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Assessing the Economic Impacts of an Economic Partnership Agreement on Nigeria

Soamiely Andriamananjara
Paul Brenton
Jan Erik von Uexküll
Peter Walkenhorst

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Abstract

This study discusses potential economic implications for Nigeria of an Economic Partnership Agreement with the European Union. It uses the World Bank's Tariff Reform Impact Simulation Tool to assess the effects of preferential tariff liberalization with respect to the European Union. The results suggest that the impact of an Economic Partnership Agreement on total imports into Nigeria will be slight. This is in part because the Agreement will likely allow the most protected sectors to be excluded from liberalization, and also because where substantial tariffs are involved much of the increase in imports from the European Union will occur at the expense of other suppliers of imports. It is this trade diversion, arising from the discriminatory nature of the EPA, which generates a negative welfare impact of the tariff reforms. One way for Nigeria to limit these losses is to pursue non-preferential trade liberalization before implementing an EPA. The paper looks at the large number of import bans in Nigeria and argues that the positive impact on welfare of removing these import bans is likely to be substantial. Their removal would undermine a major reason for cross border smuggling and pave the way for a return to normal regional trade flows. The paper shows how an Economic Partnership Agreement presents an opportunity for accelerating the reforms that are needed to support a strategy to increase regional and global trade integration. Such an agreement is more likely to have positive and significant impacts when integrated into a comprehensive strategy toward competitiveness and alleviation of the supply constraints that have stifled the impact of previous trade agreements. Key issues that should be addressed include liberalization and regulatory strengthening of services sectors to ensure that all firms in Nigeria have access to efficiently produced backbone services and initiatives to address the country's poor trade logistics performance.

This paper—a product of the Africa Technical Families, Africa Region—is part of a larger effort to analyze trade agreements and trade policy issues. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at sandriamananjara@worldbank.org and pbrenton@worldbank.org.

Assessing the Economic Impacts of an Economic Partnership Agreement on Nigeria

Soamiely Andriamananjara, Paul Brenton,
Jan Erik von Uexküll and Peter Walkenhorst[1]

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1. Introduction

The 2000 Cotonou agreement between the European Union and 79 African, Caribbean, and Pacific (ACP) countries required the parties to negotiate a new set of trade agreements (referred to as Economic Partnership Agreements – EPAs) between the EU and ACP regional groupings. Negotiations started in 2002 and were supposed to be concluded by the end of 2007, when a waiver on inconsistencies between the Cotonou regime and WTO regulations expired. The negotiations have taken place in a context in which most ACP countries have seen a very weak supply response to the non-reciprocal preferences of the previous agreements. The objective of the negotiations has therefore been to achieve development friendly trade agreements that are consistent with WTO rules on reciprocal free trade areas (FTAs).

For the large majority of ACP economies, the EPA negotiations were not concluded by the end of 2007 as planned. The Caribbean is the only region that has agreed to a comprehensive EPA. Many African countries have initialed 'interim EPAs' under which the EU provides immediate tariff-free and quota-free access for 100 percent of its imports from the ACP partner, with short transition periods for rice and sugar and improved rules of origin for key products such as fish and clothing. The ACP-signatories are typically required to provide tariff free access to their own markets for at least 80 percent of their imports from the EU within a transition period, usually of 15 years. Nigeria is among the countries that have so far opted not to initial an interim deal and, as a non-LDC, has lost favorable EU market access under the Cotonou Agreement and has reverted to the less generous GSP.[2]

The objective of this study is to examine the potential implications of an EPA between the European Union and Nigeria. Given the large share of oil in its export bundle, the bulk of the adjustment for Nigeria as a result of an EPA would probably not come from improved access to the EU market (although more liberal rules of origin may lead to significant benefits for some sectors and stimulate export diversification). Indeed, more than 95 percent of Nigeria's exports already enter the European Union under zero MFN tariffs, for which there can be no preferences. Given Nigeria's relatively high tariffs, the main direct impact would come on the import side,

[2] Least-developed countries retain wide-ranging duty-free access under the EU's 'Everything but Arms' initiative. The other non-LDCs in the ECOWAS region, Côte d'Ivoire and Ghana, signed interim EPAs with the EU in December 2007.

from the preferential dismantling of Nigerian tariffs. Hence, the main focus of this study is on the potential impact of Nigeria removing its tariffs on imports from the EU. Nevertheless, a discussion of the potential impacts of improved access to the EU market under an EPA in comparison to degree of access afforded by the GSP is provided in Appendix A.

Discussions concerning the economic impact of a potential EPA with the EU have to date tended to center on the preferential trade liberalization that ACP countries will have to implement. According to economic theory, the overall welfare impact of such discriminatory trade reform is ambiguous so that careful empirical analysis is required to identify potential outcomes and highlight policy options for ameliorating negative effects. While on the one hand, the reduction of tariffs against a particular trading partner may lead to lower import prices[3] and higher consumption, the resulting discrimination amongst trading partners may shift demand away from more efficient non-preferential to less efficient preferential producers, resulting in a more than proportional loss of tariff revenues. In many countries discussions concerning an EPA have taken place in the absence of such an empirical assessment that is crafted to the economic reality of the countries concerned. This paper presents analysis to address this issue using a partial equilibrium model of trade that takes key features of Nigeria's trade regime into account.

This study updates and builds on previous analyses by using more recent and relevant trade and protection data, especially with respect to Nigeria's applied tariff by taking into account exemptions granted. [4] The aim is not to produce a precise quantification of the likely impact of the policy changes, but rather to provide orders of magnitude of the different short-term effects and the chain of causation producing them. Moreover, the paper also discusses two important characteristics of the Nigerian economy that influence trade outcomes: (i) the pervasiveness of non-tariff barriers, including outright import bans, and (ii) the prevalence of unrecorded informal trade (smuggling).

[3] A dominant supplier from a preferential partner may be able to maintain the local price after the agreement and increase its profits, capturing for itself the forgone tariff revenues.

[4] For instance, Busse and Grossmann (2004) and Karingi et. al (2005) use partial equilibrium models to evaluate the EPA impacts. Raihan et al (2007) and Sandrey et al (2007) use a multi-region computable general equilibrium model. Enterplan (2005) uses both a partial equilibrium model and a dynamic computable general equilibrium model.

It is important that the EPA discussion should not be undertaken in isolation from the range of other trade and development policy issues facing Nigeria. For example, Nigeria is facing opportunities to pursue more effective regional integration, including the adoption of the ECOWAS common external tariff. While an analysis of the likely consequence of the complete implementation of the ECOWAS CET is beyond the scope of the present study, the current analysis shows that sequencing an EPA with reform that reduces the level of external protection in Nigeria can lead to considerably different estimated EPA impacts. Finally, the scope of the EPA goes well beyond reciprocal tariff reduction to cover issues such as trade facilitation and standards, services and investment. In this context, it is important that an EPA should not be seen as a goal in itself but rather it should be consistent with the attainment of clearly defined broader trade and development objectives.

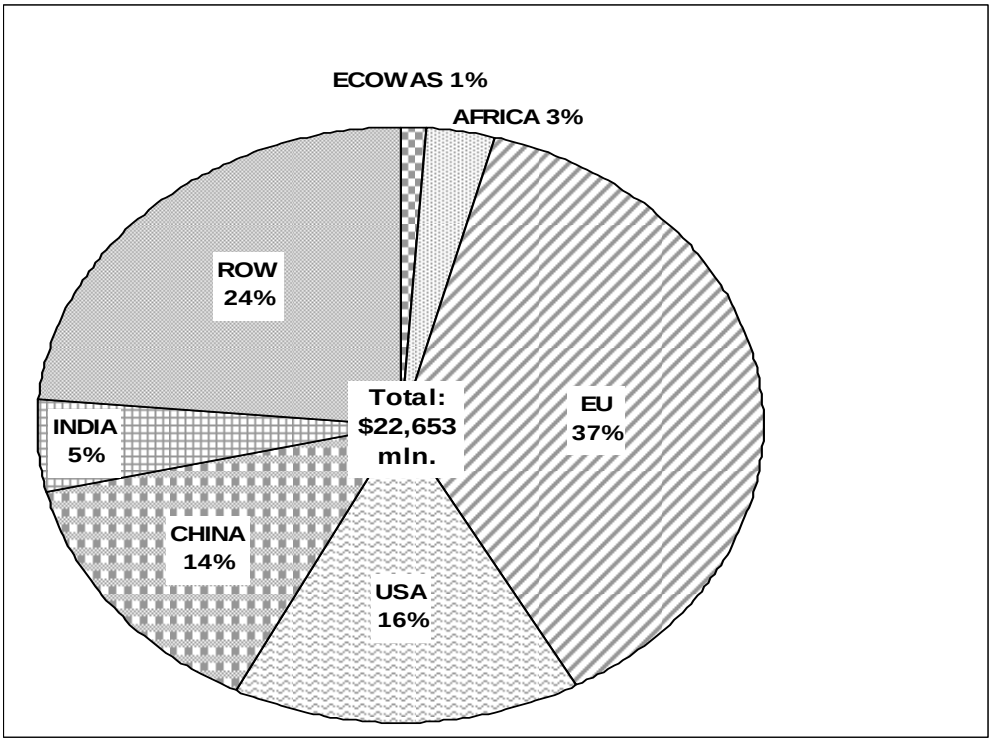
The paper is organized as follows. Section 2 describes the structure of Nigeria's imports, with special attention to those from the EU. Section 3 discusses the nature of Nigeria's tariffs and other trade barriers. Section 4 contains the main part of the paper and presents the findings from the analysis carried out with the tariff simulation tool TRIST to provide estimates of the potential effects of preferential import liberalization with respect to the EU. Finally, Section 5 concludes by discussing the issue of how an EPA could be leveraged to address key constraints to integration into regional and global markets. It also discusses potential complementary measures for boosting "supply response" and making the resulting EPA a tool for development.

2. Structure of Nigerian Imports

Nigeria imported almost US$23 billion worth of goods in 2006 according to official figures from Customs. Of those imports, US$9 billion or 38 percent came from the European Union (Figure 1). This suggests that preferential trade liberalization with the EU could have a significant impact on the Nigerian economy. However, while the EU is still the largest import supplier to Nigeria, its share has been steadily decreasing over the last two decades (from around 60 percent in the late eighties) as more efficient Asian suppliers gained market shares over their European counterparts. Indeed, starting from around 1 percent in the mid-eighties, the market shares of China and India rose, respectively, to 14 percent and 5 percent in 2006. The United States was the second largest source in 2006, accounting for 16 percent of Nigeria's merchandise imports.

In contrast, official imports from its ECOWAS partners remain very small at around 1 percent. It is important to stress that the official data reported here do not account for the purportedly large amount of unrecorded informal trade (smuggling) between Nigeria and its regional neighbors. This issue will be addressed later in this section.

Figure 1. Structure of Nigeria's imports, by source



Source: Computed by authors based on TRIST database

Table 1 reports the 20 most important product categories (according to 3-digit ISIC classification) imported by Nigeria from the EU. Nigeria's imports from the EU tend to be concentrated with the largest 7 ISIC categories (out of 72 traded sectors) accounting for more than half of all imports from the EU. Basic chemicals constitute the largest category. Other important categories include capital intensive sectors such as general and special purpose machinery, motor vehicles, and television and radio equipment. Nigeria also imports substantial amounts of basic iron and steel, as well as food products (dairy and processed foods) from the EU.

Table 1. Imports from EU: top 20 sectors by value

Sector (ISIC-3 digits)	Imports from EU [million US$]	Total imports [million US$]	EU Share
241 - Basic Chemicals	789	2,394	33.0
291 - General purpose machinery	783	1,529	51.2
292 - Special Purpose Machinery	692	2,148	32.2
341 - Motor Vehicles	593	1,527	38.8
323 - TV & radio receivers, sound or video recording apparatus	513	644	79.7
271 - Basic Iron and Steel	486	1,315	37.0
152 - Dairy Products	475	658	72.2
242 - Other Chemical Products	456	1,110	41.1
311 - Electric Motors, Generators and Transformers	362	777	46.6
011 - Growing of crops and horticulture	343	1,436	23.9
151 - Production, Processing and Preservation of Meat, Fish, Fruit, Vegetables, Oils and Fats	330	952	34.7
272 - Basic Precious and Non-ferrous Metals	290	577	50.3
232 - Refined petroleum products	260	560	46.4
322 - TV & radio transmitters and apparatus for line telephony	232	505	45.9
154 - Other Food Products	229	430	53.3
351 - Building and repairing of ships and boats	208	372	55.9
210 - Paper and Paper Products	191	522	36.6
269 - Non-metallic Mineral Products n.e.c.	157	540	29.1
300 - office, accounting and computing machine	120	260	46.2
281 - Structural Metal Products, Tanks, Reservoirs etc	117	341	34.3
Total all sectors	8,579	22,653	37.9

Source: Computed by authors based on TRIST database

For many of the sectors shown in Table 1, EU suppliers have a dominant position. There are also a number of other sectors where imports are smaller but the EU share is high, such as, furniture. Preferential liberalization in sectors in which the EU has a substantial initial market share may lead to more trade creation than trade diversion, if the high initial share indicates that the EU is a competitive/efficient source in those sectors. However, in the case of some food products, such as dairy, it could reflect EU production and export subsidies. On the other hand, if there are only a few firms behind such a dominant position then the tariff reduction may not be passed on to consumers but the rents may be appropriated by the EU companies. Categories with significant import values and important EU market shares are television and radio equipment (US$512 million from EU accounting for almost 80 percent of total imports), dairy products (US$475

million; 72 percent), and general purpose machinery (US$782 million; 51 percent). These sectors are thus likely to be important in determining the overall impact of the EPA.

The official data summarized here do not capture unrecorded informal trade (smuggling)—an important characteristic of the Nigerian economy. Smuggled imports generally enter Nigeria through three routes: from bordering ECOWAS countries (Benin and Niger), from bordering CEMAC countries (Cameroon and Chad), and directly through customs fraud at Nigeria's own ports and airports. The available evidence indicates that the ECOWAS route is the most important one.[5] Raballand and Mjekiqi (2008) estimate that up to US$4 billion of cargo enters Nigeria's market unofficially from the Cotonou port alone, which would represent a substantial portion of Nigeria's total imports. Smuggling activities tend to be concentrated on a limited number of products which are highly protected or banned in Nigeria: cigarettes, textiles and clothing, used goods (cars, tires and clothes), bulk food items (rice, wheat, sugar), and processed foods (tomato paste, condensed milk) (World Bank, forthcoming). Given that smuggling in a sector is determined primarily by the degree of Nigeria's trade restrictiveness[6], an EPA may significantly alter the incentives to smuggle. A preferential tariff reduction on imports from the EU would reduce the arbitrage opportunity currently available to import EU products into low-tariff Benin (for example) before re-exporting them to Nigeria. The removal of import bans and a non discriminatory "most-favored-nation" (MFN) reduction of tariffs - decreasing the tariff differential between Nigeria and its neighbors – would go even further in reducing smuggling.

3. Nigerian Trade Policy

One of the key characteristics of the Nigerian import regime is the frequency of NTBs, including outright prohibitions (or import bans). While tariffs have declined somewhat since 2002, the number of products subject to import bans has gone up significantly, with increases in 2001,

[5] Recent comparison of wholesale prices in Nigeria and three neighbouring countries (Benin, Niger, and Togo) reveal that, for a number of highly protected commodities (rice, sugar, cigarette, prepared/preserved tomatoes, and concentrated unsweetened milk), the difference in prices is considerably less than one might expect from the difference in tariff protection. This suggests that there is a significant level of smuggling in those commodities, and that the smuggling is effectively eroding the actual protective power of the high tariff rate.

[6] For example, about 90 percent of Benin's poultry imports are re-exported informally to Nigeria, while almost all frozen fish imports are intended for the domestic market. There are no restrictions on fish imports into Nigeria whereas frozen poultry is banned. Thus, Benin tends to re-export goods that are most heavily protected in Nigeria. Source: Chapter 3, World Bank (Forthcoming)

2003 and 2004 (IMF 2005 and World Bank 2008). Nigeria maintains an import prohibition list that contained 46 categories, in 2007—see Appendix C. The list is long and covers a wide range of products (1086 (HS8) tariff lines, 185 of which are partial bans (with some exceptions to the ban)), whose only common trait is that they compete with domestic Nigerian manufacturing or agricultural industries.

Table 2. Sectoral prevalence of import bans in Nigeria

hscodes	Description	fully banned tariff lines	partially banned tariff lines	total tariff lines	Banned (fully & partially) / total tariff lines
01-05	Animal & Animal Products	53	0	233	22.7%
06-15	Vegetable Products	103	0	335	30.7%
16-24	Foodstuffs	56	8	217	29.5%
25-27	Mineral Products	2	1	160	1.9%
28-38	Chemicals & Allied Industries	5	32	836	4.4%
39-40	Plastics / Rubbers	12	4	255	6.3%
41-43	Raw Hides, Skins, Leather, & Furs	0	29	92	31.5%
44-49	Wood & Wood Products	15	1	254	6.3%
50-63	Textiles	542	1	874	62.1%
64-67	Footwear / Headgear	2	75	105	73.3%
68-71	Stone / Glass	1	0	211	0.5%
72-83	Metals	0	7	619	1.1%
84-85	Machinery / Electrical	45	0	897	5.0%
86-89	Transportation	61	0	236	25.8%
90-97	Miscellaneous	4	27	389	8.0%
	Total	901	185	5713	19.0%

Source: Computed by authors

The extent to which these bans are enforced varies and exemptions sometimes are granted. In fact, it is estimated that 8 percent (US$1.8 billion) of official total imports in 2006 were in tariff lines that carry a complete ban and another 1 percent in tariff lines with partial bans. The tariff lines with a complete ban account for 12.4 percent (14 percent with partial bans) of total tariff revenue. At the sector level, bans are most prominent for the textile and footwear sectors, where 62% and 73% respectively of tariff lines are banned (Table 2). A number of other sectors (animal products, food, hides and skins, vegetable products, transportation) also have a high prevalence of banned tariff lines, typically around 30%. It is important to note that many of the products subject to import bans, such as food and clothing, are substantial components of the consumption

bundle of the poor. Hence, it can be anticipated that relaxation of these import bans would have a positive impact on poverty in Nigeria.

Beyond the prohibition list, Nigeria maintains high tariffs in a number of sectors. The Nigerian tariff schedule was simplified in 2005, and was partially aligned with the ECOWAS Common External Tariff (CET), with the maximum rate lowered, but only to 50 percent, well above the ECOWAS proposed ceiling of 20 percent.[7] A number of products including rice, sugar, cigarettes, plastics, tires, steel, household appliances, and vehicles are currently subject to 50 percent tariffs. If liberalized preferentially with the EU only, these high tariffs are very likely to lead to welfare-reducing trade diversion.

Table 3. Distribution of tariffs applied to Imports from EU

	Imports from EU (mln. US$)		Share of EU imports	
Tariff category defined by:	statutory tariff rate	applied tariff rate	statutory tariff rate	applied tariff rate
0	1,725	1,853	20.1%	21.6%
0 <= 5%	4,079	3,542	47.5%	41.3%
5%<= 10%	1,541	1,898	18.0%	22.1%
10%<=20%	961	1,116	11.2%	13.0%
>20%	273	170	3.2%	2.0%

Source: Computed by authors based on TRIST model and database

Similar to many other countries, Nigeria's trade regime uses a number of preferences and exemptions that are crucial for determining the incentive structure of trade, but are unfortunately often overlooked by analysts due to constraints of data availability and analytical approach. TRIST, though, makes it possible to work with tariff line data as received from Customs and reflect the prevalence of preferences and exemptions. Once the various duty exemptions and preferential rates are taken into account, Nigeria's weighted average actually applied tariff rate was 7.5 percent in 2006, according to tariff data collected from Nigerian Customs.[8] Two percent (US$ 170 million) of Nigerian imports from the EU were assessed a tariff rate of more

[7] Nigeria has recently demanded that ECOWAS institute a 5th tariff band with a rate of 50 per cent as a condition for participating in the CET. Subsequently it has been suggested that the maximum rate could be 30-35%. More recently (on September 23, 2008), the Nigerian government approved a new more liberal trade and tariff regime. A large number of imports that were previously in the 50 percent tariff bracket was moved to the 0,5,10,20 CET range and the 35 percent fifth band. Also, there are some indications that the list of import bans might be curtailed.

[8] If the various tariff exemptions were not taken into account, the trade weighted average "statutory" rate was 9 percent in 2006.

than 20 percent (Table 3). Another 13 percent (US$1 billion) had an applied tariff of above 10 percent. These would be the imports with the most likely potential to increase following an EPA that completely removes all tariffs on imports from EU. However, this also suggests that if the EPA only requires Nigeria to liberalize 80 percent of its imports from the EU, all products with tariffs higher that 10 percent could be excluded from the liberalization schedule. Some of the most "protected" import categories are reported in Table 4. As expected the categories with the highest protection tend to register small import flows. Categories with significant import values and high applied tariffs include non-metallic mineral products from EU facing an average applied tariff rate of 16 percent, miscellaneous food products (14 percent), motor vehicles (11 percent), and processed foods (11 percent).

4. Simulated Impact of Preferential Tariff Liberalization

The preferential liberalization of Nigerian tariffs with respect to the EU will likely decrease domestic prices and increase Nigeria's imports from the EU. But at the same time, it can displace imports from other (potentially more efficient) sources and result in losses in tariff revenues and welfare. The use of a rigorous analytical framework is useful to assess these different (competing) effects and estimate the net overall impact. This study uses the Tariff Reform Impact Simulation Tool (TRIST) developed by the World Bank's International Trade Department to quantify the potential impact of an EPA on Nigeria. Box 1 provides a brief description of the simulation tool.

The simulations are undertaken at the product (tariff line) level. By its comparative static nature, the model allows for comparison of two states of the world: one in which the base values of policy instruments (such as tariffs) are unchanged, and another in which these measures are exogenously changed or shocked, to reflect the policies that are being studied. Concretely, the experiment compares the Nigerian economy in two different environments: one in which an EPA has not yet occurred, and another where the tariffs against imports from the EU have been removed. The model is partial equilibrium and so does not take into account any intra-sectoral linkages and given lack of suitable data we are unable to include substitutability between imports

and domestic output.[9] The extent to which imports from the EU are actually competing with locally produced products is an important empirical issue that requires further attention.

Box 1. The TRIST Simulation Tool

The Tariff Reform Impact Simulation Tool (TRIST) comprises a partial equilibrium modeling framework and a database containing detailed information on imports and revenues from tariffs, excises and VAT levied at the border. The data for Nigeria were collected directly from the Nigerian Customs authority, at the most detailed level of product (HS 10 digit) and source country aggregation for the most recent year available which is 2006. The data are used in the TRIST framework at the most detailed and disaggregated tariff line level. However, for ease of presentation, the results presented here are aggregated to the 3-digit ISIC classification level.

TRIST simulates the response of imports and other variables to changes in the tariff rate. The underlying model assumes imperfect substitution between different import sources (different varieties)—that is, goods imported from different countries, although similar, are imperfect substitutes (shirts from the EU are an imperfect substitute for shirts from China). Within this so called Armington assumption the representative Nigerian consumer determines the level of imports of a good through a two-stage process. First, given an import price index, she chooses the level of total spending/consumption on a "composite import good," (say imported shirts). The relationship between changes in the import price index and the impact on total imports is determined by a given "demand elasticity." Then, within this composite good, she allocates spending among the different sources of the good, depending on the relative price of each variety (say, choose relatively more shirts from the EU and less from China). The extent of the between-source allocative response to a change in the relative price is determined by the "substitution elasticity." The base elasticities used in this exercise were collected from the GTAP database. However, as the true values for the exporter substitution and demand elasticities are subject to some uncertainty, a sensitivity analysis is conducted for a broad range of parameter values (see Appendix B).

In TRIST, a preferential liberalization of a given tariff affects not only the overall price level of the good but also the relative prices of the different varieties. Through the import demand elasticity and the substitution elasticity, it will lead to changes in the aggregate level of spending on that good, as well as, changes in the composition of the sourcing of that good. Both channels affect bilateral trade flows. The framework estimates the potential impact of a given tariff reform scenario on both source specific and total imports, at the product level. It also computes the changes in the overall applied tariff rate as well as the change in tax revenue collected at the border (tariff, VAT and excise). Tariff revenue can be affected directly though changes in tariff rates, but also indirectly through the resulting import response (which alters the tax base). Revenues from VAT and excise taxes are also affected by the change in imports and by a change in their tax base because they are levied on the duty inclusive value of imports. TRIST can also report the impact of the policy change on consumer welfare (or consumer surplus), which represents the extra welfare that the consumer obtains from consuming her original import bundle at the lower new price, and from the extra imports she can afford at the new price. The net welfare impact of a preferential liberalization is then determined by the difference between the loss in tariff revenues and the gain in consumer surplus.

Source: Brenton, Hoppe and von Uexküll (2007) and http://go.worldbank.org/2P8FPC0760

[9] Thus, TRIST is better at capturing the short-term sectoral effects of a given policy experiment, than at making predictions about the economy-wide medium term impact.

Table 4 Top 20 Most Protected Import Categories, by average applied tariffs

Sector (ISIC-3 digits)	Imports from EU ($mill)	Share of Imports from EU	Average Tariff Applied on Imports from EU
160 - Tobacco Products	9,163	0.11%	43.3%
153 - Grain Mill Products, Starch Products, and Prepared Animal Feeds	62,004	0.72%	22.0%
293 - Domestic Appliances n.e.c.	26,764	0.31%	20.4%
333 - watches and clocks	230	0.00%	20.2%
202 - Products of Wood, Cork, Straw and Plaiting Materials	15,085	0.18%	17.8%
50 - Fishing and related activities	3,469	0.04%	16.8%
252 - Plastics Products	69,678	0.81%	16.0%
141 - Quarrying of Stone, Sand and Clay	8,066	0.09%	15.9%
269 - Non-metallic Mineral Products n.e.c.	156,562	1.82%	15.8%
261 - Glass and Glass Products	15,618	0.18%	15.2%
154 - Other Food Products	229,174	2.67%	14.1%
289 - Other Fabricated Metal Products;	89,140	1.04%	13.9%
192 - Footwear	2,355	0.03%	12.8%
172 - Other Textiles	9,492	0.11%	12.5%
201 - Sawmilling and Planing of Wood	165	0.00%	12.1%
251 - Rubber Products	65,176	0.76%	11.6%
191 - Tanning and Dressing of Leather; Luggage, Handbags etc	1,273	0.01%	11.5%
341 - Motor Vehicles	593,116	6.91%	11.3%
369 - Manufacturing n.e.c.	12,087	0.14%	11.3%
151 - Production, Processing and Preservation of Meat, Fish, Fruit,	329,790	3.84%	10.7%

Source: Computed by authors based on TRIST model and database

In the absence of detailed information regarding the likely nature of an EPA between Nigeria and the EU, assumptions have to be made when designing the policy experiment to be simulated. Given that compatibility with Article 24 of the GATT only requires a given FTA to cover "substantially all trade" and following the precedence of the already signed "interim EPA," the central policy experiment reported in this study assumes that 20 percent of Nigeria's imports from the EU are excluded from the EPA liberalization schedule, this is the working assumption that the EU has adopted in its negotiations for free trade agreements. For simplicity, it is conjectured that the sensitive (or exclusion) list is chosen according to degree of protection that each product (imported from the EU) receives.[10] This would provide large room to maneuver for the Nigerian government and implies that a large fraction of imports from the EU would not be liberalized for a number of sectors (Table 5). For instance, the tobacco sector would be

[10] Concretely, products are ranked by collected tariff (on imports from the EU) and then starting from the top of the list, products are excluded until a cumulative import value of 20% is reached. This criterion should by no means be interpreted as a policy recommendation for the definition of a sensitive product list. In practice, the definition of sensitive products should depend on a number of other factors, including the poverty, employment and environmental impact of liberalization.

totally exempt from liberalization while more than 80 percent of the footwear, leather, wood and non-metallic mineral product sectors could be excluded from the EPA.

Table 5. Sectoral shares of excluded products from a 80 percent EPA liberalization, US$ million and percent

	Total imports from the EU	Imports from the EU Excluded from EPA Liberalization	Share of excluded products in sector imports
333 - watches and clocks	0.23	0.23	100.0%
160 - Tobacco Products	9.16	9.16	100.0%
192 – Footwear	2.35	2.34	99.6%
191 - Tanning and Dressing of Leather; Luggage, Handbags, Saddlery etc	1.27	1.23	96.7%
50 - Fishing and related activities	3.47	3.20	92.3%
202 - Products of Wood, Cork, Straw and Plaiting Materials	15.08	13.63	90.3%
261 - Glass and Glass Products	15.62	13.99	89.6%
293 - Domestic Appliances n.e.c.	26.76	23.85	89.1%
269 - Non-metallic Mineral Products n.e.c.	156.56	134.31	85.8%
343 - Parts and Accessories for Motor Vehicles and Their Engines	39.21	33.51	85.5%
172 - Other Textiles	9.49	7.04	74.1%
141 – Quarrying of Stone, Sand and Clay	8.07	5.83	72.2%
289 - Other Fabricated Metal Products; Metal Working Service Activities	89.14	63.18	70.9%
153 - Grain Mill Products, Starch Products, and Prepared Animal Feeds	62.00	38.52	62.1%
252 – Plastics Products	69.68	42.64	61.2%
272 - Basic Precious and Non-ferrous Metals	289.76	12.54	4.3%
142 - Mining and Quarrying n.e.c.	8.64	0.36	4.2%
241 - Basic Chemicals	789.38	28.95	3.7%
221 – Publishing	81.77	2.73	3.3%
12 - Farming of Animals	0.40	0.01	3.0%
361 – Furniture	13.10	0.25	1.9%
291 – general purpose machinery	782.55	14.10	1.8%
20 - Forestry, logging and related activities	3.52	0.06	1.7%
11 – Growing of crops and horticulture	343.22	5.26	1.5%
321 – electronic valves and tubes and other electronic components	8.34	0.12	1.4%
331 - medical appliances and instruments and appliances etc	65.62	0.85	1.3%
101 - Mining and Agglomeration of Hard Coal	0.39	0.00	1.1%
292 - Special Purpose Machinery	692.20	5.14	0.7%
351 - Building and repairing of ships and boats	207.75	1.21	0.6%
322 – Television and radio transmitters and apparatus for line telephony	232.00	0.01	0.0%

Source: Computed by authors based on TRIST database

At the aggregate level, Nigerian imports from the EU would be 7.4 percent higher after preferential tariff liberalization of import tariffs. As shown in Figure 2, a large fraction of this increase comes at the expense of other partners. In terms of proportional changes, the trading partners that experience the largest decline in exports are the United States (4.8 percent) and other (non-ECOWAS) African countries (4.4 percent). Official imports from ECOWAS

members would slightly decline by 2 percent, although, actual trade would probably decrease by more as the incentive to re-export (or smuggle) European goods is reduced.[11]

Table 6. Scenario 1 (80 percent liberalized): Top 30 Most Affected Import Categories

	Total Import Change		EU Import Change	
Sector (ISIC-3 digits)	thousand	%	thousand	% change
101 - Mining and Agglomeration of Hard Coal	16	3.8%	16	4.0%
342 - Bodies (Coachwork) for Motor Vehicles; 'Trailers and Semi-trailers	419	2.1%	1,274	10.2%
272 - Basic Precious and Non-ferrous Metals	10,441	1.8%	35,215	12.2%
171 - Spinning, Weaving and Finishing of Textiles	558	1.7%	1,914	9.7%
152 – Dairy Products	9,118	1.4%	31,420	6.6%
242 - Other Chemical Products	13,734	1.2%	65,601	14.4%
131 - Mining of iron ores	15	1.2%	15	1.2%
132 - Mining of non-ferrous metal ores, except uranium and thorium ores	2	1.0%	2	1.4%
155 – Beverages	1,285	0.9%	1,825	2.5%
20 - Forestry, logging and related activities	83	0.9%	273	7.8%
341 - Motor Vehicles	12,661	0.8%	62,126	10.5%
351 - Building and repairing of ships and boats	3,030	0.8%	10,038	4.8%
154 - Other Food Products	2,784	0.6%	8,149	3.6%
11 - Growing of crops and horticulture	9,243	0.6%	98,286	28.6%
271 - Basic Iron and Steel	8,367	0.6%	46,888	9.6%
210 - Paper and Paper Products	3,309	0.6%	16,377	8.6%
232 - refined petroleum products	3,496	0.6%	14,469	5.6%
151 - Production, Processing and Preservation of Meat, Fish, Fruit,	5,618	0.6%	28,572	8.7%
241 - Basic Chemicals	14,056	0.6%	90,287	11.4%
252 - Plastics Products	1,273	0.6%	7,116	10.2%
142 - Mining and Quarrying n.e.c.	203	0.5%	548	6.3%
313 - insulated wire and cable	257	0.4%	1,763	6.2%
323 - television and radio receivers, sound or video recording or	2,318	0.4%	6,478	1.3%
141 - Quarrying of Stone, Sand and Clay	56	0.4%	116	1.4%
322 - television and radio transmitters and apparatus for line telephony	1,675	0.3%	10,763	4.6%
12 - Farming of Animals	10	0.3%	12	3.0%
311 - Electric Motors, Generators and Transformers	2,395	0.3%	14,742	4.1%
312 - electricity distribution and control apparatus	421	0.3%	2,604	4.4%
243 – man-made fibres	166	0.3%	1,157	15.2%
352 - railway and tramway locomotives and rolling stock	11	0.3%	48	16.9%

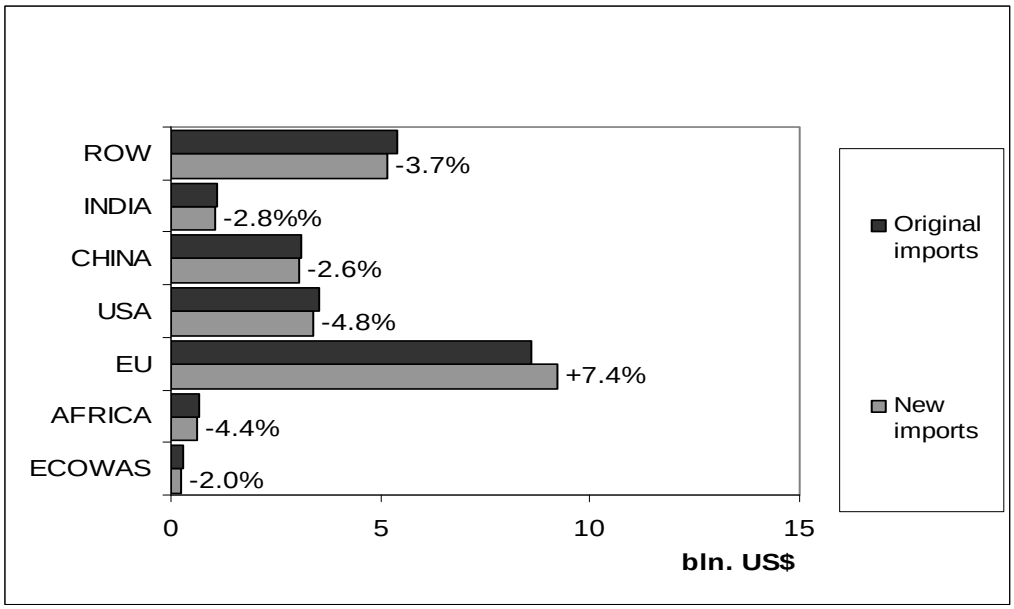
Source: Computed by authors based on TRIST model and database

Table 6 reports the simulated effects of an EPA on total imports and imports from the EU for the 30 most affected categories. For most sectors, the estimated impact on total imports would be less than one percent. Among the sectors with substantial imports, the biggest import changes would be expected for basic precious and non-ferrous metals (1.8 percent), dairy (1.4 percent) and chemical products (1.2 percent). Motor vehicles imports would also increase by 0.8 percent. For most sectors, the change in imports from the EU is much larger. Most of this comes at the

[11] On the other hand, given that high barriers are the main determinants of smuggling into Nigeria, and that those barriers would likely be excluded from the EPA liberalization schedules, the impact of an EPA on smuggling activities may be relatively small.

expense of other suppliers of imports, so that the net increase in total imports is modest. For instance, most of the US$62 million increase in motor vehicle imports from the EU is merely trade diverted from other sources—the actual newly-created trade is only US$12 million. This dominance of trade diversion is determined by a number of factors, including the initial tariff level, the degree of substitution among suppliers, as well as the initial market share of the preferred supplier (see Box 2).

Figure 2. Origin of Nigeria's imports before and after reform



Source: Computed by authors based on TRIST model and database

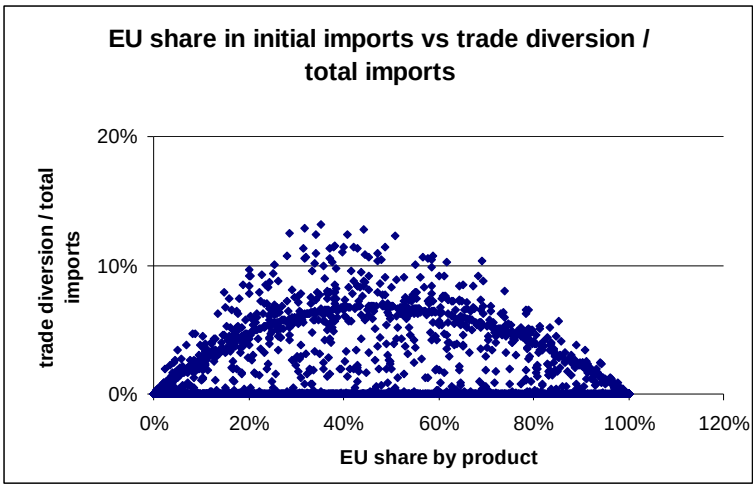
Table 7 reports the results of different EPA scenarios for a number of economic aggregates.[12] In the central EPA scenario (Scenario 1) with actually applied tariffs and the top 20% of protected lines excluded total imports are 0.5 percent (US$ 119 million) higher. The overall applied tariff rate decreases from 7.5 percent to 6.3 percent. Tax revenues from trade (both tariffs and VAT) fall by US$ 271 million, equivalent to a loss of 0.6 percent of total government revenue or about

[12] These "aggregated" or macro numbers are indicative only and need to be interpreted with caution. They are simply the sum of the tariff-line level partial equilibrium simulations, and are not taking into account the various economy-wide resource constraints and reallocations, or any intersectoral economic linkages.

4 percent of non-oil government revenue in 2006.[13] Trade diversion exceeds trade creation leading to a relatively small welfare loss of US$ 12 million.

Box 2. Trade Diversion at the Sectoral Level

In addition to the initial tariff structure and the product specific substitution elasticities, a main determinant for trade diversion in the TRIST modelling framework is the share of the preferential trading partner (in this case, the EU) in overall imports. If the overall import share is very low, trade diversion will be small because percentage changes are based on very small initial values. If the trade share of the EU is already very high, trade diversion is naturally limited by the size of the remaining market share that the EU could still take over. Thus, as illustrated by the graph (where each dot represents a specific product), the strongest trade diversion can be expected for products where the EU's market share is close to 50%.



Top 10 sectors with strongest trade diversion

ISIC	description	EU market share	EU applied tariff	trade creation / pre-reform imports	trade diversion / pre-reform imports
11	Crops and horticulture	23.9%	5.3%	0.6%	6.6%
242	Other Chemical Products	41.1%	8.2%	1.2%	4.9%
342	Bodies for Motor Vehicles	62.3%	9.3%	2.1%	4.5%
272	Basic Precious and Non-ferrous Metals	50.2%	8.9%	1.8%	4.5%
171	Spinning, Weaving and Finishing of Textiles	60.5%	7.2%	1.7%	3.8%
152	Dairy Products	72.3%	8.3%	1.4%	3.6%
241	Basic Chemicals	33.0%	3.8%	0.6%	3.4%
341	Motor Vehicles	38.8%	11.3%	0.8%	3.2%
271	Basic Iron and Steel	37.0%	6.4%	0.6%	3.0%
252	Plastics Products	31.5%	16.0%	0.6%	2.9%

Source: Compiled by authors

[13] Based on government revenue estimations from IMF article IV consultations, see IMF country report No. 08/64. Estimate is 6,376 billion Naira (49.4 billion US$) for total and 931 billion Naira (7.2 billion US$) for non-oil government revenue in 2006.

Table 7. Summary results of TRIST simulations for Nigeria, various simulations

Scenario	EPA with sensitive product list (80 percent liberalized)		EPA with no sensitive product list (100 percent liberalized)	
Tariff base	Actually collected tariffs	Statutory tariffs	Actually collected tariffs	Statutory tariffs
	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Total Imports [mln. US$]				
Change	119	243	266	403
% change	0.5%	1.1%	1.2%	1.8%
Imports from EU [mln. US$]				
Change	638	1,222	1,285	1,884
% change	7.4%	14.6%	15.0%	22.4%
Tariff Revenue [mln. US$]				
Change	-269	-439	-671	-910
% change	-15.9%	-21.8%	-39.6%	-45.2%
Tariff and VAT revenue [mln. US$]				
Change	-271	-447	-675	-921
% change	-13.5%	-19.1%	-33.6%	-39.4%
Consumer Surplus [mln. US$]				
Change	259	416	638	828
Welfare (Trade Revenue + Consumer Surplus) [mln. US$]				
Change	-12	-31	-37	-93
Applied tariff rate				
before reform	7.5%	9.0%	7.5%	9.0%
after reform	6.3%	6.9%	4.5%	4.8%

Source: Computed by authors based on TRIST model and database

Scenario 2 simulates the impact of an EPA if statutory (those on paper) tariff rates are being applied. This is the scenario that has been typically applied in previous studies of the impact of an EPA. This scenario is relevant given that the nature and composition of tariff exemptions often change from year to year. For example, in 2007, the Nigerian government removed a large number of the tariff exemptions granted in 2006. In this case the simulated impact of the EPA increases substantially with Nigeria's imports from the EU now increasing by almost 15 percent. This reflects that imports are lower in the baseline since tariff exemptions are removed and that a larger number of import flows from the EU are subject to tariff reductions. Trade revenue losses

from preferential liberalization in this scenario are US$ 447 million, a decline in revenues from trade of almost 20 percent. The loss of welfare increases to US$ 31 million, but this remains a negligible proportion of overall income in Nigeria.

Scenarios 3 and 4 in Table 7 look at the importance of the exclusion of 20% of tariff lines from liberalization with the EU. In these scenarios (for collected and statutory tariff rates, respectively) all tariff lines are included in the EPA liberalization schedule. The results show that under this scenario imports from the EU increase by 22 percent (almost US$ 2 billion) when the higher tariffs are also preferentially liberalized. At the same time, the extent of trade diversion is significantly higher, so that even as consumers gain much more under these scenarios (due to the steep price drop for previously excluded products), the discriminatory liberalization results in slightly larger (but still small) welfare losses.

Finally, the experiment conducted here is comparative static, comparing a situation without an EPA to one with an instantaneous EPA. In reality, an EPA would be implemented over a number of years with a long phasing out of tariff liberalization (around 15 years), which would spread the estimated impact over time and make the actual shock to the Nigerian economy at any given point much smaller. Box 3 illustrates this point.

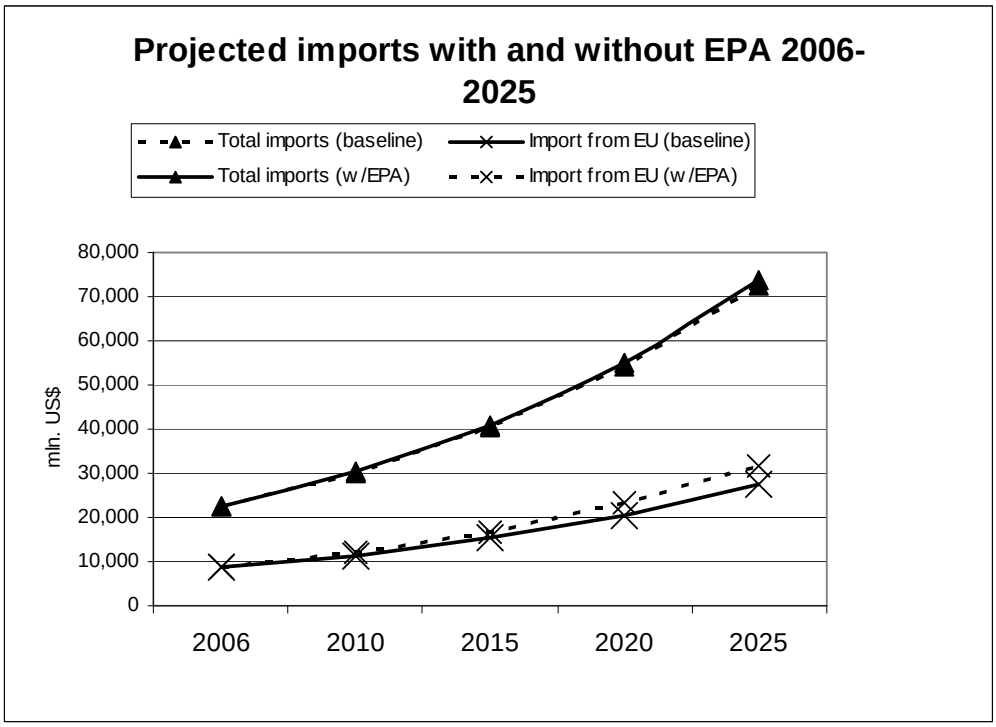
These different scenarios show that the higher the tariffs (or the greater the number of high tariff products that are included), the larger the degree of discrimination created by an EPA and the higher is the welfare loss. One way for Nigeria to limit the losses in welfare is to minimize the potential for trade diversion (and monopolistic pricing) by undertaking unilateral non-preferential trade liberalization together with implementation of an EPA. Table 8 illustrates the implications of a broader approach to trade policy reform. In the first column, the EPA (without exclusions) yields a welfare loss of US$37 million. The next scenario, in which, before the implementation of the EPA, Nigeria unilaterally introduces a tariff cap of 20 percent on MFN tariffs, welfare improves by US$39 million. Implementing the EPA together with capping the MFN tariffs overall has a positive welfare impact which is more than the simple difference of the losses from just the EPA and the gains from just the MFN reform. This is because combining the

two scenarios reduces trade diversion under the EPA for products where the MFN tariff that the EU's competitors face is also being lowered.

Box 3. Sequential EPA Tariff Phase-out

The comparative static experiment conducted in this study compares the Nigerian economy in two different states of the world: one (the baseline) in which an EPA is not in place, and another in which it is. The exercise does not provide information about the speed at which changes occur, or about what happens to various dimensions of the economy during the transition. In reality, an EPA would be implemented during quite a lengthy phasing out of tariff liberalization (around 15 years). The impact of such an EPA will then be spread out over time, so that the actual shock to the Nigerian economy at any given point in time would be much smaller, especially relative to changes that would have happened to the Nigerian trade flows anyway.

To illustrate how a phased out EPA would impact Nigerian imports overtime, a baseline projection of Nigeria's import growth without an EPA is first constructed (based on the average import growth rate for products in this HS 1 digit category over the last five years and extrapolated for the 2006-2025 period). Sequential liberalization with the EU is then assumed to begin with the lowest tariff bands starting in 2010 and to be completed in 2025 with full free trade with the EU (i.e., removing tariffs <5% in 2010, removing tariffs <10% in 2015, removing tariffs <20% in 2020, and the remaining in 2025). As shown in the graph, the impact of the phased out EPA is indeed very small at each given point of time, especially compared the baseline import growth.



Source: Computed by the authors from TRIST.

While the discussed impacts are small in general, this assessment illustrates the broader point that the EPA should not be taken in isolation and that changes in the Nigerian trade regime can be made to offset the potential negative effects of the discriminatory nature of tariff removal under an EPA. One such change in Nigeria's trade policy is the introduction of the ECOWAS CET. To the extent that the adopted CET makes the Nigerian import regime more restrictive (e.g., a high fifth band), the EPA is likely to yield more severe revenue and welfare losses. On the other hand, taking the CET process as an opportunity to adopt a more open regime would help minimize the potentially damaging impact of the discrimination introduced by an EPA.

Table 8. Welfare comparison: EPA and MFN reform

Scenario	EPA with no sensitive product list	MFN cap at 20%	EPA and MFN cap
Tariff and VAT revenue [mln. US$]			
Change	-675	-231	-828
Consumer Surplus [mln. US$]			
Change	638	270	835
Welfare (Revenue + Consumer Surplus) [mln. US$]			
Change	-37	39	8

Source: Computed by authors based on TRIST model and database

What will happen to the import bans discussed earlier in the context of the EPA? It is unlikely that the bans could be lifted only on imports from the EU but maintained on imports from other sources. One possibility is that they are converted into a relatively high tariff (say 35 percent), but kept in the 20 percent exclusion list of the EPA tariff phase-out schedule. We now discuss a very simple counterfactual exercise that provides a rough indication of the likely magnitude of the trade response to such a switch.

In the absence of observations prior to the imposition of the ban it is not possible to estimate well defined import demand equations for each of the products for Nigeria. We adopt a simple gravity type econometric approach using data for a range of countries that import the products concerned. In this model, the share of any given product in a countries import bundle is determined by its economic size (GDP), wealth (per capita income), geographic location, the

share of oil in total exports (to capture potential the potential impact of Nigeria's oil wealth on its import composition) as well as the applicable tariff rate. We built a dataset with this information from the TRAINS database (for import shares and tariffs) and World Development Indicators (all other variables) for all countries with available data. Then, we estimated the model separately for each product over the cross country sample and obtained the coefficients that then enable us to predict the import share of each product given a countries characteristics and tariff on the product. We use this approach to predict the "typical" amount of Nigerian imports or each product if the bans were to be removed and replaced by a tariff. While this approach is rather ad hoc it does provide transparent estimates from a simple approach. These estimates should be interpreted seen as orders of magnitude rather than well founded predictions.

Table 9. Observed imports under ban categories and indicative import response to replacing the import bans with a 35 percent tariff rate, 2006, Top 20 Most affected categories, US$ million

Ban category	Observed imports	Predicted imports	Response to lifting the ban
Total	**1,828**	**4,236**	**2,408**
39 - Used Motor Vehicles above eight (8) years from the year of manufacture	402	903	501
20 – Medicaments	361	739	379
32 - African print fabrics, Carpets, Lace Fabrics, Towels	409	719	309
33 – Yarn	15	277	262
9 - Vegetable Oils and Fats	9	242	233
7 - Maize, Millet, Sorghum	4	168	164
8 - Wheat Flour, Maize Flour, Cereal Groats, Meal and Pallets	4	127	123
2 – Pork and Pork Products, Beef and Beef Products, Mutton, Lamb and Goat Meat	3	87	83
1 – Live or Dead Birds including Frozen Poultry	1	84	83
42 – Furniture	28	64	36
27 – Toothpicks	18	52	33
38 - Used Air-Conditioners, Compressors and Fridges/Freezers	130	160	31
6 - Fresh and Dried Fruits	2	27	25
35 - Foot Wears and Bags including Suitcases of leather and plastics	76	95	19
17 - Beer [Bottled, Canned or otherwise Packed]	2	20	17
23 - Finished Soaps	39	56	16
24 - Disinfectant, Germicides, Mosquito repellents	26	42	16
34 - Exercise Books	0	14	13
40 - Fully built and CKD Bicycles Frames, Forks and Mudguards	15	24	9
3 - Birds Eggs	2	10	8

Source: Computed by authors

Table 9 reports the results of such an exercise for the categories with the largest import response (Appendix C reports the results for all 46 ban categories). Overall, it is predicted that replacing all the import bans with a 35 percent tariff would increase Nigeria's total official imports by about 10 percent or US$2.4 billion. Some of this increase would be "formalization" of existing "informal" trade or smuggling, the rest would be new imports driven by the less restrictive trade regime. Consumers would benefit from access to imports of these products and government tax revenue would expand since tariffs would now be collected on both "formalized" and new imports. In this case, it is estimated that tariff revenue could increase by as much as US$840 million (about 12 percent of non-oil government revenue in 2006), which is significantly more than the estimated EPA-led revenue losses estimated reported earlier.[14]

At the sectoral level, the largest import response from replacing the bans with tariffs would occur in used cars—imports of which would increase by US$500 million. This is to be expected given the importance of smuggling in that category. Formal imports of medicines would also experience a significant jump (US$379 million). Bulk food items (maize and wheat), processed foods (vegetable oils), meats (pork, poultry), as well as made-up fabrics and yarn, are also among the sectors that would register large import increases. This is likely to have an important impact on poverty, given the importance of these products to poor consumers. Removal of the import bans on intermediate products, such as textiles, would provide an important boost to final goods sectors, such as clothing, in Nigeria.

5. Issues for a Development-Friendly EPA for Nigeria

The EPA offers the opportunity for negotiations on issues that go beyond preferential tariff liberalization including trade in services, regional trade integration, foreign direct investment, competition and the regulatory environment. An EPA provides an opportunity to address reforms that are needed for increasing global and regional trade integration. More generally, an EPA is likely to have positive and significant impacts when integrated into a comprehensive strategy towards competitiveness and to alleviating the supply constraints that have muffled the impact of previous preferential and multilateral trade agreements on exports, output and employment.

[14] Raballand and Mjekiqi (2008) estimate that an additional US$400 million USD or more than ¼ of the current revenues collected by the Nigerian Customs could be collected if trade restrictions were adjusted to the current practices in the sub-region.

In terms of services trade, there are both Nigeria-specific issues at stake, such as the treatment of oil industry related services, as well as interests that would benefit from the active support of the biggest ECOWAS member, such as attempts to ease EU restrictions on temporary migration. More broadly, it is of great importance in today's globalized economy that domestic firms have access to efficiently produced backbone services inputs. Firms that have to pay more than their competitors for energy, telecommunications, transport, finance and security will find it hard to compete in both the domestic and overseas markets. Nigeria's aim to shift towards products of higher quality further increases the importance of activities that require the more intensive use of these backbone services. Box 4 discusses the implication of services liberalization in the context of an EPA.

Box 4. Liberalization of Imports of Services and Regulatory Reform

Full EPAs could provide an important opportunity to address the liberalization of trade in services and related issues. Because of the current underdeveloped nature of the service sector in Nigeria, the major gains from the liberalization of trade in services are likely to come from the liberalization of imports of services rather than from increased Nigerian exports of services. In particular, liberalization of foreign direct investment in services (delivery of services by GATS Mode 3, commercial presence) offers the largest potential for generating efficiency gains that are needed for increasing the competitiveness of Nigeria's merchandise exports and its economy more generally. For many services – particularly, finance, telecommunications, transport, and energy -- the gains from increased investment, trade-induced improvements in efficiency and competitiveness, and more rapid growth will be magnified because these play such a major role in all types of production. The boost in competitiveness needed to enable Nigerian economies to reap the full benefits of merchandise trade liberalization under "interim" EPAs will not materialize without a parallel opening of the services sector.

Because of their characteristics, serious problems can result from the liberalization of some service sectors without a satisfactory regulatory framework. Sectors in which large fixed investments are necessary for the efficient provision of services are often imperfectly competitive even with free entry. Market failures caused by monopoly power, asymmetric information, or externalities in the provision of services create the need for appropriate regulation. In addition, some services, such as finance and telecommunication, require regulation to prevent destabilizing or anticompetitive practices. Thus, to reap the full benefits of liberalizing imports of services and foreign direct investment in these service sectors, establishment of an appropriate regulatory framework will be indispensable. This is an issue that can be addressed in the EPAs through technical assistance from the EU.

As in the case of merchandise trade, Nigeria would benefit more from reducing their barriers to service imports from all foreign sources rather than liberalizing on a preferential basis with just the EU. In cases where network and capital intensive services are not already open to foreign investors, preferential liberalization of these services for investors only from the EU could give EU service providers a permanent advantage even if the services concerned are eventually liberalized multilaterally. Because the EU is unlikely to be the most efficient provider of all network and capital intensive services, preferential

liberalization of imports of less-competitive services from the EU could lead to sub-optimal development of these sectors in the EPA-countries when the investors from the EU are not the most efficient available providers of the services concerned. Liberalization of services imports from all sources tends to increase competition among service providers and is likely to lead to greater efficiency gains and more rapid growth.

Source: World Bank (2008).

In this context, the EPA can help to reinforce positive elements in the domestic reform agenda by anchoring pro-competitive policies in the agreement itself. It is subsequently more difficult for domestic lobby groups to reverse policy reforms in order to preserve or enhance their economic rents, as changes would require consent by the EU. This role of enhancing policy credibility seems particularly important for activities that depend on large-scale, long-term investors coming to the country.

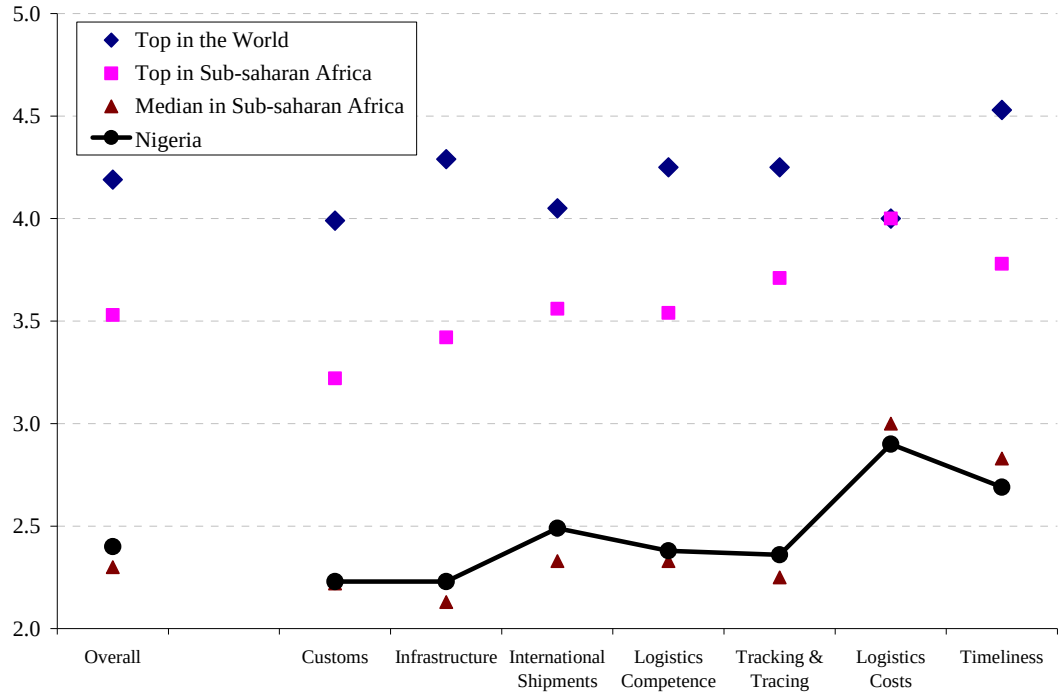
Nevertheless, the conclusion of an EPA even with favorable rules of origin (see Box A.1), appropriate services provisions, and accompanying fiscal reforms is no panacea. Due to high MFN tariffs, the persistence of import bans and other non-tariff barriers, and a highly concentrated export base, even a doubling of non-fuel exports to the EU and to regional partners ─ although welcome ─ would hardly generate the economic growth rates that Nigerian policy makers are aspiring to. An additional stimulus for growth and development is called for, and it seems advisable for policy makers to not lose focus on the question of how to maintain and strengthen the country's competitiveness in the global market. In fact, preferential integration and active participation in global markets do not present exclusive or opposing choices. Many successful countries have indeed build their strategy around a paradigm of "open regionalism", which implies negotiating reciprocal preferences with partner countries while actively integrating into international markets at the same time. Strengthening Nigeria's non-fuel export performance is a major challenge and requires attention to the incentives that actual and potential exporters face, the costs of trade and transport logistics to get products efficiently to overseas markets, and the effectiveness of trade support institutions that help private sector firms to discover and exploit international market opportunities.

Improving export performance will require movement of resources from less productive to more productive exporting firms as the latter expand the range of markets into which they sell as well

as exports per market. Also, resource mobility will facilitate the export of higher quality products, which will tend to a have a somewhat different input mix than traditional or lower quality products. Finally, resources need to be flexible enough to allow the emergence of new export activities. Hence, a key challenge for policy makers is to ensure that land, labor, capital and technology are moving to (a) sectors in which the country has a long-term capacity to compete and (b) to the most productive firms within sectors. This necessitates a clear understanding of how the macroeconomic stance, the business environment, and trade and tax policies interact to affect investment, output and trade decisions.

A major impediment to export growth is the strong anti-export bias in Nigeria's trade regime. Nigeria has traditionally had very high levels of MFN tariff protection and numerous import bans, and despite recent reforms continues to be more protectionist than the averages for Sub-Saharan Africa and the world. High trade and transport costs to get products to export markets are another major impediment. A newly developed Logistics Performance Index (World Bank, 2007b), which is based on a world-wide survey of global freight forwarders and express carriers, makes it possible to compare the situation of countries across a broad set of transport and trade facilitation dimensions. The LPI provides information on several distinct dimensions of trade and transport logistics. It turns out that Nigeria's performance is far from best practice, and mediocre even by the relatively low standards in Sub-Saharan Africa (Figure 3). Logistics experts see the most pronounced deficits in the areas of customs administration and logistics infrastructure. Moreover, with respect to logistics costs and timeliness of border clearance, Nigeria scores worse than the average in Sub-Saharan Africa.

Figure 3: Logistics Performance is Mediocre
(Logistics Performance Index, higher is better)



Source: World Bank (2007b).

A third area besides the trade regime and trade transactions costs that warrants the attention of policy makers is export promotion. Both market and government failures tend to afflict developing countries as they seek to expand exports and growth. Trade policies that provide low-tariffs are rarely sufficient to prompt dynamic export drives or overcome obstacles in other areas. In many cases, these constraints to competitiveness impinge more on higher quality and differentiated products and require specific interventions and institutions. A successful export diversification strategy should not just focus on developing products, but also look for ways to exploit new market opportunities for existing export goods.

Nigeria has pursued a number of initiatives to encourage non-oil exports in the past, including the establishment of Special Economic Zones, the operation of a duty drawback system, as well as bank guarantees and direct lending to facilitate exports (World Bank, 2007). Yet, the most prominent export incentive system that has been used in Nigeria in evolving forms since 1986 is the export expansion grant (EEG) program. This program subsidizes exports of qualifying companies through the issuance by Customs of negotiated certificates that can be redeemed

against duties on imports. The size of the subsidies of up to 40 percent of export value and the lack of controls has given rise to wide-spread fraud, such as the over-invoicing of exports, while the supply response from actual or potential exporters is unclear. In this context, the government should put regular mechanisms in place to evaluate the use of the EEG funds and to assess if and to what extent the program achieves its stated objective. More generally, a broader review of export incentive schemes would seem highly desirable in order to rationalize the government's support to exporters, improve its efficiency, and minimize the risk of abuse.

6. Conclusions

Discussions concerning the economic impact of a potential EPA with the EU have centered on the preferential trade liberalization that ACP countries will have to implement. Economic theory shows that the overall welfare impact of such discriminatory trade reform is ambiguous so that careful empirical analysis is required to identify potential outcomes and highlight policy options for ameliorating negative effects. In many countries these discussions have taken place in the absence of such an empirical assessment that is crafted to the economic reality of the countries concerned.

In this paper we address this issue using detailed data from Nigeria's customs in a partial equilibrium trade simulation model. The simulation results show that overall impacts on imports are likely to be slight, firstly, since in reality an EPA will allow Nigeria to exclude the most protected products from liberalization and, second, because there is likely to be substantial trade diversion from other import suppliers towards the EU. It is this trade diversion that leads to negative economic impacts from the EPA. This can be minimized by prior reduction of high (peak) external MFN tariffs, a reform that would reduce remaining anti-export bias in the trade regime and assist more effective integration into regional and global markets.

The paper also highlights the importance of other aspects of trade policy in Nigeria and, in particular, the import bans that affect a wide range of products. Reform of these bans, in terms of tariffication and subsequent tariff reduction, is likely to be strongly welfare improving, with significant benefits for poor consumers, since imports of a number of food products, footwear and clothing are currently banned. In addition, such a reform would improve the basis for

effective intra-regional integration by reducing a key factor that encourages smuggling from neighboring countries across Nigeria's borders.

While these standard trade policy issues relating to tariffs and import controls are an important aspect of the EPAs, they are one element of the policy pool that could be leveraged to turn the EPA into an instrument for economic development and inclusive growth. Substantial untapped opportunities are discernable in areas that have been largely neglected so far in the EPA discussions, notably concerning rules of origin and services sector reforms. Further, trade and transport facilitation, as well as more effective export promotion efforts clearly deserve a higher profile on the policy agenda. The associated policy reforms are critical to support the supply response that is necessary for the EPA to be a success, but will also make Nigeria more competitive in international markets. The policy challenges to first negotiate and then implement such a comprehensive EPA are daunting and must be addressed through appropriate technical assistance and support from the international community, possibly in the form of 'aid for trade'.

References

Brenton, P., and Mombert Hoppe (2007), *Clothing and Export Diversification: Still a Route to Growth for Low-Income Countries?* World Bank Policy Research Working Paper No. 4343, Washington DC: The World Bank.

Brenton, Paul, Mombert Hoppe and Jan Erik von Uexkull (2007), Evaluating the Revenue Effects of Trade Policy Options for COMESA Countries: the Impacts of a Customs Union and an EPA with the European Union, accessible through http://go.worldbank.org/2P8FPC0760.

Busse and Grossmann (2004): Assessing the Impact of ACP / EU Economic Partnership Agreement on West African Countries, HWWA Discussion Paper 294.

Enterplan (2005), Impact Assessment Final Report: Government of Nigeria, Capacity Building in Support of Preparation of Economic Partnership Agreement. Accessible at www.acp-eu-trade.org/library

Hoppe, Mombert (2007) "Economic Partnership Agreements: Does Preferential Access of Non-LDC African Countries Increase?" Trade Note 32, July 2007, The World Bank.

IMF (2007): Nigeria: 2007 Article IV Consultation—Staff Report; Staff Supplement and Statement; Public Information Notice on the Executive Board Discussion; and Statement by the Executive Director for Nigeria, Country Report No. 08/64, accessible through www.imf.org.

Karingi, Stephen, Nassim Oulmane, Mustaphe Sadni-Jallab Remi Lang, and Romain Perez (2005) "Assessment of the impact of the Economic Partnership Agreement Between ECOWAS countries and the European Union," ATPC Work in Progress No.29, UN ECA.

Kee, Looi and Marcelo Olarreaga (2004): Estimating Import Demand and Export Supply Elasticities, accessible through: http://editorialexpress.com/cgi-bin/conference/download.cgi?db_name=NASM2004&paper_id=368

Raballand, Gaël and Edmond Mjekiqi (2008) "Nigeria's Trade Policy Facilitates Unofficial Trade and Impacts Negatively Nigeria's Customs Efficiency and Economy," Mimeo, Africa Transport Unit, The World Bank.

Raihan, Selim, Mohammad A. Razzaque, and Edwin Laurent (2007) "Economic Partnership Agreements: Assessing Potential Implications from Some Alternative Scenarios," Mimeo, Commonwealth Secretariat.

Sandrey, Ron, Hans G. Jensen, and Olubukola Oyewumi (2007) "Trade Policy Options for Nigeria: A GTAP simulation Analysis," tralac Working Paper No.10. [online]. Available: www.tralac.org.

World Bank (2007a), "Nigeria: Competitiveness and Growth." Country Economic Memorandum. Washington DC: The World Bank.

World Bank (2007b), "Connecting to Compete: Trade Logistics in the Global Economy," Washington DC: The World Bank.

World Bank (2008), "Africa: Economic Partnership Agreements between Africa and the European Union: What to do Now? Summary Report" Washington DC: The World Bank.

World Bank (Forthcoming), "Benin's "Re-export" Trade," Chapter 3 of Benin Country Economic Memorandum. Washington DC: The World Bank

Appendix A. Implications of an EPA for Nigerian export prospects

This Appendix discusses the implications of the end of the current Cotonou system of preferences for Nigeria's market access to the EU. It uses detailed data from the Eurostat Comext and UNCTAD Trains databases to investigate the tariff barriers that Nigerian exporters would face under two alternative policy scenarios. The first scenario assumes an agreement on an EPA granting Nigeria duty and quota free access to the EU for all products. The second, examines the impact of exporting to the EU under the GSP.[15] Both cases are compared to the baseline situation under the Cotonou agreement. While it is clear that going back to Cotonou is no longer an option, making the comparisons between an EPA and the Cotonou situation, and then between GSP and Cotonou allows a clear decomposition of the gains and losses between the two options available to Nigeria (EPA versus GSP).

Table A.1 shows that preferences under Cotonou represented a tiny fraction (0.17 percent) of the overall value of Nigeria's exports to the EU.[16] As a comparison, the corresponding figure for ECOWAS members as a whole is 1.43 percent. The main reason for such a small number for Nigeria is the large share of oil in its export bundle. Indeed, more than 95 percent of Nigeria's exports enter the European Union under zero MFN tariffs, for which there can be no preferences. If only non-fuel exports are considered, the value of Nigeria's preferences as a share of its exports to the EU goes up to 1.8 percent, still a small number.

Table A.1 shows that Nigeria claims 84 percent of the preferences for which it is eligible in the EU—compared to an average of 85 percent for ECOWAS members.[17] The main reasons why preferences may not be fully utilized are restrictive rules of origin, the costs of proving compliance with the rules of origin relative to the margin of tariff preferences and lack of information on the availability of preferences. This suggests a small margin for improvement in preference utilization of existing exports from an EPA with less restrictive rules of origin and greater awareness of preferential market access possibilities. Nevertheless, for some products, for example clothing, the EU rules of origin under the Cotonou Agreement and under the GSP are likely to be prohibitive, such that, no exports are feasible given that the rules preclude the use of necessary inputs from global sources. Where these rules have been relaxed there is evidence that a considerable supply response can materialize leading to substantial increases in exports and employment (See Box A.1 for a more detailed discussion).

[15] Hoppe (2007) conducts similar analysis, by comparing the value of EU preferences under various scenarios for African Non-LDCs. As in the present analysis, he finds that the value of preferences to Nigeria is minuscule, and is not significantly affected by changes in the EU preferential scheme.

[16] The actual value of preferences can be calculated as the difference between the total duties that would have been paid without preferences (based on MFN tariffs) and the duties that are actually paid using the trade preferences. In comparison to the small number for Nigeria, Hoppe (2007) reports that the value of preference for Mauritius, the Seychelles, and Swaziland are respectively 23, 16, and 50 percent, of their overall exports to the EU.

[17] The utilization rate is calculated as follows: (value of claimed preferences/value of potential preferences)*100.

Table A.1. Value and utilization of EU trade preferences in 2005 for ECOWAS members

Country	Exports to EU [US$ 1,000]	Exports to EU with MFN-0 duty (% of value)	Potential preferences [US$ 1,000]	Actual preferences [US$ 1,000]	Utilization rate of preferences (%)[a]	Potential preferences (as % of exports to EU)	Actual preferences (as % of exports to EU)
Benin	40,563	79.27	2,648	2,600	98.19	6.53	6.41
Burkina Faso	38,256	67.74	415	303	72.99	1.08	0.79
Cape Verde	24,115	11.87	3,169	3,075	97.02	13.14	12.75
Ivory Coast	2,539,323	60.32	132,939	111,779	84.08	5.24	4.4
Gambia	7,788	49.36	416	233	55.92	5.34	2.99
Ghana	1,247,375	65.92	44,918	40,190	89.48	3.6	3.22
Guinea	534,698	93.66	3,656	1,976	54.06	0.68	0.37
Guinea Biss.	4,268	33.85	300	208	69.35	7.02	4.87
Liberia	777,126	99.8	146	101	69.56	0.02	0.01
Mali	54,237	94.32	198	98	49.75	0.36	0.18
Niger	169,159	97.76	120	101	85.16	0.07	0.06
Nigeria	10,815,870	96.1	17,984	15,116	84.06	0.17	0.14
Senegal	668,117	55.23	36,881	32,700	88.66	5.52	4.89
Sierra Leone	157,032	99.06	134	92	69.5	0.09	0.06
Togo	150,570	84.63	1,668	1,616	96.89	1.11	1.07
TOTAL	**17,228,494**	**86.83**	**245,588**	**210,189**	**85.59**	**1.43**	**1.22**

Note:

a. The utilization rate is calculated as follows: (value of claimed preferences/value of potential preferences)*100.
Sources: Eurostat Comext, UNCTAD Trains, and authors' calculations.

Detailed study of the tariff information available from EUROSTAT COMEXT reveals that in comparing the situation under Cotonou in 2005 with market access under an EPA, only 81 lines of the EU eight-digit tariff schedule with ad valorem tariffs would experience improved access conditions under an EPA, and only 2 of these lines represent goods that Nigeria exports (chicory and spinach) but these exports are currently negligible.[18] A number of Nigerian export commodities (626 tariff lines) face significant non-ad-valorem (specific) tariffs under Cotonou preferences and thus could conceivably gain from an EPA. Nevertheless, while specific sectoral exports may expand, the overall impact of an EPA on Nigeria's market access compared to the situation under Cotonou is likely to be small since the majority of exports are already entering the European market duty free.[19]

By contrast, by switching to GSP, 3,109 ad valorem lines experienced a deterioration of market access conditions (that is, GSP tariff rates are higher than Cotonou preferential rates). Nigeria currently exports goods in 272 of these lines, amounting to 1.7 percent of the total value of Nigerian exports to the EU but around 20 percent of the value of Nigerian non-fuel exports to the EU. Table A.2 reports Nigeria's export sectors (aggregated to the ISIC-3 digit classification) that

[18] The total number of ad valorem tariff lines under Cotonou is 9,697.

[19] This analysis considers only currently traded goods. It is conceivable that following further liberalization by the EU of the remaining non-zero tariffs, Nigeria starts to exports new commodities that it has not previously exported.

have been most affected by the change. In general, the tariff increases are modest. In the sectors with important tariff hikes (tobacco products, footwear, and apparel and textiles), Nigeria's export to the EU tend to be very small. Important sectors with significant exports include processed food (US$63 million facing a tariff increase of 4 percent), textiles (US$17 million facing a tariff increase of 3 percent), man-made fibers (US$17 million facing a tariff increase of 3 percent).

Table A.2.: Implications of a non-EPA for Nigeria's EU market access: Top 20 most affected sectors.

Sector (ISIC-3 digits)	Cotonou Tariffs	EU GSP Tariffs	Exports to EU [US$ 1,000]
160 - Tobacco Products	0.00%	38.68%	99
192 – Footwear	0.00%	11.61%	402
181 - Wearing Apparel, Except Fur Apparel	0.00%	9.07%	154
173 – knitted and crocheted textiles and fabrics	0.00%	9.05%	15
341 - Motor Vehicles	0.00%	6.50%	153
172 - Other Textiles	0.00%	5.96%	64
151 - Production, Processing and Preservation of Meat, Fish, Fruit, Vegetables, Oils and Fats	0.00%	4.10%	63,677
359 - Transport Equipment n.e.c.	0.00%	3.89%	4
171 - Spinning, Weaving and Finishing of Textiles	0.00%	3.40%	16,844
243 - man-made fibres	0.00%	3.20%	16,616
269 - Non-metallic Mineral Products n.e.c.	0.00%	2.38%	40
153 - Grain Mill Products, Starches and Starch Products, and Prepared Animal Feeds	0.00%	1.19%	129
333 - watches and clocks	0.00%	1.04%	23
261 - Glass and Glass Products	0.00%	0.89%	31
332 - Optical Instruments and Photographic Equipment	0.00%	0.86%	375
155 – Beverages	0.00%	0.83%	3,327
323 - television and radio receivers, sound or video recording or reproducing apparatus, and associated goods	0.00%	0.66%	1,095
154 - Other Food Products	0.00%	0.39%	394,907
11 - Growing of crops and horticulture	0.00%	0.26%	40,271
50 - Fishing and related activities	0.00%	0.12%	4,306
241 - Basic Chemicals	0.00%	0.04%	14,622

Sources: Eurostat Comext, UNCTAD Trains, and authors' calculations.

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Box A.1 On the Importance of Rules of Origin

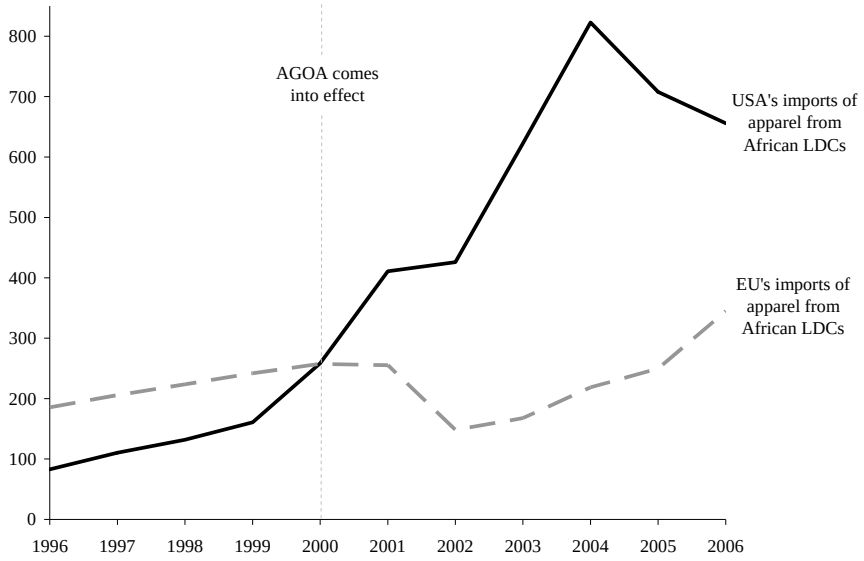
With respect to market access into the EU, one aspect that merits the attention of policy makers and negotiators are the rules of origin requirements (ROOs) for access to the EU market. While the Generalized System of Preferences (GSP) will maintain most of Nigeria's preferential access to the EU market (and avoid significant disruption in current Nigeria-EU trade) the EU's restrictive ROO limit the benefits of the market access provided under GSP. Relaxing the current complex product and process specific rules of origin and adopting a scheme that allows exporters to satisfy either a uniform change of tariff heading at the HS 6-digit level or a ten-percent value added rule could encourage the expansion and diversification of Nigeria's exports.

Preferential trading agreements use ROOs to ensure that products from third countries do not circumvent duties by requesting the preferential treatment that members of a RTA grant to one another. They specify

the amount of processing that a product must undergo in partner countries in order to quality for market access under the preferential agreement. However, domestic interests seeking to limit the competitive impact of preferential tariff removal may lobby for overly restrictive rules of origin. In a globalised economy strong limitations on the use of imported inputs can undermine the ability to compete in international markets.

A comparison of export developments for apparel from Least Developed Countries in Africa to the European Union and the United States provides a powerful illustration of the importance of rules of origin in determining export success. Both the EU's Everything but Arms program and the USA's African Growth and Opportunities Act grant duty and quota free access to apparel exports from LDCs. However, AGOA provides in addition for ROOs that are far easier to meet than the corresponding EU requirements. In particular, AGOA allows qualifying countries to count yarn and fabric from anywhere in the world as local content in apparel assembled in their countries, while the EU demands a double transformation such that apparel must be made from fabric that originates within the region. Inspection of export data shows that exports from LDCs in Africa to the USA have surged following the introduction of AGOA in 2000, while shipments to the EU have remained flat (Figure 1). Thus, rules of origin matter. In the interim agreements that the EU has signed the rules of origin for clothing, and to an extent for fish and some processed agricultural products, have been relaxed so that clothing producers in signatories can now use fabrics from say, Asia, and still qualify for preferential access to the EU market.

Rules of Origin are an Important Determinant of Export Performance
(Apparel trade, in million USD)



Source: Brenton and Hoppe (2007).

Appendix B. Sensitivity Analyses: Simulating an EPA using different elasticities

Scenario	EPA with no sensitive product list - all tariffs with the EU reduced to zero			EPA with a sensitive product list (20% of trade value excluded from liberalization)		
Column no.	1	2	3	4	5	6
elasticity	low	high	GTAP	low	high	GTAP
Total Imports [mln. US$]						
before reform	22,653	22,653	22,653	22,653	22,653	22,653
after reform	22,899	23,178	22,919	22,767	22,891	22,772
Change	246	525	266	114	238	119
% change	1.1%	2.3%	1.2%	0.5%	1.1%	0.5%
Imports from EU [mln. US$]						
before reform	8,579	8,579	8,579	8,579	8,579	8,579
after reform	9,025	9,806	9,864	8,785	9,156	9,217
Change	445	1,226	1,285	206	577	638
% change	5.2%	14.3%	15.0%	2.4%	6.7%	7.4%
Tariff Revenue [mln. US$]						
before reform	1,693	1,693	1,693	1,693	1,693	1,693
after reform	1,124	1,062	1,022	1,450	1,434	1,423
Change	-569	-631	-671	-243	-259	-269
% change	-33.6%	-37.3%	-39.6%	-14.4%	-15.3%	-15.9%
Tariff and VAT revenue [mln. US$]						
before reform	2,008	2,008	2,008	2,008	2,008	2,008
after reform	1,434	1,372	1,333	1,760	1,744	1,736
change	-573	-635	-675	-248	-263	-271
% change	-28.6%	-31.7%	-33.6%	-12.3%	-13.1%	-13.5%
Applied tariff rate						
before reform	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%
after reform	4.9%	4.6%	4.5%	6.4%	6.3%	6.3%
Trade Diversion [mln. US$]						
value	310	915	1,123	140	434	565
% of imports	1.4%	4.0%	5.0%	0.6%	1.9%	2.5%

Source: Computed by authors based on TRIST model and database

Note: Low elasticities: substitution elasticity = 1.5, demand elasticity = 0.5, High elasticities: substitution elasticity = 5, demand elasticity = 1.

Appendix C. Import Bans in Nigeria

Imports and indicative import response to replacing import bans with a 35 percent tariff rate, 2006. US$ Mill

Ban category	Observed imports	Predicted imports	Response to lifting ban
Total	1,828	4,236	-2,408
39 - Used Motor Vehicles above eight (8) years from the year of manufacture	402	903	-501
20 – Medicaments	361	739	-379
32 - African print fabrics, Carpets, Lace Fabrics, Towels	409	719	-309
33 – Yarn	15	277	-262
9 - Vegetable Oils and Fats	9	242	-233
7 - Maize, Millet, Sorghum	4	168	-164
8 - Wheat Flour, Maize Flour, Cereal Groats, Meal and Pallets	4	127	-123
2 - Pork and Pork Products, Beef and Beef Products, Mutton, Lamb and Goat Meat	3	87	-83
1 - Live or Dead Birds including Frozen Poultry	1	84	-83
42 – Furniture	28	64	-36
27 – Toothpicks	18	52	-33
38 - Used Air-Conditioners, Compressors and Fridges/Freezers	130	160	-31
6 - Fresh and Dried Fruits	2	27	-25
35 - Foot Wears and Bags including Suitcases of leather and plastics	76	95	-19
17 - Beer [Bottled, Canned or otherwise Packed]	2	20	-17
23 - Finished Soaps	39	56	-16
24 - Disinfectant, Germicides, Mosquito repellents	26	42	-16
34 - Exercise Books	0	14	-13
40 - Fully built and CKD Bicycles Frames, Forks and Mudguards	15	24	-9
3 - Birds Eggs	2	10	-8
22 – Toothpaste	1	8	-7
10 - Sugar Confectionaries [Other than Chocolate]	1	7	-6
14 - Fruit Juice in Retail Packs	8	14	-6
18 - Bentonites and Barytes	0	5	-5
13 – Biscuits	0	5	-4
29 - Corrugated Paper, Paper Boards, Cartons and Boxes	6	10	-4
46 - Telephone Re-charge Cards	14	17	-3
44 - Gaming Machines	0	2	-2
15 - Waters, including Mineral Waters and Aerated Waters	0	2	-2
30 - Calendars, Diaries, Enveloped, Greeting cards	3	4	-1
5 - Cassava/Cassava Products	0	1	-1
31 - Toilet Paper, Cleansing or Facial Tissues, Towel and similar Sanitary articles	3	4	-1
37 - Cutlasses, Axes, Pick axes, Spades, Shovels and similar tools	2	3	-1
11 - Cocoa Butter, Powder and Cakes	0	1	-1
28 - Rethreaded and used Pneumatic tyres	3	3	-1
4 - Flowers [Plastic and Fresh]	0	1	-1
12 - Spaghetti/Noodles	2	2	0
43 - Electric generating sound proof casings	28	29	0
25 - Domestic Articles and Sanitary Wares of Plastics	8	8	0
41 - Wheel Barrows	1	1	0
16 - Waters, including Mineral Waters and Aerated Waters containing added Sugar	5	5	0
19 - Bagged Cement	180	180	0
21 - Waste Pharmaceuticals	0	0	0
26 - Polypropylene Woven/Laminated Sacks and Bags	9	9	0
36 - Hollow Glass Bottles of a capacity exceeding 150mls	5	5	0
45 - Ball-Point Pens	2	2	0

Source: Calculations by authors