CHUN-TING CHEN

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Curriculum Vitae

CITIZENSHIP:
- Taiwan (F1 Visa)

EDUCATION:
- Ph.D. in Economics, The Pennsylvania State University, 2015(expected)
- MA in Economics, National Taiwan University, 2008
- BSc in Civil Engineering, National Taiwan University, 2002

Ph.D. THESIS:
- Essays on Communication, Coordination, and Correlation
  Thesis Advisor: Professor Kalyan Chatterjee

FIELDS:
- **Primary:** Game Theory, Microeconomic Theory
- **Secondary:** Network Economics

WORKING PAPERS:
- "Coordination in Social Networks", Job Market Paper
- "A Window of Cognition: Eyetracking the Reasoning Process in Spatial Beauty Contest Games" (with Chen-Ying Huang, Joseph Tao-Yi Wang)

WORK IN PROGRESS
- "Correlation with Unduplicable Messages"
- "Mechanism for Borrowing and Lending" (with Rakesh Chaturvedi)

GRANTS & FELLOWSHIPS:
- Graduate Assistantship, Department of Economics, The Pennsylvania State University, 2009-2014
- The Best Master Thesis Award, Taiwan Economics Association, 2008

TEACHING EXPERIENCE:
- Teaching Assistant to Professor Peter Newberry, Industrial Organization (ECON 444, for advanced undergraduate), 2013

RESEARCH EXPERIENCE:
- Research Assistant to Professor Kalyan Chatterjee, 2014 summer
- Research Assistant to Professor Adam Slawski, 2012 summer
- Research Assistant to Professor Chen-Ying Huang, 2008-2009

PRESENTATIONS:
- ESA 2008 International Meeting, 2008

REFERENCES:

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THESIS ABSTRACT

1. "Coordination in Social Networks", Job Market Paper

This paper studies a collective action problem in a setting of discounted repeated coordination games where information and monitoring structures are modeled as networks. Players only know their neighbors' types that describe the neighbors' inclination to participate in a collective action as well as monitor their neighbors' past actions. I ask what kinds of networks can induce people to solve the uncertainty about players' inclination and coordinate to the ex-post efficient outcome.

In order to coordinate to the ex-post efficient outcome, players need to communicate by their actions and there should be "routes" for players to communicate. I define *strong connectedness* to characterize such routes. A state has strong connectedness if and only if for every two players who incline to participate, there is a path consisting of players who have the same types to connect them. Given that the networks are fixed, finite, connected, commonly known, and undirected, if such networks are without cycles, I show that, for all priors with full support on the strong connectedness states, there is a (weak) sequential equilibrium path in which the ex-post efficient outcome repeats after a finite time T when discount factor is sufficiently high. Given that the states of nature are discrete, this equilibrium is constructive and does not depend on public or private signals other than players' actions.

2. "Correlation with Unduplicable Messages"

I consider the three-player complete information games augmented with finite-period pre-play communication. Players can communicate privately or publicly with others, but not through a mediator. I use unduplicable messages to implement the correlated equilibrium distributions.

Unduplicable messages, such as signatures, cannot be duplicated and can be sent or received by players during the communication. With only unduplicable messages and jointly controlled lotteries, I show a class of three-player games in which the correlated equilibrium distributions can be implemented. Such pre-play communication protocols may vary with the correlated equilibrium distributions we want to implement.