# ECON4640 - Political Economics, Fall 2023

**Question 1: Electoral competition and equilibrium policy [40%]**

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Consider an economy with a continuum of households of mass 1, who are characterized by unequal income endowments, $y$, distributed uniformly on the interval $[0 \quad 2]$. There are two parties, L and R, representing either side of the political spectrum. Each select their candidate through some *exogenous* process. Elections are settled by majority vote, or a coin flip in the case of a tie. The winning candidate gets to set tax rate $\tau$, which is redistributed equally to everyone as lumpsum, $g$. Thus the utility of a household (indexed by $i$) can be written as:

$$u_i = \sqrt{c_i} + \sqrt{g} \tag{1}$$

The household faces budget constraint:

$$c_i = (1 - \tau)y_i \tag{2}$$

And the government budget constraint is:

$$g = \tau \bar{y}. \tag{3}$$

where $\bar{y}$ is average income.

(a) [10 pts] Identify the most-preferred tax of Household $i$.

(b) [10 pts] Assume the electoral process is such that the two parties each randomly decide their candidate by holding a lottery among their members. These two candidates then have a televised debate where they announce and commit to their proposed policy. Discuss the forces that will weigh on the candidates when announcing their platforms.

(c) [10 pts] Now suppose that instead of a lottery, the parties nomination process chooses the most "ideologically pure" candidate. Specifically, Party $L$ nominates the household with $y_i = 0$ and Party $R$ nominates $y_j = 2$. The two candidates still debate and commit to their platforms. What is the equilibrium policy in this setting? Be detailed in your reasoning.

(d) [10 pts] Now suppose parties are abolished, and candidates have to pay their own way, incurring cost $\epsilon$ if they run in the race. Also, in the absence of political parties, candidates can no longer commit to their policy platform. Thus, candidates arise *endogenously* from the distribution of households. If no citizen runs, the default policy, $\hat{g} = 0$, is implemented. That is, there is no taxation or government good provision. What are the conditions for an equilibrium where only one citizen runs and implements the same policy as in part c?

**Question 2: Political reforms [40%]**

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Political reforms can alter the incentives and behaviour of politicians and/or policy outcomes, but reformers' intentions are not always consistent with theory and evidence. Use your knowledge of both theory and empirical studies to address the following reform settings.

(a) [20 pts] "Positions of power are dominated by men, yes, but since women make up half the voting population, their policy preferences should be well-served by democratically-elected policy makers. Thus a reform instituting a quota for women politicians will not change outcomes."

(b) [20 pts] "Power corrupts and allowing politicians to linger in positions of power will only breed more corruption. We need term limit reforms to excise corrupt leaders."

**Question 3: Patronage [20%]**

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Patronage is the exchange of public sector employment for political support, and potentially a tool for politicians to engage in legal quid-pro-quo. Colonnelli et al. (2020)[1] study this phenomenon in a Brazilian municipal context.

(a) [10 pts] Interpret the first two rows of column (1) in Table 4 (see below) from Colonnelli et al. (2020).

(b) [10 pts] Besides the test in Table 4, what is another alternative explanation for the existence of quid pro quo patronage in this setting? How do the authors respond to it?

[1]Colonnelli, E., Prem, M., Teso, E. (2020). Patronage and selection in public sector organizations. American Economic Review, 110(10), 3071-3099.

TABLE 4-EFFECT OF SUPPORTING THE WINNING PARTY: IDEOLOGY TESTS

| Type or supporter: | Candidates (1) | Donors (2) | Own supponers candidates (3) | Neighboring candidates (4) | Own supporters donors (5) | Neighboring donors (6) |
|---|---|---|---|---|---|---|
| Mayor | 0.184 | 0.082 | 0.156 | 0.001 | 0.114 | 0.001 |
| | (0.029) | (0.031) | (0.006) | (0.000) | (0.015) | (0.00 1) |
| Mayor x switcher | -0.027 | 0.002 | | | | |
| | (0.010) | (0.027) | | | | |
| Switcher | 0.011 | -0.014 | | | | |
| | (0.007) | (0.020) | | | | |
| Observations | 82,160 | 9,496 | 299,188 | 701,276 | 129,150 | 181,296 |
| Mean D.V. runner-up | 0.258 | 0.337 | 0.140 | 0.001 | 0.098 | 0.001 |
| Supponers | 22,646 | 3,821 | 81,063 | 149,768 | 41,669 | 51,410 |
| Elections | 3,361 | 536 | 4,679 | 4,679 | 893 | 893 |

*Notes:* Columns I and 2 present estimates from a version of equation ( t ) augmenJed by an indicator equal 10 I if the supporter is a "switcher," namely supponed a different party in the previous elecLion, and its interaction with the *Mayor* indicator. Column 1 focuses on the sample of candidates, while column 2 focuses on the sample of donors. See Section IVC for the lis1 of variables included as additional controls. Columns 3-6 present the estima1ed effec1s in the samples of candidates and donors supporling the winning party or Lhe runner-up party in the municipality (columns 3 and 5, respectively), and in the samples of candidates and donors supporting the same parties but in neighboring municipalities (columns 4 and 6, respectively ). See SectionVD for additional detail .The sample is restricted to supporters of the winning party or of the runner-up in a close election, using a 5 percentage point margin of victory to define an election as close. *Mean D. V. n11111er-up* shows the average of the dependent variable for the supporters of Lhe runner-up in the post-election period. Standard errors are shown in parentheses and are double clustered at the supporter and election level.