

AIRLEAP Virtual Sessions
Western Economic Association International Conference
March 17-19, 2021

There are five sessions, each with three paper presentations:

March 17 @ 4:00 PM–5:45 PM UTC

Allied Society: AIRLEAP

[Session #] Title: [23] TRACKING NEW DEVELOPMENTS IN THE CHANGING ECONOMY

Organizer: Steven Payson, AIRLEAP

Chair: Steven Payson, AIRLEAP

Host: Julia Puaschunder, The New School

Papers:

- 1. Embodiment of Information in Man vs. Machine** Shabnam Mousavi, Max Planck Institute for Human Development, shabnam@jhu.edu
Discussant: Julia Puaschunder, Columbia University, julia.puaschunder@gmail.com

Humans receive and seek information, then retain some and forget others either intentionally or not-knowingly. Machines, on the other hand, sift and sort the input information then encode it, whereas, men embody in mind and muscles. Rational logic-based as well as heuristic rules are employed in the process both by machines and by men, and bounds manifest in a variety of forms. A large body of existing research involves design of better machines and understanding of human mind in its image. Encoding moral values into self-driving cars is a case in point. We stage our inquiry below this well-paved route. Steering clear of value judgments, this paper explores the structure of information embodiment by juxtaposing the concepts and processes of information gathering and generation from a machine learning perspective to that of the role of metaphors and meaning-making related to human cognition. Logical rationality serves as benchmark, and bounds emerge inevitably with respect to goals.

- 2. The Future of the City after COVID-19: Digitalization, Preventionism, and Environmentalism** Julia Puaschunder, Columbia University, julia.puaschunder@gmail.com
Discussant: Beau Whitney, Whitney Economics, whitneyeconomics@gmail.com

Metropolitan areas have seen a resurgence of the city as a hub for exchange of ideas, social transformation and innovation. Since the ages of industrialization and globalization, cities flourished in terms of economic growth and societal advancement. The 2020 COVID-19 crisis may set an end to this. Some of the major cities and foremost Western world metropolis began to empty out with the rapid rise of an infected city population due to social transfer of the pandemic and worsened diseases outcomes in a constraint medical system in high density areas. Even if the COVID-19 will be defeated with a vaccine or overcome with herd immunity during the coming years, the economy of large cities may be permanently changed given an ongoing digitalization trends, preventive medical care attention and environmental concerns in the wake of climate change. This paper envisions these three new trends of globalization shifting city scaping to digitalization, focus on preventive medical care and environmental conscientiousness in future cities.

- 3. Essential Business or Illicit Trade? The Emerging Role of Cannabis in the U.S. Economy** Beau Whitney, Whitney Economics, whitneyeconomics@gmail.com
Discussant: Steven Payson, University of Maryland, spayson@umd.edu

Cannabis for adult-use and medical purposes while legal in some form in 36 states in the U.S., remains illegal at the federal level. By being designated as illegal at the federal level, basic economic services such as federally insured banking, farm insurance, interstate commerce, access to financial markets and

equal taxation rates are not generally offered to firms operating in this space. Data collection and medical research in cannabis is also very restricted. Yet during the Covid-19 outbreak, when many legal industries were being shut down for public safety reasons, cannabis was designated as an essential business allowing businesses to remain open to provide access to consumers. Why is this illicit industry afforded such a designation? Cannabis businesses operating legally within state systems, will employ between 450,000 and 500,000 workers in 2021, will generate over \$30 billion in retail revenues, pay approximately \$16 billion in wages and contribute nearly \$6 billion in business and payroll tax revenues to the federal coffers. States will also benefit by receiving over \$2 billion in state sales taxes from cannabis. Cannabis, illegal or not, is playing a significant role in the U.S. economy. The objective of this paper is to examine the emerging role that cannabis will have in the U.S. economy. It will examine the conflicts between state and federal legalization and the economic impact these conflicts are having on the economy, the firms and the individual. Note: Cannabis is federally illegal. This paper is not advocating on behalf of any group, but is more intended to examine, using data, the issues associated with the illegal designation on the growth and development of this nascent industry.

March 18 @ 8:00 PM–9:45 PM UTC

Allied Society: AIRLEAP

[Session #] Title: [91] UNDERSTANDING THE BARRIERS TO HIGHER EDUCATION

Organizer: Steven Payson, AIRLEAP

Chair: Debra Dwyer, Stony Brook University SUNY

Host: Steven Payson, AIRLEAP

Papers:

1. The Nexus of Economic, Risk Tolerance and Educational Choice in Vulnerable Populations and The Impact on Science and Technological Workforce Development Jonelle Bradshaw de

Hernandez, University of Texas at Austin, Jonelle.Hernandez@austin.utexas.edu

Discussant: Matthew Okrent, Farmingdale State College, mpokrent@gmail.com

The economic and financial disparities between vulnerable and non-vulnerable populations have become front and center issues in the era of COVID and American civil unrest. The underlying issue of differences in these populations is wealth creation. The added dimension of innovation makes the creation of a science and technological workforce paramount. The only way toward a more fair and equitable workforce for vulnerable populations is with bold and transformational change. Therefore, a transformational STEM and/or scientific and technological workforce that is fair, healthy, and equitable for all is the only way to achieve the dream of America. How is this achieved? It starts with understanding the complexity of economics, risk, and educational choices.

This study focuses on two additional determinants: risk tolerance and job security and their implications for the choices students make to major in a STEM or S&T field. Previous research has shown that students have different perceptions of, and preferences for, risk, based on their status within a vulnerable or non-vulnerable population. More vulnerable students are more likely to be risk averse and therefore seek job security than non-vulnerable students. Students from vulnerable populations then place more value on job security when choosing their major and career path. This presentation will update whether workforce development signals indicate that STEM and S&T jobs are secure, thereby attracting more vulnerable populations into these fields. Vulnerable populations, such as underrepresented minorities and females, are not well represented in the STEM and S&T fields. This study will provide additional motivations for why students are choosing STEM and/or S&T majors and shed light on additional reasons they may leave the STEM and S&T fields. It will also provide more information to stakeholders and investors in higher education, regarding whom to invest in and why.

2. Measuring Preferences as an Indicator of Smart Phone Dependence among College and University Students: The Relationship with Grade Point Average Debra S. Dwyer (presenting), Farmingdale State College, debra.dwyer@stonybrook.edu; Maria Xose SanMartin, Hofstra

University, maria.x.sanmartin@hofstra.edu, Rachel Kreier, St. Joseph's College, rkreier@sjcnj.edu, Xu Zhang, Farmingdale State College, xu.zhang@farmingdale.edu
Discussant: Jonelle Bradshaw de Hernandez, University of Texas at Austin, Jonelle.Hernandez@austin.utexas.edu

A proliferating literature aims to understand the potential for harm from the universal adoption of smart phone technology to meet individual and societal needs. Much of the literature on problematic smart phone use is directed at identifying factors that place a subset of users at heightened risk of dependency or addiction on their phones. Some researchers have tied problematic use to measures of the intensity of use, often from simple counts, for instance of cell phone minutes per day or number of texts per day. In some work, count data are used to assign respondents into categories such as high and low use. This revealed preference approach has limitations, because revealed behavior results from the interaction of internal psychological characteristics (including preferences) with external constraints. This paper contributes to the strand of the literature that explores the connection between problematic smart phone dependence and academic performance. We focus, in particular, on the relationship between respondents' financial valuation of access to their phone, and educational outcomes. It may be reasonable to view financial constraints as essentially zero at the margin.

- 3. What Determines the Professional Career Choices of Native American College Graduates in the United States? An Exploration Based on Scholarship Data** Mary Lindeblad-Fry, City of San Francisco, mary.lindebladfry@gmail.com
Discussant: Brian Sloboda, University of Phoenix, bsloboda@email.phoenix.edu

American Indian and Alaska Native (AI/AN) students are the least likely of all ethnic/racial groups in the United States to complete postsecondary education. As a result, those who analyze the economic well-being of Native Americans have emphasized economic development policies that encourage AI/AN students to pursue formal education beyond high school. However, very little empirical research has been conducted on the specific paths that AI/AN students pursue once they enter into higher education, and the differing motivations they have toward those alternative paths. These details on AI/AN students' pursuit of higher education may explain a great deal about the ability of AI/AN population overall to improve their economic well-being, especially in the long-term, i.e., across generations.

This study addresses this shortfall in economic research. It examines publicly available data on scholarships offered to AI/AN students, and explores the various relationships between funding availability, choice of postsecondary institution, tribal affiliation, year of matriculation, and other relevant variables. This study then analyzes how the opportunities offered by scholarships, and the choices that AI/AN students make with regard to higher education, eventually influence these students' long-term economic well-being, and in turn, the economic well-being of future generations of American Indians and Alaska Natives.

March 19 @ 2:00 PM–3:45 PM UTC

Allied Society: AIRLEAP

[Session #] Title: [115] STATISTICAL INFERENCE IN ECONOMICS

Organizer: Steven Payson, AIRLEAP

Chair: Julia Puaschunder, The New School

Host: Brian W. Sloboda, U.S. Department of Labor

Papers:

- 1. Types of Errors in Economic Research Design**, Hari Luitel, Algoma University, hari.luitel@algomau.ca
Discussant: Maria X. Sanmartin, Hofstra University, maria.x.sanmartin@hofstra.edu

In our professional as well as personal lives, we often have to make an accept-reject type of decision based on incomplete information. As long as decisions are made based on evidence that does not provide a hundred percent confidence, there will be a chance for error. No error is committed when a good prospect is accepted or a bad one is rejected. There always remains a small chance, however, that a bad

prospect might be accepted or good one might be rejected. We aspire to minimize the chances of such errors. In statistical hypothesis testing, two hypotheses are proposed: the null hypothesis (H_0) and the alternative hypothesis (H_1). The former, the null hypothesis (H_0) usually the “status-quo”, represents the statement presumed to be true. The later, the alternative hypothesis (H_1), a contrary statement, complements the null hypothesis. Based on the results of the test, one of two decisions is made -- the null hypothesis is either rejected or failed to be rejected. The two types of errors that can occur when making the decision are well documented. Type I errors are “false positives” that result from rejecting the null hypothesis when it is true, inferring a significant relationship between variables where there is none. Type II errors are “false negatives” which occur when the null hypothesis fails to be rejected, failing to recognize a significant relationship between variables or incorrectly claiming variables are unrelated. While it is important to consider these potential errors, we consider beyond these two types and offer examples of five types of errors that can occur in a research design. We then discuss general weakness and limitation of research design based on statistical hypothesis testing. Particularly, we will explain what conclusion, if any, can be reached using statistical hypothesis testing in an economic research.

2. Why Are Randomized Controlled Trials (RCTs) so Popular in Development Economics? It Is About Statistical Inference, or the Profession’s Evolution from “Physics Envy” to “Physician Envy”? Steven Payson, University of Maryland, spayson@umd.edu

Discussant: Debra S. Dwyer, Farmingdale State College, debra.dwyer@stonybrook.edu

Over the past two decades the application of randomized controlled trials (RCTs) in the field of development economics has grown to enormous prominence. Such prominence can be easily observed in terms of the substantial funding of numerous programs throughout the developing world, and the highest recognitions for scientific achievement in this subfield, earning nothing less than the Nobel Prize in Economics in 2019. Proponents of RCT methods in economic development have argued that the bedrock, or justification, for their “success” (in terms of recognition and funding) lies on their ability to advance knowledge from statistical inference deriving from widely accepted, scientific methods. This paper, however, offers alternative explanations for the apparent success of RCTs in terms of recognition and funding. These alternative explanations are based on sociological factors that create an appeal for RCTs, and promote their popularity among members of the economics profession and their institutions. Such alternative explanations of the success of RCTs are completely independent from whatever advancement of useful knowledge RCT methods have actually offered, and they are likewise independent of any contributions RCTs have actually made toward advancing economic well-being in the developing world.

3. After Taking the Con out of Econometrics, Supplementing or Replacing p Values for Better Econometrics Brian Sloboda, University of Phoenix, bsloboda@email.phoenix.edu

Discussant: Steven Payson, University of Maryland, spayson@umd.edu

In empirical economic research, economists use p-values to answer the question: How strongly does the evidence favor the alternative hypothesis relative to the null hypothesis? However, p values do not directly answer this question and are often misinterpreted in ways that lead to overstating the evidence against the null hypothesis. Despite the advocacy for not resorting to the p values to answer questions in economic research, p-values may continue to be widely reported and used to assess the strength of evidence. In fact, the p-value reveals almost nothing about the strength of the evidence, yet a p-value of 0.05 has become the ticket to get published at many journals. After all, what economists and other social scientists really want to know is whether their hypothesis is true, and if so, how strong this finding is. The objective of this paper is to provide a brief background of the dependency on the use of p-values and to provide remedies beyond p-values that can be used in economic research to assess the validity of the research.

March 19 @ 4:00 PM–5:45 PM UTC

Allied Society: AIRLEAP

[Session #] Title: [135] ETHICAL AND RESPONSIBLE LEADERSHIP IN ECONOMICS

Organizer: Steven Payson, AIRLEAP

Chair: Steven Payson, AIRLEAP

Host: Julia Puaschunder, The New School

Papers:

1. Should Economists Deceive? Prosocial Lying, Paternalism, and the Ben Bernanke Problem

George DeMartino, University of Denver, george.demartino@du.edu

Discussant: Michael Bernstein, Stony Brook University, michael.bernstein@stonybrook.edu

A widely held principle in professional ethics, across the professions, is the duty to speak truthfully when engaging in professional activity. Expert truth-telling has come to be recognized as vital to the Kantian respect that is due to clients and others who must act based on professional advice; and to the imperative to sustain trust. It is therefore notable that economics does not generally require truth telling among its members. Against truth telling, in cases where what an economist says can impact social welfare, the profession tends toward “prosocial lying”—lying that is thought to be in society’s best interests. The case of central banker statements is paradigmatic. Would economists have preferred that Ben Bernanke tell the truth about the threats to the US and world economy in the early days of the crisis of 2008, when doing so might have destabilized financial markets further? But prosocial lying comes at a cost to the profession, and to society. Not least, prosocial lying reflects a paternalistic ethos that has by now been challenged in other professions; and the prevalence of prosocial lying may undermine trust—both among economists, and between economists and those economists purport to serve.

2. Value of COVID-19: Digitalized Healthcare, Luxury Consumption and Global Education

Julia Puaschunder, Columbia University, julia.puaschunder@gmail.com

Discussant: Sushma Shukla, Piedmont Virginia Community College, sushmashuklaphd@gmail.com

The new Coronavirus (COVID-19) accounts for the most severe health and economic threat since about a century. The human, medical and economic shock with major fallout in social, humanitarian and international development domains is the most tragic event having occurred since the Great Plagues of the medieval times, the Great Depression and the two World Wars. Yet in every crisis and lasting economic, societal and humanitarian shock, there are always positive externalities as well. While the author foremost respects the more important literature on the tremendous negative consequences and hidden inequalities and unnoticed despairs of COVID-19, this paper sheds heterodox light on the positive externalities and economic growth potential of the Great Pandemic of 2019. Three positive outcomes of the novel Coronavirus pandemic are captured in a foresighted outlook: (1) A digitalization disruption with particular focus on healthcare, preventive medicine and whole-rounded, ecofriendly lifestyles is perpetuated by COVID-19.

As in previous pandemics, luxury consumption that is prospected to flourish after consumption constraints and lockdown endurance may play a role in driving economic growth in the post-COVID-19 world. (2) Digitalized education and conglomerates in the educational sector may lead to universities becoming truly global temples of information exchange. The paper closes with potential ethical imperatives to ennoble our prospected future post-COVID-19 world to come. Overall, this paper aims at providing a glimpse of hope in despair and grievance over COVID-19 and advocates for equal access or redistribution of the merits of the gains from COVID-19 for living the dream of a better, more beautiful society than COVID-19 has hit before.

3. An Analysis of Economic Philosophy and Leadership in Ancient India

Sushma Shukla, Piedmont Virginia Community College, sushmashuklaphd@gmail.com

Discussant: Emanuel Payson, Small Business Administration, emanuel.payson@gmail.com

For most of history, economics did not have a separate identity apart from social thoughts in general. Even as late as the eighteenth century, Adam Smith viewed economics as a subset of jurisprudence. However, the seeds of economic analysis were sown long before; in ancient India, societies exercised economic theories and principles during the 3rd century BCE. This paper aims to investigate the

economic leadership in ancient India between the 3rd century BCE and the 3rd century CE. There was an ancient Indian teacher, philosopher, economist, jurist, and royal advisor name Chanakya who authored the ancient Indian political treatise, the Arthshastra. He has discussed many economic theories like economic growth, tax, and mixed economy in his book. As such, he is considered the pioneer of political economics in India, and his work is thought of as an essential precursor to classical economics. This study tries to answer such questions: What were the economic theories practiced in ancient India? How political economy fueled the leadership in that era? Are those theories valid in the modern era as well?"

March 19 @ 6:00 PM–7:45 PM UTC

Allied Society: AIRLEAP

[Session #] Title: [137] ECONOMICS OF RACIAL DISPARITIES IN LAW ENFORCEMENT

Organizer: Debra Dwyer, Stony Brook University SUNY

Chair: Debra Dwyer, Stony Brook University SUNY

Host: Steven Payson, AIRLEAP

Papers:

- 1. Potential Racial Bias in Traffic Stops by Police: Inequality, Inequity, Or Both?** Debra S. Dwyer (presenting), Farmingdale State College, debra.dwyer@stonybrook.edu, Matthew Okrent, Farmingdale State College, mpokrent@gmail.com
Discussant: Mary Lindeblad-Fry, City of San Francisco, mary.lindebladfry@gmail.com

The work seeks to identify the presence of racial disparities in police stops and examine factors that drive them in order to uncover potential inequities of practice. Disparities are necessary indicators of inequality, but only sufficient indicators of inequity. The goal is to shed light on the potential for the presence of inequity. Publicly available trend data from the Suffolk County, NY police department are used to examine disparities in reasons for being pulled over as well as outcomes from the stop. Multiple techniques are applied to address potential bias from censoring problems in the data, and to minimize measurement error in latent variables. Race can be used to predict the reason for a stop, what happens during the stop, and the penalty to follow. Stops are disproportionately more Black. The reason for being pulled over, as well as the outcome of the stop, are significantly different depending on race, age, and gender. Models control for the percent of the Suffolk County Population represented by race. The findings warrant ongoing monitoring and accountability.

- 2. Big Data Approach to Examining Police Use of Force and Body-Worn Camera Implementation** Justine Perkowski (presenting), DC Women in Data, justine.perkowski@gmail.com, Debra S. Dwyer, Farmingdale State College, debra.dwyer@stonybrook.edu, Lori Scarlatos, Stony Brook University, lori.scarlatos@stonybrook.edu
Discussant: Mir M. Ali, U.S. Dept. of Health and Human Services, ali.mir.m@gmail.com

The use of excessive force by police officers has received increased attention due to media reports of deadly encounters. The dynamics of use of force encounters are not well understood, but some predictor variables have been identified: individual officer and subject characteristics, situational variables, and organizational characteristics. In response to public concern, some police departments issued body cameras to officers to mitigate the problem and increase transparency, though the true efficacy of the cameras is unknown. Publicly available data on use of force cases for 14 cities was examined, as well as sentiment towards police on Twitter. The data was examined to determine whether there were significant differences in incidence rates before and after camera implementation, between cities with and without camera programs, or between cities with different policies.

The study found that proportions of officer and subject race and gender were not representative of city demographics, but subject characteristics were representative of crime demographics. Subject race was predictive of the reason for use force, and officer race was predictive of the level of force used and the disposition of the force case. Situational characteristics were also predictive of the level of force used. The Twitter data indicated a significant difference between general sentiment and sentiment towards

police, with sentiment towards police slightly lower. The analysis of the use of force data did not indicate any significant changes before and after body-worn camera implementation, or between cities with and without body-worn camera programs. The types of body camera policies, as measured via an Organizational Effectiveness Metric, did not exhibit any significant differences between cities. The study concluded that the proposed framework should be expanded to incorporate different levels of force as the dependent variable, with reason for use of force as an intermediate variable.

- 3. Racial Disparities in Payment Source of Opioid Use Disorder Treatment among Non-Incarcerated Justice-Involved Adults in the United States** Maria X. Sanmartin (presenting), Hofstra University, maria.x.sanmartin@hofstra.edu, Ryan M. McKenna, Drexel University, rmmckenna@gmail.com, Mir M. Ali, U.S. Dept. of Health and Human Services, ali.mir.m@gmail.com, Jean D. Krebs, Hofstra University, jkrebs1@pride.hofstra.edu
Discussant: Justine Perkowski, DC Women in Data, justine.perkowski@gmail.com

Research has documented a low rate of opioid use disorder (OUD) treatment utilization among individuals involved in the criminal justice system. However, racial disparities in sources of payment for OUD treatment have not been examined in the existing literature. Although substance use disorder (SUD) treatment is relatively rare for all criminal justice system involved racial-groups, previous research has indicated that, among individuals with SUD, members of racial minority groups receive treatment at lower rates than their non-Hispanic White counterparts. Given the alarming rise of OUD in the US and the association between source of payment and utilization of health care services, this study seeks to quantify racial disparities in sources of payment for OUD treatment among individuals with criminal justice involvement.

Using data from the 2008-2016 National Survey of Drug Use and Health (NSDUH), this study analyzes the numbers of nonincarcerated individuals with OUD who have had any criminal justice involvement in the previous 12 months. The results indicate that non-Hispanic Whites are more likely to have their OUD treatment paid by a court (10%) relative to non-Hispanic Blacks (4.0%). Non-Hispanic Blacks are more likely to have their OUD treatment paid by public insurance than non-Hispanic Whites (77% vs 36%). Our findings imply that an expansion of health insurance coverage and access to substance use disorder treatments would be beneficial for reducing health care disparities. Furthermore, equitable treatment options in the criminal justice system that incentivize OUD treatment availability may help address racial disparities in sources of payment among the criminal justice-involved population with OUD.