

## Does GDP growth help you live longer?

(Katrin Werlen)

A common thought is, that people will be healthier and live longer if the economy of a country is prospering. More money means better life, better food, better health care = longer life.

But is this really true? Data from 6 different countries was collected and analyzed to give some more meat to the bone of this thesis.

Figure 1 shows the change in life expectancy in 6 different countries. Greatest variation shows Zimbabwe. Yes true, this is a poor country in Africa, so certainly their GDP also had the best development over time and they have now much better health care, so they live longer!

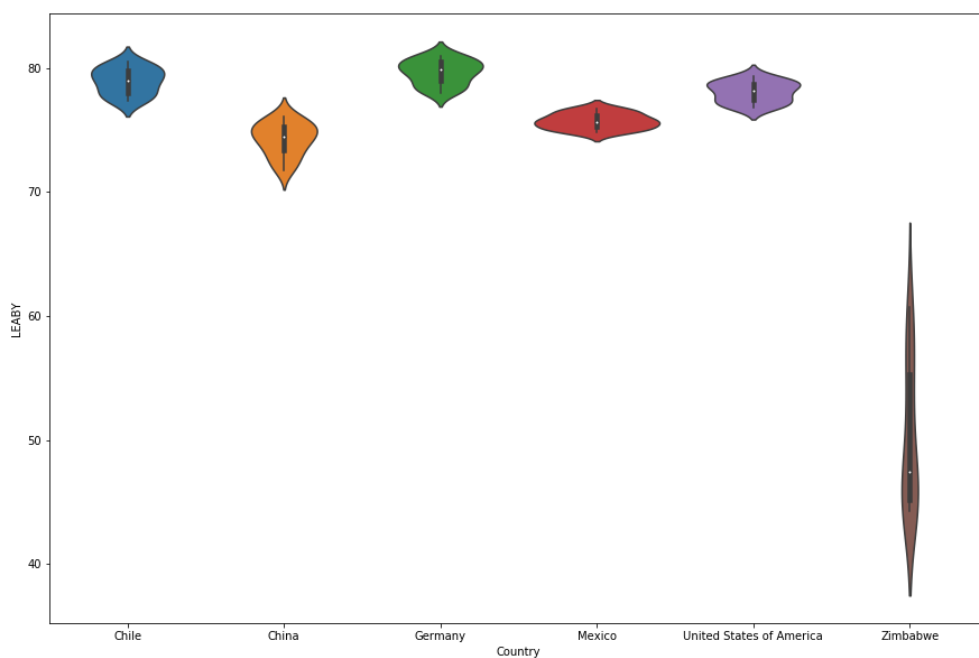


Fig 1: change in Life expectancy over time in 6 different countries

Let's check this out and see if our thesis is true. Fig 2 shows the development of GDP in the six countries of interest over time. But hold on, Zimbabwe's GDP didn't move a bit, while China is growing and growing.

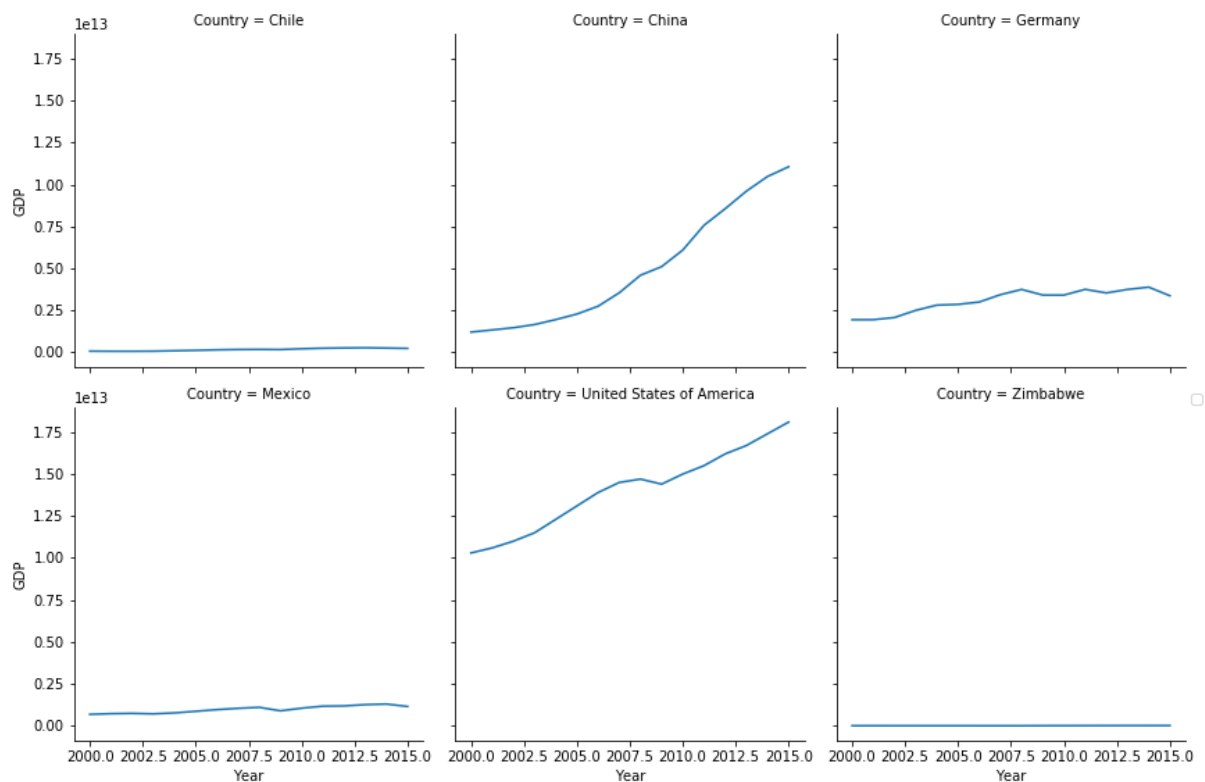


Fig 2: GDP development from 2000-2015 in the 6 analyzed countries (data: World health organization and World Bank)

While certain countries have very low GDP and stay on that low level throughout the monitoring period from 2000 – 2015 (like Zimbabwe, Mexico, Chile) others are clearly progressing, interestingly not only countries like China, which start from a low level and prosper but also developed countries like the US which start high and advance even further.

So is our thesis wrong. Let's look into the detailed life expectancy development of all the countries in figure 3.

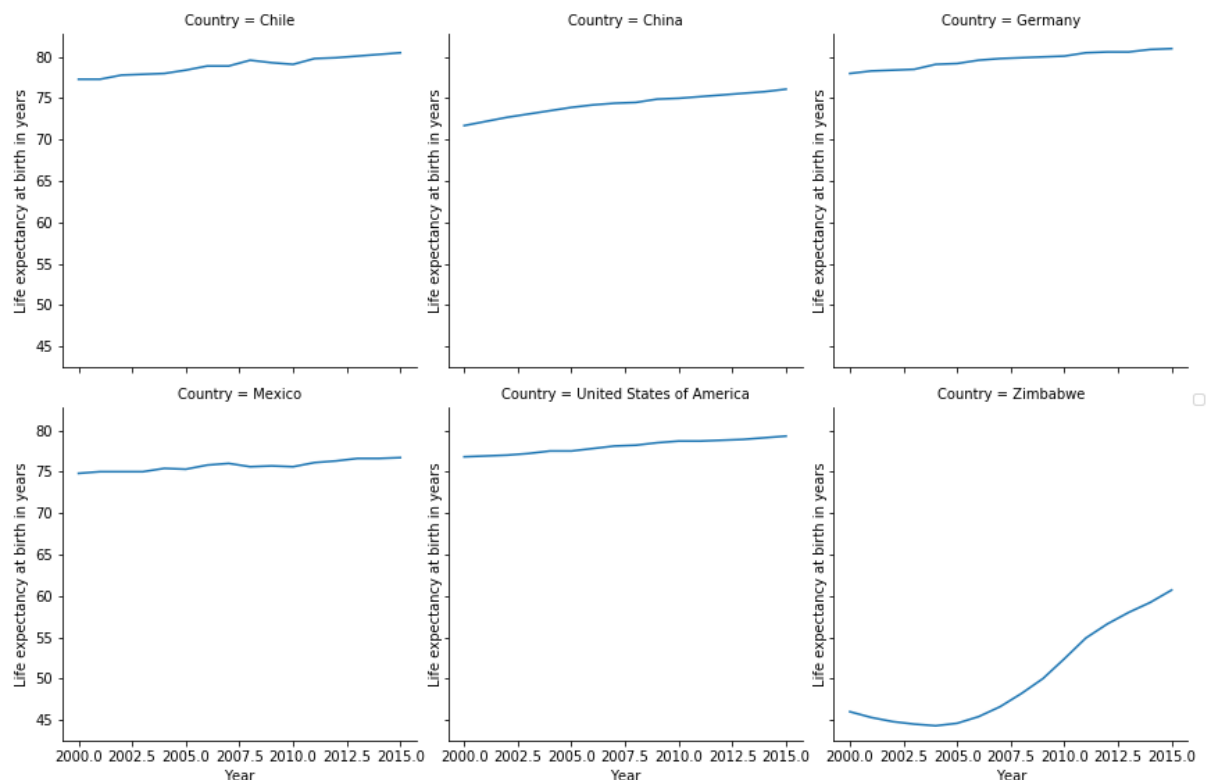


Fig 3: life expectancy at birth in years over time

The country which has the biggest increase in life expectancy at birth is Zimbabwe. As we already noticed in the first figure. Really? But they didn't have any better economy, they are on a low level and stayed there over the whole monitoring period? Does this mean a better economy doesn't help to live longer?

In the US the life expectancy was already high at the beginning of the monitoring period. And although it increased over time, it did not increase as much as the GDP. So there must be other factors which impact the life expectancy not just the GDP growth. AND: there is a natural boundary, since we cannot get older and older. So at one point even if your country's economy is growing there is not more you can do about your health. Therefore your life expectancy will reach a natural boundary.

Zimbabwe starts on a very low level, well below the average life expectancy of any other country we look at. And also at the end of the monitoring period they are still well below. Their average life expectancy is below 65!

Economy alone does not help you to live longer, more money does not make you healthier. There are certainly other factors, which have a bigger impact, which have not been explored in this post.