



147th EAAE Seminar 'CAP Impact on Economic Growth and Sustainability of Agriculture and Rural Areas'

The role of CAP in enhancing farm incomes: the redistributive effect of direct payments in Italy

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OUTLINE

1. Introduction: IT choices on DPs

2. Conceptual framework: redistribution of FI

3. Research hypotheses

4. Data and methods: FADN and decomp. of G

5. Main findings

6. Discussion and Conclusion

Introduction

- ❑ Reg.(EU) No. 1307/2013 recognised a **strong mandate for each MS** to manage many aspects related to DPs.
- ❑ IT budget for DPs 2015-2019: **3.800 M EUR every year.**

Decision	National choice
<i>Active farmer (exemption threshold)</i>	<5000 € for mountain areas; <1250 € for other areas;.
Minimum requirements for receiving DPs	Financial threshold (250 EUR 2015-2016; 300 EURO 2017+)
<i>Regional or national model/ internal convergence</i>	National / Irish model (Partial convergence 60%/90% max loss 30%)
<i>Basic payment scheme</i>	58% of national budget
<i>Greening (amount of payment)</i>	30% of national budget (individual payment calculated as 30% of payment entitlements held by the farmer)
<i>Young farmers (40 years old) scheme</i>	1% of national budget (value: 25 % of the average value of payment entitlements)
<i>Coupled support</i>	11% of national budget (of which: 42% for beef, 20% for milk, 16.4% for olive oil, 10% for protein crops, 5% sugar beet, 2% for cereals)
<i>Degressivity and Capping</i>	50%, if dir. paym.> 150M€; 100%, if dir. paym.>500M€; salary costs deducted.

The redistributive issue

❑ According to Mishra *et al.* (2009), FI inequality has an impact on: (1) economic **well-being** (2) the adoption of farming **technology**, (3) agricultural **productivity**, and (4) **growth** in the agricultural sector.

❑ EU Commission has for many years expressed concerns about the **inequitable distribution of FI support**, as **DPs are very concentrated** (Allanson 2006).

❑ In 2005 only **20%** of European farm households benefitted of **87%** of total DPs. High heterogeneity across EU: **low** (FI, NL, DK) and those with a **high concentration** of direct aids (PT, IT, UK, ES, DE).

The redistributive issue (2)

- ❑ Von Witze and Noleppa (2007) highlighted that even though **SM farms** should represent the target of DPs, the main beneficiaries are **farms with large UAA**.
- ❑ Other studies have concluded that government payments **increase income concentration** (Allanson 2006; Schmid et al. 2006; El Benni et al. 2012).
- ❑ However, several studies conducted in Europe have shown that DPs cause **income inequality to decrease** and that without DPs the concentration of FI and its unequal distribution across farm could have increased (Keeney 2000; Frawley and Keeney 2000; Severini and Tantari 2013a; 2013b; 2015) .

Research hypotheses

Against the theoretical background and in light of the Italian choices on DPs the following research hypotheses are tested:

H1: CAP reform in Italy causes a **decrease of the concentration of DPs.**

H2: CAP reform in Italy **improves the redistributive role of DPs.**

Data and methods

In practice, the static analysis of the decomposition of the Gini coefficient (G) aims to investigate the concentration of total income as the sum of incomes concentration from k different sources Y_k :

$$G = \sum_{k=1}^K \frac{\text{cov}[Y_k, F(Y)]}{\text{cov}[Y_k, F(Y_k)]} * \frac{2\text{cov}[Y_k, F(Y_k)]}{\mu_k} * \frac{\mu}{\mu_k} = \sum_{k=1}^K R_k * G_k * S_k = \sum_{k=1}^K C_k * S_k$$

In order to evaluate the marginal impact of a single income component on income inequality, Lerman and Yitzhaki (1985) derived a measure of **elasticity (η_k) of the G**:

$$\eta_k = \frac{u_k}{G} * \frac{dG}{du_k} = \frac{1}{G} * \left[\frac{u_k}{\mu} * (C_k - G) \right]$$

The (static) analyses of the decomposition of G have been applied:

- i) Ex post analysis -> **IT FADN database** for the year **2013** (n= **11.319 farms**);
- ii) Ex ante analysis -> **simulation of DPs in 2020**

Main findings

Table 1. Gini decomposition of total income. Year 2013.

	Gini coefficient	Correlation coefficient	Share coefficient	Concentration coefficient
	Gk	Rk	Sk	Ck
<i>FI=MI+DPs</i>				
MI	0.910	0.953	0.749	0.867
DPs	0.714	0.677	0.251	0.483
FI	0.770	1.000	1.000	0.770
<i>FI=MI+(SPS+Cp)</i>				
MI	0.910	0.953	0.749	0.867
SPS	0.722	0.660	0.232	0.477
Cp	0.922	0.612	0.019	0.564
FI	0.770	1.000	1.000	0.770
	Proportional contribution to inequality			Elasticity (%)
	Pk			η
<i>FI=MI+DPs</i>				
MI	0.843			0.094
DPs	0.157			-0.094
FI	1.000			0.000
<i>FI=MI+(SPS+Cp)</i>				
MI	0.843			0.094
SPS	0.143			-0.088
Cp	0.014			-0.005
FI	1.000			0

Table 2. Gini decomposition of total income. Year 2020.

	Gini coefficient	Correlation coefficient	Share coefficient	Concentration coefficient
	Gk	Rk	Sk	Ck
<i>FI=MI+DPs</i>				
MI	0.871	0.985	0.796	0.858
DPs	0.647	0.666	0.204	0.431
FI	0.770	1.000	1.000	0.770
<i>FI=MI+(BP+GR)</i>				
MI	0.871	0.985	0.796	0.858
BP + GR	0.646	0.645	0.185	0.417
Cp	0.922	0.612	0.019	0.564
FI	0.770	1.000	1.000	0.770
Proportional contribution to inequality				Elasticity (%)
	Pk			η
<i>FI=MI+DPs</i>				
MI	0.886			0.090
DPs	0.114			-0.090
FI	1.000			0.000
<i>FI=MI+(BP+GR)</i>				
MI	0.886			0.090
BP + GR	0.100			-0.085
Cp	0.014			-0.005
FI	1.000			0.000

Discussion and conclusion

H1 (CAP 15-20 decreases the concentration of DPs) → CONFIRMED

✓ the introduction of the new **DPs** scheme in Italy leads to more equal redistribution of DPs.

✓ **BP** and **GR** less concentrated than **SPS** and reduce the prop. contr. to inequality.

Due to

❑ The **national model of DPSs +**

❑ **IRm of internal convergence,**

that bridge the gap of entitlements value across farms and make DPs (>20% of FI) **less dependent on the rank of FI.**

H2 (CAP 15-20 improves the redistributive role of DPs)

→ **REJECTED**

✓ the share of **FI** from **DPs** declines.

✓ reduces the ability to contrast the **unequal** redistributive effect of the **MI.**

Due to:

❑ **budget cut for DPs in IT** (-665 M EUR; - 15.2% 2019 vs 2013) → (external convergence).

❑ **CP** instead of **RP** and **PANC**: **missed chance**



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Thank you for the attention

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