

Economics Seminar, Indian Statistical Institute, New Delhi.

SPEAKER: Rohit Lamba, Princeton University

TITLE: **Dynamic Contracts Under Persistent Private Information: A Research Agenda**

TIME: 3:30 PM - 5:00 PM.

DAY & DATE: Monday, 9th January, 2012

PLACE: Seminar Room 2

Abstract:

In this talk I'll present some of the research I'm currently doing on dynamic contracts under persistent private information with commitment. Most of it is work under progress. This will include three topics with an emphasis on the first paper.

1) Optimal Dynamic Screening (with Marco Battaglini). We study a dynamic principal agent model with asymmetric information and quasi-linear preferences in which the information evolves in a correlated fashion. We provide necessary and sufficient conditions under which the first order approach (FOA) gives the optimal solution. We then show the limitations of the FOA in the form of an impossibility result: as the level of persistence becomes arbitrarily high the FOA always fails. A simple two period example is completely characterized to elucidate the complexity of the problem, specifically the structure of global incentive constraints. Next, we are currently working on a set of positive results that give up on optimality.

2) Investment under Asymmetric Information and Threat of Expropriation: We present a dynamic contracting model between an investor and a manager where the manager has private information about the technology of production and also can expropriate all the production and terminate the contract. The optimal contract is simple and satisfies various intuitively appealing properties. It is also the first dynamic contracting model with endogenous and type dependent participation constraints.

3) Optimal Dynamic Taxation: Persistent Private Information and the First Order Approach (with Diogo Guillen). This paper makes three technical contributions. First, it presents a first model of dynamic Mirrlees taxation with discrete types. We use the first order approach to characterize the optimal planner's problem. Second, it offers a new measure of private information for dynamic tax models: the residual of the wage equation. We use data from the PSID sample. And finally, we offer a numerical technique to solve for the optimum in this reasonably complicated computational problem.

<http://www.isid.ac.in/~pu/seminar.html>