PROFESSOR IMRAN RASUL UNIVERSITY COLLEGE LONDON DEPARTMENT OF ECONOMICS

DEVELOPMENT ECONOMICS G15

PROBLEM SET 1: GROWTH

This question is based on two papers: Hall and Jones (1999) "Why do Some Countries Produce So Much More Output Per Worker Than Others?", *The Quarterly Journal of Economics*; and Acemoglu, Johnson and Robinson (2001) "The Colonial Origins of Comparative Development: An Empirical Investigation", *The American Economic Review*.

- (a) Discuss the empirical challenges typically involved in studies that aim to identify the causal effect of institutions on economic development. To what extent do these challenges apply to HJ (1999) and AJR (2001)? [5 points]
- (b) Describe the choice of instrumental variables that HJ (1999) and AJR (2001) use in their strategy to get around these empirical challenges. What is the rationale behind these instruments? What are the key differences in the choice of instruments between the two studies? [5 points]
- (c) Do you think these instruments are reliable? What concerns do you have, if any? Use the results in Table 4 (Panel B) and Table 8 in AJR (2001) and Table II and Table III in HJ (1999) in your discussion. Why do AJR (2001) check for the robustness of their results to the addition of the current disease environment in their regressions? Can you think of any other factors (not discussed in the paper) that might be influencing the results reported in AJR (2001) and HJ (1999)? [5 points]
- (d) Compare and interpret the OLS and 2SLS estimates in Table 4 in AJR (2001). Do the same for Table II in HJ (1999). Does the difference between the OLS and 2SLS estimates have the expected sign? [5 points]