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# Past Exposure to Macroeconomic Shocks and Populist Attitudes in Europe

Despina Gavresi, Anastasia Litina<sup>\*</sup>

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## 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 impressionable years. Our findings suggest that it is not only current exposure to shocks that matters (see e.g., [Guiso et al. \(2020\)](#)) but also past exposure to economic recessions, which has a persistent positive effect on the rise of populism. Interestingly, the interplay between the two, i.e., past and current exposure to economic shocks, has a mitigating effect on the rise of populism. Individuals who were exposed to economic shocks in the past are less likely to manifest populist attitudes when faced with a current crisis, as suggested by the experience-based learning literature.

**Keywords:** Macroeconomic Shocks, Trust, Attitudes, Populism

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

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# 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.

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%. <sup>1</sup> 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

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<sup>1</sup>[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.

each individual to his/her past exposure to economic shocks during their impressionable 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 to various specifications. At first, we use an alternative measure of macroeconomic shock during the impressionable years. As a macroeconomic shock in this case, we define the GDP per capita growth rate equal or lower than -6.3%, representing the 5th percentile of the GDP per capita growth rate. Then, 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). Last, we replicate the benchmark analysis, restricting the sample to countries with at least one populist party.

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.

What can explain this intriguing finding concerning the interplay between current and past exposure? Our findings can be motivated based upon the experience-based learning process (Malmendier and Nagel 2011; Malmendier 2021). More broadly Malmendier (2021) argues that past experiences alter us and shape our future reactions. As the author mentions *“The term experience effects was coined to describe the empirical finding that individuals living through and personally experiencing the realizations of macro, finance, and other economic processes respond to these experiences differently from people who are fully informed about the same outcomes, but did not personally experience them. This literature has found that personal experiences are significantly more powerful in shaping risk attitudes, beliefs, and decision-making than “information”.*” Interestingly, Malmendier and Nagel (2016) illustrate that in the context of past and current exposure to inflation and its implications on the weight that young and older individuals place on new information, young individuals react more strongly to an inflation surprise than older individual who have past inflation-related experiences.

In a similar rational, individuals in our sample react in the same way in terms of populism when exposed to a shock. However, individuals who have experienced higher exposure to past shocks, react more moderately compared to individuals who have not had much exposure to past shocks.

Uncovering the importance of the past experiences and the interplay between present and the past economic experiences is particularly important. It provides an explanation as to why people from different countries, with similar otherwise economic profiles, respond differently to modern-day economic challenges. Moreover, it is a factor to consider when shaping policies that affect the economic life of individuals and through it their political attitudes, suggesting that history plays a crucial role and should

be factored in any political decision.

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 Related Literature

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. Their findings suggest 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. In accordance with [Stankov \(2018\)](#), populism is not independent from economic shocks. High levels of inflation typically coincide with recessions which turn voters to support populists in Europe. However, time invariant country characteristics are an important factor behind the rise and fall of populist parties. Some countries are more prone to populism than others, which could be related to different institutions. The study shows that macroeconomic shocks have a lasting influence on voting preferences for populism.

We further contribute to the literature that highlights the role of collective memory and past experiences. [Fouka and Voth \(2016\)](#) investigate how present events trigger selective recall, changing the economic behavior. As an example, they use the latest debt crisis in Greece created massive political conflict between the German and Greek governments. They show how local memory affected reactions to news, leading to much larger changes in some areas, more heavily inflicted, compared to others. The proposed policies from the German government about further tightening the austerity measures that should be adopted from Greece, created public discord between the German and Greek governments, and memories of past violent conflict quickly resurfaced. The case of German-Greek conflicts illustrates the extent to which memory can become important for actual purchasing behavior. [Dinas et al. \(2021\)](#) argue that a number of studies in political science show that historical experiences of past violence and repression can serve as basis for the formation of persistent social identities that affect behavior and attitudes. A past experience of a traumatic nature may matter for attitudes towards groups that are unrelated to the past trauma, but that are facing similar experiences today. In this study, they empirically test the hypothesis that the analogy of historical experience, as transmitted through the family and local community, may reduce prejudice towards outgroups. They explore how past traumatic experiences matter for attitudes and

behavior in the present. Prompting people to react on another's condition using not only one's own past but also that of one's relatives as a frame of reference increases the range of experiences that individuals can relate to and thus the potential for empathy. As far as the past exposure to shocks, [Fouka \(2019\)](#) examines the responses of immigrants to discrimination using the case of German Americans in the early twentieth century US. World War I as it was an important exogenous shock to natives' attitudes, and during and after the war, many Germans suffered widespread harassment. On the other hand, [Makridis and McGuire \(2019\)](#) argue that the Great Depression could alter beliefs about future economic fluctuations and the trustworthiness of traditional capital and labor markets. More specifically, childhood experiences during the Great Depression can have prompted individuals to teach their children to get in touch with the entrepreneurship feeling. Other results in this literature illustrate that culture and personal experiences have a long lasting effect on individual preferences and beliefs. Changes in beliefs caused by individuals' experience can have a considerable impact not only on financial investment decisions ([Malmendier and Nagel 2011](#)) but also on political preferences as well ([Giuliano and Spilimbergo 2014](#)).

Our analysis contribute to both literature by advancing past economic experiences as a novel determinant of populism. Moreover, we further illustrate that past and current experiences interact with each other in an unpredictable way, i.e., by mitigating each other, despite the fact that both forces have in principle the same type of effect.



## 3 Data and Empirical Strategy

### 3.1 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. [Table 1](#) documents the descriptive

statistics of all the variables explained above and used in our analysis.

[INSERT TABLE 1 HERE]

There is a significant increase in the percentage of individuals who are voting for populist parties due to the macroeconomic shocks that have been experienced in the past and the current economic insecurity across Europe. Figures 1 and 2 document the evolution of shares of populist and parties votes in European countries over time. We can infer that individuals prefer to vote populist parties especially whether they live in countries hit by a higher number of shocks. Thus, there is a significant variation across countries and individuals which is the type of variation that we exploit.

[INSERT FIGURES HERE]

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.

## 3.2 Empirical Strategy

We apply an OLS (for ease of interpretation) regression model to examine the effect of exposure to macroeconomic shocks during the “impressionable years” on political participation and voting for a

populist party and as well as on interpersonal political trust and beliefs towards immigrants<sup>2</sup> Thus, we estimate the following model:

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

where  $y_{ict}$  denotes the political beliefs, attitudes and vote for a populist party of individual  $i$ , in country  $c$ , participating at ESS round  $t$ ,  $Macro Shock_i$  is individual's  $i$  exposure to a recession during the impressionable years.  $X_i$  is the vector of controls described above,  $\beta_a$ ,  $\gamma_c$ ,  $\delta_t$  and  $\theta_j$  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).<sup>3</sup>

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 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.

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<sup>2</sup>We focus primarily on the native sample, i.e., we drop first generation immigrants from our analysis. Since second generation immigrants are in most countries able to vote we keep them in the benchmark analysis.

<sup>3</sup>Our results are similar when we cluster at the country level as in the former analysis.

## 4 Empirical Findings

To assess the magnitude of our results we calculate the beta coefficients which are reported in Online Appendix Supplementary Tables. Table 2 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. An 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 2 HERE]

Table 3 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, an 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 the 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. An 1 standard deviation increase in shock is related to 0.27 standard deviations rise in allowing few immigrants outside EU, 0.25 standard deviations rise in beliefs that immigrants are bad for the host country and a 0.17 standard deviations increase in few immigrants from different race or ethnicity. The results are significant at the 1% and 10% confidence level, respectively.

[INSERT TABLE 3 HERE]

Overall, our findings hint to the fact that not only current exposure to an economic shock, but also adverse experiences during the impressionable years matter to the formation of current populist attitudes. This is an important finding as it suggests an additional determinant that should be account for by parties when shaping their policies and addressing to the people, based on the history of the country as well as the generation that dominates the median voter age (and the associated experiences of this generation).

## 5 Robustness

The robustness section establishes the robustness of the baseline analysis to a number of alternative specifications such as the use of an alternative measure (the 5th percentile) of shocks, the expansion of the impressionable years hypothesis (18-33) and the restriction of the sample to populist countries (i.e., we keep only countries that have at least one populist party). To anticipate the findings, exposure to stronger shocks and longer exposure to a shock yield similar negative effect of past exposure on modern day attitudes towards populism, and this effect is even stronger in terms of magnitude.

### 5.1 Alternative Measure of Shocks

This section establishes the robustness of the baseline analysis to the use of an alternative measure of macroeconomic shocks. Following [Giuliano and Spilimbergo \(2014\)](#) we continue to rely on GDP per capita growth rate extracting the related data from the World Bank Indicators (WBI), but now as far as our new alternative explanatory variable is concerned, we construct a dummy variable equal to 1 when the individual experienced a macroeconomic shock in which the GDP per capita growth was either equal or lower than -6.3% during his or her “impressionable years” and 0 otherwise. This threshold represents the lowest 5th percentile of the GDP per capita growth distribution for all countries during the years 1960 and 2020.

Table 2 reports the results relating to individuals’ voting behavior when they experience a stronger recession. Columns 3 and 4 replicate the baseline analysis of Columns 1 and 2, using a different measure of a shock experience during the years 18 to 25. The results remain quite similar however our coefficient of interest has a stronger magnitude, showing that individuals who experience a more significant decline

of growth rate during their impressionable years, are more likely to vote for a populist party. An 1 standard deviation increase in shock is associated with a decline of 0.011 standard deviation of having voted in the last national elections and with a 0.036 standard deviation rise in voting for a populist party. Our findings are significant at the 5% level.

Table 4 documents the results for aspects of political trust, government satisfaction and the attitudes towards immigrants. Table 4 replicates the benchmark analysis, using the full set of controls and the exposure to greater macroeconomic shocks as the main explanatory variable. The results remain robust as far as the variables of trust in political institutions, although the results related to immigrant attitudes are weaker without being significant in any confidence level.

[INSERT TABLE 4 HERE]

## 5.2 Extended Impressionable Years Hypothesis

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 2 documents the results relating to voting. Columns 5 and 6 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 5 also replicates the analysis in 2 using the full set of controls and the exposure to shocks during the ages 18 to 33. As for the case of trust, the results are qualitatively similar and quantitatively stronger.

[INSERT TABLE 5 HERE]

### **5.3 Sample Restricted to Populist Countries**

Table 6 replicates 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 the results are quite similar, though the results related to immigrant attitudes are somewhat weaker and remain significant at the 10% level.

[INSERT TABLE 6 HERE]

## **6 The Interplay in the Exposure to Past and Current Economic Shocks**

Our paper builds 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), that are both argued to be important determinants of populist attitudes, interact with each other. Do people that had adverse experience during their impressionable years respond similarly to those who never had a bad experience? Evidence from the

recent fiscal 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 2, in columns 7 and 8 reports the results for the benchmark specification for voting while Table 7 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 7 HERE]

Generally, 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. The more frequent the past exposure to economic shocks, the less strong the current anti-immigrant attitudes become, mitigated by the reaction to similar experiences in the past. This experience however is not reflected in voting patterns.

We argue that this intriguing interplay between current and past exposure can be explained by the experience-based learning literature (Malmendier and Nagel 2011; Malmendier 2021). The literature relies on the notion of *experience effects* and the brain processes involved when an individual is exposed

to a particular experience, e.g., an economic shock. Past experiences have been proved to shape the belief-formation and the decision making of individuals in a series of economic applications. While many processes are at play, we lay emphasis on the fact that evidence suggests that past exposure may mitigate current reaction of an individual compared to someone who is exposed to a stimulus for the first time (see e.g., [Malmendier and Nagel \(2016\)](#) in the context of inflation).

Likewise, our findings hint to such a behavior. The more people have been exposed to a past shock, the less they are affected by a current shock with respect to their populist attitudes and behavior. And vice versa. This is important for policy implications. Not only do we confirm that current shocks matter, but we also hint to the fact that history matters. Therefore, policy makers should always keep in mind the history of the group they address to. This is something that populist parties do already, when they try to polarize their audience based on collective remembrance.

Likewise, this type of information should be embedded in economic decisions with the aim to increase the efficiency of a measure and to mitigate the risk that a particular policy can trigger populist attitudes.

## **7 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 of age, tend participate less in national elections and when they do, they tend to 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, during which the individuals shape their political behavior.

Moreover, as additional robustness exercises, we use an alternative measure of macroeconomic shocks and 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 in the current time period, 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. This finding is another application of the experience-based learning literature ([Malmendier 2021](#)) that highlights the role of past experiences in shaping current decision-making.

Our research sheds light on the role of past economic events on shaping the personality of individuals and through it on contemporary politics and policy-making.

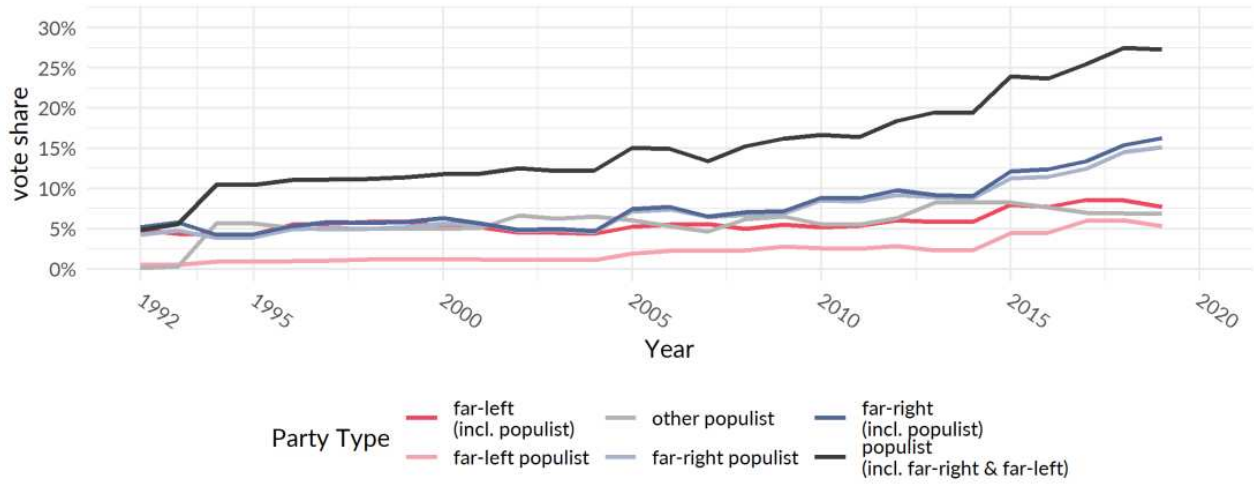
## **Baseline Tables and Figures**

**Table 1:** Descriptive Statistics

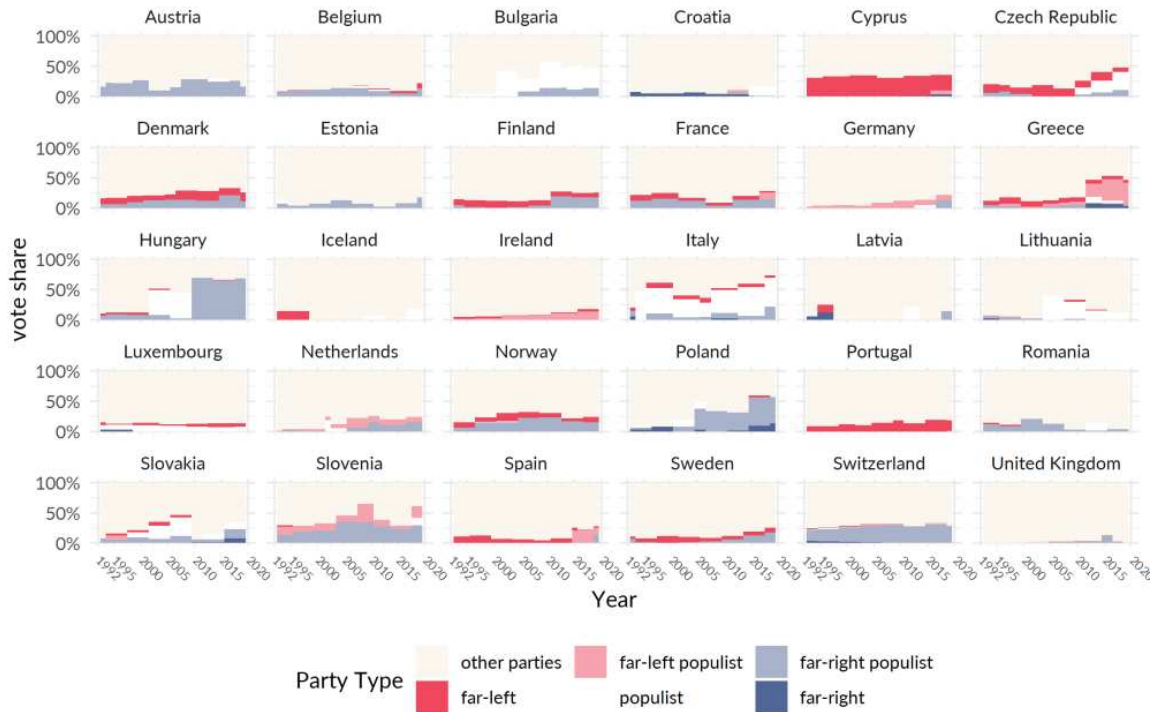
	mean	sd	min	max
<b><i>Voting participation</i></b>				
Vote in last national elections	1.79	0.40	0	1
Vote for a populist party	1.08	0.27	0	1
<b><i>Political trust</i></b>				
Trust in politicians	3.43	2.38	0	10
Trust in parliament	4.30	2.59	0	10
Trust in EU parliament	4.33	2.47	0	10
Trust in political parties	3.38	2.36	0	10
Satisfaction with national government	4.11	2.46	0	10
<b><i>Attitudes towards immigrants</i></b>				
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
<b><i>Economic Sentiment</i></b>				
Shock -3.4%	0.04	0.13	0	1
Shock -6.3%	0.02	0.09	0	1
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
<b><i>Demographics</i></b>				
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
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 the descriptive statistics of participation in voting, vote for populist parties, trust in political institutions; i) parties, ii) politicians, iii) parliament and iv) European Union, satisfaction from national government, attitudes towards immigrants; i) few immigrants from no EU, ii) few immigrants from different ethnicity, iii) many immigrants from same ethnicity, individual demographic characteristics such as gender, years of education, risk aversion, political orientation, hours watching TV, TV hours watching politics, and country economic sentiment like growth shocks, unemployment, income difficulties, globalization exposure, their first Principal Component (P.C.A) and the number of shocks.

**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)

**Table 2:** Macroeconomic Shocks, Participation in Voting and Vote Populist Party

	Vote in last elections	Populist Parties	Vote in last elections	Populist Parties	Vote in last elections	Populist Parties	Vote in last elections	Populist Parties
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Shock -3.4% (18-25)	-.0090 [.0413]	.0712* [.0366]					.0050 [.0541]	.1233** [.0534]
x Income difficulties							-.0065 [.0310]	-.0243 [.0270]
Shock -6.3% (18-25)			-.0540 [.0534]	.1275** [.0598]				
Shock -3.4% (18-33)					-.0350 [.0568]	.0843* [.0450]		
Risk Aversion	.0068*** [.0017]	.0004 [.0015]	.0068*** [.0017]	.0005 [.0015]	.0061*** [.0016]	.0003 [.0016]	.0068*** [.0017]	.0004 [.0015]
ln(Education)	.0973*** [.0213]	-.0164 [.0107]	.0972*** [.0213]	-.0163 [.0107]	.0920*** [.0199]	-.0097 [.0118]	.0973*** [.0213]	-.0163 [.0107]
TV total	-.0103*** [.0021]	.0032* [.0015]	-.0103*** [.0021]	.0031* [.0015]	-.0100*** [.0019]	.0028* [.0016]	-.0103*** [.0021]	.0032* [.0015]
TV politics	.0184*** [.0030]	.0043*** [.0013]	.0183*** [.0030]	.0043*** [.0013]	.0181*** [.0028]	.0045*** [.0013]	.0184*** [.0030]	.0043*** [.0013]
Unemployment	-.0318*** [.0061]	.0107** [.0047]	-.0319*** [.0060]	.0109** [.0046]	-.0300*** [.0056]	.0122** [.0047]	-.0318*** [.0061]	.0107** [.0047]
Income difficulties	-.0288*** [.0054]	.0132*** [.0043]	-.0286*** [.0054]	.0129*** [.0042]	-.0293*** [.0054]	.0145*** [.0048]	-.0286*** [.0055]	.0140*** [.0042]
Globalization exposure	-.0406** [.0176]	-.0135 [.0092]	-.0406** [.0176]	-.0133 [.0092]	-.0437** [.0167]	-.0094 [.0092]	-.0406** [.0176]	-.0135 [.0093]
R-squared	0.13	0.08	0.13	0.08	0.12	0.08	0.13	0.08
Observations	114,437	119,246	114,437	119,246	130,900	135,880	114,437	119,246
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Age FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cohort FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Wave FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Age*Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cluster SE Countries	Country With P	Country With P	Country With P	Country With P	Country With P	Country With P	Country With P	Country With P

Notes: This table establishes the exposure to macroeconomic shocks and its effect on participation in voting and vote for a populist party. The analysis controls for individual characteristics such as gender, political orientation, (logged) 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, globalization 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; \*\*\* denotes statistical significance at 1% level, \*\* at the 5% level, and \* at 10% confidence level.



**Table 3:** Macroeconomic Shocks During the Impressionable Years (18-25)

	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)
Shock -3.4% (18-25)	-1.0131*** [.0667]	.1944*** [.0534]	-.9511*** [.0891]	-1.2728*** [.1566]	-.2941* [.1525]	-.8609*** [.1124]	.1206* [.0580]	-.0105 [.0597]	.4571*** [.1218]
Risk Aversion	-.0102 [.0092]	.0054** [.0021]	.0008 [.0082]	.0260** [.0092]	-.0258** [.0091]	.0091 [.0072]	.0074*** [.0021]	.0048** [.0018]	.0336*** [.0081]
ln(Education)	.3899*** [.0411]	-.3896*** [.0267]	.4504*** [.0417]	.7146*** [.0638]	.5022*** [.0408]	.1690*** [.0363]	-.4409*** [.0263]	.4349*** [.0219]	-1.0605*** [.0697]
TV total	-.0466*** [.0031]	.0469*** [.0017]	-.0502*** [.0028]	-.0763*** [.0024]	-.0473*** [.0050]	-.0328*** [.0035]	.0449*** [.0017]	-.0347*** [.0018]	.0970*** [.0046]
TV politics	.1221*** [.0083]	-.0450*** [.0028]	.1158*** [.0092]	.1147*** [.0131]	.0857*** [.0091]	.0481*** [.0062]	-.0502*** [.0038]	.0406*** [.0029]	-.1282*** [.0092]
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	140,570	157,419	159,779	159,092	148,985	157,888	157,772	157,833	157,212
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	All	All	All	All	All	All	All	All	All

Notes: This table establishes the exposure to macroeconomic shocks (-3.4%) during the impressionable years and its effect on trust in i) parties, ii) politicians iii) parliament, iv) EU v) government satisfaction and attitudes towards immigrants i) immigrants from no EU ii) immigrants with different ethnicity iii) immigrants with same ethnicity and iv) immigrants make country worse. 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, the first principal component of unemployment, income difficulties and globalization exposure, as well as for age × country, age, wave and cohort fixed effects. Robust standard errors clustered at the cohort level are shown in parenthesis; \*\*\* denotes statistical significance at 1% level, \*\* at the 5% level, and \* at 10% confidence level.

**Table 4:** Robustness: Alternative Measure of Shocks During the Impressionable Years (18-25)

	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)
Shock -6.3% (18-25)	-1.4798*** [.1544]	.1186 [.0646]	-1.3831*** [.1506]	-1.9308*** [.1793]	-.2347 [.1294]	-1.2223*** [.1678]	.0329 [.0617]	.0743 [.0724]	.3693* [.1944]
Risk Aversion	-.0101 [.0090]	.0054** [.0021]	.0009 [.0081]	.0261** [.0091]	-.0257** [.0091]	.0092 [.0072]	.0073*** [.0020]	.0048** [.0017]	.0334*** [.0080]
ln(Education)	.3891*** [.0414]	-.3898*** [.0266]	.4497*** [.0420]	.7134*** [.0644]	.5024*** [.0406]	.1684*** [.0365]	-.4411*** [.0262]	.4351*** [.0218]	-1.0609*** [.0695]
TV total	-.0462*** [.0031]	.0470*** [.0017]	-.0498*** [.0029]	-.0756*** [.0024]	-.0473*** [.0050]	-.0325*** [.0037]	.0449*** [.0017]	-.0348*** [.0017]	.0971*** [.0046]
TV politics	.1218*** [.0082]	-.0451*** [.0028]	.1154*** [.0091]	.1142*** [.0130]	.0857*** [.0091]	.0478*** [.0061]	-.0502*** [.0038]	.0406*** [.0029]	-.1282*** [.0092]
Economic Insecurity (PC)	-.2949*** [.0058]	.0522*** [.0032]	-.3188*** [.0031]	-.3513*** [.0092]	-.2214*** [.0093]	-.3743*** [.0069]	.0581*** [.0026]	-.0483*** [.0050]	.1966*** [.0087]
R-squared	0.18	0.15	0.17	0.17	0.08	0.15	0.16	0.12	0.13
Observations	140,570	157,419	159,779	159,092	148,985	157,888	157,772	157,833	157,212
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	All	All	All	All	All	All	All	All	All

Notes: This table establishes the exposure to macroeconomic shocks (-6.3%) during the impressionable years and its effect on trust in i) parties, ii) politicians iii) parliament, iv) EU v) government satisfaction and attitudes towards immigrants i) immigrants from no EU ii) immigrants with different ethnicity iii) immigrants with same ethnicity and iv) immigrants make country worse. 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, the first principal component of unemployment, income difficulties and globalization exposure, as well as for age × country, age, wave and cohort fixed effects. Robust standard errors clustered at the cohort level are shown in parenthesis; \*\*\* denotes statistical significance at 1% level, \*\* at the 5% level, and \* at 10% confidence level.

**Table 5: Robustness: Macroeconomic Shocks During the Years 18-33**

	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)
Shock -3.4% (18-33)	-1.2397*** [.2473]	.3281*** [.0539]	-1.1759*** [.2236]	-1.6654*** [.3539]	-.3750 [.2341]	-1.0438*** [.2139]	.2427*** [.0489]	-.0439 [.0543]	.7292*** [.1126]
Risk Aversion	-.0145 [.0093]	.0066** [.0023]	-.0036 [.0084]	.0196* [.0100]	-.0292*** [.0085]	.0035 [.0080]	.0082*** [.0019]	.0047** [.0015]	.0360*** [.0078]
ln(Education)	.3660*** [.0356]	-.3727*** [.0303]	.4221*** [.0402]	.6750*** [.0698]	.4575*** [.0495]	.1794*** [.0372]	-.4263*** [.0300]	.4271*** [.0236]	-1.0108*** [.0769]
TV total	-.0405*** [.0037]	.0469*** [.0016]	-.0454*** [.0030]	-.0697*** [.0028]	-.0395*** [.0053]	-.0289*** [.0028]	.0444*** [.0012]	-.0353*** [.0017]	.0950*** [.0036]
TV politics	.1161*** [.0084]	-.0441*** [.0024]	.1104*** [.0082]	.1076*** [.0126]	.0834*** [.0087]	.0433*** [.0062]	-.0490*** [.0028]	.0413*** [.0025]	-.1232*** [.0078]
Economic Insecurity (PC)	-.3007*** [.0084]	.0511*** [.0031]	-.3238*** [.0047]	-.3596*** [.0108]	-.2164*** [.0102]	-.3741*** [.0078]	.0566*** [.0028]	-.0472*** [.0041]	.1954*** [.0095]
R-squared	0.17	0.15	0.17	0.17	0.08	0.15	0.15	0.12	0.13
Observations	160,252	179,514	182,366	181,605	169,227	180,152	179,982	180,088	179,052
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	All	All	All	All	All	All	All	All	All

Notes: This table establishes the exposure to macroeconomic shocks (-3.4%) during the years 18-33 and its effect on trust in i) parties, ii) politicians iii) parliament, iv) EU v) government satisfaction and attitudes towards immigrants i) immigrants from no EU ii) immigrants with different ethnicity iii) immigrants with same ethnicity and iv) immigrants make country worse. 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, the first principal component of unemployment, income difficulties and globalization exposure, as well as for age×country, age, wave and cohort fixed effects. Robust standard errors clustered at the cohort level are shown in parenthesis; \*\*\* denotes statistical significance at 1% level, \*\* at the 5% level, and \* at 10% confidence level.

**Table 6: Robustness: 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)
Shock -3.4% (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	121,226	136,812	138,553	137,984	130,847	136,700	137,000	136,983	136,727
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: This table establishes the exposure to macroeconomic shocks (-3.4%) during the impressionable years and its effect on trust in i) parties, ii) politicians iii) parliament, iv) EU v) government satisfaction and attitudes towards immigrants i) immigrants from no EU ii) immigrants with different ethnicity iii) immigrants with same ethnicity and iv) immigrants make country worse. 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, the first principal component of unemployment, income difficulties and globalization exposure, 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 cohort level are shown in parenthesis; \*\*\* denotes statistical significance at 1% level, \*\* at the 5% level, and \* at 10% confidence level.

**Table 7:** The Interplay Between Past and Current Economic Shocks

	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)
Shock -3.4% (18-25)	-1.0501*** [.0733]	.2043*** [.0499]	-.9917*** [.0886]	-1.2933*** [.1584]	-.3045* [.1422]	-.8667*** [.1187]	.1314** [.0525]	-.0308 [.0474]	.4807*** [.0969]
Economic Insecurity (PC)	-.3028*** [.0086]	.0535*** [.0031]	-.3267*** [.0040]	-.3566*** [.0102]	-.2229*** [.0103]	-.3762*** [.0071]	.0595*** [.0024]	-.0514*** [.0039]	.2001*** [.0077]
x Shock	.1421** [.0415]	-.0402** [.0118]	.1589*** [.0387]	.0801 [.0514]	.0457 [.0724]	.0231 [.0512]	-.0424* [.0197]	.0803** [.0250]	-.0976 [.0862]
Risk Aversion	-.0103 [.0092]	.0055** [.0021]	.0007 [.0082]	.0259** [.0092]	-.0258** [.0092]	.0091 [.0072]	.0074*** [.0021]	.0047** [.0017]	.0337*** [.0081]
ln(Education)	.3895*** [.0411]	-.3895*** [.0268]	.4499*** [.0416]	.7143*** [.0638]	.5020*** [.0407]	.1689*** [.0364]	-.4408*** [.0263]	.4346*** [.0219]	-1.0602*** [.0697]
TV total	-.0465*** [.0031]	.0469*** [.0017]	-.0501*** [.0028]	-.0762*** [.0024]	-.0473*** [.0050]	-.0328*** [.0035]	.0448*** [.0017]	-.0347*** [.0018]	.0970*** [.0046]
TV politics	.1220*** [.0083]	-.0450*** [.0028]	.1157*** [.0092]	.1147*** [.0131]	.0857*** [.0091]	.0481*** [.0062]	-.0502*** [.0038]	.0405*** [.0029]	-.1281*** [.0092]
R-squared	0.18	0.15	0.17	0.17	0.08	0.15	0.16	0.12	0.13
Observations	140,570	157,419	159,779	159,092	148,985	157,888	157,772	157,833	157,212
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	All	All	All	All	All	All	All	All	All

Notes: This table establishes the interaction between current and past exposure to macroeconomic shocks during the impressionable years and its effect on trust in i) parties, ii) politicians iii) parliament, iv) EU v) government satisfaction and attitudes towards immigrants i) immigrants from no EU ii) immigrants with different ethnicity iii) immigrants with same ethnicity and iv) immigrants make country worse. 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, the first principal component of unemployment, income difficulties and globalization exposure, as well as for age×country, age, wave and cohort fixed effects. Robust standard errors clustered at the cohort level are shown in parenthesis; \*\*\* denotes statistical significance at 1% level, \*\* at the 5% level, and \* at 10% confidence level.

## References

- Acemoglu, Daron , Georgy Egorov, and Konstantin Sonin (2013). “A Political Theory of Populism”. *The Quarterly Journal of Economics* 128(2), 771–805.
- Algan, Yann , Sergei Guriev, Elias Papaioannou, and Evgenia Passari (2017). “The European Trust Crisis and the Rise of Populism”. *Brookings Papers on Economic Activity* 2017(2), 309–400.
- Barro, Robert J and José F Ursúa (2008). “Macroeconomic Crises Since 1870”. *National Bureau of Economic Research*.
- Bonikowski, Bart (2017). “Ethno-Nationalist Populism and the Mobilization of Collective Resentment”. *The British Journal of Sociology* 68, S181–S213.
- Di Tella, Rafael and Julio J Rotemberg (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.
- Dinas, Elias , Vasiliki Fouka, and Alain Schläpfer (2021). “Family History and Attitudes toward Out-groups: Evidence from the European Refugee Crisis”. *The Journal of Politics* 83(2), 647–661.
- Dustmann, Christian , Barry Eichengreen, Sebastian Otten, André Sapir, Guido Tabellini, and Gylfi Zoega (2017). “Europe’s Trust Deficit”. *Causes and Remedies*. London: Centre for Economic Policy Research.
- Fouka, Vasiliki (2019). “How Do Immigrants Respond to Discrimination? The Case of Germans in the Us During World War I”. *American Political Science Review* 113(2), 405–422.
- Fouka, Vasiliki and Joachim Voth (2016). “Collective Remembrance and Private Choice: German-Greek Conflict

and Consumer Behavior in Times of Crisis”. *Stanford Center for International Development Working Paper No 587(6)*, 26.

Gill, Indermit S and Martin Raiser (2012). *Golden Growth: Restoring the Lustre of the European Economic Model*. World Bank Publications.

Giuliano, Paola and Antonio Spilimbergo (2014). “Growing Up in a Recession”. *Review of Economic Studies* 81(2), 787–817.

Guiso, Luigi , Helios Herrera, Massimo Morelli, and Tommaso Sonno (2020). “Economic Insecurity and the Demand of Populism in Europe”. *Einaudi Institute for Economics and Finance*.

Guriev, Sergei and Elias Papaioannou (2020). “The Political Economy of Populism”. *Available at SSRN 3542052*.

Krosnick, Jon A and Duane F Alwin (1989). “Aging and Susceptibility to Attitude Change”. *Journal of Personality and Social Psychology* 57(3), 416.

Makridis, Christos and Erin McGuire (2019). “Refined By Fire: The Great Depression and Entrepreneurship”. *Available at SSRN 3371991*.

Malmendier, Ulrike (2021). “Exposure, Experience, and Expertise: Why Personal Histories Matter in Economics”. Technical report, National Bureau of Economic Research.

Malmendier, Ulrike and Stefan Nagel (2011). “Depression Babies: Do Macroeconomic Experiences Affect Risk Taking?”. *The Quarterly Journal of Economics* 126(1), 373–416.

Malmendier, Ulrike and Stefan Nagel (2016). “Learning from Inflation Experiences”. *The Quarterly Journal of Economics* 131(1), 53–87.

Mudde, Cas (2004). “The Populist Zeitgeist”. *Government and Opposition* 39(4), 541–563.

- Rodrik, Dani (2018). "Populism and the Economics of Globalization". *Journal of International Business Policy* 1(1), 12–33.
- Rooduijn, Matthijs , Stijn Van Kessel, Caterina Froio, Andrea Pirro, Sarah De Lange, Daphne Halikiopoulou, Paul Lewis, Cas Mudde, and Paul Taggart (2019). "The Populist: An Overview of Populist, Far Right, Far Left and Eurosceptic Parties in Europe".
- Sears, David 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, Enrico (2013). "What Is European Integration Really About? A Political Guide for Economists". *Journal of Economic Perspectives* 27(3), 125–44.
- Stankov, Petar (2018). "The Political Economy of Populism: An Empirical Investigation". *Comparative Economic Studies* 60(2), 230–253.



## 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.

**Shock -3.4% (10th percentile).** 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.

**Shock -6.3% (5th percentile).** It is a dummy variable, taking the value 1 whether the GDP per capita growth rate is either equal or lower than -6.3% and 0 otherwise.

## A.3 Supplementary Tables

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

**Table A.1:** Macroeconomic Shocks During the Impressionable Years (18-25)

	Vote in last elections	Populist 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
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Shock -3.4% (18-25)	-.002 [.0413]	.026* [.0366]	-.056*** [.0667]	.027*** [.0534]	-.050*** [.0891]	-.063*** [.1566]	-.015* [.1525]	-.044*** [.1124]	.017* [.0580]	-.002 [.0597]	.025*** [.1218]
Risk Aversion	.024*** [.0017]	.002 [.0015]	-.006 [.0092]	.009** [.0021]	.000 [.0082]	.015** [.0092]	-.015** [.0091]	.005 [.0072]	.012*** [.0021]	.008** [.0018]	.021*** [.0081]
ln(Education)	.080*** [.0213]	-.018 [.0107]	.061*** [.0411]	-.156*** [.0267]	.069*** [.0417]	.102*** [.0638]	.075*** [.0408]	.025*** [.0363]	-.181*** [.0263]	.183*** [.0219]	-.168*** [.0697]
TV total	-.050*** [.0021]	.021* [.0015]	-.038*** [.0031]	.099*** [.0017]	-.041*** [.0028]	-.057*** [.0024]	-.038*** [.0050]	-.026*** [.0035]	.097*** [.0017]	-.077*** [.0018]	.081*** [.0046]
TV politics	.058*** [.0030]	.018*** [.0013]	.066*** [.0083]	-.063*** [.0028]	.062*** [.0092]	.057*** [.0131]	.045*** [.0091]	.025*** [.0062]	-.072*** [.0038]	.059*** [.0029]	-.071*** [.0092]
Unemployment	-.038*** [.0061]	.017** [.0047]									
Income difficulties	-.061*** [.0054]	.038*** [.0043]									
Globalization exposure	-.010** [.0176]	-.004 [.0092]									
Economic Insecurity (PC)			-.140*** [.0059]	.063*** [.0033]	-.150*** [.0028]	-.153*** [.0096]	-.101*** [.0090]	-.170*** [.0070]	.072*** [.0026]	-.062*** [.0049]	.095*** [.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	114,437	119,246	140,570	157,419	159,779	159,092	148,985	157,888	157,772	157,833	157,212
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: This table establishes the beta coefficients of exposure to macroeconomic shocks (-3.4%) during the impressionable years and its effect on participation on voting and vote for populist parties, trust in i) parties, ii) politicians iii) parliament, iv) EU v) government satisfaction and attitudes towards immigrants i) immigrants from no EU ii) immigrants with different ethnicity iii) immigrants with same ethnicity and iv) immigrants make country worse. 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, their first principal component, confidence in political parties and attitudes towards immigrants from no EU countries, as well as for age×country, age, wave and cohort fixed effects. Robust standard errors clustered at the country and cohort level are shown in parenthesis; \*\*\* denotes statistical significance at 1% level, \*\* at the 5% level, and \* at 10% confidence level.

**Table A.2:** Robustness: Alternative Measure of Shocks During the Impressionable Years (18-25)

	Vote in last elections	Populist 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
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Shock -6.3% (18-25)	-.011 [.0534]	.036** [.0598]	-.062*** [.1544]	.012 [.0646]	-.056*** [.1506]	-.053*** [.3236]	-.009 [.1294]	-.048*** [.1678]	.004 [.0617]	.008 [.0724]	.015* [.1944]
Risk Aversion	.024*** [.0017]	.002 [.0015]	-.006 [.0090]	.008** [.0021]	.001 [.0081]	.017*** [.0074]	-.015** [.0091]	.005 [.0072]	.012*** [.0020]	.008** [.0017]	.021*** [.0080]
ln(Education)	.080*** [.0213]	-.018 [.0107]	.061*** [.0414]	-.156*** [.0266]	.069*** [.0420]	.109*** [.0620]	.075*** [.0406]	.025*** [.0365]	-.181*** [.0262]	.183*** [.0218]	-.168*** [.0695]
TV total	-.050*** [.0021]	.021* [.0015]	-.038*** [.0031]	.099*** [.0017]	-.040*** [.0029]	-.067*** [.0038]	-.038*** [.0050]	-.025*** [.0037]	.097*** [.0017]	-.077*** [.0017]	.082*** [.0046]
TV politics	.058*** [.0030]	.018*** [.0013]	.066*** [.0082]	-.063*** [.0028]	.062*** [.0091]	.062*** [.0159]	.045*** [.0091]	.025*** [.0061]	-.072*** [.0038]	.060*** [.0029]	-.071*** [.0092]
Unemployment	-.038*** [.0060]	.018** [.0046]									
Income difficulties	-.061*** [.0054]	.037*** [.0042]									
Globalization exposure	-.010** [.0176]	-.004 [.0092]									
Economic Insecurity (PC)			-.140*** [.0058]	.064*** [.0032]	-.149*** [.0031]	-.153*** [.0092]	-.102*** [.0093]	-.170*** [.0069]	.073*** [.0026]	-.062*** [.0050]	.095*** [.0087]
R-squared	0.13	0.08	0.18	0.15	0.17	0.18	0.08	0.15	0.16	0.12	0.13
Observations	114,437	119,246	140,570	157,419	159,779	137,984	148,985	157,888	157,772	157,833	157,212
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: This table establishes the beta coefficients of exposure to macroeconomic shocks (-6.3%) during the impressionable years and its effect on participation on voting and vote for populist parties, trust in i) parties, ii) politicians iii) parliament, iv) EU v) government satisfaction and attitudes towards immigrants i) immigrants from no EU ii) immigrants with different ethnicity iii) immigrants with same ethnicity and iv) immigrants make country worse. 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, their first principal component, confidence in political parties and attitudes towards immigrants from no EU countries, as well as for age×country, age, wave and cohort fixed effects. Robust standard errors clustered at the country and cohort level are shown in parenthesis; \*\*\* denotes statistical significance at 1% level, \*\* at the 5% level, and \* at 10% confidence level.

**Table A.3: Robustness: Macroeconomic Shocks During the Years 18-33**

	Vote in last elections	Populist 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
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Shock -3.4% (18-33)	-.009 [.0568]	.029* [.0450]	-.066*** [.2473]	.044*** [.0539]	-.060*** [.2236]	-.052*** [.3326]	-.018 [.2341]	-.052*** [.2139]	.033*** [.0489]	-.006 [.0543]	.038*** [.1126]
Risk Aversion	.022*** [.0016]	.001 [.0016]	-.009 [.0093]	.010** [.0023]	-.002 [.0084]	.014** [.0085]	-.017*** [.0085]	.002 [.0080]	.013*** [.0019]	.008** [.0015]	.023*** [.0078]
ln(Education)	.079*** [.0199]	-.011 [.0118]	.058*** [.0356]	-.154*** [.0303]	.067*** [.0402]	.105*** [.0727]	.070*** [.0495]	.027*** [.0372]	-.180*** [.0300]	.185*** [.0236]	-.166*** [.0769]
TV total	-.049*** [.0019]	.018* [.0016]	-.033*** [.0037]	.099*** [.0016]	-.037*** [.0030]	-.063*** [.0042]	-.031*** [.0053]	-.023*** [.0028]	.096*** [.0012]	-.078*** [.0017]	.080*** [.0036]
TV politics	.059*** [.0028]	.019*** [.0013]	.064*** [.0084]	-.063*** [.0024]	.060*** [.0082]	.060*** [.0154]	.044*** [.0087]	.023*** [.0062]	-.071*** [.0028]	.061*** [.0025]	-.070*** [.0078]
Unemployment	-.036*** [.0056]	.019** [.0047]									
Income difficulties	-.063*** [.0054]	.041*** [.0048]									
Globalization exposure	-.011** [.0167]	-.003 [.0092]									
Economic Insecurity (PC)			-.142*** [.0084]	.062*** [.0031]	-.151*** [.0047]	-.157*** [.0104]	-.099*** [.0102]	-.169*** [.0078]	.071*** [.0028]	-.060*** [.0041]	.095*** [.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	130,900	135,880	160,252	179,514	182,366	157,727	169,227	180,152	179,982	180,088	179,052
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: This table establishes the beta coefficients of exposure to macroeconomic shocks (-3.4%) during the years 18 to 33 and its effect on participation on voting and vote for populist parties, trust in i) parties, ii) politicians iii) parliament, iv) EU v) government satisfaction and attitudes towards immigrants i) immigrants from no EU ii) immigrants with different ethnicity iii) immigrants with same ethnicity and iv) immigrants make country worse. 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, their first principal component, confidence in political parties and attitudes towards immigrants from no EU countries, as well as for age×country, age, wave and cohort fixed effects. Robust standard errors clustered at the country and cohort level are shown in parenthesis; \*\*\* denotes statistical significance at 1% level, \*\* at the 5% level, and \* at 10% confidence level.

**Table A.4:** Robustness: 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)
Shock -3.4% (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	121,226	136,812	138,553	137,984	130,847	136,700	137,000	136,983	136,727
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: This table establishes the beta coefficients of exposure to macroeconomic shocks (-3.4%) during the impressionable years and its effect on trust in i) parties, ii) politicians iii) parliament, iv) EU v) government satisfaction and attitudes towards immigrants i) immigrants from no EU ii) immigrants with different ethnicity iii) immigrants with same ethnicity and iv) immigrants make country worse. 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, the first principal component of unemployment, income difficulties, global exposure 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 cohort level are shown in parenthesis; \*\*\* denotes statistical significance at 1% level, \*\* at the 5% level, and \* at 10% confidence level.



**Table A.5:** The Interplay Between Past and Current Economic Shocks

	Vote in last elections	Populist 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
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Interaction	-.002 [.0310]	-.011 [.0270]	.010** [.0415]	-.007** [.0118]	.010*** [.0387]	.005 [.0514]	.003 [.0724]	.001 [.0512]	-.007* [.0197]	.014** [.0250]	-.007 [.0862]
Shock -3.4% (18-25)	.001 [.0541]	.046** [.0534]	-.058*** [.0733]	.028*** [.0499]	-.053*** [.0886]	-.064*** [.1584]	-.016* [.1422]	-.045*** [.1187]	.019** [.0525]	-.004 [.0474]	.026*** [.0969]
Income difficulties	-.061*** [.0055]	.040*** [.0042]									
Economic Insecurity (PC)			-.144*** [.0086]	.065*** [.0031]	-.153*** [.0040]	-.155*** [.0102]	-.102*** [.0103]	-.171*** [.0071]	.074*** [.0024]	-.066*** [.0039]	.097*** [.0077]
Risk Aversion	.024*** [.0017]	.002 [.0015]	-.006 [.0092]	.009** [.0021]	.000 [.0082]	.014** [.0092]	-.015** [.0092]	.005 [.0072]	.012*** [.0021]	.008** [.0017]	.021*** [.0081]
ln(Education)	.080*** [.0213]	-.018 [.0107]	.061*** [.0411]	-.156*** [.0268]	.069*** [.0416]	.101*** [.0638]	.075*** [.0407]	.025*** [.0364]	-.181*** [.0263]	.183*** [.0219]	-.168*** [.0697]
TV total	-.050*** [.0021]	.021* [.0015]	-.038*** [.0031]	.099*** [.0017]	-.041*** [.0028]	-.057*** [.0024]	-.038*** [.0050]	-.026*** [.0035]	.097*** [.0017]	-.077*** [.0018]	.081*** [.0046]
TV politics	.058*** [.0030]	.018*** [.0013]	.066*** [.0083]	-.063*** [.0028]	.062*** [.0092]	.057*** [.0131]	.045*** [.0091]	.025*** [.0062]	-.072*** [.0038]	.059*** [.0029]	-.071*** [.0092]
Unemployment	-.038*** [.0061]	.017** [.0047]									
Globalization exposure	-.010** [.0176]	-.005 [.0093]									
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	114,437	119,246	140,570	157,419	159,779	159,092	148,985	157,888	157,772	157,833	157,212
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: This table establishes the beta coefficients of the interaction between current and past exposure to macroeconomic shocks during the impressionable years and its effect on participation on voting and vote for populist parties, trust in i) parties, ii) politicians iii) parliament, iv) EU v) government satisfaction and attitudes towards immigrants i) immigrants from no EU ii) immigrants with different ethnicity iii) immigrants with same ethnicity and iv) immigrants make country worse. 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, their first principal component, confidence in political parties and attitudes towards immigrants from no EU countries, as well as for age×country, age, wave and cohort fixed effects. Robust standard errors clustered at the country and cohort level are shown in parenthesis; \*\*\* denotes statistical significance at 1% level, \*\* at the 5% level, and \* at 10% confidence level.