

Appendix A: Boxplot of regional per capita GDP renewal

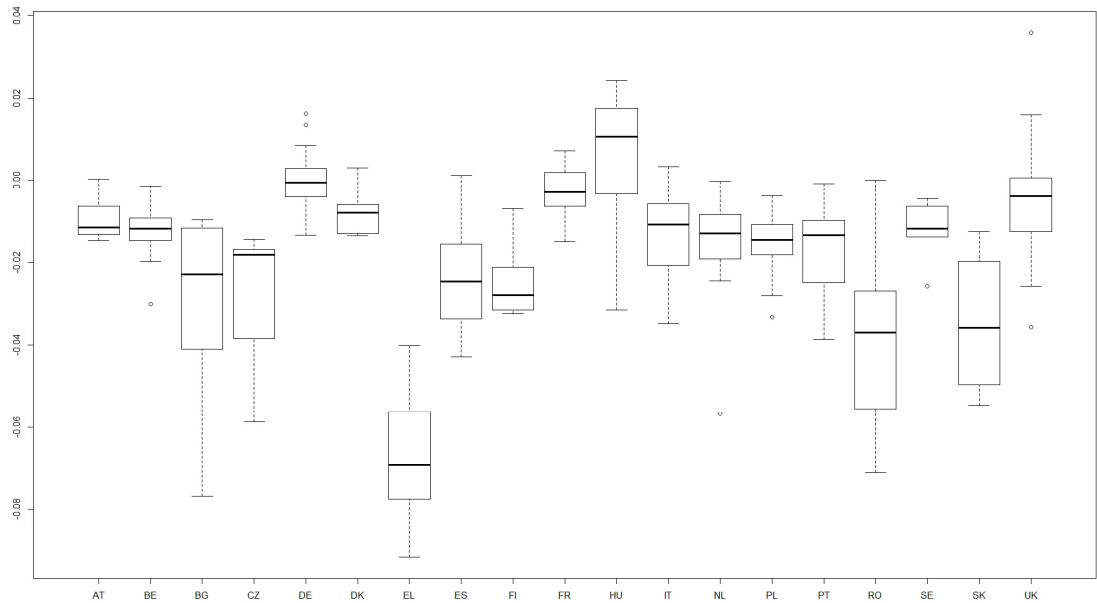


Figure A1. Boxplot of per capita GDP renewal capacity by country (EU Countries with more than 3 regions included).

Appendix B

Table B1. Variance-covariance matrix.

Variable	Log (debt)	Yield	Trade	Social Protection	Political instability, violence	Patents	Specialization	Diversification	Diff. fem. male unemp. rate	Secondary education
Log (debt)	1.0000	0.1444	-0.2295	0.4485	0.1589	0.1440	-0.1542	0.0992	0.4412	-0.3113
Yield	0.1444	1.0000	-0.0168	0.0471	0.1547	0.2778	-0.1912	0.0888	0.2816	-0.1507
Trade	-0.2295	-0.0168	1.0000	-0.1982	0.0556	0.0209	0.0987	0.5071	-0.2031	0.1982
Social protection	0.4485	0.0471	-0.1982	1.0000	0.5749	0.3227	-0.2921	0.4340	-0.2081	0.0066
Political instability, violence	0.1589	0.1547	0.0556	0.5749	1.0000	0.0995	-0.0666	0.4271	-0.3067	0.1084
Patents	0.1440	0.2778	0.0209	0.3227	0.0995	1.0000	-0.8778	0.1853	-0.1248	-0.0386
Specialization	-0.1542	-0.1912	0.0987	-0.2921	-0.0666	-0.8778	1.0000	-0.1140	0.0960	0.2061
Diversification	0.0992	0.0888	0.5071	0.4340	0.4271	0.1853	-0.1140	1.0000	-0.3066	0.2265
Diff. female male unemp. rate	0.4412	0.2816	-0.2031	-0.2081	-0.3067	-0.1248	0.0960	-0.3066	1.0000	-0.4470
Secondary education	-0.3113	-0.1507	0.1982	0.0066	0.1084	-0.0386	0.2061	0.2265	-0.4470	1.0000

Appendix C: Estimation results by geographical scale

Table C1. estimation results for national variables.

[illegible]

Note: ***: p-value < 0.01; **: p-value < 0.05; *: p-value < 0.1. Country clustered std. errors for OLS, spatial lag and spatial errors. Moran's I on residuals is based on 1000 permutations. Rho and Lambda significance based on Likelihood Ratio test.

Table C2. estimation results for regional variables.

	OLS			Random Effects			Spatial filtering Random Effects			Spatial lag			Spatial error		
	Estim.	Std.Error		Estim.	Std.Err.		Estim.	Std.Err.		Estim.	Std.Error		Estim.	Std.Error	
Intercept	-0.10078	0.06777		-0.05561	0.02731	**	-0.09544	0.02655	***	-0.06879	0.03540	*	-0.10221	0.05092	**
Patents	0.00002	0.00001	***	0.00001	0.00000	**	0.00001	0.00000	**	0.00001	0.00000	**	0.00001	0.00001	*
Specialization	0.13380	0.11388		0.05243	0.04541		0.13081	0.04271	***	0.09778	0.05849	*	0.14432	0.08637	*
Diversification	0.00910	0.00586		0.00390	0.00223	*	0.00820	0.00216	***	0.00666	0.00338	**	0.00868	0.00452	*
Diff. female male unemp. rate	-0.00247	0.00105	**	-0.00067	0.00045		-0.00191	0.00044	***	-0.00129	0.00043	***	-0.00152	0.00060	**
Secondary education	-0.02550	0.01336	*	-0.00842	0.01596		-0.02061	0.01245	*	-0.01831	0.00950	*	-0.02317	0.01497	
Observations	250			250			250			250			250		
Rho										0.61778	0.05572	***			
Lambda													0.67243	0.05509	***
AIC	-1349.807			-1438.800			1245.187			-1433.500			-1428.100		
National random eff. (var.)				0.00020											
Sp. filtering random effects (var.)							0.00000								
Residual (var.)				0.00010			0.00015								
Moran's I	0.3818			0.0070			-0.0835			-0.01412			-0.02671		
	(p-value < 0.01)			(p-value = 0.3467)			(p-value = 0.988)			(p-value 0.6074)			(p-value 0.7502)		
Eigenvectors included							19/250								
LM err.	101.88150	***													
LM lag.	111.73180	***													
Robust LM err.	2.62190														
Robust LM lag.	12.47220	***													

Note: ***: p-value < 0.01; **: p-value < 0.05; *: p-value < 0.1. Country clustered std. errors for OLS, spatial lag and spatial errors. Moran's I on residuals is based on 1000 permutations. Rho and Lambda significance based on Likelihood Ratio test.