



# The Territorial Distribution of CAP/RDP Support

by Stefan Busse

# The Territorial Distribution of CAP/RDP Support

---



## Contents:

1. Introduction
2. Pillar1
3. Pillar2
4. The influence of farm type
5. Conclusion



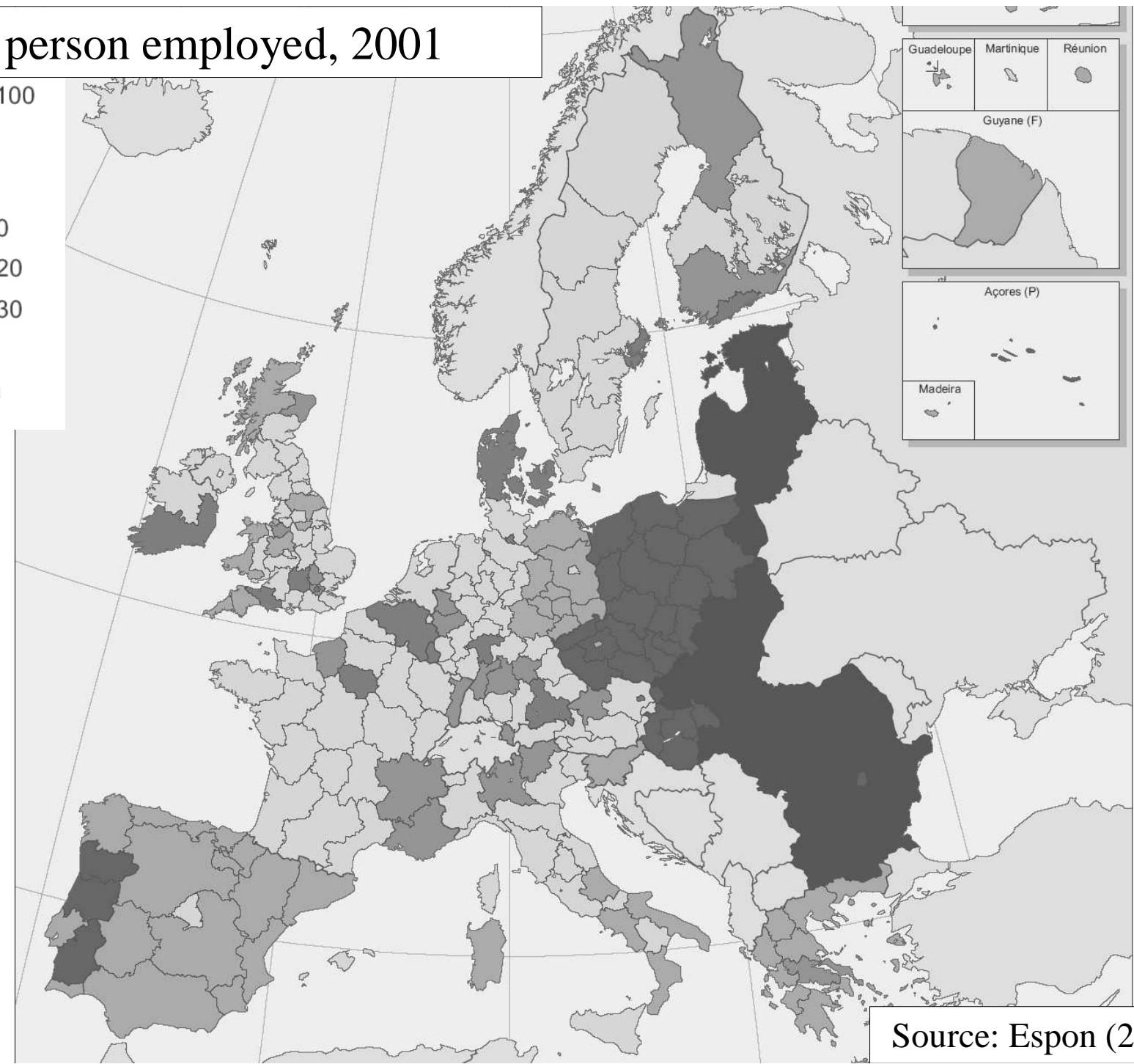
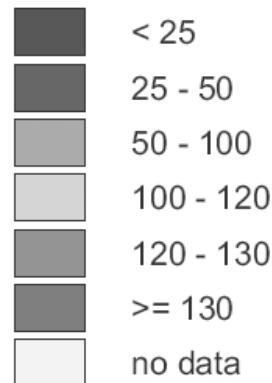
## The Territorial Distribution of CAP/RDP Support

---

- NUTS3 level
- 1.300 regions in the EU-25 (439 Landkreise)
- 150.000- 800.000 people
- Year 1999 as basis
- 1989- 1999 population change, weighted by population level
- Sources:
  - Statistical analysis of data at NUTS3 level
  - Findings from EU-wide review of literature
  - Problem: availability of data (up to 91% missing)

# GDP per person employed, 2001

Index, EU25 = 100



Source: Espon (2006)



## The Territorial Distribution of CAP/RDP Support

---

### 2. Pillar1

- Investigation of the two policy instruments:
  - sum of the value of MPS and
  - direct income payments received by farmers



# The Territorial Distribution of CAP/RDP Support

---

Pearson correlation coefficiens between level of **Pillar 1** support accuring to NUTS3 regions and socio-economic indicators

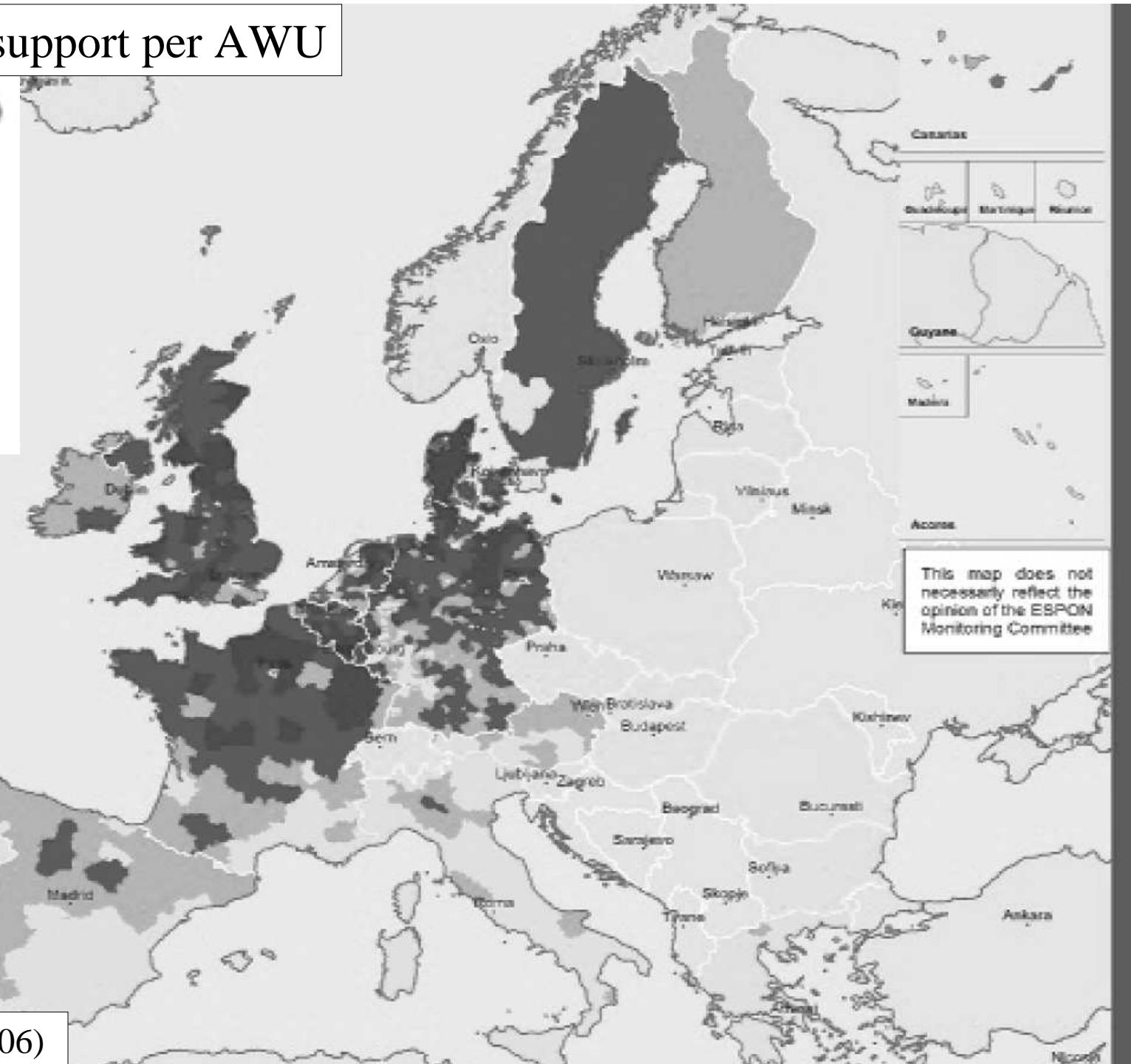
	GDP per head	Unemployment rate	Population change '89-99	<i>Support per ha UAA</i>	<i>Support per AWU</i>
Support per ha UAA	0.088(**)	-0.305(**)	0.216(**)	1	0.261(**)
N	1051	945	892	1051	1051
Support per AWU	-0.143(**)	-0.095(**)	0.117(**)	0.261(**)	1
N	1053	947	892	1051	1053

\*\* Correlation statistically significant at the 0.01 level (2-tailed).

# Total Pillar 1 support per AWU

'000 Euros 1999

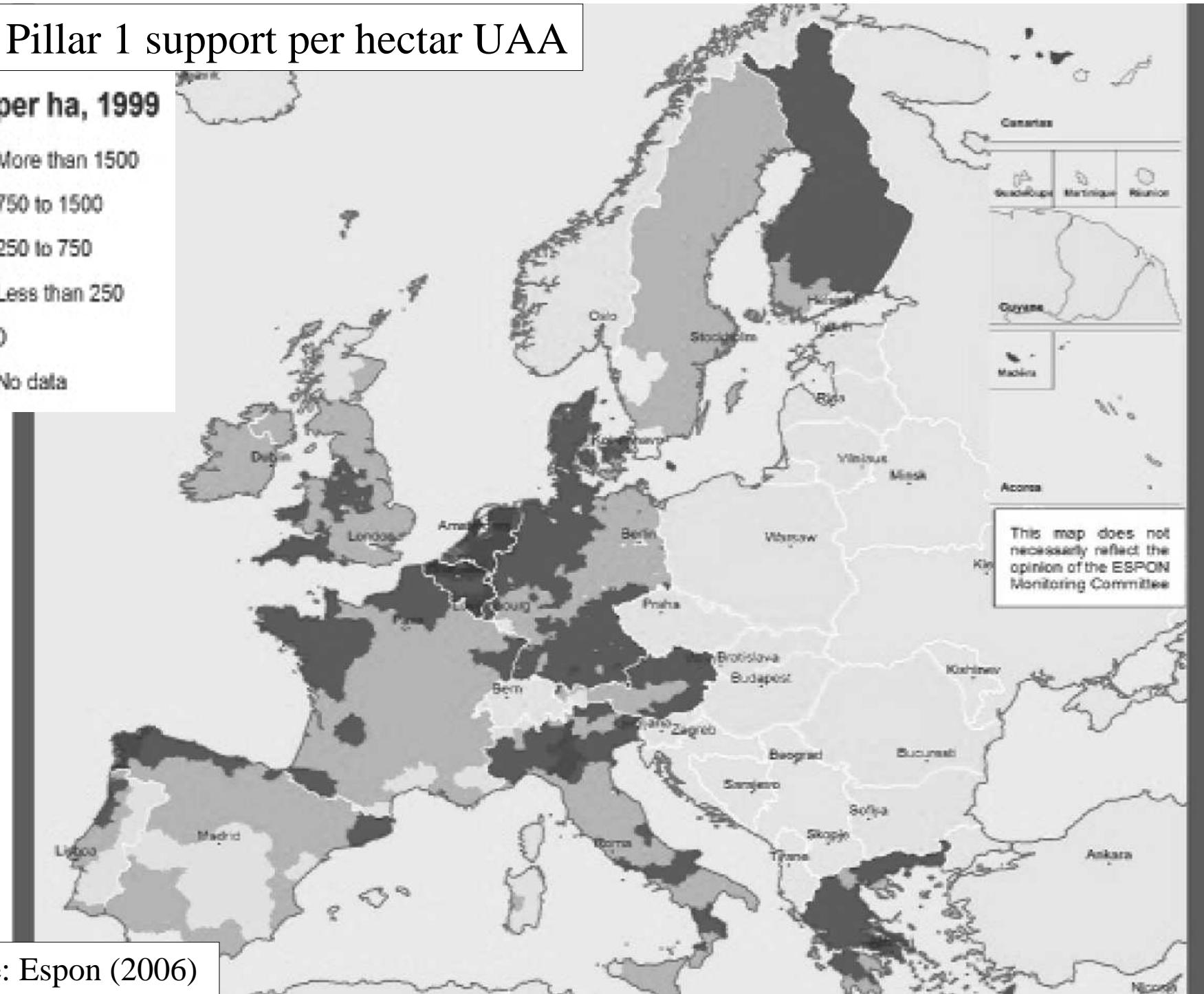
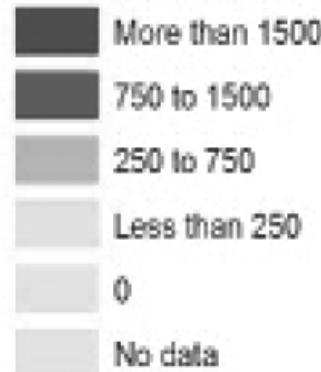
- More than 40
- 25 to 40
- 10 to 25
- Less than 10
- 0
- No Data



Source: Espon (2006)

# Total Pillar 1 support per hectar UAA

Euros per ha, 1999



Source: Espon (2006)



# The Territorial Distribution of CAP/RDP Support

Pearson correlation coefficient between the level of **market price support** and **direct income payments** accuring to NUTS3 regions and socio-economic indicators

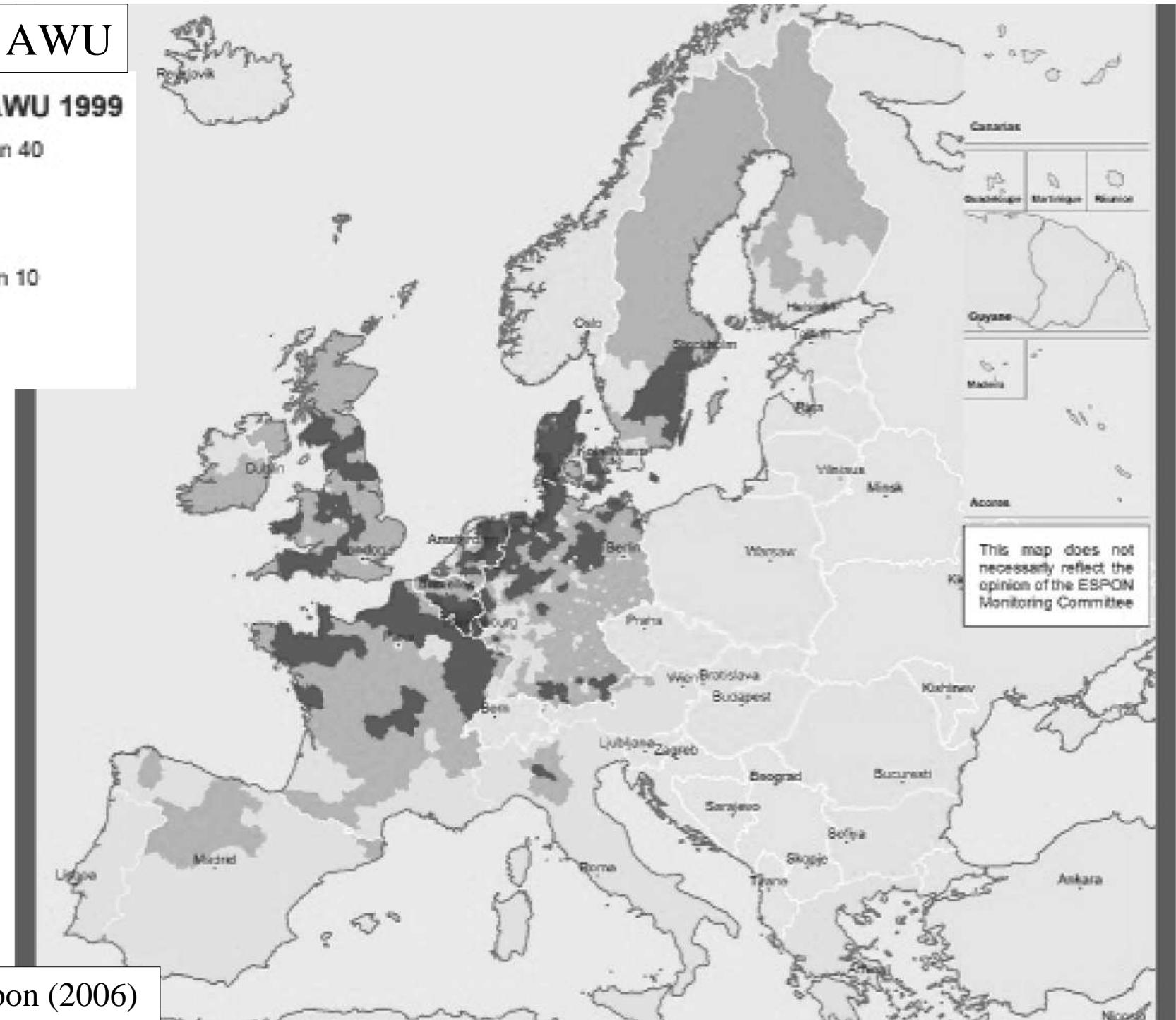
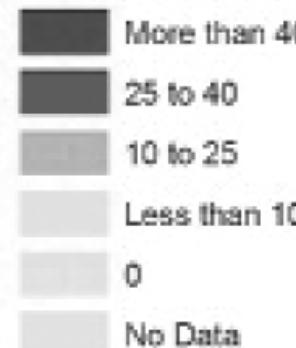
	Support per ha UAA	Support per AWU	GDP per head	Unemployment rate	Population change 1989-99
<b>Market Price Support</b>					
Support per ha UAA	1	0.557(**)	0.113(**)	-0.371(**)	0.199(**)
N	1069	1068	1069	963	896
Support per AWU	0.557(**)	1	-0.089(**)	-0.161(**)	0.116(**)
N	1068	1078	1078	972	900
<b>Direct Income Payments</b>					
Support per ha UAA	1	0.382(**)	-0.156(**)	0.209(**)	-0.028
N	1067	1065	1067	961	894
Support per AWU	0.382(**)	1	-0.191(**)	0.163(**)	-0.103(**)
N	1065	1065	1065	959	893

\*\* Correlation statistically significant at the 0.01 level (2-tailed).

Source: Espon (2006)

## MPS per AWU

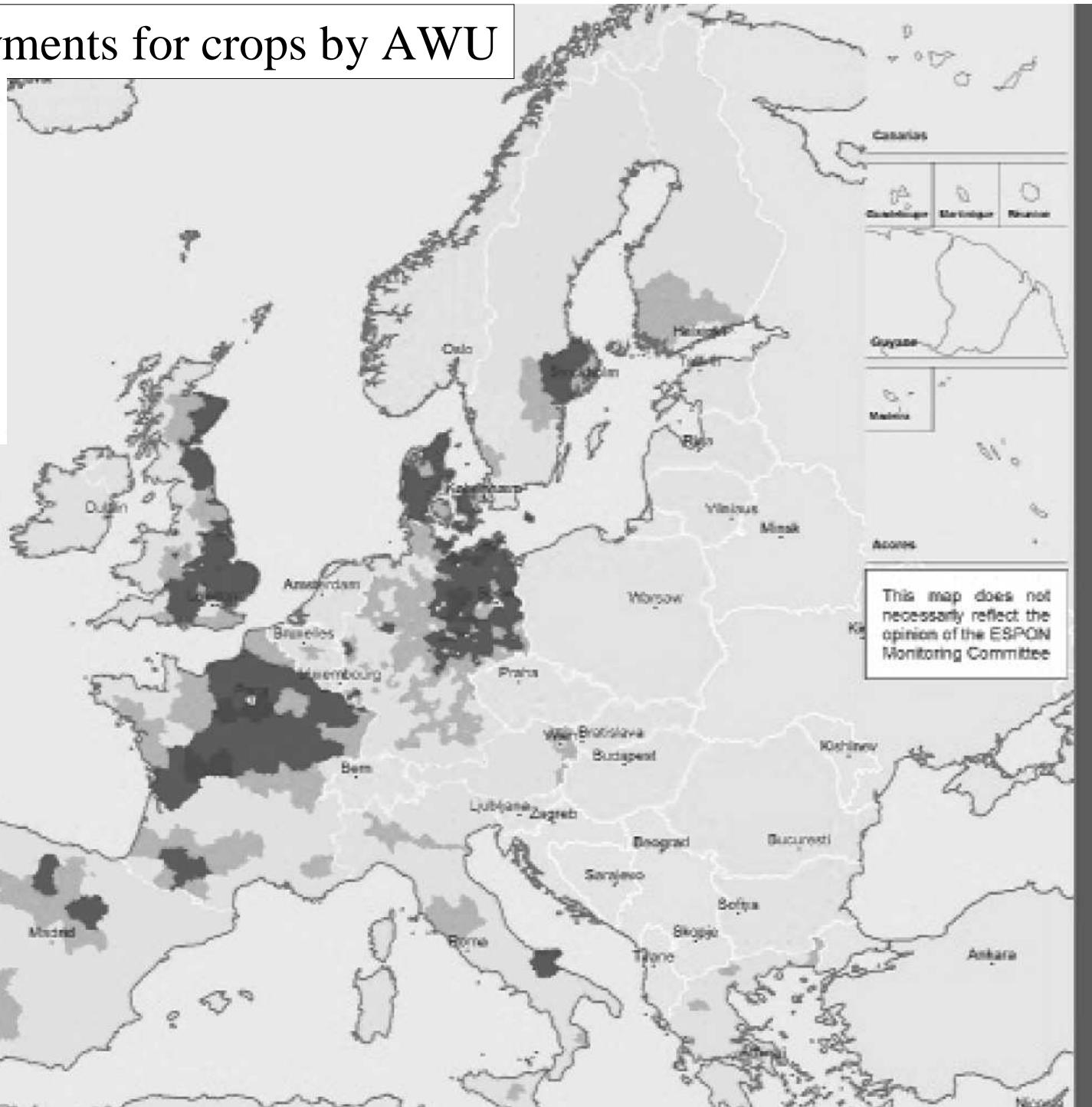
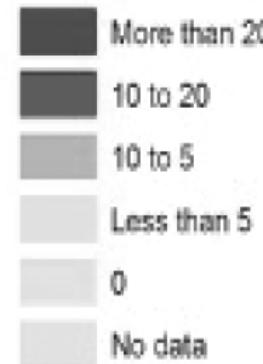
### Euros per AWU 1999



Source: Espon (2006)

# Direct income payments for crops by AWU

'000 Euros per AWU 1999

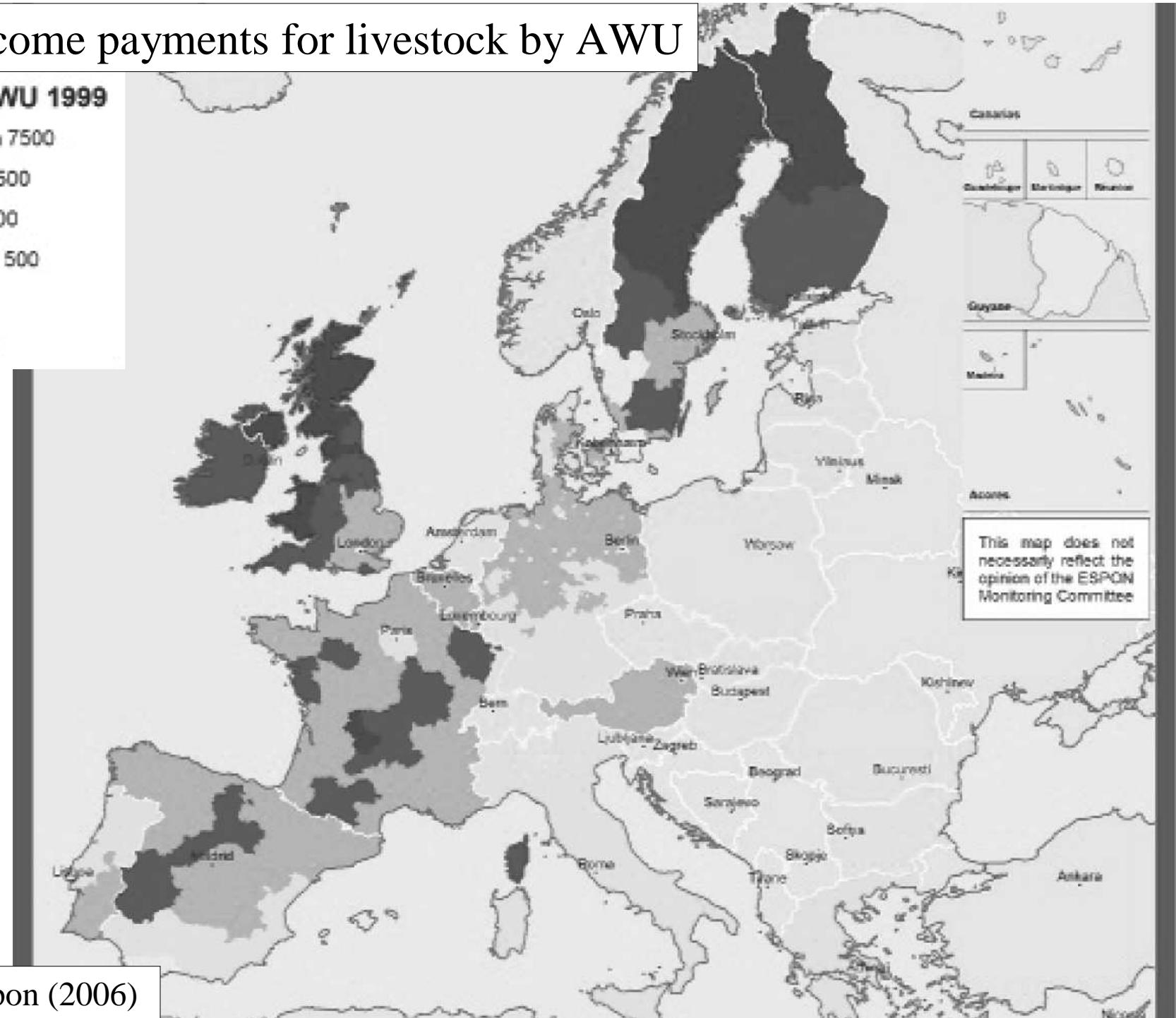


Source: Espon (2006)

# Direct income payments for livestock by AWU

Euros per AWU 1999

- More than 7500
- 2500 to 7500
- 500 to 2500
- Less than 500
- 0
- all others





## The Territorial Distribution of CAP/RDP Support

---

### 3. Pillar2

- Pillar1 was not designed as a cohesion instrument
- Pillar2 support is supposed to integrate rural development policy more
- Level of support was estimated by:
  - The sum of the value of environmental subsidies and LFA payments received by farmers
  - Apportionment of national Rural Development expenditure



# The Territorial Distribution of CAP/RDP Support

---

Pearson Correlation coefficient between **total Pillar 2** support and socio-economic indicators

	Support per ha UAA	Support per AWU	GDP per head	Unemployment rate	Population change '89-99
	<b>Environmental subsidies + LFA payments</b>				
Support per ha UAA	1	0.740(**)	0.143(**)	-0.244(**)	0.048
N	1063	1062	1063	957	892
Support per AWU	0.740(**)	1	0.004	-0.181(**)	0.034
N	1062	1062	1062	956	892
	<i>Based on appointed RD budget data</i>				
Support per ha UAA	1	0.366(**)	-0.040	-0.095(**)	-0.024
N	1063	1062	1063	957	892
Support per AWU	0.366(**)	1	-0.106(**)	-0.061	-0.013
N	1062	1066	1066	960	892

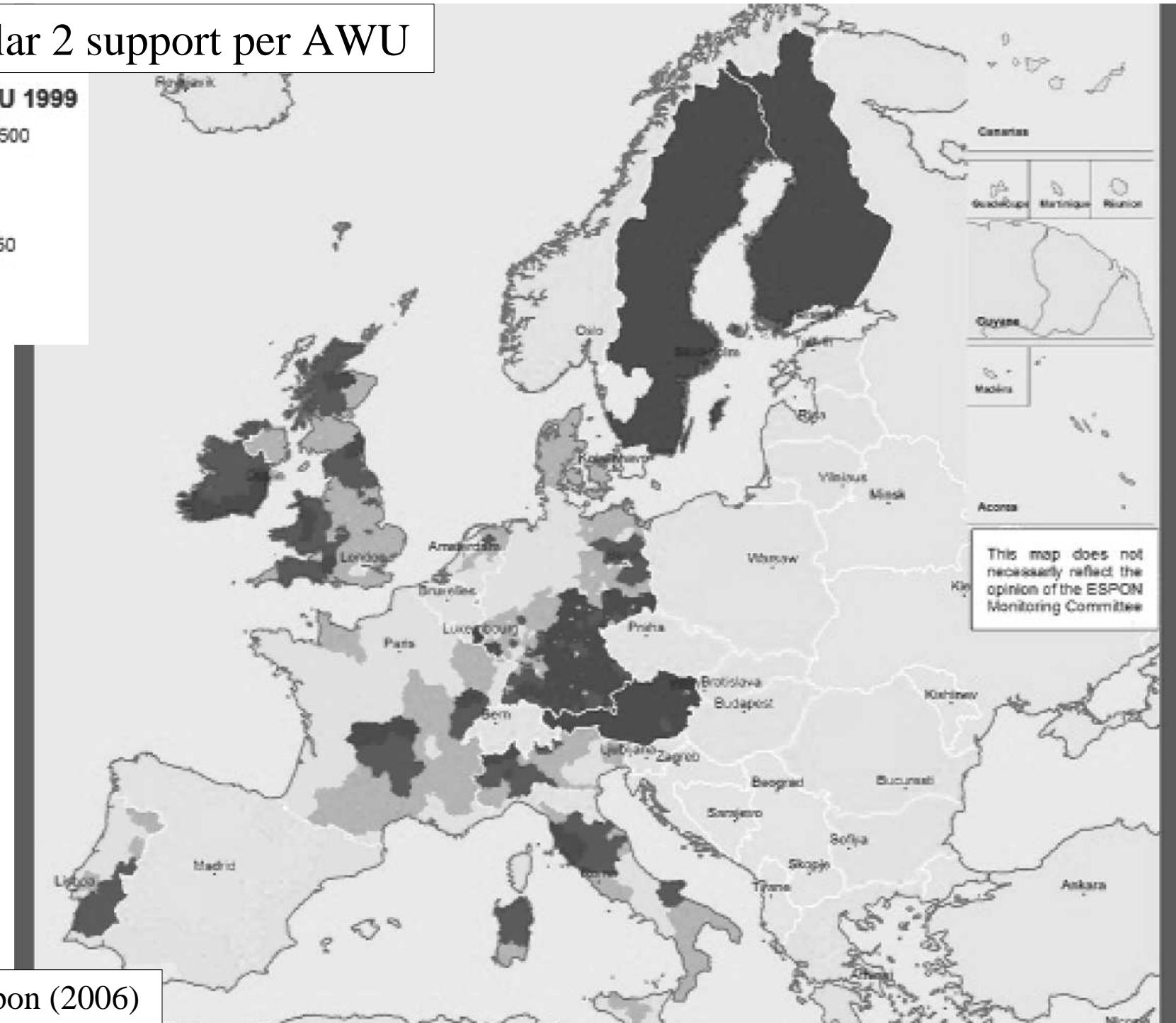
\* Correlation statistically significant at the 0.01 level (2-tailed).

Source: Espon (2006)

# Total Pillar 2 support per AWU

## Euros per AWU 1999

- More than 2500
- 750 to 2500
- 250 to 750
- Less than 250
- 0
- No data

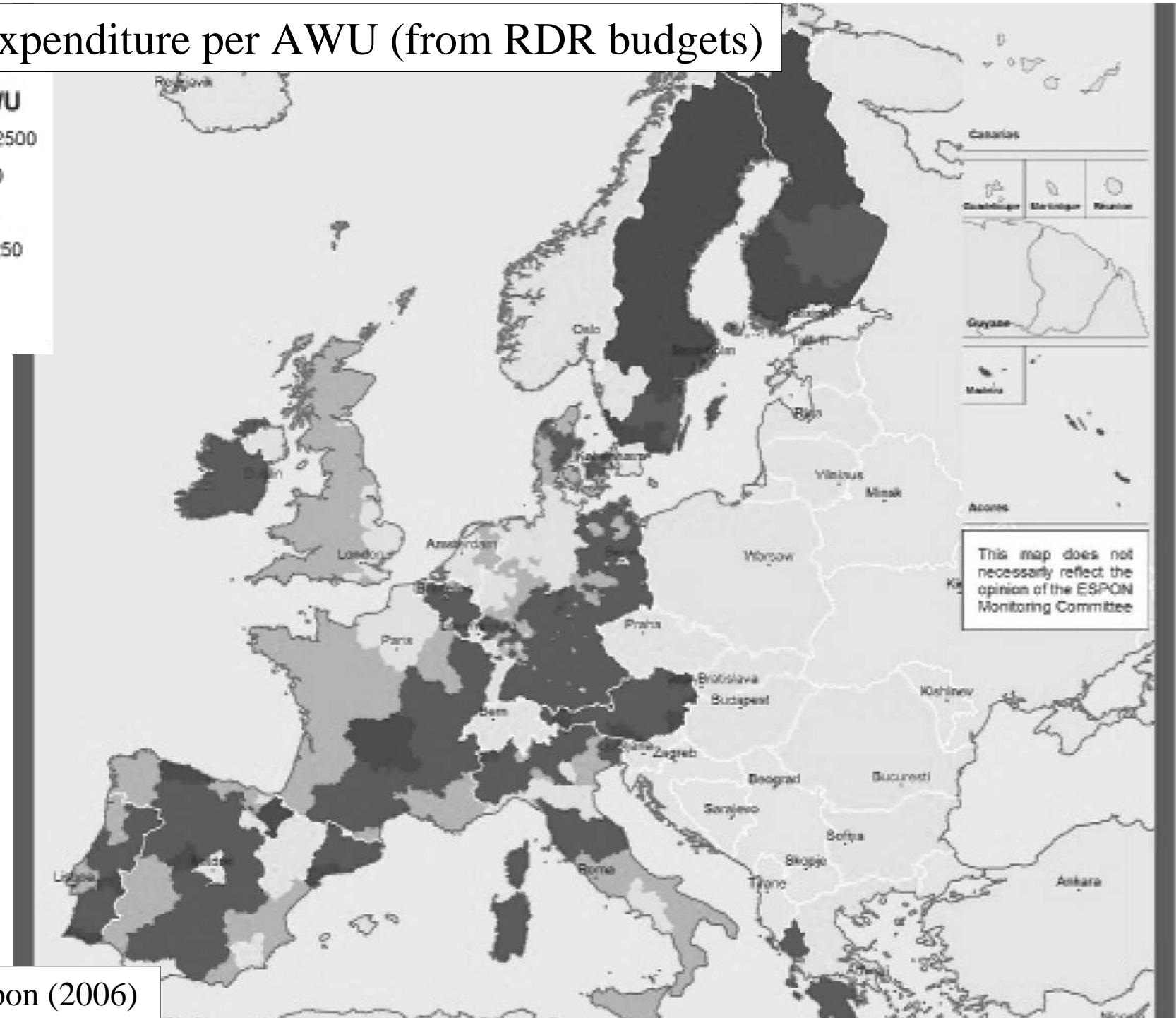


Source: Espon (2006)

## Pillar 2 expenditure per AWU (from RDR budgets)

Euros per AWU

- More than 2500
- 750 to 2500
- 250 to 750
- Less than 250
- 0
- No data



Source: Espon (2006)



# The Territorial Distribution of CAP/RDP Support

---

Pearson correlation coefficient between level of **LFA** payments and socio-economic indicators

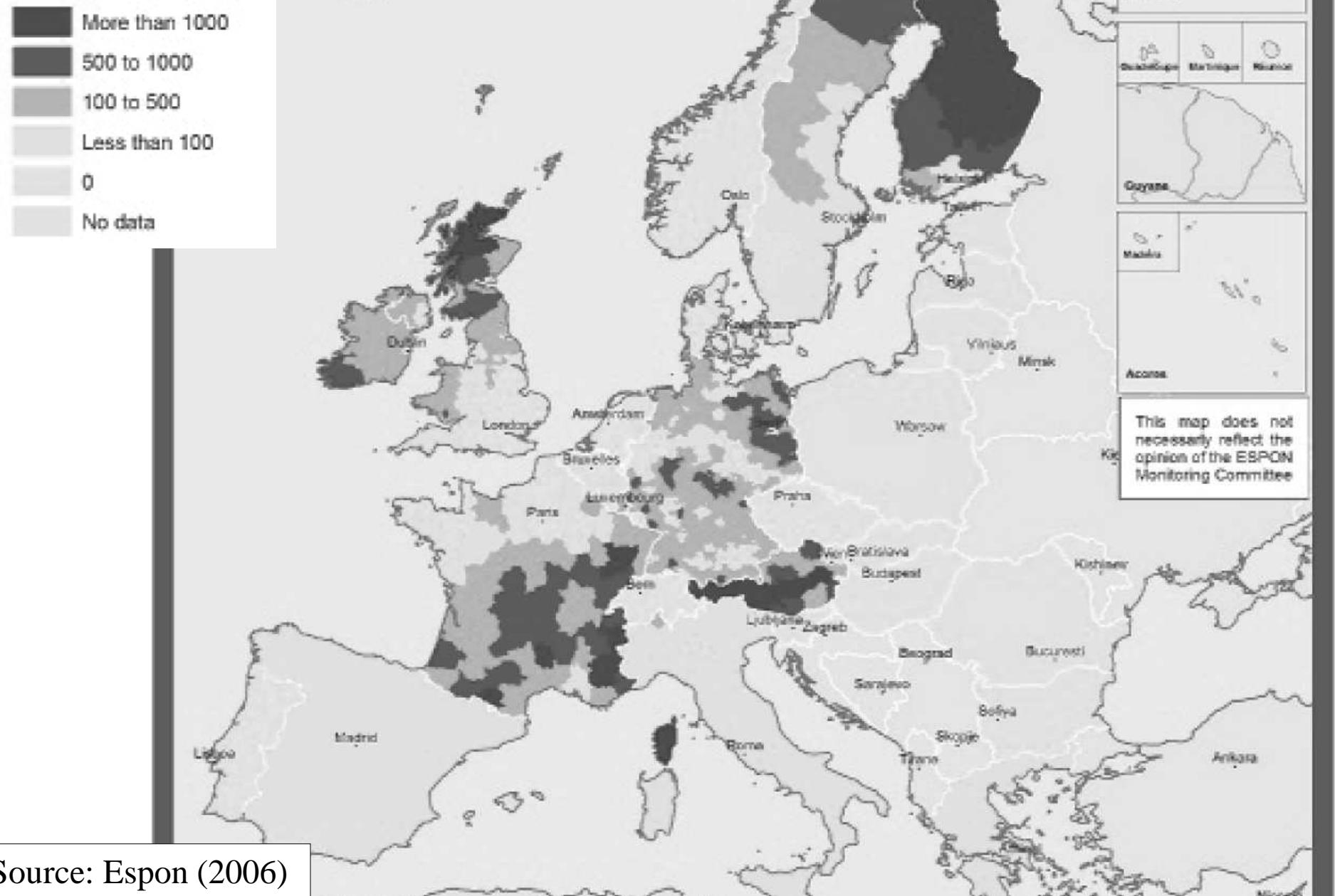
	Support per ha UAA	Support per AWU	GDP per head	Unemployment rate	Population change '89-99
Support per ha UAA	1	0.955(**)	-0.011	0.043	-0.045
N	1063	1062	1063	957	892
Support per AWU	0.955(**)	1	-0.055	0.057	-0.037
N	1062	1068	1068	962	894

\*\* Correlation is significant at the 0.01 level (2-tailed).

Source: Espon (2006)

## LFA support per AWU

## Euros per AWU 1999





# The Territorial Distribution of CAP/RDP Support

---

Pearson correlation coefficient between level of **agri-environmental** subsidies and socio-economic indicators

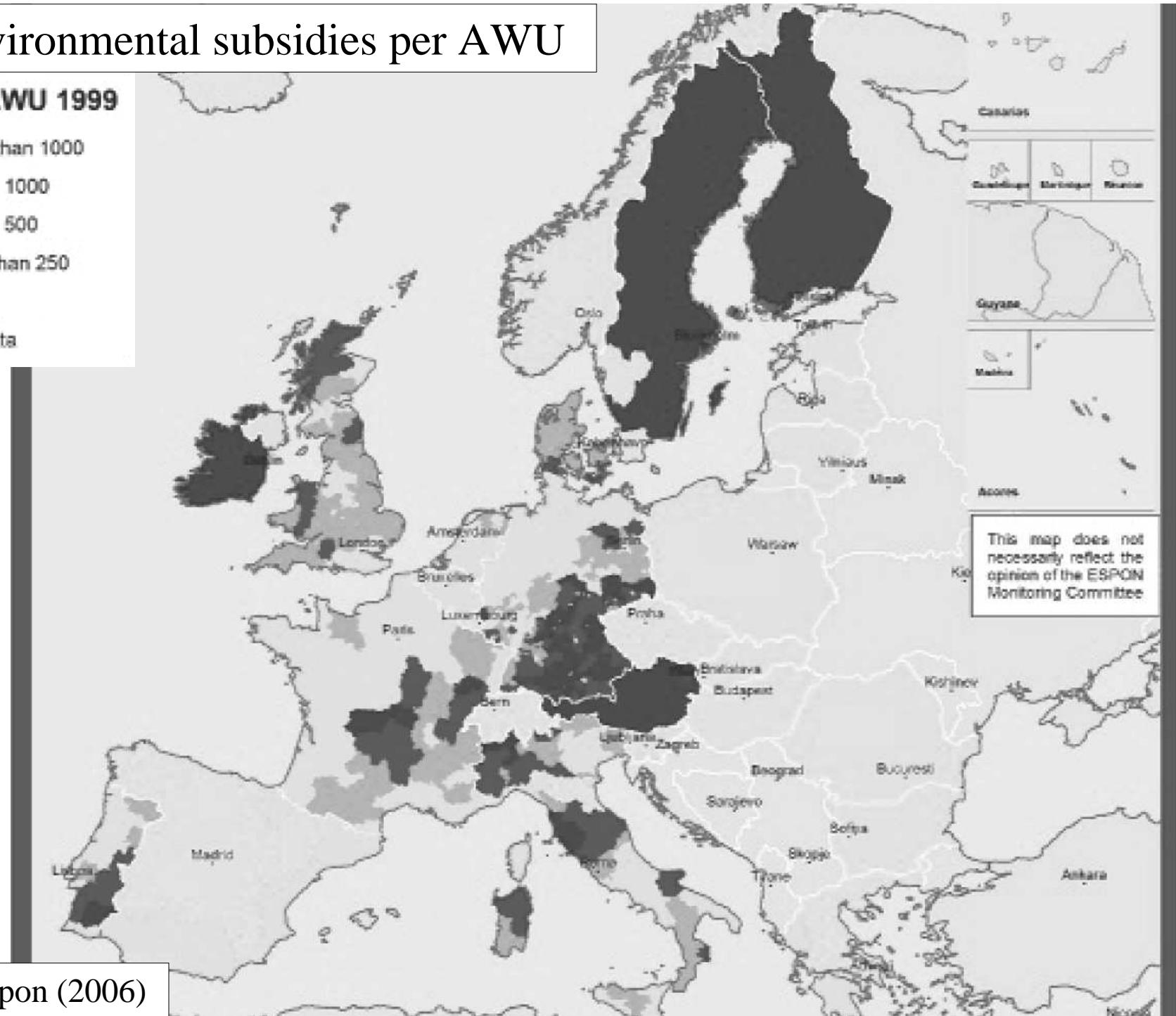
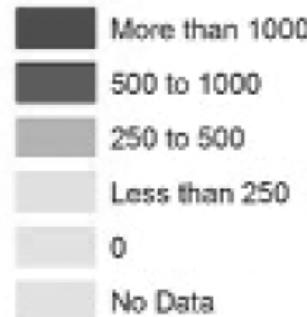
	Support per ha UAA	Support per AWU	GDP per head	Unemployment rate	Population change '89-99
Support per ha UAA	1	0.801(**)	0.146(**)	-0.240(**)	0.046
N	1067	1066	1067	961	894
Support per AWU	0.801(**)	1	0.017	-0.158(**)	0.014
N	1066	1069	1069	963	894

\*\* Correlation is significant at the 0.01 level (2-tailed).

Source: Espon (2006)

# Agri-environmental subsidies per AWU

Euros per AWU 1999



Source: Espon (2006)



## The Territorial Distribution of CAP/RDP Support

---

### 4. The influence of farm type

- Larger farm -> more €support from Pillar1!
- Larger farm -> more €/ha support from Pillar1?
  
- Average farm size in European Size Units (ESUs) in each region
- Five groups: quintiles regions with support levels smaller than first quintile -> first group



# The Territorial Distribution of CAP/RDP Support

Cross-tabulation of per hectar **Pillar1** support and farm economic size

	Farm size classification					
Level of Pillar 1 support	Group 1 (Smallest)	2	3	4	Group 5 (Largest)	Total
Group (lowest)	89	45	47	9	20	210
	42.4%	21.4%	22.4%	4.3%	9.5%	100.0%
2	26	32	56	23	73	210
	12.4%	15.2%	26.7%	11.0%	34.8%	100.0%
3	32	39	51	41	46	209
	15.3%	18.7%	24.4%	19.6%	22.0%	100.0%
4	43	68	26	49	24	210
	20.5%	32.4%	12.4%	23.3%	11.4%	100.0%
Group 5 (highest)	20	26	30	87	46	209
	9.6%	12.4%	14.4%	41.6%	22.0%	100.0%
Total	210	210	210	209	209	1048

Source: Espon (2006)



# The Territorial Distribution of CAP/RDP Support

Cross-tabulation of **Pillar2** CAP support measures in relation to farm economic size

	Farm size classification					
Level of Pillar support	Group 1 (Smallest)	2	3	4	Group 5 (Largest)	Total
Group (lowest)	44	8	35	81	44	212
	20.8%	3.8%	16.5%	38.2%	20.8%	100.0 %
2	10	12	43	80	67	212
	4.7%	5.7%	20.3%	37.7%	31.6%	100.0 %
3	35	25	69	34	49	212
	16.5%	11.8%	32.5%	16.0%	23.1%	100.0
4	50	76	43	12	31	212
	23.6%	35.8%	20.3%	5.7%	14.6%	100.0 %
Group (highest)	73	91	22	5	22	213
	34.3%	42.7%	10.3%	2.3%	10.3%	100.0 %
Total	212	212	212	212	213	1061

Source: Espon (2006)

## Agricultural factors influencing the level of CAP support

	Pillar 1 support per 100 ha	Pillar 1 support per 100 ha	Pillar 2 support (FADN) per 100 ha	Pillar 2 support (FADN) per 100 ha	Pillar 2 support (RDP) per 100 ha	Pillar 2 support (RDP) per 100 ha
	$\beta$	t	$\beta$	t	$\beta$	t
(Constant)	46.638	5.005	10.969	10.360	10.317	7.347
Average farm size	0.682	11.746	-0.079	-12.016	-0.055	-6.273
% Irrigated	2.425	4.804	-0.196	-3.417	-0.228	-2.998
% Rice	0.399	0.374	-0.052	-0.430	-0.017	-0.106
% Viniculture	-1.117	-4.850	-0.029	-1.092	0.081	2.331
% Fruit	-2.151	-4.552	-0.032	-0.590	0.137	1.922
% Olives	-0.331	-1.071	0.031	0.869	0.085	1.816
% Permanent pasture	0.227	3.667	0.005	0.671	-0.017	-1.827
% Assoc. crops	0.908	1.531	-0.011	-0.170	0.240	2.682
% Small parcels	0.906	8.882	-0.003	-0.219	0.046	2.966
% Natural vegetation	0.464	2.575	-0.093	-4.531	0.036	1.340



# The Territorial Distribution of CAP/RDP Support

---

	Pillar 1 support per 100 ha	Pillar 1 support per 100 ha	Pillar 2 support (FADN) per 100 ha	Pillar 2 support (FADN) per 100 ha	Pillar 2 support (RDP) per 100 ha	Pillar 2 support (RDP) per 100 ha
Intensity of production	0.006	7.909	0.000	1.190	0.000	1.646
GDP per head	0.000	-0.353	0.000	-0.526	0.000	0.639
Unemployment rate	-1.911	-4.274	-0.293	-5.773	-0.321	-4.762
Population change	1.680	0.273	-0.155	-5.007	-0.145	-3.532

Source: Espon (2006)



## The Territorial Distribution of CAP/RDP Support

---

### 5. Conclusions

- Uneven effects across the EU-15
- Not positively contributing towards the goal of more balanced and sustainable development
- Often it tends to benefit richer regions with lower unemployment rates and high population growth
- Differing Member State priorities (Pillar2)
- Inadequate and uneven funding of measures
- Co-financing requirement



# The Territorial Distribution of CAP/RDP Support

---



## Sources:

CAP (2005): The CAP and the Regions, The Territorial Impact of the Common Agricultural Policy, Cabi Publishing, 2005.

Espon (2006): Homepage of the European Spatial Planning Observation Network, URL  
<http://www.espon.eu/>

Matthews, A. (2005): Book Review: The CAP and the Regions: The Territoial Impact of the Common Agricultural Policy, in EuroChoices, Vol. 5 No. 1, 2006.

