

Political Economics II

Final exam: August 28, 2015

I. Short Answers

No more than 2 pages per question. Choose 5 out of 6. Worth 10 points each.

1. Equilibrium redistribution

“According to the Meltzer-Richard model, higher inequality as measured by the 90-10 ratio – where the numbers refer to percentiles in the income distribution – could alternatively lead to larger, smaller or unchanged redistributive programs”. Is this statement true or false? Explain!

2. Redistributive spending

In the probabilistic voting model of redistributive spending, groups with certain characteristics receive more benefits. What are these characteristics? What is the empirical support that actual government expenditures are targeted to groups with these characteristics?

3. Legislative bargaining over a fixed budget

Consider a legislature with three parties, $J = 1, 2, 3$, where each party represents a specific group with equal shares $\alpha^J = \frac{1}{3}$ in the population. The parties bargain over a fixed budget of size 2 under the constraint $\sum_J \alpha^J f^J = 2$, where f^J is per-capita spending on group J . Each party's payoff is linear in the per-capita spending level for the group it represents: $w^J = f^J$. The bargaining is done under closed rule in one round. Nature draws an agenda setter among the three parties with equal recognition probability $p^J = p = \frac{1}{3}$. The chosen setter makes a take-it-or-leave-it offer of an allocation $\{f^J\}$. If at least two parties approve, the proposal is implemented. If not, a default allocation of per-capita spending $f^J = d^J$ is realized with $d^1 = 3$, $d^2 = 2$, and $d^3 = 1$.

Solve for the bargaining outcome when each of the three parties has been chosen to set the agenda and calculate the value of the game for each party – i.e., calculate the expected utilities for parties/group members $E(w^J)$ before the identity of the agenda setter has been drawn by nature. Which of the parties are the best and the worst off? Explain briefly!

4. The effect of spending on voters

A naive model of the effects of targeted spending in district d at time t , x_{dt} , on votes is

$$v_{dt} = \beta x_{dt} + \varepsilon_{dt}.$$

- a) Explain, intuitively, why estimation of this model is likely to yield a biased estimate of β .
- b) Explain ways to get unbiased estimates of β .
- c) Briefly discuss a paper that has applied such a technique and its results.

5. Party effects

Does the party affiliation of politicians in power matter for government policy? Discuss the evidence?

6. Environmental policy in alternative electoral systems

Suppose a government can spend a fixed budget either on regional cash transfers or on an environmental policy with nation-wide benefits. Which electoral systems do you predict would stimulate a more ambitious environmental policies, everything else equal? Explain briefly the analytical intuition behind your suggested prediction!

II. Problems

Choose 1 out of 2. Worth 25 points.

7. Equilibrium transfers in the probabilistic voting model

Consider a model with three groups of citizens, denoted by $J = 1, 2, 3$, with population sizes $\alpha^J < \frac{1}{2}$. Assume that $\alpha^1 = \alpha^2 > \alpha^3$. The government budget is fixed at B , and is exhausted by per-capita transfers, b^J , to the three groups:

$$\sum_J \alpha^J b^J = B.$$

Every member of each group has the same level of income y , such that private consumption in group J is $c^J = y + b^J$. Individuals have concave utility functions $u^J = U(c^J)$.

Two parties, $P = A, B$ each maximize their probability of winning and simultaneously commit themselves to a policy vector $\mathbf{b}_P = \{b_P^J\}_{J=1,2,3}$ in their electoral

platform. The party with the most votes gets to implement its platform after the election. The two parties also have other “ideological” attributes, which the voters value in different ways. Specifically, voter i in group J votes for party A if

$$U(y + b_A^J) > U(y + b_B^J) + \sigma^i + \delta ,$$

where $\sigma^i \stackrel{\geq}{\leq} 0$ is a voter-specific ideological parameter, and $\delta \stackrel{\geq}{\leq} 0$ an aggregate ideological shock. Assume that σ^i has a uniform group-specific distribution with density ϕ^J on $[-\frac{1}{2\phi^J}, \frac{1}{2\phi^J}]$, and that δ is uniform with density ψ on $[-\frac{1}{2\psi}, \frac{1}{2\psi}]$. Assume that $\phi^1 > \phi^2 = \phi^3$.

a) Show how the probability of winning for party A , p_A , depends on the policies announced by the two parties, $\mathbf{b}_A, \mathbf{b}_B$, when each voter casts her ballot optimally.

b) Characterize the equilibrium when parties set their policy platforms optimally. (Assume an interior solution.) How do the transfers given to groups 1-3 relate to each other and to the parameters $\{\alpha^J\}$ and $\{\phi^J\}$? Explain the result intuitively!

8. Estimation and identification of constitutional effects

According to a theoretical model you have developed, a continuous policy outcome Y depends on a specific constitutional feature. The latter is described by a binary variable $S \in \{0, 1\}$. Your theory has the qualitative implication that $E(Y^1) > E(Y^0)$ – ceteris paribus, it predicts a higher value of Y in a typical country when $S = 1$ than when $S = 0$. You only have access to cross-country data: that is, you observe $\{Y_i, S_i, \mathbf{X}_i\}$ for a certain set of countries $i = 1, \dots, I$ in a certain time period, where \mathbf{X}_i is a vector of (potentially) policy-relevant economic, political and social variables in country i .

How can you test your theory with these data? Describe formally different empirical strategies for testing and the specific identifying assumptions they rely on! Discuss the strengths and weaknesses of each strategy you describe!

III. Essays

Choose 1 of 2. Worth 25 points.

9. Campaigning

Suppose that you are advising a prime minister/president who is contemplating adjusting economic policy before the next election. She is asking you (please answer the questions below)

(a) What is the evidence that higher growth in the election year will get her more votes; how many votes would she expect to gain per percentage increase in GDP in the election year that she can deliver?

(b) She is also contemplating spending more money in some key areas. She is asking you what areas she should spend more money in to maximize her vote share. The electoral system is proportional. What would you answer and how would you empirically identify the areas where she should spend more?

(c) She mentions that some of her other advisors have found that the vote share of local politicians (e.g. congressmen) is lower in times when they manage to get more national spending into the area. These advisors interpret this as a sign that bringing more money to the district can actually hurt the local politician. How would you explain the negative correlation between local spending and vote shares? What empirical evidence could you present that shows that local spending increases the vote support of local politicians?

10. Preferences of voters vs. politicians

In the standard median voter framework, policy is entirely dictated by voter preferences. In other models, the preferences of the politicians also matter for policy to varying degree. How can we, empirically, determine the degree to which policy follows voters or politicians' preferences? Discuss some empirical strategies designed to estimate this, and describe the results from studies employing these strategies.

The maximum score is 100 (50+25+25) points and a pass requires 50 points.
Good luck!