Reinhart-Rogoff Affair and Reproducible Data Analysis

The Reinhart-Rogoff affair centered around the paper published in 2010 to *The American Economic Review* by Carmen Reinhart and Kenneth Rogoff, “Growth in a time of debt”, which suggested that when government debt levels are greater than 90% of the GDP, the GDP reaches an incredibly slow growth rate. However; this claim was problematic, as found by researchers looking to replicate their study, who had different findings. The discrepancies between these results resulted from a coding error in Reinhart and Rogoff’s analysis which caused the exclusion of several countries from their analysis. This scandal demonstrates the need for open science, through which researchers can collaborate to find the best possible ways to answer research questions, and to ensure that relevant data is not excluded from analysis. Because open science encourages multiple collaborators to work together to solve a problem, issues such as the particular coding error indicated in this affair can be more easily found and amended. The multiple approaches used and tested by the collaborators working to answer the scientific question of interest also lead to a level of data analysis reproducibility.