## Equilibrium Strategy Profiles (For JLEO Revision)

First, need to get timing clear for evolution of state variable. Take state variable to be  $q_{st}$ .

•  $q_{s1}$ : beginning of the world (or,  $Q_{s0} - \mu = q_{s1}$ )

• 
$$Q_{s1} = q_{s1} + R_{p1} + R_{c1}$$
  
-  $q_{s2} = Q_{s1} - \mu$ 

Strategies

• For patron: function of  $q_{st}$ 

• For c: function of  $q_{st} + R_{pt}$ 

• For s: function of  $Q_{st} = q_{st} + R_{pt} + R_{ct}$ 

• For g: not a function of  $q_{st}$  at all

For Markov-perfect equilibrium, strategy profile must be dependent on state variable,  $q_s$  only.

## Period 1

- Patron:  $R_{p1} = \frac{\beta}{1-\delta} (q_{s1} l_{s1})$  to augment  $q_{s1}$  if this is greater than 0. Else,  $R_{p1} = 0$ . Can write in max language.
  - Patron might also want to invest to encourage recognition. Most efficient way to do this is to augment  $L_{g1}$  (other options are to push either g or s to war, but probability of other outcome diminishes efficiency of investment, and assume payoff to war is lower to begin with).
- International community:

1. If 
$$R_{p1} + q_{s1} - l_{s1} \ge \frac{\beta}{1-\delta}$$
,  $R_{c1} = 0$ 

2. Otherwise  $R_{c1} = l_{s1} - (q_{s1} + R_{p1}) + \varepsilon$  to augment  $l_{s1}$ 

- (SQ,Cede) is played and game ends

- Gov't / Secessionists: Choose unilateral, simultaneous best responses depending on magnitudes of  $Q_{i1}$ ,  $L_{i1}$  and  $\omega_{i1}$ 
  - Game only continues if (SQ,SQ) or (Cede, Cede) was played