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- ▶ [Module 1: The Basics of R and Introduction to the Course](#)
- ▶ [Entrance Survey](#)
- ▶ [Module 2: Fundamentals of Probability, Random Variables, Distributions, and Joint Distributions](#)
- ▶ [Module 3: Gathering and Collecting Data, Ethics, and Kernel Density Estimates](#)
- ▶ [Module 4: Joint, Marginal, and Conditional Distributions &](#)

Module 12: Endogeneity, Instrumental Variables, and Experimental Design > Experimental Design > Two Stage Least Squares - Quiz

Two Stage Least Squares - Quiz

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Question 1

1/1 point (graded)

As Prof. Duflo explained, two stage least squares (2SLS) is a two step procedure. What is the regressor in the second stage?

- ☐ a. The “fitted” values of the regressor of interest from the first stage.
- ☐ b. The estimated effect of your instrument on the regressor of interest in the first stage.
- ☒ c. The “fitted” values of the outcome variable in the first stage. ✓
- ☐ d. The instrumented for variable
- ☐ e. The outcome of interest

Explanation

Functions of Random Variable

- ▶ Module 5: Moments of a Random Variable, Applications to Auctions, & Intro to Regression
- ▶ Module 6: Special Distributions, the Sample Mean, the Central Limit Theorem, and Estimation
- ▶ Module 7: Assessing and Deriving Estimators - Confidence Intervals, and Hypothesis Testing
- ▶ Module 8: Causality, Analyzing Randomized Experiments, & Nonparametric Regression
- ▶ Module 9: Single and Multivariate Linear

In the 2SLS procedure, in the first stage: you estimate your first stage equation, in which you regress your instrumented variable on the instrument (same first stage as the Wald estimate). The key difference is that in 2SLS you regress your outcome variable on the saved fitted values from the first stage, rather than the variable itself. The fitted values capture the variation in the instrumented for variable that are a result of variation in the instrument.

Submit

You have used 1 of 2 attempts

✓ Correct (1/1 point)

Question 2

1/1 point (graded)

What is one advantage of two stage least squares relative to a Wald estimate?

- ☐ a. You do not need to satisfy the exclusion restriction
- ☐ b. You do not need to ensure random assignment
- ☒ c. The instrument (and the variable that it is instrumented for) does not need to be a dummy




Explanation


Models

- ▶ Module 10: Practical Issues in Running Regressions, and Omitted Variable Bias
- ▶ Module 11: Intro to Machine Learning and Data Visualization
- ▼ Module 12: Endogeneity, Instrumental Variables, and Experimental Design

Endogeneity and Instrumental Variables

Finger Exercises due Dec 14, 2016
05:00 IST 

Experimental Design

Finger Exercises due Dec 14, 2016
05:00 IST 

Module 12: Homework

Homework due Dec 12, 2016
05:00 IST 

- ▶ Exit Survey

Since a regression is used rather than a ratio, the instrument does not need to be a dummy. You still need to satisfy the restrictions of instrumental variables.

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You have used 1 of 1 attempt

✓ Correct (1/1 point)

Discussion

Topic: Module 12 / Two Stage Least Squares - Quiz

Show Discussion



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