

Optimal selling mechanisms with costly information acquisition

Jacques Crémer

IDEI-GREMAQ, Université de Toulouse

Yossi Spiegel

Tel Aviv University

Charles Z. Zheng

Northwestern University

August 12, 2003

Abstract : We consider auction environments where bidders must incur a cost to learn their valuations. The seller chooses a mechanism which indicates for each period, as a function of the bids in previous periods, which new potential buyers should be asked to bid; it must also induce buyers both to acquire and to reveal truthfully their valuations. We prove a very general “full extraction of the surplus” result: the seller can obtain the same profit as if he had full control over the buyers’ acquisition of information and could have observed directly their valuations once they are informed. We also present appealing implementations of the optimal mechanism in special cases.