

# Problem Set #7

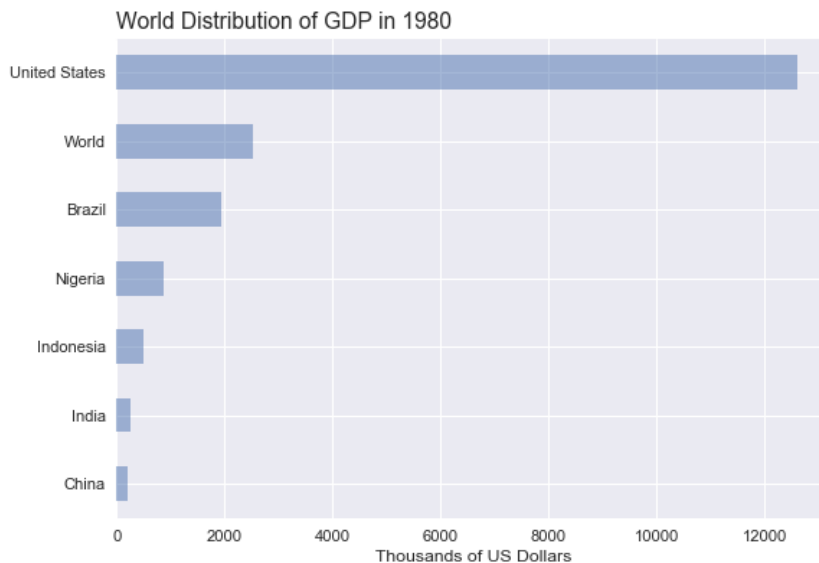
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## 1 Research Question

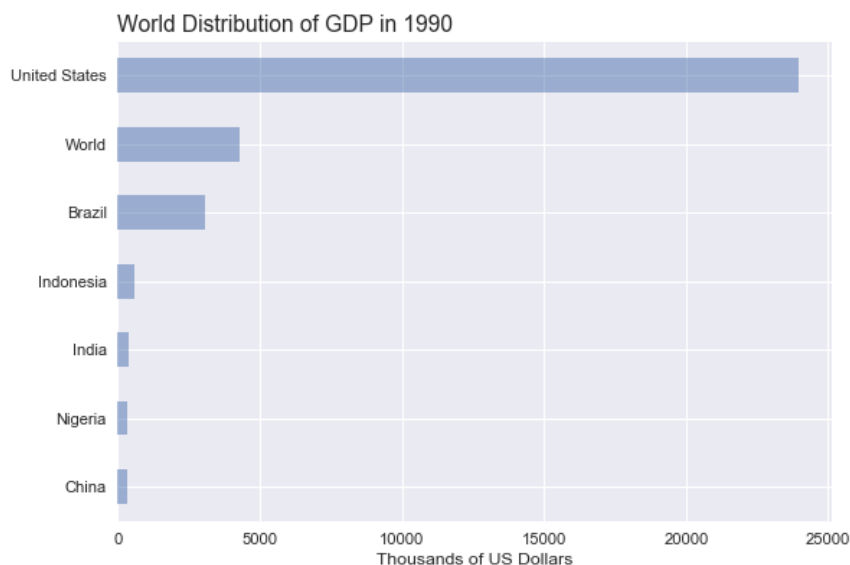
The world distribution of income is an important topic for economists. Many have looked at how GDP per capita has changed across countries over time. In this analysis I look at GDP per capita in 5 countries relative to the United States and the World level of GDP per capita from 1980 through 2016 at 10 year intervals. The data comes from the World Bank and GDP per capita is measured in thousands of current US dollars. In all years the United States has had the highest GDP per capita and as such serves as a great benchmark for comparison. The other countries that I examine move around quite a bit relative to the World and to each other. The countries that I have chosen for this analysis are Brazil, India, China, Nigeria, and Indonesia. I have selected these countries because they were the focus of a study by Sala-i-Martin, who examines a similar question, but also because they were among the most populous during the time period and presented interesting cases to study.

## 2 GDP Per Capita 1980



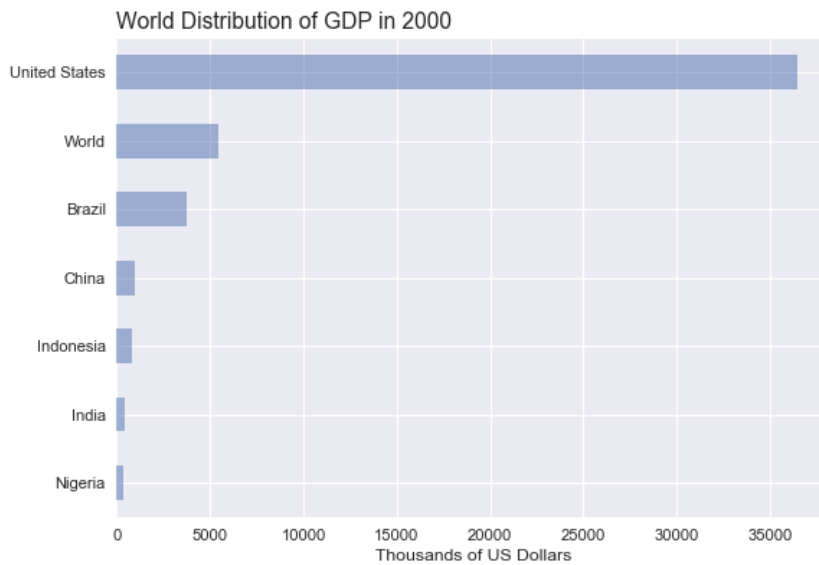
In the figure above we see that Brazil ranks near top of the group in GDP per capita. This could be due to the fact that Brazil saw a decrease in poverty in the 1970's which could have resulted in higher GDP per capita during the time frame. Surprisingly, Nigeria ranks next in GDP per capita which could be explained by a boost in the number of rich Nigerians in the late 1970's. Indonesia is next in line followed by India and China. Right before the 1980's, India was the second most populous country in the world and as shown in the graph incomes per capita were relatively low. Finally, China ranks last in GDP per capita in 1980 which could be explained by the fact that in the decade before, one third of Chinese citizens lived in absolute poverty.

### 3 GDP Per Capita 1990



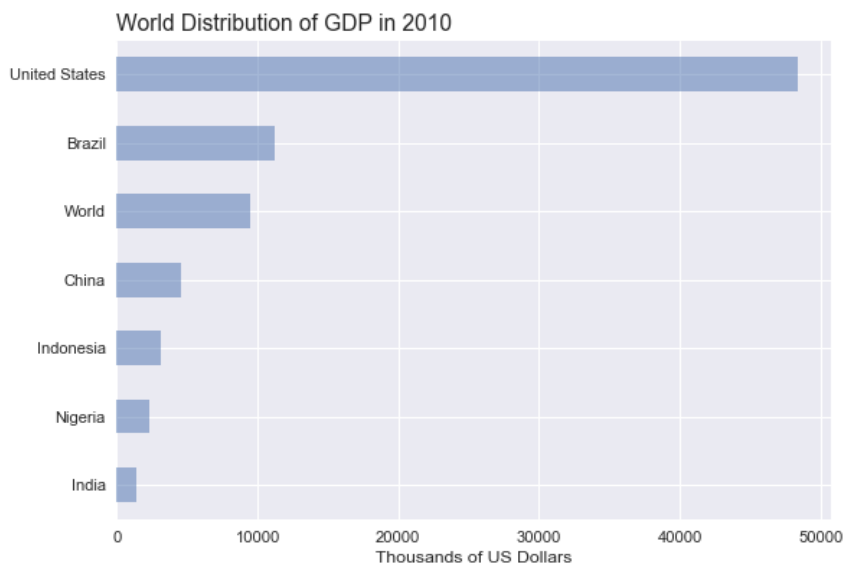
Ten years later this graph looks very similar, however, we see that the biggest change is Nigeria's fall from 4th place to 6th place which is consistent with exploding income inequality that was observed during this time.

## 4 GDP Per Capita 2000



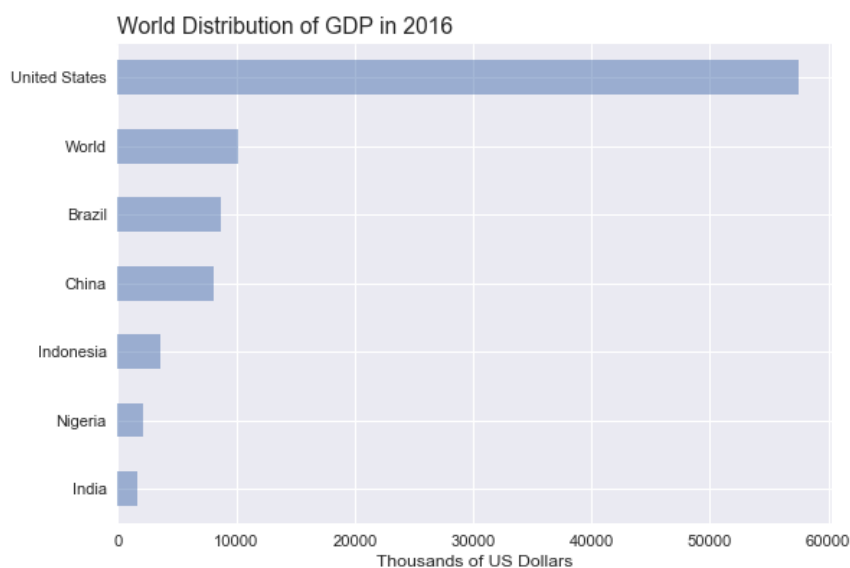
By the year 2000, China moves towards the top of the distribution now ranking above Indonesia, India, and Nigeria. This may be attributed to China's increased trade presence and integration into global markets.

## 5 GDP Per Capita 2010



In 2010, the biggest change is that Brazil's income surpasses that of the World GDP per capita. While Brazil experiences a substantial increase in GDP per capita we see that incomes around the world almost double. Brazilian GDP per capita increases from around 7,000 to over 10,000 dollars while the World GDP per capita increases from 5,000 to right under 10,000 dollars. Incomes also increase significantly in the United States increasing from 37,000 to around 48,000 dollars. The remaining countries also experience increases in income, however, these changes are not as significant. The final change we see is that India falls to the very bottom of the distribution. This could be attributed to the boom in population that India saw during this time which was not also accompanied by a comensurate increase in incomes.

## 6 GDP Per Capita 2016



In the final year I examine, we do not see many significant changes. The World GDP per capita again rises above Brazil with all of the other countries maintaining the same order as before.