Dynamic Influence: Persuasion and Incentives

Ian Ball*

July 16, 2017

Abstract

I study a general model of dynamic information provision in a long-run relationship. The state of nature follows an exogenous Markov chain. A principal with commitment power observes the state realizations and sends signals to an agent in order to influence his actions, which are observed. I solve for the principal’s value in the patient limit. Then I characterize when the principal can achieve her optimal value through persuasion alone, that is, without intertemporal incentives. Finally, I show that in the binary case, a simple strategy of backloading information is optimal. The model is applied to repeated lobbying of a politician.

JEL Classification: C72, C73, D82, D83.

Keywords: Optimal information provision, persuasion, informational incentives.

*Yale University, Department of Economics, email: ian.ball@yale.edu. I especially thank Dirk Bergemann for guidance throughout the project. I also thank workshop audiences at Yale and NYU, particularly Larry Samuelson, David Pearce, Ariel Rubinstein, Nikhil Vellodi, Ryota Ijima, Mira Frick, Laura Doval, Helene Mass, Caroline Thomas, Ala Avoyan, and Takuo Sugaya.