The geography of EU discontent and the regional development trap

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1.

The European Union at stake

The idea of a united Europe

- 9 May 1950 – A plan for new political cooperation in Europe
- The European Coal and Steel Community; the European Economic Community; the European Union

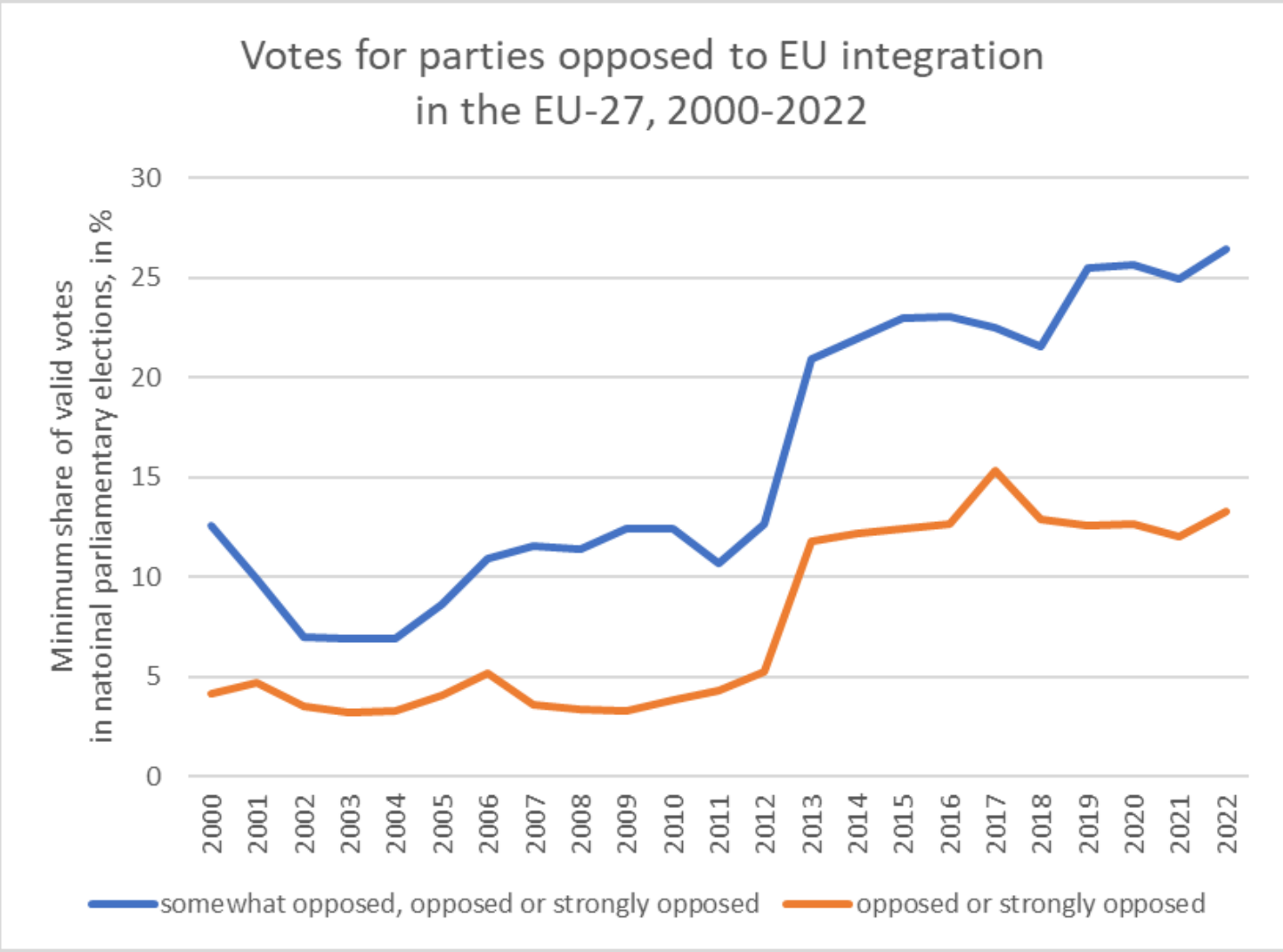
But what have the Romans ever done for us?

The two visions of Europe (and of development)

2.

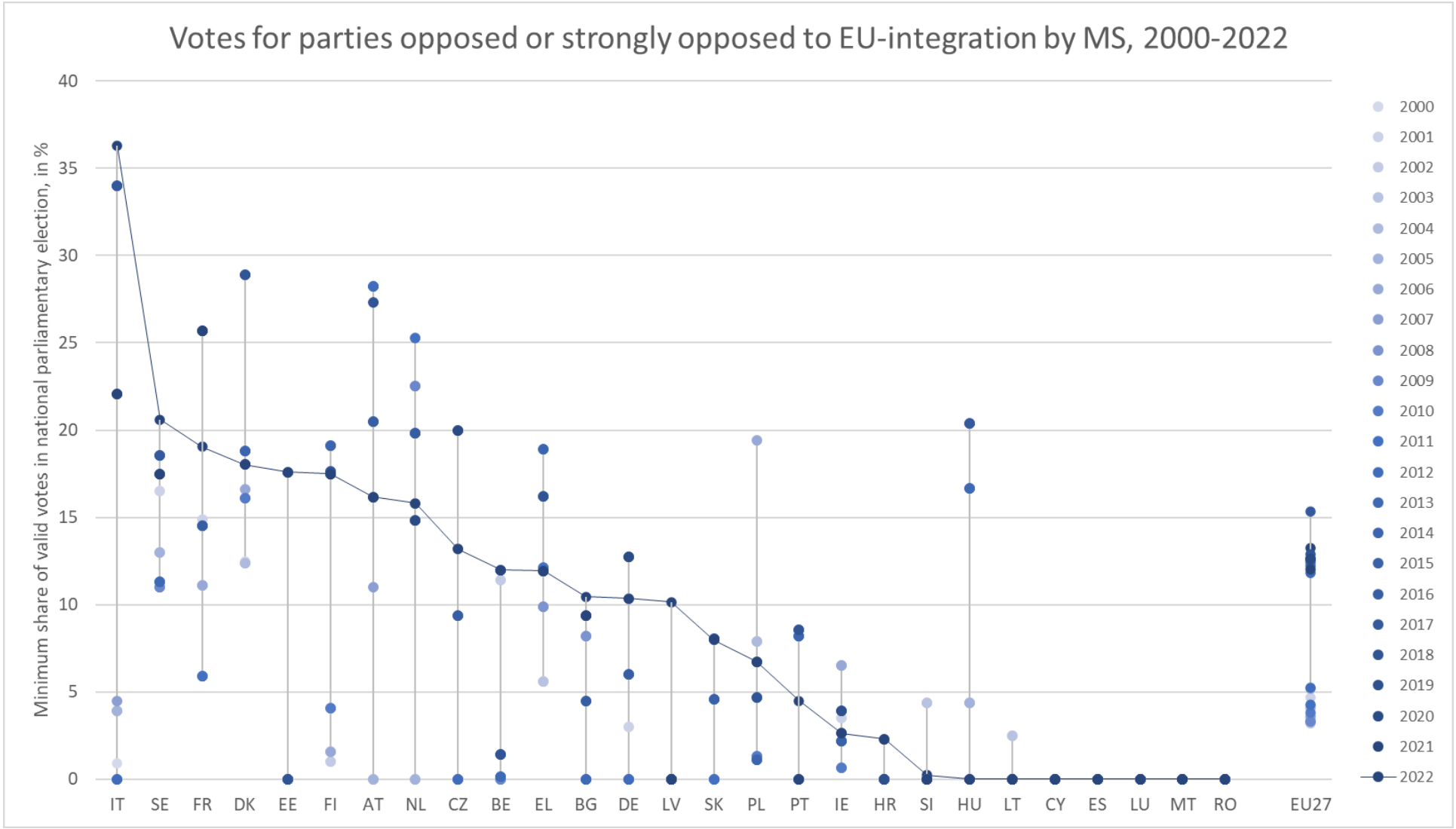
Discontent and Euroscepticism

Euroscepticism on the rise

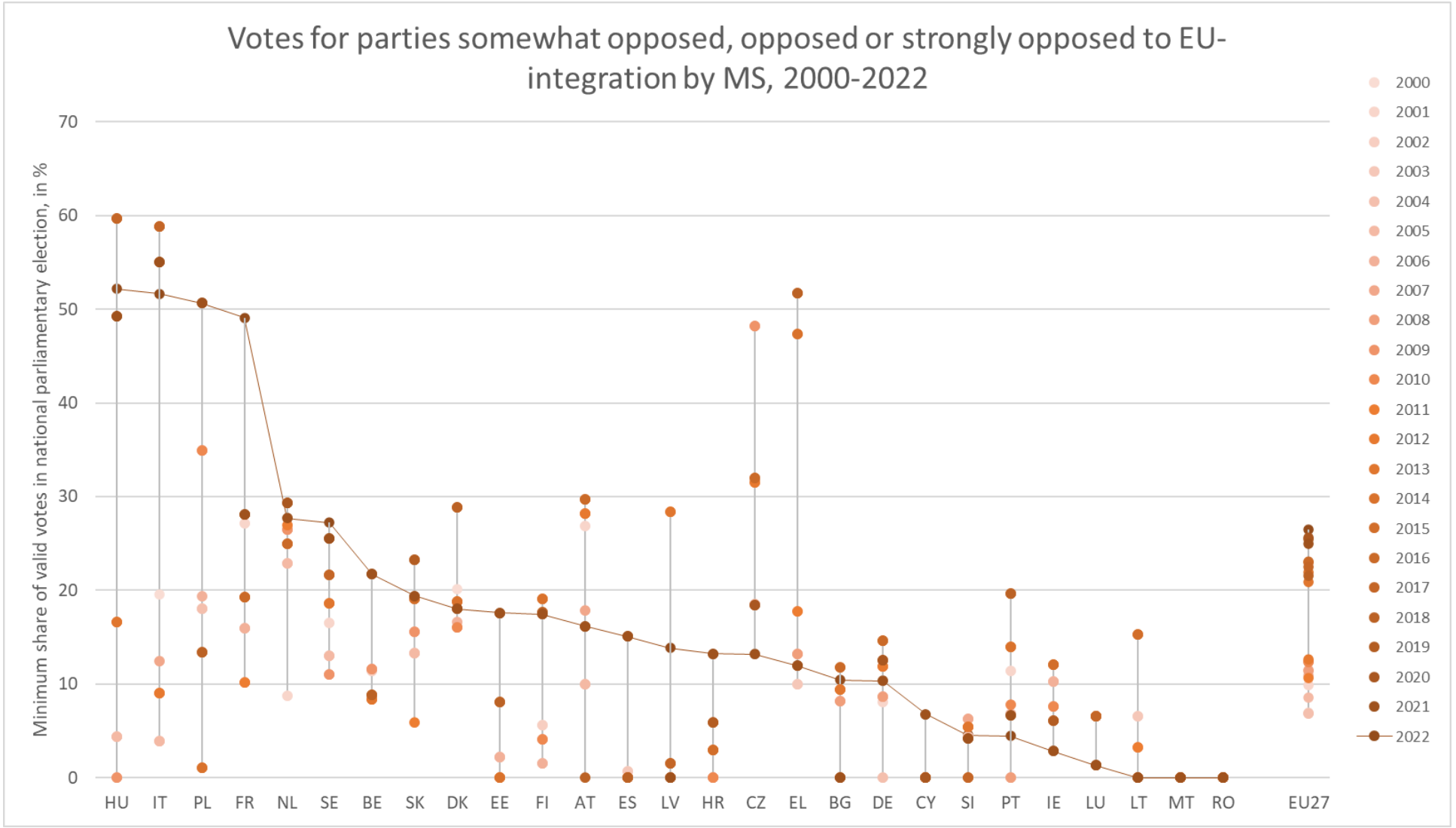


- **A big increase following the economic and financial crisis of 2008**
- **Brexit may have reduced appeal of hard Euroscepticism**
- **But softer Euroscepticism continues to grow**

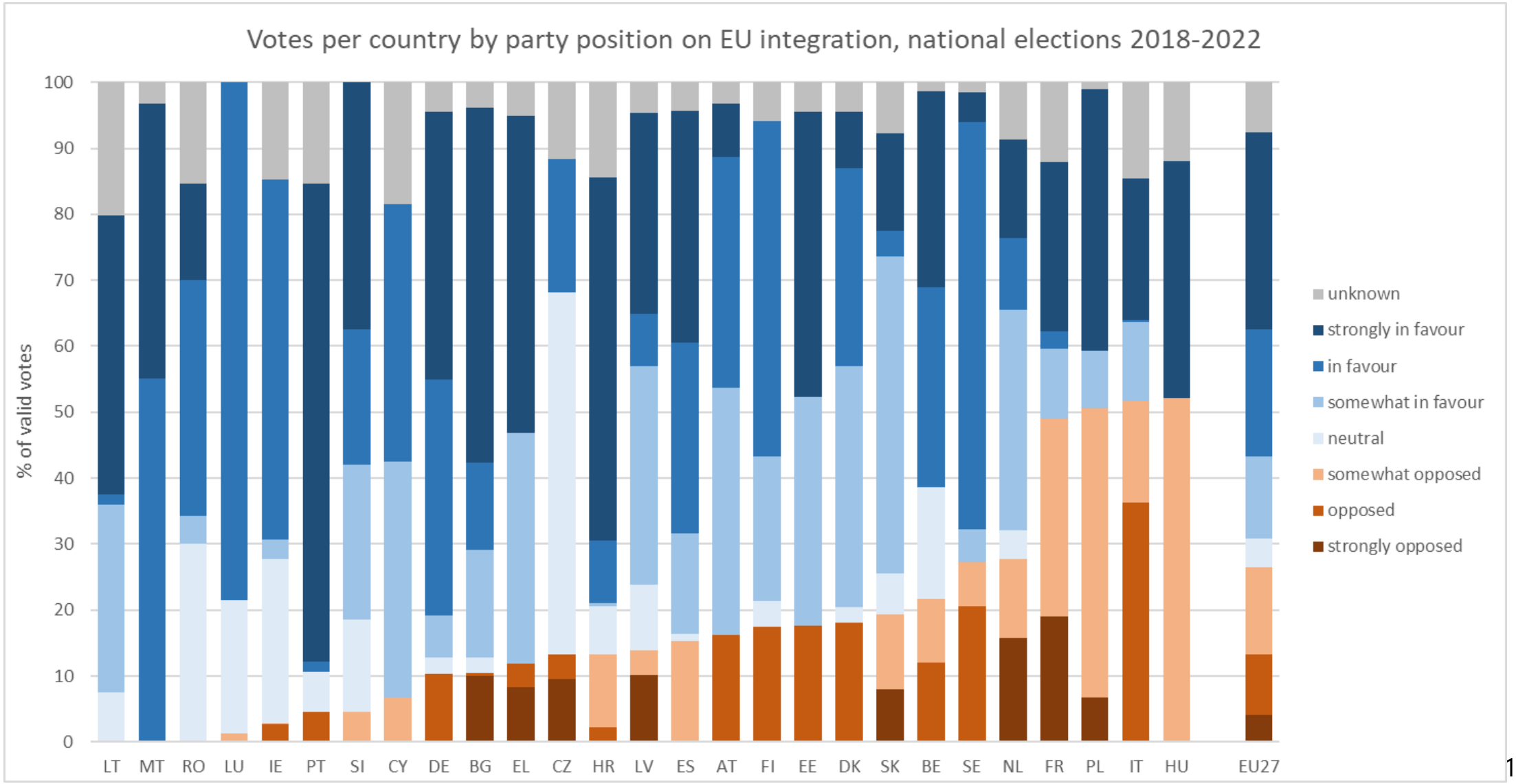
Hard Euroscepticism



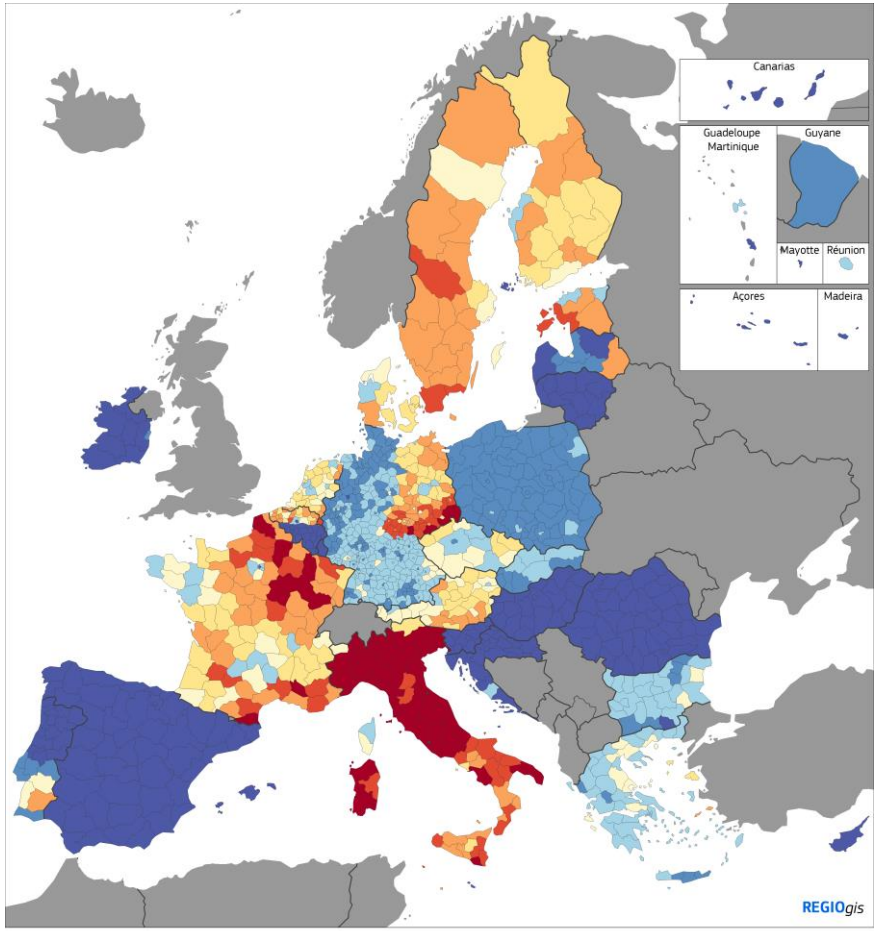
Soft Euroscepticism



Votes by party position on EU integration



Hard and soft Euroscepticism

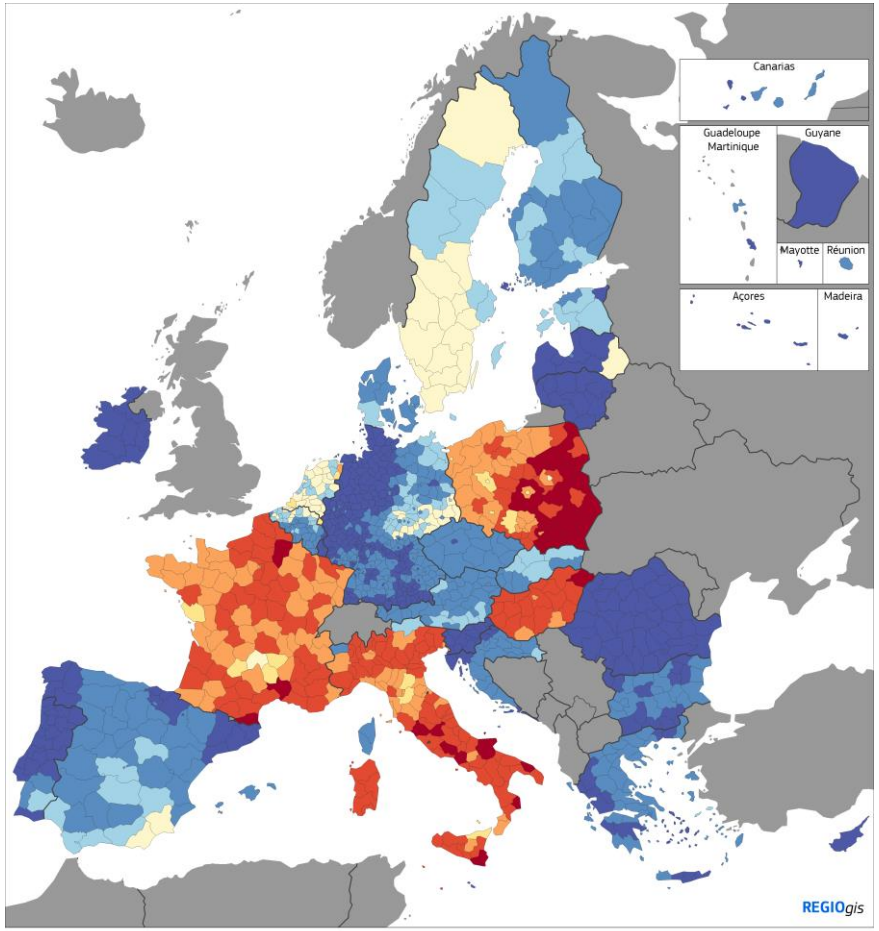


Minimum share of votes for parties opposed or strongly opposed to European integration, 2018-2022

% of valid votes

0.0 - 4.0	16.1 - 20.0
4.1 - 8.0	20.1 - 25.0
8.1 - 13.27	25.1 - 30.0
13.28 - 16.0	> 30.0

BG, FR, IT, LV, HU, MT, PT, SI, SE: 2022
CZ, DE, CY, NL: 2021
IE, HR, LT, RO, SK: 2020
BE, DK, EE, EL, ES, AT, PL, FI: 2019
LU: 2018
Source: DG REGIO based on EU-NED database, national administrative sources and Chapel Hill Expert Survey 2019



Minimum share of votes for parties somewhat opposed, opposed or strongly opposed to European integration, 2018-2022

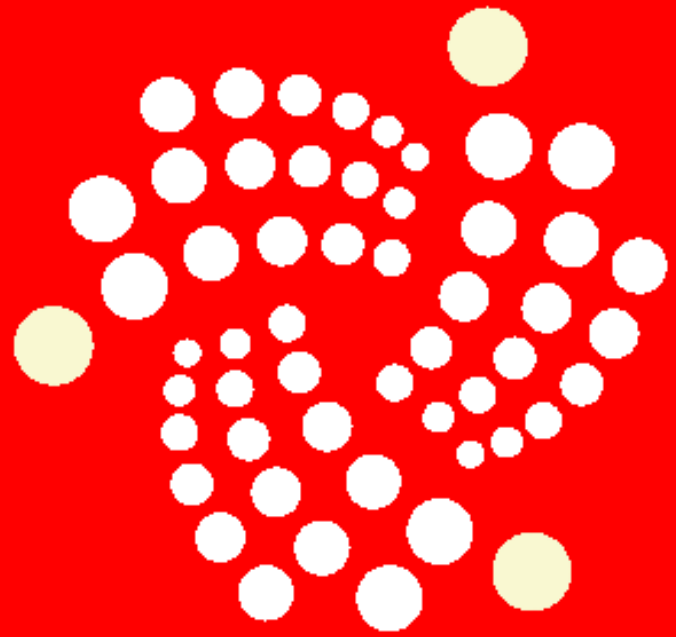
% of valid votes

0.0 - 10.0	35.1 - 40.0
10.1 - 20.0	40.1 - 50.0
20.1 - 26.48	50.1 - 60.0
26.49 - 35.0	> 60.0

BG, FR, IT, LV, HU, MT, PT, SI, SE: 2022
CZ, DE, CY, NL: 2021
IE, HR, LT, RO, SK: 2020
BE, DK, EE, EL, ES, AT, PL, FI: 2019
LU: 2018
Source: DG REGIO based on EU-NED database, national administrative sources and Chapel Hill Expert Survey 2019

3.

The explanations

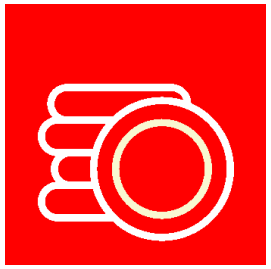


Classic and new explanations

Classic

Individual factors: Education, ageing, migration

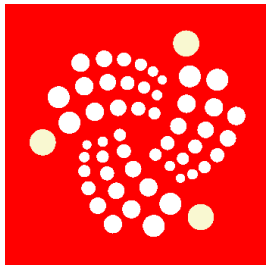
Geography: Location, rurality, density



Economy: Employment, industrial decline, lack of opportunities

New: Development trap

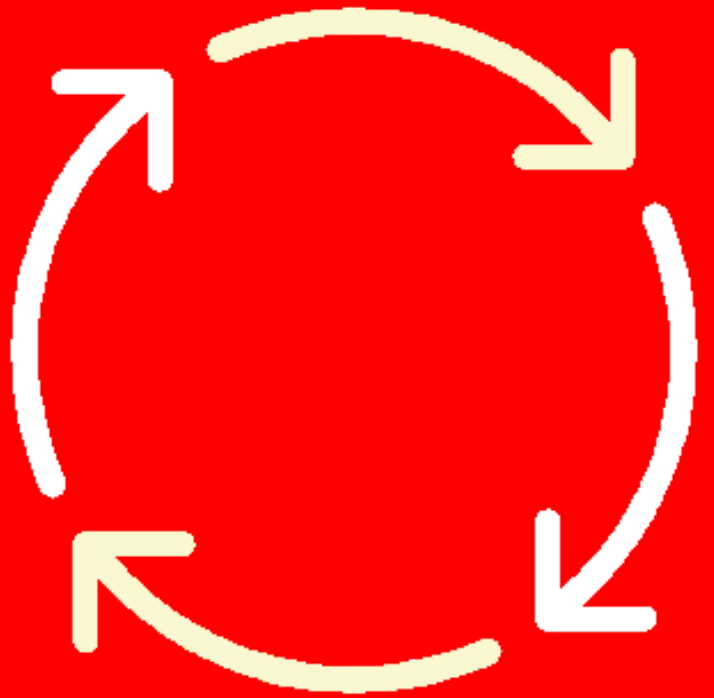
Risk of a development trap



Intensity of the trap

Length of the trap

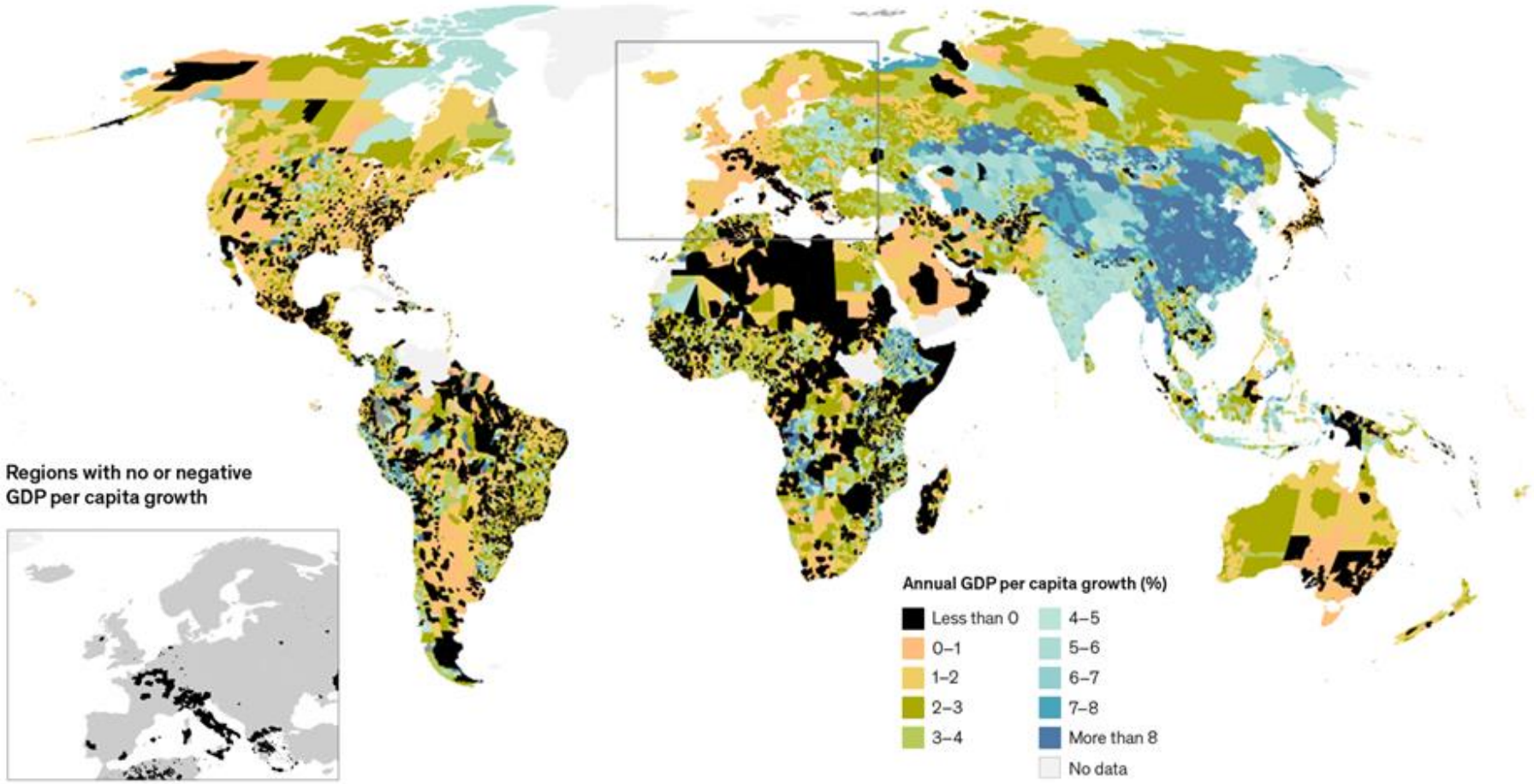
4.



What is a development trap?

The problem

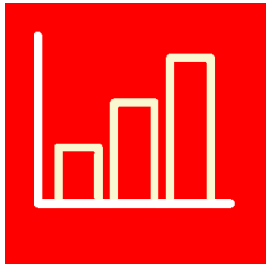
Growth in the last two decades (GDP per capita, 2000-2019)



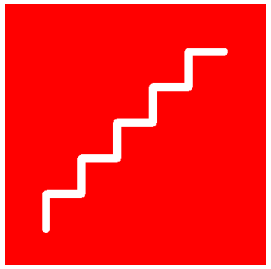
Source: elaborated with data from McKinsey Global Institute (2023).

Identifying a development trap

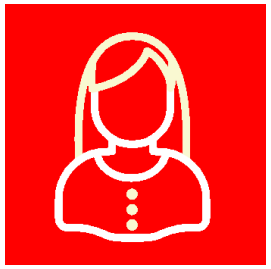
Three variables of economic dynamism



GDP per capita



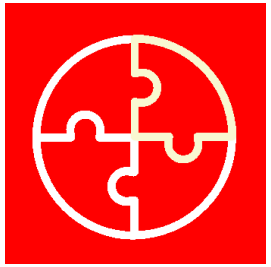
Productivity



Employment

Over three dimensions

The region itself in the past



The country it belongs to

The EU

Translated into formulae

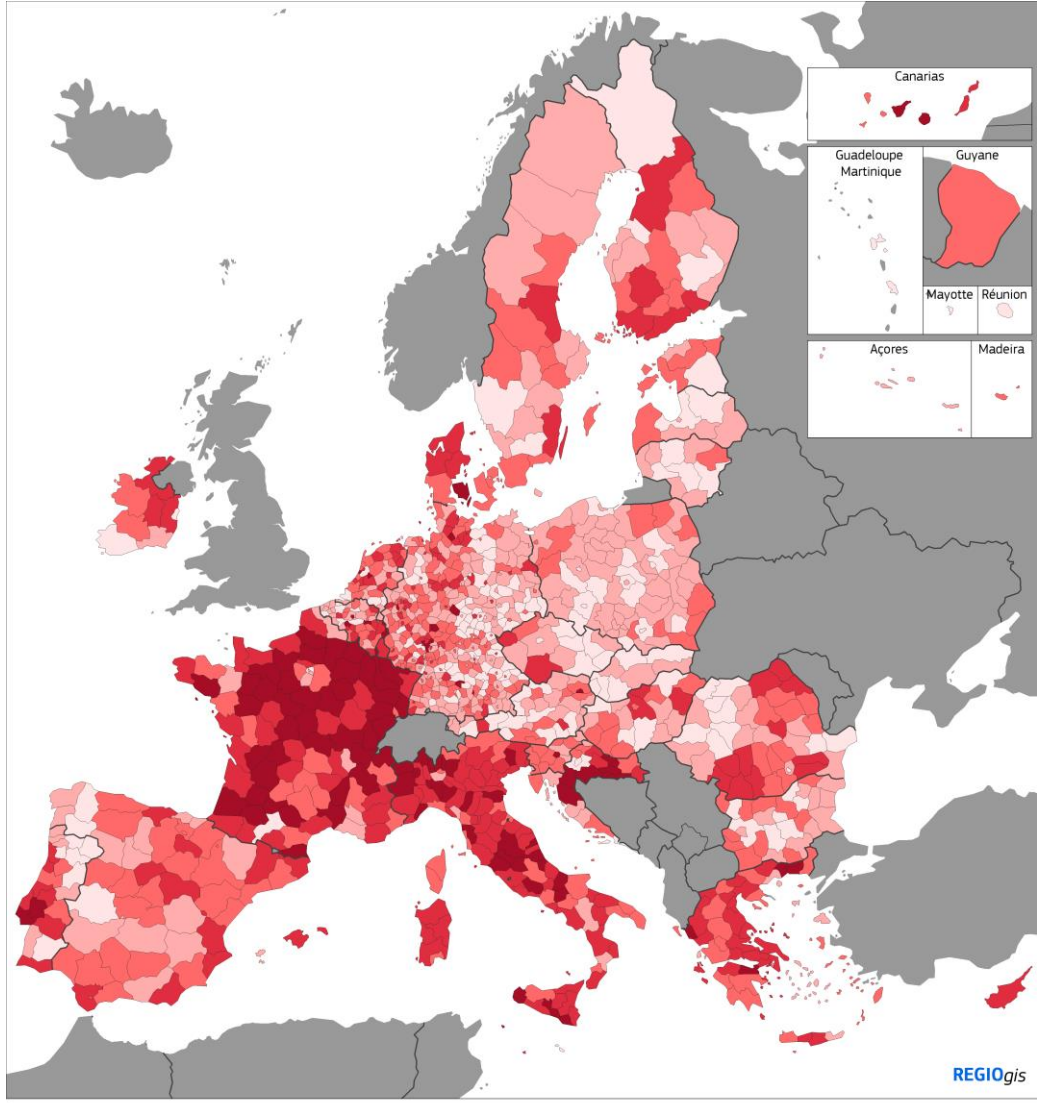
$$DT_{1,i,t} = \begin{cases} 1 - \dfrac{\sum_y D_{i,t}^{y,R} + \sum_y D_{i,t}^{y,MS} + \sum_y D_{i,t}^{y,EU}}{9}, & if\ NUTS2\ in\ MS \geq 2 \\ 1 - \dfrac{\sum_y D_{i,t}^{y,R} + \sum_y D_{i,t}^{y,EU}}{6}, & if\ NUTS2\ in\ MS = 1 \end{cases}$$

$$DT_{2,i,t} = \begin{cases} -1 \times \dfrac{[(\sum_y a_{i,t}^{y,R} + \sum_y a_{i,t}^{y,MS} + \sum_y a_{i,t}^{y,EU}) \times 9^{-1}] - \mu_{1990}^{Raw\ DT2}}{\sigma_{1990}^{DT2}}, & if\ NUTS2\ in\ MS \geq 2 \\ -1 \times \dfrac{[(\sum_y a_{i,t}^{y,R} + \sum_y a_{i,t}^{y,EU}) \times 6^{-1}] - \mu_{1990}^{Raw\ DT2}}{\sigma_{1990}^{DT2}}, & if\ NUTS2\ in\ MS = 1 \end{cases}$$

5.

Development traps in the EU

Risk



Development trap index 1 at NUTS-3 level, 2001-2018

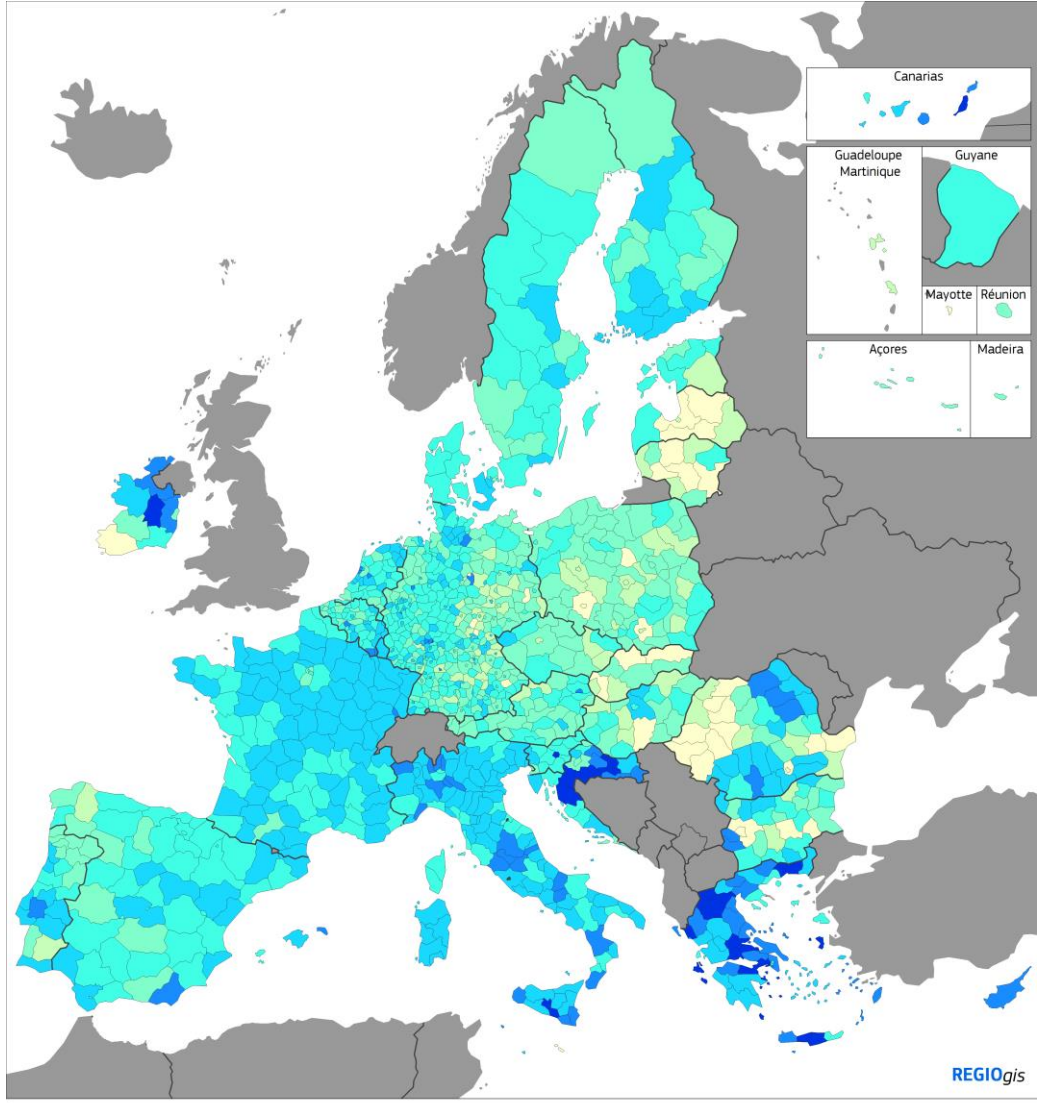
Likelihood of being in a development trap

- <0.4
- 0.4-0.5
- 0.5-0.6
- 0.6 - 0.7
- >0.7

This index measures if a region's growth is lower than that of the EU, of its country or of the same region during the previous five years.
It considers GDP per head, productivity and employment per head growth over a five year period. A region scores 1 for each time its growth is lower. This score between 0 and 9 is then rescaled to 0-1.
Source: DG REGIO calculations based on JRC and Eurostat data

0 500 km

Intensity



Development trap index 2 at NUTS-3 level, 2001-2018

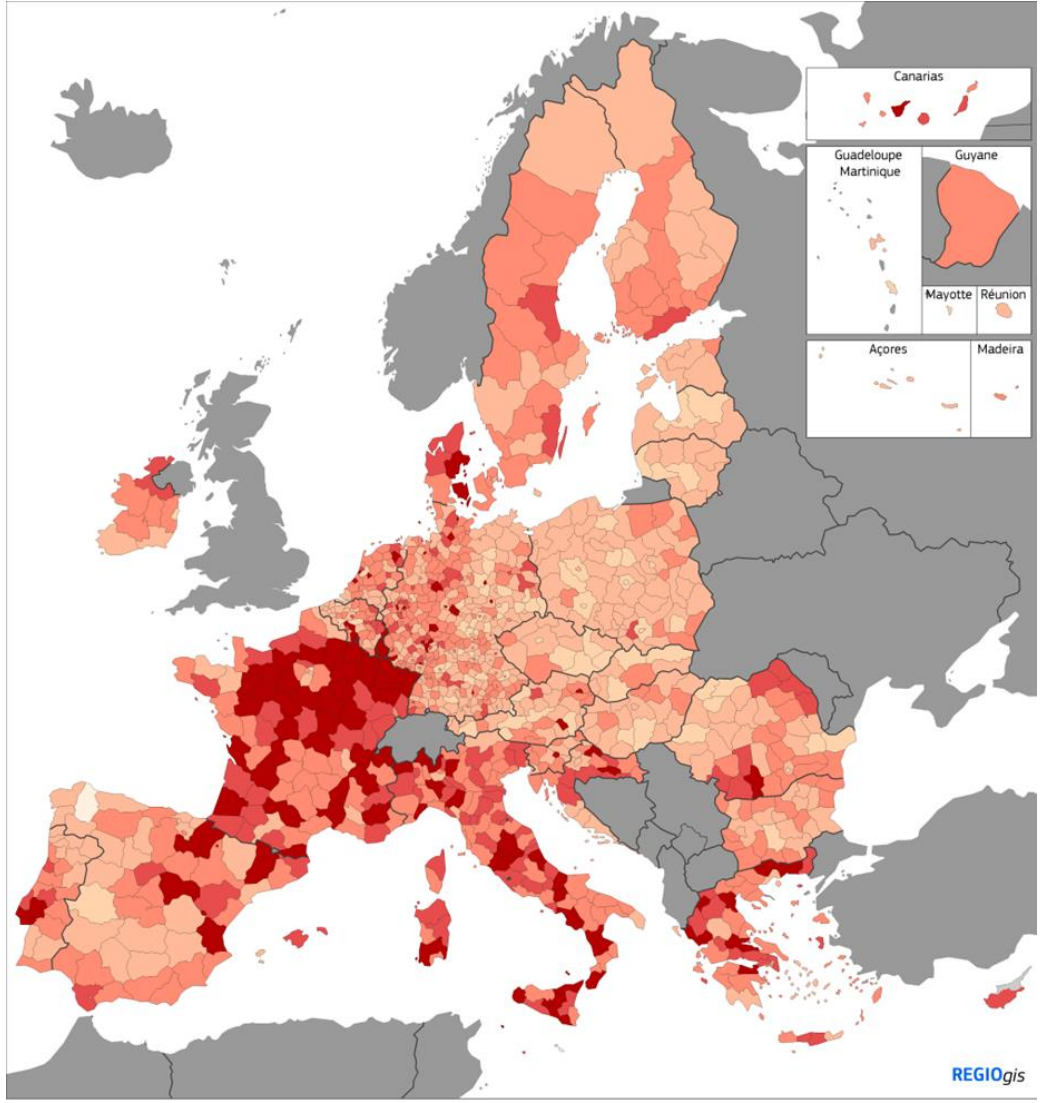
Depth of the development trap

- <0
- 0-0.3
- 0.3-0.6
- 0.6-0.9
- 0.9-1.2
- 1.2-1.5
- >1.5

This index measures the extent to which a region's growth is lower than that of the EU, of its country and of the same region during the previous five years.
It considers GDP per head, productivity and employment per head growth. The index is standardized by using the mean and standard deviation of the first period.
Source: DG REGIO calculations based on JRC and Eurostat data

0 500 km

Length



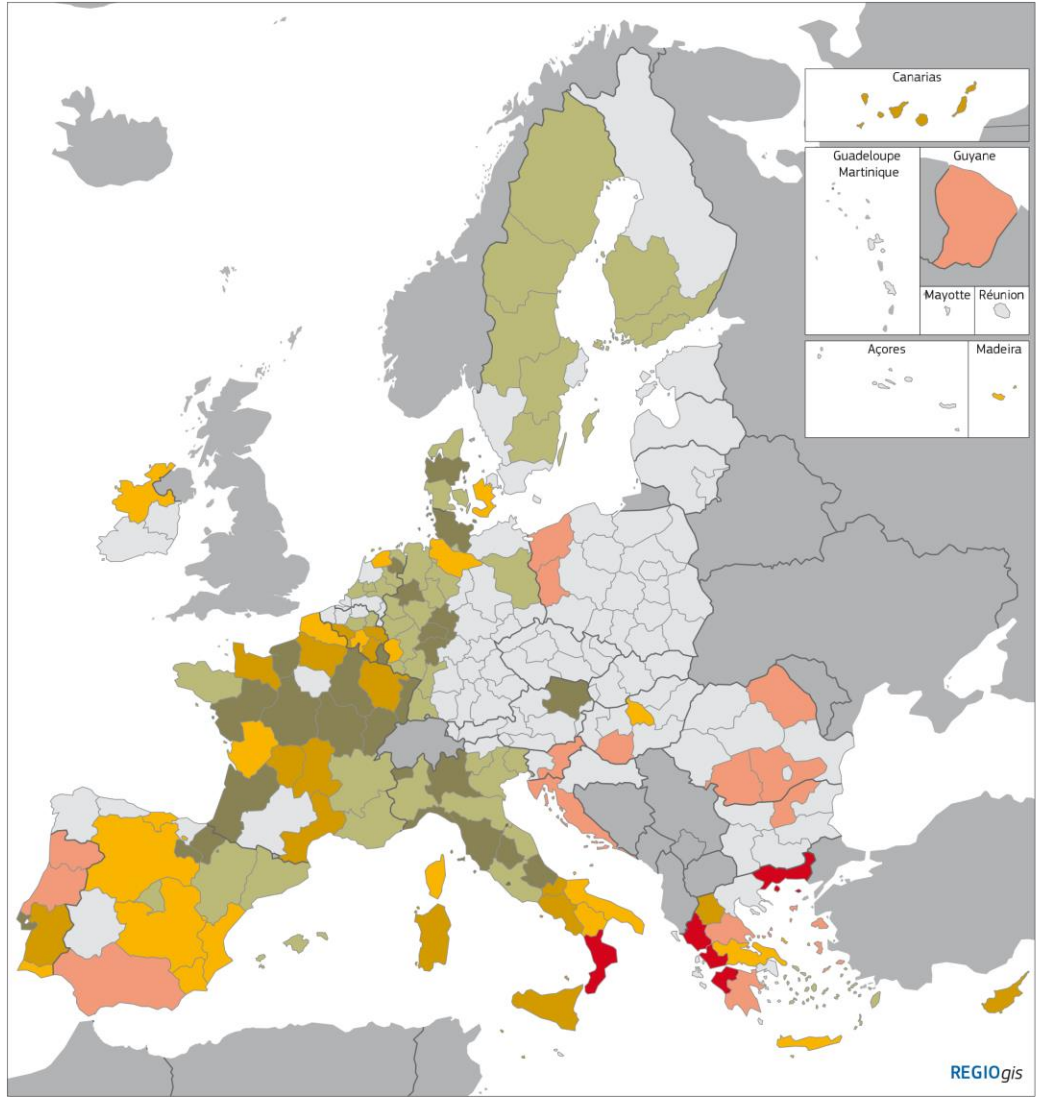
Number of years in a development trap during 2001-2019

Years
- 0
- less than 5
- 5 - 9
- 10 - 13
- 14 - 16
- 17 - 19

This map shows the number of years that a region scored 0.5 or more on the Development Trap Index 1.
Source: DG REGIO calculations based on JRC and Eurostat data

0 500 km

Happening at different levels of development



Map 2 Number of years in a development trap during 2001–2019 by level of GDP per head in 2000

GDP/head (index EU-27=100) vs. years

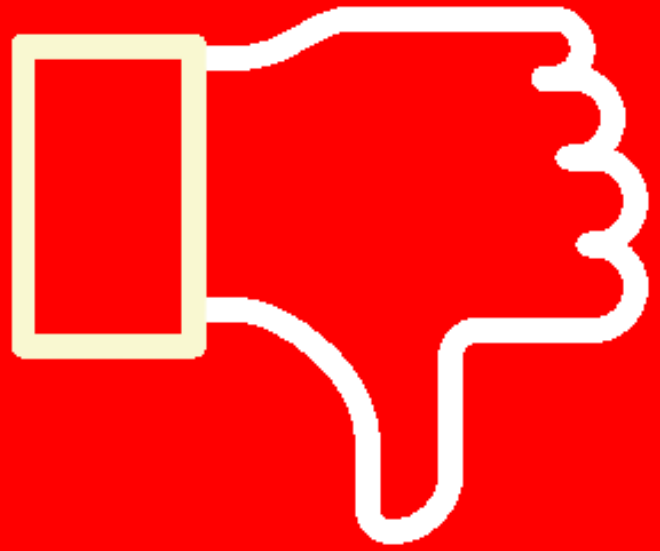
- < 75%, 10–14 years
- 75 - 100%, 10–14 years
- > 100%, 10–14 years
- < 75%, 15–19 years
- 75 - 100%, 15–19 years
- > 100%, 15–19 years
- less than 10 years in a development trap

Six capital regions have been merged with the surrounding regions to limit distortions in the GDP/head values.
Source: DG REGIO calculations based on JRC and Eurostat data.

0 500 km

6.

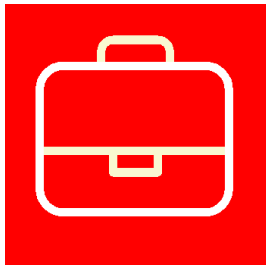
Traps and discontent



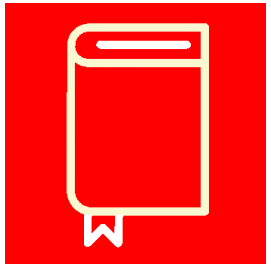
Results

Less Eurosceptic voting

Higher population density



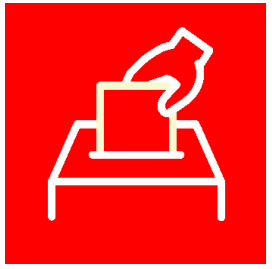
Higher employment rates



More people with higher education

More people born in another MS

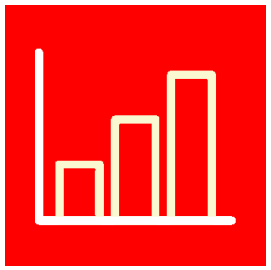
Higher quality of government



Higher turnout

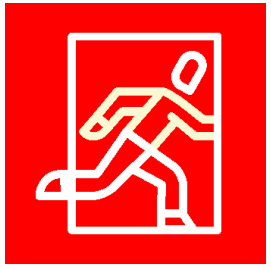
Results (II)

More Eurosceptic voting



Higher GDP per head

More industrial jobs

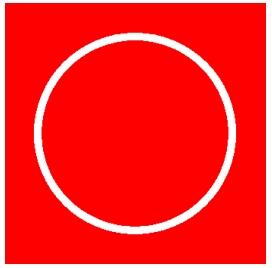


Higher net-migration

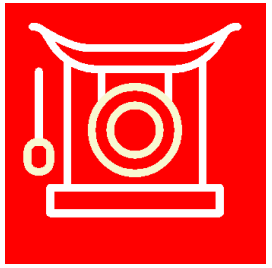
More elderly residents (hard)

More people born outside the EU (hard)

People vote more Eurosceptic if…



Their region (1) is at risk of a development trap, (2) is in an intense trap or (3) spent more years in a trap



This applies to both hard and soft plus hard Euroscepticism

For two electoral cycles (2013-2028 and 2018-2022)

Effect increases with time: Seven times bigger if measured over the entire 2001-2018 period than if considering 2018 alone

Traps as drivers of hard Euroscepticism

Dependent variable: Share of votes for hard Eurosceptic parties (2018-2022)	DT1 OLS	DT2 OLS
Development trap index (1) (Average 2001-2018)	20.18*** (3.059)	
Development trap index (2) (Average 2001-2018)		3.822*** (1.211)
GDP pc index (EU-27) (2018)	0.0503*** (0.0119)	0.0488*** (0.0117)
Employment in industry (%) (2018)	0.136*** (0.0450)	0.116** (0.0462)
Migration (‰) (2000-2018)	0.0465 (0.0717)	0.0978 (0.0753)
Foreigners (+15 %) born in another EU country (2018)	-0.917*** (0.152)	-0.957*** (0.164)
Foreigners (+15 %) born outside the EU (2018)	0.261** (0.102)	0.313*** (0.105)
Elderly (%) (2018)	1.019*** (0.111)	1.023*** (0.113)
Density 2011 (ln)	-2.349*** (0.563)	-2.210*** (0.567)
Higher education, 25-64 (%) (2018)	-0.174*** (0.0419)	-0.204*** (0.0429)
Employment (%) (2018)	-0.0601 (0.0680)	-0.0931 (0.0698)
Quality of government (2017)	-1.922*** (0.689)	-1.496** (0.709)
Turnout (%)	0.127*** (0.0399)	0.101** (0.0406)
Share of votes covered in CHES (%)	-0.0515 (0.0507)	-0.0960* (0.0532)

Being in a development trap matters

Controls go mostly along with the literature

Length of traps and hard Euroscepticism

Dependent variable: Share of votes for parties strongly opposed and opposed to European integration (2018-2022)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	DT1, 2018		DT1, 2015-2018		DT1, 2010-2018		DT1, 2001-2018		DT1, Years in trap since 2010		DT1, Years in trap since 2001	
Development trap (1)	5.050***	3.324***	6.724***	5.954***	15.96***	16.03***	23.90***	22.08***	0.675***	0.597***	0.617***	0.496***
	(1.135)	(1.110)	(1.396)	(1.377)	(2.049)	(2.041)	(2.875)	(2.977)	(0.124)	(0.123)	(0.0885)	(0.0931)
Controls	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES
Observations	1,166	1,130	1,166	1,130	1,166	1,130	1,166	1,130	1,166	1,130	1,166	1,130
R-squared	0.027	0.241	0.030	0.247	0.066	0.277	0.085	0.281	0.038	0.251	0.061	0.259
Adjusted R-squared	0.0248	0.234	0.0279	0.240	0.0640	0.270	0.0824	0.274	0.0360	0.244	0.0585	0.252
DF	1162	1118	1162	1118	1162	1118	1162	1118	1162	1118	1162	1118

Places that have been in a more intense trap over a longer period are more likely to vote for Eusrosceptic options

How much more likely? The intensity is 7 times higher

Soft and hard Euroscepticism

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	DT1, 2018		DT1, 2015-2018		DT1, 2010-2018		DT1, 2001-2018		DT1, Years in trap since 2010		DT1,Years in t rap since 2001	
Development trap (1)	-1.076	1.290	4.225*	5.107**	20.83***	16.06***	35.12***	34.16***	0.879***	0.459**	0.818***	0.664***
	(2.027)	(1.958)	(2.545)	(2.504)	(3.423)	(3.738)	(4.406)	(4.913)	(0.216)	(0.232)	(0.144)	(0.162)
Controls	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES
Observations	1,166	1,130	1,166	1,130	1,166	1,130	1,166	1,130	1,166	1,130	1,166	1,130
R-squared	0.034	0.148	0.036	0.150	0.064	0.161	0.085	0.183	0.047	0.150	0.061	0.161
Adjusted R-squared	0.0315	0.139	0.0334	0.142	0.0614	0.153	0.0830	0.175	0.0450	0.142	0.0590	0.152
DF	1162	1118	1162	1118	1162	1118	1162	1118	1162	1118	1162	1118

The same applies for soft Euroscepticism

Two electoral cycles, 2013-2022

Also works for two waves of national parliamentary elections

Impact of the controls remains mostly the same, with the exception of net migration rate, quality of government and turnout

Dependent variable: Share of votes for parties strongly opposed and opposed to European integration (2013-2022)	(3) DT1 Pooled OLS	(6) DT2 Pooled OLS
Development trap index (1)	4.485***	
	(1.044)	
Development trap index (2)		0.941***
		(0.351)
GDP pc index (EU-27)	0.0671***	0.0675***
	(0.0123)	(0.0119)
Employment in industry (%)	-0.0614	-0.0681*
	(0.0394)	(0.0392)
Migration (‰) since 2000	0.0602	0.0682
	(0.0599)	(0.0611)
Foreigners (+15 %) born in another EU country	-1.090***	-1.086***
	(0.127)	(0.127)
Foreigners (+15 %) born outside the EU	0.377***	0.391***
	(0.0864)	(0.0865)
Elderly (%)	0.0979***	0.104***
	(0.0335)	(0.0353)
Density 2011 (ln)	-4.351***	-4.397***
	(0.455)	(0.450)
Higher education, 25-64 (%)	-0.374***	-0.386***
	(0.0349)	(0.0349)
Employment (%)	0.0983*	0.102*
	(0.0565)	(0.0572)
Quality of government	-0.879	-0.879
	(0.546)	(0.559)
Turnout (%)	-0.0763***	-0.0814***
	(0.0274)	(0.0276)
Share of votes covered in CHES (%)	0.0305	0.0328
	(0.0336)	(0.0338)
Observations	1,585	1,585
R-squared	0.183	0.179
Adjusted R-squared	0.176	0.172
DF	1571	1571

Causality

Instrument: Presence of absolute nuclear families in Medieval times

Marginal changes to coefficients, concerning foreigners from outside the EU, education, and employment

Dependent variable: Share of votes for hard Eurosceptic parties (2018-2022)	DT1 IV analysis	DT2 IV analysis
Development trap index (1) (Average 2001-2018)	92.06***	
	(29.87)	
Development trap index (2) (Average 2001-2018)		48.75***
		(17.00)
GDP pc index (EU-27) (2018)	0.0601***	0.0922***
	(0.0151)	(0.0268)
Employment in industry (%) (2018)	0.320***	0.438***
	(0.103)	(0.154)
Migration (‰) (2000-2018)	-0.671***	-0.757***
	(0.222)	(0.268)
Foreigners (+15 %) born in another EU country (2018)	-0.519**	-0.433
	(0.230)	(0.271)
Foreigners (+15 %) born outside the EU (2018)	-0.479*	-0.671**
	(0.262)	(0.331)
Elderly (%) (2018)	0.719***	0.869***
	(0.181)	(0.232)
Density 2011 (ln)	-2.993***	-3.851***
	(0.806)	(0.999)
Higher education, 25-64 (%) (2018)	0.106	0.100
	(0.0866)	(0.0976)
Employment (%) (2018)	0.566***	0.576***
	(0.139)	(0.150)
Quality of government (2017)	-8.617***	-7.212***
	(1.063)	(1.305)
Turnout (%)	0.249***	0.118*
	(0.0788)	(0.0632)
Share of votes covered in CHES (%)	0.0217	0.0112
	(0.121)	(0.148)
Observations	819	819
Uncentered R-squared	0.643	0.550
Kleibergen-Paap rk LM statistic	10.03	8.097
Cragg-Donald Wald F statistic	11.97	8.883
Anderson-Rubin chi-sq test of significance of endogenous regressors	3.46e-06	3.46e-06
Stock-Wright LM S statistic	22.84	22.84

7.

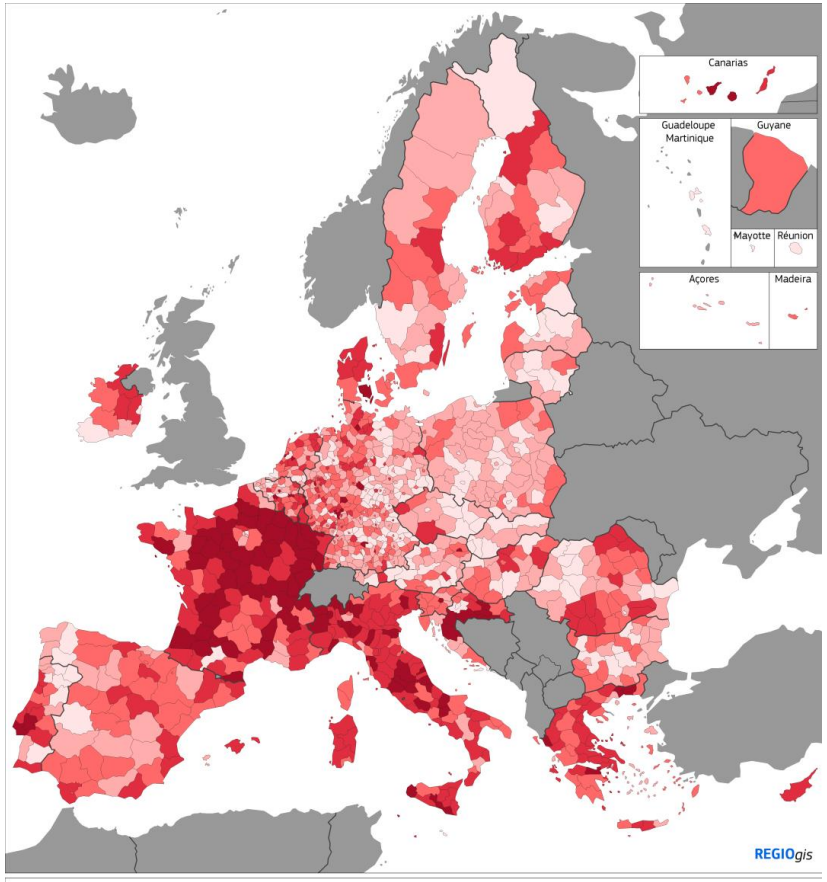
What can multilaterals do?

The two visions of Europe (and of the world)

So, can we live without the EU?

I've seen much of the rest of the world. It is brutal and cruel and dark. Rome is the light!

The problem is (partly) territorial…



Development trap index 1 at NUTS-3 level, 2001-2018

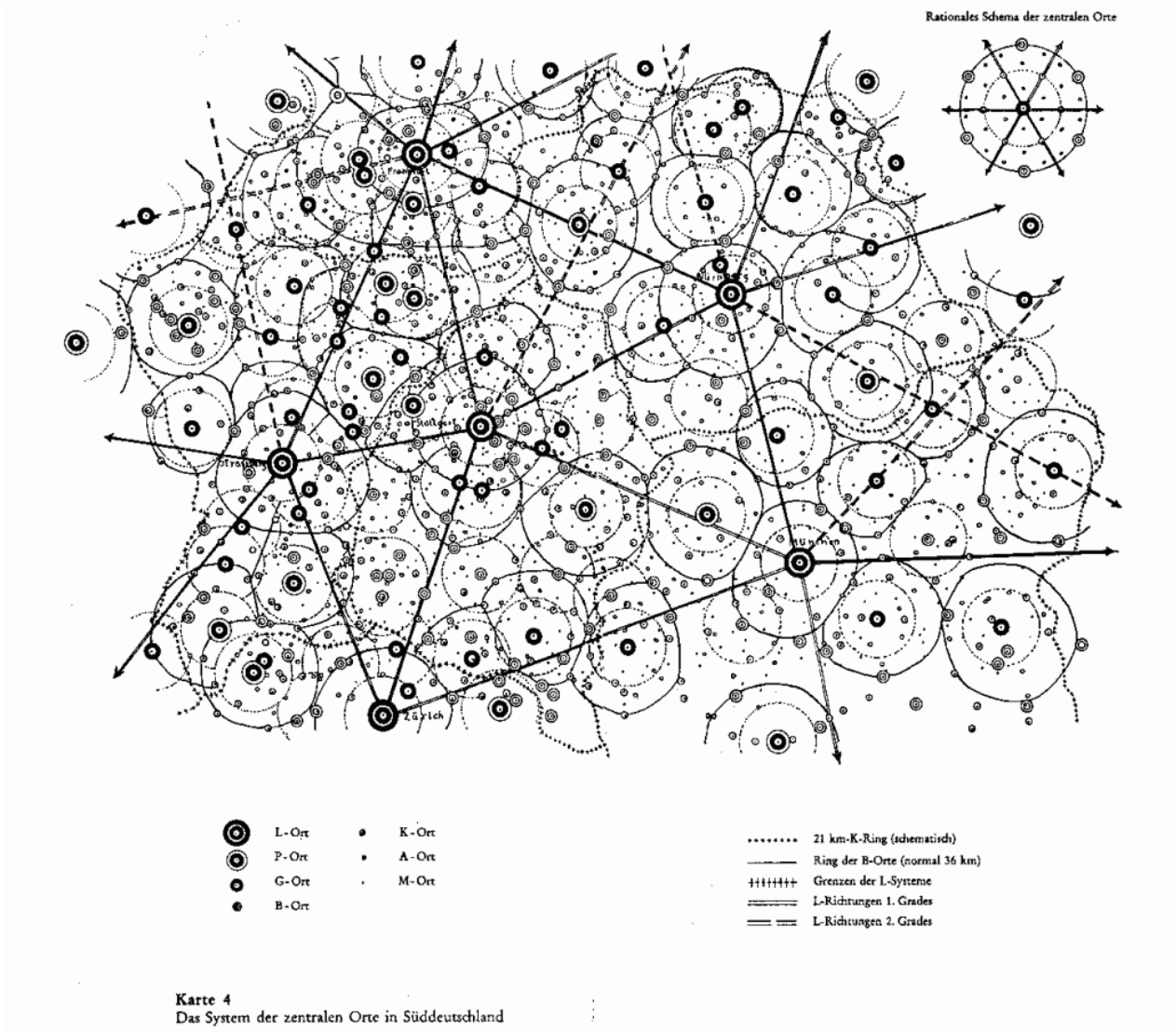
Likelihood of being in a development trap

- <0.4
- 0.4-0.5
- 0.5-0.6
- 0.6 - 0.7
- >0.7

This index measures if a region's growth is lower than that of the EU, of its country or of the same region during the previous five years.
It considers GDP per head, productivity and employment per head growth over a five year period. A region scores 1 for each time its growth is lower. This score between 0 and 9 is then rescaled to 0-1.
Source: DG REGIO calculations based on JRC and Eurostat data

0 500 km

So we need territorial solutions



Karte 4
Das System der zentralen Orte in Süddeutschland

The geography of discontent and the regional development trap in Europe

Andrés Rodríguez-Pose

(with Lewis Dijkstra and Hugo Poelman)

More information in http://personal.lse.ac.uk/rodrigu1/

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