**Assignment 2**

The second assignment for EC3143 is an individual project. It is based on the estimation of a panel regression model. You have been assigned a series of countries and this is indicated on canvas. Check that you have been assigned a set of countries and if you have not been assigned a country contact the lecturer immediately. Doing the analysis on a set of countries you have not been assigned will result in you receiving a zero grade. You are to obtain data on export share, GDP, Total Factor Productivity (TFP) and Labour from the Penn World Tables:

<https://febpwt.webhosting.rug.nl/Dmn/AggregateXs/VariableCodeSelect>

The data to download has been highlighted in Appendix 1 of the assignment. You should download data from 2001 to 2018 (or as many years as available).

Using the data you have downloaded you are to complete the following:

1. Specify the model you will be estimating. You wish to assess the effects of the log of GDP, the log of employment, the log of total factor productivity on the share of exports.
2. Outline your hypotheses detailing (i) your expectations for the signs of the variables and (ii) how the model chosen allows you to test your hypotheses. Justify your answers with reference to the relevant literature.
3. Describe each of the variables and how they vary across the countries you have been assigned.
4. Estimate the model you have specified in part (a) using the fixed effects dummy variable (FEDV) model. Comment on the results obtained with specific reference to differences across countries.
5. Estimate the model you have specified in part (a) using the fixed effects within group model. Comment on the results obtained and the advantages of this approach over the FEDV model.
6. Estimate the model you have specified in part (a) using the random effects model. Comment on the results obtained. What are the advantages of using the random effects model over the fixed effects models.
7. Using a Hausman test identify which model you believe is more approperaite and justify your answer.

In order to achieve high marks you are encouraged to (i) exhibit a good understanding of how to justify your model specification (ii) exhibit a good understanding of how to interpret the estimated results, (iii) present the assignment in a professional manner and (iv) make sufficient reference to relevant literature in order to explain your model choices and results.

Assignments are to have a maximum length of 1,500 words. They are to be word processed (double spaced with 12cpi) and to include a word count – a penalty of 1% per 100 words

**Appendix 1: Data Download Information**

Graphical user interface, text, application

Description automatically generated