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## **The Economics of Crime**

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### **Overview**

This course will provide an overview of core issues and recent advances in the economics of crime. The class will cover standard law and economics topics related to the criminal justice system, including incarceration, policing, the deterrent effect of the death penalty, gun policy, drug policy, and racial bias within the criminal justice system. The class will also consider the role that social factors play in affecting crime and violence, such as abortion policies, social programs and other social conditions such as education, poverty, family structure and even environmental factors (such as lead exposure). Lectures will also emphasize methodological advances in the economic study of crime, including issues related to identification, meta-analysis, randomized controlled trials, accounting for multiple comparisons for statistical inference, synthetic controls, behavioral economics and crime, and machine learning.

### **Instructors**

John J. Donohue III is the C. Wendell and Edith M. Carlsmith Professor of Law at the Stanford Law School. He is one of the leading empirical researchers on the economics of crime over the past 25 years, whose work includes studies of the death penalty, drug policy, gun control, and the effects of abortion legalization on crime. He is the former editor of the *American Law and Economics Review*, president of the American Law and Economics Association and an elected member of the American Academy of Arts and Sciences. He earned his PhD in economics at Yale and his JD from Harvard Law School.

Jens Ludwig is the McCormick Foundation Professor of Social Service Administration, Law and Public Policy at the University of Chicago and co-director of the National Bureau of Economic Research's working group on the economics of crime. He is also director of the University of Chicago Crime Lab, which partners with cities to carry out randomized trials to learn more about how to prevent crime and violence, and directs the new crime initiative launched by JPAL at MIT. He is an elected member of the Institute of Medicine of the National Academy of Sciences and received his PhD in economics at Duke.

## Syllabus and (partial) reading list

### Lecture 1: Imprisonment (Donohue & Ludwig)

1. More prison, less crime? (Donohue)

Buonanno, Paolo and Steven Raphael (2013) “Incarceration and incapacitation: Evidence from the 2006 Italian collective pardon.” *American Economic Review*. 103(6): 2437-65.  
Drago, Francesco, Roberto Galbiati, and Pietro Vertova (2009) “The deterrent effects of prison: Evidence from a natural experiment.” *Journal of Political Economy*. 117(2): 257-80.

Levitt, Steven D. (1996) “The effect of prison population size on crime rates: Evidence from prison overcrowding litigation.” *Quarterly Journal of Economics*. 111(2): 319-351.

2. Estimating costs and benefits of crime prevention (Ludwig)

Charles, Kerwin Kofi nad Ming Ching Luoh (2010) “Male incarceration, the marriage market, and female outcomes.” *Review of Economics and Statistics*. 92(3): 614-27.

Cohen, Mark A., Roland T. Rust, Sara Steen, and Simon T. Tidd (2004) “Willingness to pay for crime control programs.” *Criminology*. 42(1): 55-88.

Dominguez-Rivera, Patricio and Steven Raphael (2015) “The role of the costs-of-crime literature in bridging the gap between social science research and policy-making: Potentials and limitations.” Working Paper, University of California at Berkeley, Goldman School of Public Policy.  
[https://gspp.berkeley.edu/assets/uploads/research/pdf/cost\\_of\\_crime\\_piece- April 23.pdf](https://gspp.berkeley.edu/assets/uploads/research/pdf/cost_of_crime_piece- April 23.pdf)

Johnson, Rucker and Steven Raphael (2009) “The effect of male incarceration dynamics on AIDS infection rates among African-American women and men.” *Journal of Law and Economics*. 52(2): 251-93.

Mueller-Smith, Michael (2015) “The criminal and labor market impacts of incarceration.” Working Paper, University of Michigan Department of Economics.  
<http://sites.lsa.umich.edu/mgms/wp-content/uploads/sites/283/2015/07/incar.pdf>

3. Do we have too many or too few people in prison? (Donohue)

Donohue, John J. “Assessing the Relative Benefits of Incarceration: The Overall Change Over the Previous Decades and the Benefits on the Margin,” in Steven Raphael and Michael Stoll, eds., “*Do Prisons Make Us Safer? The Benefits and Costs of the Prison Boom*,” pp. 269-341 (2009).

## Lecture 2: Policing (Donohue & Ludwig)

### 1. More police, less crime? (Ludwig)

Chalfin, Aaron and Justin McCrary (2015) "Are US cities under-policed? Theory and evidence." UC-Berkeley Working Paper.

[http://eml.berkeley.edu/~jmccrary/chalfin\\_mccrary2013.pdf](http://eml.berkeley.edu/~jmccrary/chalfin_mccrary2013.pdf)

Draca, Mirko, Stephen Machin and Robert Witt (2011) "Panic on the streets of London: Police, crime and the July 2005 terror attacks." *American Economic Review*. 101(5): 2157-81.

William N. Evans and Emily G. Owens (2007) "COPS and crime." *Journal of Public Economics*. 91: 181-201.

Owens, Emily G. (2013) "COPS and Cuffs." *Lessons from the Economics of Crime: What Works in Reducing Offending?* Edited by Philip J. Cook, Stephen Machin, Olivier Marie and Giovanni Mastrobuoni. Cambridge, MA: MIT Press. 17-44.

### 2. Policing strategies (Ludwig)

Cohen, Jacqueline and Jens Ludwig (2003) "Policing crime guns." In *Evaluating Gun Policy*, Edited by Jens Ludwig and Philip J. Cook. Washington, DC: Brookings Institution Press. 217-39.

Papachristos, Andrew V., Tracey Meares and Jeffrey Fagan (2007) "Attention felons: Evaluating Project Safe Neighborhoods in Chicago." *Journal of Empirical Legal Studies*. 4(2): 223-50.

### 3. Studies of racial bias in policing (Donohue)

Donohue, John J. and Steven D. Levitt (2001) "The impact of race on policing and arrests." *Journal of Law and Economics*. 44(2): 367-94.

Grogger, Jeffrey and Greg Ridgeway (2006) "Testing for racial profiling in traffic stops behind a veil of darkness." *Journal of the American Statistical Association*. 101(475): 878-87.

Persico, Nicola "Racial profiling? Detecting bias using statistical evidence." *Annual Review of Economics*.

## Lecture 3: Death penalty (Donohue)

Donohue, John J. and Justin Wolfers (2006) "Uses and abuses of empirical evidence in the death penalty debate." 58 *Stanford Law Review* 791 (2005).

Katz, Lawrence F., Steven D. Levitt and Ellen Shustorovich (2003) “Prison conditions, capital punishment and deterrence.” *American Law and Economics Review*. 5(2): 318-43.

Kovandzic, Tomislav, L. Vieraitis, and D. Boots. 2009. “Does the Death Penalty Save Lives? New Evidence from State Panel Data, 1977 to 2006,” 8 *Criminology and Public Policy* 803-43.

#### **Lecture 4: Gun policy (Donohue & Ludwig)**

##### 1. More guns, less crime? (Ludwig)

Cook, Philip J. and Jens Ludwig (2006) “The social costs of gun ownership.” *Journal of Public Economics*. 90(1-2): 379-91.

Duggan, Mark (2001) “More guns, more crime.” *Journal of Political Economy*. 109(5): 1086-14.

Lott, John R. (2010) *More Guns, Less Crime: Understanding Crime and Gun Control Laws (3<sup>rd</sup> Edition)*. Chicago: University of Chicago Press. Chapters 1-3.

##### 2. Gun control (Ludwig)

Lott, John R. (2010) *More Guns, Less Crime: Understanding Crime and Gun Control Laws (3<sup>rd</sup> Edition)*. Chicago: University of Chicago Press. Chapters 1-3.

Ludwig, Jens and Philip J. Cook (2000) “Homicide and suicide rates associated with implementation of the Brady handgun violence prevention act.” *JAMA*. 284(5): 585-91.

##### 3. Right to carry (Donohue)

John J. Donohue III, Abhay Aneja, and Kyle D. Weber, “Do Handguns Make Us Safer? A State-Level Synthetic Controls Analysis of Right-to-Carry Laws.” July 15, 2016, Stanford University Working Paper.

Lott, John R. (2010) *More Guns, Less Crime: Understanding Crime and Gun Control Laws (3<sup>rd</sup> Edition)*. Chicago: University of Chicago Press. Chapters 4, 7-10.

#### **Lecture 5: Drug policy (Donohue)**

Donohue, John J., Benjamin Ewing and David Peloquin (2011) “Rethinking America’s Illegal Drug Policy.” In *Controlling Crime: Strategies and Tradeoffs*. Edited by Philip J. Cook, Jens Ludwig and Justin McCrary. Chicago: University of Chicago Press.

Ilyana Kuziemko and Steven D. Levitt (2004) “An empirical analysis of imprisoning drug offenders.” *Journal of Public Economics*. 88: 2043-66.

Owens, Emily G. (2011) “Are Underground Markets Really That Violent? Evidence from Early 20th Century America,” *The American Law and Economics Review*. 13(1) 1–44.

## **Lecture 6: Social conditions and crime** (Donohue & Ludwig)

### 1. Poverty and crime (Ludwig)

Jacob, Brian, Max Kapustin and Jens Ludwig (2015) “The impact of housing assistance on child outcomes: Evidence from a randomized housing lottery.” *Quarterly Journal of Economics*. 130(1): 465-506.

Jacobs, Erin (2012) *Returning to Work After Prison: Final Results from the Transitional Jobs Reentry Demonstration*. New York: Manpower Demonstration Research Corporation.

Kling, Jeffrey R., Jens Ludwig and Lawrence F. Katz (2005) “Neighborhood effects on crime for female and male youth: Evidence from a randomized housing voucher experiment.” *Quarterly Journal of Economics*. 120(1): 87-130.

Kling, Jeffrey R., Jeffrey B. Liebman and Lawrence F. Katz (2007) “Experimental analysis of neighborhood effects.” *Econometrica*. 75(1): 83-119.

### 2. Abortion and crime (Donohue)

Donohue, John J. and Steven D. Levitt (2001) “The impact of legalized abortion on crime.” *Quarterly Journal of Economics*. 116(2): 379-420.

Donohue, John J. and Steven D. Levitt (2008) “Measurement error, legalized abortion, the decline in crime: A response to Foote and Goetz (2005).” *Quarterly Journal of Economics*. 123(1): 425-440.

Foote, Christopher L. and Christopher F. Goetz (2008) “the impact of legalized abortion on crime: Comment.” *Quarterly Journal of Economics*. 123(1): 407-23.

Francois, Abel, Raul Magni-Berton, and Laurent Weill. 2014. “Abortion and Crime: Cross-Country Evidence from Europe,” 40 *International Review of Law and Economics* 24-35.

### 3. Lead and crime (Donohue)

Reyes, Jessica W. (2007) “Environmental policy as social policy? The impact of childhood lead exposure on crime.” *BE Journal of Economic Analysis and Policy*. 7:1 (Contributions).

Reyes, Jessica W. (2015) “Lead exposure and behavior: Effects on aggression and risky behavior among children and adolescents.” *Economic Inquiry*. 53(3): July.

### 4. Education and crime (Ludwig)

Lochner, Lance and Enrico Moretti (2004) “The effect of education on crime: Evidence from prison inmates, arrests, and self-reports.” *American Economic Review*. 94(1): 155-89.

Oreopoulos, Philip (2004) “Estimating average and local average treatment effects of education when compulsory schooling laws really matter.” *American Economic Review*. 96(1): 152-75.

Clive R. Belfield, Milagros Nores, Steve Barnett and Lawrence Schweinhart (2006) “The High/Scope Perry Preschool Program: Cost Benefit-Analysis Using Data from the Age-40 Followup.” *Journal of Human Resources*. 41(1): 162-190.

Garces, Eliana, Duncan Thomas and Janet Currie (2002) “Longer-Term Effects of Head Start.” *American Economic Review*. 92(4): 999-1012.

Deming, David (2009) “Early childhood intervention and life-cycle skill development: Evidence from Head Start.” *American Economic Journal: Applied Economics*. 1(3): 111-34.

Campbell, Frances A., Craig T. Ramey, Elizabeth Pungello, Joseph Sparling, Shari Miller-Johnson (2002) “Early childhood education: Young adult outcomes from the Abecedarian project.” *Applied Developmental Science*. 6(1): 42-57.

### **Lecture 7: Behavioral economics and crime (Ludwig)**

Congdon, William J., Jeffrey R. Kling and Sendhil Mullainathan (2011) *Policy and Choice*. Washington, DC: Brookings Institution. Chapters 1-3.

Mullainathan, Sendhil, Joshua Schwartzstein and William J. Congdon (2012) “A reduced-form approach to behavioral public finance.” *Annual Review of Economics*. 4: 511-40.

Ludwig, Jens and Anuj Shah (2015) “Behavioral economics and crime.” Working Paper, University of Chicago.

### **Lecture 8: Machine learning and crime (Ludwig)**

Athey, Susan and Guido W. Imbens (2015) “Machine learning methods for estimating heterogeneous causal effects.” Working Paper, Stanford University.  
<https://faculty-gsb.stanford.edu/athay/documents/HeterogeneousEffects.pdf>

Belloni, Alexandre, Victor Chernozhukov, and Christian Hansen (2014) “Inference on treatment effects after selection amongst high-dimensional controls.” *Review of Economic Studies*. 81(2): 608-50.

Kleinberg, Jon, Jens Ludwig, Sendhil Mullainathan and Ziad Obermeyer (2015) “Prediction policy problems.” *American Economic Review: Papers & Proceedings*. 105(5): 491-5.

Kleinberg, Jon, Jens Ludwig, Sendhil Mullainathan and Ziad Obermeyer (2015) “Prediction policy problems.” Working Paper, Harvard University.

Kleinberg, Jon, Himabindu Lakkaraju, Jure Leskovec, Jens Ludwig and Sendhil Mullainathan (2015) "Human decisions and machine predictions." Working Paper, Harvard University.

Varian, Hal R. (2014) "Big data: New tricks for econometrics." *Journal of Economic Perspectives*. 28(2): 3-28.