EU enlargement in an uncertain macroeconomic environment:
How do changes in macroeconomic conditions influence the potential impacts on agricultural markets of a Turkish accession to the EU?

Thomas Fellmann*¹, Myrna van Leeuwen** and Petra Salamon***

* European Commission - Joint Research Centre
  Institute for Prospective Technological Studies (JRC-IPTS), Seville, Spain
  ¹ University Pablo de Olavide, Department of Economics, Seville, Spain
  E-mail: tfel@upo.es

** Agricultural Economics Research Institute (LEI), The Hague, The Netherlands
  E-mail: myrna.vanleeuwen@wur.nl

*** Johann Heinrich von Thünen-Institut (vTI), Institute of Market Analysis
  and Agricultural Trade Policy, Braunschweig, Germany
  E-mail: petra.salamon@vti.bund.de

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Turkey is officially recognized as a candidate country for European Union (EU) membership. Recent information on the over-indebtedness of some EU Member States, combined with turbulence in the global financial system and a general economic downturn, can be expected to also influence the potential impacts on agricultural markets of a Turkish accession to the EU. Two major issues arise: (1) What would be the potential impacts of a Turkish accession to the EU on agricultural production levels and in Turkey and the EU? (2) How are these impacts influenced by changes in macroeconomic conditions?

1. Background

Formal accession negotiations between the EU and Turkey started in 2005. Turkey is the 7th biggest agricultural producer in the world, even though its agricultural sector is rather poorly structured.

2. Methodology

- AGMEMOD (AGricultural Member States MODElling) is an econometric, dynamic, partial equilibrium, multi-country, multi-market model.
- Network of economists and national agricultural markets experts working together across the EU. The model covers all EU Member States, some candidate countries, Ukraine and Russia.
- Based on a set of commodity-specific model templates, individual country models are developed to reflect the details of agriculture at country level and at the same time allow for their inclusion in a combined model.
- The individual country models consist of behavioral, parametric relations that are estimated from historical time series data.
- A detailed dataset and modeling structure for Turkey were developed and integrated into the overall AGMEMOD modelling framework.

3. Main scenario assumptions

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<tr>
<th>Scenario</th>
<th>Description</th>
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<tr>
<td>Baseline Scenario (Baseline)</td>
<td>No accession of Turkey to the EU</td>
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<td>Current (agreed and scheduled) policy (Health Check) remains unchanged</td>
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<td>Standard macroeconomic projections on GDP growth and inflation as obtained from national statistical offices in the EU-27 and Turkey</td>
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<td>Exchange rates and world market prices as provided by FAPRI (2010)</td>
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4. Accession impacts in the EU-28 (year 2020)

- Price changes for the EU-28 are rather moderate; biggest increases: rice (16%), barley (2%), soft wheat and maize (1% each); biggest decreases: sheep meat (-6%), poultry (-3.5%) and oranges (-9%).
- EU production and domestic use of wheat, barley, rice, tobacco, tomatoes, oranges, apples, and sheep meat decrease significantly.
- EU self-sufficiency rates decrease remarkably in some crops (especially tobacco, sunflower and rice), but increase for vegetables and fruits (particularly oranges) and most livestock products.
- Complementary scenarios: The changed Turkish macroeconomic variables have no considerable influence on the accession results for EU-28 markets (almost all changes are between -1% and +1% compared to the Standard Accession Scenario).

5. Accession impacts in Turkey (year 2020)

- Given current border measures in Turkey, a liberalization of bilateral agricultural and food trade between Turkey and the EU would be highly asymmetrical. Moreover, with EU accession the level of support to Turkish agriculture would considerably decrease for almost all commodities.
- Accession effects on the Turkish agro-food markets are projected to be mostly negative, especially for crops production. But: Turkish producers of tobacco (higher support) and producers of sheep meat, poultry and dairy milk are projected to gain (due to lower feed costs).
- Turkish consumers would gain due to lower food market prices.

6. Conclusions

- The complementary scenarios reveal that a doubling of Turkish GDP or a doubling of Turkish inflation do not significantly alter the accession results.
- However, a 10% depreciation of the TL versus the Euro and US dollar influences and further shapes the potential Turkish accession results.
- Exchange rates are among the key variables that determine domestic prices for agricultural commodities, and the depreciation of the TL leads to less decreases in Turkish producer prices, which has also a positive effect on producer income in Turkey.