

Private Strength and Public Signals: Optimal Information Disclosure under Spying*

James Boudreau[†] Abhra Roy[‡]

July 19, 2025

Abstract

We analyze a model of conflict between two countries, say, Country A and B over a disputed territory. The countries know their own military strength, but are uncertain about their opponent's strength. Each country may be strong or weak. Further, they may enhance their initial military strength by devoting greater resources prior to the start of the conflict by employing more personnel, which may be imperfectly observable by the adversary since such a strategy must involve disclosing its military strength. Individuals are assumed to get some benefit from joining the army depending on their intrinsic preferences and military strength. The country that wins the war maintains the disputed territory. In this context, we investigate how the size of disputed territory, initial strength, and individual preference affect optimal information disclosure and the probability of war.

JEL Classification Codes: C72, D74, D82, D83.

Keywords: Information Disclosure, Contests, Bayesian Persuasion, Military Strength.

*Work in progress. Please do not read or cite without authors' permission.

[†]Kennesaw State University, email: jboudre5@kennesaw.edu.

[‡]Kennesaw State University, email: aroy1@kennesaw.edu.