

Daniel L. Chen, JD, PhD  
Assistant Professor of Law  
Duke Law School  
Office Hours: Friday 3-5

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Monday 4-7  
dchen@law.duke.edu

## Empirical Methods and the Law: Measuring the Moral and Economic Consequences of Judicial Discretion

### Introduction

This class provides an introduction to empirical methods and the law while exploring the moral and economic consequences of judicial discretion. The tools of statistics and econometrics are increasingly used by litigators, courts, and governmental agencies. Lawyers are now expected to manage expert witnesses, evaluate briefs citing empirical studies, and justify policy arguments. To teach you these skills, this course is designed around a term-length project that investigates the consequences of judicial discretion in a particular area of law of your choice (out of a list of 24 areas). **No background knowledge is assumed.** An adequate understanding of the empirical dimensions of the assigned papers, which will over time grow to critical understanding, will be developed through readings and class discussions.

The course and the project will teach important practical skills useful in litigation, policymaking, and business strategy, as well as academia, for those interested in employing empirical methods and in recent law and economics scholarship. You will not only learn how to critically evaluate claims about law and public policy but also execute an evaluation in partnership with an expert witness or government consultant. The partner will be a graduate student in economics or political science.

The theory of law and economics has grown rapidly in the last half century and is now frequently employed as a basis for judicial decisions, but little is known about the consequences of judicial decisions. The correlation between judge-made law and society-wide outcomes is generally difficult to interpret since the causality may run in both directions and the relationship may reflect omitted variables. Momentous judicial decisions by judges attuned to social trends may be caused by rather than be causes of political or socioeconomic changes. Changes in socioeconomic conditions may be over- or under-attributed to particular legal rules when many legal rules are changing simultaneously.

Legal theorists have long speculated on the relationship between court-made law and socio-economic conditions. Methods to evaluate the nature of these relationships may help judges who are interested in the broader empirical consequences of their decisions. As Judge Richard Posner writes, “[judicial] opinions lack the empirical

support that is crucial to sound constitutional adjudication,”<sup>1</sup> and as Justice Breyer writes, “I believe that a[n] interpretive approach that undervalues consequences, by undervaluing related constitutional objectives, exacts a constitutional price that is too high.”<sup>2</sup>

We will draw on many aspects of the US legal system in order to evaluate the impact of law and regulatory enforcement: we will use the dynamics of legal decision making, in particular, the role of judicial discretion and behavioral biases in the evolution of common law, in conjunction with a natural experiment provided by the US system of procedural justice. The tools of statistics and econometrics will allow us to explore the moral and economic consequences of judicial discretion in a wide range of legal areas.

Our readings will be organized as follows:

- I. **The dynamics of legal decision making** – in particular, understanding judicial discretion and behavioral biases in the evolution of common law;
- II. **The impact of law and regulatory enforcement** using the variation in law and regulatory enforcement stemming from judicial discretion;
- III. How judicial discretion and **procedural justice** may influence the perceived moral legitimacy of the law and **social control, compliance, and deterrence**;
- IV. **Nature, sources, and consequences of variation in legal institutions**, both formal and informal, in developed and developing countries;
- V. **Moral behavior and interactions as they relate to law**, such as utilitarian and deontological commitments, expressed by judges and voters.

In this class, you have the opportunity to participate in research that investigates a body of theoretical propositions that have not been empirically tested in a systematic way. Besides giving you the opportunity to ask a novel set of questions in empirical legal scholarship and uncover new stylized facts for theorists to explain, your work will be important for judges and policymakers who must frequently cite such theories with little empirical support. There may be an opportunity for you to present your work to judges in a poster session at a conference held at Duke Law School in the spring.

## Project

The random assignment of judges exercising judicial discretion allows the evaluation of legal rules and interpretations. Judicial decision-making in appellate cases often displays statistical patterns. For example, a judge’s gender and party of appointment predict how sexual harassment cases are decided. The random

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<sup>1</sup> “I would like to see an entirely different kind of constitutional theorizing. ... Above all, what are the actual and likely effects of particular decisions and doctrines?” (Posner, Richard. 1998. “Against Constitutional Theory.” *NYU Law Review* 73 (April): 1-22.).

<sup>2</sup> “Why should courts try to answer difficult ... questions on the basis of logical deduction from text or precedent alone? Why not ask about the consequences of decision-making ... I think a focus on consequences will itself constrain subjectivity.” (Breyer, Stephen. 2004. Active Liberty: Interpreting Our Democratic Constitution. The Tanner Lecture on Human Values delivered at Harvard University).

assignment of judges to appellate cases with particular characteristics therefore creates exogenous variation in precedent that is not due to social trends or other legal developments.

The term-length project will be to apply this technique to an area of law from a pre-selected list. The list is pre-selected because the data for these areas of law has already been collected. The research is timely because the data has recently become available.

- Affirmative Action;
- Abortion;
- Americans with Disabilities Act;
- Campaign Finance;
- Capital Punishment;
- Contracts;
- Criminal Appeals;
- Desegregation;
- Eleventh Amendment;
- Environmental Protection Act;
- Federalism;
- Federal Communications Commission;
- First Amendment;
- Gay Rights;
- National Environmental Policy Act;
- National Labor Review Board;
- Obscenity;
- Piercing the Corporate Veil;
- Punitive Damages;
- Sex Discrimination;
- Sex Harassment;
- Standing;
- Takings;
- Title VII.

The research question is one you can design. Examples are provided as follows:

- (1) The Effects of Affirmative Action and Title 7 on Labor Market Inequality
- (2) The Effects of Abortion Law on Marriage Markets
- (3) The Effects of the Americans with Disabilities Act on Disability Incidence and Enablement
- (4) The Effects of the Environmental Protection Act and National Environmental Policy Act on Firm Productivity
- (5) The Effects of Piercing the Corporate Veil on Stock Prices and White-Collar Crime
- (6) The Effects of Capital Punishment and Criminal Appeals Decisions on Crime
- (7) The Effects of Campaign Finance Law on Voter Turnout and Electoral Outcomes
- (8) The Effects of the First Amendment on the Marketplace for Ideas
- (9) The Effects of Obscenity Law on Sex Crimes
- (10) The Effects of Punitive Damages on Accidents and Workplace Injuries
- (11) The Effects of Gay Rights on Marriage and Child Outcomes
- (12) The Effects of Standing Doctrine on Litigation Quantity
- (13) The Effects of the Eleventh Amendment on State Sovereign Immunity
- (14) The Effects of National Labor Review Board Decisions on Unions and Firms
- (15) The Effects of Segregation on Hate Crime and Voting Preferences
- (16) The Effects of Federal Communications Commission Decisions on Media Competition

## Evaluation

Your grade will be based on class participation (15%) and the final paper (85%).

The project is broken down into smaller deadlines throughout the semester, but is designed to teach an empirical technique alongside the readings we will have covered the week or two weeks before. Because the paper is a guided research activity with weekly deadlines, I strongly recommend weekly office hours.

We will meet 13 times throughout the semester for 3 hours at a time. We will cover two papers in each session and spend time introducing the intuition behind each empirical approach that is new for that session. Readings will come from law reviews, economics journals, political science, and sociology journals.

## Class Discussion

Readings are grouped for each class meeting below. I will make these available to you before class. Student participation is essential. Laptops are not necessary in class. For some papers, I may designate one student to present the research to the rest of the class. You should come to class armed with questions, comments, challenges and syntheses. Quality participation involves not only responding to questions and volunteering insights, but also listening to and learning from your peers.

To aid you in this endeavor, by 1pm before each class, you should circulate a 250-word email to the entire class summarizing your reactions to the assigned readings. Why is this question interesting? Why is the research considered an innovation? What tricks did they use to translate a research question to an *implementable* research design? How might the authors' have formulated this question? What other questions does this open up? What assumptions could be examined?

Feel free to raise questions you want to discuss in class, possible discussion points, synthesis and critiques. The responses should bring fresh insight or critique, rather than simply summarizing the papers. They can be broad critiques or focused on specific issues raised in a specific paper. Whatever your response, it should be aimed at facilitating interesting and thoughtful classroom discussion on the assigned readings.

## Readings

### **I. Dynamics of Legal Decision-Making**

#### Week 1: Understanding Judicial Discretion

Huang, Bert. "Deference Drift? Evidence from a Surge in Federal Appeals", *Harvard Law Review*, forthcoming.

Greiner, D. James. 2008. "Causal Inference in Civil Rights Litigation", *Harvard Law Review*, 122, 540-598.

Technique: Event Study

#### Week 2: The Effect of Judicial Biography

Sunstein, C., Schkade D. & Ellman, L. 2004. "Ideological voting on federal courts of appeals: A preliminary investigation", *Virginia Law Review*, 90, 301-354.

Boyd, Christina L., Lee Epstein & Andrew D. Martin. 2010. "Untangling the Causal Effect of Sex on Judging", *American Journal of Political Science* 54 (2): 389-411.

Technique: Matching

- **Project Deadline: Topic Choice**

### Week 3: Sources of Judicial Discretion

Berdejo, Carlos and Noam Yuchtman. 2009. "Crime, Punishment, and Politics: An Analysis of Political Cycles in Criminal Sentencing". Revise and resubmit, *Review of Economics and Statistics*.

La Porta, R., F. Lopez-de-Silanes, A. Shleifer, and R. Vishny. 1998. "Law and Finance", *Journal of Political Economy*.

Technique: Fixed Effects

- **Project Deadline: Background Memo**

## **II. Impact of Law and Regulatory Enforcement**

### Week 4: Impact of Common Law

Autor, David, John Donohue III, and Stewart Schwab. 2006. "The Cost of Wrongful Discharge Laws," *Review of Economics and Statistics*, 88(2), 211-231.

Bailey, Martha. 2010. "Momma's Got the Pill: How Anthony Comstock and Griswold v. Connecticut Shaped U.S. Childbearing," *American Economic Review*, 100 (1), 98-129.

Technique: Differences-in-Differences

- **Project Deadline: The Effect of Judicial Biography on Judicial Decisions**

### Week 5: Impact of Regulation

Greenstone, Michael. 2002. "The Impacts of Environmental Regulations on Industrial Activity: Evidence from the 1970 and 1977 Clean Air Act Amendments and the Census of Manufacturers." *Journal of Political Economy*, 110(6).

Frakes, Michael. 2010. "The Impact of Medical Liability Standards on Regional Variations in Cesarean Utilization: Evidence from the Adoption of National-Standard Rules," revise and resubmit, *American Economic Review*.

Technique: Clustering

- **Project Deadline: Doctrinal Developments**

Week 6: Impact of Judicial Discretion

Kling, Jeffrey. 2006. "Incarceration Length, Employment, and Earnings," *American Economic Review*.

Chen, Daniel L. and Jasmin Sethi, "Insiders and Outsiders: Does Forbidding Sexual Harassment Exacerbate Gender Inequality?" mimeo.

Technique: Instrumental Variables

- **Project Deadline: Impact of Supreme Court Decisions Resolving Circuit Splits**

### III. Procedural Justice; Social Control; Compliance and Deterrence

Week 7: Legitimacy

Wolfers, Justin and John Donohue. 2005. "Uses and Abuses of Empirical Evidence in the Death Penalty Debate." *Stanford Law Review* 58:791-846.

Chen, Daniel L. and John Horton, "The Deterrent Effect of the Death Penalty? Evidence from British Commutations During World War I," mimeo.

Technique: Duration Analysis

- **Project Deadline: Impact of Appellate Precedent Using Instrumental Variables**

Week 8: Production of Justice

Abrams, David S; and A. Yoon. 2007. "The Luck of the Draw: Using Random Case Assignment to Investigate Attorney Ability", *74 University of Chicago Law Review*. 1145.

Iyengar, Radha. 2009. "An Analysis of Attorney Performance in the Federal Indigent Defense System", Revise and Resubmit: *American Economic Review*.

Technique: Natural Experiments

- **Project Deadline: Are Appellate Decisions Setting Precedent? Citations / Media**

#### IV. Nature, Sources, and Consequences of Changes in Legal Institutions

Week 9: De Facto vs. De Jure Institutions

Bubb, Ryan, "States, Law, and Property in West Africa," Harvard University and Conference on Empirical Legal Studies mimeo.

Dell, Melissa, "The Persistent Effects of Peru's Mining Mita," *Econometrica*, forthcoming.

Technique: Regression Discontinuity

- **Project Deadline: Temporal Estimates Using Cumulative and Distributed Lags**

Week 10: Judicial Innovation

Guthrie, C., J.J. Rachlinski, and A.J. Wistrich. 2000. "Inside the Judicial Mind," *Cornell Law Review*.

Berdejo, Carlos and Daniel L. Chen. "Priming Ideology: Electoral Cycles Among Unelected Judges", mimeo.

Technique: Priming

- **Project Deadline: Deterrence vs. Legitimacy - The Role of Damages**

#### V. Moral Behavior and Interactions With Law

Week 11: Moral Decision-Making

Chen, Daniel L. "Markets and Morality: How Does Competition Affect Moral Judgment?" mimeo.

Kling, Jeffrey R., Jeffrey B. Liebman, and Lawrence Katz. 2007. "Experimental Analysis of Neighborhood Effects." *Econometrica*, 75(1), 83-119.

Technique: Field Experiments

- **Project Deadline: Graphical Presentation**

## Week 12: Individual Behavior

Gneezy, Uri, 2005, "Deception: The Role of Consequences," *American Economic Review*.

Vanberg, Christoph, 2008, "Why Do People Keep Their Promises? An Experimental Test of Two Explanations," *Econometrica*.

Technique: Lab Experiments

- **Project Deadline: Short Oral Presentation**

## Week 13: Aggregate Behavior

Chen, Daniel L. and Jo Lind. 2005. "The Political Economy of Beliefs: Why Fiscal and Social Conservatives (Liberals) Come Hand-in-Hand," mimeo.

Prasad, Monica and Kimberly Morgan. 2009. "The Origins of Tax Systems: A French-U.S. Comparison," *American Journal of Sociology*.

Technique: Economic History

- **Project Deadline: Rough Draft**

Textbook (for reference only):

Stock, James H. and Mark W. Watson, 2006. Introduction to Econometrics.

This textbook grew out of Harvard Kennedy School's MPP program and is also used in introductory undergraduate econometrics courses. It provides additional brief examples to illustrate each of the statistical techniques listed above.

### Week 1-2

General Introduction. Ch 1

Regression Introduction. Ch 4.1-2, Ch 5.1-2

Multiple Regression Weaknesses. Ch 6.1-3, Ch 9

### Week 3-4

Interpreting Interactions. Ch 8.3

Fixed Effects, Differences-in-Differences. Ch 10

### Week 5-6

Experiments and Quasi-Experiments. Ch 13

Instrumental Variables. Ch 12

Distributed Lag. Ch 15.1-15.3

### Week 7-9

Clustering. Ch 10.6

Duration Analysis.

Concise Review

Duflo, Esther, "Empirical Methods," MIT lecture notes, 2002.

Other readings that may be helpful:

Kaye, D.H. and D.A. Freedman (2000), "Reference Guide on Statistics", *Reference Manual on Scientific Evidence*, 2<sup>nd</sup> ed., pp. 83-178.

Sykes, A.O. (2000), "An Introduction to Regression Analysis", in E. Posner, ed., *Chicago Lectures in Law & Economics* 1.

Fisher, F.M. (1980), "Multiple Regression in Legal Proceedings", *Columbia Law Review* 80(4): 702-736.