



CENTER FOR AGRI-POLICY ANALYSIS (CAPA )

INSTITUTE OF AGRICULTURAL ECONOMICS - SOFIA



# EFFECTS OF DIRECT PAYMENTS ON AGRICULTURAL DEVELOPMENT IN BULGARIA

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- The goal of the paper is to analyze some of direct payments effects on agricultural output, value added, production costs, agricultural industry patterns and to make comparative scenarios.
- 2 scenarios model – status quo and a scenario without direct payments
- Macro economic indicators – GAO, GAV, IC
- Changes in agricultural industry pattern
- Identification – winning and losing sectors



## Methodology

- Modeling on sector level and aggregating on agricultural level

$$PO = f\left(\text{Trend}; \frac{RR}{IC}\right)$$

Area, number, yield

Real revenues (market flows and subsidies)

- Intermediate consumption –subsidy determination to production costs (dispersion method)
- Agricultural identity = Sum (production output) - IC



## Assumptions

- Scenario without direct payments but other things equal (EU membership, EU has direct payments, II Pillar exists, etc).
- Major industries in crop and livestock are modeled separately along with major cost groups.
- Historical observation 1998 – 2016 year.
- Reference Average 2000 – 2006 year.
- Elasticity – endogenous, the best fit to less residuals
- Adjustments in no direct payment scenario are transplanted from status quo scenario.



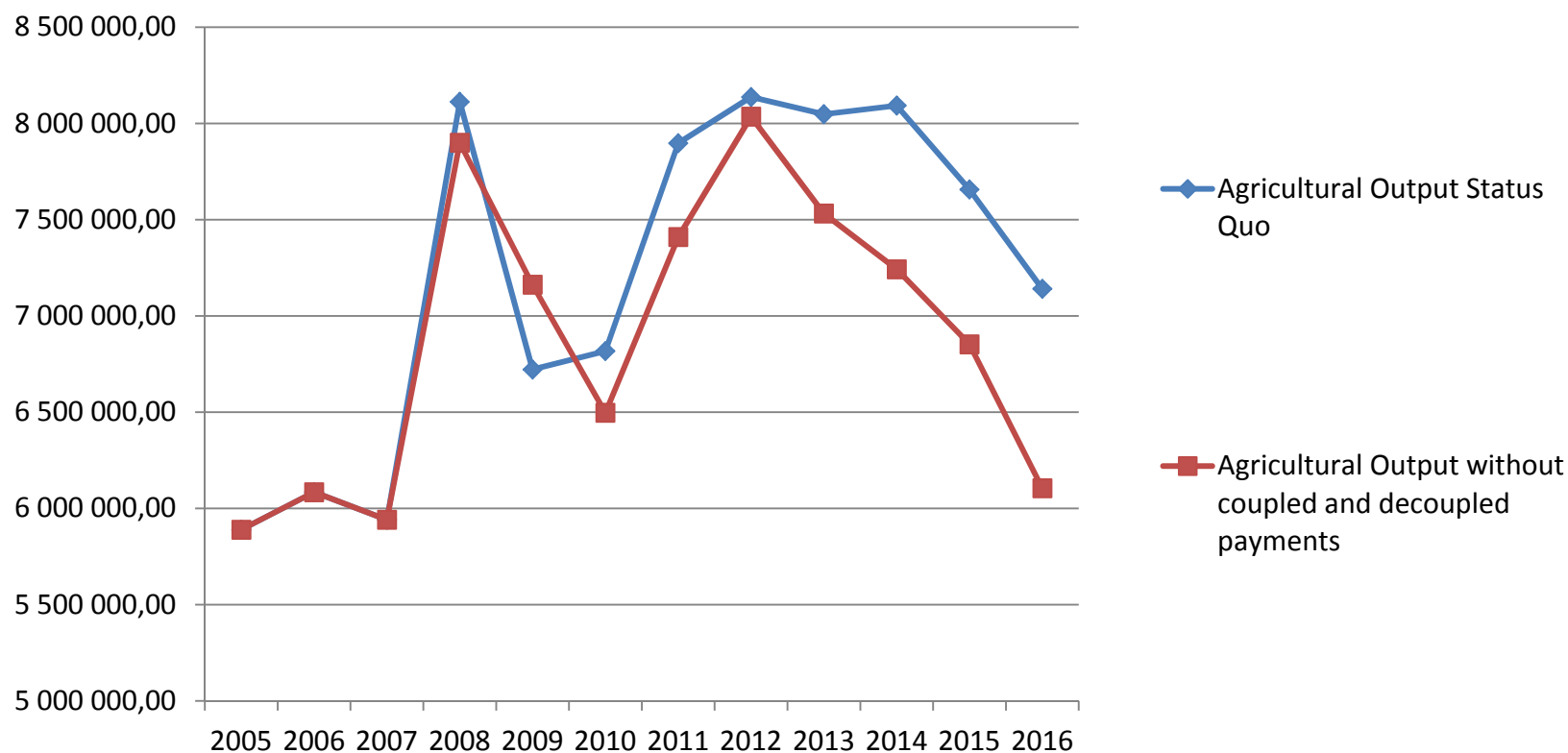
## Distribution of Direct Payments

DP Topic/Schemes	2007 - 2013	2014 - 2020
Total I Pillar envelop (billion euro)	€2,5	€5,3
SAPS / BP	97%	45%
Top-ups support / National transitional support (Billion €)	€0,6	€0,3
Greening	No	30%
VCS	3%	15% (13% + 2%)
YFS	No	0.5%
SFS	No	Yes (€500/ha)
Redistributive Payment	No	7,9% (€76/ha)

Source: Payment Agency



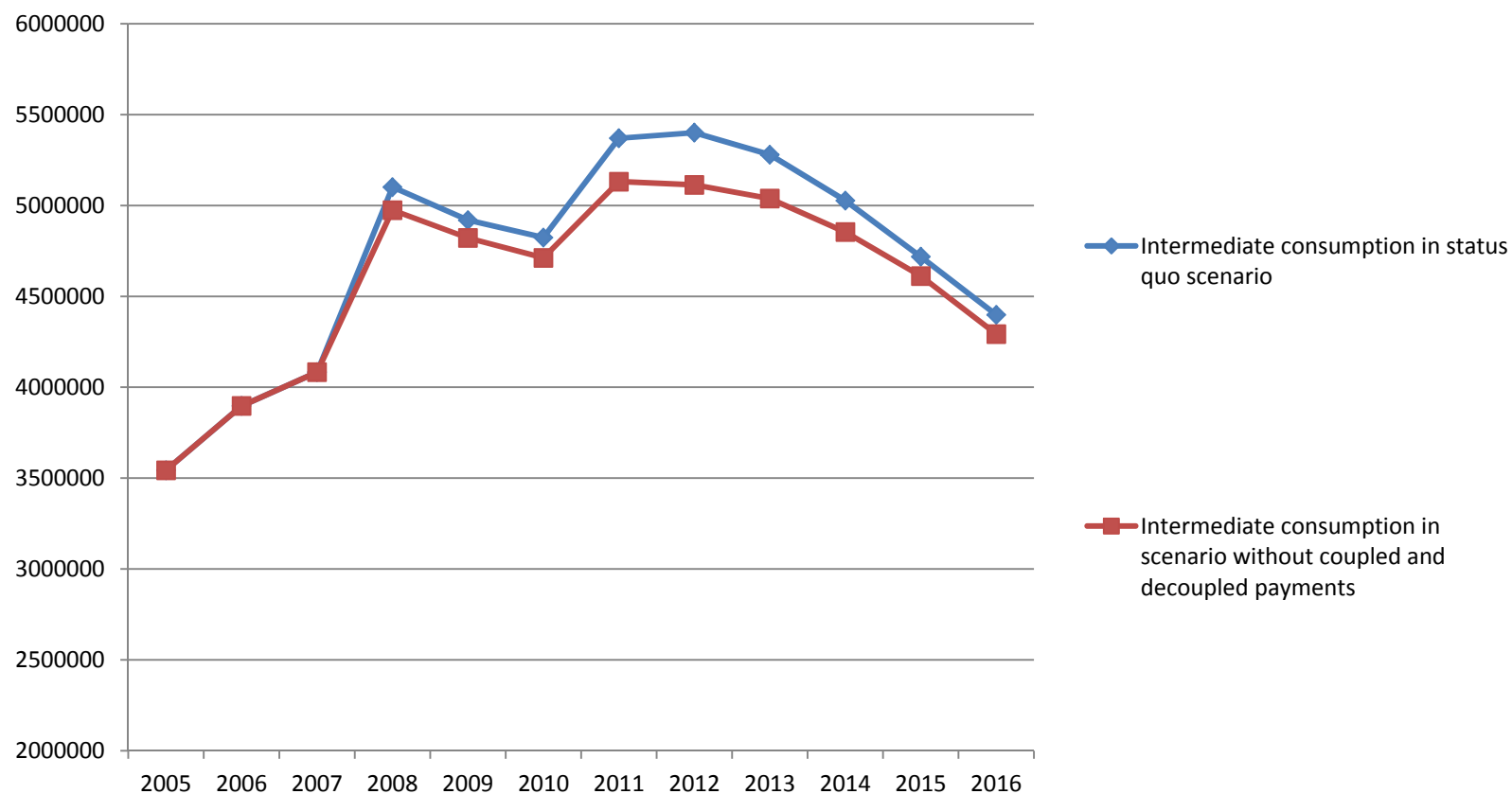
## Gross Agricultural Output - Status Quo and None DP, 000 BGN



Source: CAPA, NSI data



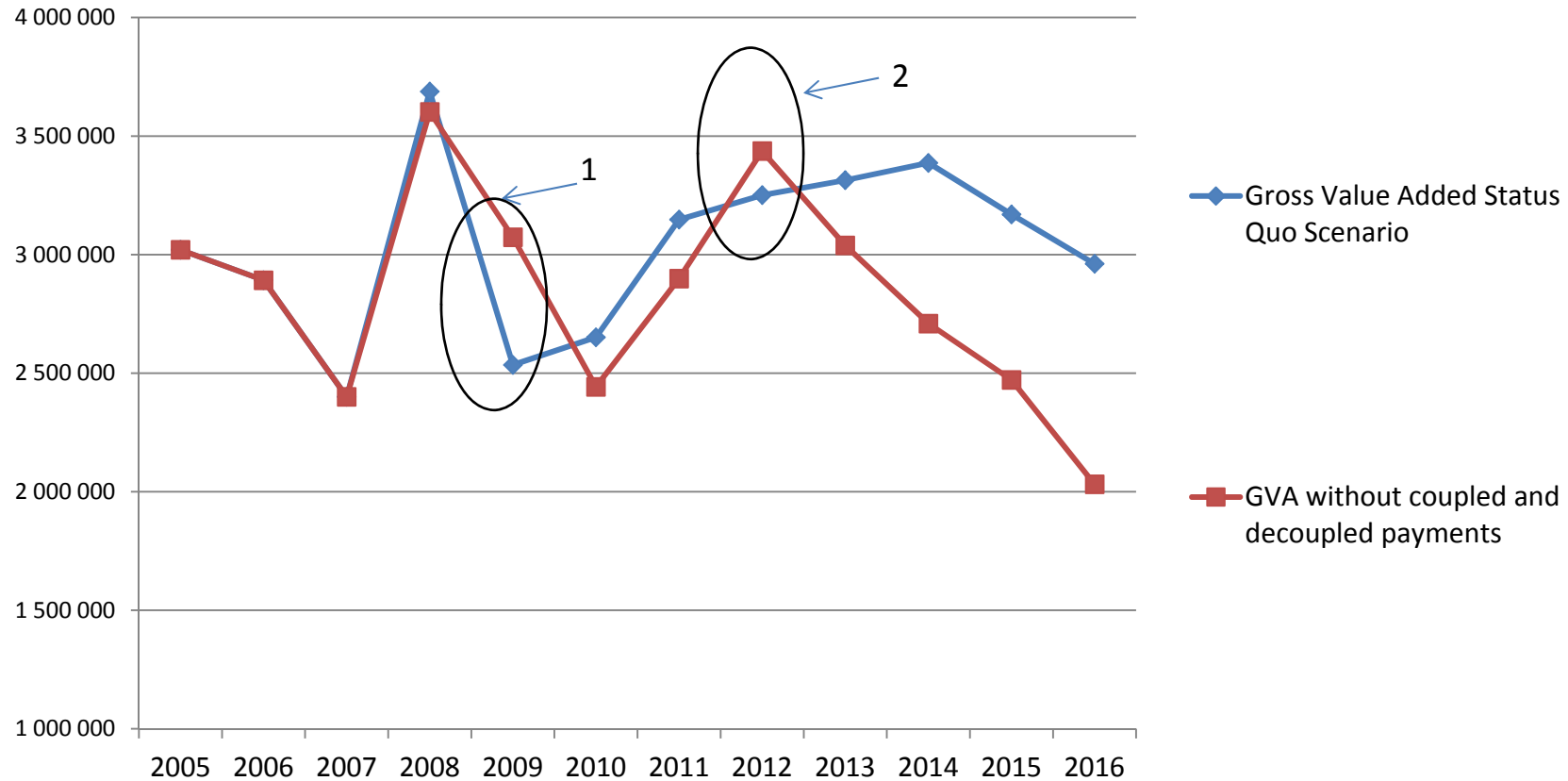
## Production Costs - Status Quo and None DP, 000 BGN



Source: CAPA, NSI data



# Gross Value Added - Status Quo and None DP, 000 BGN

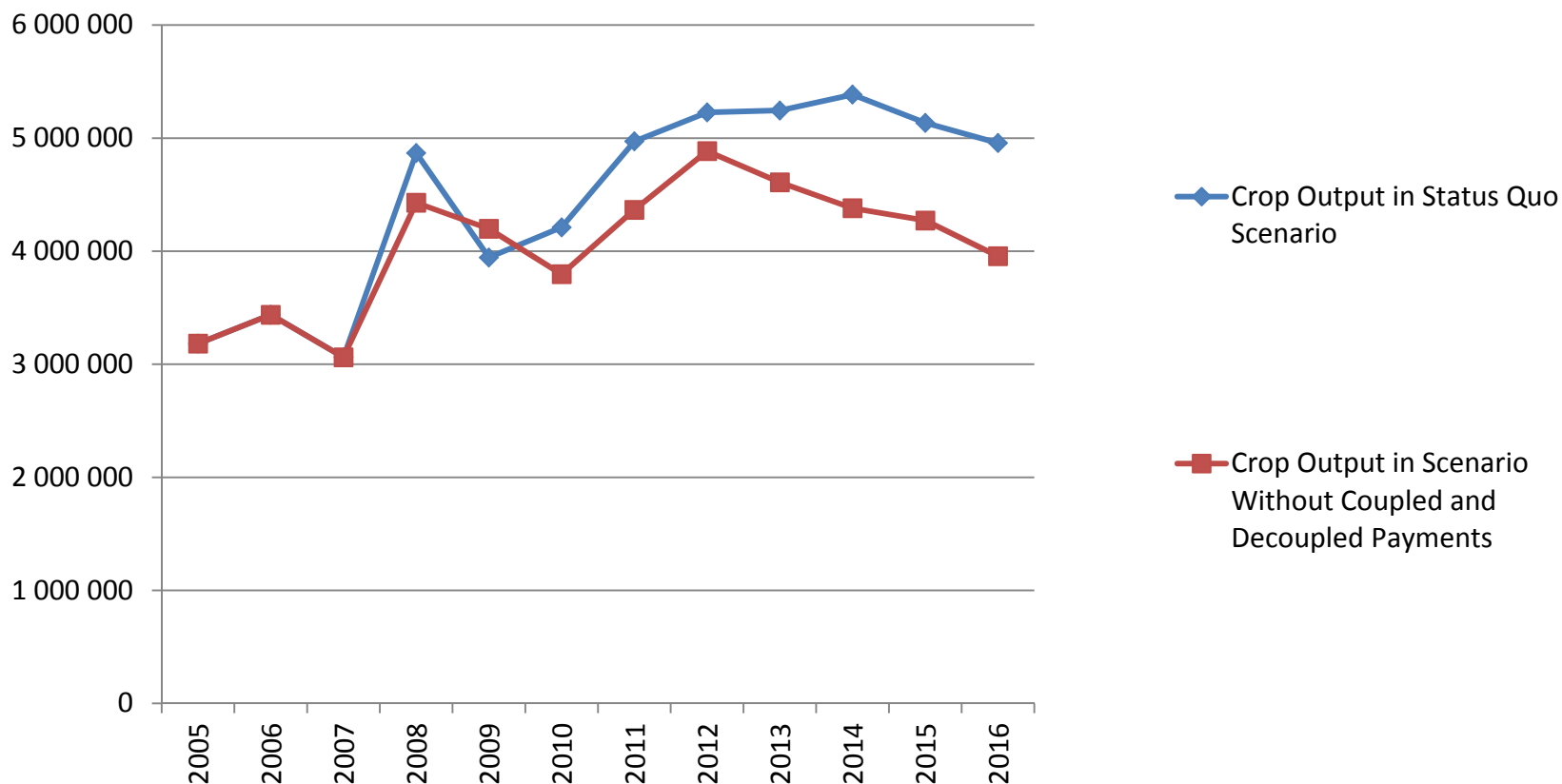


Source: CAPA, NSI data





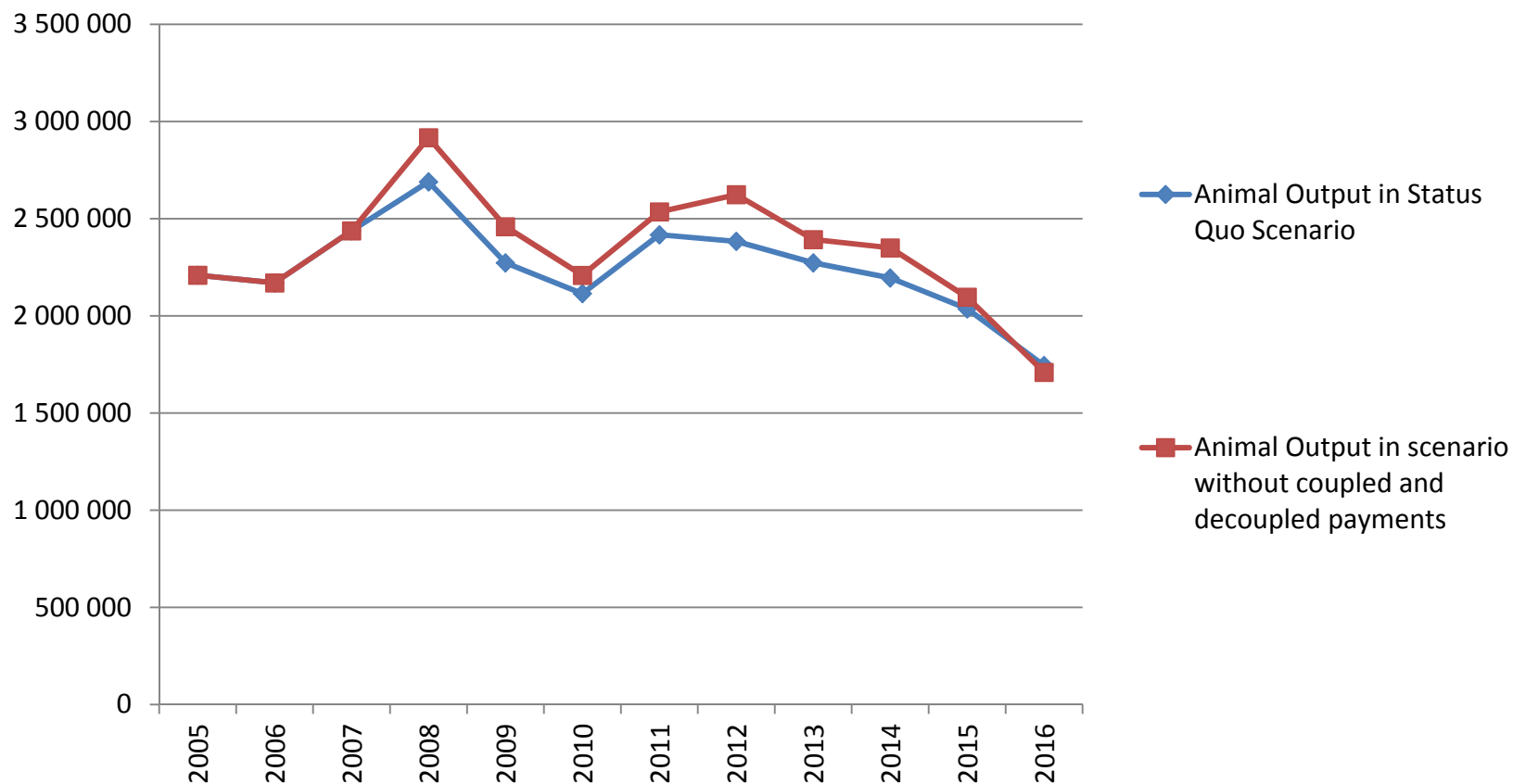
## Crop Output - Status Quo and None DP, 000 BGN



Source: CAPA, NSI data



# Livestock Output - Status Quo and None DP, 000 BGN



Source: CAPA, NSI data



## Specific conclusions

1. The Non Direct payments and Status quo scenarios have similar evolution but different magnitude on the agricultural macro indicators;
2. In No DP scenario – the GAO and GAV would have had higher levels at the first years but afterwards, they would have dropped;
3. The crop sectors show a higher outcomes from the DP implementation compared to livestock. SAPS gives advantages to land based farms;
4. In livestock farming – pig and poultry sectors are posed to rising input prices but no support ;



## General conclusions

1. Direct payments are income stability instrument but demonstrates little effect on creating added value;
2. There is an adaptive behavior of producers to support policy rather than the market signals. It creates risks for future sustainability;
3. The introduction of bigger coupled support after 2014 backs up intensive sectors and it fits better from added value point of view;
4. Decoupled support is not efficient enough apart from income contribution and must be re-considered in CAP Post 2020.



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**THANK YOU FOR YOUR ATTENTION!**

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