GDP Growth Process Book

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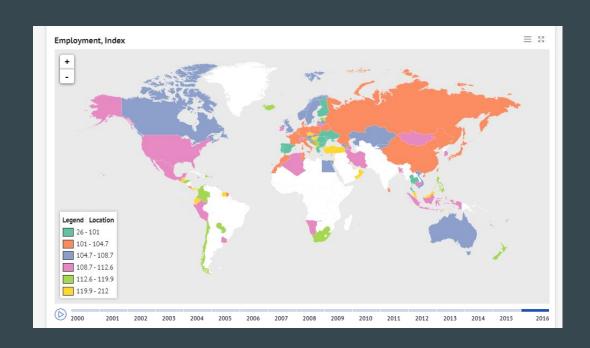
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Overview

The goal of this visualization is to provide insights on health, education, and employment with respect to countries which have the highest percent increase of GDP per capita from 2000 to 2019. GDP per capita is an important metric but cannot summarize the well being of a country alone. This visualization shows some expected and unexpected trends relative to countries with high percentage increase in GDP per capita.

Related Work

I was initially interested in creating something relating to world economy due to my BUS course. Then, I discover this Knoema chart in addition to other news articles.



Data Source

I found the data from World Bank Data (here). They had a collection of data from 2000 to 2019 focusing on the 10 countries with the largest GDP growth per Capita. I then looked for data relating to 3 fundamental aspects of a country's growth, namely: Education, Health, and Employment. There weren't any data cleanup necessary as all the information were already in csv format.

Question

I wanted to find out about the specifics of a countries growth and trends within these growths. Additionally, I wanted to provide insights on health, education, and employment with respect to countries which have the highest percent increase of GDP per capita from 2000 to 2019. Furthermore, I was curious on the most influential aspect of a country's GDP growth.

Implementation

Graph color correlated with map.

 When hovering over the bar chart, the world map demonstrates the part accordingly.

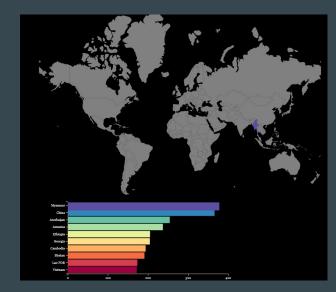
Tooltip demonstration

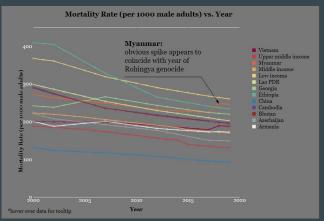
- When hovering the line charts, the percentage and country is demonstrated.

Key Influential event

- I added additional events when there were specific points that were influential.

Dot animation





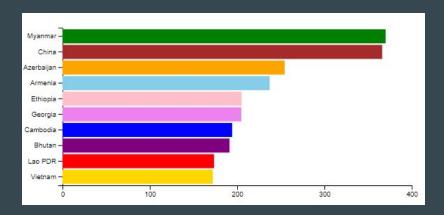
Initial Implementation

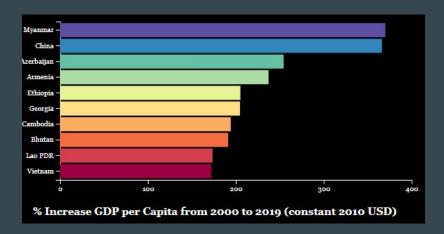
The initial implementation was on a white background and I wanted to highlight all the countries at once. However, due to there being smaller countries it was very difficult to differentiate.



Process

The initial bar chart and line charts had very stark contrasting colors. Due to consideration for aesthetic it was switched to a more cohesive color scheme on a black background.





Evaluation: Discovery

Surprisingly, employment was fairly flat throughout the years, having a large % increase in GDP per capita did not translate to increased employment in most cases.

In general, mortality rate has shown consistent improvement over the years. This trend is something we would expect with improved GDP per capita. However this is not exclusive to these 10 countries. Low income countries as a group also show the same trend.

Although there is some missing data, tertiary school enrollment appears to have increased over the years for these ten countries. Furthermore, several of these countries start below the low income group and then surpass it by 2019. This is a trend we would expect with increased GDP per capita.

Evaluation: Reflection

Overall, I am very pleased with the way the visualization is working. I could further improve it by improving the spacing between the graphs and text.

Consistent color coordination representing each country was also used to visually orient the reader to the data from scene to scene. The user is presented with one main scene where they can choose between health, education and employment. I could also improve the visual of the redirections.

Research

https://knoema.com/yrtcvke/international-financial-statistics-ifs-by-indicator?indicator = Employment%2C%20Index

https://worldwithoutgenocide.org/genocides-and-conflicts/myanmar

https://www.visualcapitalist.com/visualizing-the-94-trillion-world-economy-in-one-chart/

https://data.worldbank.org/indicator/NE.GDI.TOTL.ZS

https://loading.io/color/feature/Spectral-10/