Part 2

Javier Parada

Could there be a significant effect of having worked for the World Bank that would decrease retirees’ life expectancy? Life expectancy is a demographic indicator that measures the number of years a person belonging to a group is expected to live on average. Assuming higher life expectancy translates to people living a longer and healthier life, this e-mail suggests the life expectancy of World Bank retirees is lower than for the rest of the population, which could be concerning.

I would propose the following methodology to answer this question. First, we would have to understand that a group of World Bank retirees, such as this one containing 919 observations, could be remarkably diverse. With offices in over 130 locations, a group of World Bank retirees could possibly include a researcher located in Washington D.C. or a security guard located in Kabul. Therefore, we would have to refer to international life expectancy statistics, which can vary between 50 to 60 years for some low-income countries, such as Central African Republic or Chad, to above 80 years for some high-income countries, such as Japan or Singapore. In other words, an average of 81 could be considered very high or very low depending on where these World Bank retirees were located.[[1]](#footnote-1)

Second, I would consider not only the mean, but also the distribution of these values. The mean of these values may be 81 but the confidence interval of the mean may be wide enough, e.g. [77, 85], that we could not conclude the value is statistically different from the United States life expectancy statistics mentioned in the e-mail.

Third, the World Bank as an institution is relatively young and its number of staff members has increased over time. It could be that the sample of 919 observations is biased because many of the retirees from that same generation of World Bank staff may still be alive and we may still not know how long they are going to live. Consider a group of 100 staff that retired in the 2000’s. It could be that 90% of them are still living long and healthy lives, however, we may only include in our calculations the 10% of staff who died relatively young.

A rigorous test for whether there is a significant effect of having worked for the World Bank that could decrease retirees’ life expectancy would be to find an international database with individual-level demographic and socioeconomic characteristics and conduct a multivariate analysis where we compare the retirees’ life expectancy to individuals of the same characteristics (location, gender, cohort, socioeconomic status) and a similar occupation. Otherwise, it would be hasty to jump into conclusions because World Bank retirees are different from the groups of people represented by national life expectancy statistics.

1. Note that a better comparison would require measures of life expectancy for people above retiring age. [↑](#footnote-ref-1)