

# Brittany Street

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## Appointments

University of Michigan Criminal Justice Administrative Records System (CJARS)  
Post-Doctoral Researcher, 2019-present  
University of Missouri, Assistant Professor, starting 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, Education

## Publications

**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** [Job Market Paper]

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.

### **The Effect of Own-Gender Juries on Convictions** (with Mark Hoekstra), Under Review

This paper examines the extent to which criminal conviction rates are affected by the similarity in gender of the defendant and jury. To identify effects, we exploit the random variation in both the assignment to jury pools and the ordering of potential jurors. We do so using detailed administrative data on the juror selection process and trial proceedings for two large counties in Florida. Results indicate that own-gender juries result in significantly lower conviction rates on drug charges, though we find no evidence of effects for other charges. Estimates indicate that a one standard deviation increase in expected own-gender jurors (~10 percentage points) results in an 18 percentage point reduction in conviction rates on drug charges, which is highly significant even after adjusting for multiple comparisons. This results in a 13 percentage point decline in the likelihood of being sentenced to at least some jail time. 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 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.

### **Works in Progress**

The Effect of Household Financial Resources on Educational Attainment (with Steve Puller and David Ripplinger)

Measuring the Impact of Economic Opportunity on Mortality

The Effect of Own-Gender Mediators on Divorce Agreements

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

AL CAPONE 11<sup>th</sup> Annual Conference (\*presentation, 2020)

ALEA American Law and Economics Association (\*presentation, 2020)

MEA-SOLE (\*presentation, 2020)

Public Choice Conference (\*presentation, 2020)  
 Endogenous Rules, Risk, and Legal Institutions Workshop (presentation, 2020)  
 AEA American Economic Association (presentation, 2020)  
 SOLE Society of Labor Economists (presentation, 2019)  
 APEE Association of Private Enterprise Education (presentation, 2019)  
 TxECW Texas Economics of Crime Workshop (participant, 2019)  
 AEA American Economic Association (presentation, 2019)  
 APPAM Association for Public Policy & Management (presentation, 2018)  
 SEA Southern Economic Association (two presentations, 2018)  
 STATA TX Empirical Microeconomics Conference (poster, 2018)  
 SEA Southern Economic Association (presentation, 2017)  
 APPAM Association for Public Policy & Management (poster, 2017)  
 WEAI Western Economic Association International (presentation, 2017)  
 SAAER Symposium for Agricultural & Applied Economics Research (presentation, 2017)

## Teaching Experience

### *Instructor of Record*

Intermediate Microeconomics (ECON 323)	Texas A&M University	SP2018
Class size: 228 students		
Overall instructor rating: mean 4.8/5.0		

### *Teaching Assistant*

Sports Economics, Mark Hoekstra	Texas A&M University	FA2017
Econometrics, Steven Puller	Texas A&M University	SP2016
Econometrics, George Naufal	Texas A&M University	FA2015
Macroeconomics, Mahua Mitra	Missouri State University	FA2013/SP2014

## Honors and Awards

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)

## References

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