Limited Observability as a Constraint in Contract Design^{*}

Stefan Krasa and Steven R. Williams Department of Economics University of Illinois 1206 South Sixth Street Champaign IL 61820 http://www.staff.uiuc.edu/~skrasa swillia3@uiuc.edu

March 15, 2004

Abstract

Limited observability is the assumption that economic agents can only observe a finite amount of information. Given this constraint, contracts among agents are necessarily finite and incomplete in comparison to the ideal complete contract that we model as infinite in detail. We consider the extent that finite contracts can approximate the idealized complete contracts. The objectives of the paper are: (i) to identify properties of agents' preferences that determine whether or not finiteness of contracts causes significant inefficiency; (ii) to evaluate the performance of finite contracts against the ideal optimal contract in a bilateral bargaining model.

Keywords: limited observability, bounded rationality, contractual incompleteness

JEL Classification Numbers: D82, C78

^{*}This paper originated in In-Koo Cho's seminar on bounded rationality. We thank In-Koo for inviting us to participate in his seminar and for his comments concerning this paper. We also thank Steven Matthews, Nabil Al-Najjar, Jim Peck, Stan Reiter and Tim Van Zandt for their suggestions.