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The Environmental Policies of Populist Radical Right Governments

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Abstract

What are the consequences of electing populist leaders? This question is of continued importance as populist leaders challenge elections and impact politics across the world. While the consequences of populist electoral victories on democratic processes have been widely examined, other arenas are still being explored. The environmental policies of populist leaders are particularly important as climate change affects an increasing number of people on a global level. In this paper I show how populist radical right leaders respond to this global crisis by doubling down on economic nationalism and prioritizing national goals of development and claiming that fighting climate change is a Western imposition on domestic politics. I use a mixed methods approach that employs the most complete global data on populist leaders and their environmental stances as well as the case study of Hungary to show how populism doubles down on economic nationalism in the environmental arena.

Keywords: Populism in government; ideology; environment; policy

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Introduction

The recent wave of populist electoral advances—from near victories to serious challenges in electoral competitions—across the world has been analyzed as a reaction to the sweeping changes brought on by globalization, from financial crises and economic dislocations to increased immigration. The anti-immigrant, anti-refugee, and nativist rhetoric present in many of these campaigns has received the bulk of the academic attention.[1] While the cultural and identity elements behind the recent populist resurgence are important when explaining why more extreme parts of the electorate support these movements, populist parties' platforms on economic policies—specifically how to deal with the consequences of globalization or regional integration—are what attract more comparatively moderate voters to these parties, propelling populists to the current situation where they might actually stand a chance to occupy the highest political offices in an increasing number of countries. As the ecological consequences of human economic activity become more extreme, it is important to expand the study of populist modes of governance to environmental policies, as well as understand how varieties of populism might result in diverse policies.

The economic dimension of the populist agenda is already hard to study due to the infusion of the economic agenda with cultural politics. Environmental policies suffer from the same problem. In the case of economic politics, most researchers argue—and this research agrees with this point—that populist parties are often vague[2] in their policy promises beyond their trademark anti-immigrant stance. Many view populist economic agendas as simple rants against economic liberalization, foreign involvement in national economies, and a promise to reverse the economic consequences of the last twenty years of globalization, financialization, and liberalization (Pauwels 2014). I argue that this suspicious view of international politics and cooperation bleeds into how populist governments view environ mental politics and climate change.

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1 See Schain (2006); Akkerman (2012); Norris and Inglehart (2019) among many others.

2 On populist empty promises see Adamson (2016).

In this paper I show how populist leaders go beyond simply denying the existence of human-caused climate change, but that in the name of "the people" and economic nationalism, any action that could require economic transformation to mitigate climate change will be seen with suspicion or as an interference into the domestic politics of the country. Moreover, I will also show how international cooperation in climate change will be seen as imposition from foreign elites.

In this paper I first discuss my argument that right-wing populism doubles down on economic nationalism in the environmental arena. Next I delve into current populist politics and the nature of economic nationalism as well as the expected outcomes for left-wing populism. Then I discuss preliminary results from the quantitative data analysis. I then detail the Hungarian case study and the environmental stances of Viktor Orbán's time in power.

The populist economic agenda

Almost every analysis of populism begins by pointing out the vagueness of the term and the difficulties in defining it (e.g., Gellner and Ionescu 1969; Hawkins et al. 2018; Taggart 2000; Mény and Surel 2002; Havlík 2016). This is due to several reasons. First, there is a long-standing academic debate over whether the concept should be understood as a (thin-centered) ideology, a strategy, a communication style, or a discourse (Mudde 2017). A second reason is the variety of uses in which this term appears in the media and in political competition as a means of discrediting rivals (Havlík 2016).[3]

However, the recent attention to the success of these parties has also pushed academia toward a more rigorous discussion of this term. In recent years scholars have agreed on an "analytical core of populism." It consists of three fundamental, tightly connected characteristics.

These characteristics are (1) a perception of people and elites as homogeneous groups, (2) an antagonistic relationship between these two groups, and (3) a view of "the people" as morally sovereign (see Mudde 2004,; Hawkins, Riding, and Mudde 2012; Rooduijn et al. 2014). Cas Mudde's definition is perhaps the best encapsulation of these three characteristics with populism being defined as "a thin-centered ideology that considers society to be ultimately separated into two homogeneous and antagonistic groups, 'the pure people' and 'the corrupt elite,' which argues that politics should be an expression of the *volontégénérale* (general will) of the people" (Mudde 2004, 543).

[3] Leaders across the political spectrum, around the world, and across time have at one point had this label associated with their political positions.

But how does this definition translate into a governing program? Recent political campaigns run by populist leaders show the way well-versed orators can turn the distinction between people and elite into a major political division that spurs voters into anti-establishment voting and desire to "drain the swamp" of "politics as usual."

However, this does not translate easily into policy. Until recently many populist parties were analyzed as "successful in opposition but failures when in power"[4] or as "dogs that bark loud, but hardly ever bite" (Mudde 2013, 536). Some scholars have emphasized that these parties tend to perform weakly in office due to difficulties they have organizationally in bridging the gap from opposition to government (Heinisch 2003; Mudde 2007, 266, 281; Luther 2011).

In contrast, other findings indicate that radical right and populist parties in government had a substantial (direct or indirect) impact on policy output (Lucardie 2008; Minkenberg 2002, 16; Albertazzi and McDonnell 2010), especially when it came to immigration policies (Schain 2006; Akkerman 2012) and their effect on democratic development (Mu¨ller 2016; Canovan 1999). These parties were considered especially poor performers in economic matters. Many view populist economic agendas as simple rants against economic liberalization, foreign involvement in national economies, and a promise to reverse the economic consequences of the last twenty years of globalization, financialization, and liberalization (Dornbusch and Edwards 1990; Acemoglu, Egorov, and Sonin 2013). Some argue that socioeconomic issues are secondary to populists (Grzymala-Busse 2017) and are often logrolled for sociocultural issues in negotiations with their coalition partners (De Lange 2012). By comparison Dani Rodrik provides a compelling case for distinguishing between political and economic populism and the importance of economic issues in certain strands of populism (Rodrik 2018a, 2018b).

Yet, socioeconomic issues are at the heart of the populist agenda. In their defense of "the people" against "the elite," populists try to speak directly to the "losers of globalization"—often equated with "the people"—and sharply criticize those who gained from liberalization and globalization, usually the political and economic elites (national or international).[5] Additionally, perceived lack of responsiveness of established parties to the plight of "globalization losers" has provided a chance for their mobilization by the new populist right (Swank and Betz 2003). According to Hanspeter Kriesi et al. (2006, 2008), the mobilization of the group of "losers" by parties of the new

[4] For Adamson it is clear that the reason why populist politicians are not as successful at policymaking is because "they fail to recognize political complexities and instead make use of appealing—and "populist"—stereotypes. However, this is often only a short-term phenomenon, because the inconsistency of its overambitious, all-encompassing, and ultimately unrealistic political program soon becomes evident." (Adamson 2016, 61) However, is this still the case?

[5] For example Pauwels argues that "while there is no such thing as a single socio-demographic group that supports populist parties, these parties do generally attract social groups that feel themselves deprived" (Pauwels 2014, 7).

populist right and by transformed established parties of the liberal and conservative right has provided the key impetus for the transformation of the party systems in Western Europe and the 2008 financial crisis only increased these changes (Kriesi and Pappas 2015).

Traditionally, economic populism was very much a phenomenon of the left side of the political spectrum. Emerging in 1920s Latin America, this concept was associated with policies including a proactive role of the state, setting up protective tariffs, transferring income from exports to the domestic sector, redistributing wealth among the population, creating a supportive infrastructure, and expanding consumption and welfare facilities (Mudde2000). While today we tend to speak of right-wing populist parties (Akkerman, de Lange, and Rooduijn 2016), trying to place these parties on the left-right spectrum is particularly difficult.[6]

It is possible to find parties that are placed staunchly in the rightist camp, in terms of their cultural and identity politics, but end up very much on the left in terms of their economic policy, especially when we consider their views on what the role of the state should be in the economy. While many argue that in terms of economic policy populism seems to simply be associated with bad policies (Hawkins 2010), upon closer inspection whether a populist party veers more to the left or to the right of the political spectrum in terms of economic policy will be a condition of the context we are dealing with. For Kirk Hawkins "statist redistributive policies such as the [ones under Hugo Chavez] are understandable consequences of a populist worldview in a material context of poverty and inequality. In environments of greater income and better distribution of wealth, populists may instead push policies in a rightist direction that favors macroeconomic prudence and property rights" (Hawkins 2010, 196). In selecting a path, both left and right are possible outcomes, the choice depends largely on the interaction of populist ideas with the socioeconomic context (Hawkins 2010, 229). Moreover, the Latin American experience has also resulted in the conceptualization of inclusionary and exclusionary populism on the basis of both economic and migration policies (Mudde and Kaltwasser 2013).

Some have argued that when it comes to "complex policies such as economic policy, populists tend to continue the policies of their predecessors and to respect the obligations of international alliances" (Grzymala-Busse 2017, S6). Yet, in practice, populists often break with previously accepted policy lines. This is due to three main reasons. First, as disruptors of "politics as usual," populist leaders will not want to continue with the economic policies of previous governments especially since they

[6] In this paper I focus on right-wing populist parties in particular because they have been the most prominent in recent electoral victories. However, I plan to expand this outlook in future work as left-wing populism might result in policies that are more environmentally friendly.

spent the entire campaign arguing that those policies are hurting “the people” and benefiting “the corrupt elite,” and that they are taking office in order to “drain the swamp.” Second, the 2008 financial crisis deeply affected the impact of populist campaigns (Kriesi and Pappas 2015). These parties gained popularity and/or came to power propelled by discontent against those seen as having caused the crisis, usually previous governments and the rapid processes of liberalization and globalization (Epstein 2014).[7] Third, with many countries unable to maintain growth levels and economic protections for vulnerable populations as deindustrialization (Broz, Frieden, and Weymouth 2021) and globalization took a double toll in certain regions, the state itself entered a crisis (Innes 2017) in which only rebuilding the power of the state lost during liberalization could guarantee a solution to the current situation.

Thus, while previous governments championed globalization and openness, right-wing populists might suggest closing themselves from outside economic influence, curbing the impact of globalization, and focusing on local production. Furthermore, while previous decades saw the state being stripped of its highly lucrative sectors of employment that provided workers with substantial benefits and security, populist leaders could center their promises on restoring the state to its previous levels of welfare provision. Therefore we are likely to see populists taking office and embarking on sustained campaigns of state consolidation in economic matters breaking with past policies of openness and integration in global and regional economic networks and promoting economic nationalism. Reversing the complex process of globalization with its multifaceted aspects—financial, monetary, offshoring due to cheaper labor, and advances in technology—is difficult and in some instances impossible. However, regaining state control over strategic sectors in the economy and using them to provide what Mu¨ller (2016) calls “mass clientelism” via “colonization of the state” is within the reach of many populist leaders.

[7] The migrant crisis in Europe also contributed to this trend (Borriello and Brack 2021).

Economic nationalism for the 21st century

Therefore I argue that we are likely to see many populists taking office and embarking on sustained campaigns of state consolidation in economic matters, breaking with past policies of openness and integration in global and regional economic networks and promoting economic nationalism.[8] This policy of economic nationalism has been present not just under banners such as "America First" but since the 19th century (Helleiner 2002; Helleiner and Pickel 2005) and across a variety of geographical locations (Colantone and Stanig 2019). The focus has mostly been on the nationalist part of the equation, but the economic dimension is crucial. It sets the state on a new path of protectionism and anti-globalization. Economic nationalism has been often linked to the ideal of autarky. However, the goal of economic nationalism is not autarky but national unity, autonomy, and the augmentation of national power. While often associated with protectionism, economic nationalists will prefer free trade, if it increases national power (Nakano 2004, 224).[9]

Juliet Johnson and Andrew Barnes (2015) argue that economic nationalism must be understood more broadly and not necessarily in contradiction to economic liberalism.[10] Therefore, economic nationalists may champion either pro- or anti-globalization policies, as well as policies that span the liberal-protectionist spectrum, depending upon their particular conceptions of national identity and their beliefs about which economic policies will promote the nation as a sovereign political and economic force (Helleiner and Pickel 2005). Similarly Johnson and Barnes (2015) argue that a financial version of economic nationalism—which they call financial nationalism—will result in policies that promote the national currency, curtail the independence of central banks, and reject external loan conditionality and dependence on foreign financial institutions. I argue that the relationship is not one of outright rejection of globalization and financialization but a recasting of that relationship in new terms that provide protection to nationalist ideals.[11] Populist leaders pick those policies that still bring economic benefit and reject those that could possibly hurt the economic interests of their constituents.

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[8] While the literature–and this paper–will discuss these as nationalizations, the actual phenomenon is broader and has the better name of "etatism" or "etatization" (Jacoby and Korkut, 2016). Coined by Norman Manea, this term means in Romanian "the process of statizing" and Katherine Verdery (1996) argues that politicians who "etatize" declare that important assets belong to the state, "then seize these assets in order to deprive private individuals of access to them, and eventually ensure that they are managed by government officials" (Ganev, 2017).

[9] In particular, small-scale nation-states are likely to prefer free trade, since they would not survive without access to international markets, because their domestic markets are too small to make them self-sufficient. Their pursuit of free trade is rooted in nationalism (Nakano, 2004, p. 224).

[10] This view is also shared by Crane (1998); Helleiner and Pickel (2005); Abdelal (2001); Harmes (2012); Shulman (2000); D'Costa (2009).

[11] The complexity of this relationship was comprehensively studied in the former Soviet space by Abdelal (2001) who showed how historically rooted understandings of national identity explained the different post- Soviet external economic orientations of Latvia, Belarus, and Ukraine.

What do we know about populist policymaking so far?

In previous work I have examined in detail the economic policies enacted by right-wing populist governments in several Eastern European governments with an eye for comparative analysis showing that populist illiberal economics is based on statism and economic nationalism within a globalized system of politics (Ganga 2021b). I argued that in the economic arena, increased state power—rather than market forces—is a staple for populist leaders regardless of whether we study them in Europe, the United States, Asia, or Latin America, or under the banner of populism, state capitalism, or hybrid regimes. In the economic arena we are more likely to see the government attempt to rebuild the state's role in the economy and promote economic nationalism and protectionism, while taking advantage of the international capital that flows from market to market, often helping these regimes stay solvent (Ganga 2021b).[12]

On the international economic dimension, I have also examined the way populist leaders use international financial ties for their survival. On the one hand populist leaders do not want to see the collapse of the current international order, nor do they necessarily want it to be remade in their image. Because of their statist and economic nationalist domestic stances, these leaders will try to instrumentalize globalization to further their own political survival. While loud criticism will dominate the statements of these leaders regarding various international organizations, countries, companies, or investors, in practice, populist governments will continue their previous international engagements to stay relevant in the international arena and its many organizations and to continue reaping the benefits of this participation (Ganga 2022). These benefits range from direct financial help like that which Hungary and Poland receive from the European Union as part of the accession process, loans, grants from multilateral financial or development institutions, or even foreign investment facilitations (Ganga n.d.). Yet other benefits can be less direct though just as significant. Access to larger markets and extensive trade remain important benefits of globalization. But access also matters for the ability to gain entry to the international financial sector. As world economies have become increasingly financialized, leaders' abilities to both access these markets and hide assets within them has been extensively documented (O'Donovan, Wagner, and Zeume 2019; Cooley, Heathershaw, and Sharman 2018). Therefore I argue that populist leaders have learned to selectively pick those parts of globalization that are most likely to sustain their regime while continuing to criticize these institutions and processes to domestic audiences as a way to further their project of building statism and economic nationalism (Ganga 2022).

[12] Also see (Kelemen 2020) for a European examination of this phenomenon.

Previous work linking populism and environmentalism has made important contributions that need to be recognized as they inform this analysis. Much of that work focused on public opinion and support for populism, because it did not require the observation of actual governmental policies but instead linked support for populism to support for climate mitigation (Huber, Fesenfeld, and Bernauer 2020). In this vein of research, scholars find that supporting a nationalistic stance can be connected to voting for right-wing parties: Joakim Kulin, Ingemar Johansson Sev¨a, and Riley Dunlap (2021) find that in the United Kingdom, climate change perceptions are impacted by rising populist sentiments (Huber 2020), and in Austria individuals who distrust state institutions are also more skeptical about climate change (Huber, Greussing, and Eberl 2022).

Another strand of work focused on the activities of the various populist parties in Europe and across the world. By examining political manifestos of parties in Europe as well as the case studies of populist parties in Hungary, Poland, and Italy, Manuela Caiani and Balša Lubarda (2023) find that a conditional, "yes-but" environmentalism explains the positions of these parties, where climate change is instrumentalized for political purposes, in line with the argument in this paper. Similarly, Jale Tosun and Marc Debus (2021) argue that certain environmental issues provide populists an opportunity to maximize their vote share. Therefore these parties might adopt strict stances on environmental issues.[13] Robert Huber et al. (2021) examine the policy discourses, positions, and actions of six populist parties from Austria, the Czech Republic, Greece, Italy, Poland, and Spain, finding that these right-wing populist parties are at odds with the ambitious E.U. energy and climate policy, whereas left-wing populists instead ask for a more ambitious European-level policy. Finally, Michael Boecher et al. (2022) focus on the case of the Alternative für Deutschland (AfD) and find that during parliamentary debates, elected members of this party not only express climate skepticism but often promote so-called "alternative expertise" that goes against accepted science.

The focus on the policy of populist parties in power is not unique to this paper. Rich case studies have pushed forward this research agenda with work on Poland (Żuk and Szulecki 2020), Hungary (Bartha, Boda, and Szikra 2020), Austria (Tosun and Debus 2021), comparative work on both Poland and Hungary (Lubarda 2023), the United States, the Philippines, and Brazil (Marquardt, Oliveira, and Lederer 2022), Denmark, Finland, and Sweden (Vihma, Reischl, and Nonbo Andersen 2021).

[13] In the case of the glyphosate ban examined by Tosun and Debus (2021), the Austrian Freedom Party could promise benefits to domestic groups, indicate the misconduct of (foreign) companies in the process of risk assessment, and question the integrity of scientists.

Among this research, the work of Tobias Böhmelt (2021) stands out, because it represents the single other attempt at a cross-national analysis. While the current project focuses on environmental policies such as research and development (R&D) spending, government spending and environmental taxes, Böohmelt (2021) focused on the environmental consequences of electing populist leaders, showing that the leaders' presence in office resulted in worse environmental outcomes.

In expanding these previous arguments, in this paper I show how populist leaders go beyond simply denying the existence of human-caused climate change. In the name of "the people" and economic nationalism, any action that could require economic transformation to mitigate climate change will be seen with suspicion or as an interference into the domestic politics of the country. Moreover, I also show how international cooperation in climate change will be seen as imposition from foreign elites.

Data

For the quantitative analysis of this project, I use the latest data from the Global Populism Database (Hawkins et al. 2019) updated in 2022, which covers 66 countries and more than 200 executive leaders. The Global Populism Database (GPD) focuses on heads of state and heads of government, coding for each of their terms in office their degree of populism. After accounting for missing values, I cover 66 countries and approximately 300 executive leaders (depending on model specifications) between 1994 and 2022. The basic idea behind the GPD is to code populist discourse for political leaders using textual analysis of political speeches.[14] The project uses the technique known as "holistic grading which was designed by educational psychologists to measure diffuse, latent aspects of texts such as tone, style, and quality of argument. The technique ... has coders apply an integer grade scale and a rubric to identify rough attributes of texts at each grade" (Hawkins 2019, 2).[15]

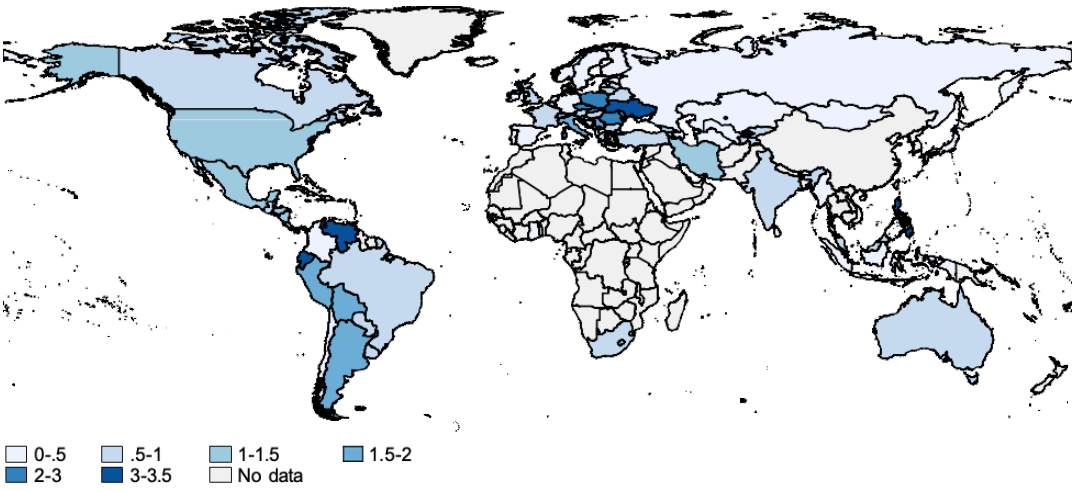
[14] At present this is the best data source for populist leaders outside of Europe. Coding efforts so far have focused mostly on Europe and alternative measures can be used for robustness checks but only on this region.

[15] The codebook further explains that "the selected texts are initially assigned one of three scores: (2) A speech in this category is extremely populist and comes very close to the ideal populist discourse. Basically, the speech expresses all or nearly all of the elements of ideal populist discourse and has few elements that would be considered non-populist; (1) a speech in this category includes strong, clearly populist elements but either does not use them consistently or tempers them by including non-populist elements. Thus, the discourse may have a romanticized notion of the people and the idea of a unified popular will (indeed, it must in order to be considered populist), but it avoids bellicose language or references to cosmic proportions or any particular enemy; and (0) a speech in this category uses few if any populist elements. Note that even if a speech expresses a Manichean worldview, it is not considered populist if it lacks some notion of a popular will" (Hawkins 2019, pp. 2–3).

The sample of texts counts four speeches for each term in office: a campaign speech (usually the closing or announcement speech), a ribbon-cutting speech (marking a commemorative event with a small domestic audience), an international speech (given before an audience of foreign nationals outside the country), and a famous speech (one widely circulated that represents the leader at his or her best). Thus, the Populism Score represents the average populism value for each leader term across the four speeches coded. This means that the unit of analysis in this paper is the leader-term. In total, this variable covers 319 leader-terms, has an average value of 0.323, and ranges from 0 to 1.92, with higher values representing higher scores of populism.

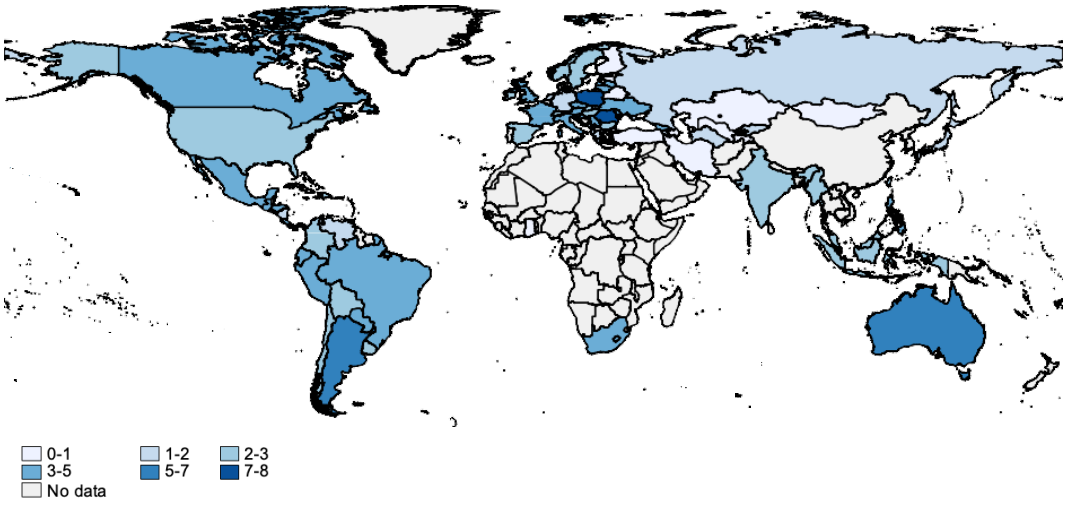
Figure 1 maps the geographical coverage of the populism data and calculates the overall populism for each country.[16] This figure shows how some parts of the world are more impacted by populism than others. However, because this measure is an artifact of the countries included in the GPD, I also visualize the number of leaders coded in each country (Figure 2). The countries with the most coded number of leaders are Poland and Romania, each with eight, while Australia and Argentina each have seven coded leaders. Overall Europe and the Americas are particularly well represented while Africa is not.

Figure 1. Populism by country



[16] I averaged the populism score of each leader and then added all the populism scores.

Figure 2. Coded leaders in each country



Previous research has focused on analyzing environmental performance as the dependent variable (Böhmelt, 2021). While this is a valuable approach, I am more interested in the policies adopted during populist leaders' tenure in office. For dependent variables I examine various dimensions of policies using data from the OECD's "Green Growth Indicators" (OECD 2023). I include in the analysis, data on environmentally related government R&D budget, as a percentage of total government R&D, as well as environmentally related taxes, as a percentage of total tax revenue.[17] The amounts the government chooses to invest in environmentally related research and development gives a clear indication as to the true priorities of the regime. Similarly, higher levels of environmental taxation could signal a greater commitment to environmentally friendly policies. When a government has a very low commitment to environmental protection and/or prioritizes development at all cost, taxation based on environmental issues will not be a big concern.

I also examine the role of the national expenditure on environmental protection, percent of GDP. However, due to poor data coverage, this measure severely restricts the available sample. I include it still because direct expenditures on environment show the level of commitment to environmental issues. Finally, I also include a measure for environment focused funds as a percentage of the allocable Overseas Development Assistance (ODA). ODA represents aid disbursed across different countries depending on need. Environmental issues are an important sector that aid is committed for. This measure examines how much of the aid for each county is earmarked for the environmental sector.

[17] I also use a measure of environmentally related taxes, percent of GDP, as well as energy-related tax revenue, percent of total environmental tax revenue.

For the control variables, I follow existing research on the determinants of environmental quality (Böhmelt 2021). First, I consider population, unemployment, and gross domestic product (GDP) per capita, which are all taken from the World Bank World Development Indicators. All three variables are log transformed. Second, I control for regime type and state capacity. Regime type is based on the polity2 score from the Polity IV data set (Marshall, Gurr, and Jaggers 2019). This variable ranges between -10 and +10, capturing perfect autocracies (lowest score) up to perfect democracies (highest score). I also add a state capacity control from the World Bank's Worldwide Governance Indicators. It captures perceptions of the quality of public services, the quality of the civil service, and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. Larger values pertain to higher governmental effectiveness. According to Böhmelt (2021), controlling for state capacity addresses the alternative mechanism that a high-quality bureaucracy, even with a highly populist leader, may ensure the effective implementation of existing rules and regulations, including environmental laws that promote environmental quality.

Finally, I include two additional controls pertaining to industrial output and the country's integration into the global system, respectively. On one hand, industrial output is based on manufacturing, value added, as a percentage of GDP using the World Bank World Development Indicators. This variable captures how "industry heavy" a state's economy is, with higher values standing for a larger manufacturing share and probably less environmental quality. On the other hand, domestic pollution is likely influenced as well by how integrated a country is in the international system. To measure international integration I use the globalization score from Axel Dreher's (2006) Globalization Index, updated by Savina Gygli et al. (2019).

Results

In Table 1 I model the relationship between right-wing populism and various environmental policies. In each of the models, higher scores in populism are associated with lower levels of environmentally related expenses on R&D, fewer environmental taxes, less spending on environmental projects, and less aid on environmental projects. The results are negative and statistically significant with the exception of Model 3 where the regression sample is severely reduced due to data missingness on the dependent variable. The models represent linear regressions with robust standard errors.[18]

Table 1. Impact of populism on environmental outcomes

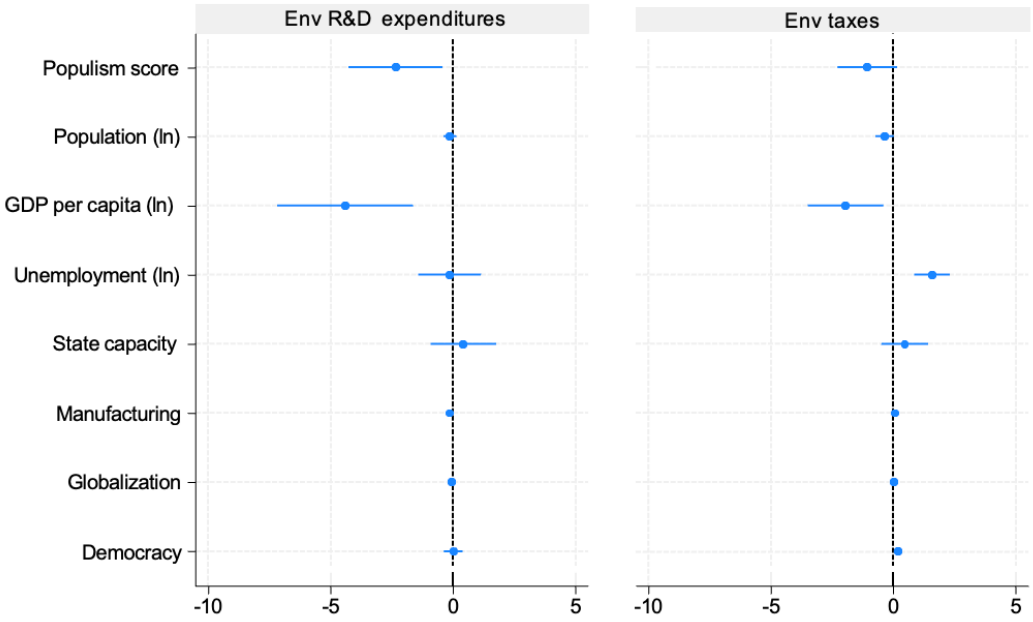
	(1) Env R&D exp	(2) Env taxes	(3) Exp on env	(4) Env ODA
Populism score	-2.340**	-1.061*	-0.172	-4.279**
	(0.971)	(0.618)	(0.164)	(2.121)
Population (ln)	-0.119	-0.353*	-0.111**	-0.186
	(0.133)	(0.189)	(0.0462)	(0.534)
GDP per capita (ln)	-4.403***	-1.948**	-0.889**	7.225*
	(1.405)	(0.786)	(0.355)	(3.838)
Unemployment (ln)	-0.132	1.584***	-0.341**	-1.957
	(0.649)	(0.369)	(0.167)	(1.326)
State capacity	0.429	0.470	-0.124	-2.826
	(0.679)	(0.486)	(0.189)	(1.718)
Manufacturing	-0.128***	0.0774*	0.0322**	-0.382**
	(0.0433)	(0.0415)	(0.0146)	(0.154)
Globalization	-0.0460	0.0262	0.0677***	0.149
	(0.0699)	(0.0401)	(0.0247)	(0.126)
Democracy	0.0184	0.197**	0.00497	-0.394
	(0.195)	(0.0889)	(0.0275)	(0.287)
Constant	55.88***	21.86***	7.035*	-65.20**
	(15.36)	(6.602)	(3.524)	(28.05)
Observations	143	250	57	97

*Note: * p < 0.10, ** p < 0.05, *** p < 0.01.*

[18] In Appendix Tables A2–A4 I add, in turn, year, country, and leader fixed effects. In those tables the results continue to show the negative association between populism and environmental policies.

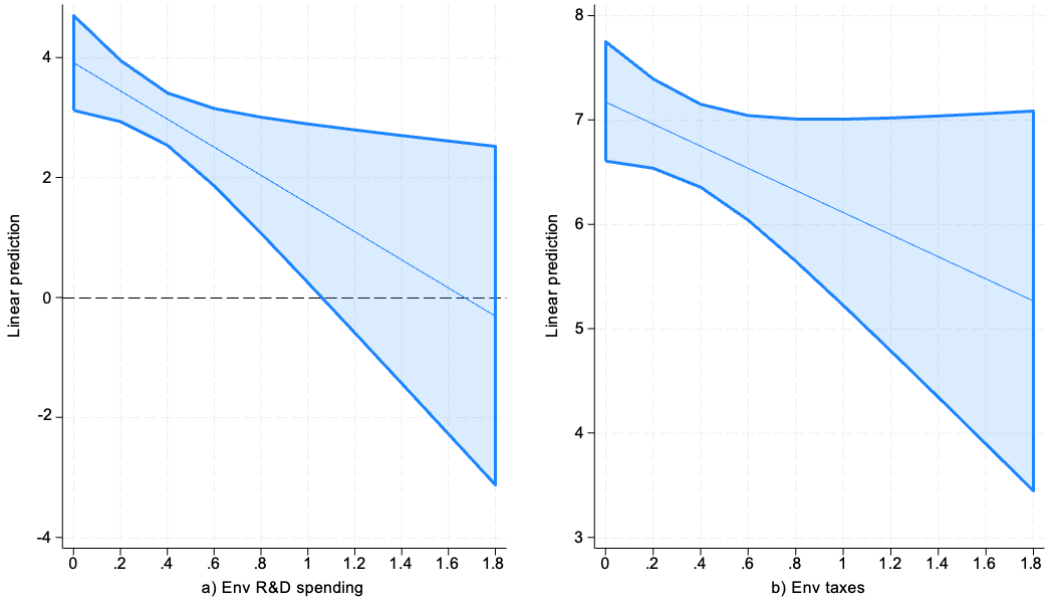
In Figure 3 I graph the margins plot for Models 1 and 2 showing that an increase in the populism score of the leader will be associated in a drop in policies that favor the environment.

Figure 3. Impact of populism on environmental outcomes. Models 1 and 2 in Table 1.



In terms of controls, I also note how the wealthier a country is the less likely it is that it will spend on environmental policies. This could be a consequence of long-term growth resulting in a higher GDP, which means that overall, the percentage spent on environmental R&D or spending on the environment in general would not need to be that high. The data starts in 1990 and the populism score begins in 1994, which means that for many of the most industrialized countries the heyday of environmental degradation and environmental investment is at least two decades in the past. Unemployment also supports the story of developed countries.

Figure 4. Effect of populism on environmental outcomes. Dashed lines indicate the 95% confidence interval. The left panel is based on Model 1, the right panel is based on Model 2.



When unemployment is high there will be less spending on the environment (Models 1 and 3) but more taxes (Model 2). A high level of manufacturing exemplifies countries still basing a lot of their economic activity in more polluting industrial activities rather than services, which explains why more manufacturing would result in less spending on the environment (Model 1) but more environmental taxes, because there are more opportunities for the manufacturing sector to pollute (Model 2).

I also examined the impact of ideology. Robert Huber and Christian Schimpf (2016) suggest that right-wing populism has more deleterious effects than populism on the left, whereas Cas Mudde and Cristóbal Rovira Kaltwasser (2013) map the left-right axis on inclusionary versus exclusionary policies. As the GPD includes an ideology variable, I examine more closely the impact of populism on the right. Table 2 presents the models with an interaction term for rightist leadership. Figure 6 presents the margins plots for Models 1 and 2 in Table 2. This suggests that for right-wing populist parties, an increase in populism score might be associated with more environmental R&D spending (though the relationship is not statistically significant), as well as more environmental taxes (in this case the relationship is statistically significant for most populism scores). This support for increased environmental taxation can be a rejoinder to my previous work into how populist parties increase the economic power of the state (Ganga 2021a).

Table 2. Impact of populism on environmental outcomes

	(1) Env R&D exp	(2) Env taxes	(3) Exp on env	(4) Env ODA
Populism score	-3.668***	-1.863***	0.200	-6.734*
	(1.187)	(0.571)	(0.304)	(3.928)
Right=1	0.248	0.592	0.161	0.364
	(0.697)	(0.576)	(0.202)	(1.471)
Right=1 × Populism score	1.732	2.755**	-0.524	2.305
	(1.365)	(1.377)	(0.368)	(4.013)
Population (ln)	-0.142	-0.281	-0.112**	-0.358
	(0.132)	(0.184)	(0.0514)	(0.560)
GDP per capita (ln)	-4.333***	-2.737***	-0.837*	8.216**
	(1.404)	(0.845)	(0.423)	(3.976)
Unemployment (ln)	-0.0418	1.254***	-0.376**	-2.701*
	(0.667)	(0.413)	(0.179)	(1.457)
State capacity	0.406	0.901	-0.182	-2.876
	(0.688)	(0.547)	(0.214)	(1.744)
Manufacturing	-0.120**	0.133***	0.0350**	-0.555***
	(0.0525)	(0.0494)	(0.0171)	(0.185)
Globalization	-0.0542	0.0438	0.0690***	-0.0349
	(0.0781)	(0.0426)	(0.0252)	(0.164)
Democracy	0.0530	0.0675	-0.00575	-0.177
	(0.185)	(0.0887)	(0.0318)	(0.353)
Constant	55.37***	28.11***	6.483	-56.25*
	(15.50)	(6.926)	(4.454)	(28.76)
Observations	135	224	57	89

Note: ∗ p < 0.10, ∗∗ p < 0.05, ∗∗∗ p < 0.01.

Figure 5. Impact of populism on environmental outcomes. Models 1 and 2 in Table 1.

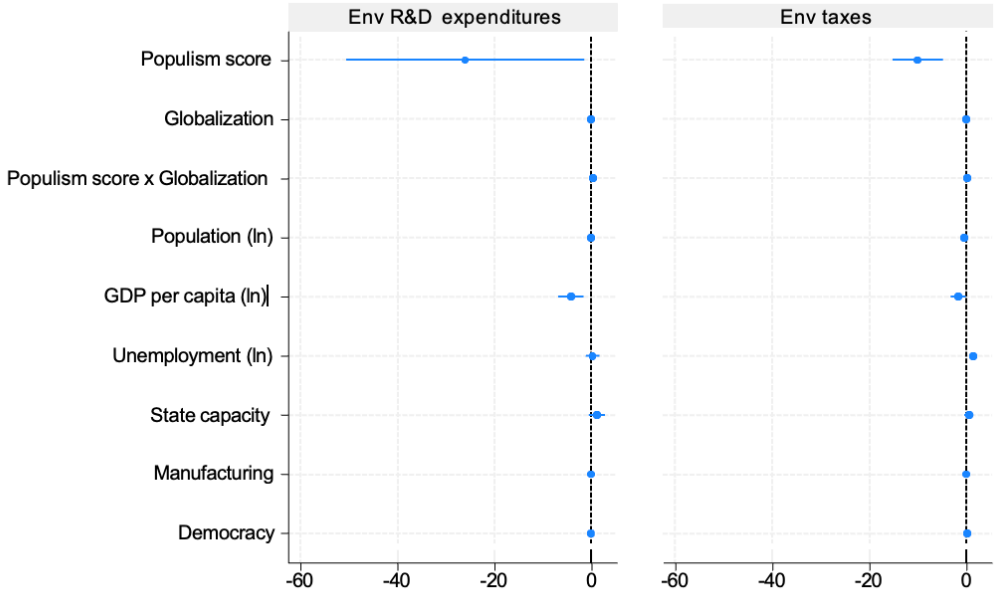


Figure 6. Effect of populism on environmental outcomes moderated by ideology. Dashed lines indicate the 95% confidence interval. The left panel is based on Model 1, the right panel is based on Model 2.

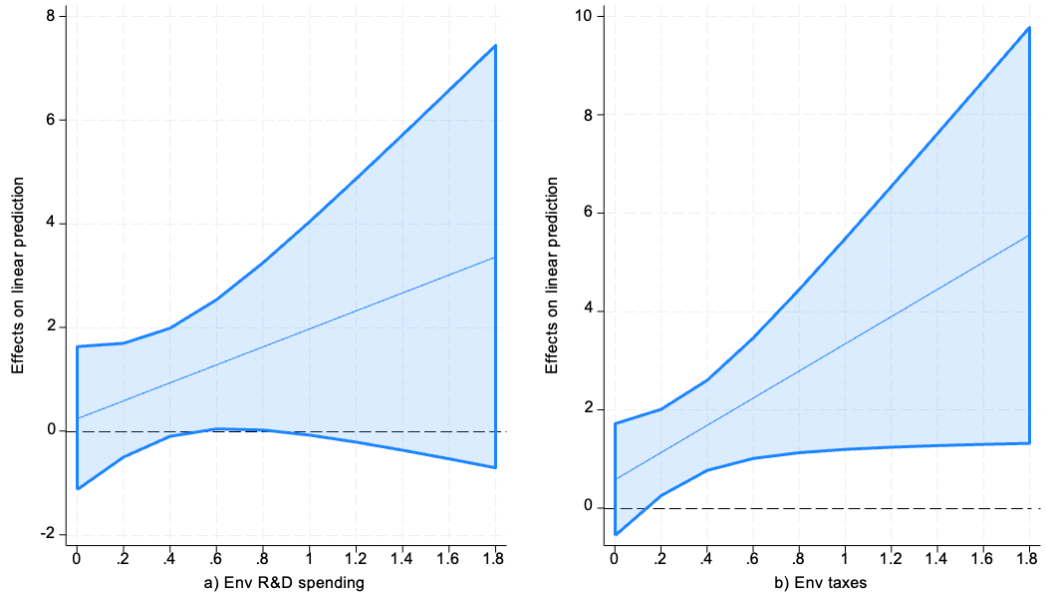


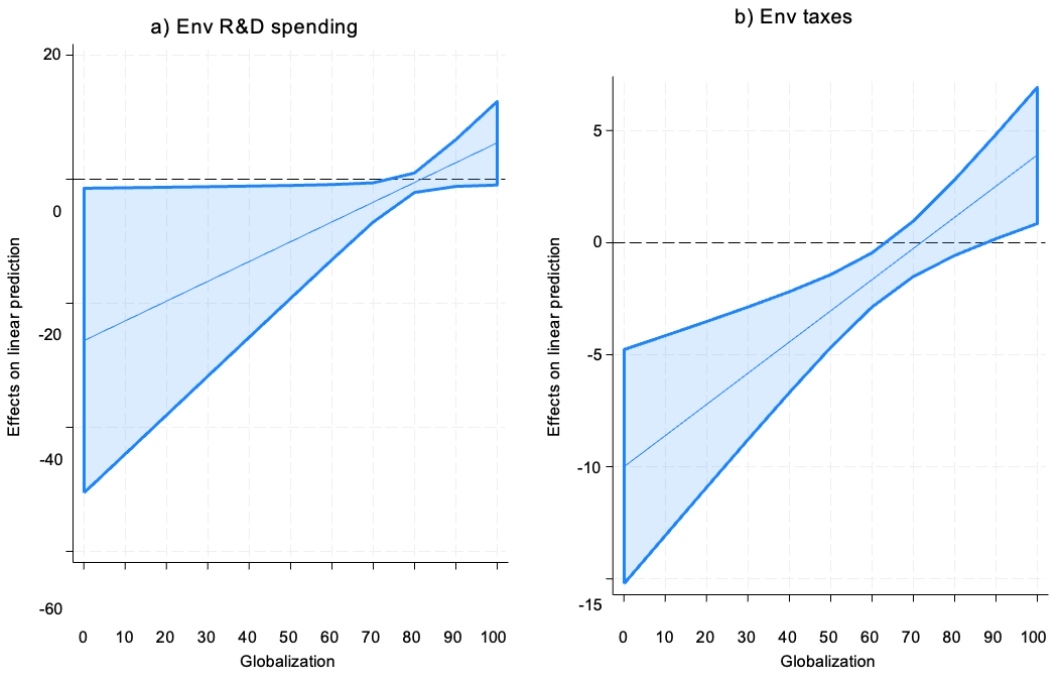
Table 3. Impact of populism on environmental outcomes

	(1) Env R&D exp	(2) Env taxes	(3) Exp on env	(4) Env ODA
Populism score	-26.05**	-9.995***	1.924	85.66**
	(12.41)	(2.653)	(4.827)	(37.30)
Populism score × Globalization	0.318**	0.139***	-0.0261	-1.102**
	(0.157)	(0.0401)	(0.0607)	(0.471)
Population (ln)	-0.180	-0.394**	-0.125**	-0.232
	(0.132)	(0.193)	(0.0605)	(0.527)
GDP per capita (ln)	-4.281***	-1.677**	-0.937**	6.065*
	(1.332)	(0.787)	(0.376)	(3.484)
Unemployment (ln)	0.218	1.504***	-0.359*	-2.733*
	(0.708)	(0.360)	(0.180)	(1.571)
State capacity	1.085	0.543	-0.166	-3.022*
	(0.836)	(0.481)	(0.246)	(1.781)
Manufacturing	-0.101**	0.0636	0.0298*	-0.423**
	(0.0398)	(0.0416)	(0.0159)	(0.162)
Globalization	-0.147	-0.0303	0.0793*	0.358***
	(0.101)	(0.0459)	(0.0422)	(0.134)
Democracy	-0.124	0.189**	0.0243	0.686
	(0.216)	(0.0824)	(0.0507)	(0.439)
Constant	62.52***	23.88***	6.641*	-77.82**
	(15.93)	(6.452)	(3.719)	(29.96)
Observations	143	250	57	97

*Note: * p < 0.10, ** p < 0.05, *** p < 0.01.*

In the next steps of the analysis, I hope to include additional measures for environmental policies. I will also examine other ways to get broader coverage for the populism variable, though the GPD is the more comprehensive resource available. Another element I hope to further examine is the impact of corruption. Often environmental policies can be circumvented by the local level of corruption. Currently, the state capacity variable attempts to account for this, but domestic politics can affect policies at multiple levels.

Figure 7. Effect of populism on environmental outcomes moderated by globalization. Dashed lines indicate the 95% confidence interval. The left panel is based on Model 1, the right panel is based on Model 2.



The Hungarian case

Fidesz and Viktor Orbán have been a staple of Hungarian politics since the first days post-Communism. Throughout its time in power and in opposition, Fidesz morphed from an anti-communist liberal movement full of alternative ideas (Pappas 2014) to a "national- liberal" mainstream party and later to a national populist party occupying all of Hungary's political space (Bozóki 2015a). Since 2010, Hungary has been described as exhibiting a "peculiar form of populism" (Enyedi 2015) or a "mix of nationalism and neoliberalism" (Bozóki 2015b). Elsewhere I detail the return of the state in economics in Hungary (Ganga 2021a, 2021b). In environmental issues, Hungary has been trailing many countries with the European Commission alleging that Budapest has been violating limits on concentrations of particulate matter for years.[19] The government has argued that poor air quality within its borders was linked to pollution coming from neighboring states,[20] but the European Union's air quality standards have been set with cross-border pollution taken into account. The European Environment Agency found that 13,100 premature deaths were linked to fine particulate matter in Hungary in 2018, one of the highest rates in Europe.[21] Moreover, the city of Budapest ranks among the worst in the European Union in air pollution.[22] I can confirm that during field work in Hungary in 2016 and 2017, there were strong smog advisories in effect almost daily.

Populist politics interjects into environmental issues at several levels. First, there are several environmental scandals associated personally with the prime minister. Second, I examine the effect of the political opposition and environmental groups and finally the government policy itself.

Orbán's government has not always spoken very actively on the environment, or when it has it was to blame neighboring countries, as mentioned earlier. However, the government stays completely silent when the implicated are directly linked to the prime minister. In 2021 a Hungarian court decided to no longer pursue the investigation into environmental damage caused by a company owned by a billionaire close to Prime Minister Orbán.[23] The Viresol factory, co-owned by Orbán's childhood friend and

[19] https://www.reuters.com/article/us-eu-court-hungary/hungary-systematically-breached-eu-air-pollution-limits-says-court-idUSKBN2A31KH

[20] https://hungarytoday.hu/air-quality-hungarian-cities-pollution/

[21] https://www.courthousenews.com/hungary-with-13k-deaths-linked-to-pollution-ordered-to-clean-the-skies/

[22] https://dailynewshungary.com/budapest-ranks-among-the-worst-in-the-eu-in-air-pollution/

[23] https://www.euractiv.com/section/politics/short news/environmental-damage-investigation-closed-no-punishment-for-orban-ally/

political ally, billionaire Lőrinc Mészáros,[24] opened in February 2019 with a 6.2 billion Hungarian forints (€17 million) subsidy from the state. A few months later, severe environmental pollution around the factory resulted in the hospitalization of several workers from a neighboring coal power plant.

Investigations showed that sulfur and phosphorus gas had formed in the reservoir shared by the power plant and Viresol. Additionally, a nearby stream was contaminated, and fish began dying. The police started investigating the water and air pollution complaints in 2019, and in October 2021, the prosecutor's office closed the investigation based on expert opinions with no punishments announced.[25]

Another scandal surfaced for Orbán, when environmental groups sounded alarms over the excessive development around Balaton lake, which resulted in the firing of the director of the Balaton Limnological Research Institute and the partial dismantling of the institute.[26] The second biggest natural lake in Hungary, Fertő (Lake Neusiedl), is similarly impacted by construction projects carried out mainly by a company of Lőrinc Mészáros. Another lake, Lake Tata, a wetland site of international importance under the Ramsar Convention is threatened to be seriously damaged by a hotel construction planned by a subsidiary of Hell Energy Company. This company has received generous E.U. funding and Hungarian public money. These problems are compounded also by the fact that one of the main suppliers of construction materials for many of the country's projects is the company of Viktor Orbán's father, Győző Orbán. This company's profits have soared since Orbán returned to power in 2010,[27] especially thanks to E.U. funding.[28]

Although political action has been mostly negative, opposition parties and civil society have been sounding the alarms on environmental degradation. In recent years Budapest has become a bastion of progressive politics and opposition, leading the government to scrutinize every single city initiative, including environmental ones.[29] In 2020, the central administration delayed Budapest's plans to expand its fleet of green vehicles and move toward a low-emissions future. The city's mayor, Gergely Karácsony, has called out the

[24] During the last 11 years, Mészáros has gone from a gas fitter in a small village to the richest person in Hungary—overwhelmingly based on E.U. funded projects.

[25] https://www.euractiv.com/section/politics/short news/environmental-damage-investigation-closed-nopunishment-for-orban-ally/

[26] https://eu.boell.org/en/2021/11/05/tragic-consequences-eu-funding-environment-hungary

[27] https://eu.boell.org/en/2021/11/05/tragic-consequences-eu-funding-environment-hungary

[28] The continued support of E.U. funding for projects that directly benefit populist illiberal leaders contributed to what Kelemen (2020) has called the E.U.'s "authoritarian equilibrium" and have been documented elsewhere in detail (Ganga 2021b).

[29] https://eurocities.eu/latest/taking-on-orban-to-secure-a-green-future-for-transport/

government's refusal to greenlight a European procurement project of low-floor trams, high- tech electric buses and state-of-the-art trolleybuses. The government initially agreed to fund the purchase itself, but not only has it completely backtracked on the decision, it is now refusing to sign the paperwork for a €200 million refundable European Investment Bank (EIB) loan.[30] Additional civil society actions were taken against building one of Europe's biggest electric battery plants in Debrecen. The Chinese-led project is said to impact water and energy demands as well as local pollution.[31]

With regards to government policy, in 2020 Orbán announced a new climate action plan and addressed future challenges in his annual state-of-the-nation speech.[32] The Prime Minister stated that "On July 1, illegal landfills will be eradicated and polluters will be punished. Disposable plastics are banned, allowing metal and glass bottles to be reused. We will protect the Danube and the Tisza rivers from pollution."[33] This policy also promised that 10 trees would be planted for every newborn in Hungary and that by 2030 the proportion of the country's forest area would be increased to 27 percent. Additionally, the Hungarian government was committed to supporting the production and purchase of cheap electric vehicles, and by 2022, new buses in public transport would be all electric. Moreover, government expected multinational companies to adopt environmentally friendly solutions and that the government would support the transition of small- and medium-sized businesses to go green with 32 billion forints (US$ 103 million) over the next two years.[34]

However, this domestic focus on environmentally friendly policies shifted gears a year later when Orbán was addressing domestic and international audiences. Ahead of an E.U. summit in 2021, Orbán said Hungary does not accept the position that individuals and families should bear the costs of climate action; the costs of the fight against climate change should be borne by the world's biggest polluting companies. He added that in such a case the fight against climate change could cost an average Hungarian family up to 20,000 forints (€57) a month. Leaning into populist rhetoric he added that "We cannot accept this. ... We support the solution that would have polluters bear the costs of climate protection," also adding, "We're at the beginning of the battle."[35] While

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30 https://eurocities.eu/latest/taking-on-orban-to-secure-a-green-future-for-transport/

31 https://www.france24.com/en/live-news/20230210-hungary-protests-against-chinese-battery-plant-defy-orbanomics

32 https://en.nhandan.vn/hungary-s-orban-announces-new-climate-action-plan-post83233.html

33 https://en.nhandan.vn/hungary-s-orban-announces-new-climate-action-plan-post83233.html

34 https://en.nhandan.vn/hungary-s-orban-announces-new-climate-action-plan-post83233.html; http://www.xinhuanet.com/english/2020-02/17/c 138789400.htm

35 https://abouthungary.hu/news-in-brief/pm-orban-cost-of-climate-change-fight-should-be-borne-by-biggest-polluting-companies

the position is valid when it comes to large polluting companies,[36] previous examples showed the reluctance of the government to pursue polluters, especially domestic companies associated with the regime.

The war in Ukraine is another factor that compounds the populist environmental impact. Due to the dependence on Russian energy across the continent, Western European countries and European institutions have agreed on a joint response that would reduce the importance of Russian energy imports. Combined with extensive economic sanctions, the reduced energy purchases were meant to cut Moscow from access to financial resources that would fuel its war effort.[37] While many European countries agreed to a partial energy embargo in spite of the economic cost for their own economies, Hungary, Slovakia, and the Czech Republic were exempt.[38] However, some have argued that while reducing Russian energy imports could be beneficial for the war effort, the dramatic return to wood and coal stoves and the encouragement by Polish leadership "to burn almost everything, of course aside from tires and similarly harmful things" to keep warm during the winter,[39] could undo decades of progress in environmental action. Although Hungary has an exemption and can import Russian energy, the Orbán government still passed legislation that loosened regulations on logging sparking widespread protests.[40]

[36] Multiple lawsuits brought by individuals against large polluters are currently being fought in courts in the United States and elsewhere.

[37] https://www.ft.com/content/abba000b-992a-45a3-941a-3616e335ccc5

[38] https://www.reuters.com/world/europe/best-we-could-get-eu-bows-hungarian-demands-agree-russian- oil-ban-2022-05-31/; https://www.politico.eu/article/viktor-orban-price-what-will-it-take-to-get-hungaryto-ban-russian-oil/

[39] https://www.politico.eu/article/russia-coal-shortage-causes-energy-crisis-poland-hungary/

[40] https://www.usnews.com/news/world/articles/2022-08-17/hungarians-renew-protest-at-forest-destruction-as-government-rolls-back-some-changes

Conclusion

The quantitative analysis and the case study of Hungary are the first step for a deeper examination of right-wing populist environmental policies. Rhetoric that is supposed to promote the interests of the people is often mixed with economic interests closely associated with the regime. While protecting the population against the winter cold and providing economic relief to the poor are worthy goals, regimes that turn a blind eye to widespread environmental damage will only suffer long-term consequences.
Important questions still remain as this analysis is deepened. The lessons of the case study suggest corruption should be more closely examined in its association with populism and its environmental impact. Moreover, how does the institutional erosion evidenced by corruption impact the policies of populist leaders. As mentioned at the beginning of the paper most concerns over populist governance are focused on its impact on democracy. The link between democratic backsliding might be directly related to the environmental performance of populist regimes. Are the environmental policies we are seeing a consequence of populism or a consequence of increasing authoritarianism. This paper is a first attempt to disentangle these important relationships. Future work on this topic will add more case studies from a variety of geographical settings and development levels as well as hopefully increasingly available quantitative data.

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Online Appendix

Table A1. Descriptive statistics

	mean	sd	min	max
Env R&D exp	3.34	3.39	0.09	28.21
Env taxes	6.84	3.46	-4.70	19.76
Exp on env	1.90	0.51	1.06	3.46
Env ODA	4.06	5.56	0.00	36.51
Populism score	0.32	0.39	0.00	1.92
Population (ln)	9.74	1.39	6.45	14.11
GDP per capita (ln)	9.78	0.81	7.21	11.80
Unemployment (ln)	1.95	0.56	-0.25	3.28
State capacity	0.38	0.93	-1.46	2.24
Manufacturing	15.17	4.84	3.86	29.76
Globalization	70.45	11.89	32.82	90.81
Democracy	7.52	3.99	-9.00	10.00
Observations	297			

Table A2. Impact of populism on environmental outcomes. Year fixed effects

	(1) Env R&D exp	(2) Env taxes	(3) Exp on env	(4) Env ODA	(5) Env tech
Populism score	-0.767	-0.0638	0.0207	-4.850	-0.0603
	(0.773)	(0.398)	(0.123)	(2.955)	(0.0935)
Population (ln)	5.233	-10.29***	3.092*	35.82	1.320**
	(5.579)	(2.818)	(1.584)	(26.11)	(0.637)
GDP per capita (ln)	0.700	-1.476	-1.153	-11.34	0.856**
	(3.857)	(1.600)	(0.837)	(17.58)	(0.344)
Unemployment (ln)	-1.164	1.203**	0.0421	-1.695	0.336**
	(1.012)	(0.590)	(0.223)	(4.072)	(0.139)
State capacity	-0.133	0.583	1.281**	4.020	0.0486
	(1.909)	(0.928)	(0.468)	(6.922)	(0.203)
Manufacturing	0.213	-0.304***	-0.00337	0.144	0.00522
	(0.176)	(0.0994)	(0.0320)	(0.637)	(0.0218)
Globalization	0.242	0.138*	-0.0594	-0.687	0.00647
	(0.172)	(0.0811)	(0.0387)	(1.071)	(0.0173)
Democracy	0.0130	-0.0102	-0.0115	-0.198	0.0116
	(0.235)	(0.114)	(0.0254)	(1.627)	(0.0259)
Constant	-69.11	115.1***	-11.97	-182.1	-20.91***
	(74.53)	(29.55)	(14.48)	(317.9)	(6.599)
Observations	143	250	57	97	296

*Note: * p < 0.10, ** p < 0.05, *** p < 0.01.*

Table A3. Impact of populism on environmental outcomes. Country fixed effects

	(1) Env R&D exp	(2) Env taxes	(3) Exp on env	(4) Env ODA	(5) Env tech
Populism score	-0.844	-0.148	0.0264	-4.132	-0.0487
	(0.705)	(0.379)	(0.0799)	(2.696)	(0.0920)
Population (ln)	-3.296	-11.21***	3.693***	32.71*	-0.154
	(4.412)	(2.297)	(1.096)	(17.16)	(0.532)
GDP per capita (ln)	1.831	-1.608	-1.324**	-14.47	0.702**
	(3.471)	(1.466)	(0.610)	(15.57)	(0.325)
Unemployment (ln)	-0.686	1.464***	-0.366**	-2.425	0.353***
	(0.872)	(0.551)	(0.142)	(3.067)	(0.134)
State capacity	-1.600	1.015	0.437	1.645	-0.0375
	(1.539)	(0.831)	(0.269)	(4.951)	(0.191)
Manufacturing	0.0385	-0.171*	-0.0230	0.174	0.0164
	(0.152)	(0.0908)	(0.0197)	(0.516)	(0.0202)
Globalization	-0.0409	0.0736	-0.0252	0.218	-0.0225*
	(0.122)	(0.0498)	(0.0240)	(0.483)	(0.0116)
Democracy	0.0753	-0.0148	-0.00903	-0.512	0.0263
	(0.236)	(0.106)	(0.0206)	(1.382)	(0.0246)
Constant	22.28	126.6***	-16.62*	-180.9	-3.756
	(58.04)	(22.48)	(8.940)	(180.4)	(5.169)
Observations	143	250	57	97	296

*Note: * p < 0.10, ** p < 0.05, *** p < 0.01.*

Table A4. Impact of populism on environmental outcomes. Leader fixed effects

	(1) Env R&D exp	(2) Env taxes	(3) Exp on env	(4) Env ODA	(5) Env tech
Populism score	-1.530*	0.854	0.465	-5.746	-0.0754
	(0.856)	(0.599)	(.)	(15.03)	(0.293)
Population (ln)	-0.342	-6.249	4.802	30.37	-0.384
	(5.803)	(4.085)	(.)	(64.33)	(1.857)
GDP per capita (ln)	-5.662**	-1.970	0.191	-16.22	1.650
	(2.644)	(1.940)	(.)	(38.14)	(0.997)
Unemployment (ln)	-0.309	0.158	0.704	-4.792	0.773**
	(0.763)	(0.650)	(.)	(7.809)	(0.344)
State capacity	2.568	-0.0779	-0.220	-0.293	0.0314
	(1.706)	(1.012)	(.)	(17.46)	(0.479)
Manufacturing	-0.229	0.0218	0.224	-0.298	0.00572
	(0.210)	(0.136)	(.)	(3.158)	(0.0563)
Globalization	0.0996	0.0372	0.135	-0.320	-0.0629
	(0.0984)	(0.0732)	(.)	(1.698)	(0.0395)
Democracy	-0.316**	0.159	0.120	-0.460	0.00378
	(0.153)	(0.104)	(.)	(14.80)	(0.0596)
Constant	61.94	82.82**	-63.06	-81.45	-8.410
	(62.19)	(36.43)	(.)	(765.8)	(16.27)
Observations	143	250	57	97	296

*Note: * p < 0.10, ** p < 0.05, *** p < 0.01.*