Empirical Labor Economics
Retake Exam
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Summer Semester 2021
60 Points

Note: Choose <u>either</u> **Part 1** <u>or</u> **Part 2**. If you answer both parts, we will only consider Part 1.

Part 1:

1.1. When do we use Instrumental Variables (IV) estimation and explain its assumptions. (*20 points*)
1.2. Discuss the issues associated with estimating the returns to schooling. (*30 points*)
1.3. Interpret and compare the following two wage estimations: (*10 points*)

$$(1)\ lnWage = \alpha + 0.061\ Schooling + \varepsilon$$
$$(0.02)$$

$$(2)\ lnWage = \alpha + 0.126\ Schooling + 0.099\ Experience - 0.006\ Experience^2 + \varepsilon$$
$$(0.012) \qquad (0.01) \qquad (0.0002)$$

Standard errors are in parentheses.

Part 2:

2.1. Explain the difference between an instrumental variable and a proxy variable. (*20 points*)
2.2. Discuss instruments for estimating the relationship between family size and schooling. (*30 points*)
2.3. Interpret and compare the following two wage estimations: (*10 points*)

$$(1)\ lnWage = \alpha + 0.061\ Schooling + \varepsilon$$
$$(0.02)$$

$$(2)\ lnWage = \alpha + 0.126\ Schooling + 0.099\ Experience - 0.006\ Experience^2 + \varepsilon$$
$$(0.012) \qquad (0.01) \qquad (0.0002)$$

Standard errors are in parentheses.