Political Economy Field Exam
Summer 2017

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

Part A: Term limits

100 points total

Consider a situation where there is a continuum of citizens of measure 1 all with the same income $y$. Their preferences are given by $w_i = y(1 - \tau) + H(g)$ where $\tau$ is the tax rate (exogenously given) and $g$ is the level of public goods ($H(g)$ is concave). The government budget constraint is given by $\tau y = \theta g + r$ where $r$ denotes rents to politicians and $\theta$ is a parameter measuring the cost of providing public goods. The incumbent politician decides on $g$ and $r$. The following game is repeated infinitely many periods: 1) $\theta_t$ is realized and observed by all, 2) Voters set a reservation utility $\omega(\theta_t)$ for reelection of the incumbent, 3) the incumbent sets $r_t$ and $g_t$; 4) Elections are held between the incumbent and an identical opponent. The politician maximizes $\sum \beta^t p_t u_t$ where $\beta$ is the subjective discount factor, $p_t$ the probability of reelection and $u_t = \gamma r_t$. A politician voted out of office cannot be reelected. The incumbent at period 0 maximizes $\gamma r_0 + \beta p_1 R_1$ where $R_1$ is the value of being the incumbent in period 1.

1. Solve for the equilibrium rents.

2. Suppose there are term limits (no more than 3 periods). How does this affect rents in equilibrium in periods 1 and 2?

Part B: Democracy vs Autocracy

100 points total

Most of the theories in political economics are about democratic political regimes where representatives are elected in competitive elections, parties compete around legislative initiatives and politicians are tempted to abuse their powers for their own personal interests. If we want to think of autocratic regimes in a non caricatural way and compare the political economics of policy-making with that in democratic regimes, how would you think of that comparison in terms of a) conflicts between politicians and the electorate (politician rents), b) conflicts between politicians inside government, c) conflicts between different categories of voters, how would you compare in a stylized way the way these conflicts play out in autocracies compared to democracies. Note: there is no single good answer here, but this is to test your deep thinking about the field of political economics.

Part C: Synthesizing the literature

100 points total

Each question worth 25 points. You should spend around 45 minutes on this section. Your score on these questions will depend on the clarity, depth and breadth of your answers; specifically, on
1. Is a strong, unconstrained state the worst of all political institutions?

2. When thinking about the human resources (selection and incentives) of bureaucrats and politicians, should one think of them just like employees in any firm?

3. How persistent are political attitudes? How effective are governments’ attempts to manipulate them?

4. Which way does the causal relationship run between economic variables (e.g., income per capita) and political variables (e.g., political institutions)?

Part D: Estimating the effects of an anti-corruption campaign

100 points total

Your score on this part will depend on the clarity, depth and breadth of your answers. You should plan to spend 45 minutes on this question.

China’s President Xi Jinping has recently undertaken a massive anti-corruption campaign against local government officials. Suppose you are interested in studying its effects on air pollution (you hypothesize that corruption leads to more air pollution, as officials are willing to “look the other way”). In conversations with Chinese officials, you discover that within the Chinese province of Sichuan, the Communist Party decided to randomly introduce to some counties, but not others, a very strict monitoring and accounting system aimed at reducing corruption among county officials. The program lasted for one year. You are tasked with evaluating the impact of the intervention.

1. Suppose you have county-level data on air pollution for a single cross-section of counties, observed at the end of the one-year intervention period. Assuming successful randomization across counties, do you need a panel to conduct the impact evaluation, or is a single cross-section sufficient? Explain. (10 points)

2. Suppose you are given a wide range of pre-intervention data on county characteristics (population density; initial pollution levels; education levels; etc.). How can you use these data to test for the successful randomization of the program across counties? (10 points)

3. Assuming there was successful randomization across counties, what will happen to your estimated effects of the program if you include county-level characteristics as controls? Explain. (20 points)

4. How might spatial considerations bias the impact evaluation? Provide a coherent “spatial” story for the estimated treatment effects being “too large” (pollution falling “too much” in the treatment counties). Provide a “spatial” story for the estimated treatment effects being “too small”. (30 points)
5. How might dynamic considerations distort the intervention itself? Provide a coherent “dynamic” story for the estimated treatment effects being “too large” (pollution falling “too much” in the treatment counties). Provide a “dynamic” story for the estimated treatment effects being “too small”. (30 points)