# The use of EU funds in the Eastern periphery: equity, efficiency and quality of government

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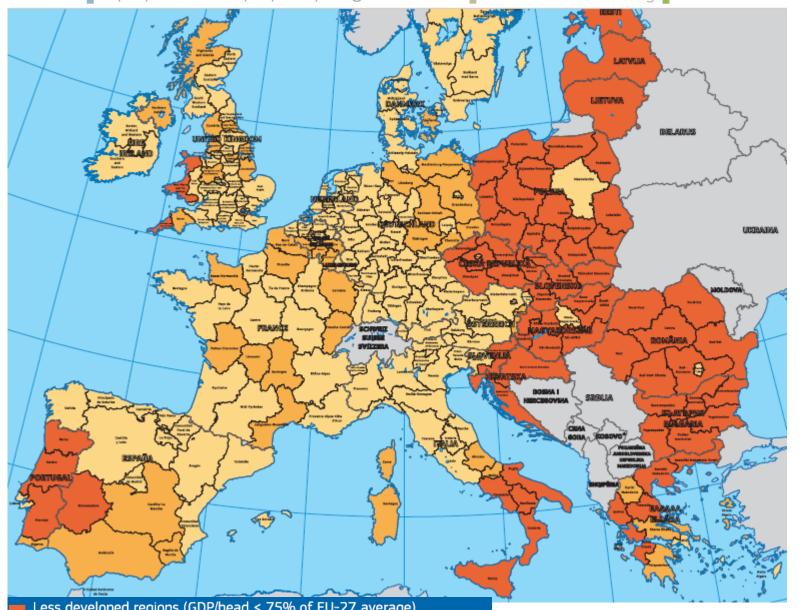
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Cohesion Policy is one of the **greatest rewards of EU membership**  $\rightarrow$  huge financial transfers to relatively backward members (Eastern Europe)

# Driving principles: Efficiency ← → Equity (solidarity)

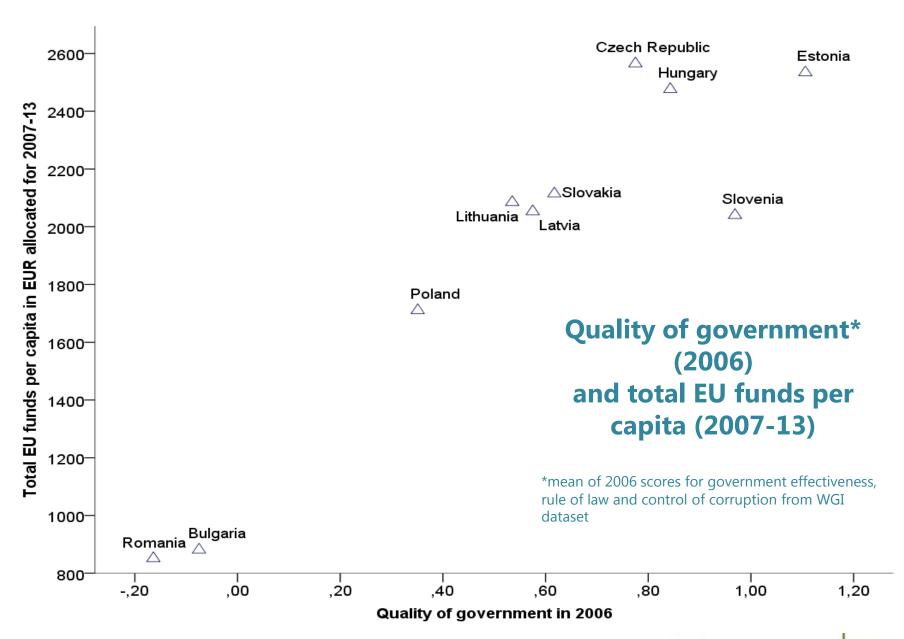
- a) regional variation in fund absorption capacity → under the same conditions competitive fund allocation is advantageous for stronger (more developed) regions (they have higher absorption capacity)
- b) Territorial eligibility for EU funds in Eastern Europe does not take into account internal (within-country) regional disparities → most backward and developed regions are grouped together into the same eligibility type
- c) Country-level variation in quality of government → may affect overall fund absorption capacity and may also influence the regional distribution of funds ■mtatkpti



Regional eligibility **(NUTS 2)** for EU funds (2014-20)

- Less developed regions (GDP/head < 75% of EU-27 average)
- Transition regions (GDP/head between 75% and 90% of EU-27 average)
- More developed regions (GDP/head >= 90% of EU-27 average)





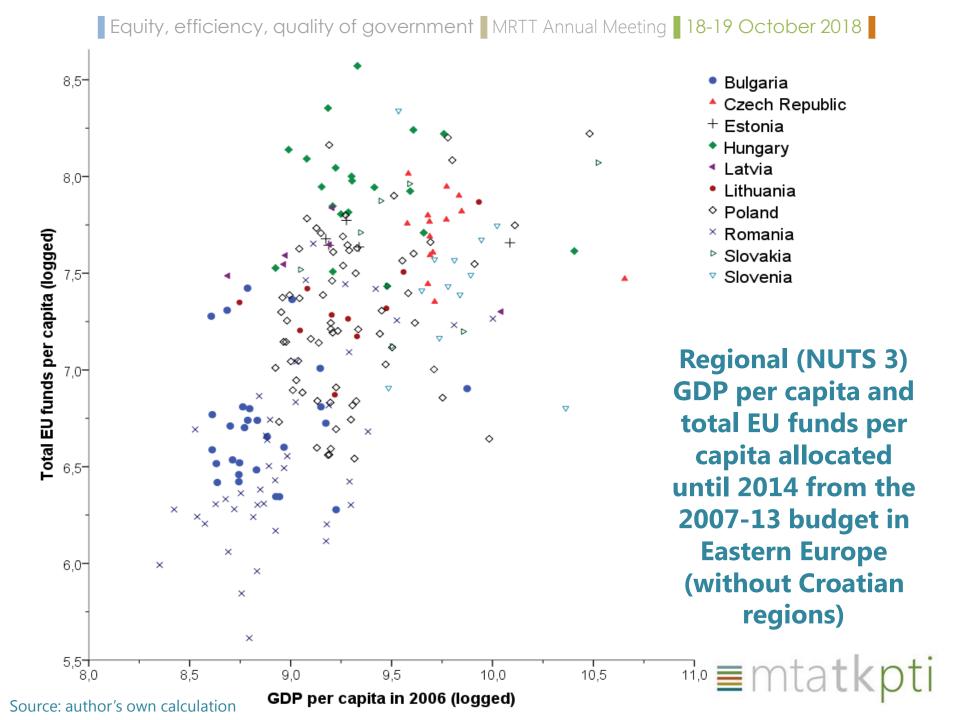
## **Research questions:**

- What is the regional pattern (NUTS 3 level) of EU fund distribution in the Eastern member states?
- How do territorial eligibility rules affect fund distribution?
- What is the role of quality of government in fund distribution?

# **Hypotheses:**

- 1) More developed regions tend to secure more EU grants in Eastern Europe
- 2) Quality of government influences regional distribution of the funds





### **Dependent variable:**

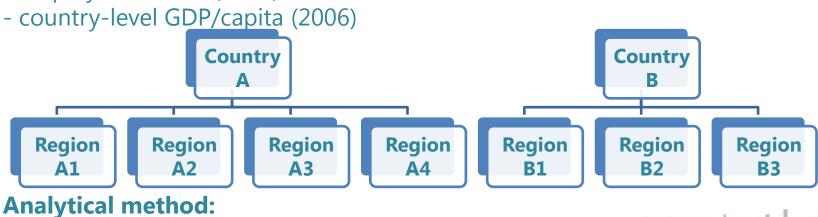
- total EU funds (ERDF + CF) per capita secured by the NUTS 3 regions in 2007-2013 (until December 2014) in the Eastern European EU member states

## **Main explanatory variables:**

- regional GDP per capita (2006)
- type of regional fund eligibility (convergence vs. competitiveness region)
- quality of government (mean of 2006 scores for government effectiveness, rule of law and control of corruption from WGI dataset)

#### **Controls:**

- size of regional population (2006)
- population density (2006)
- employment level (2006)



- Multilevel regression (Level 1: regions; Level 2: countries)

Model 3

232 b

603.25\*\*\*

Model 4

232<sup>b</sup>

617.52\*\*\*

#### Results of the multi-level models. Dependent variable: regional (NUTS 3) EU funds per capita

Model 2

	Model 1		Wiodel 2		Widdel 3		Model 4		
	В	SE	В	SE	В	SE	В	SE	
Constant	7.091***	.271	26.130***	9.238	24.991**	9.741	27.291***	1.223	
Regional level effects									
GDP/capita (regional)	.568**	.236	.553**	.240	.689***	.163			
GVA/capita (regional)							.684***	.164	
Competitiveness region <sup>a</sup>	452**	.175	451**	.183	233	.186	242	.182	
Population	123*	.065	108*	.060	117*	.066	119*	.066	
Population density	044	.076	037	.075	030	.073	030	.072	
Employment	.044	.271	.021	.266	.130	.233	.129	.236	
Country level effects									
Quality of government			2.996**	1.196	2.946**	1.268	3.022**	1.283	
GDP/capita (country)			-2.295**	1.102	-2.159*	1.166	-2.418**	1.222	
Interaction effects									
Qual. of gvt. & GDP/capita (reg.)					<b>639</b> ***	.213			
Qual. of gvt. & GVA/capita (reg.)							<b>616</b> ***	.210	
Random effects									
Regional-level variance	.166***	.040	.167***	.040	.161***	.041	.161***	.041	
Country-level variance	.654	.489	.244	.106	.264	.121	.268	.127	
	1		1				1		

232 b

56.73\*\*\*

Wald Chi-squared

232<sup>b</sup>

42.16\*\*\*

Model 1

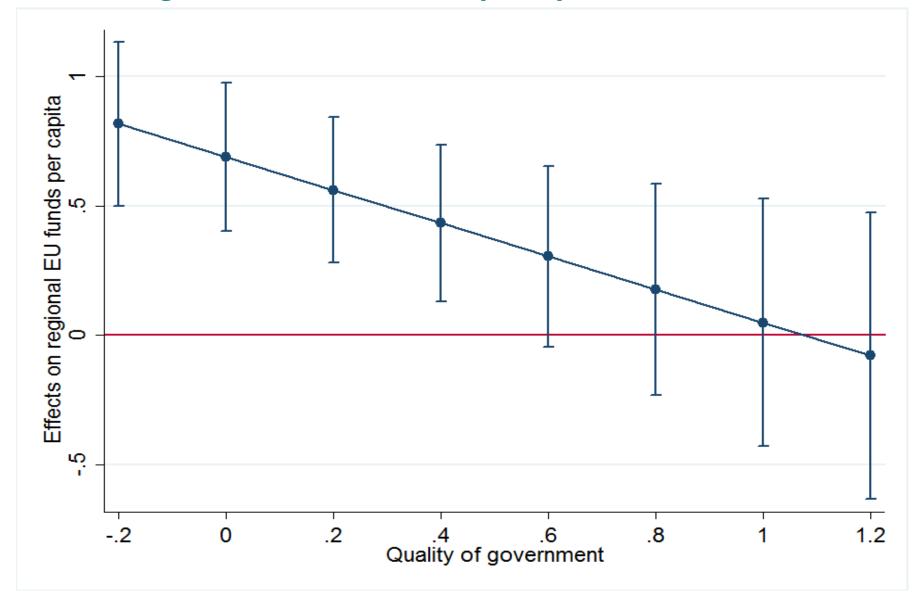
<sup>&</sup>lt;sup>a</sup> Reference group: Convergence regions

<sup>&</sup>lt;sup>b</sup> The Polish data covers the former 66 NUTS 3 level regions (in effect until 31 December 2014).

Except for the dummy and the quality of government index, all explanatory variables are logged and centred on their mean. Logged dependent variable.

Unstandardized coefficients, robust standard errors; \*\*\* p < .01; \*\* p < .05; \*p < .01 Estimates remain robust after performing bootstrapped estimations (5000 iterations).

# Average marginal effect of regional GDP per capita with quality of government on EU funds per capita (Model 3)



## **Conclusions**

- More developed regions tend to secure more EU funds per capita in Eastern Europe (their superior absorption capacity prevails)

- Territorial eligibility rules indeed bias fund distribution towards more developed areas (promote efficiency)
- Higher quality of government seems to decrease the advantage of more developed regions in securing EU funds
- Quality of government compensates for the bias in territorial eligibility rules (serves the equity principle)



# Thank you for your attention!

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