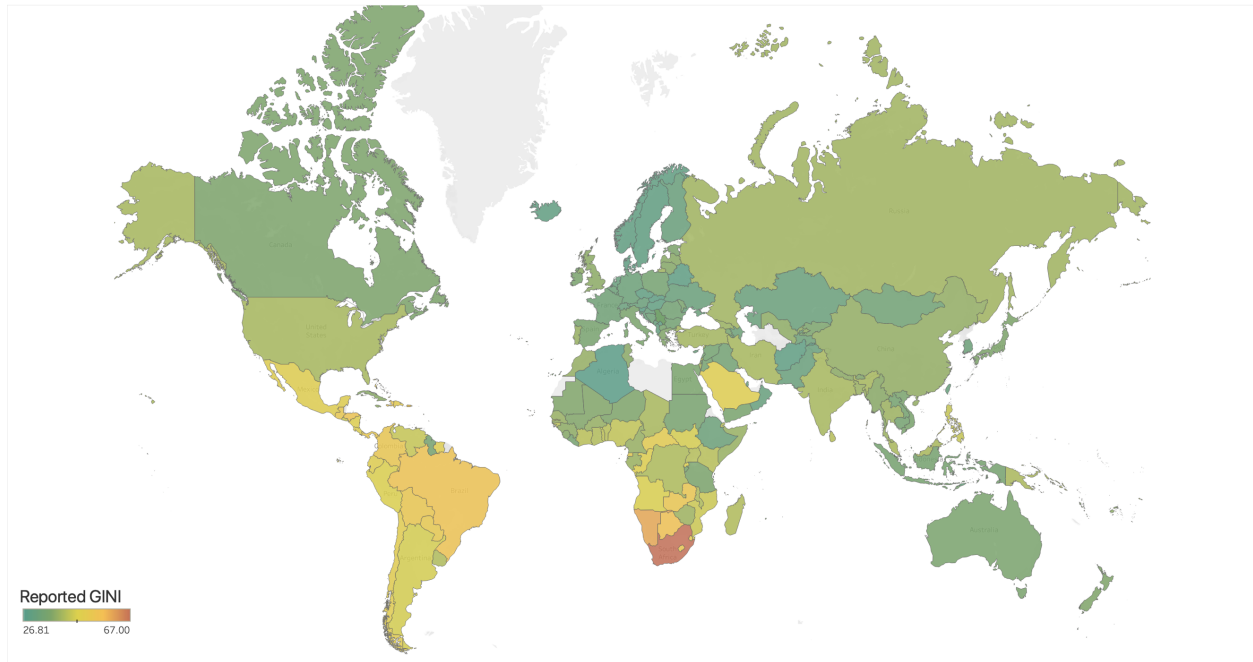**DALI Data Challenge (Part 1)**
**Joshua Pfefferkorn**

GINI Index Map (2000s and on)

I elected to use a map to visualize reported GINI index across countries in the modern era. The GINI index is a score used to measure income or wealth inequality in a given population. Presenting the data in this form enables the viewer to observe global trends in inequality that would be less easily visible in another type of chart. Warm colors indicate a higher GINI index (more inequality), while cooler colors indicate a lower GINI index. From the data, it is immediately evident that Europe and Central Asia have little inequality, while Southern Africa, South America, and Central America struggle with great wealth disparity.

Resource Share by Quintile in Sub-Regional Groups (2000s and on)

Q1, Q2, Q3, Q4 and Q5 for each Region Un Sub. Color shows details about Q1, Q2, Q3, Q4 and Q5.
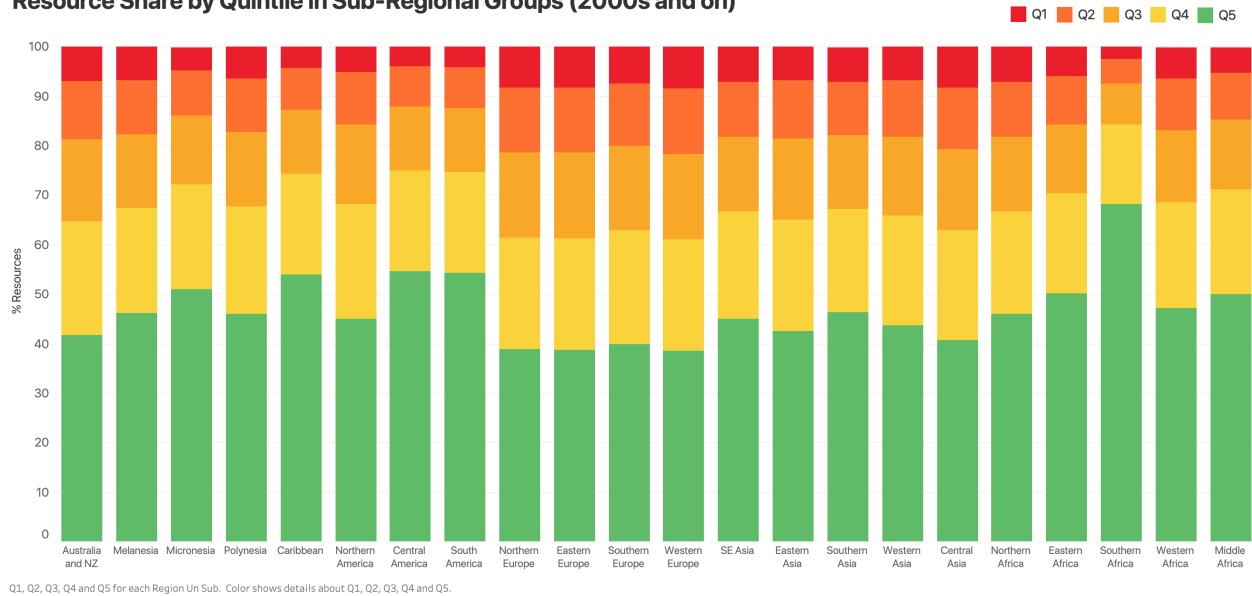
This graphic displays resource share among quintiles in sub-regional groups. Concatenating shares across groups into a single bar for each sub-region enforces the percentage values that the colors represent. Furthermore, the adjacency of the data in this form allows easy comparison. It is quick to see, for example, that Southern Africa has extreme wealth disparity, followed closely by South America, Central America, and the Caribbean. Europe seems to have the least disparity across the board.

GDP Per Capita in Sub-Regional Groups (2000s and on)
PPP based on 2011 USD
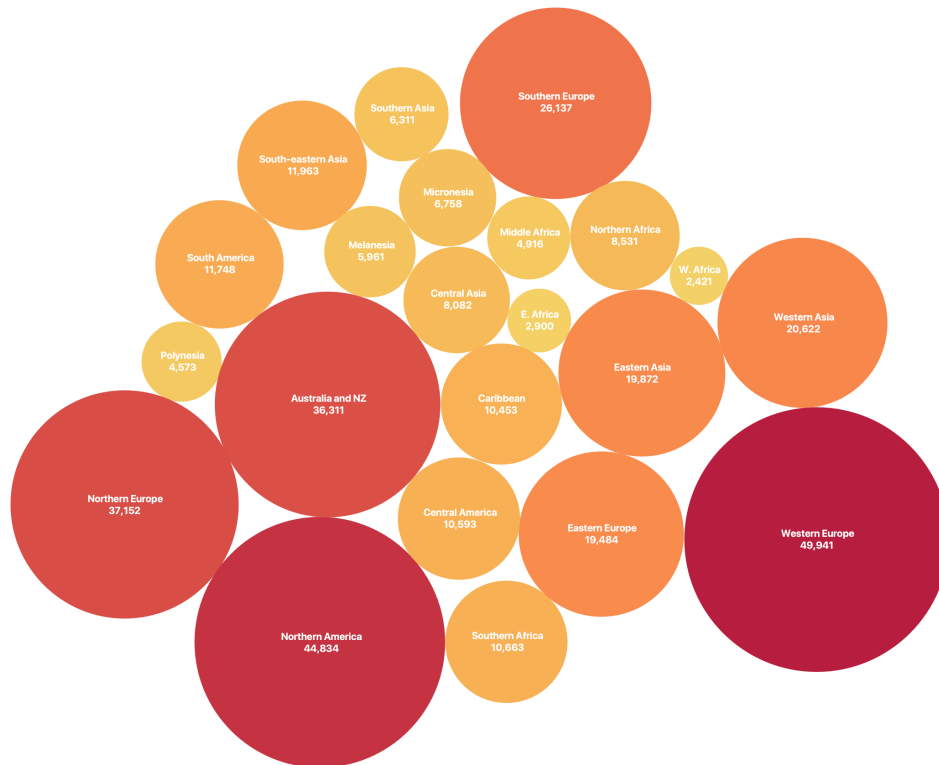
In this graph, I chose to use colored bubbles to represent GDP per capita in various sub-regions. The size and colors of the bubbles visually reinforce that data contained within them, giving an immediate sense of relative economy size in countries across these regions. As displayed, countries Northern America, Western and Northern Europe, and Austrailia and New Zealand have the highest GDP per capita, while those in Eastern and Western Africa have the lowest.

Average GINI Index Before 1990 vs. After 2000 by Country

In this graph, I hoped to convey the change in social inequality in various countries over the past several decades. This graph was tricky because many countries did not have sufficient data or were clustered very closely on the chart. However, I still think that the graph relays valuable information. Countries along the diagonal saw no or little change in GINI coefficient between the period before 1990 and after 2000. Countries to the lower right of this diagonal saw an increase in GINI index, while countries to the upper left saw a decrease in this metric. For example, Iraq saw a dramatic increase in equality, while Rwanda and Suriname saw great increases in wealth disparity. Countries like Brazil and Honduras had consistently high GINI indexes, while countries like Slovakia and Czechia had consistently low GINI indexes.