POLITICAL ECONOMY FIELD EXAM

January 14, 2013

Please answer all questions. Each question will be graded equally. You have three hours to complete the exam.

1. Majoritarian elections with heterogeneous distribution of voters across districts

There are 4 groups of voters $J = 1, ..., 4$. with utility $V^J = 1 - \tau + H(g^J)$ where τ is a common tax rate and g^J is a public good benefiting only group J. The reelection rule is $V^J \geq V^{J*} + \omega^i + \delta$ where ω^i is an idiosyncratic variable distributed uniformly on $[-\frac{1}{2\phi}, \frac{1}{2\phi}]$ and δ is an aggregate popularity shock distributed uniformly on $[-\frac{1}{2\psi}, \frac{1}{2\psi}]$. Politicians maximize $r_G^P + E(_N s_G^P) R^P$ where r_G^P are the rents of party P depending on its government status (single-party government, coalition government or opposition), $E(_N s_G^P)$ is the expected seat share of party P depending on its status and the equilibrium number of parties N. $R^P = \gamma r_G^P$ for a single party government and $R^P = 2\gamma r_G^P$ for a coalition government due to the common pool problem in coalition governments.

Assume $J = 1$ constitutes one half of the electorate in the first half of districts and is not present in the other half while $J = 2$ constitutes one half of the electorate in the second half of districts and is not present in the first half. Groups $J = 3, 4$ are equally present in all districts and each form a quarter of the electorate.

(a) Calculate the expected seat shares of parties $J = 1, 2$ in a four party equilibrium and of $J = 1, 2$ in a two party equilibrium.

(b) Calculate the public good provision for all groups in a coalition government with $P = 1, 2$ in power, each party providing public goods for their constituency. Do they agree on how much $J = 3, 4$ should get? Calculate public good provision for all groups in a two party equilibrium with $P = 1, 2$ in power. How does public good provision differ from the case where all groups are distributed equally among districts?

2. In the last US presidential election, platforms of the two main candidates were different and there seems to be a trend towards polarization in American politics. Discuss this fact in the light of the current theoretical literature. How do current models account for divergence between platforms? Do these seem satisfactory? Can you think of other ways in which one might generate divergence of platforms? Discuss.

3. Voting Behavior

(a) Why do voters turn out in democratic elections? Characterize the main theoretical puzzle. Discuss at least two theoretical models that explain the voter turnout decision, and assess the recent empirical research testing these models.

(b) Why do voters support the incumbent government rather than the opposition? Describe the key assumptions underlying benchmark models of rational, forward-looking voters. Contrast this approach with at least one alternative theoretical explanation, and assess the recent empirical research that attempts to distinguish between these models.

(c) Building on your discussions in parts a. and b. above, overall how would you characterize the relative predictive power of "rational choice" versus "behavioral" models of voter decision-making? Describe at least one remaining open question or puzzle in this broad research area.

4. Career Concerns

Consider a two period model. Taxes are fixed at $\bar{\tau}$ and the government budget must be balanced in both periods. Preferences of the voters in period $t = 1, 2$ are $w_t = y(1-\bar{\tau}) + \alpha g_t$, where $\alpha \geq 1$ is an exogenous parameter and y denotes income. The government budget constraint is $g_t = \eta(\bar{\tau}y - r_t)$, where η reflects the politician's competence in providing the public good, and is distributed uniformly over $\left[1 - \frac{1}{2\xi}, 1 + \frac{1}{2\xi}\right]$. If a politician with competence η is removed from office, a new politician is appointed whose competence is drawn at random from the same distribution.

Rents are constrained to be nonnegative and bounded from above at a level below the available tax revenue, i.e. $r_t \leq \bar{r} < \bar{\tau}y$. The objective function of the period 1 incumbent politician is: $v_I = r_1 + p_I\beta(R + r_2)$, where $0 < \beta < 1$ is a discount factor and p_I is the probability that the incumbent is reelected. R denotes ego rents from winning the election.

The timing of events is as follows: (1) An incumbent politician is in office in period 1 and chooses rents for that period r_1, without knowing his own competence η. (2) The value of η is realized and public good provision g_1 is residually determined so as to satisfy the budget constraint. Voters observe their own utility but neither η or r_1. (3) Elections are held. If the incumbent wins, his competence remains. If he loses, an opponent is appointed with competence drawn at random from the same distribution. (4) Period 2 rents r_2 are set, and public goods residually determined.

(a) Solve for the equilibrium behavior in both periods. What are equilibrium rents in periods 1 and 2? Do rents in the first period depend on η? How will voters behave? What is the probability of winning?

(b) Discuss how the equilibrium would change if the incumbent knew his own competence when setting policy in period 1?

(c) Discuss two papers that test this theory empirically? What were the strengths and weakness of these papers? Describe the data, econometric approach, and robustness of the findings.