

# Populism: Demand and Supply \*

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## Abstract

Using individual data on voting and political parties manifestos in European countries, we empirically characterize the drivers of voting for populist parties (the demand side) as well as the presence of populist parties (the supply side). We show that the economic insecurity drivers of the demand of populism are significant, especially when considering the key interactions with turnout incentives, neglected in previous studies. Once turnout effects are taken into account, economic insecurity drives consensus to populist policies directly and through indirect negative effects on trust and attitudes towards immigrants. On the supply side, populist parties are more likely to emerge when countries are faced with a systemic crisis of economic security. The orientation choice of populist parties, i.e., whether they arise on left or right of the political spectrum, is determined by the availability of political space. The typical mainstream parties response is to reduce the distance of their platform from that of successful populist entrants, amplifying the aggregate supply of populist policies.

*Keywords:* turnout, short term protection, anti-elite rhetoric, populist entry.

*JEL codes:* D72, D78

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# 1 Introduction

On both sides of the Atlantic, the Western world is facing an unprecedented wave of populist politics and populist rhetoric.<sup>1</sup> Some countries have seen mounting protest against inequality and capitalist institutions, leading to left-leaning policy demands matched by similarly oriented populist supply; in others, right-wing populist movements have found increasing support for protecting the country from immigrants and globalization. Protectionism against immigrants and free trade is also featured in the policy positions of the Trump administration in US and post-Brexit UK. In Southern Europe, the Italian Five Stars movement and the Greek and Spanish populist movements call for a guaranteed minimum income and other forms of short-term economic protection, in opposition to the European imposition of fiscal discipline – what we might call Mediterranean populism. In continental Europe, populist movements stress protection from immigrants (often linking them with Islamic terrorism) and from Chinese imports. Overall, nationalism and closure to immigration are on the rise. Why is there such a rising tide of consensus for populist proposals *now* and why *here* - i.e. with a clear time and geographical pattern? What is driving the simultaneous shift towards populism in so many countries? Is this a global shift in voters' preferences, attitudes or emotions, immediately captured by new political leaders who enter politics? And if so, what is driving this global shift of demand? Is it related to economic crisis or stagnation and, if so, through what channels?

This paper provides an empirical analysis of the channels through which economic insecurity affected the demand and supply of populist policies. We believe that in order to tackle these questions and garner a better understanding of the phenomena, we need to abstract from the many observable differences in the existing strands of populism and focus instead on what is common to all populist movements. We argue that populist movements, regardless of political orientation, all share a number of underlying common features. Focusing on these enables us to zoom in on the key drivers of the populist wave.

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<sup>1</sup>Google Trends shows an astonishing spike in the number of searches for the word populism, which quadrupled in the fall of 2016.

For our empirical study we will use the definition of *populist parties* proposed by Van Kessel (2015) and widely accepted in the recent political science literature (see the discussion in section 4). A consistent working definition of *populism* could be “a political narrative that antagonizes the people and the corrupt elite, and that aims for policies that reflect the will and are understood by the people” (Mudde, 2004).<sup>2</sup> Another consistent definition of populism that turns out to be very useful is the one offered in the *Encyclopedia*: populists claim to promote the interest of common citizens against the elites; they pander to people’s fears and enthusiasms; and they promote policies without regard to the long-term or indirect consequences.<sup>3</sup> This broad definition of populism highlights three important components: (1) the claim to be on the side of the people against the elite – which we label “supply rhetoric;” (2) the “fears or enthusiasms” of people – the demand conditions to which the populists pander; and (3) the disregard for longer-term consequences. The first component of anti-elite rhetoric is well recognized in the political science literature as the key identifying feature of populist parties, whereas the second and third component of the encyclopedia definition, which can be summarized with the synthetic term “short term protection”, refer to policy platform characteristics that are observed in most populist party manifestos, but have never been studied before as a *supply response* given voters’ demand. One of the goals of this paper is indeed to show how the short term protection policy complements rationally the anti-elite supply rhetoric, and to show how this complementarity helps understand the political times we are living. The supply of protection strategy encompasses both nationalist populism

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<sup>2</sup>Donald Trump’s inauguration speech reads “...we are transferring power from Washington D.C. and giving it back to you, the people. For too long, a small group in our nation’s Capital has reaped the rewards of government while the people have borne the cost. Washington flourished – but the people did not share in its wealth. Politicians prospered – but the jobs left, and the factories closed. The establishment protected itself, but not the citizens of our country...”. The anti-elite and anti establishment rhetoric, as well as the concept of “the people” as a uniform body, which according to political scientists distinctly characterizes populist parties, is easily spotted and measured in observable speeches. Given the scope and nature of our empirical study, we do not engage in this paper the rich political theory literature on the definition of populism. We rather limit ourselves to the definitions that are operationalizable in data analysis. Future work could attempt to study empirically some important aspects of the political theory debate, e.g. the one on the relationship between populism and pluralism – Muller (2016).

<sup>3</sup>*Encyclopedia Britannica* 2015: [www.britannica.com/topic/populism](http://www.britannica.com/topic/populism)

(emphasizing fear or enthusiasm regarding the protection of identity), and economic populism (proposing redistributive policies such as minimum income, regardless of costs). Thus, when we say that a populist party offers short-term protection we intend to include both possibilities.

In order to understand the complementary role of the various components of populists' strategies, the most important first step is understanding voters' demand side. Analyzing the demand side and the supply side together will yield a richer answer to the questions laid out above. We will see that populist parties are more likely to emerge and prosper when a country has to deal with a crisis of systemic economic security that the traditional incumbent parties (whether left-leaning, relying on government-based policies, or right-leaning, relying on markets) find it hard to address, so that their voters lose faith in them. The 21st-century crisis (characterized by the external threats of globalization and migration as well as widespread financial crisis) undermined citizens' confidence in both leftist (government-based) policies and rightist (market-based) policies that respect the institutional constraints and functioning of politics.<sup>4</sup> Previous crises, which basically resulted in the failure of only one side, simply generated political cycles, and did not leave space for the emergence of populist platforms. Instead, at a time in which the crisis is two-sided, there is room for new movements and transformation of existing opposition movements in the direction of urging removal of constraining institutions.<sup>5</sup>

A key aspect of our analysis is highlighting the important role of abstention and turnout incentives. A negative economic security shock that affects a citizen at a time when both left and right traditional recipes are perceived as ineffective, depresses the motivation to vote for traditional parties of both left and right; the disappointment generates an abstention-based entry space for a populist platform, which may be followed by a successful increase in consensus to populist parties. The figure lends support to this sequence. It shows a pattern familiar to several European countries: the economic crisis followed by voter apathy and disaffection with traditional parties,

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<sup>4</sup>For a discussion of the specific features of the great recession, see Judis (2016).

<sup>5</sup>Various forms of exit, rejection of international treaties previously subscribed, construction of walls, and so on, are just examples of simple protection proposals that have traction today but would not have attracted votes in other decades.

which in turn opened the space for entry of new populist parties or greatly magnified the vote share of existing ones. In the paper we will offer evidence that is consistent with this chain: economic insecurity causes faith in traditional parties to diminish, inducing disillusioned voters to abstain; in turn, economic insecurity and disillusion attract populist platforms offering short term protection.

[FIGURE 1 HERE]

Our framework suggests a number of testable hypotheses on both the demand side (voter behavior) and the supply side (the appearance and political stance of populist parties and the non-populist reaction). First, on the demand side, the people most severely affected by the crisis, **currently or in expectation**, - those facing the greatest economic insecurity - should be the most prone to abstain and to shift to the populist party when it appears. Second, abstention and the shift to populism should be more common among those with least trust in traditional parties, politics and institutions, who are the most vulnerable to the manipulation of beliefs by populist rhetoric. Third, mistrust and various negative attitudes - e.g. hostility to immigrants - could themselves be endogenous to the crisis. That is, mistrust and anti-immigrant attitudes may not be autonomous, cultural drivers of voting behavior but channels through which the economic insecurity brought by the crisis affects abstention and voting. Fourth, on the supply side, populist parties should be more likely to be present when and where disappointment with traditional parties is greatest - i.e. when and where the effects of economic insecurity are broadest; and less likely where national characteristics make entering with a populist platform more costly. We predict that the orientation of a new populist entrant (left or right) will be related to the relative entry space on the two sides of the political spectrum and the relative effectiveness of right-oriented or left-oriented rhetoric.

Our empirical analysis confirms these hypotheses on demand and supply, and delivers several other, more nuanced results.

We first study the determinants of the demand for populist platforms in the countries covered by the European Social Survey. Our empirical examination emphasizes accounting for selection issues, including endogenous entry of populist parties, which

other studies of populist voting typically ignore. We show that adverse shocks to economic security and trust in political parties induce people not to vote and, if they do, to choose a populist party. Ignoring the voter participation decisions not only biases the estimates of the drivers of the voting choice and underestimates the underlying demand for populist parties, but obscures the mechanism by which the disappointment induced by the crisis favors the populist vote.

A simultaneous Heckprobit estimation of the probability of participation and of a populist vote shows that economic insecurity has a statistically and economically significant direct effect, and trust in political parties and attitudes toward immigrants matter as well. Importantly, negative shocks to economic security and trust increase the vote share of populist parties almost exclusively because they kill the incentive of supporters of mainstream parties to participate in elections. On the other end, more immigrant-averse attitudes have a mild effect through reduced participation but a very large effect by switching voters preference from traditional to populist parties. Moreover, building a pseudo-panel from the individual data we show that the trust and immigrant attitude variables are themselves affected causally by shocks to economic insecurity.<sup>6</sup> Thus, we find a large total effect (direct plus indirect) of economic insecurity on the demand for populism. This suggests that cultural attitudes are an important channel through which economic insecurity affects populist support, but probably not an independent cause.

On the supply side we document that the presence of populist parties in the political arena is powerfully affected by economic insecurity and discouraged by the presence of strong non-aligned parties, which undercuts anti-elite rhetoric and so increases the cost of entry. We also show that populist parties choose their orientation strategically, leaning left or right depending on the relative salience of left-type or right-type cleavages weighted with the share of left-leaning and right-leaning voters. We find that the successful entry of a populist party changes the subsequent electoral competition, prompting the established parties to adapt their platforms to

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<sup>6</sup>Our finding that an economic insecurity shock significantly affects the attitudes towards immigrants may be due to any mix of rational updating (i.e., some people may rationally expect a higher risk of substitution) and behavioral external-blaming reactions (see e.g. the recent paper by Glaeser and Ponzetto, 2017, on the psychological tendency to focus on visible categories).

populist concerns, lending support to our idea that the supply of disinformation and anti-elite rhetoric make it difficult to conduct a credible contrarian, anti-populist campaign. In the end, the traditional parties' attempt to contain populist success is an adaptive reaction. Beside entry and orientation, the analysis of the supply side will revolve around the importance of the short term protection nature of the policy platforms, which we will show to be strongly complementary to the anti-elite rhetoric component.

The paper is organized as follows. In the next section we review the recent literature on the positive analysis of populism. Next, we outline an empirical model of the demand and supply of populism, list empirical predictions and discuss identification issues. Section 4 discusses the data. Section 5 presents the empirical results on the demand side, and Section 6 those on the supply side. Section 7 concludes.

## 2 Related Literature

The positive analysis of populism has focused on the institutional pre-conditions for the formation of populist parties (Norris, 2005; Rydgen, 2007; Golder, 2016), or electoral dynamics, identifying parties on the radical right (Mudde, 2007), but increasingly also on the radical left (March, 2007; March and Mudde, 2005; Pauwels, 2014; Stavrakakis and Katsambekis, 2014); or else on the populists' strategy for surviving once in office (see e.g. Boix, 1999). Only recently has the attention of political scientists shifted to the demand side. Inglehart and Norris (2016) observe that cultural variables outweigh economic ones in the decision to vote for a populist party (rather than abstain or vote for a non-populist party). But this weak *direct* effect stems from a failure to consider that economic security shocks significantly affects the decision to abstain. In addition to a stronger direct effect of economic shocks, thanks to our consideration of the turnout effect, we also document a significant *indirect* effect: the shocks to economic security are responsible for a sharp change in political trust and in attitudes towards immigration, which means that these changes in the

latter variables cannot be deemed independent drivers.<sup>7</sup> Indeed, economic insecurity may affect the populist vote in several indirect ways, as for instance fostering a fear of white-status loss in the case of Trump voters as documented in Mutz (2018). For a review of the literature on populism in the social sciences in general, see e.g. Gidron and Bonikoeski (2013) and Mudde and Kaltwesser (2017).

Algan et al. (2017) study the political consequences of the Great Recession in Europe, showing that in elections after 2008 the regions where unemployment rose saw the sharpest decline of trust in institutions and establishment politics. Dustman et al. (2017) reach similar results showing that in the aftermath of the crisis mistrust of European institutions, largely explained by the poorer economic conditions of the Euro-area countries, is correlated with the populist vote. Foster and Frieden (2017) nuance this result using individual characteristics from the Eurobarometer survey, and also show that the correlation is stronger in debtor countries. Like Algan et al. (2017), we find that economic insecurity has an effect on voting for populist parties and we document a causal effect of economic insecurity on people’s degree of trust in politics. Further, however, we find that economic insecurity affects the consensus for populist parties not directly but primarily because it disappoints the supporters of the traditional parties of both left and right. This induces abstention and creates a potential electoral basis for a populist new entrant.<sup>8</sup> Unlike Algan et al. (2017) and like Rodrik (2017), we study the supply side of populism, highlighting the role of economic insecurity in triggering entry of populist parties and the importance of the relative political space on the left and the right in explaining the orientation that the populist force chooses. As Rodrik (2017) notes, this is crucial in separating the explanatory role of economic shocks from that of cultural shocks.<sup>9</sup> As far as our

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<sup>7</sup>Lucassen and Lubbers give evidence – for 8 of the 11 countries they consider – that shifts towards far-right populism stemmed from perceived cultural threats more than economic threats, whereas it is plausible that in shifts towards left-wing populism the relevant perceived threat is economic. But for us, the important observation is that the perceptions of both economic and cultural threats are affected by the economic shocks.

<sup>8</sup>See Karakas (2017) for a model emphasizing the importance of being an outsider for credibility.

<sup>9</sup>Rodrik (2017) traces the origin of today’s populism to the shock of globalization arguing that history and economic theory imply that waves of globalization will predictably lead to a populist backlash, and with specific timing (when the shock hits) and geographical pattern (in the countries most severely affected). While the shock of globalization generates demand for populist policies,

finding of policy convergence is concerned (see Section 6), the closest related result is in Schumacher (2016), who shows from political manifestos that early success of populist parties did heighten scepticism over multiculturalism in mainstream party platforms.

In economics there is a literature on the *economic consequences* of populist policies (see e.g. Dornbush and Edwards 1991; Sachs 1989; Chesterley and Roberti, 2017), while our paper focuses on the *economic causes*. The prevalent existing formal theory of populism is in Acemoglu et al, 2013), where the supply of short term protection policies simply comes from *pandering* to voters' implicit demand of credible differentiation of the political candidate from the interests of the elites. Exploiting exogenous variation in import flows Steiner (2012), Autor et al. (2016), Autor et al. (2017), Colantone and Stanig (2016), Colantone and Stanig (2017), Jensen et al. (2016), all analyze empirically the electoral (support for populist parties) and political (polarization) impact of economic shocks from globalization or the European single market (Becker et al., 2016), whereas Guiso et al (2018) focus on the interaction of the various economic crises with the Euro-zone institutions. Pastor and Veronesi (2018) show how the backlash against globalization is a response to rising income inequality if aversion to inequality is assumed in voter's preferences.

A less related literature is the literature focusing on valence politics, namely on competence and corruption. On the competence demand side, Di Tella and Rotemberg (2016) analyze the demand for populism based on the behavioral observation that voters are betrayal averse, and may accordingly prefer incompetent leaders to minimize the danger of betrayal. On the competence supply side, Prato and Wolton (2017) view populism as primarily political opportunism by incompetent politicians. Corruption is more often involved in populist rhetoric, since the accusation of corruption for traditional parties and institutions is an easy component of anti-elite campaigns. As pointed out e.g. by Levine et al. (2018), it is natural that populist anti-corruption rhetoric be more effective in countries with higher perceived capture

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Rodrik stresses the importance of also understanding the supply side, and in particular the political orientation that the populist parties chose, which in his view depends on the relative salience of the specific cleavages induced by globalization. The channel of inequality is investigated for the case of Sweden in Del Bo et al (2017).

of politicians by lobbies and interest groups, since generally such a capture is correlated with corruption.<sup>10</sup> However, in our view the strategic use of valence advantages and/or strategic use of incumbents' valence disadvantages are common traits of politics, and are not confined to populists. Hence in our analysis valence politics does not play a major role. To see clear evidence of the "normality" of political posturing, see e.g. Ash et al (2017) and the earlier empirical studies of Canes-Wrone and Shotts (2004) and Rottinghaus (2006).

## 3 Empirical framework and methodology

### 3.1 Specifications

In this section we propose a simple framework to empirically model demand and supply of populism and we highlight the econometric issues that modelling people's voting choices and populist parties decisions poses. On the demand side, individual voters make two decisions: they decide whether to participate in elections and, conditional on participation, whether to vote for a populist party or not, if a populist party is present. On the supply side, parties decide whether to be present with a populist program or not and, if present, their orientation choice on the left-right political spectrum. Given orientation, their choice will depend on the expected voting shares they can gain with such a platform. Existence of a populist party will also depend on features of the country that affect the cost of entering the political market with a populist program.

We can think of a two stage process. In the first stage a party decides whether to enter with a populist platform trading off the benefit of entering with such a program - the share of votes that it can hope to obtain given the chosen orientation - against the cost of entering. The expected share of votes will depend on the extent of voters disappointment with mainstream parties, itself a function of the economic insecurity that voters experience. Conditional on entry, the populist party will position itself on

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<sup>10</sup>For a recent result on long term effects of exposure to corruption on trust in institutions and hence anti-system voting see Aasve et al (2018).

the side of the political spectrum where there are more voters and where its rhetoric is more effective in mobilizing them. We capture the adoption and orientation decisions with the following two empirical specifications:

$$np_{ct} = \alpha \bar{d}(e_{ct}) - \beta z_{ct} + u_{ct} \quad (1)$$

$$r_{jct} = \delta_0 - \delta_1 s_{lct} \times L_{ct} + \delta_2 s_{rct} \times R_{ct} + v_{ct} \quad (2)$$

Equation (1) models entry/adoption;  $np_{ct}$  is the number of populist parties in country  $c$  in year  $t$  and is equal to zero if no populist party is present;  $\bar{d}(e_{ct})$  is the average level of voters' disappointment - an increasing function of the voters degree of economic insecurity in country  $c$  in year  $t$ ,  $e_{ct}$ ;  $z_{ct}$  is a vector of features of the institutional and political system, possibly time-varying, that affect the cost of setting up a party with a populist platform; and  $u_{ct}$  an error term. In equation (2)  $r_{jct}$  is the orientation of populist party  $j$  in country  $c$  at  $t$ , increasing in orientation to the right;  $s_{ct}^L$  and  $s_{ct}^R$  the shares of left and right-oriented voters;  $L_{ct}$  and  $R_{ct}$  the left-salient and right-salient factors; and  $v_{ct}$  an error term. This formulation captures the idea, stressed by Rodrik (2017), that in a country a populist party chooses to position itself more to the right if there is a larger share of right oriented voters, catering towards some salient issue to which right-oriented voters are particularly sensitive, e.g. immigrants. Viceversa, it will position more to the left if the share of left oriented voters is larger and will cater to some salient issue to which these voters are responsive, such as income inequality. We will see at the end how even in the data these two separate types of policies share the protection strategy features.

In a second stage, voters indexed by  $i$  decide whether to participate in elections and whether to vote for a populist party or not in country  $c$  year  $t$ . The simplest model of voting is one in which voters are ideological and expressive. This means that: *a*) first, conditional on participation, voters choose the party with their preferred ideology, left or right – the ideological component; and *b*) second, that the decision whether to vote or abstain depends exclusively on a comparison between the cost and the expressive benefit of voting.

Voters are either left- or right-leaning and have a degree of disappointment with traditional politics owing to the income difficulties they experience  $d_{ict} \in [0, 1]$ . For simplicity, let this degree of disappointment differ across voters but be the same across left and right ideologies. Disappointment is affected in the same way by an economic crisis.<sup>11</sup>

When voter  $i$  does not feel sufficiently represented by the traditional party on his side of the spectrum, or when he is dissatisfied enough, he abstains from voting. Formally, the abstention condition can be expressed as:

$$A_{ict} - d_{ict} < C_{ict} + \varepsilon_{ict}$$

where  $A_{ict}$  is the benefit of voting for the preferred party when no disappointment is present,  $C_{ict}$  is the observable cost of voting, and  $\varepsilon_{ict}$  a normally distributed component affecting the net cost of voting. Rearranging, voter  $i$  participates in the election if disappointment is contained enough:

$$d_{ict} < B_{ict} + \varepsilon_{ict}$$

where  $B_{ict} = A_{ict} - C_{ict}$  is civic sense or the net benefit of voting for an ideal party. This net benefit is clearly heterogeneous across voters due to observables. Given normality of  $\varepsilon_{ict}$ , the probability that voter  $i$  participates in election is then:

$$\Pr(B_{ict} - d_{ict} > -\varepsilon_{ict}) = F(B_{ict} - d_{ict}) \quad (3)$$

where  $F(x)$  is the cumulative normal distribution of  $x$ .

Those who participate have in turn to decide whether to vote for a populist or for a mainstream party. As argued above, a disappointed voter is more likely to be supportive of a populist program offering protection, and thus to vote for a populist party, if ever decides to participate. Let  $v_{ict} = 1$  if  $B_{ict} - d_{ict} > -\varepsilon_{ict}$  and 0 otherwise. Voter  $i$  will choose a populist party if

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<sup>11</sup>Allowing for heterogeneous effects on the two sides would not alter our main predictions, and our empirical evidence indicates that this assumption is actually consistent with the data.

$$d_{ict} > Z_{ict} + \xi_{ict} | v_{ict} = 1 \& np_{ct} > 0$$

where  $Z_{ict}$  is a vector of observable characteristics that affect party choice (including a voter left/right ideology) and are typically a subset of those affecting participation, and  $\xi_{ict}$  is a normally distributed random component. Importantly, the party choice can only be expressed by those voters who choose to participate and that live in a country where a populist party exists. The probability of voting for a populist party would then be

$$\Pr(d_{ict} - Z_{ict} > \xi_{ict} | v_{ict} = 1 \& np_{ct} > 0) = F(d_{ict} - Z_{ict} | v_{ict} = 1 \& np_{ct} > 0) \quad (4)$$

Notice that disappointment, and thus economic insecurity, has opposite effects on the probability of participation in elections and on voting for a populist party: it lowers the first but raises the second.

### 3.2 Econometric problems

Estimation of our model (1)-(4) entails a number of econometric problems due to endogenous selection. The estimation of populist parties existence does not pose particular problems. Equation (1) is a reduced form regression and can be estimated using standard methods such as an ordered probit or a Poisson regression.

A first issue emerges in estimating equation (2), which studies populist parties orientation, because the latter is only observed if a populist party is present. Because the presence of a populist party is endogenous, if we ignore this selection issue, there may be sorting among populist parties presence and local voters preferences. Hence the estimated orientation choice will be representative of the countries that have a populist party but not of the population of all countries. We deal with this issue by running a probit for the presence of a populist party and obtaining a Mills ratio that is then added to the choice of orientation regression as a control; the specification of equations (1) and (2) imply that valid instruments are the institutional variables in vector  $z_{ct}$  which affect the probability that a populist platform is offered. This

“endogenous entry problem” affects also the estimation of equation (4), the individual choice to vote for a populist party and has analogous implications: the estimated parameters are representative of the preferences of the voters of countries that have a populist party but not of the population of the voters. Compared to the latter, the estimates would be biased. Given that the variables that affect populist parties presence (and thus the Mill’s that ones would compute from a first stage probit) only vary at the country-year level, in estimating equation (4) one can control for a full set of country specific year dummies: the latter would capture all country level variables that explain entry/existence of a populist party addressing the endogenous entry problem. We will follow this approach and show that accounting for entry/existence of a populist party has a very contained effect on the estimated parameters.

The second endogenous selection issue concerns the estimation of (4) and arises because voters first of all decide whether to participate or not and, only conditional on this, which party to vote for. To deal with this issue we will estimate a two-step Heckman probit model, estimating first the probability of participation, and then the probability of voting for the populist party. As observed, electoral participation depends on the same set of variables as the choice of party, possibly with opposite signs: that is, the characteristics that increase the likelihood of voting populist may also discourage participation. For identification, we need a personal characteristic - an instrument - that affects the net benefit of voting (benefit less cost), but not the choice of the party conditional on participation.

We will discuss instruments in Sections 5 and 6 when we present the estimates of voters decisions and populist parties presence.

## 4 The Data

Our main source of individual data is the European Social Survey (ESS), the richest social scientific endeavor to map attitudes, beliefs, and behavior patterns in Europe. The ESS systematically tracks changing values, attitudes, attributes and behavior patterns in European polities. It covers all European countries, though not every

country participates in every wave. Data has been collected every two years, since September 2002, by face-to-face interviews. We use seven waves through 2014. The questionnaire consists of a core module, constant from round to round and smaller rotating modules, repeated at intervals, on selected substantive topics. We will use the core module, which covers a wide range of social, economic, political, psychological and demographic variables.

## 4.1 Measuring voting decisions

The ESS asks people whether they voted in the last parliamentary election in their country and which party they voted for: “*Did you vote in the last [country name] national election in [month/year?]*”. This gives us an indicator of turnout. Those answering yes were then asked: “*Which party did you vote for in that election?*” and shown the list of parties. From this we construct a dummy that takes value 1 if the voter voted for a populist party (identified in Section 4.3).

## 4.2 Measuring voters’ characteristics

The ESS tracks a large number of variables from which we select a subset to construct proxies for the voters’ characteristics that influence both turnout and voting decisions, as discussed in Section 3. We start with our key explanatory variable for the rise of populism, namely economic insecurity.

**Economic insecurity.** We capture heterogeneity in economic insecurity with three measures. First, whether the voter has been unemployed at some time in the past five years, forcing search for a new job; second, as a measure of financial distress, whether the voter is experiencing income difficulties, i.e. finds it hard to live on his current income;<sup>12</sup> and third, an indicator of exposure to globalization, constructed exploiting information in the ESS on type of employment, industry and skill level – classifying as more exposed low-skill workers in manufacturing. The

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<sup>12</sup>People are asked: “*Which of the descriptions on this card comes closest to how you feel about your household’s income nowadays?*”. Answers range from 1 (“*Living comfortably on present income*”) to 4 (“*Finding it very difficult on present income*”) increasing in experienced difficulty.

indicator takes value of 1 if the individual is a blue-collar worker in manufacturing; 0 otherwise. We will find it useful to combine these three objective measures of financial and economic distress in a single composite index of economic insecurity by taking the first principal component, rescaled to vary between 0 (least insecure) and 1 (most insecure). With this measure we are agnostic about the specific factor causing economic insecurity. It clearly captures exposure to globalization (emphasized by Rodrik, 2017; Colantone and Stanig, 2017; Autor et al., 2017; Guiso et al., 2018), but also other forces that may have been at work, including the obsolescence of job-specific skills, labor displacement due to rapid automation (Acemoglu and Restrepo, 2017) and enduring disruptions in personal savings and investment returns caused by the 2008 financial crisis (Guiso et al., 2018). The point is that one single measure - e.g. unemployment - is unlikely to really capture voters' economic insecurity. Using unemployment alone, for instance, it would be difficult to explain the rising populist vote in Germany where the jobless rate is low (under 3.4% as of October 2018) and declining (since 2010).

Economic insecurity may also be produced by labor market competition due to immigration. Unfortunately, there are no data on immigration inflows by country of origin and region of destination, which would enable us to obtain intra-country variation in individual exposure to labor market pressure.<sup>13</sup> To capture fear of displacement in the labor market due to the possible arrival of cheap labor, we use a measure of sentiments towards immigrants: whether the voter would like fewer immigrants from low-wage countries, with answers ranging from 1 to 4 increasing in degree of support for immigration quotas. The ESS also collects people's attitudes towards quotas on immigrants from countries of the same race/ethnicity and from countries of different race and ethnicity, as well as whether people agree with the statement that immigrants make their country worse. We will use all these measures

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<sup>13</sup>Caliendo et al. (2017) make an estimate of immigrants by country of origin and country – not region – of destination using the EU labor force survey which reports gross flows of workers into a country by nationality and over time. The only data available at regional level are net population flows, a gauge that is unlikely to capture competitive pressure on local labor markets due to intense immigration. For instance, a zero net flow may reflect an inflow of immigrants of 100 and an equal outflow of displaced local workers: competitive pressure is high but net flow does not reflect it.

in studying the effects of economic insecurity on attitudes and beliefs in Section 5.4; but our results on voting are invariant to the measure used, so Section 5 reports the results using the first measure.<sup>14</sup>

**Trust in traditional politics and institutions.** In our narrative populist platforms are more likely to succeed when voters lose faith in mainstream parties and existing institutions. The ESS has several proxies for confidence in institutions, governments and political parties, all on a scale between 0 (no trust) and 10 (full trust). These indicators tend to be closely correlated and thus hard to tell apart. In analyzing individual voting behaviour we use trust in political parties, which speaks directly to our model. In studying the link between economic insecurity and trust in Section 5.4, we use all the measures.

**Other controls.** We enrich the set of explanatory variables with two proxies for voters' ability to foresee the pitfalls of the populist platforms. The first is education, measured by the number of years of full-time schooling completed. The second is a measure of attention to politics, captured by two variables: how many hours per week people devote to watching TV in general and how many of these hours are spent watching news or programs about politics and current affairs. Watching TV in general is taken as a proxy for little interest in politics, and thus as a proxy for poor information. Watching news and programs about politics, given the time spent watching TV, is used to proxy for information level.<sup>15</sup> We expect better educated people and people who watch TV programs on politics to be better able to anticipate the cost consequences of populist policies and accordingly less likely to vote for their proponents.

Voting for an anti establishment party may entail some risk and be more appealing for risk prone voters. Similarly, sensitivity to policies that offer short term protection

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<sup>14</sup>Using synthetic panel data we document that people who experience an increase in the index of economic insecurity become more supportive of limiting immigration from low-wage countries (see Section 5). This justifies taking adverse attitudes towards immigrants as a gauge of economic insecurity.

<sup>15</sup>It may well be that someone who spends 100 percent of his/her time on TV watches only one-sided news. This may be the reason why it turns out not to be particularly significant in the regression on party choice, but is significant for the decision to participate, since watching political news correlates with mobilization.

at the expense of long term policies may depend on people subjective discount. We use age as a proxy for subjective discounting, on the presumption that older people are less likely to have to bear for the future cost of current policies (assuming they care about future generations less than they care about themselves). As a proxy for risk tolerance we use the ESS indicator of whether people consider it important to avoid taking risks.

In all regressions we control for gender and political orientation, measured on a scale from 0 (far left) to 10 (far right). Needless to say, some of the variables can proxy for more than one of the dimensions of heterogeneity that we have listed. For instance gender may also reflect risk preferences as may age. Table 1 panel A shows summary statistics for these variables.

[TABLE 1 HERE]

### 4.3 Identifying populist parties

To identify populist parties in Europe, we rely on the classification proposed in the recent, comprehensive study by van Kessel (2015), which studies all the parties that gained parliamentary representation in national elections in Europe between 2000 and 2013.<sup>16</sup> The period and the countries covered match those in the ESS data. Van Kessel defines a party as populist if it a) portrays “the people” as virtuous and essentially homogeneous; b) advocates popular sovereignty, as opposed to elitist rule; c) defines itself as against the political establishment, which is alleged to act against the interest of the people. These features reflect the general anti-elite supply rhetoric dimension that is also mentioned as first characteristic in the Encyclopedia definition. To detect the presence of populist parties van Kessel uses primary sources such as party manifestos and speeches. To make sure that the classification is meaningful, he also asks a pool of country experts to validate or reject his classification by answering an ad hoc questionnaire. Using these criteria, the author identifies 59

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<sup>16</sup>The countries covered are: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, UK.

populist parties in 26 of the 31 countries examined. Since only 53 of those obtained seats in parliaments, we conduct the analysis using those 53, but all results are robust to including all 59.<sup>17</sup> There are several advantages to this classification. First, it uses a clear set of political strategy attributes, rather than subjective judgements. That is, the “supply rhetoric” is observable and can be detected from official documents. Second, van Kessel’s classification covers all the relevant European countries. And third, it allows the definition to be time-varying, so that a non-populist party may turn populist in a certain year, a feature which is important for studying the supply side of populism. For a full list of parties, see Appendix A.

Despite these merits, the dichotomous populist non-populist classification unavoidably contains a certain amount of subjective judgement. The analysis of this paper will lead to the conclusion that for identification of the populist parties the van Kessel definition suffices (because of complementarity with the other two components of the Encyclopedia definition) but the explicit consideration of the other two components yields a richer and more precise characterization of what populists do and why they are successful now and here.

## 4.4 Validating survey data on voting

Since we cannot observe true behaviour, we analyse voting decisions as reported. Obviously, response to the ESS do not necessarily correspond to what people actually did in the voting booth. Apart from recall bias, people may be reluctant to tell their voting choice truthfully. The correlation between turnout in the ESS and actual turnout is quite high, 80%. The correlation between ESS votes for populist parties conditional on participation and actual voting is lower, at 65%. This is not surprising. Apart from reluctance to reveal voting choice, the survey may be representative of the country’s adult population but not necessarily of the electorate. Furthermore, the low correlation can be traced to seven observations out of 106 in which the ESS understates actual vote for the populist party by more than 25 percentage points.<sup>18</sup>

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<sup>17</sup>Van Kessel’s definition is very similar to that of Mudde (2004, 2007), and in fact the parties identified by the two authors are essentially the same.

<sup>18</sup>All our results go through even excluding these outliers from the analysis.

Dropping these observations, the correlation is 85% and a regression of the average populist vote in the ESS on actual votes yields a slope of 0.76. The hypothesis that the slope is 1 is rejected, suggesting that the ESS sample participants tend to systematically understate the populist vote. However, if this measurement error were positively correlated with preferences for voting populist, our estimates of the effect of economic insecurity on voting would be a conservative estimate of the true effect.

## 4.5 Data on supply

We use the ESS mostly to study individual voting behavior - what we call the demand side of populism. For the supply side, we complement the ESS with several other datasets. Data on national political institutions come from the World Bank Database of Political Institutions. Data on trade with China, India and the rest of the world are drawn from the World Bank WITS statistics (UN Comtrade). Finally, the five waves (1999, 2002, 2006, 2010, 2014) of the CHES serve to determine whether populism, once it appears, spills over to non-populist parties. For each of the 246 parties included, which belong to all the countries in our sample, CHES gives a measure of the position on a set of relevant issues, which we use to obtain measures of distance between the position of a non-populist party from that of the populist party in the same country. Table 1, panel D, shows summary statistics of these measures, described in detail in Section 6.

## 5 Demand: the empirics of voters' behavior

We first show results on the drivers of the vote for a populist party using the ESS data. We model voting as a two-step decision: a) whether to participate in an election (the participation decision); and b) conditional on participation, which party to vote – in particular, whether or not to vote for a populist party (the voting decision). Estimating the two decisions simultaneously is important for two related but distinct reasons: to get consistent estimates of the voting decision if unobserved components of the participation decision are correlated with unobserved components of the voting

decision; and second, to pin down the channels through which voters' characteristics impact on the voting choice. Let  $\pi^C(x) = \pi^J(x)/\pi^V(x, z)$  denote the probability of preferring a populist party conditional on voting, which is defined as the ratio of the joint probability of voting and preferring a populist party,  $\pi^J$ , and that of participating in the election,  $\pi^V$ . The effect of a change in  $x$ , say an increase in economic insecurity, is  $\pi_x^C = (\pi_x^J \pi^V - \pi_x^V \pi^J)/(\pi^V)^2$  or, in percentage,  $\pi_x^C/\pi^C = (\pi_x^J/\pi^J - \pi_x^V/\pi^V)$  which is clearly affected by the effect of  $x$  on the participation decision. By a joint estimation of the voting and participation decisions we retrieve consistent estimates of  $\pi_x^C$  and  $\pi_x^V$  and can assess the economic role of turnout in the voting results. In frequencies,  $\pi^C$  represents the populist party's share of the vote – our dependent variable.

## 5.1 Turnout and identification

To account for the fact that the party choice only applies to those who vote in the election, itself a choice variable, we estimate a two-step Heckman probit model, estimating first the probability of participation, and then the probability of voting for the populist party. As observed in Section 3, electoral participation depends on the same set of variables as the choice of party, possibly with opposite signs: that is, the characteristics that increase the likelihood of voting populist may also discourage participation. For identification, we need a personal characteristic that affects the net benefit of voting (benefit less cost), but not the choice of the party conditional on participation. As instruments we use the mean temperature and total rainfall on the day of the elections in each region-year. The identification assumption is that meteorological conditions on the election day affect the cost of going to the polls but not the preference for voting for a specific party, which should reflect less transient factors. Because the effect of rain or heat on the cost of going to the polls may be stronger in countries where it rains infrequently (or where temperatures are frequently low) we also include interactions between rainfall and temperature with a dummy variable for southern countries.

## 5.2 Estimation results

We start estimating our Heckman probit model on the sample of countries that have a populist party in the ESS waves. Later we extend the estimates to all countries and account for selection induced by populist party existence/entry. As we will see, results are unaffected suggesting that the included controls already capture the variables that affects populist parties existence/entry. In all specifications we control for gender and political orientation and for the population of the voter’s region; we also include country-level fixed effects and ESS wave effects. Importantly, country-fixed effects capture all the time-invariant features of the country that may affect the success of populist platforms: the electoral system, the responsiveness of the established parties to salient political issues (such as labor market pressure from immigrants), and the level of corruption.<sup>19</sup> For brevity, these controls are not reported. We run regressions using sampling weights to account for differences in national’s sample size. In all regressions, standard errors are clustered at the regional level. Our final dataset consists of 136,953 observations from 25 countries when estimating the specification with all controls.

Table 2 reports the estimates of several specifications, with a progressively augmented set of controls. The bottom part shows the parameter estimates of the meteorological instruments on the participation decision. In general, rainfall on election day discourages participation in southern countries, while high temperatures significantly discourage it in Nordic countries. This conforms with intuition: going to the polls when the temperature is high is a heavy toll in a Nordic country (where hot days are rarer), while going to vote in the rain is costly in southern countries where people are less equipped for it. Conditional on the controls and the instruments there is no sign of selection bias, as is shown by the low and insignificant correlation between the residuals in the voting and the participation regressions in all specifications.

The first two columns show results of participation and voting decisions controlling for risk and time preferences, education, political information, and the three

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<sup>19</sup>These are some of the context variables that studies of populism (e.g. van Kessel, 2015) consider critical in explaining populists’ success.

proxies for economic insecurity. The proxy for risk aversion has a significant positive effect on participation: people who consider it important to avoid taking risks are more likely to vote. This measure has no effect on the choice to vote for a populist party. Hence, we find no support in the data for the idea that since the populist choice entails risk, it is more appealing for risk-tolerant voters. Age affects participation positively but has no effect on voting populist.<sup>20</sup>

Education - our proxy for people's ability to foresee the long-term costs of current policies - has a positive and precisely measured effect on voting and, conditional on participation, a negative effect on support for a populist party. Increasing education by 4 years (one sample standard deviation) raises participation probability by 24 percentage points (30% of the sample mean). The proxy for political information has a significant impact on turnout - more politically informed citizens are more likely to participate - but it has no well identified effect on voting for a populist party (see the brief discussion on the reasonableness of these findings in footnote 15).

Economic insecurity is our key determinant of the demand of populism. Unlike the papers that ignore turnout (e.g. Inglehart and Norris, 2016), our study confirms the effectiveness of the economic insecurity mechanism. Economic insecurity acts on two margins: it discourages participation and increases the likelihood of a populist vote among those who do decide to vote. The effect on the participation margin is precisely estimated and highly responsive to unemployment, income loss and exposure to globalization. It is this margin, in our interpretation, that creates the basis for the appearance of populist platforms. The populist party vote is more likely among those who lost a job, suffer an income loss and are exposed to globalization.

To facilitate interpretation of the magnitude of the effects of economic insecurity, the second set of regressions replaces the three measures of economic insecurity with their principal component. The index of economic insecurity significantly affects electoral participation and voting for the populist party. At sample means, increasing economic insecurity by one standard deviation lowers turnout by 6.8% of the sample

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<sup>20</sup>Interestingly, women are less likely to participate, and when they do, they are also less likely to support populist platforms; while the politically right-leaning are more likely to participate.

mean and increases the populist vote by 11.5%. For an individual who transits from no economic insecurity to economic insecurity, the probability of voting for a populist party increases by 56% of the unconditional sample mean, while the probability of voting falls by as much as 26 percentage points, equivalent to 33% of the sample mean. These are substantial effects.

The third pair of columns have trust in political parties as an additional explanatory variable. Consistent with our proposed interpretation of the role of disappointment with politics for the rise of populism, people with greater confidence in political parties are more likely to vote and to vote for a non-populist party. Those who have lost faith in political parties are more likely to abstain, but if they do vote, they are more likely to choose a populist party. Trust in political parties is on a scale of 0 to 10; a drop of 5 points increases the probability of voting for a populist party by 21% of the sample mean. The effect on electoral participation is similarly strong: a drop of 5 points lowers the chance of participating in elections by 8.9 percentage points, more than 11% of the unconditional mean electoral turnout.

The last pair of columns add, as a control, a measure of attitudes towards immigrants, used as a proxy for fears of competition in the labor market. The specific measure is support for policies that limit immigrants from non-EU countries; if instead we use a measure of support for limiting immigrants of the same race/ethnicity or immigrants of other race/ethnicity than that of the respondent or an average of the three measures, the results are basically unaltered. People who are more adverse to immigrants are less likely to vote and more likely to vote for a populist party if they do. A 1-standard-deviation increase in hostility to immigrants lowers turnout by 1 percent of the sample mean; the effect on voting for a populist party is more pronounced: it increases by 6.1% of the sample mean. The effects of the other variables, particularly economic insecurity and trust in political parties, are unchanged.

[TABLE 2 HERE]

Table 3, first column, summarizes the direct effect on the conditional probability of voting for a populist party of a 1-standard-deviation increase in economic insecurity, trust in political parties, and fear of immigrants. The second column shows

the contribution of these variables to the conditional probability of a populist vote through their effect on the probability of voting at all. Economic insecurity and trust in political parties affect the conditional probability of voting for a populist party mostly through their effect on turnout. Accounting for the effects on the decision whether or not to vote is crucial to understand how the drivers of populist voting operate.<sup>21</sup>

[TABLE 3 HERE]

A summary illustration of the fact that economic insecurity affects populism demand through the participation effect is given in Figure 2, where we see that panel A and panel B have the same share of citizens who prefer to vote for the populist option, but panel B displays a larger fraction of abstainers, with the disillusionment affecting traditional party supporters more strongly.

[FIGURE 2 HERE]

### 5.3 Robustness

Table 4 reports a number of extensions and robustness exercises. To save on space, the estimates of the instruments in the turnout regressions are shown in Appendix B. The first two columns run the estimates of the Heckman probit using all the sample countries, not only those that have a populist party. That is, the turnout equation is estimated using observations for countries both with and without populist parties. The endogenous presence of populist parties is fully captured by the country dummies. The results are unaffected. Economic insecurity lowers participation and increases the populist vote; the effects are significant and of the same order of magnitude as those in Table 2. The same holds true for the effects of trust in parties and the other controls. The second set of estimates, run on all countries, adds a dummy for countries in the euro-area. This has no effect on turnout but significantly raises the consensus for populist parties, possibly reflecting the dismal performance of

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<sup>21</sup>From the expression  $\pi_x^C \sigma_x = ((\pi_x^J \pi^V - \pi_x^V \pi^J)/(\pi^V)^2) \sigma_x$ , where  $\sigma_x$  is the standard deviation of  $x$ , the contribution through the effect on turnout is  $(-\pi_x^V \pi^J/(\pi^V)^2) \sigma_x$ .

euro-area countries during the Great Recession. The other estimates are unaffected. The next two columns add country-wave fixed effects, capturing changes in populist manifestos and rhetoric. Again the results are unchanged. One concern is that, the populist vote may actually be capturing voting for a new party as such. To address this, in the last two columns we run the estimates after dropping individuals who voted for any new party - i.e. a party present in the election for the first time. The results are basically unaffected. As a final robustness exercise, we run the estimates again, using a different exclusion restriction in the Heckman selection model. This is not because weather on the election day is orthogonal to the voting choice, but because one may doubt its power. As an alternative instrument we use the voters' self reported health status, on the assumption that people in weaker health face a higher turnout cost.<sup>22</sup> All results (not reported for brevity) hold if we use this alternative instrument (see working paper version, Guiso et al., 2017).

[TABLE 4 HERE]

## 5.4 Economic insecurity, voters trust in political parties and attitudes toward immigrants

Economic insecurity can affect both electoral participation and populist vote also indirectly, because it influences people's confidence in political parties and attitudes towards immigrants. A recent strand of work emphasizes the decline in confidence caused by sharp drops in economic activity. Ananyev and Guriev (2016) are able to isolate the causal effect of economic downturns on people's trust during the 2009 recession in Russia, exploiting regional variations in the industrial structure inherited from the Soviet Union, and noticing that capital-intensive and oil-related industries are more responsive to shocks to GDP. They find that a decline in GDP causes a sizeable drop in trust in other people. The same logic applies, even more plausibly,

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<sup>22</sup>Health status is invalid as an instruments if it affects people's preferences for populist or non-populist parties via differences in healthcare policies. This may apply in the US presidential elections, where dismantling Obama care was part of the Trump program, but, it is not an issue in Europe, where populist versus non-populist programs do not differ on health policy.

to falls in trust in political parties, politicians and governments, say because citizens blame incumbent parties (and the government) for poor economic performance. The same logic can be extended to argue that negative attitudes towards immigrants may be exacerbated when people, faced with economic insecurity, feel more threatened by labor market competition.

In fact, economic insecurity and trust in political parties are negatively correlated, when gauged using cross sectional variation in the pooled ESS. Similarly, economic insecurity is correlated positively with hostility to immigrants from non-EU countries. And these correlations hold even controlling for observable and country and wave fixed effects. Of course the correlations may just reflect unobserved heterogeneity - i.e. some individual characteristics that drive both economic insecurity and people's trust in politics and attitudes towards immigrants. To address this problem, we follow Deaton (1985) and construct a pseudo-panel from the sequence of ESS waves. We group the data into fourteen 5-year age cohorts of men and women in each country, respectively, and estimate the following model

$$y_{jct} = \beta_1 \mathbf{x}_{jct} + \beta_2 EI_{jct} + f_j + f_{ct} + u_{jct} \quad (5)$$

where  $y_{jct}$  denotes the generic belief/attitude of cohort  $j$  in country  $c$  in year  $t$ ,  $\mathbf{x}_{jct}$  the vector of controls,  $EI_{jct}$  the index of economic insecurity, and  $u_{jct}$  an error term. Unobserved heterogeneity is controlled for by the cohort-specific fixed effects  $f_j$ .<sup>23</sup> Country-specific trends in beliefs/attitudes and economic insecurity are captured by country-year fixed effects  $f_{ct}$ . The latter pick up any country aggregate variable that affects changes in beliefs over time, including any effect of populist party rhetoric.

Figure 3, left panel, shows a simple bivariate correlation between the change in trust in political parties and that in economic insecurity among the pseudo-panel cohorts. In all cases, an increase in the economic insecurity of the cohorts leads to a decrease in trust in political parties. The right panel shows the bivariate correla-

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<sup>23</sup>Our pseudo-panel consists of 840 age/country/year-of-birth groups. Cohorts are relatively large, with 293 observations on average. This reassures us that measurement error in the cohort means is likely to be negligible. Dropping cohorts with fewer than 50 observations (7.7% of the total) does not alter the results.

tion between changes in attitudes towards EU immigrants and changes in economic insecurity for the same cohorts. This second correlation is strongly positive.

[FIGURE 3 HERE]

The first two columns of Table 5 report controlled fixed-effect pseudo-panel regressions of trust in political parties and attitudes to non-EU immigrants on our summary measure of economic insecurity and individual time-varying controls (risk aversion, age, exposure to the media) as well as country-specific time effects common to all cohorts. Economic insecurity has a negative and highly significant effect on trust in political parties and a positive and highly significant effect on hostility towards immigrants.

The economic effects are substantial: a 1-standard-deviation increase in economic insecurity lowers trust in political parties by 7.3% of its sample standard deviation and increases hostility to non-EU immigration by 5% of its sample standard deviation. Because these are fixed-effects regressions, the results cannot depend on unobserved heterogeneity.<sup>24</sup> The results confirm the thesis that a deterioration in individual economic security causes a loss of confidence in political parties as well as a change in attitudes towards immigrants.<sup>25</sup>

[TABLE 5 HERE]

The rest of the table expands the evidence by regressing several measures of trust (in politicians, in the national parliament, in the European parliament, and an index of satisfaction with the government) and attitudes towards immigrants (preference for fewer immigrants of different race/ethnicity; for fewer immigrants of

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<sup>24</sup>The pseudo-panel regressions identify the causal effect of economic insecurity on trust in political parties and on attitudes towards immigrants that is due to: a) individuals in the cohort changing their attitudes when they experience insecurity directly; b) changes in trust towards parties/attitudes towards immigrants in that cohort reflecting group effects: say, an individual in a given cohort who loses confidence in political parties because he/she observes that other members of the same cohort have experienced economic insecurity.

<sup>25</sup>Reverse causality - people who lose trust in parties and because of this are more likely to lose their jobs or to suffer income losses - is not plausible, particularly in light of the fact that any effect that a generalized loss of confidence in politics has on the economy is already picked up by the time fixed effects and similarly for a change in attitudes towards immigrants.

same race/ethnicity; agreement that immigrants make the country worse). Economic insecurity can be seen to cause people to lose confidence in politics, institutions and governments and to increase aversion to immigrants across the board.<sup>26</sup>

#### 5.4.1 Direct, indirect, and total effects of economic insecurity

We use the estimates in the first two columns of Table 5 together with those in Table 2 to obtain an estimate of the total effect of an increase in economic insecurity on the probability of voting for a populist party among those who vote and on electoral turnout rate.<sup>27</sup> The estimates are shown in Table 6.

[TABLE 6 HERE]

In total, an increase in economic insecurity by 1 standard deviation increases populist voting by 11.3% of the sample mean. Around 92% of this increase stems from the direct effect on voting and the rest from the indirect effect through lower trust (6%) and fears of immigrants (3%). An increase of the same magnitude in insecurity lowers electoral turnout by 8.5% of the sample mean (6.6 percentage points); 93% of the drop is due to the direct effect, while 6% to the indirect effect through lower trust in political parties and a marginal 1% to increased fear of immigrants.

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<sup>26</sup>Our interpretation is supported by the results in Algan et al. (2017) who show that in regions of Europe where unemployment increased more sharply following the 2008 crisis, trust in parties and political institutions fell more and sentiments towards immigrants deteriorated. An IV analysis suggests that the causality runs from changes in unemployment to changes in trust and sentiments.

<sup>27</sup>The magnitude of the effects of economic insecurity on trust and anti-immigrant sentiments is taken from the pseudo-panel estimates; the effect of trust and immigrant sentiments (as well as the direct effect of economic insecurity) on both voting populist and turnout are taken from the Heckprobit main specification.

## 6 Supply: the empirics of populist parties and policies

### 6.1 Presence and entry of populist parties

Populist parties are not always present. Figure 4 (left panel) shows the share of countries with at least one populist party among the 31 countries in our sample. In 2000, the proportion was just above 60%; by 2009 it rose to almost 85%. Our model suggests that the presence of populist parties is heavily affected by the magnitude of the potential demand: if underlying support is sufficiently large, a populist platform is more likely to emerge (and to disappear if support fades). In Section 5.4 we showed that economic insecurity undermines confidence in political parties and creates political space for a populist platform. We accordingly predict that economic insecurity will be a major explanatory factor for the presence of populist parties. Where the scale of electors' disappointment due to insecurity exceeds the cost of setting up a party, which depends on context-specific variables, a populist party should emerge.

To test this implication we estimate the following model:

$$np_{ct} = \alpha d(e_{ct}) - \beta z_{ct} + u_{ct}$$

where  $np_{ct}$  is the number of populist parties in country  $c$  in year  $t$ ,  $d(e_{ct})$  is the level of voters' disappointment - an increasing function of the level of economic insecurity in country  $c$  in year  $t$ ;  $z_{ct}$  is a feature of the institutional and political system, possibly time-varying, that affects the cost of setting up a party with a populist platform; and  $u_{ct}$  an error term. We measure heterogeneity in the supply of populist parties with a discrete variable - the number of parties in each country defined as populist by van Kessel, in the years from 2000 to 2015. Figure 4 (right panel) shows the distribution of this variable. We capture economic insecurity with two measures. The first is simply the mean in the ESS sample in country  $c$ , year  $t$ , of our principal component measure of individual economic insecurity used in Section 5. Because the ESS is run every two years, for the country/years when the ESS measure

of economic insecurity is not available we extend that of the nearest wave. Clearly, this limits the time variability of this measure. Our second measure is the share of imports (total imports over population), to capture exposure to globalization. Because this measure is available every year, it adds variation in economic insecurity. As a proxy of the cost of forming a populist party, we have experimented with several political/institutional features, including an index of checks and balances, the nature of the electoral system, and party-political fragmentation. Though these measures all affect the presence of a populist party in the expected direction (populist parties are less likely to be present in countries with stronger checks and balances, a less fragmented political system and a proportional electoral system),<sup>28</sup> the factors with the greatest predictive power are the strength of the opposition parties and of non-aligned parties (both captured by vote in the last election). We report the results using these measures in Table 7, where we estimate a Poisson model and a Ordered Probit model, controlling for year fixed effects (to account for the common trend in populist parties documented in Figure 4) and macro Euro-regions fixed effects,<sup>29</sup> and clustering standard errors at country level, as some countries have more than one populist party. The first column shows the results proxying  $z_{ct}$  with the share of the votes going to opposition party. The supply of populism is greater where economic insecurity is more widely diffused among the population and in countries more highly exposed to globalization. It is smaller where opposition parties are strong. All the effects are statistically significant; they are also economically relevant. All else being equal, the expected number of populist changes by a multiplicative factor of 1.35, for an increase of economic insecurity of 1 standard deviation (i.e. a 35% increase in number of populist parties). An expected increase of 22% of populist parties obtains for an increase of import of 1 standard deviation. An increase in opposition

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<sup>28</sup>In principle, a proportional system should encourage the supply of populist parties by lowering the entry costs; but because lower entry costs facilitate the entry of other parties as well, they may dilute the benefit of offering a populist platform, by leaving a smaller share of the vote on the table. In our data this effect seems to prevail.

<sup>29</sup>The macro Euro-regions are: South (Spain, Portugal, Italy, Greece, Cyprus, Malta), Baltic (Estonia, Latvia, Lithuania), East (Romania, Czech Republic, Poland, Bulgaria, Croatia, Slovenia, Slovakia, Hungary), and Centre-North (Germany, France, Belgium, Denmark, Sweden, Finland, Austria, Ireland, Luxembourg, Netherlands, UK, Switzerland, Iceland, Norway).

vote by 1 standard deviation decreases by 23% the expected number of populist parties. The second column shows that the results are similar proxying  $z_{ct}$  with the share of the votes going to non-aligned parties, but smaller in magnitude, i.e. 1 standard deviation increase in not-aligned vote share decrease the expected number of populist parties by 7%). The measures of economic insecurity are somewhat stronger. The third column shows that the two proxies maintain their relevance and significance also when considered together. The negative effect of our proxies for  $z_{ct}$  lends support to our thesis that a populist platform has a better chance of winning consensus, and thus of inducing a party to propose it, when people lose faith in all the established parties. A strong opposition party or the presence of strong non-aligned parties weakens the anti-elite pillar, rendering a populist strategy less attractive. All our results are confirmed in columns (4)-(6), when we use a different estimation procedure, namely an Ordered Probit model with the same specification as before, and obtaining qualitatively the same results.

[TABLE 7 HERE]

## 6.2 The choice between left and right

Our hypothesis is that the choice of entering on the left or on the right should depend on the *relative entry space*. The latter, in turn depends on the ideological orientation of the electorate and, as Rodrik (2017) observes, on the salient features of the main economic insecurity determinants – e.g. a large inflow of immigrants or a globalization shock, or a marked increase in income concentration and inequality. In turn, these factors are likely to be differentially salient for left- or right-oriented voters, pulling the populist party’s orientation choice one way or the other depending on the relative weight of left- and right-wing voters and the relative salience of left-versus right-wing factors. To test our hypothesis on our data, we estimate the model:

$$r_{jct} = \delta_0 + \delta_1 s_{lct} \times L_{ct} + \delta_2 s_{rct} \times R_{ct} + v_{ct}$$

where  $r_{jct}$  is the orientation of populist party  $j$  in country  $c$  at  $t$ , increasing in orientation to the right;  $s_{ct}^L$  and  $s_{ct}^R$  the shares of left- and right-oriented voters,  $L_{ct}$

and  $R_{ct}$  the left-salient and right-salient factors and  $v_{ct}$  an error term. The party orientation is observed in the CHES survey and measured on a scale from 1 (far left) to 10 (far right), so our data are limited by the CHES coverage. The shares of left-oriented and right-oriented voters, also a 1-to-10 scale, are obtained from the waves of the ESS. As a measure of left-salient factors we use the Gini coefficient of income inequality (from the World Bank World Income Inequality Database) and as a measure of the right-salient factor the share of immigrants from Muslim countries in the total population. This variable, obtained from the World Bank Bilateral Migration Matrix, is available for three years (1999, 2010 and 2013). We predict  $\delta_1 < 0$  and  $\delta_2 > 0$ .

Relative entry space should be a critical determinant of the orientation choice whenever the individual characteristics of left-leaning and right-leaning voters are similarly distributed in terms of the key variables of economic insecurity, trust and ability to assess populist policies that drive the consensus for populist parties, as shown in Section 5. Table 8 confirms that this is indeed the case. The distribution of proxies for the determinants of voting, summarized by mean and standard deviation, are extremely similar between left-oriented and right-oriented voters.

[TABLE 8 HERE]

Figure 5 shows that in the CHES data, the distribution of the orientation of populist parties is sharply different from that of non-populist parties: populists have a much higher density on the right.

[FIGURE 5 HERE]

[TABLE 9 HERE]

Table 9 first column shows that the heterogeneity in populist party orientation is consistent with our hypothesis. Income inequality weighted by the population share of left-oriented voters tends to pull orientation of populist parties to the left, and the effect is statistically significant. 1-standard-deviation increase in this factor shifts orientation to the left by more than one unit in the scale, or 21% of the sample

mean. The share of immigrants from Muslim countries weighted by the share of right-oriented voters has a positive and highly statistically significant effect, pulling populist parties' orientation to the right. A 1-standard-deviation increase in this factor increases the score by 1.51 points, or 29% of the sample mean orientation. Interestingly, it is not immigration per se that affects the populist orientation but its origin from Muslim countries (see e.g. Laitin, 2018). If we replace immigration from Muslim countries with the population share of all immigrants or of immigrants from EU countries, the immigration variable (weighted by the share of right-oriented voters) is not statistically significant. This strengthens our interpretation of the results, as it strongly suggests that the orientation chosen is the one most susceptible to effective populist rhetoric (see Rodrik 2017). Results are unchanged if we account for selection due to endogenous populist party entry (second column) by adding as a control a Mill's ratio computed from a first stage Probit for the presence of a populist party using as instruments the controls in the third column of Table 7.

In sum, the results set out here and in the previous section fully support our interpretation. Populist parties and platforms appear when the popular disappointment is sharp enough to raise realistic hopes of winning a share of the total vote - *a scale effect* - large enough to outweigh the entry cost. Conditional on entry, the party chooses its political orientation strategically, tilting towards voters ideology and where the factors behind the crisis are more salient - *a relative size effect*.<sup>30</sup> There may have been other ideological and cultural reasons for the orientation choice of a new party, but we have shown that even the most standard office-seeking motivation can explain the observed variation.

### 6.3 Populists' policy choices – short term protection

Having shown the determinants of entry and orientation choices, it remains to show the third supply choice, namely the policy platform choice. In this section we show that both on the left and on the right a populist party consistently offers a signifi-

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<sup>30</sup>An important factor determining entry incentives that we do not consider in this analysis is the reduction in entry costs determined by the technological changes concerning social media. See e.g. Campante et al (2018).

cantly greater degree of short term protection. Hence the findings of this section will lend empirical support to the relevance of the Encyclopedia definition mentioned in the introduction.

Using the 2014 Chapel Hill Expert Survey (CHES), in which national experts rate European parties on a range of positions, policies and salient issues, we construct continuous measures of the three dimensions of the encyclopedia definition – (1) anti-elite rhetoric, (2) protectionism, and (3) concealment of long-term costs – for all the parties in the CHES database. We use these measures to see if it is true that those parties identified as populist by van Kessel (using dimension 1) are indeed significantly more likely to choose policy platforms that conform to the second and third dimension. The rhetoric variable averages the scores assigned to a measure of the salience of anti-establishment and anti-elite rhetoric and of reducing political corruption, on a scale from 0 (not important at all) to 10 (very important). The protectionism measure is the average of the scores for the position on five policies that may offer economic protection in different domains: deregulation (10 strongly opposes deregulation of markets); immigration (10 strongly in favor of tough policy); tax policy: (10 strongly favors tax cuts vis-a-vis improving government services); economic intervention (10 fully in favor of state intervention); cosmopolitanism (0 strongly advocates cosmopolitanism, 10 strongly advocates nationalism); redistribution of wealth (10 fully in favor of redistribution). To capture the third dimension we average parties’ positions on two long-term issues: the environment and international security or peace-keeping. Policies on these issues will pay off in the long run, the first by limiting global warming, the second by guaranteeing a stable international order. We interpret a high score on downplaying the importance of these issues as the gauge of a strategy of hiding the long-term costs of protectionism. Table 10 shows regressions of each of the three indexes on the van Kessel populist party identifier, *after* controlling for the political orientation of the party (0, far left, 10 far-right).

[TABLE 10 HERE]

Independently of political orientation, populist parties as defined by van Kessel all score higher in each of the three indexes. The difference between populist and

non-populist parties is sharpest on the anti elite/anti corruption dimension (63% above the sample average) but it is substantial for the other two (36% and 26% above average). Consistent with populist parties playing a best response to the voters' demand and disappointment documented in section 5, what left and right-wing populists have in common is short term protection supply.<sup>31</sup> The analysis presented for the demand side (section 5) holds if we consider the discrete 3D definition of populism just described (see Appendix C).

## 6.4 Non-populist parties' reaction to populism

One possibility is that non-populist parties may adapt their own platforms in imitation of a successful populist party. To test this hypothesis we use the five waves of the Chapel Hill Expert Survey (CHES). For each of a list of issues (see Appendix D for the full description), the CHES reports the position of the party on a scale of 0 to 10 (for some issues, the CHES scale is 1 to 7, but we rescale them to 0-10). To assess the party position CHES questions a pool of experts in each country. For instance, on the issue of deregulation/regulation the position of the party is gauged by a number, running from 0 (strongly opposed to deregulation) to 10 (strongly in favour). We disregard issues present in only one or two survey, considering only those that are assessed in at least three and preferably all five surveys. We group the positions into four families: overall European integration (P\_EI); European policy (P\_EU, obtained summing the scores on three issues: powers of European institutions, European cohesion policy, and EU foreign and security policy); ideology (P\_ID, obtained summing the scores on three issues: general ideological stance (left/right), stance on intensity of government intervention in the economy, libertarian versus traditional/authoritarian stance); and an index of the positions on a set of eleven policy issues (P\_PD: government expenditure versus taxation, deregulation, redistribution of wealth, civil liberties versus law and order, social lifestyle, religious principles in politics, immigration policy, multiculturalism, urban versus rural interests, political

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<sup>31</sup>Using a first principal component of each of the three dimensions in the Encyclopedia definition, the last column of Table 10 shows the correlation of this measure with van Kessel's populist identifier.

decentralization to regions/cities and position towards ethnic minorities). The first three indexes are available for all surveys, the fourth for the last three waves.

To compare platforms we proceed as follows. Let  $y_{icjt}$  denote the position of party  $i$  in country  $c$  on issue  $j$  (EI, EU, ID, PD) in year  $t$ . We distinguish between platforms of populist parties, P, and non-populist, NP, and let  $D_{ijct} = (P_{ijct}^{NP} - P_{jct}^P)^2$  denote the distance between the platform of non-populist party  $i$  and the main populist party in its country, if there is one. Let  $s_{t-1}^P$  denote the share of the vote going to the populist party or parties in the last election before the survey. We test the electoral competition hypothesis by running the regression:

$$D_{icjt} = f_t + f_{NP} + \gamma s_{t-1}^P + u_{icjt}$$

where  $f_t$  are time fixed effects,  $f_{NP}$  are non-populist party fixed effects, and  $u_{icjt}$  an error term. Because parties are country-specific, the party fixed effects also capture systematic national differences across countries. Most electoral competition models would predict a negative value for  $\gamma$ , that is, the platforms of non-populist parties should move closer to that of the populist party as the latter becomes more successful.

[FIGURES 6 HERE]

Figure 6 plots the relation between the distance of the platforms of non-populist parties from those of the populist and the populist share of the vote in the most recent election for each of the issues and for the overall index. To pick up possible non-linearities, we plot a local polynomial regression, with the 95% confidence band. In all the issues the distance decreases as populist parties gain support, which jibes with the thesis that populist policies are more palatable to the electorate at times of systemic crisis. Table 11 shows the estimates of the linear regression specified above, confirming the visual inspection of Figure 6: as populist parties gain support, their non-populist adversaries appear to adapt their platforms to reduce the distance from the populists. The effects, which account for endogenous presence of populist parties,<sup>32</sup> are substantial: increasing the share of votes to the populist party by 1

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<sup>32</sup>We include in all regressions a Mill's ratio computed from a first stage Probit for the presence

standard deviation (15 percentage points) shortens the distance between the non-populist and populist platforms by 34%, 18%, 27%, and 28% of the sample mean of our issues EI, EU, ID, PD, respectively. Table 12 rules out the possibility that it is the populist party that moves closer to the traditional parties as it gains consensus. To show this, we regress the change in populist positions on the populist share of the vote. We find that populist parties do not revise their position as their share of votes increases. Overall, this evidence means that simply counting the number of populist parties, or tallying their share of votes/seats, understates the supply of populist policies in a country.

[TABLE 11 HERE]

[TABLE 12 HERE]

## 7 Conclusions

Western countries in the last decade have experienced an unprecedented crisis that has affected global markets and sovereign states, leaving many people on unstable grounds in a way unseen before. Previously the crisis of the 1970s was mainly a market crisis, while various crises in the 1990s were government crises in a context of thriving markets. The rare combination of inability of both markets and governments to provide security has shaken the confidence in traditional political parties and institutions, induced frustration and fears aggravated by growing threats from mass immigration and globalization. This paper has described how this dual crisis, reflected in peoples' economic insecurity, has systematically affected the demand for, and supply of, populist policies. We have shown that frustration-induced abstention, largely ignored by previous literature, has made economic insecurity the leading motive behind the demand of populist policies. We have highlighted that cultural sentiments, such as distrust for traditional politics and attitudes towards immigrants, are key drivers of the populist vote albeit indirectly so, being themselves of a populist party using as instruments the controls in the third column of Table 7.

tied to economic insecurity. In sum, populism does not have a direct *cultural cause*, but rather an *economic insecurity origin*, with an important and traceable *cultural channel*. These direct and indirect effects of economic insecurity have been clearly internalized by existing or newly created populist parties in Europe that entered politics on either sides of the political spectrum. On the flip side, populism and backlashes against globalization largely did not spread to fast-developing markets (such as Asian countries) where during this past decades growth and welfare have greatly improved economic security and prospects for vast portions of the population.

## References

- [1] Aasve, A., G. Daniele and M. Le Moglie (2018): “Never Forget the First Time: The Persistent Effects of Corruption and the Rise of Populism in Italy.” Mimeo, Bocconi University.
- [2] Acemoglu, Daron, Georgy Egorov and Konstantin Sonin (2013): “A Political Theory of Populism” , *Quarterly Journal of Economics*, 771-805.
- [3] Acemoglu, Daron and Pasqual Restrepo, (2017): “Robots and Jobs: Evidence from US Labor Markets”, NBER Working Paper No. 23285
- [4] Algan Yann and Pierre Cahuc, (2010): “Inherited Trust and Growth” , *American Economic Review*, 100 (5): 2060-92.
- [5] Algan, Yann, Sergei Guriev, Elias Papaioannou, and Evgenia Passari (2017): “The European Trust Crisis and the Rise of Populism”, Brookings Papers on Economic Activity, Fall.
- [6] Ash, Elliott, Massimo Morelli and Richard Van Weelden (2017): “Elections and Divisiveness: Theory and Evidence,” *Journal of Politics*, **Vol. 4**, 1268-85.
- [7] Autor, David , David Dorn, Gordon Hanson and Kaveh Majlesi (2016): “Importing Political Polarization? The Electoral Consequences of Rising Trade Exposure” , NBER Working Paper No. 22637.
- [8] Autor, David , David Dorn, Gordon Hanson and Kaveh Majlesi (2017): “A Note on the Effect of Trade Exposure on the 2016 Presidential Elections” , MIT Working Paper.
- [9] Ananyev Maxim and Sergei Guriev (2016): “Effect of Income on Trust: Evidence from the 2009 Economic Crisis in Russia” , WP Science Po, Paris.
- [10] Becker, Sascha O. , Thiemo Fetzer and Dennis Novy (2016): “Who Voted for Brexit? A Comprehensive District-Level Analysis” , Warwick University WP N. 305.

- [11] Boix, Carles (1999): "Setting the Rules of the Game: The Choice of Electoral Systems in Advanced Democracies" , *The American Political Science Review*, 93 (3), 609-624.
- [12] Campante, Filipe, Ruben Durante, and Francesco Sobrio?(2018): "Politics 2.0: The Multifaceted Effect of Broadband Internet on Political Participation," *Journal of the European Economic Association*, **Vol. 16(4)**, 1094-136.
- [13] Chesterley, Nicholas, and Paolo Roberti (2018): "Populism and Institutional Capture," *European Journal of Political Economy*
- [14] Caliendo, Lorenzo, Luca David Opromolla, and Fernando Parro (2017): "Goods and Factor Market Integration: A Quantitative Assessment of the EU Enlargement", *NBER Working Paper 23695*
- [15] Colantone, Italo and Piero Stanig (2016): "Global Competition and Brexit", forthcoming *American Political Science Review*
- [16] Colantone, Italo and Piero Stanig (2017): " The Trade Origins of Economic Nationalism: Import Competition and Voting Behavior in Western Europe", forthcoming *American Journal of Political Science*
- [17] Dal Bo, Ernesto, Fred Finan, Olle Folke, Johanna Rickne and Torsten Persson (2017): " Economic losers and political winners: The rise of the radical right in Sweden" mimeo Uppsala University.
- [18] Deaton, Angus (1985): "Panel data from time series of cross-sections" , *Journal of Econometrics*, 30 (1-2), 109-26.
- [19] Di Tella, Rafael, and Julio J. Rotemberg (2016): "Populism and the Return of the 'Paranoid Style': Some Evidence and a Simple Model of Demand for Incompetence as Insurance Against Elite Betrayal." Harvard Business School Working Paper, No. 17-056.
- [20] Dornbusch, Rudiger, and Sebastian Edwards, eds., (1991): *The Macroeconomics of Populism in Latin America*, University of Chicago Press, Chicago.

- [21] Dustmann, Christian, Barry Eichengreen, Sebastian Otten, André Sapir, Guido Tabellini, and Gylfi Zoega (2017): "Europe's Trust Deficit: Causes and Remedies" , CEPR Press.
- [22] Foster, Chase and Jeffry Frieden (2017): "Crisis of Trust: Socio-economic determinants of Europeans' confidence in government" Mimeo Harvard University.
- [23] Gidron, Noam and Bart Bonikowski (2013): "Varieties of Populism: Literature Review and Research Agenda" , Harvard University, Weatherhead Center for International Affairs, WP n. 13.
- [24] Golder, Dawn (2016): "Far Right Parties in Europe" , *Annual Review of Political Science*, 19 (1): 477-97.
- [25] Guiso, Luigi, Helios Herrera, Massimo Morelli, and Tommaso Sonno (2017): "Demand and supply of populism" , CEPR DP 11871.
- [26] Guiso, Luigi, Helios Herrera, Massimo Morelli, and Tommaso Sonno (2018): "Global Crises and Populism: the Role of Eurozone Institutions", *Economic Policy* forthcoming.
- [27] Hans-Georg, Betz (2002): "Conditions favouring the success and failure of radical right-wing populist parties in contemporary democracies?", in Yves Mény and Yves Surel (Eds), *Democracies and the Populist Challenge*, Springer, Berlin.
- [28] Inglehart Roland F. (1997): *Modernization and Post-modernization: Cultural Economic and Political Change in 43 Societies*, Princeton University Press.
- [29] Inglehart Ronald F. and Pippa Norris (2016): "Trump, Brexit, and the Rise of Populism: Economic Have-Nots and Cultural Backlash" , Harvard Kennedy School RWP16-026.
- [30] Jensen, J. Bradford, Dennis P. Quinn, and Stephen Weymouth, (2016): "Winners and Losers in International Trade: The Effects on U.S. Presidential Voting." NBER Working Paper No. 21899.

- [31] Judis, John B (2016): *The Populist Explosion. How the Great Recession Transformed American and European Politics*, New York, Columbia University Press.
- [32] Hainmueller, J. and Michael Hiscox (2006): "Learning to Love Globalization: Education and Individual Attitudes Toward International Trade," *International Organization*, 60:2, 469-498.
- [33] Karakas, Leyla D. (2018): "Inequality, Redistribution and the Rise of Outsider Candidates," Siracuse University.
- [34] Kitschelt, H. and Anthony J. McGann (1995): *The Radical Right in Western Europe*. Ann Arbor: University of Michigan Press.
- [35] Kriesi, Hanspeter (2014), "The Populist Challenge," *West European Politics*, 37:2, 361-378.
- [36] Kriesi, H. and Takis Papas (Eds) (2016): *European Populism in the Shadow of the Great Recession*, ECPR Press, Colchester UK.
- [37] Laitin, David (2018): "Populism: the Muslim Connection." mimeo, Stanford University.
- [38] Levine, David K., Andrea Mattozzi and Salvatore Modica (2018): *When Pollsters are Wrong and Lobbyists Win: Economic Sociology and Political Economy*, draft EUI
- [39] Lucassen, Geertje, and Marcel Lubbers (2012): "Who Fears What? Explaining Far-Right-Wing Preference in Europe by Distinguishing Perceived Cultural and Economic Ethnic Threats." *Comparative Political Studies*, 45(5), 547-74.
- [40] March, Luke and Cas Mudde (2005): "What's left of the radical left? The European radical left after 1989: Decline and mutation" , *Comparative European Politics* 3 (1): 23-49.
- [41] March, Luke (2007): *Radical left parties in Europe*, Routledge, Oxford UK.

- [42] Mudde, Cas (2004): "The Populist Zeitgeist." *Government and opposition*, 39(4), 541-563.
- [43] Mudde, Cas (2007): *Populist radical right parties in Europe*, Cambridge University Press, Cambridge UK.
- [44] Mudde, Cas and Cristobal Rovira Kaltwesser (2017): *Populism*, Oxford University Press, Oxford UK.
- [45] Muller, Jean-Werner (2016): *What is Populism*, University of Pennsylvania Press, Philadelphia.
- [46] Mutz, Diana C. (2018): "Status tus threat, not economic hardship, explains the 2016 presidential vote" PNAS 1-10.
- [47] Norris, Pippa (2005): *Radical Right. Voters and Parties in the Electoral Market*, Cambridge University Press, Cambridge UK.
- [48] Pastor, Lubos and Pietro Veronesi (2018): "Inequality Aversion, Populism, and the Backlash Against Globalization" (mimeo University of Chicago).
- [49] Prato, C., and Wolton, S. (2017): "Rational Ignorance, Populism, and Reform," *European Journal of Political Economy*.
- [50] Pauwels, T (2014): *Populism in Western Europe. Comparing Belgium, germany and the Netherlands*. Routledge, New York, USA.
- [51] Rodrik, Dani (2017): "Populism and the Economics of Globalization", CEPR DP 12119.
- [52] Sachs, Jeffrey (1989): "Social Conflict and Populist Policies in latin America" , NBER WP 2897.
- [53] Schumacher, Gijs (2016): "Do Mainstream Parties Adapt to the Welfare Chauvinism of Populist Parties?" *Party Politics*, 22(3), 300-12.

- [54] Stavrakakis, Yannis and Giorgos Katsambekis (2014): "Left-wing populism in the European periphery: the case of SYRIZA" , *Journal of Political Ideologies* 19 (2): 119-142.
- [55] Steiner Nils D. and Christian W. Martin (2012): "Economic Integration, Party Polarisation and Electoral Turnout," *West European Politics* Vol. 35 (2): 238-265.
- [56] Van Kessel, Stijn (2015): *Populist Parties in Europe. Agents of Discontent?* , Palgrave MacMillan, London.
- [57] Zak, Paul J. and Stephen Knack (2001): "Trust and Growth," *The Economic Journal* , 111 (470): 295-321.

# Appendix

## A Populist parties

Table A1 lists parties that are defined as populist by van Kessel (2016) on the one hand and by Norris & Inglehart (2016) on the other.

[TABLE A1 HERE]

## B First stages for robustness

Here we present the estimates of the instruments in the turnout regressions for section 5.3.

[TABLE A2 HERE]

## C Political platforms

In section 6.3 we discuss our three-part definition of populism, and we show that this is a good fit with the van-Kessel classification, although protectionism and concealment of its long-term costs are harder to measure empirically. Table A3 reports the basic estimates using our empirical implementation of the three-dimensional measure of populism (the estimates of the instruments in the participation regressions are given in Table A4). The first two columns show the estimates of a Heckman selection model taking as dependent variable in the main specification a 3D measure of populism; this index is a continuous measure of a political party's degree of populism, and free of the unavoidable arbitrariness of the dichotomous classification into "populist" and "non-populist" parties. Because of the lower coverage of the CHES survey the number of censored observations increases considerably (from around 40 thousands to more than 75 thousands) compared with Table 2. Even so, confirming the previous results, economic insecurity lowers the likelihood of voting and increases

support for more populist parties. Trust in political parties affects participation positively and the preference for more populist parties negatively, but the latter effect is not statistically significant. The other variables have effects qualitatively similar to those produced using van Kessel definition. The second set of estimates use a binary definition of populist parties defined as those above the 75th percentile of the 3-D index. The results are similar to those in Table 2. Economic insecurity increases the probability of voting for a populist party, while trust in political parties decreases it; both effects are precisely estimated. The next two columns add attitudes towards immigrants finding that fear of immigration lowers participation and boosts populist votes. The results are invariant to the more stringent definition of populist parties (3D index above the 80th percentile, last two columns).

[TABLE A3 HERE]

[TABLE A4 HERE]

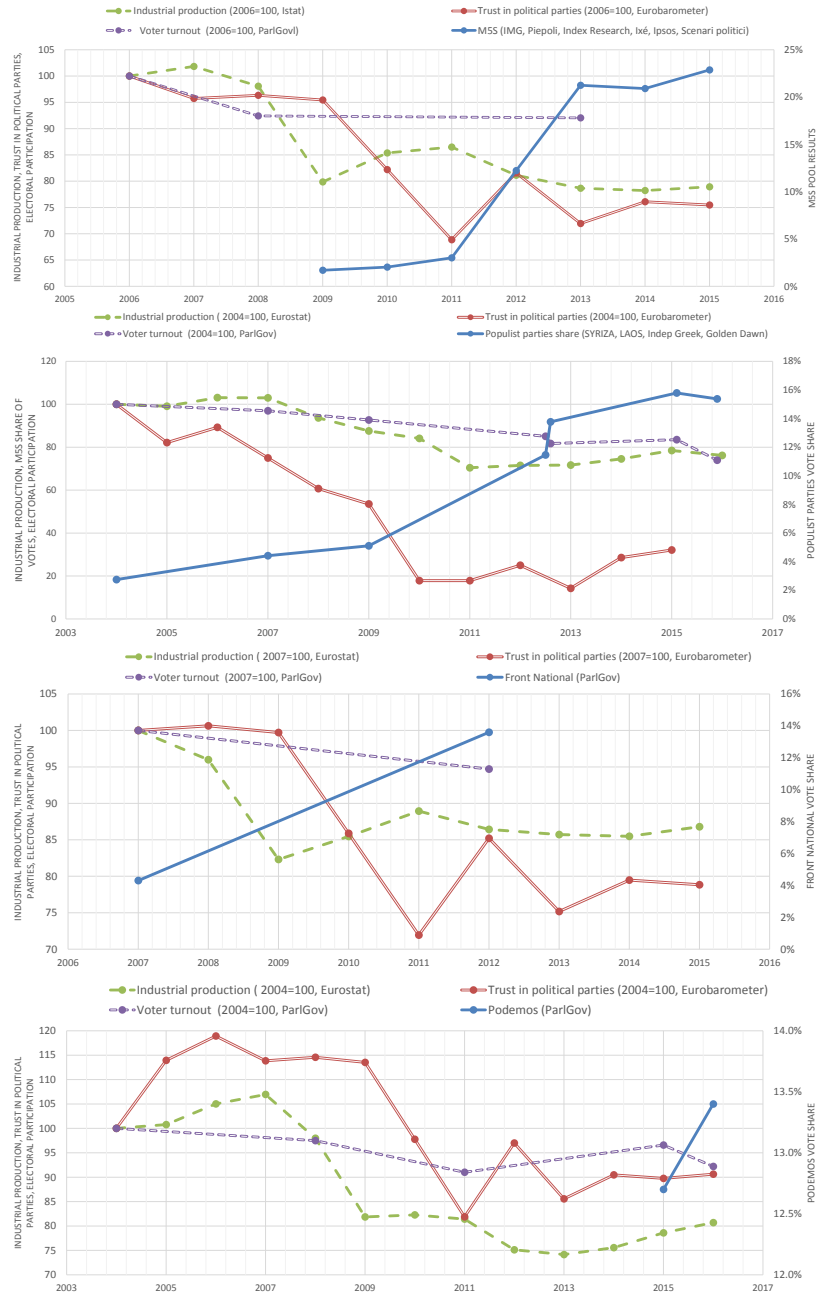
## D Political platforms

We obtain information on parties political platforms from the five waves of the Chapel Hill Expert Survey (CHES). For each of a list of several issues the CHES reports the position of the party on a scale either between 1 and 7 or between 0 and 10. Positions are grouped in four families: i) overall European integration (P\_EI); ii) 11 issues on European policy (P\_EU); 3 position on ideological issues (P\_ID) and 17 positions on policy issues (P\_PD). Table A5 lists the issues covered for each family, the scale on which the position is reported and the survey years it is available in CHES. To make sure we have enough coverage over time, we build the EU index P\_EU using the the position on the three issues covered in all 5 surveys (three issues, highlighted in italics in the table) and construct the P\_PD index using the 11 positions covered in three surveys (again highlighted in italics in the table).

[TABLE A5 HERE]

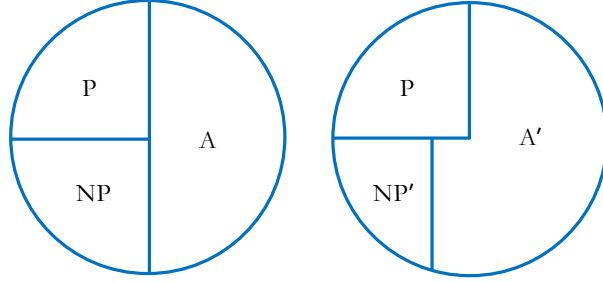
# Figures

Figure 1: Populism, Economics, Electoral participation and Trust



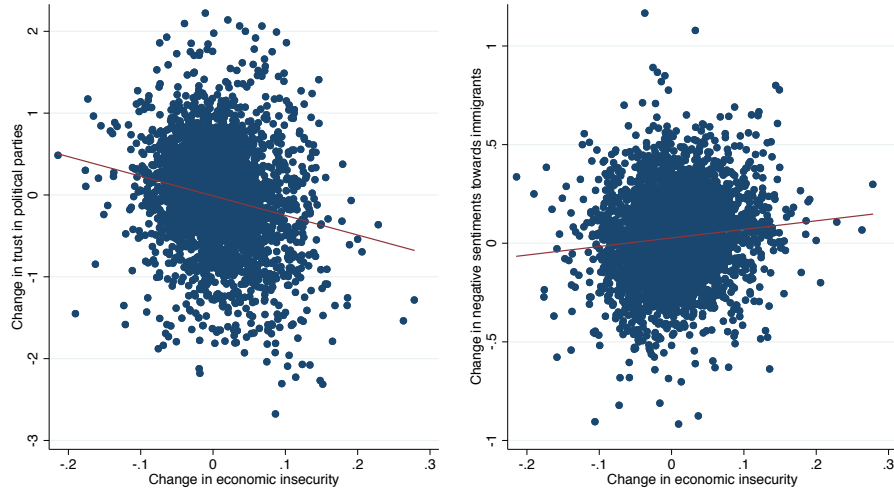
The figures show the evolution of economic activity, trust in political parties, electoral participation and consensus to populist parties in Italy, Greece, France, and Spain. Economic activity (measured by the index of industrial production), the share of the vote going to the populist parties and voter turnout are on the left scale; trust in political parties on the right scale.

Figure 2: Economic insecurity and populist demand



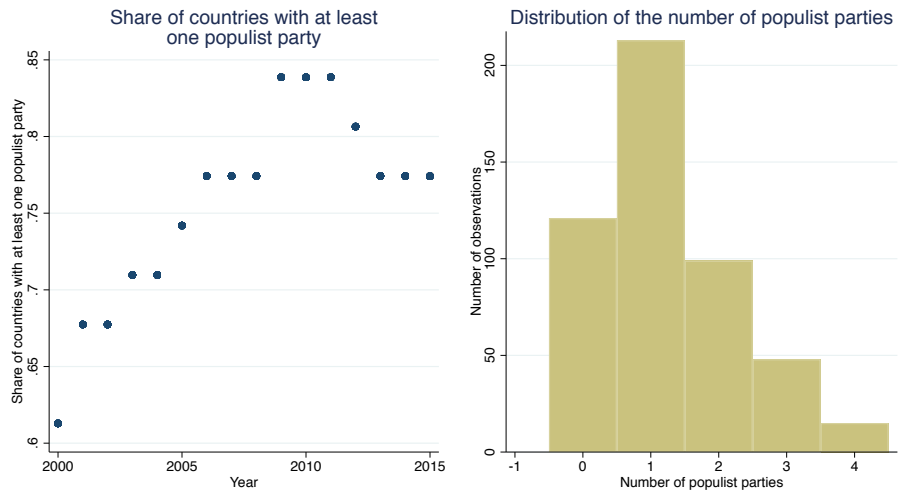
The figure shows Venn diagrams of the distribution of the population of voters between abstainers (A), populist voters (P) and non-populist voters (NP) before (left figure) and after (right figure) an increase in economic insecurity. It shows the case where economic insecurity leads to disappointment with traditional parties and thus to abstention by their supporters.

Figure 3: Economic insecurity, trust and sentiments



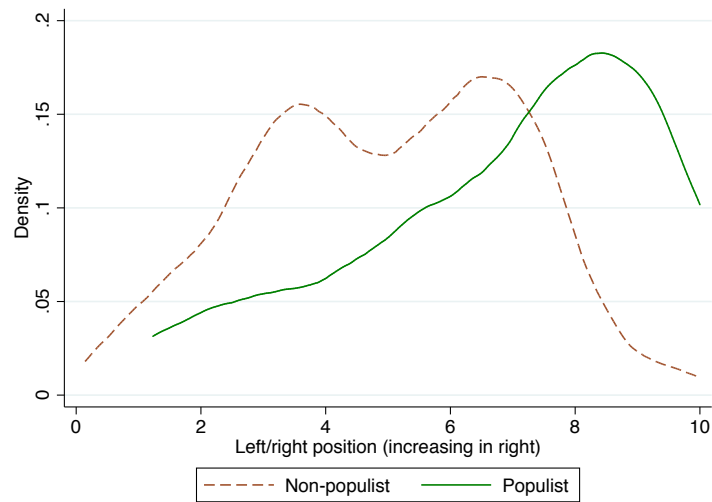
The figure shows scatterplots and linear regressions of the change in economic insecurity (x-axis) and the change in trust in political parties (y-axis, left figure) and hostility to immigrants (y-axis, right figure) in the synthetic cohorts panel.

Figure 4: The Rise of Populism



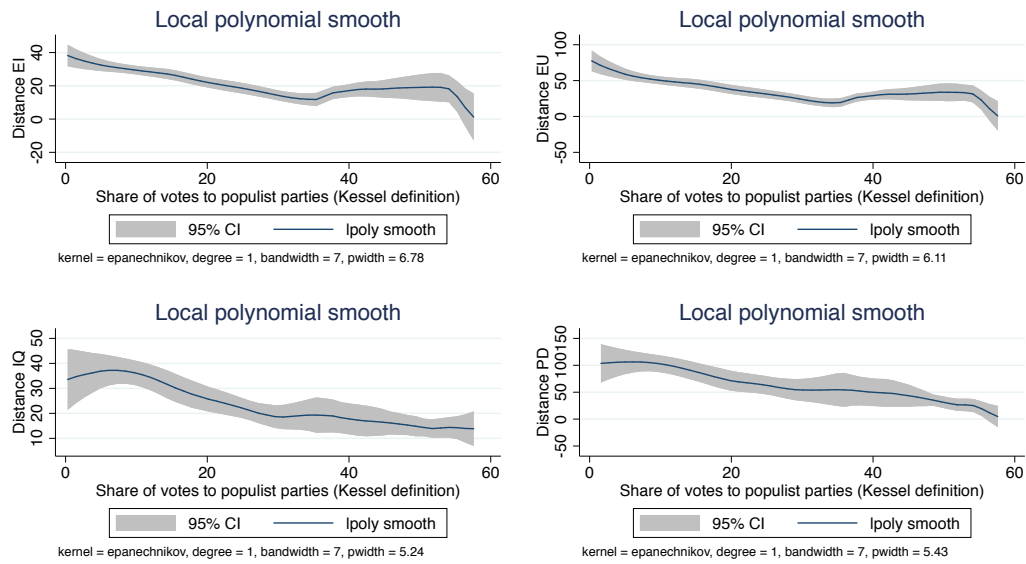
The left panel shows the evolution of the share of European countries in the ESS sample that have at least one populist party. The right panel shows the histogram of the number of populist parties in our sample.

Figure 5: Left/right orientation



The figure shows the kernel density of the ideological orientation on the left/right scale of populist and non-populist parties in Europe.

Figure 6: Distance from populist platform and share of vote to populist parties



The figures show the local polynomial smooth relation between measures of distance of non-populist from populist platforms and the share of the vote that went to populist parties in the last most recent election.

# Tables

Table 1: Descriptive statistics

Variable	Obs.	Mean	St. Dev.	Min	Max
<b>A. Demand analysis</b>					
Voted	226,117	0.78	0.41	0	1
Vote for populist party	152,898	0.08	0.27	0	1
Risk aversion	228,140	3.94	1.43	1	6
Age	238,696	48.94	17.76	18	100
Education	239,903	12.71	3.94	0	25
TV total	239,365	4.29	2.05	0	7
TV politics	230,903	1.99	1.31	0	7
Female	239,625	0.53	0.50	0	1
Right wing	213,101	5.12	2.17	0	10
Regional population (1000)	218,241	2530.24	3265.77	28	18075
Unemployment	238,732	0.13	0.34	0	1
Income difficulties	234,480	1.00	0.87	0	3
Exposure to globalization	217,718	0.28	0.45	0	1
Economic insecurity (PC)	212,638	0.21	0.21	0	1
Trust in political parties	201,677	3.59	2.35	0	10
Want less immigrants from outside EU	231,310	2.54	0.89	1	4
Daily total rain fall	222,245	3.07	5.06	0	35
Daily mean temperature	222,318	10.69	6.25	-7	25
3D measure of populism	102,724	30.80	14.64	0	99
<b>B. Pseudo panel analysis</b>					
Risk aversion	4,842	4.12	0.56	2	6
Age	4,899	54.92	16.60	22	88
Education	4,899	11.48	2.32	3	18
TV total	4,899	4.43	0.78	2	7
TV politics	4,899	2.15	0.51	1	7
Female	4,899	0.50	0.50	0	1
Right wing	4,899	5.16	0.64	0	9
Regional population (1000)	4,111	2270.41	2184.23	118	10806
Economic insecurity (PC)	4,842	0.22	0.10	0	1
Trust in political parties	4,283	3.42	1.12	0	7
Want less immigrants from outside EU	4,899	2.65	0.38	1	4
Trust politicians	4,899	3.49	1.11	1	7
Trust national parliament	4,898	4.34	1.25	1	8
Trust European parliament	4,898	4.38	0.81	0	9
Government satisfaction	4,871	4.18	1.20	0	9
Want less immigrants different race/ethnicity from majority	4,899	2.56	0.36	1	4
Want less immigrants same race/ethnicity from majority	4,899	2.21	0.33	1	4
Immigrants make country worse	4,899	5.24	0.88	2	9
<b>C. Supply analysis</b>					
Populist party	496	1.24	1.02	0	4
Economic insecurity (PC)	400	0.22	0.08	0	0.5
Import p.c.	432	10.02	6.78	1	40
Vote share opposition parties	379	41.96	13.47	0	74
Vote share not-aligned parties	360	0.37	1.95	0	15
<b>D. Chapel Hill Expert Survey</b>					
Rhetoric	767	4.52	2.02	1	10
Protection	633	5.38	1.17	2	9
Concealment	853	5.08	1.00	3	8
Populist 3D	633	35.91	18.30	0	100
Right orientation	949	5.18	2.24	0	10
Distance European integration	686	22.76	22.24	0	91
Distance European policy	684	37.10	43.45	0	239
Distance ideological issues	686	26.65	37.63	0	184
Distance policy issues	488	75.85	101.81	0	450
Gini coefficient (percentage points)	686	29.51	4.01	23	39
Immigrants from Muslim countries (percentage points)	573	0.02	0.01	0	0.05

The table shows summary statistics of the variables used to study demand (Panels A and B) and supply (Panel C and D) of populism. The construction of the single variables is discussed in the text and in Appendix A and D.

Table 2: Main specification - Heckman probit estimates of populist party vote and participation in voting

	(1) Heckprobit		(2) Heckprobit		(3) Heckprobit		(4) Heckprobit	
	Populist	Vote	Populist	Vote	Populist	Vote	Populist	Vote
Risk aversion	0.00142 (0.0107)	0.0212*** (0.00495)	0.00182 (0.0108)	0.0209*** (0.00494)	0.00168 (0.0114)	0.0217*** (0.00524)	0.00156 (0.0114)	0.0227*** (0.00530)
ln(Age)	0.0749 (0.0570)	0.810*** (0.0257)	0.0726 (0.0592)	0.801*** (0.0263)	0.0321 (0.0603)	0.820*** (0.0278)	0.0303 (0.0636)	0.835*** (0.0279)
ln(Education)	-0.0650 (0.0545)	0.522*** (0.0342)	-0.0899 (0.0581)	0.532*** (0.0342)	-0.0983* (0.0586)	0.517*** (0.0351)	-0.0763 (0.0591)	0.511*** (0.0352)
TV total	0.0112* (0.00675)	-0.0320*** (0.00461)	0.0116* (0.00682)	-0.0323*** (0.00460)	0.0141* (0.00726)	-0.0304*** (0.00448)	0.0107 (0.00768)	-0.0299*** (0.00440)
TV politics	0.0147 (0.0123)	0.0678*** (0.00618)	0.0136 (0.0126)	0.0681*** (0.00621)	0.0113 (0.0133)	0.0598*** (0.00661)	0.0135 (0.0134)	0.0581*** (0.00660)
Unemployment	0.0786** (0.0381)	-0.193*** (0.0183)						
Income difficulties	0.0910*** (0.0233)	-0.161*** (0.0121)						
Exposure globalization	0.124** (0.0569)	-0.122*** (0.0228)						
Economic insecurity (PC)			0.451*** (0.0903)	-0.788*** (0.0426)	0.435*** (0.0948)	-0.735*** (0.0450)	0.421*** (0.100)	-0.727*** (0.0449)
Trust in pol. parties					-0.0357*** (0.00820)	0.0550*** (0.00385)	-0.0322*** (0.00841)	0.0531*** (0.00386)
Few immigrants from no-EU							0.0586*** (0.0205)	-0.0347*** (0.00837)
Controls, Wave FE, Country FE	Yes		Yes		Yes		Yes	
Rho	0.157		0.115		0.0249		0.0349	
Cluster SE	Region		Region		Region		Region	
Countries	With P		With P		With P		With P	
Observations	152,868		152,868		139,898		136,953	
Censored observations	45,679		45,679		41,786		40,574	
<i>Selection</i>								
Rain		0.00128 (0.00154)		0.00122 (0.00152)		0.00236 (0.00165)		0.00239 (0.00166)
Rain * South		-0.0222** (0.00866)		-0.0221** (0.00880)		-0.0224** (0.00896)		-0.0234*** (0.00896)
Av. Temperature		-0.00532** (0.00250)		-0.00510** (0.00249)		-0.00447* (0.00248)		-0.00501** (0.00251)
Av. Temperature * South		0.00718 (0.0109)		0.00702 (0.0110)		0.0131 (0.0108)		0.0160 (0.0111)

The table shows Heckman probit estimates of the decisions to vote (Vote) and to vote for a populist party conditional on participation (Populist). Left-hand side variables: a dummy if a voter has chosen a populist party in the columns Populist and a dummy if (s)he has participated in the election in the column Vote. The excluded instrument in the populist regression is an indicator of weather condition on election day. All regressions include country and wave fixed effects. Robust standard errors clustered at the region level are shown in parenthesis. \*\*\* significant 1% or less; \*\* significant at 5%; \* significant at 10% confidence level.

Table 3: Direct effects and effects via turnout

	Effect of conditional prob of 1SD over sample mean	Contribution via turnout
Economic insecurity (PC)	0.103	0.062
Trust in pol. parties	-0.091	-0.052
Few immigrants from no-EU	0.061	0.013

The table shows the direct effect on voting for a populist party of a 1-standard-deviation increase in Economic insecurity, Trust in political parties and attitudes towards immigrants respectively (first column) and the contribution through the change induced in turnout. Calculations use estimates in Table 2, column 4.

Table 4: Main specification - Robustness

	(1) Heckprobit		(2) Heckprobit		(3) Heckprobit		(4) Heckprobit	
	Populist	Vote	Populist	Vote	Populist	Vote	Populist	Vote
Risk aversion	0.000718 (0.0113)	0.0202*** (0.00484)	0.000725 (0.0113)	0.0202*** (0.00484)	0.00389 (0.0117)	0.0220*** (0.00522)	0.00222 (0.0116)	0.0218*** (0.00524)
ln(Age)	0.0110 (0.0576)	0.777*** (0.0292)	0.0133 (0.0579)	0.777*** (0.0292)	0.0515 (0.0921)	0.824*** (0.0277)	0.0408 (0.0578)	0.819*** (0.0276)
ln(Education)	-0.109** (0.0545)	0.406*** (0.0421)	-0.109** (0.0546)	0.406*** (0.0421)	-0.0791 (0.0761)	0.525*** (0.0350)	-0.0998* (0.0574)	0.515*** (0.0352)
TV total	0.0150** (0.00726)	-0.0298*** (0.00419)	0.0145** (0.00725)	-0.0298*** (0.00420)	0.0101 (0.00755)	-0.0311*** (0.00447)	0.0142* (0.00741)	-0.0301*** (0.00450)
TV politics	0.00961 (0.0129)	0.0584*** (0.00616)	0.00989 (0.0129)	0.0584*** (0.00616)	0.0213 (0.0149)	0.0598*** (0.00652)	0.0109 (0.0134)	0.0601*** (0.00660)
Economic insecurity (PC)	0.463*** (0.0935)	-0.697*** (0.0441)	0.463*** (0.0937)	-0.697*** (0.0441)	0.436*** (0.108)	-0.732*** (0.0458)	0.438*** (0.0944)	-0.736*** (0.0450)
Trust in pol. parties	-0.0370*** (0.00822)	0.0521*** (0.00342)	-0.0366*** (0.00827)	0.0521*** (0.00342)	-0.0364*** (0.00924)	0.0540*** (0.00389)	-0.0343*** (0.00812)	0.0553*** (0.00389)
Euro area			0.276*** (0.0778)	-0.0225 (0.0397)				
Controls	Yes		Yes		Yes		Yes	
Wave FE	Yes		Yes		No		Yes	
Country FE	Yes		Yes		No		Yes	
Wave * Country FE	No		No		Yes		No	
Rho	-0.0281		-0.0232		0.0774		0.0558	
Cluster SE	Region		Region		Region		Region	
Countries	All		All		With P		With P (no new P)	
Observations	161,610		161,610		139,898		139,043	
Censored observations	49,989		49,989		41,786		41,786	

The table shows robustness Heckman probit estimates of the decisions to vote and to vote for a populist party. Left-hand side variables: a dummy if a voter has chosen a populist party in the columns Populist, and a dummy if (s)he has participated in the election in the column Vote. The excluded instrument in the populist regression is an indicator of weather conditions on election day. The first set of regressions includes all countries, not only those with a populist party; the second uses the all countries but adds a Euro-area dummy; the third set controls for interacted country-wave fixed effects; the last set runs the regressions dropping observations of individuals who voted for a new party. The first two set of regressions and the last set include country and wave fixed effects. Robust standard errors clustered at the region level are shown in parenthesis. \*\*\* significant 1% or less; \*\* significant at 5%; \* significant at 10% confidence level.

Table 5: Pseudo Panel

	(1) Trust parties	(2) Fewer non-EU immigrants	(3) Trust politicians	(4) Trust national parliament	(5) Trust European parliament	(6) Satisfaction with government	(7) Fewer immigrants of different race/ethnicity	(8) Fewer immigrants of same race/ethnicity	(9) Immigrants make country worse
Risk aversion	-0.0967** (0.0385)	0.00487 (0.0138)	-0.0340 (0.0332)	-0.00578 (0.0393)	-0.122*** (0.0425)	-0.0381 (0.0389)	-0.00606 (0.0151)	-0.0136 (0.0152)	0.0650* (0.0357)
ln(Age)	-0.226 (0.306)	-0.0777 (0.104)	-0.0739 (0.243)	-0.394 (0.290)	-0.724** (0.302)	-0.798*** (0.299)	0.283*** (0.105)	0.349*** (0.103)	-0.118 (0.263)
ln(Education)	0.393*** (0.150)	-0.263*** (0.0561)	0.522*** (0.154)	0.648*** (0.194)	0.338 (0.246)	0.390* (0.228)	-0.318*** (0.0553)	-0.320*** (0.0652)	-0.971*** (0.151)
TV total	-0.0367 (0.0279)	0.0170 (0.0104)	-0.0234 (0.0262)	-0.0601* (0.0315)	-0.0589* (0.0341)	-0.0200 (0.0288)	0.0109 (0.0104)	0.0172 (0.0105)	0.0636** (0.0275)
TV politics	0.0814* (0.0455)	-0.0123 (0.0160)	0.0254 (0.0372)	0.0804* (0.0475)	-0.0459 (0.0550)	-0.0220 (0.0473)	0.00863 (0.0158)	-0.0193 (0.0186)	-0.0682 (0.0431)
Economic insecurity (PC)	-0.850*** (0.240)	0.202** (0.0868)	-0.994*** (0.216)	-1.155*** (0.237)	-0.784*** (0.285)	-1.684*** (0.254)	0.279*** (0.0864)	0.357*** (0.0941)	0.393* (0.225)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cohort FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Wave*Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of cohorts	840	840	840	840	840	840	840	840	840
Countries	All	All	All	All	All	All	All	All	All
Observations	3,662	4,026	4,026	4,026	4,026	3,998	4,026	4,026	4,026

The table shows pseudo-panel fixed effect regressions of trust and attitudes towards immigrants on economic insecurity and controls. All regressions include country×wave fixed effects. Robust standard errors are shown in parenthesis. \*\*\* significant 1% or less; \*\* significant at 5%; \* significant at 10% confidence level.

Table 6: Effect of economic insecurity

Effect of (1 SD) economic insecurity (share of sample mean)	Direct effect	Indirect effect: trust	Indirect effect: hostility towards immigrants	Total effect
Voting populist (% of total effect)	0.103 92%	0.007 6%	0.003 3%	0.113 100%
Turnout (% of total effect)	-0.062 93%	-0.004 6%	-0.001 1%	-0.066 100%

The table reports the effect of a 1-standard-deviation increase in economic insecurity on voting for a populist party and on voter turnout. It shows the direct effect, the indirect effect through the impact of economic insecurity on trust in political parties and attitudes towards immigrants, and the total effect - the sum of the direct and indirect effects.

Table 7: Explaining the Rise of Populist Parties

	(1) Poisson	(2) Poisson	(3) Poisson	(4) Ord. Probit	(5) Ord. Probit	(6) Ord. Probit
	Number pop. parties	Number pop. parties	Number pop. parties	Number pop. parties	Number pop. parties	Number pop. parties
Economic insecurity (PC)	3.587*** (1.217)	3.907** (1.561)	3.597*** (1.282)	7.390** (2.894)	7.723** (3.229)	7.342** (3.094)
Import p.c.	0.0292*** (0.00964)	0.0380*** (0.0107)	0.0282*** (0.00931)	0.0662*** (0.0226)	0.0839*** (0.0210)	0.0673*** (0.0221)
Vote share opposition parties	-0.0197*** (0.00582)		-0.0201*** (0.00628)	-0.0394*** (0.0144)		-0.0400** (0.0179)
Vote share not-aligned parties		-0.0370** (0.0146)	-0.0391*** (0.0126)		-0.0600*** (0.0193)	-0.0732*** (0.0207)
Year FE, Euro-region FE	Yes	Yes	Yes	Yes	Yes	Yes
Observation	308	297	297	308	297	297

The table shows regression results for the number of populist parties in a country as a function of measures of voters' insecurity and countries' institutional characteristics. The dependent variable is the number of populist parties in a country in a given year. Voters' characteristics are those in the most recent ESS survey. All regressions include year and macro Euro-regions fixed effects. Columns (1)-(3) are estimated with a Poisson regression, while columns (3)-(6) using Ordered Probit. Robust standard errors are shown in parenthesis. \*\*\* significant 1% or less; \*\* significant at 5%; \* significant at 10% confidence level.

Table 8: Comparison left/right oriented

Variable	Left-oriented					Right-oriented				
	Obs.	Mean	St. Dev.	Min	Max	Obs.	Mean	St. Dev.	Min	Max
Share of people of [left/right] orientation	593	0.574	0.073	0.441	0.740	593	0.713	0.068	0.593	0.852
Education	593	2.482	0.113	1.951	2.641	593	2.457	0.122	1.888	2.605
Economic insecurity	585	0.230	0.076	0.101	0.450	585	0.222	0.081	0.085	0.460
Few immigrants from no-EU	593	2.488	0.305	1.692	3.297	593	2.627	0.287	1.855	3.362
Trust parties	467	3.341	1.015	1.517	5.434	467	3.406	1.071	1.349	5.698

The table reports summary statistics of characteristics of left-oriented and right oriented voters in our sample.

Table 9: Populist parties' orientation choice

	(1) Left/right orientation (increasing in right)	(2) Left/right orientation (increasing in right)
Share of left oriented * Left-salient factor	-0.606* (0.318)	-0.608* (0.349)
Share of right oriented * Right-salient factor	249.4*** (52.86)	249.1*** (57.50)
R-squared	0.264	0.264
Mills ratios	No	Yes
Cluster SE	Country	Country
Observation	46	46

The table reports regressions of the orientation of the populist parties in our sample on measures of relative entry space. The measure of party orientation is defined on a scale from 1 (extreme left) to 10 (extreme right). In the second column Mill's ratio computed from a first stage Probit for the presence of a populist party using as instruments the controls in the third column of Table 7 is added. Standard errors clustered at the country level, are shown in parenthesis. \*\*\* significant 1% or less; \*\* significant at 5%; \* significant at 10% confidence level.

Table 10: 3D and Kessel

	(1) Rhetoric	(2) Protection	(3) Concealment	(4) Populist 3D
Populist party	2.834*** (0.208)	1.962*** (0.114)	1.324*** (0.0944)	37.07*** (1.808)
Left/Right control	Yes	Yes	Yes	Yes
Observations	767	633	853	633
Percentage of sample mean	63%	36%	26%	100%

The table shows OLS regressions of the each of the three indexes of parties of the 3D measure of populism (Anti-Elite Rhetoric, Protection, and Concealment of the long-term costs of short-term protection) as well as of the principal component of three measures - the Populist 3D measure - on the van Kessel dummy identifying populist parties. Each regression controls for the left/right orientation of the party. The last row shows the difference in the score of populist parties from the sample mean.

Table 11: Distance from populist platform and populist share of the vote

Dependent variable	Coefficient	Std. Err.	Party FE	Year FE	Mills ratio	Obs.	R2
(1) P_EI	-0.514***	(0.121)	Yes	Yes	Yes	364	0.915
(2) P_EU	-0.456***	(0.174)	Yes	Yes	Yes	363	0.923
(3) P_IQ	-0.481**	(0.213)	Yes	Yes	Yes	364	0.891
(4) P_PD	-1.438*	(0.845)	Yes	Yes	Yes	264	0.900

The table shows the regression of the distance between the positions of non-populist and populist party on four separate issues and the share of the vote that went to the populist parties in the last past election. All regressions include year fixed effects and Mill's ratio computed from a first stage Probit for the presence of a populist party using as instruments the controls in the third column of Table 7. Robust standard errors are shown in parenthesis. \*\*\* significant 1% or less; \*\* significant at 5%; \* significant at 10% confidence level.

Table 12: Who moves

Dependent variable	Coefficient	Std. Err.	Party FE	Year FE	Obs.	R2
(1) P_EI	0.0695*	(0.0382)	Yes	Yes	73	0.872
(2) P_EU	0.0501	(0.107)	Yes	Yes	73	0.887
(3) P_IQ	0.0771	(0.170)	Yes	Yes	73	0.807
(4) P_PD	0.191	(0.732)	Yes	Yes	59	0.790

The table shows the regression of the change in populist positions on four separate issues and the share of the vote that went to the populist parties in the last past election. All regressions include year fixed effects. Robust standard errors are shown in parenthesis. \*\*\* significant 1% or less; \*\* significant at 5%; \* significant at 10% confidence level.

Table A1: Comparison Kessel (K) and Norris &amp; Inglehart (N&amp;I)

Country	Party	Kessel	N&I
AT	Freedom Party (FPÖ)	1	1
AT	Alliance for the Future of Austria (BZÖ)	1	0
AT	Team Stronach (TS)	1	0
BE	Flemish Interest (VB)	1	1
BE	National Front (FN)	1	0
BE	List Dedecker (LDD)	1	0
BG	National Movement Simeon the Second (NDSV)	1	0
BG	Attack Party (Ataka)	1	1
BG	Law, Order and Justice (RZS)	1	0
BG	Citizens for European Development of Bulgaria (GERB)	1	0
BG	VMRO-BND Bulgarian National Movement	0	1
BG	NFSB National Front for the Salvation of Bulgaria	0	1
BG	HSS Croatian Peasants Party	0	1
CH	Swiss People's Party (SVP)	1	1
CH	Swiss Democrats (SD)	1	0
CH	League of Ticinians (LdTi)	1	0
CH	Geneva Citizens' Movement (MCG)	1	0
CZ	ANO 2011 (ANO)	1	0
CZ	Public Affairs (VV)	1	0
CZ	Dawn of Direct Democracy (Úsvit)	1	1
DE	Party of Democratic Socialism/ The Left (PDS/Linke)	1	0
DE	NPD National Democratic Party	0	1
DE	AfD Alternative for Germany	0	1
DK	Danish People's Party (DF)	1	1
ES	Podemos	-	1
FI	True Finns (PS)	1	1
FR	National Front (FN)	1	1
FR	MPF Popular Republican Movement	0	1
GB	British National Party	1	1
GB	UK Independence Party	1	0
GB	NF National Front	0	1
GR	Coalition of the Radical Left (SYRIZA)	1	1
GR	Independent Greeks (ANEL)	1	1
GR	Popular Orthodox Rally (LAOS)	1	1
GR	XA Golden Dawn	0	1
GR	ND New Democracy	0	1
HR	Croatian Party of Rights dr. Ante Starčević? (HSP-AS)	1	1
HR	Croatian Labourists ? Labour Party (HL-SR)	1	0
HR	HSS Croatian Peasants Party	0	1
HR	HDSSB Croatian Democratic Alliance of Slavonia and Baranja	0	1
HR	HSP Croatian Party of Rights	0	1
HR	HDZ Croatian Democratic Union	0	1
HU	FIDESZ-Hungarian Civic Alliance (FIDESZ-MPSZ)	1	1
HU	Movement for a Better Hungary (Jobbik)	1	1
IE	Sinn Féin (SF)	1	-
IS	Citizens' Movement (BF)	1	-
IT	Forza Italia (FI) / People for Freedom (PdL)	1	0
IT	Northern League (LN)	1	1
IT	5 Star Movement (M5S)	1	1
IT	Brothers of Italy (Fdl)	0	1
LT	Labour Party (DP)	1	0
LT	Order and Justice Party (TT)	1	0
LT	DK The Way of Courage	0	1
LU	Alternative Democratic Reform Party (ADR)	1	1
LV	All for Latvia	1	1
NL	List Pim Fortuyn (LPF)	1	0
NL	Liveable Netherlands (LN)	1	0
NL	Freedom Party (PVV)	1	1
NL	SGP Political Reformed Party	0	1
NO	Progress Party (FrP)	1	1
PL	Self Defence (SO)	1	0
PL	Law and Justice (PiS)	1	1
PL	SP United Poland	0	1
PL	KNP Congress of the New Right	0	1
RO	Greater Romania Party (PRM)	1	0
RO	People's Party ? Dan Diaconescu (PP-DD)	1	1
SE	Sweden Democrats (SD)	1	1
SI	Slovenian National Party (SNS)	1	0
SI	SDS Slovenian Democratic Party	0	1
SI	SDS Slovenian Democratic Party	0	1
SK	Movement for a Democratic Slovakia (HZDS)	1	0
SK	Direction (Smer)	1	0
SK	Slovak National Party (SNS)	1	1
SK	Ordinary People and Independent Personalities (OLaNO)	1	0
SK	KDH Christian Democratic Movement	0	1
TR	MHP National Action Party	-	1

The table compares the classification of populist parties according to van Kessel with that in Inglehart and Norris. The sign "-" indicates that the country is not covered.

Table A2: First stage Robustness

	(5) Vote	(6) Vote	(7) Vote	(8) Vote
Rain	0.00232 (0.00158)	0.00232 (0.00158)	-0.000491 (0.00247)	0.00255 (0.00168)
Rain * South	-0.00954** (0.00424)	-0.00957** (0.00424)	-0.0166** (0.00839)	-0.0229** (0.00901)
Av. Temperature	-0.00369 (0.00247)	-0.00372 (0.00247)	-0.00214 (0.00649)	-0.00532** (0.00252)
Av. Temperature * South	0.00659 (0.00632)	0.00660 (0.00632)	0.0292 (0.0189)	0.0125 (0.0110)
Wave FE	Yes	Yes	No	Yes
Country FE	Yes	Yes	No	Yes
Wave * Country FE	No	No	Yes	No
Cluster SE	Region	Region	Region	Region
Countries	All	All	With P	With P (no new P)

The table shows the instruments in the voter turnout regressions in Table 4 in the text.

Table A3: 3D definition of populism

	(1) Heckman		(2) Heckprobit		(3) Heckprobit		(4) Heckprobit	
	Populist 3D (0-100)	Vote	Populist 3D d.v. (>75p)	Vote	Populist 3D d.v. (>75p)	Vote	Populist 3D d.v. (>80p)	Vote
Risk aversion	0.0729 (0.0561)	0.0300*** (0.00573)	-0.00428 (0.00977)	0.0301*** (0.00573)	-0.00432 (0.00987)	0.0311*** (0.00583)	-0.0155 (0.0101)	0.0310*** (0.00582)
ln(Age)	0.419* (0.253)	0.736*** (0.0301)	-0.120* (0.0619)	0.736*** (0.0301)	-0.139** (0.0618)	0.749*** (0.0306)	-0.101* (0.0538)	0.749*** (0.0306)
ln(Education)	-1.175*** (0.306)	0.394*** (0.0381)	-0.0944* (0.0497)	0.393*** (0.0380)	-0.0798 (0.0511)	0.377*** (0.0379)	-0.00967 (0.0511)	0.378*** (0.0379)
TV total	0.102** (0.0479)	-0.0298*** (0.00447)	0.0110 (0.00864)	-0.0300*** (0.00447)	0.0104 (0.00877)	-0.0289*** (0.00440)	0.0158* (0.00883)	-0.0288*** (0.00439)
TV politics	0.0364 (0.0535)	0.0551*** (0.00592)	-0.00783 (0.0107)	0.0550*** (0.00590)	-0.00764 (0.0106)	0.0531*** (0.00587)	0.00703 (0.00961)	0.0532*** (0.00588)
Economic insecurity (PC)	2.084*** (0.525)	-0.591*** (0.0639)	0.487*** (0.0829)	-0.591*** (0.0638)	0.480*** (0.0861)	-0.579*** (0.0635)	0.395*** (0.0857)	-0.579*** (0.0634)
Trust in pol. parties	-0.0520 (0.0423)	0.0590*** (0.00469)	-0.0294*** (0.00830)	0.0590*** (0.00470)	-0.0278*** (0.00841)	0.0564*** (0.00455)	-0.0254*** (0.00809)	0.0564*** (0.00455)
Few immigrants from no-EU					0.0406** (0.0158)	-0.0479*** (0.00921)	0.0381** (0.0161)	-0.0478*** (0.00922)
Controls, Wave FE, Country FE	Yes		Yes		Yes		Yes	
Rho	-0.0355		-0.375		-0.396		-0.275	
Cluster SE	Region		Region		Region		Region	
Countries	With P		With P		With P		With P	
Observations	139,898		139,898		136,953		136,953	
Censored observations	75902		75902		74091		74091	

The table shows robustness Heckman probit estimates of the decisions to vote and to vote for a populist party when the latter is defined using the 3D definition. The first two columns use the continuous measure of the 3D definition of populism. The second set defines as populist all parties with a 3D score above the 75th percentile; the third set uses this definition but expands the set of controls; the last set uses a tighter threshold to define a party as populist (3D score  $\geq$  80 percentile). All regressions include country and wave fixed effects. Robust standard errors clustered at the region level are shown in parenthesis. \*\*\* significant 1% or less; \*\* significant at 5%; \* significant at 10% confidence level.

Table A4: First stage on 3D

	(1) Vote	(2) Vote	(3) Vote	(4) Vote
Rain	-0.00116 (0.00226)	-0.00139 (0.00236)	-0.00141 (0.00240)	-0.00136 (0.00235)
Rain * South	-0.0108*** (0.00296)	-0.0122*** (0.00307)	-0.0132*** (0.00311)	-0.0120*** (0.00295)
Av. Temperature	4.84e-05 (0.0125)	7.37e-05 (0.0127)	-0.000728 (0.0124)	-0.000458 (0.0122)
Av. Temperature * South	0.0221* (0.0129)	0.0220* (0.0129)	0.0234* (0.0127)	0.0241* (0.0126)
Wave FE	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes
Cluster SE	Region	Region	Region	Region
Countries	With P	With P	With P	With P

The table shows the instruments in the voter turnout regressions in Table A3 in the text.

Table A5: Chapel Hill Expert Survey

Issue	Scale	Availability	N. waves asked
<b>General question</b>			
1. European Integration	1 (SO) -7 (SF)	1999-2014	5
<b>EU Policy</b>			
1. Powers of European Parliament	1 (SO) -7 (SF)	1999-2014	5
2. Tax Harmonization	1 (SO) -7 (SF)	1999	1
3. Internal Market	1 (SO) -7 (SF)	2002-2014	4
4. Common Employment Policy	1 (SO) -7 (SF)	1999, 2014	2
5. EU authority over member state budgets	1 (SO) -7 (SF)	2014	1
6. EU agriculture spending	1 (SO) -7 (SF)	2002	1
7. EU cohesion on region al policy	1 (SO) -7 (SF)	1999-2014	5
8. Common policy on environment	1 (SO) -7 (SF)	1999, 2002	2
9. Common policy on political asylum	1 (SO) -7 (SF)	1999, 2002	2
10. EU foreign and security policy	1 (SO) -7 (SF)	1999-2014	5
11. EU enlargement to Turkey	1 (SO) -7 (SF)	2006, 2010, 2014	3
<b>Ideological position</b>			
1. Overall stance	0 (Left)-10(Right)	1999-2014	5
2. Stance on economic issues	0 (Left)-10(Right)	1999-2014	5
3. Stance on democratic freedoms	0 (Libertarian)-10(Traditional)	1999-2014	5
<b>Policy issues</b>			
1. Increase gov exp/reduce taxes	0(Favor gov exp)-10(Favor reduc taxes)	2006-2014	3
2. Deregulation	0(Oppose der)-10(Favor Der)	2006-2014	3
3. Redistribution of wealth	0(Favor)-10(Oppose)	2006-2014	3
4. State intervention in economy	0(Favor)-10(Oppose)	2014	1
5. Civil liberties vs law&order	0(Promote liberties)-10(Support L&O)	2006-2014	3
6. Social lifestyle	0(Support liberal pol)-10(Oppose lib pol)	2006-2014	3
7. Role of religion in politics	0(Oppose)-10(Support)	2006-2014	3
8. Immigration policy	0(Oppose tough policy)-10(Support tough pol)	2006-2014	3
9. Integration of immigrants	0(Favor multicul. policy)-10(Support multicul pol)	2006-2014	3
10. Urban versus rural interest	0(Support urban)-10(Support rural)	2006-2014	3
11. Environment	0(Support environment)-10(Support growth)	2010, 2014	2
12. Cosmopolitanism	0(Support cosm.)-10(Support nationalism)	2006	1
13. Regional decentralization	0(Support political decentr.)-10(Oppose decentr.)	2006-2014	3
14. International security and peace keeping	0(Support int. sec)-10(Oppose int. sec.)	20,102,014	2
15. Position towards US power in world affairs	0(Oppose)-10(Support)	2006	1
16. Rights to ethnic minorities	0(Support more rights)-10(Oppose)	2006-2014	3
<b>Salience</b>			
1. Salience of anti-establishment and anti-elite rhetoric	0(Not important at all)-10(Extremely important)	2014	1
2. Salience of reducing political corruption	0(Not important at all)-10(Extremely important)	2014	1

The table lists the CHES questions that we use to define the average positions of the political parties on each of the four domains we consider (European integration, EU policy, Ideological positions; Policy issues). It shows the years in which these items are covered by CHES and the range over which the party position is defined.