

Past Exposure to Macroeconomic Shocks and Populist Attitudes in Europe

Despina Gavresi, Anastasia Litina *

July 27, 2021

Abstract

This paper explores the interplay between past exposure to macroeconomic shocks and populist attitudes. We document that individuals who experienced a macroeconomic shock during their impressionable years (between 18 and 25 years of age), are currently more prone to voting for populist parties, and manifest lower trust both in national and European institutions. We use data from the European Social Survey (ESS) to construct the differential individual exposure to macroeconomic shocks during those years. Our findings suggest that it is not only exposure to current economic shocks that matters (see e.g., Guiso et al. (2020)) but also past exposure to economic recessions, which has a persistent effect on the rise of populism. Analytically, past economic shocks are associated with a fall in trust in national and European institutions and a rise in anti-immigrant attitudes. Interestingly, the interplay between the two, i.e., past and current exposure to economic shocks, has a mitigating effect on the rise of populism, meaning that individuals who were exposed to economic shocks in the past are less likely to manifest populist attitudes when faced with a current crisis.

Keywords: Macroeconomic Shocks, Trust, Attitudes, Populism

JEL Codes: D72, E60, F68, P16, Z13

*Corresponding Author: Anastasia Litina: University of Macedonia, Greece, anastasia.litina@uom.edu.gr; Despina Gavresi: University of Ioannina, Greece, degavresi@gmail.com.

1 Introduction

In recent years, European countries have seen an unprecedented demand for populism as a result of the economic crisis that hit Europe and the world. The aftermath of the crisis found Europe with a number of new and existing populist parties succeeding to enter national parliaments.

A vast literature, initially from the domains of political science and sociology attempted to explain the origins of populism. Recently an emerging strand of the literature in economics has theoretically discussed and empirically established the economic drivers of populism. Our paper contributes to this literature by arguing that it is not only current socioeconomic conditions and recent shocks that drive populist attitudes, but also past experiences.

The rise of populism in Europe is a major concern for a number of reasons. The EU is a historically unprecedented supranational unification project (Spolaore, 2013). It has been quite successful in both preserving political peace in Europe and in integrating into the European democratic model the “periphery” countries of Southern and Eastern Europe (Gill and Raiser, 2012). Nevertheless, as suggested in Algan et al. (2017) many Europeans appear dissatisfied with local and EU politicians and institutions. They study the implications of the Great Recession for voting for populist parties, as well as for general trust and political attitudes, using regional data across Europe. They find the existence of a strong interplay between increases in unemployment and voting for populism as well as between the increases in unemployment and a decline in trust in national and European political institutions. Likewise, Dustmann et al. (2017) report similar results showing that after the crisis mistrust of European institutions, largely explained by the poorer economic conditions of the Euro-area countries, is correlated with voting for populist

parties. In a similar spirit, [Acemoglu et al. \(2013\)](#), [Rodrik \(2018\)](#) and [Di Tella and Rotemberg \(2018\)](#), as well as [Guiso et al. \(2020\)](#) provide a general discussion of the recent rise of populist parties and try to interpret that increase in the light of economic theory. [Guiso et al. \(2020\)](#) study the demand and supply of populism both empirically and theoretically. They document a link between individual-level economic insecurity and distrust in political parties, voting for populist parties, low electoral participation and attitudes towards immigrants. Economic insecurity is measured by individual unemployment, income difficulties that individuals face and the exposure to a more globalized environment in their workplace. In a recent exhaustive overview, [Guriev and Papaioannou \(2020\)](#) analysed the political economy of populism.

We use as a starting point the analysis in [Guiso et al. \(2020\)](#) to shed light to an additional dimension of the implications of economic shocks on populist attitudes, i.e., the impact of the impressionable exposure to economic shocks ([Giuliano and Spilimbergo, 2014](#)). In our analysis, on top of accounting for current exposure to economic shocks, we explore the effect of macroeconomic shocks during the critical years of early adulthood (the so-called impressionable years) on voting for populist parties, low participation in national elections, mistrust in political institutions and negative attitudes towards immigrants. As a macroeconomic shock we define the GDP per capita growth rate equal or lower than -3.4%. ¹ This threshold represents the lowest 10th percentile of the GDP per capita growth distribution for all countries from 1960 to 2020.

Analytically, we use data from the eight waves of the European Social Survey (ESS) and we associate each individual to his/her past exposure to economic shocks during their impressionable

¹[Giuliano and Spilimbergo \(2014\)](#) choose the lowest 10th percentile (-3.4%) rather than simply negative GDP growth because 80% of the individuals experienced at least one year of negative growth during their critical age period in their sample when using this definition. They also illustrate that individuals who experienced a recession when young believe that success in life depends more on luck than effort, support more government redistribution, and tend to vote for left-wing parties. The effect of recessions on beliefs is long-lasting.

years. The impressionable years hypothesis supports that core attitudes, beliefs, and values are crystallised during a period of great mental plasticity in early adulthood (between 18 and 25 years of age) and remain largely unchanged thereafter (Krosnick and Alwin, 1989). As additional controls we include the individual current shocks as in Guiso et al. (2020), a set of individual controls, and a wide set of fixed effects such as wave, country, age and cohort fixed effects and in a more demanding specification we use as well country \times age fixed effects, thereby capturing a wide set of unobservables and comparing same age individuals across different countries.

Our findings suggest that both current and impressionable exposure to shocks matters for the formation of populist attitudes. A 1 standard deviation increase in exposure to economic shocks between the age range 18 and 25 (impressionable years hypothesis) is associated with a 0.026 standard deviations decrease in the probability for voting for populist parties and around a 0.05 decrease in trust in political parties, national parliament, EU, politicians and satisfaction with government. Additionally, impressionable exposure to macroeconomic shocks gives rise to negative attitudes towards immigrants coming from countries outside EU, having different ethnicity and the beliefs that immigrants worsen the host countries. Our findings remain significant and robust as we shift our analysis to other age ranges between 18 and 33 years combining the impressionable years hypothesis with the increasing persistence hypothesis (Sears, 1983).

Interestingly, we find that when we interact both past and current exposure to economic shocks, the two experiences mitigate each other's effect. Meaning that an individual who is currently exposed to an economic shock, is less likely to manifest populist attitudes if he/she was exposed to economic shocks in the past. This suggests that individuals have already carved their personality through exposure to past shocks and are thus less vulnerable to the current economic conditions. Our paper thus contributes to previous research by uncovering the importance of

the past experiences and the interplay between present and the past economic experiences. This approach improves our understanding as to why people from different countries, with similar otherwise economic profile, respond differently to modern-day economic challenges. Our findings shed light to the fact that history matters in shaping modern day populist attitudes.

The structure of the paper is organized as follows. Section 2 introduces the data and the empirical strategy. Section 3 presents the benchmark results. Section 4 conducts robustness checks. Section 5 lays out the discussion, whereas Section 6 concludes.

2 Data and Empirical Strategy

2.1 Data

The analysis employs data from eight waves of the European Social Survey (2002-2016), a repeated cross section survey that quantifies the attitudes, beliefs and behavioral patterns of citizens in 34 European countries. The sample comprises individuals from Albania, Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Germany, Finland, France, Greece, Hungary, Iceland, Ireland, Israel, Italy, Kosovo, Lithuania, Luxembourg, the Netherlands, Norway, Poland, Portugal, Russia, Sweden, Slovenia, Slovakia, Spain, Switzerland, Turkey, United Kingdom and Ukraine. The ESS contains a rich set of questions that capture populist attitudes as well as personal characteristics such as country and year of birth, gender, age, education, political orientation, employment status, etc.

In the benchmark analysis we employ three proxies for populist attitudes as in [Guiso et al. \(2020\)](#). These are i) voting behavior; ii) aspects of trust; and iii) immigrant-related attitudes.

For voting behavior, the ESS provides us with information on whether people participated in the last national elections and which party they voted for, thus we construct a dummy that takes the value 1 if the individual voted for a populist party and 0 otherwise. Concerning trust, we use variables for trust in i) parties; ii) country's parliament; iii) politicians; and iv) European Union, all measured on a scale between 0 (no trust) and 10 (full trust) and a proxy for satisfaction with national government, taking the values 0 (extreme dissatisfaction) and 10 (extreme satisfaction). Last, we capture attitudes towards i) immigrants from non-European countries, ii) immigrants having the same or different race/ethnicity; and iii) whether people believe that immigrants make host country worse or not.

The key explanatory variable that we construct is past exposure to macroeconomic shocks, during the impressionable years of an individual (aged 18-25). We define a macroeconomic shock relying on the theoretical background of economic shocks by [Barro and Ursúa \(2008\)](#). To this end we extract data from the World Bank Indicators (WBI) for annual estimates of GDP per capita growth rate since 1960. For our explanatory variable, we construct a variable equal to 1 if the individual experienced a recession in which the GDP per capita growth was either equal or lower than -3.4% during his or her "impressionable years" and 0 otherwise. Following the rationale in [Giuliano and Spilimbergo \(2014\)](#) we choose this threshold as it is the lowest 10th percentile of the GDP per capita growth distribution for all countries from 1960 to 2020. As we are restricted by the 1960 limit, our analysis excludes those individuals who were older than 25 in the year 1960. Last, as we compare different age intervals concerning the exposure to shocks, we use the mean value of exposure to shocks for each period, i.e., we weight our variable by the range of years that is relevant for each range and each individual (18-25 and 18-33).

To capture the current exposure on economic shocks we use the measures of [Guiso et al. \(2020\)](#),

i.e., variables that measure individual and rather recent economic insecurity. Analytically these are: i) whether the voter was unemployed at some time in the past five years searching for a job; ii) whether the individual has experienced any income difficulties, e.g., whether the voter lives comfortably with the present income or finds it difficult and last; and iii) whether the voter is exposed to globalization or he is working as a low-skill worker in the manufacturing.

Additionally, we control for the full set of individual characteristics as in [Guiso et al. \(2020\)](#), i.e., the number of years completed in full time education, time spent watching TV, total hours spent watching news or programs about politics, gender, political orientation measured on a scale between 0 (far left) and 10 (far right) and risk aversion using the ESS risk indicator on whether people avoid taking risks or are prone to take any risk seeking for new adventures, considering the hypothesis that voting for a populist party may hide some risk, therefore it appeals to more risky people.

To identify the populist parties of each country we rely on [Rooduijn et al. \(2019\)](#), a list that contains the populist parties in Europe with higher than 2% of the vote in at least one national parliamentary election since 1998. This list identifies 82 populist parties in 28 of the 31 countries examined. To define a party as a populist we rely on [Mudde \(2004\)](#) definition “parties that endorse the set of ideas that society is ultimately separated into two homogeneous and antagonistic groups, the pure people versus the corrupt elite, and which argues that politics should be an expression of the general will of the people. Populism is about the pure people’s moral superiority over the elites and, therefore, people’s moral right to govern”. According to [Bonikowski \(2017\)](#) populism is not an ideology, but a theory of society.

2.2 Empirical Strategy

We apply an OLS (for ease of interpretation) regression model to examine the effect of exposure to macroeconomic shocks through the “impressionable years” on participation and voting a populist party and as well as on interpersonal political trust and beliefs towards immigrants, dropping first generation immigrants. Thus, we estimate the following model:

$$y_{ict} = a_0 + \alpha_1 MacroShock_i + \alpha_2 Xi + \beta_a + \gamma_c + \delta_t + \theta_j + \gamma_c \times age + \epsilon_{ict}, \quad (1)$$

where y_{ict} denotes the political beliefs, attitudes and vote for a populist party of individual i , in country c , participating at ESS round t , $MacroShock_i$ is individual’s i exposure to a recession during the impressionable years. Xi is the vector of controls described above, β_a , γ_c , δ_t and θ_j are the age, country, wave and cohort (individuals are grouped into ten 7-year age cohorts) fixed effects respectively, while $\gamma_c \times age$ denotes country-age fixed effects. The standard errors are robust and clustered at the country level controlling for i) participation in voting and ii) vote for a populist party. However, controlling for all the other variables about trust and immigration attitudes, standard errors are clustered at cohorts level following [Guiso et al. \(2020\)](#).²

The inclusion of country, cohort, age and wave fixed effects implies that we are always comparing a particular age group to individuals from the same age group in other countries with other experiences of recessions, to other age groups from the same country, as the experience of economic disasters changes over time. Additionally, including the most demanding specification i.e, $\gamma_c \times age$ fixed effects, we remove the source of variation coming from comparison to other age

²Our results are similar when we cluster at the country level as in the former analysis.

groups from the same country and the same age group from other countries, focusing on a given age group's changes in voting for populism, trusting the political institutions and being exposed to several macroeconomic shocks.

3 Empirical Findings

To assess the magnitude of our results we calculate the beta coefficients which are reported in Online Appendix Supplementary Tables. Table 1 documents the results for the case of an individual participating in the last national elections and voting for a populist party. In Columns 1 and 2 we include the full set of the individual controls and fixed effects and we employ the sample of countries that have at least one populist party. Our findings suggest that individuals who experienced more macroeconomic shocks during their impressionable years prefer not to participate in voting. When they do so however, they are more likely to vote for a populist party. A 1 standard deviation increase in our shock is associated with a decline of 0.002 standard deviation of having voted in the last national elections and with a 0.026 standard deviation rise in voting for a populist party. Our results are significant at the 10% level.

Beyond our main explanatory variables, the individual economic shocks (unemployment, income difficulties and exposure to globalization) are in line with [Guiso et al. \(2020\)](#).

[INSERT TABLE 1 HERE]

Table 2 reports the results for trust in i) parties, ii) politicians, iii) parliament, iv) European Union and v) government satisfaction, and as well as attitudes towards immigrants (having the same or different ethnicity; how the immigrants affect the host country). In all columns (1-9) we include the full set of individual controls and fixed effects. Following [Guiso et al. \(2020\)](#) we

use the whole sample of countries. As a control of economic insecurity we create a composite economic insecurity index using a principal component analysis of the three distinct variables (unemployment, income difficulties and exposure to globalization). The results of the table suggest that individuals who experienced more shocks during their impressionable years tend to mistrust even more parties, politicians, parliament, EU institutions and feel dissatisfied from the national government. More specifically, a 1 standard deviation increase in the shock variable is associated with a 0.056 standard deviations decline in trust in political parties, 0.050 standard deviations decline in trust in politicians, 0.063 standard deviations decline in trust in the parliament and 0.044 standard deviations decrease in government’s satisfaction. The results are significant at 1% level. Similarly, higher exposure to a shock (1 standard deviation increase) is associated with a decline of 0.015 standard deviations of trust in EU parliament.

Concerning immigrants, more exposure to macroeconomic shocks in early age triggers more negative attitudes towards immigrants coming from countries outside EU, having different ethnicity and it establishes rise to the belief that immigrants make the host countries worse.

[INSERT TABLE 2 HERE]

4 Robustness Exercises

In the benchmark analysis we focus on the “impressionable years” hypothesis which is defined between 18 and 25 years of age, playing an important role on the formation of beliefs and attitudes. However, as individuals grow older, economic shocks may directly affect their working and economic life. In this section, we test whether the individuals who experienced a macroeconomic shock during different range of years, also manifest populist attitudes. The first range we test

is between 26 and 33 years of age which is often cited as the increasing persistence hypothesis. We thus combine the two hypotheses and expand the age range from 18 to 33 years. According to [Sears \(1983\)](#) the combination of persistence and impressionable years viewpoint can shape the basic political attitudes over the lifespan.

Table 1 documents the results relating to voting. Columns 3 and 4 replicate the analysis of Columns 1 and 2, using the measure of a shock experience during their 18 and 33 years. The results are qualitatively similar, yet the magnitude is higher, reflecting the fact that within a larger span, an individual is likely to experience more shocks.

Table 3 reports the results for aspects political trust, government satisfaction and the attitudes towards immigrants. The table replicates the analysis in 1 using the full set of controls and the exposure to shocks during the ages 18 to 33 as the main explanatory variable. As for the case of vote, the results are qualitatively similar and quantitatively stronger.

[INSERT TABLE 3 HERE]

Last, in Table 4 we replicate the benchmark analysis, i.e., the impact of a macroeconomic disaster that the individuals have experienced during their impressionable years (18-25) on the shaping of trust in political system and the attitudes about immigrants, when restricting our sample to countries which have at least one populist party. In most cases are results are quite similar, though the results related to immigrant attitudes are somewhat weaker and remain significant at the 10% level.

[INSERT TABLE 4 HERE]

5 Discussion

Our paper has built on the existing literature that highlights the role of economic shocks on populist attitudes by shedding light to the role of past exposure to shocks as well as its persistent effect. It is thus interesting to explore how these two experiences (past and present) interact with each other. Evidence from the recent crisis in Europe and the world suggested that different countries responded differently even when the shock they faced was similar in magnitude and nature. We argue that this differential rise of populism has its roots partly to past exposure to different economic shocks.

To formally test this, we interact our measure of past exposure to economic shocks with the measure of current exposure. Table 1, in columns 5 and 6 reports the results for the benchmark specification for voting while Table 5 presents the results when the outcome variable is trust that an individual shows in national and European institutions i.e, trust in parties, parliament, etc. and the main explanatory variable is the interaction term between shock and the first principal component of unemployment, income difficulties and exposure to globalization.

[INSERT TABLE 5 HERE]

The magnitude and the sign of the coefficients related to past and current exposure to shocks are in line with the benchmark analysis, i.e., an increase in the growth shock is associated with a rise in populist voting, lower trust in political institutions and stronger anti-immigrant attitudes. Interestingly, the interaction term is positive and statistically significant for the cases of trust in political parties thus suggesting that the negative effect of a current crisis is mitigated the higher the exposure to past shocks. This implies that past experiences carve the personalities of

people and make them less vulnerable and less prone to populist attitudes. In a similar fashion, the higher the past exposure to an economic shock, the less strong the current anti-immigrant attitudes become, potentially shaped by similar experiences in the past. This experience however is not reflected in voting patterns.

We believe that this finding is crucial in explaining why similar crisis experience, like the Great Recession of 2008, gave rise to differential levels of populism, even for countries with similar macroeconomic characteristics. We argue that it is not only the current economic conditions that shape political attitudes but their interplay with past experiences, which moderate current reactions.

6 Conclusion

We establish the interplay between macroeconomic shocks experienced during the impressionable years and greater demand for populism in Europe. Individuals who grew up in countries hit by recessions between their 18 and 25 years, tend to not participate in national elections and if so, they support populist parties. They also trust less the political institutions and manifest stronger anti-immigrant attitudes. Our analysis accounts for a wide range of individual characteristics and a demanding list of fixed effects accounting for unobservables. We show that our results are robust when we use a different age range, i.e., the years 18 to 33, in which the individuals form their political behavior. Additionally, we restrict our sample to countries that have at least one populist party. Importantly, accounting for the interaction between the macroeconomic shock and an overall measure of individual economic insecurity, we find that the interplay between the two has a moderating effect, suggesting that people who were more exposed to economic shocks

in the past, are less vulnerable to populist voice in the face of current economic shocks. Our research sheds light on the role of past economic events on shaping the personality of individuals and through it on contemporary politics.

Baseline Tables

Table 1: Macroeconomic Shocks, Participation in Voting (Vote) and Vote Populist Party (Populist)

	Vote	Populist	Vote	Populist	Vote	Populist
	(1)	(2)	(3)	(4)	(5)	(6)
Growth Shock (18-25)	-.0090 [.0413]	.0712* [.0366]			.1548 [.1282]	.0934** [.0438]
Interaction term					-.0408 [.0420]	-.0038 [.0219]
Growth Shock (18-33)			-.0350 [.0568]	.0843* [.0450]		
Unemployment	-.0318*** [.0061]	.0107** [.0047]	-.0300*** [.0056]	.0122** [.0047]	-.0410*** [.0100]	.0070 [.0047]
Income difficulties	-.0288*** [.0054]	.0132*** [.0043]	-.0293*** [.0054]	.0145*** [.0048]	-.0398*** [.0071]	.0120*** [.0035]
Globalization Exposure	-.0406** [.0176]	-.0135 [.0092]	-.0437** [.0167]	-.0094 [.0092]	-.0258** [.0124]	.0015 [.0096]
R-squared	0.13	0.08	0.12	0.08	0.13	0.09
Observations	114437	119246	130900	135880	114437	119246

Notes: The analysis controls for individual characteristics such as gender, political orientation, years of education, risk aversion, hours per week watching TV and how many of these hours are spent watching programs about politics, unemployment, income difficulties, global exposure, confidence in political parties and attitudes towards immigrants from no EU countries as well as for age×country, age, wave and cohort fixed effects. The sample is restricted to the populist ESS countries. Robust standard errors clustered at the country level are shown in parenthesis. *** significant 1% or less; ** significant at 5% ; * significant at 10% confidence level.

Table 2: Macroeconomic Shocks During the Impressionable Years (18-25)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Trust Parties	Trust Parties	Few immigrants no EU	Trust Politicians	Trust Parliament	Trust EU	Government Satisfaction	Few immigrants different ethnicity	Many immigrants same ethnicity	Immigrants make country worse
Growth Shock (18-25)	-1.0131*** [.0667]	.1944*** [.0534]	-.9511*** [.0891]	-1.2728*** [.1566]	-.2941* [.1525]	-.8609*** [.1124]	.1206* [.0580]	-.0105 [.0597]	.4571*** [.1218]
Economic Insecurity (PC)	-.2963*** [.0059]	.0518*** [.0033]	-.3199*** [.0028]	-.3532*** [.0096]	-.2210*** [.0090]	-.3753*** [.0070]	.0577*** [.0026]	-.0479*** [.0049]	.1960*** [.0088]
R-squared	0.18	0.15	0.17	0.17	0.08	0.15	0.16	0.12	0.13
Observations	140570	157419	159779	159092	148985	157888	157772	157833	157212

Notes: The analysis controls for individual characteristics such as gender, political orientation, etc., as well as for age \times country, age, wave and cohort fixed effects. In regressions all ESS countries are included. Robust standard errors clustered at the cohort level are shown in parenthesis. *** significant 1% or less; ** significant at 5%; * significant at 10% confidence level.

Table 3: Macroeconomic Shocks During the Years 18-33

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Trust Parties	Few immigrants no EU	Trust Politicians	Trust Parliament	Trust EU	Government Satisfaction	Few immigrants different ethnicity	Many immigrants same ethnicity	Immigrants make country worse
Growth Shock (18-33)	-1.2397*** [-.2473]	.3281*** [.0539]	-1.1759*** [-.2236]	-1.3109*** [-.3326]	-.3750 [-.2341]	-1.0438*** [-.2139]	.2427*** [.0489]	-.0439 [.0543]	.7292*** [.1126]
Economic Insecurity (PC)	-.3006*** [.0084]	.0511*** [.0031]	-.3238*** [.0047]	-.3568*** [.0104]	-.2164*** [.0102]	-.3741*** [.0078]	.0566*** [.0028]	-.0472*** [.0041]	.1954*** [.0095]
R-squared	0.17	0.15	0.17	0.18	0.08	0.15	0.15	0.12	0.13
Observations	160252	179514	182366	157727	169227	180152	179982	180088	179052

Notes: The analysis controls for individual characteristics such as gender, political orientation, etc., as well as for age \times country, age, wave and cohort fixed effects. In regressions all ESS countries are included. Robust standard errors clustered at the cohort level are shown in parenthesis. *** significant 1% or less; ** significant at 5%; * significant at 10% confidence level.

Table 4: Populist Countries Restricted Sample

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Trust Parties									
Trust Parties									
Trust Politicians									
Trust Parliament									
Trust EU									
Few immigrants no EU									
Government Satisfaction									
Few immigrants different ethnicity									
Many immigrants same ethnicity									
Immigrants make country worse									
Growth Shock (18-25)	-7925*** [.0862]	.1943* [.0886]	-7551*** [.0987]	-9299*** [.1194]	-1033 [.2497]	-7848*** [.1356]	.1511 [.1035]	-.0836 [.0692]	.2401 [.2407]
Economic Insecurity (PC)	-2932*** [.0079]	.0548*** [.0031]	-3198*** [.0055]	-3484*** [.0095]	-.2215*** [.0089]	-.3744*** [.0069]	.0626*** [.0028]	-.0541*** [.0042]	.2018*** [.0095]
R-squared	0.19	0.16	0.18	0.18	0.09	0.15	0.16	0.12	0.14
Observations	12126	136812	138553	137984	130847	136700	137000	136983	136727

Notes: The analysis controls for individual characteristics such as gender, political orientation, etc., as well as for age \times country, age, wave and cohort fixed effects. In regressions all ESS countries are included. Robust standard errors clustered at the cohort level are shown in parenthesis. *** significant 1% or less; ** significant at 5%; * significant at 10% confidence level.

Table 5: Interactions: Macroeconomic Shocks and Economic Insecurity

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Trust Parties	Few immigrants no EU	Trust Politicians	Trust Parliament	Trust EU	Government Satisfaction	Few immigrants different ethnicity	Many immigrants same ethnicity	Immigrants make country worse
Growth Shock (18-25)	-4838*** [.0385]	.1362*** [.0297]	-4925*** [.1143]	-8008*** [.1924]	-2652** [.0934]	-4782** [.1888]	.1249*** [.0302]	-0046 [.0587]	.2631*** [.0724]
Economic Insecurity (PC)	-2625*** [.0053]	.0460*** [.0047]	-2916*** [.0093]	-3464*** [.0079]	-2115*** [.0090]	-3476*** [.0170]	.0549*** [.0036]	-0476*** [.0040]	.2019*** [.0113]
x Shock	.1643** [.0514]	-0.428** [.0134]	.1849** [.0477]	.2471*** [.0424]	.1125 [.0640]	.0624 [.0382]	-0.734** [.0257]	.1008*** [.0258]	-0.0595 [.0597]
R-squared	0.13	0.15	0.13	0.14	0.09	0.12	0.15	0.13	0.14
Observations	140570	157419	159779	159092	148985	157888	157772	157833	157212

Notes: The analysis controls for individual characteristics such as gender, political orientation, etc., as well as for age x country, age, wave and cohort fixed effects. In regressions all ESS countries are included. Robust standard errors clustered at the cohort level are shown in parenthesis. *** significant 1% or less; ** significant at 5%; * significant at 10% confidence level.

References

- Acemoglu, D., Egorov, G., and Sonin, K. (2013). A Political Theory of Populism. *The Quarterly Journal of Economics*, 128(2):771–805.
- Algan, Y., Guriev, S., Papaioannou, E., and Passari, E. (2017). The European Trust Crisis and the Rise of Populism. *Brookings Papers on Economic Activity*, 2017(2):309–400.
- Barro, R. J. and Ursúa, J. F. (2008). Macroeconomic Crises Since 1870. *National Bureau of Economic Research*.
- Bonikowski, B. (2017). Ethno-Nationalist Populism and the Mobilization of Collective Resentment. *The British Journal of Sociology*, 68:S181–S213.
- Di Tella, R. and Rotemberg, J. J. (2018). Populism and the Return of the “Paranoid Style”: Some Evidence and a Simple Model of Demand for Incompetence as Insurance Against Elite Betrayal. *Journal of Comparative Economics*, 46(4):988–1005.
- Dustmann, C., Eichengreen, B., Otten, S., Sapir, A., Tabellini, G., and Zoega, G. (2017). Europe’s Trust Deficit. *Causes and Remedies*. London: Centre for Economic Policy Research.
- Gill, I. S. and Raiser, M. (2012). *Golden Growth: Restoring the Lustre of the European Economic Model*. World Bank Publications.
- Giuliano, P. and Spilimbergo, A. (2014). Growing Up in a Recession. *Review of Economic Studies*, 81(2):787–817.

- Guiso, L., Herrera, H., Morelli, M., and Sonno, T. (2020). Economic Insecurity and the Demand of Populism in Europe. *Einaudi Institute for Economics and Finance*.
- Guriev, S. and Papaioannou, E. (2020). The Political Economy of Populism. *Available at SSRN 3542052*.
- Krosnick, J. A. and Alwin, D. F. (1989). Aging and Susceptibility to Attitude Change. *Journal of Personality and Social Psychology*, 57(3):416.
- Mudde, C. (2004). The Populist Zeitgeist. *Government and Opposition*, 39(4):541–563.
- Rodrik, D. (2018). Populism and the Economics of Globalization. *Journal of International Business Policy*, 1(1):12–33.
- Rooduijn, M., Van Kessel, S., Froio, C., Pirro, A., De Lange, S., Halikiopoulou, D., Lewis, P., Mudde, C., and Taggart, P. (2019). The Populist: An Overview of Populist, Far Right, Far Left and Eurosceptic Parties in Europe.
- Sears, D. O. (1983). The Persistence of Early Political Predispositions: The Roles of Attitude Object and Life Stage. *Review of Personality and Social Psychology*, 4(1):79–116.
- Spolaore, E. (2013). What Is European Integration Really About? A Political Guide for Economists. *Journal of Economic Perspectives*, 27(3):125–44.

A Online Appendix

This section provides an analytical overview of all the variables employed in the analysis.

A.1 ESS Variables

Outcome Variables

Vote in last national elections. “Vote in national elections” corresponds to the question “Some people don’t vote nowadays for one reason or another. Did you vote in the last [country] national election in [month/year]?”. It is a dummy variable taking the value 1 if he or she has voted and 0 otherwise.

Party voted. Individuals of all countries correspond to the question “Which party did you vote for in that election?”.

Vote for a populist party. It is a dummy variable indicating whether the individuals in each European country have voted for a populist party or not. 0 means not voting for populist parties and 1 means voted for it.

Trust in Parties. “Trust in Political Parties” corresponds to the question “Using this card, please tell me on a score of 0-10 how much you personally trust each of the institutions I read out. 0 means you do not trust an institution at all, and 10 means you have complete trust. Firstly [country]’s political parties?”.

Trust in Politicians. “Trust in Politicians” corresponds to the question “Using this card, please tell me on a score of 0-10 how much you personally trust each of the institutions I read out. 0 means you do not trust an institution at all, and 10 means you have complete trust. Firstly

[country]’s politicians?”

Trust in Parliament. “Trust in Parliament” corresponds to the question “Using this card, please tell me on a score of 0-10 how much you personally trust each of the institutions I read out. 0 means you do not trust an institution at all, and 10 means you have complete trust. Firstly [country]’s parliament?”.

Trust in European Union. “Trust in European Parliament” corresponds to the question “Using this card, please tell me on a score of 0-10 how much you personally trust each of the institutions I read out. 0 means you do not trust an institution at all, and 10 means you have complete trust. Firstly the European Parliament?”.

Satisfaction with Government. “Satisfaction with the National Government” corresponds to the question “How satisfied with the way national government is doing its job?”. The variable takes values from 0 to 10 with 0 denoting “extremely dissatisfied” and 10 denoting “extremely satisfied”.

Few immigrants from no EU. Respondents correspond to the question “How about people from the poorer countries outside Europe?”. 1 means allow many to come and live, and 4 means allow none.

Few immigrants from different race or ethnicity. Individuals correspond to the question “How about people of a different race or ethnic group from most [country] people?”. 1 means allow many to come and live, and 4 means allow none.

Few immigrants from same race or ethnicity. Individuals correspond to the question “Using this card, to what extent do you think [country] should allow people of the same race or ethnic group as most [country] people to come and live here?”. 1 means allow many to come and live, and 4 means allow none.

Immigrants make country worse. Individuals correspond to the question “Is [country] made a worse or a better place to live by people coming to live here from other countries?”. 0 means worse place to live, and 10 better place to live.

Control Variables

Age. The age of the respondent.

Political Orientation. In politics people sometimes talk of ‘left’ and ‘right’. Individuals correspond to the question “Using this card, where would you place yourself on this scale, where 0 means the left and 10 means the right?”.

Gender. The gender of the respondent.

Years of Education. Log years of education denotes the number of years that the individual has completed full-time or part-time. It is a continuous variable.

Risk Aversion. Individuals respond to the question “Please listen to each description and tell me how much each person is or is not like you. Use this card for your answer. She/he looks for adventures and likes to take risks. She/he wants to have an exciting life”. 1 means very much like that, and 6 not like me at all.

TV watching total time. Individuals correspond to the question “On an average weekday, how much time, in total, do you spend watching television?”. 0 means no time at all, and 7 more than three hours.

TV watching politics/news/affairs. Individuals correspond to the question “On an average weekday, how much of your time watching television is spent watching news or programs about politics and current affairs”. 0 means no time at all, and 7 more than three hours.

Unemployment. Individuals correspond to the question “Have any of these periods been within the past 5 years?”. It is a dummy variable taking the values 1 if the answer is positive and

0 otherwise.

Income difficulties. It is associated with the question “Which of the descriptions on this card comes closest to how you feel about your household’s income nowadays?”. 0 means “Living comfortably on present income” and 1 means “Very difficult on present income”.

Globalization exposure. Individuals respond to the question “What is/was the name or title of your main job? In your main job, what kind of work do/did you do most of the time? What training or qualifications are/were needed for the job?”. It is a dummy variable taking the value 1 whether the individual works as a low skill blue collar worker in manufacturing and 0 if not.

A.2 WB (Shock) Variable

GDP per capita growth rate. Annual percentage growth rate of GDP per capita based on constant local currency. Aggregates are based on constant 2010 U.S. dollars. GDP per capita is gross domestic product divided by midyear population. GDP at purchaser’s prices is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products.

Growth Shock. It is a dummy variable, taking the value 1 whether the GDP per capita growth rate is either equal or lower than -3.4% and 0 otherwise.

B Supplementary Tables and Figures

B.1 Tables

This section provides an analytical overview of the summary statistics and the tables (baseline and robustness) used in our analysis, exporting also the beta coefficients.

Table 6: Descriptive Statistics

	Impr. Years (18-25)			
	mean	sd	min	max
<i>Voting participation</i>				
Vote in last national elections	1.79	0.40	0	1
Vote for a populist party	1.08	0.27	0	1
<i>Political beliefs</i>				
Trust in politicians	3.43	2.38	0	10
Trust in parliament	4.30	2.59	0	10
Trust in EU parliament	4.33	2.47	0	10
Trust in political parties	3.38	2.36	0	10
Satisfaction with national government	4.11	2.46	0	10
<i>Attitudes towards immigrants</i>				
Immigrants make host country worse	5.28	2.30	0	10
Allow few immigrants outside EU	2.61	0.91	1	4
Allow few immigrants from different race or ethnicity	2.53	0.90	1	4
Allow many immigrants from same race or ethnicity	2.78	0.89	1	4
<i>Economic Sentiment</i>				
Growth Shock	0.04	0.13	0	1
Number of Shocks	0.25	0.75	0	7
Unemployment	1.27	0.44	0	1
Income difficulties	1.98	0.85	0	1
Globalization exposure	1.01	0.10	0	1
Principal Component (PCA)	0.23	0.78	-0.49	2.08
<i>Demographics</i>				
Men	0.46	0.49	0	1
Years of education	12.31	4.07	0	56
Risk aversion	3.95	1.43	1	6
Political orientation	5.14	2.22	0	10
TV hours watching TV	5.30	2.05	0	7
TV hours watching politics	2.99	1.32	0	7

Notes - Sources: European Social Survey ESS (2002-2016). The table reports participation in voting, vote for populist parties, trust in political institutions, satisfaction from national government, attitudes towards immigrants, individual demographic and country economic sentiment descriptive statistics.

Table 7: Macroeconomic Shocks During the Impressionable Years (18-25)

	Vote	Populist	Trust Parties	Few immigrants no EU	Trust politicians	Trust Parliament	Trust EU	Government Satisfaction	Few immigrants different ethnicity	Many immigrants same ethnicity	Immigrants make country worse
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Growth Shock (18-25)	-.0090 [.0413]	.0712* [.0366]	-1.0131*** [.0667]	.1944*** [.0534]	-.9511*** [.0891]	-1.2728*** [.1566]	-.2941* [.1525]	-.8609*** [.1124]	.1206* [.0580]	-.0105 [.0597]	.4571*** [.1218]
Risk Aversion	.0068*** [.0017]	.0004 [.0015]	-.0102 [.0092]	.0054** [.0021]	.0008 [.0082]	.0260** [.0092]	-.0258** [.0091]	.0091 [.0072]	.0074*** [.0021]	.0048** [.0018]	.0336*** [.0081]
ln(Education)	.0973*** [.0213]	-.0164 [.0107]	.3899*** [.0411]	-.3896*** [.0267]	.4504*** [.0417]	.7146*** [.0638]	.5022*** [.0408]	.1690*** [.0363]	-.4409*** [.0263]	.4349*** [.0219]	-1.0605*** [.0697]
TV total	-.0103*** [.0021]	.0032* [.0015]	-.0466*** [.0031]	.0469*** [.0017]	-.0502*** [.0028]	-.0763*** [.0024]	-.0473*** [.0050]	-.0328*** [.0035]	.0449*** [.0017]	-.0347*** [.0018]	.0970*** [.0046]
TV politics	.0184*** [.0030]	.0043*** [.0013]	.1221*** [.0083]	-.0450*** [.0028]	.1158*** [.0092]	.1147*** [.0131]	.0857*** [.0091]	.0481*** [.0062]	-.0502*** [.0038]	.0406*** [.0029]	-.1282*** [.0092]
Unemployment	-.0318*** [.0061]	.0107** [.0047]									
Income difficulties	-.0288*** [.0054]	.0132*** [.0043]									
Globalization Exposure	-.0406** [.0176]	-.0135 [.0092]									
Economic Insecurity (PC)			-.2963*** [.0059]	.0518*** [.0033]	-.3199*** [.0028]	-.3532*** [.0096]	-.2210*** [.0090]	-.3753*** [.0070]	.0577*** [.0026]	-.0479*** [.0049]	.1960*** [.0088]
R-squared	.13	.08	.18	.15	.17	.17	.08	.15	.16	.12	.13
Observations	114437	119246	140570	157419	159779	159092	148985	157888	157772	157833	157212
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Age FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cohort FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Wave FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Age*Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cluster SE	Country	Country	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort
Countries	With P	With P	All	All	All	All	All	All	All	All	All

Notes: The table reports the coefficients associated with regressions of exposure to macroeconomic shocks during the impressionable years (18-25) in participation in voting, vote for populist parties, trust in several institutions and attitudes towards immigrants. As additional controls, individual characteristics such as gender, political orientation, logged years of education, risk aversion, hours per week watching TV and programs about politics, current economic insecurity like unemployment, income difficulties, global exposure, their first principal component and as well as for age×country, age, wave and cohort fixed effects are used. Robust standard errors clustered at the country and cohorts level are shown in parenthesis. *** significant 1% or less; ** significant at 5% ; * significant at 10% confidence level.

Table 8: Macroeconomic Shocks During Years 18-33

	Vote	Populist	Trust Parties	Few immigrants no EU	Trust politicians	Trust Parliament	Trust EU	Government Satisfaction	Few immigrants different ethnicity	Many immigrants same ethnicity	Immigrants make country worse
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Growth Shock (18-33)	-.0350 [.0568]	.0843* [.0450]	-1.2397*** [.2473]	.3281*** [.0539]	-1.1759*** [.2236]	-1.3109*** [.3326]	-.3750 [.2341]	-1.0438*** [.2139]	.2427*** [.0489]	-.0439 [.0543]	.7292*** [.1126]
Risk Aversion	.0061*** [.0016]	.0003 [.0016]	-.0145 [.0093]	.0066** [.0023]	-.0036 [.0084]	.0255** [.0085]	-.0292*** [.0085]	.0035 [.0080]	.0082*** [.0019]	.0047** [.0015]	.0360*** [.0078]
ln(Education)	.0920*** [.0199]	-.0097 [.0118]	.3660*** [.0356]	-.3727*** [.0303]	.4221*** [.0402]	.7919*** [.0727]	.4575*** [.0495]	.1794*** [.0372]	-.4263*** [.0300]	.4271*** [.0236]	-1.0108*** [.0769]
TV total	-.0100*** [.0019]	.0028* [.0016]	-.0405*** [.0037]	.0469*** [.0016]	-.0454*** [.0030]	-.0824*** [.0030]	-.0395*** [.0042]	-.0289*** [.0053]	.0444*** [.0028]	-.0353*** [.0012]	.0950*** [.0017]
TV politics	.0181*** [.0028]	.0045*** [.0013]	.1161*** [.0084]	-.0441*** [.0024]	.1104*** [.0082]	.1188*** [.0154]	.0834*** [.0087]	.0433*** [.0062]	-.0490*** [.0028]	.0413*** [.0025]	-.1232*** [.0078]
Unemployment	-.0300*** [.0056]	.0122** [.0047]									
Income difficulties	-.0293*** [.0054]	.0145*** [.0048]									
Globalization Exposure	-.0437** [.0167]	-.0094 [.0092]									
Economic Insecurity (PC)			-.3006*** [.0084]	.0511*** [.0031]	-.3238*** [.0047]	-.3568*** [.0104]	-.2164*** [.0102]	-.3741*** [.0078]	.0566*** [.0028]	-.0472*** [.0041]	.1954*** [.0095]
R-squared	0.12	0.08	0.17	0.15	0.17	0.18	0.08	0.15	0.15	0.12	0.13
Observations	130900	135880	160252	179514	182366	157727	169227	180152	179982	180088	179052
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Age FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cohort FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Wave FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Age*Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cluster SE	Country	Country	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort
Countries	With P	With P	All	All	All	All	All	All	All	All	All

Notes: The table reports the coefficients associated with regressions of exposure to macroeconomic shocks during the years 18-33 in participation in voting, vote for populist parties, trust in several institutions and attitudes towards immigrants. As additional controls, individual characteristics such as gender, political orientation, logged years of education, risk aversion, hours per week watching TV and programs about politics, current economic insecurity like unemployment, income difficulties, global exposure, their first principal component and as well as for age×country, age, wave and cohort fixed effects are used. Robust standard errors clustered at the country and cohorts level are shown in parenthesis. *** significant 1% or less; ** significant at 5% ; * significant at 10% confidence level.

Table 9: Populist Countries Restricted Sample

	Trust Parties	Few immigrants no EU	Trust politicians	Trust Parliament	Trust EU	Government Satisfaction	Few immigrants different ethnicity	Many immigrants same ethnicity	Immigrants make country worse
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Growth Shock (18-25)	-.7925*** [.0862]	.1943* [.0886]	-.7551*** [.0987]	-.9299*** [.1194]	-.1033 [.2497]	-.7848*** [.1356]	.1511 [.1035]	-.0836 [.0692]	.2401 [.2407]
Risk Aversion	-.0030 [.0096]	.0060** [.0019]	.0090 [.0071]	.0304*** [.0075]	-.0232** [.0075]	.0115 [.0080]	.0075** [.0026]	.0010 [.0018]	.0405*** [.0070]
ln(Education)	.4157*** [.0370]	-.4159*** [.0262]	.4954*** [.0413]	.8552*** [.0615]	.6432*** [.0385]	.2031*** [.0265]	-.4696*** [.0280]	.4363*** [.0223]	-1.1678*** [.0751]
TV total	-.0594*** [.0040]	.0470*** [.0018]	-.0633*** [.0028]	-.0885*** [.0039]	-.0501*** [.0048]	-.0429*** [.0028]	.0451*** [.0015]	-.0386*** [.0017]	.1001*** [.0045]
TV politics	.1395*** [.0124]	-.0469*** [.0030]	.1295*** [.0120]	.1260*** [.0161]	.0887*** [.0101]	.0522*** [.0072]	-.0532*** [.0039]	.0470*** [.0023]	-.1359*** [.0104]
Economic Insecurity (PC)	-.2932*** [.0079]	.0548*** [.0031]	-.3198*** [.0055]	-.3484*** [.0095]	-.2215*** [.0089]	-.3744*** [.0069]	.0626*** [.0028]	-.0541*** [.0042]	.2018*** [.0095]
R-squared	0.19	0.16	0.18	0.18	0.09	0.15	0.16	0.12	0.14
Observations	121226	136812	138553	137984	130847	136700	137000	136983	136727
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Age FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cohort FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Wave FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Age*Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cluster SE	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort
Countries	With P	With P	With P	With P	With P	With P	With P	With P	With P

Notes: The table reports the coefficients associated with regressions of exposure to macroeconomic shocks during the impressionable years (18-25) in participation in voting, vote for populist parties, trust in several institutions and attitudes towards immigrants. As additional controls, individual characteristics such as gender, political orientation, logged years of education, risk aversion, hours per week watching TV and programs about politics, the first principal component of current economic insecurity like unemployment, income difficulties, global exposure and as well as for age×country, age, wave and cohort fixed effects are used. The sample now is restricted to ESS populist countries. Robust standard errors clustered at the cohorts level are shown in parenthesis. *** significant 1% or less; ** significant at 5% ; * significant at 10% confidence level.

Table 10: Interactions: Macroeconomic Shocks and Economic Insecurity

	Vote	Populist	Trust Parties	Few immigrants no EU	Trust politicians	Trust Parliament	Trust EU	Government Satisfaction	Few immigrants different ethnicity	Many immigrants same ethnicity	Immigrants make country worse
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Growth Shock (18-25)	.1548 [.1282]	.0934** [.0438]	-.4838*** [.0385]	.1362*** [.0297]	-.4925*** [.1143]	-.8008*** [.1924]	-.2652** [.0934]	-.4782** [.1888]	.1249*** [.0302]	-.0046 [.0587]	.2631*** [.0724]
Income Difficulties	-.0398*** [.0071]	.0120*** [.0035]									
x Shock	-.0408 [.0420]	-.0038 [.0219]									
Economic Insecurity (PC)			-.2625*** [.0053]	.0460*** [.0047]	-.2916*** [.0093]	-.3464*** [.0079]	-.2115*** [.0090]	-.3476*** [.0170]	.0549*** [.0036]	-.0476*** [.0040]	.2019*** [.0113]
x Shock			.1643** [.0514]	-.0428** [.0134]	.1849*** [.0477]	.2471*** [.0424]	.1125 [.0640]	.0624 [.0382]	-.0734** [.0257]	.1008*** [.0258]	-.0595 [.0597]
Risk Aversion	.0094** [.0036]	.0005 [.0015]	-.0018 [.0149]	.0057* [.0029]	.0079 [.0139]	.0293* [.0133]	-.0146 [.0126]	.0231 [.0131]	.0067* [.0032]	.0060 [.0032]	.0211 [.0123]
ln(Education)	.1076*** [.0309]	-.0037 [.0082]	.3033*** [.0405]	-.3980*** [.0285]	.3609*** [.0483]	.6049*** [.0809]	.4540*** [.0488]	.1150** [.0370]	-.4453*** [.0242]	.4371*** [.0198]	-1.0686*** [.0748]
TV total	-.0158*** [.0027]	.0013 [.0014]	-.0319*** [.0053]	.0462*** [.0028]	-.0398*** [.0064]	-.0634*** [.0067]	-.0573*** [.0072]	-.0094 [.0058]	.0451*** [.0030]	-.0374*** [.0011]	.0918*** [.0079]
TV politics	.0206*** [.0037]	.0038* [.0020]	.1067*** [.0072]	-.0393*** [.0052]	.1012*** [.0091]	.1143*** [.0089]	.0845*** [.0056]	.0482*** [.0062]	-.0453*** [.0059]	.0334*** [.0048]	-.1160*** [.0053]
Unemployment	-.0410*** [.0100]	.0070 [.0047]									
Globalization Exposure	-.0258** [.0124]	.0015 [.0096]									
R-squared	0.13	0.09	0.13	0.15	0.13	0.14	0.09	0.12	0.15	0.13	0.14
Observations	114437	119246	140570	157419	159779	159092	148985	157888	157772	157833	157212
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Age FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cohort FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Wave FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Age*Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cluster SE	Country	Country	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort
Countries	With P	With P	All	All	All	All	All	All	All	All	All

Notes: The table reports the coefficients associated with regressions of exposure to macroeconomic shocks during the impressionable years (18-25), the interaction between past shocks and current economic insecurity expressed by income difficulties and the first principal component of unemployment, income difficulties and global exposure in participation in voting, vote for populist parties, trust in several institutions and attitudes towards immigrants. As additional controls, individual characteristics such as gender, political orientation, logged years of education, risk aversion, hours per week watching TV and programs about politics and as well as for age×country, age, wave and cohort fixed effects are used. Robust standard errors clustered at the country and cohorts level are shown in parenthesis. *** significant 1% or less; ** significant at 5% ; * significant at 10% confidence level.

Table 11: Beta Coefficients: Macroeconomic Shocks During the Impressionable Years (18-25)

	Vote	Populist	Trust Parties	Few immigrants no EU	Trust politicians	Trust Parliament	Trust EU	Government Satisfaction	Few immigrants different ethnicity	Many immigrants same ethnicity	Immigrants make country worse
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Growth Shock (18-25)	-.002	.026*	-.056***	.027***	-.050***	-.063***	-.015*	-.044***	.017*	-.002	.025***
	[.0413]	[.0366]	[.0667]	[.0534]	[.0891]	[.1566]	[.1525]	[.1124]	[.0580]	[.0597]	[.1218]
Risk Aversion	.024***	.002	-.006	.009**	.000	.015**	-.015**	.005	.012***	.008**	.021***
	[.0017]	[.0015]	[.0092]	[.0021]	[.0082]	[.0092]	[.0091]	[.0072]	[.0021]	[.0018]	[.0081]
ln(Education)	.080***	-.018	.061***	-.156***	.069***	.102***	.075***	.025***	-.181***	.183***	-.168***
	[.0213]	[.0107]	[.0411]	[.0267]	[.0417]	[.0638]	[.0408]	[.0363]	[.0263]	[.0219]	[.0697]
TV total	-.050***	.021*	-.038***	.099***	-.041***	-.057***	-.038***	-.026***	.097***	-.077***	.081***
	[.0021]	[.0015]	[.0031]	[.0017]	[.0028]	[.0024]	[.0050]	[.0035]	[.0017]	[.0018]	[.0046]
TV politics	.058***	.018***	.066***	-.063***	.062***	.057***	.045***	.025***	-.072***	.059***	-.071***
	[.0030]	[.0013]	[.0083]	[.0028]	[.0092]	[.0131]	[.0091]	[.0062]	[.0038]	[.0029]	[.0092]
Unemployment	-.038***	.017**									
	[.0061]	[.0047]									
Income difficulties	-.061***	.038***									
	[.0054]	[.0043]									
Globalization Exposure	-.010**	-.004									
	[.0176]	[.0092]									
Economic Insecurity (PC)			-.140***	.063***	-.150***	-.153***	-.101***	-.170***	.072***	-.062***	.095***
			[.0059]	[.0033]	[.0028]	[.0096]	[.0090]	[.0070]	[.0026]	[.0049]	[.0088]
R-squared	0.13	0.08	0.18	0.15	0.17	0.17	0.08	0.15	0.16	0.12	0.13
Observations	114437	119246	140570	157419	159779	159092	148985	157888	157772	157833	157212
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Age FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cohort FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Wave FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Age*Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cluster SE	Country	Country	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort
Countries	With P	With P	All	All	All	All	All	All	All	All	All

Notes: Beta coefficients correspond to the baseline specification of impressionable years hypothesis.

Table 12: Beta Coefficients: Macroeconomic Shocks During the Years 18-33

	Vote	Populist	Trust Parties	Few immigrants no EU	Trust politicians	Trust Parliament	Trust EU	Government Satisfaction	Few immigrants different ethnicity	Many immigrants same ethnicity	Immigrants make country worse
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Growth Shock (18-33)	-.009	.029*	-.066***	.044***	-.060***	-.052***	-.018	-.052***	.033***	-.006	.038***
	[.0568]	[.0450]	[.2473]	[.0539]	[.2236]	[.3326]	[.2341]	[.2139]	[.0489]	[.0543]	[.1126]
Risk Aversion	.022***	.001	-.009	.010**	-.002	.014**	-.017***	.002	.013***	.008**	.023***
	[.0016]	[.0016]	[.0093]	[.0023]	[.0084]	[.0085]	[.0085]	[.0080]	[.0019]	[.0015]	[.0078]
ln(Education)	.079***	-.011	.058***	-.154***	.067***	.105***	.070***	.027***	-.180***	.185***	-.166***
	[.0199]	[.0118]	[.0356]	[.0303]	[.0402]	[.0727]	[.0495]	[.0372]	[.0300]	[.0236]	[.0769]
TV total	-.049***	.018*	-.033***	.099***	-.037***	-.063***	-.031***	-.023***	.096***	-.078***	.080***
	[.0019]	[.0016]	[.0037]	[.0016]	[.0030]	[.0042]	[.0053]	[.0028]	[.0012]	[.0017]	[.0036]
TV politics	.059***	.019***	.064***	-.063***	.060***	.060***	.044***	.023***	-.071***	.061***	-.070***
	[.0028]	[.0013]	[.0084]	[.0024]	[.0082]	[.0154]	[.0087]	[.0062]	[.0028]	[.0025]	[.0078]
Unemployment	-.036***	.019**									
	[.0056]	[.0047]									
Income difficulties	-.063***	.041***									
	[.0054]	[.0048]									
Globalization Exposure	-.011**	-.003									
	[.0167]	[.0092]									
Economic Insecurity (PC)			-.142***	.062***	-.151***	-.157***	-.099***	-.169***	.071***	-.060***	.095***
			[.0084]	[.0031]	[.0047]	[.0104]	[.0102]	[.0078]	[.0028]	[.0041]	[.0095]
R-squared	.12	.08	.17	.15	.17	.18	.08	.15	.15	.12	.13
Observations	130900	135880	160252	179514	182366	157727	169227	180152	179982	180088	179052
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Age FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cohort FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Wave FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Age*Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cluster SE	Country	Country	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort
Countries	With P	With P	All	All	All	All	All	All	All	All	All

Notes: Beta coefficients correspond to the specification of years 18 to 33.

Table 13: Beta Coefficients: Populist Countries Restricted Sample

	Trust Parties	Few immigrants no EU	Trust politicians	Trust Parliament	Trust EU	Government Satisfaction	Few immigrants different ethnicity	Many immigrants same ethnicity	Immigrants make country worse
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Growth Shock (18-25)	-.037*** [.0862]	.023* [.0886]	-.034*** [.0987]	-.039*** [.1194]	-.005 [.2497]	-.035*** [.1356]	.018 [.1035]	-.011 [.0692]	.011 [.2407]
Risk Aversion	-.002 [.0096]	.010** [.0019]	.005 [.0071]	.017*** [.0075]	-.014** [.0075]	.007 [.0080]	.012** [.0026]	.002 [.0018]	.025*** [.0070]
ln(Education)	.058*** [.0370]	-.150*** [.0262]	.068*** [.0413]	.109*** [.0615]	.087*** [.0385]	.027*** [.0265]	-.174*** [.0280]	.169*** [.0223]	-.167*** [.0751]
TV total	-.049*** [.0040]	.101*** [.0018]	-.052*** [.0028]	-.068*** [.0039]	-.041*** [.0048]	-.034*** [.0028]	.100*** [.0015]	-.089*** [.0017]	.085*** [.0045]
TV politics	.074*** [.0124]	-.065*** [.0030]	.068*** [.0120]	.062*** [.0161]	.046*** [.0101]	.027*** [.0072]	-.076*** [.0039]	.070*** [.0023]	-.074*** [.0104]
Economic Insecurity (PC)	-.140*** [.0079]	.068*** [.0031]	-.151*** [.0055]	-.153*** [.0095]	-.103*** [.0089]	-.172*** [.0069]	.080*** [.0028]	-.072*** [.0042]	.099*** [.0095]
R-squared	0.19	0.16	0.18	0.18	0.09	0.15	0.16	0.12	0.14
Observations	121226	136812	138553	137984	130847	136700	137000	136983	136727
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Age FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cohort FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Wave FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Age*Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cluster SE	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort
Countries	With P	With P	With P	With P	With P	With P	With P	With P	With P

Notes: Beta coefficients correspond to the baseline specification, restricting the sample to populist countries.

Table 14: Beta Coefficients: Interactions between Macroeconomic Shocks and Economic Insecurity

	Vote	Populist	Trust Parties	Few immigrants no EU	Trust politicians	Trust Parliament	Trust EU	Government Satisfaction	Few immigrants different ethnicity	Many immigrants same ethnicity	Immigrants make country worse
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Growth Shock (18-25)	.032 [.1282]	.032** [.0438]	-.037*** [.0385]	.024*** [.0297]	-.036*** [.1143]	-.053*** [.1924]	-.017** [.0934]	-.033** [.1888]	.023*** [.0302]	-.001 [.0587]	.019*** [.0724]
Income Difficulties	-.077*** [.0071]	.037*** [.0035]									
x Shock	-.009 [.0420]	-.001 [.0219]									
Economic Insecurity (PC)			-.128*** [.0053]	.055*** [.0047]	-.140*** [.0093]	-.151*** [.0079]	-.095*** [.0170]	-.159*** [.0170]	.068*** [.0036]	-.061*** [.0040]	.096*** [.0113]
x Shock			.016** [.0514]	-.010** [.0134]	.017*** [.0477]	.021*** [.0424]	.009 [.0640]	.005 [.0382]	-.018** [.0257]	.025*** [.0258]	-.005 [.0597]
Risk Aversion	.033** [.0036]	.003 [.0015]	-.001 [.0149]	.009* [.0029]	.005 [.0139]	-.017* [.0133]	-.009 [.0126]	.014 [.0131]	.011* [.0032]	.010 [.0032]	.013 [.0123]
ln(Education)	.087*** [.0309]	-.005 [.0082]	.048*** [.0405]	-.154*** [.0285]	.056*** [.0483]	.085*** [.0809]	.066*** [.0488]	.017** [.0370]	-.178*** [.0242]	.179*** [.0198]	-.163*** [.0748]
TV total	-.074*** [.0027]	.009 [.0014]	-.027*** [.0053]	.097*** [.0028]	-.033*** [.0064]	-.048*** [.0067]	-.045*** [.0072]	-.007 [.0058]	.097*** [.0030]	-.082*** [.0011]	.076*** [.0079]
TV politics	.064*** [.0037]	.019* [.0020]	.061*** [.0072]	-.055*** [.0052]	.057*** [.0091]	.058*** [.0089]	.044*** [.0056]	.026*** [.0062]	-.065*** [.0059]	.049*** [.0048]	-.064*** [.0053]
Unemployment	-.048*** [.0100]	.013 [.0047]									
Globalization Exposure	-.006** [.0124]	.001 [.0096]									
R-squared	0.13	0.09	0.13	0.15	0.13	0.14	0.09	0.12	0.15	0.13	0.14
Observations	114437	119246	140570	157419	159779	159092	148985	157888	157772	157833	157212
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Age FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cohort FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Wave FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Age*Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cluster SE	Country	Country	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort
Countries	With P	With P	All	All	All	All	All	All	All	All	All

Notes: Beta coefficients correspond to the interaction between macroeconomic shock experienced in impressionable years (18-25) and current economic insecurity.

B.2 Figures

Figure 1: Shares of populist and parties votes in Europe

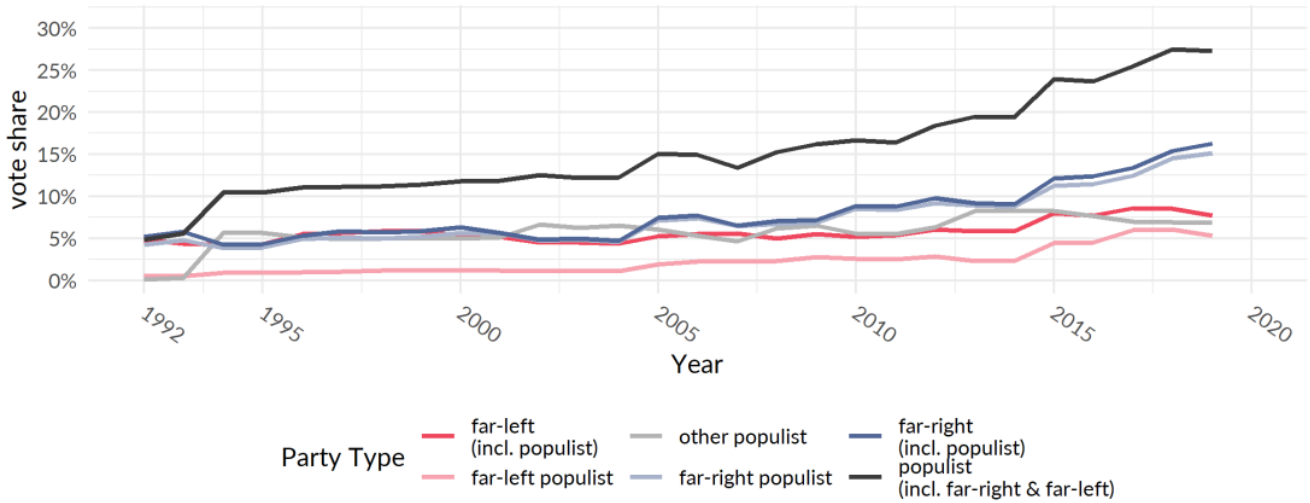
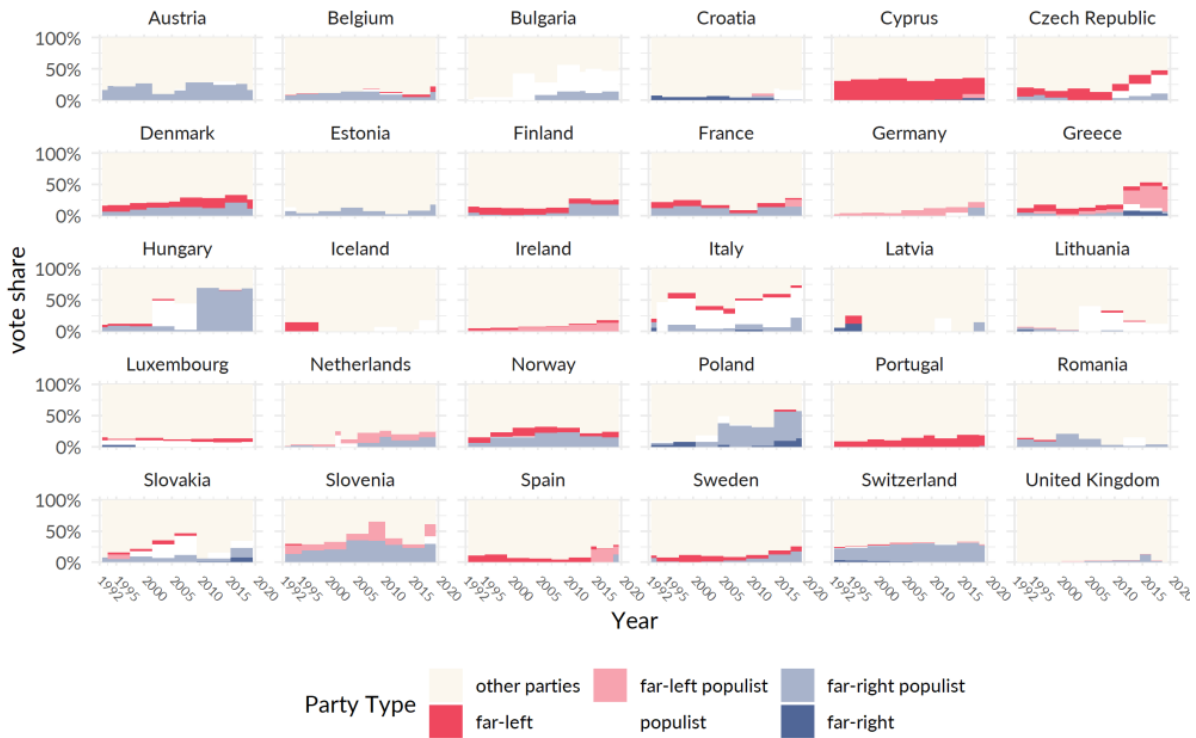


Figure 2: Vote shares of populist, far-right and far-left parties by country



Source: Rooduijn et al. (2019)