Exposure to International Trade Lowers Green Voting and Worsens Environmental Attitudes

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Abstract

From a political perspective, advancing green agendas in democracies requires obtaining electoral support for parties and candidates proposing green platforms. It is then crucial to understand the factors driving green voting and attitudes. Yet, limited research has explored the role of economic determinants in this context. In this study, we show that globalization, through the distributional consequences of import competition, is an important determinant of support for parties proposing green platforms. Our analysis covers the United States and 15 countries of Western Europe, over the period 2000-2019, with trade exposure measured at the level of sub-national geographic areas. We find that higher trade exposure leads to lower

support for more environmentalist parties and to more skeptical attitudes about climate change. Our empirical findings are in line with the theoretical channel of de-prioritization of environmental concerns, as trade-induced economic distress raises the salience of economic issues.

Conserving the natural environment and mitigating the impacts of climate change represent critical contemporary challenges and hold paramount importance for policymakers on a global scale. From a political point of view, advancing green agendas in democracies requires public opinion awareness and chiefly electoral support for parties and candidates proposing environmentalist policy platforms. Against this backdrop, it is crucial to reach a thorough understanding of the determinants of green voting and attitudes. In this respect, a large literature has looked into individual characteristics such as gender, age, and education (for a review, see [1]). More recently, a growing strand of literature has also highlighted the role of personal experiences with temperature abnormalities or extreme events (see, e.g., [2], [3]). Yet, perhaps surprisingly, only fewer studies have looked into the economic determinants of green voting and attitudes—focusing, for instance, on income and employment status (see, e.g., [4])—and this has been typically done in terms of correlations rather than causal identification analysis.

In this study, we set out to investigate the causal implications of changes in economic conditions on support for environmental action. The guiding intuition is that situations of economic distress may lead to a de-prioritization of environmental issues as economic concerns become more salient. In particular, economic shocks with distributional consequences, leading to unevenly distributed economic grievances, may have implications on the way people think about climate change and the extent to which they are willing to vote for parties that are more environmentalist.

As a source of variation in economic conditions, we focus on a key global trend, that of globalization. Specifically, we exploit differences in trade exposure across sub-national geographic areas, as driven by historical differences in industry specialization. While trade has generated aggregate welfare gains over the past three decades, it has also left losers behind. Rising trade exposure has been found to have strong distributional consequences, inducing economic distress in regions that were relatively more affected by import competition (see, e.g., [5]). Our analysis covers the United States and 15 countries of Western Europe over the period 2000-2019. We find that higher trade exposure leads to lower support for more environmentalist parties and to more skeptical attitudes about climate change. We provide evidence consistent with the channel of de-prioritization of environmental issues vis-à-vis economic concerns. Our findings suggest that addressing the distributional consequences of trade may be instrumental in making progress on climate action in the years to come.

From a theoretical point of view, different, and complementary, factors may contribute and compound to determine the link between trade exposure and environmentalism. First, in line with Inglehart's post-materialism theory [6], economic distress may foster the relevance of materialist values, such as job availability, and dampen the salience of post-materialist values, such as environmentalism. A second and related psychological factor is based on the "finite pool of worry" hypothesis [7], stating that humans' cognitive resource constraints also imply finite emotional resources. Individuals exposed to the

negative consequences of trade, having to worry more about their economic and employment status, may reduce their worry about environmental threats. Third, environmental quality has been largely shown to be a normal good (see, e.g., [8]), whose demand grows with income. To the extent that rising trade exposure determines a negative income shock, this may then translate into lower environmentalism. Fourth, rising inequality has been associated with lower aggregate demand for environmental policy (see, e.g., [9]). To the extent that rising trade exposure increases inequality by generating winners and losers, this may further contribute to lowering environmentalism.

A fifth factor is associated with the common narrative that environmental policies are antithetical to economic growth and employment. Individuals who are already harmed by trade may then reject climate change to oppose climate policies and their associated costs, which may entail further distress for them. For instance, import shocks may mobilize workers in polluting industries against emission-reducing policies such as carbon taxes and cap-and-trade systems, which may reduce the competitiveness of domestic producers vis-à-vis foreign competitors operating in less regulated countries. It has indeed been noticed how the potential losers of the green transition, e.g., low-skilled manufacturing workers employed in polluting industries, tend to overlap significantly with social groups that have already been negatively affected by globalization and technological change over the past three decades (see, e.g., [10]).

A sixth factor is more political in nature. A growing stream of literature has started to investigate the political implications of globalization. In particular, trade exposure has been shown to raise support for protectionist, isolationist, and nationalist parties and candidates (see, e.g., [11], [12]). It has also tilted people's attitudes in a nativist and authoritarian direction, thus fueling support for radical-right parties (see, e.g., [13]). These political forces tend to be also climate skeptical and hostile to policies prescribing climate change mitigation [14]. In particular, in their populist narrative, they tend to portray climate issues as concerns of the elites. These elites do not have to worry about the more serious economic problems faced by the common people and may push for green policies that hit disproportionately lower-income people [15]. As trade-exposed voters identify more with these parties, their attitudes may also be tilted in the same direction through party cues, thus reinforcing the de-prioritization of environmental issues (see, e.g., [16]).

While we provide evidence consistent with the key theoretical channel of de-prioritization of environmental concerns, it is beyond the scope of this paper to assess the relative importance of the different theoretical factors underlying this process. Such relative roles may be hard to identify even in experimental settings, where one can artificially induce one shock at a time, given the similarity of the factors and the psychological complexity of attitudes formation (see, e.g., [17]).

In this study, we investigate the environmental dimension of trade-induced political shifts, which has remained unexplored until now. Indeed, while international trade is often discussed because of its impact on the environment, we

do not have evidence on its possible direct impact on support for environmental action. Yet, shedding light on this issue is key to improving our understanding of how to advance green agendas in Western democracies.

The empirical analysis is organized in three steps. First, we investigate the impact of trade exposure on voting at the sub-national level. Then, we replicate the voting analysis using data at the individual level. Finally, we assess the effect of trade exposure on individual attitudes. Throughout the analysis, the main explanatory variable of interest is a measure of exposure to import competition in the years prior to the elections or interviews. This is computed at the level of sub-national geographic areas. The methodological details are described in the methods section. Intuitively, this measure is meant to capture economic distress induced by trade on the "supply side". In the baseline analysis we consider exposure to imports from all countries, but we also show results referring specifically to imports from high-income countries, low-income countries, and China, as these may have heterogeneous implications across different regions. We address the potential endogeneity of imports by following a standard approach in international economics. That is, the growth in imports from a given group of trading partners is instrumented using the growth in exports by the same trading partners to other destination countries.

Regional Level Results on Voting

The main dependent variable in the regressions on voting at the level of sub-national geographic areas is the *Environmentalism Score*. This index is the average of the environmentalism scores of all the parties competing in each election, weighted by their vote shares in each area. Intuitively, it is a proxy for the ideological leaning of sub-national geographic areas in terms of environmentalism, as inferred from electoral outcomes in each election. Descriptive evidence on the dynamics of environmentalism scores and other variables of interest is presented in the Online Appendix.

United States

Results for the US analysis are reported in the first two columns of Table 1. This analysis is conducted at the level of commuting zones, based on House elections. The estimated coefficients on trade exposure can be interpreted as the effect of a one standard deviation change. The first column reports the OLS results, while the second refers to the IV regression. The estimated effect of trade exposure is negative and statistically significant, suggesting that growing import competition reduces support for more environmentalist political forces. As for the magnitude of this effect, a one standard deviation increase in total trade exposure reduces the environmentalism score by around 4% of a standard deviation (see IV estimate in Column 2). Results considering imports from different origins are pretty stable across the board (left panel of Figure 1).

Europe

For Europe, we conduct the analysis at the level of electoral districts, based on national legislature elections. Results are reported in Columns 3-4 of Table 1. Consistent with the US results, the estimated effect of trade exposure is negative and statistically significant. As for the magnitude, one standard deviation increase in total trade exposure reduces the environmentalism score by around 22% of a standard deviation (see IV estimate in Column 4). The estimated effects are not statistically different from each other when we consider different origins of imports (right panel of Figure 1).

Robustness and Extensions

We have carried out a large number of robustness checks and extensions to the regional analysis of electoral outcomes. These are listed fully in the methods section and reported with all details in the Online Appendix. In particular, both for the US and for Europe, results are robust to: excluding the years of the financial crisis; controlling for export exposure; controlling for the ideological leaning in terms of protectionism; controlling for macroeconomic conditions; controlling for exposure to extreme weather events, i.e., temperature anomalies, heat episodes and dry spells, as in [3]; controlling for other potential confounders.

In addition, for the US we also show that our evidence is robust to: using alternative environmentalism scores; controlling for the vote share of the Democratic party in the first pre-sample election, interacted with either a linear time trend or year fixed effects; considering both House and Senate elections at the level of analysis at which they are held, i.e., congressional-district and state level, respectively. For Europe, we obtain similar results as the baseline when: using as a dependent variable the cumulative share of district votes for parties identified as being green; dropping the largest regions within each country and overall; replicating the analysis at the more disaggregated NUTS-3 level (available for Italy and the UK); and excluding countries with a majoritarian or mixed electoral system.

Individual Level Results on Voting and Attitudes

We accompany the analysis of voting at the level of sub-national geographic areas with an analysis based on individual-level survey data. First, we replicate the analysis of voting using information on the party voted by each individual in a given election. This allows us to investigate potential heterogeneity in the effect of trade exposure across different categories of individuals. Second, we complement the analysis of voting with an investigation of the impact of trade exposure on green attitudes.

Voting in the United States

The first two columns of Table 2 display the results on individual voting for the US. The dependent variable is measured based on the party voted by each

individual in a given election. The estimated effect of trade exposure is negative and statistically significant, with a magnitude which is very close to that found in the commuting-zone level analysis. Specifically, a one standard deviation increase in trade exposure reduces the environmentalism score by about 3% of a standard deviation (see IV estimate in Column 2). In Table A18 we show that this effect is stable when controlling for the self-reported partisan ideology of each individual, i.e., Democratic, Republican, Independent, or other.

This analysis at the individual level corroborates the sub-national level findings; moreover, it allows to investigate potential heterogeneity of the effect. To this purpose, we have augmented the baseline IV regression with interactions between trade exposure and several individual characteristics (results shown in Table A17). These include gender, education, type of occupation (i.e., part time or full time), employment status (i.e., unemployed, retired or student) as well as age groups (i.e., below 25 or above 64). The evidence points to a "sociotropic" response of voters, who seem to react to import competition independently from their personal extent of exposure, which may vary along with their individual characteristics. Only part-time workers seem to be non-responsive, with an overall estimated effect of trade exposure that is far from statistically significant. Instead, students and retired people, if anything, seem to show a stronger than average response to import competition hitting their commuting zone of residence.

Voting in Europe

The estimated effect of trade exposure is negative and statistically significant also in the analysis of Europe (Columns 3 and 4 of Table 2). As for the magnitude, one standard deviation increase in trade exposure reduces the environmentalism score by around 15% of a standard deviation. This effect remains essentially unaffected when excluding from the sample those individuals who report voting for a radical-right party, according to the list by [18] (see Table A32). The heterogeneity analysis, similar to the US one, is presented in Table A31. The estimated overall effect of trade exposure is statistically significant for all groups of individuals, pointing again to a "sociotropic" response of voters. At the same time, there is some evidence of heterogeneous effects. In particular, the effect of import competition seems to be significantly stronger for unemployed individuals, and milder for females, white collar workers, and more educated individuals, who tend to be relatively sheltered from the economic impact of trade exposure in advanced economies.

Attitudes

We complement the analysis of voting with an investigation of the impact of trade exposure on green attitudes. This analysis is particularly important as it allows us to explore whether the trade-induced shift in voting away from environmentalist political forces is also related to a consistent shift in individual attitudes in the same direction. Specifically, we begin by focusing on climate change attitudes. Then, we consider additional survey items that allow us to

provide evidence in line with the theoretical channel of de-prioritization of environmental issues vis-à-vis economic concerns, as driven by trade exposure.

All the coefficients in Figure 2 are obtained from IV regressions; they refer to total trade exposure and can be interpreted as the effect of a one standard deviation change. For the US, all the estimated effects are negative and statistically significant, based on the same specification employed for the analysis of individual vote (left panel of Figure 2). Individuals living in commuting zones more exposed to import competition are less likely to think that the seriousness of climate change is correctly assessed or underestimated by the news ("Serious"), and less likely to worry about climate change ("Worry"). In terms of magnitudes, a one standard deviation increase in trade exposure leads to a decrease by about 3 p.p. in the probability of perceiving climate change as a serious threat or being worried about it. Consistent with the channel of de-prioritization of environmental concerns, individuals more exposed to trade are also: (1) less likely to consider themselves as being environmentalists; (2) less likely to mention environment / pollution / climate change as the most important problem; and (3) less likely to think that environmental protection is much (or somewhat) more important than job availability. In addition, more trade-exposed individuals are also less likely to support the statement that states should be required to use a minimum amount of renewable fuels, they are less likely to be employed, and less likely to report a household income in the top 10% of the distribution (results shown in Table A35 of the Online Appendix).

Similarly, in Europe, individuals living in regions more exposed to trade are significantly less likely to think of climate change as a serious issue (right panel of Figure 2). Specifically, a one standard deviation increase in total trade exposure reduces the probability of perceiving climate change as a serious problem by about 2 p.p. More trade-exposed individuals are also: (1) less likely to think that fighting climate change and using energy more efficiently can boost the economy and jobs; (2) more likely to state that their household income is insufficient to have a minimum acceptable standard of living; (3) more likely to expect the economic situation of their country to get worse over the next year; and (4) less likely to agree with the statement that protecting the environment should be a priority, even if it affects economic growth.

Several robustness checks and extensions are presented in the methods section, and reported with all details in the Online Appendix, focusing on four main items of interest (i.e., the two items on top of Figure 2, both for the US and for Europe). In particular, results are largely robust when we consider exposure to imports from different origins and when we control for exposure to extreme weather events. We have also performed the same heterogeneity analysis as for voting. By and large, results point to a "sociotropic" response of individuals, consistent with the findings on voting.

Overall, the evidence presented in this section supports the theoretical argument that trade exposure can have a negative impact on environmentalist voting by leading to the de-prioritization of environmental issues, amid rising economic concerns.

Conclusion

In this study, we investigate the impact of globalization on green voting and attitudes. We find that higher trade exposure leads to lower support for environmentalist parties and to worse attitudes about climate change. Our results suggest that mitigating the unequal repercussions of international trade is key to advancing support for green agendas in Western democracies. Our findings also bring to the forefront an important additional element for the evaluation of a currently debated policy: the carbon border adjustment mechanism. By internalizing the climate externality, the tariff adjustments might lower import growth and partly avoid further deterioration of the socio-economic situation of trade-exposed social groups. In addition, this mechanism would generate tariff revenues that, together with revenues from emissions-trading schemes such as the EU ETS, could be used to compensate vulnerable households.

While we focus on international trade as a driver of politically salient distributional consequences, future studies may exploit other identifiable economic shocks such as automation, which is another key dimension of structural economic change. More research connecting economic factors, inequality, and support for climate action is much needed, especially because transitioning to a low-carbon economy may itself imply reinforced/additional distributional consequences. The climate challenge will be much harder to win without a more inclusive policy approach to managing structural changes.

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Methods

The main explanatory variable of interest is a measure of exposure to import competition in the years prior to the elections or interviews. This is computed at the level of sub-national geographic areas, following the theory-based approach developed by [5]:

$$Trade\ Exposure_{crt} = \sum_{j} \frac{L_{rj(pre-sample)}}{L_{r(pre-sample)}} * \frac{\Delta IMP_{cjt}}{L_{cj(pre-sample)}} \tag{1}$$

where c indexes countries, r sub-national geographic areas, j manufacturing industries, and t years. ΔIMP_{cjt} is the change in (real) imports over the past n years, in country c and industry j. In the baseline analysis, in line with [11], we consider the change in imports over the past two years. This is normalized over $L_{cj(pre-sample)}$: the number of workers in country c and industry j, measured pre-sample and kept constant throughout the analysis. In order to obtain the sub-national measure of trade exposure, we take the weighted sum of the change in imports per worker across industries, where the weights reflect the relative importance of the different industries in a given area, evaluated pre-sample and kept constant throughout the analysis. Using pre-sample employment figures is meant to avoid contamination issues stemming from the fact that current employment may be affected by import dynamics. Our measure is in fact meant to exploit variation in the ex-ante vulnerability to trade across geographic areas, based on their historical employment composition. The idea is that different areas are more or less exposed to import pressure depending on their initial industrial structure. In particular, larger shocks are assigned to areas in which manufacturing was more relevant ex-ante. However, given the same manufacturing share, larger shocks are attributed to areas historically specialized in industries witnessing stronger growth in imports over the sample, and in years in which the rise in imports is higher.

Our sample includes the United States and 15 countries of Western Europe: Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and United Kingdom. Trade data are sourced at the product level from UN Comtrade-BACI, and aggregated at the level of NACE-subsection industries. Subsections are identified by two-character alphabetical codes (from DA to DN in Rev. 1.1). They correspond to two-digit industries or aggregations of them (see Table A1 of Online Appendix). For the US, employment data come from County Business Patterns and refer to year 1988. For European countries, we obtain employment data either from Eurostat or from national sources. Depending on the country, they refer to an initial year between 1988 and 1995 (for details, see Table A2 of Online Appendix). For the US, in the main analysis based on House elections, trade exposure is computed at the commuting-zone level; in the extensions, it is computed either at the state level—for the analysis of Senate elections—or at the congressional-district level—for the analysis of House elections. For European countries, in the main analysis we focus on NUTS-2

administrative regions, as in [11]. NUTS-2 regions have populations ranging between 800,000 and 3 million. In total, we have 192 regions in the sample. For Germany, employment figures are only available at the more aggregated NUTS-1 level. This implies that 16 out of 192 sample regions correspond to NUTS-1 regions. For an extension of the analysis, available for Italy and the UK, we measure trade exposure at the more disaggregated NUTS-3 level.

In the baseline analysis, we regress electoral outcomes and individual attitudes on total trade exposure, instrumented as follows:

$$Instrument_{crt} = \sum_{j} \frac{L_{rj(pre-sample)}}{L_{r(pre-sample)}} * \frac{\Delta WES_{jt}}{L_{cj(pre-sample)}} \tag{2}$$

where ΔWES_{jt} is the growth of trading partners' exports in industry j to the rest of the world (i.e., excluding country c), while the normalization and weighting are the same as in Equation 1. Intuitively, we instrument the growth in imports in a given sample country using the growth in exports by all its trading partners to all other countries. This instrument borrows from earlier work in international economics (e.g., [23]). It is meant to capture the variation in imports which is due to exogenous changes in supply conditions abroad, rather than to domestic factors potentially correlated with attitudes and voting.

We show results based on four different measures of trade exposure. They are all computed according to Equation 1, but considering different types of import flows in the ΔIMP_{cjt} term. Specifically, the baseline measure includes total imports from all trading partners, thus providing the most comprehensive account of import competition. The second measure focuses only on imports from high-income countries (i.e., all the countries that have been classified by the World Bank as high income in at least one year over the period 1995-2019). The third measure considers imports from 52 low-income countries (as in [21], full list in Table A3 of Online Appendix), while the fourth measure focuses on imports from China only. The underlying intuition is that imports from different sources may be more or less relevant for different industries and potentially have heterogeneous implications for different regions. Focusing on China actually fits our instrumental variable approach particularly well. In fact, as discussed by [19], China is a trading partner witnessing a rapid and substantial internal transformation over the time period that we consider, thus providing clear supply shocks that we exploit for identification.

When using each alternative measure of trade exposure, the instrumental variable is also adapted to consider only exports originating from the selected group of trading partners. For instance, when focusing on Chinese imports, for the US we follow closely [5], using Chinese exports to a group of eight high-income countries: Australia, Denmark, Finland, Germany, Japan, New Zealand, Spain, and Switzerland. Similarly, for Europe we consider Chinese exports to the same destinations as in [11]. Specifically, compared to the eight export destinations employed by [5], [11] drop the European countries, while adding Canada. Hence the final group contains: Australia, Canada, Japan,

and New Zealand. The same approach is taken for instrumenting imports from high- and low-income countries.

Voting Data

For the US, election data at the sub-national level are from Dave Leip's US Election Atlas and the MIT Election Data and Science Lab. For Europe, they are obtained from the Constituency-Level Elections Archive (CLEA, [24]) and a number of national sources. Our sample includes legislative elections taking place between 2000 and 2019. Our main variable of interest is a proxy for the ideological leaning of sub-national geographic areas in terms of environmentalism. This is computed by combining party vote shares in each area with a party-specific indicator of environmentalism.

Specifically, we compute the center of gravity of environmentalism in each area through the following formula:

$$Environmentalism_{st} = \frac{\sum_{p=1}^{n} w_{pst} * log(0.5 + Score_{pt})}{\sum_{p=1}^{n} w_{pst}} \quad (3)$$

where s indexes sub-national geographic areas, p parties, and t years (elections). w_{pst} is the area-specific vote share, and $Score_{pt}$ is the party-specific environmentalism score. Intuitively, the center of gravity ($Environmentalism_{st}$) is the average of the environmentalism scores of the competing parties, weighted by their vote shares in the area. For brevity, in the paper we refer to the center of gravity simply as environmentalism score.

For the main analysis on the US, based on House elections, we compute the environmentalism score at the level of commuting zones. As weights, we employ the commuting zone-specific two-party vote shares of the Democratic and Republican party. These are computed as in [12], taking the ratio of Democratic (or Republican) votes over the sum of votes cast for the Democratic and Republican party. Reflecting the well-known heterogeneity of party platforms across states (see, e.g., [20]), the environmentalism score of each party is state-specific. It is computed as the average roll-call environmentalism score of senators from the relevant state over the past two years before the election, as obtained from the League of Conservation Voters (LCV). For extensions of the analysis, we compute the environmentalism score either at the congressional district level, based on party vote shares in the House elections, or at the state level, based on party vote shares in the Senate elections. In both cases, we keep using the same state-specific environmentalism scores based on LCV data. These scores are also employed in the analysis of voting at the individual level, which is based on survey data from the Cooperative Congressional Election Study (CCES) spanning the period 2006-2018.

For the 15 European countries in our sample, we use as weights the district-specific party vote shares for the elections of the legislative lower house. As for the party-specific environmentalism scores, we employ the environmental

protection index made available by the Manifesto Project (MP, [25]). The MP provides human coding of statements made in party manifestos, allowing to compute measures of the ideological leaning of parties along several dimensions (see, e.g., [11] for an analysis of nationalism). The environmental protection index (MP item *per501*) provides information on the number of claims in the party manifestos in favour of protecting the environment, fighting climate change, and other "green" policies. Being related to the national manifestos, party environmentalism scores are nation-election specific. These scores are also used in the individual-level analysis, which is based on survey data from the European Social Survey (ESS), with interviews spanning the period 2002-2019.

We note that the environmentalism scores employed for the US and Europe are somewhat different. In fact, while for Europe they are based on party manifestos, for the US they are based on roll-call data, due to lack of information on individual candidates' manifestos. In Table A13 we show that the results on the US are robust to using the Manifesto Project environmentalism scores for the Democratic and Republican party, thus following exactly the same approach as for Europe. For the US, though, we think this approach is sub-optimal since these scores are only available for Presidential elections. That is, there are no party manifestos coded for "stand-alone" House and Senate elections. Moreover, being related to Presidential elections, Manifesto Project scores do not vary by state, while we know that parties' leaning may vary significantly across states.

For an extension of the analysis of European countries we also consider a second dependent variable at the district level: Green Share. This is the cumulative share of district votes for parties identified as being green. Specifically, these are all the parties categorized as ecological by the Manifesto Project. In a further refinement, we also distinguish, within the group of green parties, those that have a primarily domestic focus from those that have a more general approach. This assessment is based on information we retrieved for all green parties from the party websites. The list of parties belonging to each of the two groups is provided in Section 2 of the Online Appendix.

Attitudes data

For the US, we rely on data from the environment survey of the Gallup Poll Social Series and from the Cooperative Congressional Election Study (CCES). For Gallup, data span the period 2000-2019 and cover a representative sample of around 1,000 respondents per year. We employ four survey items:

- *"Thinking about what is said in the news, in your view is the seriousness of global warming generally exaggerated, generally correct, or is it generally underestimated?"*
  From this question, we obtain a dummy equal to one in case of "generally correct" or "underestimated", and zero otherwise.

- *"How much do you personally worry about the greenhouse effect or global warming/climate change?"*
  From this question, we obtain a dummy equal to one in case of "a fair amount" or "a great deal", and zero otherwise.
- *"What do you think is the most important problem facing the country today?"*
  From this question, we obtain a dummy equal to one in case the respondent answers "environment/pollution/climate change", and zero otherwise.
- *"Do you consider yourself an environmentalist or not?"*
  From this question, we obtain a dummy equal to one in case the respondent answers "yes", and zero otherwise.

As for CCES, data span the period 2006-2019. We employ the survey item on the preference scale between environmental protection and job availability. Specifically, we construct a dummy variable equal to one in case the respondent thinks that environmental protection is "much more important" or "somewhat more important" than job availability, and zero otherwise. We also employ the survey item concerning support for the statement that states should be required to use a minimum amount of renewable fuels. Specifically, we construct a dummy variable equal to one in case the respondent supports the statement, and zero otherwise (see Table A35). From the same data source, we also employ data on household income, employment status, and union membership (see Table A35).

For European countries, we rely on Eurobarometer data, which span the period 2008-2019 and cover a total of 89,511 respondents in 13 countries (Switzerland and Norway are not included in the survey). We employ the following survey items:

- *"How serious a problem do you think global warming/climate change is at this moment?"*
  This question is asked in every wave of the Special Survey on Climate Change and is akin to the Gallup one for the US, thus allowing for a comparable analysis. Answers to this question range from 1 ("not at all a serious problem") to 10 ("an extremely serious problem"). For comparability with the US analysis, we construct a dummy equal to one for scores greater or equal to 7, which is the sample mean.
- *"To what extent do you agree or disagree with the following statement: Fighting climate change and using energy more efficiently can boost the economy and jobs in the EU."*
  From this question, we construct a dummy equal to one in case the respondent "tends to agree" or "totally agrees" with the statement, and zero otherwise.

In addition to these two items, we employ a dummy equal to one if the respondent reports that their household income is "somewhat lower" or "much lower" than the very lowest net monthly income that their household would need in order to have a minimum acceptable standard of living, and zero

otherwise. This item is only available for the year 2009. Moreover, we employ a dummy equal to one if the respondent expects the economic situation of their country to get worse over the next year, and zero otherwise. This item is only available for the years 2008 and 2011. Finally, we employ a dummy equal o one if the respondent "tends to agree" or "totally agrees" with the statement that protecting the environment should be a priority for their country, even if it affects economic growth. This item is only available for the year 2008.

Specifications

In this section, we outline all the estimated specifications.

Regional Level Analysis on Voting

For the regional level analysis of voting in the US, e.g., in the first two columns of Table 1, we estimate specifications of the following form:

$$Environmentalism_{zt} = \beta\ Trade\ Exposure_{zt} + \alpha_z + \gamma_z Trend_{zt} + \varepsilon_{zt} \quad (4)$$

where the dependent variable is the environmentalism score of commuting zone z in election-year t. This is regressed on trade exposure computed at the commuting-zone level. α_z are commuting-zone fixed effects, while $Trend_{zt}$ are commuting-zone specific linear time trends. Standard errors are clustered at the commuting-zone level.

For the regional level analysis of voting in Europe, e.g., in Columns 3-4 of Table 1, we estimate specifications of the following form:

$$Environmentalism_{dt} = \beta\ Trade\ Exposure_{r(d)t} + \alpha_{r(d)} + \gamma_{r(d)} Trend_{r(d)t} + \varepsilon_{dt} \quad (5)$$

where d indexes electoral districts and t years. The dependent variable is the environmentalism score of district d in election-year t. The function $r()$ maps district d to its NUTS-2 region r, that is the level at which we can measure the relevant trade exposure. In some cases, a district is itself a NUTS-2 region. In other cases, two or more districts are contained within the same region. Importantly, districts never span multiple regions. $\alpha_{r(d)}$ are region fixed effects, while $Trend_{r(d)t}$ are region specific linear time trends. Standard errors are clustered at the region-year level.

Individual Level Analysis on Voting and Attitudes

The individual level analysis for the US, both in terms of voting and in terms of attitudes, is based on the following specification:

$$Dep\_Var_{it} = \beta\ Trade\ Exposure_{z(i)t} + \mathbf{I}_{it}\gamma^{'} + \alpha_{z(i)} + \alpha_t + \varepsilon_{it} \quad (6)$$

where i indexes individuals and t election or interview years. The dependent variable is either the environmentalism score of the party voted by the individual in a given House election, or one of the survey items considered in the analysis of attitudes. In the vote analysis, the employed environmentalism scores are party-state specific, as in the commuting-zone level analysis. The function $z()$ maps individual i to their commuting zone of residence z, allowing to attribute the relevant trade exposure value. I_{it} is a vector containing three individual controls: age, gender, and a dummy for college education. α_z and α_t are commuting zone and year fixed effects, respectively. Standard errors are clustered at the commuting zone-year level.

For the individual level analysis on Europe, the estimated specification is:

$$Dep\_Var_{it} = \beta\ Trade\ Exposure_{r(i)t} + \mathbf{I}_{it}\gamma^{'} + \alpha_{r(i)} + \delta_{r(i)} Trend_{r(i)t} + \varepsilon_{it} \quad (7)$$

where i indexes individuals and t years. $r()$ maps individual i to their region r. I_{it} contains individual controls for age, gender, and college education. $\alpha_{r(i)}$ are NUTS-2 region fixed effects, while $Trend_{r(i)t}$ are region specific linear time trends. Standard errors are clustered at the region-year level. This specification is employed for the analysis of individual voting and for the analysis of the first two attitudes from the top of the plot in the right panel of Figure 2, for which we have data spanning several years. For the other three survey items, which are available for only one or two years, the trends are dropped and the fixed effects are adjusted (for details, see Table A40).

Robustness and Extensions on the Regional Analysis

In the Online Appendix, we report a large number of robustness checks and extensions to the regional analysis of voting. In particular, both for the US and for Europe, results are robust to: (1) excluding the years of the financial crisis (Tables A5 and A20); (2) controlling for export exposure (Tables A6 and A21); (3) controlling for the ideological leaning in terms of protectionism (Tables A7 and A22); (4) controlling for macroeconomic conditions, i.e., GDP growth and unemployment rate (Tables A8 and A23); (5) controlling for exposure to extreme weather events, i.e., temperature anomalies, heat episodes and dry spells, as in [3] (Tables A9 and A24); (6) controlling jointly for all the variables introduced at the above points (Tables A10 and A25); (7) controlling for potential confounders by interacting a number of pre-sample political and economic characteristics of sub-national geographic areas, both in levels and in changes, with either a linear time trend or year fixed effects, thus allowing for ex-ante different areas to follow different trajectories over time (Tables A11 and A26). Relatedly, in Tables A12 and A27 we also provide evidence pointing to a lack of pre-trends. In addition, for the US we also show that our evidence is

robust to: (1) using alternative environmentalism scores based on party manifestos (Table A13); (2) controlling for the vote share of the Democratic party in the first pre-sample election, interacted with either a linear time trend or year fixed effects (Table A14); (3) considering both House and Senate elections at the level of analysis at which they are held: congressional-district level for the House, and state level for the Senate (Tables A15 and A16). For Europe, we obtain similar results as the baseline when: (1) using as a dependent variable the cumulative share of district votes for parties identified as being green (Table A28); (2) dropping the largest regions within each country and overall (Table A29); (3) replicating the analysis at the more disaggregated NUTS-3 level (available for Italy and the UK; Table A29); (4) excluding countries with a majoritarian or mixed electoral system (Table A30).

Robustness and Extensions on the Attitudes Analysis

Several robustness checks and extensions to the analysis of attitudes are reported in the Online Appendix, focusing on four main items of interest (i.e., the two items on top of Figure 2, both for the US and for Europe). In particular, results are largely robust when we consider exposure to imports from different origins (Tables A36 and A41), and when we control for exposure to extreme weather events, as in [3] (Tables A37 and A42). In Tables A33-A34, and A38-A39, we have performed the same heterogeneity analysis as for voting. The results show some variation as we consider different attitudes, along with some empirical regularities. For instance, the effect for women is never statistically different than for men. For one item in Europe, on the belief that fighting climate change can boost the economy, we see that none of the interactions is statistically significant, while the overall effect of import exposure is significant for all groups of respondents (see Table A39). This evidence points to a "sociotropic" response of individuals, consistent with the results on voting. The picture remains largely sociotropic also for the other three items, although we find that some groups per each item are actually unaffected by import exposure. This is often (though not always) the case for students and young people, whose attitudes seem to be less related to the economic context. There are also some intriguing findings. For instance, when considering the European item on the seriousness of climate change (Table A38), the overall effect of import competition seems to be driven mainly by respondents with high education and by white collars, while blue collars and low-education individuals do not seem to be significantly affected. This finding is again consistent with the role of sociotropic concerns, which are relevant also for social groups that are less likely to be directly negatively affected by trade exposure. At the same time, this evidence is also consistent with the idea that trade exposure may induce a shift in attitudes especially for workers who tend to display greener attitudes in the first place, thus potentially tilting public opinion at the margin in a way that is politically consequential.

Data availability

The data analyzed in this study are available in the Harvard Dataverse repository at the following link: https://doi.org/10.7910/DVN/T4ZAHS [22]. All data are publicly available with one exception: individual data from the Gallup Poll Social Series. The Gallup-based replication database is shared upon request with researchers who have access to Gallup data.

Code availability

The data analysis was carried out in Stata and R. The codes that generate and visualize the results reported in this study are available in the Harvard Dataverse repository at the following link: https://doi.org/10.7910/DVN/T4ZAHS [22].

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Author Contributions Statement

The four authors contributed equally to this work. They are listed in alphabetical order.

Competing Interests Statement

The authors declare no competing interests.

Tables

Table 1 Baseline effects of trade exposure on voting at the regional level

	(1)	(2)	(3)	(4)
Dep. Var.:	**Environmentalism**			
Sample:	**United States**		**Europe**	
Trade Exposure	-0.138***	-0.037***	-0.049***	-0.080***
	[0.008]	[0.008]	[0.007]	[0.020]
Estimator	OLS	2SLS	OLS	2SLS
Commuting Zone Effects	yes	yes	-	-
Commuting Zone-Specific Trends	yes	yes	-	-
Region Effects	-	-	yes	yes
Region-Specific Trends	-	-	yes	yes
Obs.	7,241	7,241	9,634	9,634
R2	0.54	-	0.38	-
First-stage results				
World Export Supply	-	0.058***	-	0.006***
	-	[0.001]	-	[0.001]
Kleib.-Paap F-Statistic	-	9375.1	-	26.51

Notes: Regression coefficients refer to the effect of a one standard deviation change in trade exposure. Standard errors in parentheses. In columns 1-2, standard errors are clustered by commuting zone. In columns 3-4, standard errors are clustered by region-year.
P values: *** p<0.01, ** p<0.05, * p<0.1

Figure Legends/Captions (for main text figures)

Effects of Trade Exposure from Different Origins

Table 2 Baseline effects of trade exposure on voting at the individual level

	(1)	(2)	(3)	(4)
Dep. Var.:	**Individual Environmentalism**			
Sample:	**United States**		**Europe**	
Trade Exposure	-1.629***	-1.143**	-0.021*	-0.201***
	[0.387]	[0.468]	[0.011]	[0.048]
Estimator	OLS	2SLS	OLS	2SLS
Female, Age, Education	yes	yes	yes	yes
Commuting Zone Effects	yes	yes	-	-
Year Effects	yes	yes	-	-
Region Effects	-	-	yes	yes
Region-Specific Trends	-	-	yes	yes
Obs.	221,012	221,012	116,445	116,445
R2	0.13	-	0.35	-
First-stage results				
World Export Supply	-	0.059***	-	0.002***
	-	[0.002]	-	[0.000]
Kleib.-Paap F-Statistic	-	855.35	-	26.58

Notes: Regression coefficients refer to the effect of a one standard deviation change in trade exposure. Standard errors in parentheses. In columns 1-2, standard errors are clustered by commuting zone-year. In columns 3-4, standard errors are clustered by region-year. P values: *** p<0.01, ** p<0.05, * p<0.1

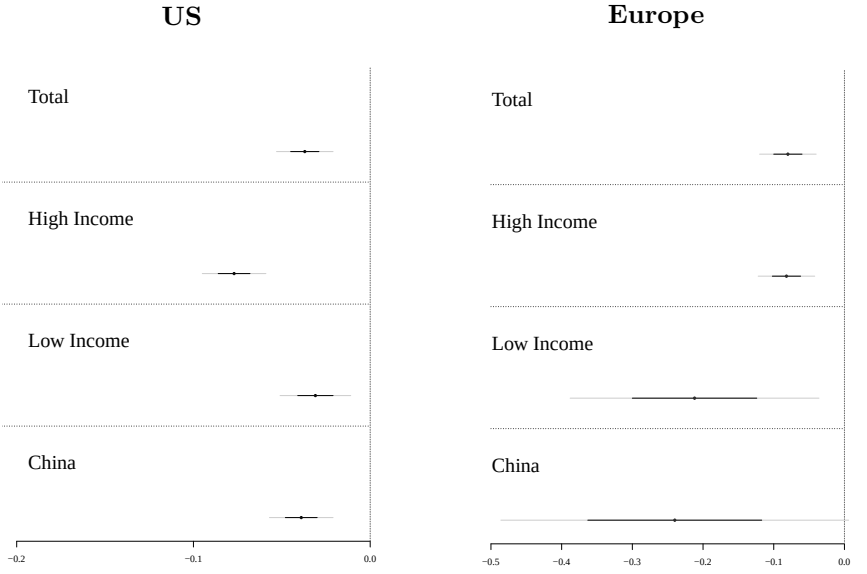

Fig. 1 IV estimates of the impact of a one standard deviation change in trade exposure on environmentalism in the US (left panel) and in Europe (right panel). Lines around the point estimates show 90% and 95% confidence intervals. Full results in Tables A4 and A19 of Online Appendix.

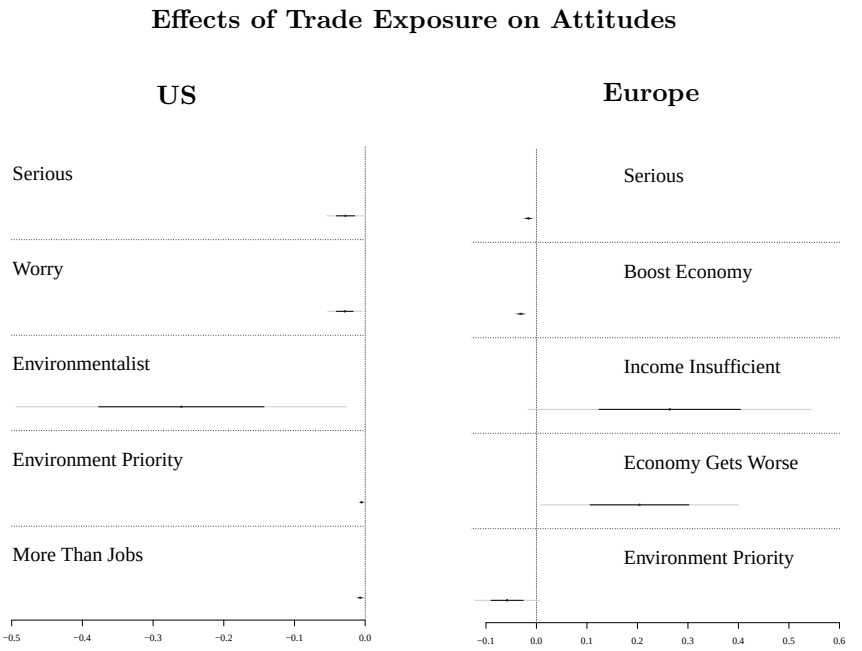

Fig. 2 IV estimates of the impact of a one standard deviation change in trade exposure on attitudes in the US (left panel) and in Europe (right panel). Lines around the point estimates show 90% and 95% confidence intervals. Full results in Tables A33-A35 and A38-A40 of Online Appendix.

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Exposure to International Trade Lowers Green Voting and Worsens Environmental Attitudes

July 24, 2023

Online Appendix

1 Details on the measurement of trade exposure

Table A1: NACE Rev. 1.1 industries

Code	Industry description
DA	Manufacture of food products, beverages and tobacco
DB	Manufacture of textiles and textile product
DC	Manufacture of leather and leather products
DD	Manufacture of wood and wood products
DE	Manufacture of pulp, paper and paper products; publishing and printing
DF	Manufacture of coke, refined petroleum products and nuclear fuel
DG	Manufacture of chemicals, chemical products, and man-made fibres
DH	Manufacture of rubber and plastic products
DI	Manufacture of other non-metallic mineral products
DJ	Manufacture of basic metals and fabricated metal products
DK	Manufacture of machinery and equipment n.e.c.
DL	Manufacture of electrical and optical equipment
DM	Manufacture of transport equipment
DN	Manufacturing n.e.c. (furniture, toys etc.)

Table A2: Employment data

Country	Initial Year	Source
Austria	1995	Eurostat
Belgium	1995	National Bank of Belgium
Finland	1995	Statfin
France	1989	INSEE
Germany	1993	Federal Employment Agency
Greece	1988	HSA Statistics Greece
Ireland	1995	Eurostat
Italy	1988	ISTAT
Netherlands	1988	CBS Statistics Netherlands
Norway	1994	Statistics Norway
Portugal	1990	INE Portugal
Spain	1993	INE Spain
Sweden	1993	SCB Statistics Sweden
Switzerland	1995	SFSO Swiss Statistics
United Kingdom	1989	ONS

Table A3: Low-income countries as in Bernard et al. (2006)

Afghanistan	Ethiopia	Moldova
Albania	Gambia	Mozambique
Angola	Georgia	Nepal
Armenia	Ghana	Niger
Azerbaijan	Guinea	Pakistan
Bangladesh	Guinea Bissau	Rwanda
Benin	Guyana	Samoa
Bhutan	Haiti	Sao Tome
Burkina Faso	India	Sierra Leone
Burundi	Kenya	Somalia
Cambodia	Lao PDR	Sri Lanka
Central African Rep.	Lesotho	St. Vincent
Chad	Madagascar	Sudan
China	Malawi	Togo
Comoros	Maldives	Uganda
Congo	Mali	Vietnam
Equatorial Guinea	Mauritania	Yemen
Eritrea		

2 Details on European green party classification

The list of green parties includes all parties categorized as ecological by the Manifesto Project (Volkens, Lehmann, Matthiess, Merz, Regel, and Wessels, 2018). The full list includes: The Greens and Peter Pilz List in Austria; The Greens and Ecologists and Green! in Belgium; Green Union in Finland; Europe Ecology - The Greens in France; Alliance'90/Greens in Germany; Green Party in Ireland; The Girasole ('Sunflower') and Green Federations in Italy; Green Left in the Netherlands; Green Party in Norway; Ecologist Party 'The Greens', People-Animals-Nature and Free in Portugal; Green Ecology Party in Sweden; Green Party of Switzerland and the Green Liberal Party in Switzerland; Green Party of England and Wales in the UK. For a refinement of the analysis, we have hand-coded these parties according to whether, on their party websites, they give special priority to the local environmental dimension, i.e., emphasizing domestic environment protection rather than having a more general approach to climate change and environmental issues. As a result of this investigation, we have identified the following parties as having a primarily domestic focus: Peter Pilz List in Austria; Green! in Belgium; and the Green Liberal Party in Switzerland. Data on green parties are employed for the analysis in Table A28.

3 Descriptive evidence

Figure A1 provides descriptive evidence on our main objects of interest. The top-left panel displays the share of survey respondents who perceive climate change as a serious issue. In the US, despite the upward tendency of recent years, the figure is not higher in 2019 than it was in 2001. In line with the idea that economic factors may be an important driver of green attitudes, there is a noticeable drop in correspondence with the financial crisis, and a recovery afterwards. A pretty similar pattern is observed for Europe, on average across the 15 countries in our sample (although data are available for a shorter time span).

The top-right panel displays information on environmentalist voting. Specifically, the red dashed line reports the vote share for parties belonging to the green family in Europe. In line with the evidence on attitudes, there is a rise at the end of the sample and a relatively flat pattern between 2000 and 2010. Overall, the green share displays a modest increase between 2000 and 2019, from around 5.5% to around 6.6%. The black dashed line reports the average environmentalism index across European countries. Also in this case, there has been a rise in recent years following a decline in correspondence with the financial crisis. The picture is slightly more nuanced for the US environmentalism index (black solid line), with a rise and fall in the middle of the sample and a level at the end of the sample that is only slightly higher than in 2000.

The bottom panel shows the evolution of imports over GDP, a standard measure of trade exposure. The evidence is in line with the unfolding of a strong globalization wave between the mid-1990s and the financial crisis, for both the US (solid line) and the 15 European countries in our sample (dashed line). From a historical perspective, this is typically referred to as the third globalization wave, following the first one between 1870 and the First World War, and the second one between 1944 and 1971. Then, we can observe what has been called a “trade collapse" in correspondence with the crisis, followed by an immediate rebound in 2010. Towards the end of the sample, imports over GDP have kept rising in Europe, while they have decreased in the US, where imports kept growing but GDP grew even faster. Still, even in the US, at the end of the period the ratio remains substantially above the initial level. We conjecture that these dynamics of trade exposure, through their ensuing distributional consequences across sub-national geographic areas, may play a significant role in explaining the dynamics of environmental concern and voting.

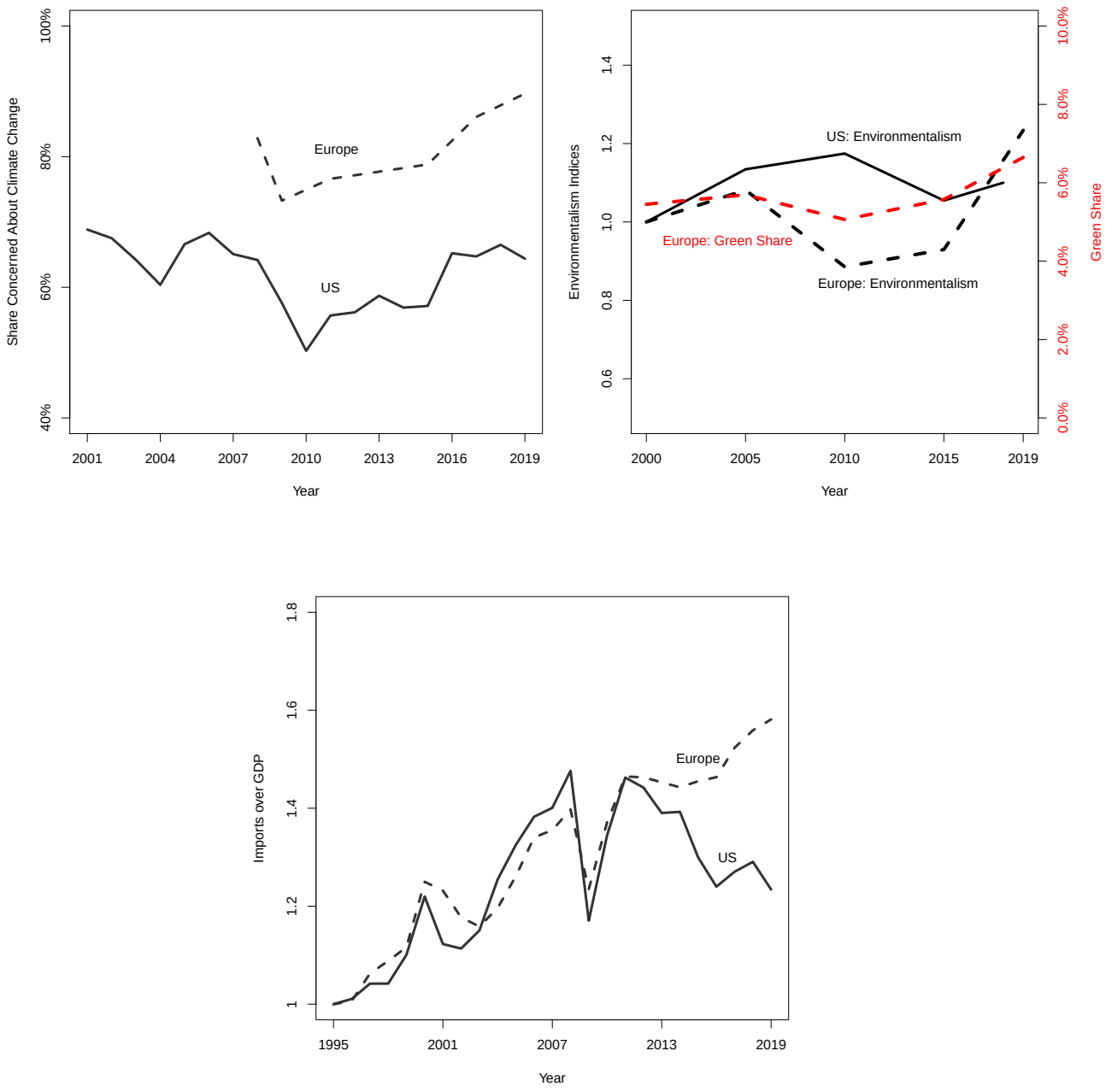

Figure A1: The top-left panel displays the (weighted) share of survey respondents who think that climate change is a serious issue in the US (solid line) and Europe (dashed line). In the top-right panel, the black solid line displays the environmentalism score in the US, based on Senate elections, on average across states; the black dashed line displays the environmentalism score in Europe, based on national legislature elections, on average across countries; the red dashed line displays the cumulative vote share for parties of the green family in Europe, based on national legislature elections, on average across countries. To reduce volatility driven by compositional effects, as different countries and states hold elections in different years, the right panel reports 5-year averages. The bottom panel displays the ratio of imports over GDP in the US (solid line) and Europe (dashed line).

4 Details on the estimation results

4.1 US Elections

Table A4: US Elections - Specific Imports

	(1)	(2)	(3)
Dep Var.:	**Environmentalism**		
Trade Exposure From:	High-Income	Low-Income	China
Trade Exposure	-0.077***	-0.031***	-0.039***
	[0.009]	[0.010]	[0.009]
Estimator	2SLS	2SLS	2SLS
Commuting Zone Effects	yes	yes	yes
Commuting Zone-Specific Trends	yes	yes	yes
Obs.	7,241	7,241	7,241
First-stage results			
Exports to other high income	0.413***	1.752***	2.098***
	[0.004]	[0.036]	[0.047]
Kleib.-Paap F-Statistic	10,354	2,342	2,002

Notes: Regression coefficients refer to the effect of a one standard deviation change in trade exposure. Standard errors clustered by CZ in parentheses. P values: *** p<0.01, ** p<0.05, * p<0.1

Table A5: US Elections - Crisis

	(1)
Dep. Var.:	**Environmentalism**
Sample:	Excluding Crisis
Trade Exposure	-0.118***
	[0.009]
Estimator	2SLS
Commuting Zone Effects	yes
Commuting Zone-Specific Trends	yes
Obs.	6,524
Kleib.-Paap F-Statistic	9,537

Notes: Regression excluding crisis years: 2008-2009. Regression coefficient refers to the effect of a one standard deviation change in trade exposure. Standard errors clustered by CZ in parentheses. P values: *** p<0.01, ** p<0.05, * p<0.1

Table A6: US Elections - Control for Export

	(1)
Dep. Var.:	**Environmentalism**
Trade Exposure	-0.520***
	[0.059]
Export Exposure	0.328***
	[0.043]
Estimator	2SLS
Commuting Zone Effects	yes
Commuting Zone-Specific Trends	yes
Obs.	7,241
Kleib.-Paap F-Statistic	226.9

Notes: Export exposure computed as trade exposure, using exports to all trading partners. Regression coefficient refers to the effect of a one standard deviation change in trade exposure. Standard errors clustered by CZ in parentheses. P values: *** p<0.01, ** p<0.05, * p<0.1

Table A7: US Elections - Protectionism

	(1)	(2)
Dep. Var.:	**DW-Nominate**	**Environmentalism**
Trade Exposure	-0.024***	-0.096***
	[0.001]	[0.009]
DW-Nominate		-2.482***
		[0.168]
Estimator	2SLS	2SLS
Commuting Zone Effects	yes	yes
Commuting Zone-Specific Trends	yes	yes
Obs.	7,241	7,241
Kleib.-Paap F-Statistic	9,375	8,853

Notes: DW-Nominate is a proxy for protectionism, computed as Environmentalism, using the first-dimension of DW-Nominate score. Regression coefficients refer to the effect of a one standard deviation change in trade exposure. Standard errors clustered by CZ in parentheses. P values: *** p<0.01, ** p<0.05, * p<0.1

Table A8: US Elections - Macro Controls

	(1)
Dep. Var.:	**Environmentalism**
Trade Exposure	-0.032***
	[0.009]
State-Level GDP Growth Rate	-0.025***
	[0.005]
State-Level Unemployment Rate	0.016***
	[0.005]
Estimator	2SLS
Commuting Zone Effects	yes
Commuting Zone-Specific Trends	yes
Obs.	7,241
Kleib.-Paap F-Statistic	7,018

Notes: Regression coefficient refers to the effect of a one standard deviation change in trade exposure. Standard errors clustered by CZ in parentheses.
P values: *** p<0.01, ** p<0.05, * p<0.1

Table A9: US Elections - Climate Controls

	(1)	(2)	(3)	(4)
Dep. Var.:	**Environmentalism**			
Trade Exposure	-0.026***	-0.025***	-0.040***	-0.036***
	[0.009]	[0.009]	[0.011]	[0.008]
Temperature Anomaly	-0.286***			
	[0.025]			
Temperature Anomaly Positive		-0.198***		
		[0.020]		
Temperature Anomaly Negative		-0.009		
		[0.016]		
Heat Episode			0.002	
			[0.005]	
Dry Spell				-0.003
				[0.003]
Estimator	2SLS	2SLS	2SLS	2SLS
Commuting Zone Effects	yes	yes	yes	yes
Commuting Zone-Specific Trends	yes	yes	yes	yes
Obs.	7,191	7,191	7,191	7,191
Kleib.-Paap F-Statistic	9,044	8,324	7,239	9,495

Notes: Regression coefficients refer to the effect of a one standard deviation change in trade exposure. Standard errors clustered by CZ in parentheses.
P values: *** p<0.01, ** p<0.05, * p<0.1

Table A10: US Elections - All Controls

Dep. Var.:	**Environmentalism**
Trade Exposure	-0.299***
	[0.061]
Export Exposure	0.131***
	[0.046]
DW-Nominate	-2.547***
	[0.160]
State-Level GDP Growth Rate	-0.013***
	[0.004]
State-Level Unemployment Rate	0.029***
	[0.006]
Temperature Anomaly	-0.230***
	[0.026]
Heat Episode	0.015***
	[0.005]
Dry Spell	-0.004
	[0.004]
Estimator	2SLS
Commuting Zone Effects	yes
Commuting Zone-Specific Trends	yes
Obs.	7,191
Kleib.-Paap F-Statistic	193.90

Notes: Regression coefficient refers to the effect of a one standard deviation change in trade exposure. Standard errors clustered by CZ in parentheses. P values: *** p<0.01, ** p<0.05, * p<0.1

Table A11: US Elections - Initial Conditions

Dep. Var:	**Environmentalism**			
Including interactions between CZ-specific initial:	**Levels**	**Changes**	**Levels**	**Changes**
And:	**Trend**	**Trend**	**Year Dummies**	**Year Dummies**
1) Political leaning: environmentalism	-0.042***	-0.043***	-0.077***	-0.040***
	[0.008]	[0.008]	[0.008]	[0.008]
2) Employment share of manufacturing	-0.036***	-0.038***	-0.064***	-0.037***
	[0.008]	[0.008]	[0.008]	[0.008]
3) Employment share of services	-0.035***	-0.039***	-0.075***	-0.038***
	[0.008]	[0.008]	[0.008]	[0.008]
4) Employment share of primary sector	-0.037***	-0.037***	-0.040***	-0.036***
	[0.008]	[0.008]	[0.008]	[0.008]
5) Employment share of low-skill workers	-0.035***	-0.037***	-0.078***	-0.049***
	[0.008]	[0.008]	[0.008]	[0.008]
6) Employment share of medium-skill workers	-0.035***	-0.039***	-0.078***	-0.038***
	[0.008]	[0.008]	[0.008]	[0.008]
7) Employment share of high-skill workers	-0.035***	-0.038***	-0.075***	-0.042***
	[0.008]	[0.008]	[0.008]	[0.008]

Notes: Regression coefficients refer to the effect of a one standard deviation change in trade exposure. Initial level of environmentalism measured in the first pre-sample election (1998); change measured between the first pre-sample election and the first sample election (2000). Other initial levels measured in 2000, with changes measured with respect to 1998. Standard errors clustered by CZ in parentheses. P values: *** p<0.01, ** p<0.05, * p<0.1

Table A12: US Elections - Pre-Trends

Estimator:	**2SLS**	**Reduced Form**
Dep. Var.: Pre-sample change in:		
1) Political leaning: environmentalism	1.208	0.044
	[1.377]	[0.050]
2) Employment share of manufacturing	-0.076**	-0.003**
	[0.035]	[0.001]
3) Employment share of services	0.080	0.003
	[0.055]	[0.002]
4) Employment share of primary sector	0.001	0.000
	[0.030]	[0.001]
5) Employment share of low-skill workers	-0.001	-0.000
	[0.002]	[0.000]
6) Employment share of medium-skill workers	0.008	0.000
	[0.006]	[0.000]
7) Employment share of high-skill workers	-0.006	-0.000
	[0.006]	[0.000]
8) Share of Republican votes in Presidential elections (1992-2000)	0.079	0.003
	[0.065]	[0.003]
9) Employment share of manufacturing (1992-2000)	0.467**	0.018***
	[0.231]	[0.007]
10) Log of population (1992-2000)	0.166	0.006
	[0.154]	[0.005]
11) Employment to population ratio (1992-2000)	0.155	0.006*
	[0.114]	[0.003]

Notes: Dependent variables are initial changes, measured between 1998-2000 unless differently specified. In column 1, these changes are regressed on the average in-sample trade exposure, instrumented using the average in-sample instrument. In column 2, changes are regressed directly on the average instrument. Division fixed effects are included. Standard errors clustered by Division in parentheses.
P values: *** p<0.01, ** p<0.05, * p<0.1

Table A13: US Elections - Manifesto Project

	(1)
Dep. Var.:	**Environmentalism (MP)**
Trade Exposure	-0.063***
	[0.002]
Estimator	2SLS
Commuting Zone Effects	yes
Commuting Zone-Specific Trends	yes
Obs.	7,241
Kleib.-Paap F-Statistic	9,375

Notes: Environmentalism based on Manifesto Project scores. Regression coefficient refers to the effect of a one standard deviation change in trade exposure. Standard errors clustered by CZ in parentheses. P values: *** p<0.01, ** p<0.05, * p<0.1

Table A14: US Elections - Democratic Share

	(1)	(2)
Dep. Var.:	**Environmentalism**	
Trade Exposure	-0.037***	-0.038***
	[0.008]	[0.008]
DEM share pre-sample X linear trend	yes	no
DEM share pre-sample X year dummies	no	yes
Estimator	2SLS	2SLS
Commuting Zone Effects	yes	yes
Commuting Zone-Specific Trends	no	yes
Obs.	7,241	7,241
Kleib.-Paap F-Statistic	10,434	9,383

Notes: Democratic vote share at the CZ level measured in 1998. Regression coefficients refer to the effect of a one standard deviation change in trade exposure. Standard errors clustered by CZ in parentheses. P values: *** p<0.01, ** p<0.05, * p<0.1

Table A15: US Elections - Congressional District Level

	(1)	(2)
Dep. Var.:	**Environmentalism**	
Trade Exposure	-0.062**	-0.077*
	[0.031]	[0.044]
Estimator	OLS	2SLS
State Effects	yes	yes
Year Effects	yes	yes
Obs.	4,346	4,346
R2	0.40	-
First-stage results		
World Export Supply	-	0.066***
	-	[0.001]
Kleib.-Paap F-Statistic	-	2,284

Notes: Regression coefficients refer to the effect of a one standard deviation change in trade exposure. Standard errors clustered by state in parentheses. P values: *** p<0.01, ** p<0.05, * p<0.1

Table A16: US Elections - Senate State Level

	(1)	(2)
Dep. Var.:	**Environmentalism**	
Trade Exposure	-0.155**	-0.271***
	[0.065]	[0.097]
Estimator	OLS	2SLS
State Effects	yes	yes
Year Effects	yes	yes
Obs.	332	332
R2	0.57	-
First-stage results		
World Export Supply	-	0.076***
	-	[0.003]
Kleib.-Paap F-Statistic	-	639.5

Notes: Regression coefficients refer to the effect of a one standard deviation change in trade exposure. Standard errors clustered by state in parentheses. P values: *** p<0.01, ** p<0.05, * p<0.1

Table A17: US Elections - Individual Vote

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Dep. Var.:	**Environmentalism - Individual Vote**									
Trade Exposure	-1.143**	-1.021**	-1.147**	-1.379***	-1.235***	-1.149**	-1.094**	-0.966**	-1.021**	-1.001**
	[0.468]	[0.479]	[0.478]	[0.481]	[0.469]	[0.471]	[0.470]	[0.479]	[0.474]	[0.476]
Trade Exp. X Female		-0.260								
		[0.284]								
Trade Exp. X High Edu			0.012							
			[0.293]							
Trade Exp. X Full Time				0.570*						
				[0.292]						
Trade Exp. X Part Time					0.954**					
					[0.467]					
Trade Exp. X Unemployed						0.031				
						[0.572]				
Trade Exp. X Student							-1.701*			
							[1.017]			
Trade Exp. X Retired								-0.695*		
								[0.363]		
Trade Exp. X Young (<25)									-2.473***	
									[0.906]	
Trade Exp. X Old (> 64)										-0.563
										[0.367]
Estimator	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS
Female, Age, Education	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Other Linear Terms	no	no	no	yes	yes	yes	yes	yes	yes	yes
Commuting Zone Effects	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Year Effects	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
t-test overall effect p-value	-	0.010	0.025	0.109	0.661	0.107	0.011	0.002	0.000	0.004
Obs.	221,012	221,012	221,012	220,874	220,874	220,874	220,874	220,874	221,012	221,012
Kleib.-Paap F-Statistic	855.35	444.31	428.01	431.52	429.70	428.61	428.24	427.68	170.27	429.19

Notes: Regression coefficients refer to the effect of a one standard deviation change in trade exposure. All interactions instrumented by interacting the IV with the relevant dummy. Standard errors clustered by commuting zone-year in parentheses. P values: *** p<0.01, ** p<0.05, * p<0.1

Table A18: US Elections - Partisan Identity

	(1)	(2)
Dep. Var.:	**Environmentalism Individual Vote**	
Trade Exposure	-1.143**	-1.099***
	[0.468]	[0.409]
Dummies for Partisan Identity	no	yes
Estimator	2SLS	2SLS
Female, Age, Education	yes	yes
Commuting Zone Effects	yes	yes
Year Effects	yes	yes
Obs.	221,012	220,943
Kleib.-Paap F-Statistic	855.35	855.65

Notes: Regression coefficients refer to the effect of a one standard deviation change in trade exposure. Standard errors clustered by commuting zone-year in parentheses. P values: *** p<0.01, ** p<0.05, * p<0.1

4.2 European Elections

Table A19: European Elections - Specific Imports

	(1)	(2)	(3)
Dep. Var.:	**Environmentalism**		
Trade Exposure from:	High-Income	Low-Income	China
Trade Exposure	-0.082***	-0.212**	-0.240*
	[0.020]	[0.088]	[0.123]
Estimator	2SLS	2SLS	2SLS
Region Effects	yes	yes	yes
Region-Specific Trends	yes	yes	yes
Obs.	9,634	9,634	9,634
First-stage results			
Exports to other high income	0.069***	0.118**	0.105*
	[0.009]	[0.049]	[0.056]
Kleib.-Paap F-Statistic	52.89	5.86	3.60

Notes: Regression coefficients refer to the effect of a one standard deviation change in trade exposure. Standard errors clustered by region-year in parentheses.
P values: *** p<0.01, ** p<0.05, * p<0.1

Table A20: European Elections - Crisis

	(1)	(2)	(3)
Dep. Var.:	**Environmentalism**		
Sample:	Pre-Crisis	Crisis	Post-Crisis
Trade Exposure	-0.376***	-0.345***	-1.715**
	[0.102]	[0.096]	[0.840]
Estimator	2SLS	2SLS	2SLS
Region Effects	yes	yes	yes
Region-Specific Trends	yes	no	yes
Obs.	3,789	2,384	3,461
Kleib.-Paap F-Statistic	31.27	25.47	2.28

Notes: Crisis years are 2008-2013. Regression coefficients refer to the effect of a one standard deviation change in trade exposure. Standard errors clustered by region-year in parentheses.
P values: *** p<0.01, ** p<0.05, * p<0.1

Table A21: European Elections - Control for Export

	(1)
Dep. Var.:	**Environmentalism**
Trade Exposure	-0.152***
	[0.034]
Export Exposure	0.131***
	[0.035]
Estimator	2SLS
Region Effects	yes
Region-Specific Trends	yes
Obs.	9,634
Kleib.-Paap F-Statistic	25.43

Notes: Export exposure computed as trade exposure, using exports to all trading partners. Regression coefficient refers to the effect of a one standard deviation change in trade exposure. Standard errors clustered by region-year in parentheses.
P values: *** p<0.01, ** p<0.05, * p<0.1

Table A22: European Elections - Protectionism

	(1)	(2)
Dep. Var.:	**Net Autarky**	**Environmentalism**
Trade Exposure	0.042*	-0.081***
	[0.025]	[0.020]
Net Autarky		0.017
		[0.024]
Estimator	2SLS	2SLS
Region Effects	yes	yes
Region-Specific Trends	yes	yes
Obs.	9,634	9,634
Kleib.-Paap F-Statistic	26.51	26.58

Notes: Net Autarky is a proxy for protectionism, computed as Environmentalism, using Net Autarky score. Regression coefficients refer to the effect of a one standard deviation change in trade exposure. Standard errors clustered by region-year in parentheses. P values:
*** p<0.01, ** p<0.05, * p<0.1

Table A23: European Elections - Macro Controls

	(1)
Dep. Var.:	**Environmentalism**
Trade Exposure	-0.078***
	[0.014]
Country-Level GDP Growth Rate	0.020***
	[0.007]
Country-Level Unemployment Rate	-0.013*
	[0.007]
Estimator	2SLS
Region Effects	yes
Region-Specific Trends	yes
Obs.	9,634
Kleib.-Paap F-Statistic	308.71

Notes: Regression coefficient refers to the effect of a one standard deviation change in trade exposure. Standard errors clustered by region-year in parentheses.
P-values: *** p<0.01, ** p<0.05, * p<0.1

Table A24: European Elections - Climate Controls

	(1)	(2)	(3)	(4)
Dep. Var.:	**Environmentalism**			
Trade Exposure	-0.094***	-0.073***	-0.095***	-0.080***
	[0.026]	[0.015]	[0.021]	[0.023]
Temperature Anomaly	0.203***			
	[0.053]			
Temperature Anomaly Positive		0.213***		
		[0.044]		
Temperature Anomaly Negative		0.016		
		[0.022]		
Heat Episode			0.050***	
			[0.008]	
Dry Spell				0.031***
				[0.009]
Estimator	2SLS	2SLS	2SLS	2SLS
Region Effects	yes	yes	yes	yes
Region-Specific Trends	yes	yes	yes	yes
Obs.	9,585	9,585	9,585	9,585
Kleib.-Paap F-Statistic	22.59	64.83	24.50	32.08

Notes: Regression coefficients refer to the effect of a one standard deviation change in trade exposure. Standard errors clustered by region-year in parentheses.
P values: *** p<0.01, ** p<0.05, * p<0.1

Table A25: European Elections - All Controls

Dep. Var.:	**Environmentalism**
Trade Exposure	-0.121***
	[0.020]
Export Exposure	0.072***
	[0.017]
Country-Level GDP Growth Rate	0.025***
	[0.008]
Country-Level Unemployment Rate	-0.004
	[0.007]
Net Autarky	0.003
	[0.022]
Temperature Anomaly	-0.280***
	[0.068]
Heat Episode	0.065***
	[0.010]
Dry Spell	0.049***
	[0.007]
Estimator	2SLS
Region Effects	yes
Region-Specific Trends	yes
Obs.	9,585
Kleib.-Paap F-Statistic	100.93

Notes: Regression coefficient refers to the effect of a one standard deviation change in trade exposure. Standard errors clustered by region-year in parentheses. P values:
*** p<0.01, ** p<0.05, * p<0.1

Table A26: European Elections - Initial Conditions

Dep. Var:	**Environmentalism**			
Including interactions between region-specific initial:	**Levels**	**Changes**	**Levels**	**Changes**
And:	**Trend**	**Trend**	**Year Dummies**	**Year Dummies**
1) Political leaning: environmentalism	-0.100***	-0.101***	-0.277**	-0.106**
	[0.024]	[0.022]	[0.121]	[0.042]
2) Political leaning: green share	-0.103***	-0.101***	-0.176***	-0.125***
	[0.023]	[0.022]	[0.035]	[0.026]
3) Employment share of manufacturing	-0.085***	-0.077***	-0.207***	-0.072**
	[0.026]	[0.026]	[0.080]	[0.028]
4) Employment share of services	-0.084***	-0.075***	-0.190**	-0.087**
	[0.026]	[0.027]	[0.078]	[0.035]
5) Employment share of primary sector	-0.094***	-0.084***	-0.186***	-0.082**
	[0.029]	[0.032]	[0.062]	[0.032]
6) Employment share of low-skill workers	-0.080***	-0.080***	-0.207**	-0.157***
	[0.027]	[0.024]	[0.080]	[0.052]
7) Employment share of medium-skill workers	-0.076***	-0.080***	-0.184*	-0.094***
	[0.028]	[0.024]	[0.104]	[0.025]
8) Employment share of high-skill workers	-0.076***	-0.080***	-0.202**	-0.081***
	[0.028]	[0.024]	[0.078]	[0.028]

Notes: In the first two rows, the initial level is measured in the first pre-sample election; changes are measured between the first pre-sample election and the first sample election. Other initial levels are measured in 2000, with changes measured with respect to 1998 (in rows 3-5) or 2002 (in rows 6-8). Regression coefficients refer to the effect of a one standard deviation change in trade exposure. Standard errors clustered by region-year in parentheses. P values: *** p<0.01, ** p<0.05, * p<0.1

Table A27: European Elections - Pre-Trends

Estimator	**2SLS**	**Reduced Form**
Dep. Var.: Pre-sample change in:		
1) Political leaning: environmentalism	-0.035	-0.000
	[0.056]	[0.000]
2) Political leaning: green share	-0.010	-0.000
	[0.007]	[0.000]
3) Employment share of manufacturing	-1.632	-0.008
	[1.071]	[0.005]
4) Employment share of services	0.736	0.003
	[1.066]	[0.005]
5) Employment share of primary sector	0.135	0.001
	[0.706]	[0.003]
6) Employment share of low-skill workers	0.770	0.004
	[1.100]	[0.005]
7) Employment share of medium-skill workers	-1.281	-0.006
	[1.131]	[0.006]
8) Employment share of high-skill workers	0.386	0.002
	[1.031]	[0.005]

Notes: Dependent variables are initial changes, measured as explained in Table A26. In column 1, these changes are regressed on the average in-sample trade exposure, instrumented using the average in-sample instrument. In column 2, changes are regressed directly on the average instrument. Country fixed effects are included. Standard errors in parentheses. P values: *** p<0.01, ** p<0.05, * p<0.1

Table A28: European Elections - Green Share

	(1)	(2)	(3)
Dep. Var.:	**Green Share Overall**	**Green Share Domestic**	**Green Share Other**
Trade Exposure	-0.002**	-0.001***	-0.001
	[0.001]	[0.000]	[0.001]
Estimator	2SLS	2SLS	2SLS
Region Effects	yes	yes	yes
Region-Specific Trends	yes	yes	yes
Obs.	9,634	9,634	9,634
First-stage results			
World Export Supply	0.006***	0.006***	0.006***
	[0.001]	[0.001]	[0.001]
Kleib.-Paap F-Statistic	26.51	26.51	26.51

Notes: Regression coefficients refer to the effect of a one standard deviation change in trade exposure. Standard errors clustered by region-year in parentheses. P values: *** p<0.01, ** p<0.05, * p<0.1

Table A29: European Elections - Region Size

	(1)	(2)	(3)	(4)	(5)
Dep. Var:	**Environmentalism**				
Sample:	Only Italy and UK NUTS3 - Level	Exclud. Largest 25% Within each country	Exclud. Largest 50% Within each country	Exclud. Largest 25% Overall	Exclud. Largest 50% Overall
Trade Exposure	-0.036***	-0.050***	-0.051**	-0.042***	-0.033***
	[0.002]	[0.017]	[0.023]	[0.012]	[0.009]
Estimator	2SLS	2SLS	2SLS	2SLS	2SLS
Region Effects	yes	yes	yes	yes	yes
Region-Specific Trends	yes	yes	yes	yes	yes
Obs.	1,412	6,087	3,995	6,571	4,061
First-stage results					
World Export Supply	0.023***	0.008***	0.007***	0.012***	0.017***
	[0.001]	[0.001]	[0.002]	[0.001]	[0.001]
Kleib.-Paap F-Statistic	1810.76	32.16	16.38	137.83	164.26

Notes: Regression coefficients refer to the effect of a one standard deviation change in trade exposure. Standard errors clustered by region-year in parentheses. P-values *** p<0.01, ** p<0.05, * p<0.1

Table A30: European Elections - Electoral Systems

	(1)	(2)	(3)	(4)	(5)	(6)
Dep. Var.:	**Environmentalism**			**Green Share**		
Sample:	Baseline	Excluding Majoritarian	Excluding Majoritarian and Mixed	Baseline	Excluding Majoritarian	Excluding Majoritarian and Mixed
Trade Exposure	-0.080***	-0.116***	-0.126***	-0.002**	-0.004***	-0.004***
	[0.020]	[0.032]	[0.032]	[0.001]	[0.001]	[0.001]
Estimator	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS
Region Effects	yes	yes	yes	yes	yes	yes
Region-Specific Trends	yes	yes	yes	yes	yes	yes
Obs.	9,634	3,651	1,755	9,634	3,651	1,755
First-stage results						
World Export Supply	0.006***	0.004***	0.004***	0.006***	0.004***	0.004***
	[0.001]	[0.001]	[0.001]	[0.001]	[0.001]	[0.001]
Kleib.-Paap F-Statistic	26.51	28.20	26.90	26.51	28.20	26.90

Notes: Regression coefficients refer to the effect of a one standard deviation change in trade exposure. Standard errors clustered by region-year in parentheses. P values: *** p<0.01, ** p<0.05, * p<0.1

Table A31: European Elections - Individual Vote

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Dep. Var.:	**Environmentalism - Individual Vote**									
Trade Exposure	-0.201***	-0.222***	-0.226***	-0.356***	-0.204***	-0.191***	-0.205***	-0.194***	-0.198***	-0.201***
	[0.048]	[0.050]	[0.054]	[0.077]	[0.051]	[0.046]	[0.049]	[0.051]	[0.048]	[0.052]
Trade Exp. X Female		0.043**								
		[0.017]								
Trade Exp. X High Edu			0.095***							
			[0.035]							
Trade Exp. X White Collar				0.239***						
				[0.068]						
Trade Exp. X Blue Collar					0.012					
					[0.053]					
Trade Exp. X Unemployed						-0.308***				
						[0.085]				
Trade Exp. X Student							0.075			
							[0.069]			
Trade Exp. X Retired								-0.033		
								[0.039]		
Trade Exp. X Young (below 25)									-0.036	
									[0.066]	
Trade Exp. X Old (above 64)										-0.002
										[0.041]
Estimator	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS
Female, Age, Education	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Other Linear Terms	no	no	no	yes	yes	yes	yes	yes	yes	yes
Region Effects	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Region-Specific Trends	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
t-test overall effect p-value	-	0.000	0.001	0.000	0.001	0.000	0.093	0.000	0.004	0.000
Obs.	116,445	116,445	116,445	116,445	116,445	116,445	116,445	116,445	116,445	116,445
Kleib.-Paap F-Statistic	26.58	7.74	7.67	17.21	12.02	13.02	6.83	8.51	6.04	8.20

Notes: Regression coefficients refer to the effect of a one standard deviation change in trade exposure. All interactions instrumented by interacting the IV with the relevant dummy. Standard errors clustered by region-year in parentheses. P values: *** p<0.01, ** p<0.05, * p<0.1

Table A32: European Elections - Excluding Radical Right

	(1)
Dep. Var.:	**Environmentalism Individual Vote**
Trade Exposure	-0.195***
	[0.050]
Estimator	2SLS
Female, Age, Education	yes
Region Effects	yes
Region-Specific Trends	yes
Obs.	111,140
Kleib.-Paap F-Statistic	26.00

Notes: Regression coefficient refers to the effect of a one standard deviation change in trade exposure. Standard errors clustered by region-year in parentheses. P values: *** p<0.01, ** p<0.05, * p<0.1

4.3 US Attitudes

Table A33: US - Global Warming Serious

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Dep. Var.:	**Global Warming - Serious Issue**									
Trade Exposure	-0.028**	-0.030**	-0.025*	-0.022	-0.030**	-0.031**	-0.027**	-0.029**	-0.029**	-0.029**
	[0.013]	[0.014]	[0.015]	[0.013]	[0.013]	[0.013]	[0.013]	[0.013]	[0.013]	[0.013]
Trade Exp. X Female		0.004								
		[0.012]								
Trade Exp. X High Edu			-0.004							
			[0.012]							
Trade Exp. X Full Time				-0.014						
				[0.011]						
Trade Exp. X Part Time					0.028					
					[0.020]					
Trade Exp. X Unemployed						0.020				
						[0.018]				
Trade Exp. X Student							-0.019			
							[0.026]			
Trade Exp. X Retired								0.005		
								[0.012]		
Trade Exp. X Young (<25)									0.008	
									[0.021]	
Trade Exp. X Old (> 64)										0.007
										[0.012]
Estimator	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS
Female, Age, Education	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Other Linear Terms	no	no	no	yes	yes	yes	yes	yes	yes	yes
Commuting Zone Effects	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Year Effects	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
t-test overall effect p-value	-	0.064	0.024	0.014	0.906	0.594	0.113	0.107	0.370	0.142
Obs.	18,399	18,399	18,399	18,399	18,399	18,399	18,399	18,399	18,399	18,399
Kleib.-Paap F-Statistic	911.92	455.39	397.77	495.43	459.58	470.56	459.08	461.15	490.69	451.23

Notes: Regression coefficients refer to the effect of a one standard deviation change in trade exposure. All interactions instrumented by interacting the IV with the relevant dummy. Standard errors clustered by commuting zone-year in parentheses. P values: *** p<0.01, ** p<0.05, * p<0.1

Table A34: US - Global Warming Worry

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Dep. Var.:	**Global Warming - Worried**									
Trade Exposure	-0.029**	-0.026*	-0.034**	-0.031**	-0.032**	-0.029**	-0.028**	-0.030**	-0.024*	-0.030**
	[0.012]	[0.014]	[0.015]	[0.013]	[0.013]	[0.013]	[0.012]	[0.013]	[0.013]	[0.013]
Trade Exp. X Female		-0.006								
		[0.012]								
Trade Exp. X High Edu			0.008							
			[0.012]							
Trade Exp. X Full Time				0.006						
				[0.012]						
Trade Exp. X Part Time					0.037*					
					[0.022]					
Trade Exp. X Unemployed						-0.007				
						[0.019]				
Trade Exp. X Student							-0.027			
							[0.026]			
Trade Exp. X Retired								0.004		
								[0.012]		
Trade Exp. X Young (<25)									-0.030	
									[0.019]	
Trade Exp. X Old (> 64)										0.006
										[0.012]
Estimator	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS
Female, Age, Education	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Other Linear Terms	no	no	no	yes	yes	yes	yes	yes	yes	yes
Commuting Zone Effects	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Year Effects	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
t-test overall effect p-value	-	0.020	0.044	0.090	0.829	0.078	0.051	0.082	0.006	0.107
Obs.	18,781	18,781	18,781	18,781	18,781	18,781	18,781	18,781	18,781	18,781
Kleib.-Paap F-Statistic	754.93	378.38	323.22	417.89	381.64	392.52	378.10	378.32	415.28	374.76

Notes: Regression coefficients refer to the effect of a one standard deviation change in trade exposure. All interactions instrumented by interacting the IV with the relevant dummy. Standard errors clustered by commuting zone-year in parentheses. P values: *** p<0.01, ** p<0.05, * p<0.1

Table A35: US - Other Attitudes

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dep. Var.:	Environment Is a Priority	Environmentalist Personal	Support Renewables	Env. More Imp. than Job	Env. More Imp. than Job	Employed	Income Top 10%
Trade Exposure	-0.005**	-0.260**	-0.054***	-0.007***	-0.005**	-0.008***	-0.004***
	[0.002]	[0.117]	[0.014]	[0.003]	[0.002]	[0.003]	[0.001]
Estimator	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS
Female, Age, Education	yes	yes	yes	yes	yes	yes	yes
Commuting Zone Effects	yes	yes	yes	yes	yes	yes	yes
Year Effects	yes	yes	yes	yes	yes	yes	yes
Income, Union, Empl. Status	no	no	no	no	yes	no	no
Obs.	19,868	2,843	220,606	194,924	157,949	450,945	409,239
First-stage results							
Exports to other high income	0.072***	0.024***	0.023***	0.073***	0.079***	0.063***	0.063***
	[0.002]	[0.002]	[0.002]	[0.001]	[0.001]	[0.002]	[0.002]
Kleib.-Paap F-Statistic	826.88	104.20	165.68	4762.68	5587.75	1035.19	1032.27

Notes: Regression coefficients refer to the effect of a one standard deviation change in trade exposure. Standard errors clustered by commuting zone-year in parentheses. P values: *** p<0.01, ** p<0.05, * p<0.1

Table A36: US Attitudes - Specific Imports

	(1)	(2)	(3)	(4)	(5)	(6)
Trade Exposure From:	High-Income		Low-Income		China	
Dep. Var. Global Warming:	Serious	Worry	Serious	Worry	Serious	Worry
Trade Exposure	-0.030**	-0.034***	-0.026*	-0.019	-0.022*	-0.011
	[0.013]	[0.013]	[0.013]	[0.013]	[0.013]	[0.012]
Estimator	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS
Female, Age, Education	yes	yes	yes	yes	yes	yes
Commuting Zone Effects	yes	yes	yes	yes	yes	yes
Year Effects	yes	yes	yes	yes	yes	yes
Obs.	18,399	18,781	18,399	18,781	18,399	18,781
First-stage results						
Exports to other high income	0.525***	0.513***	2.052***	2.053***	2.398***	2.380***
	[0.020]	[0.021]	[0.090]	[0.092]	[0.085]	[0.088]
Kleib.-Paap F-Statistic	657.05	570.56	520.25	499.23	792.45	738.20

Notes: Regression coefficients refer to the effect of a one standard deviation change in trade exposure. Standard errors clustered by commuting zone-year in parentheses. P values *** p<0.01, ** p<0.05, * p<0.1

Table A37: US Attitudes - Climate Controls

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dep. Var.:	**Global Warming - Serious Issue**				**Global Warming - Worry**			
Trade Exposure	-0.028**	-0.029**	-0.030**	-0.030**	-0.030**	-0.030**	-0.030**	-0.031**
	[0.013]	[0.013]	[0.013]	[0.013]	[0.013]	[0.013]	[0.013]	[0.012]
Temperature Anomaly	0.022				0.034**			
	[0.015]				[0.015]			
Temperature Anomaly Positive		0.020*				0.026**		
		[0.012]				[0.012]		
Temperature Anomaly Negative		-0.002				0.003		
		[0.009]				[0.008]		
Heat Episode			0.003				0.002	
			[0.002]				[0.002]	
Dry Spell				0.006***				0.006***
				[0.002]				[0.002]
Estimator	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS
Female, Age, Education	yes	yes	yes	yes	yes	yes	yes	yes
Commuting Zone Effects	yes	yes	yes	yes	yes	yes	yes	yes
Year Effects	yes	yes	yes	yes	yes	yes	yes	yes
Obs.	18,373	18,373	18,373	18,373	18,753	18,753	18,753	18,753
Kleib.-Paap F-Statistic	909.65	905.36	902.34	911.37	753.18	747.74	745.55	754.92

Notes: Regression coefficients refer to the effect of a one standard deviation change in trade exposure.
Standard errors clustered by commuting zone-year in parentheses. P values: *** p<0.01, ** p<0.05, * p<0.1

4.4 European Attitudes

Table A38: Europe - Climate Change Serious

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Dep. Var.:	**Climate Change - Serious Issue**									
Trade Exposure	-0.016***	-0.019**	-0.004	-0.019**	-0.017***	-0.018***	-0.017***	-0.012*	-0.019***	-0.011*
	[0.006]	[0.008]	[0.009]	[0.008]	[0.006]	[0.006]	[0.006]	[0.006]	[0.007]	[0.007]
Trade Exp. X Female		0.005								
		[0.007]								
Trade Exp. X High Edu			-0.019*							
			[0.010]							
Trade Exp. X White Collar				0.005						
				[0.008]						
Trade Exp. X Blue Collar					0.002					
					[0.011]					
Trade Exp. X Unemployed						0.035*				
						[0.018]				
Trade Exp. X Student							0.009			
							[0.011]			
Trade Exp. X Retired								-0.021***		
								[0.008]		
Trade Exp. X Young (below 25)									0.014	
									[0.012]	
Trade Exp. X Old (above 64)										-0.026***
										[0.009]
Estimator	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS
Female, Age, Education	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Other Linear Terms	no	no	no	yes	yes	yes	yes	yes	yes	yes
Region Effects	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Region-Specific Trends	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
t-test overall effect p-value	-	0.045	0.001	0.040	0.238	0.387	0.454	0.001	0.706	0.000
Obs.	88,485	88,485	88,485	88,485	88,485	88,485	88,485	88,485	88,485	88,485
Kleib.-Paap F-Statistic	40.88	8.81	8.57	10.15	7.68	6.71	8.49	11.37	8.47	9.51

Notes: Regression coefficients refer to the effect of a one standard deviation change in trade exposure. All interactions instrumented by interacting the IV with the relevant dummy. Standard errors clustered by region-year in parentheses. P values: *** p<0.01, ** p<0.05, * p<0.1

Table A39: Europe - Fighting Climate Change Can Boost the Economy

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Dep. Var.:	**Fighing Climate Change Can Boost the Economy**									
Trade Exposure	-0.031***	-0.027***	-0.027***	-0.032***	-0.032***	-0.031***	-0.032***	-0.031***	-0.031***	-0.031***
	[0.006]	[0.006]	[0.007]	[0.006]	[0.006]	[0.006]	[0.006]	[0.006]	[0.006]	[0.006]
Trade Exp. X Female		-0.009								
		[0.006]								
Trade Exp. X High Edu			-0.007							
			[0.008]							
Trade Exp. X White Collar				0.001						
				[0.007]						
Trade Exp. X Blue Collar					0.006					
					[0.010]					
Trade Exp. X Unemployed						-0.021				
						[0.015]				
Trade Exp. X Student							0.003			
							[0.012]			
Trade Exp. X Retired								-0.001		
								[0.007]		
Trade Exp. X Young (below 25)									-0.004	
									[0.010]	
Trade Exp. X Old (above 64)										-0.003
										[0.007]
Estimator	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS
Female, Age, Education	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Other Linear Terms	no	no	no	yes	yes	yes	yes	yes	yes	yes
Region Effects	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Region-Specific Trends	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
t-test overall effect p-value	-	0.000	0.000	0.000	0.006	0.001	0.016	0.000	0.001	0.000
Obs.	63,766	63,766	63,766	63,766	63,766	63,766	63,766	63,766	63,766	63,766
Kleib.-Paap F-Statistic	39.32	7.86	7.80	10.09	7.14	5.88	7.25	10.47	7.62	8.52

Notes: Regression coefficients refer to the effect of a one standard deviation change in trade exposure. All interactions instrumented by interacting the IV with the relevant dummy. Standard errors clustered by region-year in parentheses. P values: *** p<0.01, ** p<0.05, * p<0.1

Table A40: Europe - Other Attitudes

	(1)	(2)	(3)
Dep. Var.:	Household Income Insufficient	Economy Will Get Worse	Environment Is a Priority
Trade Exposure	0.264*	0.204**	-0.058*
	[0.140]	[0.098]	[0.032]
Estimator	2SLS	2SLS	2SLS
Female, Age, Education	yes	yes	yes
Country Effects	yes	no	yes
Region Effects	no	yes	no
Year Effects	no	yes	no
Obs.	11,018	20,047	6,533
First-stage results			
Exports to other high income	0.005**	0.001**	0.009***
	[0.002]	[0.000]	[0.002]
Kleib.-Paap F-Statistic	5.93	5.76	14.06

Notes: Regression coefficients refer to the effect of a one standard deviation change in trade exposure. Standard errors in parentheses, clustered by region-year in column 2, and by country in columns 1 and 3. P values: *** p<0.01, ** p<0.05, * p<0.1

Table A41: European Attitudes - Specific Imports

	(1)	(2)	(3)	(4)	(5)	(6)
Trade Exposure From:	High-Income		Low-Income		China	
Dep. Var. Climate Change:	Serious	Boost Econ.	Serious	Boost Econ.	Serious	Boost Econ.
Trade Exposure	-0.045***	-0.139***	-0.029**	-0.113***	-0.023**	-0.071***
	[0.011]	[0.033]	[0.013]	[0.024]	[0.010]	[0.013]
Estimator	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS
Female, Age, Education	yes	yes	yes	yes	yes	yes
Region Effects	yes	yes	yes	yes	yes	yes
Region-Specific Trends	yes	yes	yes	yes	yes	yes
Obs.	88,485	63,766	88,485	63,766	88,485	63,766
First-stage results						
Exports to other high income	0.039***	0.029***	0.096***	0.076***	0.119***	0.125***
	[0.006]	[0.005]	[0.026]	[0.017]	[0.029]	[0.020]
Kleib.-Paap F-Statistic	47.09	30.66	14.07	20.46	16.58	38.30

Notes: Regression coefficients refer to the effect of a one standard deviation change in trade exposure. Standard errors clustered by region-year in parentheses. P values: *** p<0.01, ** p<0.05, * p<0.1

Table A42: European Attitudes - Climate Controls

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dep. Var.:	**Climate Change - Serious Issue**				**Fighing Climate Change Can Boost the Economy**			
Trade Exposure	-0.020***	-0.011*	-0.011*	-0.016**	-0.021***	-0.017***	-0.032***	-0.027***
	[0.007]	[0.006]	[0.007]	[0.006]	[0.006]	[0.005]	[0.006]	[0.005]
Temperature Anomaly	0.043***				-0.042***			
	[0.009]				[0.009]			
Temperature Anomaly Positive		0.043***				-0.024***		
		[0.007]				[0.009]		
Temperature Anomaly Negative		0.003				-0.027***		
		[0.004]				[0.004]		
Heat Episode			0.006***				-0.008***	
			[0.002]				[0.002]	
Dry Spell				0.004***				-0.006***
				[0.001]				[0.002]
Estimator	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS
Female, Age, Education	yes	yes	yes	yes	yes	yes	yes	yes
Region Effects	yes	yes	yes	yes	yes	yes	yes	yes
Region-Specific Trends	yes	yes	yes	yes	yes	yes	yes	yes
Obs.	88,209	88,209	88,209	88,209	63,587	63,587	63,587	63,587
Kleib.-Paap F-Statistic	39.37	42.19	39.60	41.71	36.48	47.55	39.05	44.15

Notes: Regression coefficients refer to the effect of a one standard deviation change in trade exposure.
Standard errors clustered by region-year in parentheses. P values: *** p<0.01, ** p<0.05, * p<0.1

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