Data 311 Project Proposal

# Team Members

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I am the only team member because I reached out to the member I was partnered with (assignment by my TA due to the fact I was unable to find a team beforehand) and received no response.

# Problem Definition

I am going to be looking at the relationship between economic inequality and multiple social progress indicators. This is an interesting topic for me because I am not only a Statistics major however an Economics one as well. I have seen lots of information and comparisons between GDP and social progress however not as many for economic inequality. You hear talk of how Nordic countries with lower inequality have higher standards of living and so I want to put that to the test. I also want to see if there are diminishing or even negative returns to decreasing economic inequality when it comes to social progress or if hypothetically a fully equal nation would have the highest social progress. Finally, I want to compare all finding between Income and Wealth inequality to see if there is a noticeable difference.

# Datasets

I will be using 3 publicly available data sets. The first is my social progress dataset, by the Social Progress Imperative. It does not collect its own data but aggregates social statistics collected by international humanitarian groups into a final Social Progress Index. There are subcategories indexes which I will also be analyzing along with the final Social Progress Index.

The second dataset is my economic inequality dataset focused on income inequality, by the World Bank. It measures economic inequality with a concept in economics called the Gini index. This Gini index is a measure of statistical dispersion of the incomes of people living in a country. Specifics can be expanded in the final project however the important idea is that a Gini index of 0 represents perfect equality, while a 1 implies perfect inequality. The dataset had Gini indexes from multiple years and multiple countries. I haven’t decided how I’m going to compile the data yet (because there is not data for each year of each country) but I will most likely use the most current Gini index for each country.

The third dataset is also economic inequality however focused on wealth inequality, by Credit Suisse Group AG. It measures economic inequality with the same Gini technique as the previous dataset however uses wealth instead of income. I will be using the 2018 Global wealth databook.

# Motivation

I think these datasets are unique and will be valuable to explore because they are all indexes, so we can come up with generalized theories. If we used more concrete data, then the extrapolated meaning would be very data specific. For example, if instead of social progress, I looked only at how many high schools a country has compared to Gini Index, we would find one correlation or another but wouldn’t help in answering my general question of economic inequality vs social progress very much. Because it looks at hundreds of these statistics and aggregates them together, I can find greater meaning in my results.

A big benefit of working with data from countries is that they all share a same attribute being that country’s name. This allows me to compare data from a wide range of topics if the data is country specific.

# Conclusion

To see if there is a relationship between social progress and economic inequality. Social progress being looked at in individual categories and as an overall index. Economic inequality being looked from Gini Scores for both income and wealth.

# References

Link to Social Progress dataset: <https://secure.qgiv.com/for/datdow>

Link to Income Gini dataset: <https://data.worldbank.org/indicator/SI.POV.GINI>

Link to Wealth Gini dataset: <https://www.credit-suisse.com/about-us/en/reports-research/global-wealth-report.html>

Data for Wealth Gini dataset was found on Wikipedia in an easier to copy format (then the pdf) on the following page: <https://en.wikipedia.org/wiki/List_of_countries_by_wealth_equality>

The Wikipedia table was then scrapped and converted into a csv file using the following online tool: <https://wikitable2csv.ggor.de/>