Before looking at more advanced data, it was important to establish some basic information about the life expectancies (LE) and GDP of the six countries (Chile, China, Germany, Mexico, USA, and Zimbabwe). I first examined the average LEs and GDPs. Unsurprisingly, the US had the highest GDP, followed by China and Germany, however Germany, Chile, and the US had the highest average LEs, respectivly. This perhaps indicates that while there is a correlation between GDP and LE, it is not nessecarily a 1:1 relationship.

I was also interested in the range of data for GDP and LE. The two countries with the largest range of numbers for LE were Zimbabwe and China, likely because of vastly different reasons. While (as we will see) Zimbabwe's low GDP may account for large range in LE, China's rapidly increasing GDP is probably the cause of its wide range. Meanwhile Mexico and Chile, which had small variability in their GDP, also had smaller ranges in their LE.

When comparing annual change in LE and GDP, we can see there is some correlation. Around 2005, the LE of Zimbabwe began to rise dramatically, and we see a similar rise a few years later in the nation's GDP. That LE goes up before GDP may indicate that it is LE which causes an increase in GDP, but this data is far to limited for such a conclusion. Nevertheless, other countries exhibit similar patterns. From about 2007-2010, Chile's LE and GDP both show a drop; a parallel pattern is seen in Mexico at this time. Around this time, there was a global recession, which is likely the precipating cause of reduced GDP (all countries except for China see a downturn in GDP at this time).

Finall, my scatterplots show a correlative relationship between LE and GDP. The US, Mexico, Chile, and Germany all show a linear relationship between LE and GDP, though Germany shows some diffusion of this trend at the top of its LE and GDP. China's scatterplot reveals not a linear relationship, but one which is almost expontential during its years of most extreme growth. Interestingly, Zimbabwe initially sees GDP regress while LE increases; when GDP recovers, LE rises sharply. Despite this, I would argue that the visualized data shows a correlation between GDP and LE.