



Marcel Adenäuer  
Dipl. Ing. agr  
Department Economics and Agricultural Policy

Member of the staff since Oct. 2001  
Telephone: 0228-73-2858  
adenaeuer@agp.uni-bonn.de



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## PH D Project

# Reform of the Sugar Common Market Organisation - Impacts on the European Sugar Sector

## Objective

Recent Developments indicate that a reform of the European Common Market Organisation for Sugar (CMO Sugar) is inevitable. The main driving force is, besides the pressure put on by major sugar exporters (e.g. Brazil) in the current WTO negotiations, the „Everything but Arms“ initiative that grants the „Least Developed Countries“ unlimited and duty free market access latest by 2009 for all tradable goods but arms. Therefore, additional sugar imports are unavoidable which requires a reduction of domestic supply, because subsidised exports reach – already today – the WTO limits.

The first objective of this study is an analysis of possible economic models for the behaviour of European sugar beet producers. In a second step it is envisaged to project - on the basis of this theoretical and empirical analysis – their supply response to price and/or quota changes and the impacts on the agricultural sector based on a simulation model.

## Theoretical Background and Methodology

The rules of the CMO Sugar, in particular the quota mechanism with the possibility to sell quantities that are produced above the quota at prices oriented at the world market price for sugar, make the general profit maximising hypothesis insufficient to explain observed supply quantities. Alternative behavioural models are therefore discussed (expected profit maximisation, expected utility maximisation with risk aversion, etc.)

The second part of the study will focus on the estimation of opportunity costs of sugar beet production. An econometric approach based on individual farm data will be applied using a restricted profit function.

Finally, the results of the first two steps will be transferred to the agricultural sector model CAPRI in order to analyse selected reform options of the CMO Sugar.

## Preliminary Results

First results show that the observed supply response of sugar beet producers is caused by a combination of several motives with the effect to produce more sugar beets than expected under simple profit maximisation. With respect to the results of the estimation of opportunity costs we expect them to be considerably higher than the C beet prices. Therefore, supply response will be somewhat stronger than projected in other recent studies (e.g. Frandsen, S.E., Jensen, H.G., Yu, W., Walter-Jorgensen, A. (2003): Reform of EU Sugar Policy: Price Cuts Versus Quota Reductions, *European Review of Agricultural Economics* (30), pp. 1-26).