EC JRC Project:

"National policy instruments and EU approximation process: effects on farm holdings in the Western Balkan countries (EUEWB)"

Farm productivity in the Western Balkan countries:
Overall view of the efforts within the EUEWB project

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Presentation outline

- **Introduction**

- **Motivation for farm productivity analysis**

- **Selected topics by countries**; MAC and SR more elaborate methodologies

- **Conclusions and ideas for future**

Introduction

Overall objective of the EUEWB project („National policy instruments and EU approximation process: effects on farm holdings in the Western Balkan countries"):

- Strengthen cooperation among research community, administrations in WB to support to evidence-based policy decision-making

Specific objectives of the project:

- Monitor and collect information on agric. policy developments in WB (Task 1)
- Evaluate availability and quality of farm level data in the WB, examine applicability for scientific analysis in supporting policy making (Task 2)
- *Explore possibility to extend IFM-CAP farm model to the WB (Task 3)*
- *Conduct relevant quantitative policy impact analyses (Task 4)*

Motivation for farm productivity analysis

Early in the project, decision not to apply IFM CAP model:

- Following Task 2 findings, 2 groups of WB countries in terms of availability and suitability of farm level data for quantitative policy analysis:
  - *Macedonia and Serbia:* farm level data available and fully suitable (with some adjustments); problems with availability (MAC), quality (SR)!
  - *Other countries:* farm level data potentially suitable for AL and KO*

Main reasons:

- *Problems in accessing FADN data and progress made on IFM-CAP* (SR: access to FADN data delayed, MAC: access to disaggregated data denied by the agric. ministry; privacy law)

- *Short project time* (18M)

- *Missing important variables in FADN* (e.g. farm weights for SR)

- *Lack of sufficient programming (GAMS) knowledge* within the project team

Alternative to IFM-CAP modeling exercise:

- *Data envelopment analysis (DEA) – MAC, SR*
- *(Original) objective:* calculate farm level productivity using DEA, analyze changes across different farm types, impact of subsidies
- *Data:* different by countries (availability, quality …). Only SR to use FADN data
- *Countries:* 5; only MN not participating

Selected topics by countries

- *Albania:* Plot analysis of determinants of productivity of Albanian farms
  (*Zhllima E. et al.: The impact of crop rotation and land fragmentation on farm productivity in Albania*)

- *Bosnia and Herzegovina, Republic of Srpska:* Farm productivity based on available FADN type of data
  (*Vaško Ž.: The farm productivity in Bosnia and Herzegovina – The overview of data availability and quality*)

- *Kosovo*:* Effects of irregular migration flow (2014-2015) on agricultural productivity in Kosovo*
  (*Kerolli-Mustafa M. et al.: „Effect of irregular migration flow (2014-2015) on agricultural productivity in Kosovo"*)

- *Macedonia:* Productivity of vegetables farms in Macedonia
  (*Dimitrievski D. et al.: Technical efficiency analysis of Macedonian vegetable farms*)

- *Serbia:* Productivity of arable farms in Serbia
  (*Todorović S. et al.: Importance and impact of agricultural policy measures on efficiency of pure arable farms in the Republic of Serbia; working title!*)

*This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo declaration of independence.

Macedonia, Serbia

- *MAC, SR:* more comprehensive research
- *Valuable analytical exercises:* insights about (a part of) agriculture in the country and building potential for evidence-based decision-making

Macedonia:

- *Topic:* technical efficiency of vegetables farms in MAC
- *Method:* DEA model (input oriented, BCC); scenario analysis
- *Data:* FMS (Farm Monitoring System), 2011, 75 farms

Serbia:

- *Topic:* efficiency of pure arable farms in Serbia
- *Method:* DEA (input oriented, BCC), two limit Tobit regression model
- *Data:* FADN panel of farm type 151, 2014 (n=143) and 2015 (n=179)

Conclusions and ideas for future

- **Useful analytical exercise:**
  - *Farm-level data used* (increase use & usability, feedback about data quality)
  - *Insights into selected topics*; building potential for evidence-based policy
  - *Strengthening analytical capacity* in WB countries
  - *Cooperation*, regional and international (overall project objective)

- **Recommendations:**
  - *Further develop/upgrade regional agric. policy analytical work in WB*
  - *Use established infrastructure* (WB agecon network and databases)
  - *Unify methodology to enable (better) cross-country comparability* (but problem of data availability and quality, capacity, financing, etc.)
  - *Importance of stable funding*

- **Proposed format for the future projects:**
  - *Topic, relevant for WB countries and EC* (e.g., small farms, farms in ANC, strengthening competitiveness)
  - *Cross-country survey, synthesis report, workshop* - as in the EUEWB project

Thank you for attention!