

Regime Changes and Economic Preferences: Global Evidence

Milestone 2: Data

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Sources

In our project, we are making use of 3 datasets:

- Vdem (Coppedge et al. (2025)) dataset comes also as an R package: `vdemdata`. This dataset contains various democracy indicators for 202 countries starting of year 1789. We will be using the Liberal democracy index which combines many of these indicators into a single number for each country/year.
- Global Preference Survey (Falk et al. (2018)) dataset was downloaded as a ZIP file from the [following website](#). This dataset contains information about economic preferences of 80337 individuals from 76 countries. The survey was conducted between 2012 and 2013.
- Data on country's GDP's was downloaded from the [Maddison Project Database 2023](#) (Bolt and Zanden (2025)). This dataset was downloaded on 5th May 2025.

Data

The following table shows how were the economic preferences from the GPS survey (Falk et al. (2018)) measured.

Preference	Measurement Approach	Description
Time Preference/ Patience	Combined quantitative and qualitative	<ul style="list-style-type: none">• Quantitative: Five binary choices between immediate vs. delayed financial rewards (today or in 12 months)• Qualitative: Self-assessment on willingness to wait (11-point Likert scale)

Preference	Measurement Approach	Description
Risk Preference	Combined quantitative and qualitative	<ul style="list-style-type: none"> Quantitative: Five binary choices between fixed lottery and varying sure payments Qualitative: Self-assessment (11-point Likert scale)
Positive Reciprocity	Combined quantitative and qualitative	<ul style="list-style-type: none"> Quantitative: Scenario about giving a gift to a helpful stranger (choice of presents worth 5-30 euros) Qualitative: Self-assessment on willingness to return favors (11-point Likert scale)
Negative Reciprocity	Three qualitative self-assessments	<ul style="list-style-type: none"> Willingness to take revenge at personal cost Willingness to punish unfair behavior toward self Willingness to punish unfair behavior toward others (prosocial punishment)
Altruism	Combined quantitative and qualitative	<ul style="list-style-type: none"> Quantitative: Hypothetical donation scenario (how much of 1,000 euros would be donated) Qualitative: Self-assessment on willingness to give without expecting returns (11-point Likert scale)
Trust	Single qualitative item	<ul style="list-style-type: none"> Self-assessment on whether others have the best intentions (11-point Likert scale)

Since we have information about age of each individual during the time of interview in the GPS survey, we were able to calculate their birth years. Then we could determine whether they experienced a regime change during their formative years. For this, we had to link the V-Dem dataset with the GPS survey data. Our goal was to separate the treated and control group of individuals based on the change of liberal democracy index from the V-Dem dataset. **The treated group in our analysis consists of individuals, who experienced a regime change before turning 21 years old.** We are still considering a range of 18-21 years, since this range aligns with legal adulthood in many countries. We are planning to test multiple thresholds, to see if our results will be robust across different specifications. **The regime change is determined as a year over year change in the Liberal democracy index.** Here we also had to decide on a **threshold**, which we think is rather arbitrary. That is why we are considering a different approach, to capture linear changes of the index, not just sudden changes over years.

Assigning the formative years threshold to 21 years results to the following number of observations in both groups:

No Regime Change experience	Regime Change experience
37601	42736

Sample period

Our sample period is defined by the birth years of the individuals, which we calculated based on the age information in the GPS dataset. Each study unit (=individual) appears once. We have data for 80337 individuals.

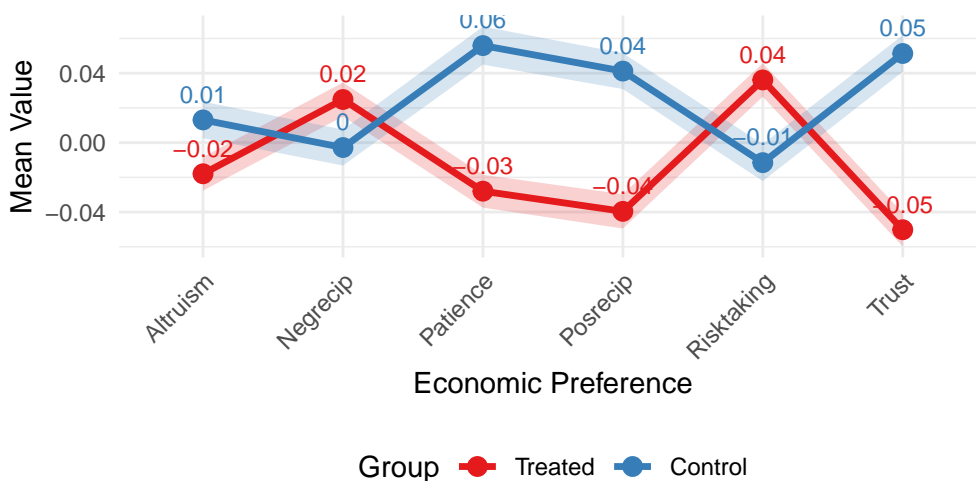
Variables

As we discussed in the previous meeting, we would be deciding for **2 economic preferences** as outcome variables from the GPS dataset. **We chose to analyse the effect of regime changes on patience and trust.** We based our decision on the following plot of mean comparisons. We assume that by using these two variables, that have larger differences between the treated and control groups, we will be able to gain more statistical power in our analysis.

Warning: Using `size` aesthetic for lines was deprecated in ggplot2 3.4.0.
i Please use `linewidth` instead.

Mean Preference Profiles by Regime Change Exposure

With 95% confidence intervals



For completeness, we include **summary statistics** for all 6 economic preferences in Table 2. Table 3 depicts the summary statistics for our control variables.

Our main key variable is **TRUST** and **PATIENCE**. The graphs below depict the average values grouped by country in 2012 and 2013.

Table 2: Summary Statistics of Economic Preferences by Regime Change Experience

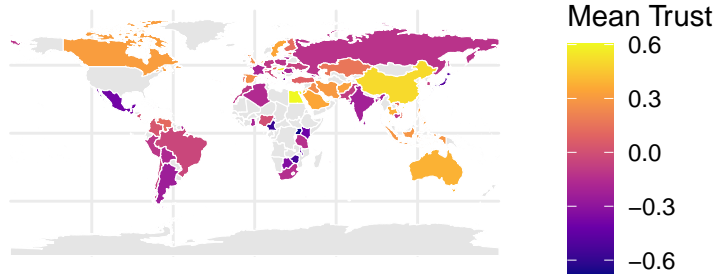
Regime Change Experience	Variable	Summary Statistics				
		Mean	SD	Min	Max	N
No Regime Change experience						
No Regime Change experience	trust	0.05	1.00	-1.97	1.68	34498
No Regime Change experience	patience	0.06	1.04	-1.31	2.76	34498
No Regime Change experience	risktaking	-0.01	1.01	-1.87	2.47	34498
No Regime Change experience	posrecip	0.04	0.98	-3.84	1.33	34498
No Regime Change experience	negrecip	0.00	0.98	-1.59	2.33	34498
No Regime Change experience	altruism	0.01	1.00	-2.61	2.33	34498
Regime Change experience						
Regime Change experience	trust	-0.05	0.99	-1.97	1.68	40549
Regime Change experience	patience	-0.03	0.97	-1.31	2.76	40549
Regime Change experience	risktaking	0.04	0.99	-1.87	2.47	40549
Regime Change experience	posrecip	-0.04	1.02	-3.84	1.33	40549
Regime Change experience	negrecip	0.02	1.01	-1.59	2.33	40549
Regime Change experience	altruism	-0.02	0.99	-2.61	2.33	40549

Table 3: Summary Statistics of Control Variables by Regime Change Experience

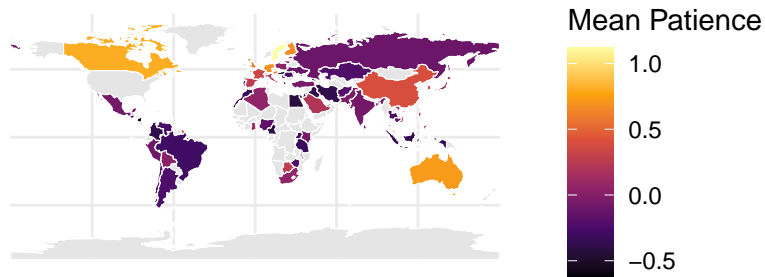
Regime Change Experience	Variable	Summary Statistics				
		Mean	SD	Min	Max	N
No Regime Change experience						
No Regime Change experience	subj_math_skills	5.29	2.80	0	10	34498
No Regime Change experience	gdppc	21376.28	16600.14	1089	66007	34498
No Regime Change experience	age	42.71	17.13	15	99	34498
Regime Change experience						
Regime Change experience	subj_math_skills	5.14	2.81	0	10	40549
Regime Change experience	gdppc	16003.44	13382.34	1089	58751	40549
Regime Change experience	age	40.46	17.43	15	99	40549

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`.groups` argument.
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`.groups` argument.

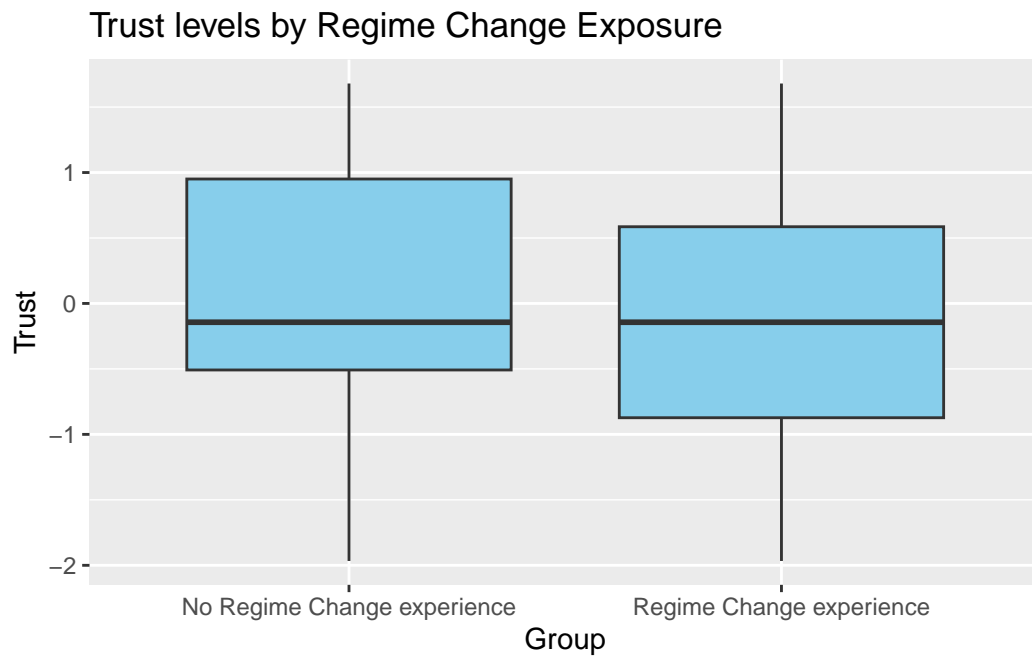
Average Trust Level by Country

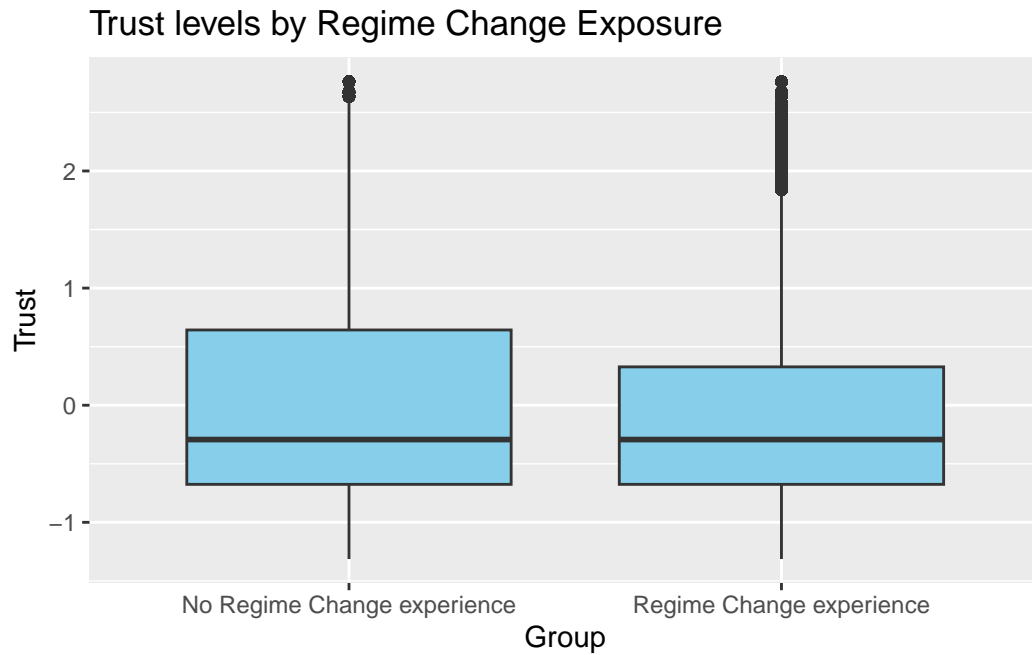


Average Patience Level by Country



The following graph depicts the **Trust** levels by **Regime Change Exposure**.



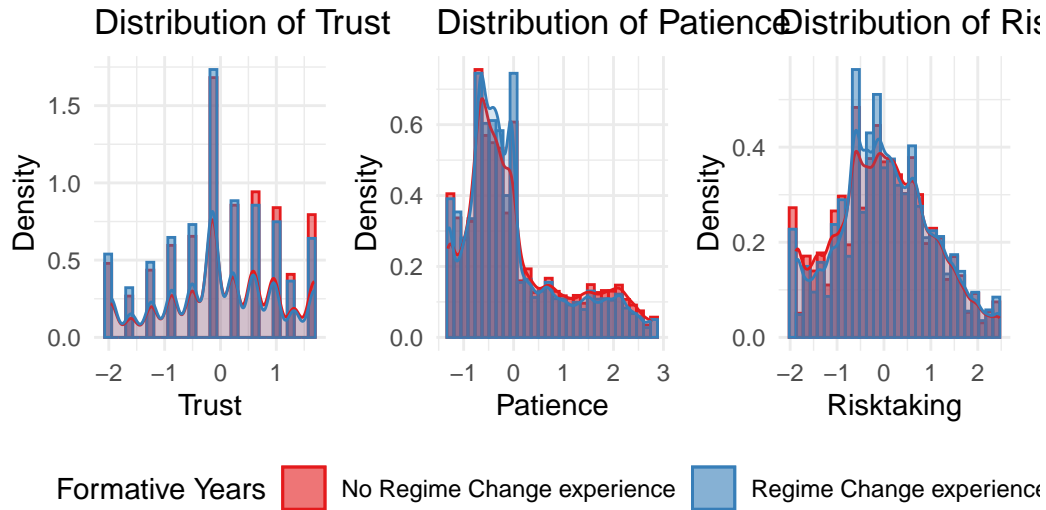


Descriptive statistics

The following figures present a detailed **visual overview of the descriptive statistics**, including distribution histograms, group-level comparisons, and difference-in-differences style visualizations highlighting trends across cohorts.

Distribution of Key Economic Preferences

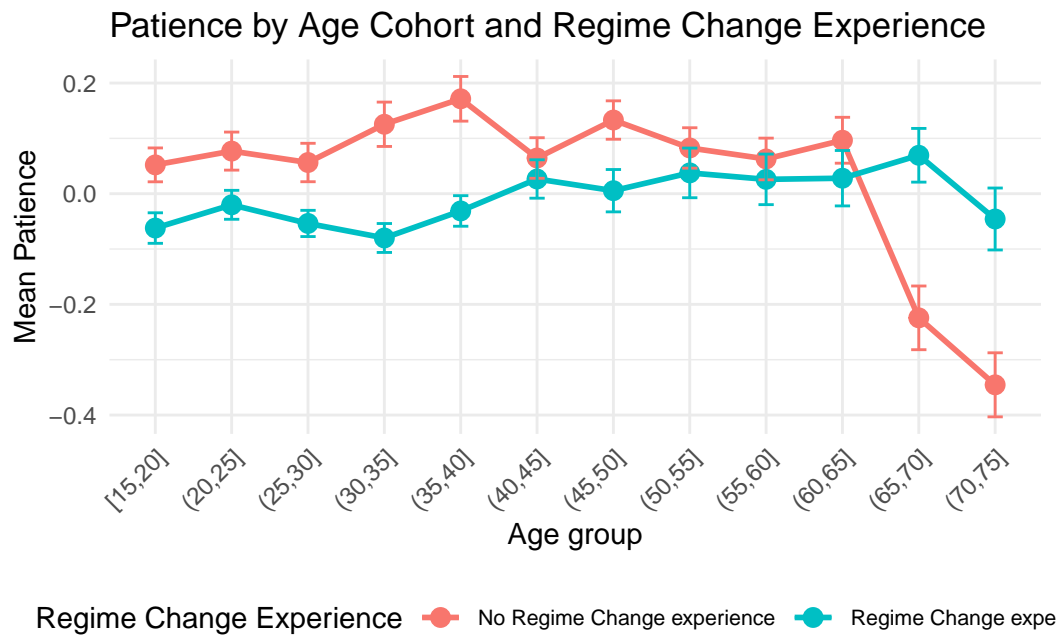
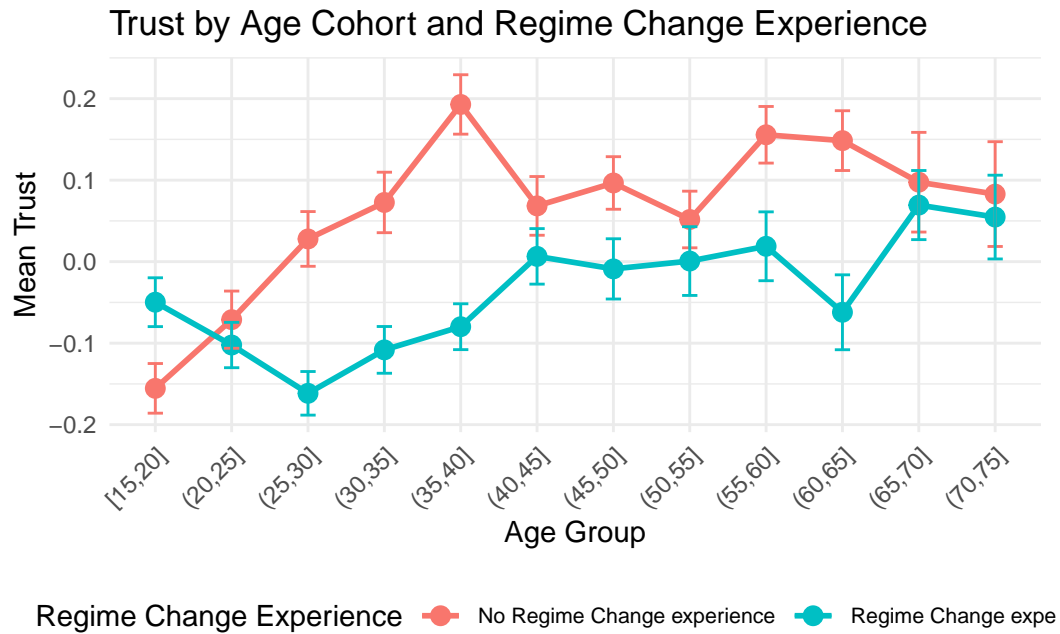
By regime change exposure during formative years (<21 years)



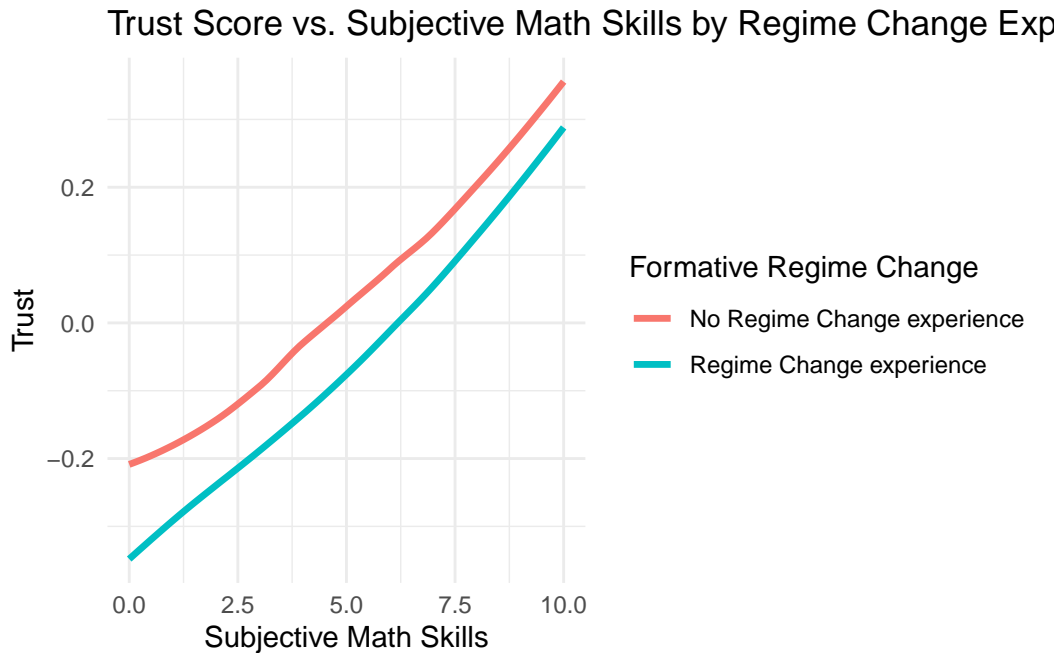
The following figures present additional visualizations of our data. In the following two graphs we are aiming to evaluate the **parallel trends assumption**.

The patience graph shows largely parallel trends for middle-aged groups (30-65), supporting the DiD assumption for these cohorts. A notable divergence appears in older ages (65+), where the no-regime-change group shows sharp decline while the regime-change group remains stable, suggesting potential long-term protective effects of early regime exposure on patience.

The trust graph reveals consistently higher trust levels among those without regime change experience across most age groups. The significant trust gap in youngest cohorts (15-25) provides some evidence supporting the hypothesis that experiencing regime changes during formative years negatively impacts trust development. Interestingly, this gap narrows and even reverses in the oldest cohorts (65+), suggesting possible delayed resilience effects.



``geom_smooth()` using formula = 'y ~ x'`



References

- Bolt, Jutta, and Jan Luiten van Zanden. 2025. "Maddison-Style Estimates of the Evolution of the World Economy: A New 2023 Update." *Journal of Economic Surveys* 39 (2): 631–71. <https://doi.org/10.1111/joes.12618>.
- Coppedge, Michael, John Gerring, Carl Henrik Knutsen, Staffan I. Lindberg, Jan Teorell, David Altman, Fabio Angiolillo, et al. 2025. "V-Dem Dataset V15." Varieties of Democracy (V-Dem) Project. <https://doi.org/10.23696/VDEMDS25>.
- Falk, Armin, Anke Becker, Thomas Dohmen, Benjamin Enke, David Huffman, and Uwe Sunde. 2018. "Global Evidence on Economic Preferences." *The Quarterly Journal of Economics* 133 (4): 1645–92. <https://doi.org/10.1093/qje/qjy013>.