The Trade and Welfare Effects of Economic Partnership Agreements

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Table of Contents

Abbreviations

ACP = African, Caribbean, and Pacific

CARIFORUM = Caribbean Forum

CE = Consumption Effects

COMAC = the Economic and Monetary Community for Central Africa

COMESA = Common Market for Eastern and Southern Africa

EBA = Everything But Arms agreement

EC = European Community

ECOWAS = the Economic West Africa Society

EPA = Economic Partnership Agreement

EU = European Union

FTA = Free Trade Agreement

GATT = General Agreement on Tariffs and Trade

GDP = Gross Domestic Product

GSP = General System of Preferences

LDC = Least Developed Country

NTTB = Non Tariff Trade Barrier

NWE = Net Welfare Effect

RoO = Rules of Origin

ROW = Rest of the World

RTA = Regional Trade Agreement

SADC = the Southern African Development Community

SP = Sensitive Product

SSA = Sub Saharan Africa

TC = Trade Creation

TD = Trade Diversion

UK = United Kingdom

WTO = World Trade Organization

1. Introduction

Currently, the EU is negotiating Economic Partnership Agreements (EPAs) with African, Caribbean, and Pacific (ACP) regions and individual ACP countries. These EPAs will function as a framework for trade between the EU and the ACP countries. They are bilateral in nature, as opposed to the multilateral framework that is developed under the WTO. The real impact of the EPAs is unclear because the negotiating process is still on-going. The European Commission sees potentially large benefits for ACP countries that participate in the EPAs:

"*EPAs help create the right conditions for trade and investment. Together with development aid, that can deliver a number of benefits for ACP countries.*" [1]

The following research question will be answered in this thesis: 'What will be the trade and welfare effects of EPAs between the EU and ACP countries?'. This primary research question will be answered in three stages.

The first part describes the development of the EPA. The background and the history of the EU – ACP agreements will be discussed. The WTO has set up rules regarding the creation of regional trade agreements. These rules are important to determine if EPAs are legitimate Regional Trade Agreements. Trade theories and trade concepts that are applicable to EPAs are discussed in the second part. The theory of Regional Trade Agreements (RTA) is used to discuss the potential effects of the EPA in the short and the long run. Trade Creation and Trade Diversion (TC & TD) are central concepts to determine the effect and impact of the EPA. Trade creation refers to the replacement of relatively high-cost domestic production with lower-cost imports from the partner country while trade diversion refers to a switch in imports from a more efficient producer country in the rest of the world to a less efficient country. The Net Welfare Effect (NWE) is addressed in partial equilibrium models when discussing TC & TD. For reasons of simplification, TC and TD are determined using tariffs as the only border measures. However, Non-Tariff-Trade-Barriers (NTTB) may also be relevant. The final part of this section will assess the role of NTTB with respect to EPAs, and tries to incorporate NTTB in the trade model. In the third part, I will use the insights from the different trade

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[1] http://ec.europa.eu/trade/wider-agenda/development/economic-partnerships/ accessed on 01/06/2010

theories to discuss the impacts of EPAs, and distinguish what the impacts possibly are for the trade in sensitive and non-sensitive products both for the EU and the ACP regions. The final section of this thesis provides a conclusion and a discussion.

2. Economic Partnership Agreements

2.1 What is an Economic Partnership Agreement (EPA)?

An Economic Partnership Agreement (EPA) is a trade development framework between countries in Africa, the Caribbean and the Pacific (ACP) and the European Union. EPAs are asymmetrical trade agreements that foster sustainable economic and social development in the ACP countries and promote the gradual integration of ACP countries into the world economy. EPAs are asymmetrical because goods of ACP regions enter the EU duty and quota free while ACP regions maintain customs duties on sensitive products that are imported from the EU. The ACP Countries are divided in six regional blocks: the Economic West Africa Society (ECOWAS), the Economic and Monetary Community of Central Africa (CEMAC), the Common Market for Eastern and Southern Africa (COMESA), the Southern African Development Community (SADC), the Caribbean Forum (CARIFORUM) and the Pacific.

Liberalization should be achieved through a preliminary phase of economic and trade cooperation between the ACP countries and the EU to address supply-side constraints, enhance production capacities and competitiveness, and attract investment (European Commission, 2000). The preliminary phase is the transition period of lowering the barriers to trade between ACP countries and the EU. The transition period takes 10 to 15 years, depending on the region or country. These barriers don't include non-tariff trade barriers. After the transition period, there should be Free Trade between ACP regions and the EU, within the given rules of the WTO. Challenges for negotiations of EPAs include: (1) the timeframe for concluding full EPAs. A full EPA is an EPA in which there is free trade between the two parties; (2) Contentious issues in the interim agreements. These issues include the definition of substantially all trade, transitional periods, export taxes, national treatment, bilateral safeguards, infant industries, the non-execution clause[2] and

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[2] The provisions of the non-execution clause refer to Article 60 of the Vienna Convention on the Law of Treaties, which relates to the denunciation or the suspension of the application of a treaty in case of substantial violation. A substantial violation of a treaty is the violation of any provision essential for the realization of the goal of the treaty.

the MFN clause[3]; (3) The thematic scope of full EPAs; (4) Harmonization of the EPA process with regional integration initiatives in the ACP. First, ACP regional blocks have to conclude a full regional agreement, and harmonize commitments, before negotiating a full EPA with the EU; (5) Development support for EPAs; the EU as well as the ACP countries face challenges both to the amounts and to the effective use of resources, which the EU foresees to be provided under its joint Aid for Trade (AfT) strategy. (ECDPM, 2009)[4]

2.2 History of EU-ACP trade agreements

The EU and the ACP countries have negotiated reciprocal and non-reciprocal trade agreements with each other for over 40 years. Reciprocal trade generates reciprocity which means that countries grant each other equally advantageous trade preferences. With non-reciprocal trade, a country unilaterally offers trade concessions to one or more other country. There are two systems of non-reciprocal trade preferences concerning the ACP countries, namely, (1) specific preferences towards ACP countries and (2) the General System of Preferences (GSP) schemes. The "Everything but Arms" (EBA) agreement is a direct extension of the GSP, (European Community, 2001a). Reciprocal trade, based on WTO rules, was introduced in the recent development and negotiation of EPAs.

The ACP preferences date back to 1957, when former colonies of France received preferential treatment. The first formal agreement between the EU and the ACP countries was established in 1975 under the first Lomé Convention. Fifteen European states and seventeen ACP states signed the first Lomé Convention on 28 February 1975. The Lomé Convention intended to increase international aid and trade between the ACP countries and the EU. Since the first Convention in 1975 there were three more Lomé Conventions; 1979, 1984, and 1990. The main provisions of the first Lomé Convention were: (1) Free access without reciprocity to the European market for goods exported from the ACP; (2) A stabilization fund to compensate the ACP for reductions in the receipts from the

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[3] MFN clause is in general a provision that requires that one country grants to another country a treatment no less favorable than the treatment that it grants to any third country.
[4] European Centre for Development policy management, Briefing note, State of EPA negotiations, May 2009

exports of their principal basic products; (3) Financial aid for the ACP counties; (4) Industrial and technological cooperation, to reduce ACP states' disadvantages; (5) Joint institutions to supervise and help implementation of the agreement, (Gruhn, 1976).

Lomé II & III created tangible obligations for a group of 75 states from Western Europe and the third World through a treaty. Lomé III represents a change from Lomé II. At the most fundamental level, participation has broadened. There are now 64 ACP participants and the Republic of Greece is participating as a new member of the European Economic Community (Gamble, 1986).

In 1990, just after the fourth Lomé Convention, an overhaul of the Lomé Convention took place, which led to the Cotonou Agreement of 23 June 2000. The Cotonou Agreement replaced the non-reciprocal trade preferences with regional free trade agreements. However, a closer examination of the Cotonou negotiations demonstrate that the forces for change yielded to the forces for inertia, and that the ability of the negotiators to rise to the challenges facing EU-ACP relations was compromised by the complexities of international negotiations (Forwood, 2001).

Like the Lomé Conventions, the GSP scheme, including the EBA, consists of a series of unilateral concessions offered to developing countries. The EU was the first to implement such a scheme in 1971. 146 countries and 25 territories, including all the LDC's, benefit from the GSP scheme of the EU (European Community, 2001b). The scheme operates at two levels: the general system provides tariff preferences based on objectives of economic development and special incentive clauses regarding sustainable development. Tariff preferences in the general system depend on the sensitivity of the product.

In addition to providing trade preferences to ACP countries under the Cotonou Agreement, the EU now provides preferences to LDCs, including those in Sub-Saharan Africa (SSA), under its EBA Initiative adopted in 2001. The EBA Initiative has complicated the EPA process by creating different trading environments and negotiating incentives for the 33 LDCs and 13 non-LDCs in SSA eligible for EPAs (Hinkle, 2005). The EBA initiative is part of the EU's General System of Preferences and is compatible with the WTO's enabling clause as it grants special preferences to permissible groupings of countries, the LDC's. In contrast to the EU's broader GSP, which is revised every

three years, the EBA initiative runs for an unlimited period and is not subject to periodic reviews. Market access is thus more secure under the EBA Initiative and is presumably more likely to encourage investment in new exports for this reason.

In conclusion, the EU has been very active in establishing trade agreements with developing countries and regions. In 2007, seven interim agreements and a Caribbean EPA were negotiated and signed. All establish free-trade areas (FTAs) for goods between the EU and various ACP countries that are compatible with the provisions of the General Agreement on Tariffs and Trade (GATT) Article XXIV[5] and in the case of the Caribbean EPA, a service agreement compatible with the provisions of GATT Article 5. In total, thirty-six of the seventy-seven ACP countries have concluded an interim agreement or EPA with the EU: ten LDCs and twenty-six non-LDCs. Among the remaining ACP countries thirty-one LDCs benefit from duty and quota-free access to the EU under the GSP "Everything but Arms" arrangements. The remaining ten non-LDCs are eligible for the standard GSP. Negotiations have been aimed at establishing a full regional EPA, including a large range of trade in goods, services and trade–related areas, to replace the interim agreements in January 2008 (Fontagné, 2011).

2.3 EPA & WTO

The GATT, the WTO's predecessor, was set up after the Second World War and became the only multilateral instrument governing international trade from 1948 until the WTO was established in 1995.[6] During the 1990s a number of complaints by Latin American exporters and by the United States made it clear that EU treatment of the ACP was incompatible with the basic principles of the WTO, specifically, the Most Favored Nation principle (MFN). The unilateral discrimination of the EU in favor of the ACP has been outlawed by the WTO (Meyn, 2008). The GATT in general forbids preferential trade agreements, as a violation of the MFN principle, but allows them if they lead to free trade between the agreeing countries (Krugman, 2008). Moreover, GATT's article XXIV allows for the negotiation of customs unions or free trade areas that offer preferential

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[5] http://www.wto.org/english/tratop_e/region_e/regatt_e.htm#gatt

[6] http://www.wto.org/english/thewto_e/whatis_e/inbrief_e/inbr01_e.htm

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'[7].

Because of GATT rules, the EU had to change its trade policy towards the ACP countries. In the Doha (2001) ministerial conference, the EU negotiated a waiver, which essentially meant that the preferential trade arrangement under Cotonou would come to an end in December 2007. This meant that the EU had to switch from preferential to reciprocal trade by 2007.

According to Article 24 of the GATT, the desire of most ACP countries to maintain tariffs for protectionist and tax reasons can be fulfilled to some extent. Following WTO regulations 90% of the trade lines and trade volume must be free of tariffs, meaning that sensitive products cannot cover more than 10% of traded volumes (Fontagné, 2010). Fully negotiated EPAs have to include a list with sensitive and non-sensitive products; the sensitive and non-sensitive products are not designated yet. Each ACP region has to decide which commodities will be classified as sensitive and non-sensitive. The EU can be a competitor in trading commodities for one or more countries in an ACP region. ACP imported goods which compete with the EU, are excluded to be classified as sensitive. This should protect regional trade within ACP blocks (Morrissey, 2008).

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[7] GATT Article XXIV, paragraph 8 (b)

3. Theory

3.1 Trade theory and Trade concepts in general

This section will outline the conceptual framework that I will use to analyze the impact of EPAs on participating countries. EPA's are Regional Trade Agreements between the EU and 6 blocks of ACP countries. The concepts of trade effects and welfare effects are of importance when discussing Regional Trade Agreements. Trade Creation and Trade Diversion are discussed in relation with the Net Welfare Effect to assess the direct impact of the EPA. This analysis is extended by introducing Non-Tariff Trade Barriers as a tariff percentage.

The concept of comparative advantage lies at the heart of international trade theory. A country has a comparative advantage in producing a good if the opportunity cost of producing that good, in terms of other goods, is lower in that country than it is in other countries. Economists use the term opportunity cost to describe these trade-offs. The opportunity cost of good A in terms of good B is the amount of good B that could have been produced with the resources used to produce a given amount of good A (Krugman, 2009). If a country has a comparative advantage in the production of good A, the country will specialize in good A production and trade good A in international markets for good B (Seck, 2010).

Partial equilibrium methods are used to analyze trade creation, trade diversion and the net welfare effect. The estimate of a partial equilibrium model can be interpreted as proportional effects relative to initial trade volumes and revenues. Consequently, the results are useful for policy-makers and negotiators. The analysis of a partial equilibrium model can be conducted at a high level of product disaggregation for any country, which is useful in assessing the impact of alternative criteria to identify sensitive products (Milner, 2010). Welfare analysis based on partial equilibrium models looks at the effect on consumers, producers and government budget.

3.2 Regional Trade Agreement (RTA)

An RTA is a group of two or more countries or other territories that reduce or eliminate trade barriers for each other but leave higher barriers for outsiders.

The World Bank distinguishes four basic forms of RTAs: Free Trade Agreement (FTA), Customs Union (CU), Common Market (CM) and Economic Union. The main difference between Customs Unions (CUs) and FTAs is that member countries are allowed to choose different external tariff rates under FTAs, whereas they must choose the same external tariffs rates under CUs. To establish which goods get the tariff preference (thus preventing tariff fraud) these agreements need 'Rules of Origin' (RoO)[8]. Countries have wider discretion and hence can negotiate with other countries more easily under FTAs, which is one of the main reasons why countries prefer FTAs over CUs (Furusawa, 2007).

The Common Market and the Economic Union have both a deeper form of integration. The Common Market incorporates the free movement of capital and labor as well as goods and services and hence, the degree of harmonization of domestic policies between the member states is high. The Economic Union has the deepest form of integration and leads to a greater loss of economic and political sovereignty. The EU and ACP countries have chosen to negotiate FTAs over CUs, the easy negotiation of EPAs is important for both trading partners.

3.3 Trade Creation, Trade Diversion (TC & TD) and the Net Welfare Effect (NWE)

Trade Creation, Trade Diversion, and the Net Welfare Effect are derived in a partial equilibrium model. However, when a free trade area is formed, presumably many markets and multiple countries are affected, not just one. Thus to analyze the aggregate effects of a FTA (Free Trade Agreement), one would need to sum up the effects across markets and across countries. In order to clarify the notion of trade creation, trade diversion and the Net Welfare Effect, I used a partial equilibrium model which considers

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[8] In a free trade agreement, one of the critical issues concerns "rules of origin." Without rules of origin, each imported commodity would enter through the country with the lowest tariff on that commodity and be traded freely within the rest of the Free Trade Area. (NBER, 1997)

the welfare effects of two countries that have become partners in a CU (a CU is somewhat different than the EPA as an FTA form (section 3.2)). The examples I use are meant to explain the terms TC, TD and the NWE.

3.3.1 Trade creation

Trade creation occurs when new trade arises between member countries because of the reduction in internal trade barriers (Kendal, 2007). Figure 3.1 represents demand and supply of aubergines in oil in the United Kingdom (UK). P is the price axis of aubergines in oil and Q is the total volume axis (quantity of aubergines in oil). The demand curve of the UK is negatively sloped (D_{uk}) and the supply curve of the UK is positively sloped (S_{uk}). This is a case where the UK is importing aubergines in oil from France before and after the joining of the European Community. Figure 3.1 shows that before joining the European Community (EC) the UK had to pay the French price plus the tariff, P_1. At P_1 the UK produced Q_2, consumed Q_1, and therefore imported $Q_1 - Q_2$. With the removal of the tariff the price falls to P_2. Consumption increases to Q_3 and domestic production falls to Q_4. Imports have therefore increased to $Q_3 - Q_4$.
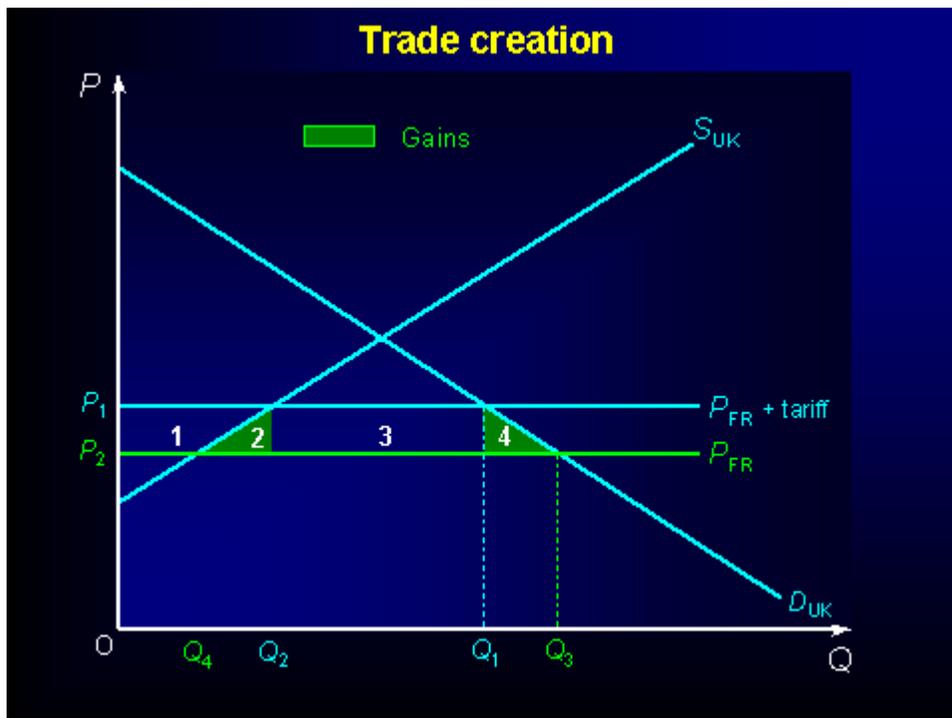

Figure 3.1 Trade Creation

Through comparative advantage and the removal of the tariff, the UK import more aubergines in oil then in the initial situation. When both countries went into the EC an FTA arised, the UK removed its tariffs on imports of aubergines in oil from France. Then the domestic price level in the UK fell until it was equal to the french price. The increase in imports caused by the removal of tariffs on imports can be called import creation or trade creation.

A free trade area creates trade that would not have existed otherwise. Because of the formation of the EC, it was possible to import products into the UK from France without the initial tariff. As a result, supply occurred from a more efficient producer of the product which lowered the price of aubergines in oil for consumers in the UK. The demand of aubergines in oil was raised and its price decreased in the UK, so did the UK welfare. Trade creation will always increase a country's national welfare.

Figure 3.1 also demonstrate the welfare gain. The NWE in the UK can be calculated based on changes in producer and consumer surplus, and government budget. There has been an increase in consumer surplus equal to areas $1 + 2 + 3 + 4$. On the other hand, there has been a reduction in the producer surplus of UK aubergines in oil producers equal to area 1 and a loss in government tariff revenues equal to area 3. This means there will always be a net gain of $2 + 4$ when trade creation occurs as a result of a country joining a trading bloc.

3.3.2 Trade diversion

Trade diversion means that trade is diverted from a more efficient exporter towards a less efficient one by the formation of a regional trade agreement. Trade diversion occurs when imports from a low-cost outside country are replaced by imports from a higher-cost partner country because the partner has preferential access to the market and does not have to pay tariffs (Kendal, 2007). Figure 3.2 shows a case of trade diversion between the UK and New Zealand. Assume the most efficient producer of lamb in the world is New Zealand; a country outside of the EC. Assume that before membership of the EC the UK could import lamb tariff-free from any country, it would therefore import lamb from New

Zealand rather than the EC. In figure 3.2, before joining the EC the UK was importing lamb from New Zealand at price P_3. The UK consumes at price P_3, so will import 100% of their demand of lamb (where the P_3 line crosses the negatively sloped demand line of lamb in the UK (D_{uk}).
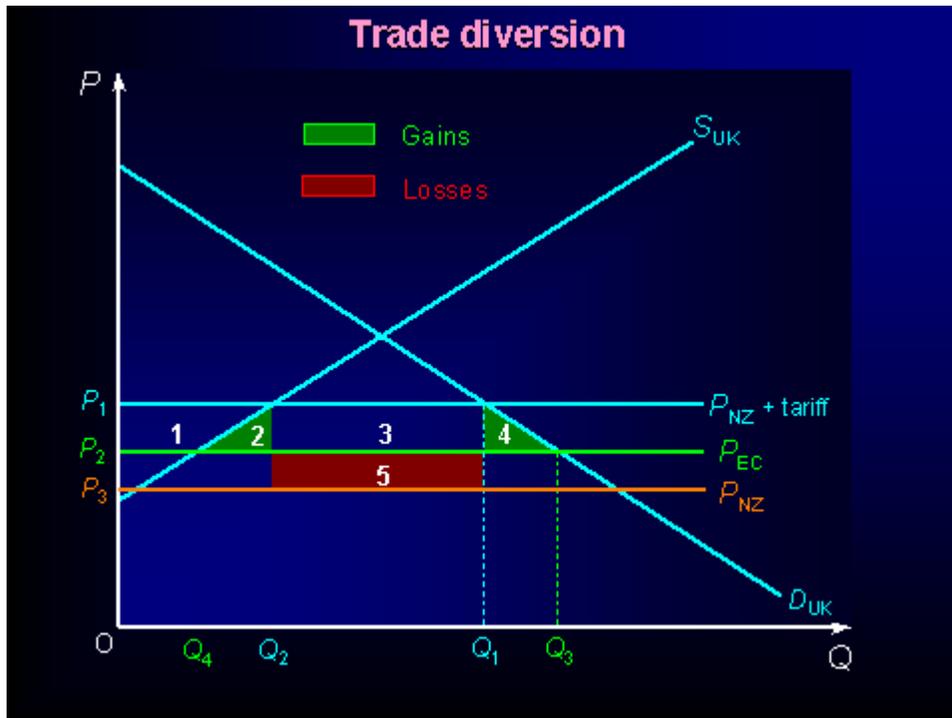

Figure 3.2 Trade Diversion

On joining the EC it was now possible to consume the EC tariff free price of P_2 (this is above the New Zealand tariff free price of P_3). The new tariff of the UK with respect to New Zealand raised (P_1-P_3). After joining the EC, EC lamb has become more expensive then lamb imported from New Zealand lamb. Consumption is therefore switched to the higher cost EC lamb. Overall figure 3.2 demonstrates a welfare loss. The UK producers gain; in the initial situation they produced O, while they produced in the new situation Q_4 for the home market. The UK consumers loose (area 5); in the initial situation they consumed the quantity demanded (where P_3 crossed D_{uk}) with price P_3, and in the new situation they consumed the quantity demanded (Q_3) with price P_2.

Because of trade diversion, figure 3.2 generates a national welfare loss (area 5). In the first place a trade diversion effect occurs; the UK joined the EC, a tariff has to be paid to import lamb from ROW producers and the price of lamb rose to P_1. Therefore, the EC

lamb became cheaper to import, which could be seen as a trade creation effect. The welfare gain (area 1 + 2 + 4) and welfare losses (area 5) stipulate the NWE (in the new situation when the UK is part of the EC). If area 5 is larger than area 1, 2 and 4, the NWE will be negative. If area 1, 2 and 4 is larger than area 5, the NWE will be positive.

3.4 Non-Tariff Trade Barriers (NTTB)

Because of declining tariff trade barriers between EU and ACP countries, ACP export to Europe are expected to raise. EU tariff barriers are gone and through trade diversion effects (*3.3.2*) ACP countries can enter the EU market with prices (lower than the export prices of ROW and EU producers). NTTBs could exist (as an extra cost barrier) which would raise the ACP production price (if implementation measures had to be taken). If ACP producers (par example) do not satisfy to the leading high quality and food security measures in Europe, maybe the ACP export growth is not as large as forecasted.

Non-Tariff Barriers to Trade are non-tax restrictions on trade, and encompass a wide range of measures such as quotas, voluntary export restraints, non-automatic import authorization, variable import levies and sanitary and phytosanitary measures (Coughlin, 1989). Seck (2010), has studied the presence of NTTBs for agricultural products within ECOWAS. He found tangible evidence of some trade barriers – but these barriers appear to be no higher, and are likely lower, than in the rest of the world. These barriers include transportation costs and bribes, which are measured only within an ACP region. A survey among EU-based companies identified the most restrictive NTTBs faced by developing countries in 2004 as: non-harmonisation of standards, labelling rules and regulations, stringent sanitary and phytosanitary measures, pesticide residues measures, health and hygiene conditions, testing and certification, restrictions on market access, bans on certain imports, and subsidies.Technical barriers to trade were relatively the largest group of NTTBs (OECD, 2005). Technical barriers to trade are divided in Technical Regulations and Standards, Testing and Certification Arrangements, and Marking, labelling and Packaging Requirements. Technical regulations and mandated product standards are important for food and agricultural trade as these can set minimum quality

characteristics of food products, such as the size, color and weight or require specific labeling of content and format (OECD, 2011).

4. Application

4.1 Impact EPA on both EU and ACP countries

The insights of TC, TD, and the NWE will be used to discuss the impact of EPAs on EU and ACP countries. The short (until 2015) and the long run (until 2022) effects of the EPA are described in the literature as well as the effects of possible technical barriers. EPA's are implemented with a timescale of fifteen years. Their impact will occur gradually in two stages. The first stage (or the short run) will end in 2015. In this period tariff losses will be kept to a minimum as a consequence of limited tariff cuts. In the long run all protection rates on non-sensitive products will be brought to zero (Fontagné, 2008). The question that this section tries to answer is: "What is the impact of the EPA on EU/ ACP trade, welfare, and NTTBs both for the EU and the ACP countries?" Special attention will be given to agricultural and sensitive products. A literature review of the existing empirical studies is used to answer this question. Furthermore, I use a graphical representation to discuss sensitive and non-sensitive products, and to discuss possible outcomes of the EPA when implementing NTTBs.

4.1.1 Effects for the EU

Karingi (2005) analyzed welfare changes in 7 regions. He distinguished 7 world regions among which the EU15 and the SSA. Karingi made a division of 3 implementation states of the EPA: (1) the reciprocity scenario assessess the EPAs implications in the case of SSA reciprocating on the favourable tariffs it is currently receiving from the EU. (2) The integration scenario is investigating deeper regional integration within Africa. The rationale behind this scenario is that African countries have a lack of supply capacity to meet the EU demands immediately after the implementation of the EPA. This scenario presents an option where the SSA countries liberalize trade among themselves without immediate reciprocation on the preferences granted by the EU. The African countries have to build their capacities so they will be able to compete with the EU producers and exporters. (3) The FTA scenario investigates the situation in which all the trade barriers between the SSA and EU in both directions

are eliminated. The EU15 will gain (4 % of GDP) under the reciprocity scenario, will loose (less than 1 % of GDP) under the integration scenario and gains (8% of GDP) under the FTA scenario. EPAs differ from the FTA scenario because of the sensitive product conditions. Under these conditions, it is allowed to liberalize 90 % (not the 100 % in the FTA case scenario) of the volume traded. For the EU the gain (8% of GDP) will probably be lower because of the difference in conditions between EPAs and the FTA case scenario. Many studies are analyzing the effects of TC, TD and NWE only for ACP regions and/or ACP countries. The studies about TC, TD and NWE of the EU are underrepresented. Karingi (2005) shows that the EU will gain under a fully implemented FTA.

4.1.2 Effects for ACP regions

Fontagné (2008) analyzed the consequences for ACP imports from the EU: 20% of the liberalization of ACP countries in relation to EU imports will be achieved in 2015, while full access to ACP markets will be provided to the EU market in 2022. Accordingly, an average 7 % increase in ACP imports from the EU is forecasted at the 2015 time horizon (short run), and 17.7% in 2022 (long run)(Fontagné, 2010). Furthermore, Fontagné (2008) forecasts a 10.7% increase in the volume of ACP exports to the EU in 2022 under an EPA scenario.

In the EPA scenario (long run), livestock exports are expected to double. Exports of agricultural products (excluding meat and cotton) and textile products are forecasted to increase by 40 per cent. The EPAs will provide a temporary advantage in terms of market access, particularly for the livestock sector. A relatively large share of the export products of the ACP countries are primary industry related, which includes agricultural products. (Morrissey, 2009).

Milner (2011) has done research on the impact of EPA on ACP imports. His research describes the differences and impact of the EPA for 34 ACP countries. In table 4.1 the welfare estimates of the 34 ACP countries are reflections of CE, TC and TD and are expressed as a percentage of GDP for the years 2005 and 2006. The welfare effects depend on the structure of imports. The overall effect of cutting tariffs will depend on the

combination of both reducing tariffs and the increase in imports as a result of falling import prices. The TC & CE (regional imports displaced by more efficient EU producers) give an increase (average of 34 countries is 0.005 of GDP) in CE for the ACP countries. The TD & CE effects will translate into a reduction of ACP tariff revenues (average of 34 countries is -0.0008 of GDP) in CE for the ACP countries. The welfare effect of the whole sample is positive but very small (average of 34 countries is 0.004 of GDP). The outcome is that two third of the ACP countries will gain and one third will lose when the EPA is fully implemented (Milner, 2011).

Table 4.1.1"Full EPA" trade effects (as % GDP)

Country	CE	TC&CE	TD&CE	Welfare
All countries (34)	**0.010**	**0.001**	**–0.008**	**0.004**
Cameroon	0.007	0.005	–0.004	0.008
Cote d'Ivoire	0.013	0.001	–0.004	0.011
Ghana	0.009	0.001	–0.010	0.001
Mauritius	0.020	0.003	–0.010	0.014
Kenya	0.007	0.002	–0.005	0.004
Tanzania	0.005	0.003	–0.009	–0.001
Uganda	0.001	0.002	–0.004	–0.001
Average (34)	**0.008**	**0.005**	**–0.008**	**0.004**
Gainers (22)	0.012	0.006	–0.008	0.010
Losers (12)	0.002	0.002	–0.009	–0.005
LDCs (13)	0.004	0.004	–0.004	0.004
Non-LDCs (21)	0.011	0.005	–0.011	0.005

Source: Derived from Table A3.1 in Morrissey and Zgovu (2011).

Notes table 4.1.1*: Figures report consumption effects (CE) only, trade creation (TC) from African, Caribbean and Pacific with CE and trade diversion (TD) from the rest of the world with CE. "All countries" is combined total and "average" is sample mean (un-weighted), all numbers rounded.

Tekere and Ndlela (2003) show that non-EU countries (with the exception of African countries) currently exporting into the SADC region will lose trade to EU producers and exporters. They find significant trade diversion that not only affects the non-EU countries but also other African countries that are not part of the SADC. In the case of COMESA, the same outcome is found: imports from within the region will be substituted by imports coming from the EU leading to reductions in regional production and economic activity.

4.2 Impact of H1 and H2 sensitive product scenarios

EU experts are using two approaches for subdividing sensitive products: the H1 scenario which gives priority to the protection of agricultural products[9], and the H2 scenario which has the objective to reduce tariff revenue losses at the regional level[10].

Table 1 represents ACP average tariffs on EU products at the end of the EPA process for the two scenarios and for all ACP regions. The ACP average tariffs are higher for all regions under H2 compared to H1, except for the Pacific region (Fontagné, 2010).

Table 4.2.1 ACP Average Tariffs on EU Products at the End of EPA Process (Per cent)

Regions	Reference Situation	EPA H1-2022	EPA H2-2022
ECOWAS	8.1	1.5	3.6
CEMAC+	13.5	3.8	6.4
COMESA	13.1	4.8	6.7
SADC	7.1	2.9	4.4
CARIFORUM	9.5	3.1	4.1
Pacific	12.0	12.0	11.9

Source: (Fontagné, 2010) Authors' calculations using MAcMAp-v2[11].

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[9] H1 scenario: in this scenario, priority for protection is given to agricultural products. Agricultural products are selected first for exclusion, following which, the most sensitive manufactured products, identified here as those contributing the most to tariff revenues, are excluded, up to the overall level of residual protection assumed to be acceptable.

[10] H2 scenario: in this scenario, the objective is to reduce tariff revenue losses at regional level. A discrete choice model was built to ensure that products were chosen in order to minimise tariff losses, at the initial trade level, subject to two constraints: share of excluded trade should not exceed the amount allowed and number of products in the regional list should not be above 20 % of total tariff lines.

[11] Market Access Map (*MAcMap*) is a database developed jointly by ITC (UNCTAD-WTO, Geneva)

The reference situation in table 4.2.1 is the initial situation when the EPA came into force in 2008. Tariffs under the H1 and H2 are much lower than in the reference situation. On average ACP countries are forecast to lose 70 per cent of tariff revenues on EU imports in the long run, under the scenario H1. Yet imports from other regions of the world will continue to provide a part of ACP tariff revenues. Thus, when tariff revenue losses are calculated on total ACP imports, losses are limited to 26 per cent on average in the long run under H1, and 19 per cent under H2 (Fontagné, 2008). These outcome shows that the income revenue losses in the long run will be limited for the ACP countries.

The EU and ACP regions have not classified traded commodities as sensitive or non-sensitive products yet. Figure 4.1 shows the possible impact of one commodity when classified as a sensitive – or non-sensitive in an EU – ACP EPA from the perspective of a home country member of the ACP (denoted *B*) among an EU country (denoted *A*). The EU country is assumed to have an upward sloping supply curve. The ACP country is assumed to have a downward sloping demand curve. There are initially two extra-
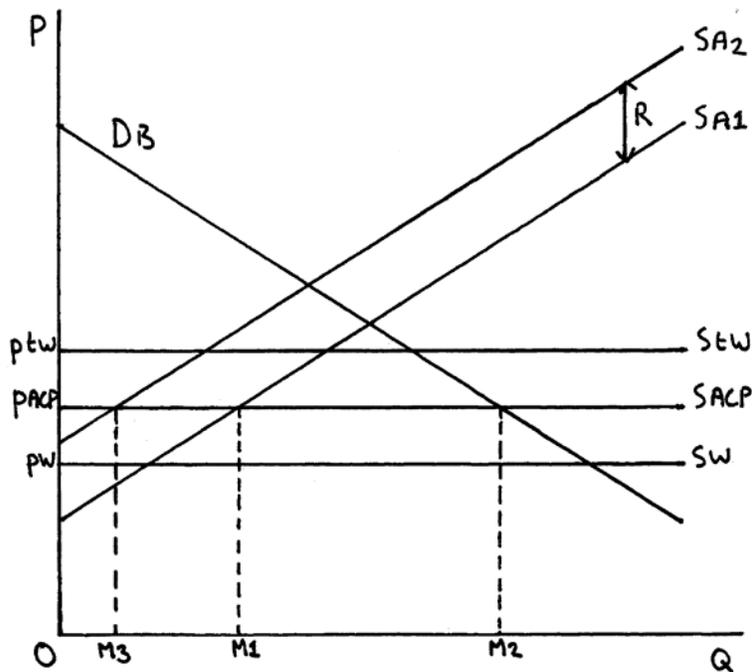

Figure 4.1 The possible impact of one commodity when classified as a sensitive – or non-sensitive in an EU – ACP EPA.

regional suppliers, the ACP and the Rest of the World (W), both with elastic supply curves. For a given product: D_B represents the home country's demand for imports, S_1A is the upward sloping supply curve of a given traded commodity without a sensitivity classification (trade of this commodity is fully liberalized between ACP region and EU) and S_2A is the upward sloping supply curve after implementing a sensitivity import tariff (R) (of the same commodity). S_{ACP} and S_W are respective supply export functions at constant cost (prices P_{ACP} and P_W). There is a non-discriminatory (ad valorem) tariff (t) on extra-regional imports, where $P_tW = P_W (1 + T)$. Applying the tariff (P_W to P_{tw}), the constant supply curve of extra-regional imports of the World (S_W) moves to the constant supply curve S_tW (after implementing the EPA).

When a trade commodity between the ACP importing country and the EU exporting country will be classified as non-sensitive the supply curve S_{A1} is applicable. Total demand of the ACP country will be OM_2; the ACP country import a quantity of OM_1 from the EU and import a quantity of OM_1 - OM_2 from other ACP countries. When a traded commodity between the ACP importing country and the EU exporting country will be classified as sensitive the supply curve S_{A2} is applicable. Total demand of the ACP country will be OM_2; the ACP country import a quantity of OM_3 from the EU and import a quantity of OM_3 - OM_2 from other ACP countries. In both situations (with sensitive and non-sensitive products) the rest of the World can not export to the ACP country because the non-discriminatory (ad valorem) is applicable. The effect of appointing a commodity as sensitive or non-sensitive is that intra-regional ACP countries export more quantity of the given commodity(OM_1 – OM_3) to the ACP country's home market (*B*). Measuring a commodity as sensitive can be a reason to protect intra-regional ACP producers against lower cost (EU) producers (of the same commodity). Intra-regional ACP exporters will export more, on the contrary EU exporters are export less (of the quantity of the given commodity) to the ACP country's home market.

4.3 Impact of the NTTBs

Over the last two decades, private standards have emerged as a mode of market governance in many industrialized countries (OECD, 2005; Henson, 2010). Research has

been done to the existence of NTTBs between Europe and ACP countries. Henson (2010) described some concerns about the impact of private standards in developing countries. One of these concerns is the legitimacy of private modes of governance in areas that have been in public regulation. Another concern is the ability of developing countries to compete in export value chains governed by agri-food standards. Widespread claims exist that developing countries are unable to meet the increasingly food safety measures and other requirements of European markets (Martinez, 2004).

A percentage of NTTB costs can figurely be derivated and implemented in a figure to show what effect NTTB costs can have. figure 4.2 shows a constant percentage NTTB costs (N) can have. Figure 4.2 illustrates the effect of NTTB costs in an EU – ACP EPA from the perspective of a home country member (denoted B) of the EU among an ACP country (denoted A). The ACP country is assumed to have an upward sloping supply curve. There are initially two extra-regional suppliers, the EU and the Rest of the World (W), both with elastic supply curves. For a given product: D_B represents the home country's demand for imports, S_A represents the partner's (upward sloping) supply curve of export (to B). S_{EU} and S_W are respective supply export functions at constant cost (prices P_{EU} and P_W). S_1A is the upward sloping supply curve before implementing the constant NTTB cost and S_2A is the upward sloping supply curve after implementing the constant NTTB cost. Because of the change in supply curve (S_1A to S_2A) the supply curve moves (to above) and the whole supply curve of country A became higher than the constant supply curve of the EU (S_{eu}).
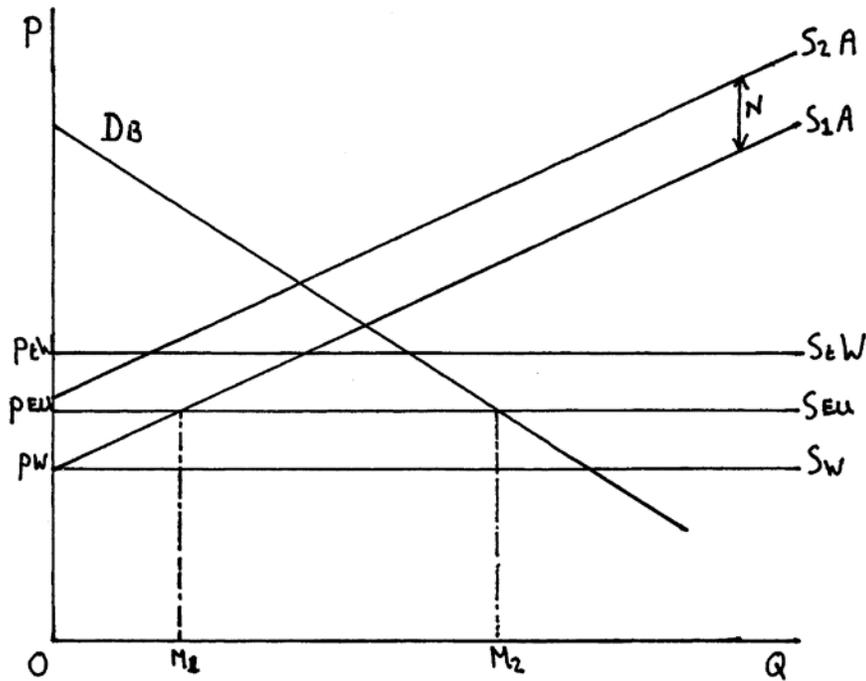
Figure 4.2 Effect of NTTB costs in an EU – ACP EPA.

There is a non-discriminatory (ad valorem) tariff (t) on extra-regional imports, where $P_tW = P_W (1 + T)$. Applying the tariff (P_W to P_{tW}), the constant supply curve of extra-regional imports of the World (S_W) moves to the constant supply curve S_tW. After the implementation of the tariff the demand of B will be OM_2 in total, with OM_1 coming from A and M_1M_2 from the EU. Applying cost N for country A, the upward sloping supply curve moves to above. Because of the change in the supply function (S_1A to S_2A) the ACP looses its price advantage with respect to the EU (OM_1). The ACP initial export of quantity M_1 expires and the EU would not import this product from the ACP country.

When the NTTB measures are converted in costs, price of ACP export products will raise. The export to Europe would decline or in the worst scenario, it would disappear.

5. Conclusion & Discussion

Countries in the EU and the ACP import and export many goods. Trade regulation by the WTO creates a harmonized system of free trade on a reciprocal base. Because of old non-reciprocal trade the EU had to reform its trade policy with ACP countries: negotiations about EPAs with ACP regions started. With Trade Creation, Trade Diversion, and Net Welfare Effect some preliminary trade and welfare impacts can be analyzed. NTTBs have another interface with the EPA; EU requirements on hygiene, quality, certification, and technical criteria are not embedded in the production of commodities in ACP regions. To meet the requirements to export products to Europe, investments in ACP production processes are necessary. EPAs include edge conditions like extra investments to improve sanitary measures, and set up stable law systems. The effects of these EU investments can influence the initial situation as well as the future situation. These investments can help ACP producers to produce their products following EU regulations and meet the obligatory EU hygiene regulations. Extra costs (because of NTTBs) of ACP production can decrease and ACP producers can compete better compared to EU producers. The implication and implementation of these investments are not negotiated yet.

A partial equilibrium model is used to measure trade creation, trade diversion, the welfare effect and effects of non-tariff trade barriers. Trade creation has always a positive effect and trade diversion has mostly a negative effect. The NWE is theoretically TC – TD; the NWE is positive is there is a change in consumer surplus, a change in producer surplus and a change in government budget. Altogether this is a positive outcome for the given country. Per commodity costs of NTTBs are variable; effects can be made visible by implementing them as a constant cost. By implementing NTTBs, a reduction could occur of the NWE in Europe and the ACP countries. The ignorance of the percentage NTTB costs is a matter of concern. Which specific products will be subject to NTTB? More research is needed to show the effects of the NTTBs.

Sensitive products have to be negotiated yet. General studies and separate cases try to show what the possible impacts could be of identifying sensitive products. Two main scenarios are developed: the H1 scenario is developed to protect agricultural products and

the H2 scenario is developed to maximize income revenue for ACP countries. ACP regions have to choose between higher import revenues versus a protection of their agricultural industry. Negotiation over sensitive products between the EU and the ACP regions has not started yet. The ACP regions themselves have to negotiate what sensitive products they need to protect their markets: 10 % of the total volume traded can be classified as sensitive. For ACP countries and the EU, the real outcome of this process on the EPAs is unknown. Further research will show the validity of current forecasts about possible outcomes concerning sensitive products.

Research of the effects on the EU is limited; many studies have been done about the effects of the implementation of an EPA for ACP regions and countries. However, it could also be useful to examine the effects of the EPA on the EU instead of examining the effects on ACP regions and countries.

The EPA is a replacement of the earlier trade treaties between the EU and ACP countries. I think they look quite similar; the difference is that the EPAs satisfy to WTO rules contrary to the earlier EU – ACP treaties. Negotiations about subjects like sensitive products, and extra EU investments are still going on. I doubt the timeframe (full implementation of EPAs in 2022) will be reached (because the negotiations have not been concluded yet). Negotiations will take more time before the EPA can be fully implemented. I think that through the NTTBs the barrier is still too high for ACP countries to export to Europe (more commodities/quantity); in the present and in the future.

The EPA has given me a clear view about the negotiation process between the EU and the ACP countries. I have made visible (with TC, TD and NWE) what possible effects an EPA could have for (1) the trade effects for both Europe and ACP countries in the short and long run. (2) What the impact of sensitive and non-sensitive products could be for two scenarios. (3) When implementing NTTB cost in relation with TC, TD and NWE. In reality these modelling forecasts can have deviations. Take notice of the outcome and after further research has been done, the non answered questions will hopefully be answered.

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