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Working Paper

Extreme weather exposure and public support for climate adaptation finance in vulnerable developing countries: Evidence from the European Union

Ruhr Economic Papers, No. 1178

Provided in Cooperation with:

RWI – Leibniz-Institut für Wirtschaftsforschung, Essen

Suggested Citation: Heckenhahn, Jonas (2025) : Extreme weather exposure and public support for climate adaptation finance in vulnerable developing countries: Evidence from the European Union, Ruhr Economic Papers, No. 1178, ISBN 978-3-96973-363-9, RWI - Leibniz-Institut für Wirtschaftsforschung, Essen, <https://doi.org/10.4419/96973363>

This Version is available at:

<https://hdl.handle.net/10419/330183>

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Imprint

Ruhr Economic Papers #1178

Responsible Editor: Thomas Bauer
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Fon: +49 201 8149-0 | email: rwi@rwi-essen.de
www.rwi-essen.de

The Institute has the legal form of a registered association;
Vereinsregister, Amtsgericht Essen VR 1784

Published by

RWI – Leibniz-Institut für Wirtschaftsforschung e.V.
Hohenzollernstr. 1-3, 45128 Essen, Germany

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The working papers published in the series constitute work in progress circulated to stimulate discussion and critical comments. Views expressed represent exclusively the authors' own opinions and do not necessarily reflect those of the editors.

RWI is funded by the Federal Government and the federal state of North Rhine-Westphalia.

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ISSN 1864-4872 (online)
ISBN 978-3-96973-363-9
DOI <https://dx.doi.org/10.4419/96973363>

Extreme Weather Exposure and Public Support for Climate Adaptation Finance in Vulnerable Developing Countries: Evidence from the European Union

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24 September 2025

Abstract: Climate change impacts are intensifying worldwide, with the harshest consequences borne by vulnerable developing countries that face high exposure and limited capacity to adapt. Although international agreements commit wealthy donor countries to provide adaptation finance, actual transfers remain far below estimated needs. Expanding such support ultimately depends on domestic political feasibility, including the preferences of donor-country publics. This paper investigates whether personal exposure to extreme weather fosters solidarity with vulnerable developing countries. I link objective indicators of heatwaves, heavy rainfall, and drought to more than 23,000 responses from the 2024 European Investment Bank Climate Survey across the EU-27. Ordered logistic regressions reveal that exposure to all three weather types is positively associated with support for financing adaptation abroad. The findings suggest that, at current exposure levels, proximate climate damages activate an empathy pathway that strengthens outward-looking solidarity, rather than a crowding-out mechanism that would shift priorities toward domestic adaptation.

Keywords: Climate Change, Extreme Weather, Heatwaves, Heavy Rainfall, Drought, Adaptation Finance, Vulnerable Countries, Climate Policy Preferences

JEL Codes: Q54, Q56, Q58, F35

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1 Introduction

Climate impacts are intensifying worldwide, but damages fall unevenly across countries (IPCC 2023; UNEP 2024a). Heatwaves, heavy rainfall, and drought are occurring more frequently and with greater intensity, disrupting human health, food production, and infrastructure. The harshest consequences are borne by vulnerable developing countries, particularly in Sub-Saharan Africa and South Asia, where high exposure to extreme weather often coincides with limited financial capacity to adapt (UNEP 2024b; Adil et al. 2025).

Adaptation has become a central pillar of global climate policy (IPCC 2023). Yet, financial flows from wealthy donor countries, such as the EU member states and the United States, remain far below the levels required to meet adaptation needs in vulnerable developing countries (UNEP 2024b). This international adaptation finance gap persists despite donor countries being bound by international agreements to support adaptation in these countries (UNFCCC 2015) and their historical responsibility for much of today's climate impacts (IPCC 2023). As a result, recipient countries face major constraints in strengthening health systems, agriculture, and infrastructure against climate risks, leaving them disproportionately exposed to the increasing severity of impacts (UNEP 2024b).

The expansion of international adaptation finance depends not only on international commitments but also on domestic political feasibility in donor states, especially the preferences of their national publics. In other words, closing the adaptation finance gap requires broad societal acceptance of substantial international aid commitments.

Therefore, this paper examines how donor-country citizens form preferences over financial support for adaptation in vulnerable developing countries. Specifically, the study investigates whether European Union residents who have recently experienced the impacts of climate change themselves—through exposure to heatwaves, heavy rainfall, or drought—are more or less willing to finance adaptation for those most in need.

Overall, two strands of related literature are particularly relevant to this study: first, conjoint and discrete choice experiments that elicit citizens' preferences for international climate adaptation support. Second, studies that exploit plausibly exogenous weather shocks to identify how climate experiences shape climate and environment-related public opinion.

Conjoint and discrete-choice experiments consistently show that while citizens in donor countries, such as Germany, Japan, and the USA, express baseline support for international adaptation aid, approval depends strongly on how proposals are designed. Support tends to decline when aid is linked to admitting more climate migrants, but increases when recipient

governance is credible, decision-making is shared, or burden-sharing is framed as fair and rules-based (Gampfer et al. 2014; Uji et al. 2021; Gaikwad et al. 2025; Bottner et al. 2025). Studies further highlight that trade ties, political alignment, or need-based targeting of recipients can shape preferences, while progressive financing at home strengthens approval (Kruse and Atkinson 2022; Andonova et al. 2025). Overall, these experiments reveal both a robust baseline of solidarity and clear sensitivities to institutional design and distributional framing.¹

The second strand of literature employs objective weather data to study climate and environment-related opinion change (Egan and Mullin 2012; Dell et al. 2014). Hoffmann et al. (2022) link high-resolution temperature and drought indicators with Eurobarometer data from 34 countries and European election data from 28 countries, showing that recent exposure increases environmental concern and Green party support. Gazmararian and Milner (2025) use poll data for 137 countries and find that climate shocks increase climate risk perceptions and support for mitigation policies among people in climate-vulnerable locations. Cologna et al. (2025) demonstrate, based on evidence from 68 countries, that subjective attribution of extreme events to climate change, rather than exposure alone, is a key driver of climate policy support. Ray et al. (2017) link U.S. survey data with local weather indicators and find that recent extreme weather modestly increases support for climate adaptation, though effects vary across policies and fade over time.²

While conjoint and choice experiments highlight how institutional design and fairness shape support for adaptation aid, and weather-shock studies show how climate experiences influence concern and domestic policy preferences, no research has examined whether objective extreme-weather exposure in donor countries affects public support for adaptation finance abroad. This study seeks to fill that gap.

This study combines high-resolution climate data on heatwaves, heavy rainfall, and drought with survey evidence to examine public preferences. Specifically, I draw on cross-sectional responses from the 2024 European Investment Bank Climate Survey, which covers 23,148 individuals spread across all EU member states (EIB 2024a, b). Each respondent is geographically matched to indicators of weather extremes, with heatwave and heavy rainfall

¹ Complementing this, a nationally representative contingent valuation survey in the UK finds a mean willingness to pay of about £27 per year for adaptation in developing countries (O'Garra and Mourato 2015).

² Moreover, Lohmann and Kontoleon (2023) find in England and Wales that floods and heatwaves increase risk perceptions, while Holub and Schündeln (2023) show that the 2021 German flood boosted pro-environmental voting. Other studies report rainfall variability increasing belief in anthropogenic climate change (Alexander et al. 2023), and unusual weather increasing climate change-related search activity (Lang 2014). Additionally, German panel analyses detect weak impacts of seasonal temperature changes on climate concern and willingness to mitigate (Pfeifer and Otto 2023), and null effects of unusual weather on climate awareness and policy preferences (Gärtner and Schoen 2021).

measures derived from ERA5 reanalysis products (Hersbach et al. 2023; C3S 2024a, b; Muñoz Sabater et al. 2024), while drought conditions are measured through the Standardized Precipitation–Evapotranspiration Index (SPEI) (Vicente-Serrano et al. 2010a, b; Beguería et al. 2025). The 2024 European Investment Bank Climate Survey provides geographically linked measures of support for adaptation in vulnerable developing countries, as well as rich information on socio-demographics, climate experiences, and attitudes toward adaptation policies and practices.

The analyses reveal that exposures to all three extreme weather types are positively associated with support for adaptation in vulnerable developing countries. As climate damages become more proximate, people appear to recognize shared vulnerability and engage an empathy pathway (“we felt it too”), fostering solidarity-based international support. At current exposure levels, this dynamic seems to promote outward-looking preferences rather than a domestic crowding-out (“help home first”).

2 Data

2.1 European Investment Bank Climate Survey data

My analysis employs survey responses of the 2024 European Investment Bank Climate Survey (EIB 2024a, b). The online survey was conducted by the BVA Group from August 6 to August 23, 2024, and includes 23,148 respondents from the 27 EU member states.³ The survey collects detailed sociodemographic data, climate-related experiences, and attitudes toward adaptation policies and behaviors. Preferences for supporting adaptation in vulnerable developing countries are measured by the following ordinal survey item: “*Do you think that your country should pay more to help the most vulnerable developing countries to adapt to the impact of climate change?*” with four response options: (1) *Yes, absolutely*; (2) *Yes, somewhat*; (3) *No, not really*; (4) *No, absolutely not*.

The survey locates respondents across 302 subnational regions in the 27 EU member states⁴. The majority of observations come from Nomenclature of Territorial Units for Statistics (NUTS)⁵-3 regions (47%) and NUTS-2 regions (42%), with a smaller share from NUTS-1

³ About 1,000 participants from the United States also took part in the survey but are excluded from the analysis. The U.S. sample only distinguishes respondents by state, which does not provide the spatial resolution needed to link responses to regional climate indicators. Respondents in all countries were randomly drawn from nationally representative online panels and completed a self-administered web-based questionnaire (EIB 2024b). Quotas were applied to ensure representativeness by key demographics.

⁴ The Latvian region *Pierīga* is excluded from the analyses, as it is not part of the most recent NUTS classification. As a result, the regression analyses are conducted based on 301 NUTS regions with a total of 23,051 participants.

⁵ The Nomenclature of Territorial Units for Statistics (NUTS) is a hierarchical classification established by the European Union to divide its territory into regions for statistical reporting and policy use (Eurostat 2025b).

regions (11%). Because NUTS-3 provides the most detailed administrative scale, followed by levels 2 and 1, this distribution ensures comparatively high spatial resolution. Each respondent is linked to a specific NUTS region, which allows survey data to be merged with objective climate indicators for that region.

2.2 Objective extreme weather exposure data

To examine how objective extreme weather exposure shapes preferences for supporting adaptation in vulnerable developing countries, I construct regional extreme weather exposure indicators from high-resolution climate data and link them to the 2024 European Investment Bank Climate Survey. Specifically, I include regional indicators of heatwaves, heavy rainfall, and drought exposure.

2.2.1 Heatwave exposure

To construct the heatwave exposure indicators, I rely on daily mean 2m air temperature data from ERA5-Land, a high-resolution reanalysis dataset produced by the European Centre for Medium-Range Weather Forecasts (C3S 2024a; Muñoz Sabater et al. 2024).⁶ The dataset provides gridded values at a $0.1^\circ \times 0.1^\circ$ resolution. I aggregate these grid-level values to the 301 EU NUTS regions included in the 2024 European Investment Bank Climate Survey, using area weights that reflect the share of each grid cell located within a given region.

Based on the resulting daily regional averages, I calculate a relative measure of heatwave exposure. Specifically, heat episodes are defined as periods of at least three consecutive days with mean temperatures above the 95th percentile of the respective region's daily mean temperature distribution in the 1990–2019 reference period (Hoffmann et al. 2022).⁷ For each region, the number of heat episode days is counted and averaged over the relevant time window by dividing the amount of heat episode days by the total number of days in the period. For the main regression analyses, I use the indicators based on the 365- and 730-days windows preceding the survey midpoint, August 14, 2024.

2.2.2 Heavy rain exposure

To capture the extent of heavy rainfall exposure across the considered NUTS regions, this study employs ERA5 data as well. Specifically, here I employ ERA5's post-processed daily total

⁶ Note that the overall construction of the regional heatwave indicator—including aggregation, definition, and calculation—closely follows Heckenhahn (2025) with methodological precedents in Hoffmann et al. (2022).

⁷ Note that a higher number of heat episode days does not necessarily correspond to higher absolute temperatures. Instead, the indicator captures how unusual recent temperatures are relative to the typical conditions of a given region—that is, relative to what residents are accustomed to. For example, a heat episode day in a cooler region may occur at lower absolute temperatures than in a warmer region, but still qualifies if it exceeds the local 95th percentile.

precipitation variable, which is aggregated from hourly single-level reanalysis data into daily sums and is provided on a $0.25^\circ \times 0.25^\circ$ resolution grid (Hersbach et al. 2023; C3S 2024b).

For the creation of the regional heavy rain indicators, I use the gridded daily total precipitation data to compute, for each day and NUTS region, the share of a region's area that was affected by heavy rainfall, which is defined as more than 30 mm rainfall per day. Specifically, in line with the heatwave exposure indicator, all grid cells overlapping a given NUTS region are identified and weighted according to the share of their area that lies within the regional boundary. Then, for each day, the area weights of all grid cells within a NUTS region that exceed the 30 mm precipitation threshold are summed and divided by the total area weight of all grid cells overlapping that region.⁸ Finally, for each NUTS region, I compute period-averaged indicators by averaging the daily shares of the area affected by heavy rainfall over the relevant time window. In the main analysis—consistent with the heatwave exposure indicators—the windows of 365- and 730-days preceding the survey reference date of August 14, 2024, are used.

2.2.3 Drought exposure

For the development of the drought indicators, I rely on the SPEI (Vicente-Serrano et al. 2010a, b; Beguería et al. 2025), a widely applied metric for detecting meteorological drought. The SPEI data are supplied on a $0.5^\circ \times 0.5^\circ$ resolution grid and monthly frequency.

Again, all grid cells overlapping a given NUTS region are identified and weighted according to the share of their area within the regional boundary. For each month, the weights of all grid cells in a region with SPEI values ≤ -1 are summed and divided by the total weight of all overlapping cells, yielding the monthly share of area under drought. These monthly shares are then averaged over the chosen time window to produce a regional drought exposure indicator. In the main analysis—consistent with the other measures—the 12- and 24-month windows preceding the survey reference date of August 14, 2024, are applied.

3 Empirical strategy

The statistical analysis uses the survey item from the 2024 European Investment Bank Climate Survey that measures preferences for supporting adaptation in vulnerable developing countries

⁸All precipitation values on days with regional average temperatures at or below 0°C are excluded, since precipitation under such conditions typically falls as snow or sleet. This ensures that the indicator captures rainfall exposure only.

as the dependent variable (EIB 2024a, b).⁹ I reverse-code the question’s response options so that higher values indicate greater support for adaptation in vulnerable developing countries.¹⁰ Since the dependent variable is ordinal, I estimate ordered logistic regression models. To account for within-region correlation, I employ region-clustered robust standard errors.

To quantify objective extreme weather exposure, this study incorporates the previously introduced three extreme weather exposure indicators. All extreme weather exposure variables were standardized to mean zero and unit variance prior to estimation. Coefficients can thus be interpreted as the change in the log-odds of supporting adaptation associated with a one-standard-deviation increase in the respective exposure measure. The general regression equation reads as follows:

$$\textit{Adaptation preference}_i = \alpha + \beta T_i + \delta X_i + \varepsilon_i, \quad (1)$$

where *Adaptation preference*_{*i*} represents the preference for supporting adaptation in vulnerable developing countries. The key independent variable *T*_{*i*} denotes one of the standardized climate exposure indicators (heatwave exposure, heavy rainfall exposure, or drought exposure). *X*_{*i*} is a vector of individual-level control variables including age, gender, income, political orientation, education, occupation, presence of children in the household, housing type, and settlement size. ε_i is an error term, while α is the model intercept. β and δ represent the estimated coefficients for the climate exposure indicator and the vector of control variables, respectively.

The main specification uses the full model with the complete set of control variables, while a reduced model without controls is estimated for comparison (Appendix A). I also conduct several sensitivity analyses by employing alternative indicators for all three extreme weather types. For heatwaves, I vary the exposure window (30, 180, and 1,460 days) and apply thresholds at the 90th and 99th percentiles. For heavy rainfall, I also adjust the exposure window (30, 180, and 1,460 days) and test alternative thresholds of 20 and 40 mm. For drought, I construct indicators based on 1-, 6-, and 48-month periods and apply alternative SPEI thresholds of -0.5 and -1.5. The corresponding regression results are presented in Appendix A.

⁹ Beyond that, Appendix B reports regression results using adaptation–mitigation balancing and domestic adaptation support as dependent variables, both based on survey items from the 2024 European Investment Bank Climate Survey and previously analyzed in Heckenhahn (2025).

¹⁰ I.e., 1 = “No, absolutely not”; 2 = “No, not really”; 3 = “Yes, somewhat”; 4 = “Yes, absolutely”.

4 Analysis and results

4.1 Descriptive statistics

The 2024 European Investment Bank Climate Survey sample is largely representative of the European population in terms of age and gender (see EIB 2024a for more detailed descriptive statistics). In terms of gender, the sample consists of 47.75% men and 52.25% women, a distribution that aligns closely with the EU population share of roughly 49% men and 51% women (Eurostat 2025a). The average respondent age is 46.2 years, which is slightly higher than the EU median age of about 45 years. For my dependent variable based on the 2024 European Investment Bank Climate Survey question “*Do you think that your country should pay more to help the most vulnerable developing countries to adapt to the impact of climate change?*”, 18.9% answer “*Yes, absolutely*”; 40.3% “*Yes, somewhat*”; 27.7% “*No, not really*”; and 13.1% “*No, absolutely not*”.

4.2 Regression results

Exposure to extreme weather is positively associated with support for helping vulnerable developing countries adapt to climate change. Heatwave exposure shows a small but significant effect over the past year (0.08 ± 0.03 , $p = 0.015$), while the two-year window effect is weaker and not statistically significant (0.07 ± 0.04 , $p = 0.105$). Heavy rain exposure has consistent effects: both the one-year window (0.05 ± 0.02 , $p = 0.036$) and especially the two-year window (0.08 ± 0.02 , $p < 0.001$) are significant. Drought exposure yields the largest effect sizes, with robust and statistically significant coefficients for both the one-year window (0.12 ± 0.05 , $p = 0.009$) and the two-year window (0.09 ± 0.04 , $p = 0.018$). Overall, the results suggest that heatwaves, heavy rainfall, and especially drought conditions increase public support for providing climate adaptation assistance to vulnerable developing countries.

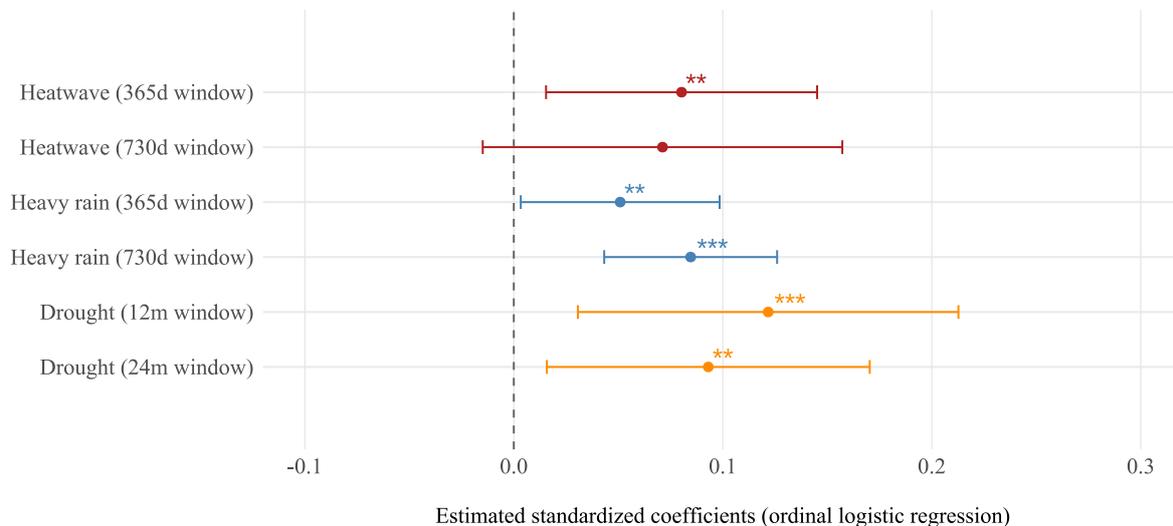


Figure 1 | Effects of extreme weather exposure on support for helping vulnerable developing countries adapt to climate change.

Points show standardized coefficients from ordinal logistic regressions with full controls (age, gender, income, political orientation, education, occupation, presence of children in the household, housing type, and settlement size). Bars indicate 95% confidence intervals with region-clustered robust standard errors. Each exposure is calculated over one-year (365d/12m) and two-year (730d/24m) windows. Significance levels: * $p \leq 0.10$, ** $p \leq 0.05$, *** $p \leq 0.01$. $N=23,051$.

5 Discussion

In this study, I link high-resolution objective indicators of heatwaves, heavy rainfall, and drought exposure to more than 23,000 survey responses from the 2024 European Investment Bank Climate Survey (EIB 2024a, b) to examine whether extreme weather shocks shape support for financing adaptation in vulnerable developing countries. I find that exposures of all three weather types are positively associated with support for adaptation in vulnerable developing countries.

The findings suggest that when climate damages become more personally proximate, individuals increasingly perceive shared vulnerability, activating an empathy pathway (“we felt it too”) that strengthens support for solidarity-based international action. At current levels of extreme weather exposure, this dynamic seems to foster outward-looking preferences rather than a domestic crowding-out effect that would shift support toward prioritizing adaptation at home (“help home first”).

To the best of my knowledge, this is the first study to link objective, high-resolution extreme-weather exposure in donor countries to public support for international climate adaptation finance. Thus, my study complements prior work that connects objective weather exposure to risk perceptions, Green voting, mitigation support or domestic adaptation support

(e.g., Ray et al. 2017; Hoffmann et al. 2022; Cologna et al. 2025; Gazmararian and Milner 2025).

This study has several limitations: First, the cross-sectional design restricts causal interpretation. Unobserved contextual factors such as media attention or political discourse, as well as differences in local adaptation capacity, may shape both how weather shocks are experienced and how they influence preferences. Second, the analysis is limited to EU respondents, which raises questions about generalizability to other donor countries. Third, this study only considers three hazards. Additional hazards such as flooding and forest fires could be included in future analyses. Finally, as Cologna et al. (2025) demonstrate, individuals' attribution of extreme weather events to climate change is a key determinant of whether such experiences translate into shifts in attitudes or policy support. My analysis cannot account for individual attribution assessments, which limits the ability to identify the mechanisms through which weather exposure influences international adaptation finance preferences.

As climate impacts intensify worldwide, the harshest burdens fall on vulnerable developing countries, where high exposure is compounded by limited adaptive capacity (IPCC 2023; UNEP 2024a). Growing public support in wealthy donor countries, reinforced by intensifying extreme events at home, could play a crucial role in narrowing the persistent gap between international adaptation finance needs and the resources actually delivered.

6 Appendix

6.1 Appendix A: Robustness checks

Heatwave exposure

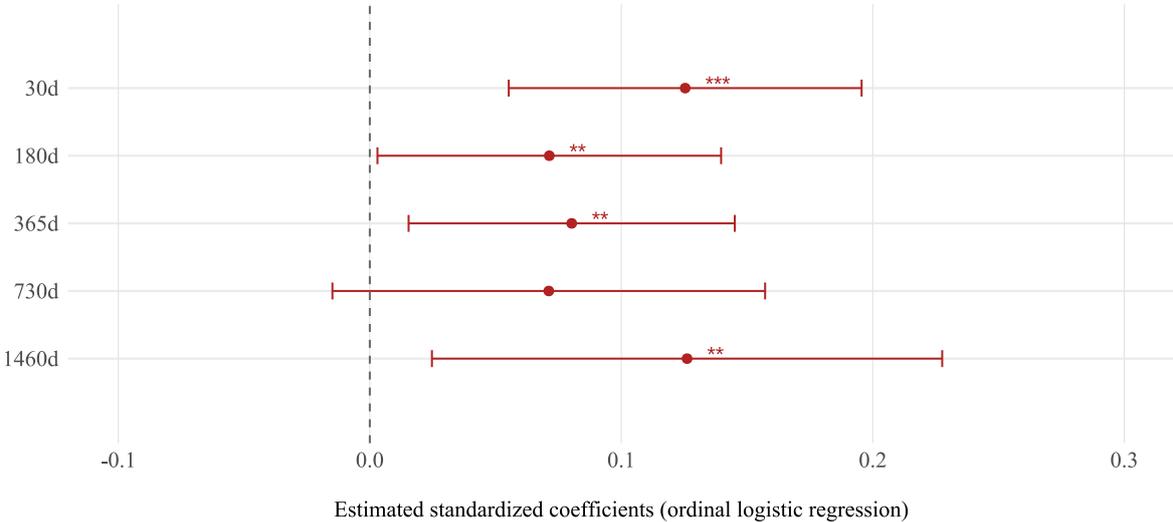


Figure A.1 | Effect of heatwave exposure (95th percentile threshold) across temporal windows (30–1460 days) on support for helping vulnerable developing countries adapt to climate change. Points show standardized coefficients from ordinal logistic regressions with full controls (age, gender, income, political orientation, education, occupation, presence of children in the household, housing type, and settlement size). Bars indicate 95% confidence intervals with region-clustered robust standard errors. Significance levels: * $p \leq 0.10$, ** $p \leq 0.05$, *** $p \leq 0.01$. $N=23,051$.

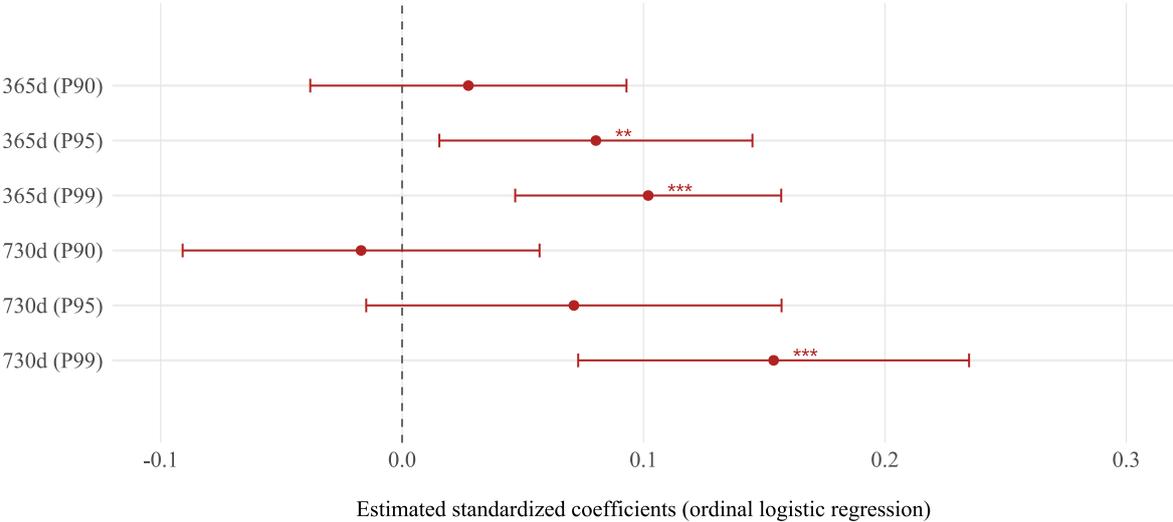


Figure A.2 | Effect of heatwave exposure across different heatwave thresholds (90th to 99th) on support for helping vulnerable developing countries adapt to climate change. Points show standardized coefficients from ordinal logistic regressions with full controls (age, gender, income, political orientation, education, occupation, presence of children in the household, housing type, and settlement size). Bars indicate 95% confidence intervals with region-clustered robust standard errors. Significance levels: * $p \leq 0.10$, ** $p \leq 0.05$, *** $p \leq 0.01$. $N=23,051$.

Heavy rainfall exposure

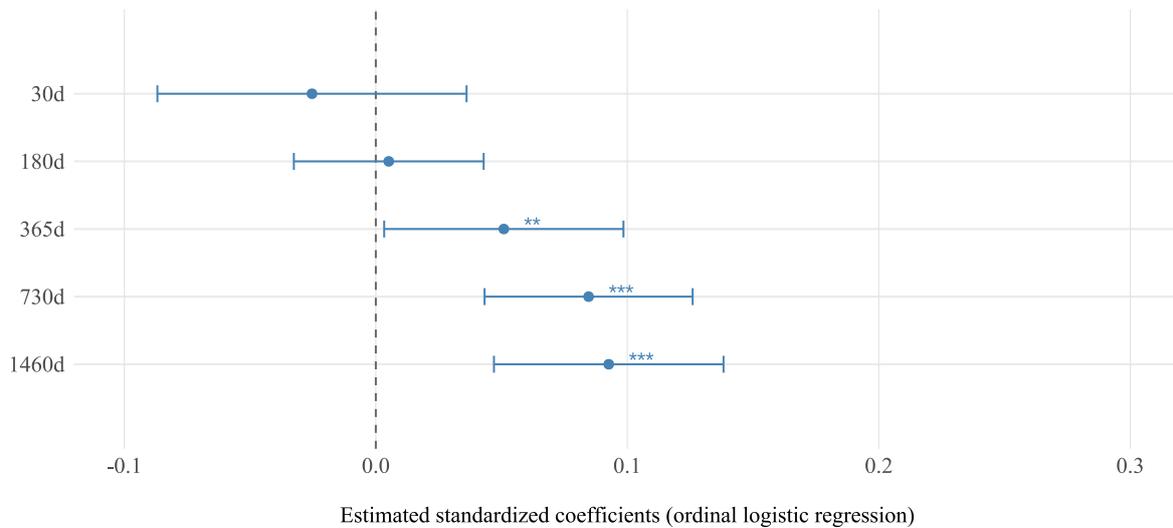


Figure A.3 | Effect of heavy rainfall exposure (30 mm threshold) across temporal windows (30–1460 days) on support for helping vulnerable developing countries adapt to climate change. Points show standardized coefficients from ordinal logistic regressions with full controls (age, gender, income, political orientation, education, occupation, presence of children in the household, housing type, and settlement size). Bars indicate 95% confidence intervals with region-clustered robust standard errors. Significance levels: * $p \leq 0.10$, ** $p \leq 0.05$, *** $p \leq 0.01$. $N=23,051$.

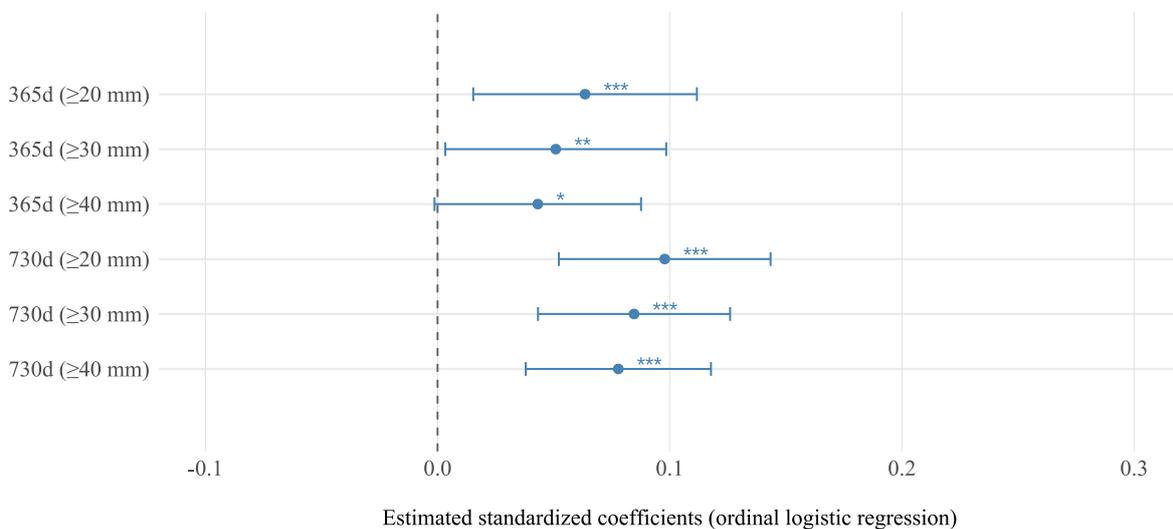


Figure A.4 | Effect of heavy rainfall exposure across different heavy rainfall thresholds (20 mm to 40 mm) on support for helping vulnerable developing countries adapt to climate change. Points show standardized coefficients from ordinal logistic regressions with full controls (age, gender, income, political orientation, education, occupation, presence of children in the household, housing type, and settlement size). Bars indicate 95% confidence intervals with region-clustered robust standard errors. Significance levels: * $p \leq 0.10$, ** $p \leq 0.05$, *** $p \leq 0.01$. $N=23,051$.

Drought exposure

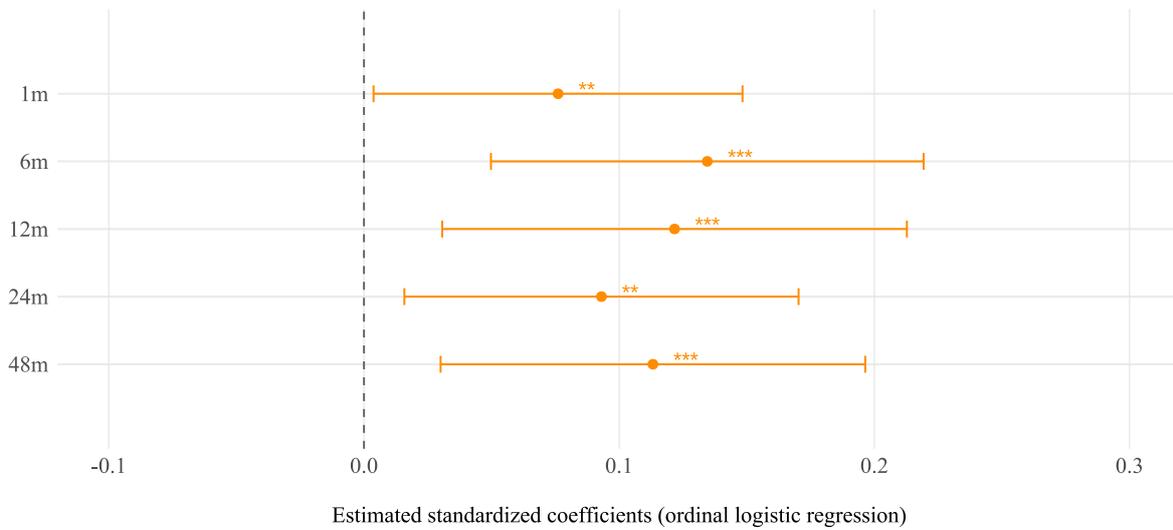


Figure A.5 | Effect of drought exposure (SPEI ≤ -1.0 threshold) across temporal windows (1–48 months) on support for helping vulnerable developing countries adapt to climate change.

Points show standardized coefficients from ordinal logistic regressions with full controls (age, gender, income, political orientation, education, occupation, presence of children in the household, housing type, and settlement size). Bars indicate 95% confidence intervals with region-clustered robust standard errors. Significance levels: * $p \leq 0.10$, ** $p \leq 0.05$, *** $p \leq 0.01$. $N=23,051$.

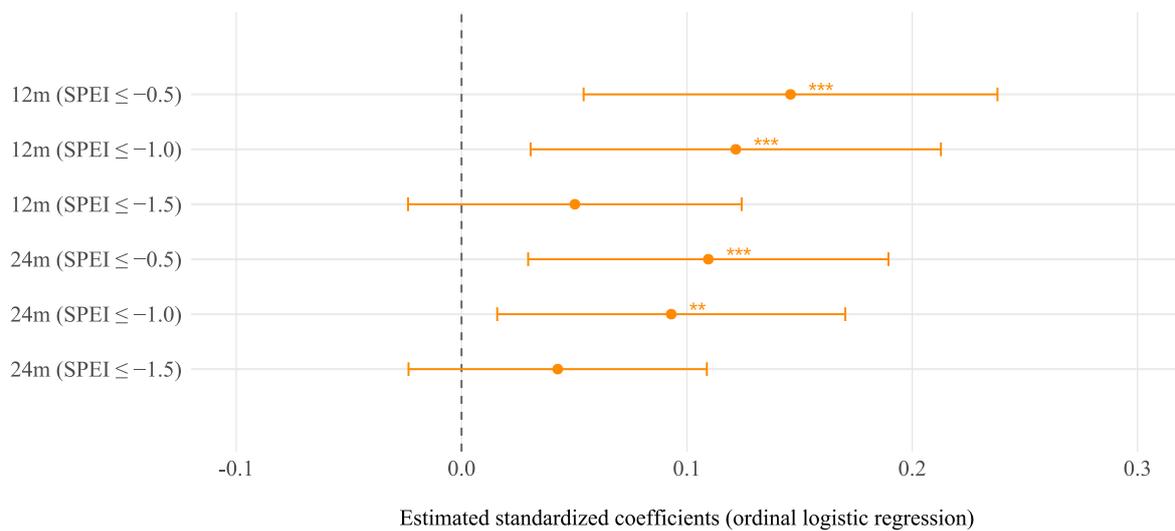


Figure A.6 | Effect of drought exposure across different drought thresholds (SPEI ≤ -0.5 to SPEI ≤ -1.5) on support for helping vulnerable developing countries adapt to climate change.

Points show standardized coefficients from ordinal logistic regressions with full controls (age, gender, income, political orientation, education, occupation, presence of children in the household, housing type, and settlement size). Bars indicate 95% confidence intervals with region-clustered robust standard errors. Significance levels: * $p \leq 0.10$, ** $p \leq 0.05$, *** $p \leq 0.01$. $N=23,051$.

Model without control variables

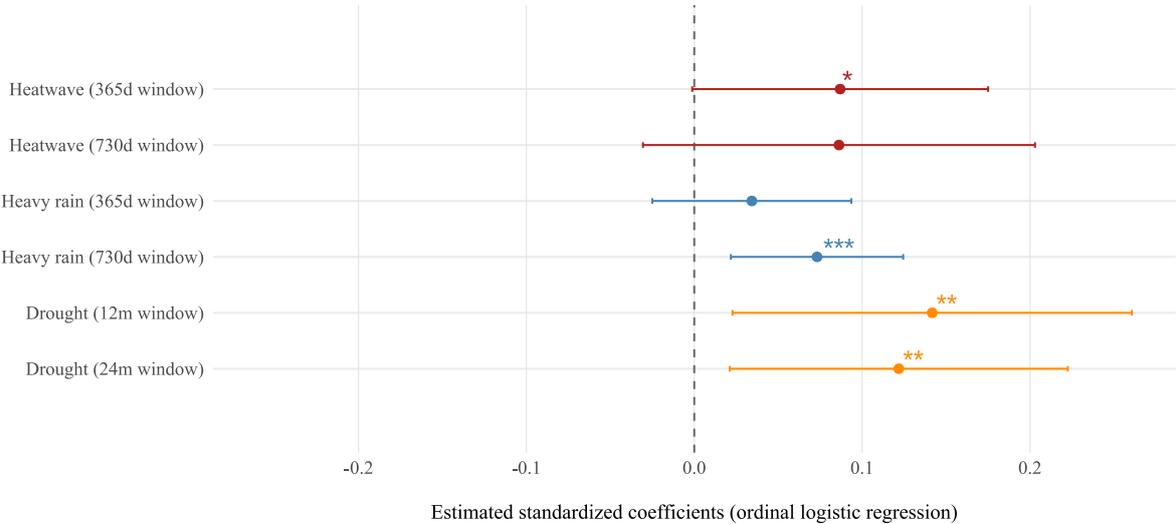


Figure A.7 | Effects of extreme weather exposure on support for helping vulnerable developing countries adapt to climate change.

Points show standardized coefficients from ordinal logistic regressions without controls. Bars indicate 95% confidence intervals with region-clustered robust standard errors. Each exposure is calculated over one-year (365d/12m) and two-year (730d/24m) windows. Significance levels: * $p \leq 0.10$, ** $p \leq 0.05$, *** $p \leq 0.01$. N=23,051.

6.2 Appendix B: Extreme weather exposure effect on domestic preferences

In earlier work (Heckenhahn 2025), I examined the role of temperature exposure using two alternative dependent variables from the 2024 European Investment Bank Climate Survey (EIB 2024a, b). Here, I revisit these dependent variables with a slightly updated model and statistical specifications and extend the analysis by incorporating heavy rainfall and drought exposure.

The first additional dependent variable captures how respondents believe their country should balance climate change mitigation and climate adaptation measures. The survey item asks: “*What do you think is the best way for your country to address climate change?*” with four categorical response options (prioritise mitigation, prioritise adaptation, pursue both equally, or none of the above). For the analysis, responses indicating “*none of the above*” were excluded, yielding a reduced sample size of 21,216. Beyond that, the order of answer options is coded as follows: (1) prioritise mitigation, (2) pursue adaptation and mitigation with equal priority, and (3) prioritise adaptation. Higher values, thus, indicate a larger adaptation focus.

Respective ordinal logistic regression results, including the effects of heatwave, heavy rainfall and drought exposure, are shown in Figure B.1. Overall, the results provide evidence that extreme weather exposure increases the relative focus on adaptation. The effect is highly significant for drought and heatwaves. The effect of heavy rainfall is only weakly significant in the 730-day window and remains insignificant in the 365-day window.

The second dependent variable measures absolute support for domestic adaptation, based on the question: “*Among the actions that your country must take in the coming years, would you say that adapting to climate change is...*” with three categorical response options (*a priority, important but not a priority, or not important*). For this dependent variable, I reversed the original scale so that higher values indicate stronger absolute support for adaptation.

Regression results, including the effects of heatwave, heavy rainfall, and drought exposure, are presented in Figure B.2. Here, the positive effect is weakly significant for heatwave exposure in the 365-day window, remains weakly significant across both windows for heavy rainfall, and is highly significant for drought throughout.

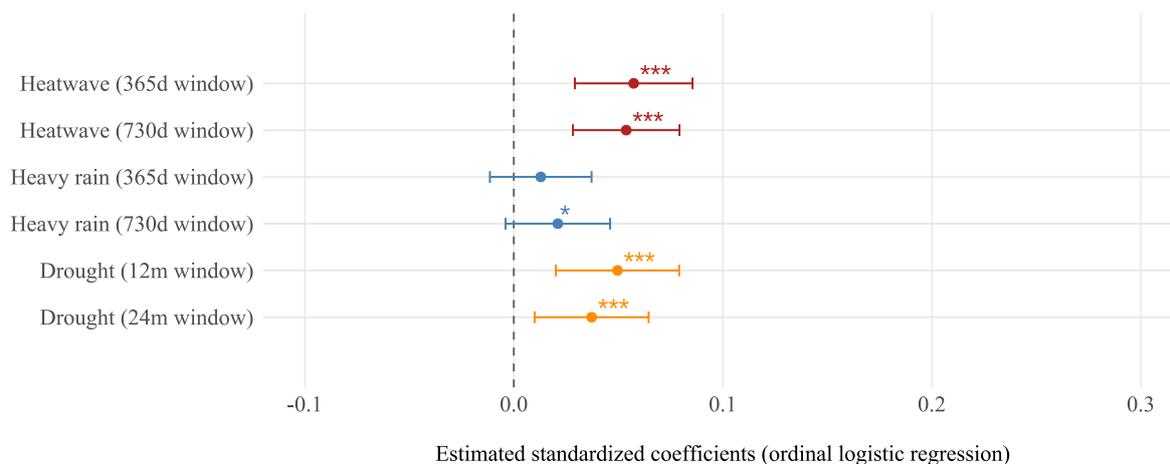


Figure B.1 | Effects of extreme weather exposure on adaptation-mitigation balancing.

Points show standardized coefficients from ordinal logistic regressions with full controls (age, gender, income, political orientation, education, occupation, presence of children in the household, housing type, and settlement size). Bars indicate 95% confidence intervals with region-clustered robust standard errors. Significance levels: * $p \leq 0.10$, ** $p \leq 0.05$, *** $p \leq 0.01$. $N=21,216$.

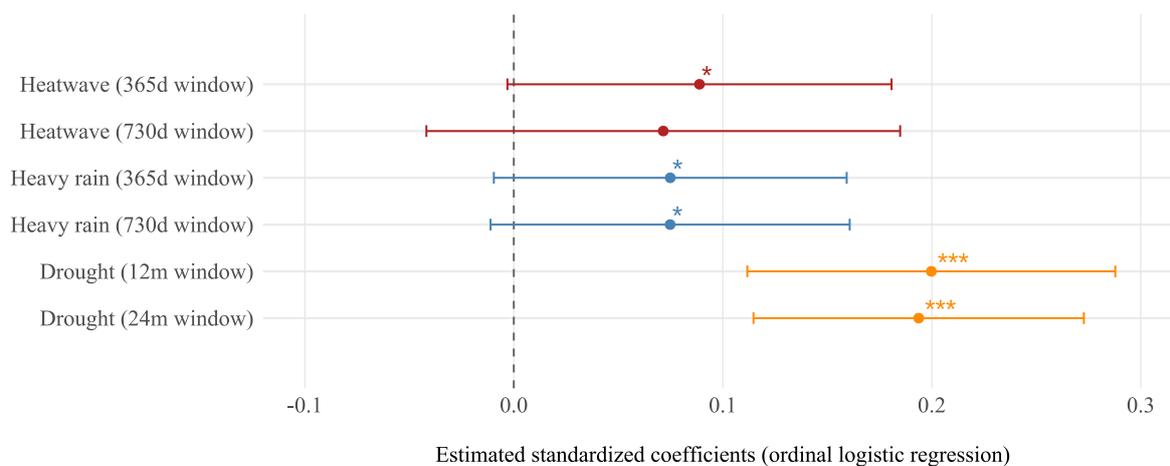


Figure B.2 | Effects of extreme weather exposure on domestic adaptation support.

Points show standardized coefficients from ordinal logistic regressions with full controls (age, gender, income, political orientation, education, occupation, presence of children in the household, housing type, and settlement size). Bars indicate 95% confidence intervals with region-clustered robust standard errors. Significance levels: * $p \leq 0.10$, ** $p \leq 0.05$, *** $p \leq 0.01$. $N=23,051$.

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