

Introduction to the dashboard

Overview of Econometrics and Population

Select year range

1900

2023

Select all

China

France

India

Italy

Spain

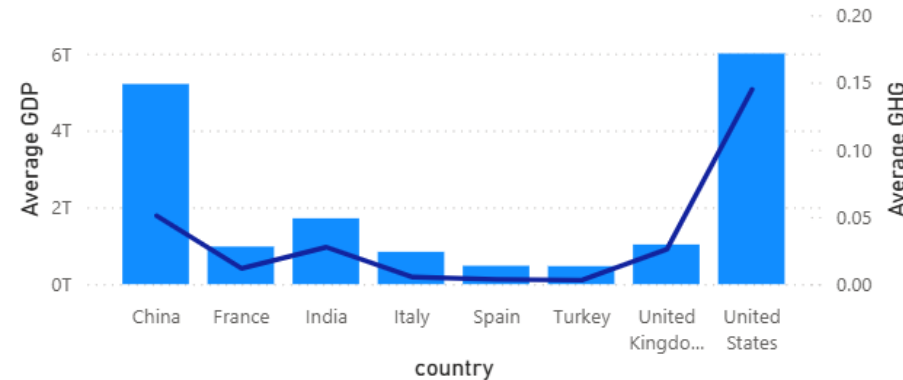
Turkey

United Kingdo...

United States

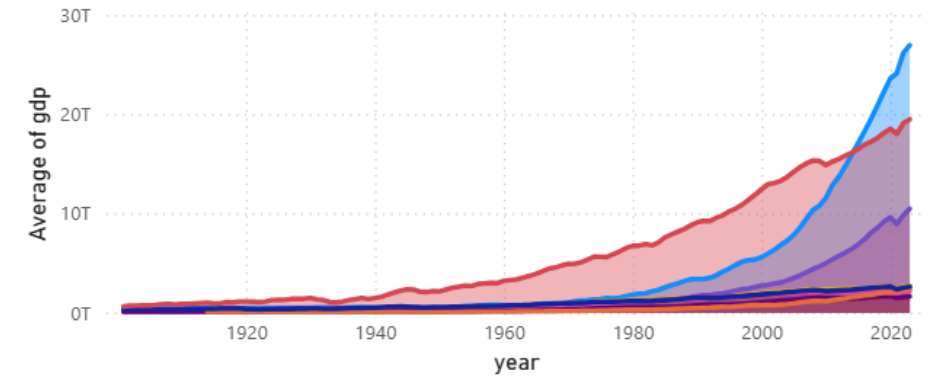
Average GDP and Average GHG by country

● Average GDP ● Average GHG



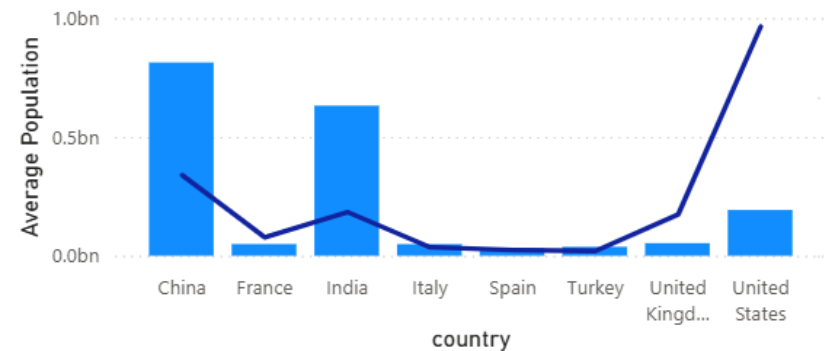
Average of gdp by year and country

country ● China ● France ● India ● Italy ● Spain ● Turkey ● United King... ● United States



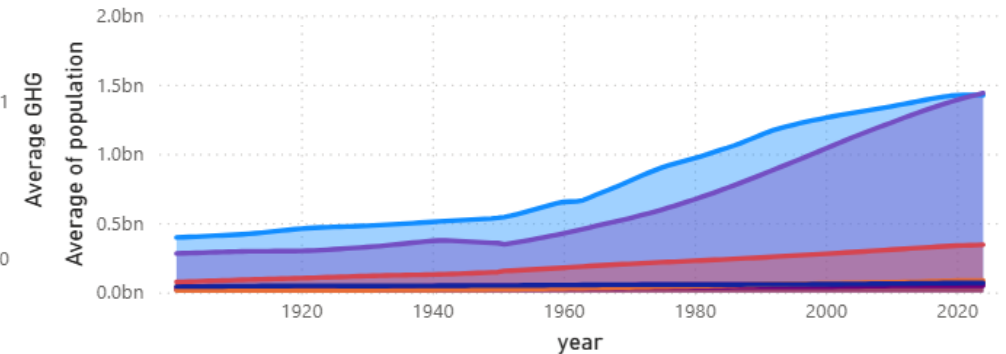
Average Population and Average GHG by country

● Average Population ● Average GHG





Average of population by year and country

country ● China ● France ● India ● Italy ● Spain ● Turkey ● United Kingdom ● United States

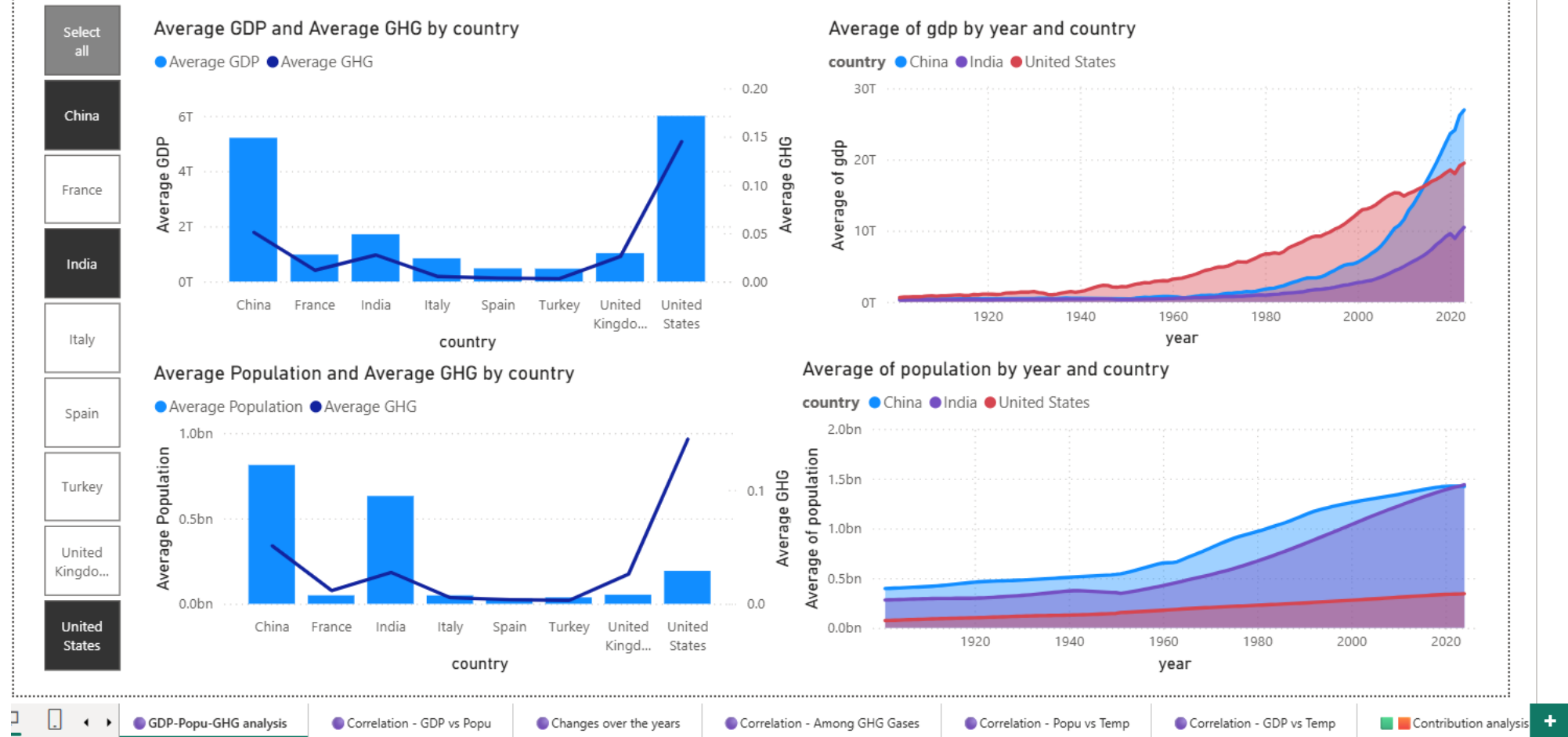


● GDP-Popu-GHG analysis x ● Correlation - GDP vs Popu ● Changes over the years ● Correlation - Among GHG Gases ● Correlation - Popu vs Temp ● Correlation - GDP vs Temp ● Contribution analysis +

The PowerBI report contains 7 pages each analyzes and highlights distinct areas of the data. The filters are synced for all the pages except for the last page “  Contribution analysis.”

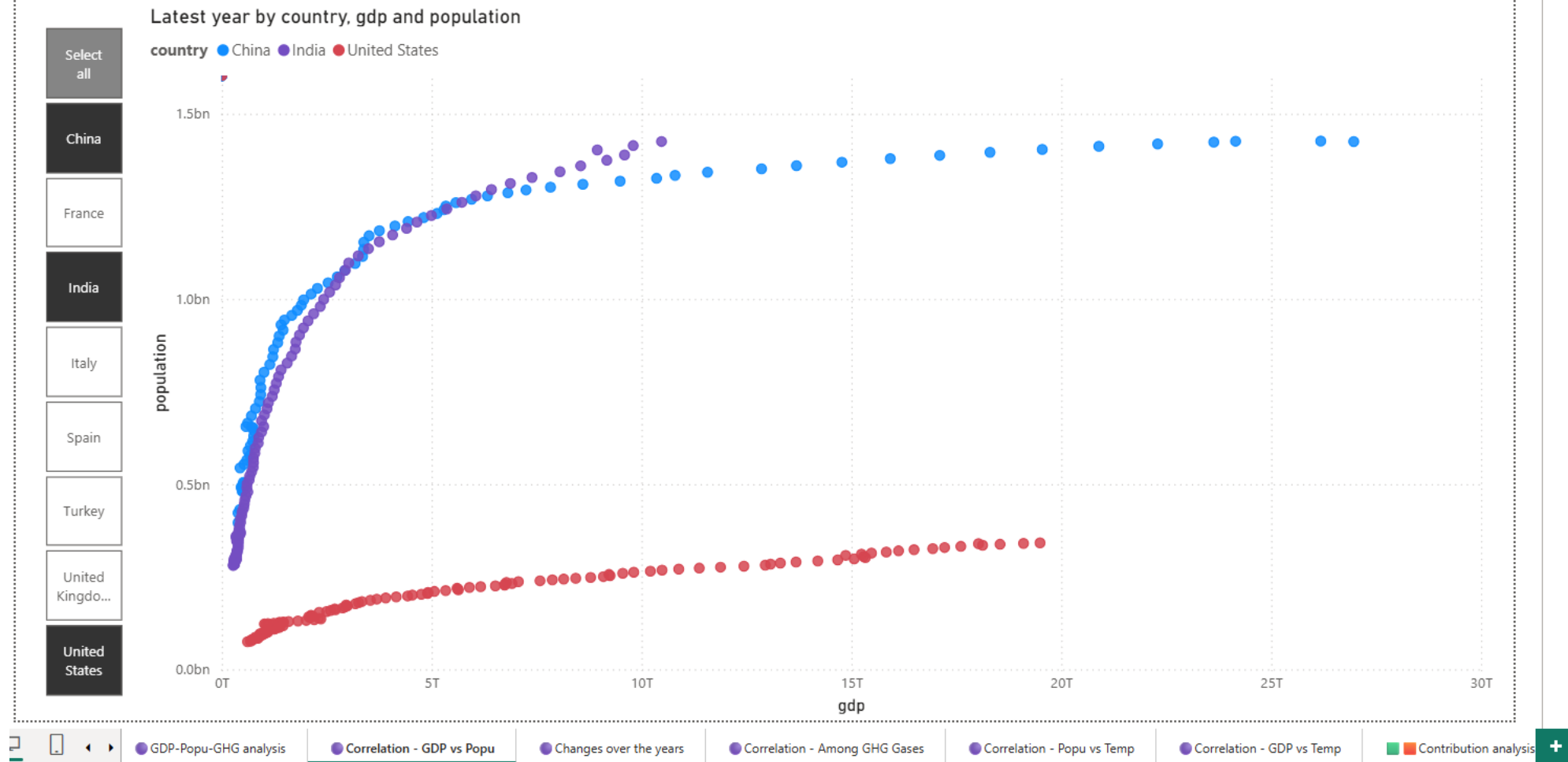
Analysis for US, China and India

Overview of Econometrics and Population



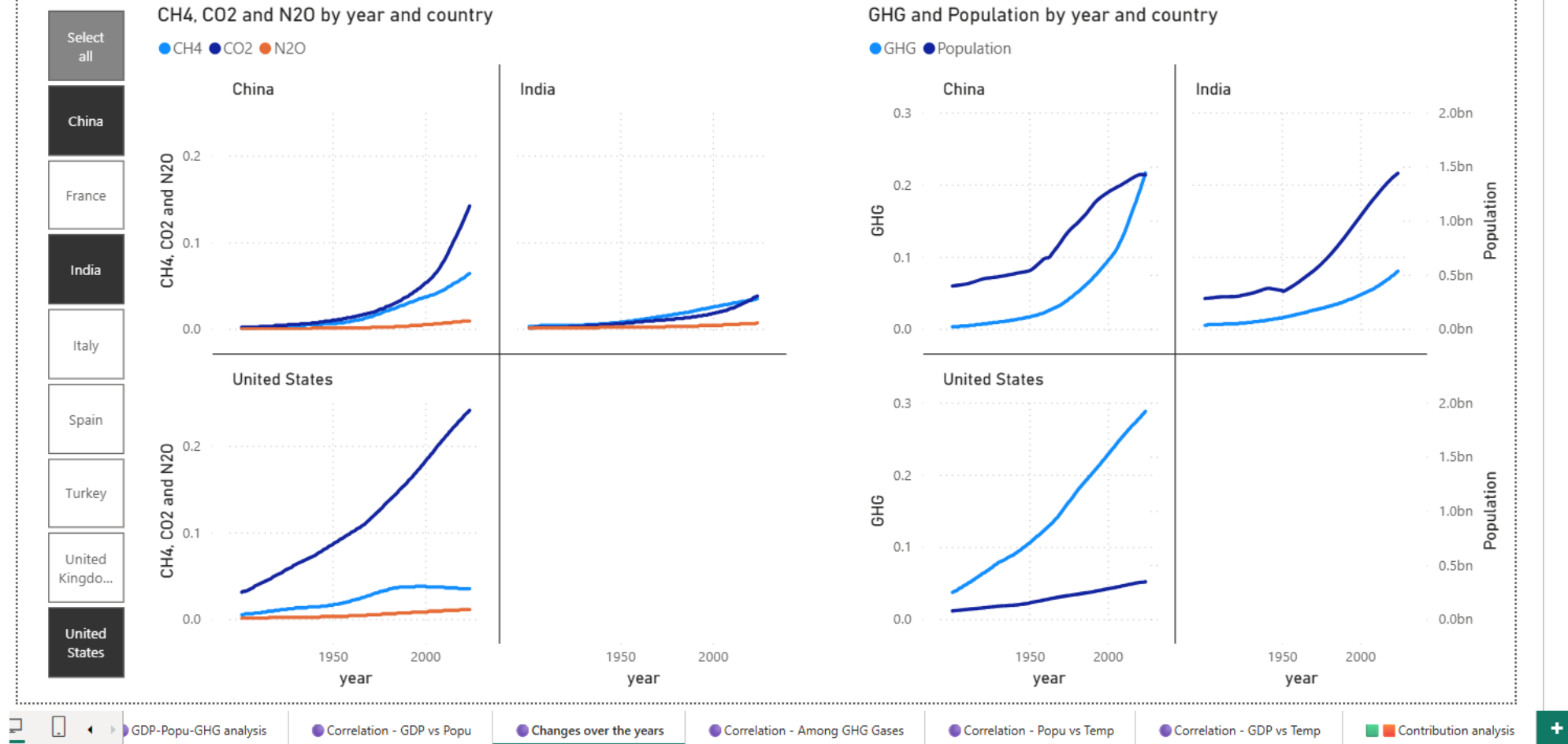
- China and US are the largest GDPs.
- China and India have the largest population.
- The GDP of China and India grew after 1960 while US shows steady and promising growth.
- Surprisingly population of US was much slower when compared to China and India.

GDP and Population trend analysis



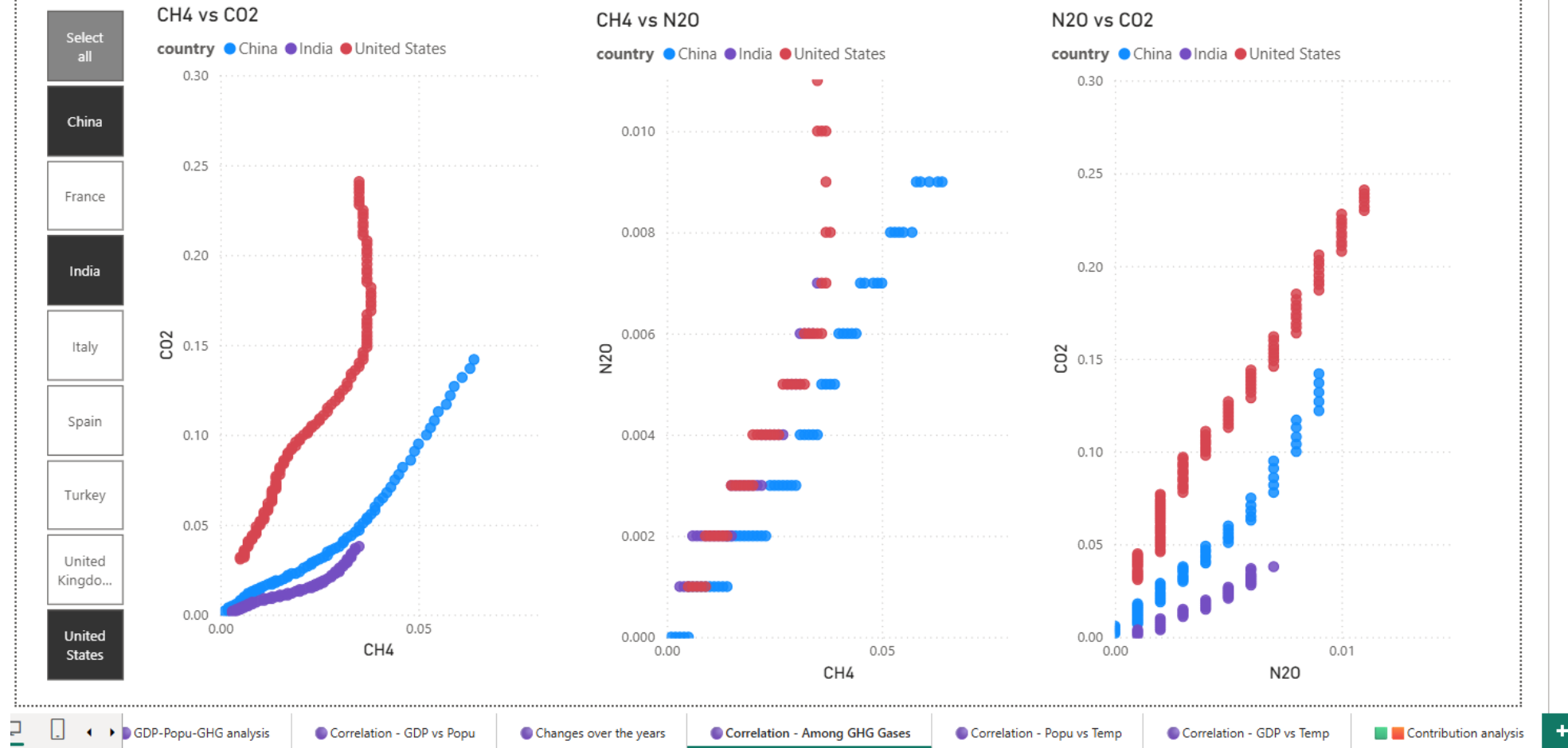
- In case of China and India GDP and population display a strong positive correlation.
- US on the other hand managed to increase its GDP without massive population growth.
- This contradictory behaviour indicates that it is mandatory to analyze each country relationship between features independently.

Temperature changes due to GHG



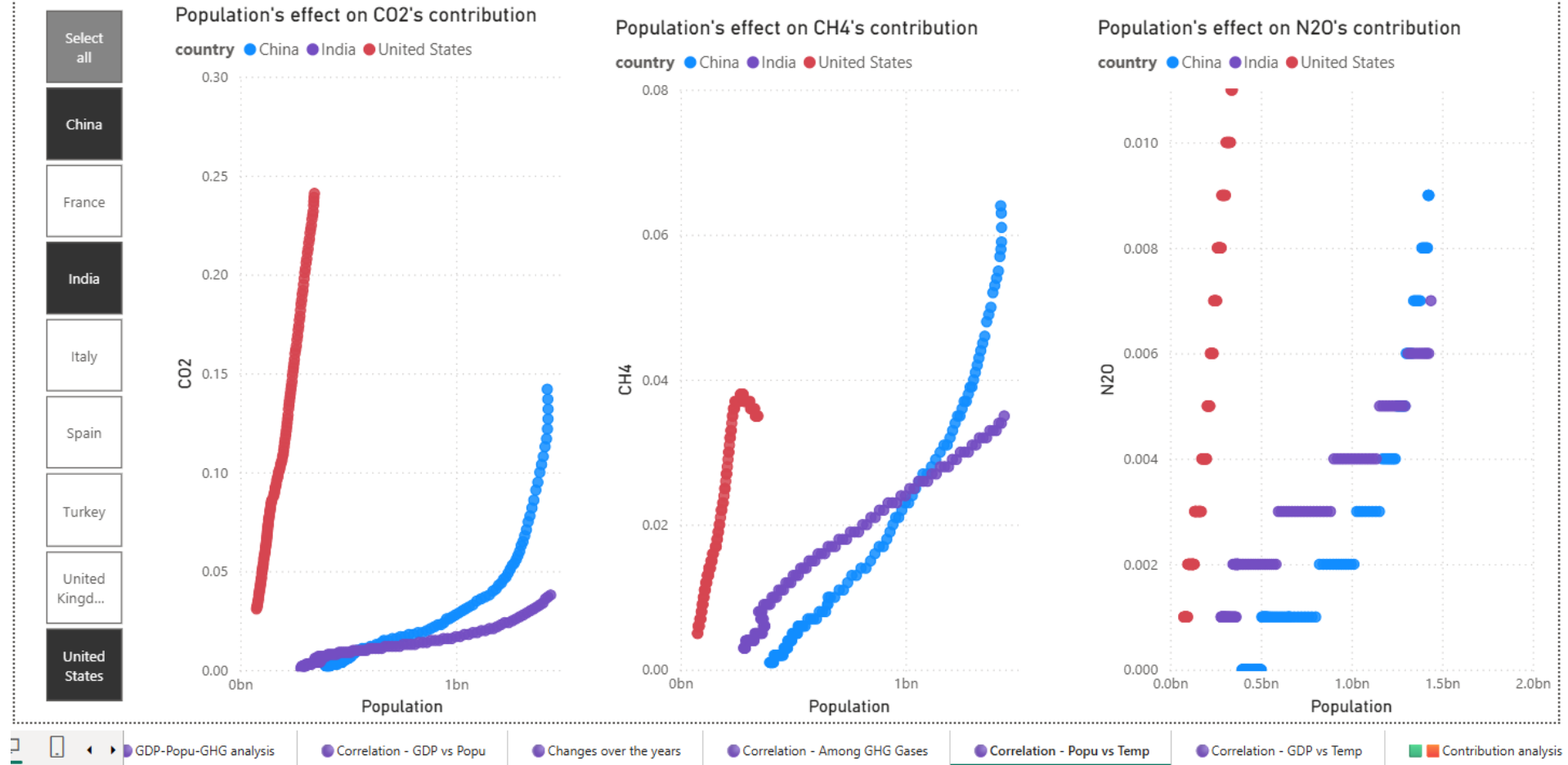
- CO₂ and CH₄ emissions followed a similar trajectory.
- CO₂ and CH₄ emissions for India progressed slowly but CH₄ exceeded CO₂. Although the difference is slight it goes to highlight India's focus on agriculture.
- CO₂ emission escalated for US while the CH₄ emission was steady.
- N₂O emission was almost a flat line for China, India and US.

Correlation of temperature changes among the GHG



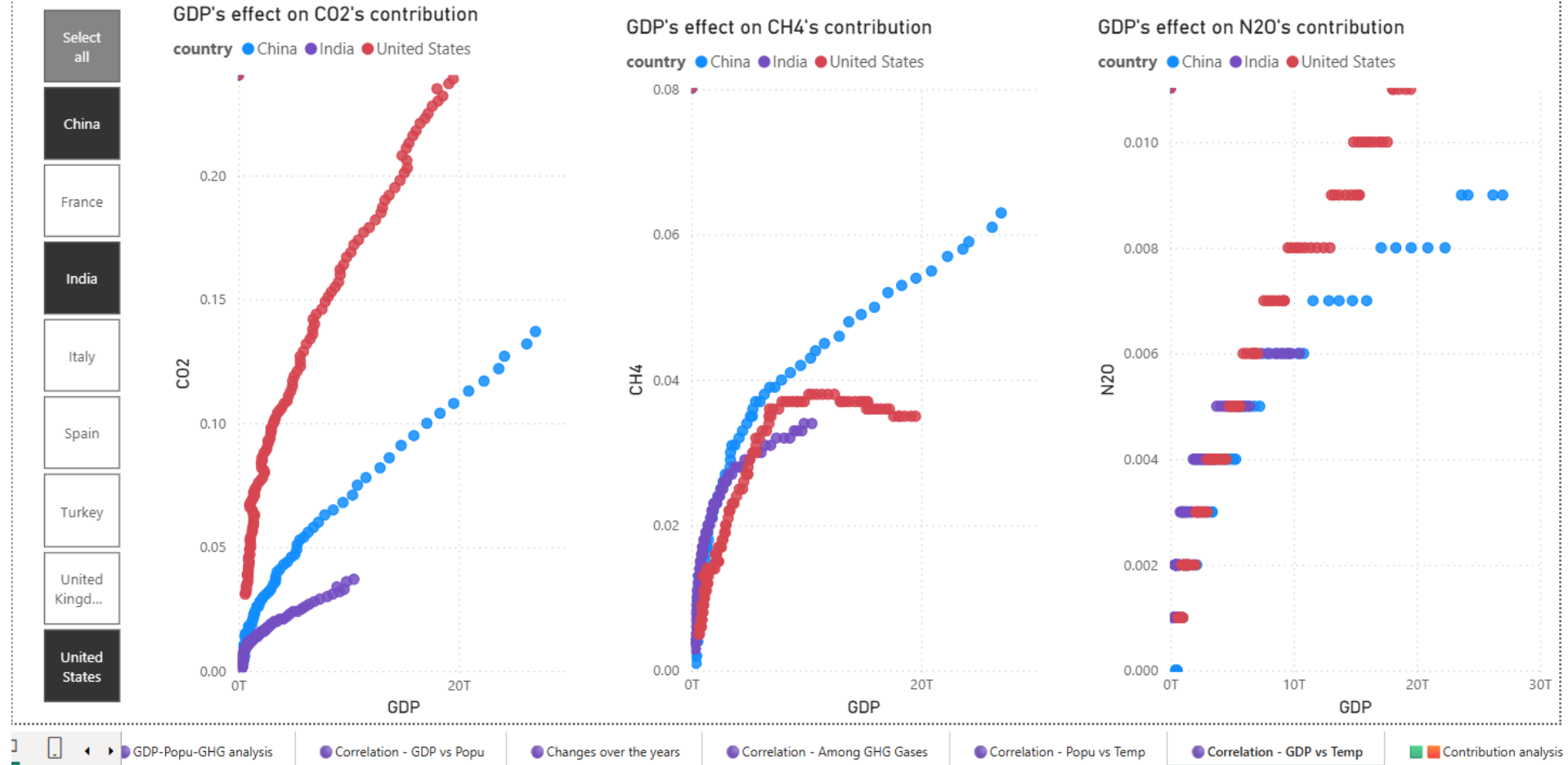
- Increasing trend in the only correlation we see no influence of the gases on each other can be inferred.
- The magnitude of the difference in the temperature is very evident with US being way ahead of the curve.

Impact of population on contribution of GHG gases to temperature changes



- Results mentioned in the previous slides can be confirmed
- CH₄ emissions dropped for US which was not clearly visible before

Impact of GDP on contribution of GHG gases to temperature changes



- Results mentioned in the previous slides can be confirmed
- N₂O emission overlap among the three countries reflects the flat line behaviour

Contribution of each GHG to the global temperature shifts

Select Country

Multiple selections

Year

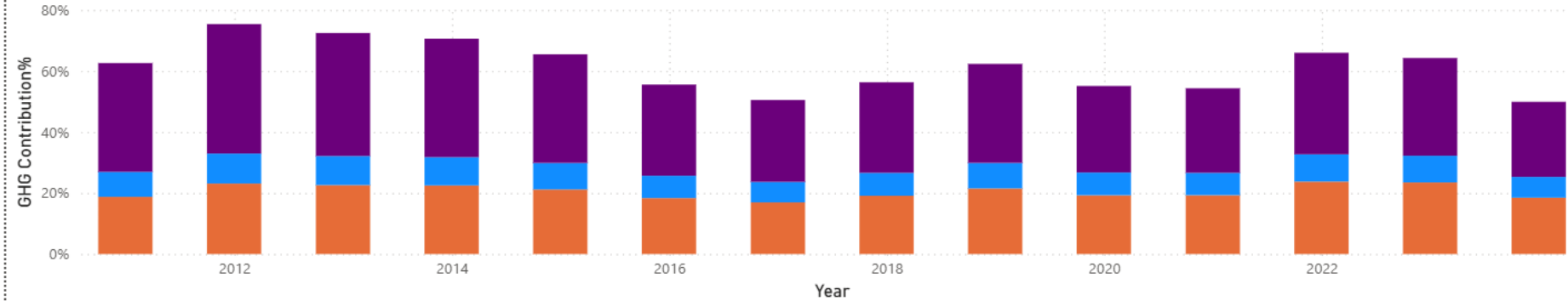
2010

2023

Filters

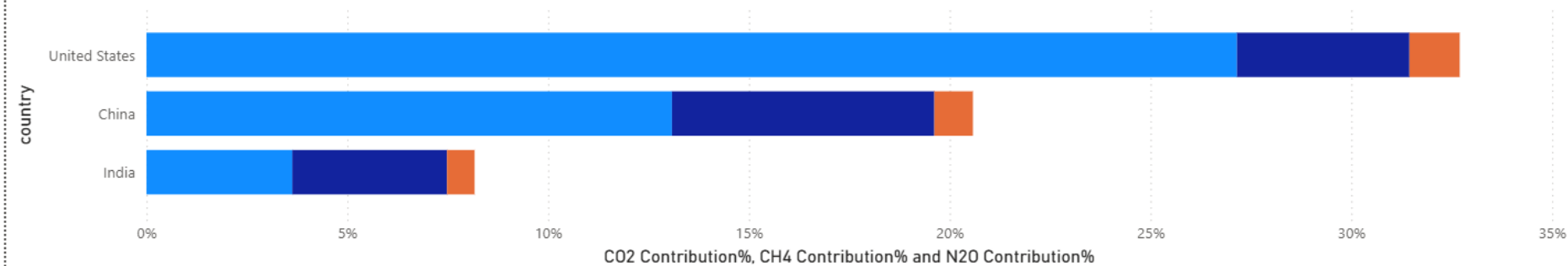
GHG Contribution% by Year and Country

Country ● China ● India ● United States



CO2, CH4 & N2O Contribution%

● CO2 Contribution% ● CH4 Contribution% ● N2O Contribution%



- US is the largest contributor of CO₂ emissions
- China is the largest contributor of CH₄ emissions
- Contribution % where the lowest in 2017.