

Conference Report for 2013 Chicago Summer School on Socioeconomic Inequality July 15 to 20 2013

This year, 36 students from universities in seven countries convened for a six-day intensive cross-disciplinary summer school on the study of inequality. The event broke down barriers between theoretical, econometric, and empirical work, and aimed to foster new research collaborations across the globe. Attendees were introduced to existing perspectives on the study of inequality, the latest applicable tools, and the challenges in the research frontier. Lecturers discussed matching, market design, social network analysis, and dynamic structural models, as well as tools from the fields of philosophy and sociology that help to frame questions of interest to policy makers. The ten presenting professors demonstrated applications of these tools to the many segments of society that define inequality between social groups and perpetuate inequality: selection into workplaces and families, social roles in high schools, and the selection of legal interventions. Poster sessions, informal meetings, and meals with the professors provided additional forums for summer school participants to receive feedback on their inequality-related research. According to one student, “The [summer school] experience helped me develop a wish list of tools I want to master and develop a customized reading list to prepare for my dissertation.”

Lectures are summarized below.

Lawrence Blume, Cornell University: Social Networks

Blume opened with the quote: “Economics is all about how people make choices. Sociology is all about why they don’t have choices to make” (Duesenberry, 1960). His lecture focused on how economic modeling can be extended to analyze individuals embedded in social scenarios and noted that wider application of economic modeling presents a large opportunity for students who are focused on inequality. He summarized some basic concepts from the mathematical analysis of networks and used them to discuss what is distinctive about social networks. He showed how simple models of social interaction have been used to model crime at both the micro and macro level. He then discussed an application of economic models of social networks to the communication of information about worker quality and job opportunities.

Pierre-Andre Chiappori, Columbia University: Family and Inequality

Chiappori expanded the discussion of inequality to the family setting, relating information about trends such as increasing female work force participation and decreased intra-household consumption inequality. This discussion was enriched by a discussion of the technical concerns involved in translating utility function measurements for the family setting. Chiappori presented solutions to the problem of comparing inequality and utility for single and married individuals, as well as applications of utility theory to understanding individual education decisions. He then discussed the construction of families in the marriage market. For some students, it was their first time seeing concepts used to analyze public goods in the economy as a whole (such as Lindahl prices) applied to the mini-economy of the family.

Steven Durlauf, University of Wisconsin-Madison: Intergenerational Mobility

In his first lecture, Durlauf provided an overview of normative issues involving inequality. Specifically he considered how different approaches to ethics have implications for how resources and opportunities should be allocated. He first described consequentialist approaches, focusing on how different social welfare functions lead to different choices of the distribution of consumption when the distribution is under the control of a social planner. Second, he explored deontological perspectives and the concept of equality of opportunity. Third, he described the capabilities approach and its vision of personal freedom. All three approaches were linked to positive questions in the study of inequality.

Durlauf gave two lectures on intergenerational mobility. He first described how intergenerational mobility is measured using either regression or Markov chain methods. He then described five alternative mechanisms which link the socioeconomic outcomes of parents and children: family investment, genes, social interactions and neighborhoods, and skill formation. Theoretical models were presented and identification problems in uncovering these alternative sources of intergenerational effects were discussed.

Raquel Fernandez, New York University: Women’s Rights and Women and Culture

Fernandez’s lecture focused on the political and cultural determinants of gender inequality, including legislation related to women’s suffrage or property rights, transmission of cultural influences, and female labor force participation and educational achievement. She presented theories of the cultural determinants of women’s work behavior and the evolution of these determinants, formulated as a learning model, as well as the evolution of women’s rights. A study of culture among second-generation Americans using an epidemiological approach indicated that the percentage of women who worked in their country of ancestry was a determinant of her own employment behavior. In addition, her research indicated that fertility and the legal system are determinants of the timing of reform related to women’s rights. Finally, acknowledging that there is an underinvestment in public goods—such as children’s education—when children leave the family to enter the marriage market, she presented a model where all externalities remain within the household to identify the efficient allocation of resources.

James Foster, George Washington University: Capabilities

Foster introduced capabilities theory to students, a philosophical aspect related to the study of inequality. This discussion enriched the treatment of the question “inequality of what?” More specifically, what statistics about the well-being of individuals are most important for policy-makers to track? Tracking income alone is not sufficient because income is a means rather than an end; rather, capabilities define the resources of an individual as well as their preferences. In his lecture, Foster described accounts that capture human flourishing to varying degrees, such as Bhutan’s gross national happiness index or Nussbaum’s list of central capabilities. These were presented in comparison with his own work, which focuses on the measurement of opportunity freedom.

James Heckman, The University of Chicago: The Life Cycle Evolution of Capabilities and the Early Evolution of Capabilities

Heckman’s lectures established a general framework for the study of inequality. First, he noted that it is difficult to define the optimal level of inequality, because inequality can arise as a market signal (as in “good” inequality where skills are rewarded in the market), whereas there also can be inequality due to discrimination and denial of opportunity. Next, he explored recent trends and statistics on inequality in the OECD and developing countries, as well as contributing factors such as household structure changes, assortative mating, and changes in the distribution of wages and returns to education. He also discussed the relation-

ship between income and consumption inequality, the relationship between income or perceived relative position and health, and intra-family processes that contribute to population-level trends in intergenerational mobility.

Heckman suggested a policy of pre-distribution, or early intervention, to reduce inequality such as high intergenerational correlation of earnings resulting from gaps in early investment in children’s cognitive and non-cognitive capabilities. He described the research supporting this approach including a framework for multi-dimensional conceptualization of skills, research on the critical periods for skill formation including epigenetic approaches, and the role of families and schools. In presenting this work, Heckman taught the econometric methods for identifying the relevant model parameters and explored the implications for policy.

Scott Kominers, Becker Friedman Institute: Market Design Approaches to Inequality

Kominers discussed how tools, methods, and approaches from market design can be used to address issues of inequality. He illustrated key market design principles through a case study on the design of school choice mechanisms. Strategy-proofness—a guarantee that each participant’s optimal strategy is to reveal his or her preferences truthfully—promotes equal access by reducing the benefits of strategic sophistication. Elimination of justified envy—ruling out the possibility that someone may prefer the outcome of someone else who has lower priority—both promotes fairness and ensures market stability. Thickening a market—incentivizing full participation in the market mechanism—improves transparency, reduces corruption, and makes outcomes more efficient. Flexibility in design helps ensure robustness to changes in policy goals. Taking these desiderata as a framework, Kominers discussed the public school choice programs in Boston, Chicago, and Germany, focusing on applications and generalizations of the student-optimal stable mechanism. Kominers concluded with explorations of how the market design approach can be used in the assignment of cadets to their branches of service, and in the of design affirmative action mechanisms.

Rachel Kranton, Duke University: Identity and Inequality

Kranton further developed the theme of how social context can be incorporated into the study of inequality and presented students options for approaching these topics using game theoretic and experimental approaches. She presented work that considers social norms as the outcome of a signaling game wherein students can choose their actions to signal their own desirable attributes to potential employers or potential social groups. Such a modeling approach can be applied to explain the phenomenon of students under-achieving to fit in with peers. In her economic model, each type of student’s equilibrium pursuit of education is sensitive to assumptions about what information peer groups and

potential employers can observe. In addition to presenting this theoretical work, she presented new experimental work, wherein behavior in games (including the trust game, dictator game and ultimatum game) is used to measure the salience of identity in a laboratory setting.

Christopher Taber, University of Wisconsin–Madison: Wage Determination

Acknowledging that wage inequality is a key aspect of inequality, Taber presented students with a brief overview of the basic models used to analyze wage inequality in labor economics. He started with a standard macro model in which individuals are paid the marginal productivity of labor. Taber then introduced the Roy model to explain self-selection of workers between sectors, given their information about their potential earnings in each sector. He then proceeded to consider a case of compensating differentials in which individuals have heterogeneity in taste of jobs. He also explored models of human capital investment such as the Ben-Porath model, and models of consumer and firm-based discrimination in an economy with two types of workers.

Petra Todd, University of Pennsylvania: Using Structural Models for Policy Evaluation

Todd introduced the students to discrete choice dynamic programming models, an option for structural estimation of behavioral models for policy evaluation. She reviewed her chapter in the handbook of labor economics, which was co-authored with Keane and Wolpin. Taking the example of decisions about education and labor supply, she started with a static model for individual level decision-making and expanded it to the dynamic case. She explored the technical aspects as well as disadvantages and advantages of either a non-parametric or parametric approach, as well as a structural versus non-structural approach, including the ability to include ex ante evaluation in the structural approach. Students learned about the practical concerns in implementing each type of analysis and the importance of validating models for policy evaluation.