Econometrics 1: Winter 2010
Questionnaire 3
"Does Compulsory School Attendance Affect Schooling and Earnings?"

The questions are based on Angrist, J. and A. Kruger (1991), "Does Compulsory School Attendance Affect Schooling and Earnings?", The Quarterly Journal of Economics, 106(4), 979-1014.

1. What is the main point of the paper?

2. To analyse the impact of education on earnings, would it be possible to perform a simple regression between the two variables? Why? Why not?

3. Explain how the compulsory schooling laws could be used to estimate the impact of education on revenues, by taking two examples. Could you see a direct impact of month of birth on income, other than through the number of school years? How will this bias the results?

4. Looking at Figure 1 and Table 1, explain the link between quarter of birth and number of years in school. Why do the authors also look at the impact of quarter of birth on those who continue their studies after 16 years?

5. Why is there such a link between quarter of birth and number of school years? Do the individuals who drop out of school at 16 represent a big part of the population? Do you find this strategy convincing?

6. Write down the main estimation equation. Interpret the results of Tables 4, 5, 6. How do OLS results compare to the IV results? Should there be a difference? In what direction? Why is the difference so small?

7. Are the instruments strongly related to the instrumented variable? Read the paper by Bound and Jaeger, "Problems with Instrumental Variables Estimation When the Correlation Between the Instruments and the Endogeneous Explanatory Variable is Weak", John Bound; David A. Jaeger; Regina M. Baker, Journal of the American Statistical Association, Vol. 90, No. 430. (Jun., 1995), pp. 443-450.