

1. Motivation: How do preferences and behaviors form?

Prosociality (altruism, reciprocity) is a crucial factor for the working of societies and affects individual well-being in many dimensions, but heterogeneity in prosociality is substantial. Why do some people behave more prosocially than others?

Does exposure to a recession during early adulthood shape social preferences and prosocial behavior in the long run?

A priori the direction of the effect (if any) is unclear:

- people who were exposed to a recession might feel more deserving and hence behave less prosocially
- people who were exposed to a recession might empathize more with those who are less fortunate and therefore behave more prosocially

2. Background: Economic environment

- Evidence points at an important role of the **social environment** (Kosse et al., 2020).
- Recent evidence also suggests that **experiencing a recession** during a person's **formative years (age 18–25)** has long-run consequences for different attitudes and preferences, e.g.:
 - Risk-taking (Malmendier & Nagel, 2011)
 - Preferences for redistribution (Giuliano & Spilimbergo, 2014, Roth & Wohlfart, 2018)
 - Attitudes toward migration (Cotofan et al., 2021)
 - Job preferences (Cassar et al., 2021)

3. Data

3.1 Individual preferences and behavior

Outcome data from the **Global Preference Survey** (Falk et al., 2018) – experimentally validated survey module within the Gallup World Poll

- 67,000 individuals in 75 countries, 78 birth cohorts (1914–1991), 2012/13 wave.
- four measures of social preferences: altruism, trust, positive reciprocity, negative reciprocity (all standardized: mean = 0, SD = 1).
- index of **prosociality** (first principal component from a PCA of the four different measures); standardized (mean = 0, SD = 1).

3.2 Data on recessions

Recessions are computed using historical country-level GDP data from the **Maddison Project Database** (Bolt and van Zanden, 2020).

- recession is defined as a period of GDP growth of -3.5% or less.
- 32% of the individuals in our sample were exposed to **at least one recession year** during their formative years (age 18–25).

4. Empirical approach

We exploit within-country across-cohort variation in exposure to recessions during a person's formative years.

Empirical model

$$y_{ict} = \beta_0 + \beta_1 recession_{ct} + \delta_c + \delta_t + \epsilon_{ict}$$

- y_{ict} prosociality of individual i in country c born in cohort t
 $recession_{ct}$ whether cohort t in country c experienced at least one recession year during youth
 δ_c country fixed effects
 δ_t cohort fixed effects
 ϵ_{ict} error term
The coefficient β_1 captures the recession effect.

Intuition: Recessions happen in different countries at different points in time and thus affect different birth cohorts.

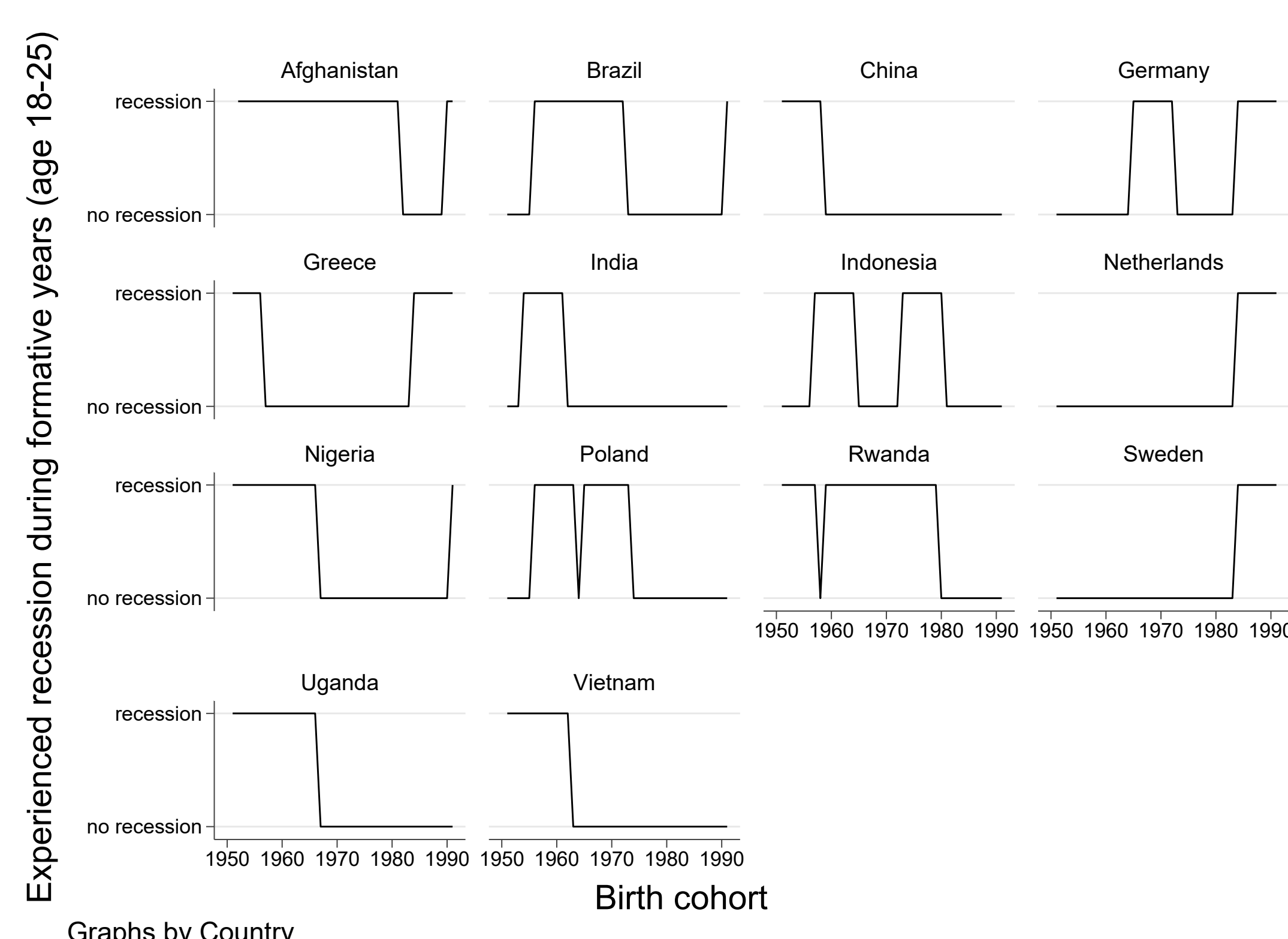


FIGURE Examples of exposure to recessions for different birth cohorts in different countries (based on data from the Maddison Project Database).

5. Results

5.1 Main Findings

We find that exposure to a recession during formative years is **negatively** associated with prosociality later in life.

- The negative effect is unique to exposure during formative years (age 18–25).
- Exposure to recessions during different ages does not have any significantly negative effect.

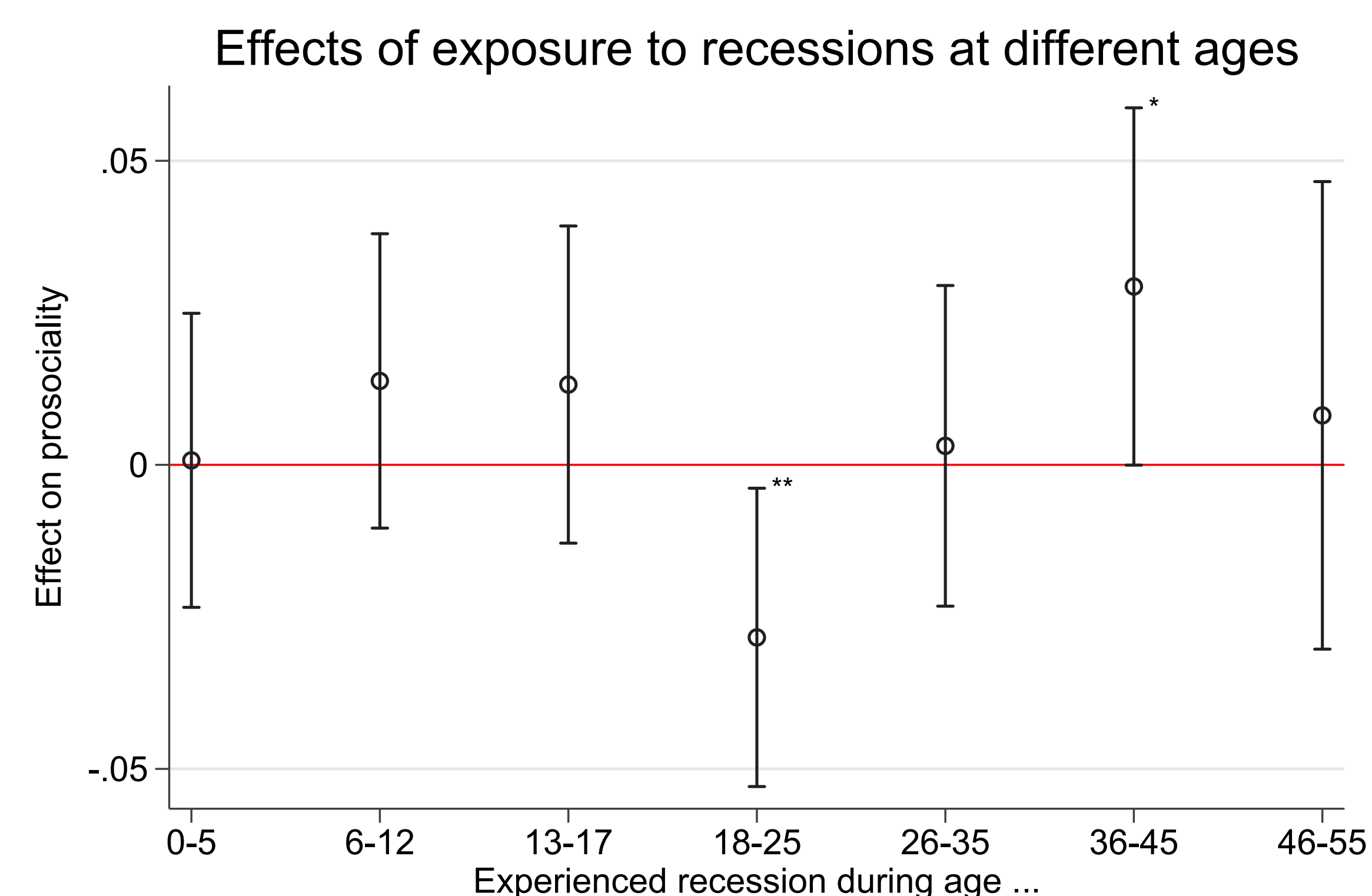


FIGURE Coefficients from OLS regressions of prosociality on dummy variables for being exposed to at least one recession year within different age brackets. The different age brackets are displayed on the horizontal axis, all coefficient estimates are based on a single regression. Controls: cohort and country fixed effects. The whiskers represent 95% confidence intervals. **significant at the 5%-level. *significant at the 10%-level.

5.2 Additional findings and robustness

- The effect is strongest for **positive reciprocity**.
- Does it matter how recessions are measured?
 - Similar results for alternative cutoffs for GDP growth.
 - Length of recession (number of years in a recession) not significantly associated with prosociality.

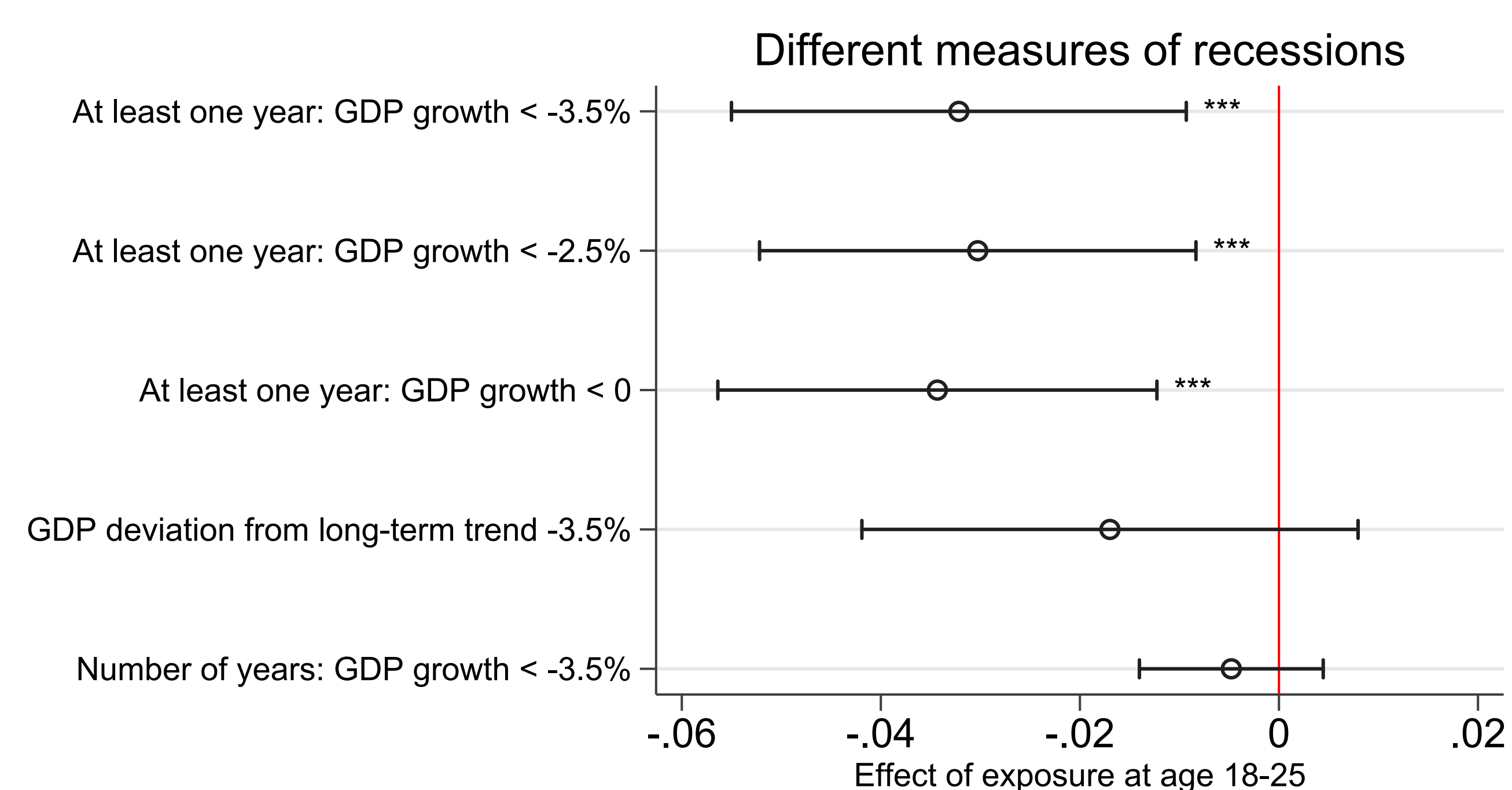


FIGURE Coefficients from OLS regressions of prosociality on recession variables. The different recession variables are displayed on the y-axis. Each of the coefficients stems from a separate regression. Controls: cohort and country fixed effects. The whiskers represent 95% confidence intervals. ***significant at the 1%-level.

- Results robust to :
 - ✓ Excluding individuals who experienced the Great Recession (age at survey < 25)
 - ✓ Controlling for demographic characteristics (gender)
 - ✓ Controlling for country-specific cohort trends
 - ✓ Controlling for political institutions in survey year or during impressionable years

6. Contact

Please contact us if you have any questions or comments!

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