

# Brittany Street

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updated: January 2022

## Appointments

University of Missouri, Department of Economics, Assistant Professor, Fall 2020-present  
University of Michigan, Criminal Justice Administrative Records System (CJARS),  
Research Affiliate, Fall 2020-present; Postdoctoral Researcher, Fall 2019-Fall 2020

## Education

Ph.D. Economics, Texas A&M University, Committee Chair - Mark Hoekstra, May 2019  
B.S. Economics and Mathematics, *Summa Cum Laude*, Missouri State University, May 2014

## Research Fields

Applied Microeconomics, Labor Economics, Crime, Criminal Justice System

## Publications

**Self-Employment as a Channel for Economic Self-Sufficiency and Criminal Disqualifications in the Pay Check Protection Program** (with Keith Finlay and Michael Mueller-Smith) *R&R Journal of Policy Analysis and Management*

This study provides the first empirical evidence on the extent of self employment within the US justice-involved population. Using linked tax return and Criminal Justice Administrative Records System data, we find that between 16.6% and 32.5% of individuals with criminal records are self-employed. Justice-involved individuals are 22% more likely to rely solely on self-employment. The recent Paycheck Protection Program, passed to support small business during the COVID-19 pandemic, initially disqualified those with a broad range of criminal histories; we find that these criteria excluded almost 1.3 million sole proprietors (5%) from PPP eligibility, with a disparate impact on Black and Hispanic individuals.

**The Effect of Own-Gender Juries on Convictions** (with Mark Hoekstra), *Journal of Law and Economics* 2021

Despite concerns about gender bias in general and jury gender in particular, little is known about the effect of jury gender on conviction rates. We identify the effect of own-gender jurors by exploiting random variation in the assignment to and ordering of jury pools in two large Florida counties. Results indicate that own-gender jurors are significantly less likely to convict on drug charges, though we find no evidence of effects for other charges. Estimates indicate that adding one own-gender juror (~1.6 standard deviations) results in a 30 percentage point reduction in conviction rates on drug charges, which is highly significant even after adjusting for multiple comparisons. These findings highlight how drawing an opposite-gender jury can impose significant costs on defendants, and demonstrate that own-gender bias can occur even in settings where the importance of being impartial is actively pressed on participants.

**The Effect of Investments in Physical Education on Student Health and Achievement** (with Analisa Packham), *Economics of Education Review* 2019

Despite the mounting evidence that physical education (PE) has health and education benefits for elementary-aged children, much less is known on the effectiveness of such programs for older children.

To study the effects of PE on adolescents, we analyze the impact of Texas Fitness Now (TFN), a four-year \$37 million grant program that mandated daily PE for middle-school students in low-income schools. Using a regression discontinuity approach to exploit the cutoff in school eligibility, we find that daily PE mandates do not lead to overall improvements in student fitness, including cardiovascular endurance, strength, and flexibility. Although we show that the program was ineffective at changing average student body composition, estimates indicate a reduction in the proportion of obese students. Using individual-level school records data, we find that PE does not lead to positive spillover effects in the classroom, including improvements in standardized test scores, or increases in attendance for 6th, 7th and 8th graders. Instead, we provide some evidence to suggest that PE reduces attendance rates and increases disciplinary incidents for middle-school students.

## **Working Papers** (available online and linked in title)

### **The Impact of Economic Opportunity on Criminal Behavior: Evidence from the Fracking Boom** *Under Review*

Economic theory suggests crime should decrease as economic opportunities increase the returns to legal employment. However, there are well-documented cases where crime increases in response to areas becoming more prosperous. This paper addresses this puzzle by examining the effects on crime only for residents already living in the area prior to the economic boom. This approach isolates the effect of local economic opportunity from the effect of changing composition due to in-migration during these periods. To identify effects, I exploit within- and across-county variation in exposure to hydraulic fracturing activities in North Dakota using administrative individual-level data on residents, mineral lease records, and criminal charges. Results indicate that the start of economic expansion – as signaled by the signing of leases – leads to a 14 percent reduction in criminal cases filed. Effects continue once the fracking boom escalates during the more labor-intensive period. This is consistent with improved economic opportunity reducing crime.

### **Measuring Child Exposure to the U.S. Justice System: Evidence from Longitudinal Links between Survey and Administrative Data** (with Keith Finlay and Michael Mueller-Smith)

This paper leverages over a terabyte of national longitudinal tax filing, national household survey, and program participation data linked with the Criminal Justice Administrative Records System (CJARS) to quantify what share of recent birth cohorts in the United States have experienced intergenerational exposure to the U.S. criminal justice system. We address three primary shortcomings in prior estimates, accounting for: (1) multiple forms of exposure beyond just incarceration, (2) cumulative exposure measures given evidence of long-term scarring ex-post from justice contact, and (3) other sources of exposure beyond biological parents (e.g., other caregivers or adult household members). To accomplish this, we build national longitudinal relationship and residency crosswalks that incorporate a range of novel data linkages: Decennial and American Community Survey household rosters, 1040 dependency filings, social security registration information, and roster information from Housing and Urban Development, Indian Health Service, and Medicare beneficiaries. We find that 9% of children born between 1999 and 2005 have had an intergenerational exposure to prison, 18% have been exposed to a felony conviction, and 39% have been exposed to any criminal charge. Corresponding estimates for black children are 20%, 35%, and 62%. As a final exercise, we show that non-prison, non-parent, and non-contemporaneous exposures to the justice system yield similar correlational estimates to several measures of child wellbeing (being age-for-grade appropriate, living in poverty, and having a grandparent as your primary caregiver), suggesting such broader measures of justice exposure are as important as the smaller, more narrowly defined traditional measures from the literature.

### **Convictions, Incarceration, and Earnings in an Event Studies Framework** (with Keith Finlay and Michael Mueller-Smith)

There is compelling evidence that convictions and incarceration have negative impacts on labor market outcomes. But research also shows that offenders have relatively low levels of human capital even before any contact with the justice system. Thus, accurately characterizing an offender's employment profile and the plausible impact of the justice system has been challenging due to this population's non-trivial involvement in both formal and informal sectors and the non-linear relationship between criminal justice involvement and economic outcomes (e.g. the first criminal record playing a critical role in life-long employment outcomes). We use high-quality longitudinal criminal justice records through CJARS integrated with extensive labor market data (IRS W-2s and ACS self-reported work) to examine the effect of criminal justice interactions on labor market outcomes in an event study framework. Employment and earnings are tracked in both formal administrative as well as self-reported employment status in survey responses, providing an opportunity to identify informality and its implications. In this research, we highlight the importance of periodicity of criminal justice events and the role of shifts to informal employment, particularly when using event studies and administrative data.

### **The Vicious Circle of Blackouts and Revenue Collection in Developing Economies: Evidence from Ghana** (with James Dzansi, Steve Puller, and Belinda Yebuah-Dwamena)

Access to reliable electricity is one of the largest barriers to economic growth in developing economies. Utilities suffer from the twin challenges of quasi-fiscal deficits and the need to implement rolling blackouts during periods with supply shortages. In this paper, we measure the negative feedback loop between bill payment and rolling blackouts that can create a "revenue trap" for electric utilities. Using household-level data on bill payment and power outages before and after a power crisis in Ghana, we estimate the impact of quasi-random exposure to power outages on subsequent bill payment. We exploit a unique feature of the power grid whereby customers in close proximity are exposed to different levels of blackouts because some are served by a feeder with critical infrastructure "down the line" and others are served by feeders that do not service essential infrastructure. We find that households quasi-experimentally exposed to rolling blackouts accumulate larger unpaid balances relative to households on essential feeders. This is consistent with a negative feedback loop in which decreases in power reliability induce households to pay bills at lower rates and, thus, weaken the utility's financial viability.

### **Conferences** (\*scheduled)

2022: American University\*, APPAM Association for Public Policy & Management\*, SOLE Society of Labor Economists\*, Western Economic Association International\*

2021: University of Florida (presentation), SEA Southern Economic Association (presentation), APPAM Association for Public Policy & Management (moved to 2022), Tulane University (presentation), West Virginia University (class presentation), NBER Gender in the Economy (egg-timer talk), Institute for Research on Poverty (IRP) summer workshop, MEA-SOLE (presentation)

2020: AL CAPONE 11<sup>th</sup> Annual Conference (presentation, cancelled), SEA Southern Economic Association (presentation), Notre Dame University (presentation), NBER Gender in the Economy (egg-timer talk), ALEA American Law and Economics Association (cancelled) Purdue University (cancelled), MEA-SOLE (cancelled), Public Choice Conference (cancelled),

Endogenous Rules, Risk, and Legal Institutions Workshop (presentation), AEA American Economic Association (presentation)  
 2019: SOLE Society of Labor Economists (presentation), APEE Association of Private Enterprise Education (presentation), TxECW Texas Economics of Crime Workshop (participant), AEA American Economic Association (presentation), Louisiana State University (presentation)  
 2018: APPAM Association for Public Policy & Management (presentation), SEA Southern Economic Association (two presentations), STATA TX Empirical Microeconomics Conference  
 2017: SEA Southern Economic Association (presentation), APPAM Association for Public Policy & Management (poster), WEAI Western Economic Association International (presentation), SAAER Symposium for Agricultural & Applied Economics Research (presentation)

### **Instructor of Record**

#### *University of Missouri*

Adv. Empirical Methods II, Topics in Policy Analysis (ECONOM 9447)	SP2021, SP2022
Intermediate Microeconomics (ECONOM 4351/7351)	SP2021, SP2022

#### *Texas A&M University*

Intermediate Microeconomics (ECON 323)	SP2018
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### **Grants, Contracts, and Awards**

Missouri Attorney General's Vehicle Stops Report Contract. 2020-2021 \$15,000, Co-PI

NBER's Gender in the Economy Study, "The Determinants and Aftermath of Victimization in U.S. households and the Implications of Covid-19," 2020-2021, \$19,930, PI

University of Michigan, "Mobility from Poverty Center and National Criminal Justice Data Expansion," 2020, \$59,857, PI

Murray Faculty Fellowship (2021)  
 Best Graduate Instructor Award (2018)  
 Gail Frey Monson Memorial Scholarship (2018-2019)  
 Private Enterprise Research Center Graduate Fellow (2016-2018)  
 Summer Time Advancement in Research (STAR) Award (2017)  
 First place 4<sup>th</sup>-year graduate departmental presentations (2018)  
 First place 3<sup>rd</sup>-year graduate departmental presentations (2017)  
 Diversity Fellowship (2014-2017)  
 APPAM First Place Poster Presentation (2017)  
 SAAER Top Paper Award (2017)

### **Related Service**

Referee: Journal of Health Economics, Economic Inquiry, Contemporary Economic Policy, Law and Social Inquiry, Resources policy

Student Advising: Sungjin Lee (committee member), Tabitha Juneau (graduate research project), Savannah McAuley (masters research project), Dili Maduabum (undergraduate research project)

Policy work: Vehicle Stops Report for the Attorney General of Missouri (2020, 2021)