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Supplementary online appendices to

IS EUROPE GOOD FOR YOU?

EU Spending and Well-Being

LISA DELLMUTH

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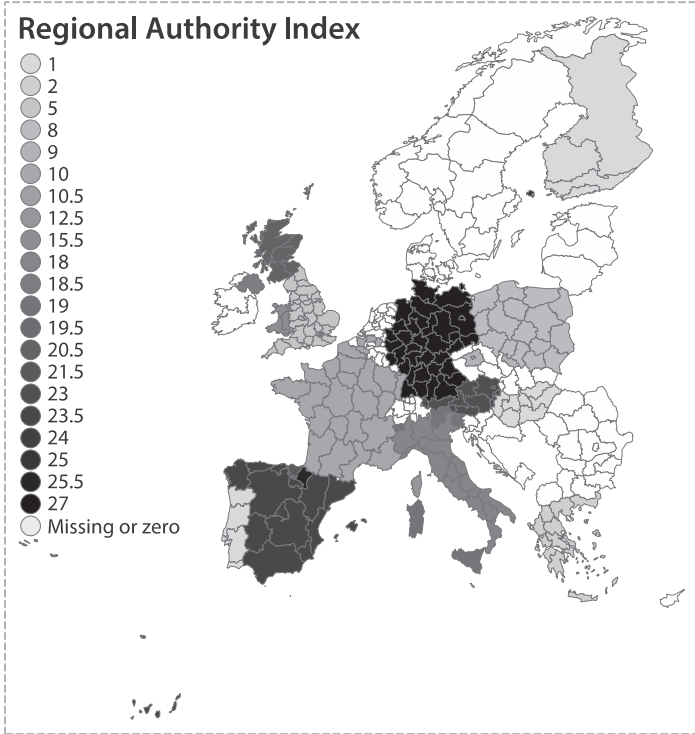
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Table S1.1: Unit of analysis: NUTS regions in the dataset

Country	NUTS level at which funds are allocated	Corresponding pre-existing administrative unit
Austria	2	States (<i>Länder</i>)
Belgium	2	Provinces (<i>Provincies</i>)
Czech Republic	2	Oblasts (<i>Oblasti</i>)
Finland	1 and 2	At the level of NUTS 1: Province of Åland (<i>Läänit</i>)
France	2	Regions/Overseas Departments (<i>Régions/ Départements d'Outre Mer</i>)
Germany	1	States (<i>Länder</i>)
Greece	2	Regions (<i>Periferies</i>)
Hungary	2	Planning and statistical regions (<i>Tervezési-statisztikai régiók</i>)
Ireland	2	Regional Assemblies
Italy	2	Regions (<i>Regioni</i>)
Netherlands	1 and 2	Only NUTS 2: Province of Flevoland (<i>Provincie</i>)
Poland	2	Province (<i>Województwa</i>)
Portugal	1 and 2	At the level of NUTS 1: Autonomous Regions (<i>Regiões Autónomas</i>); NUTS 2: Commissions for Coordination and Regional Development (<i>Comissões de Cooperação e Desenvolvimento Regional</i>)
Spain	2	Autonomous Communities and Cities (<i>Comunidades Autónomas, Ciudades Autónomas de Ceuta y Melilla</i>)
Sweden	1 and 2	At the level of NUTS 2: Stockholm (<i>Riksområden</i>)
UK	1 and 2	At the level of NUTS 1: Government Office Regions, Scotland, Wales and Northern Ireland

Notes: Author's own presentation

1 Figure S1.1: NUTS regions in the analysis, sorted by regional
2 authority index



25 Notes: Own presentation based on data from Hooghe et al (2016)

Appendix S2: Data Coverage in ECHP and EU-SILC

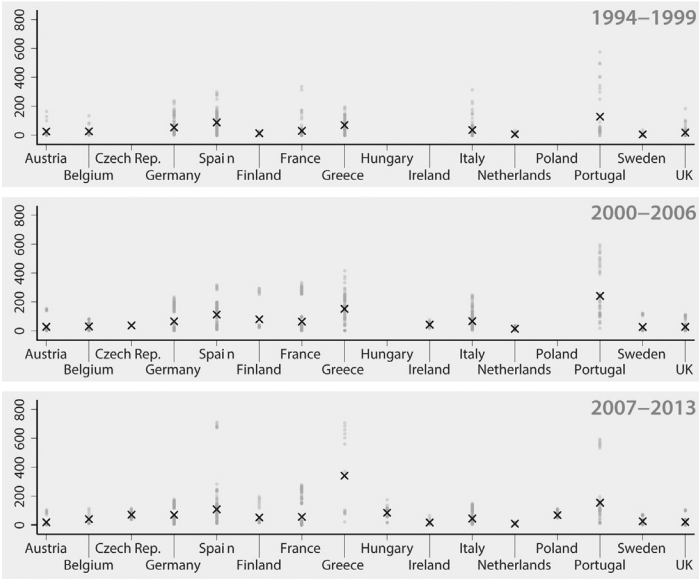
Table S2.1: Regional data available in ECHP and EU-SILC

Country	Level at which EU funds are allocated	Well-being measures (ECHP) 1993–2000	Well-being measures (EU-SILC) 2003–2013
Austria	NUTS 2	NUTS 1	NUTS 1
Belgium	NUTS 2	NUTS 2	NUTS 1
Czech Republic	NUTS 2	Not surveyed	NUTS 2
Finland	NUTS 2	NUTS 2	NUTS 2
France	NUTS 2	NUTS 2	NUTS 2
Germany	NUTS 1	NUTS 1	NUTS 0
Greece	NUTS 2	NUTS 2	NUTS 1
Hungary	NUTS 2	Not surveyed	NUTS 1
Ireland	NUTS 2	NUTS 0	NUTS 0
Italy	NUTS 2	NUTS 2	NUTS 1
Netherlands	NUTS 1	NUTS 0	NUTS 0
Poland	NUTS 2	Not surveyed	NUTS 1
Portugal	NUTS 2	NUTS 2	NUTS 1
Spain	NUTS 2	NUTS 2	NUTS 2
Sweden	NUTS 2	NUTS 2	NUTS 0 and 1
UK	NUTS 1 and 2	NUTS 1 and 2	NUTS 1 and 2

Notes: Several NUTS codes were changed during the time period studied, which I harmonized consistent with EU regulations. See Commission regulation No 1059/2003, No 105/2007, No 868/2014, and Commission Implementing Decision of 18 February 2014.

Appendix S3: Regional Funding

Figure S3.1: EU regional funding across regions, countries and over time



Notes: Payment data. Figures are inflation-adjusted spending per capita. Data from 16 countries; 634 regions during 1994-99, 997 during 2000-06, and 1122 during 2007-13.

Sources: European Commission DG Regio Datawarehouse C3 and EU annual reports on structural funds. 'X' denotes mean cross-regional funding within a country. Ireland received funding during the 1994-99 period, but because it counted as one region, it is excluded in the first panel of the dataset.

Appendix S4: Quantitative Data

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Table S4.1: Variable definitions and sources

Variable	Description	Level of analysis	Source
Employment	Employment per capita, calculated as the proportion of employed persons aged 15 to 74 in the total regional population	Region	Eurostat
EU economic investments	Variable calculated by adding 0.0001 to inflation-adjusted economic funds per capita, and taking the logarithm. Covers Obj. 1 +2+5 during 1994-95, and ERDF+EAGGF+FIG from 2000, per capita, as a share of the consumer price index in a given year. See Appendix B in the book for included budgetary components.	Region	DG Regio Datawarehouse C3, Annual Structural Funds Reports from 1995-99. Consumer price index (2010 = 100) data from International Monetary Fund, International Financial Statistics and data files.
EU social investments	Variable calculated by adding 0.0001 to inflation-adjusted social funds per capita, and taking the logarithm. Obj. 3+4 during 1994-99, and ESF-spending from 2000, per capita as a share of the consumer price index in a given year. See Appendix B in the book for included budgetary components.	Region	DG Regio Datawarehouse C3, Annual Structural Funds Reports from 1995-99. Consumer price index (2010 = 100) data from International Monetary Fund, International Financial Statistics and data files.

(continued)

Table S4.1: Variable definitions and sources (continued)

Variable	Description	Level of analysis	Source
FGT ($\alpha = 0$)	Headcount ratio (see above for mathematical formula and detailed description)	Region	Own calculations using data from ECHP, EU-SILC
FGT ($\alpha = 1$)	Average normalized poverty gap index (see above for mathematical formula and detailed description)	Region	Own calculations using data from ECHP, EU-SILC
FGT ($\alpha = 2$)	Average squared normalized poverty gap index (see above for mathematical formula and detailed description)	Region	Own calculations using data from ECHP, EU-SILC
GDP per capita	GDP per capita in constant prices, constant PPP in million, OECD base year	Region	Eurostat
GDP per capita growth	$\frac{GDP_{t-2} - GDP_{t-1}}{GDP_{t-1}}$ where GDP is GDP per capita in constant prices, constant PPP in million, OECD base year	Region	Eurostat
GE ($\alpha = 0$)	Mean logarithmic deviation (see above for mathematical formula and detailed description)	Region	Own calculations using data from ECHP, EU-SILC

(continued)

Table S4.1: Variable definitions and sources (continued)

Variable	Description	Level of analysis	Source
GE ($\alpha = 1$)	Theil index (see above for mathematical formula and detailed description)	Region	Own calculations using data from ECHP, EU-SILC
GE ($\alpha = 2$)	Squared coefficient of variation (see above for mathematical formula and description)	Region	Own calculations using data from ECHP, EU-SILC
Gini	Gini coefficient (see above for mathematical formula and detailed description)	Region	Own calculations using data from ECHP, EU-SILC
Infant mortality	Infant Mortality Rate (deaths of those under 1 year of age per 1,000 live births)	Region	OECD
Material deprivation	Severe material deprivation rate as a per cent of the total regional population	Region	Eurostat
National economic spending	Total spending on national-level economic affairs. Classification of the functions of government (COFOG), which encompasses all spending categories except defense, general, public order, and social spending	Country	IMF Government Statistics

(continued)

Table S4.1: Variable definitions and sources (continued)

Variable	Description	Level of analysis	Source
National education spending	Total spending on education at the national level	Country	IMF Government Statistics
National health spending	Total spending on health at the national level	Country	IMF Government Statistics
National social spending	Social spending at the national level as a per cent of total expenditures. COFOG categories, which encompass: <ul style="list-style-type: none"> - Recreation, culture, and religion - Social protection - Health - Housing and community amenities - Education - Family and children - Social exclusion 	Country	IMF Government Statistics

(continued)

Table S4.1: Variable definitions and sources (continued)

Variable	Description	Level of analysis	Source
P90/10	Percentile ratio, which is the decile ratio between the ninth and the first decile, comparing income in the highest income decile to that in the lowest income decile	Region	Own calculations using data from ECHP, EU-SILC
Population density	Population divided by the total area of a region in square kilometers	Region	Eurostat
Regional vote share	National government (coalition) intraregional vote share in parliamentary elections	Region	Own calculations using data from Norwegian Social Science Data Services (NSSD)
Self-perceived health	Per cent of regional population identifying their own health as very good or good. Question posed: 'How is your health in general? Very Good; Good; Fair; Bad; Very Bad'. Coded as a fraction from 0 to 1.	Region	Own calculations using data from ECHP, EU-SILC

(continued)

Table S4.1: Variable definitions and sources (continued)

Variable	Description	Level of analysis	Source
Social trust	Generalized social trust, regional averages weighted by post-stratification weights. The ESS uses stratified random samples that are representative at the NUTS regional level (see www.europeansocialsurvey.org). Missing due to biennial measurement in the European Social Survey, replaced by mean trust between the measurements. Question posed: Using this card, generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people? Please tell me on a score of 0 to 10, where 0 means you can't be too careful and 10 means that most people can be trusted. Regional average values on a scale from 0–10.	Region	Calculated using European Social Survey data
Tertiary education	Percentage of the total regional population for whom tertiary education is the highest level completed	Region	Eurostat

(continued)

Table S4.1: Variable definitions and sources (continued)

Variable	Description	Level of analysis	Source
Tight races	Difference in intra-regional vote shares between the two major parties in parliamentary elections. The lower the value, the tighter the electoral race.	Region	Eurostat
Turnout	Turnout in national parliamentary elections	Region	Coded using electoral data from the websites of the NSSD
Unemployment	Unemployment rates, representing unemployed persons aged 15 to 74 as a percentage of the labour force, meaning the total number of people employed and unemployed. This includes people actively seeking employment (excluding, eg, students and stay-at-home parents).	Region	Eurostat
National unemployment	Unemployment rates, representing unemployed persons aged 15 to 74 as a percentage of the labour force, meaning the total number of people employed and unemployed. This includes people actively seeking employment (excluding, eg, students and stay-at-home parents).	Country	World Bank

(continued)

Table S4.1: Variable definitions and sources (continued)

Variable	Description	Level of analysis	Source
Union density	Ratio of wage and salary earners that are trade union members, divided by the total number of wage and salary earners	Country	OECD Labour Force Statistics
Youth inactivity	Young people (aged 15–24) neither in employment nor in education/training, as a per cent of the total population of that cohort, excluding survey respondents who did not answer the question	Region	European Union Labour Force Survey and Eurostat

Table S4.2: Descriptive statistics

Variable	Min.	Mean	Max.	Std. dev.	N
Employment	-1.860	-0.900	-0.190	0.150	2308
EU economic investments	0	0.620	8.110	0.950	2581
EU social investments	0	0.100	2.040	0.180	2581
FGT ($\alpha=0$)	0.010	0.160	0.430	0.080	845
FGT ($\alpha=1$)	0	0.050	0.240	0.030	845
FGT ($\alpha=2$)	0	0.030	0.180	0.030	802
GDP per capita	0.010	0.030	0.090	0.010	2635
GDP per capita growth	-0.140	0.020	0.190	0.030	2479
GE ($\alpha=0$)	0.050	0.150	0.560	0.060	845
GE ($\alpha=1$)	0.050	0.140	0.740	0.070	845
GE ($\alpha=2$)	0.050	0.190	3.300	0.190	845
Gini	17.400	27.500	55.230	5.310	802
Infant mortality	0	4.650	16.700	2.080	2340
Material deprivation	0	5.700	27.400	4.770	515
National economic spending	0.270	1.530	3.230	0.280	2851
National education spending	3.540	4.990	7.650	0.870	2851
National health spending	4.250	6.280	8.440	0.950	2851
National social spending	2.140	2.830	3.220	0.200	2851
Net migration	-2.910	-0.020	1.580	0.320	1571
P90/10	2.030	3.600	9.910	1.150	800

(continued)

Table S4.2: Descriptive statistics (continued)

Variable	Min.	Mean	Max.	Std. dev.	N
Population density	0.620	4.860	8.860	1.260	2772
Regional vote share	0	44.770	85.41	14.300	2896
Self-perceived health	0.320	0.640	0.880	0.100	850
Social trust (average on a scale from 0–10)	1.690	4.770	6.730	0.830	1179
Tertiary education	0.020	0.220	0.540	0.100	850
Tight races	-45.390	-11.410	1	9.510	2832
Unemployment	0.800	9.800	33.300	5.450	2790
Union density	7.790	27.350	82.330	17.620	2473
Youth inactivity	2.900	12.360	34.200	4.980	1972

Table S4.3: Correlation matrix for capability indicators

Variables	1.	2.	3.	4.	5.
1. Unemployment	1.000				
2. Employment (log)	-0.646	1.000			
3. Youth inactivity	0.699	-0.746	1.000		
4. Infant mortality	0.191	-0.336	0.254	1.000	

Notes: N=1847

Table S4.4: Correlation matrix for all well-being indicators

	1.	2.	3.	4.	5.
1. Unemployment	1.000				
2. Employment (log)	-0.744	1.000			
3. Youth inactivity	0.773	-0.655	1.000		
4. Infant mortality	0.049	-0.141	0.363	1.000	
5. Self-perceived health	0.201	0.020	0.246	0.060	1.000
	6.	7.	8.	9.	10.
6. FGTtwo	1.000				
7. Gini	0.537	1.000			
8. GE ($\alpha=1$)	0.381	0.909	1.000		
9. GE ($\alpha=2$)	0.104	0.605	0.868	1.000	
10. P90/10	0.676	0.838	0.652	0.283	1.000

Notes: N=608

Appendix S5: Robustness Checks

Addressing endogeneity. I performed a number of robustness checks in conjunction with the regression analyses of regional well-being in Chapter 5, all of which corroborate the main findings.

To begin with, I tested whether estimated results could be biased due to endogeneity of the EU funding variables. As EU funds are designed to promote socio-economic development within the European Union writ large, aspects of regional development might affect EU funding and well-being indicators at the same time but separately. In order to address this issue, I chose an instrumental variable approach. I considered running panel fixed-effects two-stage least squares models by including cluster-robust standard errors and using the first and second lag of the funds measure as instruments for EU fund expenditures (cf Bähr, 2008). However, I refrain from instrumenting social investments using lags at $t-1$ and $t-2$ in light of serial correlation. There are no straightforward third factors of EU funding patterns with direct impact on well-being outcomes that could also serve as instrumental variables.

Prior research suggests two kinds of external instrument variables. Dall'erba and Le Gallo (2008) instruments structural funds payments by regional distance to Brussels, and concludes that the spatial distribution of structural funds payments follows a centre-periphery pattern. Bouvet (2005) uses partisan affinity as an instrument for structural funds. However, the first set of instruments shows no variation over time, making it incompatible with the fixed effects models

1 used here. Moreover, the time differences in variables related
 2 to political affinity are low, and in fact zero in some regions
 3 (see also Mohl and Hagen, 2011). Given that GDP growth
 4 might be affected by an omitted region-specific variable that
 5 might concomitantly affect the dependent variable, GDP
 6 growth must also be part of the regression analysis. GDP was
 7 therefore included as an indicator of economic development
 8 in the robustness checks. Existing approaches to use weather
 9 shocks as an instrumental variable for economic shocks (Miguel
 10 et al, 2004) are not suitable for industrialized democracies.

11 In such situations, suitable instruments may be constructed
 12 by exploiting time-series properties through Generalized
 13 Method of Moments (GMM) estimators (Arellano and Bond,
 14 1991; Arellano and Bover, 1995; Blundell and Bond, 1998;
 15 Roodman, 2006). Here, T ranges from 10 to 16, depending on
 16 the model, as data for some variables are not available before
 17 2000 (Chapter 5). Where T is large, the impact of a one-year
 18 shock on the region's apparent fixed effect would dwindle, as
 19 would the endogeneity problem. Difference GMM is centrally
 20 purposed to transform the data thereby removing the fixed
 21 effects. Insofar as the position of any of the independent
 22 variables may be influenced by the prevailing level of well-
 23 being through political or economic mechanisms—with the
 24 possible exception of population density—a correctly specified
 25 equation should accommodate at least five endogenous policy
 26 variables (EU funding, GDP growth, union density, high-
 27 skilled workforce, and national spending). As changes in the
 28 instrumenting variables may be correlated with the fixed effects
 29 (Roodman, 2009), I refrain from using system GMM, opting
 30 instead for difference GMM. I proceed to run difference GMM
 31 models that take the following generic form:

$$\Delta y_{it} = \alpha \Delta y_{i,t-1} + \Delta x'_{it} \beta + \Delta v_{it} \quad (1)$$

35 I also used the two-step estimator with the Windmeijer
 36 (2005) correction that prevents standard errors from being

1 biased downward. This two-step estimator, β_2 , is efficient and
2 robust to whatever patterns of heteroskedasticity may exist
3 (Roodman, 2009). More traditional Huber-White standard
4 errors are downward biased when the number of instruments
5 is large—severely enough to make two-step GMM useless for
6 inference (Arellano and Bond, 1991), so here it is warranted
7 to use the two-step estimator.

8 These models also allow for the inclusion of a lagged
9 dependent variable, which makes sense given that most EU
10 fund projects are multiannual and there might be some path
11 dependency in fund allocations per region. Many instruments
12 can overfit the instrumented variables (Roodman, 2009),
13 so I follow Mehrhoff (2009) and Mohl and Hagen (2011)
14 in limiting the number of moment conditions by using the
15 ‘collapse’ option developed by Roodman (2009). These steps
16 yield no evidence of second-order serial correlation. Given
17 first-order autocorrelation, I included a DV lagged by one
18 year in all models. I modeled EU funding, national health and
19 education spending, high skilled workforce, union density,
20 and GDP growth as endogenous. With this parsimonious
21 specification, the estimation results showed that the Hansen test
22 of overidentifying restrictions (Hansen, 1982) is not statistically
23 significant (ie, the null hypothesis according to which the
24 instruments are not correlated with the residual cannot be
25 rejected). The results for the EU funding variables are robust
26 in almost all cases and the main conclusions do not change
27 (see Tables S5.1–S5.5).

28 **Controlling for national educational spending.**

29 I conduct a series of panel data regression models, and
30 dynamic panel data models, using labour market outcomes
31 as dependent variables and treating national educational
32 spending as endogenous. The results remain robust throughout
33 (Table S5.2).

34 **Controlling for a potential trend.** A series of panel
35 data regression models, and dynamic panel data models, in
36 which I control for a potential trend using a count variable,

1 suggest that the results remain largely robust, with fewer
2 significant effects observed for the distributive justice indicators
3 (Table S5.3).

4 **Controlling for period dummies.** I also tested all models
5 including funding period dummies. These dummies equal 1 for
6 a specific funding period, and 0 otherwise. The results remain
7 robust and a larger number of statistically significant effects
8 for the distributive justice indicators is observed (Table S5.4).

9 **Testing the ‘Kuznets curve’ argument.** Fifth and finally,
10 I run the inequality models again, this time including GDP
11 and squared GDP to test whether GDP is negatively associated
12 with reductions in inequality, and if the positive squared GDP
13 term is indicative of a Kuznets curve. Here, too, EU funding
14 effects remain robust and a larger number of significant effects
15 for the distributive justice indicators is observed (Table S5.5).
16 This is consistent with the conclusion of Castells-Quintana
17 et al (2015), who find no evidence for the Kuznets curve. They
18 posit that the hypothesized inverted-U relationship between
19 economic development and inequality may thus assume an
20 N-shape, with inequality first increasing, then decreasing,
21 before rising again (eg, Alderson and Doran, 2013).

Table S5.1: Difference GMM replicating models

Dependent variable	Poor regions	Rich regions	Full sample
Capability indicators			
Unemployment	Social funds (t-1)=-1.541 Social funds (t-2)=0.134 N=343	Social funds (t-1)=-1.129** Social funds (t-2)=-0.249*** N=889	Social funds (t-1)=-1.073*** Social funds (t-2)=-0.114* N=1233
	Employment	Social funds (t-1)=0.008 Social funds (t-2)=-0.002 N=371	Social funds (t-1)=0.047** Social funds (t-2)=0.008** N=914
Youth inactivity	Social funds (t-1)=0.544 Social funds (t-2)=-0.040 N=330	Social funds (t-1)=-1.348 Social funds (t-2)=-0.252 N=774	Social funds (t-1)=0.298 Social funds (t-2)=-0.165 N=1105
Infant mortality	Social funds (t-1)=-0.062 Social funds (t-2)=0.046 N=87	Social funds (t-1)=-0.276 Social funds (t-2)=-0.052 N=878	Social funds (t-1)=-0.439** Social funds (t-2)=-0.059 N=1274
Self-perceived health	Social funds (t-1)=-0.045 Social funds (t-2)=0.006 N=129	Social funds (t-1)=-0.010 Social funds (t-2)=-0.002 N=319	Social funds (t-1)=-0.026 Social funds (t-2)=-0.006 N=449

(continued)

Table S5.1: Difference GMM replicating models (continued)

Dependent variable	Poor regions	Rich regions	Full sample
Distributive justice indicators			
Squared poverty gap index	Social funds (t-1)=0.156 Social funds (t-2)=0.010 N=110	Social funds (t-1)=0.025 Social funds (t-2)=-0.007 N=273	Social funds (t-1)=0.002 Social funds (t-2)=0.001 N=384
	Social funds (t-1)=2.886 Social funds (t-2)=3.375* N=109	Social funds (t-1)=-2.915 Social funds (t-2)=-0.922 N=279	Social funds (t-1)=1.965 Social funds (t-2)=0.214 N=389
Theil index	Social funds (t-1)=-0.020 Social funds (t-2)=0.370 N=109	Social funds (t-1)=-0.389 Social funds (t-2)=-0.151 N=279	Social funds (t-1)=0.294 Social funds (t-2)=0.042 N=389
	Social funds (t-1)=0.553 Social funds (t-2)=0.458* N=109	Social funds (t-1)=-0.567 Social funds (t-2)=-0.272 N=279	Social funds (t-1)=0.504 Social funds (t-2)=0.057 N=389
Squared coefficient of variation	Social funds (t-1)=0.286 Social funds (t-2)=0.076 N=105	Social funds (t-1)=-0.009 Social funds (t-2)=-0.010 N=279	Social funds (t-1)=0.112 Social funds (t-2)=0.027 N=385
	P90/10		

Notes: Significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Figures are unstandardized coefficients from difference GMM models, including a lagged dependent variable specifying lags of one year and deeper for the transformed equation. N =Number of observations. The number of observations is slightly lower than in the original regression tables due to instrumenting. Several specification tests were performed for each model. Sargan's statistic and the Hansen J test for overidentification underline the appropriateness of the instruments in the youth inactivity models, but indicate overidentification in the unemployment and employment models. Results are nonetheless robust with more parsimonious instrumenting (Roodman, 2009).

Table S5.2: Controlling for national educational spending in labour-market models

Dependent variable	Panel data models with Driscoll-Kraay standard errors			Difference GMM models		
	Poor regions	Rich regions	Full sample	Poor regions	Rich regions	Full sample
Unemployment	Social funds (t-1)=-0.993*** Social funds (t-2)=0.351* N=416	Social funds (t-1)=-0.131 Social funds (t-2)=-0.581*** N=995	Social funds (t-1)=-0.228* Social funds (t-2)=-0.510*** N=1412	Social funds (t-1)=-0.102 Social funds (t-2)=0.288 N=325	Social funds (t-1)=-1.059*** Social funds (t-2)=-0.214*** N=837	Social funds (t-1)=-0.684** Social funds (t-2)=-0.099 N=1163
	Employment	Social funds (t-1)=0.010** Social funds (t-2)=-0.000 N=440	Social funds (t-1)=0.001 Social funds (t-2)=0.009*** N=1018	Social funds (t-1)=0.000 Social funds (t-2)=0.007*** N=1459	Social funds (t-1)=0.018 Social funds (t-2)=-0.002 N=353	Social funds (t-1)=0.030 Social funds (t-2)=0.006** N=862
Youth inactivity	Social funds (t-1)=-0.005 Social funds (t-2)=0.247* N=400	Social funds (t-1)=-0.035 Social funds (t-2)=-0.562*** N=881	Social funds (t-1)=-0.024 Social funds (t-2)=-0.310*** N=1282	Social funds (t-1)=-0.582 Social funds (t-2)=0.044 N=318	Social funds (t-1)=-0.275 Social funds (t-2)=-0.274*** N=725	Social funds (t-1)=-0.225 Social funds (t-2)=-0.265** N=1044

Notes: Significance levels: *p<0.10, **p<0.05, ***p<0.01. Figures are unstandardized coefficients from difference GMM models that include a lagged dependent variable specifying lags of one year and deeper for the transformed equation. N=Number of observations. The number of observations is slightly lower than it was in the original regression tables due to instrumenting. Several specification tests were performed for each model. Sargan's statistic and the Hansen J test for overidentification underline the appropriateness of the instruments in the youth inactivity models, but indicate overidentification in the unemployment and employment models. Results are nonetheless robust with more parsimonious instrumenting (Floodman, 2009).

Table S5.3: Controlling for trend variable in models

Dependent variable	Panel data models with Driscoll-Kraay standard errors			Difference GMM models		
	Poor regions	Rich regions	Full sample	Poor regions	Rich regions	Full sample
Capability indicators						
Unemployment	Social funds (t-1)=-0.481** Social funds (t-2)=-0.208 N=437	Social funds (t-1)=-0.213 Social funds (t-2)=-0.553*** N=1060	Social funds (t-1)=-0.233** Social funds (t-2)=-0.574*** N=1500	Social funds (t-1)=-1.541 Social funds (t-2)=-0.134 N=343	Social funds (t-1)=-1.129** Social funds (t-2)=-0.249*** N=889	Social funds (t-1)=-1.073*** Social funds (t-2)=-0.114* N=1233
	Social funds (t-1)=0.005 Social funds (t-2)=0.004 N=461	Social funds (t-1)=0.002 Social funds (t-2)=0.009*** N=1083	Social funds (t-1)=0.000 Social funds (t-2)=0.008*** N=1547	Social funds (t-1)=0.008 Social funds (t-2)=-0.002 N=371	Social funds (t-1)=0.047** Social funds (t-2)=0.008** N=914	Social funds (t-1)=-0.014 Social funds (t-2)=-0.003** N=1286
Youth inactivity	Social funds (t-1)=0.182 Social funds (t-2)=0.051 N=418	Social funds (t-1)=-0.076 Social funds (t-2)=-0.572*** N=938	Social funds (t-1)=-0.009 Social funds (t-2)=-0.365*** N=1358	Social funds (t-1)=0.544 Social funds (t-2)=0.040 N=330	Social funds (t-1)=-1.384 Social funds (t-2)=-0.252 N=774	Social funds (t-1)=-0.298 Social funds (t-2)=-0.165 N=1105

(continued)

Table S5.3: Controlling for trend variable in models (continued)

	Panel data models with Driscoll-Kraay standard errors			Difference GMM models		
Infant mortality	Social funds (t-1)=-0.124	Social funds (t-1)=-0.050	Social funds (t-1)=-0.062	Social funds (t-1)=-0.276	Social funds (t-1)=-0.439**	Social funds (t-1)=-0.439**
	Social funds (t-2)=-0.008 N=459	Social funds (t-2)=-0.037 N=1462	Social funds (t-2)=0.046 N=387	Social funds (t-2)=-0.052 N=878	Social funds (t-2)=-0.059 N=1274	Social funds (t-2)=-0.059 N=1274
Self-perceived health	Social funds (t-1)=-0.020**	Social funds (t-1)=0.001	Social funds (t-1)=-0.045	Social funds (t-1)=-0.010	Social funds (t-1)=-0.026	Social funds (t-1)=-0.026
	Social funds (t-2)=0.041*** N=178	Social funds (t-2)=0.008** N=605	Social funds (t-2)=0.006 N=129	Social funds (t-2)=-0.002 N=319	Social funds (t-2)=-0.006 N=449	Social funds (t-2)=-0.006 N=449
Distributive justice indicators						
Squared poverty gap index	Social funds (t-1)=0.040***	Social funds (t-1)=0.003*	Social funds (t-1)=0.156	Social funds (t-1)=-0.025	Social funds (t-1)=0.002	Social funds (t-1)=0.002
	Social funds (t-2)=0.009 N=145	Social funds (t-2)=0.002 N=489	Social funds (t-2)=0.010 N=110	Social funds (t-2)=-0.007 N=273	Social funds (t-2)=0.001 N=384	Social funds (t-2)=0.001 N=384
Gini coefficient	Social funds (t-1)=6.682***	Social funds (t-1)=0.490	Social funds (t-1)=2.886	Social funds (t-1)=-2.915	Social funds (t-1)=1.965	Social funds (t-1)=1.965
	Social funds (t-2)=2.858*** N=144	Social funds (t-2)=-0.400 N=490	Social funds (t-2)=3.375* N=109	Social funds (t-2)=-0.922 N=279	Social funds (t-2)=0.214 N=389	Social funds (t-2)=0.214 N=389

(continued)

Table S5.3: Controlling for trend variable in models (continued)

	Panel data models with Driscoll-Kraay standard errors			Difference GMM models		
Theil index	Social funds (t-1)=0.484*** Social funds (t-2)=0.212*** N=144	Social funds (t-1)=0.084 Social funds (t-2)=-0.045 N=345	Social funds (t-1)=0.047 Social funds (t-2)=-0.060* N=490	Social funds (t-1)=-0.020 Social funds (t-2)=0.370 N=109	Social funds (t-1)=-0.389 Social funds (t-2)=-0.151 N=279	Social funds (t-1)=-0.294 Social funds (t-2)=0.042 N=389
Squared coefficient of variation	Social funds (t-1)=0.697*** Social funds (t-2)=0.222** N=144	Social funds (t-1)=0.151 Social funds (t-2)=-0.078 N=345	Social funds (t-1)=0.065 Social funds (t-2)=-0.111** N=490	Social funds (t-1)=0.553 Social funds (t-2)=0.458 N=109	Social funds (t-1)=-0.567 Social funds (t-2)=-0.272 N=279	Social funds (t-1)=0.504 Social funds (t-2)=0.057 N=389
P90/10	Social funds (t-1)=0.132 Social funds (t-2)=0.055 N=142	Social funds (t-1)=0.004 Social funds (t-2)=0.005 N=345	Social funds (t-1)=0.013 Social funds (t-2)=0.023* N=488	Social funds (t-1)=-0.286 Social funds (t-2)=0.076 N=105	Social funds (t-1)=-0.009 Social funds (t-2)=-0.010 N=279	Social funds (t-1)=0.112 Social funds (t-2)=0.027 N=385

Notes: Significance levels: *p<0.10, **p<0.05, ***p<0.01. Figures are unstandardized coefficients from difference GMM models that include a lagged dependent variable specifying lags of one year and deeper for the transformed equation. N=Number of observations. The number of observations is slightly lower than in the original regression tables due to instrumenting. Several specification tests were performed for each model. Sargan's statistic and the Hansen J test for overidentification underline the appropriateness of the instruments in the youth inactivity models, but indicate overidentification in the unemployment and employment models. Results are nonetheless robust with more parsimonious instrumenting (Roodman, 2009).

Table S5.4: Controlling for period dummies

Panel data models with Driscoll-Kraay standard errors			
Dependent variable	Poor regions	Rich regions	
Capability indicators			
Unemployment	Social funds (t-1)=-0.481** Social funds (t-2)=-0.208 N=437	Social funds (t-1)=-0.213 Social funds (t-2)=-0.553*** N=1060	Full sample Social funds (t-1)=-0.233** Social funds (t-2)=-0.574*** N=1500
Employment	Social funds (t-1)=0.005 Social funds (t-2)=0.004 N=461	Social funds (t-1)=0.002 Social funds (t-2)=-0.009*** N=1083	Social funds (t-1)=0.000 Social funds (t-2)= 0.008*** N=1547
Youth inactivity	Social funds (t-1)=0.183 Social funds (t-2)=0.051 N=418	Social funds (t-1)=-0.076 Social funds (t-2)=-0.572*** N=938	Social funds (t-1)=-0.009 Social funds (t-2)=-0.365*** N=1358
Infant mortality	Social funds (t-1)=-0.124 Social funds (t-2)=-0.008 N=459	Social funds (t-1)=0.033 Social funds (t-2)=0.025 N=993	Social funds (t-1)=-0.050 Social funds (t-2)=-0.037 N=1462
Self-perceived health	Social funds (t-1)=-0.020** Social funds (t-2)=0.041*** N=178	Social funds (t-1)=0.004 Social funds (t-2)=0.004 N=426	Social funds (t-1)=0.001 Social funds (t-2)=0.008** N=605

(continued)

Table S5.4: Controlling for period dummies (continued)

Panel data models with Driscoll-Kraay standard errors			
Distributive justice indicators			
Squared poverty gap index	Social funds (t-1)=0.040*** Social funds (t-2)=0.009 N=145	Social funds (t-1)=0.000 Social funds (t-2)=0.002** N=343	Social funds (t-1)=0.003* Social funds (t-2)=-0.002 N=489
Gini coefficient	Social funds (t-1)=6.682*** Social funds (t-2)=2.858*** N=144	Social funds (t-1)=0.649 Social funds (t-2)=-0.317 N=345	Social funds (t-1)=0.490 Social funds (t-2)=-0.400 N=490
Theil index	Social funds (t-1)=0.484*** Social funds (t-2)=0.212*** N=144	Social funds (t-1)=0.084 Social funds (t-2)=-0.045 N=345	Social funds (t-1)=0.047 Social funds (t-2)=-0.060* N=490
Squared coefficient of variation	Social funds (t-1)=0.679*** Social funds (t-2)=0.222** N=144	Social funds (t-1)=0.151* Social funds (t-2)=-0.078 N=345	Social funds (t-1)=0.065 Social funds (t-2)=-0.111** N=490
P90/10	Social funds (t-1)=0.132 Social funds (t-2)=0.055 N=142	Social funds (t-1)=0.004 Social funds (t-2)=0.005 N=345	Social funds (t-1)=0.013 Social funds (t-2)=0.023** N=488

Notes: Significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Figures are unstandardized coefficients from difference GMM models that include a lagged dependent variable specifying lags of one year and deeper for the transformed equation. N =Number of observations. The number of observations is slightly lower than in the original regression tables due to instrumenting. Several specification tests were performed for each model. Sargan's statistic and the Hansen J test for overidentification underline the appropriateness of the instruments in the youth inactivity models, but indicate overidentification in the unemployment and employment models. Results are nonetheless robust with more parsimonious instrumenting (Floodman, 2009).

Table S5.5: Controlling for GDP and GDP squared

Dependent variable	Panel data models with Driscoll-Kraay standard errors			Difference GMM models		
	Poor regions	Rich regions	Full sample	Poor regions	Rich regions	Full sample
Capability indicators						
Unemployment	Social funds (t-1)=-0.464* Social funds (t-2)=-0.177 N=437	Social funds (t-1)=-0.244* Social funds (t-2)=-0.468*** N=1060	Social funds (t-1)=-0.243** Social funds (t-2)=-0.437*** N=1500	Social funds (t-1)=-1.207 Social funds (t-2)=0.222 N=343	Social funds (t-1)=-1.076** Social funds (t-2)=-0.347*** N=889	Social funds (t-1)=-0.939** Social funds (t-2)=-0.156 N=1233
Employment	Social funds (t-1)=0.004 Social funds (t-2)=0.001 N=461	Social funds (t-1)=0.003 Social funds (t-2)=0.007*** N=1083	Social funds (t-1)=0.000 Social funds (t-2)=0.004*** N=1547	Social funds (t-1)=0.003 Social funds (t-2)=-0.002 N=371	Social funds (t-1)=0.0020,004 Social funds (t-2)= N=914	Social funds (t-1)=0.010 Social funds (t-2)=0.003* N=1286
Youth inactivity	Social funds (t-1)=0.211* Social funds (t-2)=0.014 N=418	Social funds (t-1)=-0.086 Social funds (t-2)=-0.511*** N=938	Social funds (t-1)=0.011 Social funds (t-2)=-0.372*** N=1358	Social funds (t-1)=0.845 Social funds (t-2)=0.023 N=330	Social funds (t-1)=-2.469* Social funds (t-2)=-0.115 N=774	Social funds (t-1)=-3.225* Social funds (t-2)=-0.240** N=1105

(continued)

Table S5.5: Controlling for GDP and GDP squared (continued)

	Panel data models with Driscoll-Kraay standard errors			Difference GMM models		
Infant mortality	Social funds (t-1)=-0.120	Social funds (t-1)=-0.041	Social funds (t-1)=-0.036	Social funds (t-1)=0.247	Social funds (t-1)=-0.430**	Social funds (t-1)=-0.348
	Social funds (t-2)=-0.004 N=459	Social funds (t-2)=0.023 N=993	Social funds (t-2)=-0.031 N=1462	Social funds (t-2)=0.116 N=387	Social funds (t-2)=-0.046 N=878	Social funds (t-2)=-0.004 N=1274
Self-perceived health	Social funds (t-1)=-0.028***	Social funds (t-1)=0.004	Social funds (t-1)=0.002	Social funds (t-1)=-0.048	Social funds (t-1)=0.001	Social funds (t-1)=-0.011
	Social funds (t-2)=0.031** N=178	Social funds (t-2)=0.005 N=426	Social funds (t-2)=0.008** N=605	Social funds (t-2)=0.003 N=129	Social funds (t-2)=0.006 N=319	Social funds (t-2)=-0.002 N=449
Distributive justice indicators						
Squared poverty gap index	Social funds (t-1)=0.049***	Social funds (t-1)=0.000	Social funds (t-1)=0.003*	Social funds (t-1)=0.094	Social funds (t-1)=-0.014	Social funds (t-1)=-0.022
	Social funds (t-2)=0.005 N=145	Social funds (t-2)=0.003** N=343	Social funds (t-2)=-0.002 N=489	Social funds (t-2)=0.012 N=110	Social funds (t-2)=-0.004 N=273	Social funds (t-2)=-0.005 N=384
Gini coefficient	Social funds (t-1)=6.906***	Social funds (t-1)=0.849	Social funds (t-1)=0.585	Social funds (t-1)=1.720	Social funds (t-1)=-0.397	Social funds (t-1)=-1.957
	Social funds (t-2)=2.065*** N=144	Social funds (t-2)=-0.213 N=345	Social funds (t-2)=-0.428 N=490	Social funds (t-2)=3.436** N=109	Social funds (t-2)=0.131 N=279	Social funds (t-2)=-0.872 N=389

(continued)

Table S5.5: Controlling for GDP and GDP squared (continued)

	Panel data models with Driscoll-Kraay standard errors			Difference GMM models		
Their index	Social funds (t-1)=0.479*** Social funds (t-2)=0.186** N=144	Social funds (t-1)=0.095 Social funds (t-2)=-0.041 N=345	Social funds (t-1)=0.053 Social funds (t-2)=-0.062* N=490	Social funds (t-1)=0.233 Social funds (t-2)=0.345*** N=109	Social funds (t-1)=-0.051 Social funds (t-2)=-0.023 N=279	Social funds (t-1)=-0.079 Social funds (t-2)=-0.056 N=389
Squared coefficient of variation	Social funds (t-1)=0.655** Social funds (t-2)=0.208* N=144	Social funds (t-1)=0.157 Social funds (t-2)=-0.082 N=345	Social funds (t-1)=0.075 Social funds (t-2)=-0.115** N=490	Social funds (t-1)=0.660 Social funds (t-2)=0.430 N=109	Social funds (t-1)=0.040 Social funds (t-2)=-0.016 N=279	Social funds (t-1)=-0.060 Social funds (t-2)=-0.089 N=389
P90/10	Social funds (t-1)=0.140 Social funds (t-2)=0.020 N=142	Social funds (t-1)=0.017 Social funds (t-2)=0.010 N=345	Social funds (t-1)=0.019** Social funds (t-2)=0.021 N=488	Social funds (t-1)=-0.228 Social funds (t-2)=0.092 N=105	Social funds (t-1)=-0.043 Social funds (t-2)=0.021 N=279	Social funds (t-1)=-0.084 Social funds (t-2)=-0.027 N=385

Notes: Significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Figures are unstandardized coefficients from difference GMM models that include a lagged dependent variable specifying lags of one year and deeper for the transformed equation. N =Number of observations. The number of observations is slightly lower than in the original regression tables due to instrumenting. Several specification tests were performed for each model. Sargan's statistic and the Hansen J test for overidentification underline the appropriateness of the instruments in the youth inactivity models, but indicate overidentification in the unemployment and employment models. Results are nonetheless robust with more parsimonious instrumenting (Roodman, 2009).

Appendix S6: Survey Question Wording

Welcome to our survey. This survey is part of an international comparative research project about the EU Structural Funds. We are grateful for your participation and we thank you very much for sharing your expertise with us. Completing the questionnaire will not exceed 15 minutes.

As you know, we would like you to reflect on Structural Funds programming within your country. By this we mean the process whereby the Commission decides on the map of eligible regions and the indicative allocations to the member states, and where it negotiates and approves the national strategic reference frameworks/community support frameworks and the operational programmes proposed by the member states. By regions we mean NUTS 1–3 regions.

The information provided will be treated confidentially and no answers will be attributed to any individual in any output produced by this project. The information will not be disclosed to third parties.

General information

Q1 In which country is the administrative centre of the institution that you are currently affiliated with located?

Please choose **only one** of the following:

- Belgium
- Denmark

- _____ 1 Germany
_____ 2 Greece
_____ 3 Ireland
_____ 4 Italy
_____ 5 France
_____ 6 Luxembourg
_____ 7 Netherlands
_____ 8 Spain
_____ 9 Portugal
_____ 10 UK
_____ 11 Austria
_____ 12 Finland
_____ 13 Sweden
_____ 14 Cyprus
_____ 15 Czech Republic
_____ 16 Estonia
_____ 17 Hungary
_____ 18 Latvia
_____ 19 Lithuania
_____ 20 Malta
_____ 21 Poland
_____ 22 Slovak Republic
_____ 23 Slovenia
_____ 24

_____ 25 **Q2 Are you currently working in:**

_____ 26 Please choose **only one** of the following:

- _____ 27
_____ 28 National administration (NUTS 0)
_____ 29 Regional public administration (NUTS 1 or 2)
_____ 30 Local public administration (NUTS 3)
_____ 31 None of the above
_____ 32

_____ 33 **Influence in the programming process**

_____ 34
_____ 35 **Q3 As you know, the Structural Funds programming**
_____ 36 **process is generally completed after 8–12 months**

1 of negotiations between the member states and the
 2 Commission. In your country: How influential were
 3 the following public institutions in the programming
 4 process for 2007–13?
 5

6 Please choose the appropriate response for each item:

	Not at all influential	Somewhat uninfluential	Somewhat influential	Very influential	Don't know
7 Management authorities at the national government level					
8 National government					
9 Parliament at the national government level					
10 Management authorities at the regional government level					
11 Committee at the national government level with delegates from national government and regional governments					
12 Local public administration					
13 European Commission					
14 'Comitology' committees					
15 Committee of the Regions					
16 Regional offices in Brussels					

Q4 In your country: How influential, in your opinion, were the following partners in the programming process for 2007–13?

Please choose the appropriate response for each item:

	Not at all influential	Somewhat uninfluential	Somewhat influential	Very influential	Don't know
Regional authorities					
Local authorities					
Authorities responsible for the promotion of equality between men and women					
Authorities responsible for the environment					
Trade unions					
Employers associations					
Business firms					
Farmers					

Q5 With respect to the regional allocation of structural funds in your country: In general: How important is the economic performance of regions in the previous funding period for the amount of structural funding regions receive?

Please choose **only one** of the following:

- Not at all important
- Somewhat unimportant

_____ 1 Somewhat important

_____ 2 Very important

_____ 3 Don't know

_____ 4

_____ 5 **Q6 In general: How important are the lobbying**
_____ 6 **activities of companies in regions for the amount of**
_____ 7 **structural funding regions receive?**

_____ 8

_____ 9 Please choose **only one** of the following:

_____ 10

_____ 11 Not at all important

_____ 12 Somewhat unimportant

_____ 13 Somewhat important

_____ 14 Very important

_____ 15 Don't know

_____ 16

_____ 17 **Q7 In general: How important are the selection criteria**
_____ 18 **provided by the monitoring committee for the amount**
_____ 19 **of structural funding regions receive?**

_____ 20

_____ 21 Please choose **only one** of the following:

_____ 22

_____ 23 Not at all important

_____ 24 Somewhat unimportant

_____ 25 Somewhat important

_____ 26 Very important

_____ 27 Don't know

_____ 28

_____ 29

_____ 30 **Managing authorities at the regional level**

_____ 31

_____ 32 **Q8 With respect to the administrative units at the**
_____ 33 **regional government level (NUTS 1 or 2) in your country**
_____ 34 **responsible for structural funds management: How**
_____ 35 **important, in your opinion, are the following tasks to**
_____ 36 **these units in general?**

1 [Only answer this question if you answered 'Regional public
 2 administration (NUTS 1 or 2)' or 'Local public administration
 3 (NUTS 3)' to question 2]
 4

5 Please choose the appropriate response for each item:

	Not at all important	Somewhat unimportant	Somewhat important	Very important	Don't know
6 Public relations					
7 Gathering information from					
8 interest groups					
9 Co-ordination with a higher					
10 authority in the same institution					
11 Co-ordination with other					
12 institutions at the central					
13 (national) level					
14 Co-ordination with other					
15 institutions at the regional					
16 level					
17 Co-ordination with other					
18 institutions at the local level					
19 Co-ordination with other					
20 institutions at the regional					
21 level					
22 Co-ordination with other					
23 institutions at the local level					
24 Co-ordination with member					
25 state delegates in Brussels					
26 Co-ordination with member					
27 state delegates in Brussels					
28 Co-ordination with					
29 Commission officials					
30 Co-ordination with					
31 Commission officials					
32 Co-ordination with actors					
33 within 'comitology'					
34 committees					
35					
36					

	Not at all important	Somewhat unimportant	Somewhat important	Very important	Don't know
Co-ordination with actors within 'COREPER' or Council working groups					

Managing authorities at the national level

Q9 With respect to the administrative units at the national government level in your country responsible for structural funds management: How important, in your opinion, are the following tasks to these units in general?

Please choose the appropriate response for each item:

	Not at all important	Somewhat unimportant	Somewhat important	Very important	Don't know
Public relations					
Gathering information from interest groups					
Co-ordination with a higher authority in the same institution					
Co-ordination with other institutions at the central (national) level					
Co-ordination with other institutions at the regional level					

	Not at all important	Somewhat unimportant	Somewhat important	Very important	Don't know
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					

Attitudes

Q10 We are interested in your opinion with respect to the following statements on structural funds related issues. Please express your opinion on these statements by indicating the appropriate answer.

Please choose the appropriate response for each item:

	Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree	Don't know
31					
32					
33					
34					
35					
36					

APPENDIX S6

	Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree	Don't know
1					
2					
3					
4					
5					
6					
7					
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11					
12					
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34					
35					
36					

	Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree	Don't know
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

General information

Q11 In order to better compile the results of this survey, it would be helpful for us to have some basic information about your professional affiliation in the context of the structural funds. Please indicate the institutions you have been affiliated with during 2000–06.

Please choose **all** that apply:

- Central (national) public administration (NUTS 0)
- Regional public administration (NUTS 1 or 2)
- Local public administration (NUTS 3)
- None of the above

1 **Q12 Overall, how long have you been working in**
2 **central administration?**

3
4 [Only answer this question if you answered ‘Central (national)
5 public administration (NUTS 0)’ to question 2]
6

7 < 1 year

8 2–5 years

9 6–10 years

10 11–15 years

11 16–20 years

12 > 20 years
13

14 **Q13 Overall, how long have you been working in**
15 **regional public administration?**

16
17 [Only answer this question if you answered ‘Regional public
18 administration (NUTS 1 or 2)’ to question 2]
19

20 < 1 year

21 2–5 years

22 6–10 years

23 11–15 years

24 16–20 years

25 > 20 years
26

27 **Q14 Overall, how long have you been working in local**
28 **public administration?**

29
30 [Only answer this question if you answered ‘Local public
31 administration (NUTS 3)’ to question 2]
32

33 < 1 year

34 2–5 years

35 6–10 years

36 11–15 years

_____ 1 16–20 years

_____ 2 > 20 years

_____ 3

_____ 4 **Q15 We are at the end of our survey. Is there anything**
_____ 5 **you would like to add with respect to structural**
_____ 6 **funds programming? We are very interested in**
_____ 7 **your comments.**

_____ 8

_____ 9 Please write your answer here: _____

_____ 10 _____

_____ 11 _____

_____ 12 _____

_____ 13

_____ 14 Thank you for completing this survey.

_____ 15

_____ 16

_____ 17

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Appendix S7: Auxiliary Regressions

In Chapter 3, I argue that the variation in EU funding distorted by vote-seeking politics should be minor, and is unlikely to undermine well-being effects of EU spending. To examine this, I have developed a measure of politically distorted funding on the basis of a series of regression models. I proceed in two steps. First, I create a variable that is the predicted value \hat{Y}_{it} of a cross-regional regression of EU funding using the following independent variables that previous literature suggests to shape regional funding receipts (Chalmers, 2013; Charron, 2016; Dellmuth and Stoffel, 2012; Kemmerling and Bodenstein, 2006): GDP per capita, unemployment rate, national spending on social or economic affairs, and a set of dummy variables for each year. This model was specified as follows.

Augmented Dickey-Fuller tests suggest that the data are stationary, underlining the need to modeling spending in levels ($p = 0.000$ for social and economic investments, respectively). Tests are performed seriatum using 187 panels and one lag. Given these results, and the use of inflation-adjust funding data that typically reduce the likelihood of unit roots, the next step is to specify regression models by level. Hausman tests imply that the fixed effects model is preferred over the random effects model. This choice is also theoretically motivated, as random effects models assume the intercepts to be randomly selected from a larger population, which is not the case here ($\chi^2 = 31.466$, $df = 3$, $p = 0.000$ for economic funds, and $\chi^2 = 91.94$, $df = 3$, $p = 0.000$ for social funds). Time effects are also tested, using one model that displays annual effects

1 and one that does not. Lagrange multiplier tests support the
 2 inclusion of year dummies in running all models ($p = 0.000$ for
 3 economic investments, $p = 0.000$ for social investments). Doing
 4 so affords the additional advantage provided by a conservative
 5 test that holds constant potentially unobserved time-specific
 6 variables, such as crisis years, that could impact the outcome.

7 The analysis here thus employs fixed effects models with a
 8 dummy variable included for each year (sometimes referred
 9 to as ‘two-way fixed effects models’). These models index the
 10 underlying data by t as well as i , permitting the identification
 11 of observations of any given NUTS region i at a certain point
 12 in time:

$$13 \quad y_{it} = \beta X_{it} + \alpha_i + \delta_t + u_{it} \quad (1)$$

16 where y is the amount of EU funding received, \mathbf{X} is a vector
 17 of independent variables, α_i is a fixed effect component meant
 18 to capture unobserved heterogeneity among EU regions, and
 19 δ_t is a fixed effect year introduced to control for unobserved
 20 factors common to all regions over time. In other words, year
 21 dummies are included to capture time-consistent variations
 22 among regions, which cannot be integrated into the model.
 23 Fixed effects models eliminate time-invariant confounding,
 24 estimating the effect of an independent variable only by the
 25 within-region, not cross-regional, variation in EU funding.
 26 By implication, the possible impact of independent variables
 27 on average changes in the dependent variable that may occur
 28 within regions should also be considered when interpreting
 29 these results.

30 In addition, the models were carefully examined for
 31 potential violations of regression assumptions. Crucially,
 32 multicollinearity should not bias the results, as the variance
 33 inflation factor remains under two (Fox and Monette, 1992).
 34 A Breusch-Pagan test shows that there may be issues with
 35 heteroskedastic residuals ($p = 0.000$ for economic investments,
 36

1 $p = 0.000$ for social investments). These potential problems are
 2 addressed by reporting Driscoll-Kraay robust standard errors.

3 Equation (2) shows the predicted value of social investments
 4 for a given region-year in the baseline model:

$$\begin{aligned}
 \hat{y}_1 = \hat{y}_{it} = & \beta_{1it} \ln(\text{GDP per capita})_{it} + \beta_{2it} \ln \\
 & (\text{Unemployment})_{it} \\
 & + \beta_{3it} \ln(\text{National social spending})_{it} + \alpha_i + \delta_t
 \end{aligned} \quad (2)$$

10 Equation (3) shows the predicted value of economic investments
 11 for a given region-year in the baseline model:

$$\begin{aligned}
 \hat{y}_2 = \hat{y}_{it} = & \beta_{1it} \ln(\text{GDP per capita})_{it} \\
 & + \beta_{2it} \ln(\text{National economic spending})_{it} + \alpha_i + \delta_t
 \end{aligned} \quad (3)$$

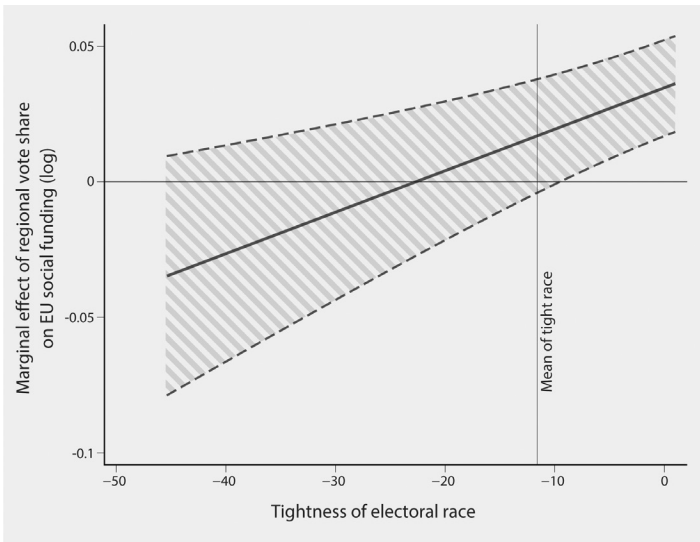
16 Second, I created the predicted value \hat{y}_{2it} of a model by
 17 adding political variables to the baseline model to account for
 18 the effect of political exigencies. A *regional vote share* variable
 19 captures the vote share of the national government or coalition
 20 in the coincident regional assembly. The concept of *tight races*
 21 is operationalized using a measure of the degree to which
 22 elections are or are not closely contested and decided by a
 23 narrower margin. To code this measure, the vote shares of the
 24 two largest parties (in terms of vote shares) in a general election
 25 are subtracted from each other (cf Bodenstein and Kemmerling,
 26 2011). Both variables are calculated on the basis of election
 27 data derived from a database provided by the Norwegian Social
 28 Science Data Services (NSD) (see Appendix S4). With the
 29 exception of the UK, for which election results are aggregated
 30 from the constituency level to the regional NUTS 1 and 2
 31 levels, this database contains results from national general
 32 elections at NUTS 1 and 2 levels for each of the countries
 33 under consideration. Results from general elections preceding
 34 the funding year were selected for analysis. For example, to
 35 explain variation in funding in Germany in 1995, 1996, 1997,
 36 and 1998, election results from the 1994 general elections

were used. Based on these measures, I estimated the predicted social investments based on the model adding these factors to the estimation:

$$\hat{y}_3 = \hat{y}_{it} = \beta_{1it} \ln(\text{GDP per capita})_{it} + \beta_{2it} \ln(\text{Unemployment})_{it} + \beta_{3it} \ln(\text{National social spending})_{it} + \beta_{4it} \text{Regional vote share}_{it} + \beta_{5it} \text{Tight races}_{it} + \beta_{6it} \text{Regional vote share}_{it} * \text{Tight races}_{it} + \alpha_i + \delta_t \quad (4)$$

In line with previous literature, I found the interaction between regional vote share and tight races in equation (4) to have a statistically significant association with social investments (Dellmuth et al, 2017), providing a good argument for this

Figure S7.1: Marginal effect of regional vote share on EU social investments at levels of tightness of the electoral race



Notes: Based on equation (4)

1 model specification. Figure S7.1, plotting the interaction term,
 2 shows that the effect of core voters on EU social investments
 3 is only statistically significant in regions where electoral races
 4 are relatively tight.

5 I then subtract $\hat{\gamma}_3 - \hat{\gamma}_1$ to arrive at a difference variable d_{it}
 6 for each region:

$$7 \quad d_{it} = \hat{\gamma}_3 - \hat{\gamma}_1 \quad (5)$$

10 This produces a variable that measures the additional amount of
 11 social investments that may be predicted either when political
 12 factors are added to the models, or the amount of funding
 13 estimated is diverted for political purposes. For economic
 14 investments, I calculated:

$$16 \quad d_{it} = \hat{\gamma}_3 - \hat{\gamma}_2 \quad (6)$$

18 For economic funds, this included the model measuring
 19 regional vote share and the interaction between *regional vote*
 20 *share* and *tight races*:

$$22 \quad \hat{\gamma}_1 = \hat{\gamma}_{it} = \beta_{1it} \ln(\text{GDP per capita})_{it} + \\
 23 \quad \beta_{2it} \ln(\text{National economic spending})_{it} \quad (7) \\
 24 \quad + \beta_{3it} \ln(\text{Regional vote share})_{it} + \\
 25 \quad \alpha_i + \delta_t$$

$$27 \quad \hat{\gamma}_1 = \hat{\gamma}_{it} = \beta_{1it} \ln(\text{GDP per capita})_{it} + \\
 28 \quad \beta_{2it} \ln(\text{National economic spending})_{it} \quad (8) \\
 29 \quad + \beta_{3it} \ln(\text{Regional vote share})_{it} + \\
 30 \quad \beta_{5it} \text{Tight races}_{it} + \beta_{6it} \text{Regional} \\
 31 \quad \text{vote share} \star \text{Tight races}_{it} + \alpha_i + \delta_t$$

33 Using these difference measures, I look at correlations
 34 between the different variants of this measure and regional
 35 context indicators, respectively. This allows me to ascertain
 36 whether funding allocated on the basis of vote-seeking

1 politics is correlated with certain regional context factors. The
 2 context factors considered are union density as an indicator
 3 of the degree to which organized labour could push for
 4 well-being-enhancing investment, high-skilled worker shares,
 5 population density as an indicator of technology diffusion,
 6 and GDP growth. However, the results suggest that politically
 7 biased EU funding does not flow systematically to specific
 8 types of regions, which may be more (or less) likely to use
 9 EU spending efficiently (Table S7.1). Thus, electoral politics
 10 may influence EU fund allocations but is unlikely to have
 11 consequences for the well-being effects of EU funds.

13 **Table S7.1: Correlations between predicted values of**
 14 **different models**

	Predicted value of social investments in models including an interaction between <i>Regional vote share</i> and <i>Tight races</i> as IVs	<i>p</i>-value	<i>N</i>
Union density	$r=0.071$	0.005	1,585
Human capital	$r=0.110$	0.000	1,504
Population density	$r=0.010$	0.678	1,723
GDP growth	$r=0.007$	0.751	1,814
	Predicted value of social investments in models including an interaction between <i>Regional vote share</i> and <i>Unemployment</i> as IVs	<i>p</i>-value	<i>N</i>
Union density	$r=0.094$	0.000	1,645
Human capital	$r=0.070$	0.006	1,564
Population density	$r=0.015$	0.532	1,783
GDP growth	$r=0.005$	0.830	1,874

(continued)

1 **Table S7.1: Correlations between predicted values of**
 2 **different models (continued)**

	Predicted value of social investments in models including <i>Regional vote share</i> as an IV	<i>p</i> -value	<i>N</i>
Union density	$r=0.072$	0.003	1,714
Human capital	$r=0.040$	0.108	1,598
Population density	$r=-0.011$	0.633	1,838
GDP growth	$r=0.097$	0.000	1,945
	Predicted value of social investments in models including an interaction between <i>Regional vote share</i> and <i>Tight races</i> as IVs	<i>p</i> -value	<i>N</i>
Union density	$r=0.111$	0.000	1,650
Human capital	$r=0.074$	0.004	1,538
Population density	$r=-0.010$	0.665	1,774
GDP growth	$r=0.114$	0.000	1,881

23 Notes: IV=Independent variable. Pearson's correlation coefficients *r*. See
 24 Appendix S6 for a detailed elaboration of model specification.

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