

Environmental concern and willingness to pay to protect it: does the relationship change according to individual vulnerabilities?

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Introduction

“The pace and scale of climate action are insufficient to tackle climate change”
(IPCC, Sixth Assessment Report 2023)

High concern for the environment, high awareness for
the issue of climate change

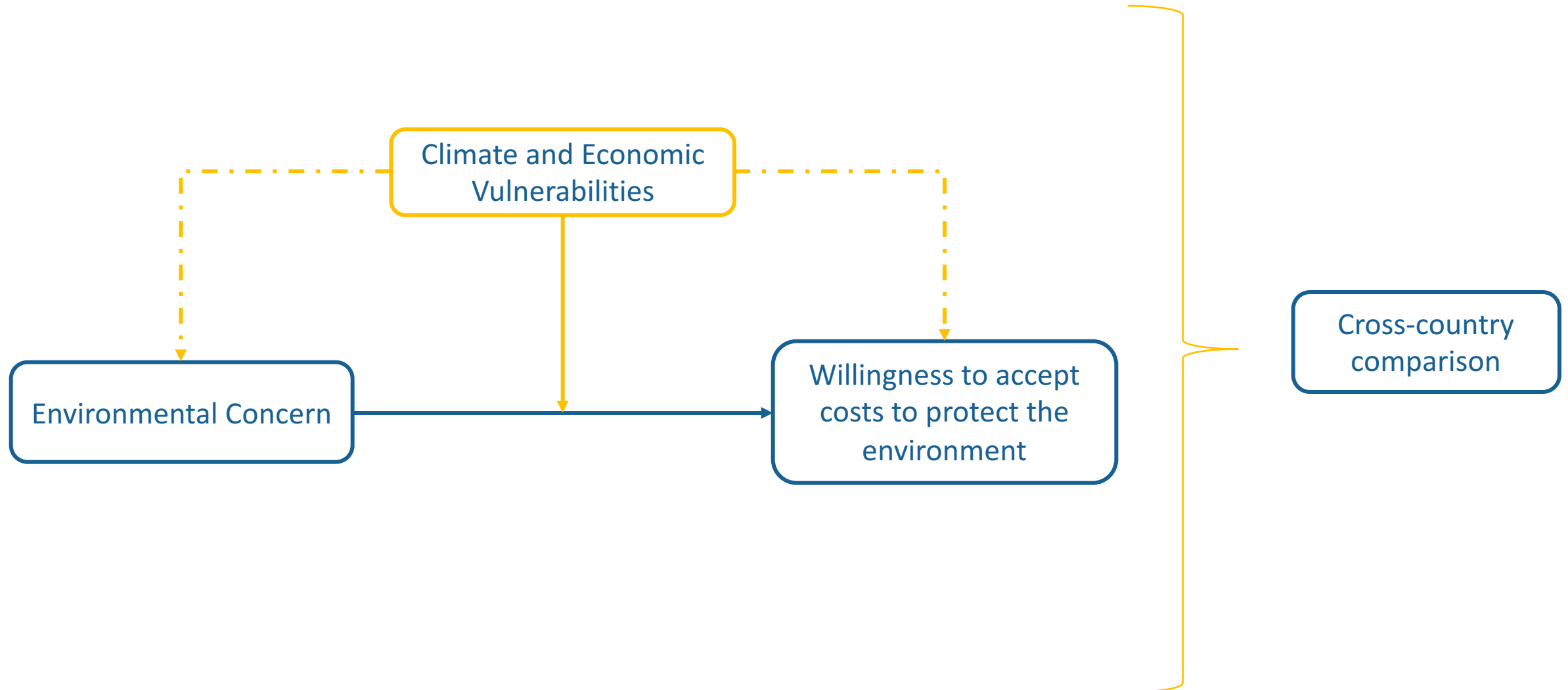
(Poortinga et al. 2019;
Baiardi, 2022)

BUT

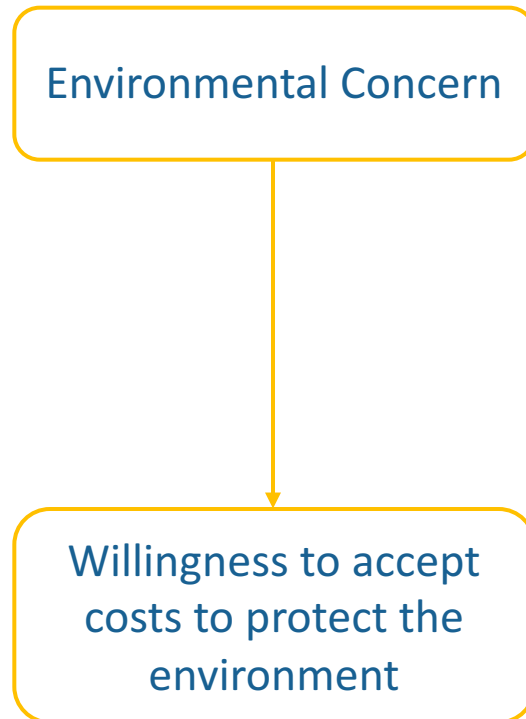
➤ **Low willingness to accept costs** to protect the
environment and mitigate climate change

(Fairbrother 2022)

Research Objectives



Background



Theory of Planned Behavior

- **Positive but modest** effect of environmental concern
- Differences according to the specificness of the measure of policy support or willingness to sacrifice
 - **Differences across countries**

(Hornsey et al., 2016; Mayerl and Best, 2019; Dienes, 2015)

Background



CLIMATE VULNERABILITIES

Youth

(Poortinga et al., 2019, Milfont et al., 2021)

Parenthood

(Ekholm and Olofsson, 2017; Tvinnereim et al., 2020)

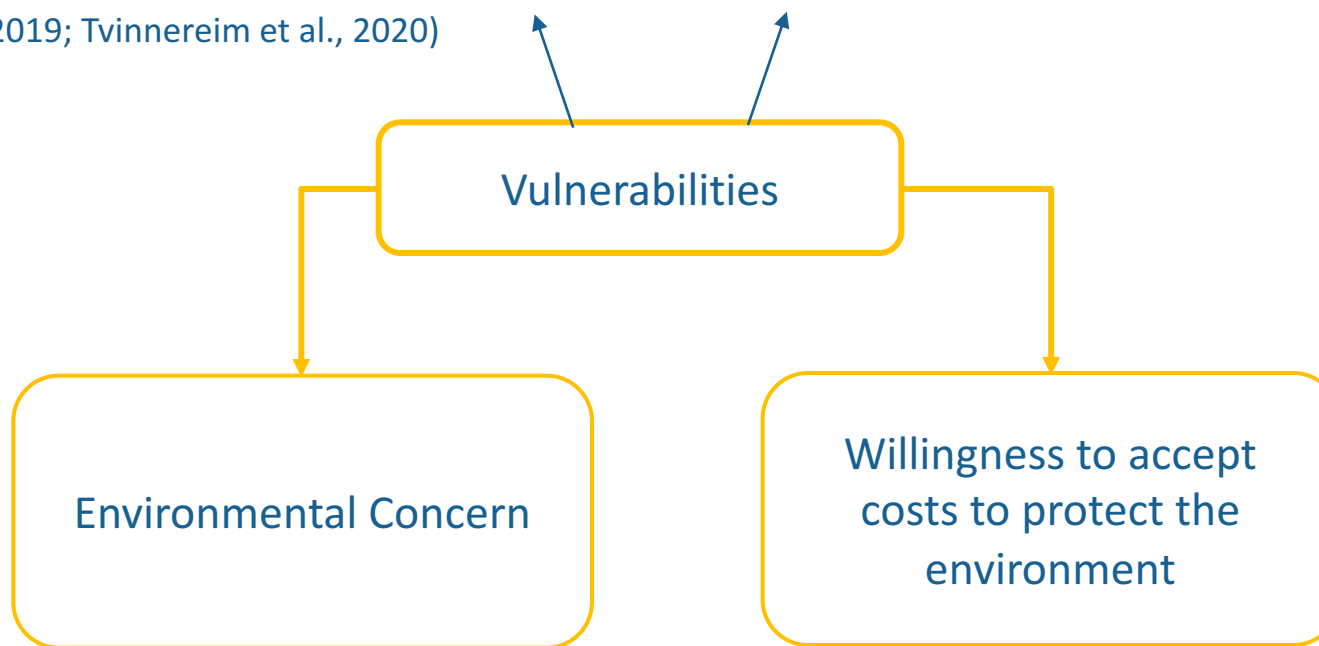
Experience of extreme weather events

(Ogunbode et al., 2019; Tvinnereim et al., 2020)

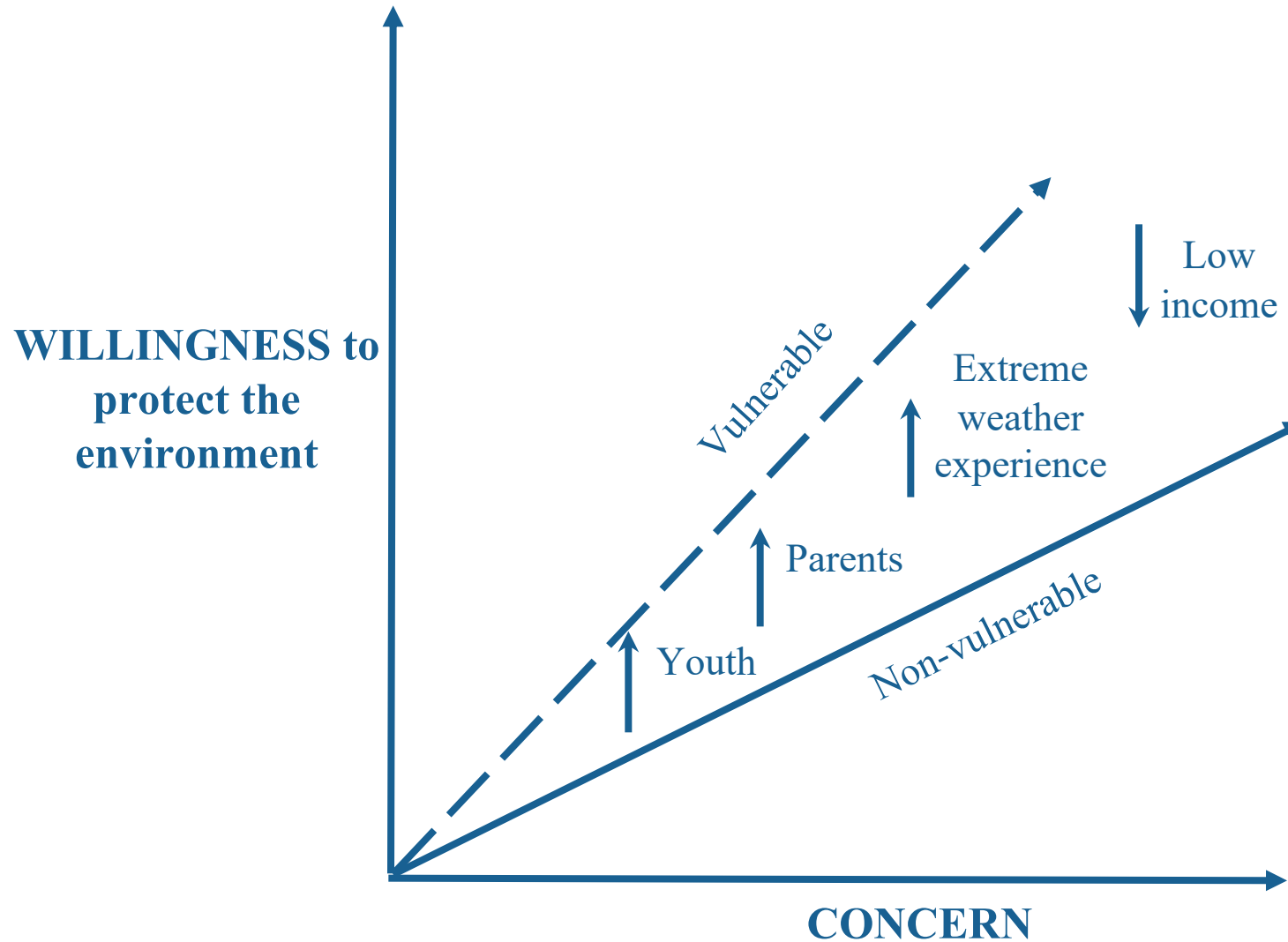
ECONOMIC VULNERABILITIES

Low Income

(McConnel, 1997; Franzen and Mayer, 2010; Dienes, 2015)



Hypotheses





Data and Methods

ISSP 2020 - Environment IV

15 countries: Austria, Denmark, Finland, Germany, Hungary, Iceland, Italy, Japan, New Zealand, Philippines, Russia, Slovenia, Switzerland, Taiwan, Thailand

Linear Regression Models

Country by country analysis

N: 19 682

Dependent variable

How willing would you be...

- ❖ To pay much higher prices
 - ❖ To pay much higher taxes
 - ❖ To accept cuts in your standard of living
- in order to protect the environment?**

Response Options:

- Very unwilling
- Fairly unwilling
- Neither unwilling nor willing
- Fairly willing
- Very willing

Average of the three items in a 1-5 scale (from very unwilling to very willing)

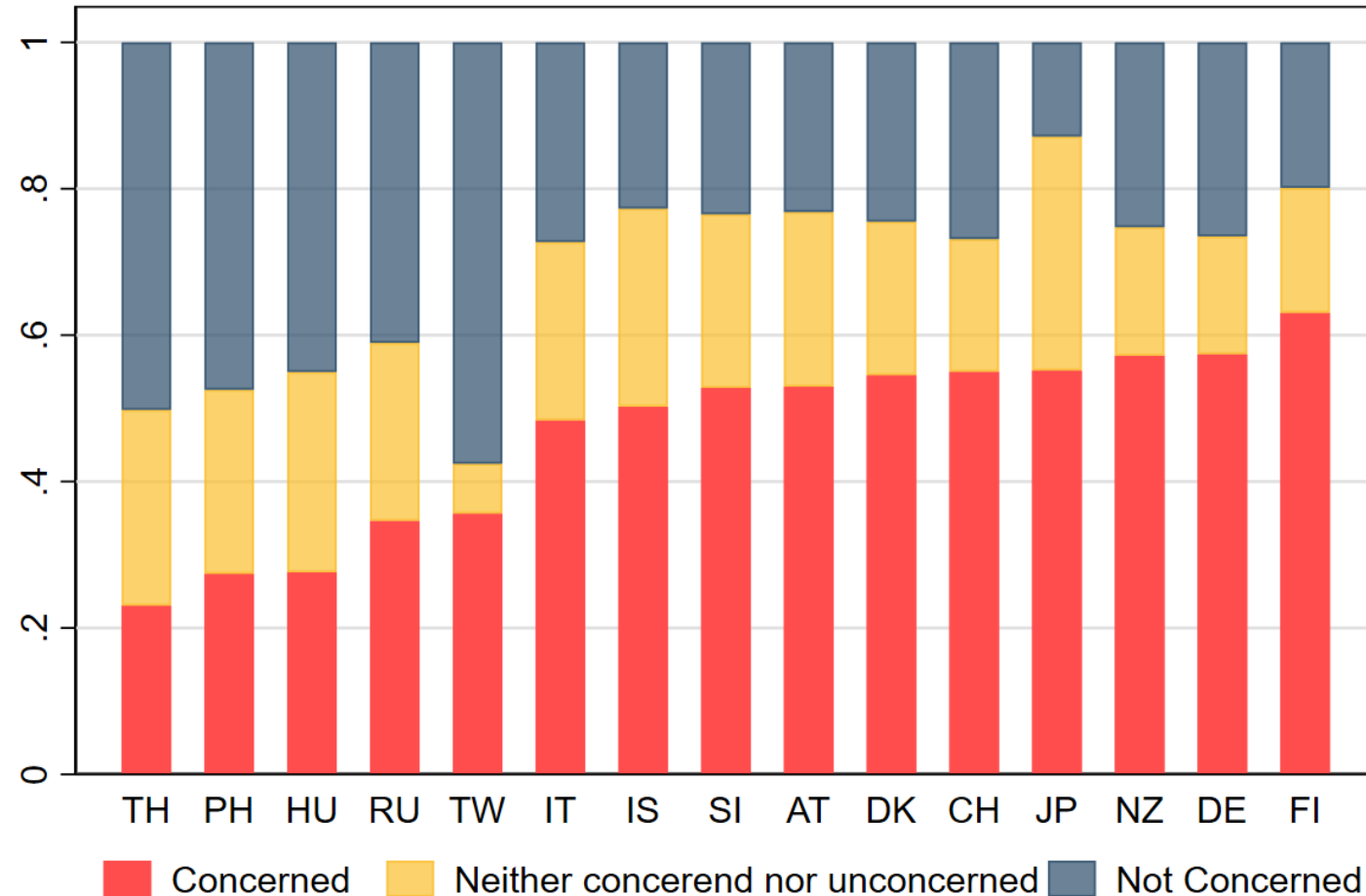
→ Willingness to accept costs to protect the environment (Cronbach's Alpha: 0.78)

Main independent variable



People worry too much about human progress harming the environment

- ❖ Strongly disagree
 - ❖ Disagree
 - ❖ Neither agree nor disagree
 - ❖ Agree
 - ❖ Strongly agree
- CONCERNED
- NOT CONCERNED



Independnet variables

❖ **Age:** 15-29; 30-59; 60-85

❖ **Children** living in the household (above and below school age): yes - no

❖ The extent to which the **neighborhood** was **affected by an extreme weather events** (such as severe storms, droughts, floods, heat waves, cold snaps, etc.) over the last twelve months:

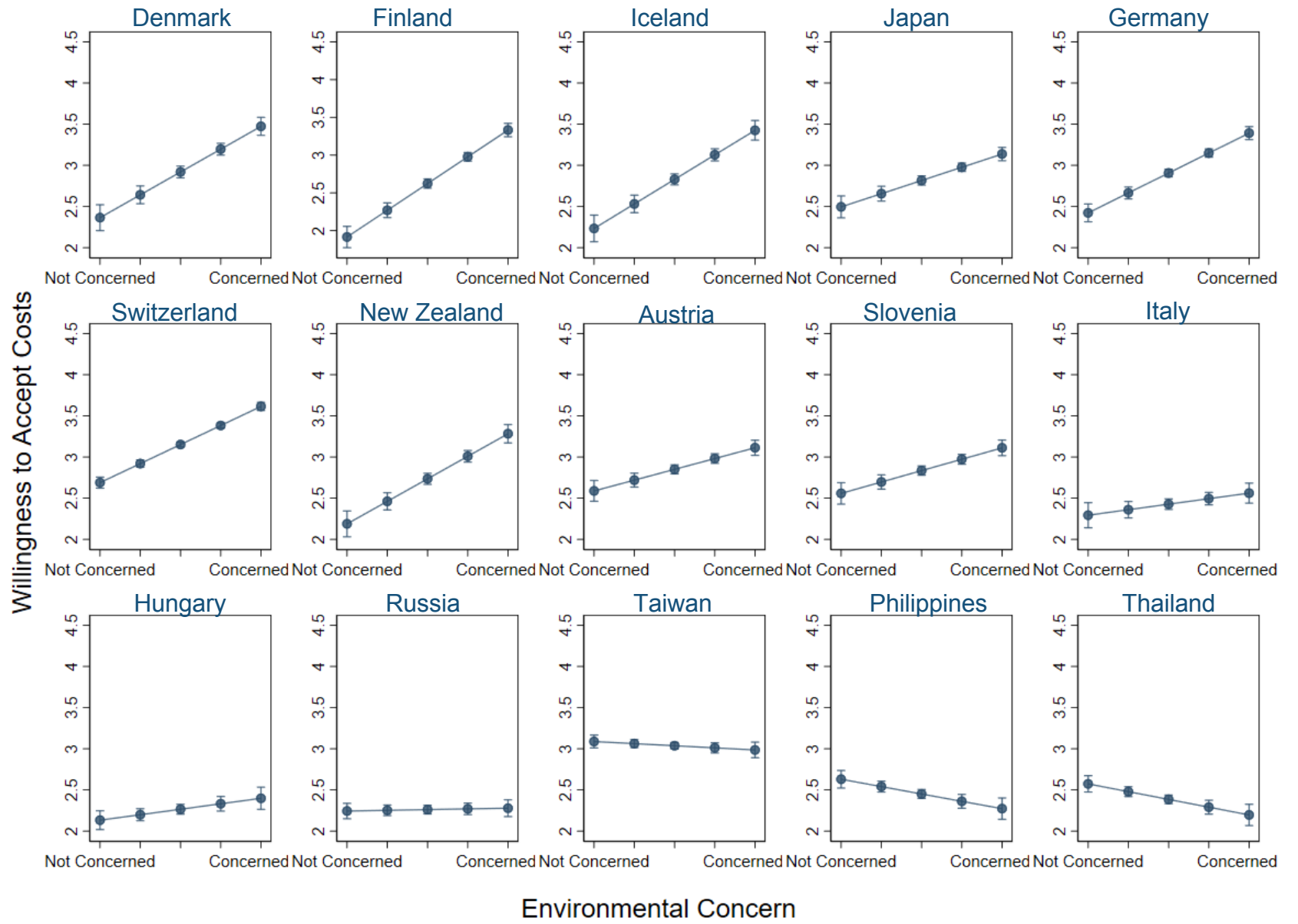
Not at all; To a small extent; To some extent; To a great extent

❖ **Income:** quintiles

Controls: gender, education, area of residence, country,

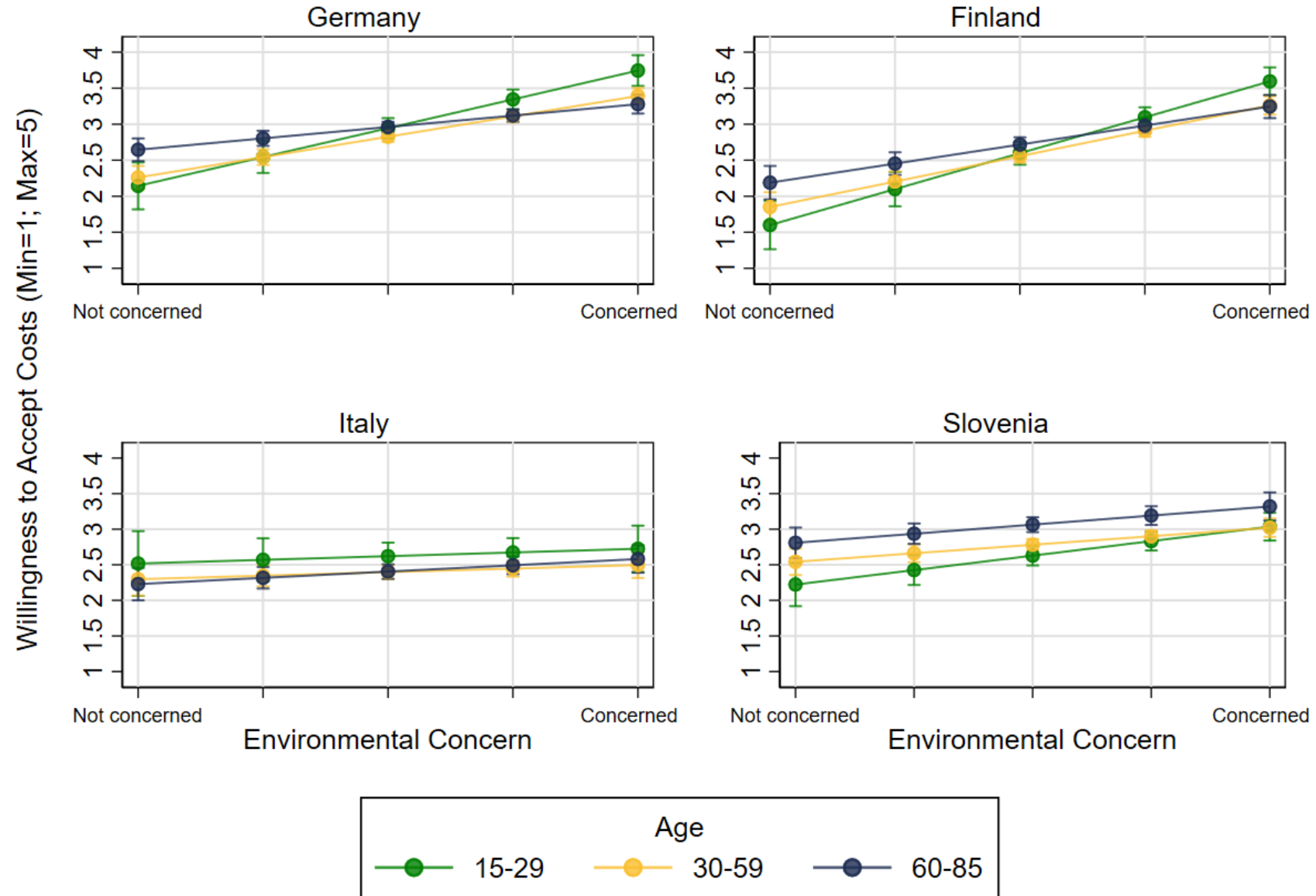
Results – Environmental Concern on Willingness to accept costs:

Country by Country



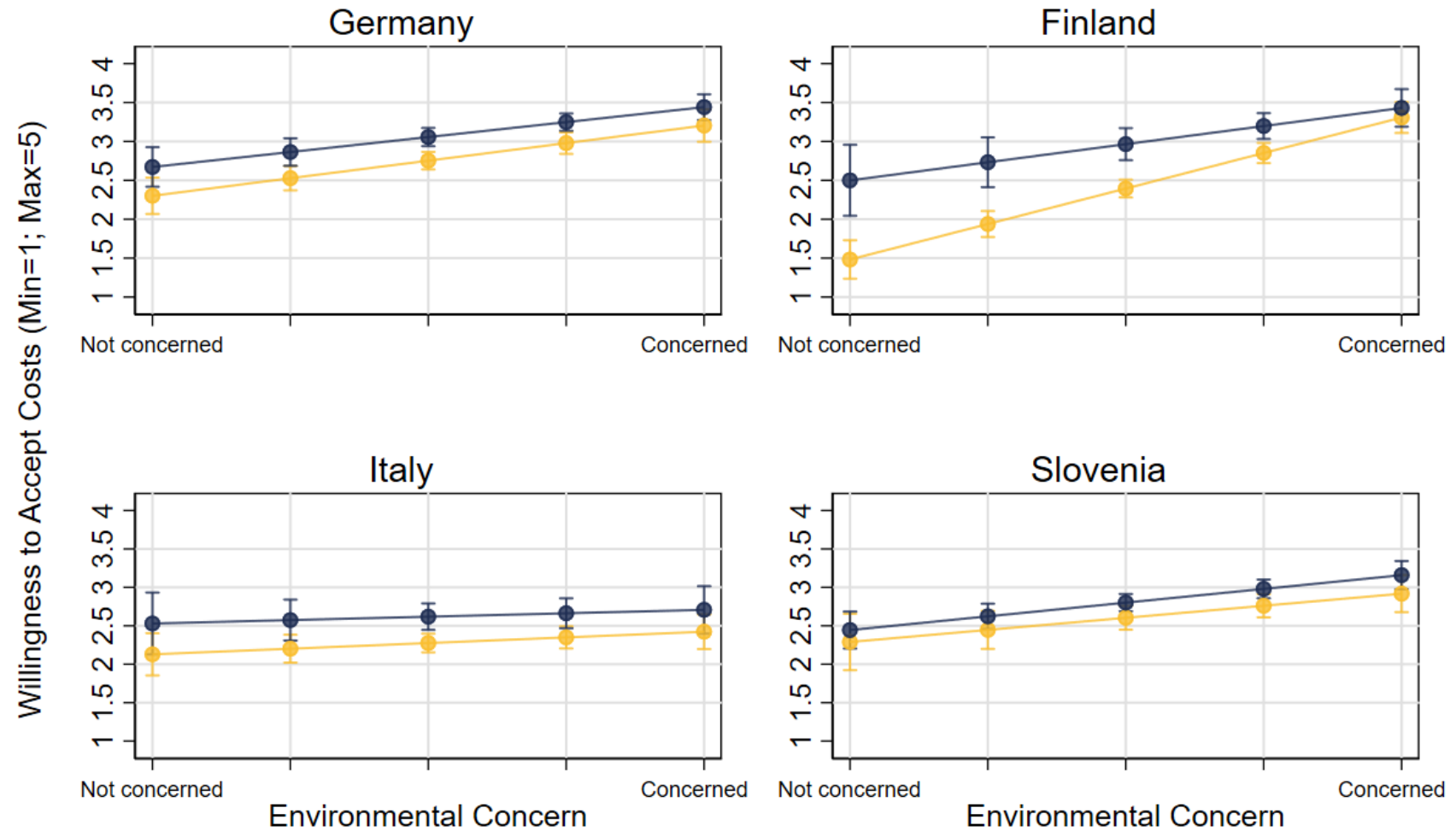
Note: Predicted mean values at 95% confidence intervals. Predictions control for country, gender, education, area of residence

Results – The Moderator Effect of AGE



Note: Predicted mean values at 95% confidence intervals. Predictions control for country, gender, education, area of residence, at means

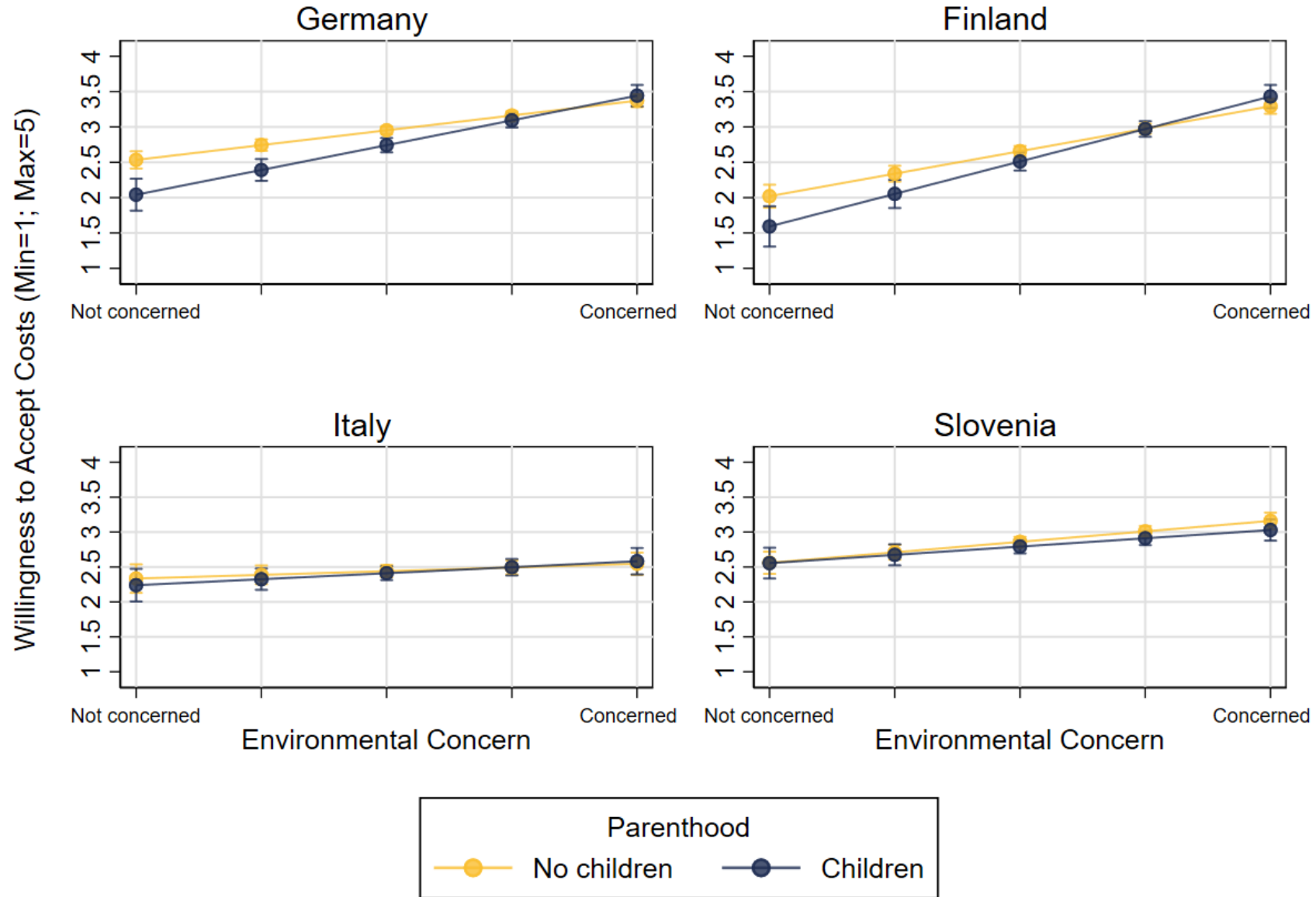
Results – The Moderator Effect of Extreme Weather Event



Note: Predicted mean values at 95% confidence intervals. Predictions control for country, gender, education, area of residence, at means

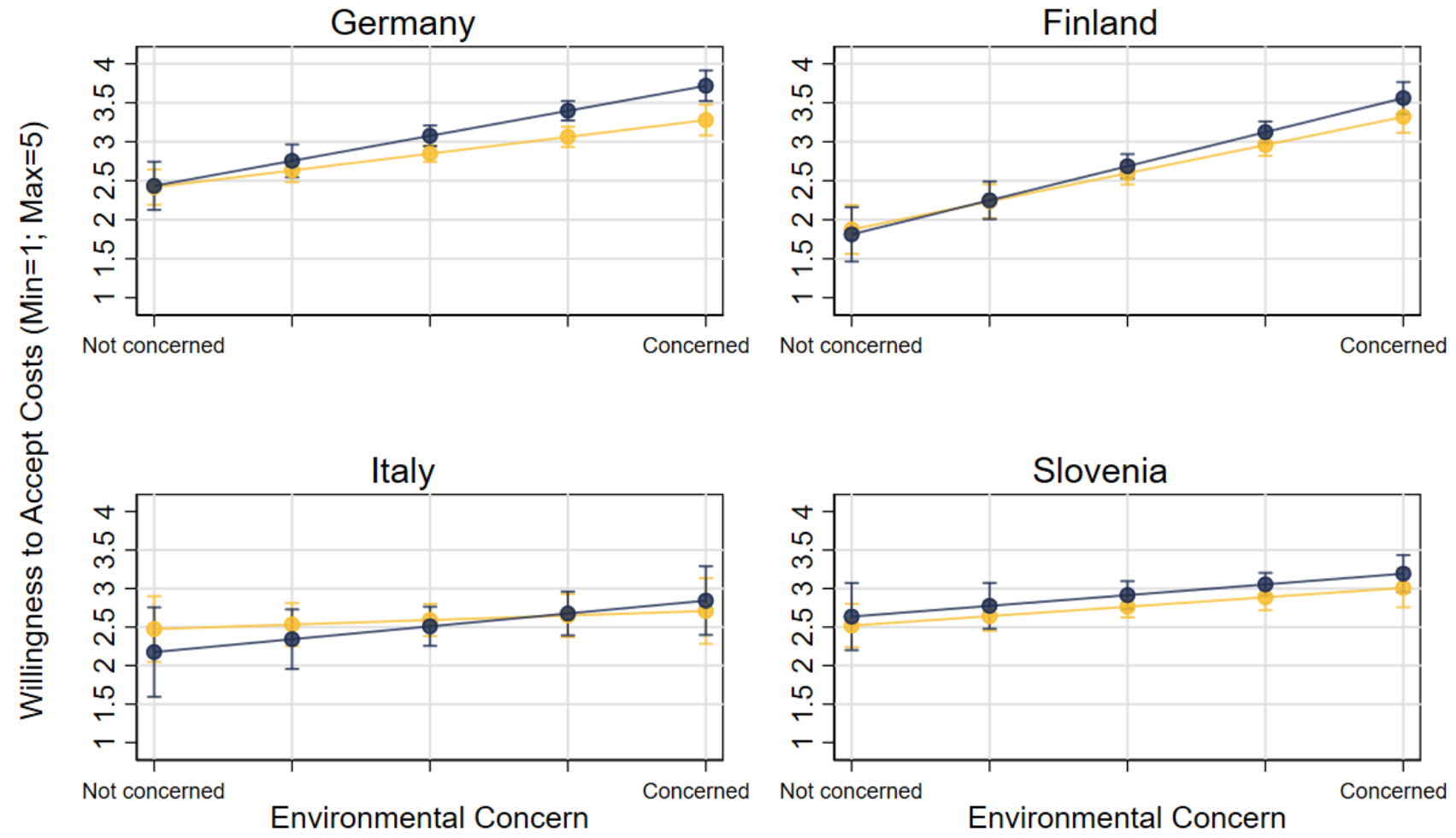
Experience of Extreme Weather Event
 ● Not at all ● To a great extent

Results – The Moderator Effect of Parenthood

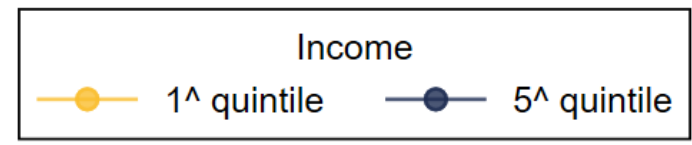


Note: Predicted mean values at 95% confidence intervals. Predictions control for country, gender, education, area of residence, at means

Results – The Moderator Effect of Income



Note: Predicted mean values at 95% confidence intervals. Predictions control for country, gender, education, area of residence, at means



Discussion and Next Steps

- ❖ Environmental **concern** as worry for human activity harming the environment → **positively influence the willingness to accept costs** to protect it.
- ❖ However, the relationship is **not consistent in every country**.

CLIMATE VULNERABILITIES

- ❖ Being more **vulnerable to climate change does not considerably modify the effect of environmental concern**.
- ❖ However, climate vulnerabilities do have some impacts, differently according to the country and to the vulnerability considered

ECONOMIC VULNERABILITIES

- ❖ The **effect of being concern** for the environment is **weaker for low-income individuals** in comparison to high-income ones, **but this is not consistent in every country**.

NEXT STEPS

→ Multilevel models to test effect of contextual factors

→ Further investigations:
Country's characteristic?
Individual awareness of vulnerability?

Limitations and methodological issues

- ❖ Measures of vulnerabilities, objective or perceived vulnerabilities

- ❖ Measuring environmental concern in cross-national surveys

THANK YOU

Comments and suggestions?

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