

Mock exam ECON 4640 Political Economics

This mock exam is not compulsory and it should not be handed in.

Answer briefly (1/2 to 1 page) two of the following three questions:

1. Discuss this statement: “The identity of the politician matters in a model with citizen candidates but not in a median voter framework.”
2. How do you define fractionalization (e.g. between racial groups). Explain briefly how fractionalization may influence public policy.
3. Why will the median voter model usually break down if more than one political variable (say the tax rate and the composition of spending) is determined simultaneously?

Essay question

1. Discuss briefly why majoritarian and proportional election systems may give different outcomes with regard to both the size of government spending and the composition of this spending. It is not necessary to present a formal model.
2. To study this relationship, Persson and Tabellini (2004) regress the size of government spending on dummies for a majoritarian and a presidential system. Included is their Table 2, which presents results from an ordinary least squares (OLS) specification. Discuss the results. Why may OLS not be an appropriate technique in this case?
3. In Table 3 (also attached), Persson and Tabellini present results from a number of estimation techniques that attempts to overcome some of the difficulties related to using OLS. Pay attention to columns (3) and (4) where they use instrumental variables (2SLS). The instruments for political system are dummies for the period when the country’s constitution was written (1921-1950, 1951-1980, after 1981) as well as some linguistic characteristics of the country. Discuss the period-instrument: Why could this be a valid instrument, and what could be the weaknesses with this instrument? Compare the findings in columns (3) and (4) in Table 3 with the results from Table 2 and discuss.

TABLE 2—SIZE OF GOVERNMENT AND CONSTITUTIONS: OLS ESTIMATES

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dependent variable	<i>cgexp</i>	<i>cgexp</i>	<i>cgrev</i>	<i>dft</i>	<i>cgexp</i>	<i>cgexp</i>	<i>cgexp</i>
<i>pres</i>	-5.18 (1.93)***		-5.00 (2.47)**	0.16 (1.15)	-2.65 (2.70)	-7.75 (2.70)***	-6.46 (2.98)**
<i>maj</i>	-6.32 (2.11)***		-3.68 (2.15)*	-3.15 (0.87)***	-1.45 (2.32)	-7.94 (3.74)**	-6.33 (2.48)**
<i>propres</i>		-6.56 (3.01)**					
<i>majpar</i>		-6.96 (3.72)*					
<i>majpres</i>		-10.37 (3.03)***					
<i>pres_newdem</i>						3.50 (2.72)	
<i>maj_newdem</i>						3.58 (4.03)	
<i>newdem</i>						-4.08 (2.23)*	
<i>pres_baddem</i>							2.42 (4.16)
<i>maj_baddem</i>							2.06 (5.97)
<i>baddem</i>							-5.73 (3.46)
<i>F</i> -test (<i>pres</i>)		0.43				4.01**	1.40
<i>F</i> -test (<i>maj</i>)						3.18*	0.66
Sample	1990's	1990's	1990's	1990's	1960–1973	1990's	1990's
Observations	80	80	76	72	42	80	80
R ²	0.71	0.70	0.68	0.50	0.79	0.72	0.70

Notes: Robust standard errors are in parentheses. All regressions include our standard controls, *lyp*, *lpop*, *gastil*, *age*, *trade*, *prop65*, *prop1564*, *federal*, and *oecd*, plus a set of indicator variables for continental location and colonial origin, except that *age* is missing in column (5)–(6), while *gastil* is missing in column (7) and replaced by *polity* in column (5). *F*-test (*pres*) refers to tests of the hypotheses that the coefficient for *propres* is equal to the difference between the coefficients for *majpres* and *majpar* [column (2)], the sum of the coefficients for *pres* and *pres_newdem* is zero [column (6)], and the sum of the coefficients for *pres* and *pres_baddem* is zero [column (7)]. *F*-test (*maj*) refers to the corresponding tests with regard to *maj* [columns (6) and (7)].

* Significant at the 10-percent level.

** Significant at the 5-percent level.

*** Significant at the 1-percent level.

TABLE 3—SIZE OF GOVERNMENT AND CONSTITUTIONS: INSTRUMENTAL VARIABLES, HECKMAN, AND MATCHING ESTIMATES

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dependent variable	<i>cgexp</i>	<i>cgexp</i>	<i>cgexp</i>	<i>cgexp</i>	<i>cgexp</i>	<i>cgexp</i>	<i>cgexp</i>
<i>pres</i>	-5.29 (2.18)**	-11.52 (4.54)**	-6.51 (3.71)*	-4.22 (3.99)	-5.86 (4.53)	-2.54 (2.26)	-7.30 (2.36)***
<i>maj</i>	-6.21 (2.82)**	-6.77 (1.98)***	-4.83 (3.19)	-4.18 (3.17)	-4.86 (3.57)	-6.59 (3.40)*	-5.76 (2.59)**
Conts & Cols	Yes	Yes	<i>col_uka</i>	<i>col_uka, laam</i>			
Sample	1990's	1990's	1990's	1990's	1990's	1990's	1990's
Endogenous selection	<i>maj</i>	<i>pres</i>	<i>pres</i> <i>maj</i>	<i>pres</i> <i>maj</i>	<i>pres</i> <i>maj</i>	<i>pres</i> <i>maj</i>	<i>pres</i> <i>maj</i>
Estimation	Heckman ML	Heckman ML	2SLS	2SLS	Stratification	Nearest neighbor	Kernel
Rho	0.05 (0.29)	0.62 (0.33)					
Chi-2			3.29	2.23			
Adjusted R^2			0.59	0.59			
Observations	75	75	75	75	65(<i>pres</i>) 67(<i>maj</i>)	65(<i>pres</i>) 67(<i>maj</i>)	65(<i>pres</i>) 67(<i>maj</i>)

Notes: Standard errors are in parentheses. Always included in second-stage specification in columns (1)–(4): *age, lyp, trade, prop1564, prop65, gastil, federal, oecd, lpop*; Conts & Cols refer to indicator variables for continental location and colonial history. Specification of constitution selection in Heckman procedure in columns (1)–(2) includes: *engfrac, eurfrac, lat01, avelf, lpop, laam*; Rho is the estimated correlation coefficient between the error terms in the first and second stage. Estimation is by maximum likelihood. First-stage specification of 2SLS in columns (3)–(4) includes (see Table A2, Appendix): for *maj*: *con2150, con5180, con81, engfrac, eurfrac, lpop, avelf*, for *pres*: *con2150, con5180, con81, engfrac, eurfrac, lat01, age*; Chi-2 is the test statistic for rejecting the overidentifying restrictions implied by exogenous (additional) instruments; critical value Chi-2 (5,0.05) = 11.07. Propensity-score logit estimation underlying columns (5)–(7) includes: *lyp, prop65, gastil, federal, col_uka, laam*; estimates of the constitutional effects in these columns are carried out separately rather than jointly; numbers at the bottom indicate observations used in estimation (observations outside the common support for the propensity score of each constitutional feature are deleted).

* Significant at the 10-percent level.

** Significant at the 5-percent level.

*** Significant at the 1-percent level.