Investigating the Relationship Between Economic Resources and Life Expectancy to Inform Strategic Decision-Making

• • •

Anthony Amadasun

Overview

- This Project look at data from World Development Statistics
- The dataset chosen from there website and this project for analysis will be gni_per_cap_atlas_method_con2021.csv and life_expectancy.csv.
-

Feature	Type	Dataset	Description
country	object	merged	Name of the countries (Japan, United Kingdom, and Nigeria selected)
year_gni	int	merged	Gross National Income for the specified year
life_gni	float	merged	Life expectancy for the specified year

Understanding the problem

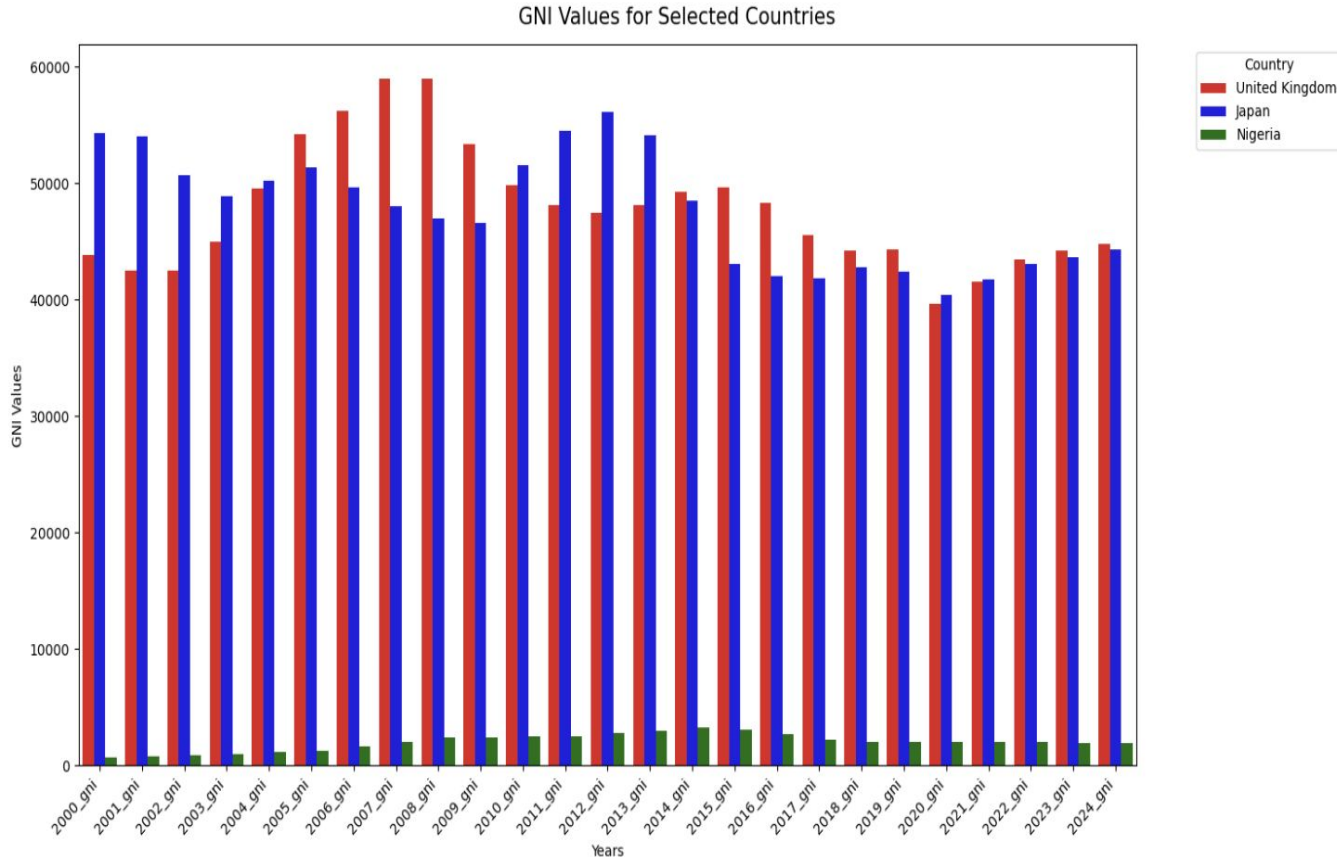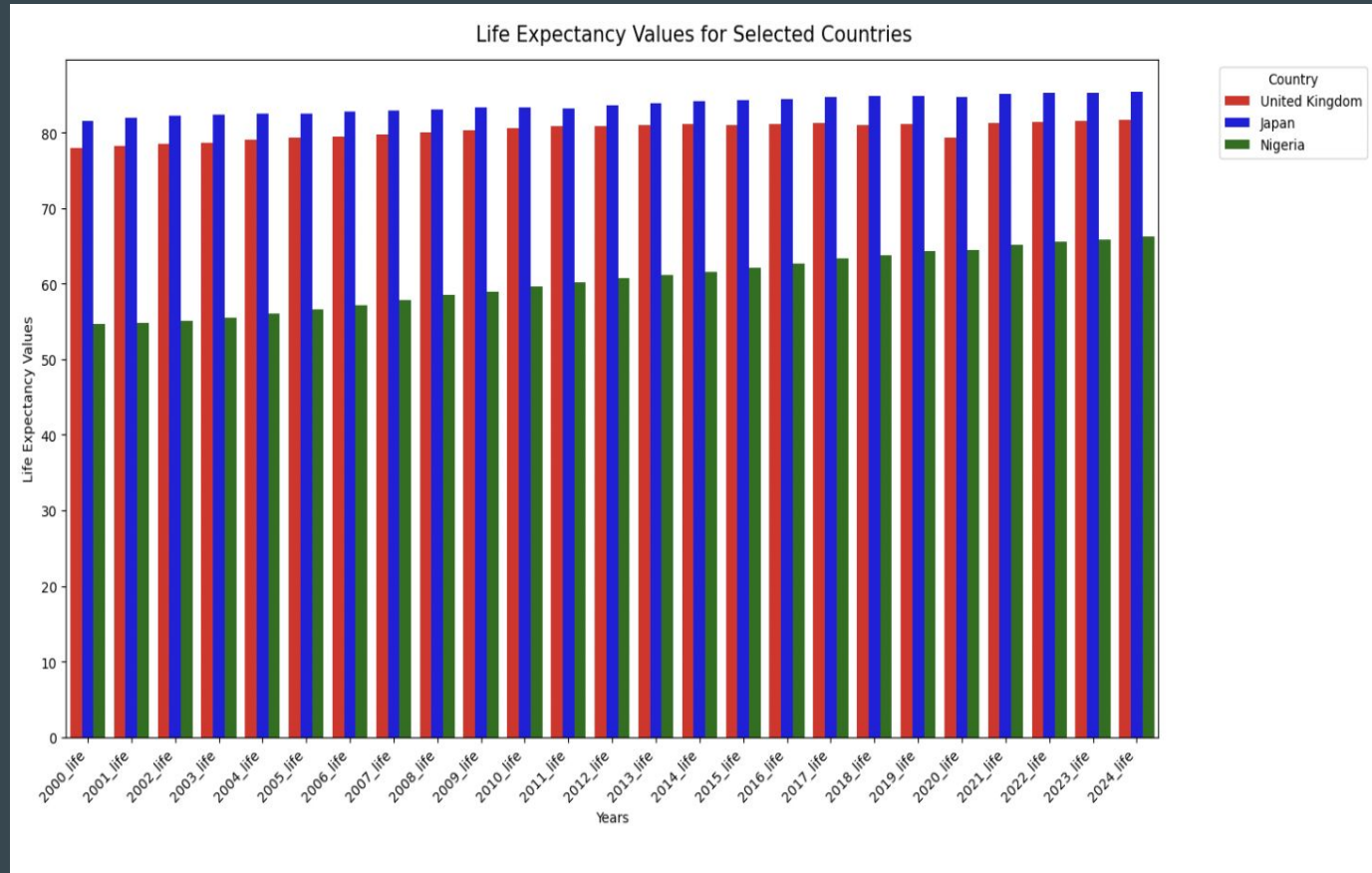| Main point	How?	Visualization Method
Why investigate the relationship between economic resources and life expectancy? Provide valuable insight that positively impact economic development and health of a population (SDGs initiatives)	What is the plan? Correlation assessment, analyze if there are global disparities in the relationship, look at patterns and trend in data that indicate how change in economic resource might influence life expectancy	heatmap and bar graph

Visual Data continued: GNI Bar plot

GNI Values for Selected Countries

❏ Highest gni is United Kingdom in the year 2007 and 2008 with a value of 59000

❏ Lowest gni is Nigeria in the year 2000 with a value of 705

Visual Data continued: Life Bar plot

Life Expectancy Values for Selected Countries

❏ The country with the highest life expectancy is Japan in the year 2024 with a value of 85.4.

❏ The country with the lowest life expectancy is Nigeria in the year 2000 with a value of 54.6.

Visual Data Heatmap:

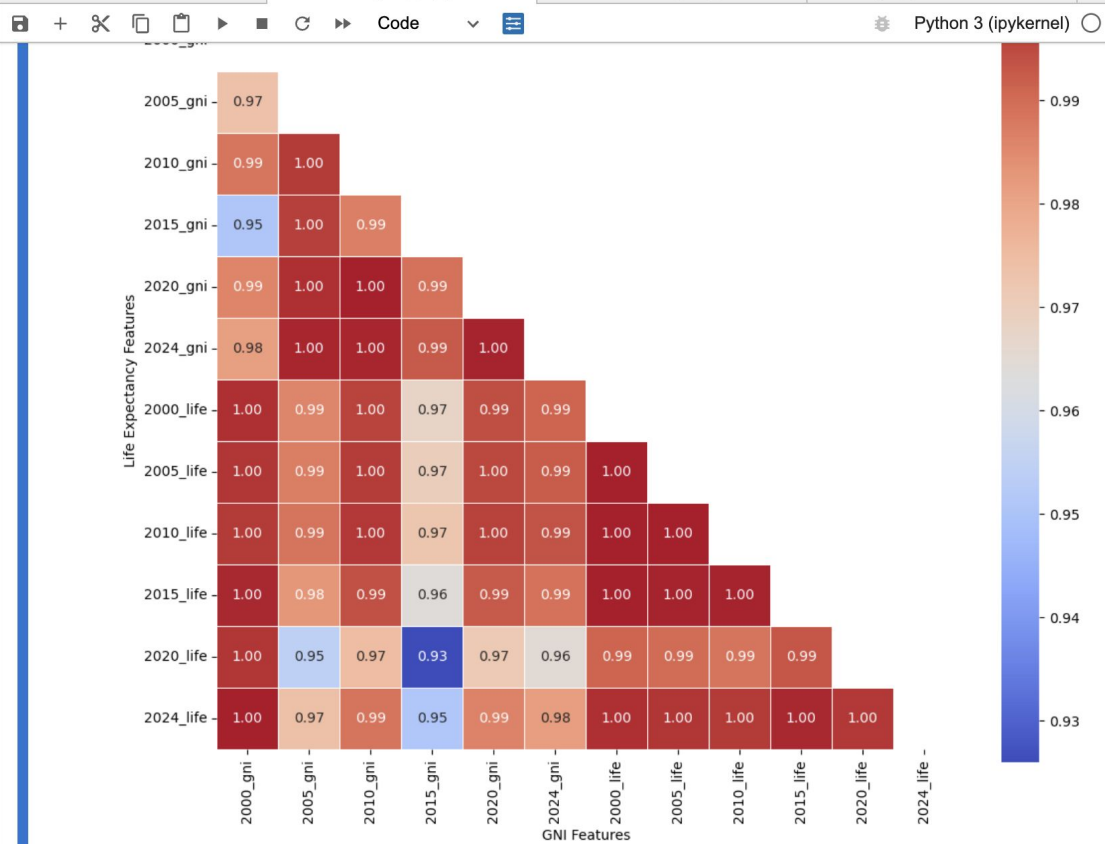| Scale of correlation coefficient	Value
$0 < r \leq 0.19$	Very Low Correlation
$0.2 \leq r \leq 0.39$	Low Correlation
$0.4 \leq r \leq 0.59$	Moderate Correlation
$0.6 \leq r \leq 0.79$	High Correlation
$0.8 \leq r \leq 1.0$	Very High Correlation

Conclusion

★ +Sustainable Development goals
★ +Robust relationship between GNI and Life expectancy
★ Thanks for your time!