

Exam for the M.Sc. in Economics

University of Copenhagen

Political Economics, Fall 2013

January 14, 2014

3 hours

Answers should be given in Danish or English

No aids allowed except Danish-English / English-Danish dictionaries

Question 1, Short Questions

a)

Explain, briefly, how a public tax-transfer system can serve both redistributive and insurance purposes. How can one empirically investigate the relative importance of redistributive and insurance motives among voters?

b)

Consider a legislature with n members, n being odd, trying to divide a cake of size 1. A member's utility is simply the share of the cake received. Bargaining takes place over two periods. Payoff in round 2 is discounted by δ . In both periods, there is an equal chance of being recognized as proposer. We assume that if members are indifferent, they vote in favor. If a majority approves the proposal in the first round, the game ends and the cake is divided according to the proposal. The constitution says that a second round proposal is automatically made into law.

(i) A constitutional rule says that the second round proposer can at most get one half of the cake and that the remainder is evenly split between the non-proposers. Derive the proposal of the subgame perfect equilibrium.

(ii) An alternative constitutional rule says that the second round proposer gets one half, while a randomly selected non-proposer gets one half and the rest of the non-proposers get zero. Derive the proposal, compare with the first rule and comment.

Question 2, Regression Discontinuity

The imaginary country of Atlantis has a political system where national elections are held every four years. In 1980, Atlantis changed the rules regarding these

elections by introducing voting rights for citizens between 13 and 18. Specifically, children who were born on or after April 1st 1980 were allowed to vote in national elections as soon they turned 13, while children born before April 1st 1980 were not allowed to vote until they turned 18.

You have a theory that participating actively in the democratic process as a teenager makes people more likely to become politicians as adults. As a result, you are interested in empirically estimating the causal effect of voting earlier in life on the likelihood of running for political office as an adult. You have access to a data set covering all children born in Atlantis in between 1978 and 1982. The data set contains the following variables:

- R_i : The number of times child i has run for political office by the time he or she is 30 years old
- Y_i : Income for child i 's parents in 1976
- F_i : The amount of money the parents spent on diapers, baby food and other baby equipment for child i
- T_i : The birthday of child i

a)

Assume that everyone who is able to vote in a given election chooses to do so. Explain how you would apply Regression Discontinuity to this data to estimate the effect of voting earlier in life on the likelihood of becoming a politician. Be as precise as you can.

b)

Describe in words under which assumptions the Regression Discontinuity approach described in a) would yield an unbiased estimate of a causal effect. Discuss whether these assumptions are likely to be satisfied and explain whether and how this might be tested.

c)

Assume that instead of children being eligible to vote at age 13 if they are *born* on or after April 1st 1980, children are eligible if they are *conceived* (if the pregnancy started) on or after April 1st 1980 as determined by the parents' doctor. Assume also that in addition to the data described in a), you have access to the data determining when each child was conceived. In particular, your data contains the variable C_i which measures the day child i was conceived.

Under these two new assumptions, how would your answers change in a) and b)?

d)

How would you interpret the estimated effect from the Regression Discontinuity in a) if some people who are eligible to vote choose not to do so?

Question 3, The Media

Referring to both theoretical models and empirical results covered in the course, discuss the following statement (write at most one page):

“The media plays an important role in politics by informing voters about politicians and their behavior.”