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## Demand and Supply of Populism \*

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#### Abstract

We define as populist a party that champions short-term protection policies while hiding their long-term costs by using anti-elite rhetoric to manipulate beliefs. We provide a framework that rationalizes this definition and generates sharp implications for people support to populist platforms (the demand side), for the timing of appearance of populist parties and their chosen orientation (the supply side) as well as for non-populist parties response to populist success (an equilibrium market reaction). Using individual data on voting in European countries we document that key features of the demand for populism as well as the supply heavily depend on turnout incentives, previously neglected in the populism literature. Once turnout effects are properly taken into account, economic insecurity drives consensus to populist policies directly as well as through indirect negative effects on trust and attitudes towards migrants. On the supply side, populist parties are more likely to emerge and prosper when countries deal with systemic economic insecurity crisis that both left-oriented incumbent parties (relying on government-based policies) and right-oriented (relying on markets) find hard to address, disappointing voters who lose faith in them and abstain. Relative entry space determines the orientation choice of populist parties, i.e., whether they enter on left or right of the political spectrum. The typical nonpopulist party policy response is to reduce the distance of their platform from that of new populist entrants, thereby magnifying the aggregate supply of populist policies.

Keywords: voter participation, short term protection, anti-elite rhetoric, populist

entry.

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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 are experiencing a growth of protests against inequality and capitalist institutions, leading to left-wing type of policy demands matched by similarly oriented populist supply; in others, right-wing populist movements find increasing support for protecting the country from immigrants and globalization threats. Protectionism from immigrants and competitive pressure from free trade is also prominent in Trump and post-Brexit UK policies - which are difficult to place on the traditional left-right spectrum. In Southern Europe, the Italian Five Stars movement and the Greek and Spanish populist movements fight for citizenship income and for other forms of economic short term protection, against European impositions of fiscal discipline – the Mediterranean populism. In continental Europe and in the UK, populist movements stress protection from immigrants (often putting it side by side with protection from Islamic terrorism) and import penetration from China. Overall, nationalism and closure to immigration are on the rise. Why are we observing a rising tide of consensus towards populist proposals now and why there - i.e. with a clear time and geographical pattern? What drives the simultaneous shift towards populism in so many countries? Is it a global shift in voters' preferences or emotions, immediately captured by new political leaders who enter politics? And if so, what drives this global shift of demand? Is it related to economic crises or stagnation and, if so, through which channels?

In this paper we argue that in order to tackle these questions and obtain a deeper understanding of the phenomena we need to abstract from the many observable differences in existing strands of populism and focus instead on what is common to all populist movements. We argue that populist movements, independent of orientation, all share deep common features. Focusing on them allows us (1) to acquire an analytical, rather than a merely descriptive, tool; (2) to zoom on the key drivers of the populist wave and thus be able to provide an answer to the questions why

<sup>&</sup>lt;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.

now and there raised above. To this end, we find the definition of populism in the Encyclopedia Britannica a particularly useful starting point: populists claim to promote the interest of common citizens against the elites; they pander to people's fear and enthusiasm; and they promote policies without regard to the long-term consequences for the country. This broad definition of populism highlights three important components: (1) the populists' claim to be on the side of the people against the elite – which we label "supply rhetoric;" (2) the "fears or enthusiasm" of people – the demand conditions to which the populists pander; and (3) the disregard for future consequences – we summarize the latter two policy characteristics of the populists' political supply as *short-term protection*.<sup>2</sup> The definition of Encyclopedia Britannica encompasses both the nationalist type of populism (emphasizing fear or enthusiasm about identity protection), and the economic type of populism (proposing redistributive policies like citizenship income, regardless of costs). Thus, when we say that a populist party offers *short-term protection* we intend to include both possibilities.

By employing and rationalizing the above 3-D definition of populism, we aim to generate and test some precise implications for voters' support (the demand side), for the timing and location of appearance of populist parties and their chosen orientation (the supply side) as well as for non-populist parties response to populist success (an equilibrium market reaction). Within this framework, the broad answer to the *why* now and why here question is that populist parties are more likely to emerge and prosper when countries deal with systemic economic insecurity crisis that both left-oriented incumbent parties (relying on government-based policies) and right-oriented (relying on markets) find it hard to address, disappointing voters who lose faith in them. The 21st century crisis (characterized by external threats from globalization and migration as well as wide-spread financial crisis) made citizens lose confidence in both left (or government-based) policies and right (or market-based) policies that respect the existing institutional constraints and functioning of politics. Previous

<sup>&</sup>lt;sup>2</sup>Citing from Encyclopedia Britannica 2015: "...either a platform that promotes the interest of common citizens and the country as a whole or a platform that seeks to redistribute wealth to gain popularity, without regard to the consequences for the country such as inflation or debt." see www.britannica.com/topic/populism

crises that resulted in the failure of only (or primarily) one side simply led to political business cycles and did not offer enough entry space for populist platforms. The latter requires substantial disappointment and turnout drops throughout the political spectrum, and the best response for a leader of an entrant is to propose greater protection from the effects of crisis even if this could cost breaking away from one form or another of existing constraints (e.g. various forms of exit and pulling out from international treaties, construction of walls, etc).

The anti-elite component of the 3-D definition of populism is easily rationalizable when disappointment spreads on both left and right: when government- as well as market-based policies prove ineffective, it is the elite as a whole that has failed, justifying entry with an anti-elite program and requesting return of power to the people. It should also be clear how this component relates to the others: they are complementary. To see this, note that the anti-elite rhetoric simply "supplies disinformation," making it possible to win elections with short-term oriented policies. For example, if a non-populist politician counters a populist policy proposal with statements about future costs, future debt accumulation or banking crises, the rational response by the populist challenger is to claim that all such statements of concern for the future consequences of the protection policies are instead driven by the self-interest of the elites. That is to say, economists and incumbent politicians may well know something about how to evaluate future costs, but since maintaining the status quo policies is in the elite interests, their statements become non-credible.

The analysis of populism that we offer in this paper leverages on turnout effects. Our theoretical premise is that voters' primary choice is between voting and staying home, but, conditional on deciding to participate, they usually vote for their ideologically closest party when populists do not exist yet on the supply side.<sup>3</sup> When a systemic crisis hits, depressing the motivations to vote for traditional parties both on left and right, the disappointment generates an *abstention-based entry space* for a populist platform.

Our framework suggests a number of testable hypotheses on both the demand

 $<sup>^{3}\</sup>mathrm{The}$  decision to vote or abstain is based on simple expressive voting assumptions, but could be generalized.

side (the behaviour of voters) and the supply side (the appearance and orientation policies of populist parties and the reaction of non-populist parties). First, on the demand side, the people most affected by the crisis - i.e. those facing greater economic insecurity - should be the most prone to abstain and to shift to the populist supply when it appears. Second, abstention and shift to the populist side should also be expected to be more likely among those citizens with lowest trust in traditional parties, politics and institutions, and most exposed to the manipulation of beliefs performed by the populist rhetoric. Third, trust and various types of negative attitudes - e.g. towards immigrants - could themselves be endogenous to the crisis. That is, trust and anti-immigrant attitudes - may not be autonomous, cultural drivers of people's vote but channels through which the economic insecurity brought by the crisis affects abstention and voting. Fourth, moving on the supply side, populist parties should be more likely to be present where and when disappointment with traditional parties is greatest - i.e. where and when the abstention basis caused by economic insecurity is the largest; and less likely where features of the country raise the cost of entering with a populist platform. We predict that the orientation choice (left or right) of a new populist entrant should be related to the relative entry space on the two sides of the political spectrum and the relative effectiveness of a right-oriented or left-oriented rhetoric.

The empirical analysis confirms that these hypotheses on demand and supply sides hold, and delivers several other nuanced results.

We first study the determinants of the *demand* for populist platforms in the European countries covered by the European Social Survey. Our empirical study stresses the importance of accounting for selection issues, which are typically ignored in other studies of populist voting. We show that adverse shocks to economic security and trust in political parties induce people not to turnout, but if they vote, to vote for a populist party. Ignoring the voter participation selection not only may bias the estimates of drivers of the voting choice and underestimate the underlying demand for populist parties, but obscures the mechanism through which the disappointment induced by the crisis favors populist voting.

From simultaneous Heckprobit estimation of the probability of participation and

populist vote, economic insecurity displays a significant (statistically and economically) direct effect, and trust and attitudes matter as well. Moreover, building a pseudo-panel from the individual data we show that trust and attitude variables are themselves causally affected by shocks to economic insecurity, hence determining a large total (direct plus indirect) effect of economic insecurity on populism demand.

On the supply side we document that the presence of populist parties in the political arena is strongly affected by economic insecurity and discouraged by the presence in the country of relevant non-aligned parties, which weakens the effectiveness of the anti-elite rhetoric raising the cost of entry. We also show that populist parties choose orientation strategically leaning towards the left or the right depending on the relative salience of left-type or right-type cleavages weighted with the share of left-oriented and right-oriented voters. We find that the successful entry of a populist party changes the subsequent electoral competition game and induces traditional parties to adapt their political platforms to those of the populist, lending support to our idea that the *disinformation supply* and *anti-elite rhetoric* make it difficult to pursue a contrarian, credible anti-populist campaign leaving non-traditional parties with adaptive reactions as the only policies to contain populist success.

The paper is organized as follows. In the next section we review the most recent related literature. Next, we introduce a simple theoretical framework for our entire view of the populism phenomenon. 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 Relation with Literature

The traditional macro-economics literature on populism (Dornbush and Edwards 1991; Sachs 1989) looks at the *consequences* of the short-term protection populist policies. Contemporary political economics works (e.g. Acemoglu et al, 2013a) have started to focus on the *causes* of short-term protection, by looking at what voters want and how politicians pander to it. The trade literature exploits exogenous variation in import flows to study political polarization and support for populist politics

(Steiner, 2012; Autor et al., 2016; Autor et al., 2017; Colantone and Stanig, 2016; Colantone and Stanig, 2017; Jensen et al., 2016), and analyzes the voting impact of economic shocks arising from exposure to globalization or to the openness induced by the European single market (Becker et al., 2016). Algan et al. (2017) study the political consequences of the Great Recession in Europe, documenting that in post-2008 elections EU regions experiencing higher unemployment gave more support to populists. They also document that regions where unemployment rose experienced the sharpest decline of trust in institutions and traditional politics. Dustman et al. (2017) reach similar results showing that in the aftermath of the crisis mistrusts towards European institutions, largely explained by worse economic conditions in the Euro area countries, correlates positively with populist voting. Foster and Frieden (2017) nuance this result using individual characteristics from the Eurobarometer survey data, and also show how it is more pronounced in debtor countries. Di Tella and Rotemberg (2016) analyze populism demand based on the behavioral observation that voters are betrayal averse, and hence may prefer incompetent leaders to minimize the chance of suffering from betrayal. In sum, the political economics literature has so far focused on what explains the demand of populist policies but has not explored the causes and sustainability of populist policies on the supply side, nor has it offered an explanation about "Why now?" should there be such a cluster of populism in the Western world, not only in the Euro are countries. Rodrik (2017) is an exception. He traces the origin of todays populism (mainly if not uniquely) to the globalization shock arguing that past history as well as economic theory imply that waves of globalization can predictably lead to a populist backlash with a specific timing (when the shock hits) and geographical pattern (in the countries most adversely affected by globalization ). While the globalization shock generates a demand for populist policies, Rodrik stresses the importance of simultaneously understanding the supply side of the rise in populism; specifically the chosen orientation of populist parties, which he argues reflects the relative salience of specific cleavages induced by the globalization shock.<sup>4</sup>

Most works in political science have focused mostly on the institutional pre-

<sup>&</sup>lt;sup>4</sup>The inequality channel is investigated for the case of Sweden in Del Bo et al (2017).

conditions for the formation of populist parties (Norris, 2005; Rydgen, 2007; Golder, 2016), or on 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 on the populists' strategies to survive in office (see e.g. Boix, 1999). Only recently, also in political science, the attention has shifted from the supply side to the demand side. Inglehart and Norris (2016) observe that cultural variables affect the decision to vote for a populist party (instead of abstaining or voting for a non-populist party) more than economic variables. But the finding of a weak *direct* effect of economic variables is likely due to the fact that they fail to observe that economic security shocks affect significantly the incentive to abstain (see our empirical sections for the details on this turnout selection problem). Beside the stronger direct effect of economic shocks that we document by taking into account the turnout selection effect, we document a significant *indirect* effect: the shocks to economic security are responsible for a sharp change in trust and attitudes towards migration, and hence the effects of the changes in the latter variables cannot be considered independent drivers.<sup>5</sup> 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).

In this work, we look simultaneously at the demand and supply sides, in order to explain the rise of populism. The demand side involves the fears and enthusiasms of people, to which politicians pander. The supply side lies in the politicians' claim to be on the side of people and against the elites. Demand and supply meet at a specific point: short-term protection. Due to growing economic insecurity, people demand short run protection. At the same time, populist parties find their own space in the political landscape and they build their agenda on the dichotomy "people vs elites". This leads to the supply of short-term protection, since long-termism is

 $<sup>^{5}</sup>$ Lucassen and Lubbers give evidence – for 8 of the 11 countries they consider – that countries that experienced a shift towards far-right-wing populism did so due to perceived cultural threats more than due to perceived ethnic economic threats, whereas it is plausible that in countries experiencing a shift towards left-wing populism the relevant perceived threat is economic. But for us the important observation is that both perceptions of economic and cultural threats have been affected by the economic shocks.

considered to be in the interest of the elites. Like Algan et al. (2017) we find an effect of economic insecurity on voting for populist parties and like them we also document a causal effect of economic insecurity on people trust beliefs in politics. But we also find that economic insecurity affects consensus towards populist parties not directly but because it disappoints supporters of both left and right-oriented traditional parties: this induces abstention and creates a potential electoral basis for a populist entrant. Differently from Algan et. al. (2017) and like Rodrik (2017), we study the supply side of populism, highlight the role of economic insecurity in triggering entry of populist parties and the importance of relative entry space on the left and the right in explaining populist party orientation. As remarked by Rodrik (2017) this is key in separating the role of economic shocks from that of cultural shocks drive the rise of populism through voting and abstention both directly and because they shift beliefs and attitudes - traditionally classified as cultural traits - sharpening our understanding of the channels of influence of populism.

As far as the policy convergence result (described in section 6) is concerned, the closest related result is in Schumacher (2016), who shows with manifestos data that early success of populist parties did affect the scepticism for multiculturalism in mainstream parties' platforms. We document systematic convergence of a broad set of policies towards the positions of successful populist parties.

## 3 Theory

In this section we propose a simple narrative to clarify what generated a demand for populist policies simultaneously in many countries and, in turn, what causes supply of different types of populism. We propose a conceptualization of the overall demand and supply phenomenon and derive the hypotheses that we then test in our empirical analysis.

#### **3.1** Traditional politics before the crisis

The simplest model of voting is one where voters are ideological and expressive. This means that: (1) Conditional on voting, a voter votes for her preferred ideology, left or right – the ideological component; and (2) the decision to vote or abstain depends exclusively on a comparison between cost of voting and expressive benefit of voting.

Voters have left or right political orientation. Assume the preference split in the population is:

$$(p_L, p_R)$$

where  $p_L(p_R)$  is the proportion of left (right) wing citizens in the population.

Voters have a disappointment level with traditional politics due to the income difficulties they experience  $d \in [0, 1]$ . For simplicity, let this disappointment level be the same across ideologies. Disappointment is affected in the same way by an economic crisis.<sup>6</sup>

Voters abstain if they do not feel represented enough, or are dissatisfied enough, by the traditional parties on their side of the spectrum. Formally, the abstention condition can be expressed as:

$$A - d < C$$

Where C is the cost of voting and A is the benefit of voting for their party when no disappointment is present. Rearranging we have:

where B = A - C is the civic sense or the net benefit of voting for an ideal party. This net benefit is clearly heterogeneous across voters. Assuming B is uniformly distributed on [0, 1], the proportion of left-wing (or right wing) voters abstaining is:

$$\Pr\left(B < d\right) = d$$

<sup>&</sup>lt;sup>6</sup>Allowing for heterogeneous effects on the two sides would not change our key predictions. Moreover our empirical evidence suggests this assumption is consistent with the data..

Thus, total abstention, unconditional on party orientation, is:  $p_L d + p_R d = d$ 

#### **3.2** Crisis and Populist Strategies

All crises have a positive effect on voter disappointment d on average (though some winners exist even when a crisis creates a lot of losers). A protracted crisis leading to a drop in trust in all the traditional policies on both sides of the spectrum creates a space for a populist party to enter the political arena. Globalization and free-trade effects generate a no-longer employable workforce in some sectors thereby reducing confidence in free markets, while the simultaneous financial crisis and the constraints on fiscal policy response to tackle it in many European countries increased the perception that the traditional left-wing policies have little impact on welfare.

The policy proposal by a populist party has a key short term protection component, obtained through some proposed sharp dismantling of the institutional constraints (e.g. implementing entry barriers to Chinese or foreign goods, exit from EU or Euro-zone, building a border wall), together with a future-cost-hiding strategy that requires a generalized anti-elite rhetoric.

Both types of left or right protection policy proposals involve major changes and very uncertain future consequences. This, in turn, requires a conscious attempt by the populists to remain vague on future consequences, associating whoever talks about future costs with the out-of-touch elite that caused the crisis and stagnation in the first place. These 3D, complementary characteristics of populist platforms and strategies are common to all kinds of populist platforms, however some differences between left and right wing populists remain.

#### 3.2.1 Left-Wing Populist

A left wing populist entering the political arena is likely to tackle the inequality cleavage, catering therefore primarily to left-ideology voters and people who are more likely to depend on government policies like redistribution or citizenship income provision. For instance, proposing explicitly exit from a Euro-zone or alternatively promising other forms of immediate protection, such as citizenship income and generalized insurance with budget deficit implications that could force the country to violate European budget rules.

Anticipating the consequences, agents with higher information and education are less likely to vote for this proposal. Agents with less education are more likely underestimating the risks and costs associated potentially with sharp changes in the respect of constraints, rules and institutions. The latter is also manipulated explicitly by the concealing component of the populist strategy.

#### 3.2.2 Right-Wing Populist

If entry occurs on the right, the populist is expected to capitalize on the national identity cleavage, the closure of borders to immigrants, the protection of national companies, etc.

A rhetoric emphasizing the dramatic consequences of mass immigration could increase the relative beliefs about the sustainability and importance of pro-workers redistributive policies, job protection policies, and the citizenship income itself. The focus of the platform is still on short run protection, but without a redistributive explicit component: the state should be minimal in terms of economic management. A right-wing populist pushes for building walls and protectionism, but without income redistribution policies internally of any kind (actually proposing flat low taxes). Even in this case the most likely supporters are people and firms most exposed to the globalization and migration competition aspects of the crisis.

#### **3.3 Demand Side Predictions**

Ceteris paribus, citizens experiencing income difficulties may be the most tempted by the short term protection, thus an economic crisis should heighten this effect. Second, the protracted crisis has an indirect effect through the drop of trust in the traditional politics, hence we should expect that citizens who experienced the sharpest drop in trust from the crisis should be those most prone to vote for a populist, and those who revised the most their trust in politics should be those most severely hit by the crisis. Third, the expectations of future costs of a populist platform and the confidence levels in traditional parties are heterogeneous because of education and information heterogeneities. Thus, more informed/educated people, who may be able to evaluate e.g. the general equilibrium and long term consequences of trade barriers, may be more unwilling to take the populist gamble.<sup>7</sup> Thus:

**Hypothesis 1:** The percentage of people voting for a populist party is increasing in the number of people who

- 1. were affected the most by the crisis in terms of economic security;
- 2. have low trust in the traditional alternative
- 3. have low education

Moreover, a testable hypothesis that emerges from our narrative is that:

**Hypothesis 2:** Trust in traditional parties, institutions and politics are negatively affected by a protracted crisis.

#### **3.4 Supply Side Predictions**

An office seeking populist entrant faces the choice on whether to enter on the left or on the right, fishing primarily in one or the other pool of disillusioned voters.

A disillusioned voter who is abstaining is suited for being mobilized to vote for a new entrant populist party. We assume that the chance of being scooped up by a new party located on the same side of the political spectrum as the voter is:

$$\rho_i \Pr\left(B < d\right) = d\rho_i \quad \text{with:} \quad i = L, R$$

where  $\rho_i \in [0, 1]$  measures how effective the populist left or right wing rhetoric is, namely what proportion of the dissatisfied voters on that side the (left or right) populist rhetoric will attract. The effectiveness of this rhetoric, in turn, depends on

<sup>&</sup>lt;sup>7</sup>The under-estimation of future costs of populist policies is a well recognized phenomenon. See e.g. Hainmueller and Hiscox (2006).

the magnitude of the country's cleavages, for instance on whether these cleavages are more geared towards anti-austerity-anti elite (left) or anti-immigrants (right).

Party entry entails an entry cost c which may in turn depend on country specific institutional features.

A populist party will potentially enter on the side where it will gather more votes. Entry is determined by the condition:

$$d\left(\max_{i=L,R}\left(p_{i}\rho_{i}\right)\right) > c$$

In sum, for a given cost of entry, the entry is determined by 3 independent factors: the proportion of left (right) wing population, the overall level of disappointment, and the attractiveness of the populist message as a rationalization and solution for their disappointment. This conclusion leads to the following hypotheses.

**Hypothesis 3:** Upon entry, a populist party will choose a left orientation if  $p_L \rho_L > p_R \rho_R$ , and vice versa.

In other words, conditional on entry the populist party will position itself on the side of the political spectrum where there are more voters and where its rhetoric is more effective in mobilizing them.

**Hypothesis 4:** Given the optimal orientation, the likelihood of a populist entry is increasing in voters' disappointment and decreasing in the cost of entry (which is a function of existing institutional constraints).

#### 3.5 Case Study

Before getting to the general econometric analysis, Figure 1 (panel 1) exemplifies our story drawing on the Italian case. It shows the evolution of GDP growth just before the 2008 crisis and in the subsequent years; that of the level of people's confidence in political parties; and the level of support (measured by the intentions to vote) for the Five Star movement - a newly created populist party. GDP falls markedly in 2009 and stagnates since then, giving rise to the deepest and most prolonged recession in Italian history. Disappointed with incumbent parties, Italians lose faith in political parties, held responsible for the country's performance. The share of people trusting political parties falls from 25% before the crisis to levels around 5% (or below) after 2009 with no sign of recovery. This disappointment with incumbent parties has two consequences: it leads voters to abstain from voting;<sup>8</sup> and, most strikingly, it raises support for "outsiders." Driven by demand for protection and voters' disillusion with (existing) political parties, the Five Stars movement enters the political market. It first appears in 2009 and since then has gained increasing support, up to becoming the second largest party in the 2013 elections and the largest one in the 2016 polls. To try to contrast their success, Prime Minister Matteo Renzi, leader of the incumbent party, has adopted a number of "populist" policies - ranging from voters-friendly budget policies (e.g. the so called "80-euro bonus"- a personal income tax cut for lower income earners), to more symbolic anti-Euro positioning (e.g. not exposing the European flag together with the Italian flag as customarily done by government representatives in public speeches).

The second panel of Figure 1 shows that a similar pattern holds in Greece: as the economic crisis deepens after 2007, people start losing faith in traditional parties, participation in elections falls, and demand for protection rises. Populist movements either enter the market (as Golden Dawn), or expand considerably (as Syriza) starting from an almost irrelevant voters' basis.

#### [FIGURE 1 HERE]

In the following sections we show systematic evidence from all European countries, supporting the narrative above.

### 4 Data

Our main source of individual level data is the European Social Survey (ESS). The ESS is the richest social scientific endeavour to map the attitudes, beliefs, and be-

<sup>&</sup>lt;sup>8</sup>The drop in turnout in European elections is even more marked: in 2004 (before the crisis) it was 73%, falls to 66% in 2009, after Lehman Brothers but before the European sovereign crisis and to 58.7% in the 2014 elections, when the effects of the European crisis were felt.

haviour patterns in Europe. The central aim of the ESS is to develop and conduct a systematic study of changing values, attitudes, attributes, and behaviour patterns within European polities. The survey covers all European countries, though not all countries participate in all waves. Data collection takes place every two years, starting in September 2002, by means of face-to-face interviews. We will use all seven waves available up to 2014. The questionnaire consists of a core module which remains constant from round to round and smaller rotating modules, repeated at intervals, each devoted to a substantive topic or theme. We will rely on information from the core module covering a wide range of socio-economic, socio-political, socio-psychological and socio-demographic variables.

#### 4.1 Measuring voting decisions

Most importantly for our purpose, the ESS asks people whether they voted in the last parliamentary election in their country and which party they voted for. Specifically, survey participants are asked: "Some people don't vote nowadays for one reason or another. Did you vote in the last [country name] national election in [month/year?]". From this we obtain an indicator of participation in the election. Those answering yes were then asked: "Which party did you vote for in that election?" and were shown the list of parties in the election. From this we construct a dummy that takes value one if the voter voted for a populist party (identified in section 4.3).

#### 4.2 Measuring voters' characteristics

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

**Economic insecurity.** We capture heterogeneity across voters in economic insecurity with three measures. First, we use an indicator of whether the voter has undergone an experience of unemployment over the past five years – forcing him or her to search for a new job; second, as a measure of financial distress we use an indicator of whether (s)he is experiencing income difficulties, i.e. (s)he finds it difficult to live with his current income. Third, we build an indicator of exposure to globalization, exploiting information in the ESS on the type of employment, industry and workers' skill level – classifying as more exposed low-skill workers in the low-tech manufacturing industry. The indicator takes value equal to 1 if the individual is a low skilled blue-collar working in the manufacturing sector; 0 otherwise. We will find it useful to summarize these three objective measures of financial and economic distress in a single index of economic insecurity by taking the first principal component, rescaled so that it varies between 0 (lowest-insecurity) and 1 (highest insecurity). 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) and Autor et al (2017)), but also other forces that may have been at place including obsolescence of labor specific skills, labor displacement caused by fast automation (Acemoglu and Restrepo, 2017) or enduring disruptions in personal savings and income-generating capacity caused by the financial crisis. The important point to stress is that one single measure - e.g. unemployment - is unlikely to capture well voters economic insecurity. Just using unemployment it would be difficult to explain the rising populist vote in Germany where unemployment is both low (below 4% as of September 2017) and declining (since 2010).

Economic insecurity may arise also from exposure to labor market competition induced by immigration flows. Unfortunately, there is no data on immigration inflows with information by country of origin and region of destination so as to obtain within country variation in individual exposure to labor market pressure <sup>9</sup>. To capture fear of displacement in the labor market due to potential arrival of cheap labor we use a measures of sentiments towards immigrants: whether the voter would like fewer

<sup>&</sup>lt;sup>9</sup>Caliendo et al. (2017) obtain an estimate of immigrants by country of origin and country of destination (and thus not by 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 the regional level are net population flows. This measure is unlikely to capture competitive pressure on local labor market due to intense immigration. For instance, a zero net flow may reflect an inflow of immigrants of 100 and an outflow of the same size of local workers displaced by cheaper imported labor. Competitive pressure is high but net flow does not reflect it.

immigrants from low-wage countries, with answers ranging from 1 to 4 increasing in support to imposing quotas on immigration. The ESS collects also people sentiments on setting quotas on immigrants from countries of same race/ethnicity and from countries of different race and ethnicity as well as peoples opinions on whether they agree that immigrants make their country worse. We will use all these measures when studying the effects of economic insecurity on attitudes and beliefs in Section 5.5; but our results on voting are invariant to the measure used, hence in Section 5 we report results using the first measure.<sup>10</sup>

Trust in traditional politics and 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 highly correlated and thus hard to tell apart. In our analysis of individual voting behaviour we use trust in political parties, which speaks directly to our model. We use all measures when studying the link between economic insecurity and trust beliefs in Sections 5.2.

**Perception of long run costs of populist policies.** We use two proxies for voters' ability to foresee the potential pitfalls of the populist platforms. The first is education, measured by the number of years of full-time completed schooling. Education can capture the ability to infer the future costs of current populist policies (e.g. because highly educated are more likely to be aware of the government intertemporal budget constraint).

The second proxy 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 the information level.<sup>11</sup> Ceteris

 $<sup>^{10}</sup>$ Using synthetic panel data we document that people who experience an increase in the index of economic insecurity become more supportive of constraining immigration from low wage countries (see Section 5). This justifies interpreting adverse attitudes towards immigrants as capturing economic insecurity. But we also show that this link is a reflection of populist rhetoric, which suggests that economic insecurity should be better captured by objective measures such as the ones we propose.

<sup>&</sup>lt;sup>11</sup>This second proxy has to be taken with a grain of salt, because it may well be possible that

paribus, we would expect better educated people and people who watch TV programs on politics to be better able to anticipate the cost consequences of a populist party policies and thus be less likely to vote for it.

Time discounting and risk aversion. The weight given to the future uncertain costs and benefits of current policies depends on the subjective discount factor (see Appendix A), and on the degree of risk aversion. The ESS has no direct measure of people's patience. We use age as a proxy for subjective discounting, relying on the idea that older people are less likely to pay for the future cost of current policies (assuming they care about future generations less than they care about themselves). The ESS is richer in terms of proxies for risk tolerance. We use an indicator of whether people consider it important to avoid taking risks measured on a scale between 1 and 6, increasing in aversion to risk.

In all regressions we control for gender and political orientation, measuring the latter with a dummy for "right" orientation (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 and so 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 most recent and comprehensive study on populism in Europe by van Kessel (2015). van Kessel (2015) examines all parties that gained parliamentary representation after national elections between 2000 and 2013 in European countries.<sup>12</sup> The period

someone who spends hundred percent of his/her time time on TV watches only one-sided news. We cannot find any more precise measure of the quality of the information that people receive, and hence this information proxy is very noisy. This may be the reason why it turns out not to be significant in the regression on the party choice, whereas it is a significant regressor for the decision to participate, since watching political news correlates with mobilization.

<sup>&</sup>lt;sup>12</sup>The countries covered are: Austria, Belgium, Bulgaria, Croatia, Cyprus, Check Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithua-

and the countries covered by van Kessel match the ones covered by the ESS data. van Kessel defines a party as populist if a) portrays "the people" as virtuous and essentially homogeneous; b) advocates popular sovereignty, as opposed to elitist rule; c) defines itself against the political establishment, which is alleged to act against the interest of the people. These features reflect the first component of our 3D definition of populism, the "supply rhetoric". To detect their presence van Kessel uses primary sources such as party manifestos and speeches. To make sure that the classification is meaningful, van Kessel consults also a pool of country experts that are asked to validate or reject his classification by answering an ad hoc questionnaire. Using these criteria, van Kessel singles out 57 populist parties distributed in 26 of the 33 countries examined.<sup>13</sup> There are several advantages to this classification. First, it is based on a clear set of attributes of what a populist party is in terms of political strategy, rather than on subjective judgements. Indeed, the "supply rhetoric" is observable and can be detected from official documents.<sup>14</sup> Second, van Kessel's classification covers all relevant European countries; 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.

Despite these merits, the classification unavoidably contains a certain amount of judgement. More importantly, it does not reflect the other two components of our conceptually more appealing 3D definition of populist policies - protection and concealing of long term costs. However, the complementarity between the components of the 3D definition suggests that van Kessel classification may nevertheless capture

nia, Luxembourg, Malta, The Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, UK.

<sup>&</sup>lt;sup>13</sup>Van Kessel's definition is very close to that of Cas Mudde (2007); in fact, the parties identified as populist by both Mudde and van Kessel are essentially the same.

<sup>&</sup>lt;sup>14</sup>Trump's first statement in his 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 view of the people as a uniform body that according to political scientists distinctly characterizes populists parties, can easily be spotted and measured in observable speeches.

also the "short term protection" dimension. To validate van Kessel definition we obtain a 3D-based classification using the 2014 Chapel Hill Expert Survey (CHES) where national experts rate European parties on a range of positions and policies and salient issues (see Section 6 for more details about CHES). We rely on these ratings (most on a scale between 0 and 10) to construct measures of each of the 3D's (anti-elite and anti-corruption rhetoric, protectionism and concealing of longterm costs of current policies) for all parties in the CHES database. The rhetoric measure averages the scores assigned to a measure of salience of anti-establishment and anti-elite rhetoric and of reducing political corruption, both on a scale between 0 (not important at all) and 10 (very important). The protectionism measure is the average of the scores measuring the position on five policies that may offer economic protection on different domains (Deregulation (10 strongly opposes deregulation of markets); Immigration policy (10 strongly in favor of tough policy); Tax policy: (10 strongly favor tax reduction 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 from rich to poor (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 and peace keeping. Both policies 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 policies as capturing a strategy to hide the long term costs of protectionism. Table 2 shows regressions of each of the 3D indexes on van Kessel populist party identifier, after controlling for the political orientation of the party (0, far left, 10 far-right).

#### [TABLE 2 HERE]

Independently of their political orientation, populist parties as defined by van Kessel all score higher in each of the 3D indexes. The difference between populist and non-populist parties is more marked on the anti elite/anti corruption dimension (59% above the sample average) but it is substantial also along the other two (34% and 27% above average). This evidence not only validates van Kessel definition but supports the generality of our 3D definition of populist parties: political orientation is irrelevant to define a party as populist. What left and right-wing populists have in common are the 3Ds. Political orientation, as argued theoretically in Section 3 and documented empirically in Section 6 is chosen strategically by populist parties based on voters prevalent orientation and salient cleavages. To summarize the 3Ds measures in a single index of party populism we extract the first principal component of the three measures. The last column of Table 2 shows the correlation of this measure with van Kessel populist identifier.

Despite the conceptual merits of the 3D measure we will conduct our analysis primarily relying on van Kessel classification. This for two reasons. First, the CHES dataset does not survey all parties in all countries. This reduces greatly the number of observations (from around 136,000 using van Kessel classification to 88,500 using the 3D, a drop around 35%, see Table 1 top panel). Second, because some of the parties positions used to build the components of the 3Ds are collected in only one or two of the CHES surveys, differently from van Kessel the 3D measure of populism has no time variation. Time variation serves well our goal of tracing populist supply over the years of our sample. However, we report robustness regressions using the 3D definition.<sup>15</sup>

#### 4.4 Validating survey data on voting

Since true voting behaviour is unobserved, the analysis of voting decision is based on reported voting. Clearly, what people state in the ESS is not necessarily what they actually did in the ballot box. Besides reported voting being potentially affected by

<sup>&</sup>lt;sup>15</sup>Inglehart and Norris (2016), also use the 2014 Chapel Hill Expert Survey (CHES) data to identify populist parties. They classify as populist a party that scores more than 80 points on a standardized 100-point scale built using thirteen selected indicators contained in the CHES, ranging from support for traditional values, liberal lifestyles, and multiculturalism, as well as their economic stance towards market deregulation, state management of the economy, and preferences for either tax cuts or public services. Some of these dimensions are the same we use for building our 3D measure, but contrary to us Inglehart and Norris (2016) make no distinction between the three D's. Rather, they emphasize the cultural traits of populist parties. Out of 57 populist parties in the van Kessel classification, 25 are defined as populist also in Inglehart and Norris (2016) more stringent classification. Tables A1 in the Appendix lists the populist parties based on the two definitions.

recall bias, people may be reluctant to report truthfully their voting choice. The correlation between turnout in the ESS and actual turnout is quite high, 80%. Furthermore, in a regression of ESS on actual turnout the slope coefficient is not statistically different from 1, though there is tendency of the ESS to exceed actual turnout on average. The correlation between ESS votes to populist parties conditional on participation and actual voting is lower, at 63%. This is not surprising. Besides some 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 79 where the ESS understates actual voting to the populist party by more than 25 percentage points. Dropping these observations the correlation is 85% and a regression of average populist voting in the ESS on actual voting yields a slope of 0.86 and a negative constant of 4.3 percentage points. The joint hypothesis that the slope is 1 and the constant 0 is rejected, suggesting that the ESS sample participants tend to understate systematically populist voting. However, if this measurement error were positively correlated with preferences for populist voting, 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. To study the supply side, we complement the ESS data with several other datasets. First, we obtain data on national political institutions from the World Bank Database of Political Institutions. Second, we obtain data on trade with China, India and the rest of the world from the World Bank WITS statistics (UN Comtrade). Finally, we use the five waves (1999, 2002, 2006, 2010, 2014) of the Chapel Hill Expert Survey (CHES) to study whether populism, once it appears, spills over to other non-populist parties. CHES reports for each of the 246 parties included in the survey belonging to all countries in our sample a measure of the party position on a set of relevant issues, which we use to obtain measures of distance between the position of a non-populist party in a country from that of the populist party in that 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 people vote for a populist party using the ESS data. As argued, citizens make two decisions: a) whether to participate in an election (participation decision); b) conditional on participation, which party to support with their vote – in particular, whether to vote for a populist party or not (voting decision). Estimating simultaneously the two decisions is important for two related but distinct reasons. First, to obtain consistent estimates of the voting decision if unobserved components of the participation decision are correlated with unobserved components of the voting decision. Second, to pin down the channels through which voters characteristics impact the voting choice among those who turnout. 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, for instance an increases in economic insecurity, is  $\pi_x^C = (\pi_x^J \pi^V - \pi_x^V \pi^J)/(\pi^V)^2$ or, in percentage changes,  $\pi_x^C/\pi^C = (\pi_x^J/\pi^J - \pi_x^V/\pi^V)$  which is clearly affected by the effect of x on the turnout decision. Joint estimation of the voting and turnout decision allows to retrieve consistent estimates of  $\pi_x^C$  and  $\pi_x^V$  and to assess the economic role of turnout in the voting results. In frequencies,  $\pi^{C}$  represents the populist vote share, our dependent variable of interest.

#### 5.1 Turnout and identification

To account for the fact that the party choice only applies to voters who participate in the election, itself a choice variable, we estimate a two step Heckman probit model. In the first stage, we estimate the probability of participation; in the second stage the probability of voting for the populist party. As discussed in Section 3, participation in election will depend on the same set of variables that affect the party choice, possibly with opposite signs: that is, voters' characteristics that increase the chances of voting for a populist party may also discourage participation. For identification, we need a personal characteristic that affects the net benefit of voting (benefit-cost), but not the choice of the party conditional on participation. As instruments we use the mean temperature and the total rain fall on the day of the elections in each region-year. Our identification assumption is that meteorological conditions affect the cost of going to the polls but not the preference for voting for a specific party. Because the effect of rain fall (temperature) on the cost going to the polls may be stronger in countries were it rains infrequently (temperature is frequently low) we insert also interactions between rain fall and temperature with a dummy variable for Southern countries.

#### 5.2 Estimation results

We estimate our Heckman probit model in the sample of countries that have a populist party in the ESS waves. In all specifications we control for gender and political orientation (measured on a scale from 0 (far left) to 10 (far right) as well as for the size of the region of the voter, proxied by population size); we also include country-level fixed effects and ESS wave effects. Importantly, country fixed effects capture all the features of the country that may affect the success of populist platforms: e.g., the electoral system, the responsiveness of existing parties to salient political issues (such as labor market pressure from immigrants), or the level of corruption. For brevity these controls are not reported. We run weighted regressions using sampling weights to account for differences in sample size across countries. In all regressions standard errors are clustered at the regional level. <sup>16</sup> Our final dataset includes 134,834 observations from 24 European countries when estimating the specification with all controls.

Table 3 shows the results of the estimates of several specifications, each time augmenting the set of controls. The bottom of the table shows the parameter estimates

 $<sup>^{16}{\</sup>rm These}$  are some of the context variables that studies of populism (e.g. van Kessel, 2015) consider critical in explaining populists' success.

of the meteorological instruments on the participation decisions. In general, rain fall on the day of elections discourages participation in Southern countries whereas high temperature significantly discourages it in Nordic countries. This conforms with intuition: going to the polls when temperature is high is a big toll in a Nordic country (where high-temperature days are rarer) while turning out when it rains is costly in Southern countries where people are less equipped to deal with rain. Conditional on the controls and the instruments there is no sign of selection bias as documented by the small and insignificant value of the correlation between the residuals in the voting and participation regressions in all specification.

The first two columns show results of participation and voting decisions controlling for risk and time preferences, education and information about political matters and the three proxies for economic insecurity. The proxy for risk aversion has a significant positive effect on participation: participation is more likely among people who consider it important to avoid taking risks. This measure has no effect on the choice of voting for a populist party. Hence, we find no support for the idea that since the populist choice entails risk it is more appealing for a risk tolerant voter. Age affects participation positively but it has no effect on voting populist.<sup>17</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 participation in elections and, conditional on participation, has a negative effect on the vote for a populist party. This is consistent with Hypothesis 1. Education is economically key. Increasing education by 4 years (one sample standard deviation) increases the participation probability by 19 percentage points (35% of the sample mean) and lowers the probability of voting for a populist party by 1.75 percentage points - as much as 22% of the sample mean. The proxy for political information, while having a significant impact on the turnout probability - more politically informed citizens are more likely to participate - has no effect on voting for a populist party (see the brief discussion on

<sup>&</sup>lt;sup>17</sup>Interestingly, women are less likely to participate, but, conditional on going to the polls, they are also less likely to support populist platforms. People with orientation to the right are more likely to participate and vote for a populist party - a finding that is robust to specification and consistent with the right-wing orientation of most populist parties in Europe (see Section 6.2 as well as van Kessel, 2015 and Mudde, 2007).

the reasonableness of these findings in footnote 11). Economic insecurity is our key determinant of the demand of populism, consistent with Hypothesis 1. Differently from the papers in this literature that ignore turnout (e.g. Inglehart and Norris, 2016) we can see the mechanism economic insecurity works. Economic insecurity acts on two margins: it discourages participation and increases the chance of voting for a populist party among those who decide to exert their voting right. The effect on the participation margin is precisely estimated and very responsive to being unemployed, suffering an income loss and being exposed to globalization. It is this margin that, in our interpretation creates the basis for the appearance of populist platforms. A vote for a populist party is more likely among those who suffer an income loss and are exposed to globalization. Having lost employment, instead, has no statistically detectable effect on the vote for a populist party, possibly because, as documented, those who lose their job refuse to participate rather than vote against the incumbent.

To easy interpretation of the size effects of economic insecurity the second set of regressions replace the three measures of economic insecurity with their principal component. The index of economic insecurity significantly lowers participation and increases voting for the populist party. At sample means, increasing economic insecurity by one standard deviation increases populist voting by 4.3% of the sample mean; and lower turnout by 6.2% of the sample mean. For an individual who transits from no economic insecurity to economic insecurity the probability of voting for a populist party increases by 14.5% of the unconditional sample mean and lowers the probability of showing up at the polls by as much as 21 percentage points, equivalent to 27% of the sample mean. These are substantial effects.

The third pair of columns add trust in political parties as an explanatory variable. Consistent with the prediction of the model (see Hypothesis 1), we find that people with greater confidence in political parties are more likely to participate in elections and to vote for a non-populist party. Those who have lost faith in political parties are more likely to give up expressing their vote, but if they do express it, they are more likely to vote for a populist party. Trust in political parties is on a scale between 0 and 10; a drop by 5 points on this scale increases the probability of voting for a populist party by 7.7% of the sample mean. Similarly strong is the effect of trust in political parties on participation: a drop in trust by 5 percentage points lowers the chance of participation in elections by 8.8 percentage points, almost 11% of the unconditional mean electoral turnout.

#### [TABLE 3 HERE]

The last pair of columns add as a control a measure of attitudes towards immigrants, used as a proxy for people fears of competition in the labor market. The specific measure is people support for policies that limit immigrants from non-EU countries; results are basically the same if we instead use a measure of support for limiting immigrants of same race/ethnicity or immigrants of other race/ethnicity than that of the respondent or an average of the three measures. Those with more adverse attitudes towards immigrants are less likely to participate in elections and more likely to vote for a populist party if they decide to participate. One standard deviation increase in adverse immigrants attitude lowers turnout by 1 percent of the sample means; the effect on voting for a populist party is more pronounced as it increases by 9.2% of the sample mean. The effects of the other variables, particularly economic insecurity and trust in political parties is unchanged.

Table 4, first column, summarizes the direct effect on the conditional probability of voting for a populist party of one standard deviation increase in economic insecurity, trust in political parties and immigrants fear. The second column shows the contribution to the conditional probability of voting of these variables through their effect on the probability of going to the polls. Economic insecurity and trust in political parties affect the conditional probability of voting for a populist party mostly through their effect on turnout; this channel contributes 11% of the effect of attitudes towards immigrants. Put differently, accounting for effects on turnout decision is crucial in order to understand how drivers of populist voting operate.<sup>18</sup>

#### [TABLE 4 HERE]

<sup>&</sup>lt;sup>18</sup>From the expression  $\pi_x^C \sigma_x = \left( (\pi_x^J \pi^V - \pi_x^V \pi^J) / (\pi^V)^2 \right) \sigma_x$ , where  $\sigma_x$  is the standard deviation of x, the contribution through the effect on turnout is  $(-\pi_x^V \pi^J / (\pi^V)^2) \sigma_x$ .

A summary illustration of the fact that economic insecurity affects populism demand through the participation effect can be given through Figure 2. In this figure, we can 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 great disillusionment affecting the traditional party supporter.

[FIGURE 2 HERE]

#### 5.3 Robustness

Table 5 reports on a number of robustness exercises. To save on space, the estimates of the instruments in the turnout regressions are shown in Appendix C. The first two columns run the estimates of the Heckman probit using all countries in the sample, not only those that have a populist party. This implies that the turnout equation is estimated using observations for countries with and without populist parties. The endogenous presence of populist parties is fully captured by the country dummies. Results are unaffected. Economic insecurity lowers participation and increases voting for populist parties, effects are significant and of the same order of magnitude as those in Table 3. The same holds true for the effects of trust in parties and the other controls. The second set of estimates, run using all countries, adds a dummy for countries in the Euro area. Being in the Euro area has no effect on turnout but raises significantly the consensus for populist parties, possibly reflecting the dismal performance of Euro area countries during the Great Recession. The other estimates are unaffected. The next two columns add country-wave fixed effects thus capturing variation over time in populist manifestos and rhetoric. Results are unchanged. One last concern is that voting for populist parties is capturing voting for new parties. To address this concern in the last two columns we run the estimates after dropping observations of individuals that voted for a new party - i.e. a party that was listed in the election for the first time. Results are basically unaffected, except that economic insecurity has a somewhat stronger effect on voting for populist parties. As a final robustness exercise we redo our estimates using a different exclusion restriction in the Heckman selection model. We do this not because the prevailing weather condition on the day of the election fails to be orthogonal to the voting choice, but because one may doubt its power. As an alternative instrument we use the voters' self reported health status, with the idea that people with weak health status face a higher turnout cost.<sup>19</sup> All results (not reported for brevity) go through if we use this alternative instrument (see working paper version, Guiso et al., 2017).

[TABLE 5 HERE]

#### 5.4 3D definition of populism

As discussed, our theoretical framework leads naturally to a 3D definition of populism. In Section 4 we have shown that a 3D-based definition fits well van-Kessel classification despite the fact that protectionism and hiding of its long-term costs are harder to measure empirically. Table 6 reports the basic estimates using our empirical implementation of the 3D measure of populism. Also here, the estimates of the instruments in the turnout regressions are shown in Appendix C. The first two columns show the estimates of a Heckman selection model using as dependent variable in the main specification a 3D measure of populism; this index is a continuous measure of the degree of populism of a political party. Hence it is free of the unavoidable arbitrariness that characterizes the dichotomous classification of parties in populist and non-populist. Because of the lower coverage of the CHES survey the number of censored observations increases considerably (from around 36,000 to around 68,000) compared to Table 3. Even so, confirming the previous results, economic insecurity lowers the chances of going to the polls and increases consensus towards high-3D parties. Moving from economic security to insecurity increases the preference for a party along the 3D scale by 4.7% of the sample mean. Trust in political parties affects participation positively and the preference for high 3D parties negatively but the later effect is not statistically significant. The other variables

<sup>&</sup>lt;sup>19</sup>Health status is invalid as an instruments if it affects people preferences for populist and nonpopulist parties because they have different health related policies. This may be true in the US presidential elections where dismantling Obama care was part of the Trump program. However, it is not an issue in Europe where health policies do not characterize populist versus non-populist programs

have effects qualitatively similar to those obtained using van Kessel definition. The second set of estimates use a binary definition of populist parties defined as those scoring above the 75th percentile of the 3D index. Results are similar to those in Table 3. Economic insecurity raises the chances of voting for a populist party and trust in political parties lowers it; both effects are precisely estimated. The next two columns add to the specification the attitudes towards immigrants finding that fear of immigration lowers participation and boosts populist votes. Results are invariant if populist parties are defined using a more stringent criteria (3D index above the 80th percentile, last two columns).

#### [TABLE 6 HERE]

In sum, the evidence shown in Tables 3, 5 and 6 is consistent with the model implications (Hypothesis 1). Voting for populist parties is more likely among people experiencing economic insecurity and among people who lost faith in political parties and people that have a harder time in foreseeing the future costs of populist policies. The role of risk preferences is unclear. Voting for a populist party is a risky option - which may require high risk tolerance to take it. But it may be argued that gambling for resurrection may be the only option that loss averse citizens who ended up in the domain of economic losses, think is available to them.

Economic insecurity plays a quantitatively important *direct* role in explaining the voting decisions of people that choose to participate in elections and this effect works crucially through the effect of economic insecurity on turnout. However, economic insecurity plays also a role through at least two important *indirect* channels: the first is through the effect of economic insecurity on people's trust in incumbent parties, and the second through its effect on attitudes towards immigrants. We discuss each one next.

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

#### 5.5.1 Testing Hypothesis 2

Economic insecurity can affect both participation in an election and voting for a populist party also indirectly, because it affects people's confidence in political parties and attitudes towards immigrants. This is what our theoretical framework suggests, see Hypothesis 2. As Figure 1 documents, the sharp drop in income in Italy in 2009 and the dismal performance of the economy since then are highly correlated with an impressive loss of confidence in political parties. Needless to say, causality can in principle go both ways. A negative shock to confidence in politics, taking place for whatever reason, may lead to a sudden stop of the economy, for instance if debt holders were to reduce financing to the government. This is the channel a substantial amount of literature has focused on when trying to understand systematic and persistent differences in per-capita GDP across countries (see e.g. Zak and Knack, 2001; Algan and Cahuc, 2010). This literature emphasizes the relevance of trust not in politics but in people, which is considered a slow moving trait. A recent strand emphasizes the opposite causality link that views drops in confidence as caused by sharp drops in economic activity. This literature focuses on movements in trust over time at the business cycles frequency rather than on persistent differences in trust levels across communities. There is some evidence that recessions cause drops in people trust. Analyzev and Guriev (2016) are able to isolate the causal effect of economic downturns on people's trust during the 2009 recession in Russia, exploiting variation across regions in industrial structure inherited by the Soviet Union, and noticing that capital-intensive and oil-related industries are more responsive to shocks to GDP. They find that a drop in GDP causes a sizeable drop in trust in other people. The same logic applies, even more plausibly, to drops in trust in political parties, politicians and governments, for instance because citizens blame incumbent parties (and the government) for poor economic performance. The same logic can also be extended to argue that attitudes towards immigrants may deteriorate when people, faced with economic insecurity, feel more threatened by immigrants competition.

Indeed, economic insecurity and trust in political parties are negatively correlated using cross sectional variation in the pooled ESS. Similarly, economic insecurity is positively correlated with attitudes against immigrants from non-EU countries and these correlations hold even controlling for observable and country and wave fixed effects. Of course these correlations may just reflect unobserved heterogeneity i.e. uncontrolled individual characteristics that drive both economic insecurity and people's trust/attitudes towards immigrants. To address this problem, we follow Deaton (1985) and use a pseudo panel constructed from the sequence of ESS waves. We group the data into eleven 5-year age cohorts of male and female individuals in each country, respectively and estimate the following model

$$y_{jct} = \beta_1 \mathbf{x}_{jct} + \beta_2 E I_{jct} + f_j + f_{cT} + u_{jct} \tag{1}$$

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 taken care of by the cohort-specific fixed effects  $f_j$ .<sup>20</sup> Country-specific trends in beliefs/attitudes and economic insecurity are captured by country-year fixed effects  $f_{cT}$ . The latter pick any country aggregate variable that affects movements over time in beliefs, including any effect of populist parties rhetoric.

Figure 3, left panel, shows a simple bivariate correlation between the change in trust in political parties and the change in economic insecurity among the pseudo panel cohorts. In all cases an increase in economic insecurity experienced by the age cohorts leads to a decrease in trust in political parties. The right hand panel shows the bivariate correlation between the change in attitudes towards immigrants from the EU and the change in economic insecurity for the same cohorts. This second correlation is strongly positive.

#### [FIGURE 3 HERE]

 $<sup>^{20}</sup>$ Our pseudo panel consists of 784 age-country-year-of-birth groups. Cohorts are relatively large, with 294 observations on average. This reassures that measurement error in building the cohort means is likely to be negligible. Dropping cohorts with fewer than 50 observations (8% of the total) leaves our results unchanged.

The first two columns of Table 7 report controlled fixed-effects pseudo panel regressions of trust in political parties and attitudes to immigrants from non-EU countries on our summary measure of economic insecurity and individual time varying controls (the measure of 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 positive and highly significant effect on attitudes towards immigrants.

Economic effects are relevant: one standard deviation increase in economic insecurity lowers trust in political parties by 8% of its sample standard deviation and increases attitudes against immigration from non-EU by 8.7% of its sample standard deviation. Because these are fixed effects regressions, results cannot be driven by unobserved heterogeneity.<sup>21</sup> They are instead consistent with the idea that a deterioration in individual economic security causes a loss in confidence in political parties as well as a change in attitudes towards immigrants, lending support to Hypothesis 2.<sup>22</sup>

#### [TABLE 7 HERE]

The rest of the table expands the evidence by regressing several measures of trust (in politicians, the national parliament, the European parliament, and index of satisfaction with the government) and attitudes towards immigrants (preference for fewer immigrants of different race/ethnicity; for fewer immigrants of same race/ethnicity; immigrants make the country worse). Interestingly, economic insecurity causes people to lose confidence in politics, institutions and governments and to raise aversion

<sup>&</sup>lt;sup>21</sup>Of course, 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. For instance, an individual in a given cohort that loses confidence in political parties because he/she observes that other members of the same cohort have experienced economic insecurity.

 $<sup>^{22}</sup>$ The reverse causality - an individual who revises trust towards parties downwards and because of this is more likely to lose his/her job or to suffer an income loss - does not seem 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. Similarly for a change in attitudes towards immigrants.

towards immigrants across the board.<sup>23</sup>

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

We use the estimates in the first two columns of Table 7 together with those in Table 3 to obtain an estimate of the the total effect - direct and indirect - of an increase in economic insecurity on the probability of voting for a populist party among the participants and on the turnout rate.<sup>24</sup> The estimates are shown in Table 8.

#### [TABLE 8 HERE]

In total, an increase in economic insecurity by one standard deviation increases populist voting by 7.4% of the sample mean. Around 81% is accounted for by the direct effect on voting and the rest by the indirect effect through lowers trust (6%) and immigrants fear (13%). The total effect on turnout is to lower it by 6.6% of the sample mean (5.1 percentage points); the direct effect accounts for 92% of the drop, while 6% is accounted for by the effect through lower trust in political parties and a small part (2%) by increased immigrants fear.

## 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 in the 26 European countries in our sample.

 $<sup>^{23}</sup>$ Our interpretation is supported by the results in Algan et al. (2017) who show that in regions of Europe where unemployment increased more following the 2008 crisis trust in parties and political institutions fell more and sentiments towards immigrants deteriorated. An IV strategy suggest causality from changes in unemployment to changes in trust and sentiments.

<sup>&</sup>lt;sup>24</sup>In particular the magnitude of the effects of economic insecurity on trust and immigrant sentiments is taken from the pseudo-panel estimates, while the effect of trust and immigrant sentiments (as well the direct effect of economic insecurity) on both voting populist and turnout are taken from the Heckprobit main specification.
In the year 2000, less than 70% of the countries have a populist party; by year 2009 all countries have a populist party, but in the later years of the sample some countries lose their populist party. Our model suggests that the presence of populist parties in a country is heavily affected by how much potential demand there is for it: if underlying support is sufficiently large, a populist platform is more likely to emerge (or to disappear if support fades away). In Section 5 we have documented that economic insecurity undermines confidence in political parties and creates political space for a populist platform. Our model predicts that economic insecurity should be a major factor in explaining the presence of populist parties. A populist party should emerge if the scale of electors disappointment caused by insecurity exceeds the cost of setting up a party which depends on context-specific variables.

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 faced by the citizens of 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 counting the number of parties in each country defined as populist by van Kessel, over the years between 2000 and 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 the one in the nearest wave. Clearly, this limits the time variability of this measure. The second is the share of imports from the rest of the world, capturing exposure to globalization. Because this measure is available every year, it adds variation in economic insecurity. As a proxy of the cost of entering politics with a populist platform we have experimented with several features of the political/institutional system, including an index of checks and balances, the nature of the electoral system, the fractionalization of political parties. Though these measures all effect the presence of a populist party in an expected direction (populist parties are less likely to be present in countries with stronger checks and balances, less fractionalized political system and with a proportional electoral system),<sup>25</sup> the ones with the highest predictive power are a measure of the strength of the opposition parties and of non-aligned parties (both captured by their share of votes in the last election). Hence, we report results using these measures. They are shown in Table 9 where we estimate a Poisson model controlling for year fixed effects, to account for the trend in populist parties documented in Figure 4 and clustering standard errors at the country level as some countries have multiple populist parties. The first column shows results proxying  $z_{ct}$  with the share of votes to opposition parties The supply of populism is higher when/where economic insecurity is more spread out in the population and in countries more exposed to globalization. It is lower when opposition parties are strong. All effects are statistically significant; they are also economically relevant. A country with an index of individual economic insecurity one standard deviation above the sample mean is predicted to have 0.2 more populist parties on average. The same effect obtains for a country with a share of world imports one standard deviation above the sample mean. Countries with a share of votes to opposition parties one standard deviation above the sample mean have on average 0.22 fewer populist parties. Since the average number of populist parties per country in our sample is 1.5, these effects are about 13% of the sample mean. The second column shows that results are very similar using the share of votes to non-aligned parties as a proxy for  $z_{ct}$ . Economic insecurity measures are somewhat stronger and more precisely estimated. The negative effect of our proxies for  $z_{ct}$  lends support to our idea that a populist platforms has more hopes to gather consensus, and thus to induce a party to propose it, when people loose faith in all established parties. A strong

<sup>&</sup>lt;sup>25</sup>In principle, a proportional system should encourage the supply of populist parties as it lowers the entry costs; but because lower entry costs facilitate entry of other parties as well, per se, may dilute the benefit of offering a populist platform, as it may leave a lower share of votes on the table. This effects seems to prevail in our data

opposition party or the presence of strong non-aligned parties weakens the anti-elite pillar of populist platforms, rendering a populist strategy less likely.

### [TABLE 9 HERE]

### 6.2 Left-right orientation choice of populist parties

As remarked in the political science literature, the phenomenon of populism has often been divided in left vs right populism.<sup>26</sup> In Section 3 we have argued that a populist who enters the political scene will actually have very similar characteristics (in terms of the 3D strategy components) regardless of whether it entered on the left or the right, supported empirically in Section 4. Moreover, it follows from our framework that the choice to enter on the left or on the right should be expected to depend on the *relative entry space*, see Hypothesis 3.<sup>27</sup> The latter, in turn depends on the ideological orientation of the voters and, as remarked by Rodrik (2017) by the most salient features that prevail in a given country as a reflection of the particular form taken by the crisis from which economic insecurity originates, e.g. a large inflow of immigrants of different ethnicity as a manifestation of the 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 orientation choice in one direction or another depending on the relative weight of leftversus right-wing voters and the relative salience of left-versus right-wing factors. To test whether Hypothesis 3 is validated in our European 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 respectively and  $v_{ct}$  and error term. The party orientation is observed in the CHES survey and measured on a scale between

<sup>&</sup>lt;sup>26</sup>See e.g. Rodrick 2017 and references therein.

<sup>&</sup>lt;sup>27</sup>It maybe worth emphasizing that in political science the concept of entry space often refers to spatial measures, whereas our notion of entry space is exclusively based on relative abstention.

1 (far left) and 10 (far right), hence our data are limited by the CHES coverage. The shares of left-oriented and right oriented voters, measured on a similar scale, are obtained from the waves of the ESS. As a measure of the left-salient factor 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 stock of immigrants from Muslim countries scaled by total population. This variable, obtained from the World Bank Bilateral Migration Matrix, is available for three years (1999, 2010 and 2013). Hypothesis 3 predicts  $\delta_1 < 0$  and  $\delta_2 > 0$ .

Of course, as remarked in Section 3.4, the relative entry space should be a critical determinant of a populist party orientation choice whenever the individual characteristics of the left and right ideology voters are similarly distributed in terms of the key variables related to economic insecurity, trust and ability to assess populist policies that drive consensus towards populist parties as shown in Section 5. Table 10 shows that this is indeed the case. Left-oriented and right oriented voters differ primarily because of their relative share. 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.

Figure 5 shows that in the CHES data, the distribution of orientation of populist parties is very different from that of non populist parties: compared to the latter, the former has a much higher density on the right.

#### [FIGURE 5 HERE]

### [TABLE 10 HERE]

Remarkably, Table 11 shows that heterogeneity in populist parties orientation can be explained at least in part by our model. 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. One standard deviation increase in this factor shifts orientation to the left by almost one unit in the scale, or 18.5% 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. hence it pulls populist parties orientation to the right. One standard deviation increase in this factor increase the score by 1.45 points - or 27.9% of the sample mean orientation. Interestingly, it is not immigration per se that affects populist orientation but its origin from Muslim countries. If we replace immigration from Muslim countries with the population share of total immigrants or with immigrants from EU countries the immigration variable (weighed with the share of right wing oriented voters) is not statistically significant. This strengthens the interpretation of the results as they strongly suggest that, consistent with Rodrick (2017) interpretation, the chosen orientation is the one on which populist parties can more effectively build their rhetoric.

In sum, the results in this section and in the previous fully support our interpretation. Populist parties/platforms appear when the disappointment in the population is large enough to raise enough hopes of obtaining a share of total votes - *a scale effect* - large enough to outweigh the cost of entering with and a populist platform. Conditional on entry, the orientation of the party is chosen strategically bending in the direction where voters ideology bends and where the factors behind the crisis are more salient - a *relative size effect*.

As a general remark on these major results of our paper, we want to emphasize that (i) disappointment and the turnout effects that come with it are as important on the supply side as they have been proven to be on the demand size of populism; (ii) that there may well be other ideological and cultural reasons in history and today for an orientation choice of a new party, but we have shown that even simple office-seeking motivation can rationalize the observed variation.

### 6.3 Non-populist parties reaction to populism

One hypothesis, consistent with the electoral competition consequences of the entry of a populist party, is that non-populist parties will adapt their political platforms mimicking that of a successful populist party. To test this implication we rely on the five waves of the Chapel Hill Expert Survey (CHES). For each of a list of several issues (see Appendix B for a complete description), the CHES reports the position of the party on a scale between 0 and 10 (for some issues the scale is between 1 and 7; in this case we rescale to a 0-10 scale). To assess the party position CHES relies on a pool of experts in each country. For instance, on the issue of deregulation /regulation the position of the party is described by a number, between 0 and 10, where 0 means strongly opposes deregulation and 10 strongly supports deregulation. Numbers in between reflect intermediate positions on deregulation. We disregard issues that are only present in one or two surveys and focus on those that are assessed in all five or at least three surveys. We group 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 European Union foreign and security policy; position on ideological issues (P\_ID, obtained summing the scores on three issues: general ideological stance on left/right dimension, stance of intensity of government intervention in the economy, position on the 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 decentralization to regions/localities and position towards ethnic minorities). The first three indexes are available for all surveys, the last one for the last three waves. In addition we build an overall measure of the party position (P<sub>total</sub>) by summing the scores on the four indexes; of course, this total index is defined only 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, Total) in year t. Let us distinguish between platforms of populist, P, and non populist, NP, parties 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 votes to the populist party (or the sum of the shares to the populist 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 parties fixed effects and  $u_{icjt}$  an error term. Because parties are specific to the country, the party fixed effects also capture systematic differences across countries. A Downsian model predicts a negative value of  $\gamma$ , that is the platforms of non-populist parties should tend to get closer to that of the populist party after 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 share of votes to the populist party in the last election before the survey for each of the issues and the total index. To pick up possible non-linearities we plot a local polynomial regression, together with the 95%confidence band. Interestingly, in all issues the distance falls as populist parties gain consensus, consistent with the prediction that populist policies are more palatable to voters in general as times of systemic crisis. Table 12 shows the estimates of the linear regression specified above. The results confirm the visual inspection of Figure 6: as populist parties gain support, non-populist parties seem to adapt their platforms to reduce the distance from that of the successful populist party. The effects are substantial: increasing the share of votes to the populist party by one standard deviation (16 percentage points) reduces the distance between the nonpopulist and populist overall platforms by 33% of the sample mean. Table 13 rules how the possibility that it is the populist party that gets closer to traditional parties as it gain consensus. To show this we regress the change in populist positions on the share of votes to populist parties in the previous election finding that that populist parties do not revise their position as their share of votes increases. Overall this evidence implies that just counting the number of populist parties, or their share of votes/seats in elections, understates the supply of populist policies in a country.

### [TABLE 12 HERE]

[TABLE 13 HERE]

# 7 Conclusions

We have described the situation of Western countries in the last decade as a global crisis that has affected both markets and sovereign states at the same time, leaving people without a safety net. This has not been the case previously: the crisis in the 70s was mainly a market crisis, while various types of state crises in the 90s were government crises in a context of markets thriving. The rare combination of markets and governments' inability to guarantee security has shaken the confidence in traditional political parties and institutions, facilitating an increase in fear, in turn aggravated by threats such as mass migration. This paper documents how this global dual crisis affects the demand and supply of populism systematically, considering as key the turnout effects on both demand and supply side. We have shown that the abstention disillusionment effects, usually neglected in the literature, make economic insecurity appear as the real driver of populism on the demand side. Moreover, the same abstention effects determine the timing, the quantity, and the orientation choice of populists on the supply side. Beside the key role of turnout effects just mentioned, the other key message of the paper is that any populist entrant, on the left as well on the right, can be characterized as always using a three dimensional strategy that always includes short term protection, hiding of future cost and anti-elite rhetoric. The interaction between anti-elite rhetoric (the key element of a populist supply strategy) and economic insecurity (the key driver of demand of populism) has been shown to be very useful also to understand the evolution of trust and attitudes towards migration.

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# Appendix

# A Populist parties

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

[TABLE A1 HERE]

# **B** 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 fours 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 A2 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 te 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 (gain highlighted in italics in the table).

[TABLE A2 HERE]

## C First stages for robustness and 3D measure

Here we present the estimates of the instruments in the turnout regressions for section 5.3 and 5.4.

[TABLE A3 HERE]

[TABLE A4 HERE]

# Figures



The figures show the evolution of economic activity, trust in political parties, electoral turnout and consensus to populist parties in Italy, Greece, France, and Spain. Economic activity (measured by the index of industrial production), the share of votes to the populist parties and electoral 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 towards traditional parties and thus to abstention of traditional parties 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 attitudes against immigrants (y-axis, right figure) in the synthetic cohorts panel.



Figure 4: The Rise of Populism

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



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 votes to populist parties (Graphs)



The figures shows the local polynomial smooth relation between measures of distance of non-populist from populist platforms and the share of votes to populist parties in the last past election. The relation is shown for distance in the position on four issues (first four panels) and one aggregate measure (last panel).

# Tables

Table 1:	Descriptive	statistics

Variable	Obs.	Mean	St. Dev.	Min	Max
A. Demand analysis					
Voted	199,095	0.78	0.41	0	1
Vote for populist party	136,243	0.07	0.26	0	1
Risk aversion	200,485	3.92	1.42	1	6
Age	210,590	48.93	17.82	18	100
Education	211,439	12.75	3.94	0	25
TV total	211,010	4.24	2.05	0	7
TV politics	203,296	2.01	1.32	0	7
Female	211,170	0.53	0.50	0	1
Right wing	188,090	5.13	2.16	0	10
Regional population (1000)	194,612	2,294	2,845	28	17,90
Unemploymen	210,352	0.13	0.34	0	1
Income difficulties	206,503	0.96	0.87	0	3
Exposure to globalization	192,783	0.28	0.45	0	1
Economic insecurity (PC)	188,070	0.25	0.23	0	1
Trust in political parties	180,227	3.66	2.36	0	10
Want less immigrants from outside EU	$203,\!830$	2.51	0.89	1	4
Daily total rain fall	$200,\!685$	3.03	5.05	0	35
Daily mean temperature	200,758	10.62	6.48	-7	25
Daily average sea level pressure	199,310	1,014	9.17	976	1,036
3D measure of populism	88,564	30.99	14.67	0	99
B. Pseudo panel analysis					
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	4899	5.16	0.64	0	9
Regional population (1000)	4111	2270	2184	118	10800
Economic insecurity (PC)	4842	0.27	0.10	0	1
Trust in political parties	4283	3.42	1.12	0	7
Want less immigrants from outside EU	4899	2.65	0.38	1	4
Trust politicians	4899	3.49	1.11	1	7
Trust national parliament	4898	4.34	1.25	1	8
Trust European parliament	4898	4.38	0.81	0	9
Government satisfaction	4871	4.18	1.20	0	9
Want less immigrants different race/etnicity from majority	4899	2.56	0.36	1	4
Want less immigrants american race/ethicity from majority	4899	2.21	0.33	1	4
Immigrants make country worse	4899	5.24	0.88	2	9
C. Supply analysis					
Populist party	416	1.53	1.09	0	5
Economic insecurity (PC)	338	1.21	0.32	1	2
Import p.c.	368	10.69	7.09	1	40
Vote share opposition parties	325	10.09 41.41	13.74	0	40 74
Vote share opposition parties Vote share not-aligned parties	325 307	0.39	2.08	0	74 15
D. Chapel Hill Expert Survey					
Distance European integration	706	23.01	22.54	0	91
Distance European policy	708 704	37.15	$\frac{22.54}{43.57}$	0	239
Distance ideological issues	706	27.35	38.20	0	184
Distance policy issues	501 500	79.36	106.26	0	510
Total distance	500	51.78	85.12	0	521
Gini coefficient (percentage points)	686	29.51	4.01	23	39
Immigrants from Muslim countries (percentage points)	557	1.61	1.35	0	5

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 an B.

Table 2: 3D and Kessel									
	(1)	(2)	(3)	(4)					
	Rhetoric	Protection	Hiding	Populist 3D					
Populist party	$2.651^{***}$	$1.840^{***}$	$1.247^{***}$	$34.54^{***}$					
	(0.210)	(0.116)	(0.0958)	(1.848)					
Left/Right control	YES	YES	YES	YES					
Observations	742	609	828	609					
Percentage of sample mean	59%	34%	24%	96%					

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 Hiding 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 value of the score of populist parties relative to the sample mean.

	(1) Heckprobit		(2) Heckprobit		(3) Heckprobit		(4) Heckprobit	
	Populist	Vote	Populist	Vote	Populist	Vote	Populist	Vote
Risk aversion	0.00313 (0.0120)	$0.0228^{***}$ (0.00550)	0.00480 (0.0121)	$0.0227^{***}$ (0.00550)	0.00455 (0.0128)	$0.0245^{***}$ (0.00560)	0.00659 (0.0126)	$0.0240^{**}$ (0.00563)
$\ln(Age)$	(0.0120) -0.0985 (0.0670)	(0.00000) $(0.835^{***})$ (0.0274)	(0.0121) -0.0907 (0.0706)	0.831*** (0.0279)	-0.0555 (0.0878)	0.850*** (0.0293)	-0.121 (0.0792)	(0.000000) 0.859*** (0.0296)
ln(Education)	$-0.264^{***}$ (0.0593)	0.473*** (0.0304)	-0.305*** (0.0602)	0.471*** (0.0301)	-0.247*** (0.0661)	$(0.462^{***})$ (0.0315)	-0.249*** (0.0616)	(0.0200) $0.456^{***}$ (0.0310)
TV total	(0.00884) (0.00842)	$-0.0277^{***}$ (0.00476)	(0.00979 (0.00837)	-0.0276*** (0.00478)	0.0118 (0.00891)	-0.0269*** (0.00489)	0.00590 (0.00915)	-0.0258** (0.00487)
TV politics	-0.00236 (0.0151)	0.0608*** (0.00633)	-0.00486 (0.0155)	0.0606*** (0.00638)	-0.00633 (0.0159)	0.0533*** (0.00703)	-0.00263 (0.0160)	(0.0514** <sup>2</sup> ) (0.00699)
Unemployment	-0.0416 (0.0468)	-0.186*** (0.0198)	(/		()	<pre></pre>	</td <td>( • • • )</td>	( • • • )
Income difficulties	0.0767** (0.0305)	-0.148*** (0.0108)						
Explosure globalization	$0.127^{***}$ (0.0412)	-0.101*** (0.0158)						
Economic insecurity (PC)	()	()	$0.316^{***}$ (0.115)	$-0.696^{***}$ (0.0331)	$0.257^{**}$ (0.121)	$-0.659^{***}$ (0.0353)	$0.279^{**}$ (0.121)	$-0.650^{***}$ (0.0353)
Trust in pol. parties Few immigrants from no-EU				<b>、</b> ,	-0.0259** (0.0114)	0.0541*** (0.00410)	-0.0229** (0.0102) 0.116***	0.0525** (0.00411) -0.0292**
							(0.0214)	(0.00884)
Controls, Wave FE, Country FE Rho	YES -0.109		YES -0.161		YES -0.108		YES -0.210	
Cluster SE	Region		Region		Region		Region	
Countries	With P		With P		With P		With P	
Observations	$136,\!634$		$136,\!634$		126,569		124,458	
Censored observations	40,441		40,441		37,260		36,353	
Selection								
Rain		0.000315		0.000341		0.00295		0.00153 ( $0.00188$ )
Rain * South		(0.00186) - $0.0175^{**}$ (0.00856)		(0.00185) -0.0174** (0.00864)		(0.00223) 0.00439 (0.0134)		-0.0181** (0.00811)
Av. Temperature		(0.00856) $-0.00490^{**}$ (0.00216)		(0.00864) -0.00478** (0.00214)		(0.0134) -0.00442** (0.00222)		-0.005513 (0.00219)
Av. Temperature * South		(0.00216) 0.0250 (0.0179)		(0.00214) 0.0237 (0.0181)		(0.00222) $0.0631^{**}$ (0.0293)		(0.00219) 0.0327* (0.0181)

Table 3: Main specification - Heckman probit estimates of populist party vote and participation in voting

The table shows Heckman probit estimates of the decisions to vote in the election (Vote) and the choice of voting 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 weather condition on the 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.

<u>Table 4: Direct eff</u>	ects and effects v	<u>via turnout</u>
	Effect on conditional prob of 1SD increase in economic insecurity (ratio of sample mean)	Contribution via turnout
Economic insecurity (PC) Trust in pol. parties Few immigrants from no-EU	0.059 -0.050 0.129	0.062 -0.051 0.011

The table shows the direct effect on voting for a populist party of one 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 3, column 4.

	(5) Heckprobit		(6) Heckprobit		(7) Heckprobit		(8) Heckprobit	
	Populist	Vote	Populist	Vote	Populist	Vote	Populist	Vote
Risk aversion	0.00375	0.0240***	0.00353	0.0240***	0.00705	0.0235***	0.00771	0.0234***
	(0.0130)	(0.00503)	(0.0130)	(0.00503)	(0.0133)	(0.00566)	(0.0134)	(0.00565)
ln(Age)	-0.0733	0.809***	-0.0719	0.809***	-0.0557	0.849***	-0.0847	0.844***
	(0.0794)	(0.0281)	(0.0806)	(0.0281)	(0.0762)	(0.0292)	(0.0708)	(0.0290)
ln(Education)	-0.257***	0.457***	-0.256***	0.457***	-0.260***	0.467***	-0.280***	0.456***
	(0.0633)	(0.0355)	(0.0640)	(0.0355)	(0.0629)	(0.0308)	(0.0597)	(0.0308)
TV total	0.0126	-0.0291***	0.0115	-0.0291***	0.00593	-0.0269***	0.0104	-0.0259***
	(0.00900)	(0.00437)	(0.00900)	(0.00437)	(0.00923)	(0.00486)	(0.00931)	(0.00491)
TV politics	-0.00777	0.0567***	-0.00745	0.0567***	0.00680	0.0529***	-0.00573	0.0530***
-	(0.0158)	(0.00630)	(0.0159)	(0.00630)	(0.0167)	(0.00688)	(0.0162)	(0.00700)
Economic insecurity (PC)	0.280**	-0.684***	0.287**	-0.684***	0.291**	-0.654***	0.312***	-0.657***
	(0.125)	(0.0361)	(0.125)	(0.0361)	(0.123)	(0.0355)	(0.118)	(0.0351)
Trust in pol. parties	-0.0272**	0.0543***	-0.0266**	0.0543***	-0.0215**	0.0536***	-0.0249**	0.0550***
	(0.0111)	(0.00366)	(0.0111)	(0.00366)	(0.0107)	(0.00411)	(0.0103)	(0.00411)
Euro area			$0.420^{***}$	-0.0333				
			(0.0788)	(0.0409)				
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	-0.154		-0.152		-0.102		-0.164	
Cluster SE	Region		Region		Region		Region	
Countries	All		All		With P		With P	
							(no new P)	
Observations	152,001		152,001		127,095		126,240	
Censored observations	46,643		46,643		37,424		37,424	

#### Table 5: Main specification - Robustness

The table shows robustness Heckman probit estimates of the turnout decision and the vote to 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 the 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 an Euro area dummy; the third set controls for interacted country. All vave fixed effects; the last set runs the regressions dropping observations of individuals who voted for a new party. All regressions include country and wave fixed effects. Robust standard errors Robust standard errors clustered at the region level are shown in parenthesis. \*\*\* significant 1% or less; \*\* significant at 5%; \* significant at 10% confidence level.

	(9) Heckman		(10) Heckprobit		(11) Heckprobit		(12) 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	0.0530 (0.0608)	$0.0299^{***}$ (0.00582)	-0.00368 (0.00992)	$0.0300^{***}$ (0.00582)	-0.00369 (0.0100)	$0.0308^{***}$ (0.00586)	$-0.0174^{*}$ (0.00993)	$0.0307^{***}$ ( $0.00585$ )
$\ln(Age)$	(0.213 (0.272)	(0.00002) $0.736^{***}$ (0.0334)	$-0.135^{**}$ (0.0641)	(0.00002) $0.737^{***}$ (0.0334)	$-0.149^{**}$ (0.0645)	(0.0343)	-0.122** (0.0583)	(0.000000) 0.749*** (0.0343)
ln(Education)	-1.177*** (0.280)	$0.334^{***}$ (0.0292)	$-0.125^{***}$ (0.0423)	0.333*** (0.0290)	$-0.105^{**}$ (0.0438)	0.319*** (0.0288)	-0.0253 (0.0457)	0.320*** (0.0288)
TV total	0.0508 (0.0535)	-0.0247*** (0.00458)	0.00657 ( $0.00949$ )	$-0.0248^{***}$ (0.00458)	0.00599 ( $0.00959$ )	-0.0237*** (0.00457)	0.0145 (0.00971)	-0.0237** (0.00456)
TV politics	0.0412 (0.0579)	$0.0482^{***}$ (0.00632)	-0.0117 (0.0107)	$0.0482^{***}$ (0.00630)	-0.0109 (0.0108)	$0.0467^{***}$ (0.00628)	0.00275 (0.0101)	$0.0468^{**}$ (0.00629)
Economic insecurity (PC)	$1.396^{***}$ (0.480)	$-0.516^{***}$ (0.0460)	$0.350^{***}$ (0.0645)	$-0.516^{***}$ (0.0459)	$0.344^{***}$ (0.0669)	$-0.507^{***}$ (0.0459)	$0.215^{***}$ (0.0711)	$-0.507^{***}$ (0.0459)
Trust in pol. parties	-0.000905 (0.0440)	$0.0592^{***}$ (0.00515)	$-0.0197^{**}$ (0.00819)	$0.0592^{***}$ (0.00516)	$-0.0180^{**}$ (0.00828)	$0.0563^{***}$ (0.00502)	$-0.0164^{*}$ (0.00858)	$0.0564^{**}$ (0.00501)
Few immigrants from no-EU					$0.0381^{**}$ (0.0162)	$-0.0444^{***}$ (0.00988)	$0.0390^{***}$ (0.0149)	$-0.0443^{**}$ (0.00988)
Controls, Wave FE, Country FE	YES		YES		YES		YES	
Rho	-0.0426		-0.0426		-0.425		-0.314	
Cluster SE	Region		Region		Region		Region	
Countries	With P		With P		With P		With P	
Observations	127,095		127,095		124,458		124,458	
Censored observations	69,947		69,947		68,326		68,326	

### Table 6: 3D definition of populism

The table shows robustness Heckman probit estimates of the turnout decision and the vote to 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 on controls; the last set uses a tighter threshold to define a party as populist (3D score i 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.

	(1) Trust parties	(2) Few immigrants from no-EU	(3) Trust politicians	(4) Trust national parliament	(5) Trust European parliament	(6) Government satisfaction	(7) Few immigrants different race/ethnicity	(8) Few immigrants same race/ethnicity	(9) Immigrants make worse
Risk aversion	$-0.104^{***}$ (0.0400)	0.00856 (0.0143)	-0.0422 (0.0345)	-0.0144 (0.0407)	$-0.133^{***}$ (0.0438)	-0.0378 (0.0399)	-0.00171 (0.0157)	-0.00822 (0.0156)	0.0575 ( $0.0357$ )
$\ln(Age)$	-0.126 (0.312)	-0.105 (0.108)	(0.0438) (0.246)	-0.240 (0.295)	-0.728** (0.309)	-0.588* (0.316)	0.256** (0.109)	0.321*** (0.108)	-0.0593 (0.272)
$\ln(\text{Education})$	$0.321^{*}$ (0.171)	-0.257*** (0.0616)	0.513*** (0.179)	$0.592^{***}$ (0.217)	0.259 (0.277)	0.515** (0.259)	-0.326*** (0.0631)	-0.353*** (0.0724)	-0.998*** (0.162)
TV total	-0.0376 (0.0290)	0.0114 (0.0108)	-0.0215 (0.0272)	-0.0629* (0.0330)	-0.0590* (0.0355)	-0.00865 (0.0303)	0.00762 (0.0108)	0.0154 (0.0108)	$0.0584^{**}$ (0.0288)
TV politics	$0.0832^{*}$ (0.0479)	-0.00766 (0.0167)	0.0295 (0.0392)	0.0865* (0.0490)	-0.0292 (0.0569)	-0.0182 (0.0491)	0.00905 (0.0167)	-0.0192 (0.0193)	-0.0703 (0.0448)
Economic insecurity (PC)	-0.828*** (0.231)	0.310*** (0.0847)	-0.976*** (0.212)	-0.956*** (0.228)	-1.000*** (0.254)	-1.209*** (0.253)	0.286*** (0.0848)	0.281*** (0.0891)	$0.446^{**}$ (0.219)
Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES
Cohort FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
Number of cohorts	784	784	784	784	784	784	784	784	784
Wave*Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
Countries Observations	All 3,438	All 3,774	All 3,774	All 3,774	All 3,774	All 3,746	All 3,774	All 3,774	All 3,774

Table 7: Pseudo Panel

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

### Table 8: Effect of economic insecurity

Effect of (1 SD) economic insecurity (share of sample mean)	Direct effect	Indirect effect: trust	Indirect effect: negative sentiments towards immigrants	Total effect
Voting populist (% of total effect)	$0.060 \\ 81\%$	$0.004 \\ 6\%$	0.010 13%	$0.074 \\ 100\%$
Turnout (% of total effect)	-0.061 92%	-0.004 6%	-0.001 2%	-0.066 100%

The table reports the effect of a one standard deviation increase in economic insecurity on voting for a populist party and on 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 direct and indirect effects.

	Populist parties	Populist parties
Economic insecurity (PC)	2.219*	2.663**
	(1.216)	(1.352)
Import p.c.	$0.0298^{***}$	$0.0359^{***}$
	(0.0082)	(0.0100)
Vote share opposition parties	-0.0146**	
	(0.00585)	
Vote share not-aligned parties		-0.0368***
		(0.0143)
Controls	YES	YES
Year FE	YES	YES
Observation	262	251

Table 9	):	Explaining	the	Rise	of Po	pulist	Parties
TOURIO C	· •	Displaning	0110	TOTOO	01 I U	parrou	I GILGIGO

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 left hand side is the number of populist parties in a country in a given year. Voters' characteristics are those in the closest past ESS survey. 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 10: Comparison left/right oriented

	Left oriented						Right oriented			
Variable	Obs.	Mean	St. Dev.	Min	Max	Obs.	Mean	St. Dev.	Min	Max
Share of people of [left/right] orientation	573	0.58	0.07	0.44	0.74	573	0.71	0.07	0.59	0.85
Share of people of [left/right] orientation * [left/right] turnout	573	0.27	0.08	0.14	0.46	573	0.39	0.08	0.24	0.61
Education	573	2.50	0.07	2.20	2.64	573	2.48	0.07	2.14	2.60
Economic insecurity	565	0.27	0.08	0.14	0.50	565	0.27	0.08	0.13	0.52
Few immigrants from no-EU	573	2.48	0.31	1.69	3.30	573	2.62	0.29	1.85	3.36
Trust parties	451	3.38	1.01	1.52	5.43	451	3.45	1.07	1.35	5.70

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

### Table 11: Populist parties orientation choice

	Left/right orientation (increasing in right)
Share of left oriented * Left-salient factor	-0.564*
	(0.319)
Share of right oriented * Right-salient factor	2.410***
	(0.550)
Observation	46

The table reports regressions of the orientation of the populist parties in our sample on measures of relative entry space. The left hand side is a measure of party orientation defined on a scale between 1 (extreme left) and 10 (extreme right). Standard errors clustered at the country level, are shown in parenthesis. \*\*\* significant 1% or less; \*\* significant at 5%; \* significant at 10% confidence level.

Table 12: Distance from populist platform and share of votes to populist parties

Dependent variable	Coefficient	Std. Err.	Year FE	Obs.	R2
(1) P-EI	-0.430***	(0.1206)	YES	397	0.907
(2) P_EU	-0.165	(0.2168)	YES	396	0.895
(3) P_IQ (4) P_PD	-0.380** -1.255*	(0.1865) (0.7067)	YES YES	$397 \\ 286$	$0.913 \\ 0.927$
(5) P_total	-0.432	(0.7410)	YES	286	0.914

The table shows the regression of the distance between the position of non-populist parties and that of the populist party on four separate issues and the share of votes to the populist parties in the last past election. The last row shows the regression results for an overall measure of distance. 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.

	<u>Table 13:</u>	Who m	noves		
Dependent variable	Coefficient	Std. Err.	Year FE	Obs.	R2
(1) P_EI (2) P_EU	$0.083^{*}$ 0.072	(0.0415) (0.1151)	YES YES	70 70	$0.871 \\ 0.889$
(2) $P_{-IQ}$ (3) $P_{-IQ}$ (4) $P_{-PD}$	0.108 0.343	(0.0927) (0.3521)	YES YES	70 56	$0.904 \\ 0.945$
(5) P_total	0.559	(0.4869)	YES	56	0.927

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The table shows results of regressions testing for the presence of effects of populist rhetoric on several measures of trust in politics and institutions and attitudes towards immigrants using the synthetics cohort panel data. Robust standard errors in parenthesis. \*\*\* significant 1% or less; \*\* significant at 5%; \* significant at 10% confidence level.

Country	Party	Kessel	N&I
AT	FPO	1	1
AT	Alliance for the Future of Austria	1	0
AT	Team Stronach	1	0
BE	Vlaams Blok	1	1
BE	FRONT NATIONAL	1	0
BE	List Dedecker	1	0
BG	NDSV	1	0
BG	Coalition Ataka	1	1
BG	Law, Order and Justice (Red, Zakonnost, Spravedlivost)	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	1	1
СН	Swiss Democrats	1	0
СН	Lega dei Ticinesi	1	0
СН	Geneva Citizen's Movement	1	0
$\mathbf{CZ}$	ANO	1	0
$\mathbf{CZ}$	Public Affairs (Veci Verejne)	1	0
$\mathbf{CZ}$	Usvit	1	1
DE	Die Linke (The Left)	1	0
DE	NPD National Democratic Party	0	1
DE	AfD Alternative for Germany	0	1
DK	Dansk Folkeparti	1	1
ES	Podemos	-	1
FI	True Finns	1	1
$\mathbf{FR}$	FN (Front National)	1	1
$\mathbf{FR}$	MPF Popular Republican Movement	0	1
GB	British National Party	1	1
GB	UK Independence Party	1	0
GB	NF National Front	0	1
$\mathbf{GR}$	SYRIZA	1	1
$\mathbf{GR}$	ANEL	1	1
$\mathbf{GR}$	XA Golden Dawn	0	1
$\mathbf{GR}$	LAOS Popular Orthodox Rally	0	1
$\mathbf{GR}$	ND New Democracy	0	1
$\mathbf{HR}$	HSP-AS	1	1
$\mathbf{HR}$	HSS Croatian Peasants Party	0	1
$\mathbf{HR}$	HDSSB Croatian Democratic Alliance of Slavonia and Baranja	0	1
$\mathbf{HR}$	HSP Croatian Party of Rights	0	1
$\mathbf{HR}$	HDZ Croatian Democratic Union	0	1

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

The table shows results of regressions testing for the presence of effects of populist rhetoric 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.

Country	Party	Kessel	N&I
HU	FYD-HDF Fed.of Young Democrats&Hungarian Dem.Forum	1	1
HU	Justice and Life Party (MIEP)	1	0
HU	Movement for a Better Hungary	1	1
HU	FIDESZ-MPSZ	1	1
IE	Sinn Fein	1	-
IS	Citizen's Movement (BF)	1	-
IT	Forza Italia	1	0
IT	Lega Nord	1	1
IT	Movimento Cinque Stelle	1	1
IT	Il Popolo della Liberta (PdL)	1	0
IT	Fdl Brothers of Italy	0	1
LT	Labour Party (DP)	1	0
LT	Party "Order and Justice" (TT)	1	0
LT	DK The Way of Courage	0	1
LU	Alternative Democratic Reform Party	1	1
LV	For Fatherland and Freedom/ LNNK	1	0
LV	All for Latvia	1	0
LV	NA National Alliance	0	1
NL	List Pim Fortuyn	1	0
NL	Liveable Netherlands	1	0
NL	Geert Wilders' Freedom Party (PVV)	1	1
NL	SGP Political Reformed Party	0	1
NO	Progress Party (FrP)	1	1
NO	Democrats	1	0
PL	Samoobrona Rzeczypospolitej Polskiej	1	0
PL	Prawo i Sprawiedliwosc	1	1
PL	SP United Poland	0	1
PL	KNP Congress of the New Right	0	1
RO	Greater Romania Party	1	0
RO	People's Party	1	1
SE	Sweden Democrats	1	1
SI	Slovene National Party (SNS)	1	0
SI	SDS Slovenian Democratic Party	0	1
SI	SDS Slovenian Democratic Party	0	1
SK	HZDS Movement for a Democratic Slovakia	1	0
SK	SMER	1	0
SK	KDH Christian Democratic Movement	1	1
SK	Slovak National Party (SNS)	1	1
SK	Ordinary People and Independent Personalities (OLaNO)	1	0
TR	MHP National Action Party	1	1

The table shows results of regressions testing for the presence of effects of populist rhetoric 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.

Issue	Scale	Availability	N. waves aske
General question			
1. European Integration	1 (SO) -7 (SF)	1999-2014	5
EU Policy			
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 states 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
Ideological position			
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
Policy issues position			
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 ves lawℴ	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

### Table A2: Chapel Hill Expert Survey

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

	(5) Vote	(6) Vote	(7) Vote	(8) Vote
Rain	0.00452**	-0.00129	0.00146	0.00452**
	(0.00205)	(0.00294)	(0.00188)	(0.00206)
Rain * South	-0.0172**	-0.0149*	-0.0173**	-0.0172**
	(0.00701)	(0.00871)	(0.00834)	(0.00701)
Av. Temperature	-0.00285	-0.00360	-0.00517**	-0.00287
	(0.00257)	(0.00649)	(0.00216)	(0.00256)
Av. Temperature * South	0.00607	0.0266	0.0283	0.00606
	(0.0102)	(0.0193)	(0.0181)	(0.0102)
Pressure	0.00219*	0.0021*		
	(0.00122)	(0.00121)		
Pressure * South	-0.00121	-0.0012		
	(0.00478)	(0.00478)		
Wave FE	YES	YES	YES	YES
Country FE	YES	YES	YES	YES
Wave * Country FE	NO	NO	NO	NO
Cluster SE	Region	Region	Region	Region
Countries	All	All	With P	With P
				(no new P)

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### Table A3: First stages Robustness

Table A4: First stages on 3D (10)(11)(12)(9)Vote Vote Vote Vote  $\operatorname{Rain}$ -9.42e-054.30e-05-5.48e-05-0.000108(0.00263)(0.00276)(0.00282)(0.00275)Rain \* South 0.00313 0.00302 0.00213 0.00218 (0.00956) -0.0132\*\*\* (0.00934) -0.0142\*\*\* (0.00958)(0.00936)-0.0152\*\*\* Av. Temperature -0.0146\*\*\* (0.00292)(0.00297)(0.00304)(0.00299)Av. Temperature \* South 0.0463 0.0476 0.0481 0.0472 (0.0308)(0.0305)(0.0305)(0.0308)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 turnout regressions in Table

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