## **Assignment II (Applied Econometrics – Panel Data)**

**Total Marks: 50** 

Weightage in Total: 10%

Date of Submission: 6th of April, 2020

## **General Instructions:**

- Each group has to work on their assigned dataset for Part-I & their assigned countries for Part-II. For data, the group leaders should mail me by March 14, 6.00 pm and the datasets would then be sent along with countries name for Part II.
- Use STATA for this assignment.
- As part of your final submission, upload single PDF document on CMS, answering the relevant
  questions. The PDF should be titled "AII-Group Name" where group name is name of the group
  mentioned in the file uploaded on the CMS (for Assignment I). Also send the do-file & log file
  of your analysis.
- Please note that your individual evaluation will also depend on your performance in the viva/group presentation schedule on April 7, 2020.

Part-I [25 Marks]

- 1. On the given data, perform the following analysis [with proper discussion & interpretation]:
  - a. Pooled data analysis:
    - i. Difference-in-difference estimator
  - b. Panel data analysis:
    - i. Fixed effect estimation
    - ii. Random effect estimation
    - iii. Hausman Test
    - iv. Significance of time-fixed effects
    - v. Significance of random effects

Part-II [25 Marks]

1. As part of this assignment, collect the bilateral trade data for the countries assigned to you for at least a period of 10-15 years. Then, fit the gravity model on the collected trade data. Give justification for the methodology and discuss your findings with proper interpretation.