**World Bank DECDG Technical Assignment: Part II**

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The claims made in the prompt by the colleague have several shortcomings. While there seems to be a significant difference in means of the average age of the deceased world bank retirees and life expectancy of a 65 years old in the US, there is an incorrect comparison group, and oversimplification of assumptions when comparing these values.

Most importantly, the analysis suffers from survival bias. A survival bias is defined as an error caused due to concentration on a sample that has cleared a certain selection process. In this case, the selection process was death. The colleague draws from a sample that only concentrates on retirees who have died, and disregards any information that would be available about retirees who are still alive. Since there is a selection into those who’ve already died, the age of death is likely to be lower than if the colleague took into consideration all retirees within an age range. Additionally, this information is being compared to life expectancy, which does not only rely on information about deceased individuals. Therefore, the averages are incomparable.

Even if we disregard the survival bias, there are several other shortcomings.

Firstly, the distribution itself looks skewed to the left, indicating that the median would be greater than the mean. Therefore, comparing simply the mean value, which is likely to be affected by outliers – in this case mostly by retirees who died at a young age – may be misleading.

Secondly, the colleague identifies an imperfect comparison group. The comparison is made to the life expectancy of an American aged 65 years old today. However, the average person in the sample of deceased world bank retirees is 81 years old. Therefore, the colleague is comparing the life expectancy of a 65-year-old with a sample that on average was 65 years old, approximately 16 years ago. Since life expectancy has been on the rise, this is an unfair comparison.

Lastly, the colleague overlooks several factors that affect life expectancy such as, gender, race, and geography. If the sample of the deceased world bank retirees consists mostly of men, then the average age of death would be lower, since women tend to have higher life expectancy. In addition, the colleague only compares the sample with the US life expectancy. Generally, developing countries have lower life expectancy than the US. Since the world bank population is not exclusively American, rather far more diverse in nationality and geographical settings, comparing the sample simply with the US life expectancy is not accurate.