

T4.3/D4.2 – COSTS IN THE VALUE **CHAIN**

THE ECONOMIC IMPACTS OF SWITCHING FROM SPECIALISED FARMING TO MIXED FARMING AND AGROFORESTRY SYSTEMS (MIFAS) IN EUROPE

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Background

- European Green Deal and Farm to Fork Strategy aim to strengthen sustainable agricultural practices in EU
- Mixed farming and agroforestry systems(MiFAS) farming shows promise for environmental and ecological benefits and for economic diversification and resilience
- MiFAS can improve yields and lower variable costs, but challenge to address labour and opportunity costs
- Between 2005 and 2020, MiFAS farming has declined in utilised agricultural area in EU

Objective

- Economic implications are unknown in MiFAS literature, particularly the effect of switching from specialised farming
- Need to understand better how economic performance is affected by switching to motivate informed policy recommendations

Data

- European farm accountancy data (EU28, 2004 2018)
- Harmonised, representative accounting data for EU farming landscape
- Over 200,000 farms and 1,200,000 farm-year observations
- Defined typologies for specialised and mixed farming
- Switch requires two years non-mixed followed by two years mixed
- Switch from: 1) specialised cropping to MiFAS; 2) specialised livestock to MiFAS
- Observe effect on: 1) revenues; 2) variable costs; 3) wages paid; 4) unpaid labour; 5) productivity; and 6) profitability

Empirical Design

Novel econometric methods to evaluate the causal effects of the treatment (i.e., switching from specialised farming to MiFAS) on the dependent variables of interest

Results

Table 1. Summary of results of the effects of switching from specialisations to MiFAS on variables of interest

Switch to MiFAS on variable	Effect
Specialised cropping to MiFAS	
Revenues	Insignificant
Variable costs	Insignificant
Wages paid	Insignificant
Unpaid labour	Increase
Profitability	Insignificant
Specialised livestock to MiFAS	
Revenues	Decrease
Variable costs	Decrease
Wages paid	Decrease
Unpaid labour	Insignificant
Profitability	Insignificant

Discussion & Conclusions

- Switching from specialised livestock decreases paid labour, variable costs and revenues, though net profits remain unaffected
- Switching from specialised cropping increases unpaid labour
- Diversifying seems to offer more opportunities to reduce costs for specialised livestock holdings
- Relatively insignificant effects of switching on economic performance belies decline of MiFAS in Europe
- Research needs to evaluate resilience to risk might be a greater motivator than profitability alone, with implications for insurance and income stability



























