The Greening Effect

Will the proposed CAP measures lead to substantial gross margin losses for German farms?

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Background
Three additional obligations are proposed by the European Commission to ‘green’ the direct payments within the Common Agricultural Policy (CAP) reform:
1. Maintain permanent grassland from 2014 on
2. Establish ecological focus area of 7% of the farms’ arable land
3. Ensure crop diversification of at least three crops
   (70% maximum of one crop, 5% minimum of each of the others)
30% of direct payments be linked to compliance with these measures

Heterogeneous farm structure and environmental conditions in Germany
→ Farms face different costs of complying with these greening obligations

Results

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Fig. 2: The greening effect on total (blue) and arable (red) land, 5, 7 and 10% ecological focus area (EFA) modeling alternatives, farms no. 1-16 [€/ha]

- Farms with higher gross margins and farms with currently little nature-oriented area face higher greening costs, i.e. greening has a larger impact
- Dairy farms and farms with grassland are more affected than fattening farms
- Farms with very high gross margins (17 & 18) will forego public support to avoid losses

For detailed references see

Data & Method

Fig. 1: Approximate location of farms studied

Data: 18 constructed average farms covering the most important farm types in Germany and a variety of environmental and climatic conditions

Method: Calculating the gross margin loss for each farm due to the three proposed greening measures compared with a baseline
→ three modeling alternatives for the ecological focus area to reflect the ongoing debate

Discussion & Conclusions

- We make restrictive assumption regarding changes in factor endowments
- Opportunity costs for maintaining permanent grassland and manure spreading are ignored
- Indirect and regional effects are not included

Greening measures might be ecologically beneficial especially in intensively farmed regions BUT: if farms use legal loop holes to circumvent these measures, the goals of the greening will be severely threatened
→ Implementation design is crucial!

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