**Dead Line: 05.05.2021**

**Word Limit:**

**The word limit is 1000 words. Figures do not count towards the word limit. Each Table counts 100 words. Copying and pasting Stata output (except for graphs and figures) is not acceptable. You should create properly formatted tables.**

**Assignment:**

**The aim of this assignment is to build a model to explain consumption behaviour and to discuss the policy implications arising from this model using STATA software. The assignment tasks are to:**

1. **Retrieve country level data only from the OECD statistics portal** (<https://data.oecd.org/hha/household-spending.htm#indicator-chart> )

* **Import data and create excel Master data file**
* **Create Long form Panel Data (Use Stata Command)** 
  + **Period: 2010-2020**
  + **Countries: 10 Developed countries**
    - **USA, UK, Australia, Canada, Germany, France, Australia, Japan, Italy and Portugal (if you can’t find data can change the country)**
  + **Dependent Variable: Consumption or household spending (USD Mn)**
  + **Independent Variables:** 
    1. **Household Disposable Income (USD Mn)**
    2. **Government General Spending/Expenditure (USD Mn)**
    3. **Government Tax Revenue (USD Mn)**
    4. **Inflation (CPI)**
    5. **Trade deficit or Net Trade (USD Mn)**
    6. **Foreign Direct Investment (USD Mn)**

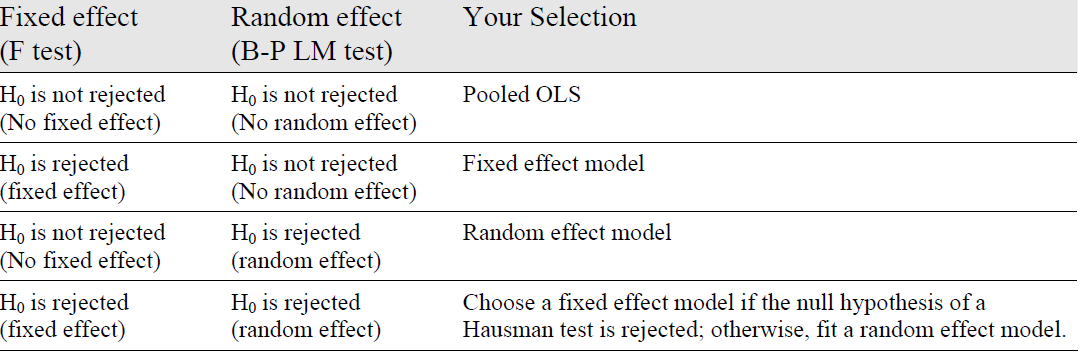
1. **Build and estimate an econometric model to explain consumption levels.**
2. **Descriptive statistics of panel data**

**In order to determine an appropriate model for a panel, first describe data carefully by producing summary statistics and drawing plots.**

**Then begin with a simple model like the pooled OLS estimator.**

1. **Testing Fixed and Random Effects**
2. **F-Test for fixed effect**
3. **Breusch-Pagan LM Test for Random Effects**
4. **Based on the above test results select the appropriate model:**

**Fixed effect model or Random effect model or Pooled OLS**

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**Imagine four possible outcomes of hypothesis testing shown in the table above. If both null hypotheses of F-test and LM test are not rejected, your best model is the pooled OLS. If the null hypothesis of an F-test in a fixed effect model is rejected and the null of a Breusch-Pagan LM test in a random effect model is not, a fixed effect model is the case. If you find both significant fixed and random effects in your panel data, conduct a Hausman specification test and compares a fixed effect model and a random effect model. If the null hypothesis of uncorrelation between individual effects and regressors is rejected, fit a random effect model; otherwise, a fixed effect model is preferred.**

**If you think that your data are not poolable and each entity has different slopes of regressors, conduct a Chow test and then, if its null hypothesis is rejected, try to fit a random coefficient model or hierarchical linear model.**

**The assignment structure should be:**

1. **Introduction with brief literature review (150 words) (eg: John Maynard Keynes)**
2. **Methodology (300 words) (Include Strength and limitations of the methodology)**

**The Methodology should contain a description of the econometric methodology and a justification of why this method was chosen. You should also provide why these countries have been selected and the period with the dataset you are using.**

1. **Results and analysis (350 words)**

* **Estimation results and a discussion of these results**
* **Present results in professional tables only include important information (Generate separate results as a table using STATA Command and use it in the essay rather than using screen shot of the result) (Don’t use raw STATA result, results should be presented in properly formatted Table )**

1. **Policy Recommendations (200 words)**

**The Policy recommendation section should contain your policy recommendations and a discussion on the limitations of data/methods used.**

**Use minimum 8 references.**

**Appendix:**

**An Appendix should be attached at the end of the dissertation that will contain the Stata commands used to obtain the results. The Appendix does not count towards the word limit.**

Related literature:

1) Thomas, J. J. (1989). The Early Econometric History of the Consumption Function. Oxford Economic Papers New Series, Vol. 41, No. 1, pages 131-149.

<https://www.jstor.org/stable/2663186?seq=1#metadata_info_tab_contents>

2) Fernandes-Corugedo, Santiago (2004). Consumption Theory. Handbooks in Central Banking, Centre for Central Banking Studies, Bank of England, No 23.

<https://core.ac.uk/download/pdf/6961909.pdf>

**Grading Criteria:**

* Addresses the question that was set
* Possesses a clear argument
* Made good use of evidence
* Was well structured
* Made appropriate use of the relevant literature

**Additional info required:**

1. **Required to attach a “do file” with all the commands used in STATA to do this assignment with correct sequence of order along with the data file and assignment. (Must provided)**
2. **Data file**