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## **Preference Erosion: The Case of Everything But Arms and Sugar**

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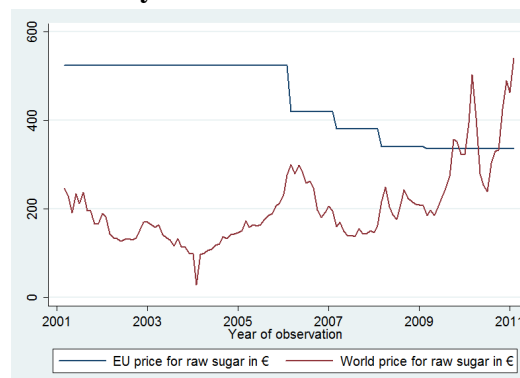
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The European Union's Everything But Arms agreement was designed to make poor countries better off. But this noble goal might be overshadowed by some unwanted by-effects. In this work we are taking a close look at a potentially important phenomenon: preference erosion.

Every change in policy creates winners and losers. This observation is demonstrated by the example of the recent introduction of the Everything But Arms (EBA) agreement. The EBA granted unlimited, duty free access to the European market for the group of the Least Developed Countries. It has been in place since 2001 and, after a transition period had expired, since 2006 for sugar. Sugar is a powerful example to show the negative impacts of the EBA for two reasons: firstly, it is a very intensively traded good. 31% of the world production (global production in 2005: 150 million tons) is sold on the world market. Secondly, the EU sugar market used to be strongly protected, with a domestic price up to three times the world market price during the last ten years.

The argumentation why the EBA was not a blessing for everyone is laid out as follows: there had already been some pressure on the Common Market Organization (CMO) for sugar because of the results of some current disputes in the context of the World Trade Organisation (WTO) negotiations: in 2004 the EU had been found guilty of subsidizing sugar exports in much bigger quantities than it had committed itself to in the 1995 concluded Uruguay round of the WTO negotiations. The expected increased inflows of sugar into the EU after EBA put even more pressure on the CMO which is why it was inevitable to change the CMO. Only one solution was possible: a drastic reduction in the intervention price. From 524 €/ton in 2006 it was gradually reduced to 335 €/ton in 2009.

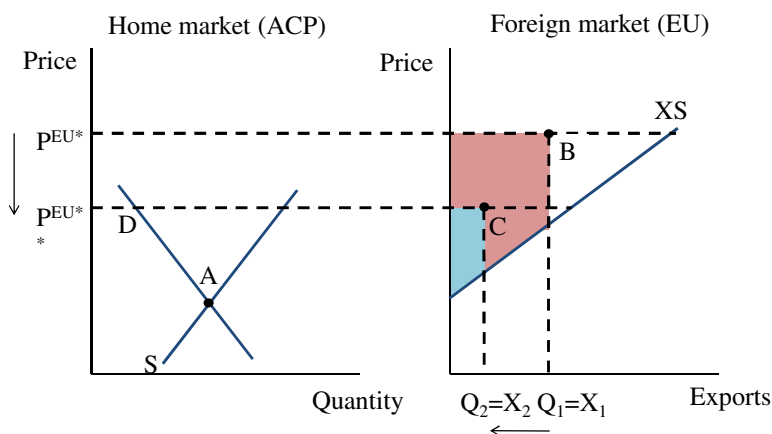
**Figure 1: Monthly Price Data in €/ton of Raw Sugar**



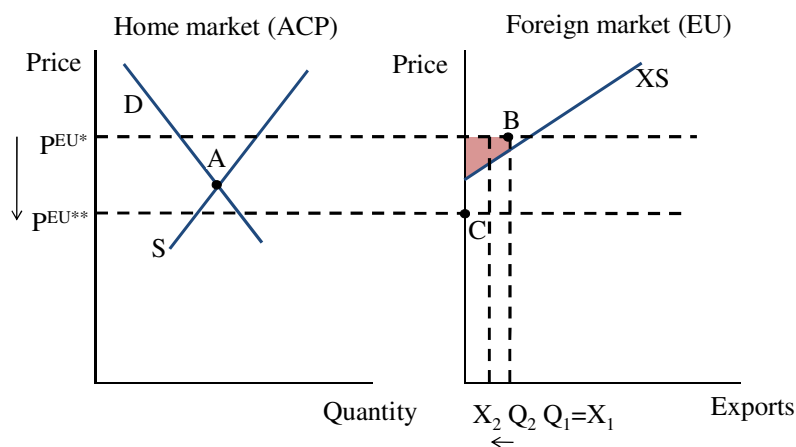
This was obviously bad for the European farmers, but also for a group that had profited from the protected European sugar market before: the countries from the African Caribbean Pacific (ACP) region. These countries were signatories of a series of Preferential Trade Agreements (PTAs) with the EU, starting in the 1970's. Two sub-agreements which ruled their imports of sugar need consideration here, namely the Sugar Protocol (SP) and Special Preferential Sugar (SPS). Both gave a tariff-free quota to the ACP countries, which generated a significant welfare gain for a few of them, including for example Mauritius.

This process of the reduction in the value of preferences is called Preference Erosion. When predicting the impacts on the affected countries, it needs to be differentiated within this heterogeneous group of countries: in the case of an ACP country, its quotas decreased and it faced a cut in prices which would definitely result in a welfare loss (see figure 2, the red shaded area indicates the welfare loss) or even cause it to drop out of the market (see figure 3).

**Figure 2: ACP country, facing lower quotas and prices**

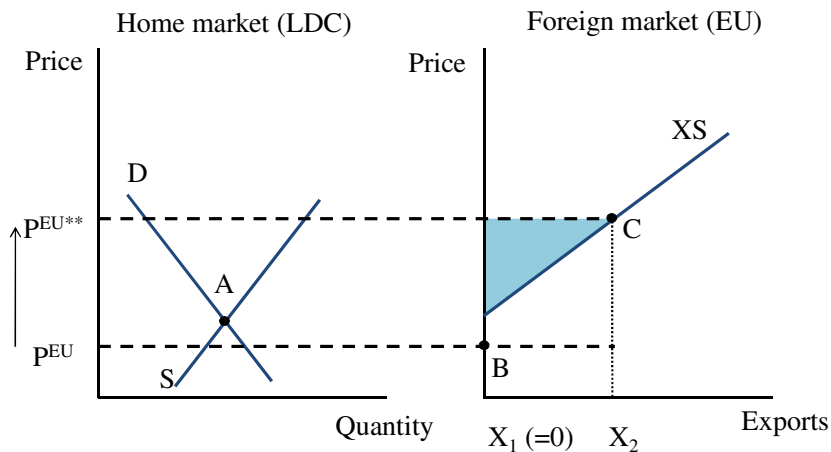


**Figure 3: ACP country, facing lower quotas and prices, not competitive anymore**



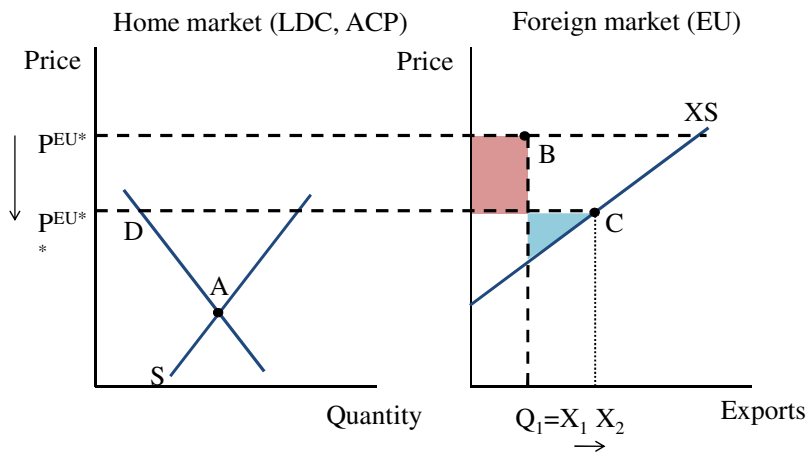
An LDC on the other hand is predicted to unambiguously profit from the EBA, because it has now access to a market with a price that is considerably higher than the one obtained on the world market (see figure 4, the blue area is the welfare gain).

**Figure 4: LCD country, facing higher prices and being granted unlimited access**



For a country that is both a signatory of the EBA and the SP / SPS the expected impacts are ambiguous: as it had already been able to sell at the European price before, the decrease in the price means a loss in profit for every ton of sugar that is sold. Meanwhile it faces no more quantitative restrictions and can thus export more sugar to the EU which might overcompensate the losses from the lower price (see figure 5, the red shaded area represents the welfare loss, the blue one the gain).

**Figure 5: LDC country that is also part of the ACP group, facing a lower price but being granted unlimited access**



In order to empirically prove these theoretically expected impacts, a gravity model is specified that predicts the trade flows of sugar from LDC and ACP countries into the EU:

$$\ln T_i^k = EBA_i + SP_i + SP\_X\_EBA_i + D^i + \ln sugprd_i^k + polity_i^k + \ln exrate_i^k + \sum_k year^k + \epsilon_i^k$$

$T_i^k$  are the mono-directional trade flows of sugar from country  $i$  into the EU; the most important exogenous variables are the dummies that capture the policy described above:  $EBA_i$  is a dummy that takes the value one for the LDC countries,  $SP_i$  becomes one if the country is a signatory of the SP/SPS and  $SP\_X\_EBA_i$  is the cross term;  $D^i$  is a fixed effect dummy that captures the constant characteristics of every country;  $sugprd_i^k$  stands for the size of the sugar sector in the exporting

country;  $polity_i^k$  is an index for the political regime and  $exrate_i^k$  controls for the exchange rate.  $year_k$  captures common macroeconomic shocks and  $e_i^k$  is the error term.

**Table 1: Econometric Results**

<i>VARIABLES</i>	<i>Fixed Effect OLS</i>	<i>Fixed Effect Poisson</i>
EBA	0.953* (0.0807)	0.642*** (0)
SP	-1.189*** (0.00610)	-0.812*** (0)
SP_X_EBA	-0.235 (0.764)	
log_sug_production	0.884 (0.383)	9.48e-08*** (0)
polity	-0.137*** (7.12e-05)	-0.0291*** (0)
log_exrate	-0.385 (0.760)	0.532*** (0)
Constant	-1.161 (0.927)	
Observations	161	207
R-squared	0.746	
Number of sections	24	24

*Robust p-values in parentheses, clustered around country*

*Regression includes sectoral and year dummies*

*\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$*

The dummy that indicates preference erosion (SP) is significantly negative: ACP countries were indeed negatively affected from the Everything but Arms agreement. In terms of their sugar exports they are clearly in a worse position than before the EBA. The LDCs on the other hand profited unambiguously.

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