

Title: Dynamic Model of Conflict with Endogenous Destruction

Abstract: We consider a contest for a territory between two countries with different motivations and the impact of these different motivations on each country's decisions with respect to allocation of their available resources to armaments. Suppose country 1 wants to win the territory for ideological reasons, and country 2 wants to win for economic reasons. These countries are otherwise similar in all other aspects. In this case, country 1's subjective valuation of the territory stays the same, while country 2's valuation decreases over time. As a result, country 1 is more likely to win the war for at least two reasons. First, country 2 does not want to fight hard because that will reduce the value of the territory. Second, if the war continues, country 2 quits much earlier. We also compute the impact on the payoff of each country due to a change in its own motivation, and the motivation of the other country.