EKT 720 – Statistical learning

Assignment 9

1. Study Gujarati Chapters 18,19 and 20, specifically
    a) Simultaneous-equation bias
    b) Structural, reduced and final forms
    c) Indirect least squares and the problem of identification
    d) 2SLS, Estimation of recursive systems
2. Consider the attached data and problem description.
3. Evaluate the identification of the system by using the order and rank conditions of identification.
4. Give the reduced and final forms - where applicable.
5. Give a mathematical representation of the relationship between the reduced form parameters and the structural form parameters.
6. Use **OLS** / **Indirect least squares / Two stage least squares** to estimate the unknown regression parameters of the structural form.
7. Use the bootstrap approach to evaluate the structural form parameters - only the Y_{2t} equation,.
8. Use the bootstrap approach to determine 95% confidence interval(s) for the R^2 values of the reduced form.