Bringing Liberalization On The Right Track –
The Case of Supply Side Constraints In The EU-ESA Negotiations

For An Economic Partnership Agreement

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1. Introduction

In September 2002, the European Union (EU) launched negotiations for Economic Partnership Agreements (EPAs) with the group of African, Caribbean and Pacific (ACP) states. According to the agreement of Cotonou, these EPAs aim at "fostering the smooth and gradual integration of the ACP States into the world economy, with due regard for their political choices and development priorities, thereby promoting their sustainable development and contributing to poverty eradication in the ACP countries." (Cotonou agreement, art. 34 I). So far, there seems to be consensus concerning these aims. Nevertheless, serious disagreement has arisen on the question how to reach them. The European Commission focuses on the liberalization of ACP countries' markets and is optimistic that this would have positive effects for development through increased competition and specialization on export sectors with comparative advantage. In contrast, many ACP countries as well as development NGOs fear that liberalization might not have the desired effect or even cause damages in ACP countries due to so called supply side constraints. Therefore, they propose additional EU funding to tackle these constraints.

This paper seeks to analyze the problem of supply side constraints and its impact on liberalization under EPAs. This does not include the decission whether in general EPAs are good or bad for development – in fact, this depends on many additional variables, such as the EU subsidies to domestic agriculture, transition costs, ESA countries ability to diversify their exports and increase the added value of exported goods and the political conditions in these countries. Therefore, the succesful tackeling of supply side constraints is a necessary, but not a sufficient condition to make EPAs work for development.

We aim at finding out which supply side constraints really exist and then present some ideas how to tackle them. As negotiations take place between the EU and various ACP regional groups, we focus on the Eastern and Southern African (ESA) group in order not to overstretch our scope. This group comprises Burundi, Comoros, DR Congo, Djibouti, Eritrea, Ethiopia, Kenya, Madagascar, Malawi, Mauritius, Rwanda, Seychelles, Sudan, Uganda, Zambia and Zimbabwe and thus represents a wide range of development levels. While Mauritius is one of Africa's economic top performers, talking about economic improvements seems very optimistic with respect to countries like DR Congo where serious armed conflicts and daily killing of civilians take place.

After briefly presenting some background information on the state of EPA-negotiations and trade arrangements between the EU and ESA countries, we provide a definition for the term supply side constraint. We then discuss a number of development problems which we suspect to be supply side constraints in order to answer two questions: Is this problem generally a supply side constraint and is it present in ESA countries? Based on this analysis, we present ideas how to tackle the constraints we have identified. With this, we do not intend to reinvent development cooperation but to provide some hints on existing concepts which might prove useful in an EPA context. We conclude by recommending a priority setting for the issue of supply side constraints under EPAs.

The first phase of EPA negotiations took place at an all ACP-EU level and addressed horizontal issues of interest to all parties. The ESA group and the EU launched their negotiations on 7 February 2004. Until then both the ESA group and the EU were setting priorities for the negotiations. On 30 July 2004 ambassadors from ESA countries and EU senior officials agreed on the scope and priorities for their EPA negotiations. Among others, development issues including supply side constraints will be addressed. The second phase of EPA negotiations began in September 2004 with meetings at ambassadorial and senior level in Brussels. During this phase (until December 2005) substantive negotiations will take place. Phase three of the negotiations from January 2006 to December 2007 envisages the continuation and finalization of the substantive negotiations in order to allow the EPA to come into force in January 2008.

Today, most ESA countries' exports enter EU markets duty free under the non-reciprocal preferential treatment established under the first Lomé agreement in 1975. Being characterized as least developed countries under the Cotonou agreement, Burundi, Comoros, DR Congo, Djibouti, Ethiopia, Eritrea, Malawi, Madagascar, Rwanda, Sudan, Uganda and Zambia even fall under the EU's "Everything but Arms" program launched in 2001. This means that they enjoy duty free market access for virtually all non-military export goods besides – for a limited transition period – sugar, rice and bananas. On the other hand, most ESA countries maintain import duties and taxes, typically low on commodities and agricultures but significantly higher for more valuable goods (IMF, country specific Statistical Appendices).

2. What is a Supply Side Constraint?

When analyzing the likely effects of liberalization on ESA countries, we take as a basis the idea that following a market liberalization, there will be two main effects on a countries' economy: first, production in non-competitive sectors will be replaced by imports. This will lower consumer prices in the country but also lead to a contraction of the country's import competing sectors and thus have negative effects on wages and employment in these sectors. Second, liberalization will create an incentive to employ more ressources in sectors where the country has a comparative advantage and thus increase exports, which will increase wages and employment in the export oriented sectors of the economy. The removal of import restrictions is therefore likely to lead to higher imports and exports (Rodrik 1998: 3) if the necessary process of adjustment is not hindered. As ressources in the country are reallocated from the less productive import competing sector to the more productive export sector, total production and wages should theoretically increase due to free trade. Supply side constraints are a reason why in practice they eventually would not. In our definition, the term refers to economic, political or social conditions which hinder a country to benefit from opportunities arising from market liberalization by posing obstacles to adjustment to the new situation. This can happen in two ways: firstly, supply side contraints can generally hinder trade and thus reduce the effect of market liberalization. In this case, both the contractive effect on the import competing sectors and the expansive effect on the export sector are reduced. Liberalization then might

not have the hoped for positive effects but is unlikely to damage the country as it leads to a situation which is in effect similar to protection. We call these B-type constraints.

The second type of supply side constraints is much more severe because it does not hinder all effects of liberalization, but only the expansive ones on the export sector. Thus, existing businesses in the import competing sector might go bankrupt because of increased international competition while no new ones can emerge in sectors with comparative advantage. The country can then be worse off after liberalization than before. We call these A-type constraints.

3. Supply Side Constraints in ESA Countries and Ways to tackle them

3.1. Transport

Poor transport possibilities belong to the most important obstacles to development. This is mainly due to high transport costs which lead to relatively high prices of export products. In the light of liberalization, it is important to note that this can hinder trade significantly, and lower the benefits that come with it (Porto 2004: 1). In so far, they have the same impact as tariffs but their elimination is far more complicated.

The problem of transport costs in ESA countries is two-fold: firstly, transport infrastructure is extraordinarily poor (see table 1 appendix). This means that transport is relatively difficult, slow and unreliable which makes it more costly: Estimates show a strong correlation between the two variables with between 40 and 60 per cent of the transport costs depending on the quality of infrastructure (Limao and Venables 2000: 11)

Secondly, transport costs are further increased by man-made barriers like inefficient custom practices, bureaucracy, regulations and corruption. For example, the medium clearance time in ports of ESA countries is significantly higher than for example in European ports (Clark et al. 2004: 29-31). In total, ESA countries face

higher transportation costs when trading with the rest of the world than most other countries (Limao and Venables 2000: 8).

Special attention has to be drawn to the seven landlocked ESA countries, a group which is even more disadvantaged by high transport costs than their coastal neighbors (Gallup and Sachs 1999: 1). As the landlocked ESA countries export mainly agricultural products and raw materials, airborne transportation plays only a limited role for them. Thus, they have to transport their exports through transit countries. This creates additional costs due to the above mentioned man-made barriers. The particular problem for landlocked countries is that these factors – e.g. malfunctioning of the transport system, strikes or political instability – are completely exogenous since they take place outside their jurisdiction. Together with unpredictable exchange rate fluctuations for prices of transport through transit countries, these dependencies raise uncertainty and additionally increase the price of imports and exports (Cárcamo-Díaz 2004: 13). Further, borders make it more difficult to connect existing infrastructure and often induce the transit countries to impose additional costs or harassment on products of landlocked economies (Gallup and Sachs 1999: 3).

The negative effects of high transport costs are obvious: posing a natural barrier comparable in effect to a tariff, they reduce the level of trade between ESA countries and the rest of the world. Thus, they reduce both the contractive and the expansive effect of liberalization on ESA countries and therefore constitute a B-type constraint.

When it comes to solutions for transport problems, one point stands out clearly: as infrastructure has for decades been one of the main priorities of development cooperation, it would be extremely unrealistic to call for significant short-term improvements of infrastructural problems. However, in an EPA context, a stronger targetting of existing infrastructure projects on trade faciliation would be desirable. Investment in infrastructure should be concentrated on the liaison between production centres and export markets making it possible to lower transport costs when trading with the rest of the world. If targeted well, even small improvements in te infrastructure sector reduce transportation costs and thus significantly increase trade (Limão and Venables 2000: 18, 19).

Currently, there are many development projects aiming at trade facilitation, *inter alia* the World Bank´s Sub-Saharan African Transport Policy Program (SSATP) and an EDF funded coast-to-interior routes project in Ethiopia. In case of positive experiences, similar projects should be strengthened.

Another important aim should be the more efficient use of existing infrastructure. As a study by Charles Hulten for the research program on Productivity of the National Bureau of Economic Research has shown (Hulten 1996), such efforts have the potential to efficiently lower transport costs.

However, the most essential point for quickly reducing transport costs is the removal of man-made barriers. Therefore, EPAs should include commitments of the ESA countries to fight corruption, streamline their customs and port authorities and make trade related bureaucratic procedures more efficient. Furthermore, EPAs should include a commitment to cross-border cooperation among ESA countries in order to reduce barriers to transit transportation. The necessary measures of cooperation should include preferred access to ports, the elimination of unjustified costs, harassment, controls and bureaucracy, and bilateral cooperation in cross-border infrastructure projects.This would especially help landlocked countries to reduce their transport costs due to man-made barriers and insecurity about future transit regulations.

The EU should encourage the reduction of man-made trade barriers, provide ESA countries with technical support for this process and carefully monitor the fulfillment of the related EPA commitments. Further, the EU should make efforts to further increase the efficiency of its own customary regulations towards ESA countries. It should also be considered to include into EPAs technical regulations aiming at facilitating customary procedures between the EU and ESA countries, e.g. through improved cooperation between the relevant authorities.

3.2. Telecommunication

Lack of access to telecommunication infrastructure causes a disadvantage for many producers in developing countries because in today's economic world, access to the internet and telephone is a *conditio sine qua non* for good market performance. Through telecommunication market signals can be received quickly, which enables producers to react adequately and in time on changing market conditions. Without

telecommunication, changes in demand, prices, interest rates and business opportunities may be received too late leading to inefficiencies and wrong production decisions.

In the case of trade liberalization telecommunication infrastructure is crucial to allow a country's production sector to efficiently adjust to the changed conditions. Otherwise, the contractive effects in the import competing sector still take place and might become even more damaging if producers in these sectors do not have a chance to adjust or shift their production which might simply drive them into bankruptcy. Worse than that, the positive expansive effects in the export sector will be reduced by the absence of telecommunication facilities as without the relevant market information, producers will find it very difficult to identify the markets where they can compete successfully. In addition, most transport processes are planned online so internet access is a prerequisite for efficiently participating in international trade. In conclusion, a country can be worse off after trade liberalization due to the absence of telecommunication infrastructure. We therefore consider telecommunication problems an A-type constraint.

Most producers in ESA countries except those in Mauritius and the Seychelles are confronted with poor telecommunication infrastructure (UNCTAD 2003 (a): 360-368). Especially small scale firms and peasants hardly have a chance to get access to information about the demand and prices for the goods they produce. It is therefore highly questionable whether these producers would be able to react adequately on the changed market conditions after liberalization. Thus, improving ESA producers' access to telecommunication infrastructure will be indispensable to allow these countries to benefit from liberalization.

Tackeling the telecommunication constraint will doubtlessly require additional investment in both communication hardware and the development of ESA producers capacity to use it. Even though costly, such investment is a precondition for efficient production, transport and logistics under EPAs. To benefit from trade liberalization, ESA countries have to be connected to global information networks in order to be competitive in today's international trade environment.

Through closer cooperation with the private sector, like joint venture operations, the EU could assist ESA countries to tackle the telecommunication

constraint. A promising example for this kind of cooperation is the promoted establishment of a regional telecommunication network (known as COMTEL) by the Common Market for Eastern and Southern Africa (COMESA) with assistance of Telia Swedtel and the African Development Bank. This project aims at increased access to telecommunication services for rural population and traverses all ESA countries.

A crucial prerequisite for modern telecommunication is electrification, often lacking in ESA countries and especially in rural areas. As it has many additional positive effects for development, electrification has for many years been on the agenda of development aid projects. The most promising results in rural development through electrification have ultimately been achieved through the promotion of renewable energy sources like solar-, wind-, and hydropower. These have the advantage of being operable in a decentralized manner. Therefore, they are independent from overland circuit lines which are often missing in developing countries and supply electricity directly where it is needed. Additionally, producers can individually invest in their own energy supply units and thus reduce the uncertainty costs due to outages in public energy supply.

As markets for renewable energy technologies are growing rapidly and a lot of investment in research and development in this sector is being made, the efficiency of these technologies is likely to further improve during the next years. Within the international action programme adopted at the "renewables2004" conference in Bonn the EU made promising commitments for renewable energy projects in developing countries. One of these is the EU Energy Initiative for Poverty Eradication and Sustainable Development (EUEI) which aims at giving the poor in developing countries improved access to renewable energies and thus foster pro-poor growth and social development. Our recommendation is that the EU and ESA countries should further increase their efforts to promote rural electrification through renewable energy sources.

3.3. Low Labour Productivity

As far as reliable data are available, all sectors of ESA countries' economies have labour productivity rates far below the international average. This is *inter alia* due to

poor education and health status of workers and low capital-labour ratios in production.

However, along with low labour productivity go low labour costs. This is why low labour productivity does not necessarily impede a country's competitiveness. Rather, low labour productivity usually shifts a country's comparative advantage to sectors where production is intensive in cheap and unskilled labour. Not surprisingly therefore the large majority of ESA countries have their comparative advantage in agricultural products and commodities (see table 2 appendix). After liberalization of trade, low labour productivity will therefore make it likely that ESA countries further specialize in the production of these goods. In terms of a countries long-term development perspective, it is highly questionable whether this is good or bad. On the one hand, increased demand for unskilled labour is likely to raise real wages and specialization on sectors with comparative advantage will increase the country's productivity. On the other hand, specializing on a limited export portfolio with little added value in production always bears the risk of dependence on international commodity prices and creates little incentive for further economic and social development.

Although low labour productivity does have a strong effect on a country's comparative advantage and therefore on the outcome of the adjustment process, it does not hinder adjustment itself and therefore according to our definition is not a supply side constraint. It has to be stressed that this does not mean that the negative effects of low labour productivity on the ESA economies can be ignored. To promote long-term development, the improvement of education and health conditions as well as the introduction of more sophisticated and capital intensive production technologies remains indispensable.

3.4. Market Structure

The main sources of structural market inefficiencies in developing countries are monopolies and the lack of economies of scale due to small markets (UNCTAD 2003 (b): 148-150). In the case of monopolies, liberalization might cause higher than usual adjustment costs because domestic monopolists have to increase their efficiency under international competition, which might include dismissals, or cause bankruptcy if they fail to do so. However, if the country has the potential to become competitive in a given sector, former monopolists should be capable to adjust or new competitive

businesses can emerge. They could then become exporters and create new jobs. Furthermore, consumers would benefit from lower prices as competition and efficiency in the production sector increase. Although the existence of monopolies might make the adjustment process more painful, it does not hinder the adjustment or positive effects of liberalization. Furthermore, the decrease of monopoly power in a liberalizing country can be seen as an additional benefit of liberalization. Therefore, the existence of monopolies is not a supply side constraint.

On the contrary, economies of scale effects can permanently hinder a country to adjust and benefit from liberalization. Increased competition following market liberalization may ruin businesses which have the potential to produce competitively in international markets but did not manage to enlarge their output in time to enjoy economies of scale as their competitors do. This damage is permanent as in sectors with economies of scale new businesses have a very hard time in getting into the market because starting with small scale production, they face higher per unit costs although they could produce at equal or even lower per unit costs once they reached a higher output level.

As many agricultural exports from ESA countries have already proven their competitiveness in international markets and economies of scale effects in agriculture are relatively low, there is little reason for concern in this production sector. The crucial businesses when analyzing this constraint are the existing manufacture industries in ESA countries. Although they do not contribute much to most ESA countries exports, some of them operate successfully in domestic markets. For an export lead development of ESA countries, these industries will be indispensable to diversify export portfolios with higher value added goods and decrease ESA countries dependence on international commodity prices.

Economies of scale related disadvantages can cause durable damages in economic sectors that are crucial for ESA countries development and should therefore be considered an A-type constraint. It should not be forgotten, though, that because of the non-reciprocal structure of the existing trade regime, ESA manufacturers already have the chance to export to EU markets and thereby increase their economy of scale benefits.

With respect to economies of scale, the crucial point is to make ESA manufacturers fit for competition in time. Therefore, research is necessary to identify manufacture

sectors were comparative advantage is given or can be easily developed. Then, these sectors should be supported through non-distorting measures for the promotion of exports, which might include government funded research and information distribution about market opportunities, pre-industrial research and development, trade fares and support in contact-building. These can be undertaken way before the beginning of liberalization as European markets are already open for ESA products.

Furthermore, EPAs should be designed flexible enough to allow ESA countries to adopt extraordinary safeguard measures in order to allow promising infant-industries to gradually increase their output to enjoy economies of scale before they have to face full international competition.

Another promising way, which has been emphasized by the EU from the beginning of EPA negotiations, is the promotion of regional trade integration between African countries. This would provide ESA producers with the possibility to enhance their export possibilities and experiences in international trade on a regional basis. They would thus benefit from economies of scale due to bigger markets before being confronted with competition from EU countries.

3.5. Capital Market Deficits

The absence of functioning capital markets is often seen as a severe constraint to economic development given that the investments necessary for promising business projects can not be realized because no credit opportunities are available or interest rates are simply too high.

To succesfully adjust after a market liberalization, investment is indispensable to establish new businesses or adjust existing ones. Also, export oriented production in general shows a higher dependence on external finance than production for domestic markets as it faces higher up-front costs for market finding, transport and legal procedures (Becker and Greenberg 2003: 11-12). Furthermore, capital market institutions are crucial for export oriented businesses to protect themselves against currency fluctuation risks through hedging.

If a sufficient supply of affordable capital is not given, the gap caused by the decline of existing non-competitive businesses can not be filled by new competitive and export oriented ones. Thus, capital market problems hinder the expansive effects of liberalization but not the contractive ones and are therefore an A-type constraint.

It should be noted, though, that capital markets in developing countries will not have to meet the same needs as those in industrialized countries. Given the relative abundance of their labour forces and their lack of capital, it is very likely that developing countries following market liberalization will find their comparative advantage in sectors where production is less capital intensive. It is therefore the pure non-existence of access to capital supply and financial services including saving possibilities and insurance for small and medium scale businesses and not so much the higher interest rates which pose a supply side constraint.

Generally, a smooth transition to a more efficient and competitive economy following a successful liberalization could encourage the development and diversification of capital markets and thereby have a positive effect even for non-export sectors. This is one of the channels the hoped-for trickle-down effects of liberalization would take.

The availability of data on capital markets in ESA countries is rather heterogeneous. On one hand, the Financial Stability Assessment Program (FSAP) of the World Bank and the IMF has recently published detailed reports on the financial markets of Mauritius (FSAP 2003 (a)) and Uganda (FSAP 2003 (b)). On the other hand, when it comes to Comoros, DR Congo and Eritrea, not even basic data on capital markets are available at the relevant databases. Nevertheless, one can state that in the countries with data available there is an obvious bias of capital market conditions against ESA-countries compared to the rest of the world and it is very likely that in countries with data missing the situation is similar if not worse.

The basic problem is the fact that capital does not find the way from willing investors to the most promising investment opportunities. The share of money saved and borrowed through banks and other financial institutions relative to GDP is comparatively low in most ESA countries. While Mauritius and Seychelles pose a positive exception and there are some encouraging developments in Kenya and Ethiopia, capital markets in the other ESA countries must be characterized as poor. Additionally, the existing financial services are often restricted to business centers or large scale clients while households in remote areas or small and medium scale businesses do not have access.

The crucial question is why efficient capital markets do not emerge in ESA countries although there is demand for both saving and credit services (Applegarth 2004: 2). The comparison of interest rates for lending and deposits reveals that the spread between the two of them is significantly higher in ESA countries which indicates inefficiency in the banking system (see table 3 appendix). While Ethiopia and Seychelles pose positive exceptions, the financial institutions in most ESA countries obviously work less efficiently than those in other countries. Thus, in relative terms, deposits are less profitable and credits are more expensive. This inefficiency-gap causes high transaction costs which reduce the possibilities for profitable capital movements and thus hinders the development of capital markets.

In summary it can be stated that although Mauritius, Seychelles, Ethiopia and Kenya have made considerable progress in developing their capital markets, financial institutions in ESA countries generally lack depth and efficiency or simply do not exist. This is a severe A-type constraint as it hinders the adjustment necessary to benefit from the chances of liberalization.

With respect to solutions for capital market problems, one point should be stated very clearly: the aim of policy measures should be to help ESA countries develop stable and efficient capital markets and thereby mobilize the financial resources that do exist in these countries. For this, development aid money for investment financing will surely be necessary in some cases to overcome temporary capital gaps. It should not be forgotten, though, that this kind of official involvement always bears the risk of crowding out private providers, which would be extremely contra productive.

Although the symptoms – lack of depth and efficiency of capital markets – are similar in most ESA countries, the causes for these problems vary from country to country. The ESA group is extremely heterogeneous when it comes to capital market conditions. Some of the main differences are due to British vs. French legal traditions, market size, structure of financial institutions and state ownership vs. private ownership of important banks (we owe this point to Thorsten Beck).

World Bank researchers Thorsten Beck and Michael Fuchs find that in Kenya, the deficient legal and institutional framework is the largest explaining factor for inefficiency. Furthermore, they state that Kenyan banks are overstaffed and lack economies of scale due to their small size (Beck and Fuchs 2004:10). On this basis,

they propose detailed policy measures to alleviate market, political and institutional barriers to competition and thus increase the effectiveness of the Kenyan financial market. This seems to be the best solution in Kenya, but problems in other ESA countries are different. For instance, while the Kenyan banking sector lacks concentration, financial sectors in other ESA countries are inefficient due to monopolist structures. Thus little effort is made to enhance their services or look for ways of doing profitable business with difficult clients such as small and medium-size enterprises.

Therefore, extensive and specific research will be necessary to find the most effective solutions for each individual ESA country. Fortunately, the EU and ESA do not stand alone with this problem as capital market development is a crucial issue for almost every aspect related to development. Experts at the World Bank and the IMF have profound experiences in evaluating capital markets and developing strategies to strengthen their efficiency. Hence, the EU and ESA should seek close cooperation with ongoing World Bank an IMF projects such as the FSAP. Under this framework, financial experts are currently undertaking a country-to-country analysis of financial institutions and capital markets. While the program's main purpose is to evaluate why existing financial institutions might fail, it has recently adopted a broader scope of analysis including the question why these institutions might be missing when dealing with lower income countries. As this is exactly the analysis needed to find solutions for capital market constraints, EU and ESA should consider political efforts to accelerate the evaluation of ESA countries' capital markets and cooperate closely with FSAP experts to determine country specific strategies for capital market development. These should be implemented before market liberalization to prevent negative effects for development and poverty due to capital market constraints but should also include a long term perspective focusing on the interdependence between trade and financial markets.

Besides EU assistance to national efforts, EPAs should include commitments to cooperation between ESA countries aimimg at the promotion of regional capital markets. This could *inter alia* be reached through legislative and regulatory harmonization and regional capital control liberalization. Thereby, efficiency losses due to small markets could be overcome and financial stability in the region could be strengthened.

4. Conclusions

Our analysis has revealed that there are indeed a number of supply side constraints with a varying potential to hinder a successful liberalization in ESA countries. Our first and most basic conclusion therefore is that liberalization is not a magic trick to promote development and that it can only work if many other issues are addressed successfully at the same time.

Among the problems discussed,

- the lack of adequate telecommunication infrastructure,
- missing economies of scale due to small market size and
- the lack of depth and efficiency of capital markets

turned out to be A-type constraints. As these problems directly hinder the expansive effects one could otherwise expect after liberalization but leave unaffected the expansive ones, ESA countries run the risk of being worse off after liberalization than before.

With respect to transport problems – including the specific problems of landlocked ESA countries – our finding is that although they pose a supply side constraint and have the potential to hinder liberalization benefits, they are not likely to lead to negative liberalization effects. As a result, they can be classified a B-type constraint.

Low labour productivity and market structures dominated by monopolies did not turn out to be supply side constraints. As stated above, this does not mean, that they do not pose serious obstacles to development. However, these problems do not hinder the adjustment process after trade liberalization.

What are the implications of these findings for the EPA negotiations? Firstly, it has to be stated that neither the optimism of the EU on the positive effects of liberalization nor the overall scepticism against liberalization articulated by many development NGOs are fully justified. Although there are supply side constraints which pose a serious threat to the success of EPAs, there are also promising ways to tackle them. Some of them have been described earlier and shall not be repeated here.

For the ongoing EPA negotiations, it will be crucial to include the issue of supply side constraints into the discussions – which already is the case – and equip EPAs with the tools necessary to adress them. Therefore, we recommend the following priority setting: while both A- and B-type constraints need to be tackled to make liberalization work for development, priority should be given to A-types. If the EU and ESA do not succeed in solving these before the beginning of substantial liberalization, they run the risk of getting results contrary to the aims of Cotonou. Therefore, in addition to the measures proposed to tackle these problems, EPAs should include a conditionality between progress with A-type constraints and further steps of liberalization.

B-type constraints, although undoubtedly important in many ways, are not as urgent as A-type constraints, at least not in relation to liberalization and trade. Of course, there are many other reasons why it would be desirable to solve these problems as soon as possible. With respect to EPAs, however, there is no need for conditionalizing liberalization to progress with B-type constraints because the worst effect they could have is to neutralize liberalization. Still, EPAs present a chance for further cooperation on these problems, especially among ESA countries themselves.

Therefore, measures to tackle B-type constraints should be included into EPAs. With respect to low labour productivity and monopoly structures, our finding is that they are serious problems, but no supply side constraints. Especially with respect to low labour productivity and its causes – poor education and bad health – strong efforts are indispensable and urgent to improve the situation of people in ESA countries. However, as there is no direct relation between these problems and adjustment to trade, we do not see the necessity of including them into EPA negotiations. This would mainly have the effect of unnecessarily complicating both the EPA negotiations and development cooperation under frameworks already in place, namely the Cotonou agreement. Therefore, our recommendation is that these problems should be dealt with under the existing programs and institutions rather than in an EPA context.

Some of the ideas we have presented can only be implemented by ESA countries themselves while the EU's role is limited to providing technical support and political advice. Others may require EU initiative including additional funding. If both parties

are ready to take the necessary efforts, supply side constraints can be overcome and EPAs have the potential to achieve a lot for people in ESA countries. If not, liberalization is a dangerous experiment in which these people bear the risk.

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6. Appendix

Table 1: Infrastructure Indices for ESA and selected EU countries

	Road-Index relative to Belgian Road-Index	Railway-Index relative to German Railway-Index
Burundi	0,01%	0,00%
Comoros	0,81%	0,00%
DR Congo	0,00%	0,25%
Djibouti	0,02%	0,92%
Eritrea	0,00%	0,25%
Ethiopia	0,00%	0,01%
Kenya	0,01%	0,60%
Madagascar	0,01%	0,08%
Malawi	0,06%	0,88%
Mauritius	3,30%	0,00%
Rwanda	0,01%	0,00%
Seychelles	6,27%	0,00%
Sudan	0,00%	0,65%
Uganda	0,00%	0,46%
Zambia	na	0,84%
Zimbabwe	0,03%	2,62%
Germany	4,26%	100,00%
France	55,78%	45,02%
Belgium	100,00%	54,89%
Italy	31,02%	30,93%

Source: Authors' calculation based upon data from CIA World Factbook 2004. Indices are calculated as follows: Road-Index = [paved roads (km)]² / [population * area (sq km)] ; Railway-Index = [Railway (km)]² / [population * area (sq km)]

Table 2: Specialization Index

Country	Exporting Sector	Rank	Revealed Comparative Advantage
Burundi	Fresh food	3	22,12
	Minerals	126	0,20
Comoros	Transport equipment	5	3,68
	Fresh food	32	10,56
	Processed food	64	1,64
Congo, DR	Minerals	7	8,28
	Wood products	79	0,57
	Basic manufactures	93	0,36
	Fresh food	151	0,29
Djibouti	Chemicals	13	1,40
	Fresh food	37	9,41
Eritrea	Leather products	3	16,48
	Electronic components	8	2,17
	Fresh food	57	5,19
Ethiopia	Leather products	7	6,72
	Fresh food	11	18,70

	Textiles	33	1,21
	Processed food	84	1,15
	Clothing	112	0,13
	Minerals	142	0,06
Kenya	Fresh food	25	12,48
	Clothing	43	2,46
	IT & Consumer electronics	56	0,10
	Processed food	58	1,87
	Minerals	67	1,15
	Leather products	71	0,62
	Basic manufactures	79	0,62
	Chemicals	80	0,42
	Wood products	84	0,49
	Non-electronic machinerie	84	0,15
	Transport equipment	84	0,06
	Electronic components	92	0,05
	Miscellanous manufacturing	94	0,22
	Textiles	107	0,17
Madagascar	Clothing	18	8,31
	Fresh food	21	13,15
Malawi	Fresh food	7	20,35
	Processed food	51	2,04
	Clothing	69	1,00
Mauritius	Clothing	8	15,62
	Processed food	16	5,40
	Textiles	29	1,46
	Miscellaneous manufacturing	53	0,62
	IT & Consumer electronics	66	0,07
	Non-electronic machinery	72	0,19
	Transport equipment	75	0,08
	Electronic components	91	0,05
	Chemicals	111	0,12
	Fresh food	114	1,20
	Basic manufactures	116	0,14
	Minerals	125	0,21
Rwanda	Minerals	20	6,76
	Fresh food	63	4,73
Seychelles	Processed food	2	13,51
	Fresh food	45	8,13
	IT & Consumer electronics	47	0,20
	Miscellaneous manufacturing	64	0,46
	Minerals	110	0,31
Sudan	Minerals	23	6,46
	Leather products	57	0,91
	Fresh food	59	5,16
	Transport equipment	74	0,08
	Processed food	117	0,46
Uganda	Fresh food	10	18,92
	Minerals	84	0,75
	Processed food	88	0.90
	Non-electronic machinery	92	0,07
	Textiles	104	0,19
	Chemicals	107	0,15
Zambia	Basic manufactures	1	9,63
	Textiles	37	1,06
	Non-electronic machinery	53	0,34
	Processed food	80	1,29
	Electronic components	81	0,08
	Leather Products	84	0,33

	Transport equipment	85	0,04
	Minerals	91	0,60
	Fresh food	100	1,63
	Chemicals	115	0,09
Zimbabwe	Basic manufactures	18	2,18
	Fresh food	20	14,36
	Leather products	60	0,86
	Miscellaneous manufacturing	75	0,38
	Clothing	81	0,61
	Processed food	82	1,20
	Minerals	92	0,58
	Textiles	93	0,26
	Non-electronic machinery	99	0,04
	Wood products	101	0,31
	Chemicals	101	0,20

- **Source: International Trade Centre, International Trade Statistic Database; Calculation based on COMTRADE of UNSD.** The index measures the country's specialization index in exports according to the Balassa formula. The index compares the share of a given sector in national exports with the share of this sector in world exports. Values above 1 indicate that the country is specialized in the sector under review. Rank 1 indicates that the country has the highest specialization index in the world for the sector under review.

Table 3: Interest spreads in selected EU and ESA countries

COUNTRY	DESCRIPTOR	2000	2001	2002	2003
DENMARK	- *DEPOSIT RATE* + LENDING RATE	4,9	4,9	4,7	na
FRANCE	- *DEPOSIT RATE* + LENDING RATE	4,1	4,0	3,6	3,9
ITALY	- *DEPOSIT RATE* + LENDING RATE	4,4	4,6	4,3	4,1
NETHERLANDS	- *DEPOSIT RATE* + LENDING RATE	1,9	1,9	1,2	0,5
EURO AREA	- *DEPOSIT RATE* + LENDING RATE	3,2	3,3	3,3	na
SPAIN	- *6-12 MONTHS DEPOSIT RATE* + VARIABLE RATE	2,2	2,1	1,8	na
DJIBOUTI	- *RATE O TIME DEPOSITS 1 MONTHS* + LENDING RATE	na	8,7	10,1	10,5
ETHIOPIA	- *DEPOSIT RATE* + LENDING RATE	4,2	3,9	4,6	4,3
KENYA	- *MAX 3-6 MONTHS' DEPOSITS* + COMM.BNKS LOANS&ADVANCES MAX.	14,2	13,0	13,0	12,4
MADAGASCAR	- *DEPOSIT RATE* + LENDING RATE	11,5	13,3	13,3	12,8
MALAWI	- *CB 3 MONTH FIXED RATE* + MAX CB LENDING	19,9	21,2	22,5	23,8
MAURITIUS	- *UPR MARG TIME DEP UP TO 3 MO* + UPPER MARGIN PRIME RATE	11,2	11,3	11,1	11,5
SEYCHELLES	- *DEPOSIT RATE* + LENDING RATE	6,7	6,2	6,2	7,1
UGANDA	- *TIME DEPOSITS* + LENDING FOR EXP. & MANUF.	13,1	14,2	13,5	9,1
ZAMBIA	- *DEPOSIT RATES-TIME 3-6 MONTHS* + COMMERCIALLENDING RATES-O.D.	18,6	22,8	21,9	18,6

Source: Authors' calculation based on data from IMF, International Financial Statistics Database. As data on deposit and lending rates are not available for all countries, similar data had to be used in some cases (see "descriptor" column)