**Basic Econometrics**

**Research Report Group Assignment**

This is a **group assignment** where you can work in groups of 3-4 other students. **All group members will receive the same marks for the assignment**. You must submit an **electronic copy** of your assignment in Canvas in pdf, doc or docx format. Hard copies will not be accepted. **Show your calculations (if any)** as well as answering the questions in clear full sentences. The number of words, tables, graphs, calculations given in parentheses after each question are a guide.

**What determines life expectancy?**

For this home assignment you will be required to model life expectancy worldwide.

Please use the file: **life\_expectancy2016.dta** (World Bank Database). Please read the description at the end of this document to understand the variables. **In this home assignment we are going to model life expectancy at birth (dependent variable).**

**QUESTION 1**

1. Please present a descriptive statistics table for the following variables. Be sure to describe the main characteristics of these variables including the standard deviation, mean etc .

* Life expectancy at birth, total (years)
* Domestic private health expenditure per capita (current US$)
* PM2.5 air pollution, mean annual exposure (micrograms per cubic meter)
* Smoking prevalence, total (ages 15+)
* People with basic handwashing facilities including soap and water (% of population)

1. **marks) 1 table**
2. Please provide a scatter diagram between Life expectancy at birth, total (years) and PM2.5 air pollution, mean annual exposure (micrograms per cubic meter).

Describe the relationship.

**(2 marks) 1 graph**

1. Describe the distribution of life expectancy with increasing PM2.5 exposure. What type of problems does this distribution cause?

**(2 marks)**

**Total: 9 marks**