

Savings and Carbon Emissions

Migliari, W. (2020).

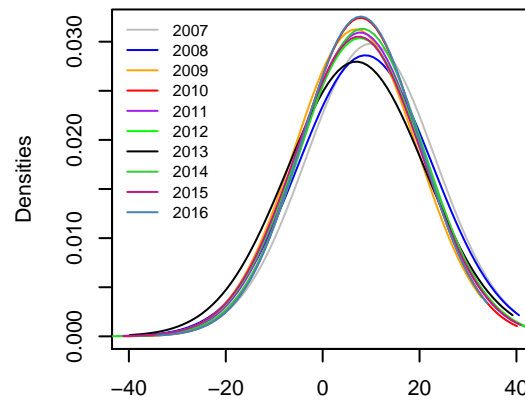
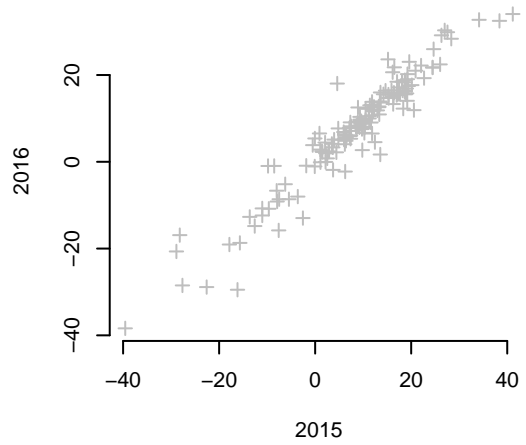
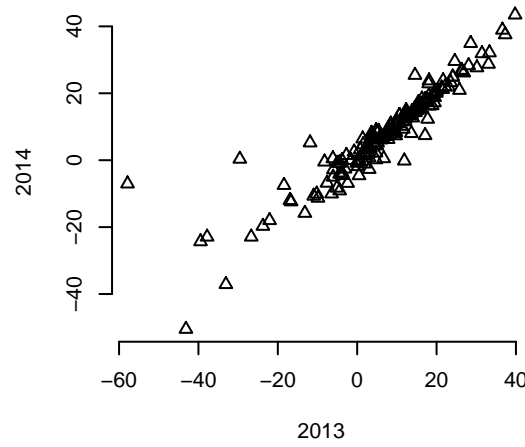
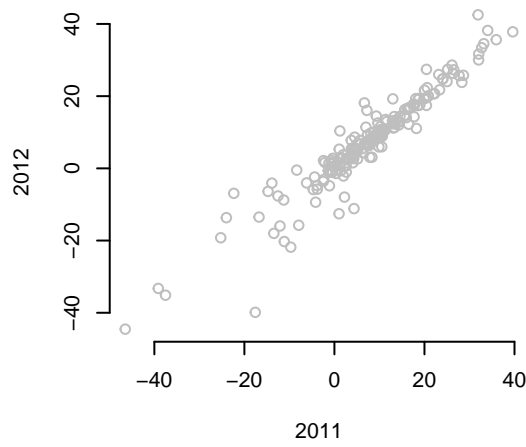
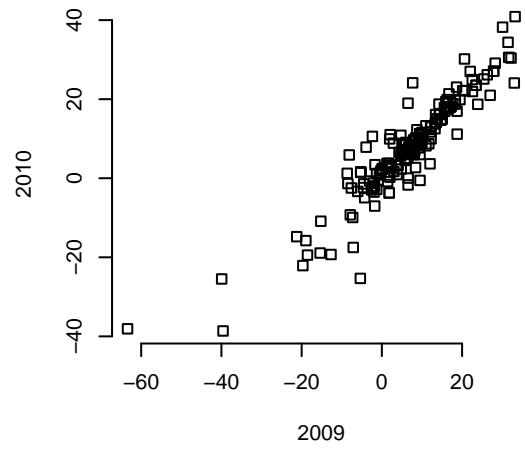
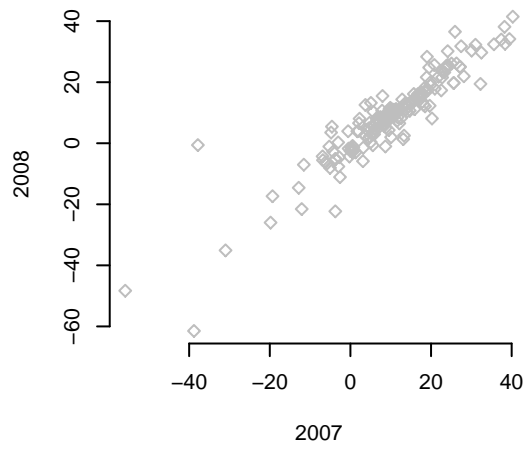
Adjusted Net Savings

Adjusted net savings is an equation used by the World Bank in which it is included not only the positive balance from current accounts, but also a series of processes on nature depletion and investments in education. The literal definition used by institution and its methodology applied for each country including regional and world averages is as follows: “Adjusted net savings are equal to net national savings plus education expenditure and minus energy depletion, mineral depletion, net forest depletion, and carbon dioxide and particulate emissions damage”.

Carbon Emissions

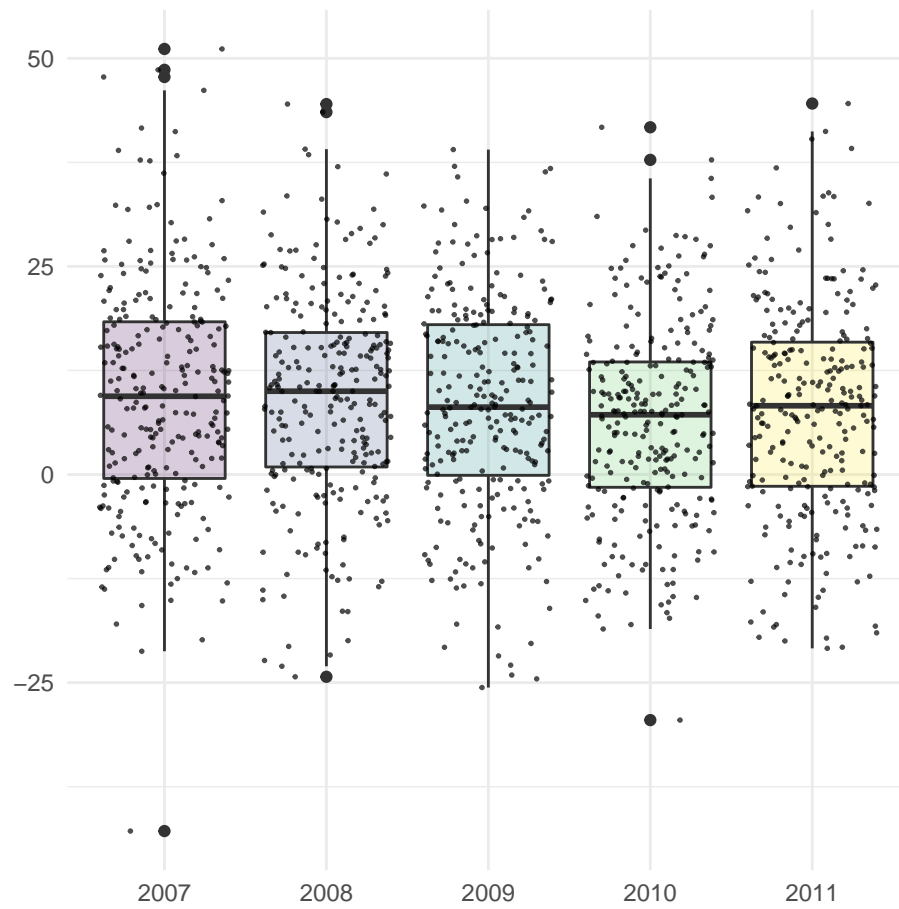
We use the adjusted net savings figures with the aim at understanding the dynamics of carbon emissions registered by the World Bank. The following five graphs plotted show five different correlations for Adjusted Net Savings (ANS) from one year to another covering a ten-year period (2007-2016). For example, do the values for the 2007 ANS have a strong attraction to the values of the 2008 year? What kind of picture we have for the subsequent binary combinations covering all the time series 2007-2016? The last plotted image is about the normal distributions for each year. We overlapped them in order to check the behaviour of the mean, the distribution of probability densities and the area of the bell curves. Carbon emissions is part of the equation in order to calculate adjusted net savings. We remember the reader that we are dealing with 269 observations divided into 14 variables for a ten-year period. Rstudio is a very powerful tool in that sense since the programme can process and plot all these pieces of information. The last one is the normal distribution of each year.

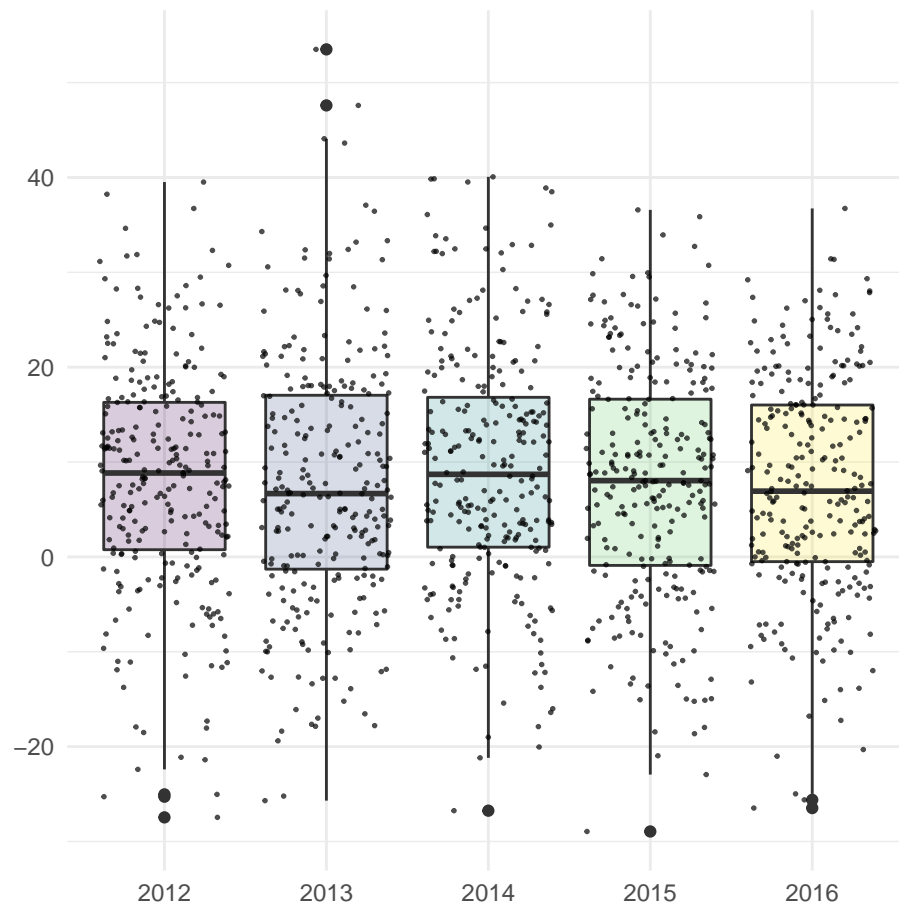
Adjusted Net Savings, Including Particulate Emission Damage (% of GNI)



Overlapped Normal Distributions for Adjusted Net Savings

Boxplots & Data on Carbon Emissions





Any comment will be very helpful since we are improving our data analysis constantly.