

Econ 270C: Analytics of Economic Development
Problem Set 2 (Due Tuesday April 25, 2006)

Democratic Politics and Violence (based on Ellman and Watchekon 2000 *OJE*)

Imagine that there are two political parties, a “weak” party (W) and a “strong” party (S) that are competing to win a democratic election. S has a source of violence, say a militia or a “youth wing”, at its disposal, but W does not.

The timing of the game is the following. In period 1, a democratic election is held, and the party getting the most votes wins the election. In period 2, a uni-dimensional public policy is chosen by the winner of the election; this policy y may take on values from $[-2, 2]$. In period 3, S may choose to launch political unrest, at which time it takes political power and implements its preferred policy. This violence imposes costs on voters and political parties. Parties are to be unable to commit to policy before the election.

Voters and parties are risk-neutral and have single-peaked preferences with an ideal policy point, indexed by θ . The median voter has ideal point $\theta = 0$, while the political parties S and W have ideal points -2 and 2 , respectively.

Political unrest imposes a cost of C on voters (the same for all θ), C_S on S, and C_W on W. We assume that violence is less costly for S than for either W or voters, and that violence is so costly for both W and voters that they prefer **any** policy outcome to violence. Formally,

$$C_W < -4 < -C_S < 0, \text{ and } -C \leq 4$$

Putting this all together, expected utility functions for the three actors in the model are the following, where y is the chosen public policy and r is the likelihood of political unrest:

$$U_S(y, r) = -\{(1-r)(y+2) + rC_S\}$$

$$U_W(y, r) = -\{(1-r)(2-y) + rC_W\}$$

$$U_\theta(y, r) = -\{(1-r)|y-\theta| + rC\}$$

a) Interpret these utility functions. **(1 point)**

b) Assume all voters and political parties have complete information about the game being played. In this case, which party wins the election, which policy do they choose, and is there the possibility of political violence? **(2 points)**

Now imagine the case in which there is uncertainty about the possibility of violence, which is modeled as uncertainty about C_S . In particular, C_S takes on a value of $(2+a)$ with probability P and a value of $(2+b)$ with probability $1-P$, where $-2 \leq a < b < 0$. When C_S takes on a value of $(2+a)$ we call this the “Tough type”, while $(2+b)$ is the “Soft type”.

c) If W wins the election, which policy (or policies) will it choose? Is there the possibility of political violence? (Please provide a formal solution as well as the intuition.) **(2 points)**

d) Given the policies that W would choose if elected, under what conditions will voters elect W ? For which values of P is W **most** likely to be elected? (Please provide a formal solution as well as the intuition.) **(3 points)**

e) Is this a reasonable model of politics in newly democratic less developed countries? Why or why not? Please illustrate your answer with particular country cases. **(2 points)**