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Econ-UA 323

Development Economics

Problem Set 4

(1) Are the following statements true or false? It is *not* enough to just guess one or the other. You need to provide an argument for or against, and only then will any credit be awarded.

[a] If in a society of 100, there are 70 beneficiaries of a policy (they gain 1 dollar) and 30 losers (they lose one dollar), and if 49 beneficiaries know their identity while no one else does, then the policy *must fail* a majority vote.

[b] A potential entrant to a new market with superior costs of production may not enter if there are imperfect credit markets *and* increasing returns in production, but will not find it a problem if only one of these restrictions holds.

[c] A good instrument must be correlated with the independent variable but uncorrelated with the dependent variable.

For the questions below, click on the links in blue to access the readings.

(2) Recall the **Munshi-Myaux study of declining fertility** in Bangladesh. Briefly and precisely describe the study:

(a) the question,

(b) the main empirical problem, and

(c) the strategy employed to deal with this problem.

(3) Choose *one* of the following readings:[1]

Nunn, N. (2008), "**The Long-Run Effects of Africa's Slave Trade**," *Quarterly Journal of Economics* **123**, 139–176.

Banerjee, A. and L. Iyer (2005), "**History, Institutions, and Economic Performance: The Legacy of Colonial Land Tenure Systems in India**," *American Economic Review* **95**, 1190–1213.

(a) (approx. one page) Explain the endogeneity problem that might arise when one is attempting to infer a causal effect from a regression:

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[1]You may also wish to consult Angrist, J. and A. Kreuger (2001), "**Instrumental Variables and the Search for Identification: From Supply and Demand to Natural Experiments**," *Journal of Economic Perspectives* **15**, 69–85.

(a.1) Start by giving an example in which endogeneity is *not* a problem, and then provide an example or two in which it is.

(a.2) Then move on to explaining what an instrumental variable, and the two things we demand of a good instrument.

(a.3) Finish the exposition by describing two-stage least squares.

(b) Read your chosen article, and summarize it.

(b.1) Start by describing the exact question that these authors want an answer to.

(b.2) Explain the endogeneity problem in each case.

(b.3) Describe the strategies used in the paper to address the problem. In either case, you will see the use of an instrument, but also a second strategy. Don't forget to discuss if you find the use of the instruments compelling.

Notes: **Slides 10a** have been constructed to help summarize these papers, but just copying from those slides will not get you much credit. It will be nice to see some good evidence that you have read and thought about the papers.

This problem set will have no answers handed out, as the "answers" are already there in the papers and my supplementary slides 10a. The point is for you to develop and understanding of the material, and to attempt to read frontier papers on the subject with the help of tools studied in class.