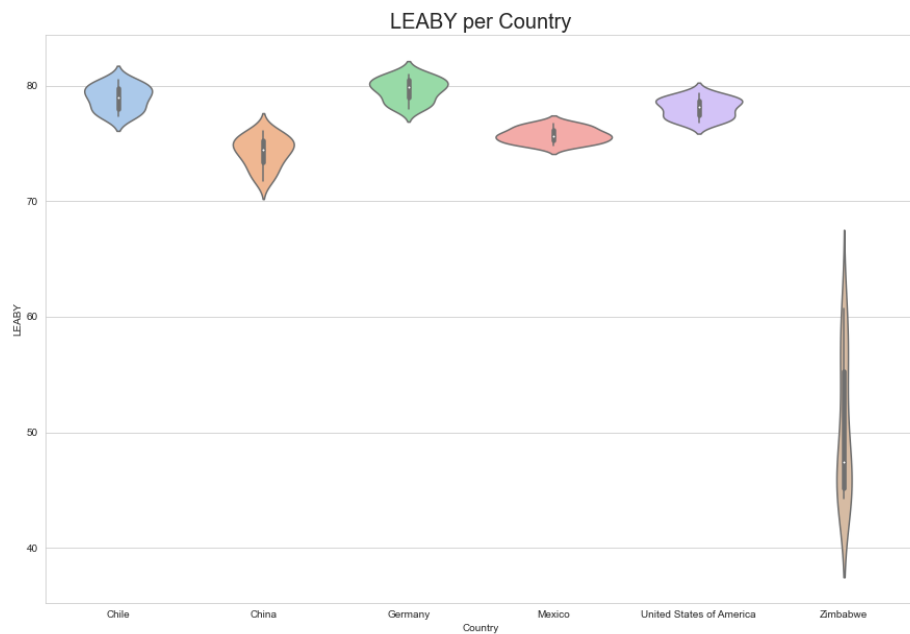


korty.codes

Life expectancy vs GDP

What can we find out?



What information can we get out of these shapes?

In this plot we have plotted the life expectancy at birth (LEABY) per country over the years. Something to note is the big difference in value between Zimbabwe and the other countries represented in our data. As well as the difference in size of the plot.

The first tells us that the life expectancy in Zimbabwe is quite low. The second tells us that there is a change in the life expectancy in Zimbabwe. Later we'll have another graph that will tell us if it is going up or down.

Life expectancy per Country

What is our data about and what is included?

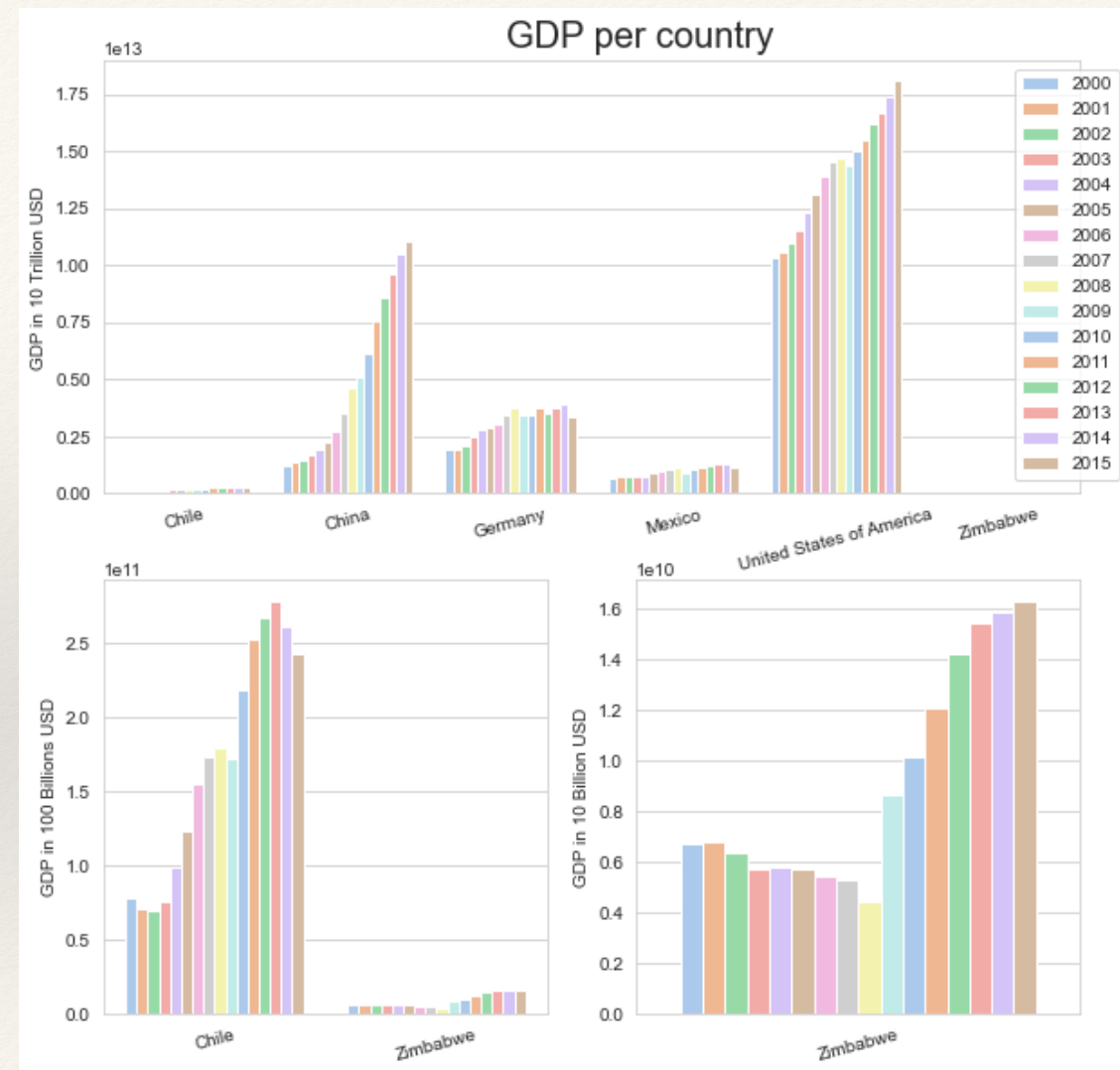
GDP per country over the years

We can see 3 plots. They are basically all the same plot but more zoomed in. We have to do this to show their values as the difference is so big it will not even show up on the graph as shown in the top plot.

Important things to note in these plots are:
Y-axis value is smaller on the bottom plots.
China and USA, their GDP keeps on rising and China's GDP almost looks exponential.
Zimbabwe has a big surge in 2008.

note:

I am aware I am using a categorial colour palette for a technically sequential dataset, the years. However I find this easier to differentiate between the years.



Life Expectancy per Country

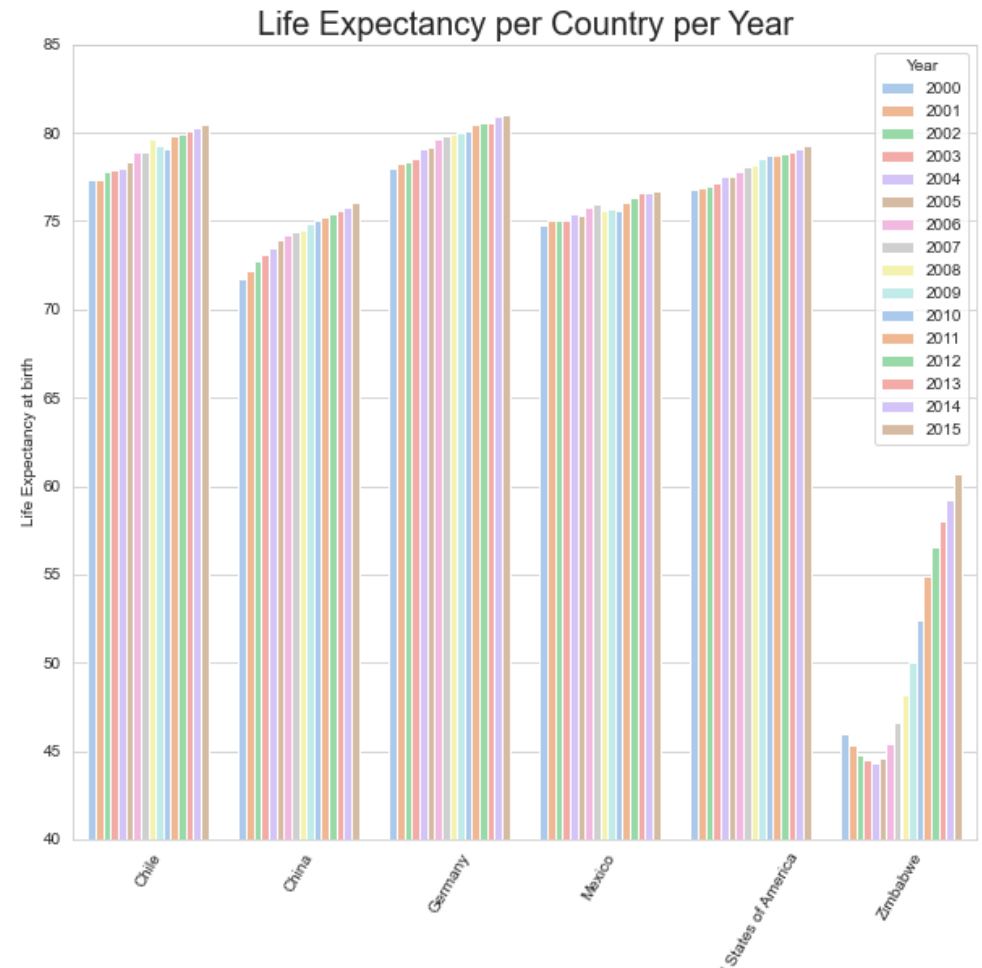
What can we learn from this information?

All countries increase over the total span of our data collection.

Chile actually has a high life expectancy, especially for their GDP, which we will get to in a later slide.

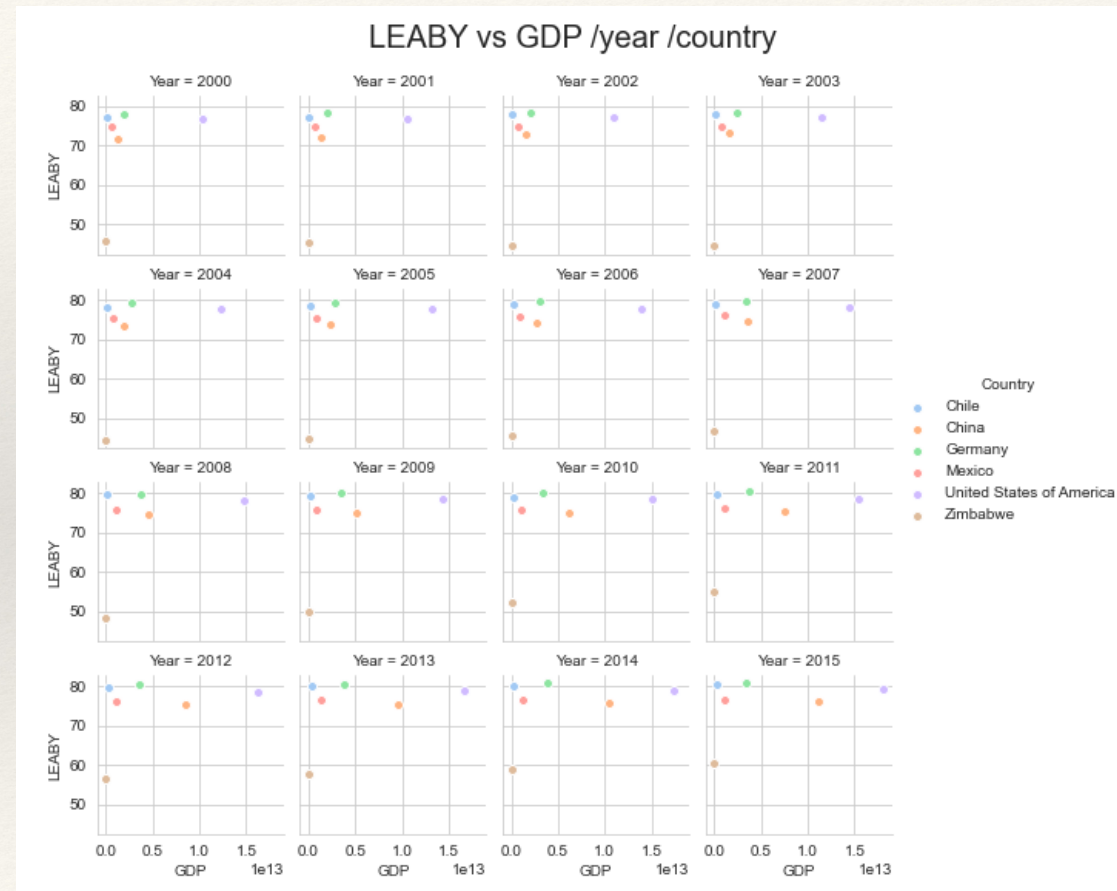
China sees a decent increase where the USA increases a bit slower.

Zimbabwe has a dip towards 2004 and a great growth of life expectancy after that.



Life expectancy vs GDP /Country /Year

- ❖ Each plot represents a year
- ❖ High on the plot = high life expectancy
- ❖ Right on the plot = high GDP
- ❖ Notice how China makes it's way to the right
- ❖ Notice how Zimbabwe moves up
- ❖ Notice the grouping of countries in year 2000 and how they are separated in 2015



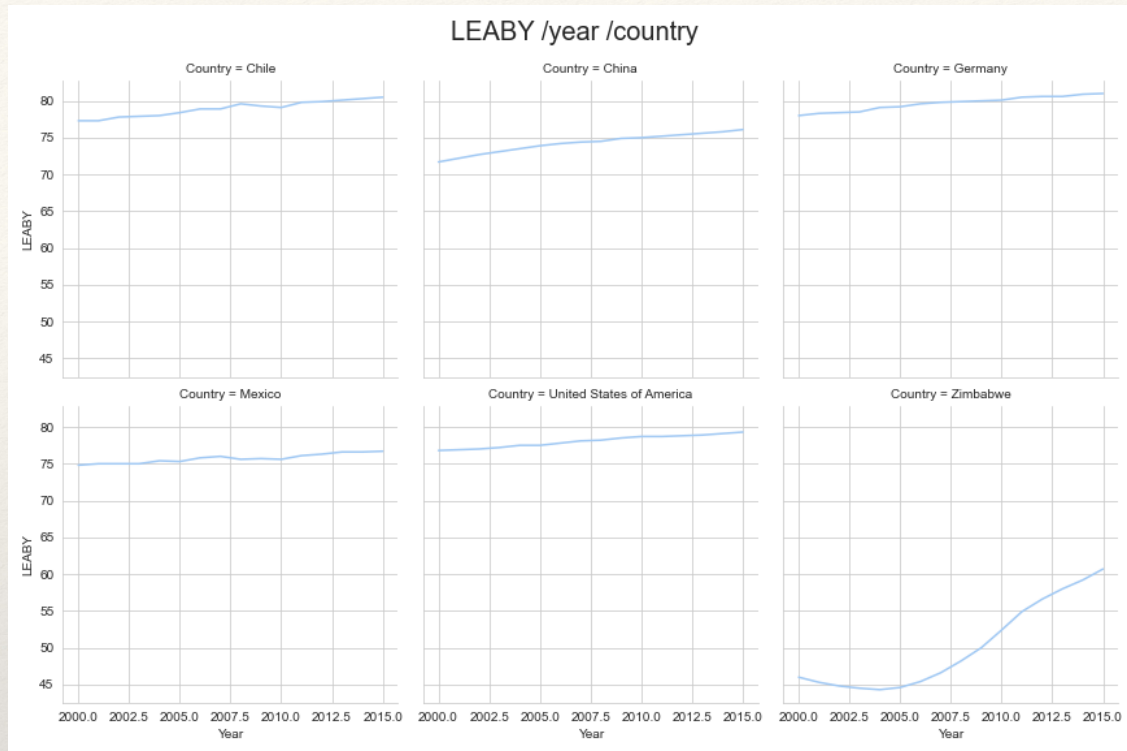


korty.codes

GDP over the years per country

Here we can easily compare the rate different countries change their GDP by. The downside again is that some of the values are so small they seem to not be moving at all. But we've seen this on the barplots in an earlier slide.

View the trend of the GDP for each country



korty.codes

Life Expectancy over the years per country

We can easily compare the life expectancy at birth for the different countries. We have the same issue but now in reverse with Zimbabwe, where now to be able to show Zimbabwe we have less of an insight in the other countries. Remember with the GDP we don't have much insight in Zimbabwe.

The first thing we note is that all countries have a line going upward meaning Life Expectancy is increasing. Secondly, we can easily see how steep the line is and get a feel of that increase.

Easily view the trend of life expectancy per country

What could have caused the shape of these plots?

- ❖ China boomed as an export country and increased its wealth
- ❖ Some countries might have developments where health care is more readily available
- ❖ GDP crossed certain thresholds for certain countries which allowed more access to health care
- ❖ If we do some searching on Zimbabwe we can see that there was unrest during the time of the dip in life expectancy in 2005
- ❖ Chile has a high life expectancy yet a relatively low GDP which can be explained by looking at their care free lifestyle

Issues and Limitations

- ❖ As described earlier there were some issues with the dataset. One being the values are so spread out it is hard to get them on the same plot.
- ❖ If we have a larger dataset with more countries we could group them into groups by their values so that every country can be displayed properly. We can then use the averages of each group to compare them with each other.

Reflection / Coding issues

- ❖ I had struggles visualising this dataset due to the values being so far apart
- ❖ Some pieces of code I do not know how to alter to change what I want. For instance: xticks on the facetgrid plots are now showing .5 years. As well as selecting different colours for certain graphs

korty.codes

The End

Thank you for taking the time to review
my work. Please feel free to leave feedback.
