

AgriFood

economics centre



Impacts of direct payments in Europe

CDG DIRECT PAYMENTS & GREENING,

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Dr Mark V. Brady

mark.brady@slu.se

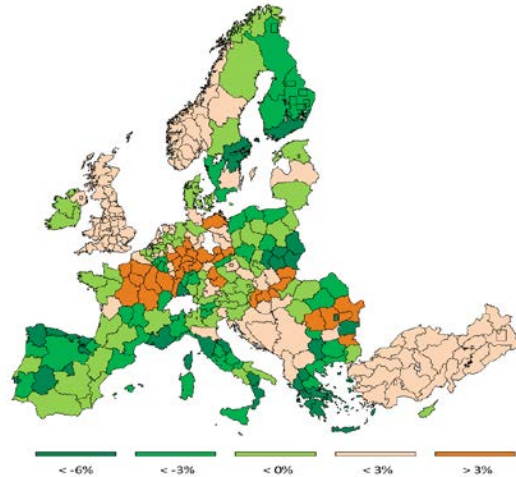
Aims of the report

Impacts of Direct Payments
Lessons for CAP post-2020 from a
quantitative analysis

- Quantify the **economic** and **environmental** impacts of Pillar I direct payments (approx. €43 billion p.a.)
- Demonstrate alternative instruments that can better achieve CAP objectives:
 - PPP: Polluter Pays Principle
 - PGP: Provider (of public goods) Gets Principle

Method: two complimentary economic models

CAPRI



- Models agricultural sector in EU27
- NUTS2 regions
- Global trade module
- Calibrated to historical data (e.g. EUROSTAT)

AgriPoliS



- Models agricultural structure
 - Spatial
 - Dynamic
 - Competition for land
- Four case-study regions
- Price changes from CAPRI
- Calibrated to historical regional data

Direct Payments (DP) can have **indirect** impacts on production

- 1) Thanks to Basic Provisions Regulation and Cross-Compliance, since production can be more profitable than fallow/set-aside.
- 2) By increasing returns to own labour and capital it is more worthwhile to continue the farm.
- 3) By boosting own capital over time it becomes easier to finance investments



Simulated scenarios

- **Baseline (REF)**
 - The current 2015-policy continued through 2020-25
- **Counterfactual scenario (NO DIRECT PAYMENTS)**
 - A policy without Pillar I direct payments is simulated through 2020-25
- **Demonstration of alternative instruments**
 - **PUBLIC GOODS:** A payment to marginal agricultural land amounting to average Pillar I direct payments for MS is combined with NO DIRECT PAYMENTS scenario (i.e., PGP)
 - **TAX:** a 25% tax on mineral fertilisers is combined with NO DIRECT PAYMENTS scenario (i.e., PPP)

Summary of CAPRI results

	<i>NO DIRECT PAYMENTS</i>	<i>PUBLIC GOODS</i>	<i>TAX</i>
Abandoned land	-6.5%	-1.7%	-7.3%
- Arable land	-3.9%	-0.8%	-4.9%
- Grassland	-11.6%	-3.4%	-12%
Production			
- Beef cattle	-4.8%	-5%	-4.9%
- Dairy	-1.4%	-1.5%	-1.4%
- Pigs	-0.2%	-0.3%	-0.4%
- Poultry	-0.3%	-0.3%	-0.6%
- Other animals	-2.7%	-2.8%	-2.8%
Environment			
- GHG emissions	-2.5%	-2.9%	-3.6%
- Nitrogen surplus	-2.4%	-5.2%	-4.8%
- Phosphorus surplus	-2.3%	-7.1%	-5.3%

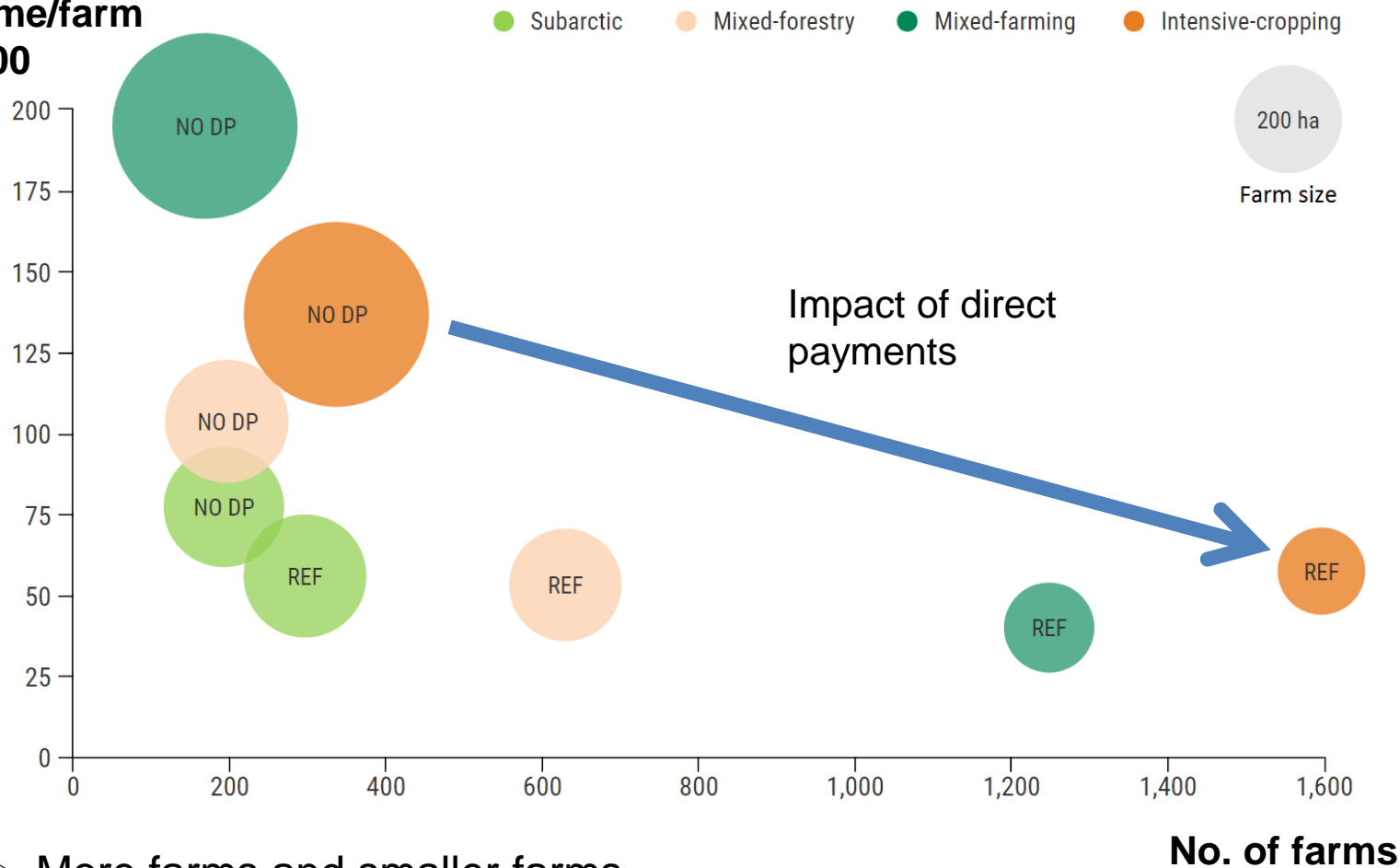
Conclusion 4

DPs result in higher greenhouse gas emissions, nutrient surpluses and pesticide inputs than would otherwise be the case.

Conclusion 1

Pillar I direct payments avoid land abandonment but at the cost of slowing structural change.

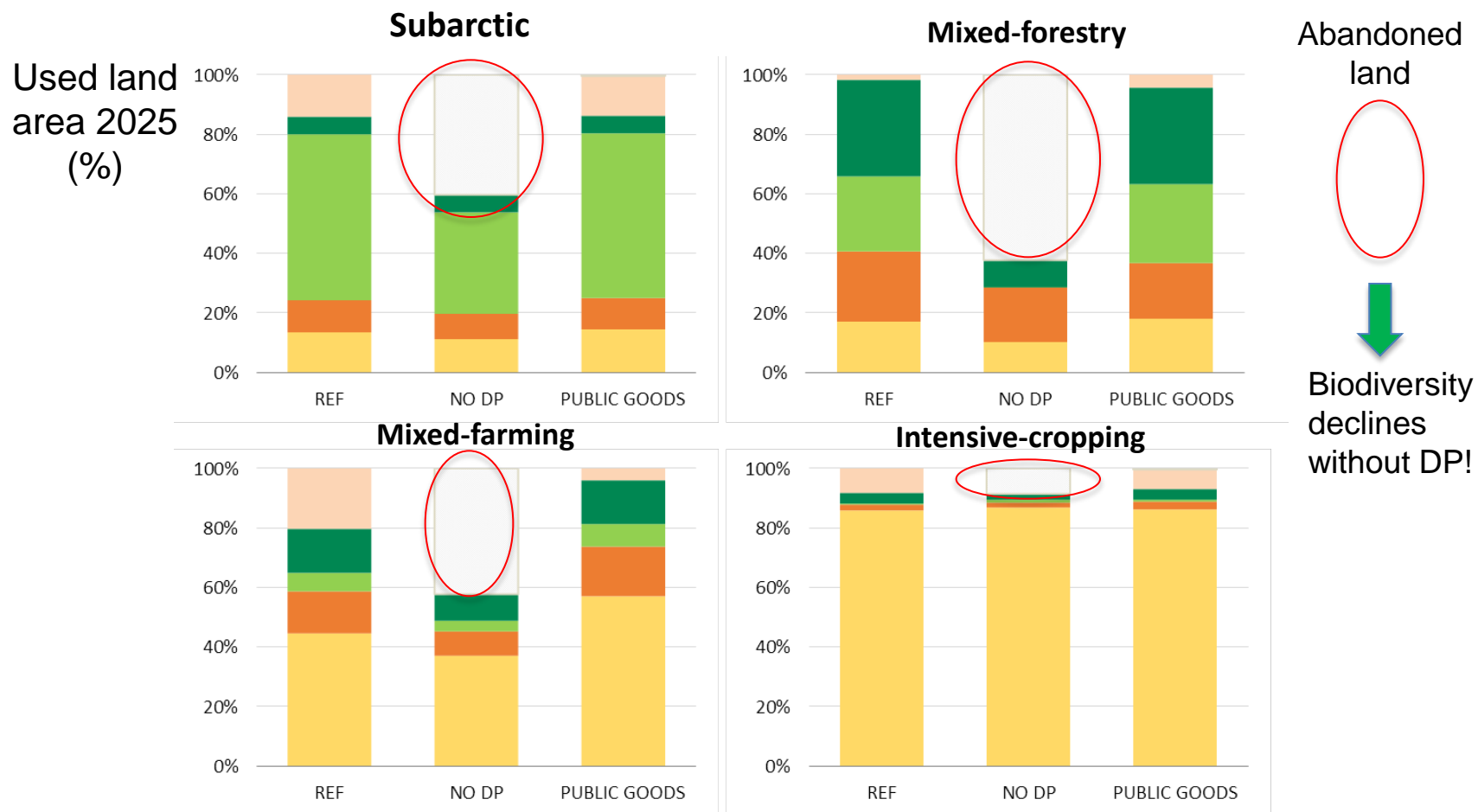
Income/farm
€1,000



- More farms and smaller farms
- Lower average farm incomes
- Particularly in productive regions!

Conclusion 2

DPs contribute to biodiversity conservation, cultural landscape preservation and food security, by averting land abandonment.



Conclusion 3

Targeted payments for provisioning of public goods (PGP), balances a competitive agricultural sector with the provisioning of public goods.

Take home messages:

Current system of Pillar I direct payments is

- 1) generating serious goal conflicts
 - hindering structural change and thus competitiveness
 - but avoiding land abandonment in marginal regions.
- 2) not effective for reducing emissions, rather increasing environmental load.
- 3) Having strong indirect production effects in marginal regions.

Conclusion 5

A menu of targeted instruments such as payments for public goods and emissions taxes are needed to substantially improve environmental quality in the EU and lower the associated costs.

Thank you for your attention and I will be happy to discuss the results with you.



Dr Mark Brady

Swedish University of Agricultural Sciences

mark.brady@slu.se