Population Aging and the Rise of Populism in Europe

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Abstract

This paper identifies population aging as a key driver of populism using multilevel regression analysis on individuals from European countries between 2002 and 2019. Unlike individual aging, we focus on the effect of population aging, measured by the old-age dependency ratio (OADR). Using data from nine rounds of the European Social Survey, we examine the relationship between population aging and populist attitudes, captured through voting for populist parties, political trust, and immigration attitudes. Our findings suggest that population aging is associated with declining electoral turnout, higher support for populist parties, lower trust in political institutions, and increased anti-immigrant sentiment. These effects emerge across both younger and older voters, suggesting that aging societies shape attitudes beyond individual aging. These effects can operate through mechanisms such as economic insecurity, cultural backlash, or shifting societal priorities in aging populations.

Keywords: Aging, Populism, Trust, Immigrant Attitudes
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1 Introduction

In recent years, European nations including France, Germany, Greece, Hungary, Italy, or Spain, have witnessed a notable upswing in the support for populist parties. This trend became also evident in the 2019 European Parliament elections where candidates affiliated with such parties gained 192 seats out of 751, a large increase compared to the 2014 election (Treib (2021) and Guisan (2022)). Likewise, the United Kingdom's 2016 referendum that lead to its withdrawal from the European Union was significantly influenced by populist propaganda campaigns (Birks (2021)).

What explains this upswing in European populism? This paper argues that population aging, i. e., the process by which older individuals become a proportionally larger fraction of a country's total population, is an important driving force behind this trend. Indeed, over the last decades, population aging has been the predominant demographic phenomenon in Europe and beyond (see, e. g., Irmen and Litina (2022)).

Our analysis examines the impact of population aging on populist attitudes, distinguishing it from the effects of individual aging. By emphasizing aging as a collective phenomenon, we highlight how living in a society where the population is aging shapes political attitudes among both young and old, beyond the direct effects of individual aging. This perspective reveals the broader population dynamics at play, rather than focusing solely on individual life-cycle effects.

Our measure of populist attitudes is derived from individual-level data in nine consecutive rounds of the European Social Survey (ESS) spanning 2002 to 2019. We capture populist tendencies through three key indicators: voting for populist parties, political trust, and attitudes toward

immigration. To measure population aging, we use a country's old-age dependency ratio (OADR), defined as the number of individuals aged 65 and older per 100 working-age individuals (15-64). This data is sourced from the World Bank Development Indicators.

We link each individual's attitudes to the OADR of their country of birth and residence, making the OADR our primary explanatory variable. By controlling for individual age, we disentangle the effects of personal aging from the broader impact of population aging, allowing us to isolate the influence of population aging on populist attitudes.

We include additional individual controls that have been argued to affect voting behavior (see, e. g., Becker et al. (2017)) including education status, gender, age, marital status, race and the degree of religiosity. We also control for economic factors that potentially drive populist attitudes. They include economic insecurity of individuals, captured with the individual's income source, income difficulties of individuals, and the individual skill level in manufacturing (see, e. g., Guiso et al. (2020)). Finally, we control for a wide range of country characteristics that capture the overall aggregate dynamics beyond population aging, such as GDP per capita in PPP, fertility rate, mortality rate, and life expectancy. In addition, we use country, cohort and ESS round fixed effects that account for much of the unobservable heterogeneity.

Our benchmark findings of Section 3 suggest that in older countries, i. e., those with a high OADR, individuals are less likely to participate in elections. Yet, when they participate they are more likely to vote for a populist party. Quantitatively, a one-unit increase in OADR is associated with a 0.54 percentage point decrease in electoral turnout and a one-unit increase in OADR is associated with a 1.49 percentage point increase in voting for populist parties. Moreover, individuals who live in older countries express less trust in parties, politicians, their national and the European parliament, the country's legal system and they feel less satisfied with the government.

Older countries are also associated with higher anti-immigrant attitudes, i. e., views such as i) immigrants make host countries worse, ii) immigrants undermine the host country's culture, iii) immigrants are bad for the host country's economy, iv) allow few immigrants outside Europe, v) allow few immigrants from different race and ethnicity and last, vi) allow many immigrants from the same race and ethnicity. Quantitatively, a one-unit increase in the OADR is predicted to reduce the level of trust in political parties by 0.037 units, whereas it increases the attitude that immigrants make a country worse by 0.1 unit.

Section 4 examines whether population aging is more likely to fuel right- or left-wing populism. Our findings indicate that individuals in older societies tend to hold more conservative views and are more inclined to support right-wing populist parties over their left-wing counterparts.

Section 5 shows that the findings of our benchmark analysis remain qualitatively and quantitatively valid in various robustness exercises. They include i) an alternative definition of the OADR, ii) a modified sample excluding Luxembourg and Portugal for which no voting for populist parties is recorded by the individuals in the ESS rounds, iii) a sample split into old individuals above 64 years of age and young individuals below 64, iv) a modified sample including only for natives, v) a modified sample comprising only European Union countries, and vi) a regional regression analysis based on NUTS 1 data. Additionally, a robustness exercise i) examining the differential effects by age groups, ii) the interplay between population aging and interpersonal trust accounting for trust on other people and the police and iii) the interplay between population aging and exposure to media i.e., total hours on TV, reading newspapers and navigating on the internet.

In Section 6, we address identification concerns to strengthen the causal interpretation of our findings. A key challenge is the potential endogeneity of the old-age dependency ratio (OADR), which may be influenced by omitted factors or reverse causality. To mitigate this, we implement

an instrumental variable (IV) strategy, using historical birth rates and specifically, the number of live births per 1,000 people occurring 30 years prior (from 1972 to 1989) as an exogenous predictor of OADR. Since past birth rates are strongly correlated with current demographic structures but unlikely to be directly related to contemporary populist attitudes, this approach helps isolate the exogenous variation in OADR. Additionally, we account for potential selection bias by employing a two-step Heckman probit model. In the first stage, we estimate the probability of electoral participation, and in the second stage, we model the probability of voting for a populist party, adjusting for potential non-random participation. These steps ensure that our results are not driven by endogenous self-selection into voting or other unobserved confounders.

Last, Section 7 discusses the intuition behind our findings. Why would an individual residing in an old society exhibit different populist attitudes than the same individual living in a young society? In aging societies, the growing demographic and political influence of the elderly shifts public discourse toward issues such as national identity, traditional values, and material security, which populist parties exploit by amplifying fears and offering simplified solutions. This increased focus on elderly-related concerns provides a platform for populist rhetoric, normalizing it and shaping attitudes across all age groups. Additionally, populist parties evoke nostalgia and reframe historical memory, particularly in countries with fascist pasts, to appeal to both older populations longing for perceived "better times" and younger voters exposed to these narratives. Low trust in political institutions, exacerbated by their perceived inability to address aging-related challenges, further drives individuals toward populism, often aligning with conspiracy beliefs and anti-establishment sentiments that bolster populist support.

The structure of the paper is as follows. Section 2 introduces the data and the empirical strategy. Section 3 presents the benchmark results. Section 4 asks whether population aging has

a differential effect on right-wing and left-wing populist attitudes and whether individual political orientation matters. Section 5 studies the robustness of our benchmark results. Section 6 discusses the mechanics of past birth rates, whereas Section 7 discusses potential underlying mechanisms. Section 8 concludes. An Online Appendix includes a glossary of terminology used in the paper as well as additional tables.

2 Related Literature

Our paper contributes to the growing body of literature examining the determinants of populism in Europe. Several studies have highlighted dissatisfaction with local and EU institutions as a potential driver of populism (Algan et al., 2017; Dustmann et al., 2017). Other scholars point to economic insecurity as a central factor pushing individuals toward populist parties (Di Tella and Rotemberg, 2018; Rodrik, 2018; Guiso et al., 2020; Rohde, 2023). For instance, Guiso et al. (2019) argue that financial crises and globalization shocks in Eurozone countries have fueled support for populist movements. Similarly, Ferree et al. (2014) and Guriev and Papaioannou (2020) provide comprehensive surveys of the political economy of populism, emphasizing the interplay between macroeconomic conditions and political outcomes.

The role of populism has also been linked to key political events, such as the UK's Brexit vote in 2016. For example, Clarke and Whittaker (2016) attribute the Leave vote to anti-immigration propaganda, while Becker et al. (2017) underscore the demographic factors, particularly the role of older constituents, in driving support for Brexit. These studies provide valuable insights into the relationship between populist rhetoric and voting behavior. Building on this literature, we measure populist attitudes using multiple questions from the European Social Survey (ESS) and

explore how population aging, as an aggregate phenomenon, shapes these attitudes.

Our research also intersects with studies focusing on anti-immigrant attitudes, which are often central to populist platforms. Older societies tend to exhibit more negative attitudes toward immigrants, as such sentiments are reinforced by everyday interactions, media discourse, and political rhetoric. For example, Schotte and Winkler (2018) find that older cohorts are more likely to hold anti-immigrant views, while Calahorrano (2013) document the role of individual attitudes and cohort aging effects in shaping immigration perceptions. However, these studies largely overlook the impact of aggregate population aging on anti-immigrant attitudes, which is a key focus of our paper.

Another strand of the literature highlights how populist parties mobilize support by evoking historical memory and nostalgia. For instance, De Cesari et al. (2020) show that populist parties often draw on ideological constructs of heritage and memory to shape new understandings of "the people," particularly in countries with fascist histories (Caramani and Manucci, 2019). Furthermore, Christner et al. (2021) link populist attitudes to conspiracy beliefs, noting that low trust in political institutions correlates with a propensity to vote for populist parties. These narratives resonate strongly with older populations, amplifying populist support.

In essence, our paper advances the literature by emphasizing the novel relationship between population aging and the rise of populist attitudes. Although previous research has extensively studied individual-level aging, we focus on the broader dynamics of population aging. Population aging fosters aggregate dynamics, such as shifts in the voting behavior of the median voter, the strategic adaptation of political parties, and the amplification of nostalgic and scaremongering narratives in public discourse. Now, our study provides a comprehensive analysis of how demographic shifts influence populist attitudes, addressing a critical gap in understanding the interplay

between population aging and political outcomes.

3 Data and Empirical Strategy

3.1 *Data*

To explore the effect of population aging on populist attitudes, we employ data from nine consecutive rounds of the European Social Survey (2002-2019). The data is cross-sectional; that is, individuals are being observed only once, but regions and countries are followed over time. For reasons of data limitations, we confine our attention to the following 29 European countries: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Germany, Finland, France, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, and the United Kingdom. The ESS contains a rich set of questions that captures populist attitudes as well as personal characteristics such as country and year of birth, gender, age, race, individual's income level, education, political orientation, degree of religiosity, employment, and marital status.

In our analysis, we use three indicators to measure populist sentiments, as outlined in previous studies (Guiso et al. (2020) and Guiso et al. (2021)). These indicators encompass i) voting patterns, ii) levels of trust, and iii) attitudes toward immigrants. In our benchmark analysis, we focus on voting behavior. In particular, we use data on individuals' participation in the last national elections and their choice of party. This allows us to create a binary variable with value 1 if the individual voted for a populist party and 0 otherwise.

Additionally, we delve into the impact of population aging on political trust and attitudes

toward immigrants. Regarding trust, we examine individuals' trust in i) political parties, ii) the national parliament, iii) politicians, iv) the European parliament and v) the legal system. Here, trust is measured on a scale from 0 (no trust) to 10 (full trust). In addition, we also consider satisfaction with the national government, represented on a scale ranging from 0 (extreme dissatisfaction) to 10 (extreme satisfaction).

Finally, we assess attitudes related to immigrants, including i) whether individuals believe that immigrants negatively impact the host country, ii) whether immigrants enrich or undermine the country's culture and iii) whether immigrants are beneficial or detrimental to the country's economy measured on a scale from 0 (favor immigrants) to 10 (against immigrants). Additionally, we also account for whether individuals are in favor of allowing i) few immigrants outside Europe, ii) few immigrants from different race and ethnicity and iii) many immigrants from the same race taking values between 0 (many immigrants) and 4 (few immigrants). These measures, along with political trust and anti-immigrant attitudes, serve as additional indicators of populism, aligning our study with Guiso et al. (2020) and Guiso et al. (2021). Clearly, the decline of trust in political institutions and the presence of anti-immigrant sentiments can induce voters to support populist parties in national elections.

Our key explanatory variable is the country's old-age dependency ratio (OADR) defined as the number of people above the age of 65, "the old individuals," per 100 people of the working population aged 15-64. We take the OADR as the proxy for population aging. We extract data from the World Bank Development Indicators (WDI) for annual estimates of the OADR since 1960. We aggregate the WDI data over 2-year intervals to match them with the ESS.

Beyond our main explanatory variable our analysis controls for a wide range of *social factors* coming from the ESS that have been shown to affect individual voting behavior (see, e. g., Becker

et al. (2017)). They include the individual education level, gender, age, marital status, race and religiosity. Indeed, our findings suggest that i) individuals who are more educated are less prone to vote for populist parties, ii) race plays an important role in the voting for populist parties, and iii) marital status or living with children affects the individual voting behavior. Last, we also control for gender, the individual age and their degree of religiosity. In general, we find that older individuals display more anti-immigrant attitudes and a lower political trust.

We further control for individual *economic factors* that potentially drive the voting for populist parties. They include economic insecurity through variables i) "what is the main source of income in an individual household", ii) "has the individual experienced any income difficulties", e. g., does the voter lives comfortably with the present income or finds it difficult, and last, iii) "was the voter exposed to globalization working", e. g., as a low-skilled worker in manufacturing (Guiso et al. (2019); Guiso et al. (2020)).

The remaining controls capture *aggregate* dynamics beyond population aging. They come from the World Development Indicators (WDI) and include country characteristics such as GDP per capita in PPP, fertility and mortality rates and life expectancy. These variables capture the effect of *socio-economic* factors including a country's stage of development on populist attitudes. Table 1 documents the descriptive statistics of all variables used in our analysis.

[INSERT TABLE 1 HERE]

In Figure 1 we illustrate the evolution of population aging from 2002 to 2019 measured by the OADR in the 29 European countries of our sample. It reveals an increasing OADR in most countries.

[INSERT FIGURE 1 HERE]

Figure 2 illustrates the mean share of ESS respondents in each country that admitted having voted for a populist party in the last election. Evidently, this share varies a lot. It is very low in countries like Luxembourg and Portugal and quite high in countries like Italy, Slovakia and the Czech Republic where about 50% of the votes go to populist parties.

[INSERT FIGURE 2 HERE]

Figures 3-6 illustrate the degree of trust in political institutions, i. e., trust in the national parliament, trust in political parties and depict attitudes toward immigrants across all sample countries. The graphs show data for each European sample country excluding Turkey, Israel, Ukraine and the Russian Federation. Overall, the level of trust varies a lot and in countries where attitudes towards immigration are rather negative the level of trust is also low.

[INSERT FIGURES 3 - 6 HERE]

To classify the populist parties of each country we rely on Rooduijn et al. (2019). These authors construct a list of all populist parties in Europe that obtained more 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 examined countries. A party is called populist if it portrays "the people" as virtuous and essentially homogeneous, advocates popular sovereignty, as opposed to elitist rule and defines itself as against the political establishment, which is alleged to act against the interest of the people.

3.2 *Empirical Strategy*

Our benchmark analysis examines the effect of population aging on i) electoral turnout, ii) voting for a populist party, iii) political trust, and iv) attitudes toward immigrants. We run OLS regres-

sions; however, as some questions are ordered, we replicate our analysis in the Online Appendix using Ordered Logit and Ordered Probit regressions (to account for how the fixed effects enter in our estimation). In the case of OLS, we estimate the following regression equation:

$$y_{ict} = a_0 + \alpha_1 OADR_{ct} + \alpha_2 X_{ict} + \alpha_3 Z_{ct} + \beta_c + \gamma_t + \theta_j + \epsilon_{ict} \tag{1}$$

Here, a subscript ict denotes individual i in country c and ESS round t. Then, the dependent variable, y_{ict}, denotes electoral turnout in regression i), voting for a populist party in regression ii), political trust in regression iii), and attitudes towards immigrants in regression iv).

$OADR_{ct}$ is the old-age dependency ratio in country c at ESS round t. X_{ict} is a vector of individual-level controls, Z_{ct} is a vector of time-varying country-level controls, β_c and γ_t are country and ESS round fixed effects as well as θ_j is cohort fixed effects (individuals are grouped into eleven 7-year age cohorts), and ϵ_{ict} is the error term.

For the benchmark regressions i) and ii) our sample excludes two European countries, i. e., Luxembourg and Portugal, where populist parties ran but no ESS participant voted for them. For the benchmark regressions iii) and iv) we follow Guiso et al. (2020) and Guiso et al. (2021) and exclude Turkey, Israel, Ukraine and the Russian Federation as outliers. Geographically, Turkey and Israel are not part of the European continent. Moreover, compared to other European countries, Ukraine and the Russian Federation are excluded from our sample as a classification of the Russian and Ukrainian political parties is not provided by the data. Finally, for the regressions i) and ii) we exclude individuals without a right to vote.

4 Empirical Findings

4.1 *Benchmark Findings*

Table 2, shows the results of the benchmark regressions i) and ii), Table 3 has the results of regressions iii) and iv). These regressions include the full set of individual and country level controls [1]. Moreover, they feature country and ESS round fixed effects. In i) and ii) regressions we exclude individuals who are not allowed to vote at the national level, e. g., immigrants.[2]

Table 2 reveals that the effect of population aging on electoral turnout is negative while its effect on voting for populist parties is positive. Both effects are significant at the 1% level and quantitatively remarkable. For example, a 10% increase in OADR is predicted to reduce the probability of voter turnout by 5.4 percentage points and to increase its probability of voting for a populist party by 15 percentage points.

[INSERT TABLE 2 HERE]

Table 3 shows that the effect of population aging on political trust and on attitudes toward immigrants is negative. This effect is significant at the 1% level and quantitatively notable. Quantitatively, a 10-unit increase in the OADR is predicted to reduce the level of trust in political parties by 0.37 units, whereas it increases the attitude that immigrants make a country worse by 1 unit.

It should be noted that we measure political trust with six distinct variables. As shown in the upper panel of Table 3 we further run regressions for the following variables: Trust in Political

[1] See the tables in the see Online Appendix

[2] Following Guiso et al. (2020) we exclude Luxembourg and Portugal in regressions i) and ii). In these countries none of the participants in any considered ESS round expressed having voted for a populist party.

Parties, Trust in Politicians, Trust in Parliament, Trust in European Parliament, Trust in Legal System and Satisfaction with the Government. Columns 1 to 6 reveal that the results are of similar magnitude, though slightly higher results for national and European parliament, to the one obtained in column 1.

The lower panel of Table 3 shows that we consider six different attitudes towards immigrants, i. e., we run regressions for the following variables: Immigrants make a Country Worse, Immigrants undermine Culture, Immigrants are Bad for the Economy, Allow Few Immigrants from Outside Europe, Allow Few Immigrants from Different Race and Allow Many Immigrants from Same Race. As shown in columns 1 to 6 the results are similar to the one obtained in column 1. [3]

[INSERT TABLE 3 HERE]

5 Discussion

In this section, we extend our empirical findings in two directions. First, we explore the effect of the OADR on voting for right-wing and left-wing populist parties. Second, we inquire into the role of individuals' political orientation for their inclination to vote for populist parties. This is implemented in two steps. The first step introduces "political conservatism" as an additional control to our benchmark regression. This allows us to detect whether the effect of population aging on populist attitudes remains strong even if conservative individuals are more prone to vote for a populist party. The second step, splits the sample into right and left-oriented individuals. This permits to implement a more nuanced study as to which of the two groups contributes more to the effect of population aging on the electoral turnout and on voting for a populist party.

[3] In the Online Appendix, Table A.1 and Tables A.2 and A.3 present the benchmark results analytically.

Table 4 reports the effect of the OADR on voting for right-wing and left-wing populist parties. We classify parties following Rooduijn et al. (2019) and construct two dummy variables. The first takes the value 1 for individuals who voted for a right-wing populist party and 0 otherwise. The second takes the value 1 for individuals who voted for a left-wing populist party and 0 otherwise. We use the same sample, controls, and fixed effects as in regressions i) and ii). Our findings suggest that in countries with a high OADR, individuals are more likely to vote for right-wing than left-wing populist parties. Quantitatively, a 10 unit increase leads to a 7.8 percentage points increase in the probability of voting for right-wing populist parties. This effect is significant at the 1% level whereas there is no significant effect of a higher OADR on the probability to vote for a left-wing populist party.

[INSERT TABLE 4 HERE]

Table 5 documents the effect of the OADR on electoral turnout and voting for a populist party using as an additional control the individuals' political orientation measured on a scale from 0 (left-oriented) to 10 (right-oriented). We find that older people are more conservative, feel closer to right parties and are more prone to vote for a populist party. Our findings remain qualitatively similar to the benchmark analysis, yet, become quantitatively stronger.

[INSERT TABLE 5 HERE]

To further explore the hypothesis on conservatism and voting for populist parties, we now split our sample into right-oriented and left-oriented individuals. The purpose is to examine whether the political orientation differentially affects populist attitudes for these two groups. Specifically, we investigate whether the results under a split sample are driven by individuals who are more right-wing oriented.

As can be seen from Table 6, both groups contribute to the effect of voting for populist parties, i. e., the results are qualitatively similar. However, the coefficients are larger for the right-oriented group. Left-oriented individuals are somewhat less inclined to participate in an election than the right-oriented individuals. In addition, right-oriented individuals are more prone to vote for populist parties.

[INSERT TABLE 6 HERE]

Overall, our findings highlight population aging as an important yet overlooked driver of populist voting and attitudes. We show that both aging societies and older individuals are more likely to adopt populist views. Crucially, this relationship persists even after controlling for individual age, suggesting that the effect is not merely a life-cycle phenomenon but rather an aggregate societal mechanism. This mechanism reflects how both younger and older individuals respond to the economic and social conditions shaped by an aging population, such as shifting labor market dynamics, welfare state pressures, and cultural transformations. These broader structural changes create an environment where populist rhetoric resonates more strongly, reinforcing populist attitudes across different age groups.

6 Robustness Exercises

This section assesses the robustness of our benchmark findings by implementing a series of sensitivity checks. First, we test whether our results hold under an alternative definition of the old-age dependency ratio, ensuring that our measure of population aging is not driving the observed effects. Second, we modify the underlying sample to examine the consistency of our estimates across different subsamples. Specifically, we rerun regressions (iii) and (iv) on a restricted sample that

excludes Luxembourg and Portugal, countries with unique demographic and institutional characteristics that might influence our results. Third, we split the sample into younger and older individuals to explore whether the impact of population aging on populist attitudes differs by age group. Fourth, we restrict the analysis to native-born individuals to assess whether immigration status influences the relationship between aging and populism. Fifth, we refine our sample further by focusing exclusively on European Union countries, allowing us to control for institutional similarities and common policy frameworks that might shape attitudes toward populism. Finally, we incorporate regional NUTS 1 data to account for subnational variations in demographic trends and political preferences, capturing localized effects of population aging.

Beyond these sample modifications, we conduct additional robustness exercises to better understand the mechanisms underlying the relationship between aging and populism. First, we examine whether population aging has differential effects on key political outcomes; voting for populist parties, political trust, and attitudes toward immigrants when disaggregated by age groups. This helps determine whether younger and older individuals respond differently to aging societies. Second, we analyze the interaction between population aging and interpersonal trust, accounting for trust in both other people and state institutions such as the police, to investigate whether eroding social cohesion contributes to the rise of populist attitudes. Lastly, we explore the role of media exposure by assessing how the relationship between population aging and populism varies with total hours spent watching TV, reading newspapers, and navigating the internet. Given the media's role in shaping political beliefs, this exercise provides insights into whether exposure to different information channels amplifies or mitigates the effects of population aging on populist attitudes.

This section evaluates the robustness of our benchmark findings through a series of sensitivity checks. We test the consistency of our results by using alternative definitions of the old-age de-

pendency ratio, adjusting the sample to exclude Luxembourg and Portugal, splitting the sample by age group, focusing on native-born individuals, and narrowing the analysis to European Union countries. Additionally, we incorporate regional NUTS 1 data to account for subnational variations. To better understand the mechanisms behind the relationship between aging and populism, we examine how aging affects voting for populist parties, political trust, and attitudes toward immigrants across age groups, explore the interaction between aging and interpersonal trust, and analyze the role of media exposure in shaping populist attitudes.

6.1 *Does the Definition of the OADR Matter?*

Here, we redefine our measure of population aging by using an alternative specification of the OADR. Specifically, instead of measuring it as the ratio of individuals aged 65 and older to the working-age population (15-64), we now express it as the share of individuals aged 65 and older relative to the total population.

Table 7 and 8 document the results. All qualitative findings of our benchmark analysis are robust. However, throughout the effect of aging is more pronounced. For instance, the comparison of Tables 2 and 7 reveals that the effect of population aging on electoral turnout is stronger if we measure aging with the alternative definition of the OADR.

[INSERT TABLE 7 AND TABLE 8 HERE]

6.2 *Do "Non-Populist" Countries Drive the Results?*

Do "non-populist" countries drive the results of our benchmark analysis? To assess this, we exclude Luxembourg and Portugal, countries with relatively low levels of populist voting and

re-estimate our main specifications. The results in Table 9 remain robust across all key outcomes, confirming that our findings are not driven by these outliers. In fact, in most cases, the estimated effects become even more pronounced, suggesting that the relationship between population aging and populist attitudes is not solely dependent on the presence or absence of highly populist-leaning electorates but reflects a broader, systematic pattern across European countries. This reinforces the validity of our conclusions and ensures that they are not artifacts of country-specific characteristics.

[INSERT TABLE 9 HERE]

6.3 *Do Populist Attitudes Differ between Young and Old Individuals?*

Living in an aging society may influence the populist attitudes of younger and older individuals in distinct ways. To examine this potential heterogeneity, we divide our sample into two age groups: younger individuals aged 18 to 64 and older individuals aged 65 and above. This allows us to assess whether the effects of population aging on populist attitudes operate differently across age cohorts, capturing variations in economic concerns, social values, and political preferences that may emerge as societies grow older. By analyzing these groups separately, we can determine whether younger individuals respond to aging societies in ways that differ from their older counterparts, providing deeper insights into the mechanisms driving our results.

Table 10 presents the results for electoral turnout and voting for populist parties, comparing the effects of population aging across different age groups. The findings indicate that the impact of

population aging remains both qualitatively and quantitatively similar for younger individuals (18-64) and older individuals (65+). This suggests that the influence of an aging society on political behavior and populist support operates consistently across age cohorts, reinforcing the notion that aggregate demographic shifts shape political attitudes beyond individual aging effects.[4]

[INSERT TABLE 10 HERE]

Tables 11 and 12 present the effects of population aging on trust in political institutions and attitudes toward immigrants, with the sample divided into two groups: Panel A reports results for older individuals aged 65 and above, while Panel B focuses on younger individuals below 64. The findings remain consistent with our baseline analysis, suggesting that the observed relationships are not driven by a particular age group. This reinforces the idea that the impact of population aging on political trust and immigration attitudes is a broader societal phenomenon rather than being concentrated within a specific demographic segment.

[INSERT TABLE 11 AND TABLE 12 HERE]

The presence of an old audience also allows politicians to approach this group differently and appeal to it via collective memory. Past experiences and historical events have been argued to have a long-term impact in all areas of economic decision-making (Malmendier (2021) on historical events and traumatic past experiences, Gavresi and Litina (2023) on the role of macroeconomic shocks during an individual's impressionable years between 18 and 25 years of age for populist attitudes, Fazio (2023) on historical exposure to protests and the support for populist attitudes, Fouka and Voth (2016) on how past events can trigger selective recall, Dinas et al. (2021) on historical experiences of past violence and the formation of persistent social identities).

[4]Note that the coefficient of electoral turnout for the old sample is negative yet significant at the 10% level whereas the corresponding coefficient for the young sample is negative and significant at the 5% level.

6.4 *Does Being Native Matter?*

Table 13 and 14 show our regression results for the restricted sample including only those individuals who are born to the country and either their father or mother is born in the country. This specification allows us to check whether our benchmark findings are driven by the attitudes expressed by first and second generation immigrants. However, our findings suggest that this is not the case. All results of the benchmark analysis remain robust and remain quantitatively unchanged.

[INSERT TABLE 13 AND TABLE 14 HERE]

6.5 *Does EU Membership Matter?*

What is the impact of population aging on populist attitudes within EU member states? To examine this, we re-estimate our regressions using a restricted sample that includes only EU countries. This allows us to assess whether the relationship between population aging and populist attitudes holds within a more institutionally and economically integrated context, ensuring that our findings are not driven by structural differences between EU and non-EU nations.

Tables 15 and 16 present the results for EU member countries. Across regressions (i), (ii), and (iv), the findings remain robust and quantitatively consistent with our baseline results, confirming that population aging within the EU is associated with lower electoral turnout, increased support for populist parties, and more negative attitudes toward immigrants. However, the results for regression (iii) differ. While trust in the European Parliament continues to exhibit a significant negative relationship with population aging, the effect on other measures of political trust dis-

appears (see the upper panel of Table 15). This suggests that while aging societies within the EU experience a general erosion of institutional trust, this effect is particularly pronounced in perceptions of EU governance rather than domestic political institutions.

[INSERT TABLE 15 AND TABLE 16 HERE]

6.6 *Does the Level of Aggregation Matter?*

Here, we conduct a regional analysis to examine the effect of population aging on populist attitudes at a more disaggregated level. Ideally, a more detailed investigation would involve re-estimating our regressions using NUTS 2-level data. However, due to limited variation in OADR at that level, we instead focus on NUTS 1 European regions, where sufficient demographic differences exist to capture meaningful effects.

The use of regional data presents both advantages and limitations compared to our benchmark analysis. On the one hand, disaggregation allows us to incorporate a greater number of unobserved regional characteristics, reducing concerns about omitted variable bias and capturing local-level heterogeneity more effectively. By controlling for factors specific to each region, we mitigate the risk that national-level variations are driving the observed relationships, thereby strengthening the robustness of our findings.

On the cost side, the regional variation of the OADR that can be exploited is smaller than the one at the country level.[5]

The key explanatory variable is now the regional old-age dependency ratio, which is defined as the population in the region older than 64 in the regional workforce aged 15 to 64. The data for

[5]This explains why we did not choose the regional analysis as our benchmark specification.

2002-2019 years are taken from Eurostat. In terms of the benchmark analysis, we aggregate the data over 2-year intervals to match them with the ESS rounds. The set of individual controls and fixed effects remain unchanged. If possible, the country-level controls are replaced by regional-level controls including regional log per-capita GDP in PPP, fertility and mortality rates and life expectancy.

Accordingly, we test the following regression equation:

$$y_{irt} = a_0 + \alpha_1 OADR_{rt} + \alpha_2 X_{irt} + \alpha_3 Z_{rt} + \beta_c + \gamma_t + \theta_j + \epsilon_{irt}. \quad (2)$$

Here, a subscript irt denotes individual i in region r and ESS round t. Then, the dependent variable, y_{irt}, denotes electoral turnout in regression i), voting for a populist party in regression ii), political trust in regression iii), and attitudes towards immigrants in regression iv).

$OADR_{rt}$ is the old-age dependency ratio in region c at ESS round t. X_{irt} is the vector of individual-level controls, Z_{ct} is the vector of time-varying regional-level controls, β_c and γ_t are country and ESS round fixed effects as well as θj is cohort fixed effects (individuals are grouped into eleven 7-year age cohorts), and ϵ_{irt} is the error term. Standard errors are robust and clustered at the cohort level as individuals are split up into eleven age groups of 7-years.

For regressions i) and ii) our sample excludes again Luxembourg and Portugal, where populist parties ran but no ESS participant voted for them.

Tables 17 and 18 indicate that our results remain robust and quantitatively similar compared to the benchmark analysis except for trust where only trust in politicians, trust in parliament and trust in European parliament remain negative and significant.

[INSERT TABLE 17 AND TABLE 18 HERE]

6.7 *Does Being to a Specific Age Group Matter ?*

In this subsection, we investigate how the old-age dependency ratio (OADR) influences voting for populist parties, political mistrust, and anti-immigrant attitudes across different age groups. Specifically, we analyze these effects separately for individuals aged 18-29 years (Panel A), 30-39 years (Panel B), 40-49 years (Panel C), 50-59 years (Panel D), and those aged 60 and above (Panel E), following the classification used in Feyrer (2011). This disaggregated approach allows us to assess whether the impact of population aging on populist attitudes varies across different stages of the life cycle, shedding light on whether younger, middle-aged, and older individuals respond differently to the aging of their societies. By doing so, we aim to disentangle whether the observed effects are driven primarily by younger voters adapting to an aging society, or if they are reinforced by the shifting preferences of older individuals.

We further examine the effects of population aging on populist attitudes, electoral turnout, political trust, and anti-immigrant attitudes by analyzing the results across different age groups, as shown in Tables A.4, A.5, and A.6. This disaggregated analysis allows us to explore how the old-age dependency ratio (OADR) influences political behavior and attitudes among individuals aged 18-29, 30-39, 40-49, 50-59, and 60+ years.

In Table A.4 the results indicate that population aging reduces electoral turnout across all age groups, with the effect being particularly pronounced and statistically significant for younger individuals (18-29 years) and older individuals (60+ years). This suggests that population aging discourages electoral participation most strongly among those at the extremes of the age distribution. In contrast, OADR consistently increases support for populist parties across all age groups, with the strongest effects observed among individuals aged 30-39 and 50-59 years. These find-

ings highlight that population aging fosters populist voting behavior across the life cycle, but the intensity varies, with middle-aged groups responding more strongly.

Table A.5 suggests that population aging is associated with a significant decline in trust in political institutions across most age groups and trust measures. Trust in the European Parliament shows a consistently negative and significant relationship with OADR across all cohorts, reflecting widespread dissatisfaction with supranational institutions in aging societies. Younger and middle-aged individuals appear more affected by the erosion of political trust, while the effects are somewhat weaker for individuals aged 60+ years. This pattern suggests that perceptions of institutional inefficacy in addressing aging-related challenges resonate more strongly among younger and working-age voters.

In Table A.6 the analysis reveals a robust and significant positive association between OADR and anti-immigrant attitudes, indicating that population aging amplifies hostility toward immigrants. The effects are strongest among older individuals (50-59 and 60+ years), particularly regarding concerns about immigrants' cultural and economic impact. Younger individuals (18-29 years) exhibit weaker responses, potentially reflecting greater openness or resistance to the narratives fueling anti-immigrant sentiment in aging societies. These results underscore the role of aging-induced cultural and economic anxieties in shaping attitudes toward immigration.

Overall, the results demonstrate that the effects of population aging extend across all age groups, shaping political behavior and attitudes in distinct but consistent ways. Population aging reduces electoral turnout, increases support for populist parties, erodes trust in political institutions, and intensifies anti-immigrant sentiment. These findings emphasize the need to consider both aggregate population dynamics and age-specific responses when analyzing the political consequences of demographic shifts.

[INSERT TABLE A.4, TABLE A.5 AND A.6 HERE]

6.8 *Population Aging, Interpersonal Trust and Trust in the Police*

In this subsection, we investigate how the interaction between the old-age dependency ratio (OADR) and interpersonal trust influences populist attitudes, electoral turnout, and anti-immigrant sentiments. Interpersonal trust encompasses trust in other people. We also consider trust in the police. These two are key dimensions of social cohesion and institutional confidence that are often highlighted. Understanding this interplay is critical, as population aging not only reshapes economic and social structures but may also erode or amplify trust levels, which in turn affect political outcomes.

[INSERT TABLE A.7 AND TABLE A.8 HERE]

The results in Tables A.7 and A.8 highlight the interplay between population aging (OADR) and interpersonal trust, measured as trust in other people (Panel A) and trust in the police (Panel B), on electoral turnout and voting for populist parties. The direct effect of OADR is significant across both panels, with higher OADR reducing electoral turnout and increasing support for populist parties. Trust in other people and trust in the police, when considered independently, have distinct effects: greater trust in other people increases support for populist parties, while trust in the police reduces it. Crucially, the interaction terms reveal important nuances. The positive interaction between OADR and trust in other people for electoral turnout suggests that higher trust mitigates the negative impact of OADR on voter participation. Conversely, the negative

interaction between OADR and trust in other people for voting for populist parties indicates that trust reduces the susceptibility of individuals to populist rhetoric in aging societies. A similar pattern emerges for trust in the police, where the interaction term reduces the effect of OADR on populist voting but has a weaker mitigating effect on electoral turnout. These findings underscore the moderating role of interpersonal trust in shaping the political consequences of population aging, suggesting that stronger social cohesion and institutional confidence can offset some of the adverse effects of demographic change.

6.9 *Does the Exposure to Media Matter?*

Exposure to media has a significant impact on the rise of populist rhetoric and the voting for populist parties. Following Gerber et al. (2011), it is argued that dedicating significant time to watching television and being frequently exposed to advertisements can have a notable, albeit temporary, impact on voting preferences. Furthermore, there is also a plentiful evidence that traditional media (newspapers and TV) have had an important impact on political outcomes by providing political news and entertainment, both in their infancy and after they have become widespread according to Enikolopov and Petrova (2015). Campante et al. (2018) estimate the effects of access to internet on political outcomes in Italy. The results show that the negative effect of the internet on political participation found by Falck et al. (2014) and Gavazza et al. (2019) was also present in Italy until 2008, when it reversed. Thus, we investigate the interaction between population aging and the first principal component of the total hours watching TV, reading newspapers and navigating on the internet and how this interplay can affect the increase of populist attitudes.

[INSERT TABLE A.9 AND TABLE A.10 HERE]

The results in Tables A.9 and A.10 highlight the interplay between population aging (OADR), media exposure, and various political outcomes. In Table A.9, OADR reduces electoral turnout and increases populist voting, while media exposure positively influences both. The interaction terms reveal that media exposure mitigates the negative impact of OADR on turnout and dampens its positive effect on populist voting, suggesting that media can moderate aging-related political disengagement and populist support. Similarly, Table A.10 shows that while OADR erodes political trust and amplifies anti-immigrant attitudes, media exposure has a dual role: it increases political trust in some cases but also reinforces negative attitudes toward immigrants, acting as both a mobilizer and a moderator of the political effects of demographic change.

6.10 Does Population Aging Lead to a Rise of the Populist Parties?

To further investigate the hypothesis that population aging leads to a rise in the number of populist parties and subsequently drives individuals to express stronger populist attitudes and vote for populist parties, we calculate the correlation between the country's old-age dependency ratio (OADR) and the number of populist parties voted for in each country within our sample. The results are presented in Table A.11.

The correlation coefficient is found to be very small, at 0.0067, suggesting that there is virtually no linear relationship between the number of populist parties in a country and its level of population aging (OADR). This result implies that while population aging is strongly associated with

individual populist attitudes and voting behavior, it does not directly correlate with an increase in the number of populist parties present in the political landscape.

This finding is significant as it highlights that the rise in populist attitudes driven by population aging may not necessarily translate into the proliferation of populist parties. Instead, it suggests that individuals may increasingly align with existing populist parties rather than new ones emerging due to population aging. This distinction underscores the complexity of the relationship between demographic change, political attitudes, and party dynamics, indicating that the effect of aging on populist behavior operates more through individual voting preferences than through the expansion of the populist party supply.

[INSERT TABLE A.11 HERE]

6.11 Logit-Probit Models

To ensure the robustness of our findings, we re-estimate the full set of regressions using both probit and logit models, as presented in Tables A.12 through A.15. These models allow us to test whether the relationships identified in our benchmark specifications hold under different assumptions about the functional form of the probability distribution for the dependent variables. We use both specifications as they bear different implications for the introduction of the fixed effects.

The results across both models are consistent with our main findings, reinforcing the robustness of the observed relationships. In particular, the old-age dependency ratio (OADR) continues to exhibit a significant negative effect on electoral turnout and a positive effect on voting for populist parties, as well as a significant impact on political trust and anti-immigrant attitudes. The marginal effects derived from these models align closely with those from our baseline regressions,

indicating that our conclusions are not sensitive to the choice of model specification.

By employing both probit and logit frameworks, we address potential concerns about model dependency and demonstrate that our findings remain valid across alternative estimation techniques.

[INSERT TABLES A.12 - A.15 HERE]

7 Identification

The primary identification concern in the analysis is the potential endogeneity between population aging (OADR) and populist attitudes, arising from reverse causality and omitted variable bias. To address omitted variables, the analysis includes an extensive set of individual- and country-level controls (e.g., education, income, GDP per capita in PPP) to account for observable factors that might jointly influence OADR and populist attitudes. Additionally, country, cohort, and ESS round fixed effects help control for unobserved heterogeneity at the country and time levels. Reverse causality could occur if populist attitudes influence demographic trends, such as birth rates or migration, which in turn affect OADR. In this Section we tackle endogeneity by employing an instrumental variable (IV) approach, using lagged birth rates from 30 years prior as an instrument for OADR. This IV is exogenous to current political attitudes but strongly predicts OADR, reducing concerns about reverse causality and omitted variable bias tied to contemporaneous social or political factors.

We also account for selection bias adopting a two-step Heckman probit model estimating first the probability of participation, and then the probability of voting for the populist party adjusting for selection. We perform an instrumental variable (IV) analysis to address potential endogeneity

between the old-age dependency ratio (OADR) and political outcomes. Following Acemoglu and Restrepo (2022), we use past birth rates (number of live births occurring 30 years prior, from 1972 to 1989) as an instrument for OADR, leveraging the exogenous variation in demographic trends across countries. This approach ensures that our estimates capture the causal impact of population aging on electoral turnout, populist voting, political trust, and attitudes toward immigrants.

Table A.16 presents the IV results for electoral turnout and voting for populist parties. The findings remain robust and significant, consistent with the benchmark analysis. Higher OADR is associated with a significant decline in turnout and a strong increase in populist voting, reinforcing the idea that population aging drives political disengagement while fostering support for populism. Table A.17 extends the analysis to political trust (Panel A) and attitudes toward immigrants (Panel B). The results confirm that OADR significantly erodes trust in political institutions and exacerbates anti-immigrant sentiment, mirroring the patterns observed in the baseline regressions.

The validity of our instrument is supported by the first-stage results in Table A.18, where the past birth rate is strongly predictive of OADR, with first-stage F-statistics well above the threshold of 104.7 (Lee et al., 2022), indicating a strong instrument. The high F-statistics in the two-stage regressions further demonstrate the robustness of the IV estimation. Overall, these results confirm the causal relationship between population aging and the observed political outcomes, providing strong evidence that the effects of aging are not driven by omitted variable bias or reverse causality.

[INSERT TABLE A.16, TABLE A.17 AND TABLE A.18 HERE]

7.1 Selection Bias Estimation Results

To address potential selection bias arising from the sequential nature of voting decisions, where individuals first decide whether to vote and then, conditional on participation, choose whom to vote for, we estimate a two-step Heckman probit model. In this framework, the first stage models the probability of electoral participation, while the second stage estimates the likelihood of voting for a populist party, adjusting for any selection bias.

The estimated p parameter is -0.0035, a value very close to zero, indicating no significant correlation between the selection process (decision to vote) and the outcome variable (voting for a populist party). This suggests that selection bias does not pose a significant issue in this model. Table A.19 presents the results, showing that the effect of population aging (OADR) on voting for populist parties remains positive and highly significant, while its effect on electoral turnout remains negative but statistically insignificant. These findings reinforce the robustness of our benchmark results, as the relationship between population aging and political outcomes persists even after accounting for potential biases in voter participation decisions.

[INSERT TABLE A.19 HERE]

8 Mechanism

In aging societies, issues pertinent to the elderly gain prominence in public discourse due to their growing demographic and political influence. This shift, often attributed to a relative "market size effect," means that topics such as national identity, traditional values, law and order, and material security dominate everyday life, media coverage, and political agendas. These themes resonate

strongly with older populations, who may feel vulnerable to societal changes or perceive threats to their way of life. Populist parties capitalize on these concerns by framing their platforms around these issues, offering simplified solutions and amplifying fears. As these topics become central to the political sphere, exposure to populist rhetoric intensifies for voters of all ages, shaping public discourse and increasing the likelihood of adopting populist attitudes (Zhuravskaya et al., 2020).

The dominance of elderly-related issues in aging societies creates an expanded platform for populist parties to propagate their messages, particularly on divisive topics like immigration and national identity. These narratives, often amplified by the media, become pervasive, normalizing populist rhetoric. This expanded exposure affects not only the elderly but also younger voters, as populist propaganda shapes perceptions of societal priorities and redefines public expectations, paving the way for increased support for populist parties and their agendas.

Another mechanism through which population aging fosters populism is the politics of historical memory. Populist parties frequently mobilize voters by evoking a nostalgic vision of the past, portraying it as a period of stability, cultural purity, and prosperity. By reconstructing heritage and memory as immutable and natural, they shape new narratives of "the people" against external threats, such as immigrants or elites (De Cesari et al., 2020). This tactic is particularly effective in countries with histories of fascism or authoritarianism, where such re-elaborations of the past resonate with collective memory (Caramani and Manucci, 2019). While this rhetoric strongly appeals to older populations longing for a return to perceived "better times," it also influences younger voters by embedding these narratives into the broader political discourse, further strengthening populist movements.

Low trust in political institutions further magnifies the appeal of populist parties in aging societies. As governments struggle to address the various challenges of population aging, such as

economic pressures and healthcare demands, their perceived inefficacy erodes public trust. Populist parties exploit this distrust by presenting themselves as anti-establishment forces, promising to dismantle the status quo. Moreover, this erosion of institutional trust aligns with the rise of conspiracy beliefs, which are often intertwined with populist attitudes. Individuals who distrust political institutions are more likely to believe in conspiracy theories, ranging from government cover-ups to fears of mind-controlling technologies (Christner et al., 2021). These beliefs reinforce populist narratives, fostering higher support for parties that frame themselves as the only viable alternative to corrupt or failing elites.

9 Concluding Remarks

This paper emphasizes population aging as a determinant of populism. We establish this link for a sample of European countries over years the 2002 to 2019. Broadly speaking, voters in older European countries reduce their electoral turnout, strengthen their support for populist parties, have less trust in political institutions, and reveal stronger anti-immigrant attitudes.

At a more abstract level, our central finding is that a given individual living in an "old" society is more likely to exhibit populist attitudes than the same individual living in a "young" society. Here, populist attitudes include extreme left as well as extreme right views (see, however, Section 4). This effect is independent of whether the individual in question is young or old (see Section 6.3).

Our finding materializes in addition to the individual aging effect that tends to make older individuals more inclined toward populism. Yet, the driving mechanism may be construed as an aggregate effect induced by the shift in a society's age distribution.

Indeed, in an older society topics that concern the life of the older population are more prevalent

in everyday life, in the media, and in the political arena. This is a pure "market size effect" that appeals to the changing preferences of an older population. In other words, subject areas such as national identity, traditional values, law and order, health hazards, or material safety are more prevalent in the public sphere. This gives an enlarged platform for populist parties to disseminate their strong views on these issues. Therefore, in old societies the exposure to this kind of propaganda increases for all voters and may shift their attitudes toward populist ideas.

A case in point are election campaigns in young and old democratic societies. Population aging means that the median voter is older in the latter. Accordingly, in older societies electoral competition for the median voter gives rise to more intense debates on the above-mentioned topics about which the elderly care most. More often than not, populist parties tend to offer broad recommendations on these topics. Hence, in older societies these populist views are easier to spread to a broad spectrum of the electorate. Exposed to this more intense rhetoric, young and old voters may find populist attitudes increasingly convincing.

As the older electorate is more conservative in the first place, the effect of more populist rhetoric on their attitudes may be stronger than with the young. For instance, when populist parties appeal to collective memory and past experiences, older individuals may be attracted to such narratives since they evoke nostalgia for a perceived better past (De Cesari et al., 2020).

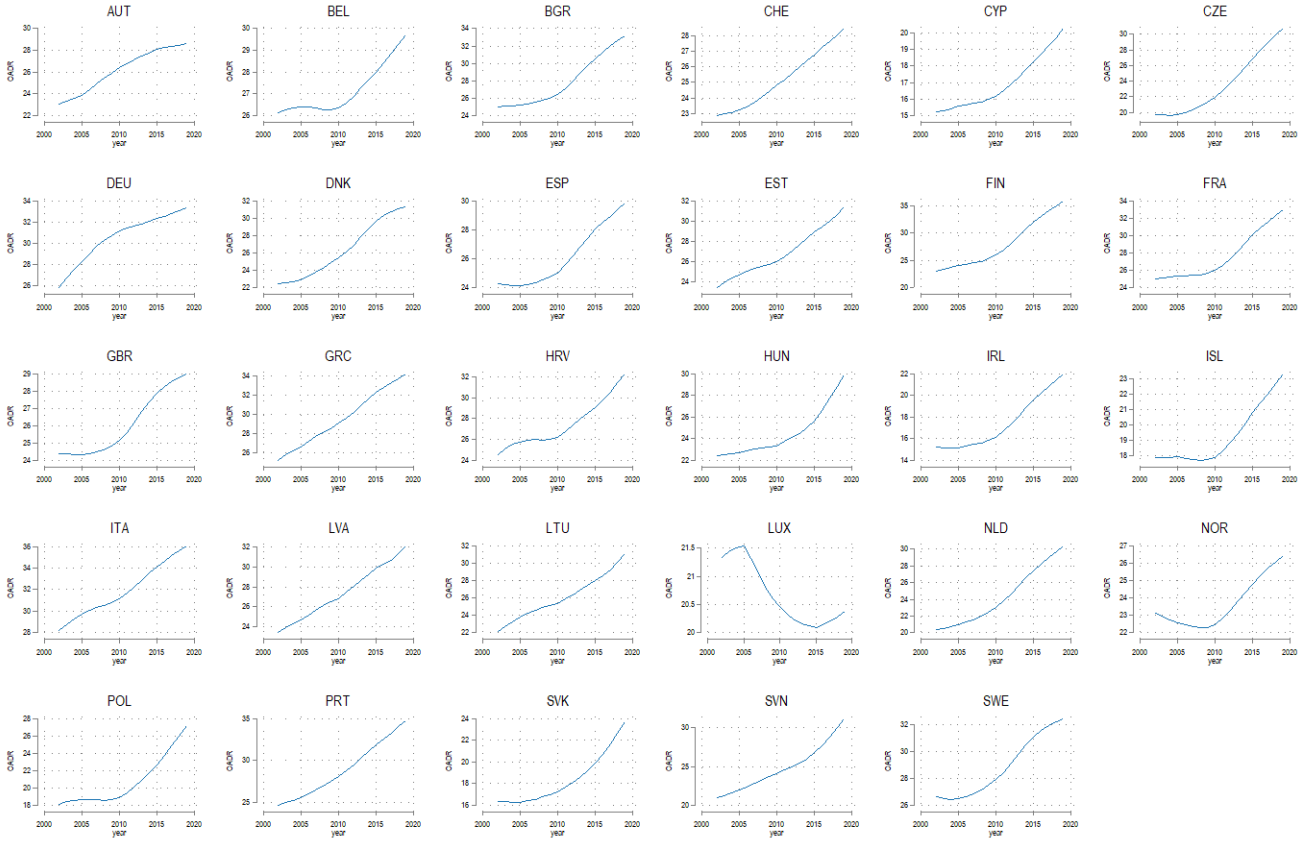
It is also conceivable that the young electorate responds more favorably to the populist rhetoric in older societies. Populist parties that advocate strict immigration policies may attract young voter who perceive immigrants as competitors in the labor market.

For the political arena, our findings suggest that population aging as an aggregate phenomenon qualifies as a driver of populism beyond the received logic of individual aging. This demographic trend is irreversible. Hence, policies that aim to reduce populism need to take the anxieties and

fears that come with population aging seriously. They also need to be conceived for the young and the old electorate alike.

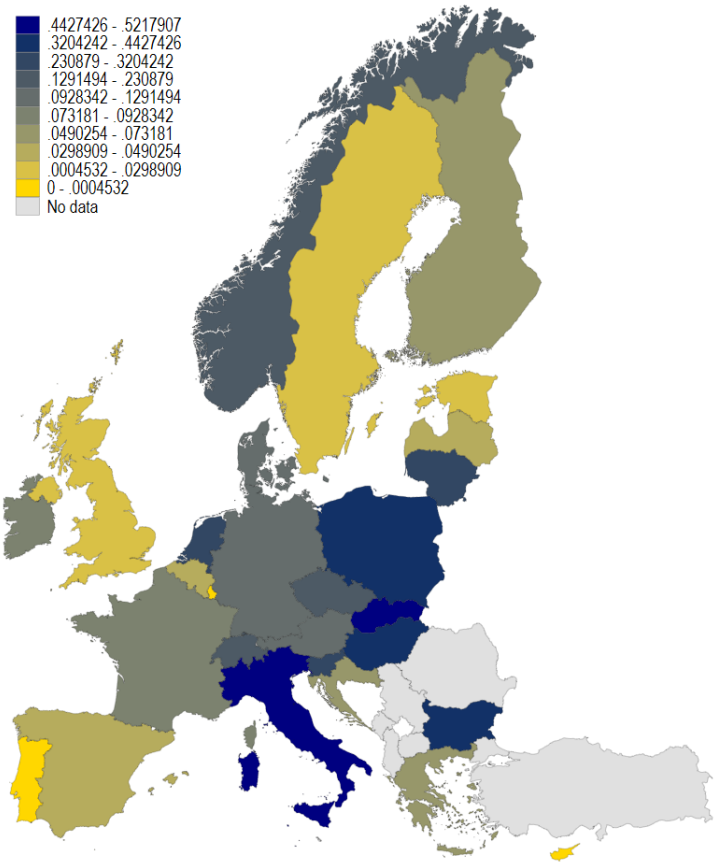
Figures and Tables

Figure 1: The Evolution of the OADR from 2002 to 2019 in 29 European Countries



Notes: This figure presents the evolution of the OADR in the 30 European countries listed in Section 3.1 from 2002 to 2019. *Source: World Bank Indicators.*

Figure 2: Voting for a Populist Party in Europe



Notes: This figure presents the mean (across ESS rounds) of the voting shares for populist parties for each European country from 2002 to 2019. *Source: European Social Survey.*

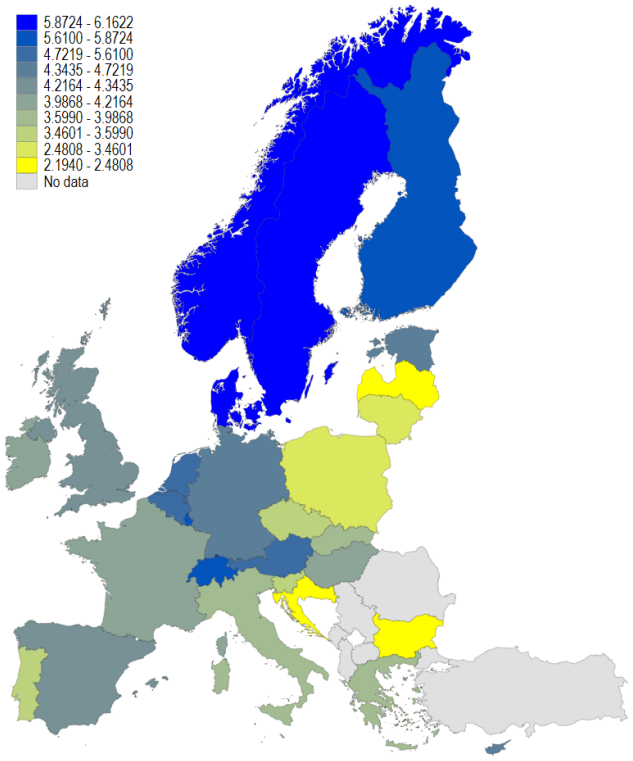


Figure 3: Trust National Parliament

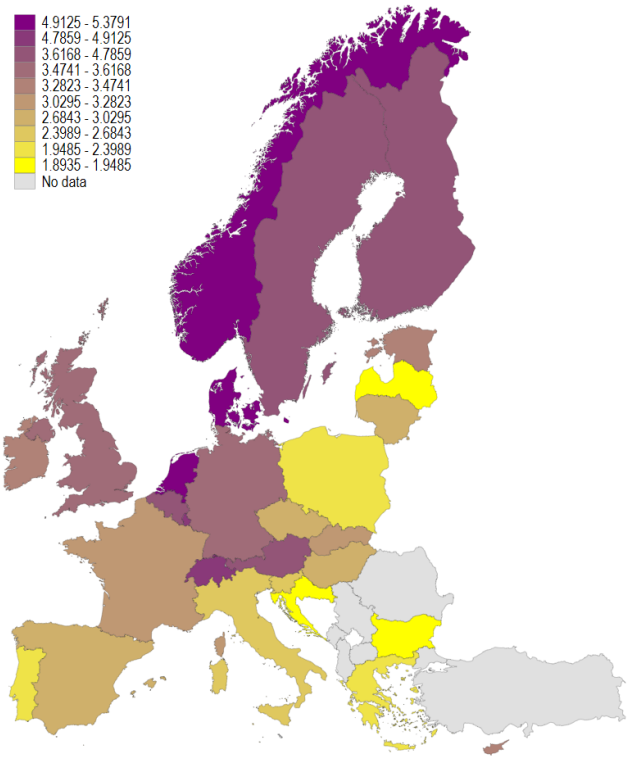


Figure 4: Trust Parties

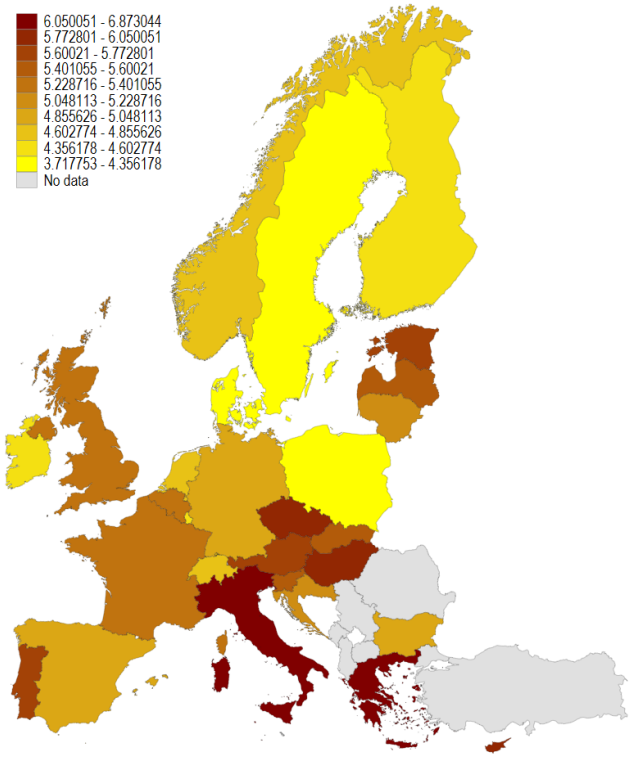


Figure 5: Immigrants Harm Country

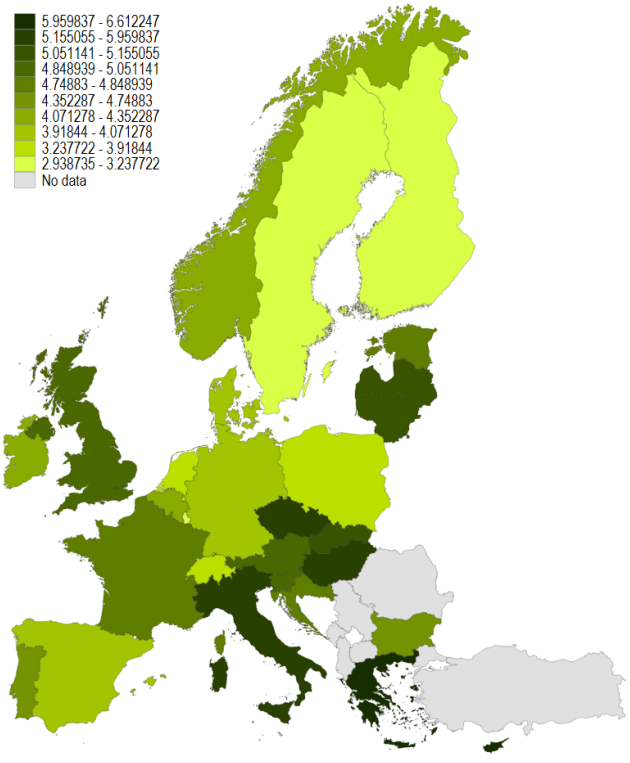


Figure 6: Immigrants Undermine Culture

Notes: This figure presents the mean (across ESS rounds) political trust and attitudes towards immigrants for each European sample country from 2002 to 2019. *Source: European Social Survey.*

Table 1: Descriptive Statistics

	min	max
Voting participation		
Electoral turnout	0	1
Vote for a populist party	0	1
Vote for a right-wing populist party	0	1
Vote for a left-wing populist party	0	1
Political trust		
Trust in political parties	0	10
Trust in politicians	0	10
Trust in national parliament	0	10
Trust in European parliament	0	10
Trust in legal system	0	10
Satisfied with government	0	10
Trust in police	0	10
Trust on other people	0	10
Attitudes towards immigrants		
Immigrants make country worse	0	10
Immigrants undermine country's culture	0	10
Immigrants are bad for the country's economy	0	10
Allow few immigrants outside Europe	1	4
Allow few immigrants from different race or ethnicity	1	4
Allow many immigrants from same race or ethnicity	1	4
Immigrants take out more than they put in	0	10
Individual characteristics		
Gender (Women = 0, Men = 1)	0	1
Age of respondent	14	105
Education status	1	5
Income sources	1	7
Income level	1	4
Globalization exposure	0	1
Race	1	2
Marital status	1	6
Religious person	0	10
Political orientation	0	10
Hours watching TV programs	0	7
Hours reading newspapers	0	7
Hours navigating on the internet	0	7
Country characteristics		
Old-age dependency ratio (OADR)	10.25	35.82
Fraction of old above 65	6.62	22.88
GDP per capita in PPP	10,759.28	10,3676.10
Life expectancy	67.15	83.75
Fertility rate	1.17	3.11
Mortality rate	1.6	23.1
Past birth rate	9.7	56.66
Nuts 1 characteristics		
Regional old-age dependency ratio	15.87	42.78
Regional GDP per capita in PPP	1,800	100,000
Regional life expectancy	73.20	85.65
Regional fertility rate	0.96	2.04
Regional mortality rate	0	10.75

Notes: The table reports the descriptive statistics of all variables used in the different layers of analysis. They include the following: old-age dependency ratio (OADR), fraction of old above 65 per 100 people aged 15-64, electoral turnout, vote for populist parties, vote for a right-wing populist party, vote for a left-wing populist party, trust in political institutions: i) parties, ii) politicians, iii) national parliament, iv) European parliament, v) legal system, satisfaction with national government, attitudes towards immigrants: i) immigrants make the country worse, ii) immigrants undermine country's culture, iii) immigrants are bad for the country's economy, iv) allow few immigrants outside Europe, v) allow few immigrants from different race-ethnicity, vi) allow many immigrants from same race-ethnicity, individual demographic characteristics such as age, gender, race, education, income source, income level, exposure to globalization, political orientation, religiosity, marital status, trust on other people, trust the police, hours watching TV, hours reading newspapers and hours navigating on the internet. As country controls we list per-capita GDP in PPP, life expectancy, fertility and mortality rates. Moreover, as regional controls in Nuts 1 regions the regional old-age dependency ratio, per-capita GDP in PPP, regional life expectancy, fertility and mortality rates. Last, as an instrument to our IV analysis we adopt the birth rate 30 years before.

Table 2: Population Aging, Electoral Turnout, and Voting for Populist Parties

	Electoral turnout	Voting populist parties
	(1)	(2)
OADR	-.0054***	.0149***
	[.0014]	[.0012]
R-squared	.11	.18
Sample	304,177	216,058
Individual Controls	Yes	Yes
Country-Level Controls	Yes	Yes
Country Fixed Effects	Yes	Yes
Essround Fixed Effects	Yes	Yes
Cohort Fixed Effects	Yes	Yes
Countries	With P	With P

Notes: This table shows the results of Regression i) and ii), i. e., it establishes the effect of the old-age dependency ratio (OADR) on the electoral turnout and on the voting for populist parties. The analysis controls for individual characteristics including age, gender, race, education, income source, religiosity, income difficulties, exposure to globalization and marital status. We use as country controls log per-capita GDP in PPP, life expectancy, fertility and mortality rates. Further, we account for country, cohort and ESS round fixed effects. Robust standard errors clustered at the cohort level are shown in parenthesis; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level.

Table 3: Population Aging, Political Trust and Attitudes Towards Immigrants

	Trust parties	Trust politicians	Trust parliament	Trust European parliament	Trust legal system	Government satisfaction
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A.						
OADR	-.0403***	-.0405***	-.0584***	-.0671***	-.0466***	-.0718***
	[.0085]	[.0070]	[.0073]	[.0042]	[.0087]	[.0073]
R-squared	.21	.20	.21	.08	.22	.17
Sample	299,560	335,028	332,585	308,942	333,065	329,137
	Immigrants make country worse	Immigrants undermine culture	Immigrants bad for economy	Immigrants outside Europe	Few immigrants from different race	Many immigrants from same race
	(1)	(2)	(3)	(4)	(5)	(6)
Panel B.						
OADR	.1080***	.1171***	.0810***	.0408***	.0488***	-.0185***
	[.0066]	[.0065]	[.0065]	[.0025]	[.0026]	[.0021]
R-squared	.15	.17	.13	.17	.17	.13
Sample	326,270	327,195	326,731	329,504	330,264	330,634
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Essround Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Cohort Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Countries	All	All	All	All	All	All

Notes: This table shows the results of Regression iii) and iv), i. e., it establishes the effect of the old-age dependency ratio (OADR) on the political trust and on attitudes towards immigrants. Observe that we capture "political trust" with six variables, namely, Trust in Parties, Trust in Politicians, Trust in the National Parliament, Trust in the European Parliament, Trust in the Legal System and Political Satisfaction. For all of these variables, the effect of population aging is negative and significant at the 1% level. Observe further that we capture "attitudes towards immigrants" with six variables, namely, Immigrants Make a Country Worse, Immigrants undermine Country's Culture, Immigrants are Bad for the Economy, Favor of Immigrants outside Europe, Favor of Few Immigrants from Different Race and Favor of Many Immigrants from the Same Race. For all of these variables the effect of population aging is positive except for the last column where it is negative and significant at the 1% level. The analysis controls for individual characteristics including age, gender, race, education, income source, income difficulties, religiosity, exposure to globalization and marital status. We use as country controls log per-capita GDP in PPP, life expectancy, fertility and mortality rates. Further, we account for country, cohort and ESS round fixed effects. Robust standard errors clustered at the cohort level are shown in parenthesis; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level.

Table 4: Population Aging and the Inclination to Vote for Right-Wing and Left-Wing Populist Parties

	Voting right-wing pop. parties	Voting left-wing pop. parties
	(1)	(2)
OADR	.0078***	-.0003
	[.0015]	[.0006]
R-squared	.18	.08
Sample	240,267	278,356
Individual Controls	Yes	Yes
Country-Level Controls	Yes	Yes
Country Fixed Effects	Yes	Yes
Essround Fixed Effects	Yes	Yes
Cohort Fixed Effects	Yes	Yes
Countries	With P	With P

Notes: This table shows the results of two regressions where the dependent variable of Regression ii) is replaced by the new variables "Voting for a Right-Wing Populist Party" or "Voting for a Left-Wing Populist Party", respectively. The analysis controls for individual characteristics including age, gender, race, education, income source, income difficulties, exposure to globalization, religiosity and marital status. We use as country controls log per-capita GDP in PPP, life expectancy, fertility and mortality rates. Further, we account for country, cohort and ESS round fixed effects. Robust standard errors clustered at the cohort level are shown in parenthesis; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level.

Table 5: The Role of Population Aging for Electoral Turnout and Voting for Populist Parties under Conservatism

	Electoral turnout	Voting populist parties
	(1)	(2)
OADR	-.0055***	.0159***
	[.0014]	[.0011]
Right Voter	.0036***	.0206***
	[.0005]	[.0006]
R-squared	.10	.20
Sample	272,065	203,311
Individual Controls	Yes	Yes
Country-Level Controls	Yes	Yes
Country Fixed Effects	Yes	Yes
Essround Fixed Effects	Yes	Yes
Cohort Fixed Effects	Yes	Yes
Countries	With P	With P

Notes: The regressions of this table add the control variable "Political Orientation" to otherwise unchanged Regression i) and ii). Hence, it shows the effect of the OADR on the electoral turnout and on the voting for populist parties under conservatism. The analysis controls for individual characteristics including age, gender, race, education, income source, income difficulties, exposure to globalization, religiosity and marital status. We use as country controls log per-capita GDP in PPP, life expectancy, fertility and mortality rates. Further, we account for country, cohort and ESS round fixed effects. Robust standard errors clustered at the cohort level are shown in parenthesis; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level.

Table 6: Population Aging, Conservatism and Voting for Populist Parties with a Split Sample

	Electoral turnout	Voting populist parties
	(1)	(2)
Panel A. Right Political Orientation		
OADR	-.0042**	.0169***
	[.0014]	[.0015]
R-squared	.12	.25
Sample	217,534	147,790
	Vote in last elections	Vote populist parties
	(1)	(2)
Panel B. Left Political Orientation		
OADR	-.0087***	.0116***
	[.0020]	[.0020]
R-squared	.09	.19
Sample	86,643	68,268
Individual Controls	Yes	Yes
Country-Level Controls	Yes	Yes
Country Fixed Effects	Yes	Yes
Essround Fixed Effects	Yes	Yes
Cohort Fixed Effects	Yes	Yes
Countries	With P	With P

Notes: The upper panel of Table 6 shows the effect of the OADR on Electoral Turnout and Voting for a Populist Party for the sub-sample of individuals with a right-wing political orientation. The lower panel shows the effect of the OADR on Electoral Turnout and Voting for a Populist Party for the sub-sample of individuals with a left-wing political orientation. The analysis controls for individual characteristics including age, gender, race, education, income source, income difficulties, exposure to globalization, religiosity and marital status. We use as country controls log per-capita GDP in PPP, life expectancy, fertility and mortality rates. Further, we account for country, cohort and ESS round fixed effects. Robust standard errors clustered at the cohort level are shown in parenthesis; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level.

Table 7: Population Aging, Electoral Turnout, and Voting for Populist Parties under an Alternative Definition of the OADR

	Electoral turnout	Voting populist parties
	(1)	(2)
Fraction OADR	-.0124***	.0286***
	[.0027]	[.0019]
R-squared	.11	.18
Sample	304,177	216,058
Individual Controls	Yes	Yes
Country-Level Controls	Yes	Yes
Country Fixed Effects	Yes	Yes
Essround Fixed Effects	Yes	Yes
Cohort Fixed Effects	Yes	Yes
Countries	With P	With P

Notes: This table shows the results of Regression i) and ii) for an OADR defined as the fraction of the population over 65 in the total population. The analysis controls for individual characteristics including age, gender, race, education, income source, income difficulties, exposure to globalization, religiosity and marital status. We use as country controls log per-capita GDP in PPP, life expectancy, fertility and mortality rates. Further, we account for country, cohort and ESS round fixed effects. Robust standard errors clustered at the cohort level are shown in parenthesis; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level.

Table 8: Population Aging, Political Trust and Attitudes Towards Immigrants under an Alternative Definition of the OADR

	Trust parties	Trust politicians	Trust parliament	Trust European parliament	Trust legal system	Government satisfaction
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A.						
Fraction OADR	-.0447**	-.0507***	-.0841***	-.1055***	-.0798***	-.0684***
	[.0156]	[.0130]	[.0124]	[.0096]	[.0141]	[.0147]
R-squared	.21	.20	.21	.08	.22	.17
Sample	299,560	335,028	332,585	308,942	333,065	329,137
	Immigrants make country worse	Immigrants undermine culture	Immigrants bad for economy	Immigrants outside Europe	Few immigrants from different race	Many immigrants from same race
	(1)	(2)	(3)	(4)	(5)	(6)
Panel B.						
Fraction OADR	.1921***	.2265***	.1543***	.0765***	.0883***	-.0397***
	[.0151]	[.0150]	[.0150]	[.0056]	[.0057]	[.0046]
R-squared	.15	.17	.13	.17	.17	.13
Sample	326,270	327,195	326,731	329,504	330,264	330,634
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Essround Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Cohort Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Countries	All	All	All	All	All	All

Notes: This table shows the results of Regression iii) and iv) for an OADR defined as the fraction of the population over 65 in the total population. The analysis controls for individual characteristics including age, gender, race, education, income source, income difficulties, exposure to globalization, religiosity and marital status. We use as country controls log per-capita GDP in PPP, life expectancy, fertility and mortality rates. Further, we account for country, cohort and ESS round fixed effects. Robust standard errors clustered at the cohort level are shown in parenthesis; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level.

Table 9: Population Aging, Political Trust and Attitudes Towards Immigrants for the Restricted Sample

	Trust parties	Trust politicians	Trust parliament	Trust European parliament	Trust legal system	Government satisfaction
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A.						
OADR	-.0453***	-.0408***	-.0541***	-.0635***	-.0418***	-.0871***
	[.0089]	[.0068]	[.0077]	[.0042]	[.0095]	[.0069]
R-squared	.20	.19	.21	.08	.22	.17
Sample	285,640	318,542	316,571	294219	316,864	312,857
	Immigrants make country worse	Immigrants undermine culture	Immigrants bad for economy	Immigrants outside Europe	Few immigrants from different race	Many immigrants from same race
	(1)	(2)	(3)	(4)	(5)	(6)
Panel B.						
OADR	.1157***	.1258***	.0889***	.0442***	.0509***	-.0207***
	[.0068]	[.0066]	[.0062]	[.0024]	[.0025]	[.0021]
R-squared	.15	.17	.13	.17	.17	.12
Sample	310,421	311,619	311,120	313,323	314,051	314,381
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Essround Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Cohort Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Countries	With P	With P	With P	With P	With P	With P

Notes: This table shows the results of Regressions iii) and iv) for the restricted sample excluding the "non-populist" countries Luxembourg and Portugal.
The analysis controls for individual characteristics including age, gender, race, education, income source, income difficulties, exposure to globalization, religiosity and marital status. We use as country controls log per-capita GDP in PPP, life expectancy, fertility and mortality rates. Further, we account for country, cohort and ESS round fixed effects. Robust standard errors clustered at the cohort level are shown in parenthesis; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level.

Table 10: Population Aging, Electoral Turnout, and Voting for Populist Parties: Old versus Young Individuals

	Electoral turnout	Voting populist parties
	(1)	(2)
Panel A. Old Individuals		
OADR	-.0026*	.0116***
	[.0012]	[.0011]
R-squared	.08	.17
Sample	73,526	55,540
	Vote in last elections	Vote populist parties
	(1)	(2)
Panel B. Young Individuals		
OADR	-.0063**	.0167***
	[.0017]	[.0010]
R-squared	.12	.19
Sample	230,651	160,518
Individual Controls	Yes	Yes
Country-Level Controls	Yes	Yes
Country Fixed Effects	Yes	Yes
Essround Fixed Effects	Yes	Yes
Cohort Fixed Effects	Yes	Yes
Countries	With P	With P

Notes: The upper panel of Table 16 shows the effect of the OADR on Electoral Turnout and Voting for a Populist Party for the subsample of individuals older than 64. The lower panel shows the effect of the OADR on Electoral Turnout and Voting for a Populist Party for the subsample of individuals aged 18 to 64. The analysis controls for individual characteristics including age, gender, race, education, income source, income difficulties, exposure to globalization, religiosity and marital status. We use as country controls log per-capita GDP in PPP, life expectancy, fertility and mortality rates. Further, we account for country, cohort and ESS round fixed effects. Robust standard errors clustered at the cohort level are shown in parenthesis; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level.

Table 11: Population Aging and Political Trust: Old versus Young Individuals

	Trust parties	Trust politicians	Trust parliament	Trust European parliament	Trust legal system	Government satisfaction
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A. Old Individuals						
OADR	-.0318**	-.0366**	-.0403***	-.0714***	-.0262**	-.0605***
	[.0096]	[.0104]	[.0076]	[.0074]	[.0083]	[.0092]
R-squared	.18	.18	.17	.08	.20	.16
Sample	71,164	78,412	77,790	68,795	77,124	76,877
	Trust parties	Trust politicians	Trust parliament	Trust European parliament	Trust legal system	Government satisfaction
	(1)	(2)	(3)	(4)	(5)	(6)
Panel B. Young Individuals						
OADR	-.0404**	-.0395***	-.0606***	-.0659***	-.0494***	-.0738***
	[.0109]	[.0085]	[.0087]	[.0055]	[.0105]	[.0091]
R-squared	.22	.21	.22	.08	.23	.18
Sample	228,396	256,616	254,795	240,147	255,941	252,260
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Essround Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Cohort Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Countries	All	All	All	All	All	All

Notes: The upper panel of Table 17 shows the effect of the OADR on Political Trust for the subsample of individuals older than 64. The lower panel shows the effect of the OADR on Political Trust for the subsample of individuals aged 18 to 64. For all of these variables, the effect of population aging is negative and significant at the 1% level in both age groups, however, the effect is quantitatively higher for older age groups.
The analysis controls for individual characteristics including age, gender, race, education, income source, income difficulties, exposure to globalization, religiosity and marital status. We use as country controls the growth rate of per-capita GDP in PPP, life expectancy, fertility, and mortality rates. Further, we account for country, cohort and ESS round fixed effects. Robust standard errors clustered at the cohort level are shown in parenthesis; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level.

Table 12: Population Aging and Attitudes Towards Immigrants: Old versus Young Individuals

	Immigrants make country worse	Immigrants undermine culture	Immigrants bad for economy	Immigrants outside Europe	Few immigrants from different race	Many immigrants from same race
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A. Old Individuals						
OADR	.0887***	.1137***	.0531***	.0350***	.0453***	-.0128***
	[.0092]	[.0131]	[.0064]	[.0015]	[.0020]	[.0014]
R-squared	.14	.15	.14	.14	.15	.13
Sample	74,991	74,554	74,782	76,444	76,751	76,925
	Immigrants make country worse	Immigrants undermine culture	Immigrants bad for economy	Immigrants outside Europe	Few immigrants from different race	Many immigrants from same race
	(1)	(2)	(3)	(4)	(5)	(6)
Panel B. Young Individuals						
OADR	.1141***	.1180***	.0901***	.0422***	.0495***	-.0199***
	[.0063]	[.0074]	[.0040]	[.0030]	[.0033]	[.0025]
R-squared	.14	.17	.13	.16	.16	.12
Sample	251,279	252,641	251,949	253,060	253,513	253,709
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Essround Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Cohort Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Countries	All	All	All	All	All	All

Notes: The upper panel of Table 18 shows the effect of the OADR on Attitudes Towards Immigrants for the subsample of individuals older than 64. The lower panel shows the effect of the OADR on Attitudes Towards Immigrants for the subsample of individuals aged 18 to 64. For all of these variables, the effect of population aging is positive except for the last column where it is negative and significant at the 1% level for both age groups.
The analysis controls for individual characteristics including age, gender, race, education, income source, income difficulties, exposure to globalization, religiosity and marital status. We use as country controls the growth rate of per-capita GDP in PPP, life expectancy, fertility, and mortality rates. Further, we account for country, cohort and ESS round fixed effects. Robust standard errors clustered at the cohort level are shown in parenthesis; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level.

Table 13: Native Sample: Population Aging, Electoral Turnout, and Voting for Populist Parties

	Electoral turnout	Voting populist parties
	(1)	(2)
OADR	-.0053***	.0144***
	[.0014]	[.0014]
R-squared	.12	.19
Sample	264,978	191,423
Individual Controls	Yes	Yes
Country-Level Controls	Yes	Yes
Country Fixed Effects	Yes	Yes
Essround Fixed Effects	Yes	Yes
Cohort Fixed Effects	Yes	Yes
Countries	With P	With P

Notes: This table shows the results of Regression i) and ii) for the restricted sample to individuals born in the country and one of their parent is also born in the same country. The analysis controls for individual characteristics including age, gender, race, education, income source, income difficulties, exposure to globalization, religiosity and marital status. We use as country controls log per-capita GDP in PPP, life expectancy, fertility and mortality rates. Further, we account for country, cohort and ESS round fixed effects. Robust standard errors clustered at thecountry level are shown in parenthesis; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level.

Table 14: Native Sample: Population Aging, Political Trust and Attitudes Towards Immigrants

	Trust parties	Trust politicians	Trust parliament	Trust European parliament	Trust legal system	Government satisfaction
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A.						
OADR	-.0315***	-.0302***	-.0503***	-.0640***	-.0395***	-.0658***
	[.0078]	[.0076]	[.0073]	[.0046]	[.0096]	[.0083]
R-squared	.22	.21	.21	.09	.23	.17
Sample	254,187	284,463	282,704	261,574	282,505	279,504
	Immigrants make country worse	Immigrants undermine culture	Immigrants bad for economy	Immigrants outside Europe	Few immigrants from different race	Many immigrants from same race
	(1)	(2)	(3)	(4)	(5)	(6)
Panel B.						
OADR	.1094***	.1185***	.0789***	.0424***	.0500***	-.0205***
	[.0066]	[.0054]	[.0057]	[.0025]	[.0024]	[.0018]
R-squared	.15	.18	.13	.17	.18	.13
Sample	276,166	276,531	276,372	279,020	279,753	280,051
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Essround Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Cohort Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Countries	All	All	All	All	All	All

Notes: This table shows the results of Regression iii) and iv) for the restricted sample to individuals born in the country and one of their parent is also born in the same country. For all of these variables, the effect of population aging is negative and significant at the 1% level. For the immigrant attitudes the effect of population aging is positive except for the last column where it is negative and significant at the 1% level.
The analysis controls for individual characteristics including age, gender, race, education, income source, income difficulties, exposure to globalization, religiosity and marital status. We use as country controls log per-capita GDP in PPP, life expectancy, fertility and mortality rates. Further, we account for country, cohort and ESS round fixed effects. Robust standard errors clustered at the cohort level are shown in parenthesis; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level.

Table 15: Population Aging, Electoral Turnout, and Voting for Populist Parties in EU Countries

	Electoral turnout	Voting populist parties
	(1)	(2)
OADR	-.0020*	.0088***
	[.0010]	[.0010]
R-squared	.11	.19
Sample	259,050	183,954
Individual Controls	Yes	Yes
Country-Level Controls	Yes	Yes
Country Fixed Effects	Yes	Yes
Essround Fixed Effects	Yes	Yes
Cohort Fixed Effects	Yes	Yes
Countries	With P	With P

Notes: This table shows the results of Regression i) and ii) for the restricted sample to countries that are members of the EU. The analysis controls for individual characteristics including age, gender, race, education, income source, income difficulties, exposure to globalization, religiosity and marital status. We use as country controls log per-capita GDP in PPP, life expectancy, fertility and mortality rates. Further, we account for country, cohort and ESS round fixed effects. Robust standard errors clustered at the cohort level are shown in parenthesis; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level.

Table 16: Population Aging, Political Trust and Attitudes Towards Immigrants in EU Countries

	Trust parties	Trust politicians	Trust parliament	Trust European parliament	Trust legal system	Government satisfaction
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A.						
OADR	.0013	.0017	-.0026	-.0438***	-.0044	-.0115
	[.0093]	[.0072]	[.0077]	[.0050]	[.0109]	[.0085]
R-squared	.20	.19	.20	.07	.21	.16
Sample	257,056	286,448	284,314	265,506	284,544	280,880
	Immigrants make country worse	Immigrants undermine culture	Immigrants bad for economy	Immigrants outside Europe	Few immigrants from different race	Many immigrants from same race
	(1)	(2)	(3)	(4)	(5)	(6)
Panel B.						
OADR	.0942***	.1171***	.0678***	.0412***	.0479***	-.0222***
	[.0067]	[.0105]	[.0083]	[.0029]	[.0033]	[.0024]
R-squared	.15	.17	.12	.17	.17	.12
Sample	277,819	278,638	278,306	281,111	281,836	282,256
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Essround Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Cohort Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Countries	All	All	All	All	All	All

Notes: This table shows the results of Regression iii) and iv) for the restricted sample to countries that are members of the EU. For Trust in the European Parliament, the effect of population aging is negative and significant at the 1% level. For the immigrant attitudes variables the effect of population aging is positive except for the last column where it is negative and significant at the 1% level.
The analysis controls for individual characteristics including age, gender, race, education, income source, income difficulties, exposure to globalization, religiosity and marital status. We use as country controls log per-capita GDP in PPP, life expectancy, fertility and mortality rates. Further, we account for country, cohort and ESS round fixed effects. Robust standard errors clustered at the cohort level are shown in parenthesis; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level.

Table 17: Regional-Level Analysis: Population Aging, Electoral Turnout, and Voting for Populist Parties

	Electoral turnout	Voting populist parties
	(1)	(2)
OADR	-.0022***	.0047***
	[.0005]	[.0005]
R-squared	.11	.23
Sample	148,672	103,802
Individual Controls	Yes	Yes
Regional-Level Controls	Yes	Yes
Country Fixed Effects	Yes	Yes
Essround Fixed Effects	Yes	Yes
Cohort Fixed Effects	Yes	Yes
Countries	With P	With P

Notes: This table shows the results of Regression i) and ii) at the regional (NUTS 1) level . In other words, it establishes the effect of the OADR on electoral turnout and on voting for populist parties at the regional level. The analysis controls for individual characteristics including age, gender, race, education, income source, income difficulties, exposure to globalization, religiosity and marital status. We use as country controls the log per-capita GDP in PPP, life expectancy, fertility and mortality rates. Further, we account for country, cohort and ESS round fixed effects. Robust standard errors clustered at the cohort level are shown in parenthesis; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level.

Table 18: Regional-Level Analysis: Population Aging, Political Trust and Attitudes Towards Immigrants

	Trust parties	Trust politicians	Trust parliament	Trust European parliament	Trust legal system	Government satisfaction
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A.						
OADR	.0142***	.0160***	-.0089*	-.0104**	-.0011	.0128***
	[.0027]	[.0032]	[.0040]	[.0041]	[.0049]	[.0034]
R-squared	.23	.22	.24	.08	.26	.17
Sample	162,755	163,412	162,488	153,664	162,483	161,533
	Immigrants make country worse	Immigrants undermine culture	Immigrants bad for economy	Immigrants outside Europe	Few immigrants from different race	Many immigrants from same race
	(1)	(2)	(3)	(4)	(5)	(6)
Panel B.						
OADR	.0217***	.0333***	.0067*	.0100***	.0117***	-.0050***
	[.0019]	[.0020]	[.0035]	[.0011]	[.0010]	[.0011]
R-squared	.15	.17	.14	.18	.19	.14
Sample	159,040	159,854	159,576	160,489	160,886	161,140
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Essround Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Cohort Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Countries	All	All	All	All	All	All

Notes: This table shows the results of Regression iii) and iv) at the regional (NUTS 1) level.
The analysis controls for individual characteristics including age, gender, race, education, income source, income difficulties, exposure to globalization, religiosity and marital status. We use as country controls the log per-capita GDP in PPP, life expectancy, fertility and mortality rates. Further, we account for country, cohort and ESS round fixed effects. Robust standard errors clustered at the cohort level are shown in parenthesis; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level.

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A Online Appendix

Description of Variables

Voting Behavior 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. The source of the data is the European Social Survey.

Electoral turnout. Individuals of all countries correspond to the question "Which party did you vote for in that election?". The source of the data is the European Social Survey.

Vote for a populist party. It is a dummy variable indicating whether the individuals interviewed in ESS from each European country have voted for a populist party or not. 0 means not voting for populist parties and 1 means voted for it. The source of the data is the European Social Survey.

Vote for right-wing populist parties. It is a dummy variable indicating whether the individuals interviewed in ESS from each European country have voted for a right-wing populist party or not. 1 means voted for right-wing populist parties and 0 otherwise. The source of the data is the European Social Survey.

Vote for left-wing populist parties. It is a dummy variable indicating whether the individuals interviewed in ESS from each European country have voted for a left-wing populist party or not. 1 means voted for left-wing populist parties and 0 otherwise. The source of the data is the European Social Survey.

Political Trust Variables

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?". The source of the data is the European Social Survey.

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?". The source of the data is the European Social Survey.

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?". The source of the data is the European Social Survey.

Trust in European parliament. "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?". The source of the data is the European Social Survey.

Trust in the legal system. It corresponds to the question "How much confidence you have in the legal system?" 1 means no trust and 4 means full trust.

Government satisfaction "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".

Trust in the police. It corresponds to the question "How much confidence you have in the police?" 1 means no trust and 4 means full trust.

Trust on people. Individuals correspond to the question " Would you say that most people can be trusted, or that you can be too careful in dealing with people?". 0 means you can be too careful and 10 means that most people can be trusted.

Immigrant Attitudes Variables

Immigrants make host 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 better place to live, and 10 worse place to live. The source of the data is the European Social Survey.

Immigrants undermine cultural life. Individuals correspond to the question "[Country]'s cultural life is generally undermined or enriched by people coming to live here from other countries?". 0 means that cultural life is enriched by immigrants, and 10 cultural life is undermined. The source of the data is the European Social Survey.

Immigrants are bad for the host economy. Individuals correspond to the question "It is generally bad or good for [country]'s economy that people come to live here from other countries?". 0 means that immigrants are bad for the economy, and 10 that immigrants are good for the economy. The source of the data is the European Social Survey.

Few immigrants from outside Europe. 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.

Many 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 none to come and live, and 4 means allow many.

Explanatory Variables

Old-age dependency ratio (OADR). Age dependency ratio, old, is the ratio of older dependents i.e., people older than 64 to the working-age population those ages 15-64. Data are shown as the proportion of dependents per 100 working-age population. The source of the data is the World Development Indicators.

Fraction of old above 65. The old above 65 ratio is measured as the number of people above the age of 65 as a fraction of the total population. The source of the data is the World Development Indicators.

Individual Control Variables

Age. The age of the respondent. The source of the data is the European Social Survey.

Gender. The gender of the respondent. It is a dummy variable taking the value 0 for women and 1 for men. The source of the data is the European Social Survey.

Education level. Individuals correspond to the question "What is the highest level of education you have achieved?". 0 means less than lower secondary education and 5 means that tertiary education is completed. The source of the data is the European Social Survey.

Income sources. It is associated with the question "What is the main source of income in your household?". 1 mean that household income is derived from wages and salaries and 8 indicates other sources. The source of the data is the European Social Survey.

Race. Individuals correspond to the question "Do you belong to a minority ethnic group in [country]?". It is a dummy variable taking the value 1 whether individuals is belong to a minority group and 2 otherwise. The source of the data is the European Social Survey.

Religiosity. It corresponds to the question "Using this card, generally speaking, would you say how religious are you? Please tell me on a score of 0 to 10, where 0 means very much religious and 10 means no religious." The source of the data is the European Social Survey.

Income scale. 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". The source of the data is the European Social Survey.

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 ski blue collar worker in manufacturing and 0 if not. The source of the data is the European Social Survey.

Marital status. Individuals correspond to the question "Could I ask about your current legal marital status? Which of the descriptions on this card applies to you?". 1 means never married, and 6 means married. The source of the data is the European Social Survey.

Political orientation. Individuals correspond to the question "In politics, people sometimes talk of "left" and "right". Where would you place yourself on this scale, where 0 means the left and 10 means the right?". The source of the data is the European Social Survey.

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. The source of the data is the European Social Survey.

Newspapers reading total time. Individuals correspond to the question "On an average weekday, how much time, in total, do you spend reading newspapers?". 0 means no time at all, and 7 more than three hours. The source of the data is the European Social Survey.

Internet navigation total time. Individuals correspond to the question "How much time do you spend using the internet on a computer, tablet, smartphone or other device, whether for work or personal use?". 0 means no time at all, and 7 means more than three hours. The source of the data is the European Social Survey.

Country Control Variables

GDP per capita in PPP. GDP per capita based on purchasing power parity (PPP). PPP GDP is gross domestic product converted to international dollars using purchasing power parity rates. An international dollar has the same purchasing power over GDP as the U.S. dollar has in the United States. GDP at purchaser's prices is the sum of gross value added by all resident producers in the country plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. Data are in constant 2017 international dollars. The source of the data is the World Development Indicators.

Mortality rate. Infant mortality rate is the number of infants dying before reaching one year of age, per 1,000 live births in a given year. The source of the data is the World Development Indicators.

Life expectancy. Life expectancy at birth indicates the number of years a newborn infant would live if prevailing patterns of mortality at the time of its birth were to stay the same throughout its life. The source of the data is the World Development Indicators.

Fertility rate. Total fertility rate represents the number of children that would be born to a woman if she were to live to the end of her childbearing years and bear children in accordance with age-specific fertility rates of the specified year. The source of the data is the World Development Indicators.

Regional (NUTS 1) Control Variables

Old-age dependency ratio. Regional age dependency ratio, old, is the ratio of older dependents i.e., people older than 64 to the working-age population those ages 15-64. The source of the data is the Eurostat.

GDP per capita in PPP. 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. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources The source of the data is the Eurostat.

Mortality rate. Infant mortality rate is the number of infants dying before reaching one year of age, per 1,000 live births in a given year. The source of the data is the Eurostat.

Life expectancy. Life expectancy shows the number of years a newborn infant would live if prevailing mortality patterns are the same throughout his life. The source of the data is the Eurostat.

Fertility rate. The fertility rate is the total number of children that would be born by a woman if she is in the age that can give birth. The source of the data is the Eurostat.

IV Variables

Birth rate. The crude birth rate indicates the number of live births occurring during the year, per 1,000 population estimated at midyear. Subtracting the crude death rate from the crude birth rate provides the rate of natural increase, which is equal to the rate of population change in

the absence of migration. The source of the data is the World Development Indicators.

Past birth rate. The crude birth rate indicates the number of live births per 1,000 midyear population 30 years before from 1972 to 1989. It is computed by the authors.

Additional Tables

Table A.1: Population Aging, Electoral Turnout, and Voting for Populist Parties

	Electoral turnout elections	Voting populist parties
	(1)	(2)
OADR	-.0054***	.0149***
	[.0014]	[.0012]
Male	.0062	.0240***
	[.0041]	[.0020]
Age of Respondent	.0047*	.0015***
	[.0021]	[.0004]
Marital Status	-.0120***	.0013**
	[.0017]	[.0004]
Respondent's Education Level	.0389***	-.0168***
	[.0048]	[.0029]
Income Source	-.0075***	.0017
	[.0022]	[.0020]
Religious Person	.0066***	-.0019***
	[.0006]	[.0003]
Exposure to Globalization	-.0360**	.0335**
	[.0122]	[.0111]
Income Level	-.0401***	.0159***
	[.0016]	[.0017]
Race	.0878***	.0683***
	[.0121]	[.0044]
Log GDP per capita in PPP	.1075***	-.0165
	[.0203]	[.0353]
Life Expectancy	.0109***	-.0454***
	[.0031]	[.0037]
Fertility Rate	-.0409**	.1307***
	[.0169]	[.0160]
Mortality Rate	-.0000	-.0810***
	[.0037]	[.0079]
R-squared	.11	.18
Sample	304,177	216,058
Individual Controls	Yes	Yes
Country-Level Controls	Yes	Yes
Country Fixed Effects	Yes	Yes
Essround Fixed Effects	Yes	Yes
Cohort Fixed Effects	Yes	Yes
Countries	With P	With P

Notes: This table shows the results of Regression i) and ii), i. e., it establishes the effect of the old-age dependency ratio (OADR) on the electoral turnout and on the voting for populist parties. The analysis controls for individual characteristics including age, gender, race, education, income source, income difficulties, exposure to globalization, religiosity and marital status. We use as country controls log per-capita GDP in PPP, life expectancy, fertility and mortality rates. Further, we account for country, cohort and ESS round fixed effects. Robust standard errors clustered at the cohort level are shown in parenthesis; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level.

Table A.2: Population Aging and Political Trust

	Trust parties	Trust politicians	Trust parliament	Trust European parliament	Trust legal system	Government satisfaction
	(1)	(2)	(3)	(4)	(5)	(6)
OADR	-.0337***	-.0290***	-.0435***	-.0686***	-.0124*	-.0749***
	[.0058]	[.0049]	[.0048]	[.0039]	[.0059]	[.0069]
Male	.0432***	.0227	.1651***	-.0983***	.0796***	.1124***
	[.0119]	[.0157]	[.0201]	[.0108]	[.0189]	[.0169]
Age of Respondent]	-.0073	-.0045	-.0071	-.0167	-.0106	-.0008
	[.0097]	[.0084]	[.0107]	[.0124]	[.0084]	[.0079]
Marital Status	.0012	-.0037	-.0056	.0028	-.0030	-.0180***
	[.0062]	[.0064]	[.0074]	[.0059]	[.0098]	[.0055]
Respondent's Education Level	.0937***	.1148***	.1925***	.1588***	.1560***	.0339***
	[.0140]	[.0127]	[.0204]	[.0148]	[.0162]	[.0098]
Income Source	.0037	.0055	-.0045	.0004	-.0226	-.0049
	[.0087]	[.0094]	[.0133]	[.0099]	[.0169]	[.0101]
Religious Person	.0861***	.0903***	.0908***	.0743***	.0718***	.0964***
	[.0027]	[.0034]	[.0025]	[.0035]	[.0032]	[.0024]
Exposure to Globalization	-.0101	-.0261	-.0460	-.1689**	-.0188	.0037
	[.0417]	[.0394]	[.0386]	[.0609]	[.0643]	[.0564]
Income Level	-.3305***	-.3547***	-.3819***	-.3335***	-.3663***	-.4534***
	[.0134]	[.0142]	[.0136]	[.0124]	[.0141]	[.0137]
Race	-.1019**	-.0780*	-.1019**	-.1987***	-.1135***	-.0030
	[.0390]	[.0394]	[.0411]	[.0420]	[.0346]	[.0433]
Log GDP per Capita in PPP	2.2397***	2.0196***	2.5867***	2.1237***	1.2211***	3.9904***
	[.1120]	[.1246]	[.1371]	[.1833]	[.1160]	[.1491]
Life Expectancy	-.0372**	-.0143	.0162	.0127	.0583**	-.0403*
	[.0154]	[.0115]	[.0135]	[.0207]	[.0190]	[.0199]
Fertility Rate	.3455***	.2232***	.1473**	-.6885***	.0654	.5855***
	[.0472]	[.0337]	[.0497]	[.0495]	[.0804]	[.0490]
Mortality Rate	.0735***	.1278***	.1990***	.3236***	.1300***	.3182***
	[.0180]	[.0153]	[.0212]	[.0145]	[.0127]	[.0185]
R-squared	.20	.19	.20	.08	.22	.17
Sample	331,329	369,018	366,845	334,396	366,894	363,179
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Essround Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Cohort Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Countries	All	All	All	All	All	All

Notes: This table shows the results of Regression iii) and iv), i. e., it establishes the effect of the old-age dependency ratio (OADR) on the political trust. The analysis controls for individual characteristics including age, gender, race, education, income source, income difficulties, exposure to globalization, religiosity and marital status. We use as country controls log per-capita GDP in PPP, life expectancy, fertility and mortality rates. Further, we account for country, cohort and ESS round fixed effects. Robust standard errors clustered at the cohort level are shown in parenthesis; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level.

Table A.3: Population Aging and Attitudes Towards Immigrants

	Immigrants make country worse	Immigrants undermine culture	Immigrants bad for economy	Immigrants outside Europe	Few immigrants from different race	Many immigrants from same race
	(1)	(2)	(3)	(4)	(5)	(6)
OADR	.1031***	.1127***	.0866***	.0332***	.0446***	-.0145***
	[.0040]	[.0048]	[.0050]	[.0023]	[.0021]	[.0017]
Male	-.0173	.0902***	-.2211***	.0281***	.0148*	-.0006
	[.0198]	[.0192]	[.0218]	[.0079]	[.0071]	[.0064]
Age of Respondent	.0139**	.0124*	.0101	.0078**	.0073**	-.0054
	[.0062]	[.0059]	[.0067]	[.0026]	[.0025]	[.0030]
Marital Status	-.0085***	-.0190***	-.0101***	-.0074***	-.0071***	.0028*
	[.0017]	[.0013]	[.0019]	[.0007]	[.0009]	[.0015]
Respondent's Education Level	-.2772***	-.3520***	-.3433***	-.0986***	-.1154***	.1105***
	[.0179]	[.0234]	[.0228]	[.0087]	[.0082]	[.0058]
Income Source	-.0071	-.0107	-.0169	-.0056	-.0031	.0050
	[.0166]	[.0177]	[.0169]	[.0063]	[.0068]	[.0064]
Religious Person	-.0279***	-.0083***	-.0240***	-.0040***	.0015	.0030**
	[.0025]	[.0021]	[.0032]	[.0010]	[.0011]	[.0012]
Exposure to Globalization	.1042*	.1835***	.1539***	.0123	.0512**	-.0342
	[.0514]	[.0469]	[.0446]	[.0185]	[.0173]	[.0194]
Income Level	.2802***	.2461***	.3297***	.0787***	.0865***	-.0859***
	[.0148]	[.0156]	[.0143]	[.0072]	[.0068]	[.0075]
Race	.4811***	.4990***	.4442***	.1231***	.1660***	-.0098
	[.0446]	[.0358]	[.0404]	[.0057]	[.0071]	[.0082]
Log GDP per Capita in PPP	-.9207***	-.2475*	-1.8612***	.1052*	.1919**	-.0510
	[.0931]	[.1146]	[.1028]	[.0555]	[.0727]	[.0547]
Life Expectancy	-.1772***	-.2025***	-.0237	-.0616***	-.0546***	.0355***
	[.0251]	[.0292]	[.0231]	[.0067]	[.0061]	[.0075]
Fertility Rate	1.4049***	1.5077***	.9192***	.6038***	.6266***	-.3307***
	[.0940]	[.0542]	[.0436]	[.0198]	[.0186]	[.0370]
Mortality Rate	-.2340***	-.1774***	-.2233***	-.0932***	-.0951***	.1100***
	[.0181]	[.0276]	[.0119]	[.0073]	[.0087]	[.0082]
R-squared	.14	.17	.13	.16	.16	.12
Sample	358,311	359,669	358,787	361,791	363,345	364,156
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Essround Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Cohort Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Countries	All	All	All	All	All	All

Notes: This table shows the results of Regression iii) and iv), i. e., it establishes the effect of the old-age dependency ratio (OADR) on attitudes towards immigrants. The analysis controls for individual characteristics including age, gender, race, education, income source, income difficulties, exposure to globalization, religiosity and marital status. We use as country controls log per-capita GDP in PPP, life expectancy, fertility and mortality rates. Further, we account for country, cohort and ESS round fixed effects. Robust standard errors clustered at the cohort level are shown in parenthesis; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level.

Table A.4: Population Aging, Electoral Turnout, and Voting for Populist Parties by Age Group

	Electoral turnout	Voting populist parties
	(1)	(2)
Panel A. 18-29 years		
OADR	-.0129*	.0164
	[.0020]	[.0049]
R-squared	.14	.19
Panel B. 30-39 years		
OADR	-.0023	.0198**
	[.0014]	[.0008]
R-squared	.11	.21
Panel C. 40-49 years		
OADR	-.0047	.0136*
	[.0015]	[.0019]
R-squared	.09	.20
Panel D. 50-59 years		
OADR	-.0070	.0184**
	[.0014]	[.0006]
R-squared	.09	.19
Panel E. 60+ years		
OADR	-.0029**	.0124***
	[.0011]	[.0014]
R-squared	.08	.18
Sample	99,962	75,805
Individual Controls	Yes	Yes
Country-Level Controls	Yes	Yes
Country Fixed Effects	Yes	Yes
Essround Fixed Effects	Yes	Yes
Cohort Fixed Effects	Yes	Yes
Countries	With P	With P

Notes: This table shows the results of Regression i) and ii), i. e., it establishes the effect of the old-age dependency ratio (OADR) on the electoral turnout and on the voting for populist parties by age group. The analysis controls for individual characteristics including age, gender, race, education, income source, religiosity, income difficulties, exposure to globalization and marital status. We use as country controls log per-capita GDP in PPP, life expectancy, fertility and mortality rates. Further, we account for country, cohort and ESS round fixed effects. Robust standard errors clustered at the cohort level are shown in parenthesis; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level.

Table A.5: Population Aging and Political Trust by Age Group

	Trust parties	Trust politicians	Trust parliament	Trust European parliament	Trust legal system	Government satisfaction
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A. 18-29 years						
OADR	-.0507*	-.0436*	-.0604**	-.0719*	-.0299	-.1006***
	[.0050]	[.0056]	[.0018]	[.0071]	[.0166]	[.0006]
R-squared	.22	.20	.21	.09	.20	.18
Panel B. 30-39 years						
OADR	-.0361	-.0208	-.0487*	-.0552**	-.0110	-.0700*
	[.0234]	[.0148]	[.0051]	[.0010]	[.0047]	[.0085]
R-squared	.22	.21	.23	.08	.23	.19
Panel C. 40-49 years						
OADR	-.0158	-.0161	-.0435**	-.0699	-.0125	-.0453**
	[.0033]	[.0038]	[.0016]	[.0138]	[.0087]	[.0025]
R-squared	.22	.21	.23	.08	.25	.18
Panel D. 50-59 years						
OADR	-.0413*	-.0351	-.0457	-.0808*	-.0170	-.0933*
	[.0039]	[.0099]	[.0133]	[.0102]	[.0052]	[.0107]
R-squared	.20	.19	.21	.08	.25	.17
Panel E. 60+ years						
OADR	-.0231***	-.0205**	-.0231**	-.0603***	.0086	-.0689***
	[.0041]	[.0064]	[.0059]	[.0050]	[.0083]	[.0082]
R-squared	.18	.17	.18	.08	.22	.16
Sample	105,973	116,352	115,764	101497	114,657	114,481
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Essround Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Cohort Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Countries	All	All	All	All	All	All

Notes: This table shows the results of Regression iii) and iv), i. e., it establishes the effect of the old-age dependency ratio (OADR) on the political trust by age group. The analysis controls for individual characteristics including age, gender, race, education, income source, income difficulties, religiosity, exposure to globalization and marital status. We use as country controls log per-capita GDP in PPP, life expectancy, fertility and mortality rates. Further, we account for country, cohort and ESS round fixed effects. Robust standard errors clustered at the cohort level are shown in parenthesis; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level.

Table A.6: Population Aging and Attitudes Towards Immigrants by Age Group

	Immigrants make country worse	Immigrants undermine culture	Immigrants bad for economy	Immigrants outside Europe	Few immigrants from different race	Many immigrants from same race
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A. 18-29 years						
OADR	.1202***	.1274***	.0927**	.0439*	.0551**	-.0229**
	[.0002]	[.0013]	[.0060]	[.0038]	[.0043]	[.0007]
R-squared	.12	.15	.09	.15	.15	.10
Panel B. 30-39 years						
OADR	.1194*	.1331	.1036*	.0336***	.0470***	-.0147**
	[.0148]	[.0246]	[.0105]	[.0002]	[.0002]	[.0007]
R-squared	.15	.18	.13	.16	.17	.11
Panel C. 40-49 years						
OADR	.0966*	.0915*	.0949*	.0310	.0394	-.0132
	[.0146]	[.0087]	[.0101]	[.0073]	[.0070]	[.0051]
R-squared	.15	.18	.14	.16	.16	.12
Panel D. 50-59 years						
OADR	.0973***	.1049**	.0888**	.0307	.0428**	-.0132
	[.0011]	[.0059]	[.0066]	[.0052]	[.0032]	[.0045]
R-squared	.15	.18	.14	.15	.15	.13
Panel E. 60+ years						
OADR	.0941***	.1137***	.0687***	.0289***	.0413***	-.0102***
	[.0064]	[.0084]	[.0065]	[.0015]	[.0017]	[.0023]
R-squared	.14	.16	.13	.14	.15	.15
Sample	111,337	111,124	111,236	113,301	113,946	114,394
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Essround Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Cohort Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Countries	All	All	All	All	All	All

Notes: This table shows the results of Regression iii) and iv), i. e., it establishes the effect of the old-age dependency ratio (OADR) on the attitudes towards immigrants by age group.
The analysis controls for individual characteristics including age, gender, race, education, income source, income difficulties, religiosity, exposure to globalization and marital status. We use as country controls log per-capita GDP in PPP, life expectancy, fertility and mortality rates. Further, we account for country, cohort and ESS round fixed effects. Robust standard errors clustered at the cohort level are shown in parenthesis; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level.

Table A.7: The Interplay between Population Aging, Electoral Turnout, Voting for Populist Parties and Interpersonal Trust

	Electoral turnout	Voting populist parties
	(1)	(2)
Panel A.		
OADR	-.0084***	.0189***
	[.0013]	[.0015]
Most people can be trusted	-.0030	.0091***
	[.0025]	[.0017]
x OADR	.0005***	-.0007***
	[.0001]	[.0001]
R-squared	.12	.19
Panel B.		
OADR	-.0066***	.0174***
	[.0011]	[.0013]
Trust police	.0080***	.0023
	[.0016]	[.0019]
x OADR	.0002***	-.0004***
	[.0001]	[.0001]
R-squared	.12	.19
Sample	301,693	214,702
Individual Controls	Yes	Yes
Country-Level Controls	Yes	Yes
Country Fixed Effects	Yes	Yes
Essround Fixed Effects	Yes	Yes
Cohort Fixed Effects	Yes	Yes
Countries	With P	With P

Notes: This table shows the results of Regression i) and ii), i. e., it establishes the effect of the interplay between old-age dependency ratio (OADR) and trust other people and the police on the electoral turnout and on the voting for populist parties. The analysis controls for individual characteristics including age, gender, race, education, income source, religiosity, income difficulties, exposure to globalization and marital status. We use as country controls log per-capita GDP in PPP, life expectancy, fertility and mortality rates. Further, we account for country, cohort and ESS round fixed effects. Robust standard errors clustered at the cohort level are shown in parenthesis; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level.

Table A.8: The Interplay between Population Aging, Political Trust, Attitudes Towards Immigrants and Interpersonal Trust

	Trust parties	Trust politicians	Trust parliament	Trust European parliament	Trust legal system	Government satisfaction
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A.						
OADR	-.0647***	-.0662***	-.0867***	-.1138***	-.0537***	-.0875***
	[.0051]	[.0051]	[.0054]	[.0037]	[.0056]	[.0061]
x Trust People	.0065***	.0074***	.0086***	.0089***	.0082***	.0027***
	[.0004]	[.0004]	[.0005]	[.0004]	[.0005]	[.0004]
Trust People	.0536***	.0448***	.0300**	-.0129	.0344**	.1101***
	[.0081]	[.0098]	[.0113]	[.0103]	[.0131]	[.0104]
R-squared	.24	.24	.25	.12	.26	.19
Panel B.						
OADR	-.0423***	-.0366***	-.0511***	-.1177***	-.0452***	-.0886***
	[.0060]	[.0051]	[.0041]	[.0048]	[.0048]	[.0060]
x Trust Police	-.0012*	-.0008	-.0012*	.0065***	.0020***	.0006*
	[.0006]	[.0007]	[.0006]	[.0005]	[.0006]	[.0003]
Trust Police	.3825***	.4106***	.4637***	.2306***	.5735***	.2794***
	[.0165]	[.0175]	[.0154]	[.0133]	[.0125]	[.0080]
R-squared	.31	.33	.35	.21	.50	.24
Sample	329,544	367,006	364,659	333,160	365,442	360,280
	Immigrants make country worse	Immigrants undermine culture	Immigrants bad for economy	Immigrants outside Europe	Few immigrants from different race	Many immigrants from same race
	(1)	(2)	(3)	(4)	(5)	(6)
Panel C.						
OADR	.1328***	.1438***	.1157***	.0425***	.0558***	-.0212***
	[.0046]	[.0049]	[.0061]	[.0026]	[.0025]	[.0019]
x Trust People	-.0058***	-.0061***	-.0058***	-.0018***	-.0021***	.0013***
	[.0005]	[.0003]	[.0003]	[.0002]	[.0002]	[.0002]
Trust People	-.0414***	-.0357***	-.0486***	-.0049	.0024	.0128***
	[.0128]	[.0092]	[.0056]	[.0034]	[.0040]	[.0035]
R-squared	.18	.20	.16	.18	.18	.14
Panel D.						
OADR	.1262***	.1344***	.1183***	.0391***	.0541***	-.0221***
	[.0026]	[.0037]	[.0049]	[.0027]	[.0020]	[.0015]
x Trust Police	-.0032***	-.0030***	-.0046***	-.0008***	-.0014***	.0011***
	[.0004]	[.0004]	[.0002]	[.0001]	[.0002]	[.0001]
Trust Police	-.0460***	-.0491***	-.0132*	-.0034	.0110**	-.0037
	[.0100]	[.0103]	[.0068]	[.0039]	[.0037]	[.0029]
R-squared	.16	.18	.14	.17	.17	.13
Sample	355,438	356,723	355,834	358,643	360,105	360,861
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Essround Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Cohort Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Countries	All	All	All	All	All	All

Notes: This table shows the results of Regression iii) and iv), i. e., it establishes the effect of the interplay between old-age dependency ratio (OADR) and trust other people and the police on the political trust and on attitudes towards immigrants.
The analysis controls for individual characteristics including age, gender, race, education, income source, income difficulties, religiosity, exposure to globalization and marital status. We use as country controls log per-capita GDP in PPP, life expectancy, fertility and mortality rates. Further, we account for country, cohort and ESS round fixed effects. Robust standard errors clustered at the cohort level are shown in parenthesis; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level.

Table A.9: The Interplay between Population Aging, Electoral Turnout, Voting for Populist Parties and Media Exposure

	Electoral turnout	Voting populist parties
	(1)	(2)
OADR	-.0073**	.0083**
	[.0029]	[.0035]
Media Exposure (P.C.A)	.0383***	.0404***
	[.0091]	[.0104]
x OADR	-.0021***	-.0012**
	[.0003]	[.0004]
R-squared	.11	.19
Sample	161,333	117,331
Individual Controls	Yes	Yes
Country-Level Controls	Yes	Yes
Country Fixed Effects	Yes	Yes
Essround Fixed Effects	Yes	Yes
Cohort Fixed Effects	Yes	Yes
Countries	With P	With P

Notes: This table shows the results of Regression i) and ii), i. e., it establishes the effect of the interplay between old-age dependency ratio (OADR) and the total hours of watching TV, reading newspapers and navigating on the internet on the electoral turnout and on the voting for populist parties. The analysis controls for individual characteristics including age, gender, race, education, income source, religiosity, income difficulties, exposure to globalization and marital status. We use as country controls log per-capita GDP in PPP, life expectancy, fertility and mortality rates. Further, we account for country, cohort and ESS round fixed effects. Robust standard errors clustered at the cohort level are shown in parenthesis; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level.

Table A.10: The Interplay between Population Aging, Political Trust, Attitudes Towards Immigrants and Media Exposure

	Trust parties	Trust politicians	Trust parliament	Trust European parliament	Trust legal system	Government satisfaction
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A.						
OADR	-.1566***	-.1268***	-.1759***	-.2720***	-.1835***	-.2033***
	[.0186]	[.0116]	[.0129]	[.0163]	[.0094]	[.0211]
x Media (P.C)	-.0108***	-.0127***	-.0178***	-.0108***	-.0135***	-.0093***
	[.0009]	[.0004]	[.0016]	[.0013]	[.0019]	[.0019]
Media (P.C)	.2683***	.2952***	.3478***	.2223***	.2479***	.2178***
	[.0286]	[.0134]	[.0405]	[.0239]	[.0459]	[.0411]
R-squared	.21	.20	.21	.08	.22	.20

	Immigrants make country worse	Immigrants undermine culture	Immigrants bad for economy	Immigrants outside Europe	Few immigrants from different race	Many immigrants from same race
	(1)	(2)	(3)	(4)	(5)	(6)
Panel B.						
OADR	.0841***	.0079	.0612***	-.0124**	-.0107**	.0539***
	[.0114]	[.0187]	[.0130]	[.0053]	[.0042]	[.0048]
x Media (P.C)	.0082***	.0085***	.0063***	.0041***	.0034***	-.0019***
	[.0025]	[.0025]	[.0017]	[.0007]	[.0007]	[.0005]
Media (P.C)	-.0477	-.0100	.0349	-.0247	-.0059	-.0249
	[.0644]	[.0639]	[.0488]	[.0179]	[.0180]	[.0149]
R-squared	.14	.18	.13	.15	.16	.13
Sample	193,908	194,477	194,079	196254	197,277	197,747
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Essround Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Cohort Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Countries	All	All	All	All	All	All

Notes: This table shows the results of Regression iii) and iv), i. e., it establishes the effect of the interplay between old-age dependency ratio (OADR) and the total hours of watching TV, reading newspapers and navigating on the internet on the political trust and on attitudes towards immigrants.
The analysis controls for individual characteristics including age, gender, race, education, income source, income difficulties, religiosity, exposure to globalization and marital status. We use as country controls log per-capita GDP in PPP, life expectancy, fertility and mortality rates. Further, we account for country, cohort and ESS round fixed effects. Robust standard errors clustered at the cohort level are shown in parenthesis; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level.

Table A.11: Correlation Matrix of the Number of Populist Parties and Old-Age Dependency Ratio

	Number of pop. parties voted	OADR
	(1)	(2)
Number of pop. parties voted	1.000	
OADR	.0067	1.000

Notes: This table establishes the correlation between the number of populist parties voted by the ESS individuals and the old-age dependency ratio (OADR).

Table A.12: Probit Model: Population Aging, Electoral Turnout, Voting for Populist Parties

	Electoral turnout	Voting populist parties
	(1)	(2)
OADR	-.0219***	.0441***
	[.0049]	[.0049]
R-squared	.11	.20
Sample	304,177	216,058
Individual Controls	Yes	Yes
Country-Level Controls	Yes	Yes
Country Fixed Effects	Yes	Yes
Essround Fixed Effects	Yes	Yes
Cohort Fixed Effects	Yes	Yes
Countries	With P	With P

Notes: This table shows the results of the probit regression of the effect of the old-age dependency ratio (OADR) on the voting for populist parties. The analysis controls for individual characteristics including age, gender, race, education, income source, religiosity, income difficulties, exposure to globalization and marital status. We use as country controls log per-capita GDP in PPP, life expectancy, fertility and mortality rates. Further, we account for country, cohort and ESS round fixed effects. Robust standard errors clustered at the cohort level are shown in parenthesis; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level.

Table A.13: Probit Model: Population Aging, Political Trust, Attitudes Towards Immigrants

	Trust parties	Trust politicians	Trust parliament	Trust European parliament	Trust legal system	Government satisfaction
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A.						
OADR	-.0181***	-.0143***	-.0234***	-.0390***	-.0306***	-.0175***
	[.0056]	[.0032]	[.0040]	[.0049]	[.0048]	[.0061]
R-squared	.12	.12	.12	.07	.12	.10
Sample	299,560	335,028	332,585	308,942	333,029	329,104
	Immigrants make country worse	Immigrants undermine culture	Immigrants bad for economy	Immigrants outside Europe	Few immigrants from different race	Many immigrants from same race
	(1)	(2)	(3)	(4)	(5)	(6)
Panel B.						
OADR	.0268***	.0329***	.0214***	.0486***	.0576***	-.0384***
	[.0069]	[.0043]	[.0044]	[.0057]	[.0061]	[.0063]
R-squared	.07	.07	.06	.09	.09	.12
Sample	326,270	327,165	326,697	329,472	330,264	330,634
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Essround Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Cohort Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Countries	All	All	All	All	All	All

Notes: This table shows the results of the probit regression of the effect of the old-age dependency ratio (OADR) on the political trust and on attitudes towards immigrants. The analysis controls for individual characteristics including age, gender, race, education, income source, income difficulties, religiosity, exposure to globalization and marital status. We use as country controls log per-capita GDP in PPP, life expectancy, fertility and mortality rates. Further, we account for country, cohort and ESS round fixed effects. Robust standard errors clustered at the cohort level are shown in parenthesis; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level.

Table A.14: Logit Model: Population Aging, Electoral Turnout, Voting for Populist Parties

	Electoral turnout	Voting populist parties
	(1)	(2)
OADR	-.0386***	.0627***
	[.0087]	[.0090]
Pseudo R-squared	.11	.20
Sample	304,177	216,058
Individual Controls	Yes	Yes
Country-Level Controls	Yes	Yes
Country Fixed Effects	Yes	Yes
Essround Fixed Effects	Yes	Yes
Cohort Fixed Effects	Yes	Yes
Countries	With P	With P

Notes: This table shows the results of the logit regression of the effect of the old-age dependency ratio (OADR) on the voting for populist parties. The analysis controls for individual characteristics including age, gender, race, education, income source, religiosity, income difficulties, exposure to globalization and marital status. We use as country controls log per-capita GDP in PPP, life expectancy, fertility and mortality rates. Further, we account for country, cohort and ESS round fixed effects. Robust standard errors clustered at the cohort level are shown in parenthesis; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level.

Table A.15: Logit Model: Population Aging, Political Trust, Attitudes Towards Immigrants

	Trust parties	Trust politicians	Trust parliament	Trust European parliament	Trust legal system	Government satisfaction
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A.						
OADR	-.0406***	-.0296***	-.0504***	-.0823***	-.0704***	-.0373***
	[.0110]	[.0066]	[.0081]	[.0102]	[.0102]	[.0126]
R-squared	.12	.12	.12	.07	.12	.10
Sample	299,560	335,028	332,585	308,942	333,029	329,104
	Immigrants make country worse	Immigrants undermine culture	Immigrants bad for economy	Immigrants outside Europe	Few immigrants from different race	Many immigrants from same race
	(1)	(2)	(3)	(4)	(5)	(6)
Panel B.						
OADR	.0593***	.0692***	.0391***	.0887***	.1047***	-.0724***
	[.0182]	[.0098]	[.0117]	[.0112]	[.0122]	[.0130]
R-squared	.07	.07	.06	.09	.09	.12
Sample	326,270	327,165	326,697	329,472	330,264	330,634
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Essround Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Cohort Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Countries	All	All	All	All	All	All

Notes: This table shows the results of the logit regression of the effect of the old-age dependency ratio (OADR) on the political trust and on attitudes towards immigrants. The analysis controls for individual characteristics including age, gender, race, education, income source, income difficulties, religiosity, exposure to globalization and marital status. We use as country controls log per-capita GDP in PPP, life expectancy, fertility and mortality rates. Further, we account for country, cohort and ESS round fixed effects. Robust standard errors clustered at the cohort level are shown in parenthesis; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level.

Table A.16: IV Analysis: Population Aging, Electoral Turnout, Voting for Populist Parties

	Electoral turnout	Voting populist parties
	(1)	(2)
OADR	-.0429***	.3267***
	[.0063]	[.0538]
R-squared	.11	.34
Sample	304,177	216,058
F stat.	340.20	116.10
Individual Controls	Yes	Yes
Country-Level Controls	Yes	Yes
Country Fixed Effects	Yes	Yes
Essround Fixed Effects	Yes	Yes
Cohort Fixed Effects	Yes	Yes
Countries	With P	With P

Notes: This table shows the results of IV analysis for Regression i) and ii). The analysis controls for individual characteristics including age, gender, race, education, income source, religiosity, income difficulties, exposure to globalization and marital status. We use as country controls log per-capita GDP in PPP, life expectancy, fertility and mortality rates. Further, we account for country, cohort and ESS round fixed effects. Robust standard errors clustered at the cohort level are shown in parenthesis; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level.

Table A.17: IV Analysis: Population Aging, Political Trust, Attitudes Towards Immigrants

	Trust parties	Trust politicians	Trust parliament	Trust European parliament	Trust legal system	Government satisfaction
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A.						
OADR	-.2636***	-.3105***	-.4249***	-.3976***	-.3670***	-.0373*
	[.0231]	[.0298]	[.0482]	[.0452]	[.0427]	[.0219]
R-squared	.20	.19	.19	.07	.21	.17
Sample	299,560	335,028	332,585	308,942	333,065	329,137
F-stat.	1,493.93	557.40	531.78	445.83	577.50	536.25
	Immigrants make country worse	Immigrants undermine culture	Immigrants bad for economy	Immigrants outside Europe	Few immigrants from different race	Many immigrants from same race
	(1)	(2)	(3)	(4)	(5)	(6)
Panel B.						
OADR	.2412***	.2248***	.4479***	.1653***	.2350***	-.1417***
	[.0311]	[.0359]	[.0486]	[.0224]	[.0175]	[.0104]
R-squared	.15	.17	.12	.16	.14	.11
Sample	326,270	327,195	326,731	329,504	330,264	330,634
F-stat.	497.09	481.85	511.97	570.81	585.30	611.13
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Essround Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Cohort Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Countries	All	All	All	All	All	All

Notes: This table shows the results of IV analysis for Regression iii) and iv). The analysis controls for individual characteristics including age, gender, race, education, income source, income difficulties, religiosity, exposure to globalization and marital status. We use as country controls log per-capita GDP in PPP, life expectancy, fertility and mortality rates. Further, we account for country, cohort and ESS round fixed effects. Robust standard errors clustered at the cohort level are shown in parenthesis; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level.

Table A.18: IV Analysis: First-Stage Estimations

	OADR Full Sample	OADR Restr. Sample
	(1)	(2)
Past Birth Rate	-.1068***	-.0057***
	[.0045]	[.0053]
R-squared	.97	.96
Sample	318,507	216,058
F stat.	557.41	116.11
Individual Controls	Yes	Yes
Country-Level Controls	Yes	Yes
Country Fixed Effects	Yes	Yes
Essround Fixed Effects	Yes	Yes
Cohort Fixed Effects	Yes	Yes
Countries	All	With P

Notes: This table shows the results of the first stage estimations and the effect of past crude births on the old-age dependency ratio (OADR).
The analysis controls for individual characteristics including age, gender, race, education, income source, income difficulties, religiosity, exposure to globalization and marital status. We use as country controls log per-capita GDP in PPP, life expectancy, fertility and mortality rates. Further, we account for country, cohort and ESS round fixed effects. Robust standard errors clustered at the cohort level are shown in parenthesis; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level.

Table A.19: Two-Step Heckman Probit Model

	Electoral turnout	Voting populist parties
	(1)	(2)
OADR	-.0019	.0033***
	[.0014]	[.0012]
R-squared	.11	.18
Sample	304,177	216,058
Rho	-.0035	
Individual Controls	Yes	Yes
Country-Level Controls	Yes	Yes
Country Fixed Effects	Yes	Yes
Essround Fixed Effects	Yes	Yes
Cohort Fixed Effects	Yes	Yes
Countries	With P	With P

Notes: This table shows the results of the estimation of a two-step Heckman probit model, estimating first the probability of participation, and then the probability of voting for the populist party adjusting for selection. The analysis controls for individual characteristics including age, gender, race, education, income source, religiosity, income difficulties, exposure to globalization and marital status. We use as country controls log per-capita GDP in PPP, life expectancy, fertility and mortality rates. Further, we account for country, cohort and ESS round fixed effects. Robust standard errors clustered at the cohort level are shown in parenthesis; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level.

Table A.20: Population Aging, Electoral Turnout, Voting for Populist Parties using Alternative Clusters

	Electoral turnout	Voting populist parties
	(1)	(2)
OADR	-.0055**	.0150**
	[.0023]	[.0059]
R-squared	.11	.18
Sample	302,645	214,526
Individual Controls	Yes	Yes
Country-Level Controls	Yes	Yes
Country Fixed Effects	Yes	Yes
Essround Fixed Effects	Yes	Yes
Cohort Fixed Effects	Yes	Yes
Countries	With P	With P

Notes: Notes: This table shows the results of Regression i) and ii), i. e., it establishes the effect of the old-age dependency ratio (OADR) on the electoral turnout and on the voting for populist parties. The analysis controls for individual characteristics including age, gender, race, education, income source, income difficulties, exposure to globalization, religiosity and marital status. We use as country controls log per-capita GDP in PPP, life expectancy, fertility and mortality rates. Further, we account for country, cohort and ESS round fixed effects. Robust standard errors clustered at the country-survey year level are shown in parenthesis; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level.

Table A.21: Population Aging, Political Trust, Attitudes Towards Immigrants using Alternative Clusters

	Trust parties	Trust politicians	Trust parliament	Trust European parliament	Trust legal system	Government satisfaction
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A.						
OADR	-.0410*	-.0411*	-.0589**	-.0686**	-.0469*	-.0729*
	[.0247]	[.0228]	[.0281]	[.0277]	[.0263]	[.0390]
R-squared	.21	.20	.21	.08	.22	.17
Sample	297,917	333,361	330,926	307448	331,434	327,470
	Immigrants make country worse	Immigrants undermine culture	Immigrants bad for economy	Immigrants outside Europe	Few immigrants from different race	Many immigrants from same race
	(1)	(2)	(3)	(4)	(5)	(6)
Panel B.						
OADR	.1084***	.1178***	.0813***	.0409***	.0490***	-.0187**
	[.0149]	[.0145]	[.0168]	[.0072]	[.0080]	[.0077]
R-squared	.15	.17	.13	.17	.17	.13
Sample	324,658	325,553	325,098	327,830	328,597	328,966
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Essround Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Cohort Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Countries	All	All	All	All	All	All

Notes: This table shows the results of Regression iii) and iv) for the restricted sample to individuals born in the country and one of their parent is also born in the same country. For all of these variables, the effect of population aging is negative and significant at the 1% level. For the immigrant attitudes the effect of population aging is positive except for the last column where it is negative and significant at the 1% level. The analysis controls for individual characteristics including age, gender, race, education, income source, income difficulties, exposure to globalization, religiosity and marital status. We use as country controls log per-capita GDP in PPP, life expectancy, fertility and mortality rates. Further, we account for country, cohort and ESS round fixed effects. Robust standard errors clustered at the country-survey year level are shown in parenthesis; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level.