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*Placement Chairs***:**

Sandra Black, +1 (212)-854-3676, sblack@columbia.edu

Suresh Naidu, +1 (212)-854-0027, sn2430@columbia.edu

*Placement Assistant***:**

Amy Devine, +1 (212) 854-6881, aed2152@columbia.edu

Education

Columbia University

Ph.D., Economics	*Expected 2023*
M.Phil., Economics	*2020*
M.A., Economics	*2019*

Bocconi University

M.Sc., Economic and Social Sciences	*2016*

    Thesis: "Spreading of Diseases on the Sexual Networks"
    Supervisors: Paolo Pin and Alessa Melagaro

Sciences Po Paris

B.A., Social Sciences	*2014*
Exchange: General Course at the *London School of Economics*	*2013-2014*

Fields of Specialization

Primary Field: Health Economics
Secondary Fields: Applied Econometrics, Family and Labor Economics, Networks

Job Market Paper

[Effects of Intra-Couple Bargaining Power on the Maternal and Neonatal Health](#)

Abstract: This paper provides evidence that bargaining power in a relationship shapes pregnancy outcomes and health disparities in the US. A key driver of bargaining power is the availability of potential non incarcerated male partners in the local dating market, which I define at the race by cohort by county level. Because these sex ratios are endogenous, I use a novel instrument that leverages the randomness in sex at birth and the persistence of local demographics to isolate exogenous variation in the relative availability of men. Instrumental variables estimation shows that higher female bargaining power leads to better outcomes: fewer out-of-wedlock births, a lower rate of Chlamydia and Hypertension among mothers, and a lower share of infants with APGAR score below the normal level. These findings point to a significant contribution of the marriage market to racial disparities in pregnancy health, and a novel explanation for the large gap between Black and White mothers. Indeed, Black women face relatively poor prospects when looking for a partner compared to White women: while there are 102 White man per 100 White women, only 89 Black men are available per 100 Black women According to my estimates, Black women's disadvantage accounts for 5-10% of the racial gap in maternal and neonatal health. Next, I use a decomposition technique to demonstrate that the racial difference in male availability is mostly policy driven, as incarceration accounts for 45% of the gap. I show with simulations that a counterfactual policy equalizing county-level incarceration rates for non-violent offenses between Black and

White people would, if one considers the sole effect on female bargaining power, prevent 200-700 adverse pregnancy outcomes per year among Black mothers.

Working Papers

1. Opening of hotels and ski facilities: impact on mobility, spending, and Covid-19 outcomes
   (**R&R at *Health Economics***)

   Abstract: This paper investigates how reopening hotels and ski facilities in Poland impacted tourism spending, mobility, and COVID-19 outcomes. We used administrative data from a government program that subsidizes travel to show that the policy increased the consumption of tourism services in ski resorts. By leveraging geolocation data from Facebook, we showed that ski resorts experienced a significant influx of tourists, increasing the number of local users by up to 50%. Furthermore, we confirmed an increase in the probability of meetings between pairs of users from distanced locations and users from tourist and non-tourist areas. As the policy impacted travel and gatherings, we then analyzed its effect on the diffusion of COVID-19. We found a significant association between tourist movements and the severity of a major pandemic wave in Poland. In particular, counties with ski facilities experienced more infections after the reopening. Moreover, counties strongly connected to the ski resorts during the reopening had more subsequent cases than weakly connected counties.

2. Contribution of school and commuting networks to spreading influenza in Poland

   Abstract: Epidemics can have devastating health and economic consequences. This paper studies the diffusion of influenza-like illnesses (ILI) through social and economic networks. Using almost two decades of weekly, county-level infection and mortality data from Poland, it studies within and across-counties ILI transmission. Firstly, it evaluates the causal effect of school closures on viral transmission. The results show that closing schools for two weeks decreases the number of within county cases by 30-40%. The decline in infections extends to elderly and pre-school children. In addition, flu-related hospitalizations drop by 7.5%, and mortality related to respiratory diseases among the elderly drops by 3%. Secondly, the paper demonstrates the significant contribution of economic links to diffusion across counties. The disease follows the paths of workers commuting between home and workplace. Together with the structure of the labor mobility networks, these results highlight the central role of regional capitals in sustaining and spreading the virus.

Work in Progress

1. Beware of Fake Friends: Spurious Links and Peer Effects in Networks

   Abstract: This paper discusses the robustness of the widely used IV method of estimating peer effects (from Bramoullé et al., [2009]) to spurious links. Spurious links are "false positive" connections that researchers observe but which do not exist in reality. First, I show that this estimator is inconsistent when spurious links are present and can find significant peer effects even if there are none. Next, I suggest an unbiased test for the existence of peer effects and show its performance in simulations.

2. Spreading New Habits

   Abstract: Various behaviors of economic relevance, such as condom use or hand washing, are subject to habitual practice. This paper takes into account habit formation to model the spread of new behaviors on networks. It augments traditional diffusion models with a novel insight: the probability of abandoning a new behavior decreases with the time spent practicing it. Three main results concerning interventions aiming to diffuse new behaviors stem from the augmented models. Firstly, repeated interventions are more successful at establishing new behaviors that require a long habit formation process. Secondly, there is a trade-off between the minimum number of initial adopters needed to spread the behavior and the intervention duration. Thirdly, habit formation can introduce non-monotonicities in adoption patterns in time, identifying behaviors prone to habit.

3. [Dashboard: Mobility in Poland During Covid-19 Pandemic](#)

    An online R Shiny dashboard visualizing mobility trends in Poland during Covid-19 pandemic. It *uses Facebook* smartphone geolocation data to measure daily changes in movement patterns in the period March 2020-May 2022. Interactive visualizations explore spatial, temporal, and network aspects of mobility.

4. Predicting Malpractice among New York Physicians

    This project utilizes machine learning techniques to predict which physicians are likely to be disciplined by the New York Medical Conduct Board. It is based on a compilation of datasets describing 140 000 physicians licensed to practice in NY and includes their characteristics, location, employment history, networks, education, and disciplinary actions. The goal of the project is to assign each physician a risk score of committing a professional misconduct.

Professional Experience

Columbia University

    Research Assistant (Prof. Michael Best)   *2019-2021*

        o Analysis of tax evasion in the Paraguayan production network (with Paraguayan Tax Authority)

    Research Assistant (Prof. José L. Montiel Olea)   *2019*

        o Review of research on educational peer effects in networks

    Research Assistant (Prof. Alessandra Casella)   *2019*

        o Analysis of data from a lab experiment in political economy

European Commission

    Brussels, Trainee in DataLab, DG HR   *2017*

        o Research on the impact of mental health and staff well-being on careers

Bocconi University

    Research Assistant (Prof. Fernando Vega-Redondo)   *2016-2017*

        o Analysis of the Spanish production network (with Spanish Tax Authority)

        o Organization of an experiment on peer effects in entrepreneurship in Accra, Ghana

Teaching Experience

Principles of Economics

    Teaching assistant, (with Prof. Prajit Dutta)   *Fall 2018*

    Teaching assistant, (with Prof. Brendan O'Flaherty)   *Spring 2019*

    Teaching assistant, (with Prof. Brendan O'Flaherty)   *Spring 2020*

Introduction to Econometrics

    Teaching assistant, (with Prof. Tamrat Gashaw)   *Fall 2019*

Honors and Awards

Dissertation Fellowship, Department of Economics, Columbia University	*2022*
Program for Economic Research, Columbia University, Data Purchase Grant	*2020*
Dean's Fellowship, Department of Economics, Columbia University	*2017-2021*
Summa Cum Laude, Bocconi University	*2016*
Bocconi Merit Award	*2014-2016*
Cum Laude, Sciences Po Paris	*2014*
Award for top student at Sciences Po Paris Dijon Campus	*2012-2014*

References

Douglas Almond *(Sponsor)*
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E. Rowan and Barbara Steinschneider Professor of Economics
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Brendan O'Flaherty
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Miscellaneous

Programming Languages:

R, MATLAB, Python, SQL, Stata, Linux shell scripting

Human Languages:

Polish (native), English (fluent), Italian (fluent), French (fluent)

Refereeing:

American Journal of Health Economics, Preventative Medicine

U.S. work authorization:

Eligible for 3-year OPT