Data Visualization and Dashboards with Tableau

For this project:

❑ Option #2
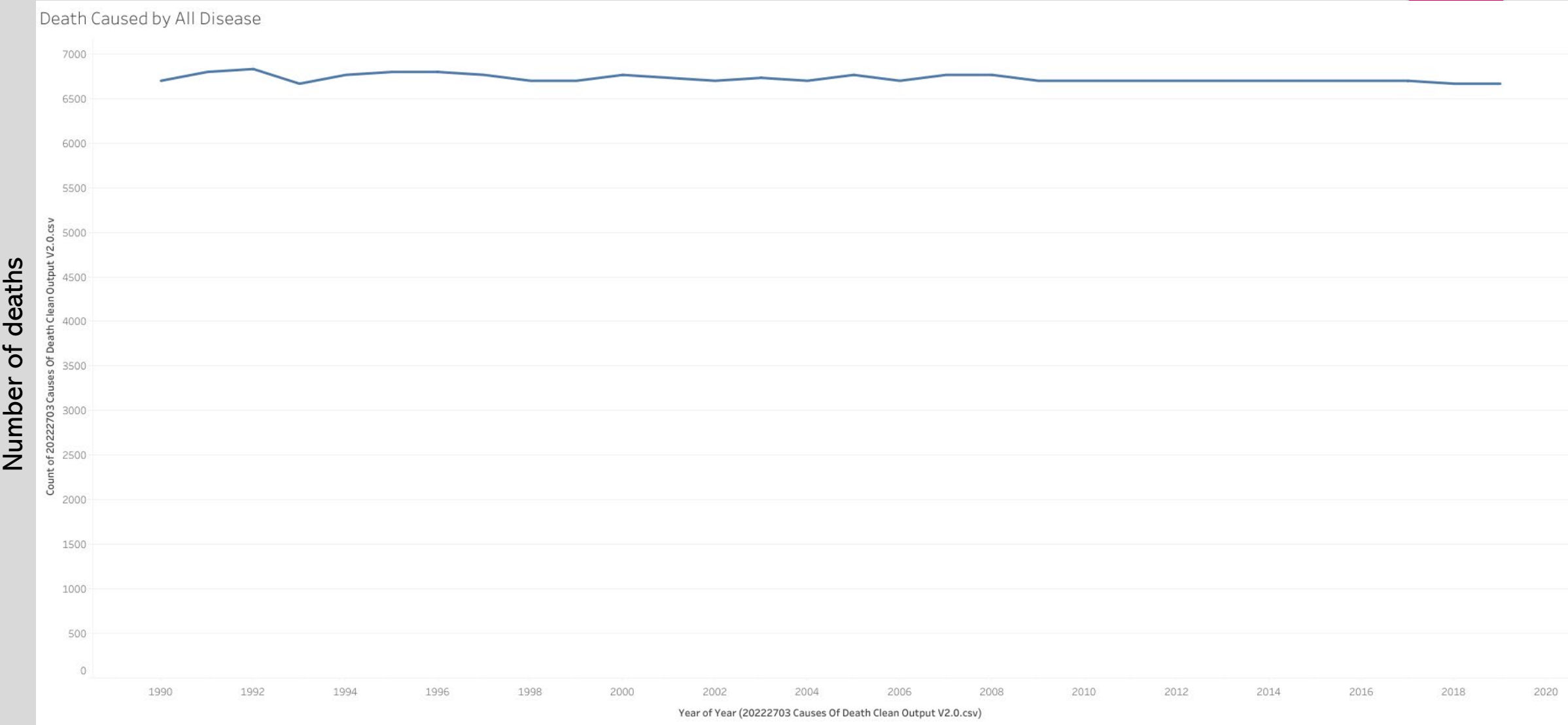
❑ "*Causes of Death - Our World In Data*"

Goals:

Answering the following questions:

❑ What is the most common cause of death?

❑ Which country suffers the most? Why?

Death numbers by all causes of deaths worldwide – 1990 to 2019:

Death Caused by All Disease

Number of deaths

Time (two years intervals)

Data analysis - causes of death can be divided into three groups:

1

Certain causes of death increased over time.

Ex. cardiovascular diseases and Diabetes

2

Certain causes of death decreased over time.

Ex. Meningitis and Maternal disorder

3

Certain causes of death that didn't change over time.

Ex. poisoning and road injuries.

iii Columns | Measure Names

Rows | Entity

Table #1

| Entity	Deaths - Drug use disor..	Deaths - Parkinson's di..	Deaths - Chronic kidney..	Deaths - Alzheimer's di..	Deaths - Diabetes melli..	Deaths - Cardiovasc..
World	2,656,936	7,183,831	28,930,713	29,785,753	31,482,459	447,979,666
China	626,914	1,533,092	4,195,276	5,381,846	3,468,554	100,505,973
India	168,928	756,832	4,556,172	1,707,561	4,781,170	52,994,710
Russia	259,452	236,367	325,433	972,305	369,649	33,903,781
United States	800,798	661,288	2,018,497	3,302,609	2,030,632	26,438,346
Indonesia	12,980	145,752	964,478	487,566	1,888,549	13,587,012
Ukraine	45,327	93,588	57,772	369,800	95,725	13,053,052
Germany	43,072	264,727	616,900	1,114,977	621,574	10,819,770
Brazil	15,696	171,324	820,932	924,942	1,315,755	9,589,019
Japan	12,254	308,326	966,881	2,638,908	251,165	9,210,437
Pakistan	17,829	92,715	874,990	244,109	845,343	7,745,192
Italy	22,033	179,066	346,993	929,827	568,245	6,614,384

From this table we can observe the following:

❑ The number one cause of death is cardiovascular disease.

❑ Diabetes mellitus comes second.

❑ China and India are the lead countries for the number of mortalities.

How bad is it?

# Cardiovascular disease and Diabetes mellitus

- 20% of cardiovascular disease mortalities are in China.

- 10% of cardiovascular disease mortalities are in India.

- Diabetes mellitus is the second cause of death, but is much lower compared to cardiovascular disease
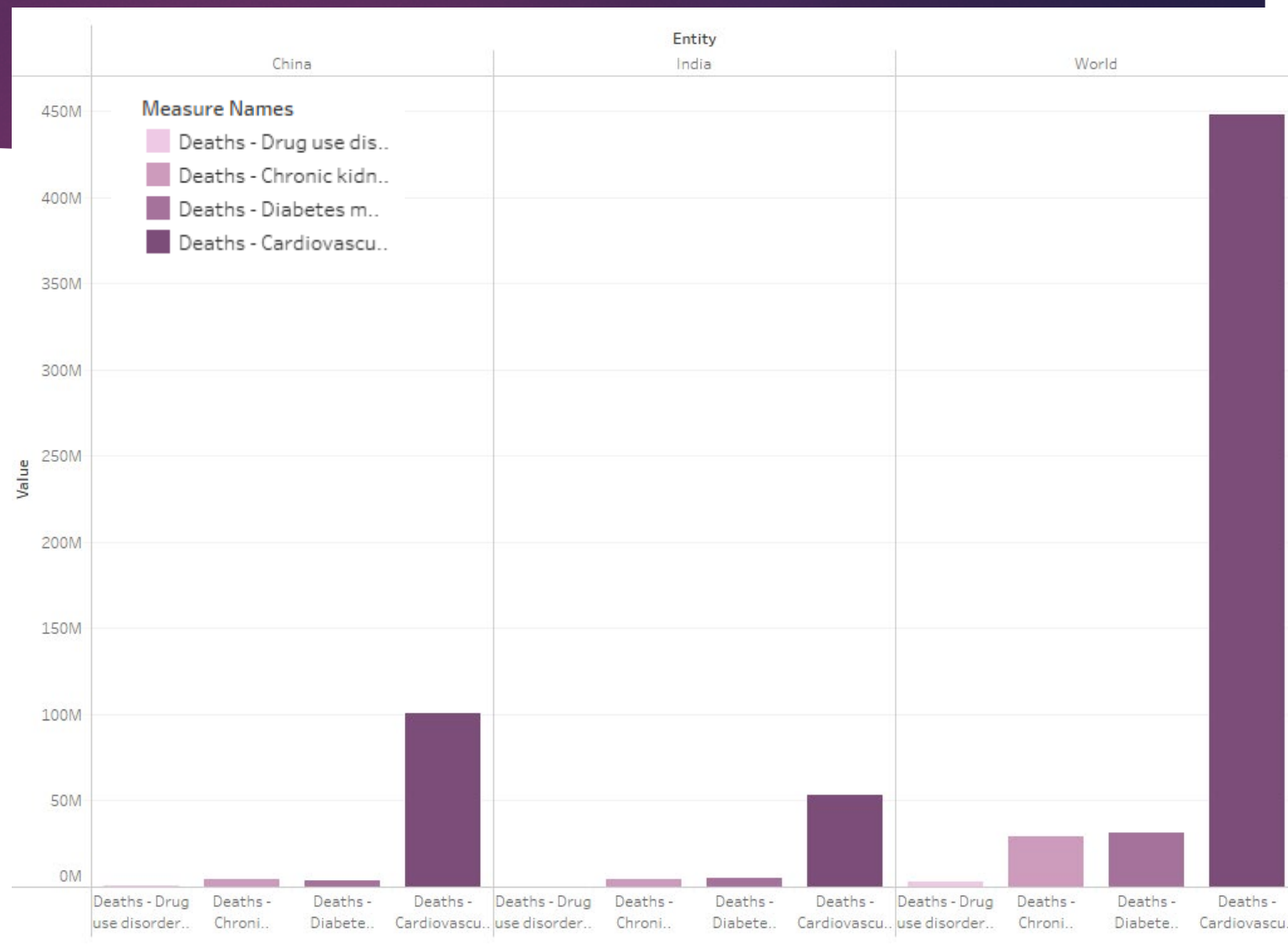
The map also supports the same conclusion:

➤ China has the highest number of mortalities in cardiovascular disease in the world.

➤ India comes second.

Q: Are these numbers high because Cardiovascular disease is a problem in China and India, or because China and India have a higher population?
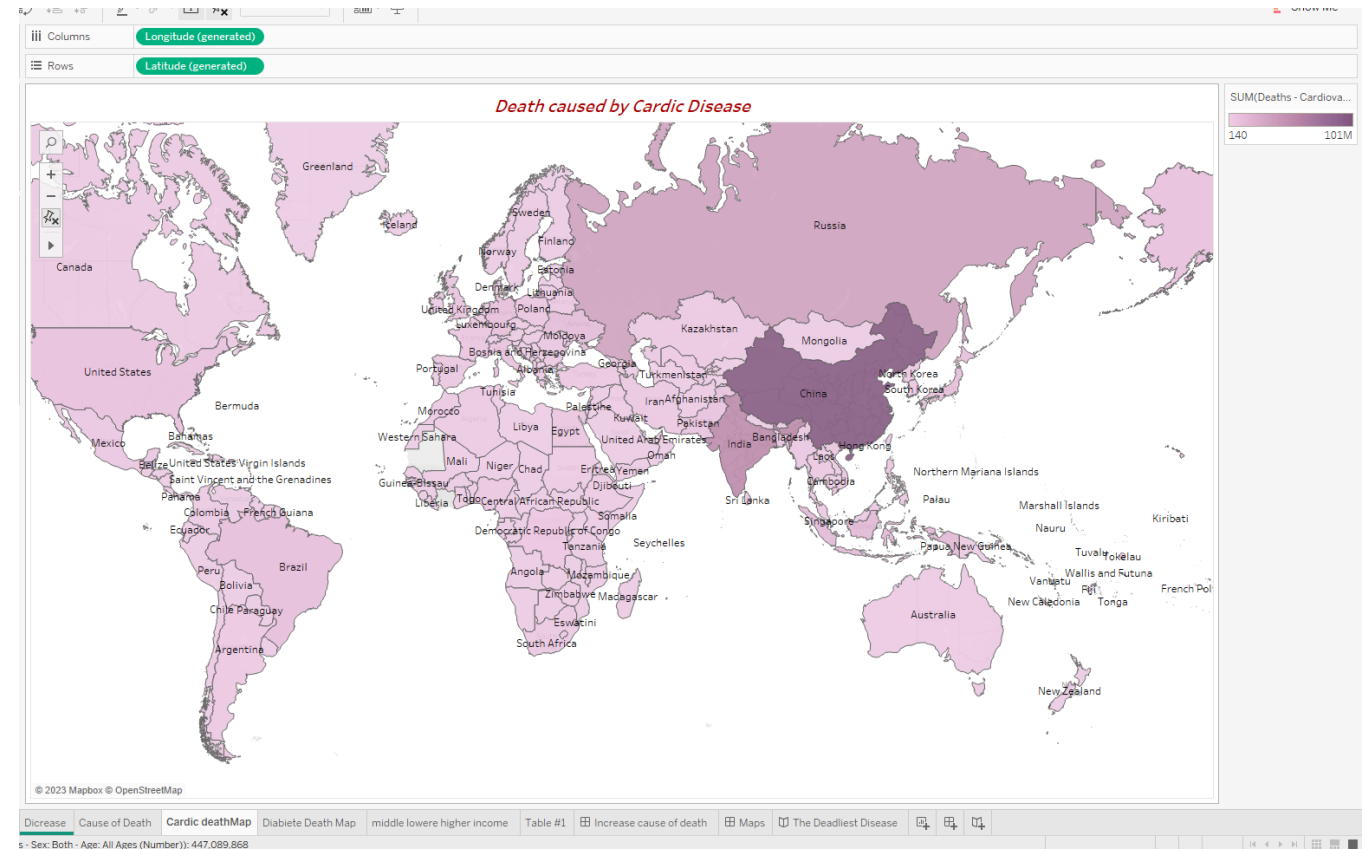
Q: Are these numbers high because

Cardiovascular disease is a problem in China and India, or because China and

India have a high population?

▶Looking at the numbers from a different lens. Based on the World Bank categories of the countries:

- ▶ High income countries
- ▶ High-middle income countries
- ▶ Low-middle income countries
- ▶ Low income countries

| Group	July 1, 2022 for FY23 (new)	July 1, 2021 for FY22 (previous)
Low income	< 1,085	< 1,045
Lower-middle income	1,086 – 4,255	1,046 – 4,095
Upper-middle income	4,256 -13,205	4,096 -12,695
High income	> 13,205	> 12,695

Cardiovascular disease by country income
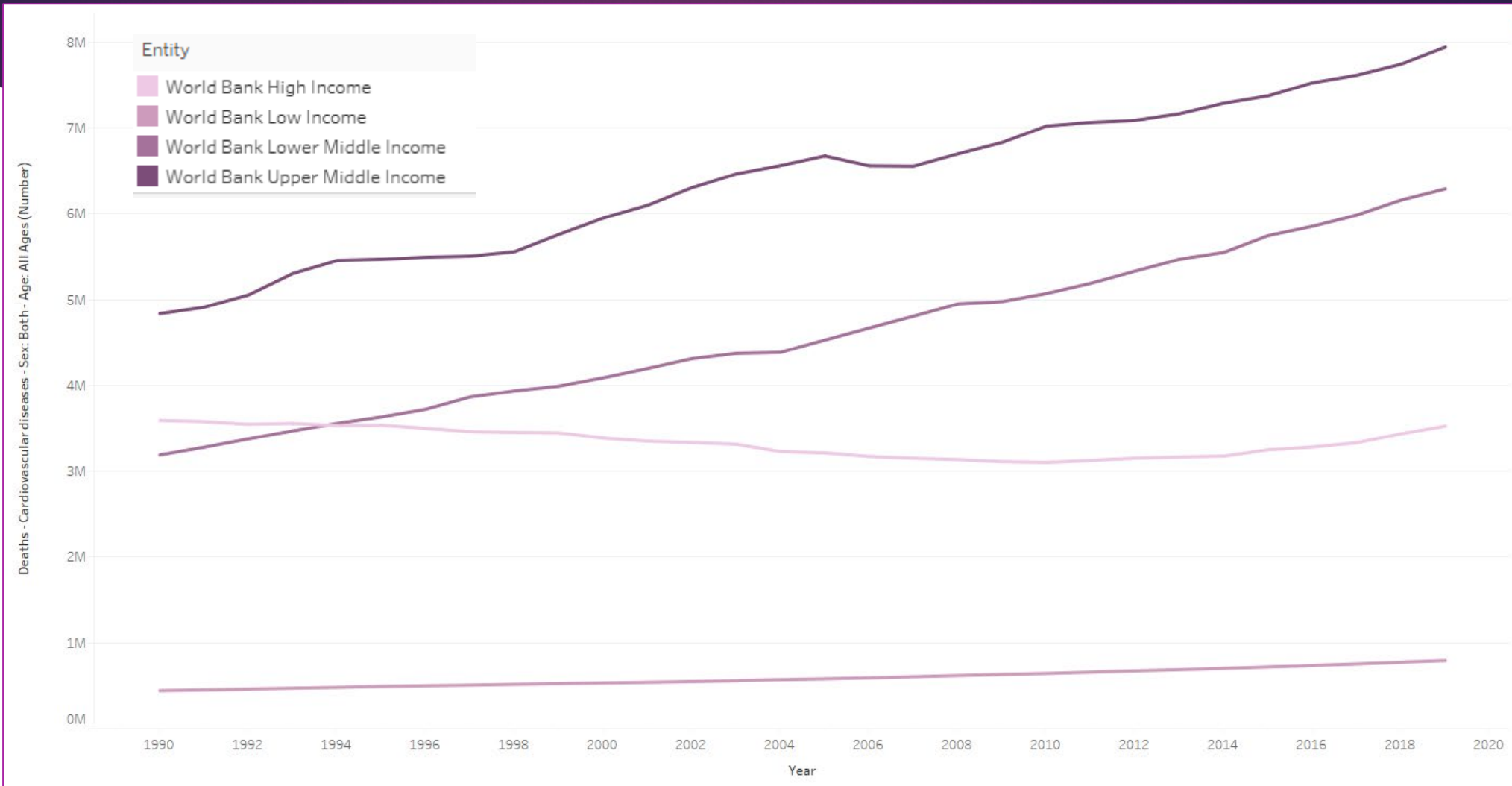
From the previous graph:

▶ It is evident that the countries that are classified as upper-middle and lower-middle income have the highest rate of cardiovascular diseases.

▶ The data was collected in 2019 and at that time, China and India fell under these categories.

From this data we can clearly say that cardiovascular diseases is not prominent in China and India, however, it seems that way because China and India have a large population.
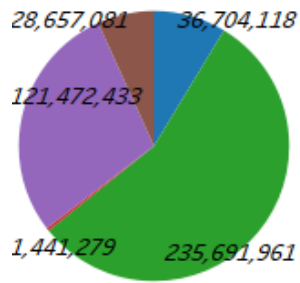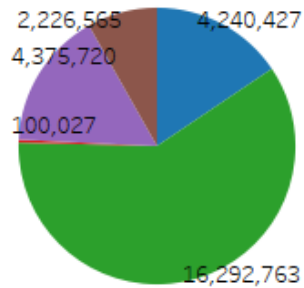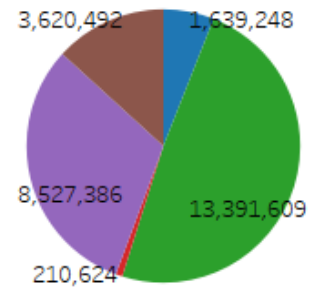
Cardiovascular, Diabetes mellitus and Alzheimer/Dementia causes of death by continents