PREDICTIVE ANALYTICS ISM-E1003

Homework 5, due date 08.04. at 10:00

What is the correct answer? Correct answer 8 points, incorrect answer -2 points, no answer 0 point.

1. Which of these are advantages of using panel data?

(I) We can address a broader range of issues and tackle more complex problems than would be possible with pure time-series or pure cross-sectional data alone

(II) It allows us to increase the number of degrees of freedom

(III) It allows us to increase the power of the tests

(IV) We can remove the impact of certain forms of omitted variables bias in regression results.

(a) I only

(b) I and II only

(c) I, II, and III only

**(d) I, II, III, and IV.**

2. Which of these is a type of panel estimator approach?

(I) Fixed effects

(II) Random effects

(III) Seemingly unrelated regression effects

(IV) Time-varying effects.

(a) I only

**(b) I and II only**

(c) I, II, and III only

(d) I, II, III, and IV.

3. Running a cross-sectional regression on the time-averaged values of the variables is known as a:

(a) Within estimator

**(b) Between estimator**

(c) Cross-sectional estimator

(d) Demeaned estimator.

4. Which of the following is a mathematical expression of a time-fixed effects model?

(a) 

(b) 

(c) , 

**(d) **.

5. The traditional Fama–MacBeth approach to tests of the CAPM involves:

**(a) A set of time-series regressions to estimate the betas for each stock and then a cross-sectional regression to estimate the risk premium**

(b) A set of cross-sectional regressions to estimate the betas and then a time-series regression to estimate the risk premium

(c) A single cross-sectional regression to estimate the CAPM beta

(d) A time-series regression to estimate the betas for each stock and then another time-series regression to estimate the risk premium.