



*Fifth Meeting of the OECD Network on farm level analysis*

## The distribution of support in Tuscany according to FADN

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## Outlines

1. The Region: territory and agriculture
2. Tuscany rural areas
3. The Regional paying agency
4. The distribution of support according to FADN
  - Sample and population data
  - Rural areas
  - Net farm income



## Some information about Tuscany

- Population: 3.6 million (6.2% Italy)
- Surface: 22,997 sq Km (7.6% Italy)
- Density: 158 inhabitants per sq km (189 Italy)
- Territory: 25.1% mountain, 66.5% hill, 8.4% plain
- 633 km of coastline (8% Italy)
- GDP: 6.7% Italy (fashion sector, hotels and shops)
- Employment: 1,577 thousands employed (7% Italy), 3% agriculture, 31% industry, 66% services (Italy: 4%, 30%, 66%)



## Structural agriculture data from Survey 2007

- Tuscany:
  - Farms: 78,903 (-3.6% than in 2005; -26.5% than in 2000)
  - UAA: 806,428 ha (-0.4% than in 2005; -4.9% than in 2000)
  - Average UAA 10.2 ha
- Italy:
  - Farms: 1,679,439 (-2.8% than in 2005; -22% than in 2000)
  - UAA: 12,744,196 (+0.3% than in 2005; -2,4% than in 2000)
  - Average UAA 7.6 ha



## Main trends of agricultural sector in Tuscany

- In 2008 the value of agricultural production is more than 2.700 million euro
- At the end of the decade agriculture in Tuscany produces 10% more than at the beginning in real value, while the national real production remains the same
- As a consequence, since 2000, regional role on national agriculture has been constantly growing: regional weight moved from 4.6% in 2000 to 5.3% in 2008



## Composition of Gross production in agriculture

- In last decades there was progressive specialization in permanent crops (about 45% of the total value of production) which involve the two main sector of agriculture in Tuscany: wine (12.4%) and nursery gardening (27.6%)
- Crops production value represents 20.3% of total production
- Livestock 17.6%
- Annexes activity value doubled from 2.8% in 2000 to 6% 2008



## The method to classify the Italian rural areas in the NSP

- The municipalities/provincial capitals with over 150 inhabitants/sq km are considered urban areas in a strict sense
- The OECD methodologies combined with an altimetrical criterion (plain, hill and mountain areas) is applied to the remaining municipalities identifying predominantly urban areas (rural municipalities population <15% total population), significantly rural (15-50%), and predominantly rural (>50%)
- Predominantly urban areas are further disaggregated on the basis of total farmland surface compared to territorial surface

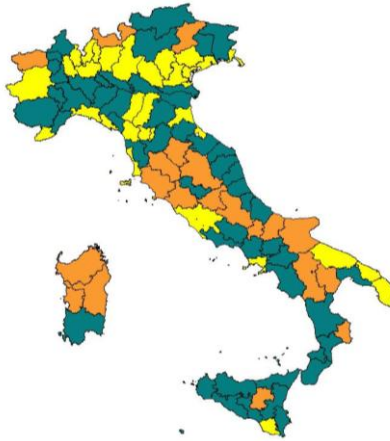


## The method produced the following classification

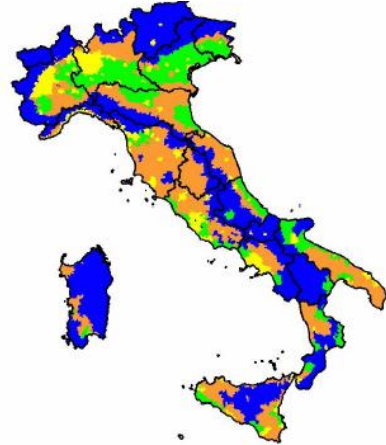
- **Urban poles:** which consist of provincial capitals with 150 inhabitants/sq km and all heavily urbanised area
- **Rural areas with specialised intensive agriculture:** which include urbanised rural plain areas, urbanised rural hill areas, predominantly and significantly rural plain areas
- **Intermediate rural areas:** which include predominantly rural hill areas (North and Centre), significantly rural hill areas and significantly rural mountain areas (North and Centre)
- **Rural areas with comprehensive development problems:** which include predominantly Rural mountain areas, predominantly rural hill areas (South) significantly rural mountain areas (South)

## The OECD and the NSP method

- Predominantly rural
- Predominantly urban
- Significantly rural



- A. Urban poles
- B. Rural areas with specialised intensive agriculture
- C. Intermediate rural areas
- D. Rural areas with comprehensive development problems



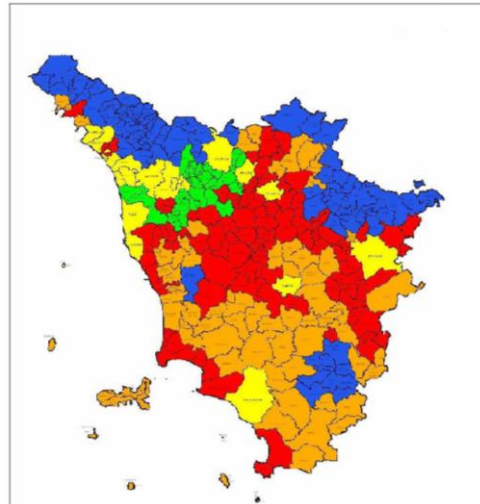
## C1 and C2 Areas in Tuscany

- Additional indicators are:
  - Incidence of employment in agriculture: in C2 it must be at least twice the European average (UE25)
  - Forestry surface and islands
- According to these further criterions intermediate rural areas were split in:
  - C1, Intermediate rural areas in transition
  - C2, Intermediate rural areas declining



## A further specification of NSP areas in Tuscany

- A) Urban poles
- B) Rural areas with specialised intensive agriculture
- C1) Intermediate rural areas in transition
- C2) Intermediate rural areas declining
- D) Rural areas with comprehensive development problems



## Resources for agriculture and rural development in Tuscany

- During the period 2004-2009 the yearly average payment made by ARTEA (Regional paying agency) amounted to 264 meuro. 63% to I Pillar; 32% to Rural development and 5% to regional policy

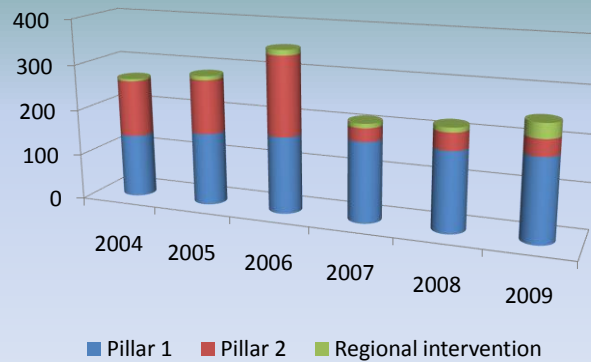
Payments made by ARTEA (million euro), 2004-2009

	2004	2005	2006	2007	2008	2009
Single Payment Regime	126,7	145,6	155,0	163,2	163,5	168,3
COM for wine	9,3	10,6	10,6	9,7	8,0	9,2
Other COM	2,1	2,1	2,3	1,9	2,1	2,0
Rural development	123,1	118,0	172,4	28,7	37,4	35,2
Regional intervention	4,8	8,7	11,8	9,3	10,2	31,4
Total	266,0	285,0	352,1	212,8	221,2	246,2



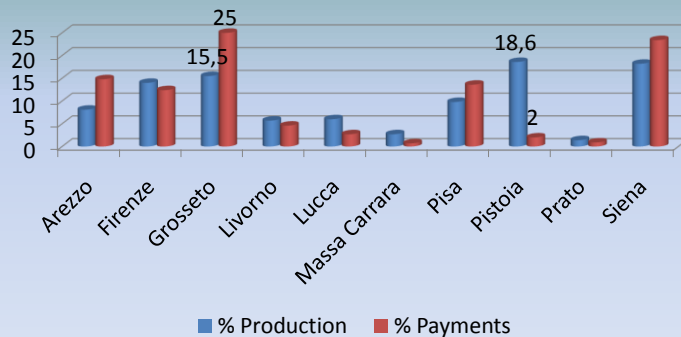
## Regional agency payments

Payments by ARTEA in the period 2004-2009 by type of intervention  
(million euro)



## Regional agency payments at provincial level

Percentage of value of production and payments on the regional total (%)





## The Tuscany FADN sample in 2007

- Tuscany FADN sample in 2007: 710 farms
  - 561: Supported farms (SFs)
  - 149: Non Supported farms (NSFs)
- Average UAA in Total sample: 55.30
  - Average UAA in SFs: 67.59
  - Average UAA in NSFs: 9.04
- Average Payments/Net farm income: 21%
  - Average Payments/Net farm income in SFs: 30%

Average farm values

	Farms	UAA	Livestock unit	Work unit	Gross receipts	Net farm income	Payments	- Crop	- Livestock	Payments/ Net farm income
	n.	ha	n.	n.	euro	euro	euro	euro	euro	%
SFs	561	67.59	22.37	3.05	230,393	77,590	23,687	6,544	80	30.5
NSFs	149	9.04	1.90	3.99	311,457	133,212	0	0	0	-
<b>Total</b>	<b>710</b>	<b>55.30</b>	<b>18.07</b>	<b>3.25</b>	<b>247,405</b>	<b>89,263</b>	<b>18,716</b>	<b>5,171</b>	<b>63</b>	<b>21.0</b>



## The Tuscany sample 2007 by type of area



Average farm values

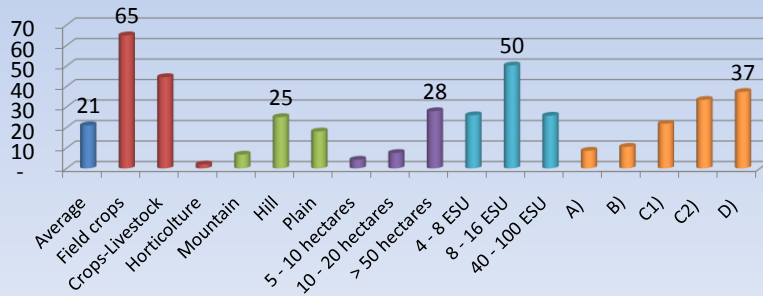
	Farms	UAA	Livestock unit	Work unit	Gross receipts	Net farm income	Payments	- Crop	- Livestock	Payments/ Net farm income
	n.	ha	n.	n.	euro	euro	euro	euro	euro	%
A	124	28.86	5.51	3.69	291,345	120,832	10,354	3,040	15	8.6
B	72	33.29	4.14	2.58	191,105	96,626	10,144	2,393	-	10.5
C1	221	61.18	7.33	4.01	319,803	102,900	22,442	6,856	32	21.8
C2	233	72.11	37.52	2.64	208,093	71,873	23,979	5,917	123	33.4
D	60	49.46	24.79	2.70	110,150	32,482	12,118	3,804	116	37.3
<b>Total</b>	<b>710</b>	<b>55.30</b>	<b>18.07</b>	<b>3.25</b>	<b>247,405</b>	<b>89,263</b>	<b>18,716</b>	<b>5,171</b>	<b>63</b>	<b>21.0</b>





# Tuscany sample 2007: share of support in Net farm income

- **Average: 21%**
- **Field crops: 65%**
- **Hill: 25%**
- **> 50 hectares: 28%**
- **From 8 to 16 ESU: 50%**
- **D) areas: 37%**



# The constant sample 2004-2007

- Constant sample: 301 farms
- Some trends:
  - unchanged surface and Work unit
  - sharp contraction of Livestock unit (-39.4%)
  - enhance economic performance: Gross receipts and Net farm income
  - increase in overall support (+6.7%) and substantial reduction of direct support (-68%)
  - reduction of the impact of support on the Gross receipts (-5%) and on Net farm income (-19.5%)

Average farm values

Year	UAA	Livestock unit	Work unit	Gross receipts	Net farm income	Payments	- Crops	- Livestock	Payments/ Net farm income
	ha	n.	n.	euro	euro	euro	euro	Euro	%
2004	60.28	24.94	3.93	300,653	92,056	17,992	16,032	723	19.5
2005	60.34	23.11	3.87	306,657	99,612	18,409	5,438	161	18.5
2006	60.04	15.00	3.87	322,071	111,841	26,084	5,957	60	23.3
2007	59.70	15.11	3.98	337,829	122,167	19,201	5,327	35	15.7
<b>Var. % 2007-2004</b>	<b>-1.0</b>	<b>-39.4</b>	<b>1.3</b>	<b>12.4</b>	<b>32.7</b>	<b>6.7</b>	<b>-66.8</b>	<b>-95.2</b>	<b>-19.5</b>



## Inferring from the sample to the population: share of support in Gross receipts by type of area



Average farm values (euro)

		A	B	C1	C2	D	Total
1	Gross sales/output	91,186	65,007	73,024	59,630	22,515	63,285
2 a	Payments	2,981	2,415	8,188	6,325	3,120	5,440
2b	MPS	4,342	3,192	2,738	2,331	582	2,592
2=2a+2b	Support	7,323	5,607	10,926	8,656	3,703	8,033
3=1+2 a	Gross receipts	94,167	67,422	81,212	65,955	25,635	68,725
4 a	Variable inputs	32,823	22,066	30,379	23,510	8,761	24,477
4b	Depreciation	8,133	5,842	12,332	8,858	6,382	8,962
5=3-4 a	Farm cash income	61,344	45,356	50,833	42,445	16,874	44,249
6=5-4b	Farm income	53,211	39,513	38,501	33,587	10,492	35,287
7	Non-farm income						
8=6+7	Farm household income						
9	Farm net worth						
10=100*2/3	Share of support in Gross receipts (%)	8	8	13	13	14	12

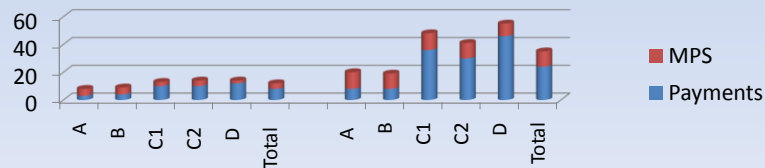


## Share of support in Net farm income by type of area



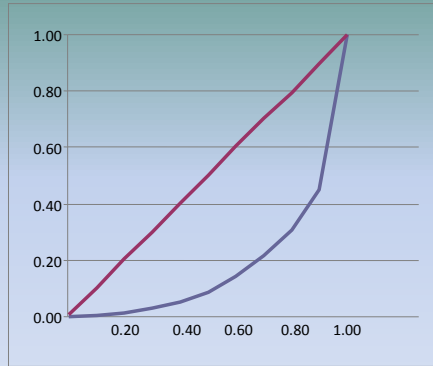
Average farm values (euro)

	A	B	C1	C2	D	Total
Support	7,323	5,607	10,926	8,656	3,703	8,033
Gross receipts	94,167	67,422	81,212	65,955	25,635	68,725
Share of support in Gross receipts (%)	8	8	13	13	14	12
- Payments	3	4	10	10	12	8
- MPS	5	5	3	4	2	4
Net farm income	35,509	29,139	22,605	21,089	6,778	22,588
Share of support in Net farm income (%)	21	19	48	41	55	36
- Payments	8	8	36	30	46	24
- MPS	12	11	12	11	9	11





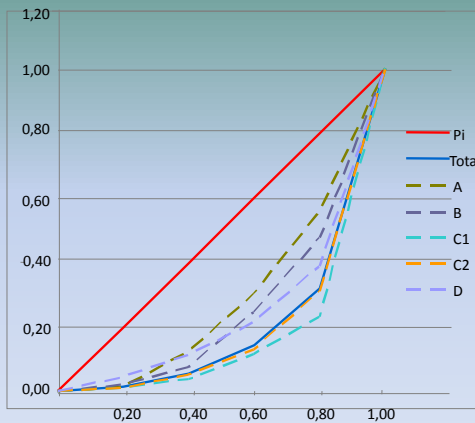
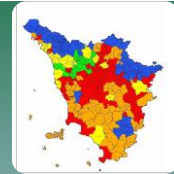
## Distribution of support: Gini coefficient and Lorenz curve



Pi	Total
0.00	0.00
0.20	0.01
0.40	0.05
0.60	0.14
0.80	0.32
1.00	1.00
<b>Gini coefficient</b>	<b>0.77</b>



## Distribution of support: Gini coefficient and Lorenz curve by type of area



Pi	A	B	C1	C2	D	Total
0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.20	0.01	0.02	0.01	0.01	0.04	0.01
0.40	0.12	0.07	0.04	0.05	0.11	0.05
0.60	0.30	0.25	0.11	0.13	0.21	0.14
0.80	0.56	0.47	0.23	0.31	0.39	0.32
1.00	1.00	1.00	1.00	1.00	1.00	1.00
<b>Gini coefficient</b>	<b>0.61</b>	<b>0.66</b>	<b>0.83</b>	<b>0.79</b>	<b>0.60</b>	<b>0.77</b>



## Share of support and Gini coefficient



- Higher level of concentration in C1 and C2 areas
- Lower level of concentration in D, but more dependence on support: higher and widespread dependence on support

	A	B	C1	C2	D	Total
Share of support in Gross receipts (%)	8	8	13	13	14	12
Share of support in Net farm income (%)	21	19	48	41	55	36
Gini coefficient	0.61	0.66	0.83	0.79	0.60	0.77



## Concluding remarks and further analysis

- Higher incidence of support in certain types of farms (specialised, large physical size but medium-sized economic)
- Higher dependence on the support in disadvantaged areas
- Large differences between the distribution of MPS and that in payments by areas
- These results occur in particular when considering the income
- From data processed we can see the importance of evaluation of support through the local zoning analysis (political priority)
- Proposals for further analysis:
  - the constant FADN sample in Tuscany in the period 2004-2007
  - distribution of support between Pillar 1 and 2 (Axes, measures)
  - comparison between regions in other countries
  - effects of Cap Reform



**THANK YOU FOR YOUR ATTENTION**

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