

### CENTER FOR HEALTH ECONOMICS & POLICY STUDIES



# **INSIDE:** Celebrating Our 5<sup>th</sup> Anniversary

New Frontiers in Applied Microeconomics and Evidence-Based Policy Making

Volume 5

SDSU

San Diego State University

Letter from the Director

#### Dear Friends of CHEPS,

When our team founded the Center for Health Economics & Policy Studies (CHEPS) five short years ago, we sought to build a community of applied microeconomists scholars who would carry out groundbreaking public policy research and inspire the next generation of graduate student scholars. Thanks to the efforts of our faculty and graduate students, the hard work of our new Assistant Director Dr. Yang Liang, and the financial support of our partners at the Charles Koch Foundation, the Troesh Family Foundation, and San Diego State University, CHEPS has established itself as one of the nation's finest predoctoral student



training institutes.

the 2021-22 During academic year, two of our Postdoctoral Affiliates attained tenure-track research faculty positions, three of our master's students earned admission to Ph.D. programs or predoctoral fellowships, and four more are preparing for Ph.D. applications in the

Fall 2022-23 admissions cycle. Since our founding, the Center has funded nearly 40 undergraduate, graduate, and postdoctoral students and consistently supported the scholarly development of faculty and students. This Fall, we are excited to welcome a new CHEPS Postdoctoral Research Fellow. We will also begin the sixth year of our Research Seminar Series, which has hosted over 120 seminars so far. We expect to reach nearly 150 by the close of the 2022-23 academic year.

The Center's groundbreaking public policy research, all of which intricately involve our graduate students — on such topics as (i) COVID-19 school closings on teenage suicides and family well-being, (ii) the unintended poverty effects of minimum wage laws, (iii) the broader health impacts of recreational marijuana legalization, (iv) the ineffectiveness of gun buyback programs in deterring crime, and (v) how robotics affects incentives for crime — continues to build our reputation in both academic and policy circles. After five years of hard work, it is undeniable that CHEPS is one of the best predoctoral training programs in the country.

Our scholarship has been featured in the national news media, including at USA Today, the Wall Street Journal, National Review, and the Washington Post. In addition, our scholarship has frequently appeared in the National Bureau of Economic Research (NBER) and has been accepted for publication at leading journals in economics, medicine, and public policy,

including the Journal of Law and Economics, the Journal of Human Resources, the Journal of Public Economics, the Review of Economics and Statistics, the Journal of Policy Analysis and Management, the Southern Economic Journal, and JAMA: Health Forum. Our students have been engaged on a variety of projects in health, public, and labor economics, including:

- the impact of COVID-19 school closings on maternal employment, remote work, and teenage suicides;
- the spillover effects of e-cigarette taxes on teenage alcohol and tobacco use;
- the effects of recreational marijuana laws on adult cocaine, heroin, methamphetamine, and fentanyl consumption;
- an exploration of whether tobacco and recreational marijuana are substitutes or complements;
- whether the effects of laws that require drug testing to access means-tested cash assistance (i.e., Temporary Assistance for Needy Families) have had a chilling effect on welfare use; and
- the impacts of minimum wage laws on teenage contraceptive use, childbearing, and abortion decisions.



Each year, I offer readers a "CHEPS Tale of the Tape" to document our cumulative progress:

- 35 graduate, undergraduate, and postdoctoral students have received funding for research-related activities. We expect four (4) more to join us in the Fall!
- 13 former MA Economics students have been accepted to Ph.D. programs (and, in one case, a third-year predoctoral program) at Cornell University, Michigan State University, the University of California-Irvine, the University of Minnesota, the

University of Notre Dame, the University of California-Santa Barbara, Colorado State University, the University of Oregon, Fordham University, the University of California-Davis, and Université catholique de Louvain (Belgium).

- 121 Research Seminars have been held by researchers visiting from institutions such as Harvard University, the University of Pennsylvania, Dartmouth University, Vanderbilt University, the University of Texas-Austin, the University of Wisconsin-Madison, the University of Kentucky, the University of California-Santa Barbara, Cornell University, Texas A&M University, the University of Southern California, the University of California-Davis, George Washington University, and the University of Georgia.
- 81 peer-reviewed publications have been published at high-quality economics, medical, policy journals such as the *Journal of Human Resources*, the *Journal of Law and Economics*, the *Journal of Urban Economics*, *JAMA: Health Forum*, the *Review of Economics and Statistics*, the *Journal of Human Resources*, the *Journal of Public Economics*, and the *Journal of Economic Behavior and Organization*.
- 24 working papers were published by the National Bureau of Economic Research (NBER) and 14 working papers at the Institute of Labor Economics (IZA).
- 42 academic research conferences and workshops at which CHEPS Affiliates have presented their cutting-edge scholarship.

Thank you for your continued support of CHEPS. We could not do what we do without your support. I hope you will enjoy reading about the impressive scholarly accomplishments of our faculty and graduate students in the 2022-23 issue of *CHEPS Magazine*!

Sincerely,

Joseph J. Sabia

Joseph J. Sabia Director, Center for Health Economics & Policy Studies (CHEPS) Professor of Economics



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# SDSU

College of Arts and Letters Center for Health Economics and Policy Studies

# **New CHEPS Research**

# COVID-19 School Closures, Remote Work, and Maternal Labor Supply

### National Bureau of Economic Research Working Paper No.29660 by Benjamin Hansen, Jessamyn Schaller, Joseph J. Sabia

The dramatic increase in employment among married women in the United States is among the most striking and transformational labor market trends of the past century. Bolstered by social change, wage gains, time-saving advancements in household technology, increasing control over fertility, and steep increases in college attendance, married women entered the labor force in droves during the 20th century. While only 10% of married women were

employed in 1930, by 1990, that rate was 68%. However, over the past 30 years, **married women's** employment and earnings have stagnated far short of equality with those of men.

Many explanations have been put forth for the stagnation of married **women's** relative labor supply, including rising expenses associated with childcare, lack of policy support for working parents, and the inflexibility of traditional jobs. Research has also documented the



Notes: School foot traffic data are from SafeGraph. Employment rates are calculated using a sample of individuals ared 25.54 in the Current Ponulation Survey.

persistence of **women's** primary role in household labor and parenting tasks. There is evidence that motherhood induces lower labor force participation and better female labor market opportunities lead to lower fertility, suggesting women still face a strong push-and-pull tradeoff between family and career.

The COVID-19 pandemic provides a unique opportunity to gain insight into the competing factors underlying observed **trends in married women's** labor supply. Pandemic-related K-12 school closures have generated a rare chance to study a supply-side shock to married **women's** labor force participation and, more broadly, the labor market costs of changes in caregiving demands. Changes in in-person instruction resulted first in a sudden and dramatic increase (when schools closed) and then a decrease (when schools reopened) in the opportunity cost of **women's time in the labor market.** Preliminary results show that K-12 school reopenings positively affect the labor supply of married women with school-aged children, increasing both employment and (conditional) work hours in non-education sectors. However, there is no evidence of effects of school reopenings on the employment or hours of unmarried mothers, women without children, or married custodial fathers.

## Teenage Suicides, Bullying, and Pandemic-Related Schooling Policies

#### by Benjamin Hansen, Matthew Lang, Jessamyn Schaller, Joseph J. Sabia

While many remember their high school years fondly as a time filled with learning, friendships, and **team sports, many adolescents' high school experiences** are filled with negative peer interactions, often in the form of bullying. Stress, anxiety, and mental health disorders can lead young people to engage in self-harm. Suicide is the second leading cause of death among teenagers.

Prior research by Benjamin Hansen and Matthew Lang (published in the Economics of Education evidence that Review) found teenage suicides may be linked to the school environment. They show that teen suicides are strongly correlated with the school year calendar, peaking in the months that students return to school, with troughs observed in the summer months and in December. They find no such suicide pattern among



young adults ages 19-to-25. Hansen and Lang posited that negative peer interactions (i.e., in-school bullying) may have played a role in explaining why teenage suicides seem to be positively correlated with in-school instruction.

The COVID-19 pandemic drastically changed in-person schooling in ways that could have **affected teenagers' mental health**. On the one hand, removing beneficial in-school learning and socializing experiences may have had adverse psychological impacts on teens. On the other hand, greater family engagement, enhanced monitoring by parents, and limited opportunities for in-person bullying may have improved their mental health.

A new study by Hansen, Lang, Schaller, and Sabia uses the COVID-19 pandemic to explore how COVID-19, and its effects on in-person schooling, affected teenage suicides. Preliminary evidence suggests that in sharp contrast to the pre-COVID-19 era, suicide rates decreased dramatically in March, April, and May 2020. This was precisely the time when much of the country was locked down under stay-at-home orders, and schools were closed throughout the country. Using SafeGraph point-of-interest (POI) data, Hansen et al. will further explore whether differences in schools' 2020 reopening policies affected teenage suicides.

# **Robotics, Employment, and Crime**

#### by Yang Liang and Joseph J. Sabia

Increased robotics and greater automation have generated important productivity gains for society. However, as is the case with any new technological innovation, laborers that are substitutes for such new capital may be adversely impacted, while those that are complements may see employment and wage gains. Recent research by Acemoglu and Restrepo (2020), published in the *Journal of Political Economy*, suggests that, on net, there is evidence of employment losses due to expanded robotics. These authors find that each additional robot per thousand workers reduces the employment-to-population ratio by 0.2 percentage points and wages by 0.4%. These adverse effects appear to be larger for less educated and less-skilled individuals. This finding suggests that such workers are substitutes for robots.

The COVID-19 pandemic has reshaped the U.S. economy in a number of ways, including by accelerating the use of robots as part of firms' production processes. According to the

Association for Advancing Automation, orders of industrial robots rose by 37%. Interestingly, robot penetration İS not constrained to one particular sector. While the automotive industry is best known for utilizing robots, non-automotive firms are expanding their orders of industrial robots at much higher rates.

CHEPS researchers have begun exploring the beneficial impacts of robotics expansion, including on firm productivity, as well as adverse spillover effects of robotics onto workers who were



substitutes for robots. In particular, CHEPS RAs, at the direction of Drs. Joe Sabia and Yang Liang are using data from **the American Community Survey, the FBI's Uniform** Crime Reports, and the International Federation of Robotics to study how robot penetration affects low-**skilled workers' labor market outcomes, health, and** the likelihood of engaging in criminal behavior (which can be affected by local labor market opportunities). The project has provided opportunities for MA student Cooper Smiley, and undergraduate student Evan Kim to develop and sharpen their coding and applied econometrics skills.

# Do the Effects of E-Cigarette Taxes Spillover to Alcohol?

by Yang Liang, Catherine Maclean, Michael Pesko, Joseph J. Sabia, and Matthew Braaksma



Over the past decade, the use of ecigarettes and other electronic nicotine delivery systems (ENDS) has been rising dramatically, especially among teenagers and young adults. Alarmed by this trend, policymakers have responded with aggressive regulation attempting to curb the use of ENDS among youths. Between 2010 and 2019, ten states and two large counties adopted ENDS taxes. A National Bureau of Economic Research (NBER) working paper (also released as

a CHEPS working paper) finds that ENDS taxes reduce youth ENDS consumption but also finds strong evidence of economic substitution between cigarettes and ENDS for young adults. These unintended substitution effects of ENDS taxation may more than fully offset any public health gains.

But are there other spillover effects of ENDS taxes that are necessary to understand before forming a complete judgment on whether such laws would pass a cost-benefit analysis? CHEPS scholars have joined forces with leading tobacco researchers (Michael Pesko at Georgia State University and Catherine Maclean at Temple University) to explore the spillover effects on youth and young adult binge drinking and alcohol-related behaviors.

The team is exploring this issue using several datasets, including the Youth Risk Behavior Surveillance System (YRBS) data, Behavioral Risk Factor Surveillance System (BRFSS), the National Survey on Drug Use and Health (NSDUH), and the National Highway Traffic **Safety Administration's (NHTSA) Fatality Analysis Repor**ting System (FARS). The authors use differences-in-differences and event study approaches to try to identify the causal impact of e-cigarette taxes on youth and young adult e-cigarette use, binge drinking, and drinking-and-driving behaviors.

Preliminary evidence suggests that increases in ENDS taxes are associated with declines in youth and young adult e-cigarette use and binge drinking. These findings are consistent with the hypothesis that e-cigarettes and (heavier use of) alcohol are complementary risky behaviors. However, we also note that curbing e-cigarette use via taxes comes at a cost: reducing e-cigarette use among cigarette users who may be using e-cigarettes as a means of smoking cessation.

### The Health Benefits of Expanded Trade: Effects of Exports on Workplace Safety and Health

by Ling Li and Yang Liang



profoundly Trade expansion influenced the US labor market over the last two decades on employment and wages. However, it is less clear how trade expansion affects workers' safety and health. Workplace injuries prevalent and expansive. are According to the National Safety Council. US workers experience about 2.8 million workplace injuries annually, costing 206 billion dollars in wage and productivity losses, medical expenditures, and administrative expenses. manufacturing Particularly, the workers have long been suffering from higher than national average workplace injury rates.

This study examines the effect of **exports on worker safety and health in the US. Utilizing foreign countries' unilat**eral liberalization to capture demand shocks on US exports, the results suggest that a \$1,000 increase in exports per worker decreased the workplace injury rate by a significant 0.7%, which implies an annual reduction of about 55,000 injuries among manufacturing workers. The reduction in injuries is more salient among establishments with lower injury rates, indicating an increase in inequality of working conditions. The improvement in

working conditions might come from more investment in advanced equipment and better compliance with safety and health regulations. Overall, the estimates imply that the export expansion during the late 1990s and early 2000swere associated with an annual reduction of about 55.000 injuries among manufacturing workers, accounting for a cost saving of about 3.83 billion dollars per year.



### Surviving the U.S.-China Trade War? Evidence from Chinese Exporters

by Yang Liang, Weiyi Shi, and Dora Hu

After decades of supporting free trade and open markets, in 2018 the US government enacted several waves of tariff increases specific products and on Import countries. tariffs increased from 2.6% to 21.6% on more than 12,000 products covering \$550 billion (23.1%) of annual US imports. In response, partners imposed trade retaliatory tariffs on US exports. countermeasures These increased tariffs from 7.3% to 20.4% on 8,073 export products covering \$127 billion (8.2%) of annual US exports. This return to protection is unprecedented in the post-war era because of the



sizes of the countries involved and the magnitudes of the tariff increases.

The project responds to the debate of trade policies and contributes to the literature by exploiting the sudden tariff changes to empirically identify the causal effect of the US-



China trade war through both countries' retaliatory tariffs. Specifically, the paper studies the effect of the US-China trade war on the survival of Chinese exporters in the short run. Utilizing a novel data set with detailed information on firms' registration status and export portfolio, researchers are able to link firm survival data with firm-level tariff exposures. Results suggest that Trump tariffs on Chinese products significantly lead Chinese exporters to exit the market. For a 1 percentage point rise in the Trump tariff exposure, the probability of firm exit increases by 0.5 to 0.9 percentage points. We also test the heterogeneous effects across a wide array of firm characteristics, such as firm ownership, firm size, firm age, and the initial export portfolio. Particularly, this exiting effect has mainly concentrated among foreign-invested enterprises owned by Hong Kong, Macau, or Taiwan investors.

### Minimum Wages, Teenage Contraceptive Use, and Pregnancy Resolution Decisions

### National Bureau of Economic Research Working Paper No. 29334 by Rebecca Margolit, Daniel I. Rees, Joseph J. Sabia

Giving birth as a teenager is associated with increases in the risk of dropping out of high school and living in poverty. Additionally, children born to teenage mothers struggle cognitively and economically compared to children born to older mothers. Although the U.S. adolescent fertility rate has declined substantially since 2007, it is still higher than any other developed country. A recent prominent paper published in the American Journal of Public Health in 2017 found that a \$1 increase in the minimum wage leads to roughly 5000 fewer adolescent births annually. Taken at face value, these results suggest that raising the minimum wage could substantially reduce the public costs of teenage childbearing, which are estimated to be \$9.4 billion per year.

In a National Bureau of Economic Research (NBER) working paper released in Fall 2021, Dr. Daniel Rees, Joseph Sabia, and second-**year master's student Rebecca Margolit** further examined these claims by replicating the results found in the prominent paper and contributed to the literature by adding more data to the investigation, employing state-of-the-art econometric techniques, and thoroughly exploring the mechanisms through which the minimum wage could have impacted teen fertility such as the **minimum wage's impact on the teen marriage rate, abortion rate, and sexual behavior.** 



These authors used data from a variety of data sources, including the National Vital Statistics Natality data, the Youth Risk Behavior Surveys, the Centers for Disease Control and Prevention Abortion Surveillance Data, and the Guttmacher Institute Abortion Data. They employed difference-indifferences and event-study analyses to try to isolate the causal impact of raising the minimum wage on teenage fertility.

In contrast to the original study, CHEPS authors find little evidence that minimum wages are related to reductions in teenage childbearing. Additionally, they find that minimum wage increases are not associated with changes in teenage sexual behaviors, including contraception use, abstinence, the number of sex partners, or abortion.

# Have Recreational Marijuana Laws Undermined Public Health Gains on Adult Tobacco Use?

National Bureau of Economic Research Working Paper No. 29706 by Dhaval Dave, Michael Pesko, Serena Philips, Yang Liang, and Joseph J. Sabia



Between 2010 and 2019, 18 states and District of Columbia had enacted recreational marijuana laws (RMLs), allowing individuals over 21 years old to legally purchase, possess, or cultivate cannabis without a doctor's prescription. Public health officials from organizations such as the American Medical Association and American Public Health Association worry that the legalization of recreational marijuana will destigmatize the act of smoking and thereby undermine the decades-long achievements of public health efforts in reducing cigarette smoking rates. One piece of evidence used to support this

hypothesis is the fact that co-consumption of marijuana and tobacco, often as "blunts," has increased in recent years among American adults. Considering that tobacco is the leading cause of preventable death in the United States, if RMLs lead to increased tobacco use, the public health costs of such laws could be substantial.

A January 2022 National Bureau of Economic Research (NBER) working paper released

by Dhaval Save, Michael Pesko, Serena Phillips, CHEPS Assistant Director Yang Liang, and Joseph Sabia is the first to comprehensively examine the impact of RMLs on adult tobacco use. Using four national datasets and both dynamic difference-in-differences and discrete time hazard approaches, the authors find little support for the hypothesis that the legalization of recreational marijuana increased adult tobacco use. On the contrary, results show that RML adoption is



associated with a small, lagged decline in adult tobacco use, consistent with the hypothesis that marijuana and tobacco are substitutes. These results suggest that there may be potentially large tobacco-related public health gains from the legalization of recreational marijuana.

### Mass Shootings, Crime, and Consumer Behavior by Hao Fe



In the past decade, a series of high-profile mass shootings throughout the United States has haunted the nation's collective conscience. Despite the low odds of experiencing a mass shooting in person, the indirect costs of such high salient crime, through inflicting fear and anxiety and leading to behavioral changes, may be far larger than the direct costs. In this study, we investigate a novel perspective of the indirect costs - how mass shootings change consumer's daily choices using precise longitudinal foot traffic data. This paper utilizes close-to-random variation on time and geographical location of mass shooting events to estimate the causal impacts. Our preliminary findings suggest that there is a significant and negative impact of this extremely salient crime on consumer behavior. Consumers respond to not

only mass shootings occurring in their local areas but also those located far away from their commuting zones.

This paper adds to the policy debates on the cost of crime to society. Unlike most homicides that receive little attention from the public, mass shootings are extremely **salient, which can induce changes in people's perception of safety and their daily routines** even if they are not direct victims. The indirect costs of crime are likely much larger than the direct costs (e.g., response costs of police and the Criminal Justice System), as argued in Becker et al. (2004). While the direct costs are routinely evaluated, the assessment of indirect costs, including those to non-victims, is rare and substantially more difficult. In this paper, we aim to fill the gap by studying the indirect cost of mass shootings to businesses through consumer behavior change. Measuring this indirect cost is crucial for businesses, city planners, and policymakers, as it will provide a guide on the optimal investment into crime prevention.

Examining the indirect cost of mass shootings also contributes to the long-standing debate on gun policy. Even though this study is not able to provide new information regarding effective gun policy, the large indirect cost of mass shootings to society, especially businesses, could bring more attention to the issue of gun violence and serves as an important input for pressing policy discussion around gun policy.

# Will Minimum Wage Hikes Help or Hurt the Working Poor?

#### by Richard V. Burkhauser, Drew McNichols, and Joseph J. Sabia

During the 84 years since the U.S. Supreme Court ruled that minimum wage laws were constitutional (*West Coast Hotel Co. v. Parrish*, 300 U.S. 379, 1937), prominent advocates of minimum wage increases — from Presidents Franklin D. Roosevelt through Joseph R. Biden — have consistently touted their potential to reduce poverty. Indeed, poverty reduction has been a central argument in support of the *Raise the Wage Act of 2021*, which would more than double the Federal minimum wage from \$7.25 to \$15 per hour by June 2025 (U.S. Senate Bill S.53).

Using data from the Current Population Survey over the period 1983-2019 and a dynamic difference-in-differences approach, Richard Burkhauser, Drew McNichols, and Joseph Sabia find little support for the hypothesis that minimum wage increases reduce poverty over this 37-year period. The precision of our preferred dynamic difference-in-differences estimates are such that, with 95 percent confidence, we can reject long-run poverty elasticities with respect to the minimum wage less than -0.131 for non-elderly individuals.



This means that our statistical estimate of 0 allows us to say (with 95 percent confidence) that a 10 percent increase in the minimum wage would not reduce the probability that an individual lives in poverty by 1.31 percent or more. There are two reasons for our result: minimum wage increases cause adverse employment effects for some low-skilled poor and near-poor workers, offsetting income gains to others, and many individuals in poor and near poor families do not work sufficient hours to be substantially helped by a minimum wage increase.

Finally, we find that the Raise the Wage Act of 2021, which would raise the Federal minimum wage to \$15 per hour, is an inefficient means of delivering income to the working poor. We find that less than 8 percent of those who earn a wage such that they would be directly impacted by a \$15 minimum wage live in poor families. Approximately two-thirds live in families with incomes over two times the poverty line, and nearly half live in families with incomes over three times the poverty line. In summary, our findings provide little compelling evidence that raising the minimum wage will be an effective or target efficient policy tool for alleviating poverty.

# Vertical ID Laws, Underage Drinking, and Adolescent Tobacco Consumption

by Joseph J. Sabia and Russell Leonard



CHEPS Researchers are in the late stages of assessing the efficacy of so-called vertical identification laws (VILs) under which minors (under age 21) receive drivers licenses (or state identification cards) that are vertically oriented, unlike the horizontally oriented cards that are issued to adults of legal drinking (and now smoking) age. The purpose of these laws is to reduce the costs to retailers of determining whether a potential buyer is below the minimum legal purchasing age for alcohol and tobacco products (now age 21 nationwide). This project contributes both **to CHEPS' continued interest in** the economics of youth risky behavior and, likely, public health at large, considering the large

annual social costs associated with underage alcohol consumption.

Colorado enacted the first VIL in 1994, and by 2019, every state (and the District of Columbia) had enacted a VIL. CHEPS MA student Russell Leonard and Joseph Sabia will evaluate nearly 30 years of data from the state and national Youth Risky Behavior Surveys (YRBS) –and use newly-developed differences-in-differences estimators—to explore the impact of VIL enactment on teenage drinking and smoking behavior.

The YRBS survey asks high school students a series of questions related to risky behaviors such as substance use and sexual behavior and has two versions which ask the same questions. The national YRBS is conducted by the CDC with a smaller sample of students designed to be nationally representative, while the state YRBS is overseen by the CDC but administered by state public health departments to a much larger sample of students. While the state YRBS is initially designed to be representative at the state level, it can be meaningfully reweighted to be nationally representative. By looking at both versions of the YRBS, we can draw conclusions on the effectiveness of VILs from a sample of hundreds of thousands of teenagers over the course of nearly three decades.

Preliminary findings suggest that state VILs have been less effective than many policymakers hoped in curbing underage tobacco and alcohol consumption.

### **Do Seatbelt Laws Reduce Traffic Fatalities?**

by D. Mark Anderson, Yang Liang, and Joseph J. Sabia



Traffic accidents are a major source of fatalities and serious injuries. Every day more than 100 Americans are killed in motor vehicle crashes. Traffic accidents are the leading cause of death for Americans between the ages of 5 and 32. One important policy tool that has been used to combat this problem is the passage of mandatory seat belt laws. This new project examines the effects of mandatory seat belt laws on driver

behavior and traffic fatalities. Utilizing data on annual traffic fatalities from the Fatality Analysis Reporting System (FARS) and collecting data — with the help of many CHEPS research assistants —on relevant control variables, CHEPS researchers have used difference-in-differences estimates to explore how such laws affect the incidence of traffic fatalities. While prior research has also shown that mandatory seat belt laws decrease overall traffic fatalities among automobile occupants, recent advances in econometric theory suggest that the estimators employed by previous scholars may lead to incorrect policy conclusions due to differences in dynamic policy effects over time. In revisiting this research question, CHEPS researchers implement alternative, cutting-edge econometric estimators to modify the way that we think about the behavior in response to these mandates.

### **Mask Mandates and the Omicron Outbreak**

by Dhaval Dave, Andrew Friedson, Kyutaro Matsuzawa, and Joseph J. Sabia

Since the beginning of the COVID-19 pandemic, debates on mask-wearing have been rigorous. With COVID-19 cases falling and vaccination rates rising, many states began lifting their indoor mask mandate in summer of 2021. However, with the Omicron variant surging in the winter of 2021, states began reimplementing indoor mask mandates. In this project, the CHEPS research team is examining the effect of California's indoor masking



requirement that was reinstated on December 15, 2021, on COVID-19 spread, measured by case rate, mortality, and hospitalization. Findings from this study will be highly relevant to ongoing policy debates about the role of mask mandates (i.e. on public transportation systems and in airports) in curbing future outbreaks.

# The Impact of Drug Testing Laws on Take-Up of Temporary Assistance for Needy Families

by Thanh Tam Nguyen, Resul Cesur, and Joseph J. Sabia



Policymakers have expressed growing concern about illicit drug use among means-tested program recipients. The most discussed tactic for fighting drug use and abuse among welfare recipients is the implementation of drug testing laws. **Although attempts at "suspicion-less" or "random" drug testing have proven** unsuccessful, the concept of drug testing for welfare continues to enjoy some public support. To avoid legal challenges, states

now implement drug testing programs only for applicants and recipients with "reasonable suspicion" of illicit substance use. Advocates of these laws contend that the use of drug testing may help deter drug use, prevent benefit payments being spent on illicit drugs, potentially reduce government spending, identify problematic users, and refer them for treatments.

CHEPS researchers are investigating the rollout of state drug testing laws for cash assistance programs to explore the effect of these laws on welfare take-up and illicit drug use among public assistance recipients. This study utilizes several datasets, including the Current Population Survey (CPS) from the Bureau of Labor Statistics (BLS), Temporary Assistance for Needy Families (TANF)



caseload data from the U.S. Department of Health and Human Services (HHS), drug treatment admissions data from the Treatment Episode Data Set: Admissions (TEDS-A), and the National Survey on Drug Use and Health (NSDUH).

This study seeks to offer some of the first empirical evidence on the effectiveness of state drug testing laws in deterring drug use among welfare recipients, one of the key objectives of the policy. Establishing the dynamics of the relationship between drug testing laws, welfare take-up, and illicit drug use among public assistance recipients would be valuable to developing future policy.

### Bullying, Binge Drinking, and Body Weight

by Joseph J. Sabia and CHEPS RA Russell Leonard

As part of a long-running research agenda of CHEPS Director Joe Sabia, a team of CHEPS scholars continues to explore the causes and consequences of in-school bullying of adolescents. The authors examine the impacts of state anti-bullying laws (ABLs) on a range of health outcomes related to bullying victimization, binge drinking, and body mass index, using data from the state and national Youth Risky Behavior Survey (YRBS). CHEPS researchers are revisiting this project in preparation for its submission to journals, extending the window of analysis to include more recent survey data, and taking advantage of some of the new differences-in-differences estimators to address any concerns that may arise from the staggered adoption of ABLs across the country.



Between 2001 and 2017, every state in the U.S. (plus Washington, D.C.) enacted ABLs, which require local school districts to pass policies that: (i) identify perpetrators and victims of bullying; (ii) punish, educate, and rehabilitate offenders; and (iii) stigmatize bullying behavior. By increasing the costs of bullying via increased likelihood of detection and punishment, these laws are designed to reduce the incidence of bullying

and, ideally, reduce the impacts of some of the social harms associated with bullying. During the past decade, there have been a considerable number of studies examining potential causal links between bullying victimization and risky health behaviors, including the ones mentioned above. However, much of this literature has relied on the questionable assumption that bullying victimization is random (or at least exogenous to public health).

To avoid this issue, a team of CHEPS researchers examines the **"reduced form" effect of** state anti-bullying laws on bullying victimization, binge drinking, drug use, and body mass index. First, recent MA graduate Russell Leonard and Dr. Sabia find evidence that state ABLs laws reduce the probability of being bullied by around 10 percent. However, they find no evidence that these policies reduce the likelihood that teenage high school students engage in binge drinking, drug use, or are overweight (or underweight, for that **matter). Leonard and Sabia conclude that public health experts' claims of large beneficial** effects on ABLs on alcohol use and body weight are likely overstated.

### Not Seen, Not Heard, or Out and Proud?

#### by Samuel Safford and Joseph J. Sabia



The past two decades have resulted in greater normalization of LGBT causes. Greater public support and normalization of policies like marriage equality have resulted in the subsequent normalization of the LGBT community. Reports of Pride events like parades, street fairs, and general festivals are commonplace in American media outlets. However,

despite broader public support, there are still issues of discrimination and even violence against the LGBT community. One potential outlet for this violence is the increased prevalence of these events, in addition to the higher level of advertisement. Those in opposition to the LGBT movement can now identify events and potentially engage in hate crimes based on that knowledge.

To better identify the relationship between the increased prevalence of these events and the increase in hate crimes against LGBT individuals, a dataset detailing some of the differences between these events in addition to the numerical increase would be required.

To better understand the relationship between greater pride publicity and hate crimes targeted toward sexual minorities, CHEPS researchers have constructed a novel data set including any pride event taking place between 2000 and 2019. Information on the type, date, and the city of the event was collected for any city that had a population of 50 thousand or greater. The constructed data set, through measurement of the type of event, allows for estimation across the degree of publicity. Two types of events are acknowledged in the data set: parades and festivals. Parades are generally larger events with more public recognition, while festivals can vary in both size and structure.

To measure hate crimes, data from the FBI's Hate Crime Statistics Program (HCSP) is used which measures hate crimes of any bias reported by law enforcement agencies across the country. Information reported by the HCSP include victim and offender characteristics (if known), the location of the offense, and the bias associated with the offense. This availability allows for estimation across several dimensions like offender and victim race, gender, and ethnicity. Further, the HCSP allows for estimation specifically on the basis of bias toward sexual minorities. Going forward, this project seeks to analyze the effect of an increase in Pride events on sexually motivated hate crimes.

# Domestic Violence Prevention Laws and Intimate Partner Violence in Brazil

#### by Júlia Sbroglio Rizzotto

Intimate partner violence (IPV) describes physical, sexual, and psychological aggression by a current or former spouse. Brazil is the 5th country with the most murders of women among 83 countries surveyed by the World Health Organization (WHO, 2005).

Violence against women harms the victims, causing damage to society. The impacts resulting from violence are present in different aspects of their lives (health, labor market, socioeconomic) and result in physical and mental health problems, less productivity, ability, and responsibility to support themselves and take care of the family, in addition to economic and social consequences and family and societal costs.



In Brazil, two legal provisions have been implemented to combat violence against women and promote public policies: Domestic Violence Law (also known as Maria da Penha law) and Femicide Law. In addition, other mechanisms were created to increase the number of reports and the safety of the victim, as they provide specialized care for cases of female violence: *Delegacias Especializadas de Atendimento das Mulheres* (Police Stations Specialized in Serving Women, DEAMs), with the aim of repressing the violence suffered, the Courts of Domestic and Family Violence Against Women and the Women's Helpline.

The establishment of a DEAM tends to cause a reduction in IPV since the cost of violence increases as the prosecution of aggressors increases. Furthermore, the existence of a DEAM can facilitate the dissolution of abusive relationships and reduce conflicts in relationships that remain. This is because restraining orders are issued that assist court procedures; thus, DEAMs may be contributing to creating safe outside options for abused women, so if they decide to leave the marriage, they are less likely to be victims of the abuser's retaliation. This paper contributes to several strands of literature. This study uses data from health facilities to minimize the difficulties that arise from women not reporting domestic abuse to the police.

# **CHEPS** in the Media

In addition to peer-reviewed publications, another metric that CHEPS uses to measure its success is the national media coverage of our scholarship. CHEPS had another terrific year in this regard, with several of our research papers - ranging from such diverse topics as school reopening policies, COVID-19 vaccination lotteries, and gun buyback programs receiving national (and in some cases international) media coverage. Our research was covered by outlets including (but not limited to) National Review, Reason, MarketWatch, CNN, Forbes, and the Washington Post. Our COVID-19 vaccination lottery paper received over 100 media citations.





Women's participation in the labor force has been stagnant since the 1990s, and the COVID-19 pandemic gave economists a rare real-time glimpse into the factors affecting that stagnation. AFP VIA GETY IMAGES

The ongoing COVID-19 pandemic has continued to change the way we live, work, and socialize, regardless of political affiliation, age, or geographical location. But with the advent of the vaccine, it seemed that normalcy was closer than ever. However, to date, only 66% of the United States population is fully vaccinated against COVID-19. States and public officials tried several different strategies to entice citizens into

vaccinating. From mandates to incentives, including beer, donuts, and cold hard cash, nothing seemed to do the trick. CHEPS researchers were the first to explore the effectiveness of 19 state-run lotteries and offered insight as to how governments can better craft incentive-**based policies. Compared with states that didn't offer vaccine lotteries,** CHEPS researchers found that there was zero difference in the vaccination rates of states that held lotteries versus those that did not.

Audio Audio State lotteries did not motivate people to get the Covid-19 vaccine, study finds



By Jen Christensen, CNN () Updated 8:49 PM ET, Fri October 15, 2021

### Research Highlights: SELECTED REVISE & RESUBMITS

### Black Lives Matter Protests and Risk Avoidance: The Case of Civil Unrest During a Pandemic

National Bureau of Economic Research Working Paper No. 28408 Revise-and-Resubmit, *Journal of Human Resources* 

by Dhaval Dave, Andrew Friedson, Kyutaro Matsuzawa, Samuel Safford, and Joseph J, Sabia



In this study, we document evidence of risk avoidance behavior during the COVID-19 pandemic using sudden changes in local perceived risk due to Black Lives Matter (BLM) protests over the killing of George Floyd in **Minneapolis by a local police officer. Floyd's death, which** resulted in the officer being charged with and later convicted of murder, touched off a series of protests in cities

around the United States, with protesters demanding policing reform.

These protests generated two forms of new potentially perceived risk. The first is the potential for greater infectious disease transmission, given that the protests involved large gatherings of people. This led both public health experts and policymakers to contend that exercise of the constitutional right to assemble during a pandemic would generate large public health costs. In response to exposure to higher perceived infection risk from the crowds, non-participants may adjust their risk-taking behavior, for instance, by increasing their social distancing and mask-wearing or by reducing their out-of-home travel. In addition to generating health-related risk compensation, BLM protests could also generate violence-related risk avoidance.

Difference-in-differences regressions show that the onset of BLM protests led to increases in rates of full-time stay-at-home behavior and median hours spent at home among local residents. The increase in stay-at-home behavior is largest when (i) local COVID-19 growth prior to the death of George Floyd was relatively higher, (ii) state mask mandates were not in place, and (iii) there were reports of violence at the civil rights rallies. These findings are consistent with local non-rallygoers responding to the increased risks of infectious disease spread and protest-related violence by increasing time spent at home. In addition, an examination of point-of-interest smartphone data provides strong evidence that the activities supplanted by BLM protests were higher risk activities for infectious disease spread than outdoor rallies. These findings highlight the integral role played by population-level risk-compensatory behavioral responses.

# Intended and Unintended Effects of E-Cigarette Taxes on Youth Tobacco Use

National Bureau of Economic Research Working Paper No. 29216 Revise-and-Resubmit, *Journal of Health Economics* 

by Rahi Abouk, Charles Courtemanche, Dhaval Dave, Bo Feng, Abigail Friedman, Catherine Maclean, Michael Pesko, Samuel Safford, Joseph J Sabia

Since first entering American markets in 2006, the use of e-cigarettes and other electronic nicotine delivery systems (ENDS) has grown dramatically, especially among teens and young adults. In response, policymakers have implemented aggressive regulation, including state and local taxes. Over this same period, tobacco cigarette has been considerably decreasing. These trends suggest that vaping could be filling the void for current smokers between traditional cigarettes and the complete cessation of smoking.

A *National Bureau of Economic Research* working paper, released in September 2021, investigates the intended and unintended effects of ENDS taxes on youth tobacco use. This study was written by Rahi Abouk (William Paterson University), Charles Courtemanche (University of Kentucky), Dhaval Dave (Bentley University), Bo Feng (Georgia State University), Abigail S. Friedman (Yale School of Public Health), Johanna Catherine Maclean (Temple University), Michael Pesko (Georgia State University), Joseph Sabia (SDSU), and Samuel Safford (Michigan State University). The researchers use two large national datasets (Monitoring the Future and the Youth Risk Behavior Surveillance System) to explore the relationship between ENDS taxes and youth tobacco use.

The coauthors find that ENDS taxes significantly reduce youth ENDS consumption.

# Intended and Unintended Effects of E-cigarette Taxes on Youth Tobacco Use

Rahi Abouk, Charles J. Courtemanche, Dhaval M. Dave, Bo Feng, Abigail S. Friedman, Johanna Catherine Maclean, Michael F. Pesko, Joseph J. Sabia & Samuel Safford

However, there is also evidence that e-cigarettes and cigarettes are economic substitutes. These substitution effects are particularly for frequent cigarette large smoking. Therefore, the effects unintended of ENDS taxation may more than fully offset any public health gains. This study has received a revise-and-resubmit at the Journal Of Health Economics, and the team of coauthors expects to resubmit the manuscript in the summer of 2022.

WORKING PAPER 29216 DOI 10.3386W/29216 ISSUE DATE September 2021 REVISION DATE December 2021

# Changes in Assortative Matching & Educational Inequality: Evidence from Marriage & Birth Records in Mexico

Revise-and-Resubmit, Journal of Demographic Economics by Lauren Hoehn-Velasco and Jacob Penglase



In recent decades, Mexico has experienced both increases in per-capita income and declines in income inequality. Despite these gains, income inequality remains considerably higher in Mexico compared to other OECD countries. Educational attainment in Mexico has similarly grown over time; however, a

large share of the population still has less than a primary education. If couples sort by educational attainment, then the marriage market may amplify inequality across households. Moreover, inequality due to assortative matching has the potential to impact future generations through intergenerational transfers of human capital. The growing level of assortativeness has the potential to increase inequality, which can impact future generations through intergenerational transfers of human capital.

In this paper, we study educational assortative matching using administrative marriage and birth records. Measuring how assortative matching has changed over time is not straightforward. The main challenge is that the marginal distributions of education for men and women have changed over time, and in particular, the distributions have become more similar. As a result, the prevalence of same-education couples has mechanically increased. We, and the literature at large, are primarily interested in identifying how preferences for same-education partners have evolved over this time period after accounting for these mechanical changes. As a result, we rely on the Separable Extreme Value index, which measures assortativeness using an underlying structural model. The key idea behind the model (and the resulting index) is that sorting is determined by the utility that spouses derive from matching with a particular type of partner. As a result, one can connect changes in preferences for a partner of the same education level to changes in assortativeness.

We compute our measures of assortativeness using the full universe of administrative marriage records recorded in Mexico by the National Institute of Statistics and Geography. Our results suggest that assortativeness has broadly increased over the past thirty years. In Mexico, it has become increasingly common for partners of similar education levels to marry one another, even after accounting for increases in educational attainment. Moreover, we find that this result is especially strong among the college-educated.

These findings, however, mask important heterogeneity that underlies our summary measures. In particular, it is necessary to recognize that assortativeness is a local property, meaning that it is possible for assortativeness to be high within one pair of education categories (e.g., college and secondary), but low within other pairs (e.g., primary and middle). In our context, we divide individuals into four mutually exclusive education categories; primary or less, middle, secondary, and college. Allowing for multiple education categories is especially important in Mexico, where a high share of the population has less than a middle-school education. Using the local measures, we find that the level of assortativeness is higher when focusing on non-adjacent versus adjacent education categories (i.e., primary-college versus secondary-college). This finding suggests that both men and women frequently match with partners who have a slightly lower or higher education, but not with one that's significantly different. Second, we find that the assortativeness of adjacent education categories has increased only slightly over the past three decades. However, we observe a large increase in assortativeness among college graduates. Moreover, this increase is greater when measuring assortativeness among college graduates and individuals in non-adjacent education categories.

# The Dependent Coverage Mandate Took a Bite Out of Crime

**Revise-and-Resubmit**, *Journal of Law and Economics* by Zach Fone, Andrew Friedson, Brandy Lipton, and Joseph J. Sabia

The Affordable Care Act's Dependent Coverage Mandate (DCM) induced approximately two million young adults to join parental employer-sponsored health insurance (ESI) plans. This study is the first to explore the impact of the DCM on crime, a potentially important externality. Using data from the National Incident-Based Reporting System, we find that the DCM induced a 2-to-5 percent reduction in property crime incidents involving young adult arrestees ages 22-to-25 relative to those ages 27to-29. This finding is supported by



supplemental analysis using data from the Uniform Crime Reports. An examination of the underlying mechanisms suggests that declines in large out-of-pocket expenditures for health care, increased educational attainment, and increases in parent-adult child cohabitation may explain these crime declines. Back-of-the-envelope calculations suggest that the DCM generated approximately \$371 to \$512 million in annual social benefits from crime reduction among young adults.

## Is Recreational Marijuana a Gateway to Harder Drug Use and Crime?

National Bureau of Economic Research Working Paper No. 29038 Revise-and-Resubmit, *Journal of Public Economics* by Dhaval Dave, Fawaz Alotaibi, Daniel I. Rees, and Joseph J. Sabia

### Is Recreational Marijuana a Gateway to Harder Drug Use and Crime?

Joseph J. Sabia, Dhaval M. Dave, Fawaz Alotaibi & Daniel I. Rees

WORKING PAPER 29038 DOI 10.3386/w29038 ISSUE DATE July 2021 REVISION DATE August 2021

A recently released National Bureau of Economic Research (NBER) Working Paper (also released by CHEPS), co-authored by Joseph Sabia, Dhaval Dave, Fawaz Alotaibi, and Daniel Rees, examines whether recreational marijuana laws led to **increases in the use of "harder drugs" and crime. De**spite recreational marijuana remaining

illegal at the federal level, 18 states (and Washington, D.C.) have legalized marijuana, meaning that individuals of at least age 21 can legally purchase, grow, or possess **marijuana without a doctor's prescription. Th**is is the first study to comprehensively examine the effects of legalizing marijuana on hard drug use, arrests, drug overdose deaths, and drug treatment admissions.

While support for the end of cannabis prohibition has increased dramatically over the past couple of decades, some lawmakers and public health officials remain concerned that **marijuana use may serve as a "gateway" to the use of other drugs, such as cocaine, opiates,** and amphetamines, the use of which may lead to increased public costs in the form of addiction, overdose, or crime. While many of the costs of drug use and addiction are born privately by the individual user, there are several potential aspects of hard drug use whose costs are not fully realized by the user. For instance, an individual who becomes addicted to drugs may turn to crime as a source of income to feed their addiction, or a person under the influence of mind-altering drugs may carry out violent offenses that they would not have committed while sober.

Using a variety of national data sources (the National Survey of Drug Use and Health, the Uniform Crime Reports, the National Vital Statistics System, and the Treatment Episode Data Set), the authors show that recreational marijuana laws significantly increase adult marijuana use and reduce drug-related arrests over an average window of three to four years following legalization. They find little evidence that the post-legalization uptick in marijuana usage encouraged hard drug use or violent crime and posit some evidence that legalization may aid in reducing opioid-related mortality. This study has received a revise-and-resubmit at the *Journal of Public Economics*.

# You Booze, You Lose? Spillovers to Crime from Alcohol Sales at College Football Games

Revise-and-Resubmit, Journal of Sports Economics by Zach Fone

Recently, CHEPS Postdoctoral Affiliate (and Postdoctoral Fellow at Montana State University) Zach received a revise-and-resubmit for his paper "You Booze, You Lose? Spillovers to Crime from Alcohol Sales at College Football Games" at the *Journal of Sports Economics*. The idea for this project came in 2019 when Zach heard that the Southeastern Conference (a major college football conference) lifted its ban on stadium alcohol sales, giving member schools the choice to sell alcohol or not.

Given his experience working on economics of crime projects with CHEPS, Zach immediately thought about the criminal spillovers that may result from these new alcohol policies. As Zach started working on the project, he learned that in recent years, many schools have lifted their alcohol sales bans at college football games, possibly as a tool to increase attendance and revenues. However, spillovers to crime deserve consideration, given the research that links alcohol consumption and availability to crime. Alcohol sales may spill over to crime through its impacts on attendance, preferences for alcohol consumption among fans, and endogenous changes to policing and enforcement, although the net effect on crime is theoretically ambiguous.



Using data from the National Incident-Based Reporting System over the 2005 to 2016 period for law enforcement agencies that serve 33 Football Subdivision Bowl schools, (FBS) the study does not find much evidence that alcohol sales impact crime on home game days. The most robust finding is a reduction in arrests for liquor

law violations, which may be a result of reduced incentives for smuggling alcohol into stadiums in the presence of alcohol sales.

### Research Highlights: JOURNAL ACCEPTANCES

### Anti-Bullying Laws and Suicidal Behaviors among Teenagers

National Bureau of Economic Research Working Paper No. 26777 Forthcoming, Journal of Policy Analysis and Management by Daniel I. Rees, Joseph J. Sabia, and Gokhan Kumpas



The association between bullying and suicides among teenagers has generated significant **"concern, even panic," according to the CDC.** In response, policymakers in every U.S. state and the District of Columbia have enacted anti-bullying laws (ABLs). These attempt to reduce bullying by requiring school districts to implement policies that train teachers, staff, and parents to detect bullying, encourage students to report victimization, and punish offenders. In addition, some anti-bullying policies require school districts to maintain

records of each bullying report and report this documentation to the Department of Education. Although ABLs have been universally adopted, the relationship between ABLs and youth suicides has received little attention from researchers.

This study, co-authored by Daniel Rees, Joseph Sabia, and Gokhan Kumpas, provides a comprehensive analysis of the impact of ABLs on teen bullying victimization and completed suicides among youths. Using data from the individual-level data from the National and State Youth Risk Behavior Surveys (YRBS), they find that state-level ABLs reduce bullying victimization, depression, and suicide ideation, with the



largest estimated effects for female teenagers and teenagers who identify as lesbian, gay, bisexual, or questioning. In addition, using death certificate data from the National Vital Statistics (NVS), they find that ABLs result in a decrease in the completed suicide rate for teenage females.

### Association Between Statewide COVID-19 Lottery Announcements and Vaccinations

#### JAMA: Health Forum

by Dhaval Dave, Andrew Friedson, Benjamin Hansen, and Joseph J. Sabia



In the United States, COVID-19 vaccination rates slowed from a peak of 3.6 million vaccinations per day during the week of April 5, 2021, to fewer than 2 million vaccinations per day by May 3, 2021. To boost vaccine uptake, 19 states announced large cash lotteries by July 1, 2021, tied to COVID-19 vaccination.

For instance, on May 12, 2021, Ohio announced Vax-a-Million, a set of

weekly \$1 million drawings to be held over 5 weeks for Ohio residents 18 years or older who had received at least 1 COVID-19 vaccine dose. One recent study failed to find an association between the Ohio drawings and increased vaccinations. In this case-control study, published in Jama Health Forum this fall, Dhaval Dave, Andrew Friedson, Benjamin Hansen, and Joseph Sabia assess if announcements of cash drawings in 19 states were associated with increased vaccine uptake by comparing vaccination trends in states that announced drawings with states that did not use a difference-in-differences framework.

There were 37.2 million first doses of the COVID-19 vaccine administered in the United States between April 28 and July 1, 2021, including 19.2 million in states that announced cash drawings. Estimates of the association between an announcement and vaccination rates were minimal in magnitude and statistically indistinguishable from zero. The authors detected no statistically significant association between a cash-drawing announcement and the number of vaccinations before or after the announcement date. This period included announcements of lottery winners for most lottery states.

The authors found that during this time, there were approximately 0.30 daily vaccinations per 1000 population. They ruled out relatively small associations between lottery announcements and vaccinations. If the cash-drawing announcements had been associated with 70% of US adults receiving a first vaccine dose by July 4 (President **Biden's stated goal), an estimate of approximately 1.22 daily vaccinations per 1000** population would have been expected. This study garnered the media attention of CNBC, CNN, Forbes, Science Insider, and other outlets.

### Association of Marijuana Legalization with Marijuana Use Among US High School Students, 1993-2019

#### JAMA: Network Open

by D. Mark Anderson, Daniel Rees, Samuel Safford, Joseph J. Sabia

Thirty-six states have legalized medical marijuana, and 18 states have passed recreational marijuana laws (RMLs). Organizations such as the American Academy of Pediatrics are concerned that legalization will encourage youth marijuana use. Marijuana use during may adolescence adversely affect areas of the prefrontal cortex, which controls essential cognitive processes.



Using data from the Youth Risk Behavior Survey for the period 1993-2019, Mark Anderson, Daniel Rees, and Joseph Sabia provide estimates of the association between legalization and adolescent marijuana use. National and state YRBS data were pooled in this repeated cross-sectional study.



between RMLs and adolescent marijuana use.

Multivariable logistic regression was used to estimate the association between legalization and marijuana use. Consistent with prior research in the literature, there was little evidence that recreational or medical marijuana laws encourage teens to use marijuana. The overall association between RML adoption and marijuana use among adolescents was statistically indistinguishable from zero. One limitation of this study is that RMLs are a relatively new phenomenon. As more post-legalization data become available, researchers can draw firmer conclusions about the relationship

# How Bad is Crime for Business? Evidence from Consumer Behavior

Journal of Urban Economics by Viviane Sanfelice and Hao Fe



Extensive research has been done about the determinants of crime and the efficacy of different prevention and policing strategies. Much less attention, however, has been given to the economic impacts of crime, especially with regard to patterns of consumer behavior. This paper fills part of the gap by providing robust evidence of the effects of short-term changes in local crimes on consumer visits to retail and foodservice establishments in a large U.S. city. Central to our analysis is the

idea that consumers' sensitivity to crime depends on crime type and place of occurrence.

We employ a conservative approach that leverages temporal and geographical variations and the richness of our data to account for unobserved heterogeneity and time variant con- **founders. Our identification strategy builds on the conjecture that consumers'** response to crime occurs at fine levels of geography and time, whereas confounders only vary at fine levels of geography or time, but not both. By specifying the appropriate fixed effects and exploiting lagged neighborhood consumer visits, we believe our estimated local impacts of crimes can be reasonably interpreted as causal. Several validity tests also confirm that our estimates are not likely to suffer from endogeneity.

Our main results find stronger effects for property than for violent offenses. In addition, the main results suggest that the crime effect on consumer visits is large and significant for incidents that occur in public spaces, whereas crimes that occur within residences do not have a statistically significant effect. This provides additional evidence that unobserved factors are not driving the association between crime and consumer visits. Exploration of the variation in crime effects finds that crime has a negative effect on consumers in the extensive margin (number of visits and number of customers), but we do not find sizable effects in the intensive margin (venue visit time). Our results also provide evidence that night visits are more sensitive to changes in crime than daytime visits. Finally, beauty salon visits, a service with predominantly female users, are used to proxy for gender asymmetric reaction to criminal activities. We find that an increase in violent crime translates into a large drop in beauty salon visits.

Our work indicates that consumers take crime rates into consideration when deciding whether to visit a business within a city neighborhood. We conclude that our findings are consistent with the argument that the perception of crime and the risk of victimization induced by crime incidents scare off consumers, potentially making businesses less profitable. Our results add to the research on the costs of crime, especially in urban areas.

# Political Violence, Risk Aversion, and Non-Localized Disease Spread: Evidence from the U.S. Capitol Riot

NBER Working Paper No. 28410 Forthcoming, Journal of Population Economics by Dhaval Dave, Drew McNichols, and Joseph J. Sabia

January 6, 2020, marked a historically violent event in United States politics. President **Joseph R. Biden's victory was met with** protesters storming the Capitol building. This study, co-authored by Dhaval M. Dave, Drew McNichols, and Joseph J. Sabia, investigates the impacts of the Capitol Riot on social mobility and COVID-19 spread. Ultimately, the authors conclude that the event did not result in increases of communal Covid-19 spread.



The authors detect some evidence of risk avoidance in response to the Capitol Riot, as local residents increased full-time stay-athome behavior and percent of time spent at home in the period surrounding and following the Riot. This finding is consistent with violence- or health-related risk averting behavior. Moreover, some of the increase in stay-at-home behavior appeared to continue beyond the days surrounding the protest,

consistent with "lockdown conditions" in many quarters of the District in the period leading up to the inauguration of President Biden.

Finally, the authors explore local and nationwide community spread of COVID-19 following the Capitol Riot. To explore local spread in Washington, DC, we use a synthetic **control design, creating a "synthetic Washington" using counties with similar urbanicity** rates, COVID-19 policy (and testing) environments, and pre-treatment rates of COVID-19 cases and growth rates. We omit from the donor pool those counties with residents whose smartphones were detected at the Capitol Riot on January 6 to avoid spillovers. Our results provide no evidence of community-level COVID-19 spread in the month following the Capitol Riot. This may be explained, in part, by risk averting behavior by local residents and the partial District lockdown.

Turning to counties outside of the District, the authors use a dose-**response "difference**in-**differences" approach to explore whether county**-level COVID-19 cases spread faster in areas that drew larger shares of residents to the protest relative to counties without attendees represented in Washington, DC. For the highest inflow counties, we find that the Capitol Riot was associated with a .004 to .010 increase in the rate of daily cumulative COVID-19 case growth in the month following the event. We conclude that the Capitol Riot may have contributed to non-localized community-level COVID-19 spread.

### The Limits of Reopening Policy to Alter Economic **Behavior: New Evidence from Texas**

**NBER Working Paper No. 28804** Forthcoming, Journal of Risk and Uncertainty by Dhaval Dave, Samuel Safford, and Joseph J. Sabia

Non-pharmaceutical interventions (NPIs) such as stay-at-home orders (SIPOs), nonessential business closures, emergency declarations, mask mandates, and limits on inperson gatherings - including capacity constraints at business venues - have been among the most common policy tools used to combat COVID-19. Many of these policies, while enacted to generate public health benefits through curbing the spread of the pandemic, may also impose economic costs in the short and longer runs due to mobility restrictions and business closures. Consequently, the mass distribution of COVID-19 vaccinations by Moderna, Pfizer, and Johnson & Johnson – along with declines in COVID-19 hospitalizations and mortality – created intense pressure on state and local policymakers to begin lifting NPIs, with the goals of improving local labor market conditions and permitting in-person gatherings that would signal a return to pre-COVID normality.

At the same time, public health experts have warned that lifting mask mandates or repealing capacity restrictions "too early" relative to the distribution of COVID-19 vaccinations (or progress toward herd immunity) could reverse COVID-19related health gains.

The Limits of Reopening Policy to Alter **Economic Behavior: New Evidence from Texas** Dhaval M. Dave, Joseph J. Sabia & Samuel Safford

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First. using daily anonymized smartphone data - and synthetic control and difference-in-differences approaches - the authors of this study find no evidence that the Texas reopening led to substantial changes in mobility, including foot traffic at a wide set of business establishments. Second, the authors find no evidence that the Texas reopening affected the rate of new COVID-19 cases or deaths during the five weeks following the reopening. These null results persist across more urbanized and less urbanized counties, as well as across counties that supported Donald Trump and Joe Biden in the 2020 presidential election. Finally, they find no evidence that the Texas reopening impacted short-run employment, including in industries most affected by the reopening. Together, these findings underscore the persistence of late-pandemic era private behavior and stickiness in individuals' riskrelated beliefs and suggest that reopening policies may have impacts that are more muted than policymakers expect.

WORKING PAPER 28804

# Risk Avoidance, Offsetting Community Effects, and COVID-19: Evidence from an Indoor Political Rally

### NBER Working Paper No. 27522

Journal of Risk and Uncertainty

by Dhaval Dave, Drew McNichols, Connor Redford, Samuel Safford, and Joseph J. Sabia

This study is the first to rigorously explore the impact of President Trump's 2020 presidential campaign kickoff rally on social distancing and COVID-19 related outcomes. To begin, the authors utilize anonymized smartphone data from SafeGraph Inc. to examine the impact of the Tulsa rally on travel into the census block groups (CBGs) where the Tulsa rally took place. Foot traffic at hotels, restaurants, and entertainment venues in the treatment CBGs also increased, consistent with this influx of visitors.

However, the authors find that net stay-at-home behavior in Tulsa county, which drew over half of rally attendees (according to cell phone data), did not change. Moreover, foot traffic at restaurants and bars and at retail and entertainment venues in Tulsa county declined on the day of the rally and the preceding day, consistent with avoidance behavior of other residents and displacement of some of their usual weekend activities that would have taken place in the absence of the rally. Such individuals may have chosen to increase stay-at-home behavior to avoid congestion at the rally, owing to road and business closures, or in response to predictions of violent clashes between protesters and rally attendees, which precipitated the National Guard being called out on June 19 and 20.

Then, turning to data from the Centers for Disease Control and Prevention (CDC), the authors explore whether the Trump rally ignited COVID-19 growth, examining (i) Tulsa county, (ii) Tulsa county, and its border counties, and (iii) the state of Oklahoma. Synthetic control estimates provide no evidence that the Tulsa rally precipitated COVID-19 case growth in any of these jurisdictions during the five weeks following the event. Moreover, a dose-response difference-in-differences approach, which utilizes SafeGraph **data on higher "donor" counties to the rally,** shows no evidence that COVID-19 cases grew more quickly in counties that sent more attendees into the rally census block group and who returned home. An examination of COVID-19 deaths up to eight weeks following the rally similarly produced no evidence of increases in the COVID-19 death rate.

These findings have important implications for policymakers considering mass gathering bans and reopening policies. To the extent that the Tulsa event displaced mobility that otherwise would have taken place, such as by reducing gatherings of non-household members at restaurants and bars downtown, such compensatory avoidance behavior may have played a vital dampening role in community spread. When assessing the risk of an event, both individual and population-level risk-mitigating behavior need to be considered.

### **Did Expanding Sports Opportunities for Women Reduce Crime? Evidence from a Natural Experiment**

Forthcoming, Journal of Human Resources by Drew McNichols, Joseph J. Sabia, and Gokhan Kumpas

More than seven million American high school students participate in some form of school-sponsored athletic program, and an additional 500,000 students participate in college athletics. Youth sports participation has been linked to important benefits for participants, including increased educational, higher aspirations for post-secondary schooling, and improved labor market outcomes.

However, many advocates of youth sports programs claim that the benefits playing sports extend beyond of



**Title IX Reduced Female Arrests** 

participants. A May 2018 White House Council of Economic Advisers report stated that youth sports programs enhance the "development of generalizable skills" that yield benefits not only for participants, but "for society as a whole." The most commonly cited positive externality from youth sports participation is reduced crime. The United Nations argues that youth sports programs serve an important peacekeeping role by deterring crime and curbing drug use. Furthermore, a number of high-profile U.S. Federal and state anticrime initiatives - such as the Violent Crime Control and Law Enforcement Act of 1994 and the Empire State After School Program of 2018 - included expansions in sports-related funding.

Using data from the 1980-2000 Uniform Crime Reports and exploiting plausibly exogenous variation in female sports participation generated by the introduction of the 1972 educational amendments to Title IX, Drew McNichols, Joseph Sabia, and Gokhan Kumpas find that a 10-percentage point increase in female high school sports participation reduced arrests among affected cohorts of 25-to-39-year-old females by 0.5 to 0.6 arrests per 1,000 population. Arrest reductions are observed for both property and violent offenses. These results are consistent with substantial Title IX-induced gains in educational attainment and labor market outcomes for affected female birth cohorts. The magnitudes of our estimates suggest that the full implementation of Title IX generated approximately \$6.7 billion in social benefits from crime reduction.
### The Effect of State E-Verify Laws on Crime

IZA Discussion Paper No. 12798

### Forthcoming, Industrial and Labor Relations Review

by Brandyn Churchill, Andrew Dickenson, Taylor Mackay, and Joseph J. Sabia

The last two decades have seen explosive growth in the number of interior immigration enforcement policies in the United States. One of the most widespread of these policies requires employers to verify the work eligibility of recent hires. These statutes, known as E-Verify mandates, have been adopted by 23 states and the federal government. Under an E-Verify mandate, employers must compare information from their new hires' Employment Eligibility Verification (I-9) forms with electronic records from the Social Security Administration and Department of Homeland Security. An employee's name, Social Security number, date of birth, citizenship status, and (if applicable) noncitizen-related information is compared to electronic federal records to assess work eligibility. A mismatch prompts an alert to the employer that must be resolved within 10 federal workdays, or the employee must be fired.

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| Close A      | The Effect of E-Verify Laws on Crime   |   |
| 8            | Brandyn F. Churchill, Andrew Dickinson, Taylor Mackay, more<br>First Published November 10, 2021 Research Article Research Ar   | Show all authors  |
|              | Article information ~  | Altmetric 2   |
| ~            | Abstract   |   |
| ^            | E-Verify laws, which have been adopted by 23 states, require employers to verify whether new<br>employees are eligible to legally work prior to employment. This study explores the impact of state  |   |
|              | E-Verify laws on crime. Using data from the 2004–2015 National<br>System, the authors find that the enactment of E-Verify is associated as the second s | ated with a 7% reduction in   |
| ~            | property crime incidents involving Hispanic arrestees. This finding<br>E-Verify mandates that extend to private employers and its extern   |   |
| aterial      | from the Uniform Crime Reports. Supplemental analyses from the Current Population Survey   |   |
|              | suggest two mechanisms to explain this result: E-Verify-induced increases in the employment of<br>low-skilled natives of Hispanic descent and out-migration of younger Hispanics. Findings show no   |   |
|              | evidence that arrests were displaced to nearby jurisdictions witho<br>arrests of African Americans were affected by E-Verify laws. The   | the second se |
| -            | suggest that E-Verify laws averted \$491 million in property crime   |   |

This study, co-authored by Brandyn Churchill, Taylor Mackay, Andrew Dickenson, and Joseph Sabia, asks, "Do E-Verify laws have important spillover effects on crime?" The impact of state Emandates Verify on crime İS theoretically ambiguous. The policy's net crime impact depends on the magnitudes of its effects on (i) labor for low-skilled market outcomes immigrants (unauthorized and authorized) and natives, (ii) mobility of workers, and (iii) the affected distribution of these effects across lowskilled populations with heterogeneous propensities for crime.

Using data from the 2004-2015 National Incident-Based Reporting System and the Uniform Crime Reports — and a difference-in-differences empirical strategy — this study is the first to comprehensively examine the impact of state E-Verify mandates on crime with special attention to criminal incidents involving arrestees of Hispanic descent. This study finds that enactment of an E-Verify law is associated with a 5 to 10 percent reduction in property crime involving Hispanic arrestees, and the effect is driven by states with mandates that extend to private employers. Supplemental analysis of the 2004-2015 Current Population Survey explores potential mechanisms through which E-Verify could affect crime, namely through employment opportunities for low-skilled immigrants and natives and the demographic (i.e., low-skilled immigrant) composition of states.

### Post-9/11 Combat Deployments Increased Crime

NBER Working Paper No. 27279

Forthcoming, Journal of Law and Economics by Resul Cesur, Erdal Tekin, and Joseph J. Sabia

"[P]eople in war had so inured themselves to corrupt and wicked manners had taken a delight and pleasure in robbing and stealing, that through manslaughter they had gathered boldness to mischief, that their laws were held in contempt, and nothing set by or regarded."

- Sir Thomas Moore, Utopia, 1516

"The [unit's] soldiers who survived all exhibited signs of posttraumatic stress disorder and other psychological conditions. Twelve of them have been arrested for murder or attempted murder."

- U.S. Supreme Court Justice Sonia Sotomayor, Lockhart v. Alabama, 2015

High-profile incidents of violence committed by post-9/11 veterans have permeated the national news media. The link between modern warfare and violence has been tied to historically high rates of Post-Traumatic Stress Disorder (PTSD), Traumatic Brain Injury (TBI), and substance abuse among combat veterans deployed during the Global War on Terrorism.

The co-authors of this study, Resul



Cesur, Joseph Sabia, and Erdal Tekin exploit the administrative procedures by which U.S. Armed Forces senior commanders conditionally randomly assign active-duty servicemen to overseas deployments to estimate the causal impact of modern warfare on crime. Using data from two national surveys and a unified framework, they find consistent evidence that post-9/11 combat service substantially increased the probability of crime commission among veterans. Combat increases the likelihood of property and violent crime, arrest, gang membership, trouble with police, and punishment under the Uniform Code of Military Justice. These results also suggest that combat exposure generated substantial economic costs to society in the form of additional crime. The authors estimate that post-9/11 combat exposure induced crime costs of approximately \$26.4 billion for violent crime and \$315 million for property crime (in 2018 dollars).

### The Unintended Effects of Ban-the-Box Laws on Crime

NBER Working Paper No. 24381

Journal of Law and Economics

by Dhaval Dave, Taylor Mackay, Thanh Tam Nguyen, and Joseph J. Sabia

The American prison system houses more than 2.2 million people, representing around one-fourth of **the world's prison population.** Recidivism in the five years following release is approximately 75% and is attributed, at least in part, to the lack of labor market opportunities from ex-offenders. To improve the labor market opportunities, 33 states and the District of Columbia have implemented Ban-the-Box (BTB) laws. BTB laws prevent employees from asking perspective employees



about their criminal histories during initial job screenings and are used to increase employment opportunities and reduce incentives for crime.

Proponents argue that withholding criminal history information employers may be more willing to hire individuals with criminal records because their perceptions may be changed when engaging with the applicants. However, this may lead to employers engaging in statistical discrimination against demographic groups with higher rates of criminal arrests. There are numerous channels which Ban-the-Box may affect crime. BTB laws are effective at increasing employment among those with criminal records, which could reduce gains to criminal activity and reduce crime, particularly in economically motivated crimes. On the other hand, if BTB laws induce statistical discrimination against racial or ethnic minorities with higher perceived risks of criminal activity, BTB laws could have the unintended consequence of increasing crime rates among less-educated minorities who have fewer job options.

This study, co-authored by Joseph Sabia, Thanh Nguyen, Taylor Mackay, and Dhaval Dave, uses administrative and survey data from the NIBRS and NLSY97 to estimate the relationship between BTB laws and crime. This study is the first to comprehensively explore the relationship between BTB laws and arrests. The study finds that BTB laws are associated with a 16 percent increase in criminal incidents involving working-age Hispanic men, which is driven by property crime increases. The result is consistent with economically motivated crimes resulting from statistical-discrimination-driven employment opportunities and, perhaps, moral hazard. However, the study finds no evidence that BTB laws drive increases in property crimes involving working-age African American males. The possible explanation for this racial or ethnicity-specific difference in crime response: barriers to public assistance receipt among Hispanics. The study concludes that BTB laws impose over \$340 million in additional crime costs on society.

### Child Access Prevention Laws and Juvenile Firearm-Related Homicides

NBER Working Paper No. 25209 Journal of Urban Economics by D. Mark Anderson, Erdal Tekin, and Joseph J. Sabia

Recent mass shooting events reinvigorated debate have safe-storage regarding gun regulation. Overall, Americans typically preferred child access prevention (CAP) laws over more divisive policies such as bans on specific weapons or high-capacity magazines. CAP laws encourage the safe storage of firearms by imposing liability on adults who allow children unsupervised access to guns. Gun safety advocates support CAP laws as a way to limit firearm-related



homicides, as well as to decrease unintentional shootings and suicides among minors. On the other hand, critics argue that safe-**storage requirements impede a person's ability to** defend their home and family during a violent intrusion and that these laws may actually increase incidences of murders, rapes, robberies, and other forms of violent crime.

Using the FBI's Supplementary Homicide Reports (SHR), this study, co-authored by Mark Anderson, Joseph Sabia, and Erdal Tekin is the first to explore the relationship between CAP laws and homicides committed by juveniles where a firearm was used in the commission of the crime. Focusing on homicides, rather than other forms of violent crime, because information on the offender's age is available and the laws are intended to affect households where one or more juveniles are present. Examining the period 1985–2013, a span when 26 states and the District of Columbia adopted CAP legislation, our estimates suggest that CAP laws are associated with a 17 percent reduction in the expected number of firearm-related homicides committed by juveniles, and this effect is driven by states enforcing a "negligent storage" standard, the strictest form of CAP legislation.

Furthermore, the authors find that CAP laws are not associated with firearm-related homicides committed by adults, nor are they associated with non-firearm-related homicides committed by juveniles, providing evidence that the relationship between CAP laws and juvenile firearm-related homicides is causal. For states with CAP laws, our results suggest that the annual value of homicides avoided ranges between \$41 and \$113 million (in 2021 dollars). These findings are particularly relevant for policymakers who are looking to find a middle ground on gun control.

### Were Urban Cowboys Enough to Control COVID-19? Local Shelter-in-Place Orders and Coronavirus Case Growth

NBER Working Paper No. 27229

Journal of Urban Economics

#### by Dhaval Dave, Andrew Friedson, Kyutaro Matsuzawa, Samuel Safford, and Joseph J. Sabia

One of the most common policy prescriptions to reduce the spread of COVID-19 has been to legally enforce social distancing through shelter-in-place orders (SIPOs). This study examines the role of localized urban SIPO policy in curbing COVID-19 cases. Specifically, Dhaval Dave, Andrew Friedson, Kyutaro Matsuzawa, Joseph Sabia, and Samuel Safford explore (i) the comparative effectiveness of county-level SIPOs in urbanized as compared to non-urbanized areas, (ii) the mechanisms through which SIPO adoption in urban counties yields COVID-related health benefits, and (iii) whether late adoption of a statewide SIPO yields health benefits beyond those achieved from early adopting counties. The authors exploit the unique laboratory of Texas, a state in which the early adoption of local SIPOs by densely populated counties covered almost two-thirds of the state's population prior to the adoption of a statewide SIPO on April 2, 2020. Using an event study framework, the authors document that countywide SIPO adoption is associated with an 8 percent increase in the percent of residents who remain at home fulltime and between a 13 to 19 percent decrease in foot traffic at venues that may contribute to the spread of COVID-19 such as restaurants, bars, hotels, and entertainment venues. These social distancing effects are largest in urbanized and densely populated counties.



Then, the authors find that in early adopting urban counties, COVID-19 case growth fell by 21 to 26 percentage points two and a half weeks following adoption of a SIPO, a result robust to controls for county-level heterogeneity in COVID-19 outbreak timing, coronavirus testing, the age distribution, and political preferences. They find that approximately 90 percent of the curbed growth in COVID-19 cases in Texas came from the early adoption of SIPOs by urbanized counties, suggesting that the later statewide shelter-in-place mandate yielded relatively few health benefits.

These findings have large implications for the policy landscape going forward. If the benefits of SIPOs are concentrated in urban areas, then the use of these restrictive policies statewide may not be necessary when fighting outbreaks. More nuanced policy strategies that are stricter in dense urban areas and looser in other areas may yield similar health benefits without imposing the costs, both in terms of economic activity and in terms of inconvenience on part of the population.

### The Association Between Medicaid Adult Dental Coverage and Children's Oral Health

### **Health Affairs**

#### by Brandy Lipton, Tracy Finlayson, Sandra Decker, Richard Manski, and Mingan Yang

Despite considerable progress, tooth decay remains the most common chronic disease of childhood. Children are more likely to have regular dental visits when their parents have dental benefits. While past research has found that Medicaid adult dental benefits increase children's use of dental care, it is unknown whether and to what extent parental dental benefits improve children's oral health.

This study examines the association between Medicaid adult dental benefits and exambased and self-report measures of low-income children's oral health using state-by-year changes to these benefits between 1999 and 2016. Data sources included the 1999-2016 National Health and Nutrition Examination Survey (NHANES) and the 2003, 2007, and 2011/12 waves of the National Survey of Children's Health (NSCH). Since previous research indicates that changes in children's use of dental care lags changes among parents, we examined concurrent, 1-year, and 2-year lagged adult dental coverage policies.

Exam-based data from the NHANES suggested that lagged adult dental benefits were associated with significant reductions of about 3 and 5 percentage points in any caries and any untreated caries, respectively. Lagged policies were also associated with about a

1 percentage point reduction in reports of fair or poor child oral health based on analysis of the NSCH. Consistent with previous research on children's dental visits, effects appeared to be concentrated among younger children.

This analysis builds on previous research that found a positive association between Medicaid adult **dental benefits and children's dental** visits by providing evidence that



these gains may translate to a reduction in tooth decay among low-income children. These results suggest that Medicaid adult dental benefits may be one mechanism to reduce income-**based disparities in children's oral health outcomes, which remain substantial.** These effects may be long lasting as research suggests that policies that increase oral health care access at early ages are also associated with better adult oral health.

# **CHEPS 2021-22 Seminar Series**

During the 2021-2022 Academic Year, CHEPS hosted 25 economists presenting scholarly research from a number of applied microeconomics fields, including health economics, labor economics, public economics, development economics, and environmental economics. During the Fall 2021 semester, these external speakers come from a variety of different research institutions and universities, including the RAND Corporation, University of California, San Diego, University of California, Davis, University of California, Riverside, University of Washington, Indiana University, Claremont McKenna College, Tulane University, University of Hawaii, and Rutgers University. This semester, seminars took on a hybrid format, allowing speakers to attend their choice of in-person or zoom seminars. Zoom options were also available for in-person seminars, allowing the opportunity for all who wished to attend.



The weekly seminars were attended by CHEPS affiliates, professors across disciplines, and both undergraduate and graduate students. The virtual nature of the seminars allowed students and academics from institutions nationwide to attend, including many coauthors and leading scholars in their fields. Additionally, the seminars served to introduce students to a variety of research interests and allowed professors affiliated with

CHEPS to network with faculty from other universities. Importantly, presenters met with CHEPS affiliates in small group sessions to discuss their research and academic experience. Several invited speakers discussed the relative quality of various economics and public policy Ph.D. programs with students. They advised on how to stand out among the growing fields of applicants and how to find the best match for their own interests. Affiliated Ph.D. students were also given the opportunity to meet with seminar speakers to discuss their current and future research and solicit advice on how to best progress through their programs. Despite the barriers that the Coronavirus pandemic has created, the Fall 2020 Seminar Series offered an invaluable experience for both faculty and students to be exposed to several novel research projects; a few of the seminars are outlined below.

Dr. Lucie Schmidt from Smith College presented her working paper, **"The Impact of** Expanding Public Health Insurance on Safety Net Program Participation: Evidence from **the ACA Medicaid Expansion." She and her co**-authors (Lara Shore-Sheppard and Tara Watson) explore potential spillover effects that the ACA Medicaid expansion may have had on the Earned Income Tax Credit (EITC) and the Supplemental Nutrition Assistance Program (SNAP). Using a county border-pair research design, Dr. Schmidt and her co-**authors' results suggest that Medicaid expansion increased SNAP and potentially EITC** participation in counties that expanded Medicaid compared to counties that did not. Overall, their results show that increasing access to one safety net program may increase the participation of others.



Dr. William Olney of the University of Hawaii presented his forthcoming working paper, "Importing the Opioid Crisis? Trade, Smuggling, and Fentanyl Overdoses", co-authored with Dr. Benjamin Hansen of the University of Oregon and Dr. Timothy Moore of Purdue University. Dr. Olney examined the effect of legal import flows on fentanyl overdose deaths, exploiting state variation in both legal import flows and fentanyl overdose death rates to see fentanyl's geographically concentrated impact in certain regions compared to other opioids. Rather than use fentanyl seizure data directly, Dr. Olney uses overall trade volumes, arguing the seizure data doesn't accurately capture all fentanyl inflows due to drug smuggling's inherently secretive nature. An event study research design is used to show an increasing effect of legal imports on fentanyl overdose deaths post-2014 when fentanyl first rose to "mainstream" popularity in both manufacturing and prevalence (usage rates?). The results conclude there is no statistically significant relationship between state-level imports and opioid deaths before 2014, but post-2014, a significant positive relationship emerges that increases over time. Dr. Onley also identifies possible fentanyl smuggling routes across the U.S. - Canada border by examining industry-specific import correlations with fentanyl deaths.

During the Spring 2022 semester, CHEPS hosted 14 experts presenting on a range of topics, including the economics of health, crime, education, and labor. These external speakers came from a diverse mix of institutions, including Cornell University, the University of Chicago, Carnegie Mellon University, and Harvard University.

One of the highlights of the CHEPS Spring Seminar Series this year was Dr. Rich **Patterson from Brigham Young University presenting his paper "Army service during the** All-Volunteer Era." He and his coauthors (Kyle Greenberg, Matthew Gudgeon, Adam Isen, and Corbin Miller) discuss differences in the backgrounds of individuals volunteering for service in the Army. Using a regression discontinuity design to estimate the effects of Army enlistment on earnings and other related outcomes. The key findings of the paper state that services' impact on long-run earnings varies by race. Black servicemembers experience yearly gains between \$5000-\$15000 11-19 years after applying to join the Army, while White servicemembers do not see any significant changes. By providing stable and well-paying Army jobs to Black servicemembers and enabling access to higher-paid post-service employment, the Army helps close the Black-White earnings gap in their sample.



Dr. Marcella Alsan, Professor at the Harvard Kennedy School of Government, presented **her forthcoming working paper, "Diversity and Legitimacy: Evidence from Clinical** Trials," coauthored with Maya Durvasula (Stanford University), Harsh Gupta (Stanford University), and Heidi Williams (Harvard University). Dr. Alsan examined whether racially diverse clinical trials influence the perceived trial legitimacy for both physicians and patients. Using a novel survey design administered to physicians and patients across the U.S., Dr. Alsan finds that more diverse clinical trials increase the perceived relevance **of the trial's results, as well as increase a physician's intent to prescribe medications** that had more diverse clinical trials. Furthermore, Dr. Alsan finds that physicians serving a

more diverse patient population value diversity in clinical trials but no relationship between diverse patient populations and perceived efficacy of the clinical trial. Consistent with the "evidencebased medicine" doctrine followed by the field medical (a combination of clinical judgement, relevant scientific evidence, and patients' values and preferences), Dr. Alsan's



results reaffirm that physicians are indeed good representative agents for their patient populations.

Another impressive CHEPS seminar series this year was a presentation by Dr. Donald Kenkel, an economist at Cornell University who served on the White House Council of Economic Advisers during the Trump Administration. Professor Kenek is the Andrew Dickson White Professor of Economics & Public Policy at Cornell University, former Chief Economist at the White House Council of Economic Advisers, and Research Associate at the National Bureau of Economic Research (NBER). He is a health economist and his scholarship focuses on the economics of disease prevention and health promotion, with a particular focus on the economics of tobacco use. His scholarship has appeared in leading outlets, including the *Journal of Political Economy*, the *Review of Economics and Statistics*, and the *Journal of Applied Econometrics*. During his seminar, Dr. Kenkel presented research on the unintentional health effects of an information shock. The information shock was created by an outbreak of lung injuries in 2019 that were thought to raise the health risks of e-cigarette consumption.

Using an interrupted time-series analysis of e-cigarette sales data, he found that the information shock decreased e-cigarette sales by 39 percent. He further found strong negative relationships between the perceived harm of e-cigarettes and the demand for e-cigarettes and smoking cessation. His research predicted that the information shock reduced e-cigarette demand and reduced smoking cessation with the help of e-cigarettes. He predict that the tragedy of the 68 deaths directly due to the outbreak of lung injuries might be compounded into over half-a-million life years lost due to deterred smoking cessation. Instead, Dr. Kenkel suggested that a combination of health information campaigns and taxation/subsidy policies could have prevented most of the health losses.



#### CENTER FOR HEALTH ECONOMICS & POLICY STUDIES FALL 2021 SEMINAR SERIES THURSDAYS 3:30 PM - 4:45 PM FINCH CONFERENCE ROOM (AL 660) (https://SDSU.zoom.us/j/7533540558)

August 19 (9:00 am PT) Joseph Sabia San Diego State University, CHEPS "Do State Tobacco 21 Laws Work?" Via Zoom (http://bit.ly/TOPS-SummerSeries)

August 26 David Powell RAND Corporation "The Labor supply Consequences of the Opioid Crisis" Via Zoom

September 2 Rachel Heath University of Washington Seminar in Development and Labor Economics

September 23 Gordon Dahl University of California, San Diego Seminar in Labor Economics

September 30 Lucie Schmidt Smith College "Impact of Expanding Public Health Insurance on Safety Net Program Participation" On Campus (Tentative)

William Olney University of Hawaii "Importing the Opioid Crisis? Trade, Smuggling, and Fentanyl Overdoses" Via Zoom

MORE INFORMATION AT: HTTPS://CHEPS.SDSU.EDU

October 7

October 14 Amanda Agan Rutgers University "Misdemeanor Prosecution" On Campus

October 21 Marianne Page University of California, Davis Seminar in Labor Economics

October 28 Jessamyn Schaller Claremont McKenna College Seminar in Labor Economics

November 4 Kosali Simon Indiana University Seminar in Health Economics Via Zoom

November 18 Patrick Button Tulane University "COVID-19, Gender Identity, Race and Ethnicity in Access to Mental Health Care" On Campus

December 2 Bree Lang University of California, Riverside "The Effect of Participation Incentives on Student Evaluations of Teaching" On Campus (Tentative)



















### **CENTER FOR HEALTH ECONOMICS & POLICY STUDIES**

Spring 2022 Seminar Series Thursdays 3:30 PM - 4:45 PM Finch Conference Room (AL 660)



January 20 DONALD KENKEL Cornell University Health Economics

January 27

**DEREK RURY** 

Economics of Crime

**University of Chicago** 

March 17 Richard Uhrig University of California, Santa Barbara Economic History

> March 24 ADAM SHUMWAY Cornell University Economic History

> > March 24

**BRIAN KOVAK** 

**Carnegie Mellon University** 

Via zoom: https://sdsu.zoom.us/j/89032117494

February 10 STEVE MELLO Dartmouth University Economics of Crime

February 17 KELLY BISHOP Arizona State University Environmental Economics

February 24 CAITLIN MYERS Middlebury College Economic Demography

March 3 RICHARD PATTERSON Brigham Young University Labor Economics

March 10 KEVIN SHIH CUNY Queens College Economics of Immigration

MORE INFORMATION AT: HTTPS://CHEPS.SDSU.EDU











Labor Economics & Trade

April 14 MARCELLA ALSAN Harvard University Health Economics

April 21 SCOTT IMBERMAN Michigan State University Labor Economics

April 28 NEERAJ SOOD University of Souther n California Health Economics





The Spring 2022 Seminar Series is supported, in part, by the SDSU Student Success Fee

## **Interviews with Departing MA Students**



Matt Braaksma, who will be graduating in Spring 2022, has been working on papers examining the impact of e-cigarette taxes and their spillover effects on youth risky behaviors. He will begin a Ph.D. program in Applied Economics at the University of Minnesota in the fall.

What motivated you to become involved as a researcher with the Center for Health Economics & Policy Studies?

When I started the master's program at SDSU, I was on the fence about applying to Ph.D. programs. CHEPS provided the opportunity for me to gain exposure to the research process from start to finish. Acquiring hands-on research experience was instrumental in my decision to pursue a Ph.D. after completing the master's program.

What are the most important skills you acquired?

I developed the empirical skills necessary to conduct high-quality research while also gaining a much deeper understating of the research process. It has been critical to gain the ability to carefully handle data and implement various econometric methods. However, it has been invaluable to experience the resilience and foresight required to go from research question to publication.

What advice do you have for future CHEPS graduate affiliates?

I would encourage future graduate affiliates to take advantage of all the opportunities that CHEPS provides. The Center allows students to gain hands-on research experience, be exposed to prominent research at the seminar series, meet with seminar speakers, and develop relationships working with their peers.

Which Ph.D. program will you be attending and why did you choose it?

I will be attending the Applied Economics program at the University of Minnesota, which is a strong fit for my research interests. The program will offer me the opportunity to further improve my research methods, deepen my understanding of economic theory, and learn from top scholars in the field. How did CHEPS help you in your endeavor to be accepted to a Ph.D. program?

CHEPS was pivotal in both my decision to apply to PhD programs, and in getting accepted to a Ph.D. program. The research experience I gained with CHEPS, as well as the advice from Dr. Sabia and the seminar speakers, was vital in being accepted into one of my most preferred PhD programs.



Russell Leonard, a graduating M.A. student, has been working on papers examining the effects of state anti-bullying laws and vertical ID laws on teenagers' risky behaviors and public health outcomes. He will begin a Ph.D. program in Economics at the University of California-Irvine in the fall.

"I have learned a ton over the past two years in the M.A. program and with CHEPS. Working hands-on with research projects has probably been the most fulfilling and formative experience that I have been able to take part in. The opportunity to manage large and complex datasets and take ownership of research projects has been invaluable, and I know that all of the skills and knowledge that I have gained here have given me a strong foundation to build on as I progress in my

academic and research career."

What are the most important skills you acquired?

The most important thing that I have learned is the importance of being obsessively careful with data management for research projects. Considering how much time and effort goes into producing quality empirical research, the extra time spent ensuring that everything that you do is 100% correct is a drop in the bucket compared to the time that can be wasted by working with flawed data.

What advice do you have for future CHEPS graduate affiliates?

Take full advantage of the seminar series. Not only are the speakers that we bring in often renowned and important researchers in their respective fields, but they are almost always amazing sources of career advice. The opportunity that you must meet with them personally and ask them about their experiences outside of strictly research will help you learn more about the profession and how to best navigate it than any class you can take.

Which Ph.D. program will you be attending, and why did you choose it?

I am attending the Economics Ph.D. program at the University of California-Irvine **beginning in fall 2022. I was initially drawn to UCI's strong applied microeconomics** faculty, some of whom I was able to meet through the CHEPS seminar series. Their group has some especially strong faculty in Public and Labor economics, which are two of my primary areas of interest.

How did CHEPS help you in your endeavor to be accepted to a Ph.D. program?

For one, CHEPS helped me come around to the realization that I wanted to pursue a PhD. Beyond that, I think that the research experience that I have gained here likely helped my resume to stand out and signal to the admissions committee that I will be a more prepared researcher entering the second and third year of the program, compared to other applicants that lack the hands-on experience that I have accrued.



Rebecca Margolit, who will be graduating this spring, worked on several papers during her career at CHEPS. She co-authored her first research paper on the impact of minimum wage increases on teen fertility and assisted on other projects on the impact of school **reopenings on married women's labor supply and the** impact of school reopenings on teen suicides.

"I have greatly cherished my time at the Center. Prior to starting at CHEPS, I had zero research experience: only a passion for economics, a raw sense of idealism, and

an intellectual curiosity. I was initially welcomed as a student and a research fellow but quickly grew to also become a co-author, mentor, and a colleague trusted with jumping into many different research tasks. I fell in love with research and began to provide mentorship and guidance to our incoming students. The training, coaching, and networking of the Center have inspired me to continue a career in academia but have also made me a fiercely competitive upcoming Ph.D. candidate. I look forward to my further affiliation with the Center during my Ph.D. and beyond."

What are the most important skills you acquired?

The most important thing that I have learned is that to understand the math is not enough. Considering how much time and effort goes into producing quality empirical research, the extra time spent ensuring that everything that you do is 100% correct is a drop in the bucket compared to the time that can be wasted by working with flawed data.

What advice do you have for future CHEPS graduate affiliates?

I think a major benefit of CHEPS that is often overlooked is the networking – not just among the senior research faculty and the seminar speakers, but of your own cohort and the cohorts before/after you. The cohort before you will show you the ropes, while your own cohort will motivate you, and then when you are a second-year in the M.A. program, the incoming cohort will teach you how to be a good mentor. Above all, I have made some important friendships that have become key resources for me as I pushed myself to strive for excellence in my research. So, my advice: make friends!

Where will you be going next?

I have accepted a Research Associate position at the University Notre Dame Wilson Sheehan Lab for Economic Opportunities (LEO), which focuses on creating evidence that impacts the way our nation addresses poverty.

How did CHEPS help you in your endeavor to be accepted to a Ph.D. program?

I had felt that I wanted to pursue a Ph.D. but had no idea what the research process entailed. The research experience gained through CHEPS has been pivotal in determining that I do want to obtain a Ph.D. in the future, and I look back on it as the most important experience in all of my M.A. program.

## **CHEPS Alumni: Where are they now?**



Zach Fone is a Postdoctoral Research Scholar in the Initiative for Regulation and Applied Economic Analysis (IRAEA) at Montana State University that specializes in applied microeconomics and policy analysis. This June, Zach will be joining the United States Air Force Academy as an Assistant Professor and Analyst for the Office of Labor and Economic Analysis (OLEA). His research interests span the economics of crime and punishment, sports economics, labor economics, and health economics. Zach received his Ph.D. in Economics from the University of New Hampshire and has been a CHEPS Research Affiliate since 2017.



Alex Chesney is an Economics Ph.D. Candidate at the University of California, Davis. He received his master's degree in Economics from San Diego State University in 2012 and his bachelor's degree from the United States Air Force Academy in 2011. Alex is interested in Public and Labor Economics and studying policies that impact military personnel and their dependents. His current research focuses on how active-duty military members make education investment decisions, and how these investments augment human capital formation. He has two papers under review at the *Journal of Public Economics* and the *Economics of Education Review*. Those papers are highlighted

below.

### "Failing to Finish: The Role of Employer Effects on Advanced Education Attainment" by Alex Chesney

Abstract: This paper investigates how promotion policies impact advanced education attainment on employees throughout a career. Using administrative data from the U.S. Department of Defense (DoD), I leverage a natural experiment where academic credentials were permanently masked from promotion consideration. I show the policy influenced the premium of a graduate degree for career advancement opportunities. I then exploit an event study and difference-in-differences design to find employees are 14 percentage points (26 percent) less likely to complete a master's degree when education credentials are no longer considered for promotion. I show attendance at for-profit institutions declined substantially after the policy reform. However, I find the promotion premium of a master's degree from a for-profit institution is not statistically distinguishable from possessing an advanced degree through an alternative university.

### "Should I get a Master's Degree? Evaluating Peer Effects on Education Investment Decisions in the Workplace"

(Revise & Resubmit at Economics of Education Review)

by Alex Chesney

Abstract: This paper examines workplace peer effects on advanced education attainment. Using administrative data from the U.S. Department of Defense (DoD) and conditional exogeneous assignment of employees to workplace, I provide empirical **evidence that coworkers' education investment behavior increases the likelihood of using** Employer-Provided Educational Assistance (EPEA) benefits to start and eventually complete a graduate degree. I find that a 10-percentage point (p.p.) increase in the proportion of peers using Tuition Assistance (TA) increases the probability of starting a master's degree by 5.95 p.p. Additionally, a 10-p.p. increase in the proportion of coworkers that have finished an advanced degree increases completion rates by 2.99 p.p. within eight years.



Gokhan Kumpas will be an Assistant Professor of Economics at California State University, Los Angeles beginning in Fall 2022. He received his B.A. from Izmir University of Economics in Turkey and his Ph.D. from the University of New Hampshire in 2021 in Economics with specializations in health economics and policy analysis from the University of New Hampshire. His dissertation focused on The Spillover Effects of Anti-Discrimination and Anti-Violence Policies. His research interests include applied microeconomics (specifically health, risky behaviors, crime, and education). Dr. Kumpas's recent research has been published in highquality peer-reviewed journals, including *the Journal of Human Resources* and the *Journal of Policy Analysis and Management*. Gokhan has been a CHEPS Research

Affiliate since the Fall of 2017.

Thanh Tam Nguyen is a Ph.D. candidate in Economics at the University of New Hampshire. She earned her BA and MA in economics at San Diego State University. Her research examines the effects of government policies on labor market outcomes, health outcomes, as well as risky behaviors, and crime. Tam is currently working on her dissertation examining the effects of public policies on vulnerable populations.

One of her essays examines the effect of state Medicaid nonpayment policies on early elective deliveries and infant health outcomes. Early elective deliveries are scheduled Cesarean sections or inductions performed during 37 and 38 weeks of gestation with no medical justifications. Early elective deliveries carry risks to



both the mother and the newborn and may also increase the costs to the health care system. By 2019, 14 state Medicaid programs have refused or reduced payment to physicians for early elective deliveries that are not medically indicated. Using restricted-use data from the 2009-2019 Natality Detail Files, difference-in-differences estimates suggest nonpayment policies are associated with a 9 to 10 percent reduction in early elective deliveries among mothers ages 15-44 with no college degree. These laws are also associated with a small improvement in birthweight and full-term births, yet no change in APGAR score.

In another essay, Tam studies the effect of Medicaid bundled payments for perinatal care on maternal and birth outcomes. The U.S. performs poorly on various measures of maternal and infant health outcomes. In addition, racial and ethnic disparities in maternal and infant health remain a significant and persistent challenge. To improve efficiency and health outcomes, state Medicaid programs have implemented value-based payment models



that reward providers for quality of care and, in some cases, cost savings. One of such payment reforms in Medicaid perinatal care is the bundled payment system, which pays all providers involved in a pregnancy a single fixed payment for a group of maternity services and, in many cases, retrospectively reconciles payments based on costs and quality performance. Advocates for bundled payments contend that the program encourages lower spending and improves the quality of care by holding physicians responsible for all care throughout a pregnancy as well as rewarding them for efficient coordination and management of multiple health care inputs. Using cross-sectional data drawn from the 2009-2019 Natality Detail Files, results suggest evidence of beneficial health effects of Medicaid bundled payments, such as increased prenatal care utilization, increased birth weight, and reduced early-term births.



Tam is also working on a paper examining the impact of state nondiscrimination laws in private insurance on health outcomes of lesbian, gay, bisexual, and transgender (LGBT) individuals in the U.S. Sexual minorities face stark and persistent health disparities. Insurance nondiscrimination laws may help improve the health of LGBTs by not only providing legal protection against discrimination based on sexual orientation and gender identity but also creating an inclusive environment to encourage sexual minorities to seek out for medical care. Pooling data from the Behavioral Risk Factor Surveillance System (BRFSS), Tam is interested in studying the effect of state nondiscrimination laws on a wide range of health outcomes of LGBT individuals, including health insurance coverage, access to care, physical and mental health status, and risky behaviors.



Toshio Ferrazares is currently in his third year of the Economics Ph.D. Program at the University of California, Santa Barbara. His research focuses largely on Public and Labor Economics. His current work focuses on the economics of policing and crime, where he has studied the effect of body-worn cameras on police and civilian safety. In 2021, he received an award for "Best Second Year Paper." Before attending UCSB, he obtained a M.A. degree in Economics from San Diego State University where he was a CHEPS MA affiliate.

He recently received a revise-and-resubmit at the *Journal* of *Urban Economics;* the paper is highlighted below:

"Monitoring Police with Body-Worn Cameras: Evidence from Chicago" (Revise & Resubmit at Journal of Urban Economics) by Toshio Ferrazares

Abstract: Using data from the Chicago Police Department on complaints filed by civilians and reports of force by officers, this paper estimates the effect of body-worn cameras (BWCs) on officer and civilian behavior. Utilizing a two-way fixed effects design with a staggered adoption of BWCs across 22 policing districts to almost 12,000 officers, I find an estimated 33% reduction in use-of-force complaints following the usage of body-worn cameras. This effect is driven in large part by a reduction in white officer-black civilian useof-force complaints. Additionally, I find a corresponding 42% reduction in officers reporting striking a civilian and a large though less significant reduction in firearm usage, potential mechanisms for the reduction in complaints. Importantly, these reductions are not associated with an increase in injury to officers or any increase in force from civilians. However, I find that officers make fewer arrests for narcotics and cannabis possession following BWC adoption.

Kyu Matsuzawa, a second-year Ph.D. student at University of Oregon, is working on several projects with CHEPS. The first set of projects include re-examining the effects of minimum wage on poverty and public benefit assistance. The second project examines the effect of California's indoor mask mandate on COVID-19 spread. Another project is examining the effect of Black Lives Matter (BLM) protests that occurred in 2020 on human behavior. This paper recently received a revise & resubmit at the *Journal of Human Resources*, one of the top labor economics journals,



and some of the referee comments involved working with more complicated data such as individual COVID-19 case data and hospitalization data.

## **Continuing Graduate Affiliate Bios**



Eric Thomas received his BS in economics and BA in political science from The University of the Pacific in 2017. During his undergrad, Eric developed an interest in both international economics and institutions. After graduation, he worked in banking as a credit analyst before deciding to pursue further graduate studies in Economics at SDSU. His tenure at the bank resulted in an interest in financing and the role it can play in encouraging community growth. His research interests include international trade, labor policy, migration, and financial economics. Specifically, he is interested in how these intersect and relate economic development. After completing the program, he is planning

on attending a Ph.D. program in either economics or public policy.

**Cooper Smiley** graduated from San Diego State University in 2021 with a BA in Economics with an emphasis in International Economics. Prior to attending SDSU, he was a Civil Affairs Medic in the United States Army. Working in remote, third-world countries sparked his interest in economics. He is currently pursuing an MA in Economics at SDSU. Upon competition of the MA program, he hopes to continue to a PhD program in Economics or Public Policy. His interests include development economics, health economics, and labor economics. In his free time, Cooper likes to cook, workout, and play with his dog, Tess.





Evan Kim is a recent graduate of San Diego State University with a BA in Economics. Evan is currently taking **Master's**-level courses in Economics and working with CHEPS to strengthen his Ph.D. application. Evan is interested in International Finance and International Trade policy. Evan worked closely with CHEPS Assistant Director Yang Liang to examine the effects of industrial robot prevalence on the local labor market and crime outcomes, particularly drug-related offenses. Evan intends to apply to Ph.D. programs in Economics this coming cycle.



### Tim Phillips is an incoming master's student at SDSU.

He grew up in San Diego, CA. He decided to go to Sonoma State because he was recruited to play soccer there. He will receive his B.A. in Economics from Sonoma State University in 2022. He is currently pursuing an M.A. in Economics at San Diego State University. He aspires to obtain a Ph.D. in Economics after completion of the M.A. program at SDSU. Some of my favorite subjects within the economic scope include econometrics along with advanced microeconomics.

**I'm currently pursuing a data analytics internship for thi**s summer. Some of his hobbies include being outside and spending time with friends and family



Marianne Sawires graduated from the University of California, San Diego, in 2017 with a B.A. in political science with a specialization in international relations and a minor in economics. After graduating, she fundraised for a nonprofit benefiting children in low-income communities. She is now continuing her education at SDSU by joining the M.A. in Economics program. Post completion of this program, she hopes to work in the field of economic development to improve the quality of life of people born with inherently less opportunities.



**Isaiah Valencia** received his undergraduate in Statistics at the University of California, Davis. He is currently pursuing his M.S. in Statistics at San Diego State University, though he aims to continue onto a Ph.D. in Economics in 2023. His primary research interest is causal inference, particularly in the economics of risky health behaviors and poverty.

## **Faculty Spotlights**



Jacob Penglase is an Assistant Professor in the Department of Economics. He holds a Ph.D. in economics from Boston College. Prior to joining SDSU, he was a postdoctoral researcher at the University of Bordeaux and an associate economist at Analysis Group. His research focuses on measuring inequality within the household, especially as it relates to vulnerable individuals. Recent work develops a new technique to measure individual poverty rates that account for both economies of scale in consumption and intra-household inequality. His work has appeared in the *Economic Journal*, the

Journal of Public Economics, and the Journal of Economic Behavior and Organization.

Hao Fe is an Assistant Professor and undergraduate advisor at San Diego State University. She joined the Department of Economics in 2018 after receiving her Ph.D. in Economics from the University of Rochester. Her research combines econometric models with emerging big data sources to develop novel causal inference approaches. Her areas of interest include peer effects, crime, and health economics. She has papers published in the *Journal of Applied Econometrics* and *Journal of Urban Economics*. Since arriving at SDSU, she has received a critical thinking grants from the College of Arts



and Letters twice. She was awarded a research fellowship by CHEPS in the 2019-2020 academic year.



**Shoshana Grossbard** is Professor Emerita of Economics at San Diego State University and a Research Fellow at the Institute of Labor Economics. She is also a member of the Family Inequality Network at the University of Chicago. Shoshana is a leading scholar in the economics of marriage and the family. Her work has been published in such journals as the Journal of Political Economy, the Economic Journal, and the Journal of Population Economics. She serves as president of the Society of Economics of the Household (SEHO)

and is currently a CHEPS Scholar in Residence. Her most recent exciting work includes:

### "Mothers' Caregiving During COVID: The Impact of Marital Property Laws on Women's Labor Force Status"

Abstract: If mothers take care of children more than fathers, then after the onset of COVID-19 mothers' employment is expected to drop more than that of fathers. This gender gap is likely to be larger where women are less concerned about the financial repercussions of opting out of the labor force, and therefore the gender gap in employment is likely to grow more where Community Property or homemaking provisions give more protection to homemakers in case of union dissolution. Difference-in-differences and event study estimations applied to CPS data for 2019-2020 show that after the onset of COVID-19, the labor force participation of mothers of school-age children—but not of fathers--dropped more in states with marital property laws more generous to parental caregivers. These results stand in contrast to how these groups' labor force participation changed after the Great Recession compared to pre-recession levels.



Brandy Lipton, Ph.D., is a health economist and Assistant Professor in the School of Public Health at San Diego State University. Her core interests lie in exploring the connections between health care policies and both health and economic outcomes using guasi-experimental techniques. The majority of her work leverages state-level variation in Medicaid and Children's Health Insurance Program policies. Content areas of interest include the effects of health insurance expansions on access to care and health outcomes, Medicaid optional benefits for adults,

and oral health policy. Prior to joining San Diego State University, Dr. Lipton was a health economist with the Agency for Healthcare Research and Quality and the National Center for Health Statistics. Brandy will be joining the Department of Health, Society, and Behavior at the University of California-Irvine in Fall 2022.

Medicaid Benefit Generosity and Labor Market Outcomes © Evidence from Medicaid Adult Vision Benefits

#### Michel H. Boudreaux Brandy J. Lipton

ABSTRACT This paper examines whether Medicaid adult vision coverage affects labor market activity by using state-by-year changes to these benefits. We find that vision benefits increase hours worked and occupational skill requirements, but no consistent evidence of changes on the extensive employment margins Intensive margin effects could be facilitated by decreased barriers to transportation—when a state overs vision services, beneficiaries are more likely to commute to work by car or motorsycle rather than other modes. Our study suggests that, conditional on eligibility. Medicaid can have a positive effect on labor market activity by expanding access to services that enable work.





Júlia Sbroglio Rizzotto is a Ph.D. Candidate in Economics at the Pontifical Catholic University of Rio Grande do Sul (PUCRS). She is a visiting doctoral student at San Diego State University, where she has worked as part of my Ph.D. with Professor Shoshana Grossbard. Her main concentration area is applied microeconomics with focus on Economics of Education, Labor Economics, and Development Economics. She works mainly on the issues affecting domestic violence, school system, and bullying. I won the Rio Grande do Sul Regional Council of Economics awards in 2018, 2019, 2020, and 2021 and also in 2020, she won the XI

Institute of Supplementary Health Studies Award in the Economy category. Next fall, Julia will be at the University of Illinois Urbana-Champaign, working with Professor Mary Paula Arends-Kuenning. In her job market paper, she analyzes the relationship between **intimate partner violence and women's police station in Brazil.** She will be on the academic job market in Fall 2023.



Audrey Beck is an Associate Professor of Sociology at San Diego State University. She received her B.A. from the University of California, Los Angeles, and her Ph.D. in sociology with specializations in demography and stratification from Duke University. Following graduation, she was a postdoctoral fellow in the Office of Population Research and the Center for Research on Child Wellbeing at Princeton University. While there, her primary focus

was the impact of union formation and dissolution on child health, parenting, and child school readiness. She first came to San Diego State University as a postdoctoral research associate before joining the Sociology Department as an Assistant Professor in 2015. Her work uses a variety of demographic methods to understand race, ethnic, and nativity disparities in health. Recent work with colleagues at USC explores a) the impact of neighborhood economic conditions and crime on birth outcomes and b) the collection of police-involved death data and the contextual and policy correlates of such deaths. Dr. Beck has received a number of grants and fellowships and has published her research in *Demography, Social Science and Medicine Journal of Gerontology, Social Science Quarterly, American Journal of Public Health, Sociology of Education, and Journal of Marriage and Family,* among others.

Ryan Abman is an Associate Professor of Economics who specializes in environmental and resource economics at San Diego State University. His work centers on the local and global economic drivers of forest loss and land-use change around the world. Specific research areas include the role of trade liberalization and grade policy in deforestation and agricultural trade, the ecological impacts of smallholder agricultural development programs, and the relationship between agricultural productivity and land conversion. His work has been published in the *Journal of the Association of Environmental and Resource Economists*, the *Journal of Environmental Economics and Management*, and the



*American Journal of Agricultural Economics,* among others. Ryan received his Ph.D. in economics from the University of California, Santa Barbara, in 2015 and holds a B.A. in International Affairs and Economics from the University of Colorado, Boulder. Ryan arrived at SDSU in 2015 and has taught courses in environmental economics and natural resource economics for undergraduate students and econometrics for the MA program. He currently serves as co-graduate advisor of the Economics MA program and will be joined by Ed Balsdon in that role in Fall 2022.



Yang Liang is an Assistant Professor of Economics and Assistant Director of the Center for Health Economics & Policy Studies (CHEPS) at San Diego State University. Liang is an applied economist specializing in labor and international economics. His general research focuses on how firms and workers respond to globalization and technological progress. His recent projects with CHEPS include: the impact of recreational marijuana laws (RMLs) on adult tobacco use, the effects of e-cigarette taxes on teenage binge drinking and alcohol-related traffic fatalities, and whether mandatory seat belt laws reduce traffic fatalities utilizing state-of-the-art econometrics tools. His work has been published in peer-reviewed journals, including The World Economy and China

*Economic Review*, as well as book chapters and policy briefs with the Upjohn Institute and Peter Institute for International Economics. Liang received his Ph.D. in Economics from Syracuse University.

Ed Balsdon joined the SDSU faculty in 2000 after earning a Ph.D. in Economics from UC Santa Barbara. His scholarly work specializing in natural resource economics, public finance, and behavioral responses to risk has appeared in *Land Economics*, the *Journal of Urban Economics*, the *National Tax Journal*, and other publications. He has served as the SDSU Associate Dean of Graduate & Research Affairs from 2014 – 2020, and the Interim Dean of Graduate Studies in 2020-2021. During this administrative period, he contributed economic analysis to a large NSF grant project examining coastal flood risk in California. Ed rejoined the SDSU Economics Department in Fall 2021.





Thiago de Lucena is an Assistant Professor in the Department of Economics at San Diego State University. He joined the faculty at SDSU after completing his Ph.D. in Economics at the University of California, Davis. He is interested in development economics, labor economics, and political economy.

His recent work seeks to understand the relationships between the gender of institutional leadership and the gender gap in top positions. He also studies the relationship between corruption and political participation.

Leadership & Gender Composition in Managerial Positions: Evidence from the Brazilian Public Sector

Thiago de Lucena \*

October 20, 2021



## **SDSU Department of Economics**

by Economics Department Chair Hisham Foad



This year has been remarkable in terms of the achievements of our faculty, staff, and students. We remain one of the largest departments in terms of enrollments in the College of Arts and Letters, with over 500 undergraduate majors. At this **year's commencement, we expect to have 188** undergraduate students and 8 graduate students receive their degrees. I am very proud of all the hard work put in by our students as well as the support by staff and faculty to facilitate the successes of our students. Our graduates are moving on to a wide range of careers in fields like consulting, data analytics, finance, and public policy. A number of our undergraduates are moving on to graduate study, including a strong cohort entering our M.A. program. Our graduating

M.A. students have also had excellent placements, with some moving into research positions in the public and private sectors, while others have been admitted to highly ranked Ph.D. programs in Economics and Public Policy.

We also launched a fully online degree completion program this year through SDSU Global Campus. This program is targeted towards students who have completed at least two years of coursework in the past and require the flexibility of a fully online program due to working full-time. We welcomed 25 students to our first entering class this year and expect to see robust growth in this program. All courses are taught by faculty from our department, and students that may have otherwise never completed their studies now have an opportunity to graduate with an economics degree from SDSU.

Our 13 Tenure/Tenure Track faculty published 36 research papers in peer-reviewed journals in the 2021-2022 academic year. This is twice as many publications as we had last year and reflects the vibrant research being done across the department. I am especially proud that many of these studies represent collaborations between faculty and students, with several students having the opportunity to co-author published research. This reflects the close relationship between teaching and research in our department. Our faculty have also brought in over \$500,000 in external funding over the past year to support continued mentoring and research activity. I am also excited to announce that we hired a new faculty member, Thiago de Lucena Coehlo. Thiago is completing his Ph.D. at UC Davis and is a labor economist who specializes in gender and racial minorities.

I believe the department is showing remarkable growth and potential. We expect to continue hiring and maintain our focus on both providing a comprehensive curriculum for students and engaging in cutting-edge research.

Sincerely,

Hisham Foad

Hisham Foad

## **Statistical Software Boot Camp**



Prior to the beginning of the 2021 semester, incoming CHEPS graduate fellows took part in the annual CHEPS "Coding Bootcamp." During this week-long, immersive training led by former CHEPS fellow and current University of New Hampshire Ph.D. candidate Tam Nguyen, the incoming first-year MA students were introduced to the statistical software skills and techniques necessary for carrying out the professional-level research that CHEPS

conducts. This experience includes instruction in two different statistical software packages, Stata and R, which are some of the industry standard technologies used in applied economic research.

The bootcamp familiarized the student affiliates with different public datasets that have been used in current and past CHEPS projects. Some examples of the datasets include the Behavioral Risk Factor Surveillance System (BRFSS), Current Population Survey (CPS), the American Community Survey (ACS), the Integrated Public Use Microdata Series (IPUMS), the General Social Survey (GSS), the Uniform Crime Reports (UCR), and the Surveillance, Epidemiology, and End Results Program (SEER) data. In addition to using

these datasets, the students developed the habit of looking at codebooks when using survey data to create new variables.

Exposure to these skills prior to the start of the school



year both helps the Center, as its incoming junior researchers are ready to "hit the ground running" at the beginning of the semester since they are exposed early on to material and concepts that are important to the core curriculum of the MA program at San Diego State. During the daily lessons, fellows complete assignments in groups and receive homework coding assignments every evening. At the end of the week, students are assigned a final coding project— a replication of the data work of a previously published paper. Graduate research fellows who participate in this bootcamp often consider it among one of the most valuable experiences of their graduate career.

## **CHEPS Website and Social Media**

Please learn more about CHEPS at our website; cheps, sdsu, edu and via Twitter @SDSUCHEPS



#### Welcome from the Director

The Center for Health Economics & Policy Studies (CHEPS) is an interdisciplinary research center that supports impactful, policy relevant scholarship in the areas of health economics and social policy analysis. Housed in the College of Arts & Letters, CHEPS brings together faculty and graduate students engaged in complementary research in the areas of national defense policy, economic demography, the economics of crime and punishment, and the economics of risky health behaviors. <u>Read more>></u>





## **CHEPS Publications, 2021-2022**

#### Peer-Reviewed Publications

Abman, Ryan, and Hisham Foad. 2022. "Border Walls and Crime: Evidence from the Secure Fence Act." *Eastern Economic Journal*: 1-31.

Anderson, D Mark, Daniel I Rees, Joseph J Sabia, and Samuel Safford. 2021. "Association of Marijuana Legalization with Marijuana Use Among US High School Students, 1993-2019." *JAMA Network Open* 4 (9): e2124638-e2124638.

Anderson, D Mark, Joseph J Sabia, and Erdal Tekin. 2021. "Child Access Prevention Laws and Juvenile Firearm-Related Homicides." *Journal of Urban Economics* 126: 103387.

Anderson, D. Mark, Kyutaro Matsuzawa, and Joseph J. Sabia. 2021. "Marriage Equality and Youth Mental Health," *Journal of Law and Economics* 64(1): 29-51.

Calvi, Rosella, Jacob Penglase and Dennni Tommasi. 2022. Measuring Women's Empowerment in Collective Households. Forthcoming, *American Economic Review (Papers & Proceedings)*.

Cesur, Resul, Joseph J. Sabia, and Erdal Tekin. In press. "Post-9/11 War Deployments Increased Crime Among Veterans," Forthcoming, *Journal of Law and Economics*.

Churchill, Brandyn, Andrew Dickinson, Taylor Mackay, and Joseph J. Sabia. In press. "The Effect of State E-Verify Mandates on Crime," Forthcoming, *Industrial and Labor Relations Review*.

Dave, Dhaval, Andrew Friedson, Kyutaro Matsuzawa, Drew McNichols, Connor Redpath, and Joseph J Sabia. 2021. "Risk avoidance, offsetting community effects, and COVID-19: Evidence from an indoor political rally." *Journal of Risk and Uncertainty* 63 (2): 133-167.

Dave, Dhaval, Andrew Friedson, Benjamin Hansen, and Joseph J. Sabia. 2021. "Association Between Statewide COVID-19 Lottery Announcements and Vaccinations," *JAMA: Health Forum* 2(10): e213117.

Dave, Dhaval, Andrew Friedson, Kyutaro Matsuzawa, Joseph J. Sabia, and Samuel Safford. 2022. "Were Urban Cowboys Enough to Control COVID-19? Local Shelter-in-Place Orders and Coronavirus Case Growth," *Journal of Urban Economics* 127: 103294.

Dave, Dhaval, Drew McNichols, and Joseph J. Sabia. In press. "Political Violence, Risk Aversion, and Non-Localized Disease Spread: Evidence from the U.S. Capitol Riot," Forthcoming, *Journal of Population Economics*.

Dave, Dhaval, Joseph J. Sabia, and Samuel Safford. In press. "The Limits of Reopening Policy to Alter Economic Behavior: New Evidence from Texas," Forthcoming, *Journal of Risk and Uncertainty*.

Decker, Sandra L, Salam Abdus, and Brandy J Lipton. 2022. "Eligibility for and enrollment in Medicaid among nonelderly adults after implementation of the Affordable Care Act." *Medical Care Research and Review* 79 (1): 125-132.

Fe, Hao, and Viviane Sanfelice. 2022. "How Bad is Crime for Business? Evidence from Consumer Behavior." *Journal of Urban Economics* 129: 103448.

Finch, Brian Karl, Kyla Thomas, Audrey N Beck, D Brian Burghart, David Klinger, and Richard R Johnson. 2022. "Assessing data completeness, quality, and representativeness of justifiable homicides in the FBI's Supplementary Homicide Reports: A research note." *Journal of Quantitative Criminology* 38 (1): 267-293.

Finch, Brian Karl, Kyla Thomas, Joseph R Gibbons, and Audrey N Beck. 2021. "The impact of residing in a gang territory on adverse birth outcomes: evidence from Los Angeles." *Journal of Urban Health* 98 (2): 233-247.

Grossbard, Shoshana, Lucia Mangiavacchi, William Nilsson, and Luca Piccoli. 2022. "Spouses' earnings association and inequality: A non-linear perspective." *Journal of Economic Inequality*: 1-28.

Hoehn-Velasco, Lauren, Adan Silverio-Murillo, Jose Roberto Balmori de la Miyar, and Jacob Penglase. 2022. "The impact of the COVID-19 recession on Mexican households: evidence from employment and time use for men, women, and children." *Review of Economics of the Household*: 1-35.

Jha, Riyaranjan, Jae Yoon Lee, Yang Liang, Devashish Mitra. 2021. "Offshoring, Exports, and Employment: Theory and Evidence from Korean Firms," *The World Economy*.

Lipton, Brandy J, Tracy L Finlayson, Sandra L Decker, Richard J Manski, and Mingan Yang. 2021. "The Association Between Medicaid Adult Dental Coverage and Children's Oral Health: Study examines the association between Medicaid adult dental coverage and children's oral health." *Health Affairs* 40 (11): 1731-1739.

Lipton, Brandy J, Jefferson Nguyen, and Melody K Schiaffino. 2021. "California's Health4All Kids Expansion and Health Insurance Coverage Among Low-Income Noncitizen Children: Study examines California's Health4All Kids expansion and health insurance coverage among low-income noncitizen children." *Health Affairs* 40 (7): 1075-1083.

McNichols, Drew, Joseph J. Sabia, and Gokhan Kumpas. In press. "Female Athletics, Human Capital and Crime: Evidence from a Natural Experiment," Forthcoming, *Journal of Human Resources*.

Nguyen, Phuong, Melody K Schiaffino, and Brandy J Lipton. 2021. "Disparities in self-management outcomes by limited English proficiency among adults with heart disease." *Preventive Medicine Reports* 23: 101407.

Penglase, Jacob. 2021. "Consumption inequality among children: Evidence from child fostering in Malawi." *The Economic Journal* 131 (634): 1000-1025.

Penglase, Jake, Caitlin Brown, and Rossella Calvi. 2021. Sharing the Pie: Undernutrition, Intrahousehold Allocation and Poverty. Forthcoming, *Journal of Public Economics*. Penglase, Jake, Lauren Hoehn-Velasco. 2021. The Impact of Unilateral Divorce in Mexico: Bargaining Power and Labor Supply. Forthcoming, *Journal of Economic Behavior & Organization*.

Rees, Daniel, Joseph J. Sabia, and Gokhan Kumpas. In press. "Anti-Bullying Laws and Suicide Among Teenagers," Forthcoming, *Journal of Policy Analysis and Management*.

Sabia, Joseph J, Thanh Tam Nguyen, Taylor Mackay, and Dhaval Dave. 2021. "The Unintended Effects of Ban-the-Box Laws on Crime." *Journal of Law and Economics* 64 (4): 783-820.

#### Working Papers with Revise and Resubmit

Abouk, Rahi, Charles J. Courtemanche, Dhaval Dave, Bo Feng, Abigail Friedman, Johanna Catherine Maclean, Michael F. Pesko, Joseph J. Sabia and Samuel Safford. 2022. "Intended and Unintended Effects of E-Cigarette Taxes on Youth Tobacco Use," Revise and Resubmit, *Journal of Health Economics*.

Bansak, C., Grossbard, S. And Wong, C.H.P., Labor supply of women, COVID, and property division rules." Revise and Resubmit, *Economics and Human Biology*.

Beller, Andrea, Shoshana Grossbard, Ana Fava, and Marouane Idmansour. 2021. Women and Economics Workshops Run by Gary Becker and Jacob Mincer at Columbia University and the University of Chicago. Revise and Resubmit, Journal of History of Economic Thought.

Calvi, Rosella and Penglase, Jacob and Tonmasi, Denni and Wolf, Alex, The More the Poorer? Resource Sharing and Scale Economics in Large Families. Revise and Resubmit, *Journal of Development Economics* 

Dave, Dhaval, Andrew Friedson, Kyutaro Matsuzawa, Joseph J. Sabia, and Samuel Safford. 2022. "Black Lives Matter Protests and Risk Avoidance: The Case of Civil Unrest During a Pandemic," Revise and Resubmit, *Journal of Human Resources*.

Fe, Hao. "Social Networks and Consumer Behavior: Evidence from Yelp." Revise and resubmit, Journal of Economic Behavior and Organization

Fone, Zach. 2021. You Booze, You Lose? Spillovers to Crime from Alcohol Sales at College Football Games. Revise and Resubmit, Journal of Sports Economics.

Fone, Zach, Brandy Lipton, Andrew Friedson, and Joseph J. Sabia. 2021. "The Affordable Care Act's Dependent Coverage Mandate Took a Bite Out of Crime," Revise and Resubmit, *Journal of Law and Economics*.

Fone, Zach, Joseph J. Sabia, and Resul Cesur. 2022. "The Unintended Effects of Minimum Wage Increases on Crime," Revise and Resubmit, *Journal of Public Economics*.

Hoehn-Velasco, Lauren and Penglase, Jacob, Changes in Assortative Matching and Educational Inequality: Evidence from Marriage and Birth Records in Mexico. 2021. Revise and Resubmit, *Journal* of Demographic Economics. Sabia, Joseph J., Dhaval Dave, Fawaz Altaiobi, and Daniel I. Rees. 2022. "Is Recreational Marijuana a Gateway to Harder Drug Use and Crime?" Revise and Resubmit, *Journal of Public Economics*.

#### Released Working Papers

Bansak, C., Grossbard, S. and Wong, C.H.P., 2021. "Mothers' Caregiving during COVID: The Impact of Divorce Laws and Homeownership on Women's Labor Force Status." Institute of Labor Economics (IZA) Discussion Paper No. 14408.

Brewer, Ben, Gokhan Kumpas. 2021. "Actually I don't: The Impact of Warrantless Arrest Laws on Divorce & Marriage." Working Paper, University of Nevada.

Caetano, Carolina, Gregorio Caetano, Hao Fe, and Eric Reed Nielsen. 2021. "A Dummy Test of Identification in Models with Bunching." Federal Reserve System (FEDS) Working Paper No. 2021-68.

Dave, Dhaval M., Yang Liang, Michael F. Pesko, Serena Phillips, Joseph J. Sabia. 2022. "Have Recreational Marijuana Laws Undermined Public Health Progress on Adult Tobacco Use?" NBER Working Paper 29706.

Fone, Zach, Joseph J. Sabia, Resul Cesur. 2021. "Do Minimum Wage Increases Reduce Crime?" NBER Working Paper 25647.

Grossbard, S and L. Hakak. 2022. "Adding Grossbard to Grossman: A Model of Demand for Health with Household Production and Marriage Markets," Institute for the Study of Free Enterprise at University of Kentucky Working Paper 48.

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