Course outline

How does an NPTEL online course work?

Week 0 :

Week 01

Week 02

Week 03

Week 04

Week 05 :

Week 06

Week 07

Week 08

Week 09

Week 10

- Lecture 82 : Remedy for Autocorrelation
- Lecture 83 : Model Specification
- Lecture 84 : Model Specification (Contd.)
- Lecture 85 : Model Specification (Contd.)
- Lecture 86 : Model Specification (Contd.)
- Lecture 87 : Model Specification (Contd.)
- Lecture 88 : Model Specification (Contd.)
- Lecture 89 : Model Specification (Contd.)
- Lecture 90 : Model Specification (Contd.)
- Lecture 91 : Continuation with Proxy Variable
- Lecture 92 : Ramsey Reset Test
- Quiz: Week 10:Assignment 10
- Feedback for Week 10

Week 11

Week 12

Course Material

Download Videos

Assignment Solution

Week 10:Assignment 10

The due date for submitting this assignment has passed.

Due on 2021-10-06, 23:59 IST.

As per our records you have not submitted this assignment.

1) *1 point*

Which of the following approaches can be considered as remedies for Autocorrelation problem?

a. Take logarithms of each of the variables
b. Add lagged values of the variables to the regression equation
c. Use dummy variables to remove outlying observations
d. Try a model in first differenced form rather than in levels.

☐ a
☐ b
☐ c
☐ d

No, the answer is incorrect.
Score: 0
Accepted Answers:
b
d

2) *1 point*

Which of the following statements are true:

A. Due to omitted variable the standard error is likely to be underestimated
B. Due to omitted variable the standard error is likely to be invalid
C. Due to omitted variable the standard error is likely to be overestimated
D. Despite omitted variable bias, the standard error will be valid

a) AD
b) AB
c) CD
d) BC

○ a
○ b
○ c
○ d

No, the answer is incorrect.
Score: 0
Accepted Answers:
b

3) *1 point*

Which of the following statements are TRUE?
A. Due to inclusion of irrelevant variables in the model, the standard error is likely to be underestimated
B. Due to inclusion of irrelevant variables in the model, the standard error is likely to be overestimated

a) A
b) B
c) Both A & B
d) Neither A nor B

○ a
○ b
○ c
○ d

No, the answer is incorrect.
Score: 0
Accepted Answers:
b

4) *1 point*

A relevant variable excluded from the model can influence the dependent variable through other explanatory variables only

a) True
b) False

○ a
○ b

No, the answer is incorrect.
Score: 0
Accepted Answers:
b

5) *1 point*

Omitted variable bias may cause the problem of heteroscedasticity and autocorrelation

a) True
b) False

○ a
○ b

No, the answer is incorrect.
Score: 0
Accepted Answers:
a

6) *1 point*

Proxy variables could act as a replacement when our model suffers from omitted variable bias. However, we shouldn't use proxy variables in such case as it may induce measurement error

a) True
b) False

○ a
○ b

No, the answer is incorrect.
Score: 0
Accepted Answers:
b

7) *0 points*

Given that

$Y = \beta_1 + \beta_2 X_i$; and

Y-hat = $b_1 + b_2 X_1 + \beta_3 X_3$

$b_2 = \beta_2 + h\,\beta_3$

What should be the relationship between b_2 and β_2, if both β_3 and h are greater than zero?

a) b_2 is an underestimate of β_2
b) b_2 is an overestimate of β_2
c) No relationship exists
d) $b_2 = \beta_2$

○ a
○ b
○ c
○ d

No, the answer is incorrect.
Score: 0
Accepted Answers:
b

8) *1 point*

What should be the true R-square in case of overestimation?

a. R^2-true < R^2-Fitted1 - R^2-Fitted2
b. R^2-true = R^2-Fitted1 + R^2-Fitted2
c. R^2-true < R^2-Fitted1 + R^2-Fitted2
d. R^2-true > R^2-Fitted1 + R^2-Fitted2

○ a
○ b
○ c
○ d

No, the answer is incorrect.
Score: 0
Accepted Answers:
c

9) *1 point*

Refer the equation below:

$$y_t = \beta_1 + \beta_2 x_{2t} + \beta_3 x_{3t} + u_t$$

R squared (R SQ MULT) in a multiple regression is lower than the sum total of the R squared in the two simple regressions (R SQ SIMP1, R SQ SIMP2) with individual explanatory variable.

Ripon has observed that β_2 β_3 are positive in the simple regression equation. He has inferred that the X_2, X_3 are positively correlated. State if Ripon's inference is true or false

a) True
b) False

○ a
○ b

No, the answer is incorrect.
Score: 0
Accepted Answers:
a

10) *1 point*

Which statements are True/ False -
A. Using RAMSEY RESET TEST, we can identify the specific variable for which a square or cubic term is to be included in the regression equation
B. While we do differencing to remove autocorrelation, the value of Rho could be greater than 1.

a) A is True B is False
b) B is True A is false
c) Both True
d) Both False

○ a
○ b
○ c
○ d

No, the answer is incorrect.
Score: 0
Accepted Answers:
d