

Table C2: Basic information on CAPSIM

Objective

Impact analyses for CAP scenarios on agriculture (area allocation, market balances, income), consumers in EU Member States and on the EU Budget

Methodology

- Partial equilibrium model
 - Supply side:
 - Based on behavioural functions for activity levels (yields are assumed exogenous) and input demands
 - Currently: double log form with elasticity set calibrated to profit maximisation conditions. Respecification to Generalized Leontief functional form is envisaged
 - Activity levels comply with balances on land, male and female calves, and after respecification, energy and protein
 - Demand: Currently double log form with synthetic, calibrated elasticities. Respecification will use a globally well behaved functional form.
 - Processing: Currently only modelled on EU level, assuming constant returns. Revision will explicitly model processing in EU Member States
 - Trade: Currently either exogenous trade volumes or exogenous international prices. Incorporation of a revised trade component (net trade functions mimicking the WATSIM) foreseen.
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Policy instruments

- Border measures: Tariffs (specific or ad valorem), flexible levies / variable export restitutions, WTO constraints on subsidized exports
 - Domestic market support: Intervention will be triggered (up to a prespecified upper bound) if there is a support price but WTO constraints are binding. Subsidies per unit of current output are possible but irrelevant in the CAP
 - Payments: Different premia (grand cultures, durum wheat, suckler cows, special male, slaughter) are implemented. Ceilings are met, if necessary, by proportional scaling of payments per activity.
 - Set aside is implemented based on an elasticity of the effective set aside with respect to the obligatory set aside rate.
 - Quotas
 - Currently implemented as a quota on total production.
 - For sugar we will impose in the future a quota on A+B sugar only, treating C-sugar as a separate product traded at international prices.
 - Inefficiency from a non optimal allocation of quota rights is currently neglected. Incorporation is foreseen based on information on farm level cost functions
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Data sources

- Eurostat gives data on market balances (ZPA1), economic accounts values (COSA) and a number of EU producer prices (PRAG), if they cannot be derived as unit values.
 - Completeness and consistency of these series is the result of a major modelling effort on its own (COCO module) by a joint effort with the CAPRI team
 - International prices are derived from the WATSIM data base
 - Supplementary information on missing variables is coming from different sources (DG Agri, FAO, USDA, ILO, national statistical agencies)
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Results

- Activity levels, market balances and income (NVAF) in agriculture per EU Member state, per capita and per ha
 - Consumer welfare: currently measured as consumer surplus, will be given as equivalent variation after respecification.
 - FEOGA impacts will be estimated, in a rough manner, in a simplified budget component, currently under construction
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