

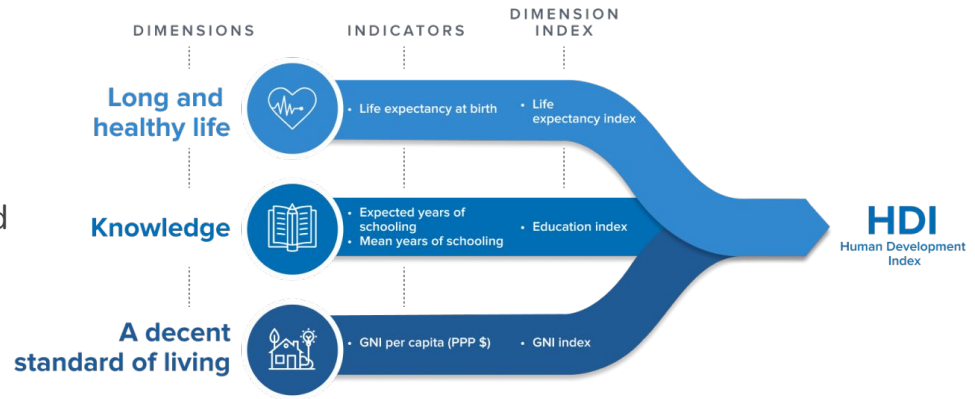
# Data Dynamics of Human Development

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# Human Development Index

- The project was to analyze the United Nations Human Development Index from the years 2011-2021 for the 6 regions and 191 countries
- The Human Development Index (HDI) is compiled annually every year
- The HDI is composed of multiple factors and indexes
  - Life expectancy at birth
  - Education
  - Standard of Living (GNI)
- HDI allows for organizations and people to track countries performances on metrics easily





# Goals of the project

- The dataset the project was working with was all UN HDI data between the years 2011 to 2021 for all 191 countries.
- The main goal was to create an interactive website that made it easy for individual users to display the development of each country in more detail
- The other goal of the project was to analyze the data and draw conclusions around the different data involved in the HDI rankings



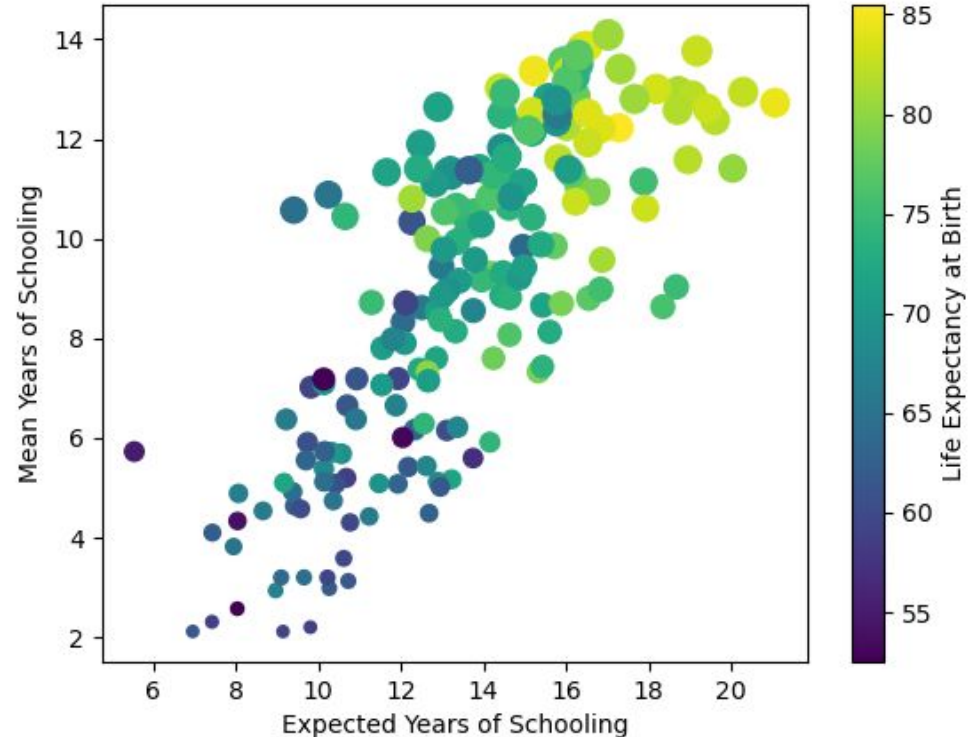
# HDI Component Comparison Analysis



\*2021 HDI data suggests a relationship between the years of schooling and longevity of life.

\*Shows the impact that the individual components make on the development of a country. Income is not the only measure to consider.

\*Expected years of schooling usually exceeds mean years of schooling for countries.



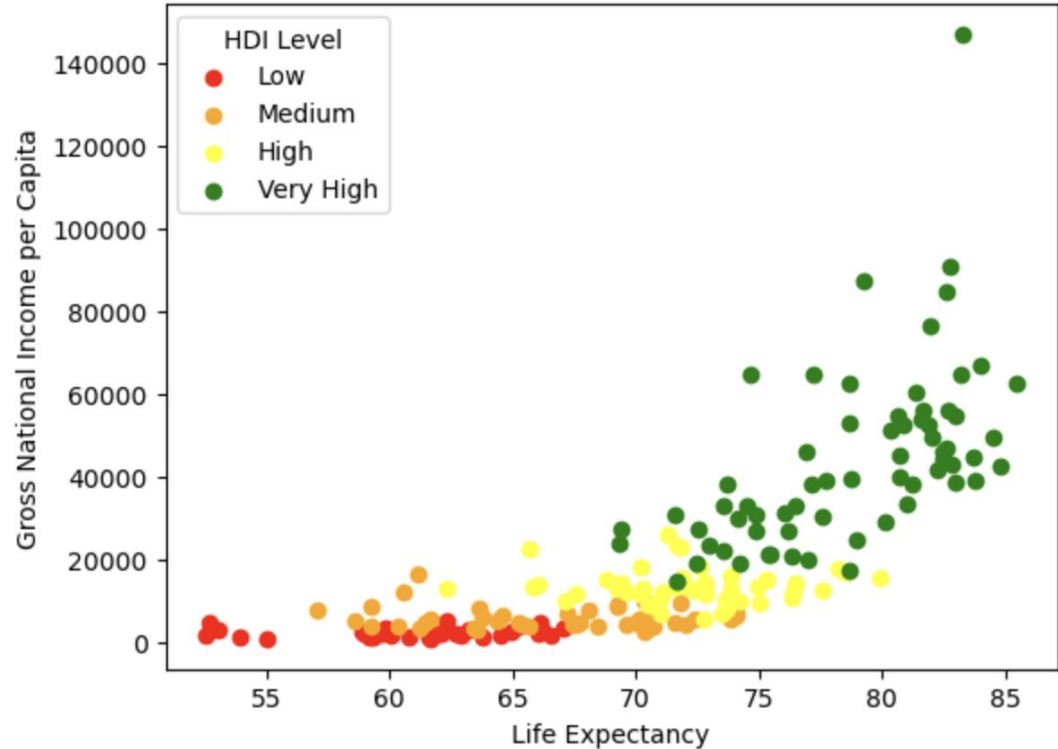
# HDI Component Comparison Analysis



\*The more developed countries have a wider spread of life expectancy and gross net income than the under developed countries have

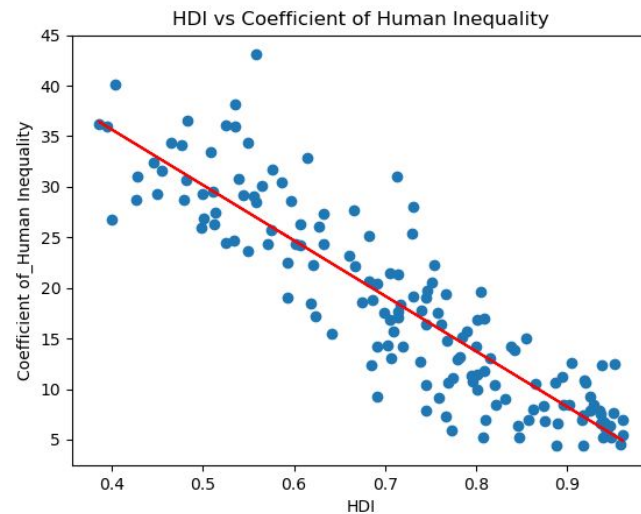
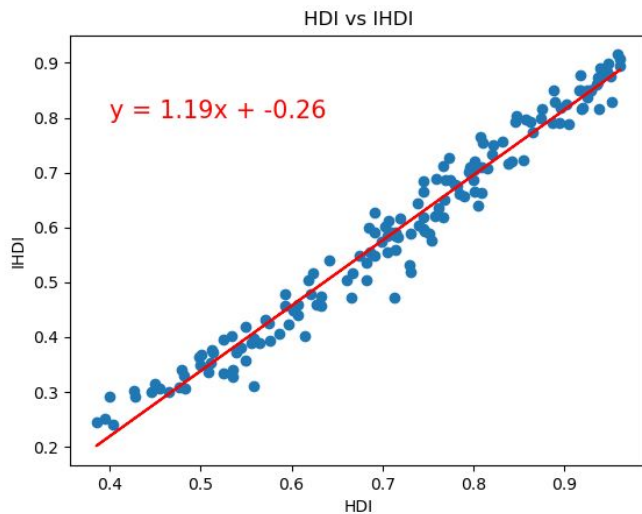
\* At a certain point, the money an average person makes in a country is less impactful on their expected years of life

\*The higher the HDI level, the more varied the components tend to be



# HDI vs IHDI

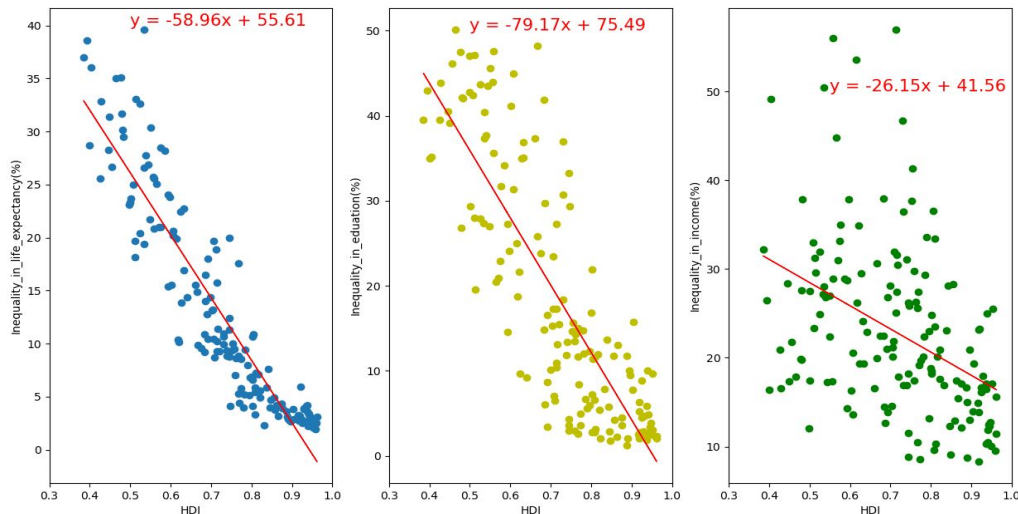
- HDI vs IHDI correlation coefficient is 0.98
- HDI vs Coefficient of Human Inequality is -0.89



# HDI vs Coefficients of Inequality

- HDI vs Inequality in Life Expectancy: - 0.92
- HDI vs Inequality in Education: -0.83
- HDI vs Inequality in Income: -0.41

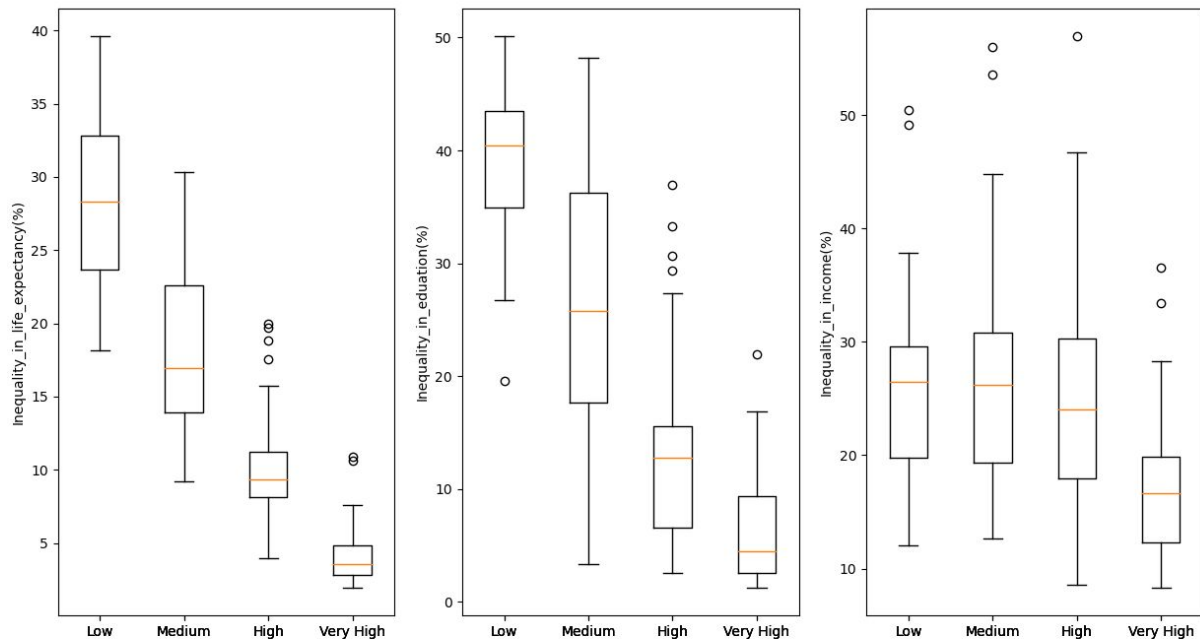
**HDI vs Coefficients of Human Inequality**





# HDI Levels vs Coefficients of Inequality

HDI Levels vs Coefficients of Human Inequality

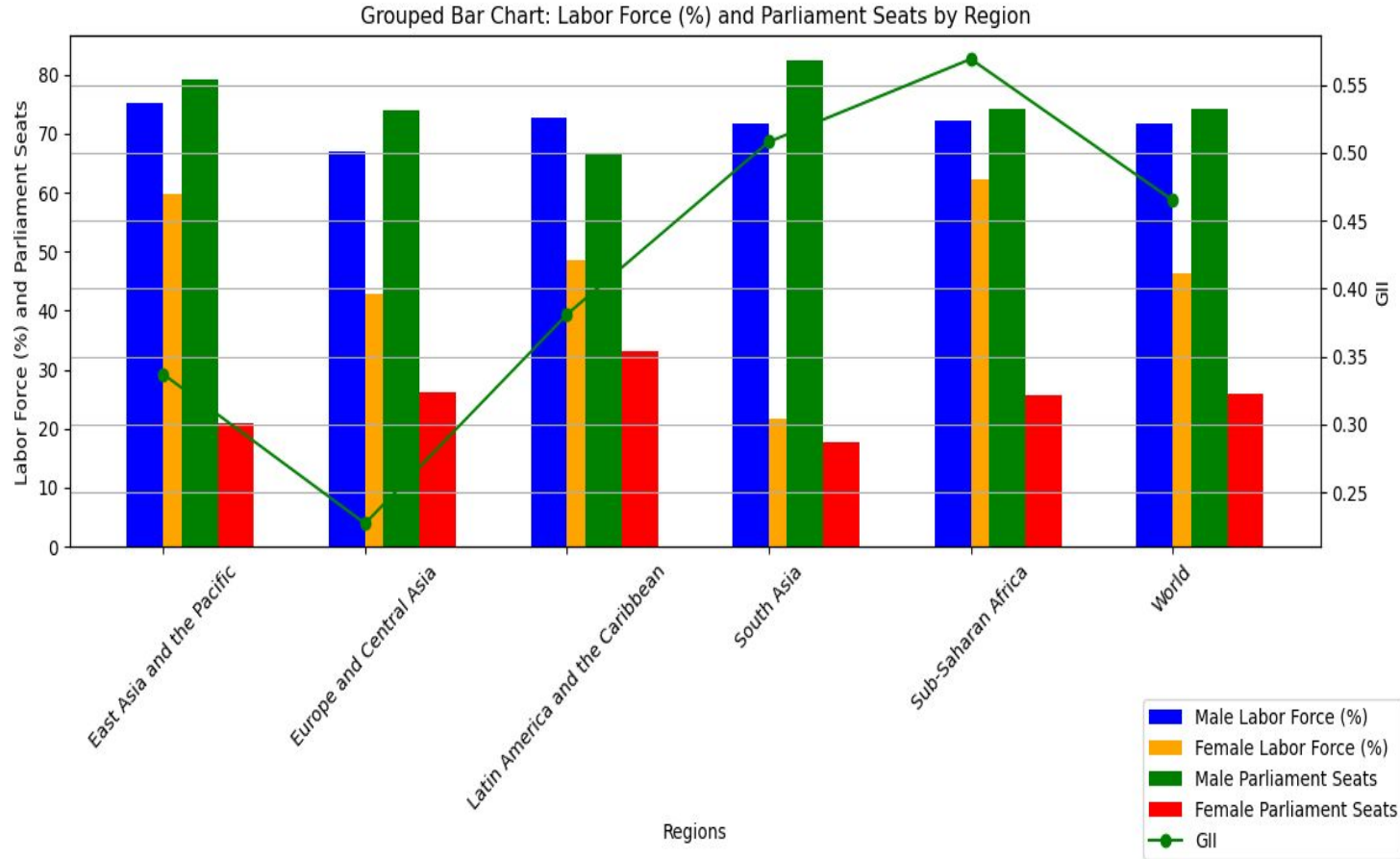




# Analysis

\*Males hold the majority of positions or seats in parliament across the world

\*Males also carry the majority of the labor force

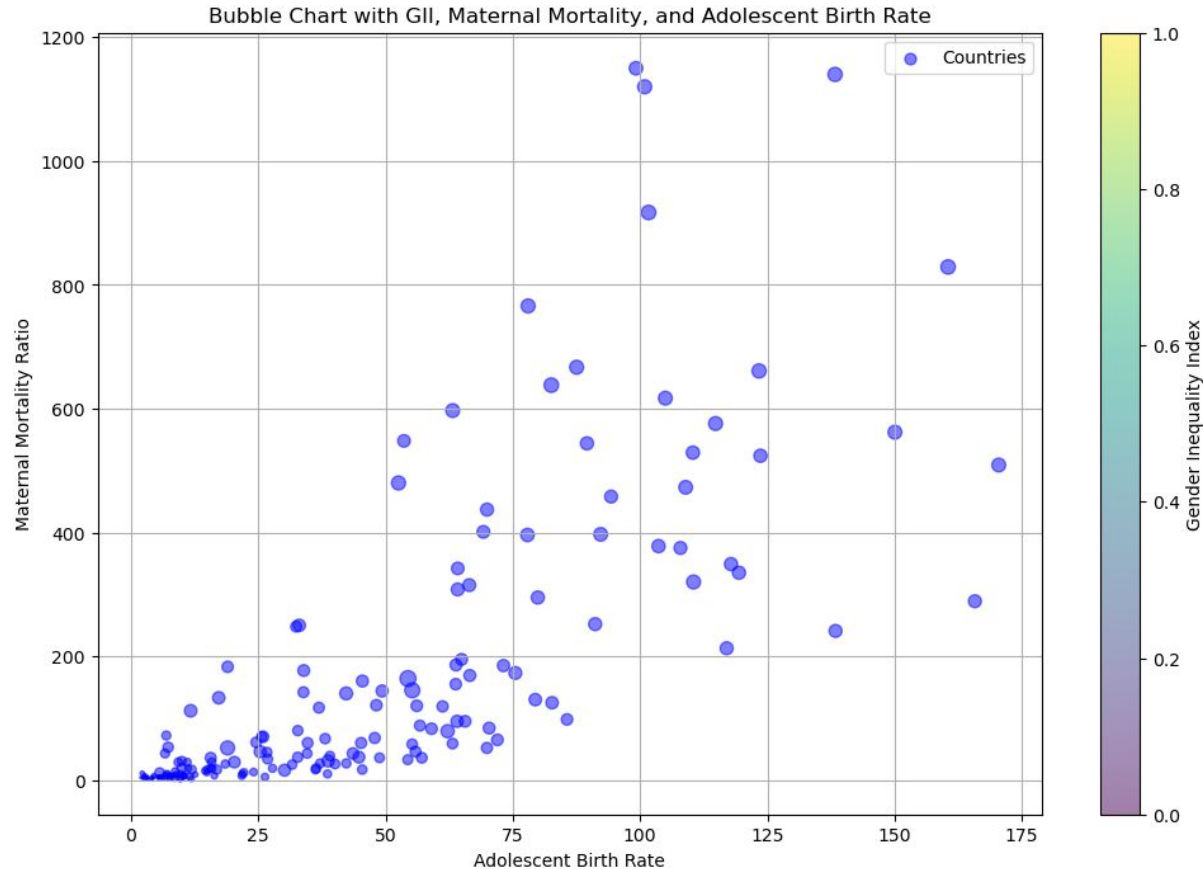


# GII vs Maternal Mortality Ratio vs Adolescent Birth Rate



\*Higher GII is associated with increased maternal mortality ratio (maternal deaths/100,000 live births)

\*As well, a higher GII typically is associated with increased rates of adolescent births (births between ages of 15-19 y/o)





# Conclusions

- The components used to calculate the HDI score work together to create a balanced score that is not solely dependent on income for each country
- The more developed a country is, there was a longer life expectancy and higher GNI
- There was also a strong correlation between HDI and IHDI
- East Asia and Pacific, Europe and Central Asia, and Latin America and Caribbean have higher HDI and IHDI than those in Arab states, South Asia, and Sub-Saharan Africa
- There was also a clear correlation between HDI and years of schooling