

THE CHINESE UNIVERSITY OF HONG KONG

Department of Information Engineering

Seminar

Bargaining with Middlemen

by

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The Chinese University of Hong Kong

Abstract

We consider a dynamic and decentralized market modeled by a non-cooperative networked bargaining game. Our goal is to study how the network structure of the market and the role of middlemen influence the market's efficiency and fairness. We introduce the concept of limit stationary equilibrium in a general trading network and use it to analyze how endogenous delay emerges in trade and how surplus is shared between sellers and buyers. We will draw connections to mean-field games and outline some of the future work in mind.

Biography

Vijay G. Subramanian is a Research Assistant Faculty in the EECS Department at Northwestern University. He obtained his Ph. D. from UIUC in 1999. After graduating he worked in the research arm of Motorola, and thereafter at the Hamilton Institute in Ireland. His current research interests are on game theoretic and economic modeling of socio-technological systems and networks, social networks and the analysis of associated stochastic processes. Other research interests are in stochastic modeling, communications, information theory and applied mathematics with a large portion of past work on probabilistic analysis of communication networks, especially analysis of scheduling and routing algorithms. In the past he has also done some work with applications in immunology and coding of stochastic processes.

** ALL ARE WELCOME **

Host: Professor Jianwei Huang (Tel: 3943-8353, Email: jwhuang@ie.cuhk.edu.hk) Enquiries: Information Engineering Dept., CUHK (Tel.: 3943-8385)