The European Trust Crisis and the Rise of Populism

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Motivation

— **European and global rise of extremism and populism.** *Roots?*

- globalization

- inequality

- immigration

— **European crisis**

- *Economic*. Deep recession in the periphery (output contraction, rise in unemployment, poverty)

- *Political*. Animosity between "core" and "periphery" (historical, cultural roots)

- *Trust*. Beliefs, distrust in political system, the EU.

Unemployment, Trust/Beliefs and Political Extremism

—— **Descriptive patterns (regional variation before-after the crisis)**

- Unemployment dynamics

- Voting for extremist/nationalistic parties

- Trust and beliefs; emphasis on trust towards institutions (EU, political parties, courts, police) and "general" trust (focus of literature so far)

—— **Unemployment and voting for extremist-populist parties**

- Simple (within region across time) correlations; *ols*.

- Component of unemployment stemming from "global" aspect of the crisis (industrial specialization, construction sector). *2sls*.

—— **European Trust Crisis. Unemployment and Beliefs-Trust**

- Trust (general, institutions); beliefs (towards immigration). *ols*

- Industrial-specialization driven component of unemployment. *2sls*.

Structure

1. **Related Literature**

2. **Data** [voting, trust/beliefs, regional accounts]

3. **Descriptive Before-After Analysis** [voting, trust, beliefs]

4. **Unemployment and Voting**

    — OLS estimates [graphical illustration]

    — 2sls estimates [first-stage, "reduced-forms", 2sls]

5. **Unemployment and the European Trust Crisis**

    — OLS estimates [graphical illustrations]

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6. **Conclusion. Policy Implications**

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Related Literature

1. **Extremism/populism** [political science, renewed interest, few parallel studies]

   • Origins, implications

2. **Consequences of the European crisis**

   • economics, poverty, banking

   • distrust, beliefs, political preferences, voting,

3. **Trust (beliefs and norms) and economic performance**

   • correlations.

   • origins of trust/beliefs

Populism/Extremism. Origins

— **Long-term.** Deeply rooted institutional and cultural traits; geography (preferences for redistribution).

— **Medium-term.** Globalization. Skill-biased technical change and automation; erosion of labour market protection; executive pay

— **Short-term.** [that can have however lasting implications]. Crisis.

Literature Reviews. economics, political science and sociology. Gidron and Bonikowski (2013). Mudde and Rovira Katwesser (2017).

Populism/Extremism. Recent Empirical Studies

— Becker *et al*. (2016). BREXIT; correlates across regions

— Colantone and Stanig (2016). BREXIT. Globalization, China trade shock

— Autor *et al*. (2016, 2017) and Che *et al*. (2017). US; Globalization.

— Jensen, Quinn, and Weymouth (2016).

— Dippel *et al*. (2017). Germany; import competition

— Colantone and Stanig (2017). European regions; Global competition

— Inglehart and Norris (2016). Role of culture

— Eichengreen *et al*. (2016), Stock (1984); Research on the Interwar Period

— Dornbusch and Edwards (1991). Latin America. Focus on consequences

— Dustmann *et al*. (2017). European regions; economic insecurity

— Guiso *et al*. (2017). Europe; individual-level economic insecurity

Populism/Extremism. Theory

— Di Tella and Rotenberg (2016); focus on betrayal from politicians

— Mukand and Rodrik (2017). Elite, majority and minority (majority-minority ethnic, religion, immigrant distinction) (elite versus majority and minority difference is wealth).

- Right-wing populism; enemies of the people are minorities/immigrants.

- Left-wing populism. Enemies of the people are the elite.

Theory and Empirics

— Guiso, Herrera, Morelli, and Sonno (2017).

European Crisis. Aspects

— **Economics/finance**

- macro policies; banks; current account deficits; fiscal conditions; misallocation, coordination failures. [e.g., Martin and Philippon (2016); Gopinath *et al*. (2017), vast literature]

— **Politics of Currency Union** [Spolaore (2013]

- Institutional Divergence [Papaioannou (2016)]

— **Culture, Beliefs/Norms.** [Guiso, Sapienza, and Zingales (2016); Guiso, Morelli, and Herrera (2017); Alesina, Tabellini, and Trebbi (2017); Dustmann *et al*. (2017)]

Trust and Economic Performance

— **Economic development/growth.** [Tabellini, 2010; Algan and Cahuc, 2008; Knack and Keefer, 1998]

- Institutions and corruption
- Financial development
- Trade and foreign investment
- Labour market institutions
- Organizational structure

— **Determinants**

- Long-run factors; historical episodes [Nunn and Wantchekon 2011; Guiso, Sapienza, and Zingales, 2016; Putnam, 1994]
- Short-run; economic downturn [Ananiev and Guriev, 2016; Putnam, 2001]

— **Reviews.** Algan and Cahuc (2013); Guiso, Sapienza and Zingales (2011); Durlauf and Fafchamps (2005); Fernandez (2014)

Contributions to the Literature

1. **Extremism/populism** [political science, renewed interest, few parallel studies]

   • **Stress the role of unemployment and the crisis.**

2. **Consequences of the European crisis**

   • economics, poverty, banking

   • **Stress connection between economics and voting**

3. **Trust (beliefs and norms) and economic performance**

   • correlations.

   • origins of trust/beliefs

   • **Stress role of "institutional trust"**

Structure

1. **Related Literature**
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6. **Conclusion. Next Steps**

Data. EU Regions (NUTS)

— **Regional output, employment, and industry composition. EUROSTAT**

- 26 Countries

- 244 Regions

— **General trust, trust towards institutions and beliefs. European Social Surveys (ESS). 24 countries**

- 183 regions

— **Electoral Data.**

- National elections; country-specific sources.

- Classification of political parties' orientation [political science sources, web, other country-specific resources]

Countries and Regions

List of Countries

Austria (6), Belgium (3), Bulgaria (6), Cyprus (1), Czech Republic (8), Denmark (5), Estonia (1), Finland (5), France (8), Germany (16), Greece (8), Hungary (6), Iceland (1), Ireland (2), Italy (18), Netherlands (12), Norway (7), Poland (16), Portugal (5), Romania (8), Slovakia (4), Slovenia (2), Spain (17), Sweden (8), Switzerland (5), UK (12).

Country Groups

— **Centre:** Austria, Belgium, France, Germany, Luxembourg, Netherlands, Switzerland.

— **South:** Cyprus, Greece, Italy, Portugal, Spain.

— **North:** Denmark. Ireland, Iceland, Norway, Sweden, UK, Finland.

— **Former Transition:** Bulgaria, Czech Republic, Estonia, Hungary, Poland, Slovakia, Slovenia, Romania.

Parties Political Classification

— **Radical-Left.** Syriza, Podemos,

— **Far Right (often nationalistic).** True Finns, Golden Dawn, National Front

— **Eurospeptic and Separatist.** 5 star movement, UKIP

— **Populist.** Party for Freedom, UKIP

— **Non-Mainstream (Extremist) Parties.** Sum of previous dimensions

Issues

— Hard-to-assign; parties' position change; orientation of MPs differs

— Dichotomous classification may be problematic

Structure

1. **Related Literature**
2. **Data** [voting, trust/beliefs, regional accounts]
3. **Descriptive Before-After Analysis** [unemployment, voting, trust, beliefs]
4. **Unemployment and Voting**
   — OLS estimates [graphical illustration]
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Descriptive Patterns across European Regions

— **Unemployment**

— **Voting for extremist/populist parties**

— **General Trust** [focus of literature]

— **Trust towards Institutions** [EU, local political parties, courts, police]

— **Role of Immigrants** [economy, cultural life]

Unemployment 2000-2016 [Source. Eurostat] .

Evolution of Unemployment by Country Group
NUTS2 Level
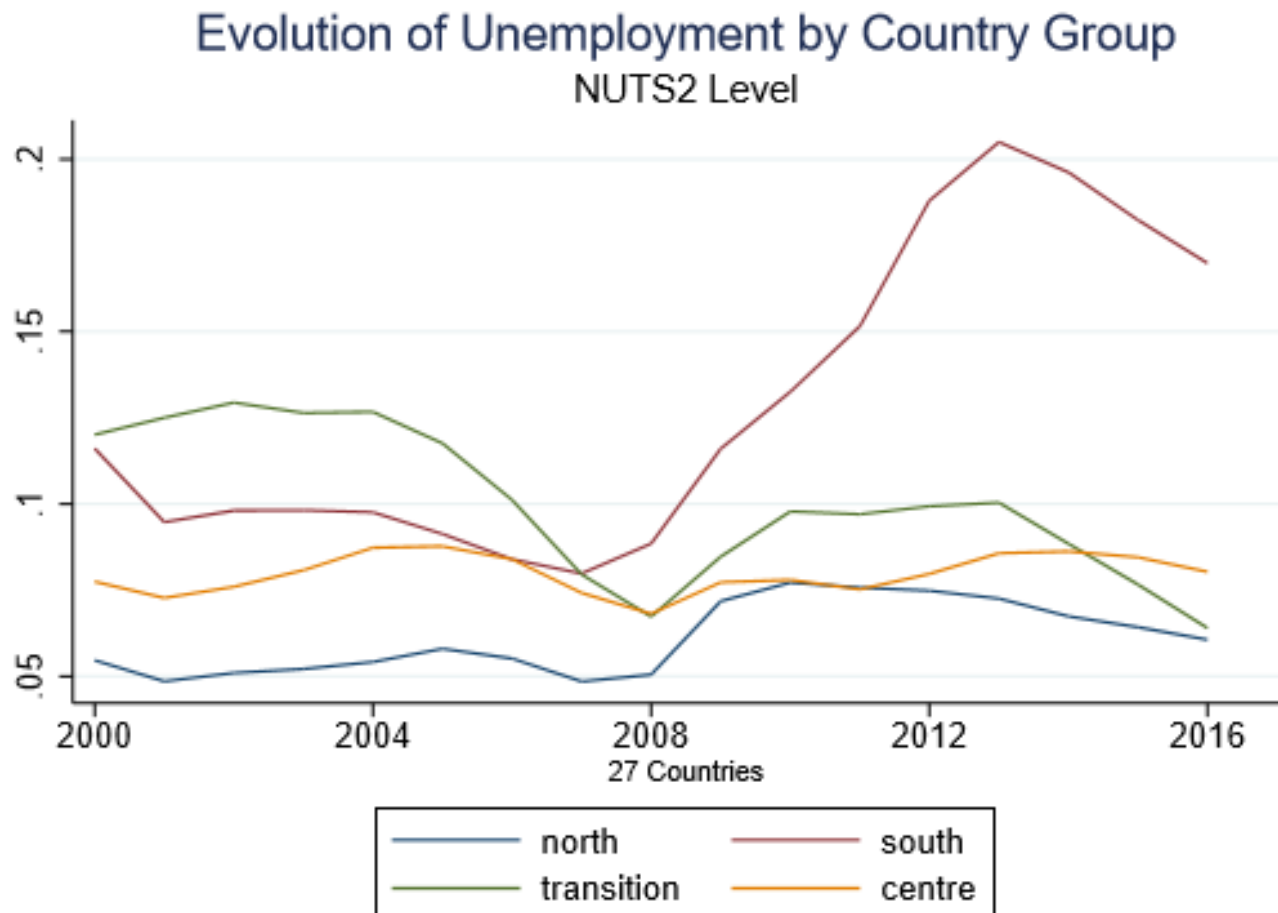
Voting for Anti-Establishment Parties (2000-2017).
[Source. Country-Specific Electoral Datasets]

Distribution of Voting for Anti-Establishment Parties, Before and After the Crisis
European Sample, NUTS2 Level

Pre Crisis   After the Crisis
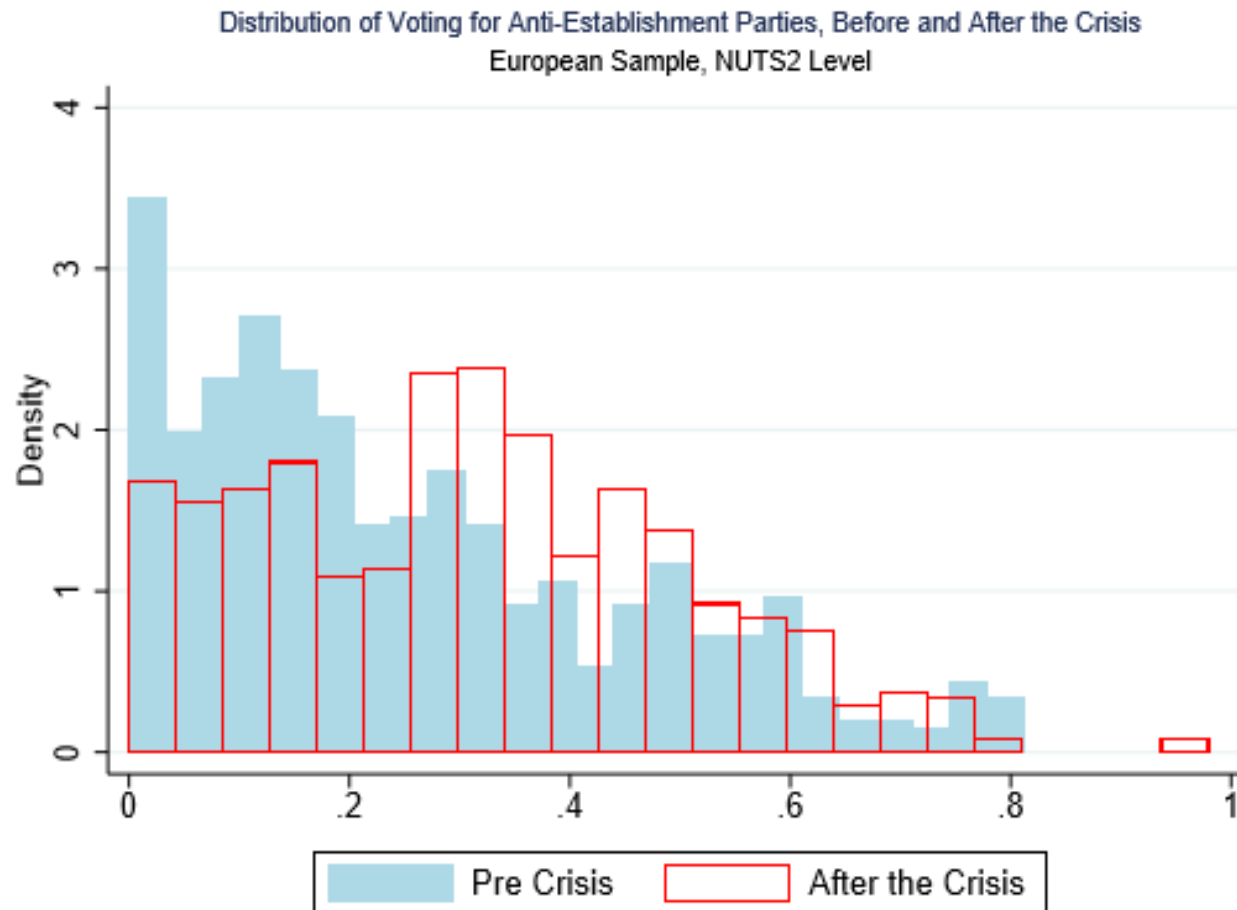
Voting for Radical-Left Parties (2000-2017).
[Source. Country-Specific Electoral Datasets]

Distribution of Voting for Radical Left Parties, Before and After the Crisis
European Sample, NUTS2 Level

Pre Crisis   After the Crisis
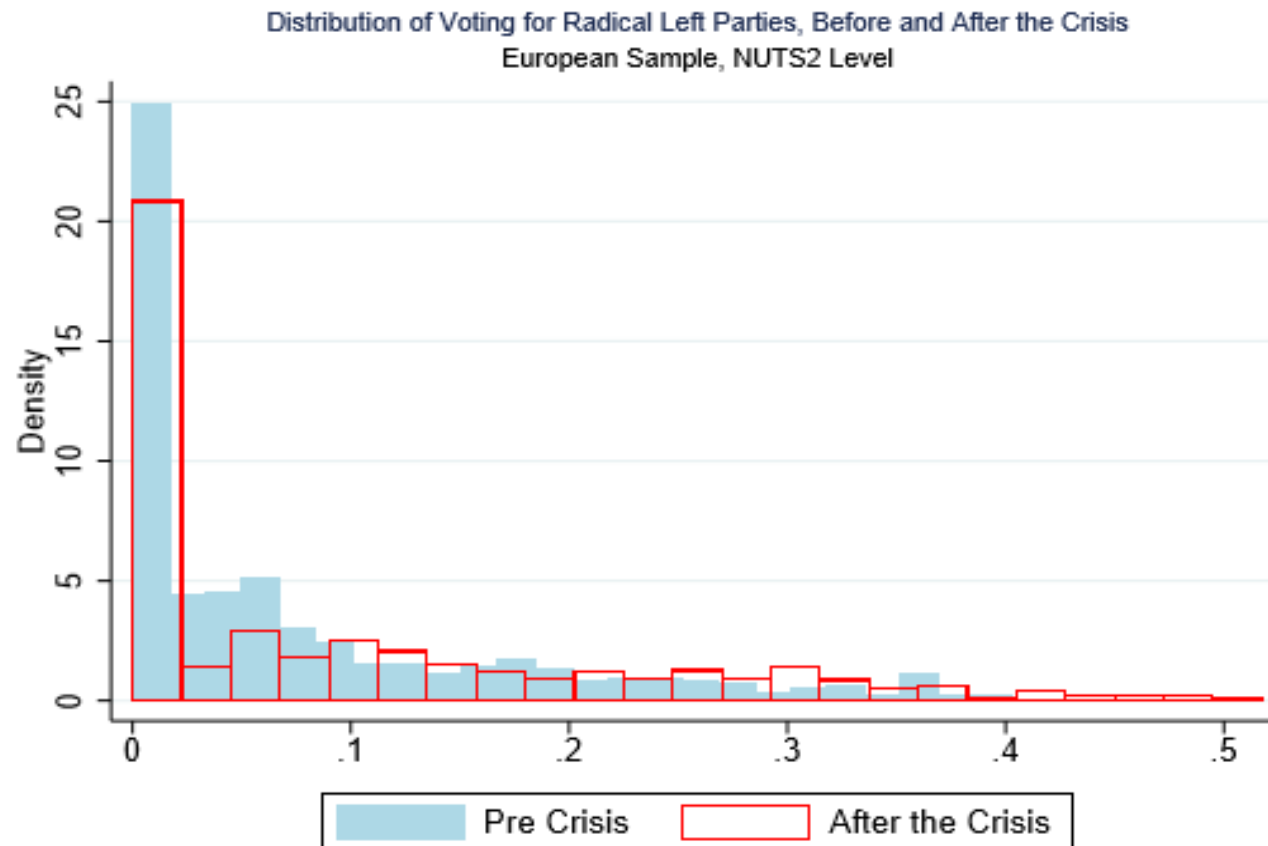
Voting for Far-Right Parties (2000-2017).
[Source. Country-Specific Electoral Datasets]

Distribution of Voting for Far Right Parties, Before and After the Crisis
European Sample, NUTS2 Level

Legend: Pre Crisis | After the Crisis
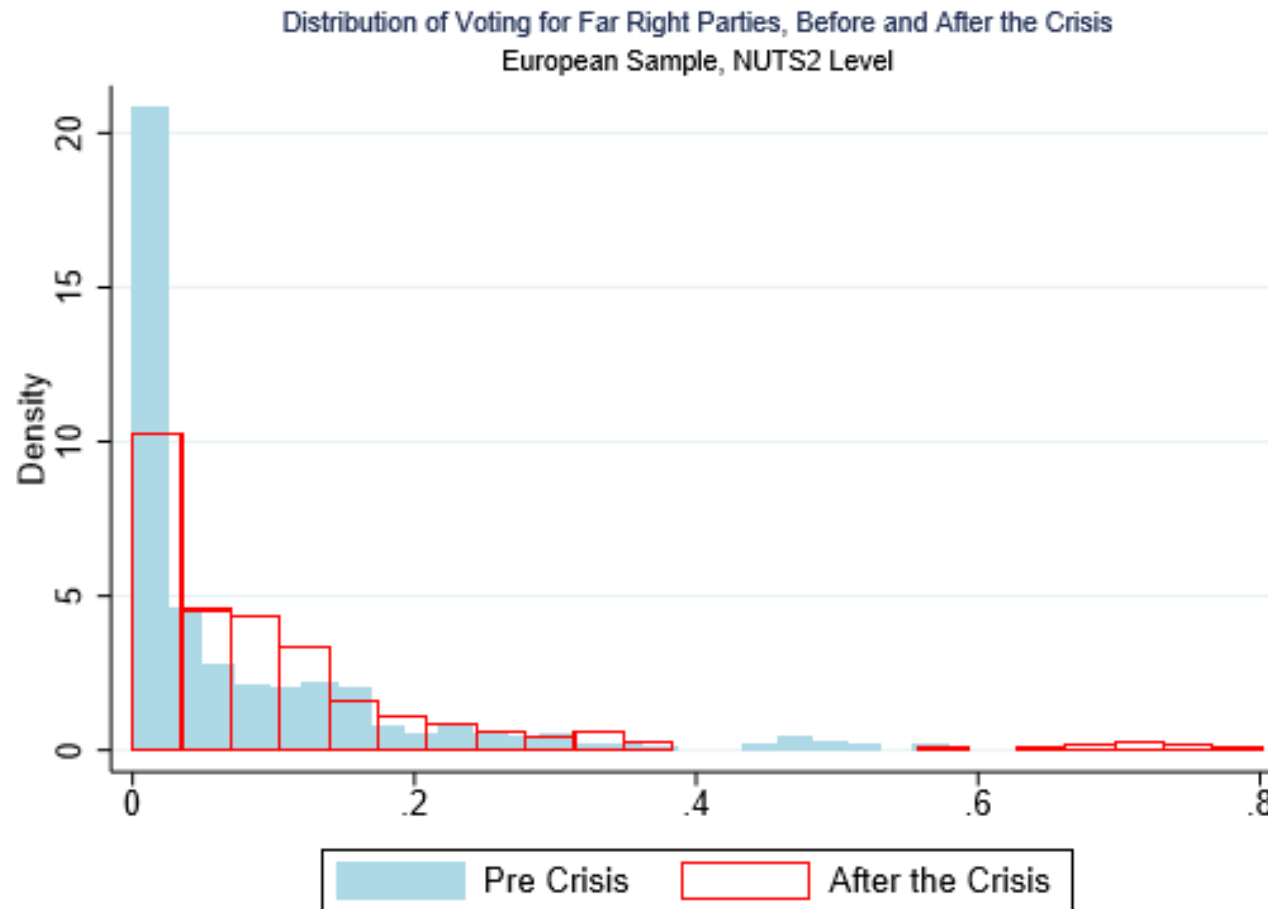
Voting for Populist Parties (2000-2017).

[Source. Country-Specific Electoral Datasets]

Distribution of Voting for Populist Parties, Before and After the Crisis
European Sample, NUTS2 Level
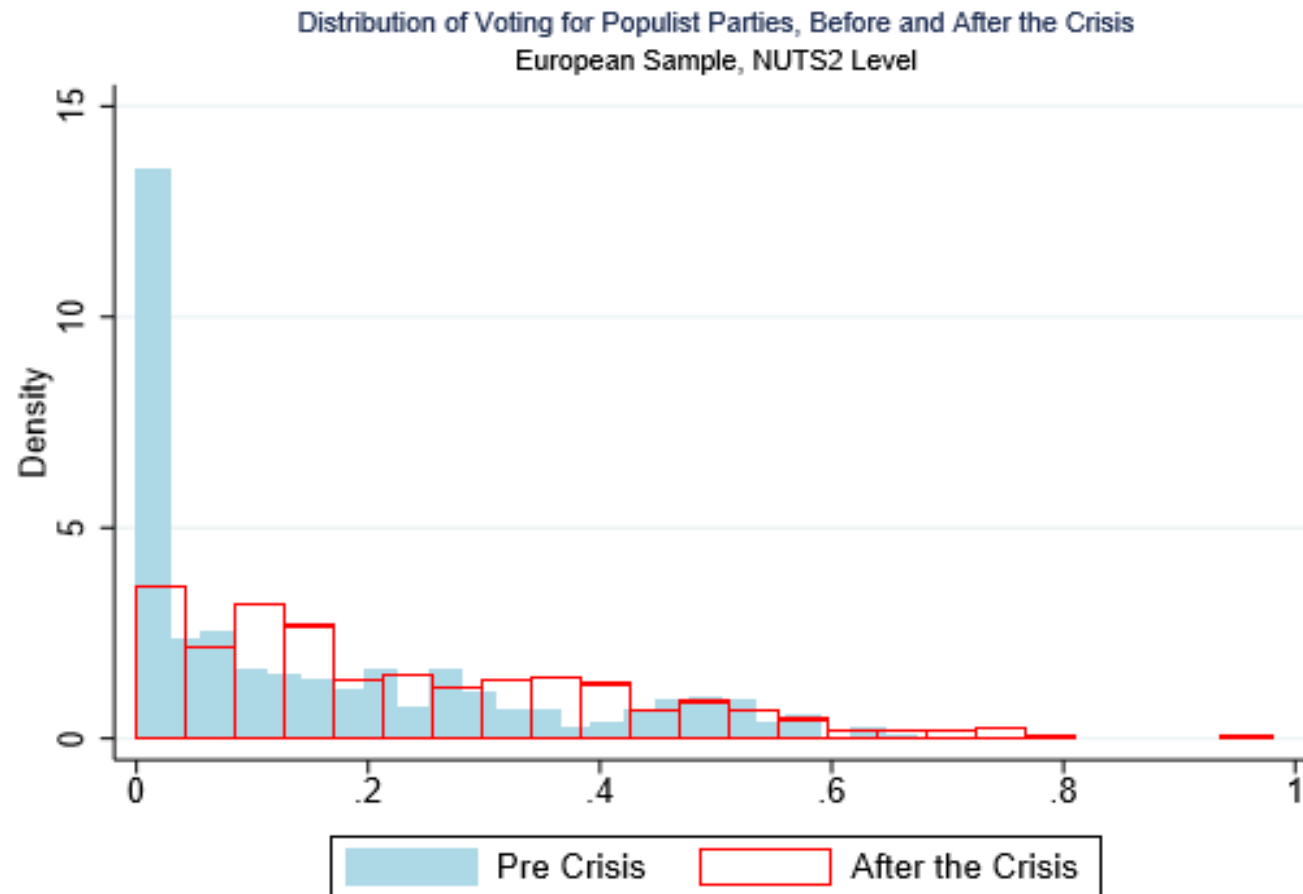
Voting for Eurosceptic parties (2000-2017).
[Source. Country-Specific Electoral Datasets]

Distribution of Voting for Eurosceptic Parties, Before and After the Crisis
European Sample, NUTS2 Level

Legend: Pre Crisis / After the Crisis
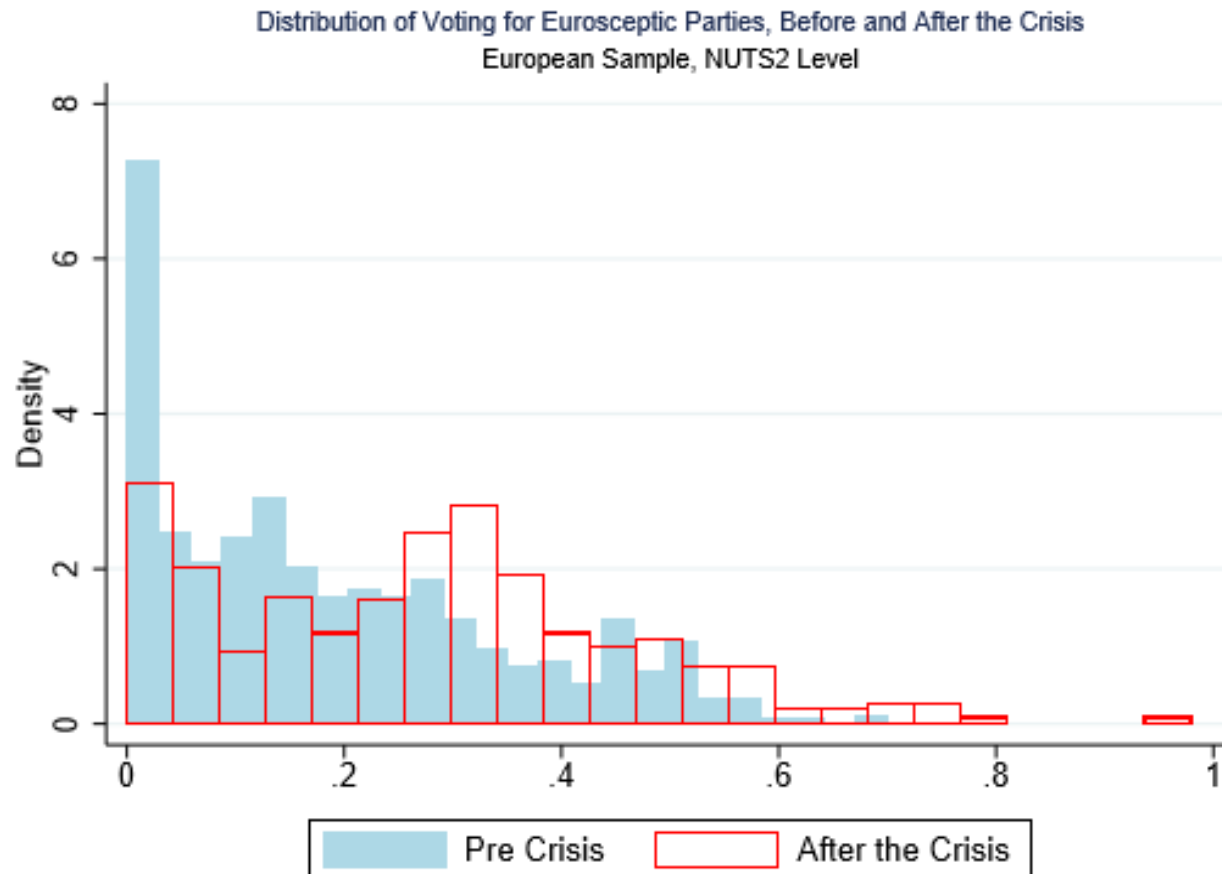
General Trust. [Source. ESS]

Distribution of Trust in People, Before and After the Crisis
European Sample, NUTS2 Level

Pre Crisis   After the Crisis
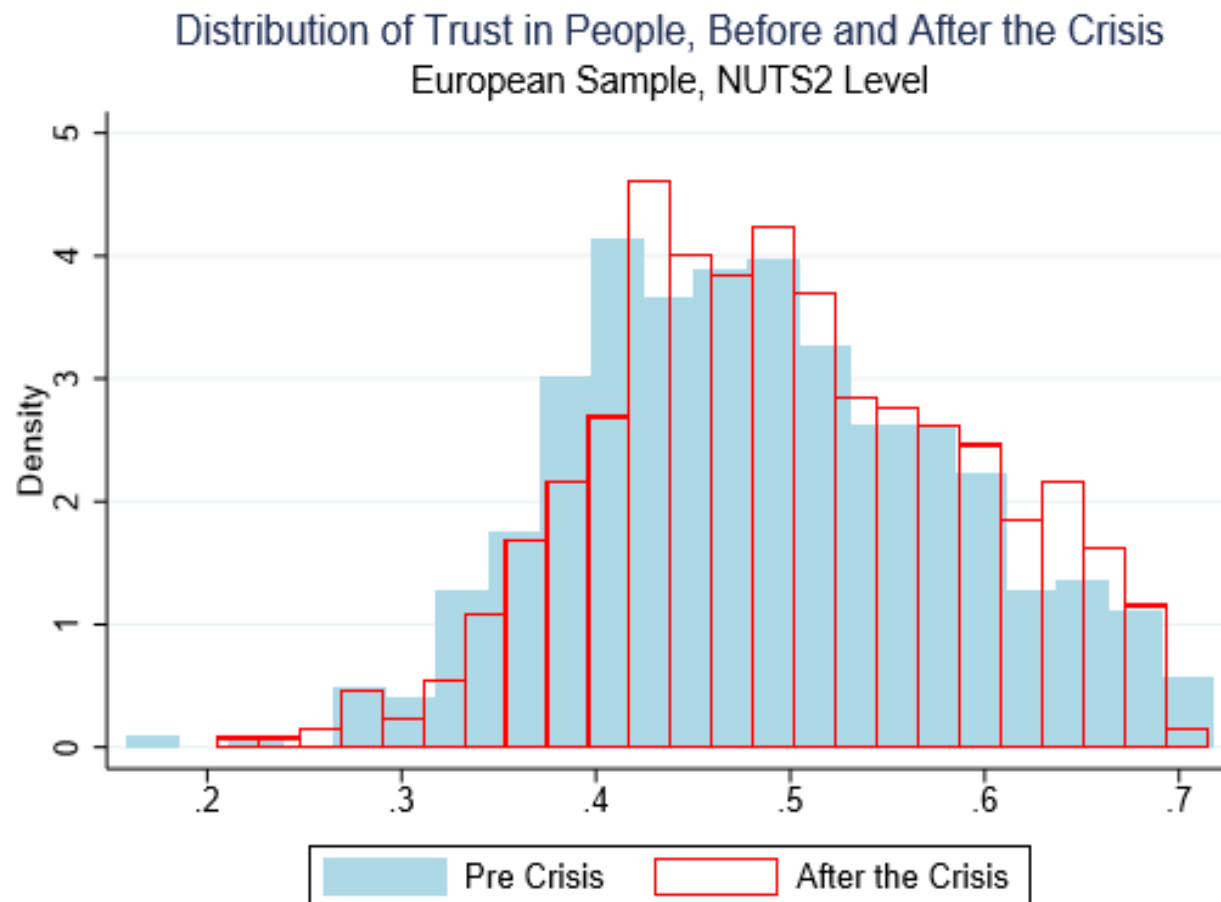
Trust towards the European Union. [Source. ESS]

Distribution of Trust in European Parliament, Before and After the Crisis
European Sample, NUTS2 Level

Pre Crisis   After the Crisis
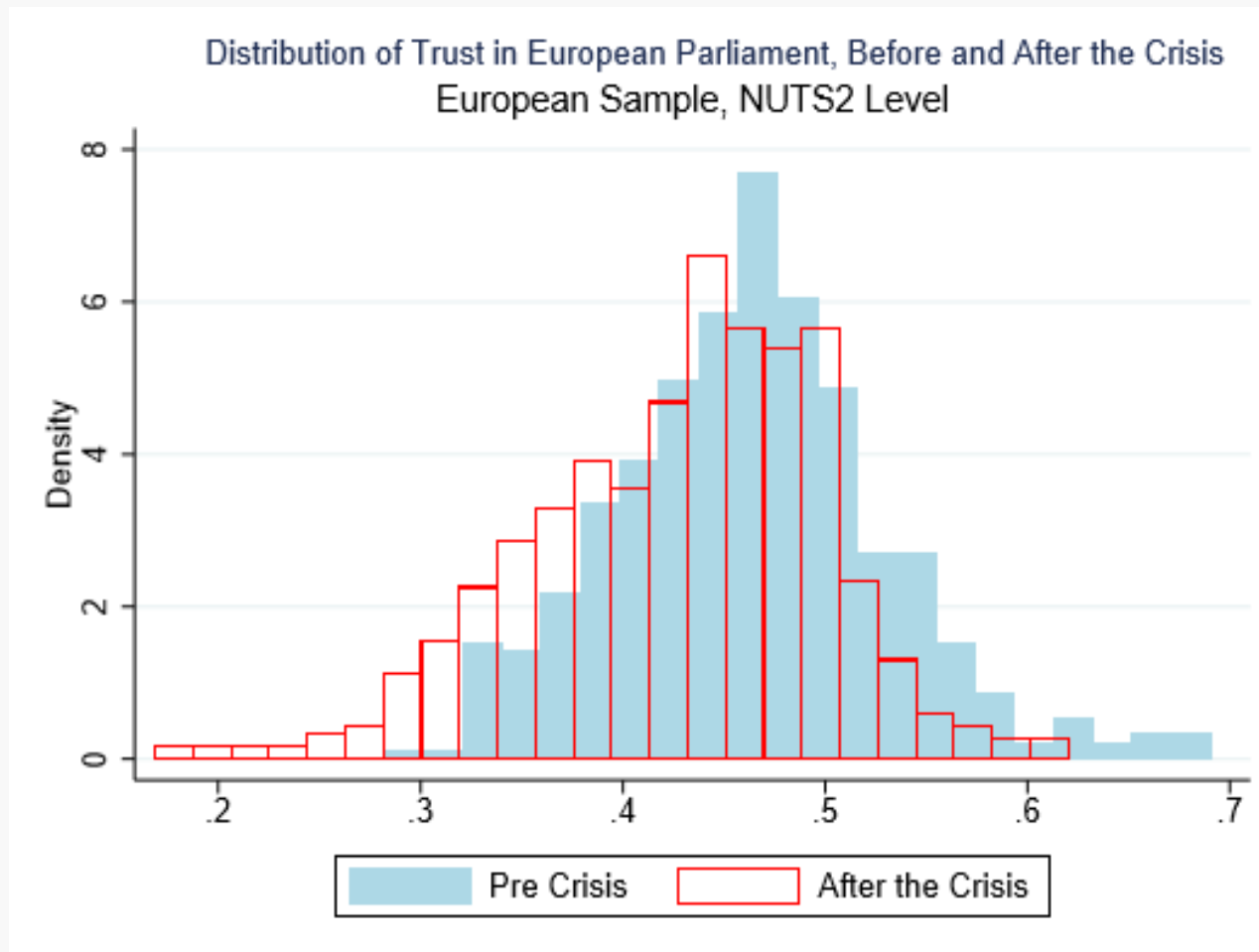
Trust in National Parliament. [Source. ESS]

Distribution of Trust in National Parliament, Before and After the Crisis
European Sample, NUTS2 Level

Legend: Pre Crisis | After the Crisis
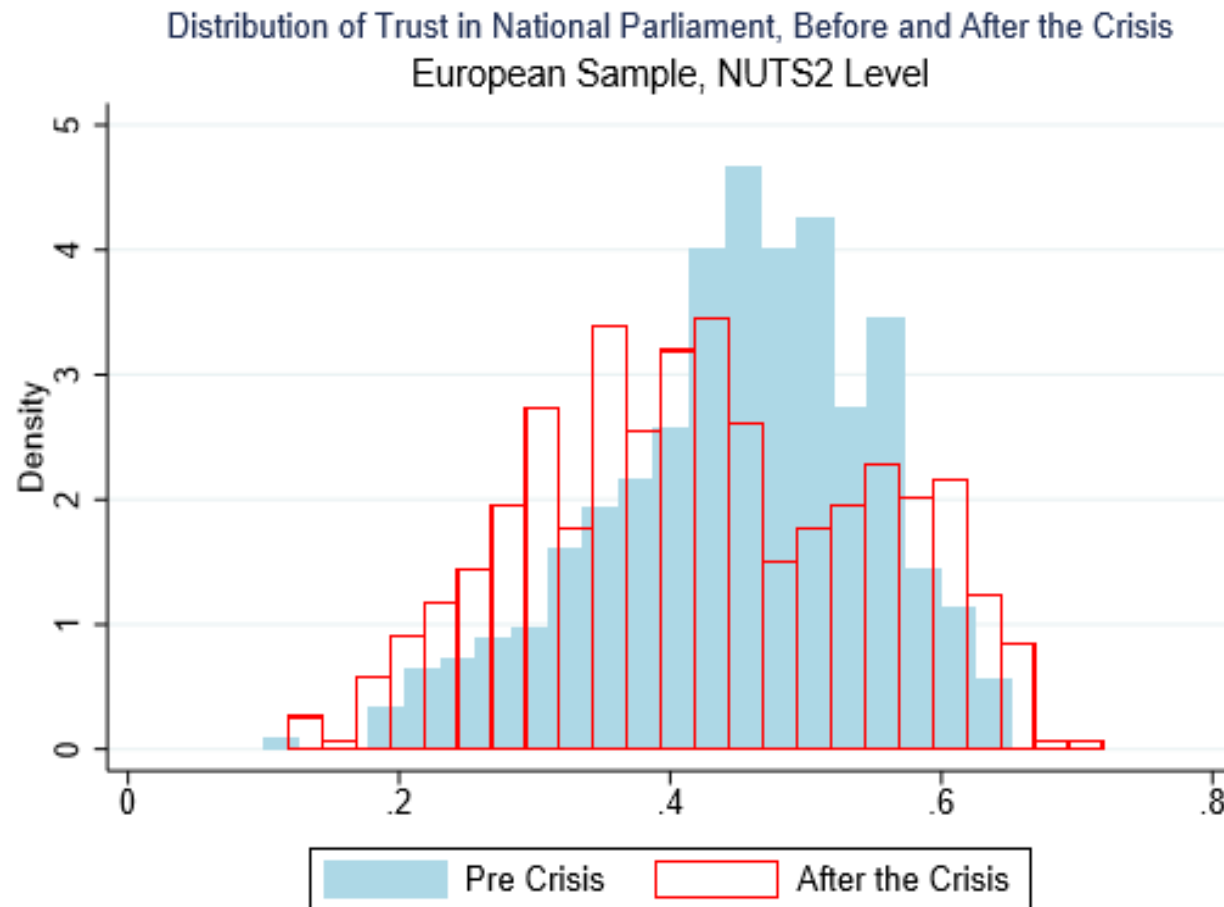
Trust in the Legal System. [Source. ESS]

Distribution of Trust in Legal System, Before and After the Crisis
European Sample, NUTS2 Level
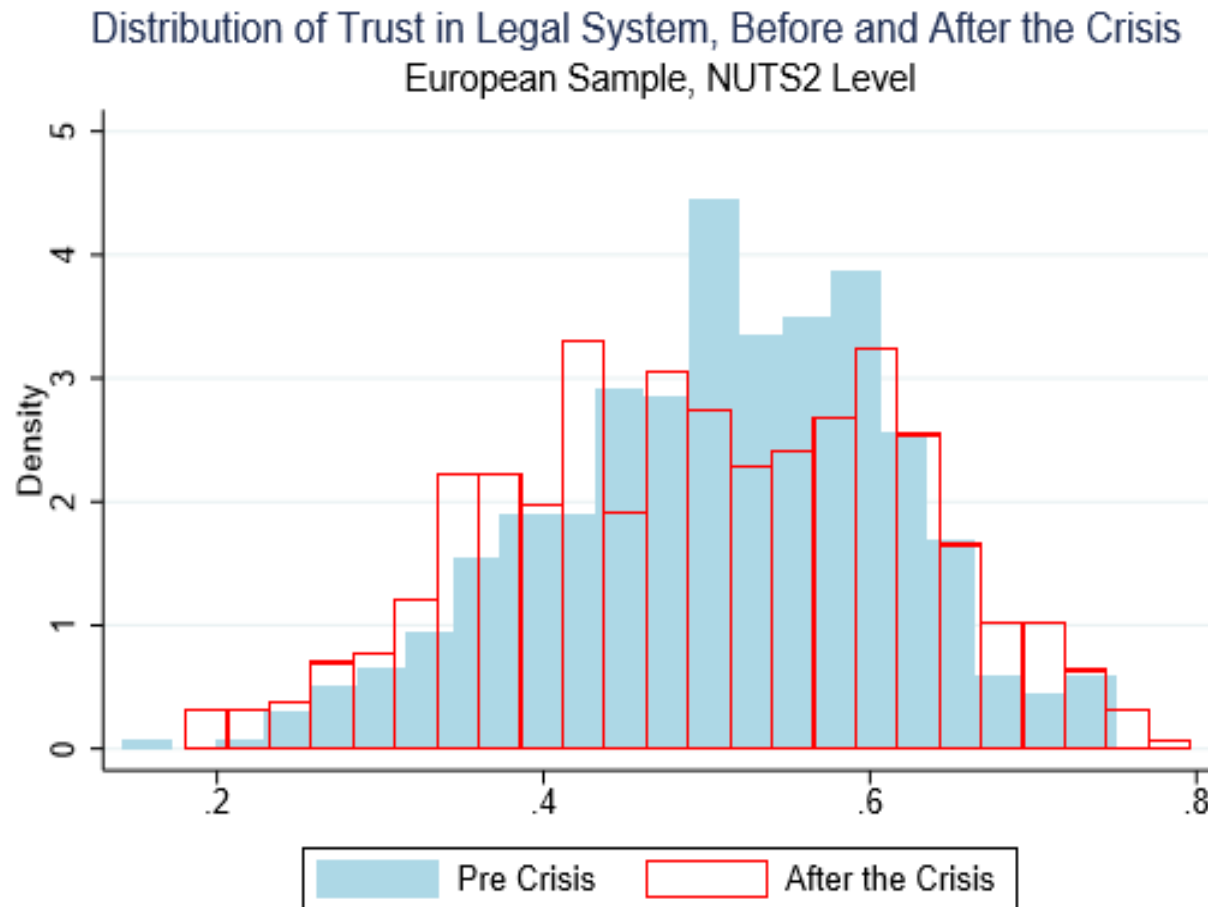
Trust towards the Police. [Source. ESS]
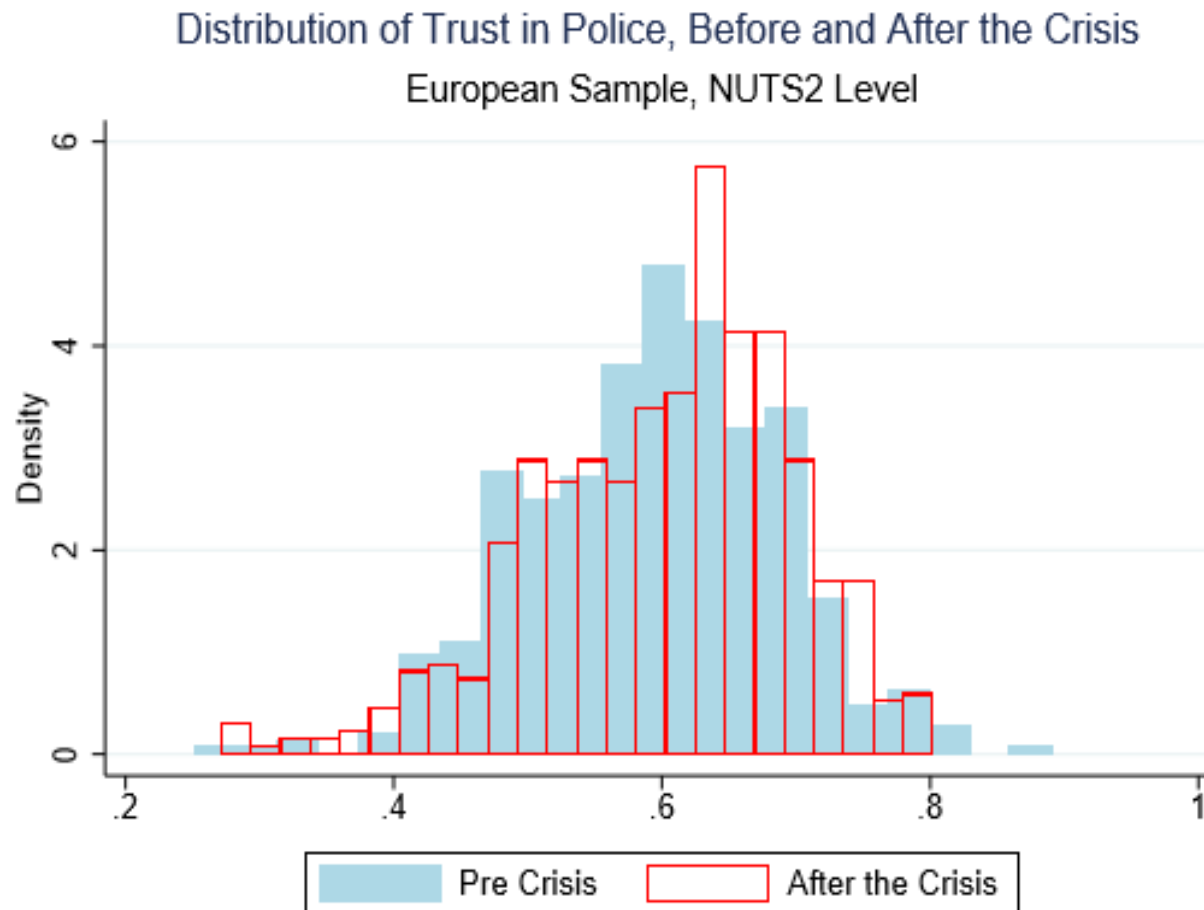
Distribution of Trust in Police, Before and After the Crisis
European Sample, NUTS2 Level

Structure

1. **Related Literature**

2. **Data** [voting, trust/beliefs, regional accounts]

3. **Descriptive Before-After Analysis** [voting, trust, beliefs]

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   — OLS estimates [graphical illustration]

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Unemployment and Voting

— **Panel specifications.** Region fixed-effects; country-group-specific time effects

— **Difference Specifications. Post-Pre Crisis.**

- Period 2. Post Crisis. 2009-2017

- Period 1. Pre Crisis. 2000-2008

— **Towards causation. 2SLS**

- First-stage relationship.

- Reduced-form relationship

- 2sls estimates

— **Further Evidence. BREXIT analysis ("out-of-sample" prediction)**

Unemployment and Anti-Establishment Voting

Change in Voting for Anti-establishment Parties and Change in Total Unemployment

Before and After the Crisis
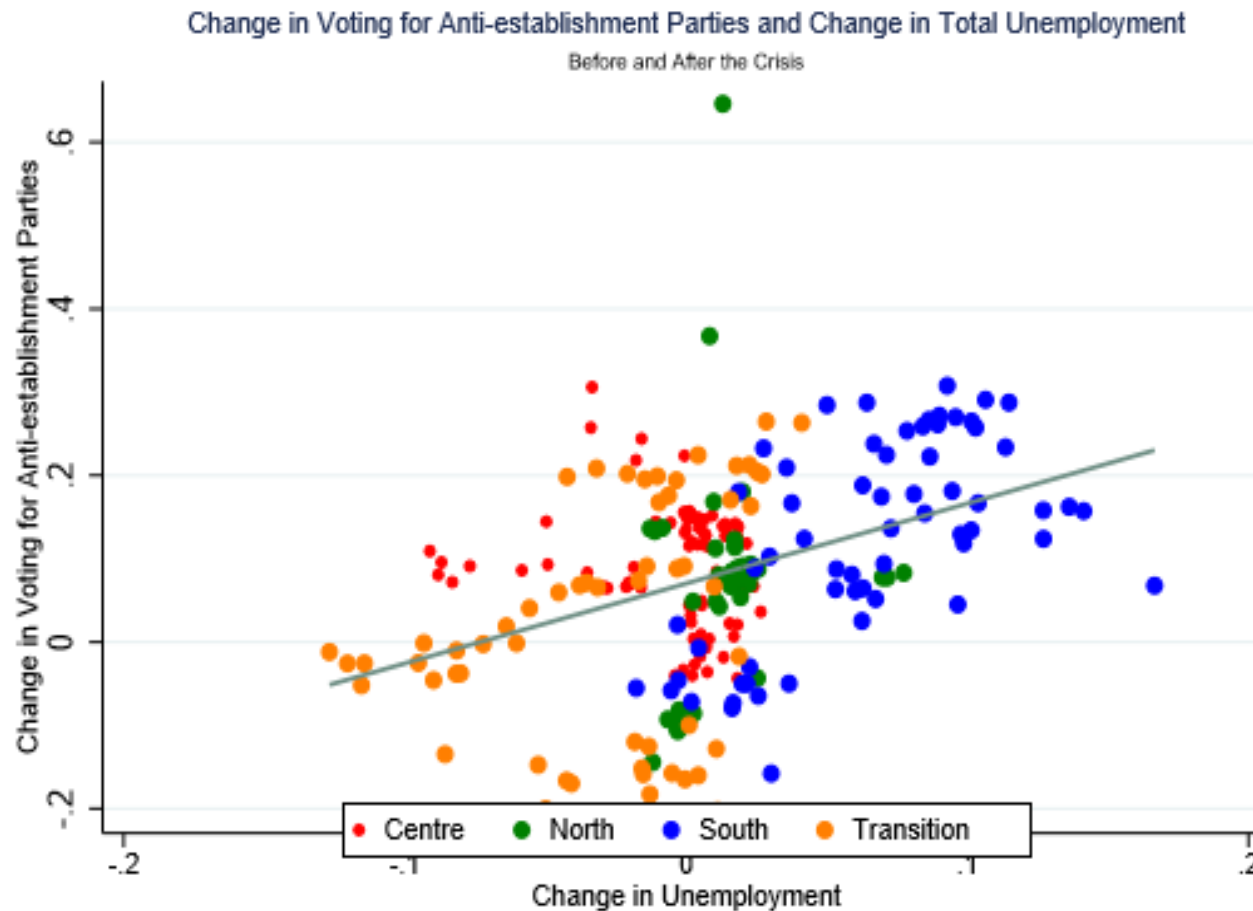
Source: National Election Sources and Eurostat

Unemployment and Voting for Radical-Left Parties

Change in Voting for Radical Left Parties and Change in Total Unemployment
Before and After the Crisis
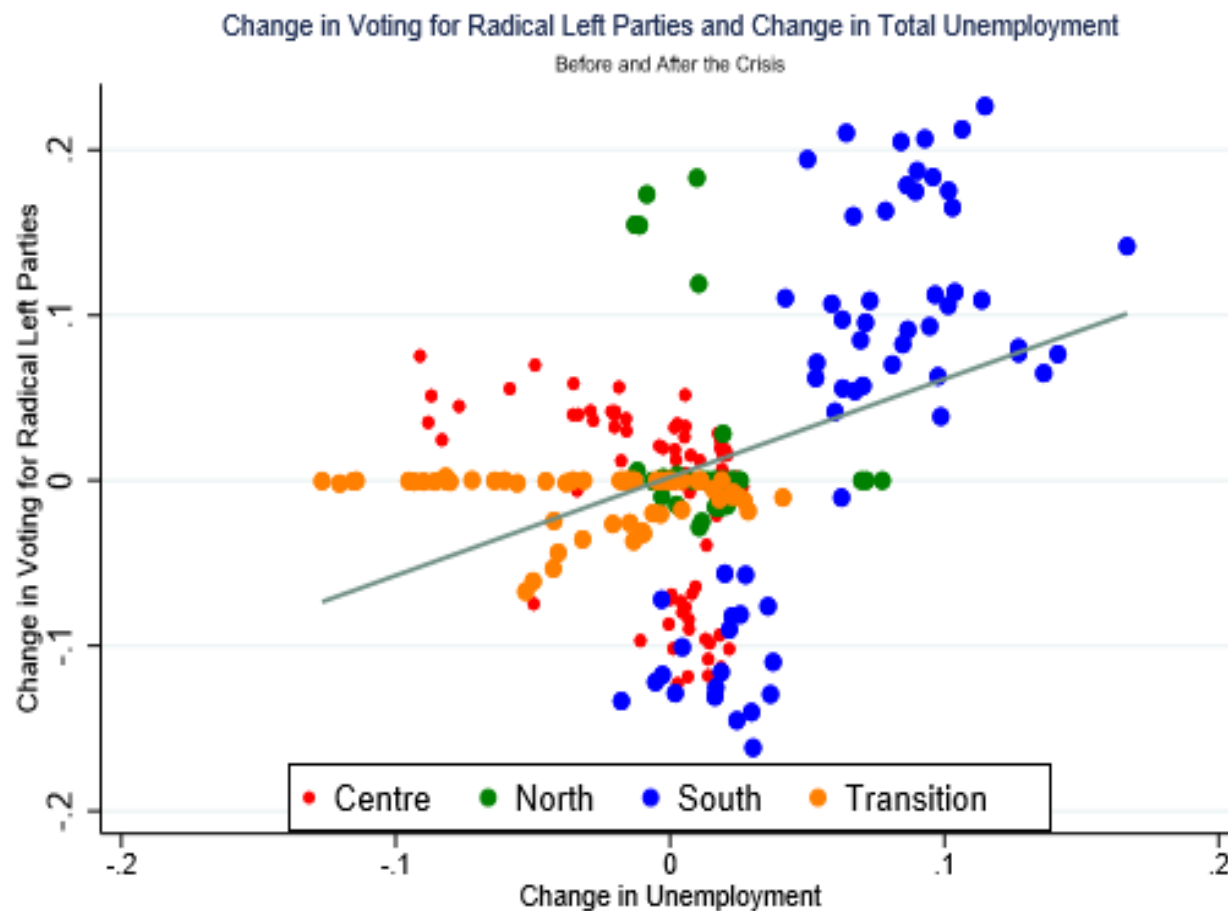
Unemployment and Voting for Far-Right Parties

Change in Voting for Far Right Parties and Change in Total Unemployment

Before and After the Crisis
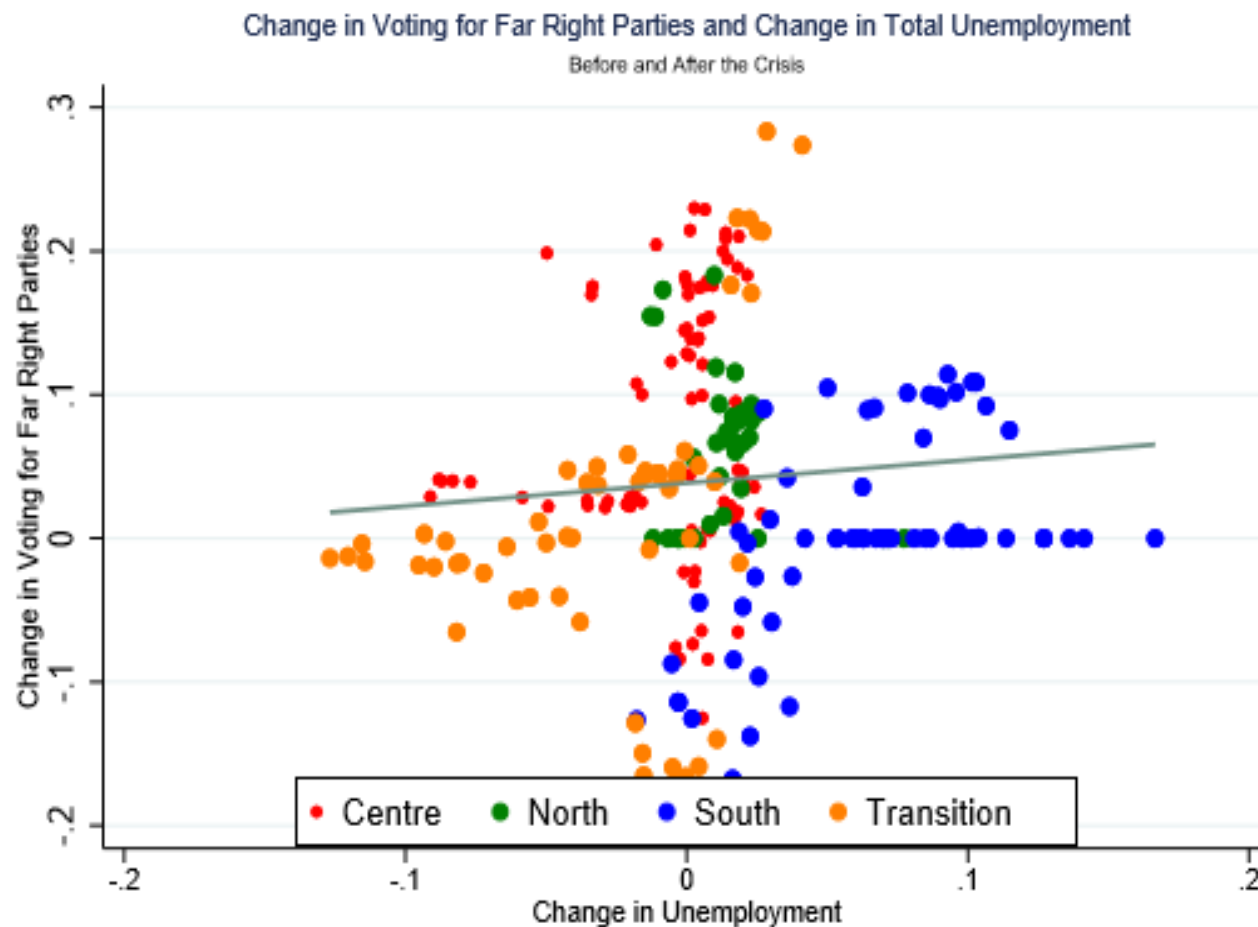
Source: National Election Sources and Eurostat

Unemployment and Voting for Populist Parties
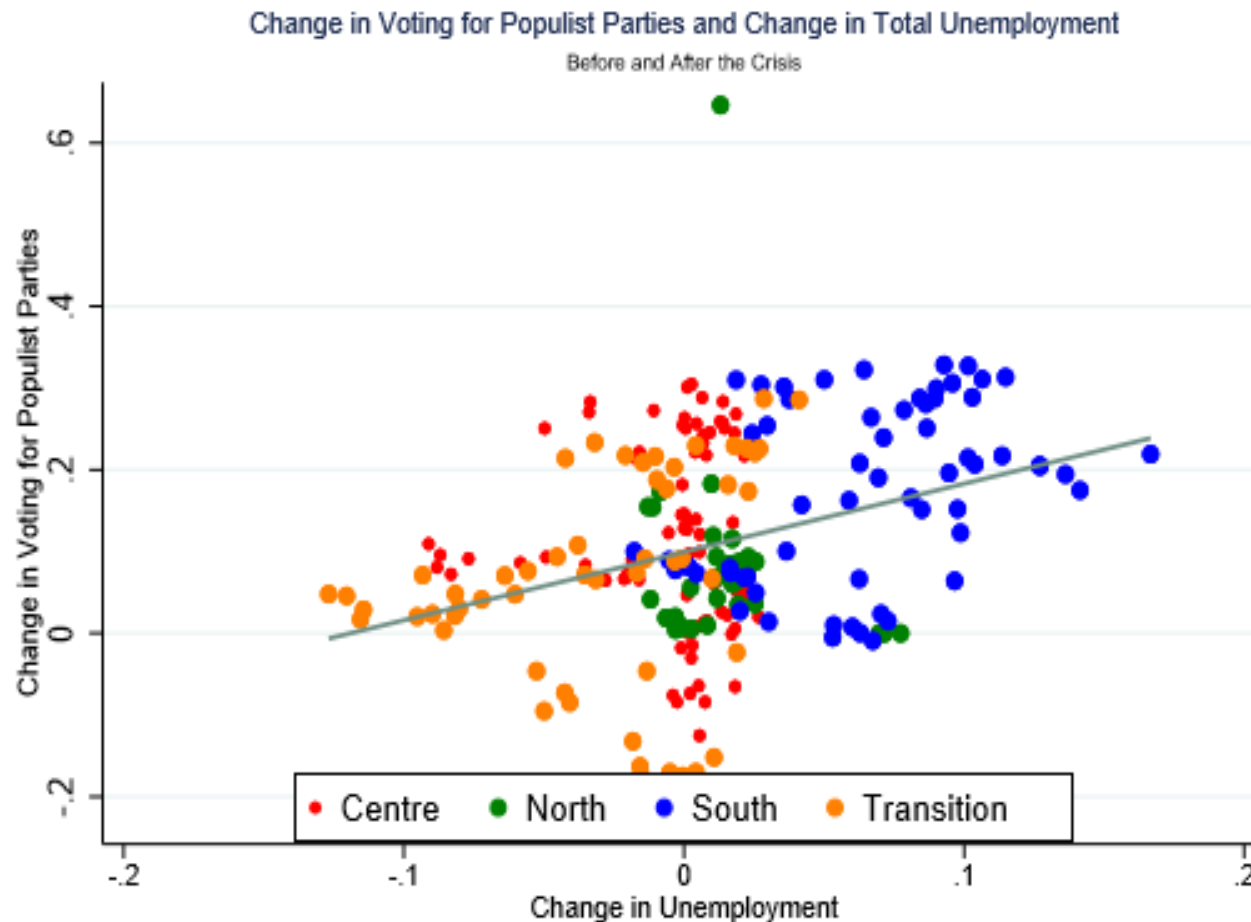
Change in Voting for Populist Parties and Change in Total Unemployment
Before and After the Crisis

Source: National Election Sources and Eurostat

Unemployment and Voting for Eurosceptic Parties

Change in Voting for Eurosceptic Parties and Change in Total Unemployment
Before and After the Crisis
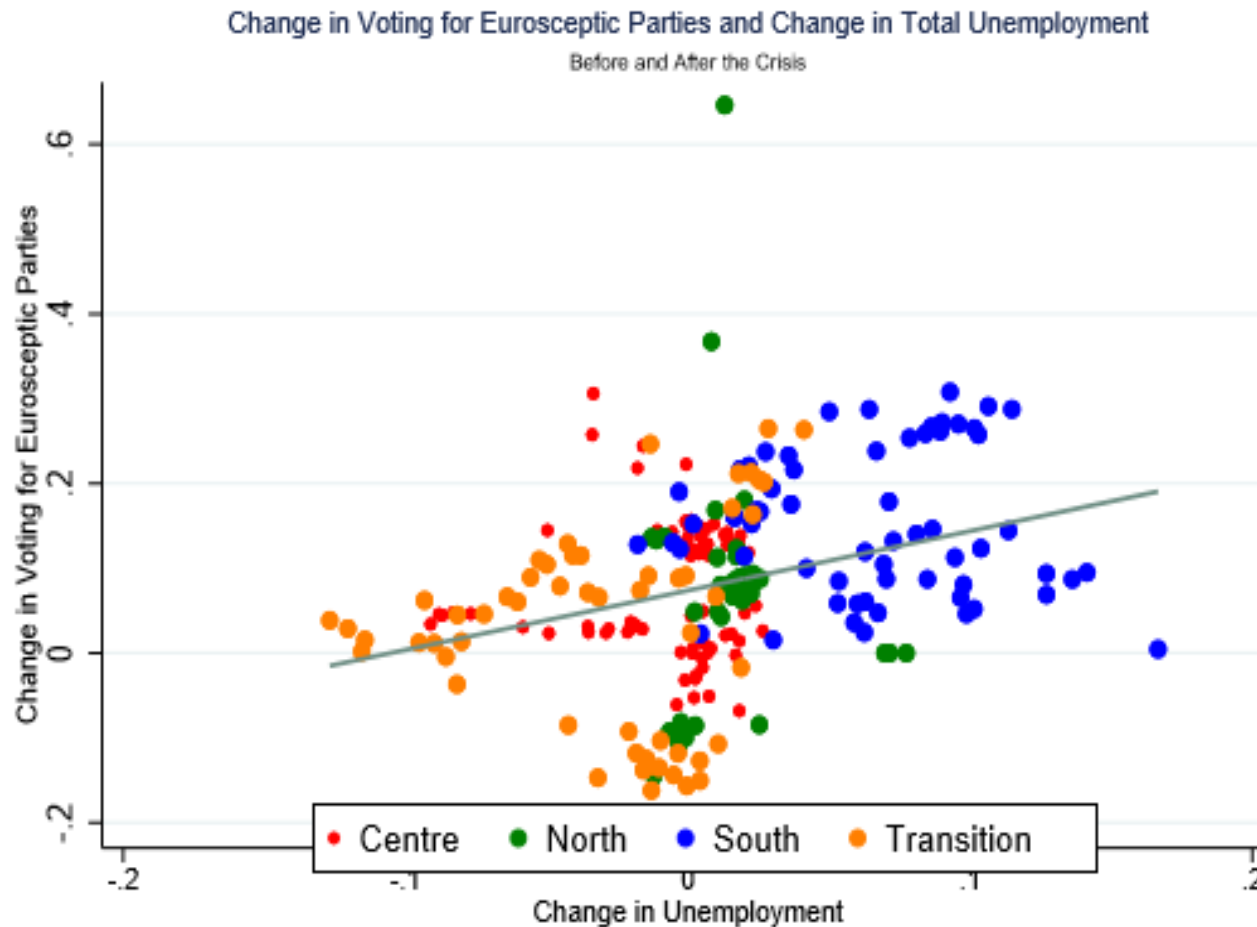
Source: National Election Sources and Eurostat

Panel OLS Specifications

	Anti-Establishment Parties (All Types)	Radical Left Parties	Far-Right Parties	Populist Parties	Anti-European Parties	Participation Rate
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A. General Period (4-year) Time Fixed-Effects						
Unemployment	1.1386***	0.8129**	0.2193	1.0960***	0.9438**	-0.4299**
	(0.3396)	(0.3434)	(0.2014)	(0.3532)	(0.3991)	(0.1675)
standardized "beta"	0.345	0.462	0.107	0.355	0.316	-0.198
adj. R square	0.319	0.157	0.136	0.386	0.397	0.239
within R-squre	0.322	0.161	0.140	0.388	0.399	0.242
Panel B. Country-Group Period (4-year) Time Fixed-Effects						
Unemployment	0.9666**	0.443	0.5183**	0.9256**	0.5535	-0.4926**
	(0.4419)	(0.3978)	(0.2188)	(0.4164)	(0.4493)	(0.1969)
standardized "beta"	0.293	0.252	0.253	0.300	0.185	-0.227
adj. R square	0.333	0.353	0.270	0.399	0.429	0.372
within R-square	0.342	0.361	0.279	0.407	0.436	0.381
Countries	23	23	23	23	23	22
Regions	225	225	225	225	225	220
Observations	1020	1020	1020	1020	1020	932

Difference (Post-Pre Crisis) Specifications

	Anti-Establishment Parties (All Types)	Radical Left Parties	Far-Right Parties	Populist Parties	Anti-European Parties	Participation Rate
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A. General Constant						
Difference Unemployment	1.1317***	0.7445**	0.1112	1.0135***	0.9280***	-0.3008*
	(0.2853)	(0.3282)	(0.2348)	(0.3311)	(0.2741)	(0.1732)
standardized "beta"	0.444	0.508	0.066	0.387	0.382	-0.314
adj. R square	0.194	0.255	0.000	0.146	0.142	0.095
Panel B. Country-Group Constants						
Difference Unemployment	1.3379**	0.5305	0.7223**	0.9725**	-0.034	-0.1579
	(0.5032)	(0.5126)	(0.3266)	(0.4373)	(0.3949)	(0.2605)
standardized "beta"	0.525	0.362	0.431	0.372	-0.014	-0.165
adj. R square	0.202	0.274	0.186	0.149	0.281	0.291
Countries	26	26	26	26	26	25
Regions	244	244	244	244	244	230

Correlation ~ Causation. Issues

— **Reverse causation** [unlikely, but cannot be ruled out]

— **Measurement error** [present esp. with regional output; different types of employment, classical error-in-variables]

— **Omitted variables**

- Time-invariant [region fixed-effects]

- General time-varying [year/period, groupXyear fixed-effects]

- Region time-varying [control for education, demographics, urbanization]

Identification Idea

— **Isolate "global", unrelated to European regions' cycle, component of economic downturn during the crisis**

— **Industrial composition, in particular role of construction**

- Considerable role of construction on the crisis in many countries [e.g., United States, United Kingdom, Spain, Ireland, Greece, Portugal]

- Construction share is quite small; in 2007, mean/median 0.07, range {0.0235-15.25}

  - Greece 6%-13%

  - Germany 2.5%-7.2%

  - Belgium 2.6%-7.5%

Identifying Assumptions

1. **"First-stage" fit.** Regional unemployment is related to share of construction (before the crisis), conditional also on other sectoral shares (and other controls)

2. **Exclusion Restriction.** Share of construction, before the crisis, affects voting (and trust/beliefs) only (mostly) via affecting the intensity of the crisis, conditional on observables

   • Reasonable; Other channels (??)

   • Control for potentially-relevant factors; education, demographics, and other regional factors

First-Stage. Construction Share before the Crisis and Changes in Unemployment (2015-2008, No Controls)
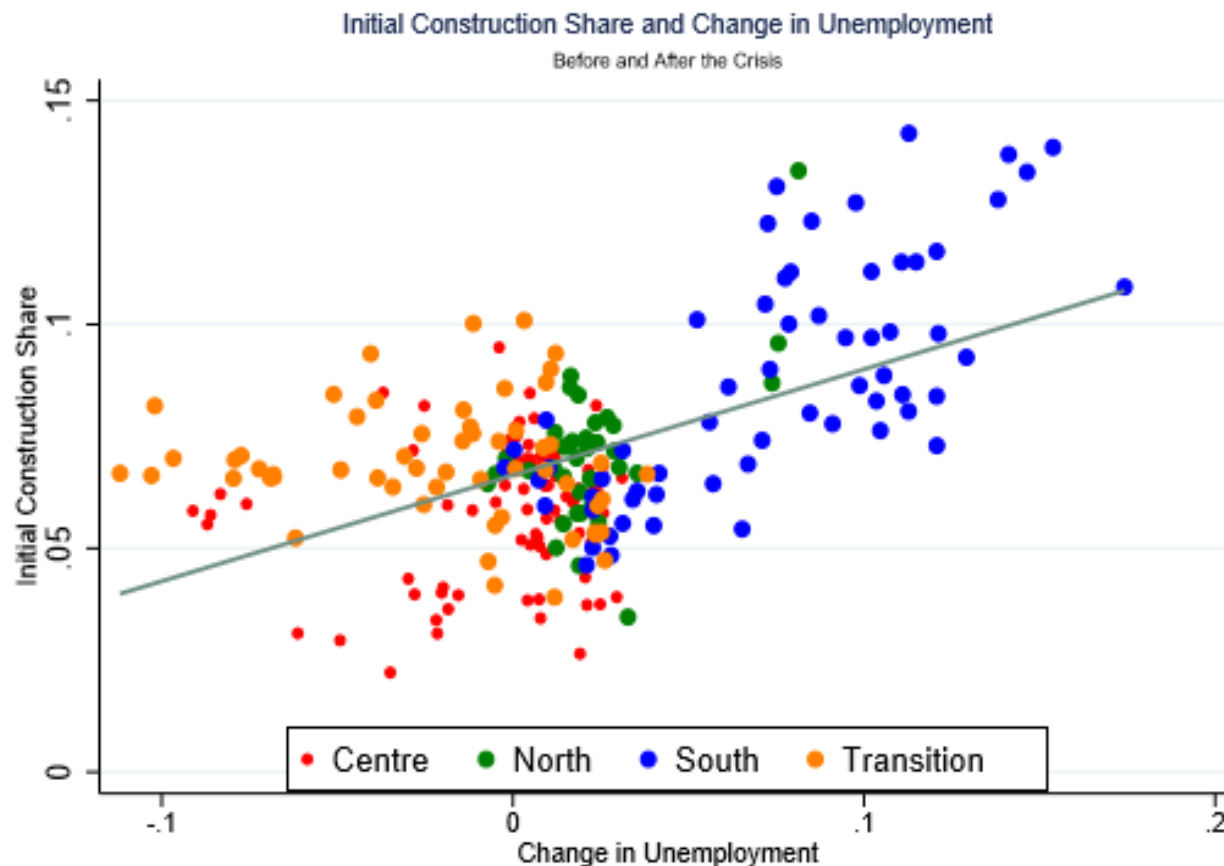
First-Stage, cont. Construction Share before the Crisis and Changes in Unemployment, cond. for sectoral shares

2SLS Panel Specifications

	Anti-Establishment Parties (All Types)	Radical Left Parties	Far-Right Parties	Populist Parties	Anti-European Parties	Participation Rate
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A. General Period Fixed-Effects. No Controls						
Unemployment	2.1985***	1.0018***	0.6188	2.0077***	1.6536***	-0.5625
	(0.5384)	(0.2459)	(0.5199)	(0.5291)	(0.6306)	(0.5110)
Kleibergen-Paap F-Stat	27.12	27.12	27.12	27.12	27.12	20.53
Other Industrial Shares	No	No	No	No	No	No
Panel B. General Period Fixed-Effects. Industrial Shares Controls						
Unemployment	2.7912***	1.2676***	0.5672	2.3517***	1.7693**	-0.5625
	(0.8951)	(0.4140)	(0.5820)	(0.7047)	(0.8089)	(0.5110)
Kleibergen-Paap F-Stat	20.85	20.85	20.85	20.85	20.85	20.53
Other Industrial Shares	Yes	Yes	Yes	Yes	Yes	Yes

2SLS. Pre-Crisis Construction, Post-Pre Crisis Changes in Unemployment and Changes in Extremist Voting

	Anti-Establishment Parties (All Types)	Radical Left Parties	Far-Right Parties	Populist Parties	Anti-European Parties	Participation Rate
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A. General Constant						
Difference Unemployment	1.1964***	1.1926***	-0.3902	1.0674**	0.6537	-0.2551
	(0.3797)	(0.3976)	(0.3784)	(0.5135)	(0.4388)	(0.2370)
Cragg Donald F-Stat	92.01	92.01	92.01	92.01	92.01	87.99
Kleibergen-Paap F-Stat	16.28	16.28	16.28	16.28	16.28	17.04
Panel B. Country-Group Constants						
Difference Unemployment	2.0594**	1.4157*	0.2894	1.5304	-0.7899	0.1619
	(0.8502)	(0.7995)	(0.8109)	(0.9949)	(0.7525)	(0.4088)
Cragg Donald F-Stat	35.374	35.374	35.374	35.374	35.374	34.018
Kleibergen-Paap F-Stat	7.86	7.86	7.86	7.86	7.86	8.12
Countries	226	226	226	226	226	212
Regions	23	23	23	23	23	22

BREXIT Analysis. Unemployment (2014) and Vote to Leave the EU

Vote to Exit the EU and Total Unemployment in 2014
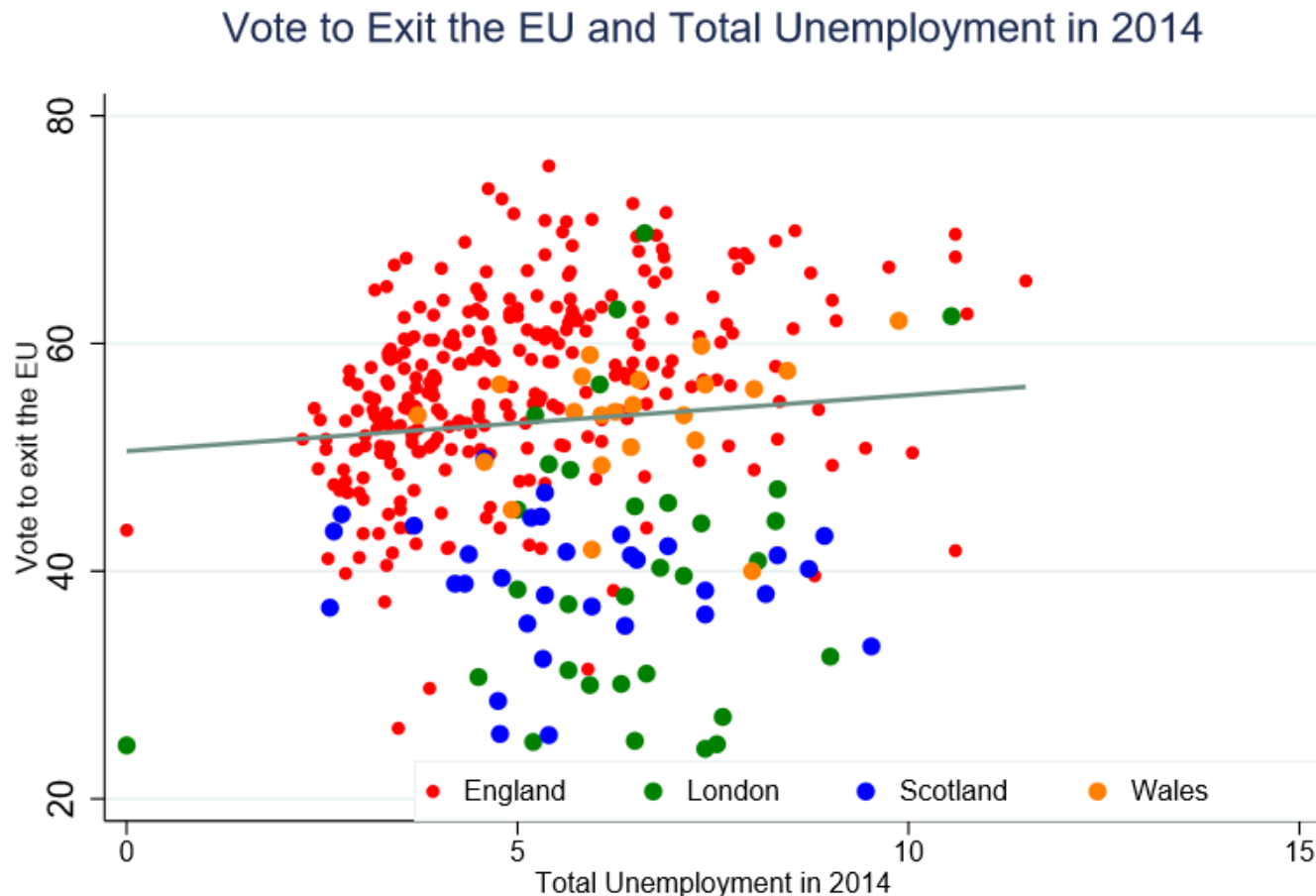
Source: ONS

BREXIT Analysis. Changes in Unemployment (2007-2014) and Vote to Leave the EU

Vote to Exit the EU and Change in Unemployment before and after the Crisis

Source: ONS
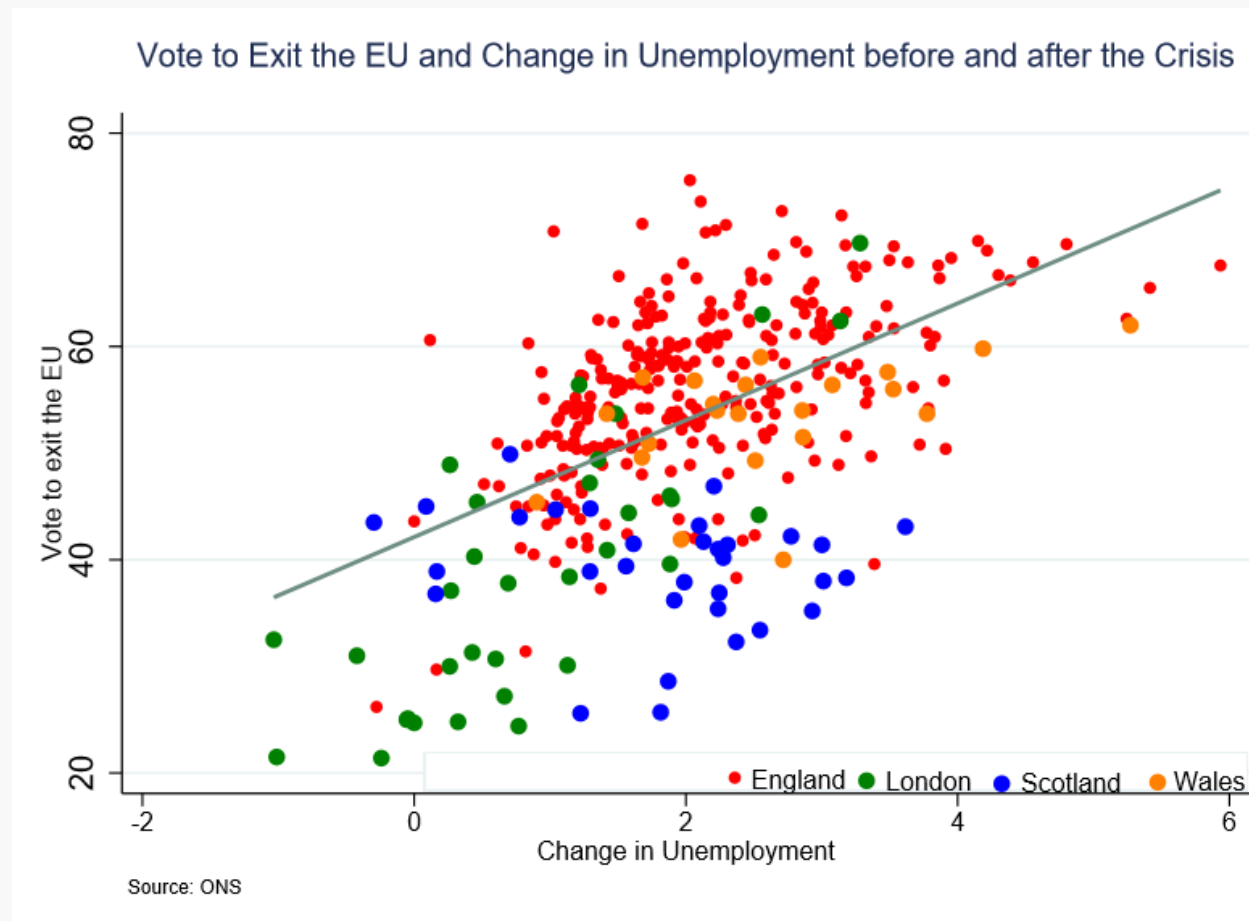
Unemployment and BREXIT

Dependent Variable	Leave the EU Votte				Change in Unemploymennt		Leave the EU Vote					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Unemployment [2014]	0.50*	1.35***										
	(0.30)	(0.23)										
Changes in Unemployment [2007-2014]			5.48***	4.31***						15.48***	17.35***	12.00***
			(0.45)	(0.43)						(2.04)	(2.76)	(1.44)
Pre-Crisis Construction Share [2005-2008]					0.16***	0.12***	2.44***	2.16***	1.90***			
					(0.03)	(0.03)	(0.28)	(0.24)	(0.22)			
Controls	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
adj. R square	0.01	0.43	0.29	0.53	0.08	0.17	0.19	0.52	0.56	-0.69	-0.93	0.41
Regions	379	379	379	379	370	370	370	370	370	370	370	370
First-Stage F-statistic										32.5	23.3	52.0

Structure

1. **Related Literature**

2. **Data** [voting, trust/beliefs, regional accounts]

3. **Descriptive Before-After Analysis** [voting, trust, beliefs]

4. **Unemployment and Voting**

    — OLS estimates [graphical illustration]

    — 2sls estimates [first-stage, "reduced-forms", 2sls]

5. **Unemployment and the European Trust Crisis**

    — OLS estimates [graphical illustrations]

    — 2sls estimates [first-stage, "reduced-forms", 2sls]

6. **Conclusion. Next Steps**

Unemployment and the European Trust Crisis

— **Structure**

- Graphical analysis. Before-After Crisis
- OLS difference-in-difference specifications. All regions; all years
- Difference specifications. Before-after Crisis
- 2sls difference specifications. Before-after Crisis

— **Aspects**

- Trust in the EU [comparison with trust in the UN]
- Trust in National Political Parties
- Trust in Courts [comparison with trust in Police]
- General Trust
- Political Beliefs
- Immigrants' Economic and Cultural Role

Unemployment and General Trust
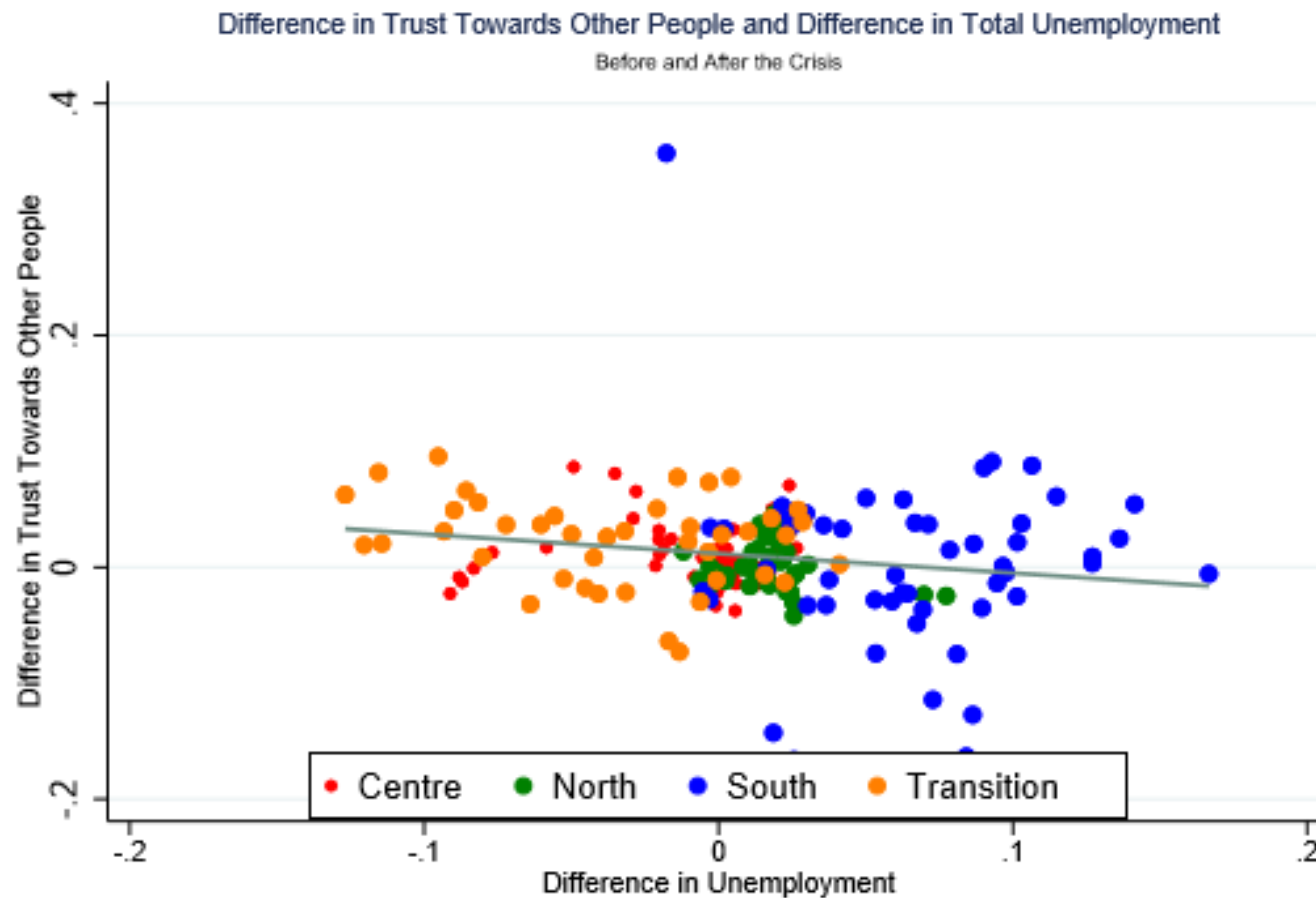
Difference in Trust Towards Other People and Difference in Total Unemployment
Before and After the Crisis

Source: European Social Survey and Eurostat

Unemployment and Trust in the European Parliament

Difference in Trust in European Parliament and Difference in Total Unemployment
Before and After the Crisis

Source: European Social Survey and Eurostat

52
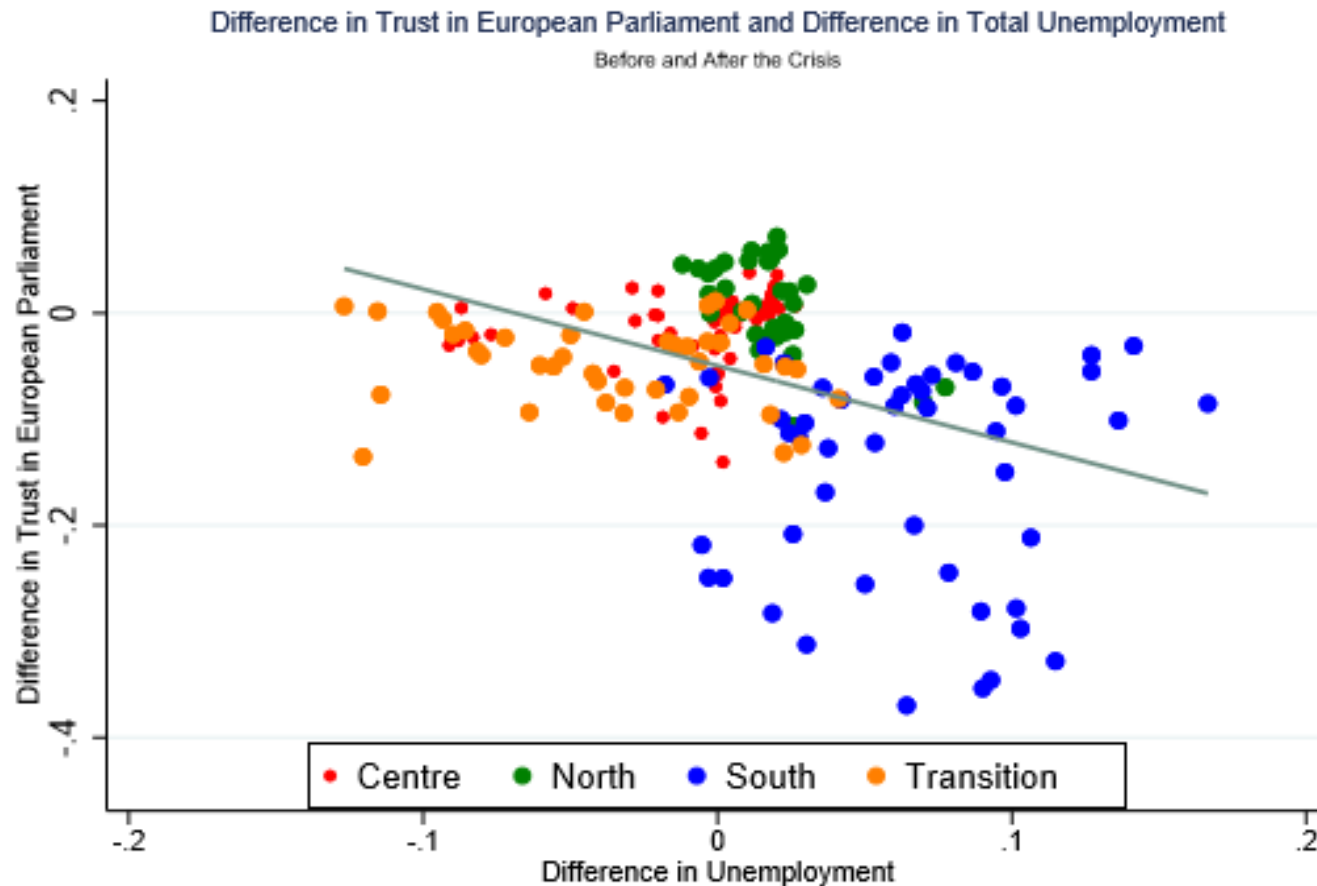
Unemployment and Trust in National Parliament

Difference in Trust in the National Parliament and Difference in Total Unemployment
Before and After the Crisis

Source: European Social Survey and Eurostat
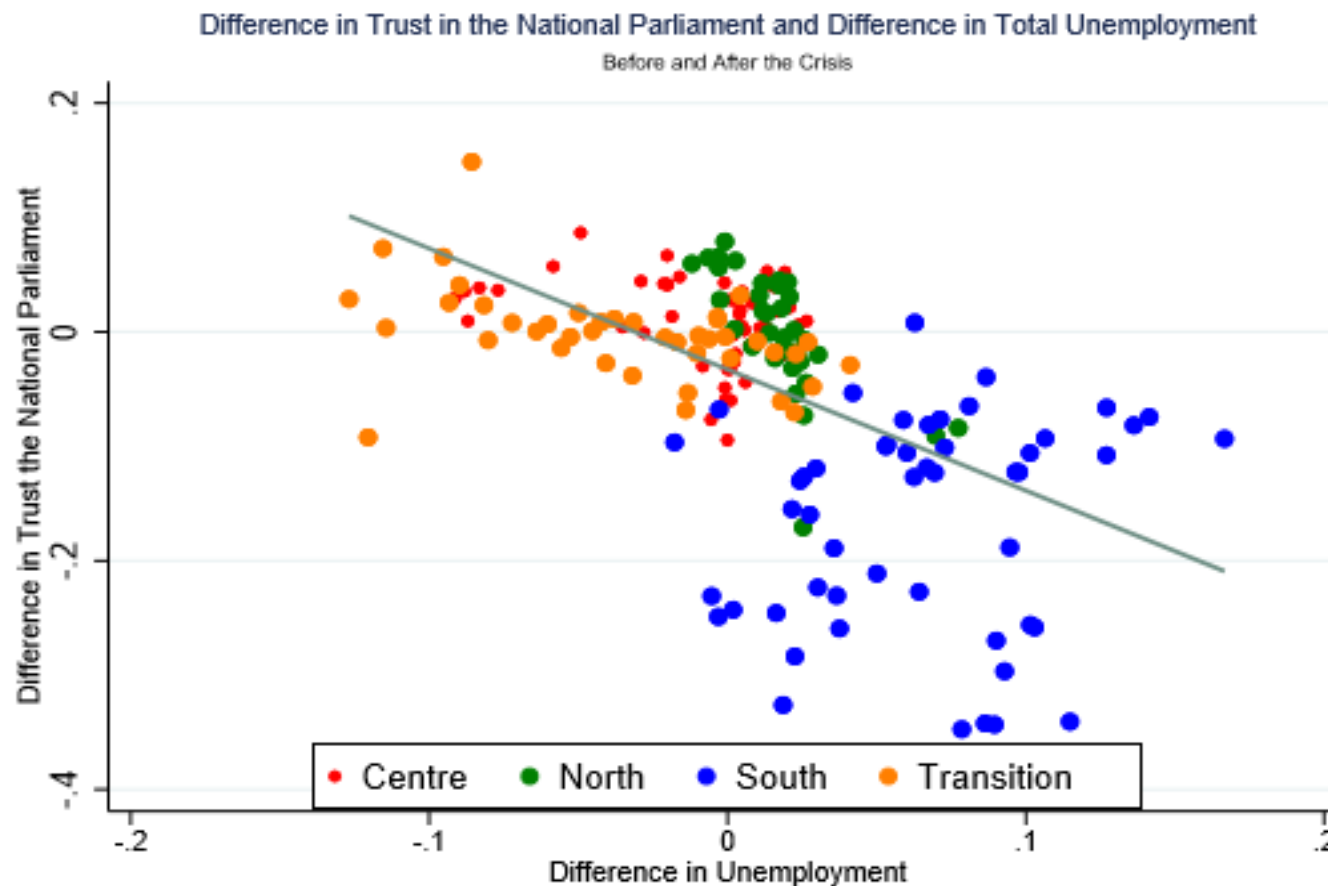
Unemployment and Trust in Courts
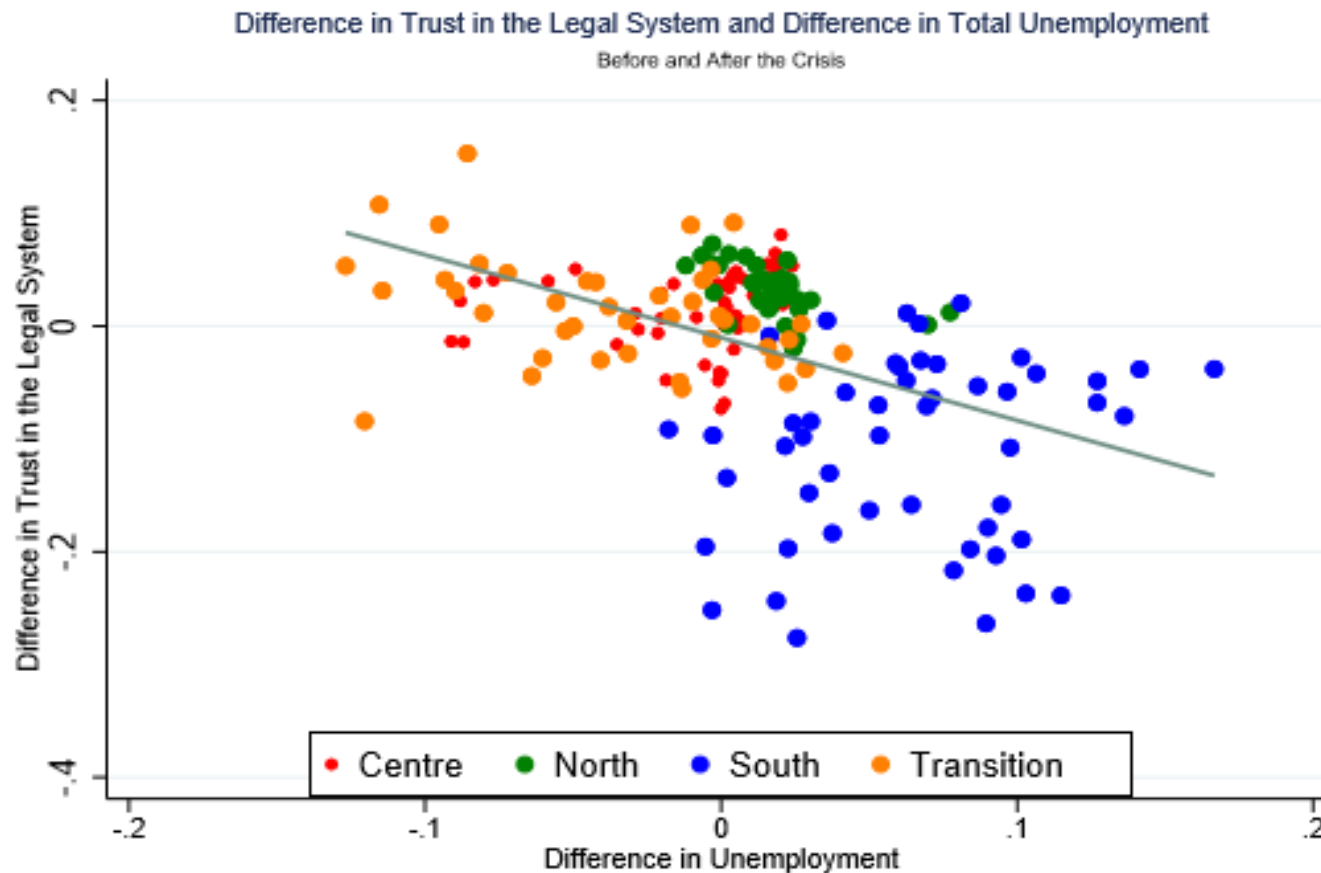
Difference in Trust in the Legal System and Difference in Total Unemployment
Before and After the Crisis

Source: European Social Survey and Eurostat

Unemployment and Trust in the Police

Difference in Trust in the Police and Difference in Total Unemployment
Before and After the Crisis
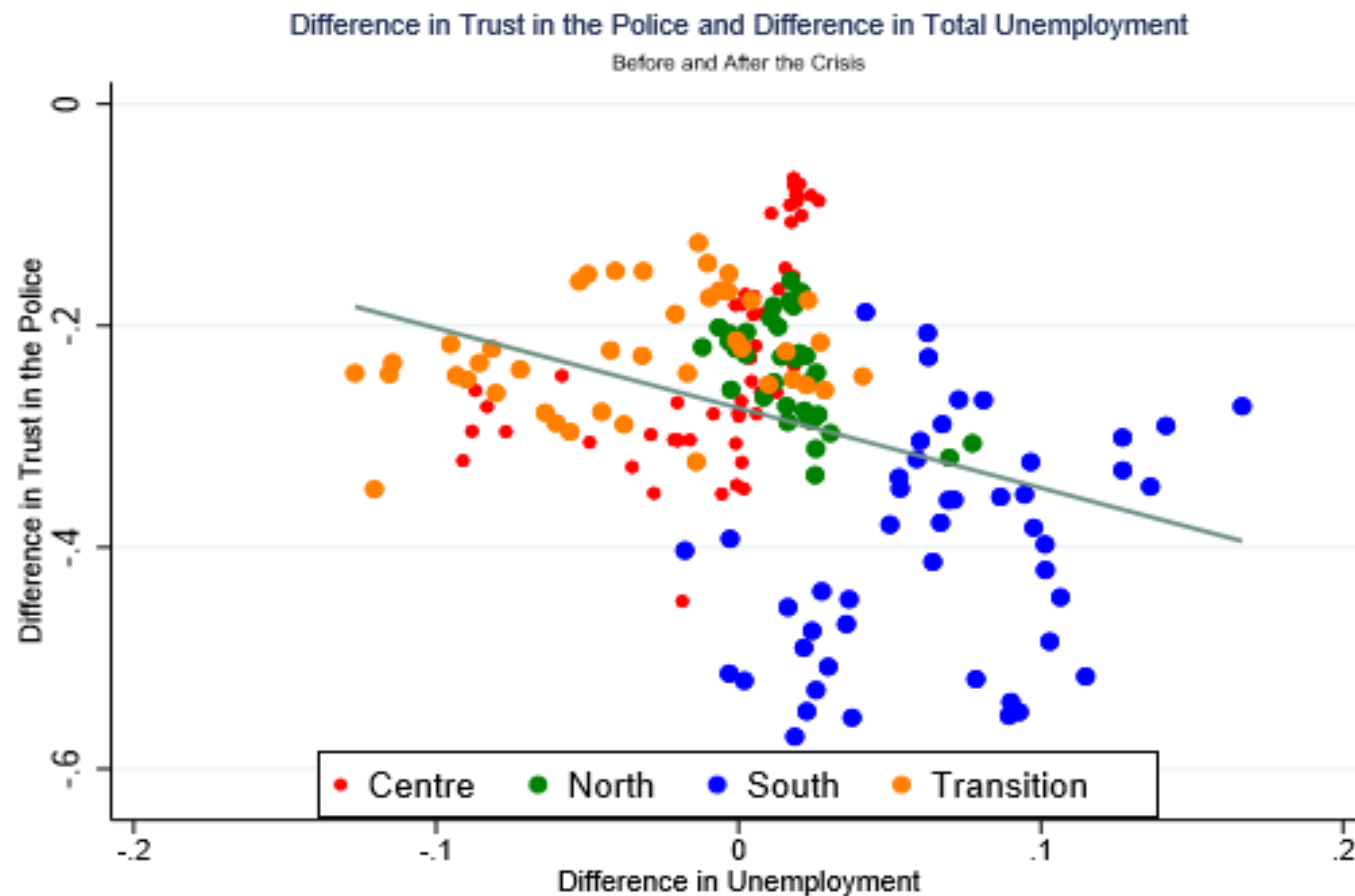
Source: European Social Survey and Eurostat

Panel Estimates. Unemployment Trust and Political Beliefs

	General Trust	People Fair	People Helpful	Trust Parliament	Trust Politicians	Trust Legal System	Trust Police	Trust Eur. Parliament	Trust UN	Satisf. Democ	Left-Right Orientat.	Feel Close to a Party	Further Unification
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)

Panel A. General ESS Round (Time) Fixed-Effects

	General Trust	People Fair	People Helpful	Trust Parliament	Trust Politicians	Trust Legal System	Trust Police	Trust Eur. Parliament	Trust UN	Satisf. Democ	Left-Right Orientat.	Feel Close to a Party	Further Unification
Unemployment	-0.1867**	-0.0941*	-0.1629***	-0.6845***	-0.5903***	-0.4431***	-0.0393	-0.3337***	-0.0233	-0.9532***	-0.0654	-0.3975*	0.1058
	(0.0669)	(0.0567)	(0.0570)	(0.1504)	(0.1819)	(0.0916)	(0.0638)	(0.1137)	(0.0846)	(0.1466)	(0.0838)	(0.1992)	(0.1983)
stand. "beta"	-0.107	-0.057	-0.091	-0.324	-0.293	-0.208	-0.023	-0.248	-0.016	-0.450	-0.065	-0.153	0.067
adj. R square	0.851	0.855	0.849	0.759	0.807	0.807	0.803	0.449	0.656	0.744	0.652	0.655	0.689
within R-squre	0.0806	0.0297	0.1001	0.2426	0.2427	0.1068	0.0684	0.233	0.1088	0.2636	0.0262	0.0497	0.1549

Panel B. Country-Group ESS Round (Time) Fixed-Effects

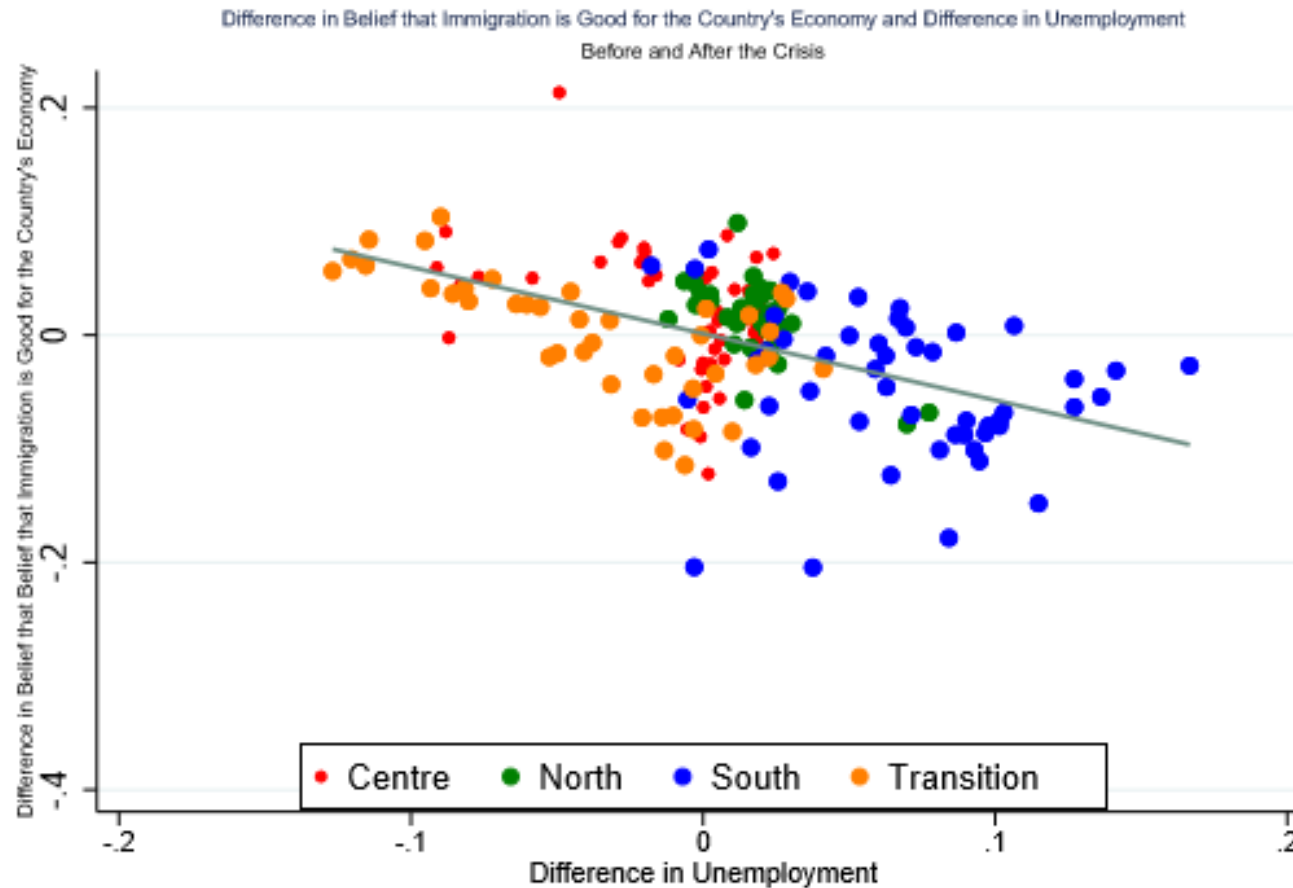|	General Trust	People Fair	People Helpful	Trust Parliament	Trust Politicians	Trust Legal System	Trust Police	Trust Eur. Parliament	Trust UN	Satisf. Democ	Left-Right Orientat.	Feel Close to a Party	Further Unification
Unemployment	-0.1142*	-0.1212*	-0.0346	-0.3027**	-0.3025***	-0.1087	0.1229	-0.0645	0.0516	-0.5500***	0.1210	-0.4638*	-0.1632
	(0.0668)	(0.0710)	(0.0728)	(0.1395)	(0.0788)	(0.1411)	(0.1324)	(0.1591)	(0.1277)	(0.1371)	(0.0728)	(0.2725)	(0.1288)
stand. "beta"	-0.065	-0.074	-0.019	-0.150	-0.143	-0.051	0.165	-0.05	0.04	-0.26	0.12	-0.18	-0.10
adj. R square	0.86	0.86	0.85	0.83	0.86	0.85	0.82	0.59	0.69	0.81	0.68	0.71	0.742
within R-square	0.123	0.0513	0.1431	0.4611	0.4693	0.3103	0.0712	0.4392	0.2198	0.4642	0.1179	0.2281	0.3188

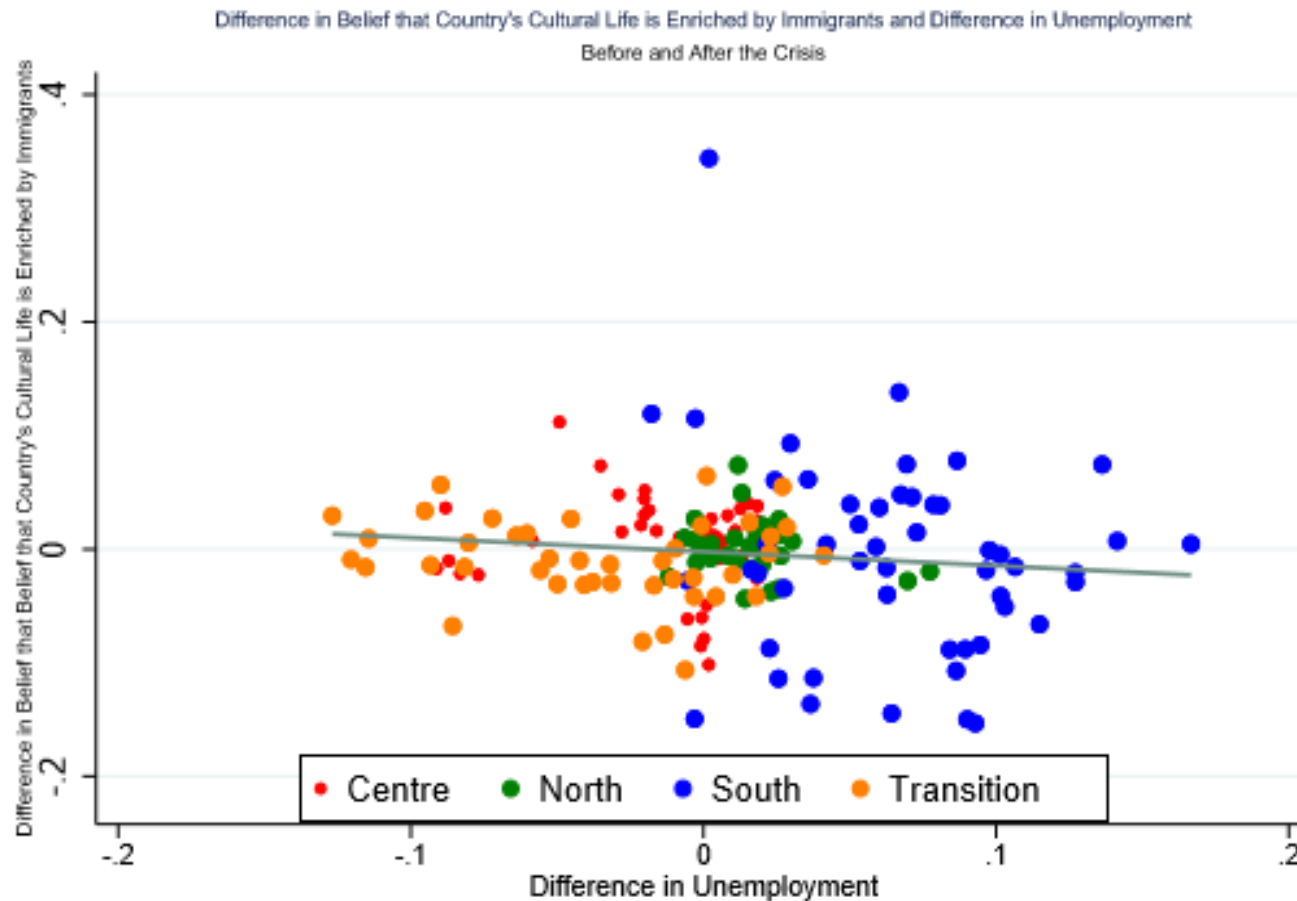# Post-Pre Crisis Difference Specifications. Unemployment Trust and Political Beliefs

	General Trust	People Fair	People Helpful	Trust Parliament	Trust Politicians	Trust Legal System	Trust Police	Trust Eur. Parliament	Trust UN	Satisf. Democ	Left-Right Orientat.	Feel Close to a Party	Further Unification
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Panel A. 2012-2008													
Unemployment	-0.0537	0.0251	-0.0765	-0.6484*	-0.7317***	-0.3795**	-0.122	-0.4369**	0.023	-0.7502*	0.1174	0.22	-0.1812
	(0.1442)	(0.1171)	(0.2018)	(0.3180)	(0.2427)	(0.1765)	(0.1639)	(0.1548)	(0.1287)	(0.4289)	(0.1947)	(0.4698)	(0.4073)
adj. R square	0.011	0.002	0.028	0.459	0.463	0.270	0.111	0.293	0.060	0.526	0.070	0.094	0.217
Regions	142	142	142	142	142	142	142	142	142	142	142	142	142
Countries	17	17	17	17	17	17	17	17	17	17	17	17	17
Panel B. 2014-2008													
Unemployment	-0.2740**	-0.1453	-0.4597**	-0.9481***	-0.9270***	-0.1973	0.0114	-0.2814*	0.271	-1.0191***	0.2556***	-0.5944	-0.2234
	(0.0993)	(0.1465)	(0.1622)	(0.2491)	(0.1944)	(0.1902)	(0.2417)	(0.1575)	(0.1744)	(0.2170)	(0.0332)	(0.5690)	(0.3150)
adj. R square	0.11	0.045	0.128	0.432	0.376	0.141	0.051	0.25	0.025	0.53	0.081	0.074	0.161
Regions	132	132	132	132	132	132	132	132	132	132	132	132	132
Countries	15	15	15	15	15	15	15	15	15	15	15	15	15

Unemployment and Role of Immigration in the Economy

Difference in Belief that Immigration is Good for the Country's Economy and Difference in Unemployment Before and After the Crisis

Source: European Social Survey and Eurostat

Unemployment and Role of Immigration in Cultural Life

Difference in Belief that Country's Cultural Life is Enriched by Immigrants and Difference in Unemployment Before and After the Crisis

Source: European Social Survey and Eurostat

Unemployment and Views on Immigration

	Allow Immigrants			Immigrants' Role		
	Majority Race/Ethnic Group	Different Race/Ethnic Group	Poor Non-EU Countries	Economy	Cultural Life	Country Better/Worse
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A. General ESS Round (Time) Fixed-Effects						
Unemployment	-0.1627	-0.2562	-0.2714	-0.5554***	-0.0441	-0.1767*
	(0.1945)	(0.1661)	(0.1953)	(0.0800)	(0.0770)	(0.0907)
standardized "beta"	-0.088	-0.123	-0.127	-0.390	-0.026	-0.116
adj. R square	0.047	0.081	0.048	0.195	0.049	0.075
within R-squre	0.054	0.088	0.054	0.201	0.056	0.081
Panel B. Country-Group ESS Round (Time) Fixed-Effects						
Unemployment	-0.3547*	-0.3973**	-0.4582**	-0.5226***	-0.0656	-0.1075
	(0.1913)	(0.1858)	(0.1928)	(0.1416)	(0.0773)	(0.1402)
standardized "beta"	-0.193	-0.191	-0.214	-0.367	-0.039	-0.071
adj. R square	0.178	0.199	0.133	0.280	0.082	0.130
within R-square	0.198	0.218	0.153	0.297	0.104	0.151
Countries	22	22	22	22	22	22
Regions	184	184	184	184	184	184
Observations	1053	1053	1053	1053	1053	1053

"Reduced-Form" Estimates. Construction Share before the Crisis and Changes in Trust in European Parliament

Difference in Trust in the European Parliament and Construction Share before the Crisis
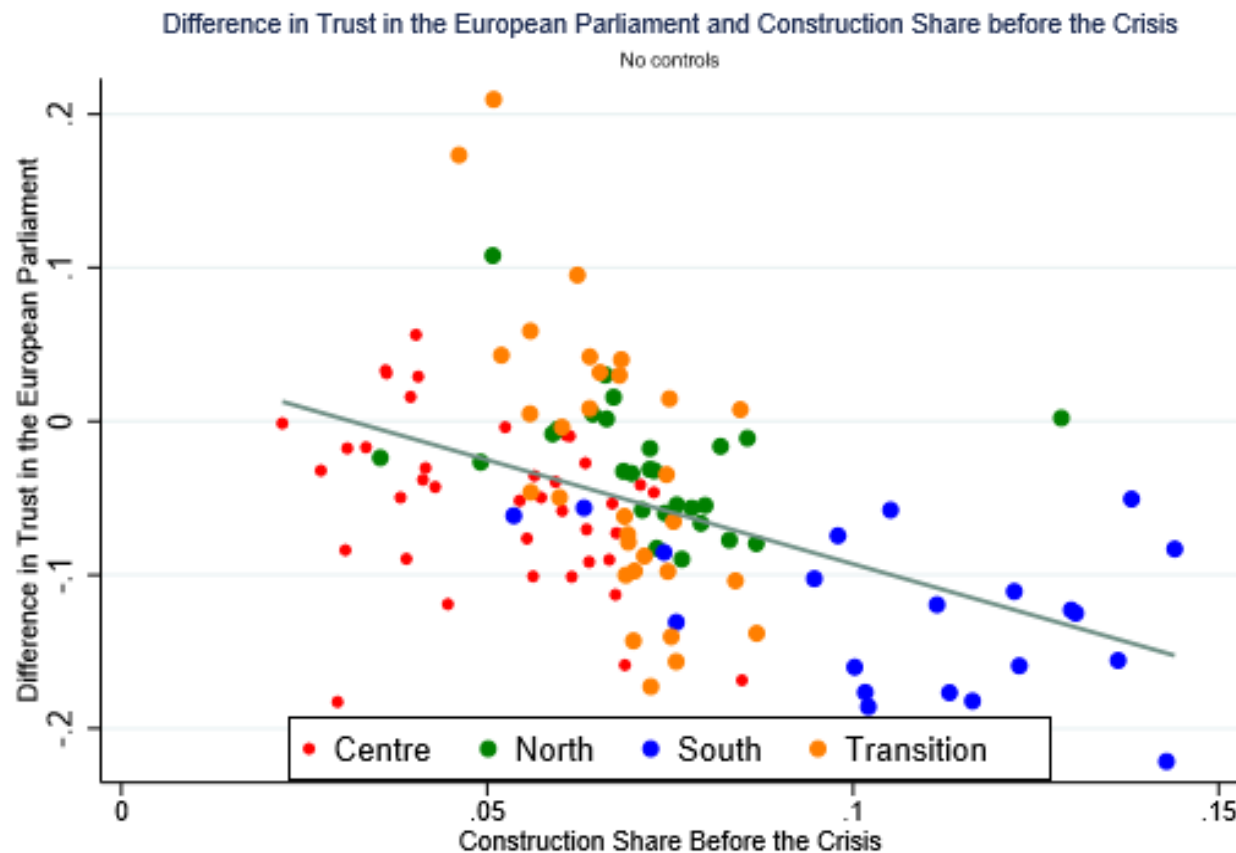
"Reduced-Form" Estimates. Construction Share before the Crisis and Changes in Trust in Nat. Parliament

Difference in Trust in the National Parliament and Construction Share before the Crisis

No controls

Source: ESS & Eurostat
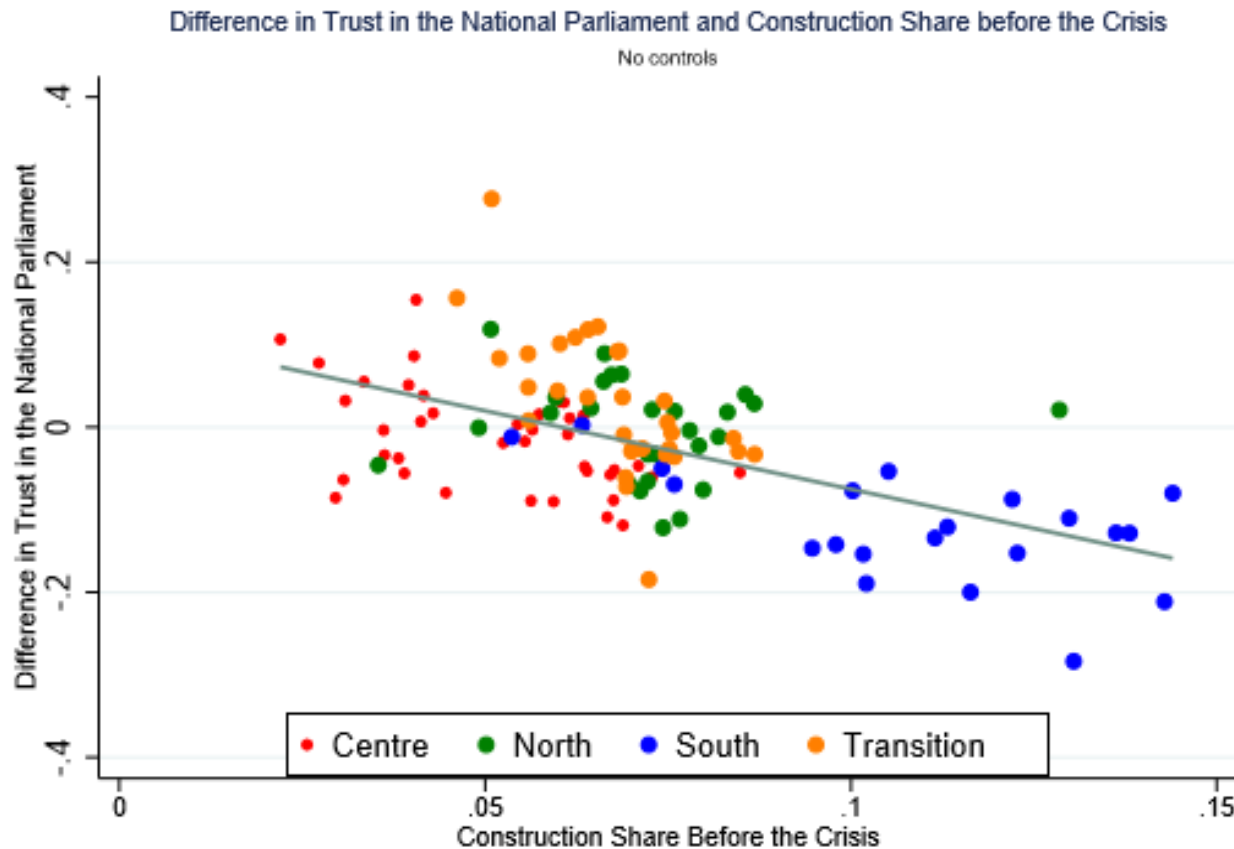
"Reduced-Form" Estimates. Construction Share before the Crisis and Changes in Trust in Legal System

Difference in Trust in the Legal System and Construction Share before the Crisis

No controls

Source: ESS & Eurostat
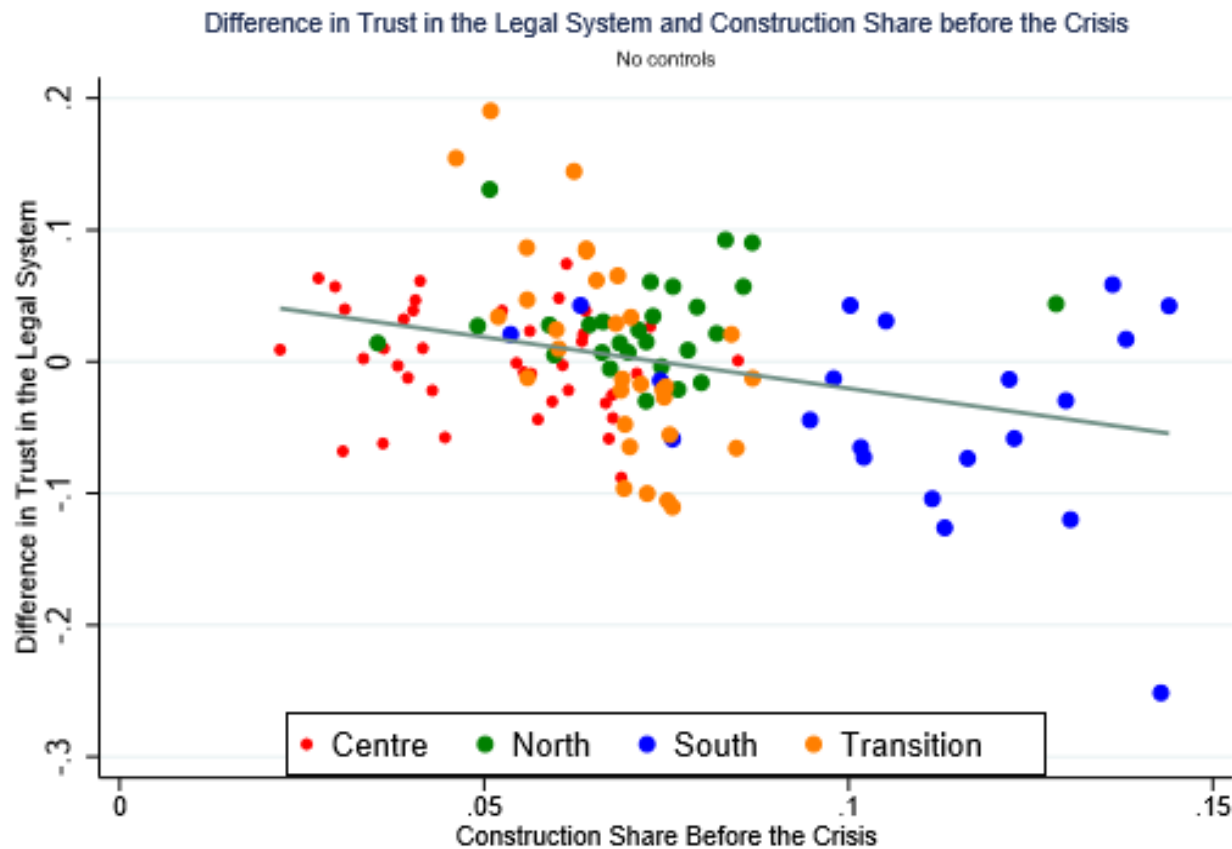
Trust. 2sls Panel Estimates.

	General Trust	People Fair	People Helpful	Trust Parliament	Trust Politicians	Trust Legal System	Trust Police	Trust Eur. Parliament	Trust UN	Satisf. Democ	Left-Right Orientat.	Feel Close to a Party	Further Unification
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Panel A. General ESS Round (Time) Fixed-Effects													
Unemployment	-0.2346***	-0.0972*	-0.2109***	-1.1344***	-0.9429***	-0.6512***	-0.1527	-0.8074**	-0.2257	-1.4496***	-0.1774	-0.8715*	0.1753
	(0.0879)	(0.0516)	(0.0480)	(0.2967)	(0.2331)	(0.1889)	(0.2135)	(0.3405)	(0.1795)	(0.3700)	(0.1113)	(0.5226)	(0.2225)
F-Stat	24.10	24.10	24.10	24.10	24.10	24.10	24.10	24.10	24.10	24.10	24.10	24.10	55.06
Panel B. Country-Group ESS Round (Time) Fixed-Effects													
Unemployment	-0.1592	-0.1639	-0.0837	-0.7258**	-0.6060**	-0.3026	-0.0663	-0.8261**	-0.2769	-1.2145***	-0.0338	-1.4469***	-0.0339
	(0.1458)	(0.1213)	(0.1241)	(0.3382)	(0.2555)	(0.2237)	(0.2431)	(0.3699)	(0.1995)	(0.3729)	(0.1207)	(0.4901)	(0.2332)
F-Stat	22.52	22.52	22.52	22.52	22.52	22.52	22.52	22.52	22.52	22.52	22.52	22.52	27.91
Controls	No	No	No	No	No	No	No	No	No	No	No	No	No
Countries	20	20	20	20	20	20	20	20	20	20	20	20	18
Observations	969	969	969	969	969	969	969	969	969	969	969	969	651

Trust. 2sls Difference (Post-Pre Crisis, 2012-2008) Specifications.

General Trust	People Fair	People Helpful	Trust Parliament	Trust Politicians	Trust Legal System	Trust Police	Trust Eur. Parliament	Trust UN	Satisf. Democ	Left-Right Orientat.	Feel Close to a Party	Further Unification
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
-0.2685	0.2171	-0.1482	-1.7279***	-1.9117***	-1.2490**	-0.658	-0.8309*	-0.1762	-1.7173**	0.3446	0.3904	0.3637
(0.3249)	(0.3403)	(0.2352)	(0.6705)	(0.6086)	(0.5344)	(0.4539)	(0.4925)	(0.4433)	(0.8446)	(0.2363)	(0.4409)	(0.8334)
31.82	31.82	31.82	31.82	31.82	31.82	31.82	31.82	31.82	31.82	31.82	31.82	31.82
130	130	130	130	130	130	130	130	130	130	130	130	130
17	17	17	17	17	17	17	17	17	17	17	17	17

Immigration. 2sls Panel Estimates.

	Allow Immigrants			Immigrants' Role		
	Majority Race/Ethnic Group	Different Race/Ethnic Group	Poor Non-EU Countries	Economy	Cultural Life	Country Better/Worse
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A. General ESS Round (Time) Fixed-Effects						
Unemployment	-0.0448	-0.2492	-0.267	-0.6348***	-0.0777	-0.2074
	(0.2307)	(0.2386)	(0.2775)	(0.1849)	(0.1484)	(0.1431)
Kleibergen-Paap F-Stat	24.10	24.10	24.10	24.10	24.10	24.10
Panel B. Country-Group ESS Round (Time) Fixed-Effects						
Unemployment	-0.239	-0.4248	-0.5621*	-0.6405**	-0.2635	-0.145
	(0.3334)	(0.2982)	(0.3135)	(0.3183)	(0.2356)	(0.2176)
Kleibergen-Paap F-Stat	22.52	22.52	22.52	22.52	22.52	22.52
Countries	20	20	20	20	20	20
Regions	174	174	174	174	174	174
Observations	969	969	969	969	969	969

Unemployment and Beliefs

— **General Trust. Small, not always significant.**

— **Trust towards national politics. Strong, always significant**

— **Trust towards national legal system. Considerable, always significant.**

— **Trust towards police. absent**

— **Trust towards EU (as compared to the UN). moderate, most times significant.**

— **Dissatisfaction with democracy. Strong, always significant [problematic]**

— **Left-right self-orientation. absent**

— **Close to a political party. moderate, most times significant.**

— **European integration should go further or not. Absent**

— **Cultural impact of immigrants. absent**

— **Economic impact of immigrants. moderate, most times significant.**

Heterogeneity. Unemployment and Trust/Beliefs

Results Summary

— Correlations quite homogeneous across age and gender

— Correlations equally significant for employed and unemployed

— Somewhat stronger effects for non-college educated respondents

Structure

1. **Related Literature**
2. **Data** [voting, trust/beliefs, regional accounts]
3. **Descriptive Before-After Analysis** [voting, trust, beliefs]
4. **Unemployment and Voting**
   — OLS estimates [graphical illustration]
   — 2sls estimates [first-stage, "reduced-forms", 2sls]
5. **Unemployment and the European Trust Crisis**
   — OLS estimates [graphical illustrations]
   — 2sls estimates [first-stage, "reduced-forms", 2sls]
6. **Conclusion. Policy Implications**

Summary

— **Link between (changes in) unemployment and (rise in) extremist voting**

- Correlation across European regions

- Component of rise in unemployment explained by pre-crisis share of construction (even conditional on potentially relevant factors)

— **Unemployment and Distrust**

- EU (but not the UN); national politics/parliament; legal system and courts (but not the police)

- Small impact in general trust (perhaps due to opposing effects)

- Role of immigrants in the economy (as compared to social life)

- OLS; 2SLS (share of construction before the crisis as an "instrument" for changes in unemployment)

Policy Implications

1. Preserve trust (recent EU Commission Report); key for functioning of democracy
2. Employment Policies
3. Supply-side that take time must be enhanced with demand-side interventions
4. EU coordination

Policy Implications

— **Loss of confidence in national and European institutions and rise of populism strongly related to the effect of the crisis on jobs**

1. Call for countercyclical macroeconomic policies preventing rising unemployment growth-promoting policies
   - Supply-side interventions in labor, capital, and product markets
   - Pan-European counter- cyclical fiscal policies (revamping the EU budget)
   - Priorities on research, innovation and public infrastructures
   - Help and retrain unskilled workers through education and training

2. Preserve trust of citizens facing economic insecurity
   - Better social security and safety nets for unemployed workers

Appendix

1. Unemployment and Output
2. Unemployment and Political Beliefs
3. Descriptive Patterns. Beliefs on Immigration
4. Unemployment and Beliefs on Immigration

Regional Unemployment and Output. 2000-2015.

Log GDP per Capita and % Unemployment, 2000-2015
Controlling for Region and Time FE, NUTS Level
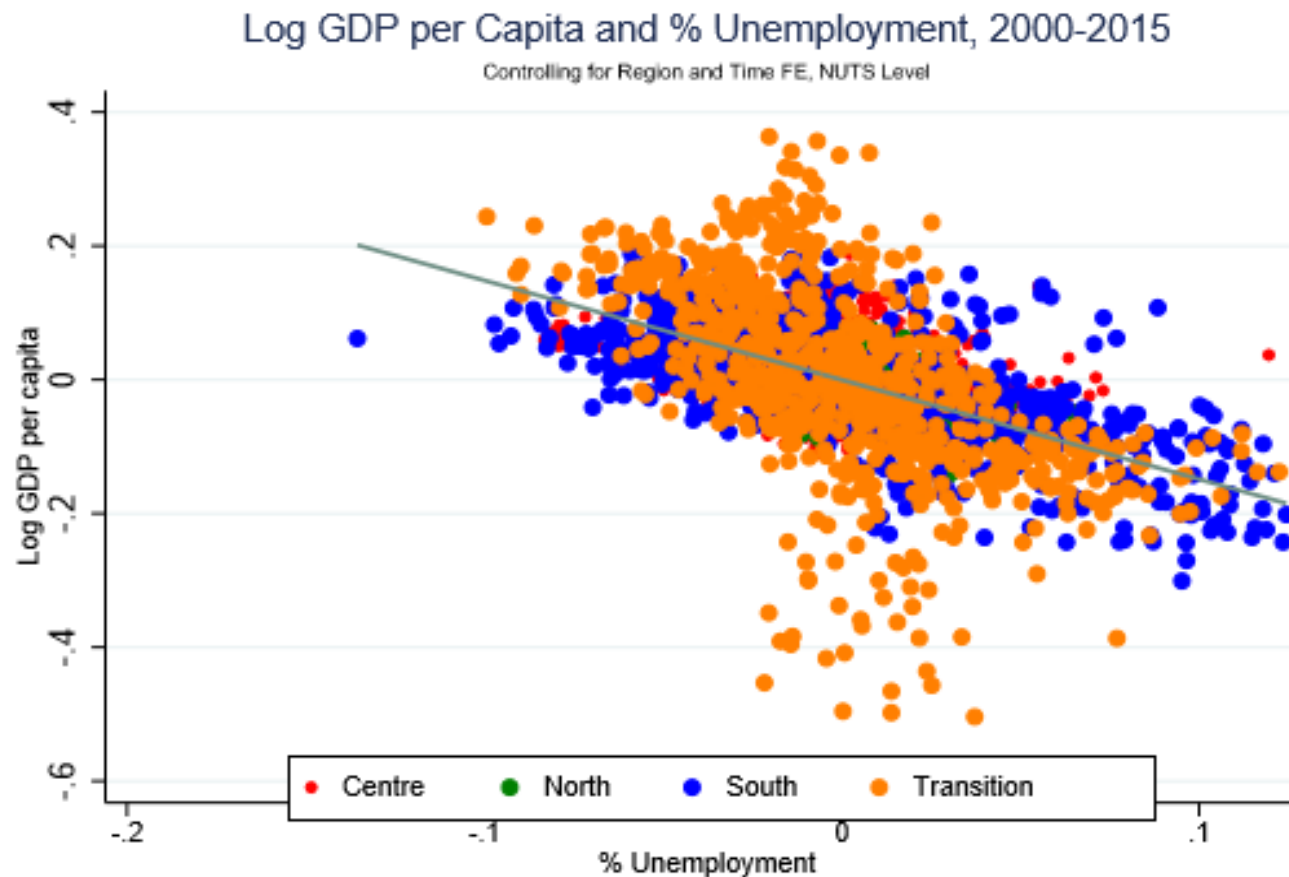
Recession Intensity: 2000-2015
Regional Unemployment and Output Before and after the Crisis

Change in Log GDP per capita and Change in Total Unemployment
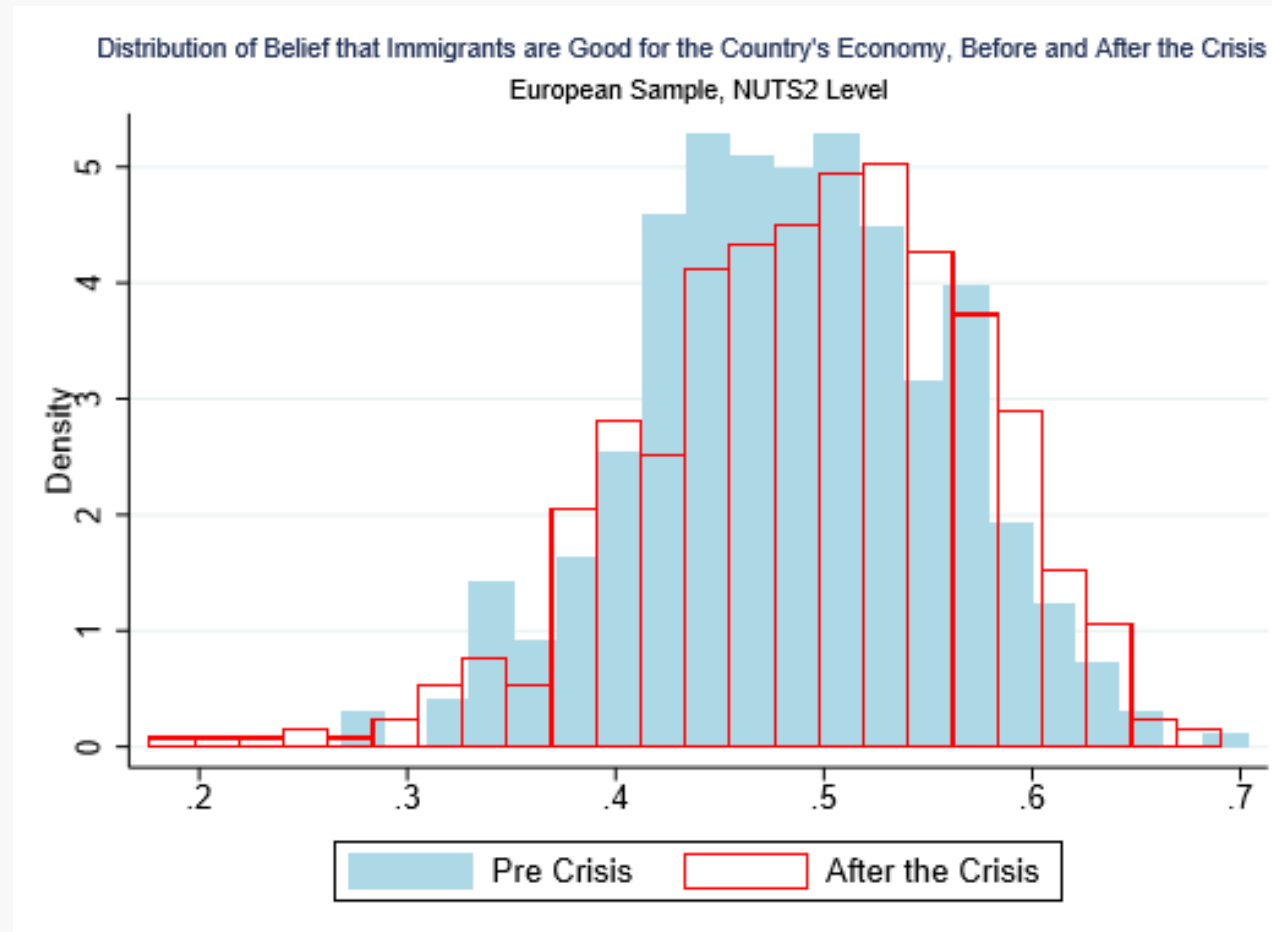Before and After the Crisis
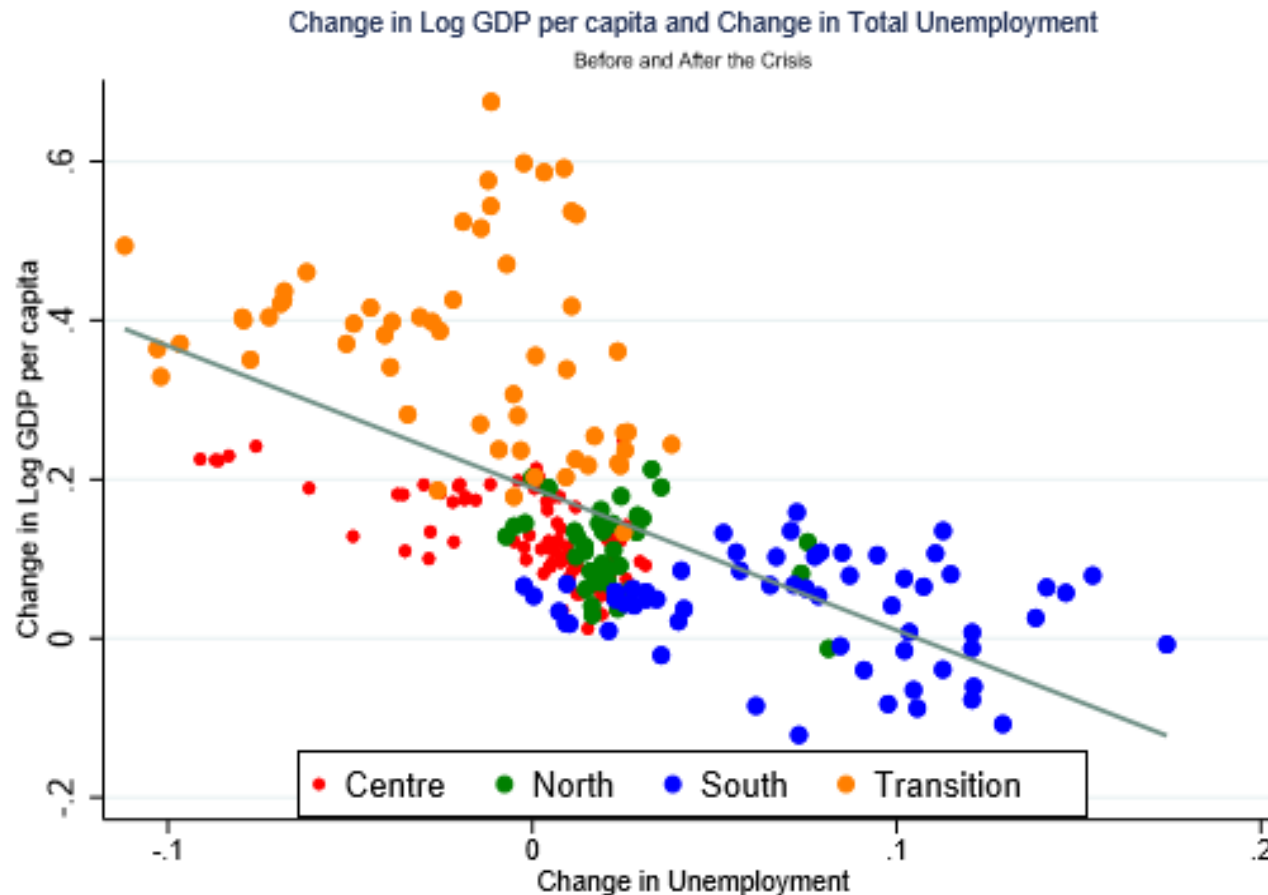
Source: Eurostat

Belief that Immigrants are Good for Country's Economy.
[Source. ESS]

Distribution of Belief that Immigrants are Good for the Country's Economy, Before and After the Crisis
European Sample, NUTS2 Level

Legend: Pre Crisis · After the Crisis

Belief that Immigrants Enrich Country's Cultural Life.
[Source. ESS]

Distribution of Belief that the Country's Cultural Life is Enriched by Immigrants, Before and After the Crisis
European Sample, NUTS2 Level
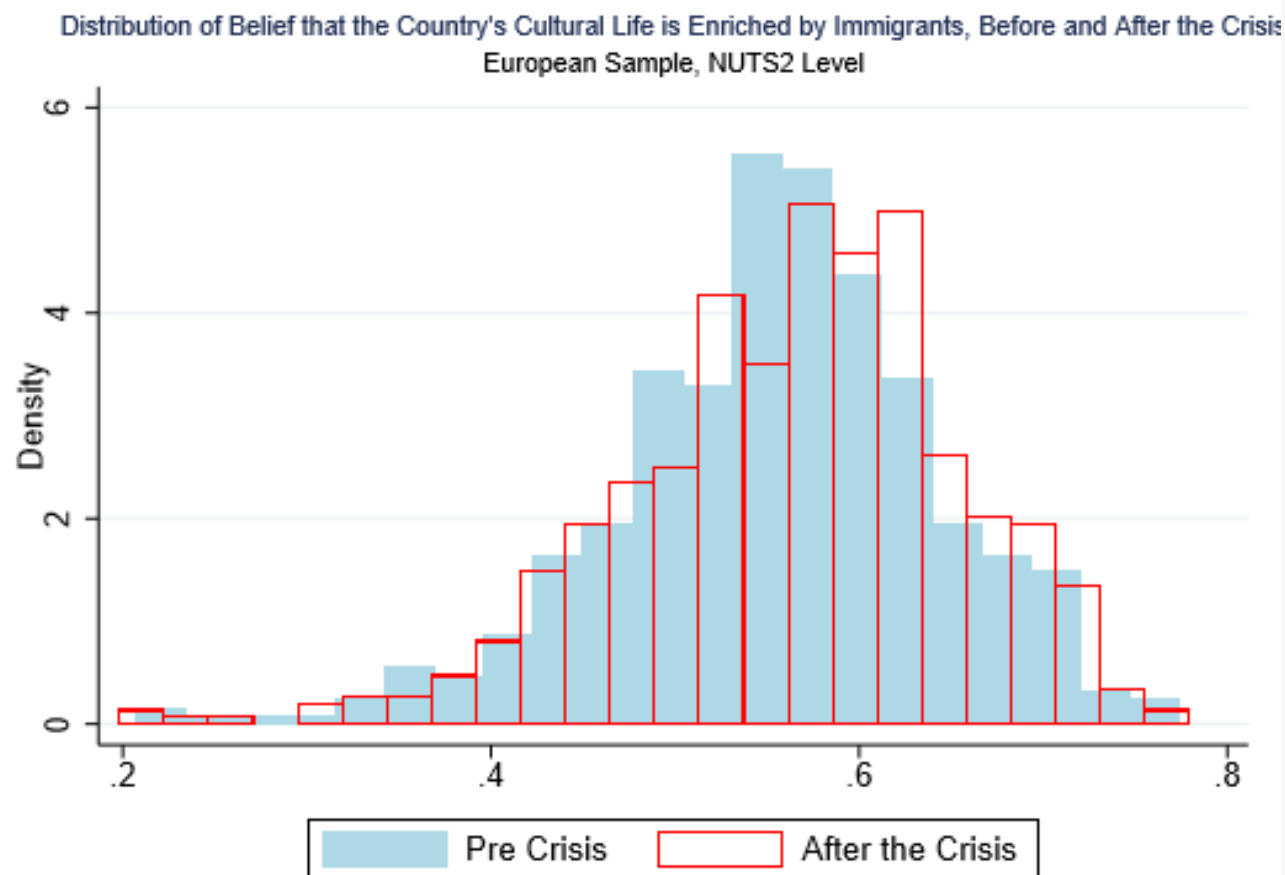
Immigration. 2sls Estimates. Before-After the Crisis

Change before and after the crisis (2008-2014) in:	Allow Immigrants			Immigrants' Role		
	Majority Race/Ethnic Group	Different Race/Ethnic Group	Poor Non-EU Countries	Economy	Cultural Life	Country Better/Worse
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A. 2SLS Estimates						
Unemployment	-0.6863***	-1.2291***	-1.6126***	-0.9253**	-0.2176	-0.4651*
	(0.2627)	(0.3055)	(0.4993)	(0.3918)	(0.3637)	(0.2635)
F-Stat	27.09	27.09	27.09	27.09	27.09	27.09
Panel B. OLS Estimates						
Unemployment	-0.5318***	-0.5870***	-0.6671***	-0.7716***	0.0199	-0.2486*
	(0.1760)	(0.1492)	(0.1799)	(0.2249)	(0.1748)	(0.1359)
adj. R square	0.378	0.241	0.169	0.285	0.025	0.112
Regions	132	132	132	132	132	132
Countries	15	15	15	15	15	15

Heterogeneity. Unemployment and Beliefs on Immigration

	Allow Immigrants			Immigrants' Role		
	Majority Race/Ethnic Group	Different Race/Ethnic Group	Poor Non-EU Countries	Economy	Cultural Life	Country Better/Worse
	(1)	(2)	(3)	(4)	(5)	(6)
	Panel A. Full Sample					
Unemployment	-0.4681**	-0.4870***	-0.5436***	-0.7209***	-0.1771**	-0.3345***
	(-2.35)	(-3.72)	(-3.66)	(-5.92)	(-2.08)	(-3.69)
Observations	101010	100836	100615	99430	99250	99091
	Panel B1. Males					
Unemployment	-0.4555**	-0.5003***	-0.5492***	-0.7891***	-0.1981**	-0.3511***
	(-2.21)	(-3.44)	(-3.34)	(-6.57)	(-2.30)	(-3.65)
Observations	45730	45635	45577	45464	45106	45112
	Panel B2. Females					
Unemployment	-0.4686**	-0.4615***	-0.5288***	-0.6587***	-0.1523	-0.3119***
	(-2.33)	(-3.55)	(-3.64)	(-4.92)	(-1.61)	(-3.38)
Observations	55229	55149	54987	53918	54094	53931
	Panel C1. Young (Up to 30 Years)					
Unemployment	-0.4739***	-0.3370***	-0.4207***	-0.4670***	-0.0422	-0.1544
	(-2.69)	(-2.72)	(-3.53)	(-5.93)	(-0.48)	(-1.47)
Observations	14206	14196	14187	14062	14128	14002
	Panel C2. Middle-Age (31-60 Years)					
Unemployment	-0.4470**	-0.4923***	-0.5241***	-0.7266***	-0.1770*	-0.3410***
	(-2.26)	(-3.55)	(-3.32)	(-5.85)	(-1.79)	(-3.39)
Observations	52951	52890	52816	52577	52533	52263
	Panel C3. Old (Over 60 Years)					
Unemployment	-0.5580**	-0.6374***	-0.7023***	-0.9328***	-0.3406***	-0.4751***
	(-2.39)	(-4.39)	(-4.06)	(-4.97)	(-3.00)	(-3.75)
Observations	33847	33744	33606	32785	32584	32821