

# World Economic Indicator Project

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# Business Problem

- ❖ What factors a country should focus on to sustain GDP/Capita?

# Solution

- ❖ Analyzing data to determine how a nation may achieve sustainable growth

From the Data Analysis, it can be concluded that there is a strong positive correlation between GDP/Capita and some Factors That countries should focus on for sustainable growth are -

- Health Exp/Capita
- Tourism Inbound Per Capita
- Tourism Outbound Per Capita
- Energy Usage Per Capita
- CO2 Emissions Per Capita
- Avg Life Expectancy
- Population Urban
- Population 15+
- Internet Usage
- Mobile Phone Usage

From the Data Analysis, it can be concluded that there is a strong negative correlation between GDP/Capita, and some Factors That countries should focus on for sustainable growth are –

- Lending Interest Rate
- Birth Rate
- Infant Mortality Rate
- Population 0-14
- Total Population
- Business Tax Rate
- Ease of Business

# Executive Summary

- ❖ Healthy populations are crucial for sustainable growth. Investment in health development results in a nation's sustainable GDP/capita growth.
- ❖ Energy use and GDP have a strong positive correlation, which indicates that as energy use rises, so do GDP and CO<sub>2</sub> emissions. It is advised to use renewable energy to sustain GDP growth.
- ❖ Increase in population does not always result in growth in GDP. Overpopulation can adversely affect sustainability due to overexploitation of resources. Its important to keep the population in check.
- ❖ Tourism significantly increases a nation's GDP, thus the government should spend heavily on the industry by promoting sustainable business practices more justifiable modes of transportation, ecologically friendly lodging, and a wide range of traditional foods.
- ❖ Regions having high birth rate and infant mortality rate shows low GDP/capita which the government show focus on and take necessary health measures.
- ❖ Countries with high mobile and internet usage have high GDP which is required in countries with low GDP so that they can also become advanced in technology.

# Health Expenditure Per Capita vs GDP per Capita

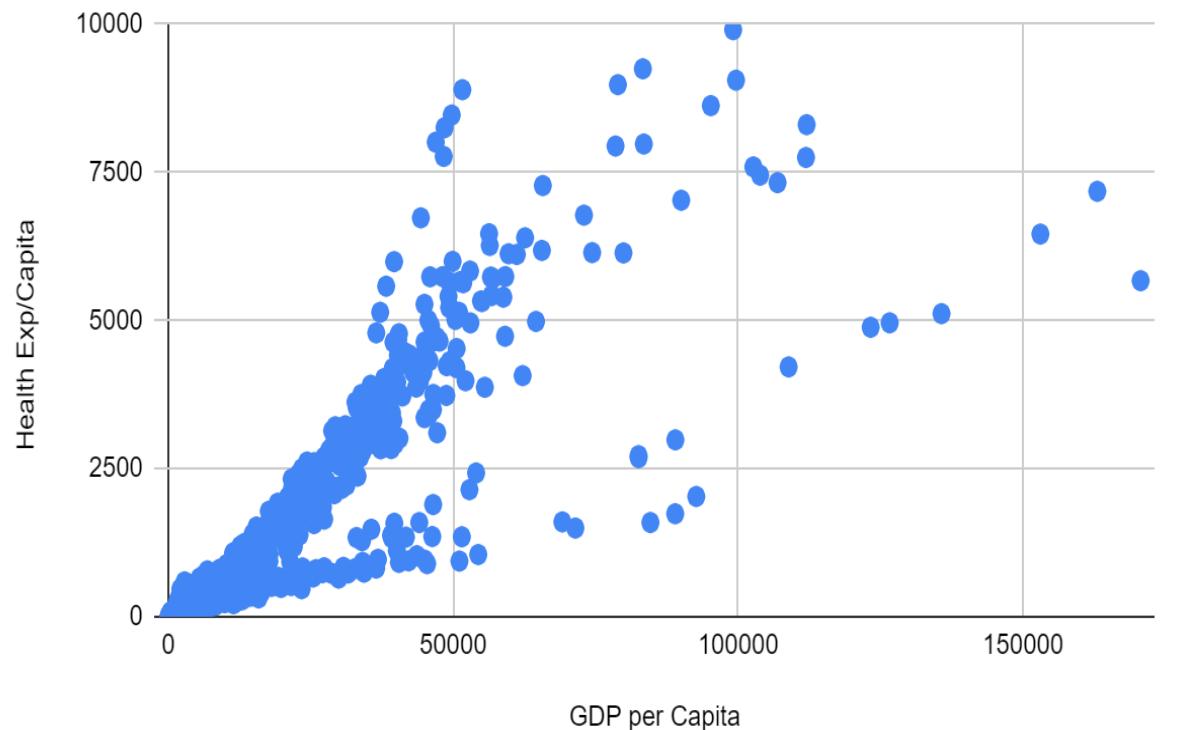
The correlation coefficient between Health Exp/Capita and GDP/capita is 0.884, Which shows an increase in trend with a positive slope. From the Scatter plot, we can clearly see the Linear Trend. Also, the point is not scattered randomly.

The health of a country's population is a major factor in the sustainable growth of any country.

The correlation

When a country fund the expansion of its Health infrastructure and that increases the overall health of the population and directly leads to the sustainable growth of that country.

Health Exp/Capita vs. GDP per Capita



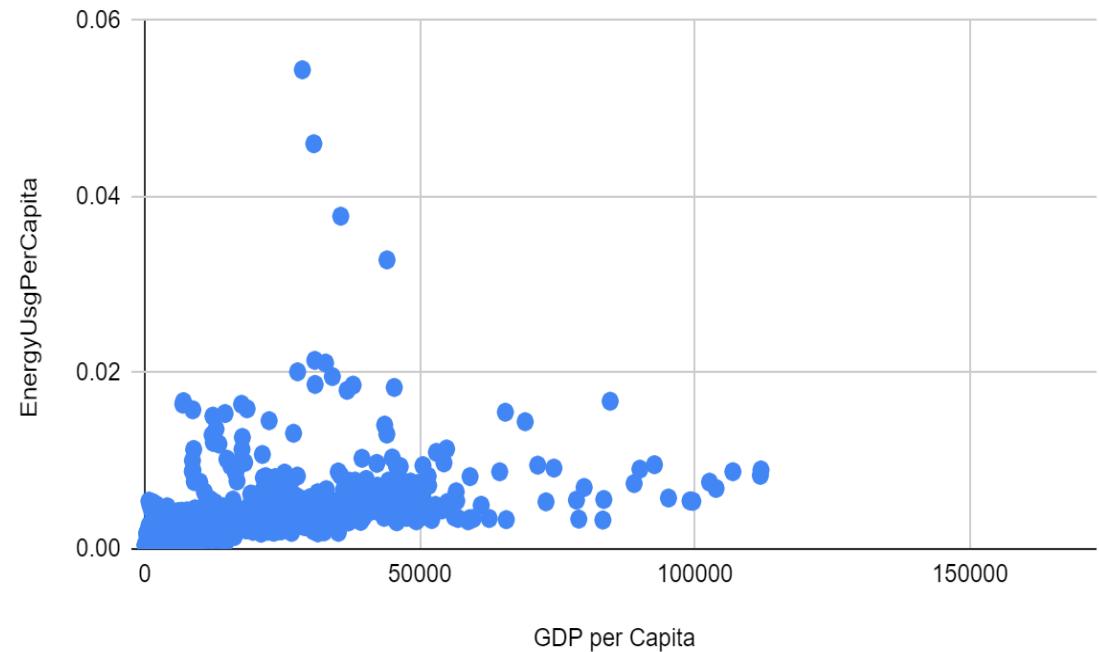
## Energy Usage Per Capita vs GDP per Capita

The correlation coefficient between Energy Usage/Capita and GDP/Capita is 0.53. Which shows an increase in trend with a positive slope.

Also, the point is not scattered randomly.

This shows a country that focuses more on energy usage per capita has high GDP/per capita. It is advisable to use more renewable energy resources.

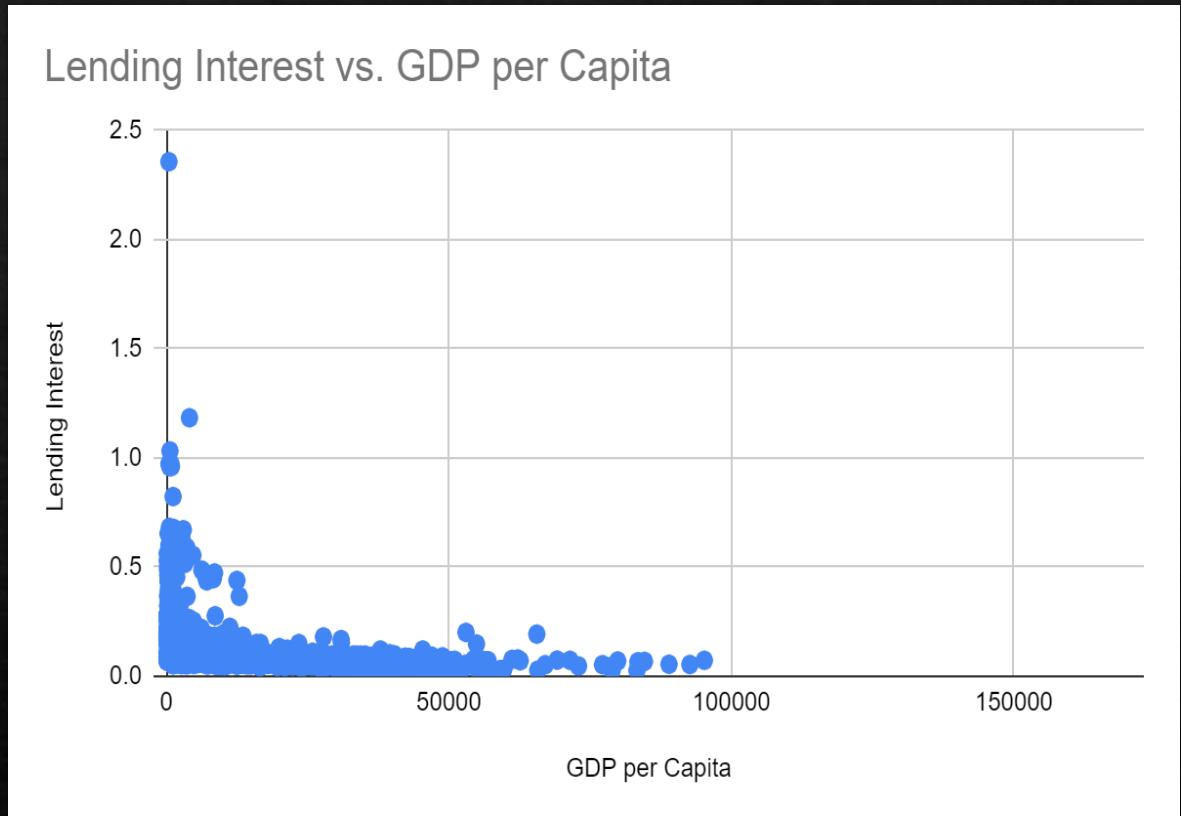
EnergyUsgPerCapita vs. GDP per Capita



## Lending Interest Rate vs GDP per Capita

The Correlation between GDP and Lending Interest is -0.372. This shows a negative slope and decrease in trend as the magnitude of this correlation coefficient is on the slightly lower side.

From the Scatter plot, it is clear that there is very less impact of Lending Interest on GDP

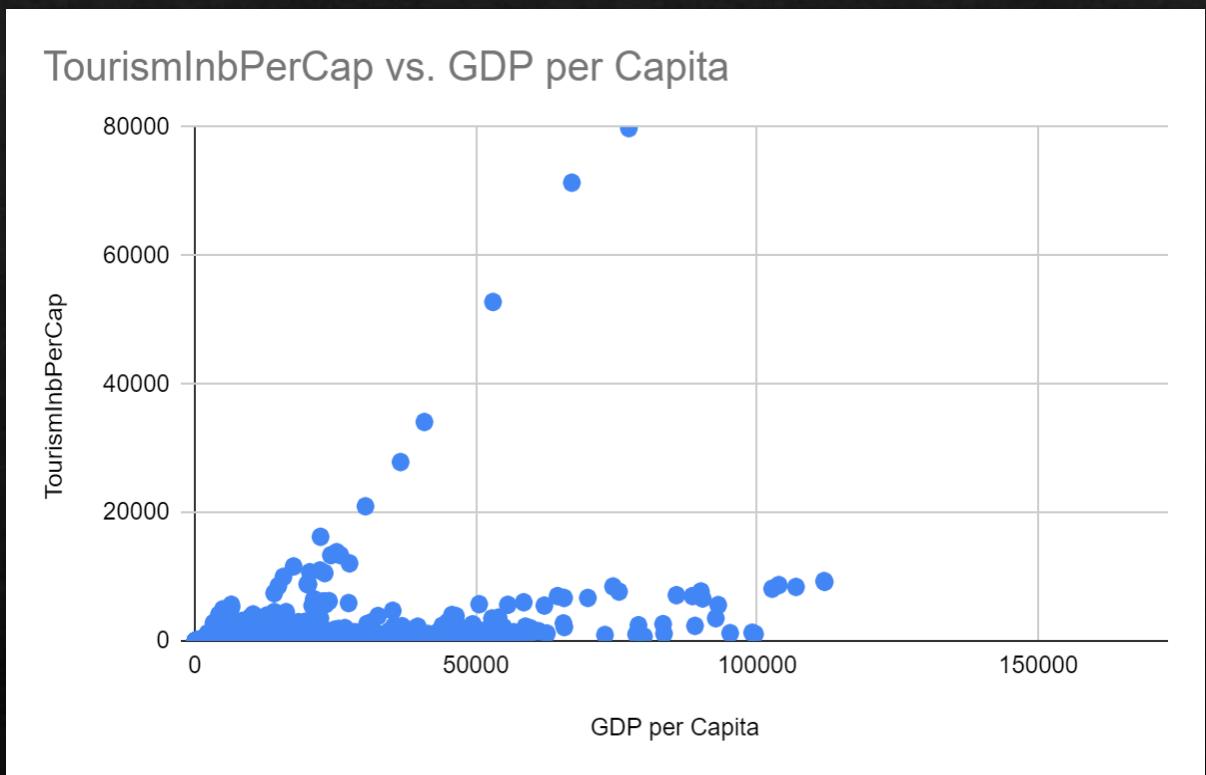


# Tourism Inbound Per Capita vs GDP per Capita

The correlation coefficient between GDP/Capita and Tourism Inbound/Capita is 0.355 which shows a positive slope.

Allowing Overseas tourist helps in GDP growth and which helps in sustaining the growth of a country.

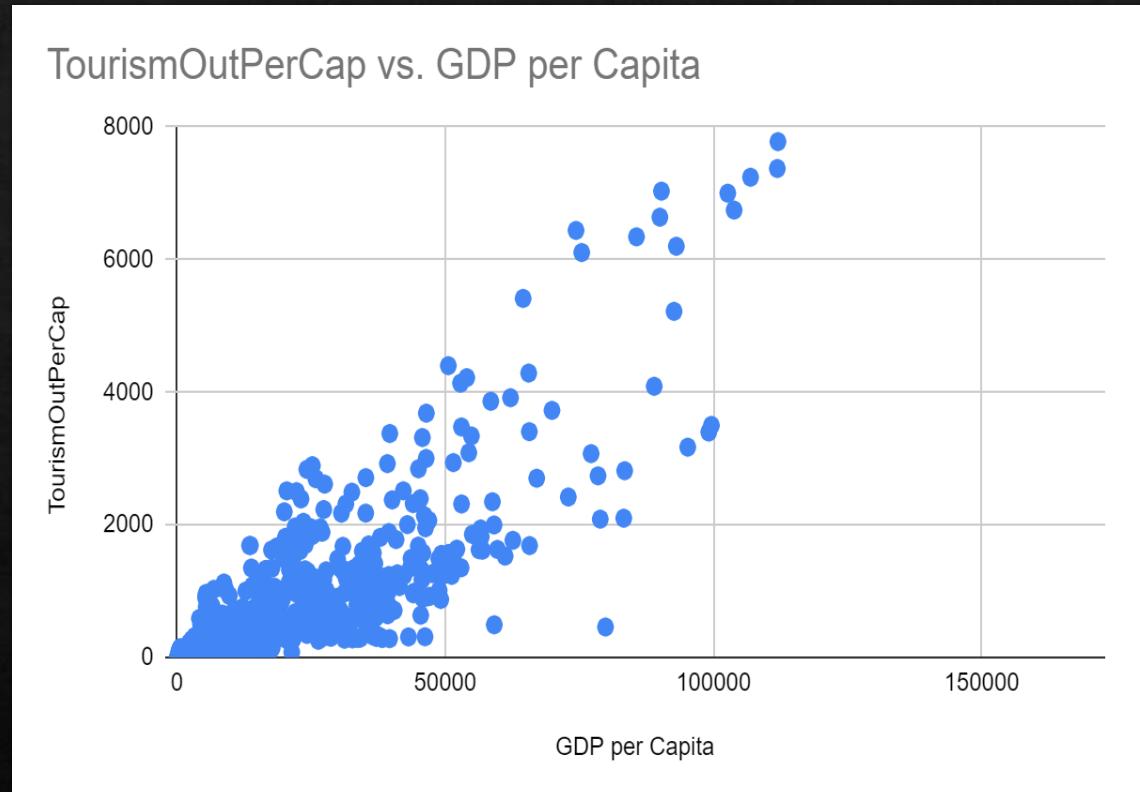
With improving the tourist spots, transport, accommodation, and food quality would maintain a continuous rise in tourists



# Tourism Outbound Per Capita vs GDP per Capita

The correlation coefficient of Tourism Outbound/Capita and GDP/Capita is 0.85 with a positive slope and magnitude on the higher side. The Increase in Tourism leads to an increase in the GDP of the country

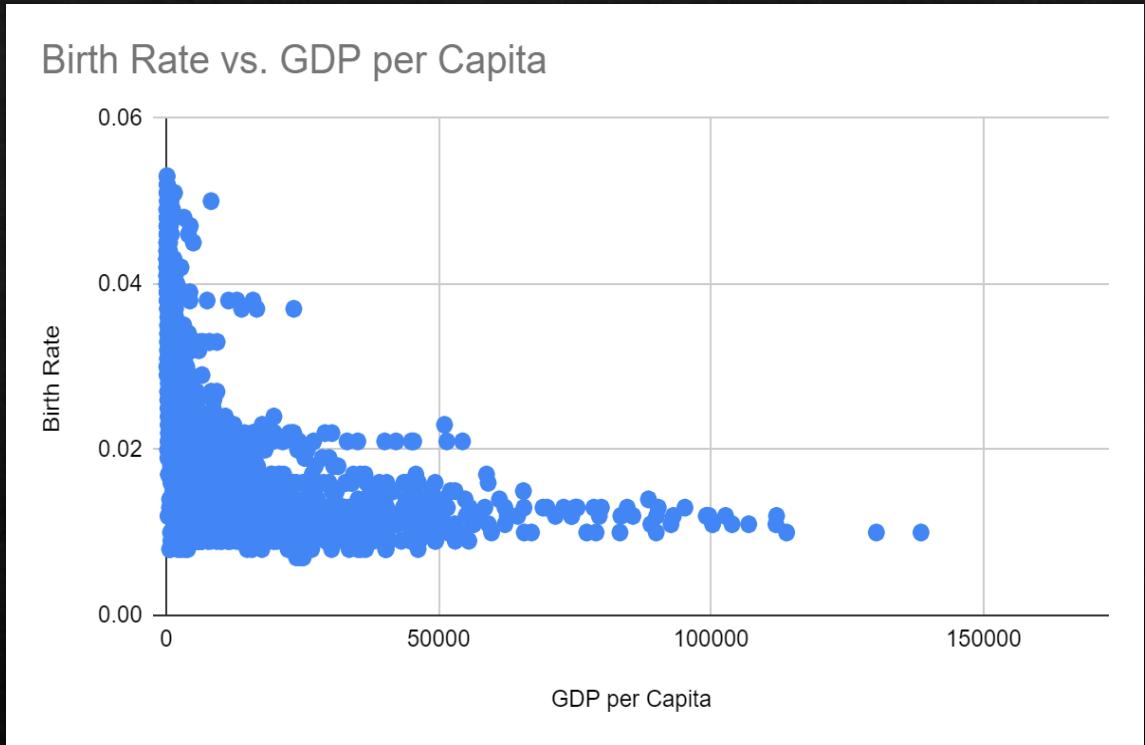
More tourists within the country result in a positive change in GDP. Investing in Tourism Transportation, affordable accommodation and a variety of food attracts tourists across the country



## Birth Rate vs GDP per Capita

The correlation coefficient between Birth Rate and GDP is -0.489 which gives the decline in trend with a negative slope. As Birth Rate increases GDP decreases.

Scatter Plot indicates a slight negative trend. There should be policies for the citizens to have children to maintain the population of any country.



# Steps Followed

- ❖ Firstly Unique Id was made in every sheet containing data using Concatenate function.
- ❖ Then Data was merged using that Unique Id by the V-LOOKUP function.
- ❖ After Merging the Data Duplicate values were deleted.
- ❖ Missing values were filled using the previous year's data and if data was not available for the previous year the values remained null.
- ❖ Necessary columns were added which helps in analysis.
- ❖ Processed data Using Univariate and Bivariate Analysis
- ❖ Executive summary of Data Analysis.