MBA 753: Causal Inference Methods in Business Analytics

Assignment 2

Note: Please name the file as follows: "your roll number - your first name", for example: "123456789 - Nivedita". Save it as a pdf and submit.

Q1. Conduct an event study analysis to study the change of trend in petrol prices after the Indian government introduced day-to-day changes in fuel prices on 16th June 2017. **[15 marks]**

a. What is the regression equation for your model?
b. What is the relationship of time with petrol prices?
c. What is your conclusion about the policy implemented from 16th June 2017.

Q2. For the event study model above, include state as one of the covariates. **[25 marks]**

a. What is the regression equation for your model?
b. What is the relationship of time with petrol prices? Did the relationship change from the first model to the second model?
c. What can you say about the relationship between states and petrol prices? Is the relationship causal – why or why not?

Q3. Fit two event studies model – one for Karnataka and one for Maharashtra. **[20 marks]**

a. Write the regression equations of model for both the states.
b. Compare and interpret the causal relationship of policy implementation for the two states.