

# Austerity, Economic Vulnerability, and Populism\*

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## Abstract

Governments have repeatedly adjusted fiscal policy during the past decades. We examine the political effects of these adjustments in Western countries since the early 1990s using both district-level election outcomes and individual-level voting data. We expect that austerity increases populist votes, but only among economically vulnerable voters, who are hit most by austerity. Following the political economy literature, we identify economically vulnerable regions, looking at the share of low-skilled workers and share of manufacturing production. The results from a difference-in-differences analysis show that austerity increases support for populist parties in economically vulnerable regions, but austerity has little effect on voting in economically less vulnerable regions. These findings are confirmed by the analysis at the individual level. Our results suggest that the success of populist parties across Europe critically hinges on the governments failure to protect the losers of structural economic change. The economic origins of populism, therefore, are not purely external, but the populist backlash is triggered by internal factors, notably public policies.

*Keywords:* fiscal policy, globalization, automation, political backlash, elections, Western Europe.

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# 1 Introduction

Governments have implemented fiscal adjustment measures on a regular basis during the past decades. These policies have strong distributional consequences, especially in contemporary, industrialized democracies. These countries have experienced major economic transformations, such as globalization or automation, that raise economic insecurity among voters. In this context, public safety nets are crucial because they provide insurance against enhanced economic risk and hence stabilize societies both socially and politically. In contrast, government decisions to cut fiscal spending magnify rather than mitigate the adverse effects of the ongoing economic transformations. Government decisions, therefore, are crucial in periods of structural economic change.

Surprisingly, economic explanations of populism in recent years have not paid much attention to governments and their policy choices. Existing analyses have significantly improved our understanding of political backlash by highlighting the impact of economic outcomes specifically trade shocks, financial crises, or technological innovations on voters. At the same time, the role of governments in this mechanism is largely left blank. Governments, however, have traditionally been at the center of analyses of globalization politics (e.g., Mosley, 2003) and should play an important role in how we think about the economic origins of populism and political backlash. We, therefore, examine *how government policy, and in particular fiscal austerity, affects the political behavior of voters in times of enhanced economic risk.*

Our analysis concentrates on the impact of fiscal austerity on economically vulnerable voters. Even though cutbacks generally are national-level decisions that apply to the whole country, exposure to fiscal cutbacks varies significantly across regions and societal groups. In particular, cutbacks primarily affect economically vulnerable voters, who rely on government support to cope with increased economic risk. In contrast, voters who already do well

are barely affected by public spending cuts. Austerity policies, therefore, trigger a disenchantment primarily among voters who face social decline and hence are hit most by fiscal cutbacks. As a result, vulnerable voters increasingly opt for the populist pledge to rectify their economic situation either by reversing spending cuts or by curtailing globalization as the original source of economic risk.

In order to identify economically vulnerable voters, we draw on the international political economy literature that has investigated the winners and losers from economic transformations for decades (e.g., Milner, 1988; Frieden, 2000). This literature highlights the importance of factor endowment (Scheve and Slaughter, 2001), sectoral competitiveness (Jensen, Quinn and Weymouth, 2017), and occupational characteristics (Gingrich, 2019; Owen, 2020) for income and job security. Following these different theoretical logics, low-skilled workers, workers in manufacturing, and workers in routine jobs are particularly vulnerable and suffer most from austerity. We, therefore, expect that these workers are more likely to turn to populist parties when the government adjusts fiscal policy.

Empirically, we examine the effect of austerity on votes in Western countries since the early 1990s using both district-level election outcomes and individual-level voting data. The results from a difference-in-differences (DiD) analysis show that austerity increases support for populist parties in economically vulnerable regions, but austerity has little effect on voting in economically less vulnerable regions. Moreover, we find that radical right parties gain in economically vulnerable regions in cases of austerity, whereas the same is not true for radical left parties. The analysis at the individual level confirms these results. Our findings indicate that fiscal cutbacks and the resulting lack of insurance against economic shocks contribute significantly to the rise of populist parties and the backlash against globalization.

In an effort to strengthen our identification strategy, we implement two additional tests.

First, we include lead variables of austerity and show that they bear no effect on our outcomes. This test provides evidence that the parallel trend assumption holds. Second, exploiting the fact that European countries implement austerity measures even in good times, we show that our results are not driven by the occurrence of economic crises. Put differently, even when macro-economic conditions are normal, economically vulnerable areas and economically vulnerable individuals turn to populist parties in cases of austerity measures.

Our study contributes to the new literature on the globalization backlash by moving public policy and governments to the center of the analysis. There is now large evidence that economically vulnerable voters increasingly turn towards populist parties (Owen and Johnston, 2017; Jensen, Quinn and Weymouth, 2017; Ballard-Rosa et al., Forthcoming; Colantone and Stanig, 2018; Milner, 2018; Baccini and Weymouth, 2018; Gingrich, 2019; Broz, Frieden and Weymouth, 2019). In line with single-country studies (Fetzer, 2019), our results show that the success of populist parties across Europe critically hinges on the governments failure to protect and help the losers of structural economic change. The economic origins of populism, therefore, are not purely external and unavoidable, but the populist backlash is triggered by internal factors, notably public policies.

We also contribute to the literature on the political effects of fiscal policy by isolating the effect of fiscal cutbacks on different groups of voters. The fiscal austerity literature, so far, highlights the average response of the electorate to fiscal adjustments or reforms (Alesina, Carloni and Lecce, 2011; Giger and Nelson, 2011; Grittersová et al., 2016; Arias and Stasavage, 2019). To the extent that voter heterogeneity is examined, material explanations are dismissed in favor of ideological ones (Barnes and Hicks, 2018; Hübscher, Sattler and Wagner, 2020). To our knowledge, our paper is the first to show that the economic vulnerability of voters strongly affects the intensity of voters response to fiscal austerity, both regionally and individually. The political disruptions of austerity, therefore, can be significant even if

the median voter or the majority of voters support an austerity package.

Finally, our analysis sheds new light on government accountability in open economies. It suggests that economic policy continues to matter for popular evaluations even if voters hold governments less accountable for economic outcomes in open economies (Hellwig and Samuels, 2007; Kayser and Peress, 2012). While outcomes convey less information about policymaker competence in open economies, the policy response to these outcomes still informs voters about the governments economic priorities. Vulnerable voters infer from fiscal cutbacks that the governments policy position is incompatible with their needs and interests and hold it accountable for this.

## **2 Austerity and the economic origins of populism**

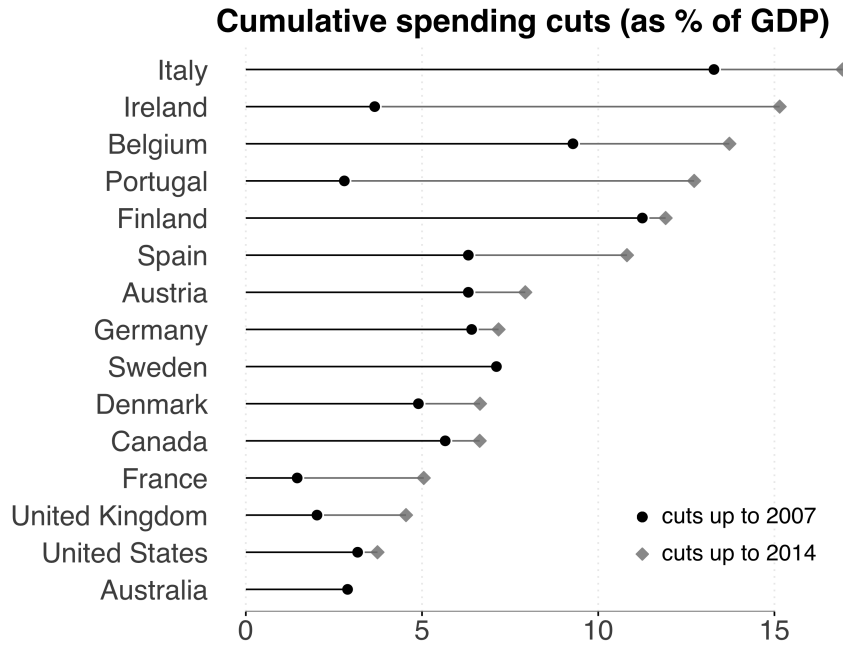
### **2.1 Fiscal policy in times of enhanced economic risk**

Governments have implemented fiscal adjustments on a regular basis during the past decades. A prominent example is the wave of austerity in the wake of the European debt crisis (Copelovitch, Frieden and Walter, 2016). These recent cutbacks, however, are not unique. Instead, they represent the peak of a longer-lasting movement towards “permanent austerity” that has been noted for a long time (Pierson, 2001, ch. 13). As figure 1 shows, most industrialized countries implemented significant cutbacks long before the start of the global financial crisis in 2007. The figure also shows that fiscal adjustments not only have occurred in the crisis countries of Southern Europe, but have been quite common across all of Europe, including Germany, Austria, and the Scandinavian countries.<sup>1</sup>

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<sup>1</sup>There are multiple possible reasons for this tendency. Financial investors closely monitor public deficits and debt (Mosley, 2000, table 1), and punish governments that do not follow a pro-market agenda (Hallerberg and Wolff, 2008). More generally, international integration pushes moderate political parties towards similar, market-friendly policies (Konstantinidis,

**Figure 1:** Austerity in Industrialized Countries, 1979-2014



Note: Source: Devries et al. (2011); Alesina, Favero and Giavazzi (2019).

These policies were implemented in a context of increased economic and social risk. Industrialized economies have faced major economic transformations during the past decades, such as a massive increase in trade, offshoring, and the automation of jobs (Autor, Dorn and Hanson, 2013). In this context, public safety nets are important to stabilize countries socially and politically. At a minimum, social policies, such as social security schemes and unemployment insurance, help citizens to cope with temporary income loss when they lose their jobs. Public policies, such as investment into education, can also enable a wider range

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Matakos and Hutlu-Eren, 2019). In addition, voters who do not need compensation, but benefit from slim states, have a disproportionate influence over economic policies (Bartels, 2008; Hacker and Pierson, 2010). Finally, the idea of fiscal restraint is embodied in many European economic institutions (Blyth, 2013). Against this background, governments have increasingly locked in low-deficit policies that require regular adjustment of fiscal spending (Bodea and Higashijima, 2017).

of citizens to reap the benefits of open markets. As a result, many voters support public policies that help them cope with the risks in open economies (Gingrich and Ansell, 2012; Walter, 2010; Kurer and Gallego, 2019). There is also evidence that these policies increase support for trade (Hays, 2009; Rickard, 2015) and decrease the risk of political backlash (Rudra, 2005; Burgoon, 2009; Margalit, 2011; Halikiopoulou and Vlandas, 2016; Richtie and You, 2020).<sup>2</sup>

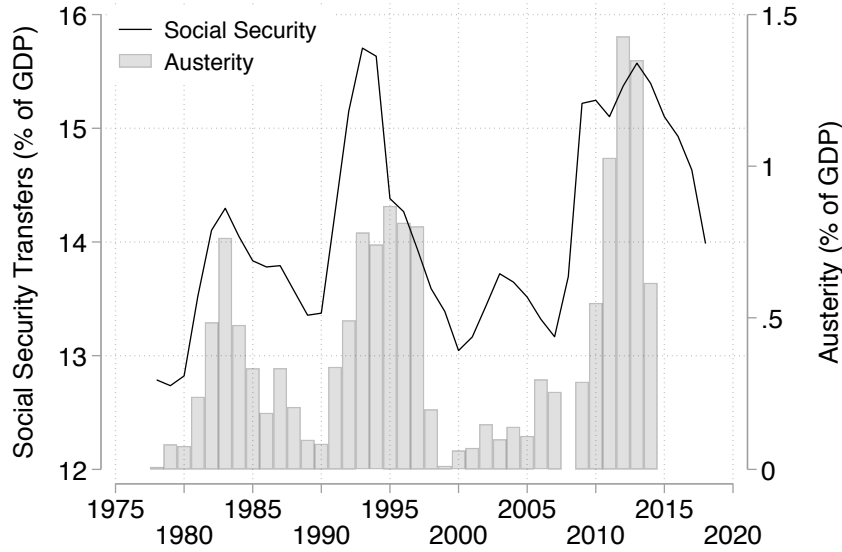
In contrast, fiscal cutbacks have strong distributional effects that essentially work in the same direction as the major economic transformations described above. Fiscal adjustments are closely linked to cutbacks in welfare state provisions, such as social security or unemployment schemes (Armingeon, Guthmann and Weisstanner, 2016). Large cutbacks also apply to all or most policy areas, including social investment and education. These policies, therefore, magnify rather than mitigate the negative economic effects of globalization and technological change on many workers and fuel the risk of social decline that these people face. These economic consequences are not confined to individuals, but also affect their social environment by putting pressure on the social cohesion of entire communities (Sambanis, Schultz and Nikolova, 2018).

To illustrate this, figure 2 shows how average social security transfers evolved over time and how this relates to the average level of austerity in industrialized countries. Social security transfers vary considerably over time and decline particularly strongly during the 1990s and again from 2013 onwards. These declines in social security transfers clearly coincide with the large waves of austerity that were implemented by governments during the past decades.

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<sup>2</sup>There is less evidence that this also is the case for technological change (Gingrich, 2019). These schemes also have their limitations. For instance, the distribution of these funds is often politically motivated and does not necessarily channel the funds to the districts that need them the most (Kim and Pelc, Forthcoming).

**Figure 2:** Austerity and Social Security Transfers Over Time



Note: Annual averages for countries listed in Figure 1. Source: Devries et al. (2011); Alesina, Favero and Giavazzi (2019); Armingeon et al. (2019).

We find a similar pattern for public spending on unemployment benefits and education in figure A1 in Appendix A. Austerity, therefore, has been associated with cutbacks in public safety nets and other public schemes that help citizens to cope with economic risk in open economies.<sup>3</sup>

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<sup>3</sup>Even though total social expenditures have gradually increased over time, this is not the case for the spending items that are central to our argument. The increase in total social expenditures is due to greater public spending on pensions and health care, but austerity still interrupts the structural upward trend in pensions and health care expenditures. Cutbacks in these areas, which are related to so-called “life-cycle risks”, are politically more difficult because they enjoy broader public support (Pierson, 2001). As a result, fiscal cuts impact the remaining spending areas more strongly, especially those that aim at protecting economically vulnerable citizens.



## 2.2 Economic vulnerability and exposure to austerity

At the same time, austerity does not matter in the same way for everyone. Even though fiscal cutbacks generally are national-level decisions that apply to the whole country, exposure to fiscal cutbacks varies significantly across regions and societal groups depending on their economic vulnerability. Economic transformations not only generate losers, but also winners who benefit from globalization or technological innovations (Gallego, Kurer and Schöll, 2020). We, therefore, expect that austerity primarily affects the political behavior of economically vulnerable groups and less the behavior of those who do well in open economies.

In order to identify the economically vulnerable voters, we draw on theories of comparative and international political economy. From a factor logic, low-skilled workers especially are worse off in open, industrialized economies, while high-skilled laborers tend to benefit in open economies (Scheve and Slaughter, 2001). From a sectoral viewpoint, the manufacturing sector faces the greatest competition from firms in developing and emerging markets, while high-skilled service industries thrive in open economies (Jensen, Quinn and Weymouth, 2017). From a new trade logic, small firms have greater difficulties succeeding in open economies, while large, productive firms are best positioned to exploit the gains from trade (Baccini, Pinto and Weymouth, 2017). Finally, from an occupational logic, workers in routine jobs are most likely to lose their jobs due to offshoring or automation (Gingrich, 2019; Owen, 2020). In other words, economic vulnerability varies with skill level, economic sector, and routine job intensity. Even if many or most in a society benefit from ongoing economic transformations, e.g. globalization and automation, a significant share of citizens face an increasing risk of social decline in contemporary, open economies.

As a result, low-skilled workers, workers in manufacturing, and workers in routine jobs are hit most by government decisions to cut fiscal spending. Austerity policies, therefore, act as a trigger that pushes these vulnerable voters towards populist political parties. Austerity

policies raise doubts among the economically vulnerable about the commitment of governments to make globalization a success for everybody. They signal that the government is primarily committed to market-friendly policies and subordinates the goal of social stability to economic efficiency concerns. While this is good news for investors and the wealthy, it also reveals to economically vulnerable voters that the government will not pursue policies that will help them to also benefit from globalization. From the perspective of a voter who faces social decline, austerity shows that policymakers are not willing to redistribute some of the aggregate welfare gains from globalization and automation to the losers in form of social assistance or social investment.

This increases the attractiveness of populist parties that offer a policy alternative for voters who are hit hardest by austerity (Hopkin, 2020). Populist parties, especially those situated on the political left, tend to be much more critical of fiscal cuts than mainstream parties. Right-wing populist parties often also oppose cutbacks, at least for the native population. They propose to shift the burden of fiscal adjustment to immigrants and other minority groups. In addition, right-wing populists propose to rectify the economic well-being of economically vulnerable workers by protecting them from foreign competition, a root cause of economic risk, that pushed vulnerable voters towards government support in the first place.<sup>4</sup> Austerity, then, serves as a trigger that fuels support for populist pledges among economically vulnerable voters and communities. Economically vulnerable individuals are more likely to vote for populist parties after an austerity package than economically safe individuals. Similarly, populist vote share should increase more in economically vulnerable than in economically prosperous electoral districts after an austerity package.

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<sup>4</sup>More broadly, populist parties quickly adapt to shifting voter taste and emphasize new issues that allow them to challenge established parties (De Vries and Hobolt, 2020).

### 3 District-level elections

The first part of our analysis examines district-level election results in 12 Western European countries and (up to) 195 NUTS-2 regions. Our time span covers (up to) 96 elections between 1991 and 2018. We always focus on elections for the lower house of the legislature. Each country appears only in years in which elections are held. The data on party vote shares on the district level are from the Constituency-Level Elections Archive (CLEA) database (Kollman et al., 2019).

The district-level analysis allows us to exploit variation in regional exposure to national austerity measures. Although austerity programs generally are decided on the national level and apply to the whole country, we expect that the impact of these policies varies across regions depending on economic vulnerability. To capture this varying impact, we rely on regional measure of economic vulnerability as identified by the previous political economy literature. We then examine how the impact of national austerity measures on populist votes in a district is moderated by the economic vulnerability of the region in which the district is located. Below, we describe the data and the empirical strategy in greater detail and report our main results.

#### 3.1 Data

**Measuring populism.** Our main outcome variable is the support for populist parties in an electoral district in an election. To compute this variable, we first match the CLEA data with the classifications of political parties on an 11-point populism scale by the Global Party Survey (GPS) (Norris, 2019).<sup>5</sup> This allows us to calculate a populism score for each

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<sup>5</sup>In this dataset, parties are classified according to a range of dimensions based on expert surveys. The conceptualization and operationalization of populism relies on Norris and Inglehart (2019), which treats populist rhetoric as antithetical to pluralist rhetoric. Populist

district-election. This score is the weighted average of the populism scores of all parties in the district-election, where parties are weighted by their vote shares. The theoretical value range of this variable is from 0 (no populism, i.e. pluralist parties receive all votes) to 10 (maximum populism, i.e. populist parties receive all votes). This measure varies across electoral districts and over time.<sup>6</sup> We label this variable *Populism Score*.

In addition to the populism score, we use the vote share of populist parties in a district-election as outcome variable in additional analyses. Populist vote shares are computed based on two definitions of populist parties: one encompassing both moderately and strongly populist parties, and one encompassing only strongly populist parties.<sup>7</sup> Moreover, we use the language “typically challenges the legitimacy of established political institutions and emphasizes that the will of the people should prevail”; pluralist language “rejects these ideas, believing that elected leaders should govern constrained by minority rights, bargaining and compromise, as well as checks and balances on executive power” (GPS codebook, p. 10). Populist rhetoric is measured on a scale from 0 to 10 with higher values indicating a more populist rhetoric. Data is available at <https://www.globalpartysurvey.org/download-data>.

<sup>6</sup>The classification of parties in the Global Party Survey is fixed since it is difficult to judge the degree of populist rhetoric in the more distant past using expert surveys today. Nonetheless, the populism score varies over time and across districts when the vote shares of political parties in a district change. Our measure, thus, captures the demand-side effects that arise when voters switch to a different political party. At the same time, it rules out supply-side effects that arise when mainstream parties become more populist. This leads to more conservative estimates in our analysis. We also examine vote share for strongly populist parties, a category which arguably includes parties that have been populist for the whole period. We also rely on different, but related time-varying measures, such as the nationalism score by Colantone and Stanig (2018), and we find similar effects.

<sup>7</sup>Norris (2019) defines moderately (strongly) populist parties as those with a populist rhetoric score above 5 (7.5).

classification of populist parties provided by PopuList (Rooduijn et al., 2019) as an alternative to the GPS data.<sup>8</sup>

Figures A2 and A3 in Appendix A show the distribution of our outcome variable across NUTS-2 regions and over time. A notable feature of the distribution of our outcome over time is that half of the countries in the sample had already experienced a surge of votes for populist parties in the 1990s and not only during the past decade.

**Measuring austerity.** We rely on a measure of austerity based on fiscal consolidation. This indicator was originally developed by Devries et al. (2011) and was updated by Alesina, Favero and Giavazzi (2019). It is an events-based measure, which qualitatively identifies the timing and the magnitude of fiscal consolidation packages using policy documents from governments and international organizations. This approach, which is now common in the literature (e.g., Alesina, Favero and Giavazzi, 2019), has the advantage of capturing the occurrence of austerity as a result of government decisions rather than of macro-economic conditions related (for instance) to the business cycle.

We use the cumulative amount of austerity that happened between the two elections, i.e. the previous election in our dataset and the election for which we examine votes.<sup>9</sup> Note

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<sup>8</sup>In this dataset, parties are classified as either populist or not based on expert surveys. Populist parties are defined as those that “endorse the set of ideas that society is ultimately separated into two homogeneous and antagonistic groups, the pure people versus the corrupt elite, and which argues that politics should be an expression of the *volonté générale* (general will) of the people” (Rooduijn et al., 2019). Data is available at <https://popu-list.org/>.

<sup>9</sup>Originally, the austerity variable was an annual time series for each country: it captures the amount of deficit-reducing measures that a government implements in a particular year. In principle, it is easy to attribute the annual consolidations to an election period in years

that this measure is continuous and includes 0s, which are countries that do not implement austerity measures, i.e. our control group. The fact that austerity measures are continuous implies that treated units receive the treatment with different intensity. Concretely, this means that some austerity policies are mild, whereas others are quite severe. We label this variable *Austerity*.

In Figure A4 in Appendix A we show the temporal evolution of our austerity variable by country. There is evidence that the intensity of this measure varies quite dramatically among countries and over time. A notable pattern emerging from these figures is that austerity measures have been very frequently implemented by European governments over the past three decades.

**Measuring economic vulnerability.** To measure economic vulnerability, we follow the international political literature on the distributional effects of globalization and automation. Specifically, we use the share of unskilled workers and the share of workers in manufacturing. Low-skilled workers have been negatively affected by both competition with cheap labor from emerging markets and technological shocks, whereas the manufacturing sector has been particularly hard-hit by trade liberalization over the past three decades. Data come from Colantone and Stanig (2018) and vary by NUTS-2 regions. We map each district to its NUTS2 region to merge the outcome variable with variables capturing economic vulnerability.

Note that we use economic vulnerability variables at their baseline value, i.e. we take the value of these variables in 1988 and this value does not change over time. We label these without elections. It is trickier for election years, which required some judgment calls. We then went through the data case by case to attribute fiscal consolidations in election years to one of the two election periods as accurate as possible.

variables *Share of Low-Skilled Workers* and *Share of Manufacturing Workers*.

In Figures A5 and A6 in Appendix A we show the geographical distribution of these two variables across NUTS-2 regions.

### 3.2 Empirical strategy

Our analysis at the district level is a standard difference-in-differences with a continuous treatment. More specifically, we estimate the following baseline model:

$$y_{cd,t} = \alpha + X_{cr(d),baseline} \times Austerity'_{c,t} \beta + \gamma_{ct} + \delta_r + \epsilon_{cd,t}, \quad (1)$$

where  $y_{cd,t}$  is our outcome variable capturing the vote share of populist parties in each district in each election-year.  $X_{cd(r),baseline}$  is a matrix including our measures of economic vulnerability at the baseline. The function  $r(d)$  maps district  $d$  to its NUTS2 region  $r$ .  $Austerity_{c,t}$  is a continuous variable scoring strictly positive values in election years in which austerity measures are implemented. The key coefficient of interest is  $\beta$ , which estimates the interaction term between the two main independent variables. It reflects how the impact of national-level austerity measures varies across districts with different degrees of economic vulnerability.

We are unable to estimate the coefficient of  $X_{cr(d),baseline}$  alone, because it is absorbed by (NUTS-2) region fixed effects, i.e.  $\delta_r$ . Similarly, we are unable to estimate the coefficient of  $Austerity_{c,t}$  alone, because it is absorbed by country-year fixed effects, i.e.  $\delta_{c,t}$ . These fixed effects net out time-invariant differences across district and time-variant differences across countries. The term  $\epsilon_{cd,t}$  captures any unaccounted-for variation.

In augmented model specifications, we enrich our baseline model with some potential

confounders. In particular, we include a China shock variable as in Colantone and Stanig (2018). Moreover, we include FDI inflow, FDI outflow, and export growth to account for economic conditions of region. We also include share of foreign-born people as a proxy for migration. This set of controls is at the baseline, i.e. the controls vary only at the NUTS-2 level. Thus, we interact each of these controls with our austerity variable to estimate their effects. We run OLS regressions with robust standard errors clustered at country-election year level.<sup>10</sup>

### 3.3 Identification

Identifying the effect of austerity presents several challenges. First, for DiD estimating a causal effect, the parallel trend assumption must be validated. To tackle this issue, we include lead variables that fake austerity measures *before* they are actually implemented. Should these leads be significant, it would be a clear violation of the parallel trend assumptions. More precisely, it would indicate that areas with large shares of manufacturing and low-skilled workers were to support populism *regardless of the presence of austerity measures*.

Second, austerity is a potential outcome to negative economic conditions. Thus, it may be the case that economic crises trigger support for populism among vulnerable voters. To address this point, we leverage the fact that austerity measures do not perfectly correlate with negative economic conditions in Western European countries. In other words, while austerity correlates negatively with economic growth and fiscal balance, our data indicate that austerity has also been implemented in periods of economic stability and growth. Thus, we run our main models on two sub-samples: 1) observations experiencing sluggish economic growth and negative fiscal balance; 2) observations experiencing average or fast economic

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<sup>10</sup>Recent studies show that treatment heterogeneity may lead to biased estimates of the average treatment effect on the treated (De Chaisemartin and d’Haultfoeuille, 2020). We test for this bias and run the recommended diagnostics, which leave our results unchanged.



growth and average or positive fiscal balance.<sup>11</sup> In doing so, we are able to detect whether periods of economic crisis drive our estimates.

Third, it seems likely that governments are strategic when implementing austerity measures. In particular, it is probably the case that governments anticipate the negative electoral consequences of austerity and that they time its implementation to mitigate voters response. For instance, there is a clear tendency for governments to implement austerity early and avoid these policies later in the electoral cycle, especially if their legislative majority is at risk (Hübscher, 2016; Hübscher and Sattler, 2017). We note that governments strategic behavior leads us to *underestimate* the effect of austerity on vulnerable voters.

Let us add that our goal is to test the general relationship between austerity and populism in a broad range of countries and periods. Cleaner identification strategies are possible for specific, well-selected austerity episodes in specific, well-selected countries (see for instance Fetzer (2019)). The question arises to what extent these results are unique to a case, or if they apply to a broader range of countries and time periods. This leads to a well-documented trade-off between internal and external validity. For a broad, comparative analysis over time, identification is more difficult and requires stronger assumptions, but in exchange we are able to explore to what extent austerity contributes to populism in general or only in particular and unique circumstances.

### 3.4 Results

**Populism.** Table 1 shows the results of our main analysis. The coefficient of the interaction between variables capturing economic vulnerability and *Austerity* is positive and significant as expected. This is true both in the baseline models (Models 1 and 2) and in models including controls (Models 3 and 4). Both share of low-skilled workers and share of manufacturing

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<sup>11</sup>We rely on the value of the lower quartile to split the sample.

workers give similar results and their coefficients remain positive and significant, even when we include both at the same time on the right-hand side of the models (Models 5 and 6).

**Table 1:** Austerity and Populism: District-level analysis

	(1)	(2)	(3)	(4)	(5)	(6)
	OLS					
	Populism Score					
Share of Low Skilled Workers*Austerity	0.013** (0.003)		0.012** (0.003)		0.010** (0.003)	0.009** (0.003)
Share of Manufacturing Workers*Austerity		0.945** (0.315)		1.004** (0.362)	0.672* (0.283)	0.707* (0.312)
Observations	13,762	13,709	11,242	11,242	13,709	11,242
R-squared	0.004	0.004	0.005	0.005	0.006	0.006
Controls	No	No	Yes	Yes	No	Yes
NUTS-2 fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Country-election year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes

Robust standard errors in parentheses \*\* p<0.01, \* p<0.05

Note: OLS regressions with robust standard errors clustered by county-election year in parentheses. The unit of observation is NUTS2-election year. The outcome variable is populism score. The key independent variable is the share of manufacturing workers or share of low-skilled workers interacted with austerity measures. Sources: GPS (Norris 2019), Devries et al (2016), Alesina et al (2019), and Colantone and Stanig (2018).

To ease the interpretation of the interaction term, we plot the estimates graphically. In particular, Figures 3 and 4 show the linear predictions of *Populism Score* for different low-skilled workers and shares of manufacturing workers in the case of no austerity measures and in the case of an average value of austerity measures. There are three take-home messages from these figures. First, support for populism is always higher with austerity than without austerity, but the difference is small and not significant (in the case of *Share of Manufacturing Workers*) in not economically vulnerable areas. Second, support for populism does not increase in regions with high shares of manufacturing workers and low-skilled workers without austerity, i.e. the linear prediction is a flat line. Third, *Populism Score* increases

dramatically in regions with high shares of low-skilled workers and manufacturing workers with (average) austerity measures.

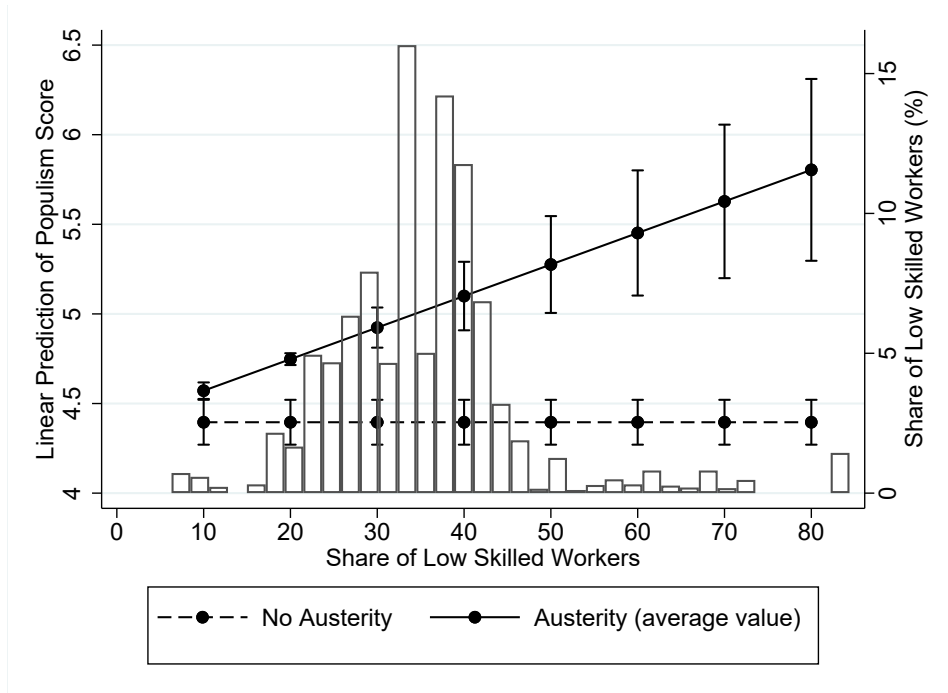
The magnitude of these effects is quite large. In countries implementing (average) austerity measures, the share of votes for populist parties increases by 8 percent, moving *Share of Low-Skilled Workers* from one standard deviation below the mean to one standard deviation above the mean. The result is similar for *Share of Manufacturing Workers*. In countries implementing (average) austerity measures, support for populism increases by 11 percent, moving *Share of Manufacturing Workers* from one standard deviation below the mean to one standard deviation above the mean.<sup>12</sup>

**Identification.** To corroborate our identification strategy, we perform two further tests. First, to check the validity of the parallel trend assumption, we include one-election year leads of *Austerity* in our main model specification. In doing so, we test whether austerity measures implemented in year  $t+1$  have an effect on elections held in year  $t$ . Should the coefficient of these leads be significant, it would cast doubt on the validity of the parallel trend assumption, indicating that districts experiencing austerity measures were on a different trend in terms of support for populism *regardless* of austerity. The coefficient of the leads is always *not* significant (Table 2). Similarly, the coefficient of lagged values of austerity are

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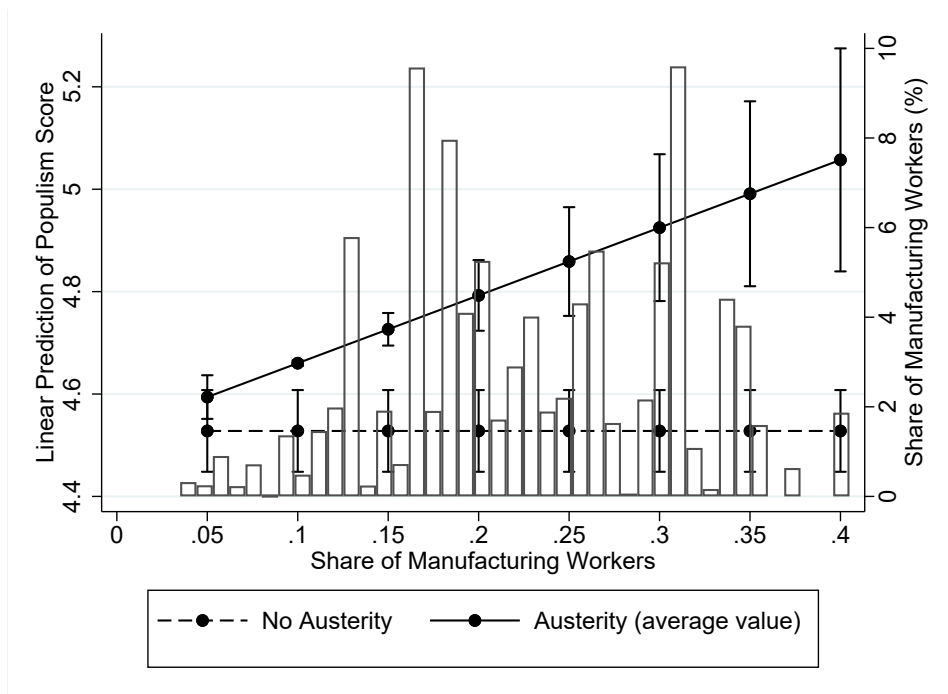
<sup>12</sup>Figures C1 and C2 in Appendix C show these effects for areas with small shares of unskilled and manufacturing workers (i.e. one standard deviation below the mean) and for areas with large shares of unskilled and manufacturing workers (i.e. one standard deviation above and mean) with and without austerity. The interpretation of these effects is similar: With austerity, the support of populism increases differentially more in areas with large shares of unskilled and manufacturing workers than in areas with small share of unskilled and manufacturing workers. Without austerity, there is no difference between these two areas.

**Figure 3:** Austerity and Populism: Share of Low-Skilled Workers



Note: Linear predictions from Model 2 in Table 1.

**Figure 4:** Austerity and Populism: Share of Manufacturing Workers



Note: Linear predictions from Model 1 in Table 1.

always not significant, indicating the effect of austerity measures does not last more than one electoral cycle.

Second, we re-run our main models, splitting the sample with respect to macro-economic conditions, i.e. low fiscal balance and high economic growth and high fiscal balance. Results are reported in Tables 3. As expected, the effects are larger when fiscal balance is negative than when fiscal balance is positive. However, our main findings remain unchanged even in cases in which there are no economic crises, i.e. when macro-economic conditions are sound. The effect for share of low-skilled workers is more robust than the effect for share of manufacturing workers. In short, our results are not a by-product of the correlation between austerity and economic crisis: austerity has a role on its own in swaying voters toward populism.<sup>13</sup>

**Additional evidence.** So far the analysis has showed that austerity triggers support for populism in economically vulnerable areas. We now turn our attention to support for radical parties, many of which take a populist position. In particular, we look at the share of votes for radical left and right parties. While we report all the details of this analysis in Appendix B, we summarize here the main findings: 1) only radical right parties gain from austerity (Table B1 and Figures B1 and B1); 2) results hold using different measures of extreme/radical parties (Table B2); 3) whether left/right governments implement austerity does not appear to matter in explaining the support for radical right/left parties (Tables B3-B6).<sup>14</sup>

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<sup>13</sup>Table C1 in Appendix C shows that results are similar if we use economic growth rather than fiscal balance. Moreover, Table C2 in Appendix C shows that our results hold when we include fiscal balance and economic growth in interaction with economic vulnerability variables.

<sup>14</sup>Left/right incumbency measures the ideology of the cabinet *before* the election, using

**Table 2:** Austerity and Populism (with leads and lags)

	(1)	(2)	(3)	(4)	(5)	(6)
	OLS					
	Populism Score					
Share of Low Skilled Workers*Austerity	0.018**		0.013**		0.018**	
	(0.007)		(0.004)		(0.006)	
Share of Low Skilled Workers*Austerity (lead)	0.009				0.009	
	(0.005)				(0.005)	
Share of Low Skilled Workers*Austerity (lag)			0.003		0.002	
			(0.005)		(0.005)	
Share of Manufacturing Workers*Austerity		1.320*		0.930**		1.277*
		(0.535)		(0.317)		(0.500)
Share of Manufacturing Workers*Austerity (lead)		0.664				0.612
		(0.409)				(0.380)
Share of Manufacturing Workers*Austerity (lag)				0.582		0.530
				(0.379)		(0.355)
Observations	13,710	13,762	13,710	13,762	13,762	13,710
R-squared	0.006	0.005	0.004	0.005	0.006	0.006
Controls	No	No	No	No	No	No
NUTS2 FE	Yes	Yes	Yes	Yes	Yes	Yes
Country-year FE	Yes	Yes	Yes	Yes	Yes	Yes

Robust standard errors in parentheses \*\* p<0.01, \* p<0.05

Note: OLS regressions with robust standard errors clustered by county-election year in parentheses. The unit of observation is NUTS2-election year. The outcome variable is the share of votes for populist parties. The key independent variable is the share of manufacturing workers or share of low-skilled workers interacted with austerity measures. Sources: GPS (Norris 2019), Devries et al (2016), Alesina et al (2019), and Colantone and Stanig (2018).

**Table 3:** Austerity and Populism: The Role of Fiscal Balance

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
OLS												
Populism Score												
Low Fiscal Balance						High Fiscal Balance						
Share of Low Skilled Workers*Austerity	0.018** (0.007)		0.019* (0.007)	0.015* (0.007)	0.016* (0.007)	0.013** (0.004)		0.012** (0.004)			0.009** (0.003)	0.009** (0.003)
Share of Manufacturing Workers*Austerity		1.568** (0.584)		1.633* (0.707)	1.385* (0.573)	1.230* (0.580)		0.901* (0.381)		1.247** (0.423)	0.599 (0.343)	0.929* (0.366)
Observations	3,698	3,698	3,332	3,332	3,698	3,332	10,064	10,012	7,909	7,909	10,012	7,909
R-squared	0.004	0.004	0.009	0.010	0.007	0.012	0.003	0.004	0.006	0.006	0.005	0.008
Controls	No	No	Yes	Yes	No	Yes	No	No	Yes	Yes	No	Yes
NUTS-2 fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country-election year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Robust standard errors in parentheses \*\* p<0.01, \* p<0.05

Note: OLS regressions with robust standard errors clustered by county-election year in parentheses. The unit of observation is NUTS2-election year. The outcome variable is the share of votes for populist parties. The key independent variable is the share of manufacturing workers or share of low-skilled workers interacted with austerity measures.

In addition, our results indicate that in regions with high shares of unskilled and manufacturing workers, austerity leads to 1) lower support for international trade, the EU, and migration; 2) negative attitudes against minorities; and 3) higher support for conservative values (Tables B7 and B8). This combination of economic-based and identity-based preferences may explain why mainly radical right parties gain electorally from austerity measures in economically vulnerable areas.

Moreover, we perform other robustness checks, whose results we report in Appendix C. First, our results are similar if we use other measures of support for populism: 1) share of votes for moderately and strongly populist parties (Figures C3-C4); 2) share of votes for strongly populist parties (Figures C5 and C6); 3) using data from PopuList, share of votes for populist parties (Figures C7 and C8).

Second, we check whether there are linearity issues with our interaction terms. Specifically, we run our main model specification, replacing *Austerity* with two dummies for high and low austerity measures. We use the average value of (strictly positive) *Austerity* to create these two dummies. Table C3 reports the results, showing that severe austerity measures are driving our results, especially with respect to *Share of Low-Skilled Workers*. Moreover, we run our main model specification, replacing *Austerity* with a not-logged measure. Results are similar to the ones reported above (Table C4).

Third, results are similar (and if anything higher) if we use a measure of austerity based on spending cuts (Table C5).<sup>15</sup> Finally, we show that our results hold if we exclude one the average left-right position of all parties in government. Data come from the Comparative Manifestos Project.

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<sup>15</sup>Results are also similar for all the other tests (available upon request).



country at a time (Figures C9 and C10). In other words, our results do not depend on the inclusion of any specific country in our sample.

## 4 Individual-level voting

Our analysis at the individual level includes 12 Western European countries and (up to) 46,918 respondents for which data is available. Our time span covers (up to) eight survey waves, 2002 and 2016. The survey data are from the European Social Survey (ESS). Below, we describe the data and the empirical strategy and report our main results. In line with the district-level analysis, we exploit variation in individual exposure to national austerity measures depending on our measures of economic vulnerability. We expect that the impact of national austerity measures on populist votes of an individual is moderated by her economic vulnerability.

### 4.1 Data

Our main outcome variable measures the support for populism of each respondent in the ESS. Specifically, we use the populism score of each party as described in the previous section and match this score to the party for which respondents in the ESS voted in the previous election.

To measure austerity, we rely on the variable described in the previous section. In our main model specification, we use a dummy scoring one if any austerity measure is in place.<sup>16</sup> To capture economic vulnerability, we use years of education of each respondent, which identifies low-skilled workers in line with the district-level analysis. Years of education has the advantage of being homogenous across countries that have different education systems. We

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<sup>16</sup>In addition analyses (available upon request), we show that our results are virtually the same for education if we use a continuous measure of austerity. They are weaker for manufacturing and RTI, though the sign of the main coefficient remains the same.

split this variable into three dummies: Lower Secondary (less than 10 years of education); 2) Upper Secondary (more than 9 and less than 15 years of education); and 3) Tertiary (more than 15 years of education). Tertiary is the baseline category in the analysis, i.e. it is the excluded variable. Furthermore, we use a dummy scoring one if respondents work in manufacturing. This variable is built on the NACE trade category reported in the ESS.

In addition to these two variables, we also include a variable measuring exposure to automation at the individual level. Following Goos, Manning and Salomons (2014), we convert varying occupational measures into a 2-digit ISCO-88 code and link it to an aggregated “routine task intensity” (RTI) index.<sup>17</sup> Then, following Gingrich (2019), we aggregate the RTI measure into five quintiles, rescaled 0-1, ranging from least to most exposed so that we are able to identify broad categories of exposure.<sup>18</sup>

## 4.2 Empirical strategy

In line with the analysis at the district level, our analysis at the individual level is a standard DiD. More specifically, we estimate the following baseline model:

$$y_{ic,w} = \alpha + X_{ic,w}\zeta' + X_{ic,w} \times Austerity_{c(i),w}\eta + \gamma_{cw} + \epsilon_{ic,w}, \quad (2)$$

where  $y_{ic,w}$  is our outcome variable capturing the respondents  $i$  support for populism in wave  $w$ .  $X_{ic,w}$  is a matrix including our measures of economic vulnerability: education, manufacturing, and exposure to automation.<sup>19</sup>  $Austerity_{c,w}$  is a dummy scoring one if austerity

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<sup>17</sup>The RTI index categorizes occupations based on the skills most exposed to pressures of automation through the 1980s and 1990s. This measure is missing for three major occupational groups (ISCO 23, 33, and 61), which are excluded from the analysis.

<sup>18</sup>Results are similar if we use the continuous version of the RTI developed by Goos, Manning and Salomons (2014).

<sup>19</sup>We are unable to use the baseline values of our measures of economic vulnerability, since

measures are implemented by country  $c$  in the ESS wave  $w$ . The function  $c(i)$  maps respondent  $i$  to its country  $c$ . In this analysis, the key coefficient of interest is  $\eta$ , which estimates the interaction term between the two main independent variables. We are unable to estimate the coefficient of  $Austerity_{c,w}$  alone, because it is absorbed by country-year fixed effects, i.e.  $\gamma_{c,t}$ . The term  $\epsilon_{ic,w}$  captures the residuals.

In the augmented model specifications, we enrich our baseline model with a host of individual-level characteristics. In particular, we include gender and age, which absorb an important variation of our outcome. Moreover, we add dummies for retired respondent, student, unemployed respondent, self-employed respondent, and respondent working in services. We interact each of these controls with *Austerity* to estimate their effects. We run OLS regressions with robust standard errors.

### 4.3 Results

We report the analysis for education in Table 4 (Models 1 and 2). The coefficient of the interaction between *Lower Secondary Education* and *Austerity (dummy)* is always positive and significant. This indicates that low-education respondents are more likely to support a populist party during austerity than they are without austerity. Interestingly, the coefficient of the interaction between *Upper Secondary Education* and *Austerity (dummy)* is also positive and significant. This indicates that support for populism is not limited to the people with the lowest level of education during austerity, though the magnitude of the effect is larger for people with lower secondary educations than for people with upper secondary educations. Note also that the coefficients of *Lower Upper Education* and *Upper Upper Education* alone are also positive and significant, indicating that respondents with a secondary education are more likely to support populism with and without austerity than respondents with a higher

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the ESS is a repeated cross-section and not a panel. That is, the same respondents are not observed in the different waves.

level of education.

**Table 4:** Austerity and Populism: Individual-level analysis

	(1)	(2)	(3)	(4)	(5)	(6)
	OLS					
	Populism Score					
Lower Secondary Education	0.040*	0.040*				
	(0.016)	(0.016)				
Upper Secondary Education	0.086**	0.086**				
	(0.018)	(0.018)				
Manufacturing			-0.021	-0.022		
			(0.020)	(0.020)		
RTI					-0.035	-0.007
					(0.023)	(0.024)
Lower Secondary Education*Austerity (dummy)	0.172**	0.172**				
	(0.032)	(0.032)				
Upper Secondary Education*Austerity (dummy)	0.070*	0.070*				
	(0.033)	(0.033)				
Manufacturing*Austerity (dummy)			0.082*	0.080*		
			(0.034)	(0.034)		
RTI*Austerity (dummy)					0.113**	0.155**
					(0.042)	(0.044)
Constant	4.625**	4.625**	4.765**	4.222**	4.720**	4.099**
	(0.064)	(0.064)	(0.064)	(0.203)	(0.070)	(0.215)
Observations	46,918	46,918	44,169	44,038	39,069	38,957
R-squared	0.332	0.332	0.334	0.337	0.337	0.340
Controls	No	Yes	No	Yes	No	Yes
NUTS2 FE	Yes	Yes	Yes	Yes	Yes	Yes
Country-year FE	Yes	Yes	Yes	Yes	Yes	Yes

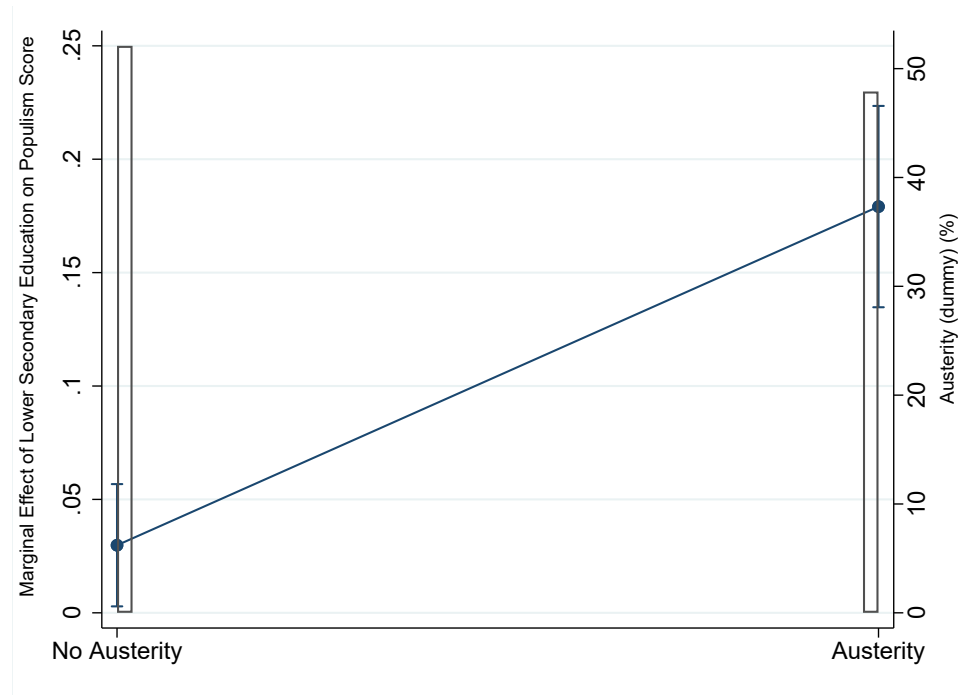
Robust standard errors in parentheses \*\* p<0.01, \* p<0.05

Note: OLS regressions with robust standard errors in parentheses. The unit of observation is individual-survey wave. The outcome variable is populism score. The key independent variables are economic vulnerability variables interacted with austerity measures. *Controls* include age and gender as well as dummies for retired respondent, student, unemployed respondent, self-employed respondent, and respondent working in services (all interacted with austerity). Sources: GPS (Norris 2019), Devries et al (2016), Alesina et al (2019), and ESS (2020).

To ease the interpretation of the interaction term, we plot the estimates graphically. Figure 5 shows the marginal effect of *Lower Secondary Education* on *Populism Score* without

and with austerity. The take-home message is that the probability of supporting populism is significantly higher for low-education individuals than it is for high-education individuals in the case of austerity measures. The effect is very sizable: *Populism Score* is six times higher with austerity than it is without austerity.

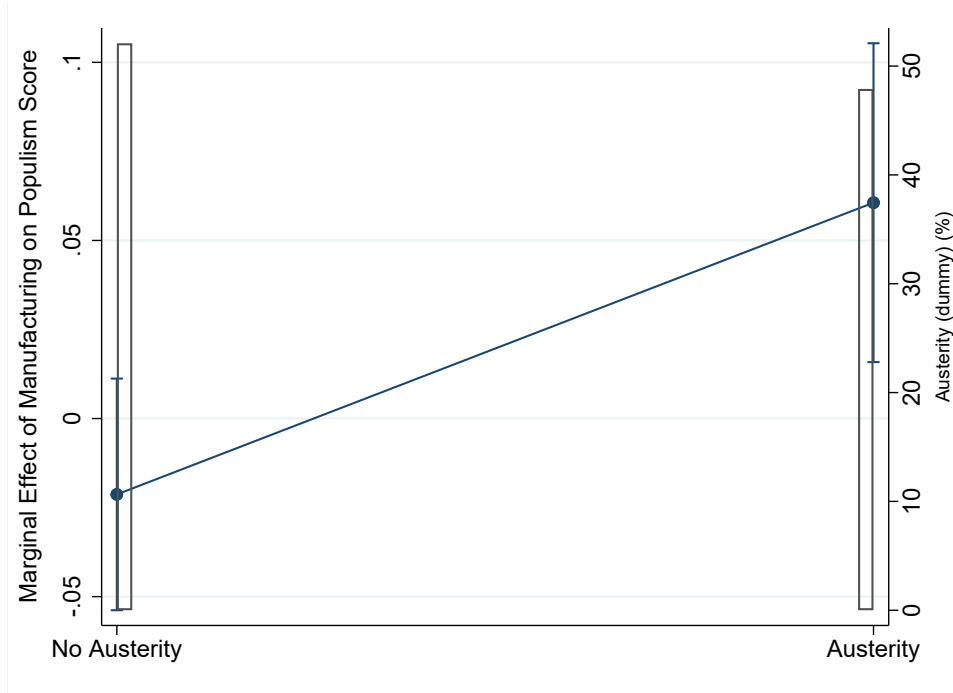
**Figure 5:** Austerity and Populism: Lower Secondary Education



Note: Marginal effects from Model 1 in Table 4.

We report the analysis for manufacturing in Table 4 (Models 3 and 4). The coefficient of the interaction between *Manufacturing* and *Austerity (dummy)* is always positive and significant. Figure 6 shows the marginal effect of *Manufacturing* on *Populism Score* without and with austerity. The take-home message is that voters working in manufacturing are significantly more likely to support populist parties in case of austerity measures than they are in case of no austerity. Note that the probability of supporting populism is not statistically different between people working in manufacturing and people working in other sectors when no austerity measures are in place.

**Figure 6:** Austerity and Populism: Manufacturing

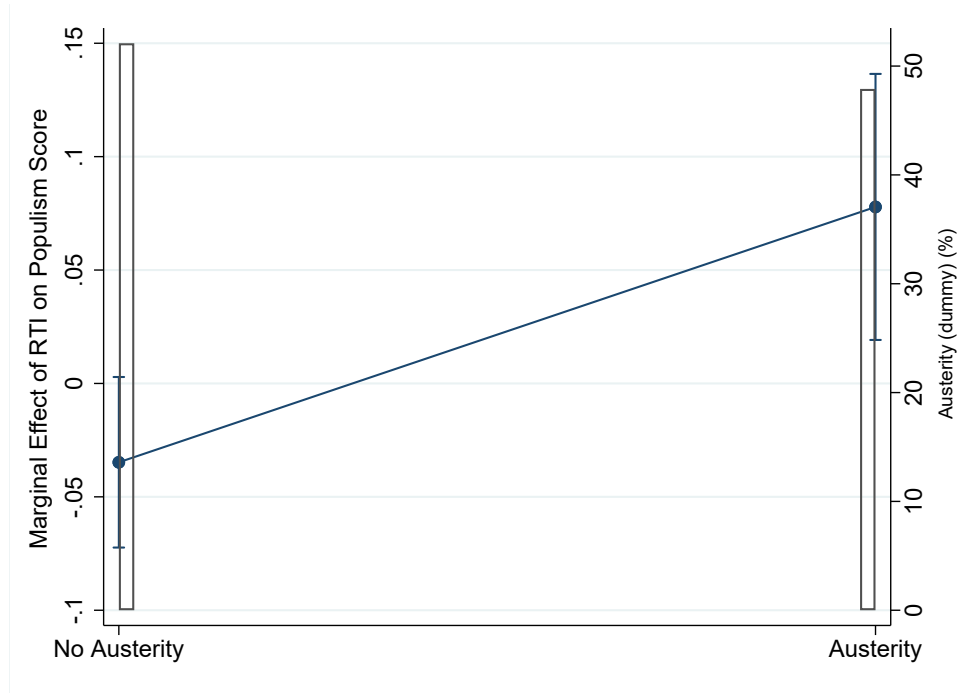


Note: Marginal effects from Model 3 in Table 4.

We report the analysis for routine jobs in Table 4 (Models 5 and 6). The coefficient of the interaction between *RTI* and *Austerity (dummy)* is always positive and significant. Figure 7 shows a marginal effect of *RTI* on *Populism Score* with or without austerity. There is no difference in the probability of supporting populism between individuals whose occupations are exposed to automation and individuals whose occupations are not exposed to automation without austerity. In the case of austerity, the probability of voting populist parties for individuals whose occupations are exposed to automation is significantly higher than it is for individuals whose occupations are not exposed to automation.

Finally, we perform a large number of robustness checks in line with the district-level analysis. These tests, which leave our results unchanged, are available upon request. All in all, the individual-level analysis confirms the findings of the district-level analysis: austerity increases support for populism differentially more among the losers than among the winners from globalization and automation.

**Figure 7:** Austerity (Dummy) and Populism: RTI



Note: Marginal effects from Model 5 in Table 4.

## 5 Conclusion

This paper examines the political effects of fiscal austerity in open economies. It shows that economically vulnerable voters, i.e. low-skilled workers, workers in the manufacturing industry, and workers in routine jobs, increasingly turn to populist parties when governments implement fiscal cutbacks. We find this effect for both district-level election and individual-level voting data in Western European countries since the 1990s. Austerity has distributional effects that magnify rather than mitigate the negative economic effects of globalization and technological change on many workers. This raises doubts among these voters that governments stand by their promise to make globalization a success for everyone.

Our results imply that economic policy and government decisions play a crucial role in the mechanism that led to the backlash against globalization. Governments have a variety of means to moderate the adverse effects of globalization and technological change. If gov-

ernments do not use these means to compensate voters for the increased social risk that they face in open economies, populist parties will be able to exploit the growing anti-globalization sentiment among dissatisfied voters. The economic origins of populism, therefore, are not purely external or unavoidable. Public policies, and especially austerity policies, are crucial because they undermine the so-called “embedded liberalism” compromise of the postwar period that protected vulnerable workers against the enhanced social risks in open economies.

Our findings also have important implications for government policy after the Covid-19 crisis. Governments have spent large amounts to buffer the economic impact of the health crisis. A crucial, long-term question now is how to deal with the newly accumulated public debt after the crisis. Our results show that a return to austerity policies after the crisis would be politically highly contentious. Government spending certainly helped to prevent large-scale economic and political destabilization, but the pandemic still has had very unequal effects on citizens (Bambra, Lynch and Smith, Forthcoming). If, on top of that, vulnerable groups will be the ones who pay the price for government interventions during the crisis, then this is likely to fuel further support for populist rhetoric and populist parties.



## References

- Alesina, Alberto, Carlo Favero and Francesco Giavazzi. 2019. *Austerity: When It Works and When It Does Not*. Princeton: Princeton University Press.
- Alesina, Alberto, Dorian Carloni and Giampaolo Lecce. 2011. “The Electoral Consequences of Large Fiscal Adjustments.” NBER Working Paper No. 17655.
- Arias, Eric and David Stasavage. 2019. “How Large Are the Political Costs of Fiscal Austerity.” *Journal of Politics* 81(4):1517–1522.
- Armingeon, Klaus, Kai Guthmann and David Weisstanner. 2016. “Choosing the Path of Austerity: A Neo-Functionalist Explanation of Welfare-policy Choices in Periods of Fiscal Consolidation.” *West European Politics* 39(4):628–647.
- Armingeon, Klaus, Virginia Wenger, Fiona Wiedemeier, Christian Isler, Laura Knöpfeland David Weisstanner and Sarah Engler. 2019. “Comparative Political Data Set 1960-2017.” Electronic Database, available at <http://www.cps-data.org>.
- Autor, David H., David Dorn and Gordon H. Hanson. 2013. “The China Syndrome: Local Labor Market Effects of Import Competition in the United States.” *American Economic Review* 103(6):2121–2168.
- Baccini, Leonardo, Pablo M. Pinto and Stephen Weymouth. 2017. “The Distributional Consequences of Preferential Trade Liberalization: Firm-Level Evidence.” *International Organization* 71(2):373–395.
- Baccini, Leonardo and Stephen Weymouth. 2018. “Gone for Good: Deindustrialization, White Voter Backlash, and U.S. Presidential Voting.” Paper presented at the Meeting of the International Political Economy Society (IPES), November.
- Ballard-Rosa, Cameron, Mashail Malik, Stephanie Rickard and Ken Scheve. Forthcoming.

- “The Economic Origins of Authoritarian Values: Evidence from Local Trade Shocks in the United Kingdom.” *Comparative Political Studies* .
- Bambra, Clare, Julia Lynch and Katherine E. Smith. Forthcoming. *The Unequal Pandemic: Covid-10 and Health Inequalities*. Bristol University Press.
- Barnes, Lucy and Timothy Hicks. 2018. “Making Austerity Popular: The Media and Mass Attitudes Towards Fiscal Policy.” *American Journal of Political Science* 62(2):340–354.
- Bartels, Larry M. 2008. *Unequal Democracy: The Political Economy of the New Gilded Age*. Princeton University Press.
- Blyth, Mark. 2013. *Austerity – The History of A Dangerous Idea*. Oxford University Press.
- Bodea, Cristina and Masaaki Higashijima. 2017. “Central Bank Independence and Fiscal Policy: Can the Central Bank Restrain Deficit Spending?” *British Journal of Political Science* 47(1):47–70.
- Broz, Lawrence J., Jeffry Frieden and Stephen Weymouth. 2019. “Populism in Place: The Economic Geography of the Globalization Backlash.” Manuscript.
- Burgoon, Brian. 2009. “Globalization and Backlash: Polanyi’s Revenge?” *Review of International Political Economy* 16(2):145–177.
- Colantone, Italo and Piero Stanig. 2018. “The Trade Origins of Economic Nationalism: Import Competition and Voting Behavior in Western Europe.” *American Journal of Political Science* 62(4):936–953.
- Copelovitch, Mark, Jeffry Frieden and Stefanie Walter. 2016. “The Political Economy of the Euro Crisis.” *Comparative Political Studies* 49(7):811–840.
- De Chaisemartin, Clément and Xavier d’Haultfoeuille. 2020. “Two-way fixed effects estimators with heterogeneous treatment effects.” *American Economic Review* .

- De Vries, Catherine and Sara Hobolt. 2020. *Political Entrepreneurs: The Rise of Challenger Parties in Europe*. Princeton University Press.
- Devries, Pete, Jaime Guajardo, Daniel Leigh and Andrea Pescatori. 2011. “A New Action-Based Dataset of Fiscal Consolidation.” IMF Working Paper 11/128.
- Fetzer, Thiemo. 2019. “Did Austerity Cause Brexit?” *American Economic Review* 109(11):3849–3886.
- Frieden, Jeffrey A. 2000. *Global Capitalism: Its Fall and Rise in the Twentieth Century*. Norton & Company.
- Gallego, Aina, Thomas Kurer and Nikolas Schöll. 2020. “Neither Left-Behind nor Superstar: Ordinary Winners of Digitalization at the Ballot Box.” *Journal of Politics* (online).
- Giger, Nathalie and Moira Nelson. 2011. “The Electoral Consequences of Welfare State Retrenchment: Blame Avoidance or Credit Claiming in the Era of Permanent Austerity.” *European Journal of Political Research* 50(1):1–23.
- Gingrich, Jane. 2019. “Did State Responses to Automation Matter for Voters?” *Research and Politics* 6(1):1–9.
- Gingrich, Jane and Ben Ansell. 2012. “Preferences in Context: Micro Preferences, Macro Contexts, and the Demand for Social Policy.” *Comparative Political Studies* 45(12):1624–1654.
- Goos, Maarten, Alan Manning and Anna Salomons. 2014. “Explaining Job Polarization: Routine-Based Technological Change and Offshoring.” *American Economic Review* 104(8):2509–2526.
- Grittersová, Jana, Indridi H. Indridason, Christina C. Gregory and Ricardo Crespo. 2016. “Austerity and Niche Parties: The Electoral Consequences of Fiscal Reforms.” *Electoral Studies* 42:276–289.

- Hacker, Jacob S. and Paul Pierson. 2010. "Winner-Take-All Politics: Public Policy, Political Organization, and the Precipitous Rise of Top Incomes in the United States." *Politics & Society* 38(2):152–204.
- Halikiopoulou, Daphne and Tim Vlandas. 2016. "Risks, Costs and Labour Markets: Explaining Cross-National Patterns of Far Right Party Success in European Parliament Elections." *Journal of Common Market Studies* 5(3):636–655.
- Hallerberg, Mark and Guntram Wolff. 2008. "Fiscal institutions, fiscal policy and sovereign risk premia in EMU." *Public Choice* 136(3):379–396.
- Hays, Jude C. 2009. *Globalization and the New Politics of Embedded Liberalism*. Oxford University Press.
- Hellwig, Timothy and David Samuels. 2007. "Voting in Open Economies – the Electoral Consequences of Globalization." *Comparative Political Studies* 40(3):283–306.
- Hopkin, Jonathan. 2020. *Anti-System Politics: The Crisis of Market Capitalism in Rich Democracies*. Oxford University Press.
- Hübscher, Evelyne. 2016. "The Political Economy of Fiscal Consolidation Revisited." *Journal of Public Policy* 36(4):573–601.
- Hübscher, Evelyne and Thomas Sattler. 2017. "Fiscal Consolidation under Electoral Risk." *European Journal of Political Research* 56(1):151–168.
- Hübscher, Evelyne, Thomas Sattler and Markus Wagner. 2020. "Voter Responses to Fiscal Austerity." *British Journal of Political Science*. DOI: <https://doi.org/10.1017/S0007123420000320>.
- Jensen, J. Bradford, Dennis P. Quinn and Stephen Weymouth. 2017. "Winners and Losers in International Trade: The Effects on US Presidential Voting." *International Organization* 71(3):423–457.

- Kayser, Mark A. and Michael Peress. 2012. "Benchmarking across Borders: Electoral Accountability and the Necessity of Comparison." *American Political Science Review* 106(3):661–684.
- Kim, Sung Eun and Krzysztof J. Pelc. Forthcoming. "Trade Competition and Worker Compensation: Why Do Some Receive More than Others?" *International Studies Quarterly* Online First.
- Kollman, Ken, Allen Hicken, Daniele Caramani, David Backer and David Lublin. 2019. "Constituency-Level Elections Archive." Ann Arbor, MI: Center for Political Studies, University of Michigan [producer and distributor]. Retrieved from <http://www.electiondataarchive.org>.
- Konstantinidis, Nikitas, Konstantinos Matakos and Hande Hutlu-Eren. 2019. "'Take Back Control'? The effects of Supranational Integration on Party-System Polarization." *Review of International Organizations* 14(2):297–333.
- Kurer, Thomas and Aina Gallego. 2019. "The Distributional Consequences of Technological Change: Worker-Level Evidence." *Research and Politics* (online).
- Margalit, Yotam. 2011. "Costly Jobs: Trade-Related Layoffs, Government Compensation, and Voting in U.S. Elections." *American Political Science Review* 105(1):166–188.
- Milner, Helen V. 1988. *Resisting Protectionism: Global Industries and the Politics of International Trade*. Princeton University Press.
- Milner, Helen V. 2018. "Globalization and its Political Consequences: The Effects on Party Politics in the West." Paper presented at the Annual Meeting of the American Political Science Association, Boston, August 30 - September 2.
- Mosley, Layna. 2000. "Room to Move: International Financial Markets and National Welfare States." *International Organization* 54(4):737–773.

- Mosley, Layna. 2003. *Global Capital and National Governments*. Cambridge University Press.
- Norris, Pippa. 2019. “The Global Party Survey (V1.0).” Available at: [www.globalpartysurvey.org](http://www.globalpartysurvey.org).
- Norris, Pippa and Ronald Inglehart. 2019. *Cultural Backlash: Trump, Brexit and the Rise of Authoritarian Populism*. Cambridge University Press.
- Owen, Erica. 2020. “Firms vs. Workers? The Politics of Openness in an Era of Global Production and Automation.” Paper presented in the Global Research in International Political Economy seminar, June 10.
- Owen, Erica and Noel Johnston. 2017. “Occupation and the Political Economy of Trade: Job routineness, offshorability and protectionist sentiment.” *International Organization* 71(4):665–699.
- Pierson, Paul, ed. 2001. *The New Politics of the Welfare State*. Oxford University Press.
- Richtie, Melinda and Hye Young You. 2020. “Trump and Trade: Protectionist Politics and Redistributive Policy.” Working Paper, UC Riverside and New York University.
- Rickard, Stephanie J. 2015. “Compensating the Losers: An Examination of Congressional Votes on Trade Adjustment Assistance.” *International Interactions* 41(1):46–60.
- Rooduijn, Matthijs, Stijn Van Kessel, Caterina Froio, Andrea Pirro, Sarah De Lange, Daphne Halikiopoulou, Paul Lewis, Cas Mudde and Paul Taggart. 2019. “The PopuList: An Overview of Populist, Far Right, Far Left and Eurosceptic Parties in Europe.” Available at: [www.popu-list.org](http://www.popu-list.org).
- Rudra, Nita. 2005. “Globalization and the Strengthening of Democracy in the Developing World.” *American Journal of Political Science* 49(4):704–730.

- Sambaris, Nicholas, Anna Schultz and Elena Nikolova. 2018. “Austerity as violence: measuring the effects of economic austerity on pro-sociality.” EBRD Working Paper No. 220.
- Scheve, Kenneth and Matthew J. Slaughter. 2001. “What Determines Individual Trade-Policy Preferences?” *Journal of International Economics* 54(2):267–292.
- Walter, Stefanie. 2010. “Globalization and the Welfare State: Testing the Microfoundations of the Compensation Hypothesis.” *International Studies Quarterly* 54(2):403–426.

# Appendices

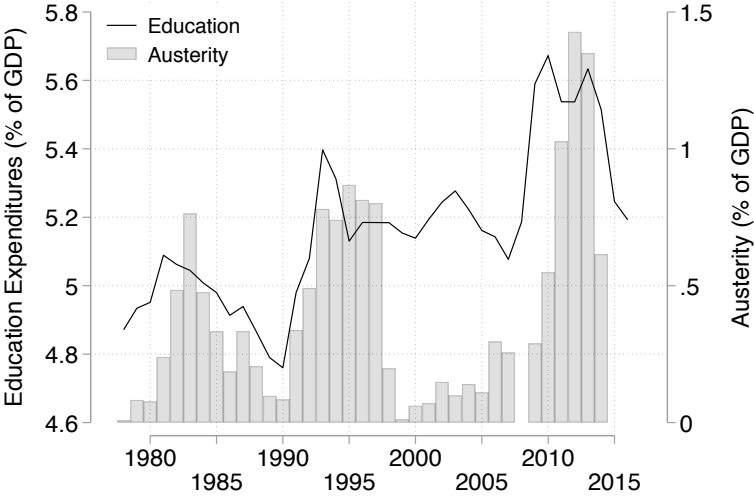
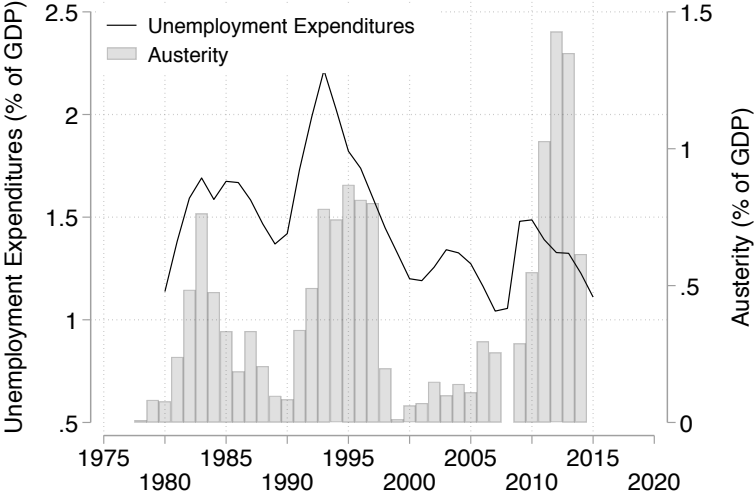
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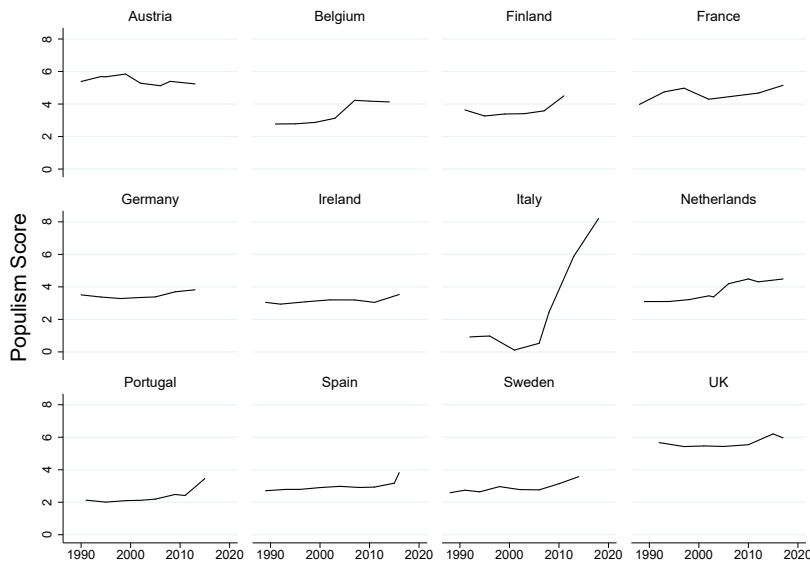


# A Descriptives

**Figure A1:** Unemployment and public education expenditures over time (source: Devries et al. (2011); Alesina, Favero and Giavazzi (2019); Armingeon et al. (2019)).

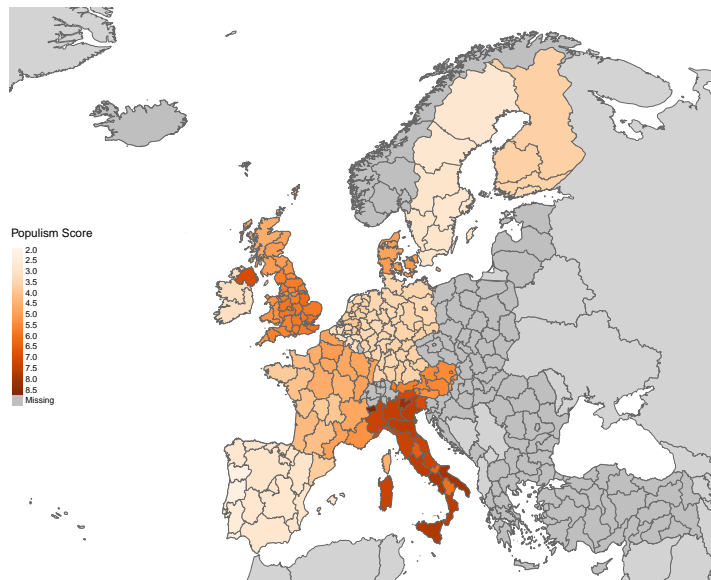


**Figure A2:** Support for Populism over time, 1991-2018



Source: Global Party Survey (Norris 2019).

**Figure A3:** Support for Populism across NUTS-2 regions, 1991-2018



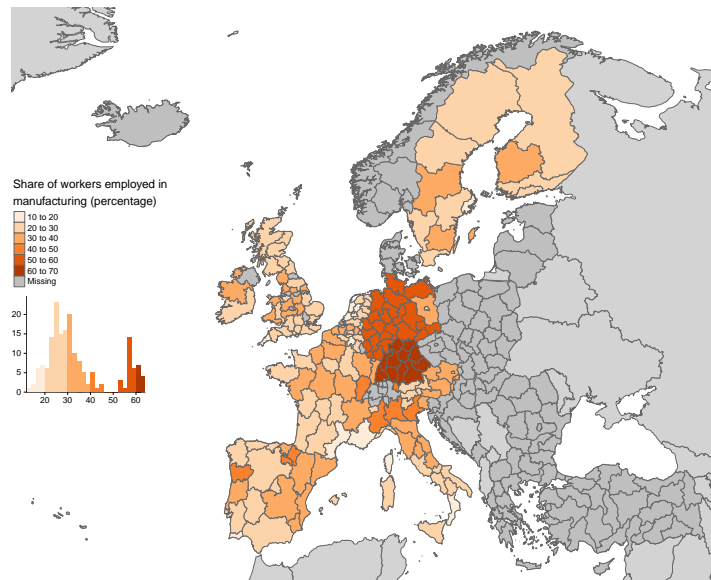
Source: Global Party Survey (Norris 2019).

**Figure A4:** Austerity (fiscal consolidation) over time, 1991-2018



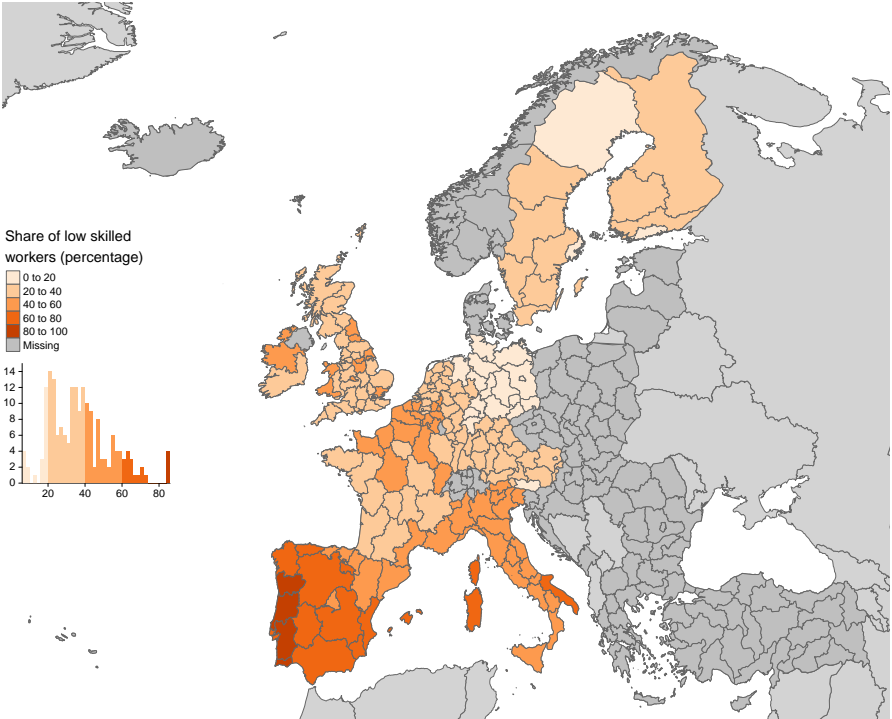
Source: Devries et al (2016) and Alesina et al (2019).

**Figure A5:** Share of Manufacturing Workers across NUTS-2 regions, 1991-2018



Source: Colantone and Stanig (2018).

**Figure A6:** Share of Low Skilled Workers across NUTS-2 regions, 1991-2018



Source: Colantone and Stanig (2018).

## B Radical Parties

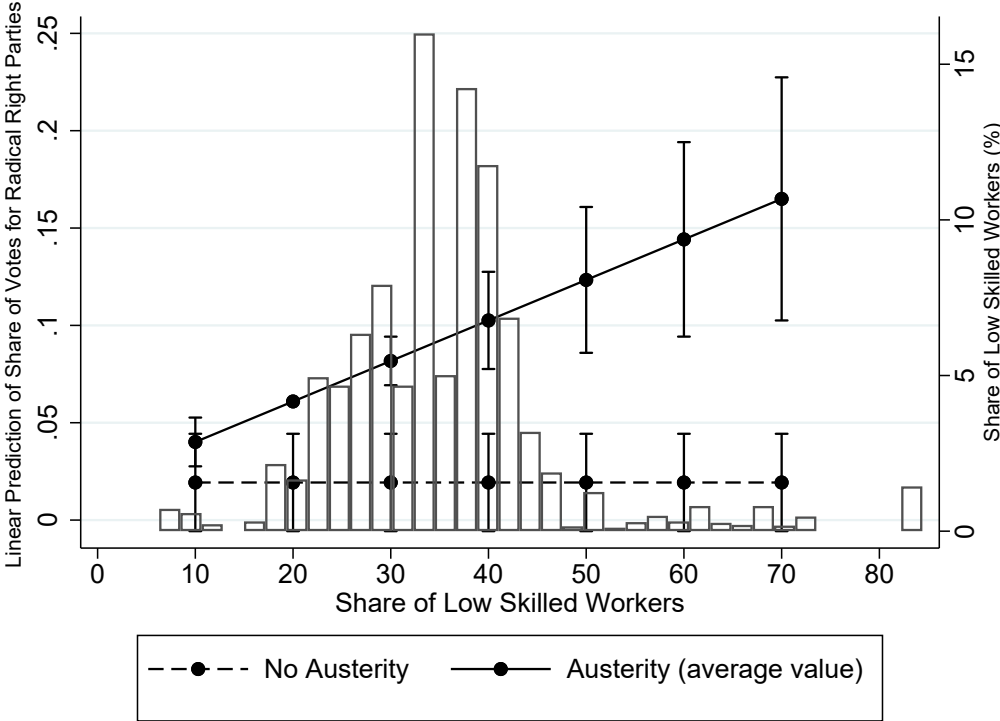
Data come from PopuList (Rooduijn et al., 2019). We rely on the same model specifications as for *Populism Score*. Table B1 shows the results of the analysis regarding radical parties. Models 1-6 report models in which share of radical left parties is the outcome, whereas Models 7-12 report models in which share of radical right parties is the outcome. The coefficient of the interaction term between economic vulnerability variables and *Austerity* is not significant for radical left parties. On the contrary, when share of radical right parties is the outcome, the coefficient of the interaction term between both *Share of Low-Skilled Workers* and *Share of Manufacturing Workers* and *Austerity* is significant across all model specifications. The effect is stronger for *Share of Low-Skilled Workers* in terms of both size of the effect and significance. In sum, attracting disgruntled, economically vulnerable workers has been the key of radical right parties success during periods of austerity.

To ease the interpretation of the interaction term, we plot the estimates graphically. In particular, Figures B1 and B2 show the linear predictions of share of votes for radical right parties for different shares of low-skilled workers and manufacturing workers without austerity measures and with an average value of austerity measures. The pattern we see is in line with Figures 3 and 4: 1) support for radical right parties is always higher with austerity than without austerity, but the difference is small and not significant (in the case of *Share of Manufacturing Workers*) in not economically vulnerable areas; 2) support for radical right parties does not increase for different levels of economic vulnerability without austerity; 3) support for radical right parties increases significantly in areas with high shares of manufacturing workers and low-skilled workers in the case of austerity measures.

The magnitude of the effects related to support for radical parties is even larger than the magnitude of the effects related to support for populism. This is also due to the fact that support for radical parties is significantly lower than support for populism. In countries im-

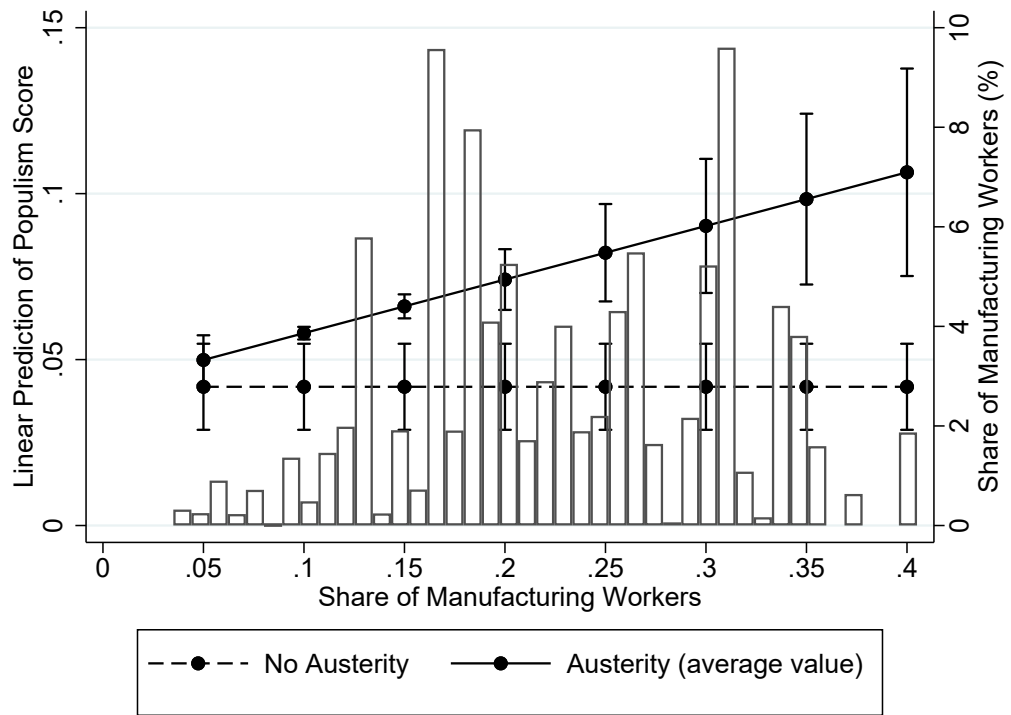
plementing (average) austerity measures, the share of votes for radical right parties increases by 63 percent moving, *Share of Low-Skilled Workers* from one standard deviation below the mean to one standard deviation above the mean. In countries implementing (average) austerity measures, support for radical right parties increases by 37 percent, moving *Share of Manufacturing Workers* from one standard deviation below the mean to one standard deviation above the mean.

**Figure B1:** Austerity and Radical Right Parties: Share of Low-Skilled Workers



Note: Linear predictions from Model 6 in Table B1.

**Figure B2:** Austerity and Radical Right Parties: Share of Manufacturing Workers



Note: Linear predictions from Model 1 in Table B1.

**Table B1:** Austerity and Radical Parties

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Share of Votes for Radical Left Parties						Share of Votes for Radical Right Parties					
	OLS											
Share of Low Skilled Workers*Austerity	-0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	-0.000 (0.000)	0.000 (0.000)	0.001** (0.001)	0.001** (0.000)	0.001** (0.000)	0.001** (0.000)	0.001** (0.000)	0.001* (0.000)	0.001* (0.000)
Share of Manufacturing*Austerity	0.028 (0.032)	0.045 (0.028)	0.035 (0.030)	0.045 (0.030)	0.045 (0.025)	0.115* (0.047)	0.124* (0.058)	0.089* (0.043)	0.124* (0.058)	0.089* (0.043)	0.094 (0.060)	0.094 (0.060)
Observations	14,875	14,820	12,315	12,315	14,820	12,315	14,875	14,820	12,315	12,315	14,820	12,315
R-squared	0.001	0.000	0.016	0.014	0.001	0.016	0.007	0.007	0.016	0.016	0.011	0.023
Controls	No	No	Yes	Yes	No	Yes	No	No	Yes	Yes	No	Yes
NUTS2 FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country-year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Robust standard errors in parentheses \*\* p<0.01, \* p<0.05

Note: OLS regressions with robust standard errors clustered by county-election year in parentheses. The unit of observation is NUTS2-election year. The outcome variable is the share of votes for radical left and right parties. The key independent variable is the share of manufacturing workers or share of low-skilled workers interacted with austerity measures. Sources: PopuList, Devries et al (2016), Alesina et al (2019), and Colantone and Stanig (2018).



**Table B2:** Austerity and Radical Parties

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	OLS							
	Share of Votes for Radical Left Parties				Share of Votes for Radical Right Parties			
Share of Manufacturing*Austerity	0.011 (0.043)		0.042 (0.031)		0.104** (0.037)		0.120** (0.039)	
Share of Low Skilled Workers*Austerity		-0.000 (0.001)		0.000 (0.000)		0.001 (0.001)		0.001 (0.001)
Observations	14,875	14,819	12,316	12,316	14,875	14,819	12,316	12,316
R-squared	0.000	0.000	0.025	0.024	0.004	0.001	0.008	0.007
Controls	No	No	Yes	Yes	No	No	Yes	Yes
NUTS2 fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country-election year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Robust standard errors in parentheses ** p&lt;0.01, * p&lt;0.05</b>								

Note: OLS regressions with robust standard errors clustered by county-election year in parentheses. The unit of observation is NUTS2-election year. The outcome variable is the share of votes for radical left and right parties. The key independent variable is the share of manufacturing workers or share of low-skilled workers interacted with austerity measures. Sources: Parlgov, Devries et al (2016), Alesina et al (2018), and Colantone and Stanig (2018).

**Table B3:** Austerity and Radical Parties (accounting for incumbency)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
OLS								
	Share of Votes for Radical Left Parties			Share of Votes for Radical Right Parties				
	Right Incumbent			Left Incumbent				
Share of Manufacturing*Austerity	0.049 (0.071)	0.119* (0.054)	0.132* (0.053)	0.103* (0.048)				
Share of Low Skilled Workers*Austerity	0.000 (0.001)	0.001 (0.001)	0.002 (0.001)					0.002* (0.001)
Observations	8,175	8,134	6,648	6,648	6,700	6,685	5,668	5,668
R-squared	0.003	0.000	0.095	0.092	0.005	0.005	0.016	0.025
Controls	No	No	Yes	Yes	No	No	Yes	Yes
NUTS2 fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country-election year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Robust standard errors in parentheses ** p&lt;0.01, * p&lt;0.05</b>								

Note: OLS regressions with robust standard errors clustered by county-election year in parentheses. The unit of observation is NUTS2-election year. The outcome variable is the share of votes for populist parties. The key independent variable is the share of manufacturing workers or share of low skilled workers interacted with austerity measures. Sources: GPS (Norris 2019), Devries et al (2016), Alesina et al (2019), and Colantone and Stanig (2018).

**Table B4:** Austerity and Radical Parties (accounting for incumbency)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
OLS								
	Share of Votes for Radical Left Parties				Share of Votes for Radical Right Parties			
	Left Incumbent				Right Incumbent			
Share of Manufacturing* Austerity	0.003 (0.021)	-0.001 (0.024)	-0.001 (0.024)	0.091 (0.050)	0.110** (0.039)			
Share of Low Skilled Workers* Austerity	-0.001 (0.000)	-0.001 (0.000)	-0.001 (0.000)	0.001* (0.001)	0.001** (0.000)			
Observations	6,700	6,685	5,668	8,175	8,134	6,648	6,648	6,648
R-squared	0.000	0.002	0.000	0.002	0.013	0.016	0.030	0.033
Controls	No	No	Yes	Yes	No	No	Yes	Yes
NUTS2 fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country-election year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Robust standard errors in parentheses ** p&lt;0.01, * p&lt;0.05</b>								

Note: OLS regressions with robust standard errors clustered by county-election year in parentheses. The unit of observation is NUTS2-election year. The outcome variable is the share of votes for populist parties. The key independent variable is the share of manufacturing workers or share of low skilled workers interacted with austerity measures. Sources: GPS (Norris 2019), Devries et al (2016), Alesina et al (2019), and Colantone and Stanig (2018).

**Table B5:** Austerity and Radical Parties (accounting for incumbency)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
OLS								
	Share of Votes for Radical Left Parties			Share of Votes for Radical Right Parties				
	Right Incumbent			Left Incumbent				
Share of Manufacturing*Austerity	0.043 (0.071)	0.107* (0.052)	0.182** (0.044)	0.152** (0.042)				
Share of Low Skilled Workers*Austerity	0.000 (0.001)	0.001 (0.001)	0.002* (0.001)	0.002* (0.001)				0.002* (0.001)
Observations	8,175	8,134	6,648	6,648	6,700	6,685	5,668	5,668
R-squared	0.003	0.000	0.101	0.100	0.008	0.005	0.015	0.017
Controls	No	No	Yes	Yes	No	No	Yes	Yes
NUTS2 fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country-election year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Robust standard errors in parentheses ** p<0.01, * p<0.05								

Note: OLS regressions with robust standard errors clustered by county-election year in parentheses. The unit of observation is NUTS2-election year. The outcome variable is the share of votes for populist parties. The key independent variable is the share of manufacturing workers or share of low skilled workers interacted with austerity measures. Sources: GPS (Norris 2019), Devries et al (2016), Alesina et al (2019), and Colantone and Stanig (2018).

**Table B6:** Austerity and Radical Parties (accounting for incumbency)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	OLS							
	Share of Votes for Radical Left Parties				Share of Votes for Radical Right Parties			
	Left Incumbent				Right Incumbent			
Share of Manufacturing*Austerity	-0.039 (0.042)	-0.001* (0.000)	-0.002 (0.028)	-0.001** (0.000)	0.031 (0.017)	0.000 (0.000)	0.062* (0.029)	0.000 (0.000)
Share of Low Skilled Workers*Austerity								
Observations	6,700	6,685	5,668	5,668	8,175	8,134	6,648	6,648
R-squared	0.001	0.004	0.045	0.052	0.000	0.000	0.001	0.000
Controls	No	No	Yes	Yes	No	No	Yes	Yes
NUTS2 fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country-election year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Robust standard errors in parentheses ** p<0.01, * p<0.05								

Note: OLS regressions with robust standard errors clustered by county-election year in parentheses. The unit of observation is NUTS2-election year. The outcome variable is the share of votes for populist parties. The key independent variable is the share of manufacturing workers or share of low skilled workers interacted with austerity measures. Sources: GPS (Norris 2019), Devries et al (2016), Alesina et al (2019), and Colantone and Stanig (2018).



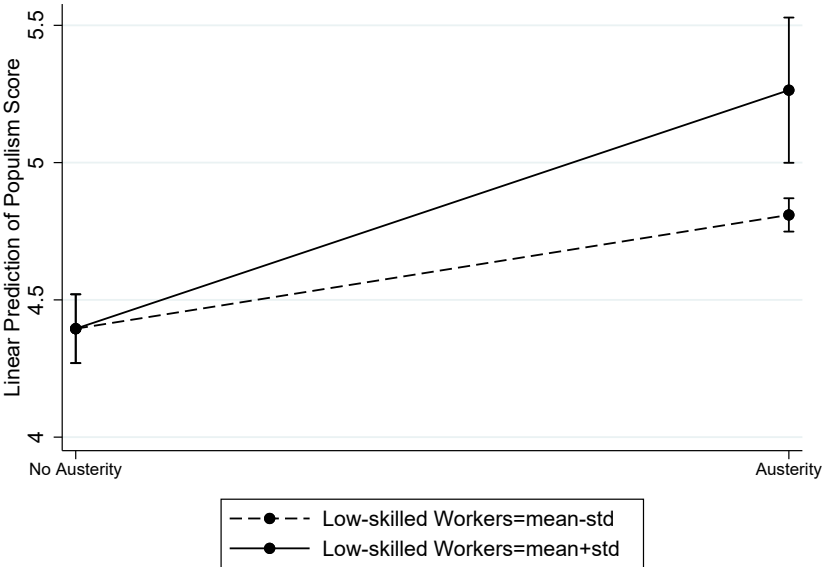
**Table B8:** Austerity and Political Attitudes: Share of Manufacturing Workers

	(1)	(2)	(3)	(4)	(5)
	Autarky	Euroskeptic	Conservatism	Against Migration	Against Minority
Share of Manufacturing Workers*Auster	0.394*	0.167*	1.033**	0.875**	0.944**
	(0.194)	(0.077)	(0.298)	(0.292)	(0.298)
Observations	14,867	14,875	13,762	13,762	13,762
R-squared	0.003	0.005	0.003	0.003	0.003
Controls	No	No	No	No	No
NUTS2 FE	Yes	Yes	Yes	Yes	Yes
Country-year FE	No	No	No	No	No
Robust standard errors in parentheses ** p<0.01, * p<0.05					

Note: OLS regressions with robust standard errors clustered by county-election year in parentheses. The unit of observation is NUTS2-election year. The outcome variable is the share of votes for populist parties. The key independent variable is the share of manufacturing workers or share of low skilled workers interacted with austerity measures. Sources: GPS (Norris 2019), Devries et al (2016), Alesina et al (2019), and Colantone and Stanig (2018).

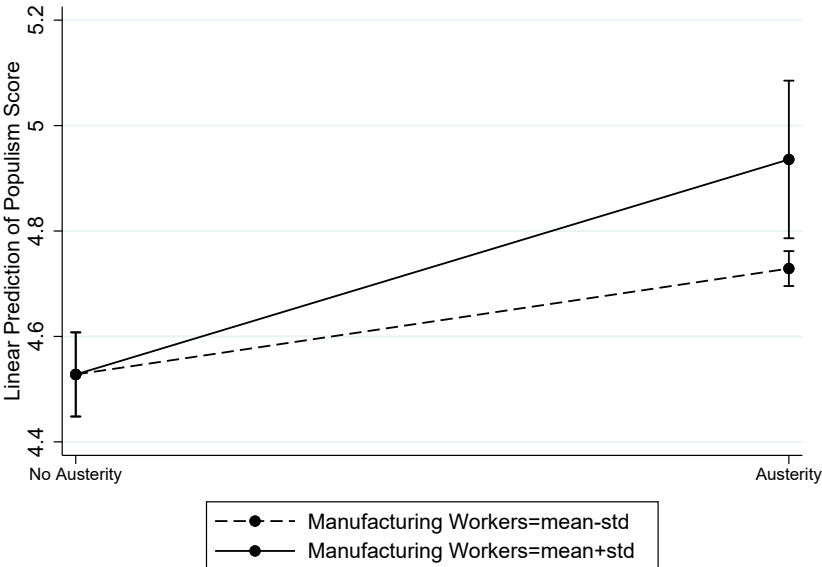
# C Robustness Checks: District-Level

Figure C1: Austerity and Radical Right Parties: Share of Low-Skilled Workers



Note: Linear predictions from Model 6 in Table B1.

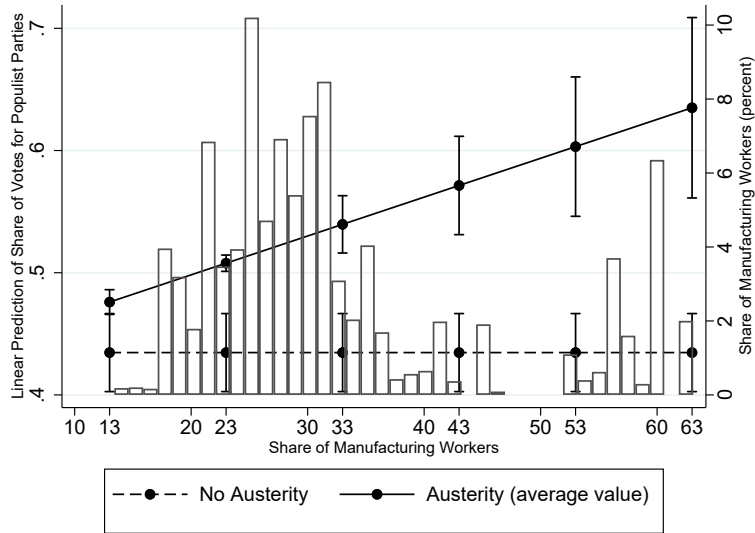
Figure C2: Austerity and Radical Right Parties: Share of Manufacturing Workers



Note: Linear predictions from Model 1 in Table B1.

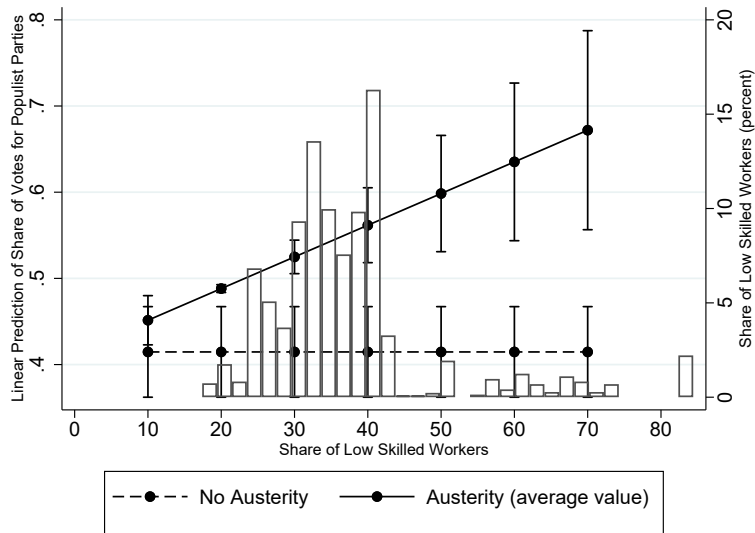


**Figure C3:** Austerity and Share of Votes for Moderately and Strongly Populist Parties: Share of Manufacturing Workers



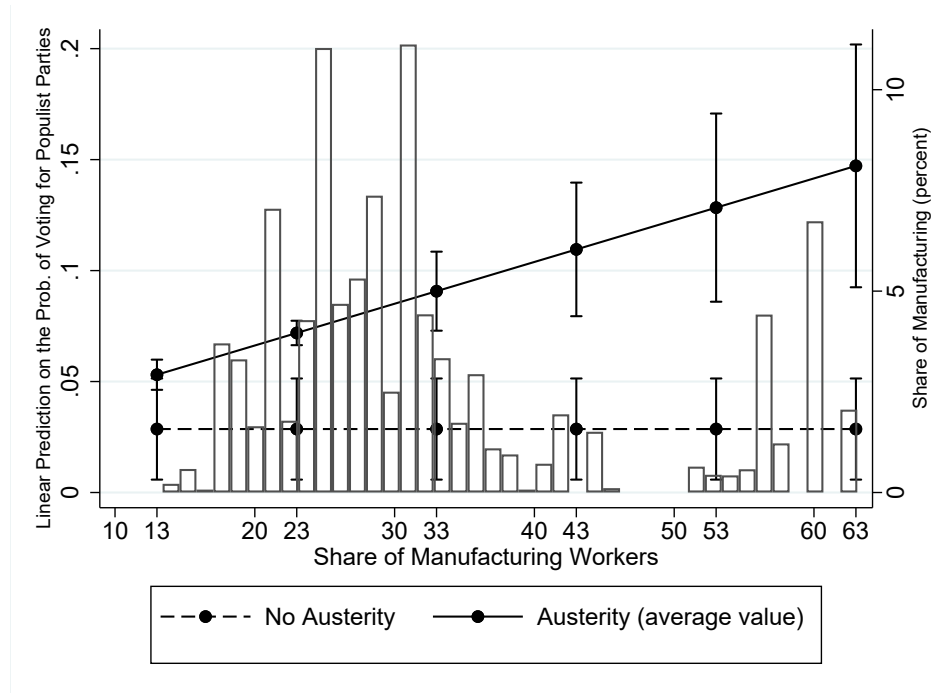
Source: Global Party Survey (Norris 2019).

**Figure C4:** Austerity and Share of Votes for Moderately and Strongly Populist Parties: Share of Low Skilled Workers



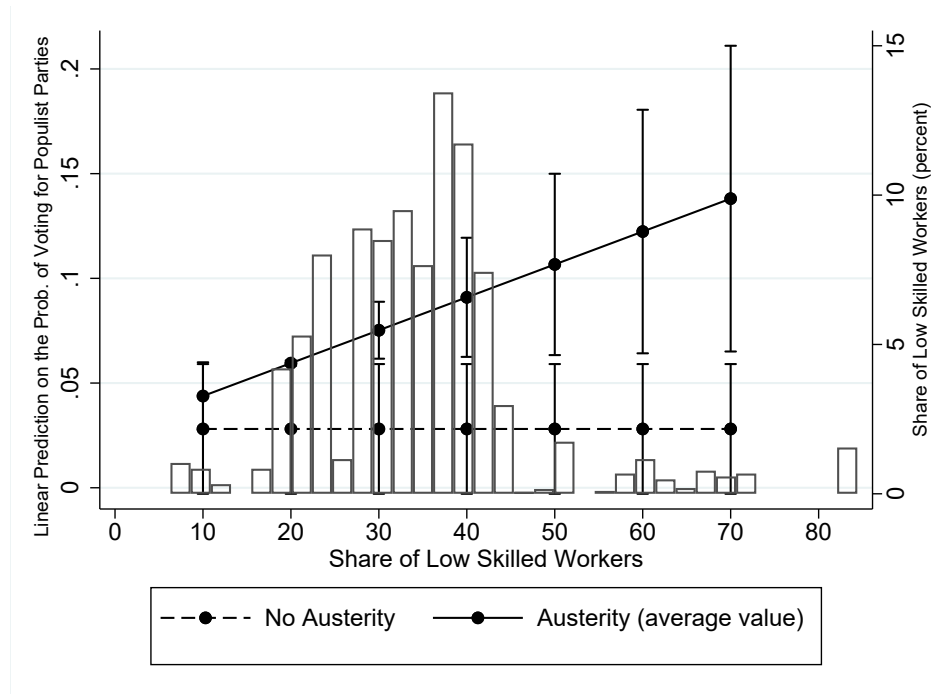
Source: Global Party Survey (Norris 2019).

**Figure C5:** Austerity and Share of Votes for Strongly Populist Parties: Share of Manufacturing Workers



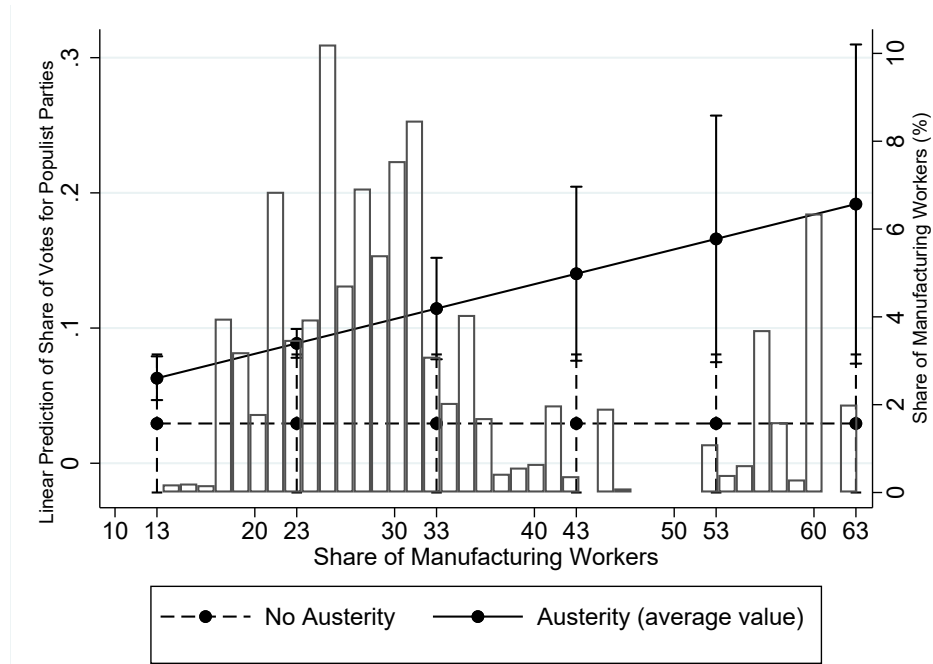
Source: Global Party Survey (Norris 2019).

**Figure C6:** Austerity and Share of Votes for Strongly Populist Parties: Share of Low Skilled Workers



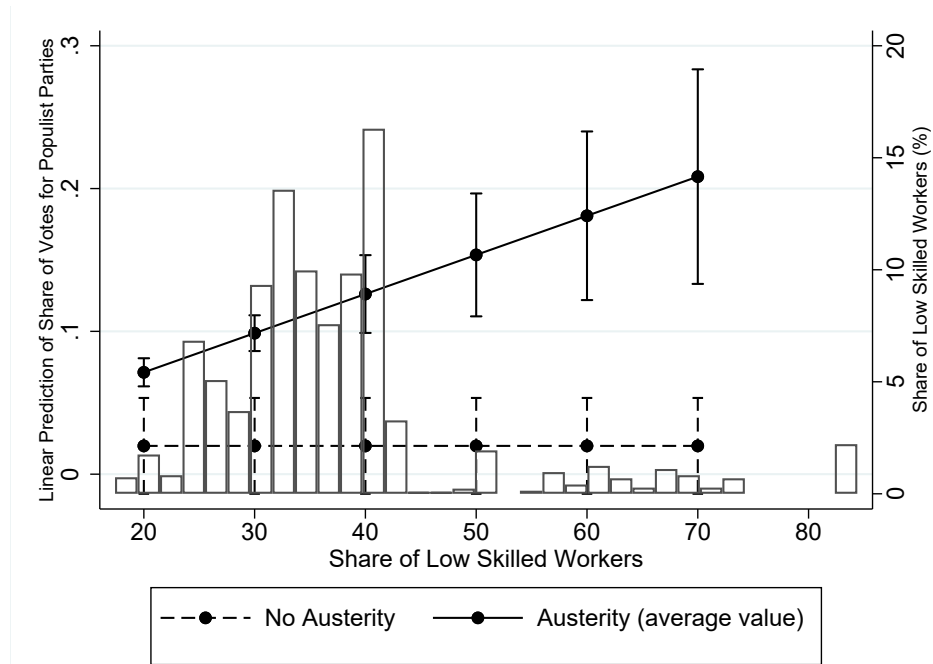
Source: Global Party Survey (Norris 2019).

**Figure C7:** Austerity and Share of Votes for Populist Parties: Share of Manufacturing Workers



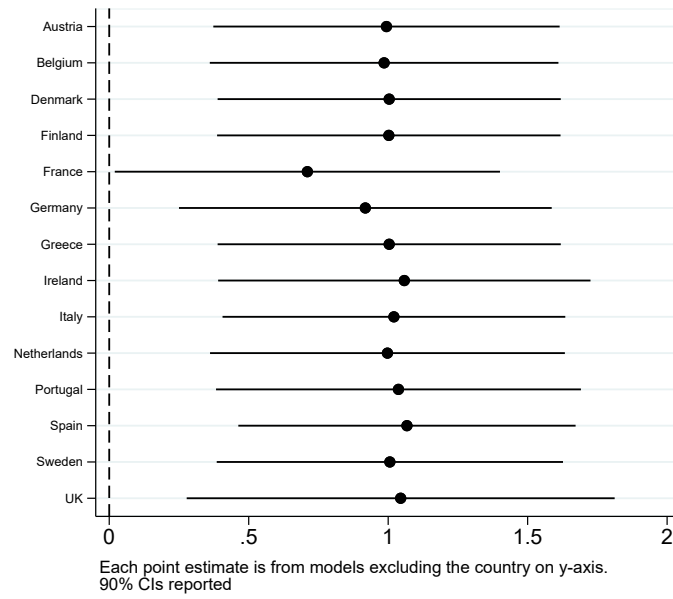
Source: PopuList (Rooduijn et al 2019).

**Figure C8:** Austerity and Share of Votes for Populist Parties: Share of Low Skilled Workers



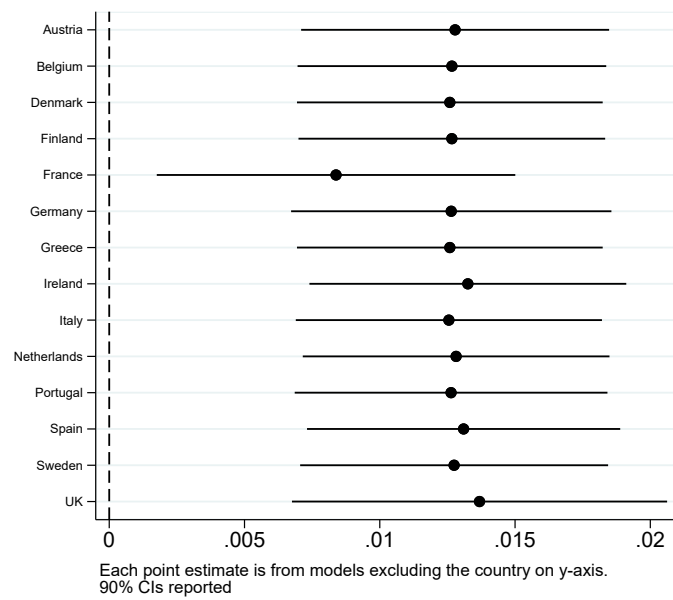
Source: PopuList (Rooduijn et al 2019).

**Figure C9: Austerity and Populism: Share of Manufacturing Workers**



Note: Linear predictions from Model 1 in Table 1.

**Figure C10: Austerity and Populism: Share of Low Skilled Workers**



Note: Linear predictions from Model 2 in Table 1.

**Table C1: Austerity and Populism: The Role of Economic Growth**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
OLS												
	Low Economic Growth						High Economic Growth					
	Populism Score											
Share of Low Skilled Workers*Austerity	0.032** (0.008)		0.026** (0.004)		0.023** (0.005)	0.026** (0.004)	0.012** (0.004)		0.008* (0.003)		0.010** (0.003)	0.006* (0.003)
Share of Manufacturing Workers*Austerity		1.998** (0.567)		0.726 (0.654)	1.208** (0.337)	0.017 (0.622)		0.827* (0.339)		0.700* (0.340)	0.556 (0.305)	0.492 (0.311)
Observations	3,511	3,490	3,388	3,388	3,490	3,388	10,251	10,220	7,853	7,853	10,220	7,853
R-squared	0.005	0.006	0.008	0.010	0.008	0.010	0.003	0.004	0.002	0.003	0.005	0.003
Controls	No	No	Yes	Yes	No	Yes	No	No	Yes	Yes	No	Yes
NUTS-2 fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country-election year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Robust standard errors in parentheses \*\* p<0.01, \* p<0.05

Note: OLS regressions with robust standard errors clustered by county-election year in parentheses. The unit of observation is NUTS2-election year. The outcome variable is the share of votes for populist parties. The key independent variable is the share of manufacturing workers or share of low-skilled workers interacted with austerity measures. Sources: GPS (Norris 2019), Devries et al (2016), Alesina et al (2019), and Colantone and Stanig (2018).

**Table C2:** Austerity and Populism including Economic Growth and Fiscal Balance

	(1)	(2)	(3)	(4)	(5)	(6)
	OLS					
	Populism Score					
Share of Manufacturing Workers*Austerity	0.824*		0.729		0.598	0.444
	(0.350)		(0.417)		(0.320)	(0.366)
Share of Low Skilled Workers*Austerity		0.011**		0.009*	0.008*	0.007*
		(0.004)		(0.004)	(0.003)	(0.003)
Share of Manufacturing Workers*GDP Growth	0.121		0.244		0.086	
	(0.132)		(0.131)		(0.108)	
Share of Manufacturing Workers*Fiscal Balance	-0.125		-0.209		-0.090	
	(0.112)		(0.112)		(0.093)	
Share of Low Skilled Workers*GDP Growth		0.001		0.002		0.001
		(0.002)		(0.001)		(0.001)
Share of Low Skilled Workers*Fiscal Balance		-0.002		-0.002		-0.001
		(0.001)		(0.001)		(0.001)
Observations	13,762	13,710	11,241	11,241	13,710	11,241
R-squared	0.004	0.005	0.006	0.006	0.007	0.009
Controls	No	No	Yes	Yes	Yes	Yes
NUTS2 FE	Yes	Yes	Yes	Yes	Yes	Yes
Country-year FE	Yes	Yes	Yes	Yes	Yes	Yes

Robust standard errors in parentheses \*\* p<0.01, \* p<0.05

Note: OLS regressions with robust standard errors clustered by county-election year in parentheses. The unit of observation is NUTS2-election year. The outcome variable is populism score. The key independent variable is the share of manufacturing workers or share of low-skilled workers interacted with austerity measures. Sources: GPS (Norris 2019), Devries et al (2016), Alesina et al (2019), Colantone and Stanig (2018), and WDI (2020).

**Table C3: Austerity and Populism (with dummies)**

	(1)	(2)	(3)	(4)	(5)	(6)
	OLS					
	Populism Score					
Share of Manufacturing Workers*Austerity (low)	-0.606 (0.406)		-0.758 (0.400)		-0.699* (0.309)	-0.670* (0.341)
Share of Manufacturing Workers*Austerity (high)	0.819 (0.511)		0.510 (0.573)		0.351 (0.424)	0.091 (0.468)
Share of Low Skilled Workers*Austerity (low)		-0.001 (0.005)		-0.005 (0.004)	0.003 (0.004)	-0.002 (0.002)
Share of Low Skilled Workers*Austerity (high)		0.017** (0.005)		0.013* (0.005)	0.015** (0.004)	0.013** (0.004)
Observations	13,762	13,709	11,242	11,242	13,709	11,242
R-squared	0.004	0.005	0.005	0.006	0.007	0.007
Controls	No	No	Yes	Yes	Yes	Yes
NUTS-2 fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Country-election year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes

Robust standard errors in parentheses \*\* p<0.01, \* p<0.05

Note: OLS regressions with robust standard errors clustered by county-election year in parentheses. The unit of observation is NUTS2-election year. The outcome variable is the share of votes for populist parties. The key independent variables are the share of manufacturing workers or share of low skilled workers interacted with dummies of austerity measures (low and high). Sources: GPS (Norris 2019), Devries et al (2016), Alesina et al (2019), and Colantone and Stanig (2018).

**Table C4: Austerity and Populism (not logged)**

	(1)	(2)	(3)	(4)	(5)	(6)
	OLS					
	Populism Score					
Share of Manufacturing Workers*Austerity (not logged)	0.423** (0.139)		0.433** (0.135)		0.339** (0.106)	0.332** (0.103)
Share of Low Skilled Workers*Austerity (not logged)		0.005** (0.002)		0.005** (0.002)	0.004** (0.001)	0.004* (0.001)
Observations	13,762	13,709	11,242	11,242	13,709	11,242
R-squared	0.005	0.004	0.006	0.006	0.007	0.008
Controls	No	No	Yes	Yes	No	Yes
NUTS-2 fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Country-election year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes

Robust standard errors in parentheses \*\* p<0.01, \* p<0.05

Note: OLS regressions with robust standard errors clustered by county-election year in parentheses. The unit of observation is NUTS2-election year. The outcome variable is the share of votes for populist parties. The key independent variable is the share of manufacturing workers or share of low skilled workers interacted with austerity measures (not logged). Sources: GPS (Norris 2019), Devries et al (2016), Alesina et al (2019), and Colantone and Stanig (2018).

**Table C5: Austerity and Populism (spending cuts)**

	(1)	(2)	(3)	(4)	(5)	(6)
	OLS					
	Populism Score					
Share of Manufacturing Workers*Austerity (spending cuts)	1.273* (0.501)		1.526* (0.686)		0.934* (0.415)	1.055 (0.571)
Share of Low Skilled Workers*Austerity (spending cuts)		0.017** (0.006)		0.020* (0.008)	0.013* (0.005)	0.016* (0.007)
Observations	13,762	13,709	11,242	11,242	13,709	11,242
R-squared	0.003	0.003	0.005	0.006	0.005	0.007
Controls	No	No	Yes	Yes	No	Yes
NUTS-2 fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Country-election year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes

Robust standard errors in parentheses \*\* p<0.01, \* p<0.05

Note: OLS regressions with robust standard errors clustered by county-election year in parentheses. The unit of observation is NUTS2-election year. The outcome variable is the share of votes for populist parties. The key independent variable is the share of manufacturing workers or share of low skilled workers interacted with austerity measures (spending cuts). Sources: GPS (Norris 2019), Devries et al (2016), Alesina et al (2019), and Colantone and Stanig (2018).