ATTITUDES

Income Inequality & Environmental Concerns

1. Aim

Due to climate change, the need to take pro-environmental actions becomes more urgent. The COVID-19 pandemic has exposed the impact of income inequality on human well-being. Differences on how to best deal with income inequality arise from the differences in attitudes towards income inequality. Each country has a single measure of income inequality at the national level (e.g., Gini index) but there is a range of attitudes towards income inequality. This poster aims to show the relationship between people's attitudes towards income inequality and their views towards environmental concerns.

2. Significance

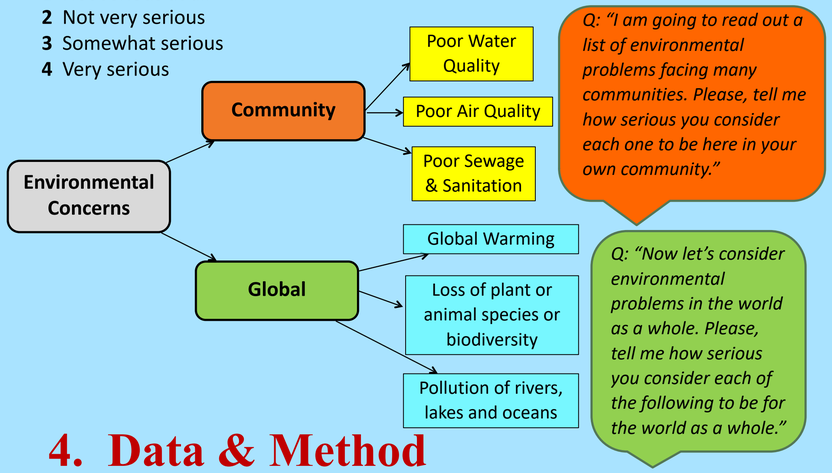
Since the environment is a public good, there is inherent collective action problem in protecting the environment. A person's view of society and how the distribution of resources ought to be affects his/her attitude towards income inequality, which in turns affects his/her concern for the environment. Since community environmental concerns have more direct and immediate impact than global environmental concerns to an individual, individual attitudes towards income inequality is more likely to affect individual perception of the seriousness of community environmental concerns; not at the global level.

This research can help us gear towards achieving the Sustainable Development Goals:
Goal 6 "Clean Water and Sanitation"
Goal 13 "Climate Action"
Goal 14 "Life Below Water"
Goal 15 "Life On Land"

3. Environmental Concerns

Individual attitudes towards environmental concerns could be linked to their attitudes towards income inequality in their country. There are two broad types of environmental concerns: those that individuals face in the communities they live in and those that impact the world.

Responses to the questions are coded as:
1 Not serious at all
2 Not very serious
3 Somewhat serious
4 Very serious



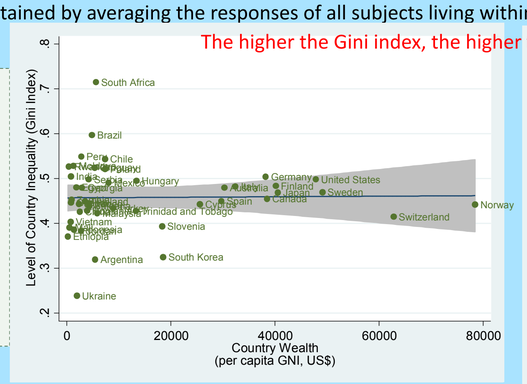
4. Data & Method

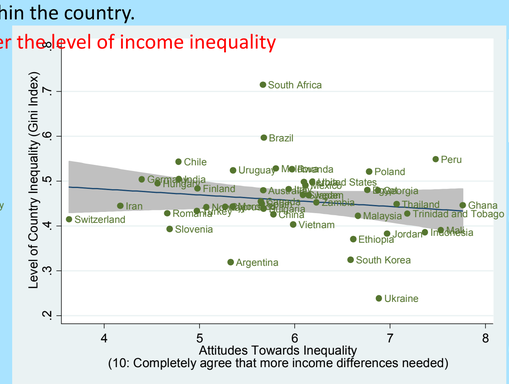
Data on individual environmental concerns are obtained from survey responses from about 68,000 respondents living in 47 countries from major continents in wave 5 (2005-2009) of the World Values Survey (WVS) data set [1]. The environmental concern questions are only asked in this wave of the WVS survey series. Data on country income inequality (Gini index) is obtained from the Standardized World Income Inequality Database (SWIID) [2]. Country wealth is measured as its gross national income (GNI) per capita, based on purchasing power parity (PPP) in current international dollars; and the data are obtained from the World Bank database [3].

5. Analysis at Country Level

Individual attitudes towards income inequality is measured by survey responses to the following statements on scale of 1 to 10 with 1 indicating complete agreement with the statement, "incomes should be made more equal," and 10 indicating "we need larger income differences as incentives." This psychological dimension of income inequality within a country is obtained by averaging the responses of all subjects living within the country.

There is no correlation between a country's wealth and the level of income inequality within it. The disparities of the distribution of income (i.e., income inequality) within a country is independent of a country's wealth (left panel).



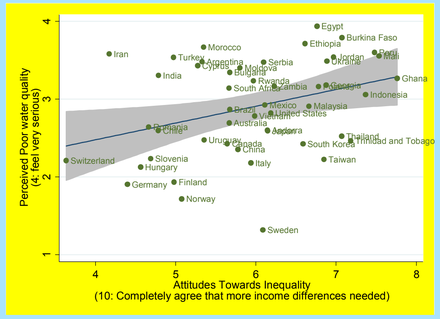


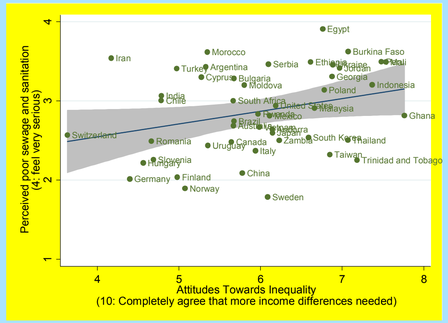
There is a very weak correlation between a country's level of income inequality and its citizens' attitudes towards income inequality (right panel).

95% CI — Fitted values

Each figure has a 95% confidence interval (CI: colored grey) around fitted values. It indicates that observations will lie within this confidence interval 95% of the time if repeated samples are drawn.

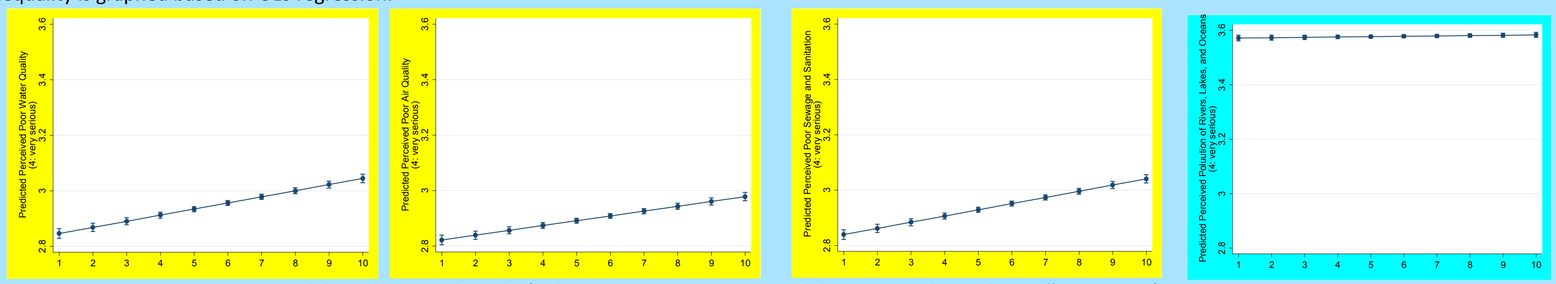
Countries with a higher preference for larger income differences tend to perceive that community environmental concerns as more serious. By using OLS regression, the average level of preference for larger income differences is positively associated with the perceived seriousness of poor water quality and poor sewage and sanitation. Attitudes towards income inequality is not a statistically significant predictor for the perceived seriousness of poor air quality and global environmental concerns (e.g., global warming). The two figures below show the distribution of countries for the two dependent variables with significant statistical association.





6. Analysis at Individual Level

Individuals feel that larger income differences are needed as incentives and these individuals have a "deserving" mentality that individuals should work hard to earn what they deserve. Accordingly, individuals with a higher preference for larger income differences are more concerned about what happens in their community. By using ordinal logistic regression, they tend to feel that community environmental concerns are more serious. The controls in this regression model included income, gender, age, marital status and level of education. This predictor is statistically significant for the perceived serious of all the three types of community environmental concerns and one of the global environmental concerns (pollution of rivers, lakes and oceans). The predicted mean of a individual level of concern for the environment is based on his/her specific level of preference for income inequality is graphed based on OLS regression.



7. Conclusion

Individual attitudes towards income inequality affect their attitudes towards environmental concerns, especially those in the community. The findings generally support the hypothesized mechanism linking attitudes towards income inequality and environmental concerns. The mechanism, a view of what a society ought to be, could be driving the effects on environmental concerns, and by extension, actions on environmental protection. A suggested improvement for future studies is to include a wider variety of environmental concerns as this research is limited to only six.

References:

1. Inglehart, R., C. , et al., eds. *World Values Survey: Round Five - Country-Pooled Datafile*. 2018, JD Systems Institute & WVSA Secretariat: Madrid, Spain & Vienna, Austria.
2. Solt, F., *Measuring Income Inequality Across Countries and Over Time: The Standardized World Income Inequality Database.* Social Science Quarterly, 2020. **101**(3): p. 1183-1199.
3. World Bank. *GNI per capita, Atlas method (current US$)*. 2021; Available from: https://data.worldbank.org/indicator/NY.GNP.PCAP.CD.