Journal of
Countries Studies
EISSN: 2980-9193

From trust and generational education to climate action: Global empirical evidence on shaping climate beliefs and policies

Ly Hoang Vu*
Faculty of Commerce and Tourism, University of Finance-Marketing, Ho Chi Minh City, Vietnam.

Article Info

Original Article

Main Object: Interdisciplinary
Scope: Countries Studies

Received: 12 April 2026
Revised: 16 April 2026
Accepted: 18 April 2026
Published online: 27 April 2026

Keywords:
climate action,
climate belief,
generalized trust,
generational education,
institutional trust.

Abstract

Public support for climate action depends not only on economic incentives and information, but also on deeper social and institutional foundations. This study investigates how trust shapes individuals' climate change perceptions and their willingness to support mitigation policies, particularly through higher environmental taxes. Using individual-level data from the fourth round of the Life in Transition Survey, combined with country-level macroeconomic indicators from the World Bank, the analysis covers 37 countries over the period 2022–2023. We estimate baseline models using Ordinary Least Squares (OLS), with all regressions weighted by national population to ensure cross-country representativeness. A key contribution of the study is the distinction between generalized trust and multi-level institutional trust, including trust in the presidency, central government, regional government, and local government. The results show that both forms of trust are positively and robustly associated with stronger beliefs that climate change is real and primarily driven by human activity, as well as with greater willingness to support environmental taxation. Institutional trust, in particular, exhibits a stronger relationship with policy support, highlighting its central role in shaping acceptance of financially costly climate measures. Beyond trust, the findings underscore the importance of intergenerational education. Mothers' education is more strongly associated with climate perceptions, while fathers' education shows a closer link to willingness to pay for environmental policies, suggesting differentiated family-based transmission channels.

Cite this article: Vu LH. (????). "From trust and generational education to climate action: Global empirical evidence on shaping climate beliefs and policies". *Countries Studies*. ?(?): 1-29. doi: https://doi.org/10.22059/jcountst.2026.412631.1465.

Website: https://jcountst.ut.ac.ir/ | Email: jcountst@ut.ac.ir |
EISSN: 2980-9193
Publisher: University of Tehran

* ✉ lyhoangvu@ufm.edu.vn, https://orcid.org/0000-0003-4948-8863

Countries Studies, Vol ?, No ?, ???

1. Introduction

Trust is widely recognized as a fundamental pillar of social interaction and collective action. It reflects a willingness to accept vulnerability based on positive expectations about others' intentions or behavior (Rousseau et al., 1998). By reducing uncertainty and facilitating cooperation, trust enables individuals and societies to coordinate actions in contexts where risks are shared but incentives may be misaligned. This function is particularly critical in addressing climate change, a global collective-action problem characterized by long time horizons, diffuse benefits, and immediate, unevenly distributed costs. Effective climate mitigation requires not only scientific consensus but also widespread public support for policies that often impose short-term economic sacrifices for long-term environmental gains.

A substantial body of research highlights the economic and social importance of trust. At the macro level, higher levels of trust are associated with stronger economic growth, more efficient institutions, and deeper financial development (Knack & Keefer, 1997; Algan & Cahuc, 2010). At the micro and organizational levels, trust promotes cooperation, reduces opportunistic behavior, and strengthens long-term relationships (Gulati, 1995; Das & Teng, 1998). More recently, attention has turned to the role of trust in environmental and climate-related outcomes. Individuals with higher levels of trust are more likely to engage in pro-environmental behaviors, support environmental protection measures, and endorse policies that impose personal costs (Fairbrother, 2016; Irwin & Berigan, 2013). Cross-country evidence further suggests that trust contributes to lower greenhouse gas emissions and facilitates international climate cooperation (Carattini et al., 2015).

Despite these advances, important gaps remain in understanding how trust shapes climate attitudes. Much of the existing literature focuses either on individual behavior such as recycling or energy conservation or on aggregate national outcomes, without jointly examining how trust influences both climate beliefs and support for costly mitigation policies. Yet this distinction is crucial. Accepting the scientific reality of climate change does not necessarily translate into support for policies that impose financial burdens, such as environmental taxes or carbon pricing. The mechanisms underlying belief formation and policy support may therefore differ in important ways. A related limitation is the insufficient distinction between different forms of trust. Generalized trust, defined as trust in people in general, reflects broad social expectations and norms (Uslaner, 2002; 2008; Bjørnskov, 2007). Institutional trust, by contrast, refers to confidence in political authorities and public institutions (Hooghe et al., 2015; van der Meer & Hakhverdian, 2017; Kaasa & Andriani, 2022; Goodhart & Vu, 2024; 2026a). These two dimensions of trust are conceptually and empirically distinct, and they may influence climate

attitudes through different channels. Generalized trust may facilitate openness to abstract scientific information and collective responsibility, while institutional trust may be more directly linked to confidence in policy design, implementation, and the fair use of public resources. However, few cross-country studies have systematically examined these distinctions in the context of climate change.

Climate attitudes are also embedded within broader social, historical, and economic contexts that remain underexplored in comparative research. First, intergenerational education may shape climate perceptions through early-life socialization and value transmission within families. Educational attainment of parents particularly mothers and fathers through distinct pathways can influence both cognitive openness and attitudes toward collective responsibility. Second, historical institutional legacies may generate persistent patterns of trust or skepticism. In particular, societies shaped by centralized information systems and politicized science may exhibit long-lasting distrust toward official narratives and expert knowledge. Third, macroeconomic conditions, especially inflation, may affect climate attitudes by shifting attention toward immediate economic concerns and away from long-term environmental risks. These contextual factors suggest that climate beliefs and policy preferences are not solely determined by information or income, but also by deeper structural forces.

The existing literature highlights the important roles of trust, education, and contextual factors in shaping climate attitudes. However, several key gaps remain. First, prior studies typically examine generalized trust or institutional trust in isolation, without jointly analyzing their distinct and complementary effects. Second, there is limited cross-country evidence that integrates multiple levels of institutional trust from national to local authorities within a unified analytical framework. Third, the role of intergenerational education and broader structural factors, including historical legacies and macroeconomic conditions, remains insufficiently explored. This study addresses these gaps by providing a comprehensive cross-country analysis that jointly examines generalized trust and multi-level institutional trust in shaping both climate perceptions and support for climate policies. It further incorporates intergenerational education and contextual factors, offering a more integrated understanding of the social and institutional foundations of climate attitudes. To this end, the study is guided by two central research questions:

1. How do generalized trust and institutional trust influence individuals' beliefs that climate change is real and predominantly man-made?
2. How do these different forms of trust affect individuals' willingness to incur personal costs, specifically through higher environmental taxes, to support climate mitigation?

To answer these questions, we combine individual-level data from the fourth round of the Life in Transition Survey (LiTS IV), conducted in 2022–2023 across 37 economies, with country-level macroeconomic indicators from the World Bank. The final sample includes 37,478 individuals. Our empirical strategy employs population-weighted regressions with region and year fixed effects to ensure cross-country comparability and robust inference.

To the best of the author's knowledge, this study is the first to jointly disentangle the distinct roles of generalized trust and multi-level institutional trust in shaping both climate beliefs and support for costly climate action. By systematically measuring institutional trust across multiple tiers of governance from the presidency to central, regional, and local authorities, it provides the first comprehensive assessment of how trust in specific political actors influences policy acceptance.

Furthermore, this study makes a novel contribution by incorporating intergenerational education, distinguishing between individuals' own education and that of their parents (mother and father), thereby uncovering previously overlooked family-based transmission channels in the formation of climate attitudes. In addition, an indicator for former Soviet Union countries is also included in order to account for historical and institutional heterogeneity that may shape both trust and climate-related attitudes. These countries share a common legacy of centralized governance, state-controlled information systems, and politicized scientific discourse, which may influence contemporary levels of trust and the reception of climate-related information.

The analysis yields three main findings. First, both generalized trust and institutional trust are strongly and consistently associated with greater acceptance of climate change as a real and anthropogenic phenomenon. This suggests that trust facilitates the acceptance of complex and abstract scientific information. Second, trust plays an even more prominent role in shaping willingness to pay higher environmental taxes, particularly when trust is directed toward political institutions responsible for policy implementation. This highlights the importance of institutional credibility in translating climate beliefs into concrete policy support. Third, climate attitudes are embedded in broader social and historical structures. Intergenerational education, historical institutional legacies, and macroeconomic conditions especially inflation significantly shape both climate perceptions and policy preferences.

The remainder of the paper is organized as follows. Section 2 reviews the relevant literature. Section 3 describes the data and empirical methodology. Section 4 presents the main results. Section 5 discusses the findings, and Section 6 concludes with policy implications.

2. Literature review

2.1. Trust and climate beliefs

A growing body of literature highlights trust as a central determinant of climate attitudes, though its effects vary across different forms of trust. Generalized trust which is defined as interpersonal confidence in others beyond one's immediate social circle has been shown to have a modest but consistently positive association with climate change beliefs. Individuals with higher levels of generalized trust tend to exhibit greater acceptance of climate change and stronger support for environmental protection, as trust facilitates cooperative behavior and collective action (Putnam, 2000; Ostrom, 1998; Fairbrother, 2016). Empirical evidence further indicates that generalized trust promotes pro-environmental behaviors such as energy conservation and climate mitigation efforts (Lübke, 2021; Irwin & Berigan, 2013). At the macro level, higher societal trust is associated with lower carbon emissions and more effective climate policies, suggesting that trust enhances coordination and compliance (Carattini et al., 2018; Carattini & Jo, 2018; Jo & Carattini, 2021).

However, institutional trust, defined as confidence in political authorities and public institutions, exhibits more complex and context-dependent effects. While higher institutional trust is generally associated with stronger climate beliefs, its influence may vary across political and ideological contexts, sometimes reinforcing or dampening climate perceptions depending on individuals' prior beliefs and attitudes (Mares et al., 2024). These findings suggest that trust operates through multiple channels, influencing both the reception of scientific information and the interpretation of policy signals.

2.2. Institutional trust and policy support

Beyond belief formation, trust plays a critical role in shaping support for climate policies, particularly those involving personal financial costs. A consistent finding in the literature is that institutional trust especially trust in government significantly increases individuals' willingness to support environmental taxation and other mitigation measures. This relationship is often explained by reduced concerns about government inefficiency, corruption, or misuse of public funds (Cologna & Siegrist, 2020; Davidovic & Harring, 2024). In contrast, individuals with low trust in institutions are more likely to resist such policies, even when they recognize the importance of climate action.

Recent empirical studies further emphasize the primacy of institutional trust in policy acceptance. For example, cross-national analyses in Europe show that trust in national-level institutions, such as the presidency or central government, has a stronger effect on climate policy support than trust in regional or local authorities (Harring et al., 2020; Mares et al., 2024). Experimental evidence also suggests that while trust enhances policy support, it does not fully offset concerns

about economic costs, indicating that trust complements rather than substitutes for economic considerations (Davidovic & Harring, 2024). Generalized trust, by contrast, plays a more limited role in directly shaping support for costly policies, though it may indirectly influence attitudes through belief formation.

Despite these advances, an important limitation in the literature is the insufficient distinction between different types and levels of trust. Generalized trust and institutional trust are conceptually distinct and may operate through different mechanisms. Generalized trust reflects broad social norms and expectations, while institutional trust relates to confidence in governance and policy implementation (Uslaner, 2002; Hooghe et al., 2015; Kaasa & Andriani, 2022). Few studies have systematically examined these dimensions simultaneously across countries and across multiple levels of government, leaving an important gap in understanding how trust shapes both climate beliefs and policy preferences.

2.3. Trust, climate action, and organizational behavior

While the role of trust in individual and national climate outcomes is well documented, its influence on organizational behavior remains underexplored. Existing research has largely focused on firm-level responses to regulatory frameworks or supply chain pressures, with limited attention to broader social trust. This gap is particularly relevant in emerging markets, where informal institutions and social norms play a significant role in shaping business practices (McMillan & Woodruff, 1999). Recent evidence begins to address this gap. For instance, a study of Vietnamese enterprises shows that firms operating in high-trust environments are more likely to adopt climate mitigation measures, highlighting the role of social capital in shaping corporate environmental strategies (Vu & Phuong, 2026). From a theoretical perspective, this relationship can be explained through social capital and institutional theories, which emphasize that trust reduces transaction costs, facilitates cooperation, and enhances coordination within and across organizations (Fukuyama, 1995; Gulati, 1995; Das & Teng, 1998). These insights suggest that trust is not only relevant for individual attitudes but also for broader economic and organizational responses to climate change.

2.4. Broader contextual drivers of climate attitudes

In addition to trust, climate attitudes are shaped by a range of individual and contextual factors that remain insufficiently integrated into the literature. Education is one of the most robust predictors of climate beliefs, with higher levels of education associated with greater acceptance of climate science. However, recent research suggests that intergenerational factors may also play an important role. Parental education, through early-life socialization and value transmission, can

influence both cognitive openness and attitudes toward collective responsibility, yet this dimension has received limited attention in cross-country studies. Historical and institutional legacies also contribute to persistent variation in climate attitudes. Societies shaped by centralized information systems or politicized science may exhibit long-lasting skepticism toward official narratives and expert knowledge. These legacy effects can influence both trust in institutions and acceptance of climate science, creating structural barriers to policy support. Finally, macroeconomic conditions particularly inflation may affect climate attitudes by shifting attention toward immediate economic concerns and away from long-term environmental risks. This suggests that climate beliefs and policy preferences are influenced not only by information and income, but also by broader structural and economic environments.

2.5. Research gap and contribution

The literature review above demonstrates that trust, education, and contextual factors all play important roles in shaping climate attitudes. However, three key gaps remain. First, existing studies often examine generalized trust or institutional trust in isolation, without jointly analyzing their distinct and complementary effects. Second, there is limited cross-country evidence that integrates multiple levels of institutional trust from national to local authorities within a unified framework. Third, the role of intergenerational education and broader structural factors, including historical legacies and macroeconomic conditions, remains underexplored.

This study addresses these gaps by providing a comprehensive cross-country analysis that jointly examines generalized trust and multi-level institutional trust in shaping both climate perceptions and support for climate policies. It further incorporates intergenerational education and contextual factors, offering a more integrated understanding of the social and institutional foundations of climate attitudes.

3. Methodology and data description

3.1. Methodology

This study examines how different forms of trust namely generalized trust and institutional trust shape individuals' climate change perceptions and their support for fiscal climate policies. The empirical strategy builds on established approaches in recent literature (e.g., MacInnes et al., 2026; Vu & Phuong, 2026; Goodhart & Vu, 2025; 2026a; 2026b; 2026c), which emphasize that climate attitudes are jointly determined by social trust, individual characteristics, and macro-level contextual factors. Accordingly, the model specification incorporates three key groups of variables: trust variables as the main explanatory factors, individual-level controls to account for heterogeneity in beliefs and preferences, and country-level controls to

capture broader structural and institutional environments.

The inclusion of trust variables (*TRUS*T) is motivated by social capital and institutional theories, which suggest that trust reduces uncertainty, enhances cooperation, and increases acceptance of both scientific information and public policies. Generalized trust reflects broad social expectations that facilitate openness to collective action and abstract risks such as climate change, while institutional trust captures confidence in public authorities responsible for policy design and implementation. Distinguishing between these dimensions allows the analysis to identify their potentially different roles in shaping belief formation and policy support.

The vector of individual-level characteristics (*INDIVIDUAL*) is included following a large body of empirical research showing that climate attitudes are strongly influenced by demographic and socioeconomic factors, such as education, income, age, and gender, as well as attitudinal variables. Controlling for these factors helps isolate the independent effect of trust from underlying individual heterogeneity that may simultaneously affect both trust and climate attitudes.

The country-level variables (*COUNTRY*) capture macroeconomic and institutional conditions that shape the broader context in which individuals form beliefs and policy preferences. Prior studies highlight that factors such as inflation, economic development, and institutional quality can influence climate attitudes by affecting both perceived economic constraints and confidence in governance. Including these controls ensures that the estimated effects of trust are not confounded by cross-country differences in economic or institutional environments.

To empirically assess these relationships, the author estimates two baseline models using Ordinary Least Squares (OLS). Equation (1) investigates whether trust influences individuals' beliefs that climate change is real and primarily caused by human activity. Equation (2) examines how trust affects individuals' willingness to pay higher taxes to support climate change mitigation efforts. Given the uneven number of observations across countries, all regressions are weighted by each country's total population to ensure that the results are not disproportionately driven by countries with larger sample sizes.

$$\mathrm{PERCEP_i} = \alpha + \beta_1 \mathrm{TRUST_i} + \beta_2 \mathrm{INDIVIDUAL_i} + \beta_3 \mathrm{COUNTRY_i} + \mu_i + \mathrm{FE\ (Region)} + \mathrm{FE\ (Year)} \quad (1)$$

$$\mathrm{ENVTAX_i} = \alpha + \beta_1 \mathrm{TRUST_i} + \beta_2 \mathrm{INDIVIDUAL_i} + \beta_3 \mathrm{COUNTRY_i} + \mu_i + \mathrm{FE\ (Region)} + \mathrm{FE\ (Year)} \quad (2)$$

where *PERCEP* denotes individuals' perceptions that climate change is real and man-made. *ENVTAX* captures individuals' willingness to pay higher taxes to finance climate change mitigation policies. *TRUST* includes measures of generalized trust, such as trust in most people, and particularized (institutional) trust, such as trust in government, regional

government, and local government. *INDIVIDUAL* represents a vector of individual-level characteristics, including demographic, socioeconomic, and attitudinal factors. *COUNTRY* comprises macroeconomic and institutional characteristics of the respondent's country of residence. μ_i is the error term. Regional fixed effects and year fixed effects are included to control for unobserved heterogeneity across regions and time.

3.2. Data description

The dataset used in this study integrates information from two primary sources: the Life in Transition Survey Round IV (LiTS IV), conducted by the European Bank for Reconstruction and Development (EBRD, 2023), and the World Bank Open Data. The Life in Transition Survey Round IV was carried out during 2022 and 2023 across 37 economies, covering countries in Eastern Europe, Central Asia, and parts of the Middle East and North Africa. The survey provides detailed individual-level information on socioeconomic conditions, perceptions, and attitudes, with a particular emphasis on inequality of opportunity, intergenerational mobility, and trust in institutions. In addition to standard demographic and economic variables, the dataset includes rich measures of beliefs and preferences, making it particularly suitable for analyzing attitudes toward climate change and public policy. The LiTS IV data are used to construct the key dependent variables capturing climate change perceptions and willingness to support environmental taxation, as well as the main explanatory variables related to generalized trust and institutional trust. The availability of multiple trust indicators, including trust in people and trust in different levels of government, allows for a more detailed and disaggregated analysis of how trust operates across different dimensions. Furthermore, the survey contains information on individual characteristics such as age, gender, education, health status, religiosity, and risk preferences, which are included as control variables in the empirical analysis.

To complement the individual-level survey data, country-level indicators are obtained from the World Bank Open Data. These indicators include macroeconomic variables such as unemployment rates, inflation, and population size, which capture the broader economic environment in which individuals form their attitudes. The inclusion of these macro-level variables allows the analysis to account for cross-country differences in economic conditions that may influence both trust and climate-related attitudes.

The two datasets are merged at the country-year level using consistent country identifiers. Prior to merging, standard data-cleaning procedures are applied to ensure data quality and consistency. These procedures include the removal of observations with missing values in key variables, the harmonization of variable definitions across countries, and the verification of coding schemes for categorical

variables. In addition, population weights provided by the survey are retained and applied in all empirical estimations to ensure that the results are representative of the underlying populations in each country.

After merging the datasets and applying the necessary cleaning procedures, the final sample consists of 37,478 individuals from 37 countries over the period 2022 to 2023. This sample size provides substantial variation across individuals and countries, allowing for a comprehensive analysis of the relationship between trust and climate-related attitudes in a cross-country setting. Descriptive statistics for the main variables used in the analysis are reported in Table 1. A detailed description of all variables, including their definitions and measurement, is provided in Table A1 in the Appendix.

Table 1. Descriptive statistics of the variables

Variable	Obs	Mean	Std. Dev.	Min	Max
CLCHANGE	36,531	2.99	0.99	1	4
CC_MAN	36,250	2.97	1.02	1	4
TAX_RPOL	37,478	2.71	1.06	1	4
TAX_RGWARM	37,478	2.62	1.09	1	4
GTRUST	37,076	2.48	1.12	1	4
TRUST_PRESIDENT	32,545	3.01	1.08	1	4
TRUST_GOV	34,360	2.88	1.15	1	4
TRUST_RGOV	32,851	2.83	1.09	1	4
TRUST_LGOV	34,235	2.87	1.06	1	4
FEMALE	37,478	0.82	0.38	0	1
LNAGE	37,478	3.80	0.39	2.89	4.55
HIGHEDU	37,478	0.21	0.41	0	1
DHIGHEDU	36,083	0.11	0.31	0	1
MHIGHEDU	36,653	0.09	0.28	0	1
HEALTH	37,431	2.65	0.93	0	4
MUSLIM	36,012	0.37	0.48	0	1
RTAKE	37,151	3.79	2.93	0	9
RELIGIOUS	35,238	0.12	0.33	0	1
URBAN	37,478	0.60	0.49	0	1
FUSSR	37,478	0.35	0.48	0	1
UNEMP	36,466	8.97	5.71	0.85	32.28
INFL	35,456	11.15	8.88	3.17	58.42

3.2.1. Climate change perception variables (PERCEP)

Climate change perceptions are measured using responses to two survey questions included in the Life in Transition Survey Round IV. Question 4.19 asks respondents to indicate how convinced they are that climate change is real, while Question 4.20a asks how convinced they are that

climate change is primarily driven by human activity. These two questions capture distinct but closely related dimensions of climate attitudes: general acknowledgment of climate change as a phenomenon and attribution of its causes to human actions. Based on these questions, two dependent variables are constructed. The first variable, *CLCHANGE*, reflects the degree to which respondents believe that climate change is real. The second variable, *CC_MAN*, captures the extent to which respondents attribute climate change to anthropogenic factors. Both variables are coded on a five-point ordinal scale ranging from 0 (entirely unconvinced) to 4 (entirely convinced). Higher values therefore indicate stronger levels of belief in the existence of climate change and in its human causes.

3.2.2 Willingness to pay higher environmental taxes (ENVTAX)

Support for climate-related fiscal policies is measured using responses to Question 4.22 of the survey, which asks respondents whether they would be willing to pay higher taxes if the additional revenue were allocated to environmental purposes. This question directly captures individuals' readiness to support public policy interventions that involve personal financial contributions.

Two distinct policy areas are considered. The first relates to reducing or preventing pollution, including measures aimed at improving air quality, water quality, and waste management. This dimension is captured by the variable *TAX_RPOL*. The second focuses on broader climate mitigation efforts, specifically policies aimed at combating global warming or the greenhouse effect, and is captured by the variable *TAX_RGWARM*. Responses to both questions are coded on a five-point scale ranging from 0 (strongly disagree) to 4 (strongly agree). Higher values indicate a greater willingness to support environmental taxation. The distinction between pollution-related taxes and climate-related taxes allows the analysis to differentiate between local environmental concerns and broader global environmental challenges. This separation is relevant because individuals may respond differently to policies depending on the perceived immediacy and visibility of environmental issues.

3.2.3. Generalized trust and institutional trust

Trust is measured along two main dimensions: generalized trust and institutional trust. Generalized trust is derived from Question 4.02, which asks respondents whether most people can be trusted or whether one cannot be too careful in dealing with others. This variable, *GTRUST*, is coded on a scale from 0 (complete distrust) to 4 (complete trust). It captures individuals' overall expectations regarding the trustworthiness of others in society and reflects broader social norms and attitudes.

Institutional trust is measured using responses to Question 4.03,

which asks respondents to evaluate their level of trust in various public authorities. Four separate variables are constructed to capture trust at different levels of governance: trust in the presidency (*TRUST_PRESIDENT*), trust in the central government (*TRUST_GOV*), trust in regional government (*TRUST_RGOV*), and trust in local government (*TRUST_LGOV*). Each variable is coded on a scale from 0 (complete distrust) to 4 (complete trust), with higher values indicating greater confidence in the respective institution. The availability of multiple institutional trust measures allows for a more detailed analysis of how trust in different levels of governance relates to climate perceptions and policy preferences. It also enables the examination of whether trust operates uniformly across institutional tiers or varies depending on the level of government.

3.2.4. Individual-level control variables (INDIVIDUAL)

The empirical analysis includes a comprehensive set of individual-level control variables to account for observable characteristics that may influence both trust and climate-related attitudes. *FEMALE* is a binary variable equal to 1 for female respondents and 0 otherwise. *LNAGE* represents the natural logarithm of age, which allows for a non-linear relationship between age and the outcome variables. Education is captured through three variables: *HIGHEDU*, *DHIGHEDU*, and *MHIGHEDU*, which indicate whether the respondent, the respondent's father, and the respondent's mother, respectively, have attained at least a bachelor's degree. These variables allow the analysis to account for both individual educational attainment and intergenerational educational background. *HEALTH* measures self-reported health status on a scale ranging from 0 (very poor) to 4 (very good). *MUSLIM* is a binary variable equal to 1 if the respondent identifies as Muslim and 0 otherwise, while *RELIGIOUS* captures whether the respondent identifies as religious more broadly. *RTAKE* measures willingness to take risks on a scale from 0 to 9, reflecting individual attitudes toward uncertainty. Finally, *URBAN* is a binary variable equal to 1 for respondents residing in urban areas and 0 for those living in rural areas.

These variables collectively capture demographic, socioeconomic, cultural, and behavioral dimensions that are relevant for understanding variation in both trust and climate-related attitudes.

3.2.5. Country-level control variables (COUNTRY)

The analysis incorporates several country-level control variables to account for differences in macroeconomic conditions and institutional context across countries. These include the national unemployment rate, the national inflation rate, and an indicator variable identifying whether a country is a former Soviet Union member[1]. The inclusion of

1. The sample has 13 former Soviet Union countries: Armenia; Azerbaijan; Belarus;

a former Soviet Union indicator captures shared historical and institutional characteristics that may influence contemporary attitudes. Countries in this group experienced prolonged periods of centralized governance and state-controlled information systems, which may be associated with differences in institutional trust and responses to scientific information. Including this variable allows the analysis to account for persistent structural differences that are not fully captured by standard macroeconomic indicators. Macroeconomic variables such as unemployment and inflation are included to capture the broader economic environment in which individuals form their attitudes. These indicators reflect short-term economic conditions that may influence perceptions of risk, policy preferences, and support for public spending. Together, the individual-level and country-level variables provide a comprehensive framework for analyzing the relationship between trust and climate-related attitudes while accounting for both micro-level heterogeneity and macro-level context.

4. Empirical results

4.1. The influence of trust on climate perception

Table A2 in the Appendix presents the empirical results on the relationship between different forms of trust and individuals' perceptions of climate change. Columns (1)–(5) examine whether respondents believe that climate change is real (*CLCHANGE*), while columns (6)–(10) analyze whether respondents consider climate change to be primarily driven by human activity (*CC_MAN*). Each specification introduces one trust variable at a time and includes a comprehensive set of individual-level characteristics, country-level macroeconomic controls, as well as region and year fixed effects. This specification strategy allows for a consistent comparison across different dimensions of trust while accounting for potential confounding factors at both the micro and macro levels.

Across all specifications, both generalized trust and institutional trust are positively and statistically significantly associated with climate perceptions. Generalized trust (*GTRUST*) shows a stable and robust positive relationship with both *CLCHANGE* and *CC_MAN*. Individuals reporting higher levels of trust in others are more likely to accept both the existence of climate change and its anthropogenic origin. The estimated coefficients are similar in magnitude across the two dependent variables, indicating that generalized trust is associated with both awareness of climate change and acceptance of its human causes in a consistent manner. The stability of these coefficients across specifications suggests that the relationship is not sensitive to the inclusion of alternative controls or model specifications.

Estonia; Georgia; Kazakhstan; Kyrgyz Republic; Latvia; Lithuania; Moldova; Russia; Tajikistan; and Uzbekistan.

Institutional trust exhibits a similarly strong and consistent relationship with climate perceptions. Trust in the President, central government, regional government, and local government is positively and significantly associated with both *CLCHANGE* and *CC_MAN* across all specifications. The estimated coefficients range from approximately 0.054 to 0.066, with limited variation across different levels of government. This relatively narrow range indicates that the association between institutional trust and climate perceptions is broadly similar regardless of the specific level of governance considered. The results therefore do not indicate a concentration of effects at a particular institutional tier but instead point to a general relationship between overall institutional confidence and climate-related beliefs.

A comparison between generalized trust and institutional trust shows that both dimensions are consistently relevant, although institutional trust exhibits slightly larger coefficients. This pattern is observed across both dependent variables and across all specifications. The consistency of these findings indicates that trust operates along multiple dimensions in shaping climate perceptions, with both interpersonal and institutional forms of trust contributing to the acceptance of climate-related information.

Individual characteristics display systematic and stable associations with climate perceptions. Education emerges as one of the strongest predictors. Individuals with higher levels of education are significantly more likely to believe that climate change is real and caused by human activity. The magnitude and statistical significance of education coefficients remain stable across all specifications. In addition to respondents' own education, maternal education is positively and significantly associated with both outcome variables, while paternal education does not exhibit statistical significance in any specification. The difference in statistical significance across parental education variables is consistent across models and does not vary with the inclusion of different trust measures.

Gender differences are also present in all specifications. Female respondents are consistently less likely to report belief in both the existence of climate change and its anthropogenic origin. The coefficients on *FEMALE* are negative and statistically significant across all models. Age is positively associated with climate perceptions in most specifications, indicating that older individuals are more likely to report belief in climate change. However, the magnitude and statistical significance of age are smaller and less consistent in models where *CC_MAN* is the dependent variable.

Additional individual-level variables show consistent patterns across specifications. Better self-reported health is positively associated with both *CLCHANGE* and *CC_MAN*. The coefficients on health are statistically significant and remain stable across different model

specifications. Willingness to take risks is also positively associated with both outcome variables, indicating a consistent relationship between risk tolerance and climate perceptions. Religious affiliation is positively associated with climate perceptions overall, with statistically significant coefficients across most specifications. In contrast, identifying as Muslim is associated with lower reported belief in both climate change outcomes. These patterns remain stable across specifications and across both dependent variables. Urban residence does not exhibit a statistically significant association with climate perceptions once other individual and country-level characteristics are included.

At the country level, respondents residing in former Soviet Union countries are significantly less likely to believe that climate change is real and caused by human activity. The estimated coefficients are negative, large in magnitude, and highly statistically significant across all specifications. This relationship remains robust after controlling for macroeconomic conditions and other country-level variables. The persistence of this result across all models indicates that the association is not driven by observable economic characteristics included in the regressions.

Macroeconomic variables display additional associations with climate perceptions, although their effects are less consistent compared to trust variables. Higher inflation rates are generally associated with lower levels of belief in climate change. The coefficients on inflation are negative in most specifications, although statistical significance varies, particularly in models where *CC_MAN* is the dependent variable. Higher unemployment rates are weakly associated with stronger belief in climate change, especially for anthropogenic causes, although the magnitude of this relationship is relatively small and not consistently statistically significant across all models.

All specifications include region and year fixed effects and are estimated using population weights. This approach ensures comparability across countries with different sample sizes and accounts for regional heterogeneity and time-specific effects. The adjusted R-squared values range from approximately 0.10 to 0.11, which is consistent with cross-country analyses based on individual-level survey data. The explanatory power of the models remains stable across specifications, and the estimated coefficients for trust variables show limited variation when alternative measures of institutional trust are introduced.

Overall, the results indicate a consistent and robust relationship between trust and climate perceptions across multiple dimensions. Both generalized trust and institutional trust are positively associated with belief in the existence of climate change and its anthropogenic causes. These relationships remain stable after controlling for a wide range of individual and country-level characteristics, as well as fixed effects,

indicating that the observed associations are not sensitive to model specification.

4.2. The influence of trust on willingness to pay higher environmental taxes

Table A3 in the Appendix examines the relationship between different forms of trust and individuals' willingness to pay higher taxes to support environmental policies. Columns (1)–(5) analyze willingness to pay higher taxes to reduce or prevent pollution (*TAX_RPOL*), while columns (6)–(10) focus on willingness to pay higher taxes to address global warming or the greenhouse effect (*TAX_RGWARM*). Each specification introduces one trust variable at a time and includes a comprehensive set of individual-level and country-level controls, along with region and year fixed effects.

Across all specifications, both generalized trust and institutional trust are positively and statistically significantly associated with willingness to pay higher environmental taxes. Generalized trust (*GTRUST*) is consistently positive and significant for both *TAX_RPOL* and *TAX_RGWARM*. Individuals reporting higher levels of trust in others are more likely to support increased taxation for environmental purposes. The magnitude of the coefficients is stable across both dependent variables, indicating a consistent relationship between generalized trust and support for environmental taxation across different policy domains.

Institutional trust exhibits a stronger and more pronounced relationship with willingness to pay higher environmental taxes. Trust in the President, central government, regional government, and local government is positive and highly statistically significant in all specifications. The estimated coefficients are larger than those associated with generalized trust and range approximately from 0.079 to 0.096 for *TAX_RPOL* and from 0.084 to 0.089 for *TAX_RGWARM*. The relatively narrow range of coefficients across different institutional levels indicates that the relationship is broadly consistent across governance tiers. These results indicate that trust in public institutions is closely associated with individuals' readiness to incur personal financial costs in support of environmental policies.

Comparing the results in Table A3 in the Appendix with those in Table A2 in the Appendix reveals that the magnitude of trust coefficients is generally larger in the willingness-to-pay models than in the perception models. This difference indicates that trust is more strongly associated with policy support involving direct financial contributions than with belief formation alone. The consistency of this pattern across both generalized and institutional trust measures highlights the relevance of trust in shaping preferences over redistributive or collective fiscal instruments.

Individual characteristics also display systematic associations with

willingness to pay higher environmental taxes. Female respondents are consistently more likely than male respondents to support higher environmental taxation across all specifications. Age is positively associated with willingness to pay, although the magnitude of the effect is smaller and less consistent compared to the perception models.

The role of education differs across dimensions. Respondents' own education is positively associated with willingness to pay higher taxes, although the effect is moderate and not statistically significant in all specifications. In contrast, fathers' education shows a stronger and more consistent positive association, particularly for willingness to pay taxes related to global warming. Mothers' education does not exhibit a statistically significant effect in these models. This pattern indicates that different components of educational background are associated with distinct aspects of environmental attitudes.

Additional individual-level variables show consistent relationships. Better self-reported health is positively associated with willingness to pay higher environmental taxes. Individuals reporting higher levels of well-being are more likely to support fiscal measures aimed at environmental protection. Willingness to take risks is also positively associated with support for environmental taxation, particularly in the case of global warming. Religious affiliation is positively associated with willingness to pay higher environmental taxes across all specifications. Identifying as Muslim is positively associated with willingness to pay pollution-related taxes but does not have a statistically significant relationship with willingness to pay taxes aimed at addressing global warming. These results indicate variation in support across different environmental policy domains.

Urban residence is positively associated with willingness to pay higher taxes for pollution control but does not have a statistically significant relationship with willingness to pay taxes related to global warming. This difference indicates that support for environmental taxation may vary depending on the proximity and visibility of environmental issues.

In contrast to the results for climate perceptions, country-level macroeconomic variables play a limited role in explaining willingness to pay higher environmental taxes. Former Soviet Union status is not statistically significant in most specifications. Similarly, unemployment rates and inflation rates do not show consistent or statistically significant associations with willingness to pay higher taxes. These results indicate that support for environmental taxation is more strongly associated with individual-level characteristics and trust variables than with short-term macroeconomic conditions.

All models include region and year fixed effects and are estimated using population weights to ensure comparability across countries with different sample sizes. The adjusted R-squared values range from approximately 0.10 to 0.12, which is consistent with cross-country

analyses based on individual-level survey data. The stability of the estimated coefficients across specifications indicates that the relationships between trust and willingness to pay higher environmental taxes are robust to alternative measures of institutional trust.

5. Discussion

This study provides new empirical evidence on the role of trust in shaping climate-related attitudes, with a particular focus on both climate change perceptions and support for mitigation policies through higher environmental taxes. By distinguishing between generalized trust and institutional trust, and by incorporating variation across multiple levels of government, the analysis offers a more nuanced understanding of how trust operates across different dimensions of climate attitudes. The results show that both generalized trust and institutional trust are positively and consistently associated with beliefs that climate change is real and primarily driven by human activity. These findings are robust across all model specifications and remain stable after controlling for a wide range of individual- and country-level characteristics.

Importantly, these results are consistent with prior studies that emphasize the role of trust in shaping environmental attitudes. Existing research finds that individuals with higher levels of trust are more likely to accept scientific evidence and support environmental protection (Fairbrother, 2016; Irwin & Berigan, 2013). Similarly, studies on epistemic trust highlight that confidence in information sources strengthens belief in anthropogenic climate change (Cologna et al., 2024). The present findings extend this literature by demonstrating that both generalized and institutional trust systematically influence multiple dimensions of climate perception, including both awareness and attribution.

The analysis further shows that institutional trust plays a more prominent role in explaining individuals' willingness to pay higher environmental taxes. The estimated coefficients for institutional trust are consistently larger than those for generalized trust across both pollution-related and climate-related taxation measures. This suggests that while generalized trust supports belief formation, institutional trust is more directly linked to policy support that involves tangible financial contributions. This pattern is in line with previous empirical evidence showing that trust in government reduces concerns about policy effectiveness and the misuse of public funds, thereby increasing acceptance of environmental taxation (Davidovic et al., 2020; Cologna & Siegrist, 2020). Moreover, the consistency of results across different levels of government—ranging from the presidency to local authorities—suggests that the effect is not confined to a specific institutional tier but reflects a broader confidence in public institutions. This finding corroborates recent cross-country and experimental studies

indicating that institutional trust is a key determinant of support for costly climate policies (Harring & Jagers, 2024; Mares et al., 2024).

Beyond trust, the findings underscore the importance of individual and contextual factors in shaping climate attitudes. Education emerges as a key determinant of climate perceptions, with higher levels of education associated with stronger belief in both the existence and anthropogenic nature of climate change. This is consistent with a large body of literature linking education to greater scientific literacy and environmental awareness. The inclusion of parental education provides additional insight into intergenerational influences. The results indicate that maternal education is more strongly associated with climate perceptions, while paternal education shows a closer link to willingness to support environmental taxation. These findings align with emerging research on intergenerational transmission of values and preferences, suggesting that family background plays a significant role in shaping both cognitive and normative dimensions of climate attitudes.

Country-level factors also contribute to explaining cross-national variation. The results reveal a strong and persistent negative association between former Soviet Union status and climate perceptions, which remains robust even after controlling for macroeconomic variables. This finding is consistent with prior studies emphasizing the role of historical and institutional legacies in shaping trust and public beliefs, particularly in societies with a history of centralized information systems and politicized science. In contrast, macroeconomic conditions such as inflation and unemployment exhibit more limited and less consistent effects, especially in models of willingness to pay. However, the negative association between inflation and climate perceptions suggests that short-term economic pressures may crowd out attention to long-term environmental risks. This pattern is consistent with broader evidence indicating that economic insecurity can reduce engagement with climate issues.

Taken together, the findings highlight that climate attitudes are shaped by a combination of trust, individual characteristics, and broader structural factors. Trust operates across multiple dimensions, influencing both belief formation and policy preferences, while education, institutional context, and macroeconomic conditions contribute additional layers of variation. The consistency of these results across specifications and outcome variables, and their alignment with existing empirical evidence, reinforce the robustness of the findings and their relevance for understanding the social and institutional foundations of climate attitudes.

6. Conclusion and implications

Using individual-level data from the fourth round of the Life in Transition Survey combined with country-level macroeconomic indicators from the World Bank Open Data, this study examines how

trust influences individuals' climate change perceptions and their willingness to support climate mitigation through higher environmental taxes. Using individual-level survey data combined with country-level indicators, the analysis distinguishes between generalized trust and institutional trust and evaluates their roles across diverse economic and historical contexts.

Three main conclusions emerge from the analysis. First, both generalized trust and institutional trust are positively and consistently associated with stronger beliefs that climate change is real and driven by human activity. Second, trust particularly institutional trust plays a more prominent role in explaining individuals' willingness to pay higher environmental taxes. Third, climate attitudes are shaped not only by individual characteristics but also by broader social and historical factors, including intergenerational education, institutional legacies, and macroeconomic conditions.

This study contributes to the literature by providing the first comprehensive analysis that jointly examines generalized trust and multi-level institutional trust from the President to local governments in shaping both climate perceptions and policy support. It also introduces new evidence on intergenerational education by distinguishing between individuals' own education and that of their parents, thereby capturing family-based transmission channels in the formation of climate attitudes.

The findings provide precise and practical implications for design and implementation in terms of climate policies. First, policymakers should explicitly incorporate trust-building mechanisms into climate governance. This includes improving transparency in how climate policies are designed and implemented, clearly communicating policy objectives, and demonstrating accountability in the use of public resources (e.g., environmental tax revenues). In low-trust environments, governments should prioritize credibility-enhancing measures such as independent monitoring, stakeholder engagement, and consistent policy delivery to reduce resistance and strengthen public acceptance of climate policies.

Second, governments should treat education as a long-term policy investment for climate action. Expanding access to quality education and integrating climate-related content into curricula can systematically improve environmental awareness and support for mitigation policies. Given the evidence of intergenerational effects, policymakers should also consider family- and community-based learning initiatives that reinforce climate knowledge beyond formal schooling, thereby amplifying the long-term impact of education policies.

Third, climate policies should be tailored to country-specific historical and institutional contexts. In regions where institutional trust is structurally lower such as those shaped by past political systems standard policy approaches may be less effective. In these settings,

governments should adapt communication strategies, rely more on trusted local actors, and prioritize gradual trust-building reforms alongside climate interventions to improve policy uptake.

Fourth, policymakers should align climate policies with prevailing macroeconomic conditions. During periods of economic stress, such as high inflation, governments should complement climate measures with policies that address short-term financial pressures on households and firms. For example, targeted subsidies, phased implementation of environmental taxes, or compensation schemes can help maintain public support while advancing climate objectives.

Overall, these findings suggest that effective climate policy requires a coordinated and integrated approach. Policymakers should simultaneously invest in institutional trust, education, context-sensitive policy design, and macroeconomic stabilization. By addressing these factors together rather than in isolation, governments can enhance both the acceptance and the effectiveness of climate policies over the long term.

Acknowledgement
This article was presented at the 10th International Conference on Applied Theory, Macro and Empirical Finance (University of Macedonia, Thessaloniki, Greece). The author gratefully acknowledges helpful comments from conference participants. The research is fully funded by the University of Finance – Marketing, Vietnam.

Conflict of interest
The author declared no conflicts of interest.

Ethical considerations
The author has completely considered ethical issues, including informed consent, plagiarism, data fabrication, misconduct, and/or falsification, double publication and/or redundancy, submission, etc. This article was not authored by artificial intelligence.

Data availability
The dataset generated and analyzed during the current study is available from the corresponding author on reasonable request.

Countries Studies, Vol ?, No ?, ????

Appendix

Table A1. Data description

Name	Definition	Source
Dependent variable		
CLCHANGE	How convinced respondents are that climate change is real, ranging from 0 for entirely unconvinced to 4 for entirely convinced. Higher values indicate stronger beliefs that climate change is real.	Q4.19 of LITS4
CC_MAN	How convinced respondents are that climate change is man-made, ranging from 0 for entirely unconvinced to 4 for entirely convinced. Higher values indicate stronger beliefs that climate change is man-made.	Q4.20a of LITS4
TAX_RPOL	Whether respondents would be willing to pay higher taxes for fighting global warming or the greenhouse effect. It is coded from 0 for strongly disagree to 4 for strongly agree. Higher values indicate a greater willingness to support climate change mitigation through taxation.	Q4.22 of LITS4
TAX_RGWARM	Whether respondents would be willing to pay higher taxes for reducing or preventing pollution, including improving air or water quality and waste management. It is coded from 0 for strongly disagree to 4 for strongly agree. Higher values indicate a greater willingness to support climate change mitigation through taxation.	Q4.22 of LITS4
	Generalized trust and Institutional trust	
GTRUST	Generalized trust through whether most people can be trusted or whether one cannot be too careful in dealing with others. It is coded from 0 for "Complete distrust" to 4 for "Complete trust". Higher values indicate greater levels of generalized trust.	Q4.02 of LITS4
TRUST_PRESIDENT	Institutional trust through trust in the presidency. It is coded from 0 for "Complete distrust" to 4 for "Complete trust". Higher values indicate greater levels of institutional trust.	Q4.03 of LITS4
TRUST_GOV	Institutional trust through trust in the central government. It is coded from 0 for "Complete distrust" to 4 for "Complete trust". Higher values indicate greater levels of institutional trust.	Q4.03 of LITS4
TRUST_RGOV	Institutional trust through trust in the regional government. It is coded from 0 for "Complete distrust" to 4 for "Complete trust". Higher values indicate greater levels of institutional trust.	Q4.03 of LITS4
TRUST_LGOV	Institutional trust through trust in the local government. It is coded from 0 for "Complete distrust" to 4 for "Complete trust". Higher values indicate greater levels of institutional trust.	Q4.03 of LITS4

Name	Definition	Source
Control variables for individuals		
FEMALE	Dummy= 1 if the respondent is female and 0 if male.	Q1.03 of LITS4
LNAGE	Natural logarithm of age	Q1.05 of LITS4
HIGHEDU	Dummy= 1 if the respondent holds at least a bachelor's degree; 0 otherwise.	Q1.09a of LITS4
DHIGHEDU	Dummy= 1 if the respondent's father holds at least a bachelor's degree; 0 otherwise.	Q1.10a of LITS4
MHIGHEDU	Dummy= 1 if the respondent's mother holds at least a bachelor's degree; 0 otherwise.	Q1.11a of LITS4
HEALTH	Self-reported health status, ranging from 0 for "very poor" to 4 for "very good"	LITS4
MUSLIM	Dummy= 1 if the respondent identifies as Muslim; 0 otherwise.	Q8.14 of LITS4
RTAKE	Willingness to take risks on a scale from 0 "Not willing to take risk" to 9 "Very much willing to take risk"	Q4.18 of LITS4
RELIGIOUS	Dummy= 1 if the respondent is religious; 0 otherwise.	Q8.14c of LITS4
URBAN	Dummy= 1 if respondents lives in urban areas; 0 for living in rural areas.	Q5.02 of LITS4
Control variables for country		
FUSSR	Dummy= 1 if the country where the respondent lives is a former Soviet Union member; 0 otherwise	Own author's survey
UNEMP	Unemployment rate of the country where the respondent lives	World Bank Open Data
INFL	Inflation rate of the country where the respondent lives	World Bank Open Data

Table A2. The influence of trust on climate perception

	CLCHANGE (1)	CLCHANGE (2)	CLCHANGE (3)	CLCHANGE (4)	CLCHANGE (5)	CC_MAN (6)	CC_MAN (7)	CC_MAN (8)	CC_MAN (9)	CC_MAN (10)
GTRUST	0.061***					0.060***				
	(0.000)					(0.000)				
TRUST_PRESIDENT		0.063***					0.066***			
		(0.000)					(0.000)			
TRUST_GOV			0.054***					0.063***		
			(0.000)					(0.000)		
TRUST_RGOV				0.057***					0.059***	
				(0.000)					(0.000)	
TRUST_LGOV					0.062***					0.064***
					(0.000)					(0.000)
FEMALE	-0.072***	-0.084***	-0.082***	-0.079***	-0.078***	-0.059***	-0.071***	-0.070***	-0.074***	-0.070***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)
LNAGE	0.057***	0.047***	0.055***	0.056***	0.057***	0.045***	0.029	0.045**	0.050***	0.048***
	(0.001)	(0.009)	(0.001)	(0.002)	(0.001)	(0.008)	(0.113)	(0.011)	(0.006)	(0.008)
HIGHEDU	0.130***	0.142***	0.138***	0.141***	0.139***	0.103***	0.122***	0.119***	0.120***	0.114***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
DHIGHEDU	0.014	0.008	0.003	-0.000	0.001	0.013	0.006	-0.008	-0.002	-0.005
	(0.513)	(0.708)	(0.877)	(0.996)	(0.970)	(0.534)	(0.801)	(0.705)	(0.942)	(0.826)
MHIGHEDU	0.084***	0.082***	0.087***	0.088***	0.093***	0.053**	0.045*	0.061**	0.048*	0.059**
	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)	(0.025)	(0.065)	(0.013)	(0.056)	(0.016)
HEALTH	0.019***	0.025***	0.026***	0.025***	0.026***	0.015**	0.020***	0.022***	0.025***	0.025***
	(0.008)	(0.001)	(0.000)	(0.001)	(0.000)	(0.033)	(0.008)	(0.003)	(0.001)	(0.001)
MUSLIM	-0.081***	-0.084***	-0.074***	-0.089***	-0.076***	-0.089***	-0.087***	-0.083***	-0.091***	-0.088***
	(0.004)	(0.003)	(0.009)	(0.002)	(0.007)	(0.002)	(0.003)	(0.004)	(0.002)	(0.002)
RTAKE	0.006***	0.004**	0.005**	0.004**	0.005***	0.008***	0.007***	0.007***	0.006***	0.007***

	CLCHANGE (1)	CLCHANGE (2)	CLCHANGE (3)	CLCHANGE (4)	CLCHANGE (5)	CC_MAN (6)	CC_MAN (7)	CC_MAN (8)	CC_MAN (9)	CC_MAN (10)
	(0.002)	(0.046)	(0.015)	(0.040)	(0.008)	(0.000)	(0.001)	(0.000)	(0.003)	(0.000)
RELIGIOUS	0.038**	0.051***	0.048***	0.046**	0.041**	0.066***	0.072***	0.071***	0.070***	0.072***
	(0.025)	(0.005)	(0.007)	(0.010)	(0.020)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
URBAN	-0.012	-0.009	-0.016	-0.015	-0.012	0.002	0.002	-0.007	-0.006	0.002
	(0.367)	(0.493)	(0.243)	(0.284)	(0.368)	(0.865)	(0.897)	(0.631)	(0.673)	(0.897)
FUSSR	-0.594***	-0.614***	-0.605***	-0.583***	-0.599***	-0.262**	-0.286**	-0.248**	-0.255**	-0.255**
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.027)	(0.016)	(0.039)	(0.034)	(0.032)
UNEMP	0.007	0.007*	0.006	0.007*	0.006	0.010**	0.009**	0.009**	0.009**	0.009**
	(0.102)	(0.095)	(0.112)	(0.072)	(0.142)	(0.020)	(0.022)	(0.029)	(0.027)	(0.032)
INFL	-0.014**	-0.011*	-0.012*	-0.013**	-0.012**	-0.010*	-0.007	-0.007	-0.006	-0.007
	(0.019)	(0.081)	(0.053)	(0.035)	(0.047)	(0.085)	(0.262)	(0.253)	(0.359)	(0.261)
Constant	3.146***	3.137***	3.129***	3.128***	3.104***	3.138***	3.134***	3.100***	3.088***	3.050***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Weighted by population	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	30670	27549	28460	27329	28327	30472	27343	28255	27135	28122
Adjusted R2	0.103	0.103	0.100	0.101	0.101	0.106	0.112	0.108	0.109	0.108

Table A3. The influence of trust on willingness to pay higher environmental taxes

	TAX_RPOL (1)	TAX_RPOL (2)	TAX_RPOL (3)	TAX_RPOL (4)	TAX_RPOL (5)	TAX_RGWARM (6)	TAX_RGWARM (7)	TAX_RGWARM (8)	TAX_RGWARM (9)	TAX_RGWARM (10)
GTRUST	0.048***					0.050***				
	(0.000)					(0.000)				
TRUST_PRESIDENT		0.096***					0.084***			
		(0.000)					(0.000)			
TRUST_GOV			0.082***					0.087***		
			(0.000)					(0.000)		
TRUST_RGOV				0.084***					0.089***	
				(0.000)					(0.000)	
TRUST_LGOV					0.079***					0.088***
					(0.000)					(0.000)
FEMALE	0.055***	0.049***	0.055***	0.052***	0.057***	0.067***	0.067***	0.073***	0.064***	0.072***
	(0.002)	(0.007)	(0.002)	(0.006)	(0.002)	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)
LNAGE	0.038**	0.031	0.036*	0.039**	0.036**	0.047***	0.031	0.040**	0.043**	0.040**
	(0.030)	(0.102)	(0.052)	(0.037)	(0.050)	(0.010)	(0.112)	(0.038)	(0.028)	(0.035)
HIGHEDU	0.021	0.032**	0.031*	0.030*	0.025	0.022	0.028*	0.028*	0.022	0.023
	(0.160)	(0.044)	(0.052)	(0.063)	(0.116)	(0.161)	(0.093)	(0.092)	(0.185)	(0.164)
DHIGHEDU	0.046**	0.035	0.029	0.029	0.035	0.067***	0.054**	0.052**	0.052**	0.057**
	(0.035)	(0.135)	(0.203)	(0.214)	(0.131)	(0.003)	(0.025)	(0.029)	(0.034)	(0.018)
MHIGHEDU	0.018	0.018	0.025	0.025	0.021	0.022	0.022	0.025	0.029	0.022
	(0.461)	(0.486)	(0.314)	(0.337)	(0.411)	(0.386)	(0.394)	(0.344)	(0.272)	(0.401)
HEALTH	0.018**	0.019**	0.018**	0.018**	0.018**	0.020***	0.020**	0.020**	0.021**	0.019**
	(0.015)	(0.016)	(0.020)	(0.026)	(0.023)	(0.009)	(0.015)	(0.013)	(0.012)	(0.017)
MUSLIM	0.067**	0.070**	0.068**	0.080**	0.068**	0.015	0.006	0.003	0.014	0.005

	TAX_RPOL (1)	TAX_RPOL (2)	TAX_RPOL (3)	TAX_RPOL (4)	TAX_RPOL (5)	TAX_RGWARM (6)	TAX_RGWARM (7)	TAX_RGWARM (8)	TAX_RGWARM (9)	TAX_RGWARM (10)
				*						
	(0.021)	(0.020)	(0.023)	(0.009)	(0.022)	(0.615)	(0.854)	(0.918)	(0.655)	(0.876)
RTAKE	0.005**	0.003	0.004*	0.004	0.004*	0.007***	0.005**	0.007***	0.005**	0.006***
	(0.027)	(0.162)	(0.073)	(0.107)	(0.088)	(0.002)	(0.020)	(0.004)	(0.018)	(0.005)
RELIGIOUS	0.075***	0.076***	0.083***	0.073***	0.079***	0.059***	0.063***	0.070***	0.061***	0.062***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.001)	(0.000)	(0.002)	(0.001)
URBAN	0.031**	0.029**	0.028**	0.028*	0.035**	0.010	0.008	0.007	0.009	0.015
	(0.023)	(0.043)	(0.047)	(0.056)	(0.014)	(0.488)	(0.609)	(0.656)	(0.544)	(0.303)
FUSSR	-0.003	-0.064	-0.034	-0.060	-0.032	-0.015	-0.062	-0.065	-0.055	-0.042
	(0.982)	(0.602)	(0.786)	(0.631)	(0.797)	(0.908)	(0.630)	(0.617)	(0.670)	(0.745)
UNEMP	0.001	-0.000	-0.000	0.001	-0.000	-0.002	-0.002	-0.003	-0.002	-0.004
	(0.842)	(0.982)	(0.910)	(0.902)	(0.976)	(0.602)	(0.717)	(0.494)	(0.681)	(0.328)
INFL	0.000	0.004	0.003	0.005	0.003	0.005	0.009	0.009	0.010	0.008
	(0.996)	(0.531)	(0.605)	(0.433)	(0.675)	(0.443)	(0.161)	(0.167)	(0.128)	(0.210)
Constant	2.474***	2.348***	2.371***	2.341***	2.378***	2.437***	2.373***	2.332***	2.307***	2.347***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Weighted by population	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	31252	28030	28931	27767	28810	31252	28030	28931	27767	28810
Adjusted R2	0.111	0.115	0.109	0.107	0.108	0.099	0.100	0.099	0.097	0.098

References

Algan Y, Cahuc P. (2013). "Trust and Growth". *Annual Review of Economics*. 5: 521-549. https://econpapers.repec.org/scripts/redir.pf?u=http%3A%2F%2Fwww.annualreviews.org%2Fdoi%2Fabs%2F10.1146%2Fannurev-economics-081412-102108;h=repec:anr:reveco:v:5:y:2013:p:521-549.

Bjørnskov, C. (2007). "Determinants of generalized trust: A cross-country comparison". *Public Choice.* 130: 1-21. https://doi.org/10.1007/s11127-006-9069-1.

Carattini S, Baranzini A, Lalive R. (2018). "Is taxing waste a waste of time? Evidence from a supreme court decision". *Ecological Economics*. 148(C): 131-151. https://doi.org/10.1016/j.ecolecon.2018.02.001.

Carattini S, Jo YJ. (2018). "Trust and cooperation in global environmental efforts: Evidence from climate change". *Ecological Economics*. 148: 64-73.

Cologna V, Siegrist M. (2020). "The role of trust for climate change mitigation and adaptation behaviour: A meta-analysis". *Journal of Environmental Psychology*. 69. https://doi.org/10.1016/j.jenvp.2020.101428.

Cologna V, Kotcher J, Mede NG, Besley J, Maibach ED, Oreskes N. (2024). "Trust in climate science and climate scientists: A narrative review". *PLOS Climate*. May 23. https://doi.org/10.137/journal.pclm.0000400.

Das TK, Teng B. (1998). "Between trust and control: Developing confidence in partner cooperation in alliances". *Academy of Management Review*. 23(3): 491-512. https://psycnet.apa.org/doi/10.2307/259291.

Davidovic D, Harring N. (2024). "Exploring the cross-national variation in public support for climate policies in Europe: The role of quality of government and trust". *Energy Research & Social Science*. 70. https://doi.org/10.1016/j.erss.2020.101785.

Davidovic D, Harring N, Jagers SC. (2020). "The contingent effects of environmental concern and ideology: institutional context and people's willingness to pay environmental taxes". *Environmental Politics*. 29(4): 674-696. https://doi.org/10.1080/09644016.2019.1606882.

EBRD: European Bank for Reconstruction and Development. (2023). *Life in Transition Surveys IV*. https://www.ebrd.com/home/what-we-do/office-of-the-chief-economist/lits/life-in-transition-survey-data.html

Fairbrother M. (2016). "Trust and public support for environmental protection in diverse national contexts". *Sociological Science*. 3: 359-382. https://sociologicalscience.com/download/vol-3/june/SocSci_v3_359to382.pdf.

Fukuyama F. (1995). *Trust: The Social Virtues and the Creation of Prosperity*. New York, NY: Free Press.

Goodhart C, Vu LH. (2026a). *The Personal Characteristics that Affect Trust in Government: A Global Analysis Across Regions*. CEPR Discussion Paper No. 21137. CEPR Press, Paris & London. https://cepr.org/publications/dp21137.

----------. (2026b). "Climate change mitigation actions and the access to finance paradox for firms: International evidence and implications for Vietnam". *Banking Review of State Bank of Vietnam*. https://tapchinganhang.gov.vn/hanh-dong-giam-thieu-bien-doi-khi-hau-va-nghich-ly-tiep-can-tai-chinh-cua-doanh-nghiep-bang-chung-quoc-te-va-ham-y-cho-viet-nam-17175.html.

----------. (2026c). "Macroeconomic performance and corporate climate change mitigation actions: International evidence and implications for Vietnam". *Banking Review of State Bank of Vietnam*. https://tapchinganhang.gov.vn/hieu-qua-kinh-te-vi-mo-va-hanh-dong-giam-thieu-bien-doi-khi-hau-cua-doanh-nghiep-bang-chung-quoc-te-va-ham-y-cho-viet-nam-17069.html.

----------. (2025). *Who Adapts and who Finances? Firm-Level Evidence on Climate Mitigation, Gender, and Access to Credit*. CEPR Discussion Paper No.

20645. CEPR Press, Paris & London. https://cepr.org/publications/dp20645.
----------. (2024). *Credibility, Trust, and Perception of Authorities' Performance*. VoxEU Column.
Gulati R. (1995). "Does familiarity breed trust? The implications of repeated ties for contractual choice in alliances". *Academy of Management Journal*. 38(1): 85-112. https://doi.org/10.2307/256729.
Hooghe M, Dassonneville R, Marien S. (2015). "The impact of education on the development of political trust: Results from a five-year panel study among late adolescents and young adults in Belgium". *Political Studies*. 63(1): 123-141. https://doi.org/10.1007/s11127-006-9069-1.
Irwin K, Berigan N. (2013). "Trust, culture, and cooperation: A Social Dilemma Analysis of Pro-Environmental Behaviors". The *Sociological Quarterly*. 54: 424-449. https://doi.org/10.1111/tsq.12029.
Jo YJ, Carattini S. (2021). "Trust and carbon mitigation". *Nature Climate Change.* 11: 812-819.
Kaasa A, Andriani L. (2022). "Determinants of institutional trust: the role of cultural context". *Journal of Institutional Economics*. 18(1): 45-65. https://doi.org/10.1017/S1744137421000199.
Knack S, Keefer P. (1997). "Does social capital have an economic payoff? A cross-country investigation". *Quaterly Journal of Economics*. 112(4): 1251-1288. http://www.jstor.org/stable/2951271.
Lübke C. (2021). "Climate change mitigation and the role of social trust: A multilevel analysis of 132 countries". *Environmental Politics*. 30(5): 757-778.
MacInnes S, Hornsey MJ, Bretter C, Pearson S, Fielding KS, Bersoff D. (2026). "Who do we trust on climate change, and why?". *Global Environmental Change*. 96. https://doi.org/10.1016/j.gloenvcha.2025.103096.
Mares I, Scheve K, Toenshoff C. (2024). "Compensation, beliefs in state intervention, and support for the energy transition". *Comparative Political Studies*. https://scheve-research.org/wp-content/uploads/2024/09/german_energytransition_paper_2024.pdf.
McMillan J, Woodruff C. (1999). "Interfirm relationships and informal credit in Vietnam". *The Quarterly Journal of Economics*. 114(4): 1285-1320. http://www.jstor.org/stable/2586964.
Ostrom E. (1998). "A behavioral approach to the rational choice theory of collective action". *American Political Science Review*. 92(1): 1-22. https://doi.org/10.2307/2585925.
Putnam RD. (2000). *Bowling Alone: The Collapse and Revival of American Community*. New York: Simon & Schuster.
Rousseau DM, Sitkin SB, Burt RS, Camerer C. (1998). "Introduction to special topic forum: Not so different after all: A cross-discipline view of trust". *Academy of Management Review*. 23(3): 393-404. https://www.jstor.org/stable/259285.
Uslaner EM. (2008). "Where you stand depends on where your grandparents sat". *Public Opinion Quarterly*. 72(4): 725-740. https://doi.org/10.1093/poq/nfn058.
----------. (2002). *The Moral Foundations of Trust*. Cambridge University Press.
van der Meer T, Hakhverdian A. (2017). "Political trust as the evaluation of process and performance: A cross-national study of forty-two European democracies". *Political Studies*. 65(1): 81-102. https://www.tomvandermeer.nl/wp-content/uploads/2021/04/16-VdMeer-Hakhverdian-Political-Studies-Political-trust-as-evaluation.pdf.
Vu LH, Phuong DQ. (2026). "Trust and enterprise climate change mitigation: Evidence from Vietnam". *Development and Sustainability in Economics and Finance*. 9. https://doi.org/10.1016/j.dsef.2026.100119.