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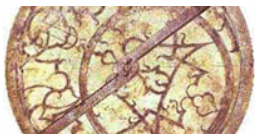

FISCAL REVENUE LOSSES AND TRADE DIVERSION FROM THE ECONOMIC PARTNERSHIP AGREEMENTS: ARE THE CONCERNS JUSTIFIED?

Jean-Jacques Hallaert

Preliminary Version

Abstract

In contrast to existing published literature that assumed the EPAs tariff cuts, this paper uses the tariff cuts *actually* agreed by some African countries to quantify fiscal revenue losses from the EPAs. It finds that the profile in the tariff cuts vary significantly across countries. Revenue losses are limited and spread over long transition periods. Using *taxable* imports instead of *total* imports (a standard method of the literature), in order to take into account tax breaks and preferences granted to other partners in regional groups, increases the estimated revenue losses but they remain limited. Trade diversion, a source of additional indirect revenue loss, could be significant.

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Author's E-Mail Address: jjhallaert@yahoo.com

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I. INTRODUCTION

Trade relations between the African, Caribbean, Pacific (ACP) countries and the European Union are changing dramatically. For over three decades, they were governed by non-reciprocal preferential treatment granted by the EU to over 70 ACP countries under the successive Lomé Conventions and the Cotonou Agreement. But since 2008, with the phasing in of the interim Economic Partnership Agreements (EPAs), these trade relations have been reciprocal.

The EPAs have triggered many fears documented and analyzed by a vast literature. A first group of concern is that the EPAs could affect countries' capacity to use trade policy for fostering development. First, it is feared that the EPAs could harm the intra-ACP regional integrations. The EPAs groups in Africa do not match the existing regional groups in part because of the overlapping regional agreements in Africa. This creates problems. For example the 15 Southern African Development Community (SADC) members are negotiating EPAs under four different groups. The Southern African Customs Union (SACU) common external tariff (CET) is threatened by the differences in bilateral tariff agreements its members have agreed with the EU. A second concern is that the EPAs could divert intra-ACPs trade flows to EU-ACPs (Drapper, 2007; Perez, 2006; UNECA, 2005). Third, according to the interim EPAs, ACP countries would extend to the EU any more favorable treatment they might provide to third countries in future preferential trade agreements (PTA). Although the European Commission claims that this provision is limited to "major trading partners" (meaning that the provision would apply to any PTA between an ACP country or group of ACP countries and countries accounting for more than 1 percent of world trade such as India or China), this remains a contentious issues both with the ACPs and at the WTO.

A second group of concerns is related to the adjustment costs. The EPAs may have social repercussions and affect negatively on poverty or human rights (Bilal and Roza, 2007; Nwobike, 2006). They could also have developmental repercussions if, because of the increase in EU competition, local companies or farmers reduce their output (Perez, 2006; Perez and Karingi, 2007; Nwobike, 2006). Fiscal implications are a third type of adjustment costs. They have received a lot of interest because, as argued by Milner and al. (2005), the static welfare effect of the EPA is small when the revenue effect is excluded but the revenue losses can be significant. Moreover, many ACP countries' budget rely heavily (sometimes for more than 50 percent) from revenue from import taxes (Bilal and Roza, 2007; Hallaert, 2004; and Kowalski, 2005). The elimination of the customs duties on imports from such a large trade partner as the EU could thus jeopardize both fiscal and macroeconomic stability of some countries (UNECA, 2005). A sharp fall in fiscal revenues could also reduce the government abilities to meet the very large developmental and social needs of the ACPs.

Many studies estimating potential revenue losses were published before the interim EPAs were signed. Thus, they had to assume what will be the trade liberalization under the EPAs including possible exclusions. These assumptions have a strong impact on the results. Therefore, the main value added of this paper is its use the *actual* tariff schedule agreed under the interim EPAs for a sample of African countries. It will also address some of the methodological criticisms directed at previous studies.

Section II briefly describes the history and the state of play of the EPAs. Section III surveys the literature estimating the potential revenue losses for African countries. The method and the data used in this paper are detailed in Section IV. Section V shows that there the tariff cuts differ significantly across the various EPAs. Section VI estimates the static direct fiscal cost for three Eastern African Community (EAC) countries (Burundi, Rwanda, and Tanzania) and Madagascar while Section VII tries to evaluate the potential trade diversion, which constitutes a potentially important indirect source of revenue losses.

II. THE EPAS: HISTORY AND STATE OF PLAY

Since 1975, the ACP countries have been enjoying a preferential access to the European market. This preferential access was not compatible with GATT/WTO rules because it was non-reciprocal and discriminated among developing countries. It was thus challenged successfully. The European Union requested a waiver to its obligation under the GATT/WTO in 1994 and in 2001 and committed to put in place a system compatible with WTO rules by end 2007. This transition was built into the Cotonou agreement.[1]

The Cotonou agreement includes the negotiation of EPAs under which the EU and regional groups of ACP countries would offer reciprocal trade preferences.[2] In practice, this means that ACP countries would have to *give* preferential access to EU products in order to *continue* to enjoy a preferential access to the EU. In addition to their cornerstone, trade in goods, the EPAs also cover customs issues and trade facilitation, technical barriers to trade, sanitary and phytosanitary measures, agriculture, fisheries, current payment and capital movements, competition, innovation and intellectual property, and public procurement.

The negotiations of the EPAs were difficult. By end-2007, only with the Cariforum could a regional EPA covering all the topics could be agreed.[3] In Africa and the Pacific, only bilateral agreements were initialed, although an agreement was concluded with the EAC; a subset of a larger region. Moreover these bilateral agreements were partial. These bilateral agreements all cover the trade in goods, a requirement to meet the WTO obligations, but not most of the other issues. These partial agreements are called "interim EPAs" because of the understanding that negotiations toward comprehensive EPAs will continue.

As reported in Table 1, not all ACP countries initialed an interim EPA. Those who did initial such agreements benefit since January 1, 2008 from a full duty- and quota-free access to the

[1] In 1996, the European Commission released a "Green Paper" explaining why the relations between the EU and the ACPs needed to be revised (European Commission, 1996).

[2] Six ACP regional groups were defined by the European Commission. The expected membership of these groups is shown in Table 1.

[3] Cariforum members are Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, the Dominican Republic, Grenada, Guyana, Haiti, Jamaica, Saint Lucia, Saint Vincent and the Grenadines, Saint Christopher and Nevis, Surinam, and Trinidad and Tobago.

market (except for rice and sugar that will be liberalized respectively by 2010 and 2015.) The fate of the countries that have not initialed an interim EPA depends if they are a Least Developed country (LDC) or not. LDCs benefit from the European "Everything But Arms" (EBA) initiative that provides duty- and quota-free access to all LDCs. Non-LDCs only benefit from the European Generalized System of Preferences (GSP). Under the GSP, the European Union offers lower tariffs or duty-free access but these preferences are less favorable than the treatment under the EPAs, the EBA, or the Lomé Conventions and the Cotonou Agreement.

Table 1. List of the interim and comprehensive EPAs [1/]

ESA	EAC 2/	SADC	CEMAC & Sao Tome and Principe	West Africa	Caribbean	Pacific
Comoros	**Burundi**	Angola	**Cameroon**	Benin	**Antigua & Barbuda**	Cook Is.
Congo (DR)	**Kenya**	**Botswana**	RCA	Burkina Faso	**Bahamas**	Fed. Micronesia
Djibouti	**Rwanda**	**Lesotho**	Chad	Cape Verde	**Barbados**	**Fiji**
Eritrea	**Uganda**	**Mozambique**	Congo	Gambia	**Belize**	Kiribati
Ethiopia	**Tanzania**	**Namibia**	Equatorial Guinea	**Ghana**	**Dominica**	Marshall Is.
Malawi		**Swaziland**	Gabon	Guinea	**Dominican Rep.**	Nauru
Madagascar			S. Tome & Principe	Guinea Bissau	**Grenada**	Niue
Mauritius				**Ivory Coast**	**Guyana**	Palau
Seychelles				Liberia	**Haiti**	**Papua N.G.**
Sudan				Mali	**Jamaica**	Samoa
Zambia				Mauritania	**St Lucia**	Solomon Is.
Zimbabwe				Niger	**St Vincent**	Tonga
				Nigeria	**St. Ch. & Nevis**	Tuvalu
				Senegal	**Surinam**	Vanuatu
				Sierra Leone	**Trinidad & Tobago**	
				Togo		

Source: European Commission (2007, 2009a).
1/ Countries/Regions that have initialed an interim EPA are bolded. Countries/Regions that have concluded comprehensive EPAs (covering all aspects of the EPA) are bolded and underlined.
2/ EAC countries were initially split between the Eastern and Southern Africa group (ESA) and the Southern African Development Community (SADC) group. They eventually decided to negotiate a common EPA. This illustrates that the regional groups designed for the EPAs do not match existing and overlapping regional integrations.

III. THE EXISTING LITERATURE: RESULTS AND CRITICISMS

Estimated fiscal losses vary significantly across countries but also for the same country (Table 2). There are many reasons for these variations. Although they can be partly explained by the data used and the reference period,[4] the main reason appears to be methodological.

[4] Different reference periods can lead to very different results because of several factors. The tariff regime can change and did change quite substantially in many ACPs. Imports structure can in some countries be volatile.

Table 2. Survey of the estimates of revenue losses from the EPAs in Africa

	Revenue loss			
	import duties	In percent of		Source
	In millions USD$	imports duties	total revenue	
Angola	-103.3			UNECA (2005)
Benin	-32.1			CAPE (2002)
	-27.6	-47.4	-8.6	Busse et al. (2004)
	-39.5			UNECA (2005)
Botswana	-32.4			Tekere and Ndelda (2003)
	-5.2			UNECA (2005)
Burkina Faso	-24.7			CAPE (2002)
	-17.5	-46.8	-5.6	Busse et al. (2004)
	-22.0			UNECA (2005)
Burundi	-7.7			UNECA (2005)
Cameroon	-149.3			UNECA (2005)
		-81.9	-8.2	Bilal and Roza (2007)
Cape Verde	-24.0	-79.9	-19.8	Busse et al. (2004)
	-34.3	-78.0	-15.8	Nielsen & Zouhon-Bi (2007)
Central African Rep.	-5.8			UNECA (2005)
		-79.2	-14.9	Bilal and Roza (2007)
Chad	-26.7			UNECA (2005)
Congo	-75.1			UNECA (2005)
Congo (Dem. Rep.)	-24.7			UNECA (2005)
Cote d'Ivoire	-140.6			CAPE (2002)
	-82.9	-55.5	-4.6	Busse et al. (2004)
	-112.2			UNECA (2005)
Djibouti	-37.5			UNECA (2005)
Equatorial Guinea	-33.9			UNECA (2005)
Eritrea	-7.4			UNECA (2005)
Ethiopia	-55.1	-15.4	-4.9	UNECA (2005)
Gabon	-74.3			UNECA (2005)
Gambia	-13.8	-65.0	-21.9	Busse et al. (2004)
Ghana	-90.8	-66.4	-10.3	Busse et al. (2004)
	-193.7			UNECA (2005)
	-150.6	-47.4	-7.1	Nielsen & Zouhon-Bi (2007)
Guinea	-16.7	-51.6	-4.9	Busse et al. (2004)
Guinea Bissau	-3.2			CAPE (2002)
	-2.2	-65.8	-5.6	Busse et al. (2004)
	-2.0			UNECA (2005)
Kenya	-107.3			UNECA (2005)
Lesotho	-0.3	-0.3	-0.1	UNECA (2005)
Madagascar	-7.7			UNECA (2005)
Malawi	-24.6			Tekere and Ndelda (2003)
	-7.1			UNECA (2005)
		-6.3	-1.4	Bilal and Roza (2007)
Mali	-44.9			CAPE (2002)
	-16.6	-35.6	-3.8	Busse et al. (2004)
	-33.1			UNECA (2005)
	-19.6	-9.7		Rampulla, Semega, Vellutini (2007)
Mauritania	-11.8	-49.3	-6.3	Busse et al. (2004)
	-14.6			UNECA (2005)
Mauritius	-209.9			Tekere and Ndelda (2003)
	-71.1			UNECA (2005)
		-27.9	-9.3	Bilal and Roza (2007)
Mozambique	-29.2			Tekere and Ndelda (2003)
	-7.6	-9.5	-1.5	UNECA (2005)
		-23.0	-5.2	Bilal and Roza (2007)
Namibia	-285.3			Tekere and Ndelda (2003)
	-3.8			UNECA (2005)
Niger	-15.2			CAPE (2002)
	-6.6	-29.6	-3.6	Busse et al. (2004)
	-20.5			UNECA (2005)
Nigeria	-487.8	-52.7	-2.5	Busse et al. (2004)
	-426.9			UNECA (2005)
	-682.0	-41.5	-2.4	Nielsen & Zouhon-Bi (2007)
		-34.4		Bouet et al. (2007)
Rwanda	-5.6			UNECA (2005)
Senegal	-129.2		-15.7	CAPE (2002)
	-87.9	-60.0	-10.7	Busse et al. (2004)
	-80.2			UNECA (2005)
	-154.7	-69.6	-10.4	Nielsen & Zouhon-Bi (2007)
		-45.2		Bouet et al. (2007)
Seychelles	-24.9			UNECA (2005)
Sudan	-73.2			UNECA (2005)
Swaziland	-5.6			Tekere and Ndelda (2003)
	-0.8			UNECA (2005)
Tanzania	-146.6			Tekere and Ndelda (2003)
		-71.1 to - 72.8		Milner and al. (2005)
	-32.5	-25.9	-2.3	UNECA (2005)
		-30.0	-8.2	Bilal and Roza (2007)
Togo	-16.1			CAPE (2002)
	-35.5			UNECA (2005)
	-12.9	-43.2	-7.4	Busse et al. (2004)
Uganda		-58.1 to -60.5		Milner and al. (2005)
	-9.5	-18.2	-1.8	UNECA (2005)
Zambia	-15.8	-9.8	-2.9	UNECA (2005)
		-22.0	-2.0	Bilal and Roza (2007)
Zimbabwe	-118.3			Tekere and Ndelda (2003)
	-18.4			UNECA (2005)

One problem with existing available estimates of revenue losses is that they were done before actual tariff cuts were agreed. Therefore they had to assume the magnitude of the tariff cuts and these assumptions differ across studies. For the same reasons, exclusions of goods from tariff reductions are either ignored or, if not, assumed. Finally, transition periods were not known and therefore the time profile of revenue losses could not be analyzed.

Second, most studies tend to overestimate revenue losses. For example, Tekere and Ndlela (2003) use bound tariff rather than applied tariffs. This results in a large overestimate of the revenue losses. The UNECA found that revenue losses are more than 6 times smaller for Zimbabwe and Botswana, and between 3 and 4.5 times smaller for Malawi, Mauritius, Mozambique, and Tanzania when applied tariffs are used instead of bound tariffs (Table 2). Even studies that use applied tariffs can overestimate revenue losses because they assume that all imports are taxed. However, many ACP countries provide numerous tax breaks to importers, including to export processing zones (EPZs) or other incentives to attract foreign direct investment (FDI). Moreover, preferential treatment is often granted to partners in PTAs reducing taxable imports. The study by Busse et al. (2004) is an exception: it used the effective rate of revenue collection for several West African countries and found lower revenue losses than the UNECA study.

Third, the literature limits its calculations to the customs duties losses. However, customs duties are part of the basis for the calculation of excise taxes and VAT. Cutting the custom tariff rates drastically, as is the case in the EPAs, will thus affect these other revenues. Therefore, revenue losses are underestimated.

Finally, Bilal and Roza (2007) criticize the literature because it calculates only the static effect of the EPAs. Indeed, if the EPAs trigger an increase in economic growth, revenue losses will be more limited because higher growth leads to higher revenues. [5]

All these problems led Bilal and Roza (2007) to conclude that the "overall effects of EPA on fiscal revenue have not yet been comprehensively assessed. Instead, empirical studies have generally focused on estimating the potential size of the loss of tariff revenues."

IV. METHODOLOGY AND DATA

This paper attempts to address several of the shortcomings of the literature. First, it uses actual tariff cuts of the interim EPAs. Therefore there are no assumptions needed regarding the magnitude of the tariff cuts, the list of excluded goods, and the transition period. Second, revenue losses are estimated using applied tariffs. WITS database provides these tariff at the HS-6 digits for 2006 (EAC) or 2007 (Madagascar).[6] The Comtrade database provides imports data (at HS-6 digits) for 2006. For Burundi, imports were only available for 2005.

[5] For a survey of the empirical literature on the impact of trade liberalization and growth, see Hallaert (2006).

[6] For Madagascar, four HS-6 digits tariff lines with specific duties are excluded from the analysis.

Theoretical revenue from customs tariffs is calculated for each year of the transition period, assuming that neither the tariff cuts nor growth will affect the composition by products of imports (i.e., a constant import share assumption).

This method, standard in the literature, assumes that all imports are taxed. Thus it does not address one of the weaknesses of the literature: it ignores the impact of tax breaks and PTAs preferences. Taking into account these factors requires detailed data that were only available for Madagascar. Calculation is based on the Malagasy customs tariff schedule at its most detailed level (HS-8 digits) implemented starting mid- 2008 i.e. taking into account the small tariff changes included in the 2008 amended budget. Malagasy customs data for 2007 imports were used. These data allow to estimate the revenue losses taking into account the impact of existing PTAs on revenues but also the main sources of tariff exemptions (the EPZs). Moreover, they allow to go beyond the estimation of customs tariff revenue losses to estimate *total* revenue losses from the EPAs i.e. including their impact revenues from excise on imports and from VAT on imports.[7]

The estimates are static. Assessing the dynamic effect of the tariff cuts under the EPAs would require a different approach than the one underpinning this paper, namely Computable General Equilibrium (CGE) modeling. CGE models can provide useful information on the impact of the EPAs (UNECA, 2005; Bouët and al., 2007; Perez, 2006; Perez and Karingi, 2007). However, standard models, such as GTAP, do not capture properly government revenues. Moreover, they cannot go into the level of details that are needed to address the other criticisms to existing literature. Finally, their results are sensitive to the modeling assumptions.

V. PROFILE IN THE TARIFF CUTS

A. WTO requirements

Although the interim EPAs were initialed in 2007, tariff cuts schedules are not yet available for all ACP countries. The European Commission published some aggregated numbers, which show that the ACP countries would liberalize at least 80 percent of their imports over a period ranging from 10 to 26 years (Table 3).

The 80 percent coverage is consistent with the European Commission's interpretation of the WTO requirement that a PTA covers "substantially all the trade" (Art. XXIV:8(a) of the GATT 1994). According to the European Commission, this WTO provision means that at least 90 percent of bilateral trade flows should be liberalized.[8] Given that, under the EPAs, the EU will provide duty- and quota-free access to all ACP exports, liberalizing 90 percent of the bilateral trade flows requires the various ACPs to liberalize about 80 percent of their

[7] For more details on the import taxation in Madagascar, see Hallaert (2008).

[8] This understanding was also applies to the EU-South Africa Agreement. It should, however, be stressed that this interpretation is not shared by all WTO members.

imports from the EU. The exact share depends on the bilateral trade balance. For ACP countries experiencing a bilateral trade deficit with the EU, eliminating tariffs on more than 80 percent of the imports is required. For ACP countries experiencing a trade surplus, less than 80 percent needs to be liberalized.

Table 3. Coverage of the customs tariff cuts under the EPAs

	ACP Liberalization (in percent of import value from EU)	Transition Period (in years)
Comoros	80.0	15
Madagascar	81.0	15
Mauritius	95.6	15
Seychelles	97.5	15
Zambia	80.0	…
Zimbabwe	80.0	15
EAC	82.0	26
Botswana	86.0	10
Lesotho	86.0	10
Mozambique	80.5	10
Namibia	86.0	10
Swaziland	86.0	10
Cameroon	80.0	15
Ghana	80.5	15
Ivory Coast	80.5	16
CARIFORUM	86.9	26
Fiji	80.0	15
Papua N.G.	88.0	15

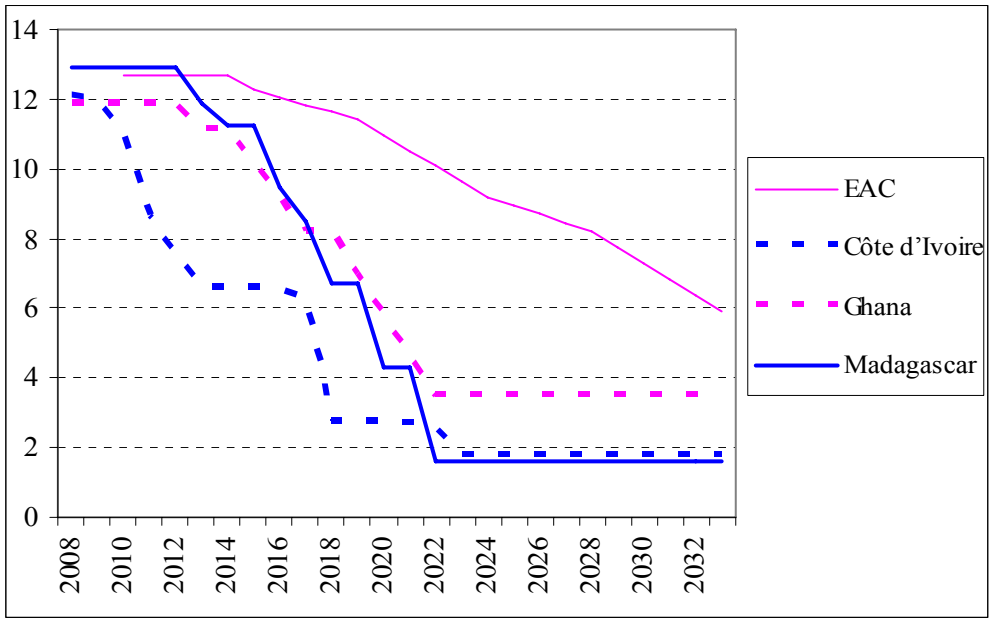
Source: European Commission (2007, 2009a).

Another WTO requirement is that "any interim agreement […] shall include a plan and schedule for the formation of such a customs union or of such a free-trade area within a reasonable length of time" (Art. XXIV:5(c)). According to the "Understanding on the interpretation of Article XXIV of the General Agreement on Tariffs and Trade 1994," the "reasonable length of time" should "exceed 10 years only in exceptional cases." However, as reported in Table 3, most of the interim EPAs exceed this 10 year period sometimes by a large margin.

B. Tariff cuts: How deep? How fast?

Figure 1 illustrates the simple average tariff rate on EU imports implied by the interim EPAs of Côte d'Ivoire, East African Community (Kenya, Uganda, Tanzania, Rwanda and Burundi), Ghana, and Madagascar.

Figure 1. Profile in tariff cuts in selected African countries
(Simple average tariff on imports from the EU)



Source: Author's calculation.

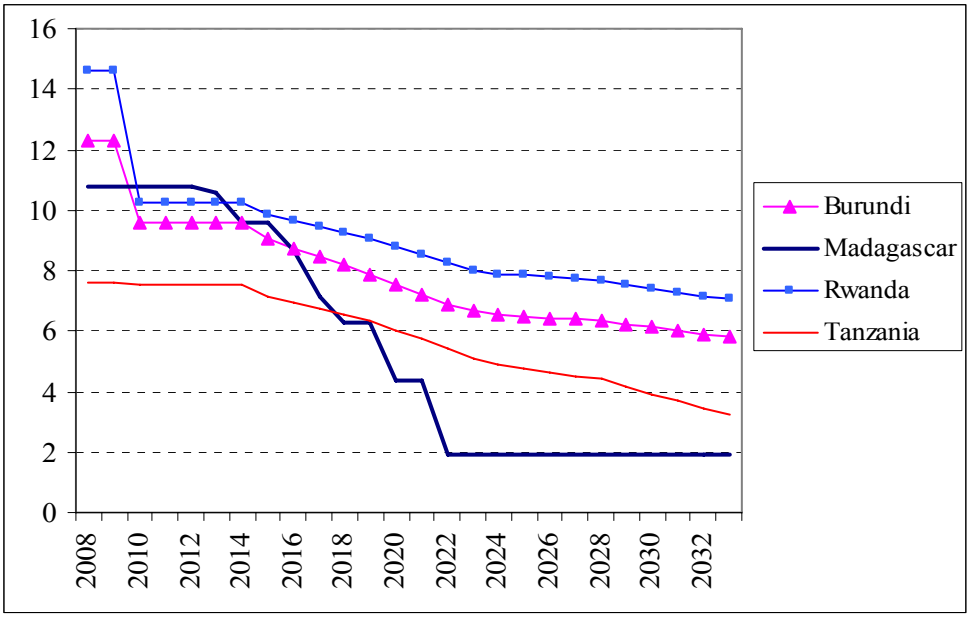
Tariff cuts vary significantly across the ACP countries. Although their starting points are broadly similar, EAC countries will reduce their average tariff rate on EU goods by 6.8 percentage points but Madagascar by 11.3 percentage points. These are substantial cuts and point to an important issue that will be detailed later: the gap between the MFN tariff and the tariff on EU imports is large and, thus, is likely to trigger substantial trade diversion.

As a result, at the end of the transition period the tariff, the dispersion in average tariffs will be larger than in 2008. While for all countries of the sample, the simple average tariff on EU products is close (12 to 13 percent) it will range from less than 2 percent for Côte d'Ivoire and Madagascar to almost 6 percent for the EAC. This reflects different strategies in selecting products excluded from any cuts. For all the countries, the exclusion covers about 20 percent of imports value, but some ACP chose to exclude only a few lines with large imports; others chose to exclude a large number of tariff lines with relatively low imports.

The weighted average tariff rate confirms that the EAC's tariff cut will be more limited and more gradual than Madagascar's (Figure 2). More interestingly, it shows that the impact of the same EPA differs significantly across EAC members. EAC members have different baskets of imports from the EU. Thus, the weighted average at the end of the process will be

much higher for Rwanda and Burundi than for Tanzania. Figure 2 also shows that moving to the EAC CET will imply a significant liberalization for Rwanda and Burundi. For Rwanda, this liberalization is larger than the one agreed under the EPA. For Burundi, although the impact of the move toward the CET is more limited, it remains significant.

Figure 2. Weighted average tariff on imports from EU.



Source: Author's calculation.

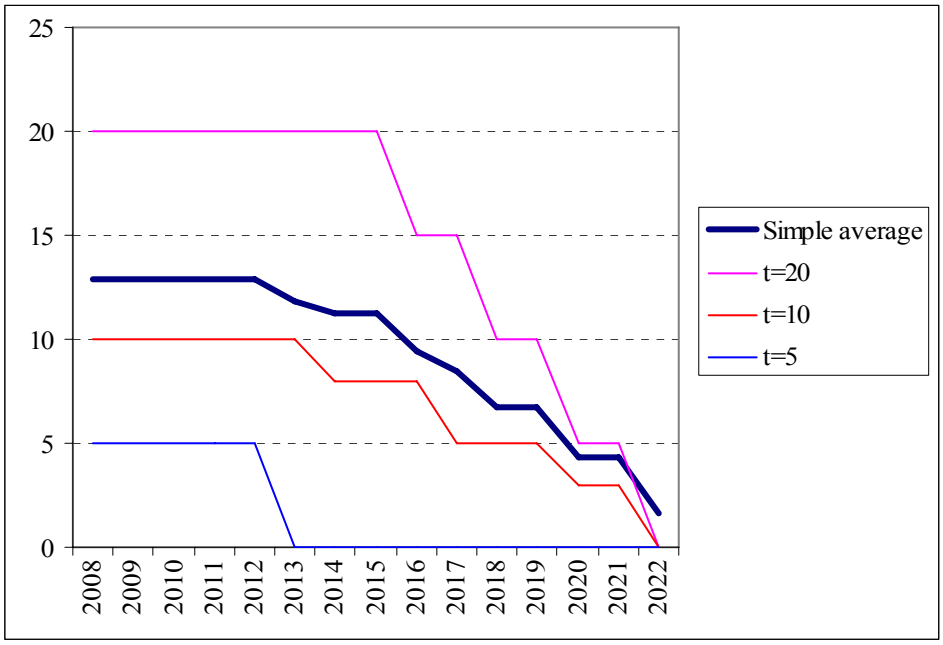
Third, the time profile of the cuts also differ significantly across countries. As indicated in Table 3, the tariff cuts start at a different period of time. Actual cuts start as soon as July 2009 for Côte d'Ivoire but only in 2013 for Ghana and Madagascar and in 2015 for the EAC.

The magnitude and the speed of the adjustment depends on the transition period and on the depth of the tariff cut. ACP countries' strategies differ regarding these two factors. Côte d'Ivoire chose to frontload the tariff cuts and to implement them over 15 years. In contrast, Madagascar and Ghana chose to delay their cut but to implement them over a shorter period (10 years). The EAC stands out. Its actual cut will start later than other countries in the sample and span on a longest period (19 years). This delay may be due to the fact that the EAC common external tariff (CET) was not yet fully implemented in 2007 and will result in some significant tariff liberalization prior to the EPA for countries like Rwanda. Rwanda's average tariff stood at 18.7 percent in both 2006 and 2007 i.e. much higher than the EAC average MFN tariff of 12.7 percent in 2010 indicated in the interim EPA.

Looking at the sequencing of the tariff cuts provides additional details on the difference in strategies across African countries. With the exception of Côte d'Ivoire that fully eliminates some of its highest tariff as soon as July 2009, African ACP countries of the sample have usually cut their tariff over several years starting with the lowest tariff rates. Figure 3 illustrates the case of Madagascar. The EAC has a similar pattern. In 2010, the EAC cuts the

duty-free MFN tariff to … 0 percent. This is not as worthless as it may seems at first glance because it guarantees EU exporters against any possible increase in tariff in the future. Then, in 2015, the second lowest tariff rate is phased out (over eight years later). In 2020, the phasing out of the 25 percent tariff rate starts (it is eliminated after thirteen years). None of the highest tariff rates (ranging from 35 to 100 percent) is cut.

Figure 3. Madagascar – Profile in tariff rate cuts under the interim EPA



t = tariff rate.

Starting phasing out tariffs with the lowest tariff rates limits the risk of welfare-reducing trade distortion in the short run and smoothes the adjustment shock because the risk trade distortion increases with the gap between the MFN tariff and the preferential tariff. Moreover, this strategy has the advantage to leave time to implement measures that will offset the revenue losses of the tariff cuts.

In sum, average tariffs clearly show that the tariff cuts under the EPAs are far from being homogeneous across countries both in their depth and in their time profile. Except in the case of Côte d'Ivoire, actual cuts are delayed, spread over many years, and starts with the lower rates. This should postpone the full impact of the revenue loss and limit, in the short run, trade diversion, leaving time for reform that would allow to minimize the adjustment cost of the EPAs. Nonetheless, the overall tariff cut remains substantial.

VI. THE DIRECT REVENUE LOSSES

A. Revenue losses are limited

Customs duties revenue losses vary significantly across countries. For the four countries considered in this paper, they range from 8 to 21 percent (Table 4). This is relatively small even when it is taken into account that taxes on international trade make up about half of government revenues in Madagascar, 19 percent in Burundi, 13 percent in Rwanda, and 10 percent in Tanzania. Madagascar will be the worst affected because it is the country where revenue losses from customs duties are the largest and the country whose budget is the most dependent on taxes on international trade. But, even in this case, the loss is limited to 3 percent of total revenue at the end of the 15-year-long transition period.

Table 4. Tariff revenue losses from the EPAs [1/]

	Fiscal loss			Initial share EU in revenues from tariffs	Initial share EU in imports
	Million US$	In percent of total revenue from customs tariff	In percent of revenue from cutoms tariffs on EU goods		
Burundi	6	16	53	31	35
Madagascar [1/]	34	21	71	30	29
Rwanda	9	8	52	16	20
Tanzania	34	8	58	15	17

Source: Author's calculation as indicated in the text.
1/ Excluding revenue from three HS-6 digits tariff lines with specific duties. These lines accounted for 0.1 percent of imports from the EU in 2006.

Revenue losses depend crucially on two factors: the depth of the tariff cut and the share of the EU in the countries total imports. Madagascar cut more its tariffs (Figures 1 and 2) than EAC countries. As a result, Madagascar will lose 71 percent of its revenue from customs duties on EU imports compared to 52 to 58 percent for the EAC countries. Since the EU share in the country's total imports is also relatively high at 29 percent, this translates into a drop of 21 percent of its total revenue from customs duties on imports (excluding a few oil products with specific duties). In 2007, customs duties accounted for 11 percent of the Malagasy government's fiscal revenues.[9] Thus, a 21 percent drop in customs duty revenue only reduces total revenue by about 2 ½ percent. Taking into account that customs duties are

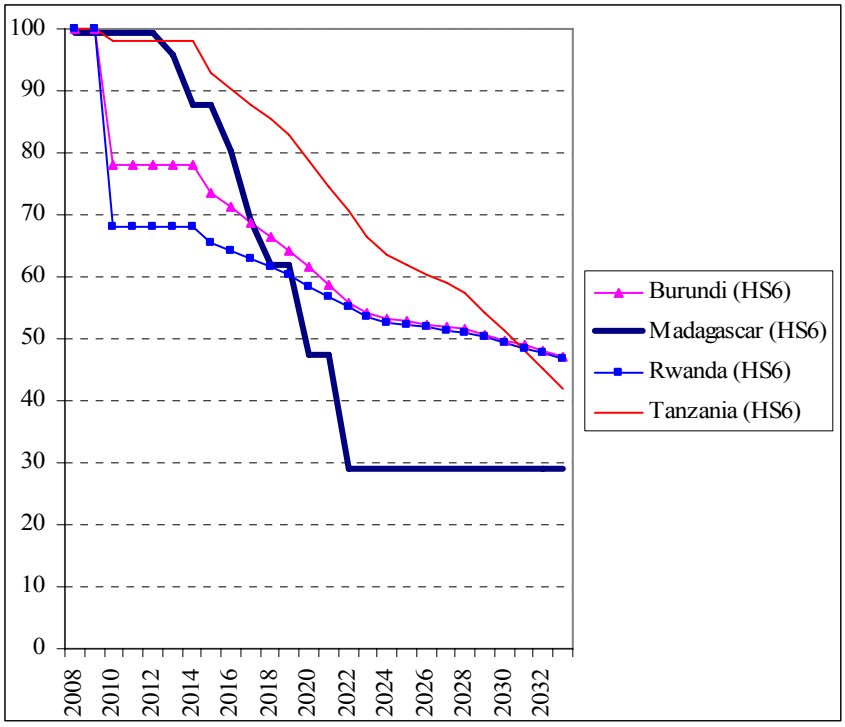
[9] Taxes on imports drop from half government revenues to 1/3 of Madagascar when oil products are excluded. Fiscal revenues from taxes on oil imports are safeguarded under the EPAs because almost 90 percent of Madagascar's marginal oil imports from the EU (chapter 27 of the HS nomenclature) are excluded from tariff cuts in the EPAs.

part of the base for VAT on imports, there is an additional loss of about ½ percent of revenues at the end of the transition period.[10]

Rwanda and Burundi would both lose slightly more than half of their revenue from customs duties on EU goods (Figure 4). But, because the EU has a larger share in Burundi imports than in Rwanda's imports the loss in total revenue from customs duties is twice as large reaching 16 percent (Figure 5). In contrast, despite losing more revenues from duties on EU imports than Rwanda or Burundi, Tanzania's total loss in revenue from customs duties will be relatively limited at 8 percent because the EU accounts only for 17 percent of its imports.

Figures 4 and 5 illustrate the time profile in revenue losses. Rwanda and Burundi will first reduce their MFN tariff to align their schedule to the EAC CET then cut their tariff on EU imports. Although the revenue loss of import duties on EU imports is similar for Rwanda and Burundi at the end of the transition period (Figure 4), the impact is larger for Burundi (Figure 5). Moreover, Figure 5 shows that the impact of moving to the EAC CET has more revenue implications for Rwanda than the EPA. For Burundi, in contrast, the EPA has a larger impact. This difference is due to the already mentioned larger share of EU imports in Burundi than in Rwanda.

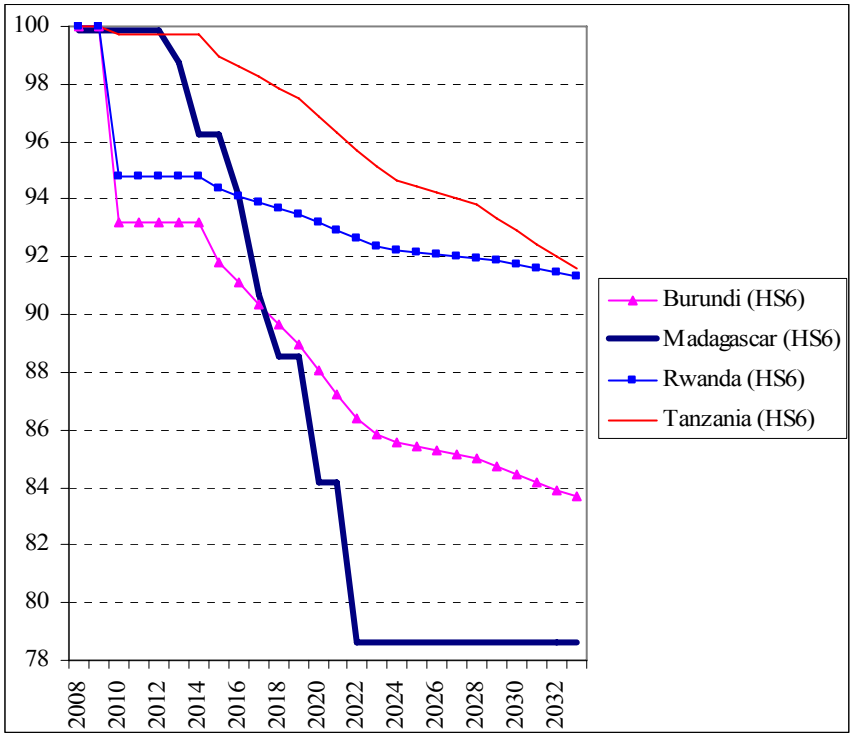
Figure 4. Revenue losses on import duties on EU imports (2008=100)



Source: Author's calculation.

[10] The impact on excise on imports will be marginal because most of imports subject to excise following the 2008 tax reforms (Hallaert, 2008) are exempted from any tariff cuts under the EPAs.

Figure 5. Revenue losses on import duties on total imports (2008=100)



Source: Author's calculation.

B. Exclusions: How large is the fiscal motivation?

The literature has emphasized that fiscal revenue losses will depend crucially on the choice of products excluded from tariff cuts. Although fiscal considerations play a role in selecting the excluded products, other considerations such as industrial policies and lobbying are also at play.

The choice of excluded product will be different if a country negotiates an EPA bilaterally or as part of a regional group. In a bilateral setting, an ACP country can promote its national preferences. In contrast, in a regional framework such as the EAC, the same country will have to negotiate with other members of the group in order to have a consolidated regional list. This will presumably affect how much fiscal revenues are actually safeguarded (i.e., safeguarded revenue are likely to be lower than what could be potentially safeguarded).

Under the EPAs, ACP countries will only exclude up to 20 percent of their imports from the tariff cuts (Table 3). Under this constraint, the EAC countries chose to exclude 24 percent of the group's HS-6 digits tariff lines. Table 5 reports that this covers more than 30 percent of Burundi and Rwanda's imports from the EU but only 22 percent of Tanzania's. Nonetheless, the share of revenue from imports duties on EU imports safeguarded is roughly similar across countries ranging from 41.5 to 44.7 percent. Madagascar excluded relatively fewer tariff lines (12 percent of its HS-6 digits tariff lines) covering a slightly smaller share of the

EU imports. As a result, only 30 percent of revenue from imports duties on EU imports are safeguarded compared to over 40 percent for EAC countries.

Table 5. Revenue from duties on EU imports safeguarded by the exclusions
(in percent)

	Burundi	Rwanda	Tanzania	Madagascar
Share EU imports excluded	32.4	34.9	21.8	20.1
Share of revenue safeguarded	41.5	43.7	44.7	29.5
Average tariff on excluded goods	21.0	23.1	24.3	17.5

Source: Author's calculation as indicated in the text.

How does this outcome compare to a strategy that would have only one objective: minimizing revenue losses? Taking as a constraint that the share of imports from the EU that can be excluded cannot be larger than the one agreed under the interim EPAs, Table 6 indicates that Madagascar could have safeguarded 5 ½ percent more of its customs duties revenue. As expected in a regional setting, the situation is more dramatic for the EAC countries. Rwanda and Tanzania could both have safeguarded more than 70 percent of their revenues from customs duties on European imports. This is about 27 percent more of revenues. For Burundi, this share is lower but remains large: an additional 12 percent of revenues could have been safeguarded.

Table 6. Minimization of revenue losses
(in percent of revenues from customs duties on EU imports)

	Burundi	Rwanda	Tanzania	Madagascar
Share of revenue safeguarded under the interim EPA	41.5	43.7	44.7	29.5
Share of revenue safeguarded under minimization of the losses	53.1	70.8	72.2	35.1
Difference	11.6	27.1	27.5	5.6

Source: Author's calculation as indicated in the text.

Other considerations than safeguarding fiscal revenues influenced the choice of excluded products. For example, for many of the excluded tariff lines there are no imports. While the necessity to make compromises in a regional group may partly explain this fact in the EAC (a product important for one EAC member may not be imported at all by another member), it cannot be an explanation in the case of Madagascar. Nonetheless, for 11 percent of the tariff

lines excluded by Madagascar from tariff cuts there are no imports. The rationale of excluding such products can be protectionist: maintain a tariff in order to prevent future imports in the hope that protection will allow local industry to survive or to develop. Obviously, excluding lines with no imports does not affect the capacity to meet the 80 percent liberalization criteria and has no direct impact on revenue. However, there can be an indirect fiscal impact if these tariffs are high or prohibitive. In such a case, the tariff cut would have triggered some imports and, during the transition period, some revenues.

Table 7. Exclusions from the EPAs
(Number of HS-6 lines unless mentioned otherwise)

	Burundi	Rwanda	Tanzania	Madagascar 1/
Interim EPA	1266	1266	1266	411
Minimization of the Revenue losses	627	150	1335	40
Lines in common	532	59	821	11
In percent of EPAs exclusions	42	5	71	3
In percent of exclusion under the minimization strategy	97	39	61	28

Source: Author's calculation as indicated in the text.
1/ In addition three lines with specific duties are excluded.

Table 7 illustrates evidence that fiscal consideration was not the only motivation in selecting the excluded products. With the exception of Burundi, the choice of tariff lines excluded does not cover a large share of the lines that would minimize revenue losses. It barely reaches 28 percent in Madagascar, where the negotiations of the EPA was conducted with the Ministry for the Economy, Trade, and Industry with little coordination, if any, with the Ministry of Finance, which oversees the customs administration.

Madagascar excluded mostly agricultural products and processed food (Chapter 1-24 of the HS nomenclature). If the excluded products were selected only in order to protect fiscal revenue from total import taxes (customs duties, excise tax on imports, and VAT on imports), the exclusions would be more evenly shared across HS sections as reported in Table 8.

Table 8. Madagascar – Pattern in exclusions under the interim EPA
(in percent of each HS section)

HS-nomenclature	Percent of tariff lines that are excluded	
	Interim EPA	Minimization of Fiscal losses
01-05 Animal & Animal Products	19	5
06-15 Vegetable Products	24	6
16-24 Foodstuffs	75	26
25-27 Mineral Products	10	1
28-38 Chemicals & Allied Industries	6	2
39-40 Plastics / Rubbers	20	8
41-43 Raw Hides, Skins, Leather, Furs	12	2
44-49 Wood & Wood Products	6	6
50-63 Textiles	3	5
64-67 Footwear / Headgear	6	7
68-71 Stone / Glass	0	5
72-83 Metals	3	2
84-85 Machinery / Electrical	1	3
86-89 Transportation	0	6
90-97 Miscellaneous	3	4

Source: Author's calculation at the HS-8 digits level.

C. Taking into account tax exemptions and PTAs

The results presented so far have the advantage on existing studies to take into account the actual tariff cuts. Nonetheless these results may be biased because they consider that all imports are taxed. Moreover, limiting the estimates of revenue losses to customs revenues, although standard in the literature, misestimates the total revenue loss because customs duties are part of the taxable base for the calculation of excise and of VAT.[11] This section addresses these potential biases with the case of Madagascar.

The choice of Madagascar is dictated by data availability. Nonetheless, it is also a good case. Assuming that all imports are taxable is particularly problematic for Madagascar where EPZs and some FDI benefit from customs duties exemptions. This is significant because EPZ accounted to over ¼ of imports in 2007 (Hallaert, 2008). Moreover, Madagascar grants preferential treatment to imports from the Common Market for Eastern and Southern Africa (COMESA) and has started to phase out its tariffs on SADC countries (Hallaert 2007a and 2007b).

[11] For details in the case of Madagascar taxation of imports see Hallaert (2008a).

Using taxable imports instead of total imports shows a loss in customs revenues on EU imports of 29 percent (Table 9) instead of 21 percent reported previously (Table 4).[12] Adding the exemptions granted to COMESA imports, the loss reaches 30 percent. This loss will add to the loss on the phasing out of tariffs on goods from the SADC. [13]

Table 9. Madagascar's revenue losses from the EPA losses
(in percent of 2008 revenues excluding revenues from tariff lines with specific duties)

	Customs duties	All import taxes 2/
Ignoring preferences to COMESA	-29.2	-11.3
Including preferences to COMESA 1/	-30.1	-11.4

Source: Author's calculations.
1/ Actual preferences for COMESA.
2/ customs duties, excise on imports, and VAT on imports.

Finaly, the spillover of customs tariffs cuts on other taxes on imports (excise and VAT on imports) means that the EPAs will reduce revenues from all taxes on non-oil imports by more than 11 percent. This represents a drop of about 4 percent of total government revenues (compared to about 3 percent estimated previously).

VII. INDIRECT REVENUE LOSSES FROM TRADE DIVERSIONS

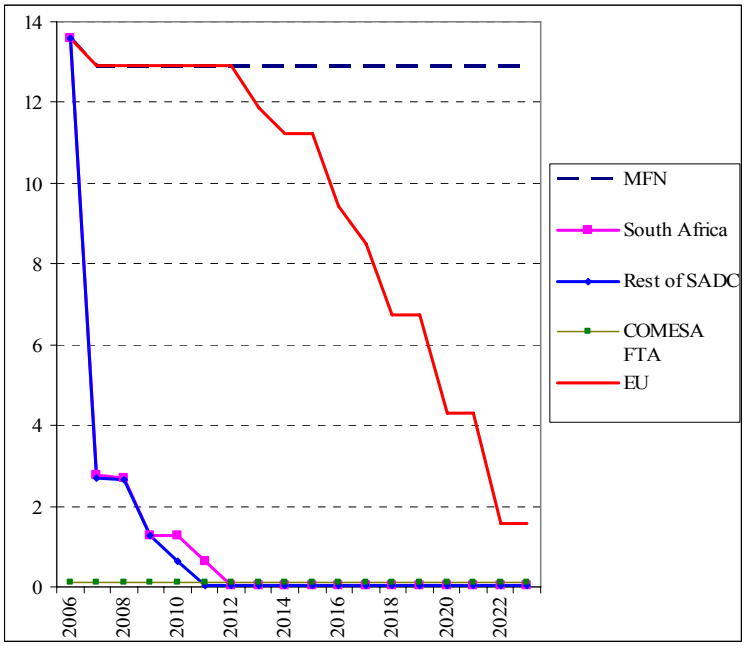
As a result. of the EPAs and other regional agreements, the taxation of imports will change significantly over time (Figure 6). The first implication will be to increase the complexity of the customs regime. This complexity entails costs. Vast and changing differences in the taxation of goods by country of origin provides incentives for fraud on the origin of countries and for corruption, which would further reduce revenues. Measures to fight against these frauds, such as rules of origin exist but they further add to the complexity of the trade regime and involve additional costs and obstacles to trade.

The second implication is trade diversion. Figure 6 shows that the gap between MFN tariff rate and the final tariff rate on EU imports will be large. Because of this large difference in import taxation, duty-free EU products can replace taxed imports from other suppliers. This trade diversion constitutes an indirect source of revenue losses.

[12] Other reasons for this increase are the possible volatility of imports (imports for 2007 instead of 2006), better precision in data (the calculation are now made at the HS-8 digits level), different data (previous estimates where using COMTRADE while in this section national customs data are used).

[13] For an estimate of the revenue losses from the SADC see Hallaert (2007b and 2008).

Figure 6. Madagascar – Simple average tariff on imports from various regions



Source: Author's calculation and Hallaert (2007a).
Note: Assuming no change in the MFN tariff schedule after July 2008.

Trade diversion is difficult to measure and depend on the reaction of EU exporters. EU exporters may not have the same capacity to supply the increased demand for all liberalized products. Moreover, trade diversion will depend on the degree of the competition in various sectors. In other terms, will EU exporters pass on to their customers in the ACP countries the decrease in tariff or will they be able to increase their export price and thus capture the tariff rent? Empirical evidence suggests that exporters capture, at least partially, the tariff rent (Olarreaga and Özden, 2005) but there is variability across importing countries and across industries.

The fiscal impact can be very different depending on the exporters reaction. If EU exporters increase their export prices, then trade diversion would be smaller. Revenue losses will also be smaller because the spillover of the tariff cut on revenues from indirect taxes such as VAT would be also more limited. However, these gains are likely to be marginal and illusory because two major gains from the EPAs would be sacrificed. First, the gains of the trade liberalization will not be passed to the ACP consumers nor to the ACP firms that have imported inputs. Second, the competition impact, a major source of potential growth from trade liberalization, would be muted and so would any additional revenue associated with economic growth.

Transition periods and exclusions are again key in assessing the potential for trade diversion. Section V has shown that, in the short term, the risks of trade diversion are limited because the tariff cuts are delayed and because tariff cuts will start in with the lowest tariffs rates.

In the case of Madagascar, exclusions from the EPAs will limit trade diversion. Although only 13 percent of products[14] are excluded from tariff cuts, they accounted for about 18 percent of EU imports in 2007 and 38 percent of total taxable imports. Thus potentially about 87 percent of products or 62 percent of the country's taxable imports are subject to some diversion. However, there is no risk of diversion for non-excluded MFN duty-free tariff lines,[15] and for products for which the EU is already the sole foreign supplier. Adding these products to the one excluded from tariff cuts, 28 percent of products or 49 percent of Madagascar's taxable imports should not suffer from trade diversion.

These numbers suggest that the potential for trade diversion is sizable and thus the potential second round effect on revenues. So what can be done to reduce its negative impact? Because trade diversion arises from the gap in taxation between various import sources, the most direct way to deal with it is to reduce this gap by cutting the MFN rate. This will bring the gains of a non-discriminatory trade liberalization and reduce welfare decreasing trade diversions and the cost of fraud. However revenue losses will increase.[16]

This additional revenue loss can be offset, at least partially. Non-discriminatory trade liberalization can be designed so that it does not have overly adverse consequences for revenue mobilization. Revenue will likely be least affected when the MFN tariff cut is accompanied by measures that eliminate or reduce incentives to evade or avoid taxes such as the elimination of prohibitive or very high tariffs, the streamlining in customs exemptions, the tariffication of quantitative restrictions (such as elimination of local exemptions and quantitative restrictions—see Hallaert, 2004 and Ebrill and al., 1999).

Moreover appropriate policy reforms will enhance the growth impact of the liberalization and thus the additional revenue from growth. Rebalancing the tax system from taxes on international trade to domestic taxes is a reform that the ACP countries should consider. It would help address the loss in fiscal revenues and it will help secure EU financial support. The increase in domestic tax rate is not necessarily large. Keck and Piermartini (2005) estimate that, in the SADC, a uniform increase in consumption tax of 1.1 to 1.5 percent would offset tariff revenue lost because of the EPAs. However, past experience suggests that in low- and middle-income countries, the rebalancing of the taxation was only partially successful. Baunsgaard and Keen (2005) found that low-income countries have "recovered at best, no more than about 30 cents of each lost dollar." Nonetheless, this is an option worth trying given the potential welfare cost of trade diversion and because the EU committed to significantly contribute to the absorption of "the net impact of tariff liberalization on government revenue, in the context of tax reforms" (European Commission, 2009b). As early

[14] One product is identified as one tariff lines.

[15] Unless MFN tariffs are increased in the future.

[16] Messerlin and Delpeuch (2007) suggest another strategy that would limit additional revenue losses while reducing the risks of trade diversion. The ACPs could cut substantially their bound tariffs, and modestly their applied tariffs. The cut in bound tariff would reduce the huge uncertainty in trading the ACPs and generate new trade opportunities, thus reducing the trade diversion potential.

as 2004, Poul Nielson, then EU Development Commissioner, clearly indicated that the tax reforms meant a tax rebalancing: "Where public budgets still heavily rely on customs duties, the local economy would benefit from reforms aimed at rationalizing the fiscal system, shifting from external to domestic taxation" (quoted in Nwobike, 2006).

VIII. CONCLUSION

Fiscal revenue losses are one of the main concerns triggered by the EPAs. A substantial literature has been devoted to assessing these potential losses. This paper uses the *actual* interim EPAs initialed by four African countries to estimate the revenue losses from the EPAs. This is a major advantage compared to the existing literature, which was making assumptions on what would be in the eventual agreement including on the products that would be excluded and ignored the impact of the transition period.

Despite the concerns, the static revenue losses appear rather limited and will take place over a long period of time. Using the method commonly used in the literature suggest that the customs duties revenues could drop by 8 percent in Rwanda and Tanzania up to 21 percent in Madagascar. However, this method underestimates revenue losses: using the *taxable* imports instead of *total* imports and taking into account the preferences granted to COMESA partners, Madagascar would loose about 30 percent of its revenues from customs duties. Moreover the spillover of tariff cuts on other taxes on imports would be significant so that total government revenues would drop by 5 percent.

However, this relatively small direct loss over a long transition period will be compounded by a second-round indirect losses associated stemming from trade diversion. Although, this paper does not measure the extent of trade diversion, it shows that 70 percent of products or half of Madagascar's imports could potentially suffer from trade diversion. But it also shows that trade diversion will be delayed because of the long transition period and because tariff cuts starts with the lower tariff rates.

Thus, it is not too late to implement reforms to address the potential revenue losses from the EPAs. ACP countries should take advantage of the transition period to liberalize their MFN tariff rates thus reducing the potential trade diversion effect. This would bring the gains from a non-discriminatory trade liberalization, reduce the trade diversion of the EPAs, and simplify the customs regime. The additional revenue losses from this strategy could be at least partly offset by a combination of reform of the trade regime and the rebalancing of the tax regime from taxes on imports to domestic taxes. Past experience suggests that the rebalancing is unlikely to recoup fully the revenue losses from trade liberalization but this is a reform that would be beneficial and appears necessary to secure some EU budget support.

REFERENCES

Baunsgaard, T. and M. Keen, 2005, *Tax Revenue and (or?) Trade Liberalization*. IMF Working Paper WP/05/112 (Washington, DC: IMF); available online at: http://www.imf.org/external/pubs/cat/longres.cfm?sk=18252.0.

Bilal, San and Vincent Roza, 2007, *Addressing the Fiscal Effects of an EPA* (Maastricht and Brussels: European Centre for Development Policy Management); www.ecdpm.org/Web_ECDPM/Web/Content/Contentbackup260308.nsf/0/b28d18bb26c8c451c125731a004bd108.

Bouët, Antoine, David Laborde, and Simon Mevel, 2007, *Searching for an Alternative to Economic Partnership Agreements*, Research Brief No. 10 (Washington, D.C.: IFPRI); available online at: http://www.ifpri.org/pubs/ib/rb10.asp.

Busse, Mathias, Axel Borrmann, and Harold Groβman, 2004, *The Impact of ACP/EU Economic Partnership Agreements on ECOWAS Countries: An Empirical Analysis of Trade and Budget Effects*. (Hamburg: Hamburg Institute of International Economics).

Cellule d'Analyse de Politique Economique (CAPE), 2002, *Impact des Accords de Partenariat Economique (APE) et les Scenarii des Ajustements préliminaires: Cas de l'UEMOA* (Cotonou), unpublished.

Drapper, Peter, 2007, *EU-Africa Trade Relations: The Political Economy of Economic Partnership Agreements*, Jan Tumlir Policy Essays No.2 (Brussels: European Center for International Political Economy); available online at: http://www.ecipe.org/publications/jan-tumlir-policy-essays/eu-africa-trade-relations-the-political-economy-of-economic-partnership-agreements.

Ebrill, Liam, Janet Stotsky, and Reint Gropp , 1999, *Revenue implications of trade liberalization*, IMF Occasional paper no. 180 (Washington DC: IMF).

European Commission, 1996, *Green Paper on the Relations Between the European Union and the ACP Countries on the Eve of the 21st Century: Challenges and Options for a New Partnership*, COM (96) 570 final, (Brussels: European Commission); available online at: http://aei.pitt.edu/1206/.

_____, 2007, *Update: Interim Economic Partnership Agreements* (Brussels: European Commission / Directorate General for Trade); available online at: http://trade.ec.europa.eu/doclib/html/136959.htm.

_____, 2009a, *Factsheet on the interim Economic Partnership Agreements —Eastern and Southern Africa (ESA)*, (Brussels: European Commission / Directorate General for Trade); available online at: http://ec.europa.eu/trade/issues/bilateral/regions/acp/pr270109_en.htm.

_____, 2009b, *Factsheet on the interim Economic Partnership Agreements —An Overview of the Interim Agreements*, (Brussels: European Commission / Directorate General for Trade); available online at: http://ec.europa.eu/trade/issues/bilateral/regions/acp/pr270109_en.htm.

Hallaert, Jean-Jacques, 2004, "Implications of Trade Liberalization on Government Revenue", *An OECD Tool Kit for Trade Policy Makers III – Trade in the Service of Growth* (Paris: OECD).

_____, 2006, "A History of Empirical Literature on the Relationship Between Trade and Growth," *Mondes en Développement*, No. 135, 2006/3; available online at: http://www.cairn.info/revue-mondes-en-developpement-2006-3-p-63.htm.

_____, 2007a, *Can Regional Integration Accelerate Development in Africa? CGE Model Simulations of the Impact of the SADC FTA on the Republic of Madagascar*, Working Paper WP/07/66 (Washington D.C.: IMF); available online at: http://www.imf.org/external/pubs/cat/longres.cfm?sk=20540.0.

_____, 2007b, "The Economic and Fiscal Impact of Joining the SADC FTA," *Republic of Madagascar: Selected Issues*, Country Report No. 07/239 (Washington D.C.: IMF); available online at: http://www.imf.org/external/pubs/cat/longres.cfm?sk=21184.0.

_____, 2008, *How Does a Domestic Tax Reform Affects Protection Against Imports? The Case of the Republic of Madagascar*, Working Paper WP/08/151 (Washington DC: IMF); available at: http://www.imf.org/external/pubs/cat/longres.cfm?sk=22022.0.

Keck and Piermartini, 2005, *The Economic Impact of EPAs in SADC Countries*, Staff Working Paper ERSD-2005-04 (Geneva: WTO).

Kowalski, Przemyslaw, 2005, *Impact of Changes in Tariffs on Developing Countries' Government Revenue*. OECD Trade Policy Working Paper No.18, TD/TC/WP(2004)29/FINAL (Paris: OECD); available online at: http://www.olis.oecd.org/olis/2004doc.nsf/LinkTo/td-tc-wp(2004)29-final.

Messerlin, Patrick A. and Claire Delpeuch, 2007, *EPAS: A Plan 'A+'* GEM working paper (Paris: Groupe d'Economie Mondiale de Sciences-Po); available online at: http://gem.sciences-po.fr/content/publications/trade_policy.html#regional.

Milner, Chris, Oliver. Morissey, and Andrew McKay, 2005, "Some Simple Analytics of the Trade and Welfare Effects of Economic Partnership Agreements," *Journal of African Economies*, vol. 14(3).

Nielsen, Lynge and Zouhon-Bi, Simplice G., 2007, *The Economic Community of West African States : fiscal revenue implications of the prospective economic partnership agreement with the European Union*, Policy Research Working Paper WPS 4266 (Washington, D.C.: World Bank); available online at: http://econ.worldbank.org/external/default/main?pagePK=64165259&theSitePK=469372&piPK=64165421&menuPK=64166093&entityID=000016406_20070621102844.

Nwobike, Justice C., 2006, "The Emerging Trade Regime Under the Cotonou Partnership Agreement: Its Human Rights Implications," *Journal of World Trade*, vol. 40(2).

Olarreaga, Marcelo and Çaglar Özden, 2005, "AGOA and Apparel: Who Captures the Tariff Rent in the Presence of Preferential Market Access?" *The World Economy*, Vol. 28 (1).

Perez, Romain, 2006, "Are the Economic Partnership Agreements a First-best Optimum for the African Caribbean Pacific Countries," *Journal of World Trade*, vol. 40(6).

_____ and Stephen Njuguna Karingi, 2007, "How to Balance the Outcomes of the Economic Partnership Agreements for Sub-Saharan African Countries?" *The World Economy*, vol. 30(12).

Rampulla, Cristina, Djibril Semega, and Charles Vellutini, 2007, *Accord de Partenariat Economique - Etude sur les recettes douanières et la fiscalité intérieure*; available at: www.inter-reseaux.org/IMG/pdf/Mali__Etude_recettes_douanieres.pdf.

Segura-Ubiergo, Alex, 2008, "Fiscal Implications of an Economic Partnership Agreement" *Senegal – Selected Issues*, IMF Country Report No. 08/221 (Washington, D.C.: International Monetary Fund); available online at: http://www.imf.org/external/pubs/cat/longres.cfm?sk=22147.0.

Tekere, M. and D. Ndlela, 2003, *Impact Assessment of Economic Partnership Agreements on Southern African Development Community and Preliminary Adjustment Scenarios*, Final Report (Harare: Trade and Development Studies Centre).

UNECA, 2005, *The Economic and Welfare Impacts of EU-Africa Economic partnership Agreements*, ATPC, Briefing Note No. 6 (Addis Ababa: UNECA); available online at: www.uneca.org/TRID/documents/Analytical%20Methodology%20for%20EPAs%20Study.pdf.