CSSM 502 HW2 Report

Hypothesis:

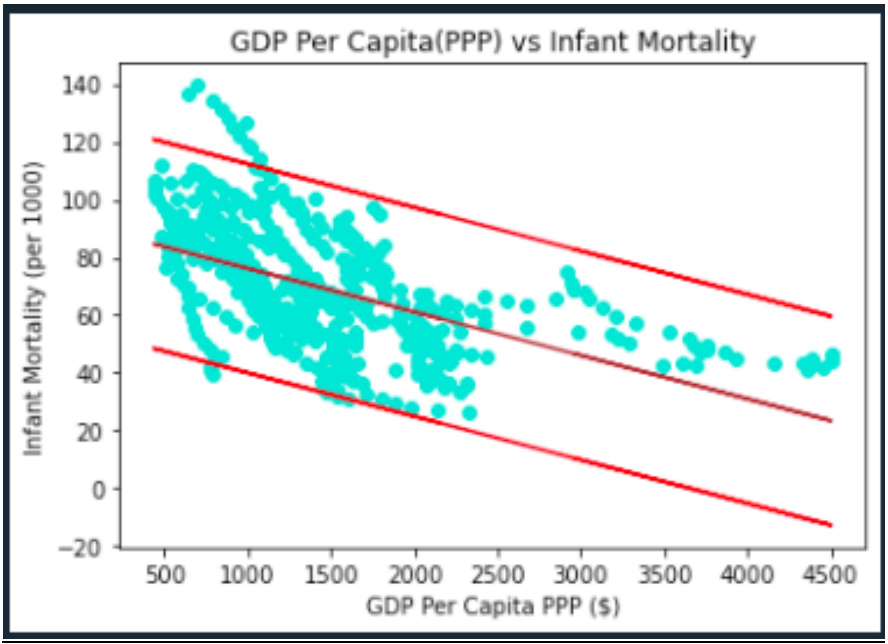
Countries with lower GDP per capita has higher infant mortality rates compared to the countries with lower GDP per capita. The datasets that I use comes from Worldbank and the study is conducted for the low income countries for the years between 2000-2019. I used GDP per capita (PPP) to account for purchasing power.

Model:

A simple linear regression model: Y = bX + c
where X= GDP Per Capita(PPP) and Y= Infant Mortality (per 1000).

Estimated beta coefficient is - 0.015 which shows a negative relation between X and Y. As GDP Per Capita (PPP) increases by $1 , holding other things constant, Infant Mortality per 1000 decreases by 0.015.

Result:



95% Confidence Interval for the dependent variable is between the red lines and the regression line is plotted as the brown line. We can see that visually more than 95% of the data points lie within the 95% confidence interval. This means that our hyphothesis cannot be rejected at 5% significance level.

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