University of Hertfordshire UH

Climate Change Data Analysis Based on
World Bank Data

Name: Tabinda latif

**Student ID:** 22023493

Abstract:

I have compared some data indicators provided by world bank data on their official website. The main concept of this report is to highlight the relationship between different indicators of world bank data. I have chosen the datasets for yearly GDP growth and imports of goods and services per year.

GDP, or Gross Domestic Product, is a widely used measure of the economic activity within a country. It represents the total value of all goods and services produced within a country's borders in a specific period, typically a year. GDP includes both consumer goods and capital goods produced for investment purposes. It is a key indicator of a country's economic health and is used to compare the economic performance of different countries. GDP is calculated by summing up the value of all final goods and services produced in a country. This includes goods produced by all sectors of the economy, including agriculture, manufacturing, and services.
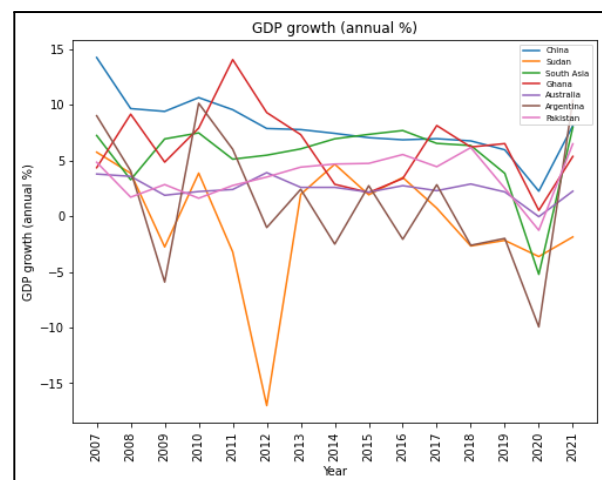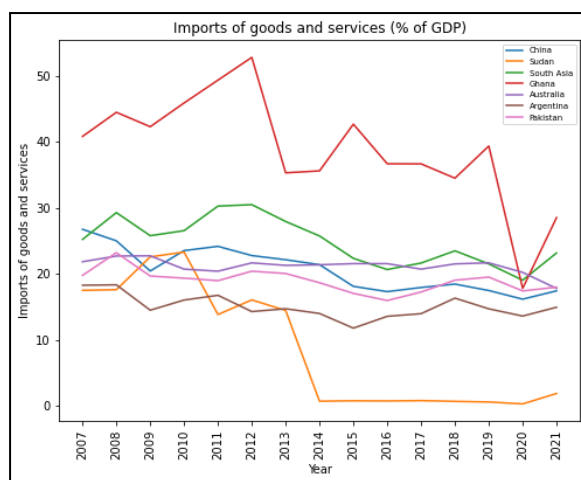

The main idea and objective of this report is to deduce some results for the relationship between GDP and other data indicators. I have chosen a set of different countries. For this purpose, I have compared the Gross Domestic Product yearly data with the imports of goods and services per year. In the preceding line plot, we can observe that there are a lot of ups and downs in the imports of different goods and services in the selected group of countries. Sudan has incredibly lowered its imports.

In the above graph, we have compared the data for Gross Domestic Product growth yearly for different countries. We can also see the ups and downs in this plot too.

By comparing the results of the above two graphs, I have deduced the result that the countries having more imports of goods and services in its country have less Gross Domestic Product growth per year.

To study population growth and ages in different countries, I have downloaded the data for population ages between 15 to 64 (% of total population) from world bank data. I have also downloaded the data for mortality rate for under-5 children in the world.

Population ages 15-64 (% of total population)
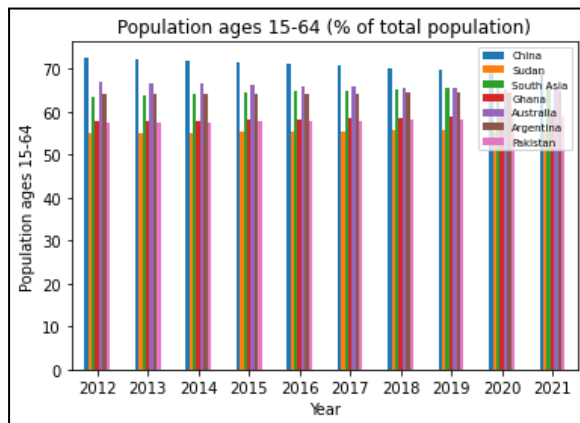
To represent the population ages (15 to 64 years) I made use of bar plots. Bar plots are commonly used in data visualisation to display and compare categorical data. They are especially useful for visualising the frequency or distribution of data across different categories.

Here I have categorised the years and countries. We can observe that China has nearly 72% of the total population having the age ranges between 15 and 64 years and this trend is being stable all the time.

Mortality rate, under-5 (per 1,000 live births)
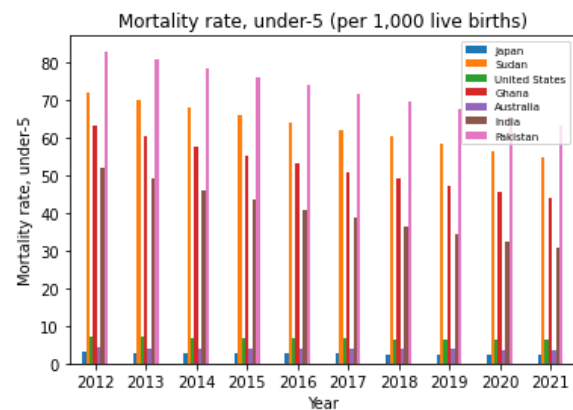
I have also compared the data for mortality rate for children under 5 years of age. We can see that the mortality rate has lowered down gradually in the last 11 years.

From the list of selected countries, we can observe that Pakistan has the largest rate of mortality for under-5 aged children. Japan has the lowest rate of mortality in the last 10 years.

By studying the above graphs, we can deduce that there is no direct relationship between these two parameters.