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A Behavioural Approach**

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Abstract

This paper analyses the reasons why most populist parties and movements do not accept the necessity of policies aimed at contrasting climate change (CC). Indeed, these parties either tend to deny the very existence of the issue, or openly oppose the policies for tackling it. The paper starts with a rapid literature and fact review on the urgency of the CC problem and the ascent of populist parties. Subsequently, it investigates the reasons behind populists' stance towards the CC issue, on the hypothesis that, by and large, they reflect the preferences of their electorate. Since this denialism may appear irrational, this analysis applies the heuristics and bias literature developed by cognitive psychologists and behavioural economists. Moreover, it uses findings from behavioural development economics, as well as insights from the literature on social dilemmas and collective action, to understand the attitudes of those that are inclined to vote for populist parties, also stressing the analogies between populists' opposition to the policies for mitigating the effects of CC and their hostility to the policies for tackling the effects of the recent Covid-19 pandemic. The findings of the paper may help restyle the habitual framing of the CC issue, so as to present it in a more convincing manner to those attracted by populist narratives.

Key words: climate change, populism, cognitive biases, social dilemmas

JEL: D91, H44, H87

1. Introduction

The political landscape of democratic countries has seen in recent decades the rise of the so-called populist parties and leaders. According to the Timbro Authoritarian Populism Index, nowadays the overall popular consensus for left and right-wing populist parties combined equals that enjoyed by social democratic parties and surpasses the consensus for liberal parties. Although there are signs that this global trend might be stalling, in present Europe three countries have governments made up exclusively of populists, in six other countries they are part of ruling coalitions, and in four others they support non-populist governments. Donald Trump, unanimously considered a populist leader, was elected President of the United States in 2016.

Apart from any political or value judgement, what is striking is that whatsoever commitment to undertake measures for climate change (CC) mitigation is missing in the policy agenda of these parties and their leaders, and that—in some cases—the existence of the problem is denied. Considering that CC is now a fact supported by an overwhelming scientific evidence, that it is widely acknowledged and also perceived by most as a danger; this paper tries to understand the reasons behind the neglect or the open hostility that populist parties and leaders exhibit towards this issue, on the hypothesis that, by and large, they tend to reflect the preferences of their electorate. Since this sort of denialism may appear irrational, this paper applies the heuristics and bias literature developed by cognitive psychologists and behavioural economists to the explanation of populists' attitudes towards CC. In particular, it makes use of some findings from behavioural development economics to shed light on preferences (of deprived individuals) with respect to environmental policy, as well as of insights provided by the literature on social dilemmas and collective action to better understand the role of generalized trust when people choose whether to cooperate with others for preserving the environment. With this regard, the paper discusses the analogies between populists' attitudes towards policies for mitigating the effects of CC and their attitudes towards the policies for mitigating the effects of the recent Covid-19 pandemic.

What is summarized above is the original contribution of this paper, that may help modifying the ways in which the CC issue is usually framed, so as to present it in a more convincing and suggestive manner to those people that are attracted by the populist narrative.

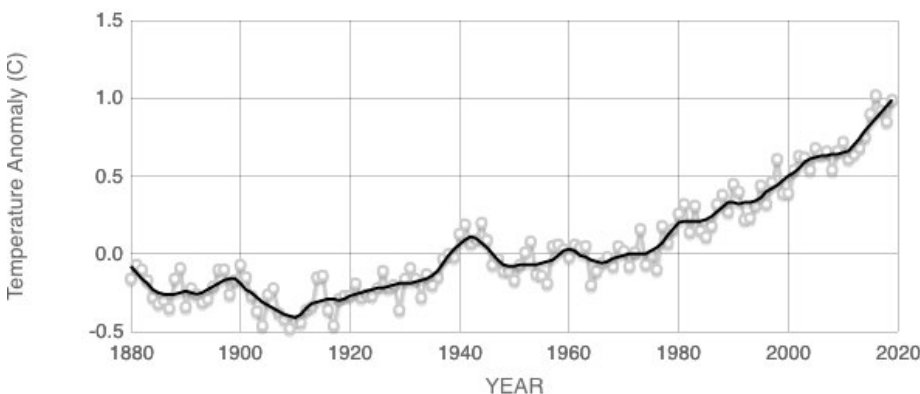
The rest of the paper is organized as follows: section 2 shortly explains why the climate change issue is salient and urgent; section 3 describes the context that has made the recent emergence of populism possible in the advanced economies; section 4 outlines the main characters of contemporary populism; section 5 discusses how cognitive psychology and behavioural economics can contribute to understand the populist attitudes towards CC; section 6 shows how the findings of behavioural development economics can be applied to explain the low willingness to pay for CC mitigation by deprived people that tend to vote for populist parties; section 7 focuses on how the low generalized trust among the typical voters for populist parties makes them reluctant to undertake collective actions as those for CC mitigation or for reducing the effects of the recent Covid-19 pandemic; section 8 summarizes what is missing in the CC issue to induce populists to give it priority, and section 9 concludes.

2. The urgency of the climate change issue

The Intergovernmental Panel on Climate Change (IPCC) of the UN defines CC in bio and geophysical terms as: “(...) changes over time in the averages and variability of surface temperature, precipitation, and wind as well as associated changes in Earth’s atmosphere, oceans and natural water supplies, snow and ice, land surface, ecosystems, and living organisms” (IPCC, 2007b). Since 1992, five CC assessment reports have been completed by the IPCC, identifying rapidly growing climate-related impacts and risks. Consonantly, the NASA Goddard Institute for Space Studies (GISS) reports that nineteen of the twenty warmest years since 1880 all have occurred since 2001¹ and that global mean surface temperature (GMST) has warmed from 0.5°C to 1.0°C (1980 to 2018) relative to the pre-industrial period (see figure 1). Increasing global temperature is, however, only one element of observed global climate change: precipitation patterns are changing, intensity and frequency of storms and other extremes are increasing.

Overall the increase in warming is projected to have consequences on human health also through the distribution and abundance of vector-borne diseases (such as dengue fever and malaria), and on countries’ national income, poverty and disadvantage through its impact on agriculture, industry, and tourism. Increases in global mean surface temperature (GMST) of 2.0°C or higher than the pre-industrial period, look increasingly unmanageable and dangerous to natural and human systems. As the IPCC puts it, “scientific evidence for warming of the climate system is unequivocal”, and addressing climate change has become one of the most pressing issues facing the planet and human beings. The IPCC Special Report, however, also points out that limiting GMST to 1.5°C or less is still possible and that it will require limiting GHG emission.

Figure 1. Temperature Rise since 1880



Source: climate.nasa.gov

Surveys report that there is diffused awareness of the above information and nearly everyone in surveyed populations has at least heard of CC (PEW survey, 2019; Leiserowitz, 2007). Consistently, there is a growing perception among people of CC as a threat: the fraction of population concerned about the climate

¹ With the exception of 1998.

threat has increased significantly in many countries, going from 56% in 2013 to 67% and beyond in 2018, as emerges from PEW surveys. The latest PEW survey (2020) shows that worries for CC have in some cases overcome the concern for the Covid-19 pandemic.

The perception of the problem among people is potentially pivotal due to the causal role of human activity in current and projected global CC, i.e. its anthropogenic origin. More than 90% of climate scientists agree that the global climate is changing, largely because of carbon dioxide emissions resulting from human activity (Anderegg et al., 2010; Doran and Zimmerman, 2009). However, along with its (anthropogenic) origin, the issue still allows for an equally anthropogenic solution: the IPCC Special Report concludes that limiting GMST to 1.5°C or less is still possible and that it will require limiting GHG emission. The call for action by the international community to bring GHG emissions to net zero by 2050, paired with the diffuse perception of danger among people, demand for a strong response by the political authorities at any level, which is possible only if the main political parties and movements adjust their offer so as to give priority to the CC issue.

3. Why populism emerges: the humus for populism

3.1 What is populism

It rarely happens that parties label themselves as populists. The term ‘populism’ is a vague term that has been used to describe a diverse variety of phenomena, which therefore allows for several different definitions. In the ideational approach, populism is an ideology that in the interpretation by Laclau (2005), Albertazzi and Mc Donnell (2008), de la Torre (2019), and Mudde, finds its fulcrum in the opposition between two antagonistic groupings. On the one hand are "the people", the morally good ones; on the other the “elite”, the oligarchy or power block depicted as corrupt, self-serving and depriving (or attempting to deprive) the sovereign people not only of their rights and voice, but also of their values, prosperity and identity (Albertazzi and McDonnell, 2008). Mudde (2004) portrays populism as the “voice of the people” that aims for policies that are understood by the people and reflect their will. According to Laclau, populism is an emancipatory social force through which marginalized groups challenge dominant power systems; others still, boil it down to populism as anti-institutionalism (Acemoglu, Robinson and Torvik, 2013). Populism is also generally defined as a thin ideology which allows for its form to vary widely. It coexists and is complementary to both right or left-wing ideologies: both right and left-wing populisms exist. The “people” populism refers to, are defined based along class, ethnic, or national lines and the “elite” is identified as a homogeneous entity comprising the political, economic, cultural, and media establishment, all accused of placing their own interests and often the interests of other groups² above those of "the people".

The populist electorate is generally characterized by a weaker social position (Kriesi et al., 2008) along with low levels of education (Elchardus and Spruyt, 2016), typically working class or lower middle class and the unemployed. Those who are most affected by modernizations and more likely to feel threatened by the rapid

² large corporations, foreign countries, or immigrants

changes in post-industrial societies and fear ethnic competition since they stand among the losers (Rodrik, 2017). This results in higher levels of political distrust and dissatisfaction, eventually ideological extremism (Pauwels, 2014).

Present-day populism in the Western world originates in the 1980s. Its consensus has grown since, and it nowadays dominates the political scene in some important countries (Timbro Authoritarian Populism Index). Considering the strong rise of the populist consensus, it is helpful to understand what the context variables that favour its emergence and development are: what are the 'initial conditions' that open the field to its proliferation.

In the literature, such factors are identified in discontinuity events and structural change: a financial crisis, globalization or technological advancement. More specifically, in the related cascade effects that ensue lower living standards, stagnation or outright depression, a cultural and educational divide, a highly uneven income distribution, an increase in unemployment as well as a change in its composition. In summary, the triggering factors are identified in the structural changes that lead to the emergence of economic insecurity, of globalization losers in the population and of a generalized dissatisfaction with a consequent fall in trust in institutions and the establishment (Tabellini, 2019; Guiso et al., 2018; Kriesi et al., 2008; Dornbusch and Edwards, 1991; Drake, 1982; Guiso et al. 2010). This in turn gives rise to two opposite effects: on the one hand a decrease in the probability of vote participation (increase in abstention), i.e. the 'disaffected voter' syndrome (Ramiro 2016); and on the other an increase in the vote for populist parties (Guiso et al., 2017; Pauwels, 2014).

However, according to some authors (Funke et al., 2015) the pivotal point is not as much in the crisis or structural change itself, as it is in the perception of its endogeneity or exogeneity. In their view, a non-financial macro crisis is considered to be caused by external shocks and cannot be avoided: it is therefore perceived as excusable. This type of shock produces an increase in consensus around the incumbent government³. A financial crisis instead, is perceived as endogenous: resulting from corruption, policy failures and moral hazard for which politics/politicians can be blamed; hence it is perceived as avoidable and inexcusable. It is the latter that produce general dissatisfaction in the functioning of democratic institutions and in traditional parties, with a consequent fall in trust. The resultant is an increase in the polarization in voters' behaviour (Funke et al. 2015) which gives rise to new space in the political spectrum, both on the right and on the left (Guiso et al., 2017). Funke et al. (2015) show how this occurred after every endogenous crisis in developed countries from 1890 to the great crisis of 2008. In the same vein Aglan et al. (2017) and Dorn (2018), consider the political consequences of the great recession in 2008 and find a strong correlation between the raise in unemployment and the decline in trust in institutions and in establishment politics⁴.

³ at the time of writing (spring/summer 2020), Italy is going through a crisis due to the covid 19 pandemic, which can be defined as exogenous and the data on the consent to the government in office in the various European countries (Demios survey, Sole 24 Ore) confirm the view of Funke et al. (2016)

⁴ 1% increase in unemployment rate 2-3% increase in voting for antiestablishment parties

Dutsman et al. (2017), Guiso et al. (2018) instead, explain how economic insecurity allows for entry spaces at the two ends of the political spectrum. Additionally, traditional democratic parties that drift towards a deregulation that "neglects the wishes of their traditional supporters" and the consequent absence of the supply of traditional welfare state protection by traditional parties is also found to contribute (Tabellini, 2010).

4. The characteristics of the populist offer

The way in which populist parties propose themselves is anchored to the context that allows for their flourishing. The novelty of their manifesto lies in the opposition to the existing: they propose themselves as a break with the past, as an alternative to traditional parties and as anti-establishment. Populist parties typically propose short term protection policies (Guiso et al., 2018; Acemoglu 2013, Dornbusch et al., 1991). They respond to the “losers” demand for structural changes, for the welfare protection neglected by traditional parties (Tabellini, 2010) as well as for a credible differentiation from the interests of the elites (Acemoglu, 2013).

The yearning by the electorate for a differentiation from the establishment is such that it turns into disdain for competence. Di Tella and Rotemberg (2016) talk of betrayal aversion of the elector who is disillusioned with traditional and competent parties and thus shows a preference for new and untested candidates, to the point of finding incompetence appealing (Acemoglu, 2013). Indeed, disappointment leads to a greater propensity to risk: disappointed voters welcome risk as a chance to make up for what they have lost (Panunzi, 2019; Quattrone and Tversy, 1988). The comparatively minor competence of non-traditional parties representatives is thought to minimize the danger of betrayal to which the voter is normally averse (Tella et Rotemberg, 2016). An example are the US 2016 presidential elections where the competence gap between the candidates (Trump/Clinton) was clearcut but did not help the Democratic candidate to win.

Another characterizing feature of populist parties is their narrative or storytelling. Populists use a language that resonates: strong, simple and effective. The aim is to connect with the “people”. The effectiveness lies in creating a simple and understandable story through recurring elements and ingredients such as an absolute simplification of society, identifying an impending catastrophe or disaster that puts people in danger, an enemy and eventually a saviour, and an intuitive short term solution. All in all, a story that everyone can understand also by way of the "KISS" principle: “keep it simple, stupid” mentioned by Joern Precht (2018). The effectiveness of this narrative is transversal to different cultures and to very different countries (Europe, USA, South America), irrespective of cultural differences. The identified reason lies in the fact that it mainly hinges on feelings that appeal to the whole of humanity in a transversal way: nostalgia, fear of the unknown, of being threatened and eventually feelings of hope offered by the new candidate (Joern Precht, 2018). In the story the populist leader is the hero / the saviour offering the illusion of paternalistic care.

5. Characteristics of the CC problem: maybe tomorrow and in somebody else's backyard...

Analysing the CC problem from a behavioural economics perspective, allows for a better understanding of the struggle people experience in perceiving the issue and the consequent difficulties in reaching a sufficient consensus to undertake a CC mitigation action. CC is a complex problem that is known to most people thanks to extensive information: there is widespread awareness and "Across nations, nearly everyone in surveyed populations has at least heard of the issue..." (PEW survey 2019; Leiserowitz et al., 2017).

The source of information on CC are scientific forecasts which, as such, concern situations of the undefined future: it is not known how close the CC emergence is. This implies a certain degree of unpredictability which concerns not only the timing, but also the extent and distributional impact of CC (Stenmann & Bekke, 2008). In fact, CC is perceived by many as distant in time (mostly in the future) and somewhere far geographically; characteristics that make it considerably uncertain and "invisible" (Weber, 2010; Moser & Dilling, 2011; Hardisty et al., 2010). In some cases this is aggravated by science rejection, as is the case with the erosion of trust in science among conservatives in the United States (Lewandowsky et al., 2016); and by responsibility rejection, i.e. the rejection of the anthropogenic origin -CO₂ emissions- of CC (Mc Cright and Dunlap, 2010). These do not depend on literacy and education (Lewandowsky et al., 2016; Weber, 2010), but are due to the contradictory information in the media and to the political-ideological cue such as the 'manufactured doubt' created by vested interest groups⁵(Jacques et al., 2008). The resultant is general awareness based on superficial information among most (Leiserowitz et al., 2007; Moser and Dilling, 2011) and one which does not touch personal concern, which remains low (Hardisty et al., 2010; Weber, 2010). In line with this, in wealthier countries, most responsible for CC according to the theory of CO₂ emissions, although CC is perceived as an important problem, it is not considered a highly dangerous threat. Lo & Chow (2015) find a positive correlation between GDP and perceived importance of CC, but a negative correlation with the related perceived risk. Thus, it is not surprising that the CC problem is likely to be overcome by threats recognized as more immediate (Moser & Dilling, 2011, Hardisty et al., 2010).

Uncertainty also characterizes the actions proposed for CC mitigation: there is a time lag between the mitigation actions implemented today and the potential results in the future (Hardisty et al., 2010). This also regards the terms within which such actions must be implemented not to become futile: there is no defined deadline. The various types of costs involved (hassle, change of habits and not least, monetary) in the implementation of PMCC (preventive mitigation climate change) actions are characterized by certainty instead: these cannot be deferred in time and will be incurred with certainty in the present or near future. The highlighted characteristics of the CC problem trigger a series of biases that lead people to discount CC risks.

⁵ 90% of the books that endorse skepticism on environmental issues are sponsored by conservative think tanks (Jacques et al., 2008), which feed conspiracy theories.

5.1 The CC issue in terms of cognitive psychology and behavioural economics

Given the characteristics of the CC problem and the widespread awareness of its existence and importance; it is the reading of it in terms of cognitive psychology and behavioural economics that enables an understanding of the inertia towards the issue and the lack of a consequent widespread sense of urgency by the majority. In confirmation of this, the findings from behavioural economics ground the growing recognition that the model of extreme rationality is of limited value as a predictor of human behaviour in complex collective social problems (Camerer, Loewenstein, and Prelec, 2005; Reiskamp, Busemeyer and Mellers, 2006) and identify the regularities and biases in human behaviour that intervene and cause the drift from rational choice.

To begin with, (scientific) information on CC is disseminated by means of statistics and forecasts. This triggers statistical biases including the tendency to under-infer from large samples and to generalize from a small amount of information, in particular from experience (Griffin and Tversky, 1992; Benjamin et al., 2016); but also (the tendency) to form beliefs asymmetrically with a propensity to discount bad news but embrace good news (Sharot et al., 2012). This curbs the formation of accurate beliefs, which are necessary for making rational decisions. Furthermore, this type of information lacks vividness, personality and the 'identifiable victim' (Jenni and Loewenstein, 1997; Nisbett and Ross, 1980); which results in emotional distance. Thus, there is no personal concern and affect, which are the driving forces behind action - in our case CC mitigation (Weber, 2010).

The CC problem is proposed as a forecast; thus, in hypothetical, uncertain as well as long-run terms. This allows for the 'availability heuristic' and the "exposure effect" to occur, thanks to which our attention is diverted from distant or speculative dangers towards those that are perceived as close and concrete. Personal forecasts also tend to be biased by recent events and not by those stimuli that remain beyond our personal experience (Hardisty et al., 2010). Even in the case of perfectly sophisticated agents, with regard to their present bias, their commitment will not be optimal if there is uncertainty about the future (Amador et al., 2006; Laibson, 2015). The characteristics of 'future' and 'potential' event results in a (mental) processing in abstract terms, unlike events close in time which are construed in concrete terms (Trope and Liberman, 2003). There is a discrepancy between affective strength and impact: future events lead to an abstract representation and lack associations connected to emotional reactions, on the contrary present events are connected with affective associations. The minor concern for CC derives from a disconnection between the analytic and affective systems⁶ (Moser & Dilling, 2011; Weber, 2010). Affect, in particular negative affect, is the wellspring of action (Peters and Slovic, 2000).

The information on the subject is not unambiguous but controversial, which allows for a confirmation bias.

⁶ People have been shown to process information in two distinct ways, mediated by different neural substrates when making judgments or arriving at decisions on the basis of temporal and spatial association and similarity. The associative system is intuitive, automatic, and fast. It maps uncertain and adverse aspects of the environment into affective responses (e.g., fear, dread, anxiety) and thus represents risk as a feeling (Loewenstein et al., 2001). This system requires real world experience as an input. The second processing system works by analytic algorithms and rules, including those specified by normative models of judgment and decision making (e.g., the probability calculus, Bayesian updating, formal logic, and utility maximization). It is slower and requires conscious awareness and control.

Thus, people tend to selectively hear and collect evidence that supports their pre-existing beliefs and underlying values (Braman et al., 2012) which is motivated by identity-protective cognition thanks to which each group of people will foreground the aspect of information that is congruent with their worldview. Depending on worldview is also a differential in risk perception, as is the case of partisan CC perception between democrats and conservatives in the US (McCright and Dunlap, 2011). Cognitive shortcuts and conspiracy theories also intervene (Lewandowsky et al., 2013). Contradictory information on the likely consequences of CC or on the best strategies to avoid them, also allows for cognitive dissonance (Festinger, 1957) and inconsistency between beliefs and behaviours. This causes an uncomfortable psychological tension resulting in a change of beliefs so as to fit behaviour instead of the opposite. With respect to climate, this implies that people who cause large greenhouse gas emissions, e.g. the middle class, tend to believe that climate change problems are overstated. The concurrence of these biases further results in science rejection (Lewandowsky & Oberauer, 2016). Surprisingly, the level of education, scientific knowledge, and science literacy is not influential if not minimally (Allum et al., 2008). One striking aspect of the public's views of science is that the general level of education, are only modestly predictive of the public's general attitudes and trust in science.

The uncertainty or ambiguity of the issue, as well as its manifestations and solutions also allow for the environmental optimism or positive illusion bias: people are likely to overestimate their ability to avoid or cope with environmental degradation, downplay the probability of being personally affected by it and overestimate their ability to control events even if things go badly. At the other end of the spectrum, when CC is perceived as an overwhelmingly serious problem without effective strategies to counter it; the resultant is denial, numbing, and apathy, i.e. reactions that control the unpleasant experience of fear rather than the actual threat (American Psychiatric Association, 2009; Center for Research on Environmental Decisions, 2009).

These biases are not mutually exclusive, on the contrary they add up and along with present bias they lead to discount the CC problem.

6. Why is the populist electorate biased against CC mitigation policies?

To understand why the deviations from expected utility maximization studied by prospect theory and the other biases outlined above are particularly well founded among the populist electorate, a parallel can be drawn with some findings from behavioural development economics. Behavioural development economics studies the choices whereby poor people in developing countries decide whether and how much to invest in health prevention (Rao and Kremer, 2019). The preventive climate change mitigation action/investment (PCCMI) can be interpreted in terms of a present investment to avoid or contain the future cost of CC; this is comparable to the investment choice in health prevention (PHI) of the deprived/poor in developing countries. As with PHI, PCCMI involves present costs for a potential future benefit. In both cases there are short run costs both in monetary and hassle terms (or utility costs), and in both cases costs are considered to be outweighed by potential long-run benefits often in the distant future. Furthermore, there are no clear take-up

deadlines, which is found to be pivotal in PHI decision making (Mani et al., 2013). As for PHI, although the return opportunity is high, for PCCMI too there is low take up: in one case and in the other the problem is underinvestment.

The parallel with PHI works because of the common characteristics between the two preventive investments and because of the commonality / similarity between the actors involved. In fact, one can compare the attitude of the poor in developing countries with respect to the PHI problem, to that of the losers of structural changes that populists are addressing in developed countries, with respect to the CC problem. The difference in the country scenarios is levelled out by the agents' situation of deprivation. Growth of insecurity, due to a decrease in job security in the lower and middle classes in developed countries for example, triggers a way of thinking of the 'poor' in terms of time discounting (Schilbach et al., 2016). The situation of deprivation causes a high cognitive load, there is not just a correlation but a causality between deprivation and mental function: the deprived agent needs to direct all his physical and mental resources towards present, immediate needs (Schilbach et al., 2016). The cognitive bias produced by poverty, a 'cognitive tax' induced by the situation of deprivation itself, is to be considered relative (to the context): it is therefore also valid in developed countries (Schilbach et al., 2016; Shah et al., 2012). Hence, it can be considered that the deprived middle-class behaves as the poor in developing countries.

The cognitive load of deprivation / uncertainty leads to counterproductive behaviours (Shah et al., 2012) and amplifies the effect of the mentioned biases (and discounting) which interferes with the decision making regarding a long term and uncertain consideration such as a PHI or a PCCMI. In addition, a liquidity-constrained individual shows high sensitivity to convenience or hassle costs and price, further restraining forces that translate into low willingness to pay (Dupas & Miguel, 2017). Furthermore, in line with the concept of 'finite pool of worry' or 'apocalypse fatigue' (Nordhaus and Shellenberger, 2009) (Weber, 2006) which contributes to discount future or hypothetical issues; the CC issue is given little weight (Shiv Fedoirkin 1999; Moser & Dilling, 2011) and it keeps slipping behind more pressing matters. A good example is the Good Samaritan study (Darley and Batson, 1973)

The considered biases add on to the generally valid 'present bias' introduced by prospect theory, owing to which present losses loom larger than gains in the future (Kahneman and Tversky, 1979). This is especially true for naïve individuals but, 'individuals are largely naive on average' (Kremer et al, 2019; Augenblick & Rabin, 2018). In general, present bias causes indefinite procrastination in the take up of preventive actions because it induces to put less weight on future benefits than on current costs.

7. Social dilemmas and populism in the face of CC and covid-19 pandemic

There is an additional dimension of the CC issue that goes beyond the short-termism often affecting intertemporal decision making. Indeed, CC is a tragedy of the commons, that is a situation where each individual has free access to a shared resource (the "common"), but no incentive to limit his/her exploitation of it. In such situations, interdependent actors typically face the dilemma whether to act as free riders, thus leading to the overexploitation of the resource to the detriment of everybody, or to undertake some form of

collective action, namely to incur some cost in order to cooperate with others for safeguarding the resource. It is well known that individual rationality should suggest to free ride; however, in many cases cooperation emerges as a result of psychological mechanisms and social norms that induce people to deviate from strict self-interested rational behaviour. In particular, the presence of generalized interpersonal trust (or social trust), namely individuals' belief that people they have not met before will not act opportunistically to take advantage of them, is essential in many social contexts to make cooperation possible.

Thus, low trust among individuals is an obvious obstacle to collective action, and this also applies to actions aimed at preserving the environment. In parallel/concurrently, there is evidence indicating a strong correlation between low voter reciprocal/social trust and preferences for populist governments (see Keefer et al., 2019): *“low social and political trust reduces voter incentives to support candidates who promise high-quality government and increases their incentives to support populist candidates”* (p.2). In contrast, *“Social trust facilitates the expression of citizen demand for good government by lowering the costs of collective action, allowing citizens to achieve their common goals by holding politicians accountable at the ballot box”* (p. 9), and *“voters who oppose populists and support the candidates of high-quality government must necessarily also support policies that are sustainable”* (p.16). Hence, low generalized trust seems to be an important determinant of both people's reluctance to invest for mitigating CC and their inclination to vote for populist parties and leaders.

It has been noticed that the recent Covid-19 pandemic has created social dilemmas that are closely parallel to those that individuals face in regard to CC. Indeed, precautionary measures such as social distancing and staying at home impose personal costs and spread their benefits throughout the community by slowing contagion of Covid-19 and reducing the chance that hospitals can be overwhelmed. Given these personal costs and diffuse benefits, individuals are tempted to live their lives as normal, while letting others pay the economic and psychological costs of staying at home or social distancing. Obviously, if all—or a large number of people—indulge that temptation, then the transmission of the virus accelerates and everyone would have fared better by complying with the precautionary measures (Johnson et al., 2020).

The collective action problems posed by policies to mitigate the impact of the Covid-19 pandemic have led some commentators to remark that *“there is no way that government—however well organized and professional—can address challenges like this pandemic without a civic-minded citizenry that trusts the public health advice of its government and is committed to the rule of law”* (Bowles and Carlin, 2020). It is argued that this is one of the main reasons—together with their disdain for expertise and science—why populist governments and leaders, like President Bolsonaro of Brasil, Prime Minister Johnson of the United Kingdom or President Trump of the United States, have been unable—especially in the initial phase of the pandemic—to slow the spread of the virus within their countries. Therefore, the populists' propensity to despise social solidarity and their low confidence in social action helps explaining why governments of this type have tackled the Covid-19 emergency either through a laissez-faire approach that matches the individualistic and free riding attitudes of their constituency (then being forced by the rapid diffusion of the virus to partially revise this strategy), or through an authoritarian approach such as that followed by

Hungarian Prime Minister Orban and Czech Prime Minister Babis.⁷ Indeed, along the many analogies between the populist approach to the policies for mitigating CC and those for mitigating the impact of the Coronavirus, one should account for an important difference, due to the fact that—in the case of the pandemic—the effects of government policies become apparent to everybody in a short lapse of time and are comparable with the effects of the policies implemented by other governments (in spite of the attempts by some authoritarian governments to report fake data on Covid-19 diffusion and casualties). In contrast, the effects of government policies for CC mitigation are likely to become fully evident in a much more distant future and it is harder to attribute them to the action of a particular government, thus allowing governments that deny or minimize the problem to stick to their approach.

8. So why do populists neglect CC?

The answer to the question above is related to the peculiarities of the variables that are part of the problem: the characteristics of the CC issue itself, those of the populist electorate (the populist demand), those of the populist political offer and finally the specific features of the contingent situation.

With regard to the CC issue, it is more about what is missing for making it appealing within a populist frame. Indeed, it does not have those characteristics of certainty, apparent fairness, saliency, blame, potential/apparent short-term solvability through simple policies and souverainism that qualify the populist discourse.

First, certainty is missing. Climate change is affected by more sources of uncertainty: timing, location and magnitude of the effects are not certain. All this makes the CC problem somehow invisible, thus not contributing to give an image of attractiveness to the costly actions needed for CC mitigation (see Amador et al., 2006; Laibson, 2015). Also the effects of a possible PCCMI are uncertain in their timing and magnitude, being only potential. What is certain, instead, is that any PCCMI implies non-negligible costs, both monetary and utility losses. This is at odds with what is peculiar to the populist political offer, that is a discount bias towards short-term rewards.

Second, the distribution of such costs is unfair: not only is there evidence of a differential social impact of CC and an uneven pattern of relative social vulnerability, with a greater burden that is expected to be borne by more deprived groups (Preston et al., 2014), but also of an unequal distribution of the costs and benefits of the CC mitigation policies. Lower income and other disadvantaged groups are those that contribute the least to cause CC, but concurrently pay the most (in proportion to their income) for the possible implementation of CC mitigation policies (Preston et al., 2014). This is a “climate injustice” affecting that part of the electorate from which the populist parties draw their consensus, which helps explain why these parties do not support CC mitigation policies.

Third, there is no perception of saliency: the problem is presented through scientific projections and lacks the real world experience that our mind’s associative system needs to translate risk into affective reactions

⁷ On the different approaches whereby populist governments and leaders have tackled the Covid-19 pandemic, see—among others— Kavakli (2020), Meyer (2020), Mudde (2020).

(Antarctic ice that melts are not a direct experience), which are necessary to spur us to action (Weber, 2010). Indeed, the lack of saliency prevents a response from the affective system, while triggering the analytical system (Lowenstein, 2003). Furthermore, the complexity of the problem eludes the process of simplification that is necessary for a populist narrative. In case saliency is sought through a negative and catastrophic narrative, the results tend to be counterproductive: “an excessive focus on negative impacts (i.e. a severe ‘diagnosis’) without effective emphasis on solutions (a feasible ‘treatment’) typically results in turning audiences off rather than engaging them more actively” (Moser and Dilling, 2011, p. 165).

Fourth, there is no possibility of blame: the CC is attributable to human beings and their productive activities. According to World Bank data, 52% of production based emissions are attributable to the middle class and 54% are consumption based CO2 emissions. Notwithstanding the anthropocenic cause is endorsed by an overwhelming scientific consensus (Bedford et al., 2013), it is questioned by some. In the US, for example, the erosion of trust in science among conservatives (Gauchat, 2012), partly attributed to the 'manufactured doubt' created by vested interest groups, is reflected in the denial of the anthropocenic causes of CC (e.g., Hamilton, 2011; Hamilton et al., 2015; McCright and Dunlap, 2011). In any case, there is no definite and identifiable enemy to oppose, a culprit, since this cannot be the productive middle class. The populist approach, instead, requires an enemy, some "other" that is concretely identifiable and perceived as such by the dissatisfied electorate. The lack of this feature does not allow for the affective associations that are necessary for the populist rhetoric/setting to be triggered and does not allow for the usual in-group/out-group bias.

Fifth, a potentially decisive short-term policy is missing: there is no 'easy fix' that typically characterizes populist proposals. On the contrary, PCCMI implies a redefinition of the organizing principle of the post-industrial society, a change in the cultural pattern that is at present dominated by consumerism and materialism (Lo & Chow, 2015; Gowdy, 2008).

Sixth, CC is an issue that cannot be addressed merely domestically: it has a global dimension that must be addressed through a multilateral approach in order to prevent free riding by the various countries. The nationalist rhetoric of the populists and their souverainism make them very reluctant to commit their countries to comply with international agreements that limit the emissions of the signatory states.

9. Concluding remarks

Our times are characterized by what is perhaps the most serious threat ever faced by our species: global climate change. To address this challenge, the complexity and characteristics of the problem itself require besides the engagement of individuals, the intervention of the authorities. Considering the widespread awareness of the existence of climate change and the danger it represents, as emerges from surveys, we would expect an almost unanimous consensus among the electorate on the priority that these issues should have in the political agenda of all parties and leaders. In fact, while traditional parties have gradually enclosed climate change mitigation policies in their programmes (as, for instance, emerges from the importance that the European Commission headed by Ursula von der Leyen—which is supported by a

coalition of traditional centre-right and centre-left parties—attributes to the “Green Deal”), it is striking how parties and leaders that have appeared and rapidly gained consensus in the last two decades, the so-called populists, are either generally neglecting climate change or are openly hostile to policies that resolutely address the issue.

In trying to understand why populists exhibit such an attitude, this paper analyses the peculiar characteristics of the climate change issue and of the populist political offer, as well as the conditions that allow for this type of party to take hold. Subsequently, the analysis is reinforced through the lens of behavioural economics and by borrowing specific findings from behavioural development economics, thus identifying the biases that typically affect people’s perceptions and reactions with regard to climate change. Indeed, while partial naiveté and present-bias, by which most people are affected (Kremer et al., 2019; Augenblick & Rabin, 2018), may help explain the success of populism and its lack of interest in climate change, this paper advances that these biases are exacerbated by the cognitive load caused by the relative deprivation that lower income individuals often experience.

Emphasis is also given to the fact that the environment is a common good, hence people face the social dilemma of whether to bear some cost for safeguarding it or free riding on the efforts of others, which is a further explanation of why populists are lukewarm or even openly hostile to collective actions aimed at reducing greenhouse emissions. High social (generalized) trust is crucial for keeping free riding on check and allowing effective collective action, while low social trust seems to characterize those groups that are more inclined to vote for populist parties and leaders. It is thus straightforward to remark how the populists’ propensity to despise social solidarity and their low confidence in social action, can shed light on the deep reasons underlying the tendency of populist governments to deal with the Covid-19 emergency either by a laissez-faire approach matching the individualistic and free riding attitudes of their constituency, or with an authoritarian approach.

The identification of the reasons explaining the neglect of climate change by populists or their aversion to the policies for addressing it, can be useful to understand what is the most effective way to present this issue in order to engage that part of the electorate that is sympathetic towards populist parties. A direction to take is thus outlined. It might seem paradoxical but it can be desirable to adopt a language closer to the populist-type direct rhetoric, with the aim of reframing the climate change issue in modalities which are more appealing to their electorate. This amounts to set the problem in such a way as to make it personally engaging, and to provoke a sense of urgency that is still missing, thus gaining that character of saliency that many people still do not feel. To this purpose, some research has identified the use of narratives—that is, personal anecdotes or “storytelling”—as a powerful means to communicate science (e.g., Dahlstrom, 2014). At the same time, climate change should be presented not only as an impending catastrophe, but also as an opportunity for implementing new policies that will bring about innovative activities and good jobs (ILO, 2018). Moreover, climate change should not any longer appear as something belonging to the intellectual and political elites, but as an issue that primarily concerns the well-being of the entire community and in particular that of the lower classes and their descendants. To this end, it must clearly emerge that the cost of

the policies to combat climate change will be shared fairly and will therefore be borne more than proportionally by the wealthy classes. An additional nudge in this direction is the idea of a “green populism” (Davis, 2000), hinging on the critique of an “unworldly” science of experts allegedly presenting “objective” facts in ways that appear to be functional to the interests of the elites. A science showing a more pronounced vocation to care for humans and all living things could be the foundation of this alternative form of populism focused on environmental problems.

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