# Decomposing the Rise of the Populist Radical Right\*

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#### Abstract

Support for populist radical right parties in Europe has dramatically increased in the twenty-first century. We decompose the rise of the populist radical right between 2005-2020 into four components: changes in party positions, changes in voter characteristics (demographics and opinions), changes in voters' priorities, and a residual. We merge data on party positions from the Comparative Manifesto Project with data on voter characteristics from the Integrated Value Survey. Using a probabilistic voting model, we estimate voting priorities: the parameters of the utility function, which determine the weights voters place on different party positions, given their characteristics. We find that shifts in party positions and changes in voter characteristics explain only a negligible part of the rise of the populist radical right. Instead, the main driver behind the success of populist radical right parties lies in voters' changing priorities: voters—mainly older, non-unionized low-educated males—increasingly place a higher priority on cultural issues compared to economic issues. This allows populist radical right parties to tap into a preexisting reservoir of culturally conservative voters.

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The rise of populist radical right parties (PRRP) is one of the most important political developments of the twenty-first century. While PRRP were a marginal political force in European politics in the early 1990s, they currently capture close to 20% of the vote as we show in Figure 1. PRRP are increasingly present not only in parliaments but also in governments (Akkerman et al., 2016; Funke et al., 2020). They have managed to impact policy-making on multiple issues, from immigration to welfare programs (Abou-Chadi and Krause, 2020; Rathgeb and Busemeyer, 2021). In certain contexts, they have significantly eroded democratic norms and institutions (McCoy and Somer, 2019).

Recent years witnessed an abundance of research identifying reduced-form effects of various factors driving support for PRRP (Rodrik, 2018; Noury and Roland, 2020). Still, there is no consensus on what is the main explanation for the extensive rise of PRRP across Europe and which factors are idiosyncratic to specific cases (Guriev and Papioannou, 2020). Moreover, there is no agreement on the broad mechanisms behind the rise of PRRP, including whether this trend is driven by supply or demand forces (Golder, 2016). Those who focus on the supply side consider how changes in party positions (e.g., a moderation of the positions of PRRP) can explain growing support for PRRP. On the demand side, there is an ongoing debate between two potential explanations. A common view argues that voters' characteristics have changed. For instance, public opinion might have shifted toward more nativist opinions. The alternative view argues that voters' priorities have changed. According to this explanation, a substantial share of the population always held conservative cultural positions. The rise of PRRP occurred because voters have come to prioritize these positions when deciding which party to support (Bartels, 2017).

In this paper, we compare the explanatory power of these three classes of arguments—changes in party positions, changes in voter characteristics, and changes in priorities—by introducing a decomposition method to the study of voting behavior in Europe. We couple information on voter characteristics from the Integrate Values Survey (IVS) with rich data on party positions from the Comparative Manifesto Project (CMP) and employ a probabilistic voting model to estimate voters' priorities. We find that changes in priorities are the main driver behind the ascent of PRRP. Particularly, over the last two decades, voters have attached increased importance to cultural issues at the expense of economic issues.

We start by outlining a probabilistic voting model for how party positions, voter char-

acteristics, and voter priorities co-determine each voter's preferred party. In the model, a voter's utility from supporting a specific party is a function of that party's position vector (supply), weighted by the voter's individual "voting weights" (demand). Each weight corresponds to a different party position and can be positive or negative, depending on whether the voter supports or opposes this position. Weights with higher absolute values have a greater influence on the voting decision.

The two demand channels, voter characteristics, and voter priorities affect the voting decision through the voting weights. We allow the voting weights to vary across voters by assuming that they are a function of voter characteristics. The mapping between voter characteristics and the weights is determined by the voter priorities. In our model, voter priorities correspond to the parameters of the utility function. Therefore, we distinguish between two distinct demand changes. The first is a change in characteristics, reflecting a shift in underlying opinions or in the demographic composition of voters. For instance, we expect a big shift in public opinion against immigration to increase the number of voters who put positive weights on anti-immigration positions. The second is a change in priorities, reflecting changes in the importance, salience, or legitimacy of specific positions. Hence, if immigration concerns become more important we expect the preexisting pool of anti-immigrant voters to start prioritizing those issues, and so adopt larger positive weights on anti-immigration positions—even in the absence of any change in opinions.

We bring the model to the data by merging the IVS and CMP datasets. The IVS includes a rich and consistent set of voter characteristics. We analyze approximately 100 variables over three waves: 2005-2009, 2011-2013, and 2017-2020. The CMP provides data on 56 party positions, based on the share of mentions of each topic in each party manifesto. Our merged dataset includes approximately 60,000 respondents in 22 countries. We classify parties as PRRP based on the classification of radical right parties in the PopuList dataset.

We estimate the model in two steps. We assume the voting weights are a linear function

<sup>&</sup>lt;sup>1</sup>While the IVS survey data provides us with rich respondent-level information on voter characteristics, it limits our ability to identify whether respondents would actually vote. Hence, we do not focus on the turnout margin, despite its importance (Guiso et al., 2017).

<sup>&</sup>lt;sup>2</sup>Scholars and media commentators sometimes use 'populist radical right' and 'radical right' interchangeably. While these two concepts have distinct theoretical definitions, in practice 99% of supporters of radical right parties in our data are supporting parties that are populist radical right. Therefore, our empirical results remain very similar if we exclude non-populist radical right parties from our definition. See further discussion in Section 2.3

of the voter characteristics. In the first step, we estimate the parameters determining the probability of voting for each party. These include a vector of party fixed effects, which capture the common utility voters receive from each party, and a matrix defining the slope of the linear function. We estimate these parameters separately for each survey wave. We include all available variables in our datasets, allowing the data to decide which combinations of variables are most relevant for voting decisions. To avoid over-fitting we estimate a penalized maximum likelihood estimator. We penalize the slope matrix according to its nuclear norm and maximize the combined objective function using proximal gradient descent. In the second step, we estimate the intercept of the linear function. This intercept represents the average voting weights for every position. The intercepts determine the party fixed effects which we estimated in the first step, together with a residual (e.g. the party brand). Therefore, we estimate the intercepts by combining all survey waves and regressing the estimated party fixed effects on party positions, using only within-party variation.

We find that on key issues, the estimated weights are in line with common expectations. For example, green voters place higher positive weights on environmental protection compared to other voters. We also find that PRRP supporters are distinguished from other voters mostly in the higher positive weights they attach to conservative cultural issues.

Next, we decompose the increase in support for the PRRP between 2005-2009 and 2017-2020 into four components: party positions, voter characteristics, voter priorities, and a residual. We build on decomposition methods that were used for the study of income inequality (Juhn et al., 1993; DiNardo et al., 1996; Fortin et al., 2011) and use counterfactual analyses to quantify the share of the overall rise in PRRP support attributed to each component. Specifically, we utilize our model to calculate counterfactual changes in support for PRRP when only one component shifts over time and the other three are held fixed.

Aggregating results from all 22 countries, we find that 51% of the overall rise of PRRP can be attributed to party positions, voter characteristics, and voter priorities. Of the three components, it is changes in priorities that explain most of the increased support for the PRRP (50.6% of the overall rise). In contrast, voter characteristics and party positions explain only 3.0% and 0.2% of the change in PRRP support, respectively.

We complement the decomposition analysis and explore mechanisms for the trends in each of the components. On the supply side, we rule out the hypothesis that PRRP gained substantial support across Europe by moderating their positions (Lancaster, 2020). In fact, PRRP have become more extreme on their core issues of nativism over time. We also do not find much support for the argument that the rise of PRRP is driven by mainstream parties' shift to progressive cultural positions or by an ideological convergence of the center-left and center-right (Berman and Kundnani, 2021), at least in the time period covered in our study.

On the demand side, we first investigate our striking finding that changes in voter characteristics do not drive PRRP support. We find no substantial shift in public opinion towards more culturally conservative opinions. For example, in contrast to multiple media accounts, attitudes have not moved en masse toward greater opposition to immigration. In contrast, while the voter characteristics predicting PRRP support are stable over time, we find substantial cross-country variations in these characteristics. We use a similar decomposition method to predict the counterfactual support that PRRP would have received in different countries if voters in all countries were facing the same choice set. We find that the cross-country variation in voter characteristics can partially explain why PRRP is stronger in some areas (e.g., Eastern Europe) and weaker in others (e.g., Scandinavia).

What have changed over time, however, are voter priorities: here lies the main driver of the rise in support for PRRP according to the decomposition results. We find that the relative importance voters attach to economic positions had decreased since the mid-2000s. In other words, voters today are less likely to choose which party to vote for based on that parity's economic positions. In contrast, weights on conservative cultural positions have increased over time, especially among males, those without a college degree, older individuals, and non-union members. This means that culturally conservative voters are now more likely to vote for a party because of its conservative cultural positions. Moreover, culturally progressive voters are now less likely to penalize parties that support conservative cultural values.

Finally, we show that the increase in the residual is mainly a result of the entry of new parties. The average number of PRRP in a country increased by 105% between 2005 and 2019. Our counterfactual analysis suggests that PRRP could have received some support had they entered earlier. We attribute entry to the residual component because we do not know whether parties did not enter earlier due to supply or demand factors.

Our analysis is purely descriptive and makes several contributions that complement previous causal and descriptive research. Establishing new empirical facts on the channels through which support for PRRP rises allows us to compare theories and reject prominent hypotheses in the literature that are inconsistent with our findings. Indeed, the first contribution of this paper is to an ongoing debate about whether the rise of PRRP reflects a shift in voters' worldviews toward more anti-immigration, nativist attitudes (Hangartner et al., 2019) or whether PRRP attract voters by changing priorities and activating pre-existing worldviews (Bartels, 2017; Sides et al., 2019; Magistro and Wittstock, 2021). We directly compare these explanations and show that the latter better fits the data. Changes in voter priorities more strongly explain the rise of PRRP than changes in voters' attitudes or demographics.

With regard to the supply side, recent papers argue that the rise of PRRP stems from left-wing parties adopting more progressive cultural positions (Zeira, 2022), the convergence of the center-left and center-right (Berman and Kundnani, 2021; Berman, 2021), and PRRP adopting more centrist positions on traditional morality issues (Akkerman, 2015). We do not find evidence that a change in the positions of existing European parties is a major driver of PRRP support at least since the mid-2000s. That being said, our results suggest that the entry of new parties does play a role in explaining this electoral development.

This paper also contributes to the literature on the effects of different shocks on PRRP support, including technological change (Anelli et al., 2019), financial crises (Funke et al., 2020) trade (Colantone and Stanig, 2018b,a; Autor et al., 2020; Dippel et al., 2020), and new media technology (Guriev et al., 2021; Manacorda et al., 2022). Our descriptive analysis complements these causal accounts by pointing to the channels through which these shocks operate. For example, if trade shocks increased PRRP support, our results suggest this occurs by changing the priorities of voters rather than their opinions.

Finally, this paper contributes to a small literature estimating the weights voters place on issues when determining which party to support (Johns, 2010; De Vries et al., 2013; Kendall et al., 2015; Sides et al., 2019). With the caveat that our estimated weights are not causally identified, we highlight two key findings: first, we show how weights vary across voters and how they change over time. Second, our method allows us to analyze the weights placed on any party position. Specifically, we compare the weights placed on economic and cultural issues and provide quantitative evidence to a recent theoretical literature discussing the growing importance of cultural issues (Enke, 2020; Bonomi et al., 2020, 2021).

### 1 Model

Our voting model provides a simple unifying framework for how party positions, voter characteristics, and voter priorities co-determine each voter's party preference. In this section, we describe the model and explain how we use it for our decomposition exercise.

#### 1.1 Working Hypothesis

We follow classic probabilistic voting models by assuming that utility is a function of voter preferences, party positions on issues, and an error term. Voters use a standard utility maximization framework and support the party that maximizes their utility.

Voter i's utility from voting for party j is a function of the party's positions weighted by her individual voting weights. Specifically, we assume the following functional form for voters' utility:

$$U_{ij} = w_i' z_j + \zeta_j + \varepsilon_{ij}$$

The L-dimensional vector  $z_j$  represents party j's positions.  $w_i$  is a corresponding L-dimensional vector of voting weights. Each individual weight  $w_i^l$  represents the impact of the corresponding party position  $z_j^l$  on voter i's utility. The sign of the weight is positive when the voter supports a position (i.e., utility increases when voting for a party with this position) and negative if she opposes it. The weight's magnitude measures how much the voter cares about this position compared to other positions. We use  $\zeta_j$  to capture the residual common utility from voting for party j, an unobserved party quality that increases the utility from supporting the party among all voters. This residual includes both the utility from unobserved party positions and the party's "valence"—other unobserved party qualities that affect voters' utility from supporting the party. Valence could capture factors such as the party leader's popularity or the party's historical reputation. Finally,  $\varepsilon_{ij}$  represents all unobserved idiosyncratic factors that affect voters' decisions.

We assume that the voting weights are a linear function of voter characteristics:

$$w_i = x_i' \Phi + \beta \tag{1}$$

The M-dimensional vector  $x_i$  represents the observed characteristics of voter i. The  $M \times L$ 

matrix  $\Phi$  determines how each voter characteristic affects the weights voters place on a specific position. When a higher value of voter characteristic  $x^m$  generates larger support for position  $z^l$ ,  $\Phi_{lm}$  will be positive, and vice versa. For instance, if  $x^m$  measures the support of voters for redistribution and  $z^l$  measures the support of parties for larger welfare spending, we would expect  $\Phi_{ml}$  to have a positive value. We standardize the distribution of  $x_i$  such that the L-dimensional intercept vector  $\beta$  represents the average weight of the full population.

Taken together, the utility function is a linear function of the interactions between voter characteristics and party postions. We define a vector  $\delta$  such that  $\delta_j := \beta' z_j + \zeta_j$ .  $\delta_j$  captures the utility gain from party j that is common across voters. Hence we can write the utility as

$$U(x_i, z_j, \varepsilon_{ij}) = x_i' \Phi z_j + \delta_j + \varepsilon_{ij}$$
(2)

The parameterization of Equation 2 can capture the first-order approximation of any functional form. This includes the standard bliss point utility functions where voters vote for the party closest to them ideologically as discussed in Appendix A. It also allows a more complex utility function, where voters vote based on multiple dimensions and where demographics, such as education, can also affect voting choices (Abou-Chadi and Hix, 2021; Kriesi et al., 2008; Piketty, 2020).

To take this model to the data, we assume that the unobserved idiosyncratic shock  $\varepsilon_{ij}$  has a general extreme value type-I distribution (Gumbel). Together with Equation 2, this assumption allows us to write the probability of voting for a party as

$$P(z_j|x_i) = \frac{\exp(x_i'\Phi z_j + \delta_j)}{\sum_k \exp(x_i'\Phi z_k + \delta_k)}$$

We use this expression to calculate the likelihood function of the model parameters.

### 1.2 Decomposition

Building on the aforementioned model we can decompose the rise of PRRP into changes in party positions, voter characteristics, voter priorities, and a residual. For each component of our decomposition, we simulate the counterfactual increase in support for PRRP if only that input of the model changed while others remained fixed.

The statistic that we decompose is  $S_P^{t,c}$ , the share of PRRP supporters in country c at

period t. This share is defined as

$$S_P^{t,c} := \int P(\Pi|x_i; \theta_t, Z_t^c, \zeta_t^c) f_t^c(x_i) dx_i$$

where  $\Pi$  is the event of supporting a PRRP ( $\arg\max_j U_{ij} \in \mathcal{P}$ , with  $\mathcal{P}$  noting the set of PRRP). We use  $\theta$  to note the set of utility parameters  $\theta = (\Phi, \beta)$ . We mark by  $Z_t^c = \{z_{j,t}\}_{j\in\mathcal{J}_{c,t}}$  the matrix of observed party positions, and  $\zeta_t^c = \{\zeta_{j,t}\}_{j\in\mathcal{J}_{c,t}}$  is the vector of residuals.<sup>3</sup> Finally,  $f_t^c$  is the density of voter characteristics at time t in country c. Using this notation, the change in PRRP support between periods t and t+1 is

$$\Delta_t^{t+1} S_P^c = \int P\left(\Pi | x_i; \theta_{t+1}, Z_{t+1}^c, \zeta_{t+1}^c\right) f_{t+1}^c(x_i) dx_i - \int P\left(\Pi | x_i; \theta_t, Z_t, \zeta_t^c\right) f_t^c(x_i) dx_i$$

In order to accommodate parties' entry and exit, we include all parties that participated in either time t or t + 1. We then set the residual  $\zeta_{j,t}$  to  $-\infty$  if party j does not participate in period t, such that the predicted voting share for this party would be set to zero.<sup>4</sup>

This parameterization allows us to decompose  $\Delta_t^{t+1}S_P^c$  into the sum of four components.

$$\Delta_{t}^{t+1}S_{P}^{c} = \underbrace{\int P\left(\Pi|x_{i};\theta_{t},Z_{t}^{c},\zeta_{t+1}^{c}\right)f_{t}^{c}\left(x_{i}\right)\mathrm{d}x_{i} - \int P\left(\Pi|x_{i};\theta_{t},Z_{t}^{c},\zeta_{t}^{c}\right)f_{t}^{c}\left(x_{i}\right)\mathrm{d}x_{i}}_{\text{Residual}} + \underbrace{\int P\left(\Pi|x_{i};\theta_{t},Z_{t+1}^{c},\zeta_{t+1}^{c}\right)f_{t}^{c}\left(x_{i}\right)\mathrm{d}x_{i} - \int P\left(\Pi|x_{i};\theta_{t},Z_{t}^{c},\zeta_{t+1}^{c}\right)f_{t}^{c}\left(x_{i}\right)\mathrm{d}x_{i}}_{\text{Party Positions}} + \underbrace{\int P\left(\Pi|x_{i};\theta_{t},Z_{t+1}^{c},\zeta_{t+1}^{c}\right)f_{t+1}^{c}\left(x_{i}\right)\mathrm{d}x_{i} - \int P\left(\Pi|x_{i};\theta_{t},Z_{t+1}^{c},\zeta_{t+1}^{c}\right)f_{t}^{c}\left(x_{i}\right)\mathrm{d}x_{i}}_{\text{Voter Characteristics}} + \underbrace{\int P\left(\Pi|x_{i};\theta_{t+1},Z_{t+1}^{c},\zeta_{t+1}^{c}\right)f_{t+1}^{c}\left(x_{i}\right)\mathrm{d}x_{i} - \int P\left(\Pi|x_{i};\theta_{t},Z_{t+1}^{c},\zeta_{t+1}^{c}\right)f_{t+1}^{c}\left(x_{i}\right)\mathrm{d}x_{i}}_{\text{Voting Priorities}}$$

$$(3)$$

Each component represents a counterfactual exercise where only one input changes, while the others are held fixed. The components correspond to the three different sets of potential mechanisms for the rise of PRRP, together with a fourth residual component. The rest of

<sup>&</sup>lt;sup>3</sup>We use  $\mathcal{J}_{c,t}$  for the set of all parties that are on the ballot in country c at time t.

<sup>&</sup>lt;sup>4</sup>We attribute entries to the residual component as they could generate an increase in support for PRRP due to both supply and demand. On the supply side, mechanically, once a party enters, voters who always placed a large weight on the party's positions can express their support for it. On the demand side, it is likely that the choice of parties to enter is often endogenous and potentially corresponds to changes in voter priorities or characteristics.

this section presents details on each component.

**Party Positions** This component captures changes in the supply of party positions Z, holding the voting weights (voter characteristics and priorities) and the residuals fixed. We expect this component to be large if the rise of PRRP is driven mainly by supply changes.

Several supply hypotheses focus on changes in the PRRP themselves. PRRP could have moderated their cultural positions in order to appeal to more mainstream voters, for instance, by toning down their rhetoric on issues related to gender roles and LGBTQ rights (Akkerman, 2015; Lancaster, 2020). Alternatively, PRRP could have shifted their economic positions from neoliberal, anti-tax policies toward welfare chauvinism, understood as generous welfare benefits which exclude those who are deemed as unauthentic members of the nation (Lefkofridi and Michel, 2016; Schumacher and Van Kersbergen, 2016).

A second set of hypotheses focuses on supply changes of the mainstream parties. For instance, Berman and Snegovaya (2019) argue that the convergence of center-left and center-right parties on economic issues during the 1990s has allowed populist challengers to capture the vote of economically discontent voters.

Voter Characteristics This demand component captures changes in f, the distribution of voter characteristics  $x_i$ . This component is associated with the dominant image of the rise of the populist radical right as a political tsunami: a swift and powerful shift in public opinion toward the ethnonationalism and authoritarianism of these parties.

Such shifts in public opinions were identified in specific contexts. Examining Greek public attitudes following the refugee crisis of 2015, Hangartner et al. (2019) show that greater exposure to refugees fuels opposition to immigration—the positions that lie at the core of the populist radical right's agenda. Similar findings have been documented in Austria (Rudolph and Wagner, 2021) and Norway (Nordø and Ivarsflaten, 2021) although not in some other contexts (Cools et al., 2021; Schaub et al., 2021). An alternative driver of voters' attitudes toward PRRP is trade shocks: analyzing British survey data, Ballard-Rosa et al. (2017) argue that people who live in regions exposed to trade shocks adopted more authoritarian values—which, in turn, nudge voters toward populist right parties and causes (such as Brexit).<sup>5</sup>

<sup>&</sup>lt;sup>5</sup>Along similar lines, Ballard-Rosa et al. (2021) argue that more intense competition from Chinese imports drove Americans toward more authoritarian attitudes and support for Trump in 2016.

Changes in voter characteristics also include demographic changes. For example, the rise of PRRP could be driven by unemployment growth if unemployed workers are more likely to vote for PRRP (Algan et al., 2017; Guiso et al., 2017). Dehdari (2022) argues that in Sweden, unemployment increases support for PRRP among low-skilled workers, and points at growing hostility toward immigrants among the less well-off as a key mechanism at work.

Voting Priorities This component captures changes in the parameters  $\Phi$  and  $\beta$ . These parameters determine whether voters support or oppose each party position and how they prioritize the different positions, given their opinions and demographics.

Voting priorities can lead to increased support for PRRP even in the absence of a major shift in either voters' characteristics or the supply of parties. This can occur when certain topics become more important, salient, or legitimate. As evocatively argued by Bartels (2017), PRRP may have increased their support by activating a preexisting reservoir of culturally conservative attitudes and not because of a sudden shift of mass attitudes in their direction. In Italy, for instance, Magistro and Wittstock (2021) argue that support for PRRP increased while anti-immigration attitudes remained stable due to a change in the salience of anti-immigration issues. Closely related, Sobolewska and Ford (2020) explain that support for Brexit occurred due to the activation of preexisting ethnonationalist attitudes. Cantoni et al. (2020) argue that the emergence of the AfD in Germany gained support due to preexisting demand for its nationalist positions. Bonikowski (2017) refers to this as the growing resonance of the PRRP's message in the electorate.<sup>6</sup> A common argument in this body of work is that voters have come to prioritize cultural concerns, such as race and nationality over economic issues (De Vries et al., 2013; Norris and Inglehart, 2019; Noury and Roland, 2020).

Residual The residual component captures changes in the residual  $\zeta$  of all parties. Change in the residuals could generate an increase in support for PRRP in several ways. First, due to changes in unobserved party positions, either by the PRRP or their competitors. Second, due to an increase in the valence of PRRP, for example, if these parties had more charismatic

<sup>&</sup>lt;sup>6</sup>The activation of pre-existing attitudes may also explain the support for the populist radical right in the United States. Sides et al. (2019) show that the Trump candidacy captured voters who already expressed negative affect toward minority groups such as Muslim Americans and opposition to immigration. Mason et al. (2021) analyze rich data set collected since 2011 and show that latent animosity toward minority groups associated with the Democratic Party, such as LGBTQ persons and Black Americans, has driven voters toward Trump.

leaders in recent years. Thirds, due to model misspecification. Fourth, and most importantly, the residual captures the entry and exit of parties from the political system, which we model as having  $\zeta_t = -\infty$ .

The order of the four components in the decomposition can affect the results as it determines whether to fix the components not being analyzed to their level at the start (t) or end (t+1) of the period. We start with the residual component, such that the rest of the components fix the residuals to their value at t+1. Since the residual component also includes new entries, this component captures the counterfactual support for the new PRRP (e.g. the AfD in Germany), had they entered earlier. Moreover, fixing the residuals to their value at t+1 implies that we quantify the impact of changes in our main three components as if the new entrants have already entered. Otherwise, the three main components would be mechanically zero for new entrants, as support cannot grow for a party that hasn't entered yet. We use manifestos from t+1 when the party did not exist at wave t, and vice versa. Therefore, the party position component only captures changes in the position of parties that existed in both waves. We set party position as the second component such that in our remaining components (voter characteristics and priorities) all manifestos are fixed to their value at t+1, and not just the new entrants.<sup>7</sup> The order of voting weights and voter characteristics can be reversed and does not significantly affect the results.

### 2 Data

In this section, we discuss our data on party positions, voter characteristics, and definitions for party categories. Throughout the paper, we focus on Europe. By limiting our analyses to Europe, we focus on PRRP that have long defined themselves in opposition to similar political developments, such as European integration, and that have formed transnational networks of cooperation in supra-national institutions, such as the European Parliament (McDonnell and Werner, 2020). Analyzing PRRP in Europe also allows us to focus on a region where these parties have particularly gained strength in recent years (Rodrik, 2018).

<sup>&</sup>lt;sup>7</sup>Choosing a different decomposition order would imply fixing manifestos to their value at time t. Since we impute manifestos for new entrants based on their value in t+1, we would mix manifestos from time t+1 for new entrants and from time t for all other parties. Still, we use manifestos from time t for parties that did not exist at time t+1 (exits). However, this occurs more rarely, especially for PRRP.

#### 2.1 Party Positions: Comparative Manifesto Project

We characterize parties' positions on various issues using the Comparative Manifesto Project (CMP) (Volkens et al., 2020). This dataset covers the manifestos (the party's platform) of parties running in elections for the lower house. The CMP codes which share of the manifesto is dedicated to each topic, and for many topics details the share of positive and negative mentions. Our analysis includes all of the CMP main categories (three-digit variable names) as these variables are available across countries and over time. A key advantage of this data is its objectivity: it relies on the texts parties produce and not on how experts perceive the parties' positions. Moreover, the dataset covers a large variety of topics, including economic issues, cultural issues, stands on globalization, national security, and foreign policy.

When aggregating results from various economic or cultural positions, we restrict ourselves to using two indices of party positions, created by the CMP. The economic index measures the overall party's position on the government intervention-free market scale. It incorporates 19 party positions including positions on the welfare state, economic systems, protectionism, and regulation. The cultural index (originally called the society index) summarizes cultural positions on a progressive-conservative scale. It incorporates 11 party positions on issues including traditional morality, nationalism, multiculturalism, law and order, and democracy. Both indices are constructed by adding conservative party positions and subtracting liberal positions such that a high value reflects more support for a free market or more conservative cultural values. Appendix Table A.2 presents the full list of CMP party positions along with a short description.

## 2.2 Voter Characteristics: Integrated Values Survey

We measure voter characteristics using the Integrated Values Survey (IVS). The IVS is composed of two large-scale cross-national repeated surveys: the World Values Survey (WVS) and European Values Survey (EVS). This dataset provides several advantages for our analysis. First, it includes broad information on a variety of voter characteristics including demographics, religious beliefs, social values, and opinions on various topics. Second, many

<sup>&</sup>lt;sup>8</sup>An alternative data source on party positions is the Chapel Hill Expert Survey (CHES). Yet the coverage of CHES is more limited than that of the CMP. Furthermore, we prefer the CMP because it provides an objective measure of positions. Previous work suggests that the CMP measures are strongly correlated with those of the Chapel Hill Expert Survey (Adams et al., 2019).

of the questions in the IVS are consistently asked over time. This feature is critical for our decomposition analysis and typically does not exist in similar datasets, such as European Social Survey. Third, the data covers a broad range of countries.

We study the three most recent survey waves: 2005-2009, 2011-2013, and 2017-2020. We include in our study all 22 European countries that were surveyed in both the 2005-2009 and the 2017-2020 waves, and for which at least 70% of the supported parties can be matched to the CMP. Figure 2 presents the countries included in our database along with the support that PRRP received in the 2017-2020 survey, as well as in the closest elections to that wave. The figure shows that we cover countries with a wide range of PRRP support spanning from 0% to almost 80%. Appendix Table A.1 summarizes the constructed IVS data and Appendix B includes further details about how we processed the data.

To estimate changes over time and provide our model with as much flexibility as possible, by default we include in our analysis all variables that appear in all three survey waves. We exclude three variables that ask directly about priorities or general positions and not about opinions, behaviors, or demographics, as we capture priorities separately in the decomposition exercise. An additional concern is that voters' opinions may be affected by the party they support, instead of voters choosing a party based on their opinions (Barber and Pope, 2019). This is especially common when a new government is elected and, as a result, voters immediately change their opinions on the government (Hetherington and Rudolph, 2015). Therefore, we test which opinions tend to change once parties join the governing coalition and exclude from our analysis the three most elastic variables. Appendix Table A.3 describes the final set of 101 opinion, and behavior, and demographic variables included in our data.

Our main outcome variable is respondents' preferred party, defined as the party participants said they would vote for or the party that appeals to them most.<sup>11</sup> However, we are

<sup>&</sup>lt;sup>9</sup>These variables include a question on how do you position yourself on a left-right scale, and two questions that ask respondents to prioritize policy topics from a given subset of options. Since the subset of available options does not include to the topics we estimate as most important (e.g., immigration policy, size of the welfare state, etc.) we do not use these questions to estimate priorities directly.

<sup>&</sup>lt;sup>10</sup>For each opinion in our data, we run a linear regression where the dependent variable is the opinion and the independent variable is whether the party supported by the respondent is part of the governing coalition, as determined by the ParlGov dataset (Döring and Manow, 2020). We include party fixed effects and country-wave fixed effects. We exclude from our data the three variables most strongly affected by a party's coalition status: 'confidence in parliament', 'confidence in political parties', and 'confidence in government'.

<sup>&</sup>lt;sup>11</sup>Most surveys asked participants who they would vote for and if participants said they did not know, they were asked which party they support. In the last EVS wave, participants were only asked which party

limited in focusing only on voters who support a specific party and abstract from any analysis of voter turnout.

To link parties across the datasets, we use PartyFacts identifiers when they are available and harmonize parties manually based on their names in many other cases. Appendix B.2 describes the process of party identification in the IVS data. By definition, the CMP data is measured around elections, while the IVS surveys are not necessarily conducted close to elections. When merging the datasets, we assign to each party the CMP variables defined for the election closest to when the IVS survey was taken. We define the party position as missing if no CMP data is available five years before or after the survey. We include in the analysis only respondents whom we were able to match with CMP data. Fortunately, Table A.4 shows that we match 94% of respondents who expressed support for a party included in the CMP data.

#### 2.3 Party Classification

European PRRP share several main characteristics. (Mudde, 2007). First, they subscribe to a nativist worldview, which considers minorities as a threat to the purity of the 'real people'. These parties are also authoritarian, understood as a "belief in a strictly ordered society, in which infringements on authority are to be punished severely" (Mudde, 2019, 29). And their populist politics is predicated on a moral opposition between the corrupt elites and the pure and unified people.

We determine whether a party is a PRRP according to the PopuList, a comprehensive dataset that is updated periodically (Rooduijn et al., 2019). The dataset classifies European parties since 1989 based on experts' judgment. We define PRRP as parties who were ever classified as radical-right parties in the PopuList data, since 2005. The Populist also classifies parties as populist and non-populist. However, we include both populist and non-populist radical right parties in our PRRP definition for three reasons. First, there is almost a complete overlap in PopuList between the parties that are classified as populist radical right and those that are classified as (any) radical right; only a handful of parties, which represent

appealed to them most. We use the answers to both questions to define the outcome for as many respondents as possible.

<sup>&</sup>lt;sup>12</sup>There are three cases where the classification of parties based on the Populist is not constant in our data. Since such changes are so rare, we define a party as a PRRP if the PopuList defined it as radical right in any time period.

less than 1% of the overall radical right support share in the IVS, are non-populist. Second, voters of these parties seem to share similar characteristics, and specifically similar views on conservative cultural topics. Third, these parties are often close substitutes and therefore, in some countries (e.g. Greece), voters shifted from populist to non-populist radical-right parties. Excluding the non-populist radical-right parties from our definition generates fluctuations in the share of PRRP support in some countries, which is irrelevant to the main trend we attempt to study. Our results are substantively unchanged if non-populist radical right parties are excluded from our definition.

We use the CMP data to classify parties into other categories, or 'families' as they are often referred to in the political science literature (Mair and Mudde, 1998). Specifically, we define parties as left-wing parties if the CMP codes them as social democratic, socialist, or other left parties; mainstream right parties are those coded as liberal, Christian democratic, or conservative parties; green parties are those that are coded as ecological parties.

Appendix Figure A.1 shows the similarities among voters in our different party categories. To create this figure we regress the support for each party on voter characteristics using IVS data. We then predict the fitted value for each voter and party. For every two parties with at least fifty supporters, we calculate the correlation between the fitted values among all voters in both of the parties' countries. Red colors indicate similarities between the characteristics of the voters of the two parties, while purple indicates dissimilarities. For instance, UKIP voters (last row) are particularly similar to AfD voters, such that a model that predicts support for UKIP in the UK can predict support for the AfD in Germany almost as well. We divide parties into the aforementioned categories and report the average correlations between and within each category. For this exercise, we also include two additional categories for populist left and other populists, based on the Populist classification.

Overall, our classification of PRRP, as well as other party categories, generates a cohesive set of categories. We find a high correlation on average between parties in the same category. The correlation between PRRP is particularly high (0.27). The only non-populist radical-right party included in this graph is "Kotelba" (Slovakia), <sup>13</sup> and it is also correlated with the populist radical right parties. This demonstrates the similarity between non-populist and populist radical-right parties that lead us to combine them into one category. In contrast,

<sup>&</sup>lt;sup>13</sup>All other non-populist radical right parties have less than fifty supporters.

the correlations between parties from different categories tend to be negative. The figure also demonstrates why it makes sense to distinguish between radicals of different stripes: voters of left-wing, center and right-wing populist parties are clearly different from each other (Rooduijn et al., 2017; Rooduijn, 2018).

#### 2.4 Summary Statistics

Table 1 presents summary statistics of party positions for PRRP and all other parties, based on manifestos that correspond to the 2005-2009 and 2017-2020 IVS waves. The first two rows of Table 1 show the average values for the economic and cultural CMP indices. Negative values denote positions left of the center, while positive values stand for more right-wing positions. The negative values for the economic index imply that on average, both PRRP and non-PRRP tend to dedicate a larger share of their platforms to left-of-center economic policies. On cultural issues, PRRP tend to dedicate larger shares of their platforms to conservative values, whereas non-PRRP are on average more culturally progressive. The rows below these two indices present the average percentage share of the manifestos dedicated to ten positions that most strongly distinguish between PRRP and non-PRRP. We find that PRRP dedicate a substantial and increasing amount of their platforms to nationalistic topics (e.g. positive mentions of national way of life), which other parties more rarely discuss.

Table 2 presents summary statistics for the demographics and opinions of the PRRP and non-PRRP voters, using the 2005-2009 and 2017-2020 IVS waves. In line with previous research (Gidron and Hall, 2017), PRRP supporters are more likely to be males, live in rural areas, and are less likely to hold a college degree. When examining the ten opinion variables that are most distinctive between PRRP and non-PRRP supporters, we find that PRRP voters have significantly more nationalistic and traditional worldviews.

## 3 Estimation

In this section, we describe how we estimate the model parameters using a two-step procedure. We first estimate the matrix  $\Phi$  mapping voter characteristics to voting weights and the vector  $\delta$  of the common utility from each party using a penalized MLE, separately for each IVS wave. These parameters fully determine the likelihood of voting for each party (Equation 2). We

then estimate  $\beta$ , the average voting weights for each position, and  $\zeta$ , the residuals, with a linear regression, using the estimands for  $\hat{\delta}$  from all three waves between 2005-2020.

#### 3.1 First Step: Estimation of $\Phi$ and $\delta$

Our wide datasets imply that our parameter space is high dimensional. We prefer not to make any a-priori assumptions regarding which combination of variables is important for explaining party support. Instead, we use all available variables and let the data determine which variables are relevant. This approach is especially important when studying an open question, such as the rise of PRRP, where many competing theories have been proposed and we would not want to rule out any hypothesis in advance. As a result, the dimension of matrix  $\Phi$  is approximately 5,000 (the number of voter characteristics multiplied by the number of party positions). This could generate noisy estimates of  $\Phi$  due to overfitting.

To solve this problem, we rely on machine learning techniques. Specifically, we restrict the support of  $\Phi$  such that  $\|\Phi\| < c$  for some constant c. We use the nuclear norm as our matrix norm for two reasons. First, the nuclear norm is known to generate low-rank solutions. Low-rank matrices are easier to interpret and imply that the voters decide which party to support based on relatively few dimensions, as the literature suggests (Poole and Rosenthal, 2001; Kriesi et al., 2008; Abou-Chadi and Hix, 2021). Second, the nuclear norm generates a convex optimization problem that is computationally easier to solve. For these reasons, this norm has been frequently used in recent econometric research (Athey et al., 2021).

We estimate  $\Phi$  and  $\delta$  using a penalized maximum likelihood estimator. We solve the following maximization problem

$$\max_{\Phi, \delta} \mathcal{L}\left(\Phi, \delta\right) + \lambda \left\|\Phi\right\| = \max_{\Phi, \delta} \sum_{i} \log \frac{\exp\left[x_{i} \Phi z_{j(i)} + \delta_{j(i)}\right]}{\sum_{k \in \mathcal{J}_{c(i)}} \exp\left[x_{i} \Phi z_{k} + \delta_{k}\right]} + \lambda \left\|\Phi\right\|$$

We estimate the parameters separately for each IVS wave. We choose the value of the penalization parameter  $\lambda$  using cross-validation. Similar to Athey et al. (2021), we solve this maximization problem using proximal gradient descent (Hastie et al., 2019).<sup>14</sup>

<sup>&</sup>lt;sup>14</sup>Since the nuclear norm is non-differentiable, standard optimization methods (e.g., gradient descent) would not work.

#### 3.2 Second Step: Estimation of $\beta$ and $\zeta$

In the second step, we use the estimands of  $\hat{\delta}$  from the first step to estimate  $\beta$ , the mean value for each voting weight, and  $\zeta$ , each party's residual. In this step, we combine information from all three waves. We assume that the residual  $\zeta_{j,t}$  is the sum of a constant component  $\eta_j$  and a time-varying component  $\nu_{j,t}$ . Hence, we assume the following linear model

$$\delta_{i,t} = \beta_t z_{i,t} + \eta_i + \nu_{i,t}$$

Taking the difference between two consecutive waves, we get the following equation:

$$\Delta_t^{t+1} \delta_j = \underbrace{\Delta_t^{t+1} \beta \bar{z_j}}_{\text{Voter Priorities}} + \underbrace{\bar{\beta} \Delta_t^{t+1} z_j}_{\text{Party Positions}} + \underbrace{\Delta_t^{t+1} \nu_j}_{\text{Residual}}$$
(4)

This equation decomposes the contribution of changes in voter priorities, party positions, and residuals to the overall changes in  $\delta$ . The first component is changes in the average weights placed on party positions  $(\beta)$ , the second component is changes in party positions (z), and the final component is changes in the residual component  $(\nu)$ . Voter characteristics do not affect  $\delta$  since it is defined as the common utility all voters receive from a party, regardless of their characteristics. The coefficients  $\Delta_t^{t+1}\beta$  and  $\bar{\beta}$  can be estimated by regressing  $\hat{\delta}$  on  $\bar{z}_j, \Delta_t^{t+1}z_j$ .

Since the number of party positions is relatively large compared to the overall number of observations (the total number of parties in each wave) we make two additional assumptions to avoid over-fitting. First, we assume that for countries that appear in the 2011-2013 intermediate wave, the change in beta is constant over time such that  $\beta_{t+1} = \frac{\beta_{t+2} + \beta_t}{2}$ . This implies that if we sum Equation 4 for  $\Delta_t^{t+1}$  and  $\Delta_{t+1}^{t+2}$  we get

$$\Delta_t^{t+2} \delta_j = \Delta_t^{t+2} \beta \bar{z_j} + \bar{\beta} \Delta_t^{t+2} z_j + \Delta_t^{t+2} \nu_j$$

where the average is taken over all three periods.

Second, we use the estimation results from the first step to reduce the dimension of the estimation. We assume that the combinations of party positions that generate differences in utility among voters are the same factors that determine the average utility across all

voters.<sup>15</sup> We use the singular value decomposition of  $\Phi_t$  to find the k linear combinations of party positions that generate the largest utility differences. We then reduce the dimension of  $\beta_t$  to k by restricting it to be in the span of these linear combinations. We choose k = 5 though other values yield similar results. See Appendix C for more details.

#### 3.3 Estimation Results: 2017-2020 Voting Weights

Before presenting our decomposition results, we explore the voting weights estimated for the 2017-2020 survey wave. This section serves two purposes. First, it provides a sanity check for our model as we show that the weights we find are sensible. Second, it demonstrates that our technique for estimating weights allows us to uncover rich heterogeneity in the data.

We calculate the weights each voter places on each party position using the estimates of the model parameters,  $\Phi$  and  $\beta$ . Each weight is a linear function of the voter characteristics, based on Equation 1. We also compute aggregated weights for the two main indices of the CMP, the economic and cultural index. We take a simple average of the weights of all variables that are used in an index and flip the sign of the weights of variables that enter the index negatively.<sup>16</sup> The weights are measured in units of standard deviation to utility units, defined as how a one standard deviation increase in this position would affect voter utility.<sup>17</sup>

Appendix Figure A.2 presents the largest coefficients in the linear function between the voter characteristics and their corresponding weights for the two indices. For each index, we plot the absolute value of the ten largest coefficients in the 2017-2020 wave. We find that holding all else equal, individuals who express confidence in unions tend to reward parties with left-wing economic positions (put a large negative weight on an index of right-wing economic positions). Individuals with higher income and older individuals tend to reward parties with more right-wing economic positions. Studying the weights placed on the cultural index reveals that individuals who believe jobs should prioritize natives and those that do not want immigrants as neighbors reward parties with right-wing cultural positions. In contrast, individuals who have confidence in the environmental protection movement or confidence in

<sup>&</sup>lt;sup>15</sup>This assumption would be violated if all voters have a strong and homogeneous taste for certain party positions. For instance, if all voters equally support parties expressing positions regarding improving the quality of the education system regardless of their characteristics.

<sup>&</sup>lt;sup>16</sup>This is equivalent to assuming that each index position contributes equally to the change in the index.

 $<sup>^{17}</sup>$ To provide some intuition for these units, with two parties the utility is the logarithm of the odds ratio. So, for example, an increase of one utility unit is equivalent to a change from a 50/50 vote share to approximately 73/27.

the EU will tend to reward left-wing cultural positions. 18

Figure 3 shows that PRRP voters tend to put more weight on conservative cultural issues, compared to economic issues. We plot the weights placed by the 25th, 50th, and 75th percentile of voters in each party category for the 2017-2020 wave. The first two panels present results for the two indices (economic and cultural). We find that the weights PRRP voters place on the economy index are similar to mainstream right-wing voters. In contrast, PRRP voters care more about conservative cultural positions compared to mainstream voters. More generally, the cultural index differentiates between supporters of different party categories better than the economy index. We will revisit this result when discussing over-time changes in voting weights.

Examining weights on individual party positions reinforces our conclusion that PRRP voters are distinct mostly in the weights they assign to conservative cultural issues. Figure 3 presents the weights on the eight CMP variables with largest variation in weights across party categories. We find that PRRP voters tend to put large positive weights on positive mentions of a national way of life and negative weights on positive references for multiculturalism. On economic issues, they tend to be more similar to mainstream right-wing voters, though they also place higher weight on a free-market economy. Reassuringly, Figure 3 also shows that green parties tend to place higher weights on environmental protection, suggesting that our model captures heterogeneity in specific priorities.

## 4 Decomposition Results

Figure 4 presents the key result of the paper: the aggregated decomposition results from all 22 countries in our data. To create this figure, we first decompose the trends in PRRP support in each country separately, based on Equation 3. We then aggregate the results using a weighted average of all countries, where the weights are the inverse of the share of PRRP support in the 2017-2020 wave. Hence, we aggregate the contribution of each component to the rise of PRRP, as a share of the overall PRRP support in that country in 2017-2020. This weighting guarantees that the results are not driven mainly by countries with very high levels of PRRP support (e.g. Hungary or Poland). In order to focus on the *change* in PRRP, we fix

<sup>&</sup>lt;sup>18</sup>While the sign of most of the coefficients is in line with common perceptions, some of them are not, as expected when using multiple correlated variables.

the initial support to 0% and the final support to 100%. For countries that are unavailable in the 2011-2013 wave, we impute their decomposition values as the average of the 2005-2009 and 2017-2020 waves.

Our decomposition results in Figure 4 show that changes in voter priorities, together with the residual component, explain almost the entire rise in support for PRRP. Changes in voter opinions, as well as party positions, contribute to it very little (if at all). Negative values imply that based only on the changes in this component, PRRP support would have been expected to decrease during this period. Taking the two periods together, voter priorities explain 50.6% of the overall increase in PRRP support. In a striking contrast, party positions and voter characteristics explain only 0.2% and 3.0%, respectively. The remainder of the increase is driven by the residual. Figure A.3 shows the results by country. While there is clear variation across countries, in almost all countries voter characteristics, as well as party positions, cannot explain the rise of PRRP.

In the rest of this section, we will discuss additional evidence for the change in each component.

#### 4.1 Changes in Party Positions

Our decomposition estimates reveal that changes in party positions contribute little to the rise in PRRP support, in contrast to several theories discussed in Section 1.2. We further investigate the potential importance of party positions by analyzing their changes over time and how these changes relate to the aforementioned theories. Figure 5 shows the trend in the two CMP position index for the four main party categories in 2005-2018. We weigh each party by its vote share within a country and then weigh all countries equally to calculate the party positions in a given year. Since elections are typically held every few years we present five-year moving averages.

Overall, we do not find support for the hypotheses that highlight party positions as the key driver of the rise of PRRP. Previous work has found that in the 1990s there has been a convergence in economic positions, that could have contributed to the rise of PRRP (Berman, 2021). But within the time period covered in our study, we find that on average parties have only diverged in their economic positions since 2005. The top panel of Figure 5 shows a divergence in economic positions, which are driven by the left and the greens.

Looking at cultural positions, we do not find evidence that PRRP gained votes by moderating their positions. The bottom panel of Figure 5 shows the average party cultural position index for the four party categories. Over time, PRRP have shifted to the right, further distinguishing themselves from the other parties. Clearly, PRRP did not attract more votes by moderating their populist positions. Moreover, in contrast to a common claim that the "wokeness" of mainstream parties on cultural issues pushed their voters to the PRRP, we find that the divergence on cultural issues is driven almost entirely by the cultural shift to the right of the PRRP.

The trends in Figure 5 could also reflect demand trends as the weights assigned to every party depend on its vote share. To isolate supply changes, in Figure A.4 we repeat the same exercise, allowing only the party positions to change over time. For every five years, we estimate the average change in positions for each party, weighing every party by its initial support in that five-year period. We then plot the cumulative change for each party category. The result are similar to our original results in Figure 5, suggesting that the trends we find in party positions occurred also within existing parties.

In order to better understand the shift to the cultural right, we further explore the trends in individual party positions. Appendix Figure A.5 shows the trends for the five positions with the largest distinction between PRRP and other parties. The most substantial change occurred in positive mentions of a national way of life. The PRRP today dedicate almost 10% of their manifestos to this issue, compared to approximately 1%-3% among other party categories. We also find that some of the topics most widely discussed on PRRP platforms, such as negative references to the European Union, internationalism, and multiculturialism, are barely mentioned by other parties.

While the reduced form evidence rules out dominant supply-side explanations, there could be other potential supply-side hypotheses that are consistent with the trends in party position. For example, it is possible that PRRP gained support by becoming more extreme on cultural issues. However, our decomposition results suggest that such alternative hypotheses are unlikely to be major drivers of the support for PRRP. When predicting the counterfactual increase in support for PRRP, holding voting weights fixed to their value in the 2005-2009 wave, while changing only party positions, we find very little effect on the radical right vote share.

#### 4.2 Changes in Voter Characteristics

Our finding that both changes in opinions (e.g., growing nativism) and changes in demographics (e.g., increasing unemployment) cannot meaningfully explain the rise of PRRP goes against many recent narratives on the rise of right-wing populism, which we presented in Section 1.2. In this section, we explore this claim in more detail using reduced-form analyses of IVS data.

We construct a "PRRP score" that summarizes support for PRRP positions at the individual level. We first run a LASSO regression and predict support for PRRP in the 2017-2020 survey wave based on voters' characteristics. We then predict for each voter in each wave whether they would vote for a PRRP based on their characteristics and define the standardized fitted value as their PRRP score. PRRP score and demonstrates that these variables are indeed typically associated with right-wing populism, including prioritizing natives and decreased confidence in the EU.

Figure 6 shows that on average voters did not move closer to the positions of PRRP since 2005. The PRRP score in 2017-2020 is very similar to the score in 2005-2009. The dashed blue line shows the average value of the PRRP scores across all countries, whereas the solid grey lines show separately the trends in each country. While in specific countries there are some significant trends in public opinion toward (e.g. Hungary) and further away (e.g., Germany) from the populist radical right, there is no clear trend in aggregate. The average difference between these periods is only 6% of the difference between the average PRRP score of PRRP supporters and other voters. Hypothetically it is possible that the PRRP score increased exactly in the countries where PRRP support has been rising. However, if that would have been the case, the decomposition analysis would have found that voter characteristics explain some of the rises of PRRP. This demonstrates the importance of studying many countries simultaneously in one framework when analyzing broad political trends.

Appendix Figure A.7 shows that there is no clear shift in opinions specifically among potential PRRP voters, i.e., voters with a higher PRRP score. We present the mean score among the voters at the top 5, 10, and 20 percentiles of the PRRP score distribution. While

<sup>&</sup>lt;sup>19</sup>We ensure that all the country indicators are taken into account in the LASSO regression by forcing the model not to penalize these variables. However, we do not use the country indicators when calculating the PRRP score since our purpose is to capture the characteristics at the voter level.

there is an increase in the PRRP score among these voters in some of the countries analyzed, the increase is not dramatic and does not occur in many countries.

We receive similar results when we examine trends for specific opinions. In Appendix Figure A.8 we focus on six specific variables typically associated with right-wing populism and present their evolution in each country and in aggregate. Once again, we find that on average, opinions on these topics are relatively stable. In some topics (homosexuality not justifiable) support is even declining.

To verify that we are not missing important variables, in Appendix Figure A.9 we take into account all variables and present the opinions that changed the most between 2005 and 2020. Interestingly, some of the most important changes move in the opposite direction of PRRP positions. For example, voters developed less conservative opinions on traditional morality issues, such as abortion and divorce.

This section, along with the results of our decomposition exercise, brings into question the common argument that voters' opinions and demographics have changed and this change explains the rise of PRRP. Any theory claiming that the rise in support for PRRP reflects more nativist and authoritarian opinions should explain why these opinions are not changing along with PRRP support.

#### 4.2.1 Explaining Cross-Country Differences

While differences in voter characteristics do not explain the increase in support for PRRP across time, they do explain some of the differences in support across countries.

Instead of decomposing temporal variation in PRRP support, we use a similar decomposition to explore cross-country variation in the support of PRRP. For voters in each country, we simulate their counterfactual support for the National Front, had they faced the same choice as voters in France. In other words, we fix the parties, their positions and residuals, to the values in France in 2017-2020 and only allow voter characteristics to differ across countries. Formally we calculate the following counterfactual for every country c:

$$\tilde{S}_{P}^{t,c} = \int P(\Pi|x_i; \theta_t, Z_t^{France}, \zeta_t^{France}) f_t^c(x_i) dx_i$$
 (5)

where t corresponds to the 2017-2020 IVS wave.

Figure 7 shows that the support for PRRP is different across countries partly because of

voter characteristics.<sup>20</sup> The variation across countries is consistent with the variation in the actual support for PRRP that exists in the data and is presented in Figure 2. The potential support for PRRP is smallest in the Nordic countries and largest in Eastern European countries. As expected, in the U.K. and U.S. we predict much larger counterfactual support for PRRP than exists in the data, probably due to the first-past-the-post system in these countries that tends to favor two-party systems (Duverger, 1959; Fujiwara et al., 2011).

The counterfactual support for the National Front can be interpreted as the reservoir of PRRP voters. It measures in which countries voter characteristics indicate a latent demand for a large PRRP. This section focuses on France only for convenience. Appendix Figure A.10 conducts a similar exercise using German parties and presents the counterfactual support for the AfD. The results are similar, demonstrating that our finding in this section is not unique to France.

#### 4.3 Changes in Voting Priorities

Our decomposition results show that a large share (50.6%) of the increase in support for PRRP is driven by changes in priorities. These are changes in the utility parameters, which change the voting weights for every given set of demographics and opinions. These results are consistent with the hypothesis that the rise in PRRP support is driven not by a change in mass attitudes but rather by the activation of preexisting attitudes (Bartels, 2017; Bonikowski, 2017; Sides et al., 2019). In this section, we analyze in more detail how priorities changed during this period.

We find that voters place less weight on economic issues, compared to cultural issues, and particularly conservative cultural issues. In Figure 8 we examine the changes in the weights placed on the economic index and cultural index over time. To isolate the changes in priorities from the changes in voters' characteristics, we fix the distribution of voters' characteristics to its value in the 2017-2020 wave. Figure 8 presents the changes in weights that are driven only by changes in the utility function parameters.

We find that the distribution of the weights placed on the economy index became more concentrated around zero in 2017-2020. The left panel of Figure 8 presents the distribution of

 $<sup>^{20}</sup>$ We are able to include the U.S. in this map because the World Value Survey was conducted there as well. For the U.S., we impute all variables related to the European Union to their average level in our sample.

weights on the economic index in 2005-2009 (blue) and in 2017-2020 (yellow), holding voters' characteristics fixed. Ceteris paribus, the economic positions of parties have become a less decisive factor when individuals decide their vote.

On the other hand, the right panel of Figure 8 shows a shift to the right in the weights placed on the cultural index. Fewer voters now place a very negative weight on the cultural index, while more voters place a positive weight. This implies that cultural positions have become a more decisive factor in the voting decision of conservative voters. Moreover, there are fewer voters who penalize parties for holding conservative cultural positions.

We find substantial heterogeneity in priority changes across different demographic groups. Figure 9 presents the changes in the distribution of the weights separately by gender and age. We repeat the previous exercise, and for each subpopulation, we plot the distribution of the economic and cultural index in 2005-2009 (blue) and in 2017-2020 (yellow), holding voter characteristics fixed. While the trends in the economic weights are similar between males and females, the trends for cultural weights are strikingly different. We find that the shift to the right in the weights placed on conservative cultural positions is driven mainly by male voters. Female voters have only moderated their weights on cultural positions during the same period. Subfigure (b) shows that the shift to the right in the cultural weights is also correlated with age and is larger for older voters. In contrast, voters below the age of 35 have shifted to the left. On economics issues, while older voters have started with more conservative priorities, all age groups have deprioritized economic issues, compared to cultural issues.

We also find a growing divergence on cultural issues between college and non-college graduates, as well as union and non-union members. Figure 10 shows the change in the weight distribution separately by college education and union membership status. On cultural issues, we find a shift to the right of the weight distribution only for non-college and non-union voters. In contrast, college graduates and union members have shifted their weights in the opposite direction, prioritizing more liberal cultural policies. On economic positions, we find that college graduates and non-union members used to prioritize more conservative positions in the past. However, the different subpopulations have gradually converged with time in their economic weights.

These findings corroborates previous work, although more limited in its empirical scope,

regarding the growing role of cultural issues in shaping political identities and behavior. De Vries et al. (2013), for instance, analyze survey data from the Netherlands and show that since the early 1980s, political identities have become more weakly associated with voters' redistributive preferences while more strongly tied to their attitudes on immigration. In Italy, anti-immigration attitudes have also become more strongly predictive of voting behavior since the early 2000s (Magistro and Wittstock, 2021). As summarized by Norris and Inglehart (2019) from a broader cross-national perspective, "[T]oday the most heated political issues in Western societies are cultural, dealing with the integration of ethnic minorities, immigration, and border control, Islamic-related terrorism, same-sex marriage and LGBTQ rights" (see also Gidron et al. (2020)). Cultural issues continued to gain political importance even following the 2008 financial crisis, as economic developments were discussed through cultural frameworks that emphasize questions such as national sovereignty in the context of economic globalization (Hutter and Kriesi, 2019). The results provided above provide the most comprehensive empirical documentation of this development and its role in driving support for PRRP.

Finally, the residual component also increases substantially within this time period. This is mainly driven by entries of new parties. Our counterfactual analysis suggests that PRRP could have received some support had they entered earlier. Appendix D discusses this in detail.

### 5 Conclusions

There is no lack of potential explanations for the rise of the populist radical right. Our goal in this manuscript is not to introduce another factor that may drive the support for these parties but rather to provide a framework for organizing existing explanations into distinct categories—changes in party positions, voter characteristics, and voter priorities—and assessing their explanatory power.

Our findings cast strong doubt on the idea that changes in voters' demographics or opinions, whether driven by economic forces such as trade shocks or cultural developments such as growing ethnic diversification, explain the rise of PRPP—although it may still be that these developments have affected electoral politics through their impact on voters' priorities.

While public opinion may explain idiosyncratic changes in these parties' support, it cannot explain the dramatic rise in support over the last two decades across Europe.

Rather than changes in voters' characteristics, it is growing priorities attached to the issues owned by the PRRP that explain their growing electoral appeal. In Bartels (2017) memorable phrasing, PRRP are not surfing into power on a wave of growing nativism and authoritarianism in public opinion; instead, these parties have proved apt at mobilizing preexisting reservoirs of potential support. This implies that significant electoral changes can occur not only when people change their minds but also when certain issues become more important or salient.

While explaining why priorities change is beyond the scope of this paper, we note several potential explanations: a) an increase in economic security that allowed voters to focus on moral good (Enke et al., 2022; Inglehart, 1981); b) trade shocks, immigration shocks, or skill-biased technical change made cultural cleavages more salient (Bonomi et al., 2020), c) social media changed the public discourse and made certain nationalist issues more salient (Manacorda et al., 2022); d) voters believe that more economic outcomes are determined by supranational organizations and non-government actors so that national representatives have less power to set economic policy (Mounk, 2018). Whatever the reason, the change in the priorities of voters dramatically shifted the political map in Europe and should be the focus of future research.

### References

- Abou-Chadi, T. and S. Hix (2021). Brahmin left versus merchant right? education, class, multiparty competition, and redistribution in western europe. *The British Journal of Sociology* 72(1), 79–92.
- Abou-Chadi, T. and W. Krause (2020). The causal effect of radical right success on mainstream parties' policy positions: A regression discontinuity approach. *British Journal of Political Science* 50(3), 829–847.
- Adams, J., L. Bernardi, L. Ezrow, O. B. Gordon, T.-P. Liu, and M. C. Phillips (2019). A problem with empirical studies of party policy shifts: Alternative measures of party shifts are uncorrelated. *European Journal of Political Research* 58(4), 1234–1244.
- Akkerman, T. (2015). Gender and the radical right in western europe: a comparative analysis of policy agendas. *Patterns of Prejudice* 49(1-2), 37–60.
- Akkerman, T., S. L. de Lange, and M. Rooduijn (2016). Radical right-wing populist parties in Western Europe: Into the mainstream? Routledge.
- Algan, Y., S. Guriev, E. Papioannou, and E. Passari (2017). The European Trust Crisis and the Rise of Populism. *Brookings Papers on Economic Activity*, 309–382.
- Anelli, M., I. Colantone, and P. Stanig (2019). We Were The Robots: Automation and Voting Behavior in Western Europe.
- Athey, S., M. Bayati, N. Doudchenko, G. Imbens, and K. Khosravi (2021). Matrix completion methods for causal panel data models. *Journal of the American Statistical Association*, 1–15.
- Autor, D., D. Dorn, G. Hanson, and K. Majlesi (2020, October). Importing Political Polarization? The Electoral Consequences of Rising Trade Exposure. *American Economic Review* 110(10), 3139–3183.
- Ballard-Rosa, C., A. Jensen, and K. Scheve (2021). Economic decline, social identity, and authoritarian values in the united states. *International Studies Quarterly*.
- Ballard-Rosa, C., M. Malik, S. Rickard, and K. Scheve (2017). The economic origins of authoritarian values: evidence from local trade shocks in the united kingdom. In *Annual Meeting of the International Political Economy Society, Nov*, Volume 17, pp. 18.
- Barber, M. and J. C. Pope (2019). Does party trump ideology? disentangling party and ideology in america. *American Political Science Review* 113(1), 38–54.
- Bartels, L. (2017). The 'wave' of right-wing populist sentiment is a myth. Washington Post.
- Berman, S. (2021). The causes of populism in the west. *Annual Review of Political Science* 24, 71–88.
- Berman, S. and H. Kundnani (2021). Mainstream parties in crisis: The cost of convergence. Journal of Democracy 32(1), 22–36.
- Berman, S. and M. Snegovaya (2019). Populism and the decline of social democracy. *Journal of Democracy* 30(3), 5–19.
- Bonikowski, B. (2017). Ethno-nationalist populism and the mobilization of collective resentment. The British journal of sociology 68, S181–S213.
- Bonomi, G., N. Gennaioli, and G. Tabellini (2020). Identity, Beliefs, and Political Conflict.
- Bonomi, G., N. Gennaioli, and G. Tabellini (2021, 09). Identity, Beliefs, and Political Conflict. *The Quarterly Journal of Economics* 136(4), 2371–2411.

- Cantoni, D., F. Hagemeister, and M. Westcott (2020). Persistence and Activation of Right-Wing Political Ideology.
- Colantone, I. and P. Stanig (2018a). Global competition and brexit. American political science review 112(2), 201–218.
- Colantone, I. and P. Stanig (2018b). The trade origins of economic nationalism: Import competition and voting behavior in western europe. *American Journal of Political Science* 62(4), 936–953.
- Cools, S., H. Finseraas, and O. Rogeberg (2021). Local immigration and support for antiimmigration parties: A meta-analysis. *American Journal of Political Science*.
- De Vries, C. E., A. Hakhverdian, and B. Lancee (2013). The dynamics of voters' left/right identification: The role of economic and cultural attitudes. *Political Science Research and Methods* 1(2), 223–238.
- Dehdari, S. H. (2022). Economic distress and support for radical right parties—evidence from sweden. *Comparative Political Studies* 55(2), 191–221.
- DiNardo, J., N. M. Fortin, and T. Lemieux (1996). Labor market institutions and the distribution of wages, 1973-1992: A semiparametric approach. *Econometrica: Journal of the Econometric Society*, 1001–1044.
- Dippel, C., R. Gold, S. Heblich, and R. Pinto (2020). The Effect of Trade on Workers and Voters.
- Döring, H. and S. Regel (2019). Party facts: A database of political parties worldwide. *Party politics* 25(2), 97–109.
- Duverger, M. (1959). Political parties: Their organization and activity in the modern state. Metheun & Co. Ltd.
- Döring, H. and P. Manow (2020). ParlGov 2020 Release.
- Enke, B. (2020). Moral Values and Voting. Journal of Political Economy 128 (10), 3679–3729.
- Enke, B., M. Polborn, and A. Wu (2022). Morals as luxury goods and political polarization. Technical report, National Bureau of Economic Research.
- Fortin, N., T. Lemieux, and S. Firpo (2011). Decomposition methods in economics, volume 4 of handbook of labor economics, chapter 1.
- Fujiwara, T. et al. (2011). A regression discontinuity test of strategic voting and duverger's law. Quarterly Journal of Political Science 6 (3–4), 197–233.
- Funke, M., M. Schularick, and C. Trebesch (2020). Populist Leaders and the Economy.
- Gidron, N., J. Adams, and W. Horne (2020). American affective polarization in comparative perspective. Cambridge University Press.
- Gidron, N. and P. A. Hall (2017). The politics of social status: Economic and cultural roots of the populist right. *The British journal of sociology 68*, S57–S84.
- Golder, M. (2016). Far right parties in europe. Annual Review of Political Science 19, 477–497.
- Guiso, L., H. Herrera, M. Morelli, and T. Sonno (2017). Demand and Supply of Populism.
- Guriev, S., N. Melnikov, and E. Zhuravskaya (2021). 3g internet and confidence in government. The Quarterly Journal of Economics 136(4), 2533–2613.
- Guriev, S. and E. Papioannou (2020). The Political Economy of Populism. *Journal of Economic Literature*, Forthcoming.

- Hangartner, D., E. Dinas, M. Marbach, K. Matakos, and D. Xefteris (2019). Does exposure to the refugee crisis make natives more hostile? *American Political Science Review* 113(2), 442–455.
- Hastie, T., R. Tibshirani, and M. Wainwright (2019). Statistical learning with sparsity: the lasso and generalizations. Chapman and Hall/CRC.
- Hetherington, M. J. and T. J. Rudolph (2015). Why washington won't work. In Why Washington Won't Work. University of Chicago Press.
- Hutter, S. and H. Kriesi (Eds.) (2019). European party politics in times of crisis. Cambridge University Press.
- Inglehart, R. (1981). Post-materialism in an environment of insecurity. American political science review 75(4), 880–900.
- Johns, R. (2010). Measuring issue salience in british elections: Competing interpretations of "most important issue". *Political Research Quarterly* 63(1), 143–158.
- Juhn, C., K. M. Murphy, and B. Pierce (1993). Wage inequality and the rise in returns to skill. *Journal of political Economy* 101(3), 410–442.
- Kendall, C., T. Nannicini, and F. Trebbi (2015). How do voters respond to information? evidence from a randomized campaign. *American Economic Review* 105(1), 322–53.
- Kriesi, H., E. Grande, R. Lachat, M. Dolezal, S. Bornschier, and T. Frey (2008). West European politics in the age of globalization. Cambridge University Press.
- Lancaster, C. M. (2020). Value shift: immigration attitudes and the sociocultural divide. British Journal of Political Science, 1–20.
- Lefkofridi, Z. and E. Michel (2016). The electoral politics of solidarity. The strains of commitment: The political sources of solidarity in diverse societies, 233–67.
- Magistro, B. and N. Wittstock (2021). Changing preferences versus issue salience: The political success of anti-immigration parties in italy. South European Society and Politics 26 (3), 383–411.
- Mair, P. and C. Mudde (1998). The party family and its study. *Annual review of political science* 1(1), 211–229.
- Manacorda, M., M. Tabellini, and A. Tesei (2022). Mobile internet and the rise of political tribalism in europe.
- Mason, L., J. Wronsky, and J. V. KANE (2021). Activating animus: The uniquely social roots of trump support. *American Political Science Review*, 1–9.
- McCoy, J. and M. Somer (2019). Toward a theory of pernicious polarization and how it harms democracies: Comparative evidence and possible remedies. *The Annals of the American Academy of Political and Social Science* 681(1), 234–271.
- McDonnell, D. and A. Werner (2020). International populism: The radical right in the European Parliament. Oxford University Press, USA.
- Mounk, Y. (2018). The people vs. democracy. Harvard University Press.
- Mudde, C. (2007). Populist radical right parties in Europe. Cambridge university press.
- Mudde, C. (2019). The far right today. John Wiley & Sons.
- Nordø, Å. D. and E. Ivarsflaten (2021). The scope of exclusionary public response to the european refugee crisis. *European Journal of Political Research*.
- Norris, P. and R. Inglehart (2019). Cultural backlash: Trump, Brexit, and authoritarian

- populism. Cambridge University Press.
- Noury, A. and G. Roland (2020). Identity Politics and Populism in Europe. *Annual Review of Political Science* 23(1), 421–439.
- Piketty, T. (2020). Capital and ideology. Harvard University Press.
- Poole, K. T. and H. Rosenthal (2001). D-nominate after 10 years: A comparative update to congress: A political-economic history of roll-call voting. *Legislative Studies Quarterly*, 5–29.
- Rathgeb, P. and M. R. Busemeyer (2021). How to study the populist radical right and the welfare state? West European Politics 45(1), 1–23.
- Rodrik, D. (2018). Populism and the economics of globalization. *Journal of international business policy* 1(1), 12–33.
- Rooduijn, M. (2018). What unites the voter bases of populist parties? comparing the electorates of 15 populist parties. European Political Science Review 10(3), 351–368.
- Rooduijn, M., B. Burgoon, E. J. Van Elsas, and H. G. Van de Werfhorst (2017). Radical distinction: Support for radical left and radical right parties in europe. *European Union Politics* 18(4), 536–559.
- Rooduijn, M., S. Van Kessel, C. Froio, A. Pirro, S. De Lange, D. Halikiopoulou, P. Lewis, C. Mudde, and P. Taggart (2019). The PopuList: An overview of populist, far right, far left and Eurosceptic parties in Europe.
- Rosen, K. T. and M. Resnick (1980). The size distribution of cities: an examination of the pareto law and primacy. *Journal of urban economics* 8(2), 165-186.
- Rudolph, L. and M. Wagner (2021). Europe's migration crisis: Local contact and out-group hostility. European Journal of Political Research.
- Schaub, M., J. Gereke, and D. Baldassarri (2021). Strangers in hostile lands: Exposure to refugees and right-wing support in germany's eastern regions. *Comparative Political Studies* 54 (3-4), 686–717.
- Schumacher, G. and K. Van Kersbergen (2016). Do mainstream parties adapt to the welfare chauvinism of populist parties? *Party Politics* 22(3), 300–312.
- Sides, J., M. Tesler, and L. Vavreck (2019). *Identity crisis*. Princeton University Press.
- Sobolewska, M. and R. Ford (2020). Brexitland: Identity, diversity and the reshaping of British politics. Cambridge University Press.
- Volkens, A., T. Burst, W. Krause, P. Lehmann, T. MatthieAY, N. Merz, S. Regel, B. Weßels, and L. Zehnter (2020). The manifesto data collection. manifesto project (mrg/cmp/marpor). version 2020b.
- Zeira, J. (2022). The rise of the educated class.

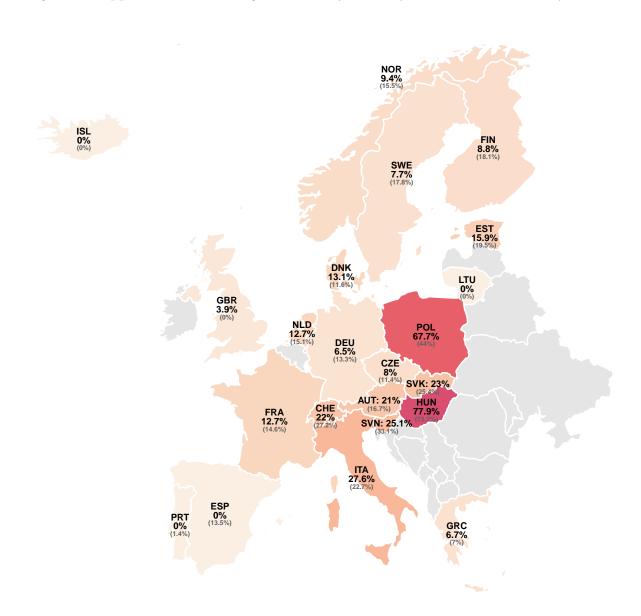
# Figures and Tables

20% 15% PRRP Vote Share 10% 2017-2020 wave 2005-2009 2011-2013 5% 2010 2015 1990 1995 2000 2005 2020 Year

Figure 1: Support for Populist Radical Right Parties Over Time

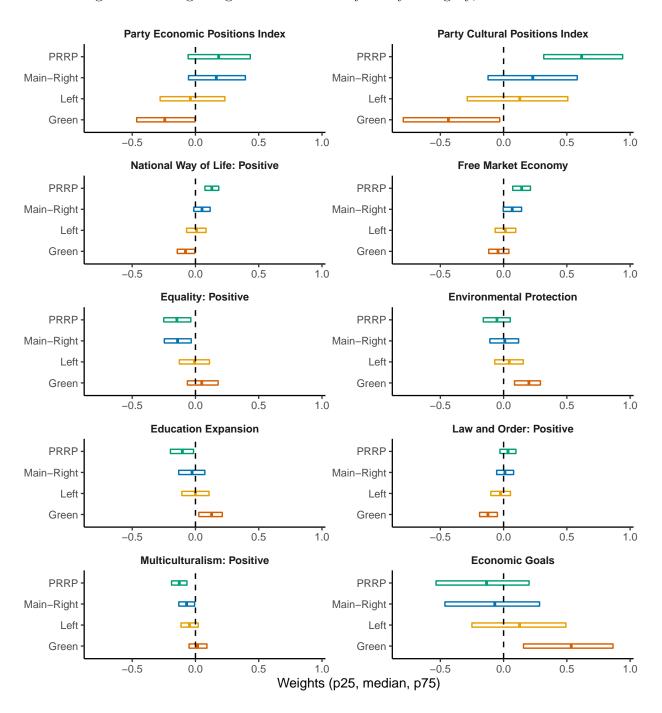
This figure shows the average vote share of PRRP in the 22 European countries in our data. Within each country, the vote share every year is calculated as the average PRRP vote share among all parties appearing in the CMP dataset in all parliamentary elections in the five years ending in that year. We then calculate the average share across all 22 countries.

Figure 2: Support for Radical Right Parties by Country, 2017-2020 IVS Survey Wave



This figure shows the average vote share of PRRP in the 2017-2020 IVS Survey Wave. The actual vote share in the closest election appears in gray in parenthesis. Note that the closest elections can occur several years before or after the survey.

Figure 3: Voting Weights Distribution by Party Category, 2017-2020



This figure shows the weights voters place on the two party position indices and eight manifesto variables in the most recent survey wave (2017-2020). The chosen manifesto variables have the largest variance of weights across the four party families. We estimate the model on the 2017-2020 wave and for each voter calculate the weights based on her characteristics using Equation 1. For the two indices, the weights are the average weights on the party positions comprising each index, where weights for positions that enter the index with a negative sign are multiplied by -1. Weights are in standard deviation to utility units – the increase in utility for an increase of one standard deviation in the index/position. We present the 25th, 50th, and 75th percentiles of weights for voters supporting different party categories: PRRP, mainstream right-wing, left-wing, and green. The party categories are described in Section 2.3, the indices are discussed in Section 3.3, and their manifesto components are described in Appendix Table A.2.

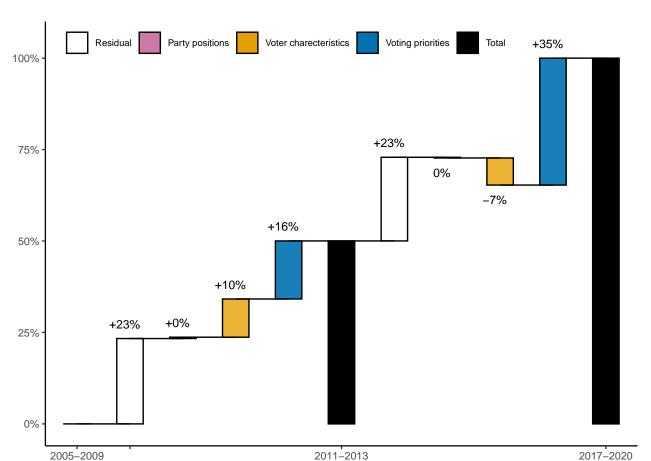
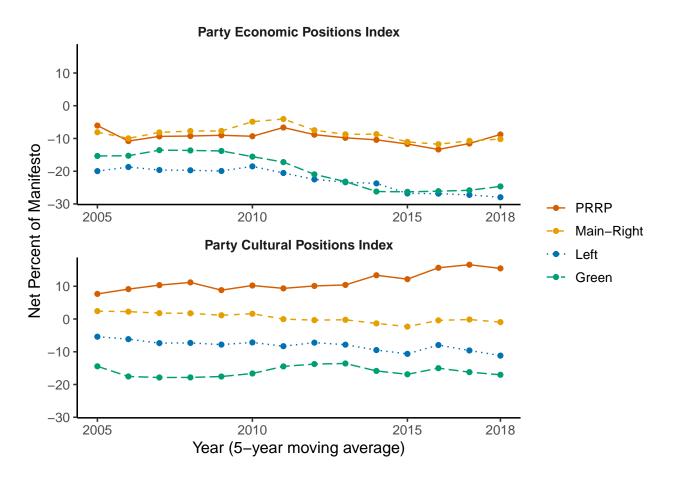


Figure 4: Decomposition of the Rise in Populist Radical Right Support

This figure presents the result of our main decomposition exercise. The black bars present the share of the increase in PRRP support between 2005-2009 and 2017-2020. We aggregate across all 22 countries by using a weighted average of their decomposition results (that appear in Figure A.3). Weights are the inverse of the share of radical right support in the 2017-2020 wave.

Figure 5: Changes in Party Positions Over Time



This figure shows the changes in party positions for four party categories (PRRP, Main Right, Left, and Green) since 2005 using the CMP data. The figure presents the moving average values for each index and group of parties for five-year periods. Each country is weighted equally, and parties within each country are weighted by their average voting shares. For each index, we sum all the values composing the index (some values have a negative sign). Thus, the y-axis represents the average net share of the manifesto dedicated to the party positions composing each index. The indices are discussed in Section 3.3 and their manifesto components are described in Appendix Table A.2.

O.50 - CZSch Republic Slovakia

Greece
Poland
Portugal
Limbania
Norway
Spain
Finland

Austria

Carmany

O.25 - CSCh Republic
Slovakia

Average
Switzerland
Forace
Poland
Estonia
Norway
Spain
Finland

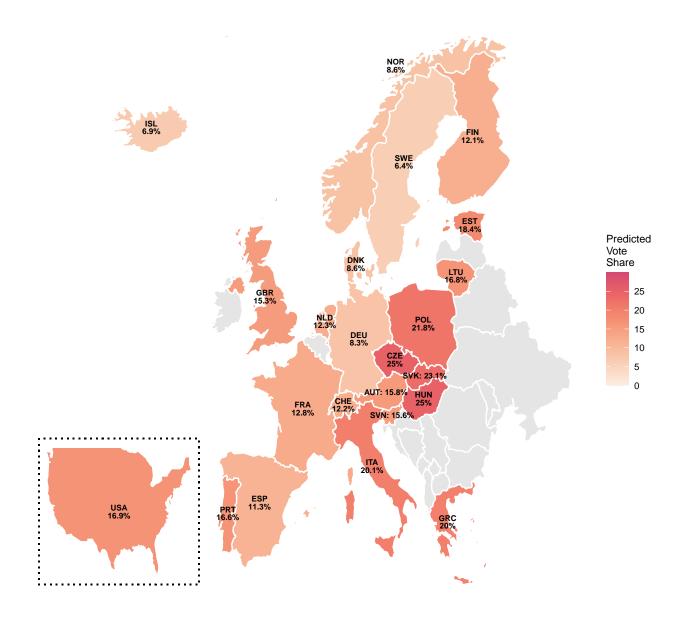
Austria

Figure 6: Voters' PRRP Score Over Time

This figure presents the average voters' PRRP score by survey wave. The score is calculated by running a LASSO regression predicting PRRP support. The regression is run on the most recent survey and includes all IVS variables in our final dataset, along with country fixed effects, with no penalty on the country coefficient. To calculate the PRRP score we standardize the fitted value based on the regression coefficients (excluding country). We pin the mean value in the 2005-2009 wave to zero in all countries. The gray lines show the trend in each country, while the blue dashed line is the average across all 22 countries.

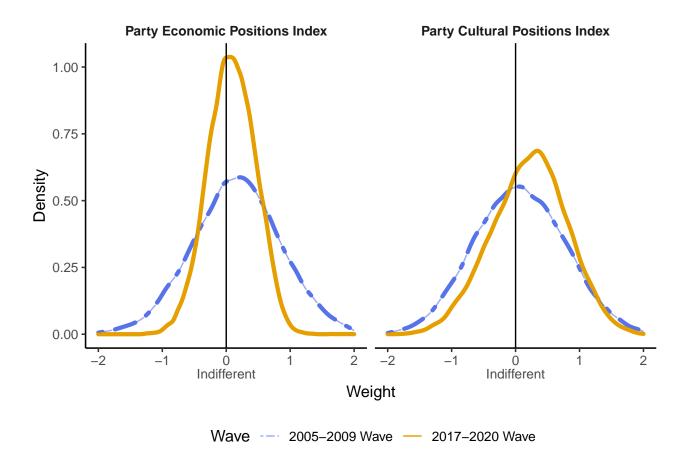
Country - Aggregate

Figure 7: Counterfactual Support for the National Front by Voter Characteristics



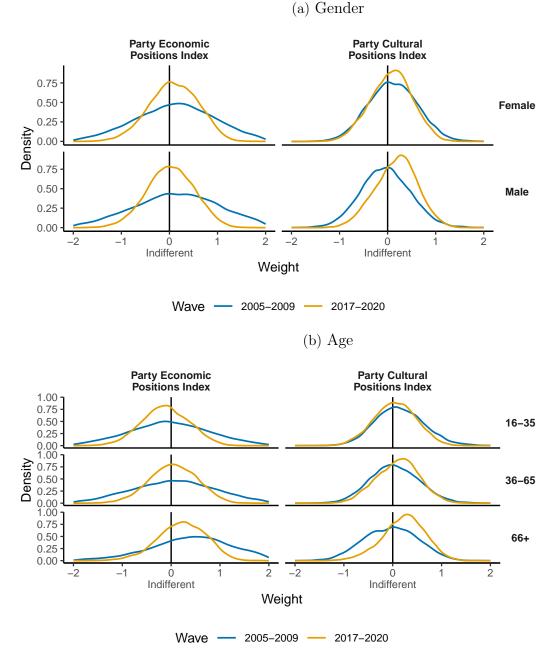
This figure calculates the counterfactual support for the National Front in the 2017-2020 wave if French voters had the characteristics of voters in other countries. We calculate the counterfactual separately for each country based on the formula in Equation 5. In all countries, we use the party positions of French parties in the 2017-2020 wave  $(Z_t^{France})$  along with the estimated residuals for French parties  $(\zeta_t^{France})$  and the model parameters that were estimated for this wave  $(\hat{\Phi}_t, \hat{\beta}_t)$ . For each country, we predict the share of National Front supporters according to the voter characteristics in that country. For the U.S. sample, we impute the responses for the IVS question related to the European Union based on the sample averages.

Figure 8: Changes in the Distribution of Voting Weights, Holding Characteristics Fixed



This figure shows the distribution of the weights voters place on the economic and cultural indices of party positions for different waves, holding voters' characteristics fixed at their level in 2017-2020. Weights are calculated based on Equation 1, using voter characteristics from the 2017-2020 IVS survey, and the estimated utility parameters for the 2005-2009 wave (blue) and 2017-2020 wave (yellow). The weight placed on an index is the average weight corresponding to each party position that comprises the index, where weights for positions that enter the index with a negative sign are multiplied by -1. Weights are in standard deviation to utility units – the increase in utility for an increase of one standard deviation in the index. The indices are discussed in Section 3.3 and their manifesto components are described in Appendix Table A.2.

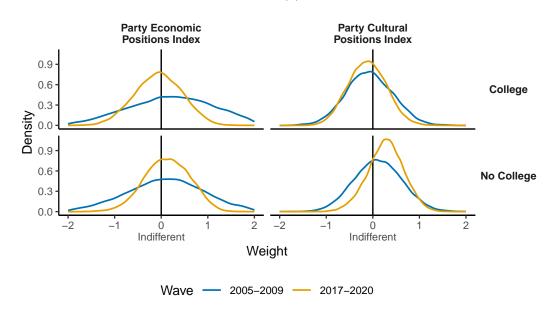
Figure 9: Voting Weights by Sub-Populations, Holding Characteristics Fixed



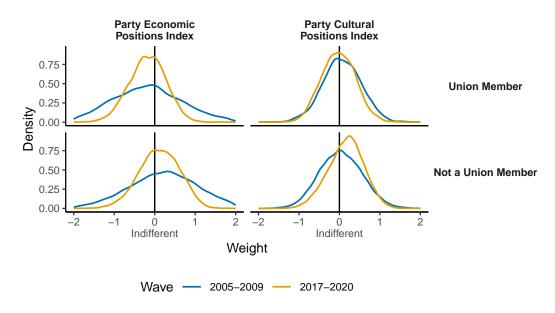
This figure shows the sub-population distribution of the weights voters place on the economic and cultural indices of party positions for different waves, holding voters' characteristics fixed at their level in 2017-2020. Weights are calculated based on Equation 1, using voter characteristics from the 2017-2020 IVS survey, and the estimated utility parameters for the 2005-2009 wave (blue) and 2017-2020 wave (yellow). The weight placed on an index is the average weight corresponding to each party position that comprises the index, where weights for positions that enter the index with a negative sign are multiplied by -1. Weights are in standard deviation to utility units – the increase in utility for an increase of one standard deviation in the index. The indices are discussed in Section 3.3 and their manifesto components are described in Appendix Table A.2

Figure 10: Voting Weights by Sub-Populations, Holding Characteristics Fixed

(a) Education



(b) Union Membership Status



This figure shows the sub-population distribution of the weights voters place on the economic and cultural indices of party positions for different waves, holding voters' characteristics fixed at their level in 2017-2020. Weights are calculated based on Equation 1, using voter characteristics from the 2017-2020 IVS survey, and the estimated utility parameters for the 2005-2009 wave (blue) and 2017-2020 wave (yellow). The weight placed on an index is the average weight corresponding to each party position that comprises the index, where weights for positions that enter the index with a negative sign are multiplied by -1. Weights are in standard deviation to utility units – the increase in utility for an increase of one standard deviation in the index. The indices are discussed in Section 3.3 and their manifesto components are described in Appendix Table A.2

Table 1: CMP Descriptive Statistics

	2005	2005-2009		-2020
	PRRP	Other Parties	PRRP	Other Parties
Party Economic Positions Index	-6.4	-8.1	-6.4	-14.8
Party Cultural Positions Index	13.2	-6.7	19.7	-6.7
Top 10 Distinctive Variables				
European Community/Union: Negative	2.8	0.3	3.4	0.5
National Way of Life: Positive	6.1	1.9	10.8	2.6
Internationalism: Negative	1.2	0.2	1.2	0.2
Multiculturalism: Negative	3.2	0.5	2.6	0.9
Military: Positive	2.7	1.6	3.8	2.1
Law and Order: Positive	7.0	4.4	6.9	4.0
Protectionism: Positive	1.5	0.1	0.9	0.5
Welfare State Limitation	0.9	0.4	1.7	0.5
Traditional Morality: Positive	2.6	1.2	3.0	0.9
Free Market Economy	2.0	1.3	2.7	1.6

This table provides descriptive statistics on variables in the CMP data. The first two rows show the averages of the two party position indices and the next ten rows focus on the ten positions with the largest difference between PRRP and other parties. The first two columns present the averages of each variable in 2005-2009 and the last two columns present the averages in 2017-2020. Each variable represents percentile shares of platforms. The indices are net percentile share: the difference between the share dedicated to right-wing positions and left-wing positions.

Table 2: IVS Descriptive Statistics

	2005-	2009	2017-	2020
	Populist Radical Right	Other Parties	Populist Radical Right	Other Parties
Demographics				
College education	0.16	0.28	0.22	0.40
Age	45.83	50.04	51.01	52.48
Male	0.53	0.47	0.53	0.45
Right Wing	0.66	0.41	0.74	0.42
Urban	0.21	0.27	0.18	0.24
Most Distinctive Opinions				
Confidence in EU	-0.13	0.07	-0.53	0.04
Jobs should prioritize natives	0.46	-0.03	0.55	-0.13
Don't want immigrant neighbors	0.14	-0.08	0.55	-0.04
Confidence in press	-0.11	0.05	-0.36	0.03
Confidence in UN	-0.14	0.06	-0.42	0.04
Confidence in environmental protection mvt	-0.16	0.01	-0.31	0.07
Like idea of army rule	0.14	-0.05	0.34	-0.04
Confidence in civil services	-0.29	-0.06	-0.15	0.13
Trust other people	-0.35	-0.02	-0.33	0.13
Confidence in justice system	-0.28	-0.04	-0.31	0.13

This table provides descriptive statistics on variables in the Integrated Values Survey data. The first five rows show the average of each demographic variable. We define urban as living in a city with more than 100,000 people and right-wing as a self-reported ideology that is more conservative than the median. The next rows show the average of each voter opinion variable for the ten most distinctive opinions. We rank the most distinctive opinions using a variable importance exercise from a random forest prediction of whether each voter is a PRRP supporter. The first two columns present the averages of each variable in 2005-2009 and the last two columns present the averages in 2017-2020.

# Appendix

# A Theory Appendix

In this section, we discuss the similarities between our model and a quadratic bliss-point model. Assume that voters have a bliss point which is a linear function of their observables,  $Ax_i$ . Voters support parties that are closest to their bliss point. Formally, define the distance between two vectors of positions as

$$dist(u,v)^2 = \sum_k \beta_k^2 (u_k - v_k)^2$$

The vector  $\beta$  represents the relative importance of different party positions in this model. Using this distance function, we can define the bliss-point utility function as

$$U_{ij} = dist(z_j, Ax_i)^2 + \zeta_j + \epsilon_{ij}$$

Defining  $\Phi = A * diag(\beta)$  and  $\delta_j = z^2 \beta^2 + \zeta_j$ , we can write the utility function as

$$U_{ij} = x_i \Phi z_i' + \delta_j$$

which is exactly the utility function we estimate in the first stage (Equation 2). Therefore, our estimation of the first stage will be unbiased in the case of a bliss-point model.

Our estimation of the second stage will be biased. To fully accommodate for a bliss-point utility model, we need to allow  $\delta$  to depend on a quadratic function of the party positions. The misspecification error would be attributed to the residual component  $\zeta_j$ .

## B Data Appendix

## **B.1** Data Processing

We clean categorical variables in the IVS data to keep the number of potential categories reasonable and merge similar variables when possible.<sup>21</sup> For all variables, we impute missing values using random forests for each country-wave separately. When a value is missing for an entire country-wave, we typically exclude the variable from our final dataset. In rare cases, where the variable is available for almost all other countries in all survey waves, we impute the values for the specific missing country-wave using the nearest survey waves for that country.<sup>22</sup>

<sup>&</sup>lt;sup>21</sup>For example, we aggregate the answers to the question asking the respondent about her religion to the following variables: Protestant, Catholic, other Christian, Muslim, Jew, Hindu, Buddhist, and other.

<sup>&</sup>lt;sup>22</sup>When the variable is available in both a proceeding and a succeeding wave, we impute the variable as a linear interpolation of the mean values in each of these waves, according to the year when each survey was taken. In cases where we have only a proceeding or a succeeding wave, we impute the missing data as the mean value of the available wave. For the imputation process we also use three additional survey waves conducted before 2005. All the imputations are described in Table A.3.

#### **B.2** Merging Datasets

We merge party data across the various datasets using PartyFacts (Döring and Regel, 2019) when possible and manually in other cases. In order to assign party positions to parties in the IVS data, we first match each party with a party in the CMP data and then in each survey wave assign the party positions from the closest election. The closest election is determined based on the distance between the mean date when a survey was conducted in a country-year and the date when the election was conducted. We define the party position as missing if no CMP data is available five years before or after the survey.<sup>23</sup> Overall we match 94% of the IVS respondents who supported a specific party with a manifesto within 5 years from the survey date and 92% are matched with a manifesto in the closest election to the survey date. We do not match all parties due to the following reasons: a party may not publish a manifesto, the manifesto of the party may not be coded in CMP,<sup>24</sup> a party may run in an alliance, and a party may have existed when the survey was conducted but not during the election.

When parties change names or run in various coalitions, it is often not clear if a new party was established or whether the same party runs in a different name or constellations. We follow the CMP to deal with this issue and define unique parties according to their CMP id. The CMP also indicates when one party is a successor of another. However, there are only three pairs of parties where both the predecessor and the successor parties appear in our data and therefore we do not merge predecessor and successor parties.

# C Estimation Appendix

In this section we discuss the dimension reduction in our second step estimation of the  $\beta$  parameter. We assume that the combinations of party positions that generate differences in utility among voters are the same factors that determine the average utility across all voters. Formally, the voting weights for every voter are given by Equation 1. Using  $\Phi_t = U_t \Sigma_t V_t^T$  to describe the singular value decomposition of matrix  $\Phi_t$ , this can be written as  $w_t(x_i) = x_i U_t \Sigma_t V_t^T + \beta_t$ . Defining  $\tilde{\beta} = \beta V$  we can write  $w_t(x) = (x_i U_t \Sigma_t + \tilde{\beta}_t) V_t^T$ . Since we restrict the nuclear norm of  $\Phi$  in the first stage, the last components of  $x_i U \Sigma$  would be close to zero (assuming the diagonal of  $\Sigma$  is ordered). Similarly, we restrict  $\tilde{\beta}$  such that only the first k components are different from zero. Therefore,  $\beta_t$  has to be a linear combination of the first k components in matrix V, such that  $\beta_t \in \text{span}\{[V_t]_k\}$ . We choose k = 5 though other values yield similar results.

<sup>&</sup>lt;sup>23</sup>Although an IVS wave may be composed of both an EVS wave and a WVS wave that were not necessarily conducted at same year we assign each IVS wave a single date for the merge. We do so in order to assign a single manifesto to each party. However, calculating the mean date at the EVS/WVS wave level would have changed the assigned manifesto of a party only in a handful of cases and would not have changed the set of observations we are able to match to CMP data within five years.

<sup>&</sup>lt;sup>24</sup>CMP codes manifestos for parties receiving at least 1 seat in the elections for the lower house in Western Europe and 2 seats in elections in Central and Eastern Europe. In some cases, the platforms of parties that met these conditions in the past are also coded.

 $<sup>^{25}</sup>$ Using the first k components in an SVD of a matrix yields the best approximation for the matrix for the Frobenius norm based on the Eckart–Young–Mirsky Theorem.

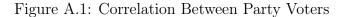
#### D Residual Rise of PRRP

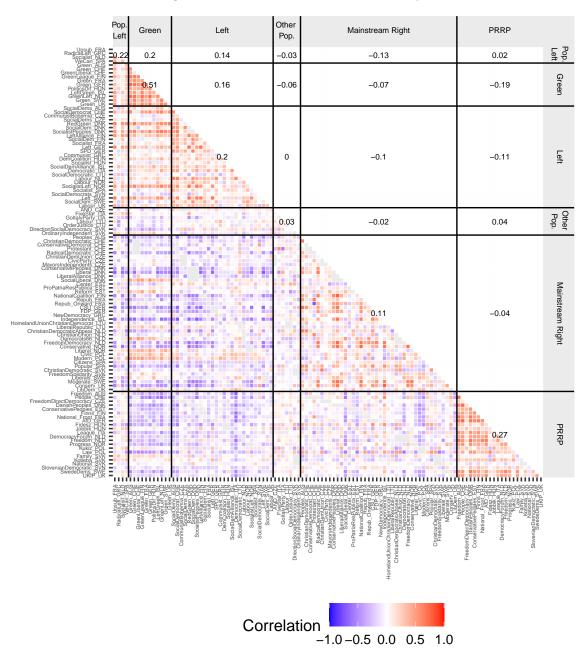
The second substantial component in our decomposition is the residual, which accounts for 46.2% of the overall increase in support for populist radical right parties. This component measures changes in the party valence as well as changes driven by entry and exit, as discussed in Section 1.

Preliminary evidence suggests that the entry of new parties is a particularly important driver. First of all, mechanically PRRP will not receive votes if they are not running a national election campaign. Second, the existence of more radical right parties could have provided voters with more options that match their preferences. Figure A.11 shows that the average number of PRRP increased from 0.57 to 1.17 between 1999 and 2019. To create this figure, we use CMP data to count the average number of radical right parties that received at least 1% of the vote across all elections in the past five years and then average the result over all the countries in our sample.

An important question for future research is why PRRP did not run earlier. Our counterfactual analysis suggests that based only on their positions, the potential support for the radical right had already existed in 2005-2009, and that these parties would have received a large number of votes, had they entered earlier. This late entry could be driven by both supply and demand channels. On the supply side, we can consider the time it took parties to learn from the success of PRRP in other countries and the high fixed cost of establishing a national party that voters are willing to consider. On the demand side, it is possible that in some countries the valence of the radical right (the utility voters receive from the party that is not related to party positions) was not sufficiently high, perhaps due to limited media attention. Low valence could explain the failure of radical right parties in countries such as Sweden, where the Swedish Democrats ran in elections but did not enter the parliament.

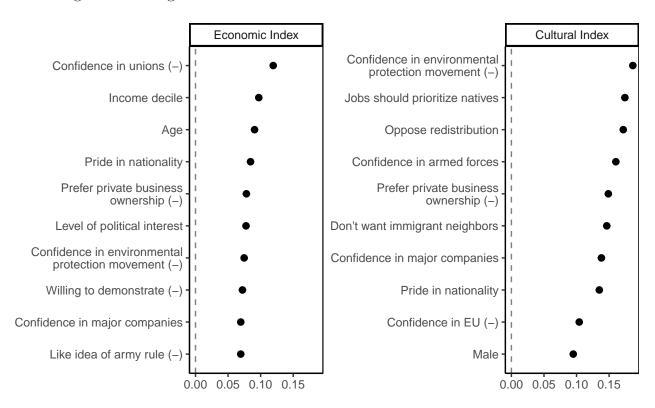
In addition to new entries, the residual component also captures changes in support for parties that are not driven by voter characteristics, voter priorities, or party positions. This could include changes in unobserved party positions that are not correlated with the observed party positions, such as leader charisma, or party salience. Alternatively, this could also represent changes in priorities that voters place on such unobserved party characteristics.





This figure presents the similarities between voters of different partys. For each party, we use a linear regression to predict support for that party based on each voter's characteristics, using data from the IVS. Then for every two parties, we calculate the correlation between the fitted values among all voters in both of the parties' countries. The labels show the average correlation between all parties in each family. We determine whether a party is PRRP based on the PopuList dataset classification into radical-right. We adopt the PopuList definition for populist left and other populists. We classify the remaining parties into categories based on the CMP data as explained in Section 2.3. We present all parties in our data that received support from at least 50 respondents.

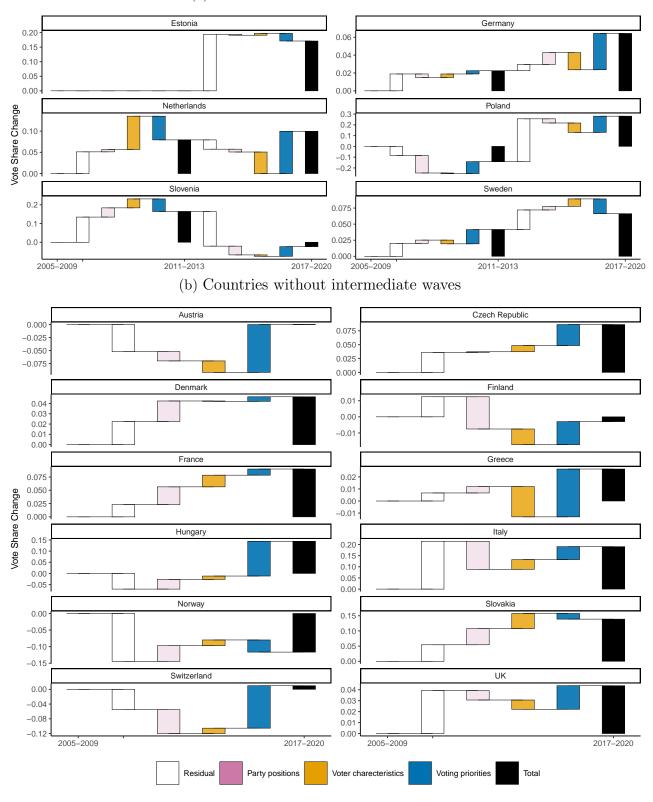
Figure A.2: Largest Coefficients Placed on the Economic and Cultural index



This figure presents the prominent coefficients on the IVS variables generating the weights for the economic and cultural index. For each index, we present the ten largest coefficients, in absolute value. We include a (-) sign for variables with a negative coefficient. The indices are the sum of the relevant manifesto variables, multiplied by (-1) for left-wing positions. We calculate weights for individual variables using Equation 1. We aggregate the corresponding variable weights for the indices, multiplying by (-1) when accordingly. We standardize the weights such that they represent the utility effect of a one standard deviation in the index.

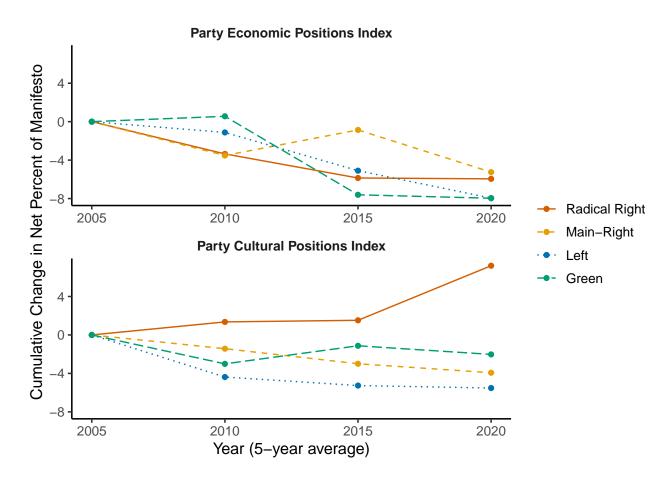
Figure A.3: Decomposition of Support for PRRP, by Country

(a) Countries with intermediate waves



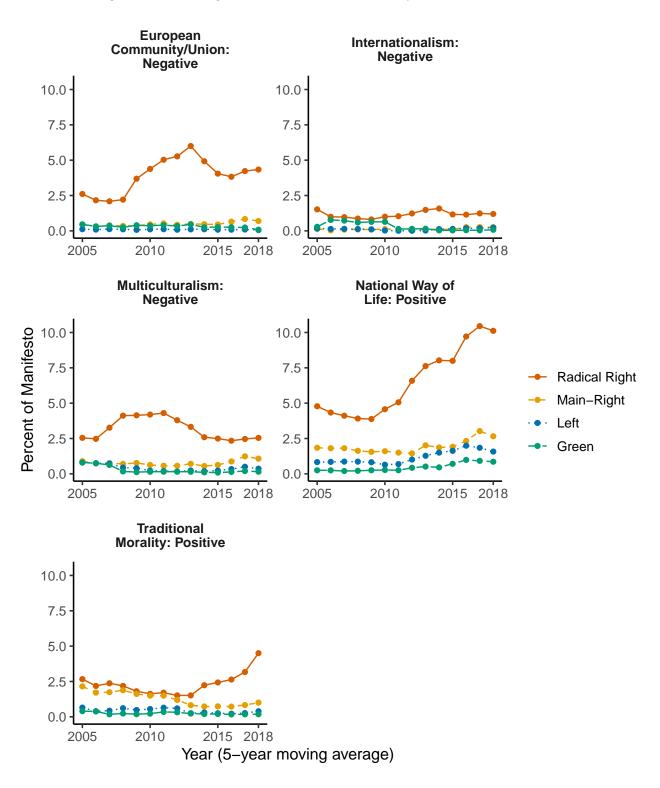
This figure presents the results of our decomposition by country. The black bars present the share of the increase in radical right support between 2005-2009 and 2017-2020. We decompose the rise in the share of PRRP support based on Equation 3. Each component represents the counterfactual change if only that input had changed while the others are held fixed. We present the results separately for countries where we have data from the 2011-2013 wave and countries where that data is not available. Countries with no PRRP support are not presented.

Figure A.4: Within-Party Position Changes



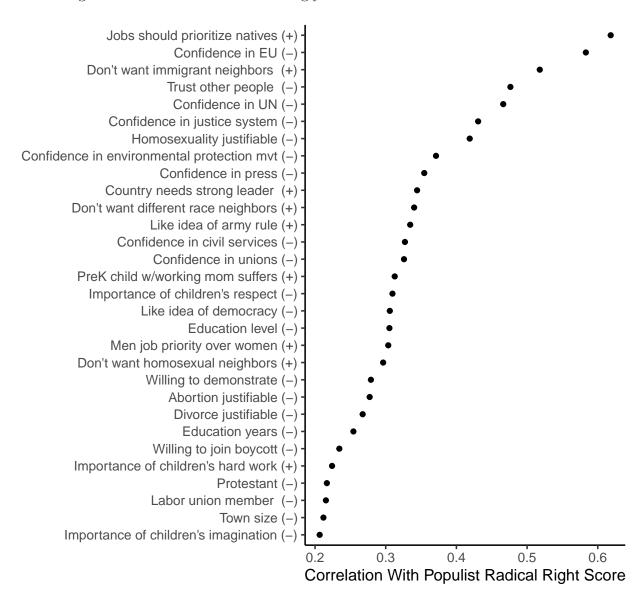
This figure shows the cumulative within-party changes of the two CMP party position indices by party categories. The manifesto components that comprise each index are described in Appendix Table A.2. The figure presents the average of the cumulative changes within each party since 2005. In particular, for each five-year period we first compute position changes at the party level. We then aggregate the change across parties and countries. Each country is weighted equally, and parties within each country are weighted by their average voting shares in the initial year. We present the cumulative change, summarizing all changes since 2005.

Figure A.5: Changes in Most Distinctive Party Positions Over Time



This figure shows the average position by party category for the five positions with the largest difference between PRRP and other parties. The manifesto components are described in Appendix Table A.2. The figure presents the moving average values for each component for groups of parties for five-year periods. Each country is weighted equally, and parties within each country are weighted by their average voting shares.

Figure A.6: Covariates Most Strongly Correlated with the PRRP Score



This figure presents the voter characteristics most strongly correlated with the PRRP score. For more details on the PRRP score, see Figure 6.

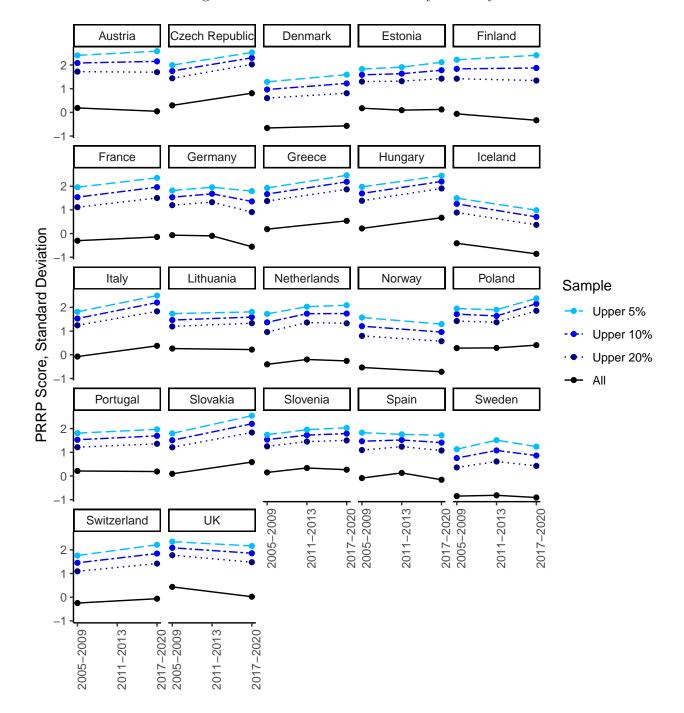
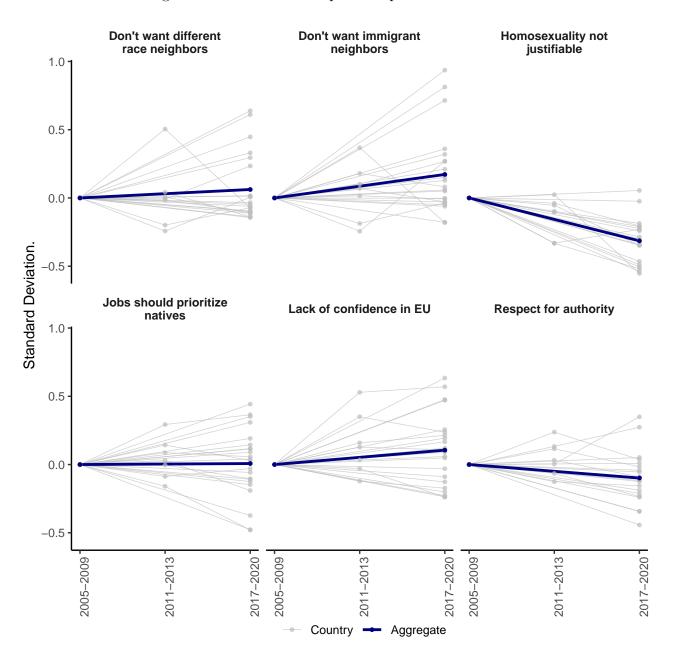


Figure A.7: Voters' PRRP Score By Country

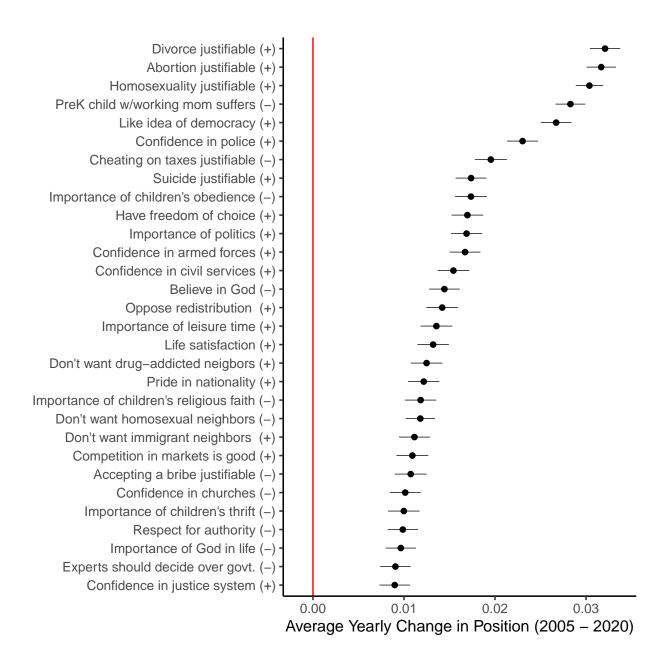
This figure presents the voters' PRRP score by country and survey wave, along with the average score for the voters with the highest score. For more details on the PRRP score, see Figure 6.

Figure A.8: Evolution of Specific Opinions over Time



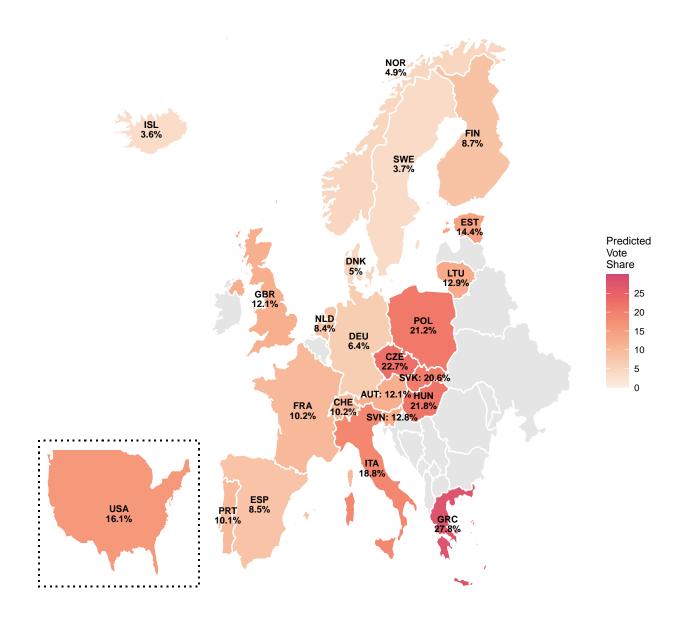
This figure shows the evolution of six specific voter opinions over time. Each thin gray line shows the trend in a single country and the thick bold blue lines show the average across all 22 countries, with all countries weighted equally. We standardize the variables within each country using means and standard deviations from the 2005-2009 IVS wave. We omit Italy from the question regarding the justifiability of homosexuality since it was not asked in the country in 2005-2009. For more details on each variable see Appendix Table A.3.

Figure A.9: Opinions that Changed the Most 2005-2020



This figure shows the opinions that changed the most between 2005-2020. We run a separate regression of every opinion variable on the survey year and country fixed effects. Each dot represents the coefficient on time in this regression. 95% confidence intervals are reported.

Figure A.10: Counterfactual Support for the AfD by Voter Characteristics



This figure calculates the counterfactual support for the AfD in the 2017-2020 wave if German voters had the characteristics of voters in other countries. We calculate the counterfactual separately for each country based on a formula similar to Equation 5. For more details see Figure 7.

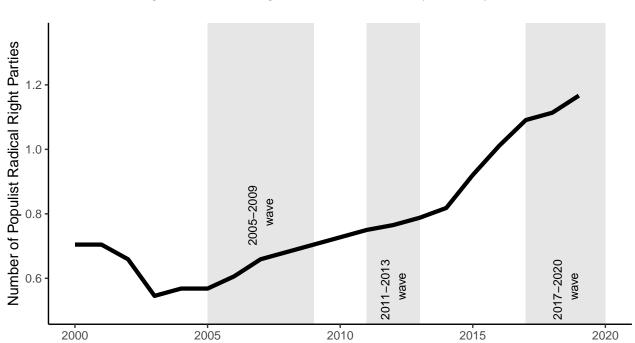


Figure A.11: Average Number of PRRP by Country

This figure shows the average number of PRRP that received at least 1% of the vote share by country. Within each country, the number of PRRP in each year is calculated as the average number of PRRP receiving at least 1% of the vote in all parliamentary elections in the five years ending that year. We then calculate the average number across all 22 countries, with all countries weighted equally.

Year

Table A.1: IVS Data

IVS Wave	Countries	Parties	Radical Right Parties	Observations	RRP Support Share
2005-2009	22	151	19	26,153	0.11
2010-2014	7	53	6	6,377	0.12
2017-2021	22	173	28	27,105	0.17

This table provides descriptive statistics on the final dataset analyzed. Each row represents an Integrated Values Survey wave. The observations include only respondents who were successfully matched with the Comparative Manifesto Project data. PRRP support share is the average support for PRRP taken over the 22 countries.

Table A.2: CMP Party Positions

		Ind	ex
Variable	Description	Economic	Cultural
Foreign Special Relationships: Positive (per101)	Favourable mentions of particular countries with which the manifesto country has a special relationship; the need for co-operation with and/or aid to such countries		
Foreign Special Relationships: Negative (per102)	Negative mentions of particular countries with which the manifesto country has a special relationship		
Anti-Imperialism (per103)	Negative references to imperial behaviour and/or negative references to one state exerting strong influence over other states		
Military: Positive (per104) Military: Negative (per105)	The importance of external security and defence Negative references to the military or use of military power to solve conflicts		
Peace (per106)	Any declaration of belief in peace and peaceful means of solving crises absent reference to the military		
Internationalism: Positive (per107)	Need for international co-operation, including co-operation with specific countries other than those coded in Foreign Special Relationships		
European Community/Union: Positive (per108)	Favourable mentions of European Community/Union in general		
Internationalism: Negative (per109)	Negative references to international co-operation		
European Community/Union: Negative (per110)	Negative references to the European Community/Union		
Freedom and Human Rights (per201)	Favourable mentions of importance of personal freedom and civil rights in the manifesto and other countries		-
Democracy (per202) Constitutionalism: Positive (per203)	Favourable mentions of democracy as the only game in town Support for maintaining the status quo of the constitution		-
Constitutionalism: Negative (per204)	Opposition to the entirety or specific aspects of the manifesto country's constitution		
Decentralization (per301)	Support for federalism or decentralisation of political and/or economic power		
Centralisation (per302)	General opposition to political decision-making at lower political levels		
Governmental and Administrative Efficiency (per303)	Need for efficiency and economy in government and administration and/or the general appeal to make the process of government and administration cheaper and more efficient		
Political Corruption (per304)	Need to eliminate political corruption and associated abuses of political and/or bureaucratic power		
Political Authority (per305)	References to the manifesto partys competence to govern and/or other partys lack of such competence		
Free Market Economy (per401)	Favourable mentions of the free market and free market capitalism as an economic model	+	
Incentives: Positive (per402)	Favourable mentions of supply side oriented economic policies	+	
Market Regulation (per403)	Support for policies designed to create a fair and open economic market	-	
Economic Planning (per404)	Favourable mentions of long-standing economic planning by the government	-	

Table A.2: CMP Party Positions (continued)

		Ind	ex
Variable	Description	Economic	Cultural
Corporatism/Mixed Economy (per405)	Favourable mentions of cooperation of government, employers, and trade unions simultaneously	-	
Protectionism: Positive (per406)	Favourable mentions of extending or maintaining the protection of internal markets	-	
Protectionism: Negative (per407)	Support for the concept of free trade and open markets	+	
Economic Goals (per408)	Broad and general economic goals that are not mentioned in relation to any other category		
Keynesian Demand Management (per409)	Favourable mentions of demand side oriented economic policies	-	
Economic Growth: Positive (per410)	The paradigm of economic growth	+	
Technology and Infrastructure: Positive (per411)	Importance of modernisation of industry and updated methods of transport and communication		
Controlled Economy (per412)	Support for direct government control of economy	-	
Nationalisation (per413)	Favourable mentions of government ownership of industries, either partial or complete; calls for keeping nationalised industries in state hand or nationalising currently private industries	-	
Economic Orthodoxy (per414)	Need for economically healthy government policy making	+	
Marxist Analysis (per415)	Positive references to Marxist-Leninist ideology and specific use of Marxist-Leninist terminology by the manifesto party	-	
Anti-Growth Economy: Positive (per416)	Favourable mentions of anti-growth politics		
Environmental Protection (per501)	General policies in favour of protecting the environment, fighting climate change, and other green policies		
Culture: Positive (per502)	Need for state funding of cultural and leisure facilities including arts and sport		
Equality: Positive (per503) Welfare State Expansion (per504)	Concept of social justice and the need for fair treatment of all people Favourable mentions of need to introduce, maintain or expand any public social service or social security scheme	-	-
Welfare State Limitation (per505)	Limiting state expenditures on social services or social security	+	
Education Expansion (per506)	Need to expand and/or improve educational provision at all levels $$	-	
Education Limitation (per507)	Limiting state expenditure on education	+	
National Way of Life: Positive (per601)	Favourable mentions of the manifesto country's nation, history, and general appeals		+
National Way of Life: Negative (per602)	Unfavourable mentions of the manifesto country's nation and history		-
Traditional Morality: Positive (per603)	Favourable mentions of traditional and/or religious moral values $$		+
Traditional Morality: Negative (per604)	Opposition to traditional and/or religious moral values		-
Law and Order: Positive (per605)	Favourable mentions of strict law enforcement, and tougher actions against domestic crime		+
Civic Mindedness: Positive (per606)	Appeals for national solidarity and the need for society to see itself as united		

Table A.2: CMP Party Positions (continued)

		Ind	ex
Variable	Description	Economic	Cultural
Multiculturalism: Positive (per607)	Favourable mentions of cultural diversity and cultural plurality within domestic societies		-
Multiculturalism: Negative (per608)	The enforcement or encouragement of cultural integration		+
Labour Groups: Positive (per701)	Favourable references to all labour groups, the working class, and unemployed workers in general	-	
Labour Groups: Negative (per702)	Negative references to labour groups and trade unions	+	
Agriculture and Farmers: Positive (per703)	Specific policies in favour of agriculture and farmers		
Middle Class and Professional Groups (per704)	General favourable references to the middle class		+
Underprivileged Minority Groups (per705)	Very general favourable references to underprivileged minorities who are defined neither in economic nor in demographic terms		
Non-economic Demographic Groups (per706)	General favourable mentions of demographically defined special interest groups of all kinds		

Table A.3: IVS Variables

Variable	Description	Coding and notes
Demographics		
Town size	Size of town where the interview was conducted	The possible answers depended on the exact survey: {2,000 and less; under 5,000; 2,000-5,000; 5,000-10,000; 10,000-20,000; 5,000-20,000; 20,000-50,000; 50,000-100,000; 20,000-100,000; 100,000-500,000; 500,000 and more}. For every range of town size we use the log of the average of the two bounds. for the top category, for which we have no upper bound, we calculated the log of the minimum value multiplied by 8.35 (Rosen and Resnick, 1980)
Religious	"Independently of whether you go to church or not, would you say you are" A religious person, Not a religious person, A convinced atheist	$1 = A \text{ religious person}, 0 = \{All \text{ other options}\}$
Athiest		$1 = A$ convinced atheist, $0 = \{All \text{ other options}\}$
Male	Respondent's sex	1 = Male, 0 = Female
Age	"This means you are years old (write in age in two digits)."	Open numeric response
Married or living together	"Are you currently": Married, Living together as married, Divorced, Separated, Widowed, Single	1 = {Married; Living together as married; Living apart but steady relation (married,cohabitation)}, 0 = {All other options}
Divorced, separated, or widow		1 = {Divorced; Separated; Widowed; Divorced, Separated or Widow}, 0 = {All other options}
Single		$1 = \{ \frac{\text{Single/Never married} \}}{\text{Never married} }, 0 = \{ \text{All other options} \}$
Number of children	"How many children have you ever had", "How many children do you have - deceased children not included" (EVS 2008-2010)	Open numeric response
Employment status	"Are you employed now or not? If yes, about how many hours a week? If more than one job: only for the main job" Scale: Yes, has paid employment = {Full time employee (30 hours a week or more); Part time employee (less than 30 hours a week); Self employed}. No, no paid employment = {Retired/pensioned; Housewife not otherwise employed; Student; Unemployed}	$2 = \{ \text{Full time; Self employed} \}, 1 = \text{Part} \\ \text{time, } 0 = \{ \text{Retired; Housewife; Students; } \\ \text{Unemployed} \}$
Self-employed	1 0 7 7 7	$1 = $ Self employed, $0 = $ {All other options}
Retired		$1 = \text{Retired}, 0 = \{\text{All other options}\}$
Housewife		$1 = \text{Housewife}, 0 = \{\text{All other options}\}\$
Student		$1 = $ Student, $0 = $ {All other options}
Unemployed		$1 = \text{Unemployed}, 0 = \{\text{All other options}\}\$
Other employment		$1 = \text{Other}, 0 = \{\text{All other options}\}\$
Income decile	"On this card is an income scale on which 1 indicates the lowest income group and 10 the highest income group in your country. We would like to know in what group your household is. Please, specify the appropriate number, counting all wages, salaries, pensions and other incomes that come in."	1 = Lower step, 29, 10 = Higher step. For Portugal, the 2017-2020 wave is imputed based on the 2005-2009 wave.
Protestant	"Do you belong to a religion or religious denomination?. If yes, which one?"	$1 = \text{Protestant},  0 = \{ \text{All other options} \}$
Catholic		$1 = \text{Roman Catholic}, 0 = \{\text{All other options}\}\$
Muslim		$1 = Muslim, 0 = \{All other options\}$
Other type of Christian		1 = {Other Christian (Evangelical/Pentecostal/Free church/etc.); Orthodox (Russian/Greek/etc.)}, 0 = {All other options}
No religion/atheist		1 = Do not belong to a denomination, 0 = {All other options}
Jew		$1 = \text{Jew}, 0 = \{\text{All other options}\}$

Table A.3: IVS Variables (continued)

Variable	Description	Coding and notes
Other religion		1 = {Other; Buddhist; Hindu}, 0 = {All other options}
Education level	"What is the highest educational level that you have attained?"	The possible answers to this question depend on the survey wave. We coded education into six levels: $0 = \{\text{Inadequately completed} \}$ elementary education; Not applicable/No formal education; ISCED $0$ / no education; Less than primary}, $1 = \{\text{Completed} \}$ (compulsory) elementary education; ISCED 1; Primary}, $2 = \{\text{Incomplete secondary} \}$ school: technical/vocational type; Incomplete secondary: university-preparatory type/Secondary; ISCED 2; Lower secondary}, $3 = \{\text{Complete secondary} \}$ school: technical/vocational type/secondary; Complete secondary: university-preparatory type/full secondary; ISCED 3; Upper secondary}, $4 = \{\text{Some university without degree/higher education - lower-level tertiary; ISCED 4; ISCED 5; Post-secondary non tertiary; Short-cycle tertiary}, 5 = \{\text{University with degree/higher education - upper-level tertiary; ISCED 6, ISCED 7; ISCED 8; Bachelor or equivalent; Master or equivalent; Doctoral or equivalent}.$
Education years	"At what age did you (or will you) complete your full time education, either at school or at an institution of higher education?"	Open numeric response. Winsorized at 70. For Greece in wave 2017-2020 we impute the mean value from wave 2005-2009. For US in wave 2017-2020 we impute the mean value from wave 2011-2013
Behavioral		
Frequency of attending religious services	"Apart from weddings, funerals and christenings, about how often do you attend religious services these days?"	<ul> <li>0 = Never practically never, 1 = Less often, 2</li> <li>= Once a year, 3 = Other specific holy days,</li> <li>4 = Only on special holy days/Christmas/Easter days, 5 = Once a month, 6 = Once a week, 7 = More than once a week.</li> </ul>
Member environment organization	"Now I am going to read out a list of voluntary organizations; for each one, could you tell me whether you are a member, an active member, an inactive member or not a member of that type of organization?" In the 1989-1993 and 1999-2000 Waves, possible answers were Mentioned and Not mentioned. Environmental organization.	$ \begin{aligned} 1 &= \{ \text{Active member; Mentioned} \},  0 &= \{ \text{Not a member; Inactive member; Not mentioned} \} \end{aligned} $
Member of labor union Member of religious organization	Labour union Church or religious organization	
Member of sports organization	Sport or recreational organization, football, baseball, rugby team	
Member of artistic organization	Art, music or educational organization	
Member of political party	Political party	
Member of professional organization	Professional association	
Member of other organization	Other organization	Same as above. For Germany, the 2011-2013 wave is imputed based on the 2005-2009 and 2017-2020 waves.

Table A.3: IVS Variables (continued)

Variable	Description	Coding and notes
Willing to sign petition  Willing to join boycott	"Now I'd like you to look at this card. I'm going to read out some different forms of political action that people can take, and I'd like you to tell me, for each one, whether you have actually done any of these things, whether you might do it or would never, under any circumstances, do it." Signing a petition Joining in boycotts	$0 =  ext{Would never do}, 1 =  ext{Might do}, 2 =  ext{Have}$ done
Willing to demonstrate	Attending peaceful demonstrations	
Willing to join strike	Joining strikes	
Opinions Respect for authority	"Here is a list of various changes in our way of life that might take place in the near future. Please tell me for each one, if it were to happen whether you think it would be a good thing, a bad thing, or don't you mind?:" Greater respect for authority	0 = Bad thing, 1 = Don't mind, 2 = Good thing
Jobs should prioritize natives	"Do you agree, disagree or neither agree nor disagree with the following statements?" When jobs are scarce, employers should give priority to people of this country over immigrants.	0 = Disagree, $1 = $ Neither, $2 = $ Agree
Men job priority over women	When jobs are scarce, men should have more right to a job than women	0 = Disagree, 1 = Neither, 2 = Agree. For Greece in wave 2017-2020 we impute the mean value from wave 2005-2009.
Prefer private business ownership	"Now I'd like you to tell me your views on various issues. How would you place your views on this scale? 1 means you agree completely with the statement on the left; 10 means you agree completely with the statement on the right; and if your views fall somewhere in between, you can choose any number in between." Private vs state ownership of business	1= Private ownership of business should be increased, 29, $10=$ Government ownership of business should be increased
Personal over govt responsibility	Government responsibility	1 = The government should take more responsibility, $29$ , $10 =$ People should take more responsibility
Competition in markets is good	Competition good or harmful	1 = Competition is harmful, 29, 10 = Competition is good
Oppose redistribution	Income equality	1 = Incomes should be made more equal, 29, 10 = We need larger income differences as incentive.
Country needs strong leader	"I'm going to describe various types of political systems and ask what you think about each as a way of governing this country. For each one, would you say it is a very good, fairly good, fairly bad or very bad way of governing this country?" Having a strong leader who does not have to bother with parliament and elections	0 = Very bad, 1 = Fairly bad, 2 = Fairly good, 3 = Very good
Experts should decide over govt.	Having experts, not government, make decisions according to what they think is best for the country	
Like idea of army rule Like idea of democracy	Having the army rule Having a democratic political system	
Pride in nationality	"How proud are you to be of nationality of this country?"	0 = Not at all proud, 1 = Not very proud, 2 = Quite proud, 3 = Very proud, missing = Not applicable/ Foreigner/ Has not [country] nationality
Happiness	"Taking all things together, would you say you are:	0 = Not at all happy, 1 = Not very happy, 2 = Quite happy, 3 = Very happy.
Trust other people	"Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?"	0 = Can't be too careful, 1 = Most people can be trusted
Life satisfaction	"All things considered, how satisfied are you with your life as a whole these days? Please use this card to help with your answer."	0 = Dissatisfied, 18, 9 = Satisfied

Table A.3: IVS Variables (continued)

Variable	Description	Coding and notes
Have freedom of choice	"Some people feel they have completely free choice and control over their lives, while other people feel that what they do has no real effect on what happens to them. Please use this scale where 1 means 'none at all' and 10 means 'a great deal' to indicate how much freedom of choice and control you feel you have over the way your life turns out."	1 = None at all,  29, 10 = A great deal
Importance of family	"For each of the following aspects, indicate how important it is in your life. Would you say it is very important, rather important, not very important or not important at all" Family	0 = Not at all important, 1 = Not very important, 2 = Rather important, 3 = Very important
Importance of friends	Friends	
Importance of leisure time	Leisure time	
Importance of politics	Politics	
Importance of work	Work	
Importance of religion State of health	Religion "All in all, how would you describe your state of health these days? Would you say it is"	0 = Very poor, 1 = Poor, 2 = Fair, 3 = Good, 4 = Very good
Importance of children's hard work	"Here is a list of qualities that children can be encouraged to learn at home. Which, if any, do you consider to be especially important? Please choose up to five." Hard work	0 = Not mentioned, 1 = Important.
Importance of children's responsibility	Feeling of responsibility	
Importance of children's imagination	Imagination	
Importance of children's respect	Tolerance and respect for other people	
Importance of children's thrift	Thrift saving money and things	
Importance of children's determination	Determination, perseverance	
Importance of children's religious faith	Religious faith	
Importance of children's unselfishness	Not being selfish (unselfishness)	
Importance of children's obedience	Obedience	
Importance of children's independence	Independence	
Don't want drug-addicted neigbors	"On this list are various groups of people. Could you please mention any that you would not like to have as neighbors?" Drug addicts	0 = Not mentioned, 1 = Mentioned.
Don't want different race neighbors	People of a different race	
Don't want immigrant neighbors	Immigrants/foreign workers	
Don't want homosexual neighbors	Homosexuals	
Don't want heavy-drinking neighbors	Heavy drinkers	
PreK child w/working mom suffers	" When a mother works for pay, the children suffer"	0 = Strongly disagree, 1 = Disagree, 2 = Agree, 3 = Agree strongly.
Level of political interest	"How interested would you say you are in politics?"	0 = Not at all interested, 1 = Not very interested, 2 = Somewhat interested, 3 = Very interested

Table A.3: IVS Variables (continued)

Variable	Description	Coding and notes
Confidence in press	"I am going to name a number of organizations. For each one, could you tell me how much confidence you have in them: is it a great deal of confidence, quite a lot of confidence, not very much confidence or none at all?" The press	0 = None at all,  1 = Not very much,  2 =  Quite a lot, $3 = A great deal$
Confidence in unions	Labor unions	
Confidence in police	The police	
Confidence in courts	The courts	
Confidence in UN	The United Nations	
Confidence in churches	The churches (mosque, temple etc.)	
Confidence in civil services	The civil services	
Confidence in major companies	Major companies	
Confidence in environmental protection organizations	Environmental organizations	
Confidence in EU	The European Union	
Confidence in armed forces	The armed forces	0 = None at all, $1 = Not$ very much, $2 = Quite$ a lot, $3 = A$ great deal. For Iceland, the 2017-2020 wave values are imputed based on the 2005-2009 wave
Believe in God	"In which of the following things do you believe, if you believe in any?" God	0 = No, 1 = Yes
Believe in hell	Hell	
Importance of God in life	"How important is God in your life?. Please use this scale to indicate. 10 means 'very important' and 1 means 'not at all important'"	1 = Not at all important, 29, 10 = Very important
Avoiding public transit fare justifiable	"Please tell me for each of the following statements whether you think it can always be justified, never be justified, or something in between, using this card."  Avoiding a fare on public transport	1= Never justifiable, 29, $10=$ Always justifiable
Abortion justifiable	Abortion	
Divorce justifiable	Divorce	
Accepting a bribe justifiable	Someone accepting a bribe in the course of their duties	
Suicide justifiable	Suicide	
Cheating on taxes justifiable	"Please tell me for each of the following statements whether you think it can always be justified, never be justified, or something in between, using this card."  Cheating on taxes if you have a chance	0= Never justifiable, 18, $9=$ Always justifiable. For Germany, the 2011-2013 wave was imputed based on the 2005-2009 and 2017-2020 waves
Homosexuality justifiable	Homosexuality	0= Never justifiable, 18, $9=$ Always justifiable. For Italy, the 2005-2009 wave was imputed based on the 1999-2000 and 2017-2020 waves
Prostitution justifiable	Prostitution	0 = Never justifiable, 18, $9 = Always$ justifiable. For Spain, the 2011-2013 wave was imputed based on the 2005-2009 and 2017-2020 waves

Table A.4: IVS Data Matched with CMP

	Unique	Unique Radical Right		Radical Right
	Parties	Parties	Observations	Supporters
1) All data		•	91,425	•
2) Respondents supporting a party	354		63,187	•
3) Respondents matched with CMP	210	32	59,635	7,934

This table provides descriptive statistics on the Integrated Values Survey data. The first row shows the total number of respondents in the country-waves we analyzed. The second row presents descriptive statistics for the subset of respondents supporting a specific party. The third row presents statistics for participants who supported a party that could be matched with the CMP. These are the participants included in our final dataset.