Exam SØK3521 June 2020, 6 hours

Answer all 3 questions. Share of marks including with each question.

Question 1 (35%) Human Capital

    a. Demonstrate how unobserved ability differences between individuals leads to bias in the estimates of the returns to schooling.

    b. How can compulsory schooling laws be used to address this issue? How do we interpret estimates of returns to schooling from research that uses changes in these laws?

    c. The government is considering the desirability of increasing the school leaving age by 1 year (i.e. extending compulsory schooling by 1 extra year). When considering such a policy why is it important to distinguish between the causal effect of education on earnings and the correlation between earnings and education?

Question 2 (30%) Peers and Classes

    a. Why are peer effects potentially important for educational policy?

    b. What are the main difficulties in estimating peer effects amongst classmates? Discuss approaches to solving these problems.

    c. How do class-size rules help us to understand the effect of class-size on student outcomes?

Question 3 (35%) Educational Attainment

    a. Using an education production function approach, demonstrate how attainment at a given age can be thought of as a result of all past inputs.

    b. How can we use value add to identify effective teachers? How does this differ from approaches based on observable characteristics (i.e. experience, certification…) of teachers?

    c. Assume we can accurately identify teacher value add. Discuss advantages and disadvantages of paying teachers on the basis of their value add.