18,673	31.6	34.0	33.00	66.40	40.00
44	Fiji	848	Micro	2,627	–	34.5	27.01	–	–
45	Guyana	772	Micro	786	12.0	9.2	28.58	81.00	–
46	Jamaica	2,665	Small	8,030	28.6	64.0	31.00	83.60	74.70
47	Kiribati	98	Micro	62	–	–	–	–	–

Table A1 (continued)

No.	Country	Population (2004) ('000)	Size	GDP (2004) ($ million)	Trade tax as % of total revenue (2001)	Manufactured exports as % of total exports (2002)	Industrial Output as % of GDP	Gross Secondary School Enrolment (1999/2000) (%)	Net Secondary School Enrolment (1999/2000) (%)
Low middle-income (continued)									
48	Micronesia, Fed. Sts.	127	Micro	226	–	–	–	–	–
49	Namibia	2,033	Small	5,456	29.9	52.0	31.00	59.80	34.20
50	Samoa	179	Micro	363	–	81.4	–	76.00	68.40
51	Solomon Islands	471	Micro	242	–	3.8	–	–	–
52	Suriname	443	Micro	1,109	36.7	14.0	19.58	50.70	–
53	Swaziland	1,120	Small	2,413	52.0	76.0	50.00	60.00	37.30
54	Tonga	102	Micro	213	–	4.4	15.12	–	–
55	Vanuatu	215	Micro	316	–	–	9.39	28.50	22.60
Upper middle-income									
56	Barbados	272	Micro	2,627	–	59.0	20.76	100.00	70.70
57	Belize	283	Micro	1,094	–	18.2	19.71	71.60	36.00
58	Botswana	1,727	Small	8,659	9.9	91.0	48.00	81.80	58.80
59	Dominica	71	Micro	269	–	30.6	21.04	–	–
60	Equatorial Guinea	506	Micro	3,235	14.7	–	88.92	31.20	26.10
61	Gabon	1,374	Small	7,228	21.8	2.0	46.00	54.40	–
62	Grenada	106	Micro	436	–	3.7	22.63	–	–
63	Mauritius	1,234	Small	6,056	34.6	73.0	31.00	100.00	72.50
64	Palau	20	Micro	127	–	–	12.69	–	–
65	Seychelles	85	Micro	704	47.0	1.0	36.06	–	–
66	South Africa	45,584	Large	212,777	3.7	63.0	32.00	90.20	–
67	St Kitts and Nevis	47	Micro	397	–	73.3	28.32	–	–
68	St Lucia	164	Micro	729	–	25.6	18.03	94.30	64.00
69	St Vincent and the Grenadines	108	Micro	403	–	9.5	24.41	–	–
70	Trinidad and Tobago	1,323	Small	12,544	–	46.0	48.81	78.40	63.80
High income: Non-OECD									
71	Bahamas, The	320	Micro	5,260	–	31.2	36.10	–	–

– = not available

Table A2. Selected indicators for project countries

(A) Fiscal adjustment projects

Country	Project dates	Project costs ($ million)	Population (2004) ('000)	Size	GDP (2004) ($ million)	Trade tax as % of total revenue
(F_1) Mauritania	1998–2002	30.0	2,906	Small	1,357.0	10.9
(F_2) Tanzania	1996–1999	70.2	36,571	Large	10,851.0	29.2
(F_3) Pakistan	2004–2008	149.0	152,061	Very large	96,115.0	12.0

(B) Trade facilitation projects

Country	Project dates	Project costs ($ million)	Population (2004) ('000)	Size	GDP (2004) ($ million)	Trade tax as % of total revenue
TF_1 Moldova	2003–2007	9.7	4,218	Small	30,282.0	31.0
TF_2 Cambodia	2005–2009	12.0	13,630	Medium	4,597.0	n/a
TF_3 Ecuador	1997–2003	42.6	13,213	Medium	30,282.0	10.0
TF_4 Colombia	1993–1999	86.6	45,300	Large	97,384.0	38.0

(C) Production and employment adjustment projects

Country	Project dates	Project costs ($ million)	Population (2004) ('000)	Size	GDP (2004) ($ million)	Trade tax as % of total revenue
(PE_1) Bosnia-Herzegovina	2004–2008	14.0	3,836	Small	8,121.0	37.0
(PE_2) Serbia-Montenegro	2003–2006	25.5	8,152	Medium	23,996.0	32.0

(D) Skills/productivity enhancement projects

Country	Project dates	Project costs ($ million)	Population (2004) ('000)	Size	GDP (2004) ($ million)	Trade tax as % of total revenue
SP_1 Cape Verde	2003–2007	13.5	481	Micro	948.0	68.6
SP_2 Croatia	1999–2005	8.0	4,508	Small	34,200.0	n/a
SP_3 Honduras	2004–2007	33.8	7,140	Medium	7,370.0	n/a
SP_4 Egypt	2003–2006	12.5	68,738	Large	75,148.0	83.5%
SP_5 Mexico	2006–2015	382.0	103,795	Very large	676,497.0	73.4%

Size (population): Micro: <1 million; Small: 1–5 million; Medium: 5–15 million; Large: 15–100 million; Very large: >100 million
– = not available

Table A3. Estimated adjustment costs (million €)[a]

No.	Country	Fiscal adjustment	Export diversification	Employment adjustment	Skills/productivity enhancement costs	Total adjustment
1	Benin	70.0	30.0	20.0	45.0	165.0
2	Burkina Faso	50.0	20.0	20.0	45.0	135.0
3	Burundi	50.0	65.0	20.0	45.0	180.0
4	Cameroon	60.0	90.0	50.0	65.0	265.0
5	Central African Republic	60.0	12.0	12.0	20.0	104.0
6	Chad	50.0	45.0	20.0	45.0	160.0
7	Comoros	30.0	10.0	6.0	30.0	76.0
8	Congo, Democratic Republic	50.0	50.0	40.0	65.0	205.0
9	Congo, Republic	30.0	45.0	25.0	20.0	120.0
10	Ivory Coast	70.0	65.0	50.0	65.0	250.0
11	Eritrea	30.0	25.0	12.0	35.0	102.0
12	Ethiopia	70.0	65.0	50.0	65.0	250.0
13	Gambia, The	60.0	25.0	10.0	35.0	130.0
14	Ghana	70.0	65.0	50.0	50.0	235.0
15	Guinea	40.0	20.0	25.0	45.0	130.0
16	Guinea-Bissau	40.0	45.0	10.0	35.0	130.0
17	Haiti	50.0	20.0	20.0	30.0	120.0
18	Kenya	60.0	65.0	40.0	65.0	230.0
19	Lesotho	40.0	25.0	25.0	35.0	125.0
20	Liberia	40.0	45.0	12.0	35.0	132.0
21	Madagascar	90.0	65.0	40.0	65.0	260.0
22	Malawi	40.0	45.0	20.0	30.0	135.0
23	Mali	70.0	65.0	25.0	45.0	205.0
24	Mauritania	30.0	45.0	12.0	35.0	122.0
25	Mozambique	60.0	90.0	50.0	65.0	265.0
26	Niger	70.0	65.0	20.0	45.0	200.0
27	Nigeria	155.0	140.0	100.0	100.0	495.0
28	Papua New Guinea	50.0	65.0	40.0	45.0	200.0
29	Rwanda	50.0	65.0	25.0	45.0	185.0
30	São Tomé & Principe	15.0	10.0	6.0	15.0	46.0
31	Senegal	50.0	20.0	25.0	45.0	140.0
32	Sierra Leone	50.0	20.0	25.0	45.0	140.0
33	Somalia	50.0	45.0	25.0	30.0	150.0
34	Sudan	90.0	90.0	40.0	65.0	285.0
35	Tanzania, United Rep of	70.0	65.0	40.0	65.0	240.0
36	Togo	60.0	12.0	12.0	20.0	104.0
37	Uganda	90.0	90.0	50.0	50.0	280.0
38	Zambia	50.0	45.0	25.0	45.0	165.0
39	Zimbabwe	40.0	20.0	25.0	30.0	115.0
40	Angola	40.0	45.0	40.0	45.0	170.0
41	Cape Verde	30.0	30.0	6.0	10.0	76.0
42	Djibouti	15.0	10.0	4.0	30.0	59.0
43	Dominican Republic	50.0	20.0	25.0	20.0	115.0
44	Fiji	20.0	5.0	6.0	15.0	46.0
45	Guyana	15.0	30.0	6.0	10.0	61.0
46	Jamaica	40.0	12.0	12.0	15.0	79.0
47	Kiribati	20.0	10.0	6.0	15.0	51.0
48	Micronesia, Federated States	20.0	10.0	6.0	15.0	51.0
49	Namibia	40.0	12.0	12.0	15.0	79.0
50	Samoa	20.0	5.0	6.0	10.0	41.0

Table A3 (continued)

No.	Country	Fiscal adjustment	Export diversification	Employment adjustment	Skills/productivity enhancement costs	Total adjustment
51	Solomon Islands	20.0	30.0	6.0	15.0	71.0
52	Suriname	20.0	10.0	6.0	15.0	51.0
53	Swaziland	60.0	12.0	25.0	15.0	112.0
54	Tonga	20.0	30.0	4.0	15.0	69.0
55	Vanuatu	20.0	10.0	4.0	30.0	64.0
56	Barbados	20.0	5.0	6.0	10.0	41.0
57	Belize	20.0	10.0	6.0	10.0	46.0
58	Botswana	30.0	12.0	25.0	15.0	82.0
59	Dominica	20.0	5.0	6.0	15.0	46.0
60	Equatorial Guinea	15.0	10.0	15.0	15.0	55.0
61	Gabon	40.0	45.0	25.0	20.0	130.0
62	Grenada	20.0	30.0	6.0	15.0	71.0
63	Mauritius	40.0	12.0	12.0	15.0	79.0
64	Palau	20.0	10.0	4.0	15.0	49.0
65	Seychelles	30.0	30.0	6.0	15.0	81.0
66	South Africa[b]	0.0				
67	St Kitts and Nevis	20.0	5.0	6.0	15.0	46.0
68	St Lucia	20.0	5.0	4.0	10.0	39.0
69	St Vincent and the Grenadines	20.0	30.0	6.0	15.0	71.0
70	Trinidad and Tobago	40.0	12.0	25.0	15.0	92.0
71	Bahamas, The	20.0	5.0	6.0	15.0	46.0
	Total	**3,025.0**	**2,401.0**	**1,454.0**	**2,265.0**	**9,145.0**

[a]In 2005-equivalent prices

[b]Excluded from calculation, given separate FTA arrangement with EU

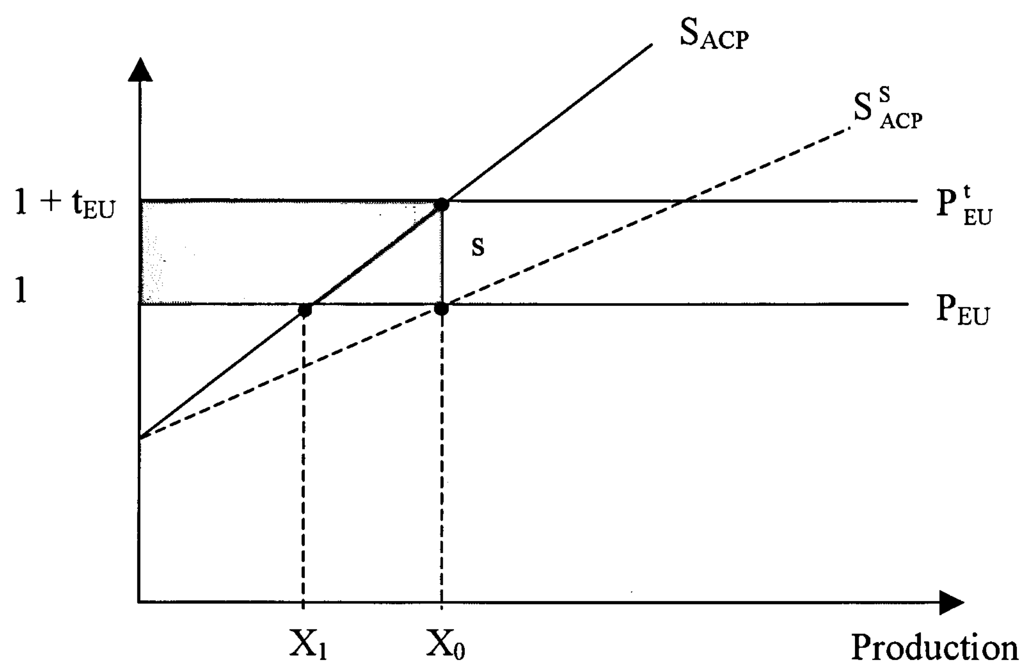
Annex 2. Alternative estimate of the cost of adjustment to EPA (subsidy-equivalent methodology)

Import tariffs on competing imports serve as implicit subsidies to local producers. The creation of an EPA and the lowering of import duties on competing imports from the EU would eliminate the implicit subsidy to local producers. Each ACP country could therefore seek financial support or compensation from the EU for the introduction of reciprocity in ACP–EU trade relations in the form of explicit subsidy equivalents for the eliminated tariffs on imports from the EU for the transitional or adjustment period; these funds would be contingent on the adoption of restructuring programmes by sectors. The conceptualisation and quantification of the 'subsidy equivalent' of the current EU tariff on competing imports is straightforward and directly relates to standard empirical analyses of the effects of an EPA. Consider Figure A1.

Under pre-EPA conditions and the supply curve (S_{ACP}), firms can supply X_0 to the local or regional market by pricing up to the tariff-inclusive price against competing EU imports ($1 + t_{EU}$). The introduction of reciprocity and removal of tariffs on EU imports lowers domestic prices by t_{EU} and causes domestic producers to reduce production to X_1. (Estimates of the production effects of the EPA measure the fall in production, $X_0 - X_1$ fall out of standard partial equilibrium modelling.) The subsidy equivalent of the tariff (t_{EU}) is the subsidy (s) that would shift the domestic supply ($S_{s\,ACP}$) such that at the tariff-free price from the EU (P_{EU}) production can be maintained at the pre-EPA level (X_0). The total subsidy equivalent payment per time period is therefore X_{0s} (the shaded area in Figure A1).

CREDIT (2004) reports estimates of the (annual) total subsidy equivalent of the average tariff on imports from the EU for all sectors of the Mauritian economy. The estimated overall cost of an equivalent subsidy is a little over 1.8 billion Rupees at 2002 prices. This is equivalent to about 1.2% of Mauritian GDP in 2002. If one assumes that the subsidy equivalent of the tariff on EU imports is on average the same proportion of GDP across all

Figure A1. The subsidy equivalent of current tariff protection against EU imports



the ACP countries, one can calculate an aggregate ACP measure of the costs of adjustment (or replacement cost of tariffs *vis-à-vis* EU imports). In Table A4 this assumption is applied, after revising 2004 GDP values in euros (using the same inflation adjustment and exchange rate conversion as applied elsewhere in the study). The aggregate estimated replacement cost of tariff on EU imports for all the ACP countries (excluding Somalia for which GDP data were not available) is about €6 billion.

Table A4

No.	Country	GDP (2004) ($million)	Estimated GDP (2005)[a] ($million)	Subsidy equivalent[b] (€millions)[c]	(€ million)
Low income					
1	Benin	4,075	4,177	50.1225	41.50143
2	Burkina Faso	4,824	4,945	59.3352	49.12955
3	Burundi	657	673	8.0811	6.691151
4	Cameroon	14,733	15,101	181.2159	150.0468
5	Central African Republic	1,331	1,364	16.3713	13.55544
6	Chad	4,285	4,392	52.7055	43.64015
7	Comoros	367	376	4.5141	3.737675
8	Congo, Dem. Republic	6,571	6,735	80.8233	66.92169
9	Congo, Republic	4,384	4,494	53.9232	44.64841
10	Ivory Coast	15,286	15,668	188.0178	155.6787
11	Eritrea	925	948	11.3775	9.42057
12	Ethiopia	8,077	8,279	99.3471	82.2594
13	Gambia, The	415	425	5.1045	4.226526
14	Ghana	8,620	8,836	106.026	87.78953
15	Guinea	3,508	3,596	43.1484	35.72688
16	Guinea-Bissau	280	287	3.444	2.851632
17	Haiti	3,535	3,623	43.4805	36.00185
18	Kenya	15,600	15,990	191.88	158.8766
19	Lesotho	1,375	1,409	16.9125	14.00355
20	Liberia	448	459	5.5104	4.562611
21	Madagascar	4,364	4,473	53.6772	44.44472
22	Malawi	1,813	1,858	22.2999	18.46432
23	Mali	4,863	4,985	59.8149	49.52674
24	Mauritania	1,357	1,391	16.6911	13.82023
25	Mozambique	5,548	5,687	68.2404	56.50305
26	Niger	3,081	3,158	37.8963	31.37814
27	Nigeria	72,106	73,909	886.9038	734.3563
28	Papua New Guinea	3,909	4,007	48.0807	39.81082
29	Rwanda	1,845	1,891	22.6935	18.79022
30	São Tomé and Principe	62	64	0.7626	0.631433
31	Senegal	7,665	7,857	94.2795	78.06343
32	Sierra Leone	1,075	1,102	13.2225	10.94823
33	Somalia	-			
34	Sudan	19,559	20,048	240.5757	199.1967
35	Tanzania, United Rep. of	10,851	11,122	133.4673	110.5109
36	Togo	2,061	2,113	25.3503	20.99005
37	Uganda	6,833	7,004	84.0459	69.59001
38	Zambia	5,389	5,524	66.2847	54.88373
39	Zimbabwe	17,750	18,194	218.325	180.7731

Table A4 (continued)

No.	Country	GDP (2004) ($million)	Estimated GDP (2005)[a] ($million)	Subsidy equivalent[b] (€millions)[c]	(€ million)
Lower middle-income					
40	Angola	20,108	20,611	247.3284	204.7879
41	Cape Verde	948	972	11.6604	9.654811
42	Djibouti	663	680	8.1549	6.752257
43	Dominican Republic	18,673	19,140	229.6779	190.1733
44	Fiji	2,627	2,693	32.3121	26.75442
45	Guyana	786	806	9.6678	8.004938
46	Jamaica	8,030	8,231	98.769	81.78073
47	Kiribati	62	64	0.7626	0.631433
48	Micronesia, Federated Sts.	226	232	2.7798	2.301674
49	Namibia	5,456	5,592	67.1088	55.56609
50	Samoa	363	372	4.4649	3.696937
51	Solomon Islands	242	248	2.9766	2.464625
52	Suriname	1,109	1,137	13.6407	11.2945
53	Swaziland	2,413	2,473	29.6799	24.57496
54	Tonga	213	218	2.6199	2.169277
55	Vanuatu	316	324	3.8868	3.21827
Upper middle-income					
56	Barbados	2,627	2,693	32.3121	26.75442
57	Belize	1,094	1,121	13.4562	11.14173
58	Botswana	8,659	8,875	106.5057	88.18672
59	Dominica	269	276	3.3087	2.739604
60	Equatorial Guinea	3,235	3,316	39.7905	32.94653
61	Gabon	7,228	7,409	88.9044	73.61284
62	Grenada	436	447	5.3628	4.440398
63	Mauritius	6,056	6,207	74.4888	61.67673
64	Palau	127	130	1.5621	1.293419
65	Seychelles	704	722	8.6592	7.169818
66	South Africa	212,777	218,096	2617.157	2167.006
67	St Kitts and Nevis	397	407	4.8831	4.043207
68	St Lucia	729	747	8.9667	7.424428
69	St Vincent & the Grenadines	403	413	4.9569	4.104313
70	Trinidad and Tobago	12,544	12,858	154.2912	127.7531
High income: Non-OECD					
71	Bahamas, The	5,260	5,392	64.698	53.56994
	Total				5998.072

[a]GDP (2004) * 1.025 (i.e. assumed 2.5% inflation rate)
[b]Estimated GDP (2005) * 0.012 (i.e. assumed rate of GDP of 1.2% as in case of CREDIT (2004) study of subsidy equivalent of Mauritius tariff on EU imports
[c]US$ values expressed in euros at rate $1 = €0.828

Endnotes

1. Although LDC ACP countries would gain preferential access under the EU's Everything But Arms (EBA) initiative.
2. The revenue is redistributed from the government to domestic consumers, and in that sense it is not 'lost' by the country.
3. A number of recent studies recognise the fiscal consequences of trade liberalisation for developing countries (for example IMF, 2005).
4. Note that this is not the case for the alternative methodology for measuring adjustment costs. In that case the cost of negotiations and legislative changes would have to be added on.