

Question 1: Probabilistic voting models [30 points]

Consider an economy with n voters who all have the same income y (hence, the total income in the economy is ny). The voters derive benefit from consuming private goods c that they buy from their own income, and from consuming goods g that are provided by the government. In particular, each voters' preferences for g and c are as follows:

$$W(g) = c + \frac{1}{4}g + \sqrt{g} \quad (1)$$

The publicly provided good g is financed by a proportional income tax of rate τ . The voters use all of their after-tax income to buy private goods c . The publicly provided good g is also a private good, in the sense that it is both rival and excludable. All prices are normalized to 1.

An election is coming up. Two candidates A and B will run, each with the objective of maximizing their probability of winning and thereby, possibly, extracting rents r from the tax revenues from each voter. The timing is such that (i) the two candidates announce their platforms, (ii) elections are held, and (iii) the winning platform is implemented.

Although the voters have identical preferences over c and g according to (1), they differ in how they value candidate-specific characteristics (for example, the candidates' ideology, their hair style etc.). It can then be shown that candidate A 's probability of winning is:

$$p_A = \frac{1}{2} + \phi \left(W(g_A, r_A) - W(g_B, r_B) \right), \quad (2)$$

where ϕ measures the level of certainty of how the ideological popularity is distributed among the voters, and $W(g_A, r_A)$ and $W(g_B, r_B)$ denote voter utility under candidate A 's and B 's policy platforms, respectively.

- (a) What is the equilibrium level of public goods g in this economy? (Hint: Start by writing down the citizens' and the government budget constraints.) [12 points]
- (b) What is the equilibrium level of rent extraction r in this economy? (Hint: Note that $p_A = \frac{1}{2}$ in equilibrium.) [8 points]
- (c) How does the equilibrium level of g depend on ϕ ? How does the equilibrium level of r depend on ϕ ? Explain the intuition behind these results. [10 points]

Question 2: Social interactions as drivers of political beliefs and political mass movements [30 points]

- (a) An important question for policymakers is whether tastes for public social policies are driven by the electorate or if they can be considered an outcome of the political system itself. Alesina and Fuchs-Schündeln (2007) examine precisely this issue: namely, are individual policy preferences exogenous or are they endogenous to political regimes?
 - (i) Highlight the main argument, the methodology and data used to explore the question, and four reasons that may explain tastes for public services. [7.5 points]
 - (ii) In particular, what is the empirical challenge and how does the paper address the potential problems with its empirical strategy? [7.5 points]

- (b) Theoretical work generally suggests that a sense of civic duty or consumption value drive political involvement. Less is known about why people engage in political mass movements. Discuss the paper by Campante and Chor (2013) that analyzes the causes of popular uprisings and protests.
 - (iii) Highlight the main argument, the methodology and data used to explore the question, and the three mechanisms that may explain their findings. [7.5 points]
 - (iv) In particular, what is the empirical challenge and how does the paper address the potential problems with its empirical strategy? [7.5 points]

Question 3: Mass media [30 points]

Snyder and Strömberg (2010) estimate the impact of press coverage on a number of outcomes such as citizen knowledge, voter behavior, politicians' performance, electoral outcomes and policy. In order to identify the causal effect of active media coverage of voters' House representative, they exploit variation in the match, or “congruence”, between newspaper markets and U.S. congressional districts.

- (a) How do Snyder and Strömberg define congruence between newspaper markets and congressional districts? Explain the intuition for why variation in congruence is likely to capture variation in press coverage that is exogenous to citizen knowledge and political outcomes. [10 points]
- (b) One of the outcomes of interest in Snyder and Strömberg (2010) is voter turnout in House elections. Explain and motivate their measure for turnout, and discuss what they find. [10 points]
- (c) Although the use of congruence provides a credible identification strategy, the authors still have concerns. These concerns mainly fall into two categories: (I) Concerns related to representative characteristics—more interesting congressmen attract more media coverage, which might affect newspaper sales; (II) Concerns related to population or location characteristics of a county—congruence is generally lower in bigger cities. Explain how the authors change the baseline specification in order to deal with these two types of concerns, respectively. [10 points]

Question 4: Political mass movements [10 points]

NOTE: Students that successfully completed the paper report and got the full score (10 points) should skip this question completely. Students that obtained 5 points should skip part (b).

As mentioned in Question (2), theoretical work suggests that a sense of civic duty or consumption value drive political involvement. However, there is not much knowledge about the persistence of preferences and behavior generated by personal experience.

Discuss the paper by Madestam and Yanagizawa-Drott (2011) that studies the effect of celebrating Fourth of July in the US on people's political views and behavior.

- (a) First, talk about why it may be difficult to measure how cultural events, such as Fourth of July, affect society at large and how the authors solve this issue in their study. [5 points]
- (b) Second, what are the theories that help explain the impact of cultural events broadly speaking and the persistence of the effects that the paper identifies? [5 points]