

# **Law and Economics**

## Market, Non-market and Network Transactions

Edited by

**Panta Murali Prasad**

Indian Institute of Technology Kanpur, India

**Ranita Nagar**

Gujarat National Law University, Gandhinagar , India

Series in Economics



VERNON PRESS

Copyright © 2019 Vernon Press, an imprint of Vernon Art and Science Inc, on behalf of the author.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior permission of Vernon Art and Science Inc.

[www.vernonpress.com](http://www.vernonpress.com)

*In the Americas:*  
Vernon Press  
1000 N West Street,  
Suite 1200, Wilmington,  
Delaware 19801  
United States

*In the rest of the world:*  
Vernon Press  
C/Sancti Espiritu 17,  
Malaga, 29006  
Spain

Series in Economics

Library of Congress Control Number: 2018963327

ISBN: 978-1-62273-452-8

Product and company names mentioned in this work are the trademarks of their respective owners. While every care has been taken in preparing this work, neither the authors nor Vernon Art and Science Inc. may be held responsible for any loss or damage caused or alleged to be caused directly or indirectly by the information contained in it.

Every effort has been made to trace all copyright holders, but if any have been inadvertently overlooked the publisher will be pleased to include any necessary credits in any subsequent reprint or edition.

Cover's image used with permission by Prof. Praveen Kulshreshtha. Edited by Mr. T Das

Cover design by Vernon Press

# Table of Contents

<b>Preface</b>	<b>v</b>
<b>Acknowledgements</b>	<b>xi</b>
Chapter 1 <b>Introduction</b> Thomas S. Ulen	1
Chapter 2 <b>What is Innovative Leadership? An industry perspective</b> Uday Racherla	15
Chapter 3 <b>From explosion to radiation: Why court delays affect loan EMIs and the wider economy</b> Ramanand Mundkur	23
Chapter 4 <b>Mergers, acquisitions, competitiveness and competition: A study of the Indian cement sector</b> Neha Jaiswal, Pulak Mishra, and Indrajit Dube	35
Chapter 5 <b>Gender identity, perceived gender discrimination and stress among working professionals</b> Navya Jain and Meena Osmany	67
Chapter 6 <b>Modelling drivers of Financial Inclusion in India to aid policy-makers – an AHP approach</b> Syed Hameedur Rahman Zaini, and Asif Akhtar	85

Chapter 7	<b>What drives level of Financial Inclusion: Study with reference to India?</b>	105
	Ravindra Tripathi, Priyanka Tandon, and Nikhil Yadav	
Chapter 8	<b>Need for institutional arbitration in construction contracts in India</b>	119
	Mohana Raje, Kavita Kalyandurgmath, and Jagdish Raje	
Chapter 9	<b>Economic analysis of Pharmaceutical Patent regime in India: A study in light of pre and post TRIPS regime</b>	143
	Dr. Hardik H. Parikh	
Chapter 10	<b>Governance of Nanomaterials in India: Learning from institutional analysis of the European REACH Regulation</b>	167
	Julian Schenten	
Chapter 11	<b>Should a Constitution contain explicit anti-corruption mechanism?</b>	189
	Supruet Thavornnyutikarn	
Chapter 12	<b>The Way Ahead: Towards A Social Economics?</b>	201
	Upendra Baxi	
<b>Index</b>		<b>217</b>

# Preface

Market and non-market institutions under capitalism will mobilise and allocate resources efficiently for economic growth and development. However, asymmetric information, pervasive subsidies, misuse of dominant position, negative externalities, and bounded rationality limits the efficacy of the institutions on mitigation of techno-economic and legal challenges. Moreover, competition among the nations' national security in terms of environment, economy, and sovereignty further results in protectionist market and non-market transactions. As a consequence, sovereign debt, jobless growth, double trust dilemma, weapons of mass destruction, commercialisation of merit goods, and unfair trade practices prevail. Thus, there is a need for efficient property, contract, tort, and business legal rules to provide incentives to change the behaviour of individuals to achieve sustainable development. Law and Economics applies economics as a method to formulate efficient legal rules that provide incentives to parties to meet reasonable and rational standards in order to minimise costs and maximise benefits, jointly on their activities. In essence, legalisation of economic freedom will mitigate risks and uncertainties and promote overall social wellbeing.

Innovation plays a major role in achieving sustainable development in the knowledge economy. However, the innovator and investor – who have opposing goals, interests and fears, and suffer from “Double Trust Dilemma” – share one thing in common: they both want the new venture to succeed and make very high profits! Consequently, to circumvent the “Double Trust Dilemma”, both innovator and investor must rely on a mutually agreeable and dependable legal framework, to lower risks and maximise individual returns.

Industries in capitalism will have a little concern for environmentalism and safety standards. This will impose social costs on households that will hinder the attainment of sustainable development. Similarly, producer sovereignty prevails over consumer sovereignty in a goods and services market in an underdeveloped market system. The supply of substandard quality of goods and services under the standard form of contracts will impose financial and health risks on ignorant consumers. In addition, liability and regulatory systems, on product defects and services deficiency,

have little effect in providing incentives to the wrongdoer to reduce the risk of harm on consumers.

This book is published from the proceedings of the 2<sup>nd</sup> International Law and Economics Conference on Market, Non-market and Network Transactions. It was held at the Indian Institute of Technology Kanpur (IIT Kanpur) on 3<sup>rd</sup> and 4<sup>th</sup> September 2016, under the consortium of the Indian Institute of Technology Kanpur, Gujarat National Law University (GNLU) and Indian Institute of Management Ahmedabad (IIMA). The consortium stressed that there is a need for efficient legal rules to change the behaviour of individuals, of societies, and basic social structures and trends, to achieve societal well-being. It has also emphasised the institutional conditions that might promote efficient legal norms. Accordingly, the consortium has concentrated its efforts on:

- Research-based teaching and teaching-based research on Law and Economics by initiation of National and International collaborative academic activities;
- Creation of an association (Indian Association of Law and Economics) for generation and dissemination of knowledge to academicians, technocrats, professionals and policy makers; and,
- Participation in the formulation and implementation of efficient legal rules to minimise transaction costs of the parties and to achieve sustainable development.

It has received 444 abstracts against the announced seven conference themes. They were:

- 1) Law and Economics of Private and Public Laws;
- 2) Environmental Challenges;
- 3) Consumer Contracts;
- 4) Crime against Women;
- 5) Intellectual Property Rights;
- 6) Law and Finance; and
- 7) Constitutional functionaries and the Public Trust, from the academic fraternity, professionals and decision makers.

The double review process of the abstracts helped us to select 42 oral and 26 poster presentations. We had 27 oral presentations in nine sessions and 11 poster presentations. Based on the recommendations of the oral sessions' chair and combined with a few keynote talks, we had developed 12 chapters for publication.

The contributors have developed their chapters by keeping in view globalisation, that not only enhances the Gross Domestic Product of the member nations of United Nations, World Trade Organization, World Bank and the International Monetary Fund but brings market (Competition) and non-market (Gender discrimination) conflicts that requires ex-ante (Administrative Laws) and ex-post (Private Laws) effective remedial measures. The chapters emphasise in a nutshell:

- Law and Economics have continued to improve and expand, introducing behavioural insights from psychology and, most recently, empirical methods to the study of law. The chapter urges law and economics scholars around the world to engage with local, regional, and national decision makers to create a process for the routine collection of empirical evidence about a wide range of legal matters. (Chapter 1);
- The role of innovative leadership (R&D) and its challenges in value creation for the stakeholders and ecology in one of the Fortune 500 Companies. (Chapter 2);
- The docket - explosion results in docket-radiation (Accumulation of court cases) and in turn will contribute to high transaction costs where there are no disputes in credit transactions that ultimately hinders overall economic growth and development. (Chapter 3);
- Mergers & Acquisitions, In-house R&D and Selling techniques increase the market share of firms in the Indian cement sector. Thus, there is a need for an ex-post scrutiny of M&A by antitrust authorities in combination with other business strategies to curb the anti-competitive behaviour of the firms. (Chapter 4);
- The chapter focuses on the relationship between gender identity, perceived gender discrimination and stress among working professionals. The empirical work reveals that gender identity significantly predicts perceived gender discrimination and that gender identity and perceived gender discrimination together predict stress. (Chapter 5);
- An Analytic Hierarchy Process (AHP) model and its usefulness to policy makers on the structured implementation of financial inclusion in India. The model states that among the various drivers of financial inclusion, the role of rural intermediaries assumes the highest importance for the adoption of a financial inclusion policy in the country. (Chapter 6);

- The chapter examines the factors that determine the level of financial inclusion in India. According to the study, banks' accessibility and enhancement of information communication technology will help to achieve financial inclusion and in turn achieve social wellbeing. (Chapter 7);
- The chapter analyses the institutional arbitration and its efficacy in providing redressal to aggrieved contractual parties in the construction sector in India. The study highlights that a speedy and cost-effective method of dispute resolution between parties will enhance their economic performance. (Chapter 8);
- The chapter examines TRIPS and TRIPS plus the pharmaceutical industry and healthcare in India. According to it, the pharmaceutical product patent provisions shall trade off between the growth of pharmaceutical industry and the improvement of public healthcare in India under the TRIPS regime. (Chapter 9);
- This chapter analyses the extent to which the European REACH Regulation contributes to adequate risk control of nanomaterials. It introduces an analytical framework which may support the Indian legislator in identifying the "most harmonious fit" to solve the regulatory choice problem of ensuring safe and sustainable management of nanomaterials in chemical legislation. (Chapter 10);
- People's demand for more anti-corruption constitutional provision will result in more corruption. According to the study, the Constitution should control and limit the power and authority of the state; thus, it will reduce corruption in that manner. (Chapter 11); and,
- The chapter explores, within the context of law and economics, some key ideas in the movement of towards 'social economics'. May we instead of law and economics consider law as economics and economics as law? Are there ways to integrate considerations of 'efficiency' with 'justice'? How is one to view 'efficiency' both as a 'static' and 'dynamic' social process? How do the judicial process and law shape the free market and stand shaped by it? Does the 'nudge' theory implicitly extend to Indian social action litigation? (Chapter 12).

The interdisciplinary subject Law and Economics is gaining momentum among academicians, practitioners and policy makers in India. The higher

educational institutions viz., National Law Institutions, Indian Institute of Technologies, Management Institutions carry out teaching, research and outreach activities on Law and Economics. The Apex Court Justices Sapre A. M., Sikri A. K. and Chandrachud D. Y., apply law and economics principles to the cases of Shivshakti Sugar Mills v. Shree Renuka Sagar and Justice K.S. Puttuswamy (Retd.) v. Union of India in the year 2017. The Government of India in its legislations viz., the Real Estate (Regulation and Development) Act and the Insolvency and Bankruptcy Code use the principles. The Indian Association of Law and Economics (IALE) was formed in the year 2016.

Panta Murali Prasad  
Ranita Nagar



## Acknowledgements

The book is the outcome of the 2<sup>nd</sup> International Conference on Law and Economics at Indian Institute of Technology Kanpur, 2016. The conference was organised by Indian Institute of Technology Kanpur, Gujarat National Law University-Gandhinagar and Indian Institute of Management Ahmedabad.

Grateful thanks are due to the Directors of Indian Institute of Technology Kanpur, Gujarat National Law University-Gandhinagar and Indian Institute of Management Ahmedabad. Grateful thanks are also due to Prof. H. B. Schäfer, at Bucerius Law University, Germany, for his helpful advice as on teaching, research and outreach activities of Law and Economics in India.

Thank are due to the contributors of book chapters: Thomas S. Ulen, Uday S. Racherla, Ramanand Mundkur, Neha Jaiswal, Pulak Mishra, *Indrajit Dube*, Navya Jain, Meena Osmany, Syed Hameedur Rahman Zaini, Asif Akhtar, RavindraTripathi, Priyanka Tandon, Nikhil Yadav, Mohana Raje, Kavita Kalyandurgmath, Jagdish Raje, Hardik H. Parikh, Julian Schenten, Supruet Thavornnyutikarn, Upendra Baxi.

Emanuela Carbonara, University of Bologna, Manoj Dalvi, Long Island University, Errol D'Souza, Indian Institute of Management Ahmedabad, T. C. A. Anant, University of Delhi, Y. V. Reddy, Former Governor, Reserve Bank of India, Satish Jain, Jawaharlal Nahru University, D Narasimha Reddy, University of Hyderabad, Ariel Porat, Tel Aviv University, Vikramadita Khanna, University of Michigan Law School, Bandi Kamaiah, University of Hyderabad, Jaivir Singh, Jawaharlal Nahru University, Avinash S. Ganu, Visiting Faculty, GIPE, Sayali Ganu Dabake, Visiting Faculty, GIPE, Hitesh Kumar Thakkar, Gujarat National Law University, Marisport A., Gujarat National Law University, Tarun Gupta, Indian Institute of Technology Kanpur, Praveen Kulshreshtha, Indian Institute of Technology Kanpur, RavindraTripathi, MNIT Allahabad, Navin Bali, IBBI, New Delhi, Rahul Arora, CUTS, Jaipur, Kamonluck Daensophon, Thammasat University, Shantanu Braj Choubey, Lawyer, Patna High Court, Jasmine Kaur, Lawyer, Punjab and Haryana High Court, Bedanta Chakraborty, Gujarat National Law University, Cheta Sheth, Gujarat National Law University, Jagrati Gupta, Gujarat National Law University, VidhiKatiyar, Punjab university,

Nitin N. Zade, TISS, Amitava Roy, St. Xaviers' Kolkata, Ashu Arora, Allahabad University, Nishant Vats, Centre of Advanced Financial Research and Learning, Nabarun Ray, Gujarat National Law University, Lalit Panda, Alumni, Gujarat National Law University, Ram Singh, Delhi School of Economics, VivekRanjan Pandey, Advocate, Anish Sugathan, Indian Institute of Management Ahmedabad, YugankGoyal, Jindal School of Liberal Arts and Humanities, Nalin Bharti, Indian Institute of Technology Patna, Anand S. Dayal, Koura & Co., Advocates, Vikas Kumar, AzimPremji University, Sarbjit Singh, CUTS, Jaipur, Mamta Kumari, Indian Institute of Technology Patna, Dereje Asfaw, Indian Institute of Technology Kanpur, Smeshekar, NLIU, Kartin Meyer-Renschhausen, University of Applied Sciences Darmstad, Sital Kalantry, Cornell Law School, Viswanath Pingali, IIMA, Ravindra Kumar Singh, GNLU, contributors of oral and poster presentations and participants of the ICLE, 2016, and many others. Many thanks to all of them.

Grateful thanks are due to Indian Council of Social Science Research (ICSSR), and India Infrastructure Finance Company (IIFCL) which provided us the financial assistance to organize the Conference.

We are responsible for any error of fact or interpretation which may remain, and which will be corrected as the fascinating issue at the book's heart, Law and Economics: Market, Non-market and Network Transactions, continues to unfold.

## Chapter 1

# Introduction

Thomas S. Ulen<sup>1,2</sup>

### Abstract

Law and economics has demonstrated an allure to scholars and practitioners around the world. That allure arises from the numerous important insights and avenues for understanding the law that law and economics has provided. Additionally, the field has continued to improve and expand, introducing behavioral insights from psychology and, most recently, empirical methods to the study of the law. Focusing on that latter development, this chapter explores the lack of reception to early empirical work, such as Farber and Matheson's important article eliminating the distinction between bargain and gift promises, and contrasts that cool reception to the explosion of and warm reception for recent empirical legal studies. The chapter concludes by urging law and economics scholars around the world to engage with local, regional, and national decisionmakers to create a process for the routine collection of empirical evidence about a wide range of legal matters.

**Keywords:** Behavioral Law and Economics, Empirical Legal Studies, Law and Economics, Private Law.

---

<sup>1</sup> Swanlund Chair Emeritus, University of Illinois at Urbana-Champaign, and Professor of Law Emeritus, University of Illinois College of Law; Faculty Fellow of the Hagler Institute for Advanced Studies, Texas A&M University, and Visiting Professor, Texas A&M University School of Law, 2016-2018; Distinguished Lecturer, Hagler Institute for Advanced Studies, Texas A&M University, 2018-2019.

<sup>2</sup> This is a revised version of a talk that I gave by Skype to the ICLE at IIT Kanpur on Sunday, September 4, 2016. I would like to thank Professor and Dean Ranita Nagar for her very kind invitation to speak to the conference and to apologize to her and the conferees for not being able to be there with you. I had the delightful duty and pleasure of spending the week of the conference taking care of our two granddaughters.

My subjects today are the allure of law and economics and of evidence-based law. I shall seek to offer some thoughts on why this field has grabbed the attention of legal scholars all over the world and has been such a fertile source of insights into the law and of practical wisdom for the legal profession. I also want to make a preliminary case for using empirical methods to provide an evidentiary basis for law.

I have been doing law and economics for nearly 40 years, and I find it just as interesting and exciting today as I did when I first discovered the field in the late 1970s. And I think that many people, including all of you, have noticed that allure yourselves or are in the early stages of succumbing to that allure. During the time that I have had the honor and pleasure to be affiliated with great law schools and universities in the U.S. and abroad, I have also found that the people who have been attracted to law and economics are among the most intelligent, enthusiastic, and hard-working scholars that I have had the good fortune to meet and interact with.

These facts lead me to ask: Why has this field been so alluring to so many faculty, students, and practitioners for so long and in so many countries? Relatedly, why has the rate of scholarly progress toward a greater understanding of the law been so deeply associated with law and economics over the past 30-plus years? And finally, what can we do to bring the power of empirical legal studies to bear on legal debate, government officials, and practitioners?

Here are a couple of reasons for the continuing allure of law and economics. One is the inherent interest of the topic. I mean not just that law and how it operates and serves modern society are fascinating topics, although they certainly are. I mean, rather, that the most fascinating aspect of law and economics is that it brings two great and distantly related disciplines into close connection to throw remarkably bright light on each of those scholarly disciplines. We are, of course, most familiar with the insights that economics has brought to bear on law.<sup>3</sup>

---

<sup>3</sup> The amount of new knowledge that has been generated by law-and-economics scholars around the world over the past 40 years is breathtakingly large. See, for example, any of the superb texts by Richard Posner, Steven Shavell, A. Mitchell Polinsky, Thomas Miceli, and Jim Leitzel; the text by Robert Cooter and me; the two-volume *Handbooks of Law and Economics*, edited by A. Mitchell Polinsky and Steve Shavell; and the various volumes of the second edition of the *Encyclopedia of Law and Economics*, series editor Gerrit de Geest.

Just as remarkable are the less-noticed insights that the law has been able to throw on topics in economics. For example, I did not fully appreciate the power of the work being done in cognitive and social psychology (and now known as behavioral economics) by scholars like Daniel Kahneman, Amos Tversky, Richard Thaler, Paul Slovic, George Lowenstein, and others for understanding *economics* until I saw it applied by legal scholars. As yet another example that I do not believe has been adequately recognized, consider the powerful insights into bargaining and other transactions that contract law could confer on the economics of contracts.<sup>4</sup> The economic analysis of contracts by economists could profit greatly from a close study of contract law (especially the economic analysis of contracts).<sup>5</sup>

A second – and, I think, more important reason – for the continuing allure of law and economics is that the field keeps changing for the better. It is not the same field today that it was 40 years ago. Nor is it the same field that it was 20 or 10 years ago. And I am confident that the field will have made further advances in the next 20 years.

To give just three examples of these continuing improvements, consider these: First, during the late 1970s and the 1980s law-and-economics scholars wrote principally about (and elaborated) the theoretical aspects of bringing economic analysis to the study of the law. For instance, they showed how an economic understanding of tort liability might have important answers to open questions in the analysis of tort law (such as the significant differences between negligence liability and strict liability). They also showed that an economic understanding of contract law helped to explain how best to enforce bargain promises and the circumstances under which gift or donative promises might be enforceable.

The principal tool that scholars used in this first phase of law and economics was standard microeconomic theory. Legal decision makers, like economic decision makers, were thought to be rationally self-interested. As a result, they took actions that were well-suited to maximizing their well-being. So, for example, if the law imposed liability on a tortfeasor who failed to take as much precaution as required by the

---

<sup>4</sup> For a compelling example, see DOUGLAS G. BAIRD, *RECONSTRUCTING CONTRACTS* (2013).

<sup>5</sup> See an explanation of the Nobel Prize in Economics awarded to Oliver Hart in 2016 for his scholarship in the economics of contracts at <https://content.ubs.com/microsites/together/en/nobel-perspectives/laureates/oliver-hart.html>.

The possibilities for cross-fertilization between that work and contract law are many.

legal duty of care, rational potential injurers would comply with their legal duty and, therefore, the social costs of accidents would be minimized.

Second, in the late 1980s and early 1990s, law and economics discovered behavioral economics and began to apply that field to the study of law.<sup>6</sup> And those applications have been transformative.<sup>7</sup> Because behavioral economics focuses on the *actual* observable regularities of human behavior rather than on the normative ideal of the rational decisionmaker, behavioral economics was inherently of much greater interest to lawyers and law scholars (who, despite their interest in theory, are practical and pragmatic at heart).

Third, beginning in the early 1990s and continuing through to today, law and economics has taken a very empirical turn. In part, this is because the economic theories of the various areas of the law had, by that time, been so thoroughly elaborated that there was very little more to do in the way of theorizing.

I want to use the remainder of my talk to focus on this ongoing work in empirical legal studies as an explanatory factor in the continuing allure of law and economics.

I shall seek to make four central points about empirical legal studies. First, traditional doctrinal analysis, for reasons about which I shall speculate shortly, was neither capable of doing empirical studies nor, more surprisingly, interested in what those studies might reveal. Second, a widespread interest in empirical work about legal issues blossomed with the spread of law and economics, largely because economics, as a social science, had been deeply interested in confirming or rejecting its theories through empirical work since at least the 1950s. However, and third, even when the desire to do empirical legal studies appeared after the spread of law and economics, it proved difficult for that work to begin because the legal system did not routinely provide data that were well-suited to assessing empirical propositions about the law. That situation induced empirically minded legal scholars to modify their empirical techniques

---

<sup>6</sup> Incidentally, this application of behavioral economics to law occurred before it occurred in economics and much more thoroughly than in economics. One indication of this assertion is that I do not know a single law-and-economics scholar who was surprised by the awarding of the 2002 Nobel Memorial Prize in Economic Sciences to the psychologist Daniel Kahneman, but I do know economists who were surprised by that selection.

<sup>7</sup> See Russell B Korobkin & Thomas S Ulen, *Law and Behavioral Science: Removing the Rationality Assumption from Law and Economics*, 88 CAL. L. REV. 1051 (2000).

from those that they would have otherwise adopted from economics. Fourth and finally, I will make a modest proposal for something that you and I can do to make empirical legal studies better and more interesting and persuasive to legal and policy decisionmakers.

Now to some background information.

By “empirical data” I mean systematically collected information about a particular phenomenon or phenomena. Further, when I refer to “empirical data,” I mean that someone has arranged those data so that they reveal as much as possible about the phenomenon. These data are typically referred to as “descriptive data” or “descriptive statistics.” For example, they show us the observations that are the most common – the mean, median, and mode. They also show us the range of the data – from the lowest number to the highest number or, more technically, the variance or the standard deviation of our data. Finally, we may use these data to perform analysis of the data – for example, to search for correlations among the various elements of the data or to find causal relations through regressions.

Let me give a very brief example. Suppose that the legal phenomenon in which we are interested is crime. So, we collect as much data as we can from a variety of jurisdictions (say, cities) about a set of property and personal, nonviolent and violent crimes over a given time period. We also collect information about a variety of other matters – the number of police in each of the cities; the number of crimes that are solved by an arrest; the number of criminal defendants who are found guilty; and the punishments they are sentenced to. We then compute our descriptive statistics for all these data. We know the numbers for each city in our sample for each of, say, the last 10 years. We know the average number of crimes per city per year, and we compute the variance and standard deviation for those crimes within each city over the last 10 years.

Those *descriptive* data can tell us a lot. For example, they can tell us whether crime has been constant over the last 10 years, going up, or going down. They might tell us that crime seems to be becoming more serious or less violent. They can help us to understand variations in crime. Does crime (All crime? Only some crimes?) move countercyclically, going up when the economy goes down and going down when the economy goes up? How effective are criminal justice system variables, such as the number of police, the presence of public cameras, and the length and certainty of sanctions, in deterring crime?<sup>8</sup>

---

<sup>8</sup> For a marvelous recent summary of these and other matters, see Magnus Lofstrom

Yet another important revelation from these descriptive data can be comparisons across regional and national boundaries. Still confining ourselves to crime, our first instinct might be to believe that crime rates in Country A are likely to be determined by factors in Country A. But suppose that we discover that the pattern of crime and crime rates in Country A follows the pattern of crime and crime rates in Countries B, C, D, and so on. We know that the culture, demographics, economies, and criminal justice systems of those countries are very different. And yet our descriptive statistics reveal that the pattern of crime and crime rates is very similar in all those countries. That strongly suggests that there are some common factors across the countries that account for this similarity of patterns.

This is not merely a theoretical possibility. It is, in fact, precisely what is going on among the high-income Western countries with respect to crime rates. The patterns are eerily similar across those countries. Specifically, crime rates in all high-income Western countries peaked in the early 1990s and have been declining ever since. This is an intriguing puzzle. Why should the patterns be similar, given the many and big differences among the countries?<sup>9</sup>

We might wish to go beyond description to offer explanation. That typically means a causal explanation relating the variations in crime within a city, region, or country to distinct causal factors. This calls for care and sophistication regarding technique. But these matters are not so sophisticated that they should frighten away any aspiring legal scholar. I have already mentioned some of the causal factors that might be of interest. For example, we might be eager to see if stronger and longer punishment causes less crime or whether more police means less crime and vice versa.

As one of my favorite examples of the allure of law and economics (and the surprises that careful empirical work can reveal), consider the remarkable work of John Donohue and Steve Levitt. In 2001 they published a famous article demonstrating that half of the decline in both

---

& Steven Raphael, *Crime, the Criminal Justice System, and Socioeconomic Inequality*, 30 J. ECON. PERSP. 103 (2016).

<sup>9</sup> See Michael Tonry, *Why Crime Rates Are Falling Throughout the Western World*, 43 CRIME AND JUSTICE 1 (2014); Lofstrom & Raphael, *supra* n. 8; Franklin E. Zimring, *The Necessity and Value of Transnational Comparative Study: Some Preaching from a Recent Convert*, 5 CRIM. PUB. POL'Y. 615 (2006); and FRANKLIN E. ZIMRING, *THE GREAT AMERICAN CRIME DECLINE* (2006).

PAGES MISSING  
FROM THIS FREE SAMPLE

# Index

## A

abuse, 156, 189, 190  
adjournments, 30, 121  
advertising, 38, 39, 43, 44, 52, 58,  
61, 64  
affordable, 86, 107, 144, 158, 163,  
164, 181  
agreements, 58, 131, 164  
allocation, 27, 31, 32, 48, 130,  
138, 147, 149  
Alternative Dispute Resolution,  
120, 123, 128, 132  
amendment, 49, 152, 153, 154,  
196, 198  
antitrust, 35, 41, 47, 60  
appeals, 30  
arbitration, 25, 119, 122, 123,  
124, 125, 126, 127, 132, 135,  
137, 138

## B

bargain, 164  
barriers, 39, 49, 107, 121, 150,  
181, 210  
behavioural economic theory,  
209, 211  
benefit, 26, 90, 108, 123, 126,  
133, 149, 160, 178, 191  
bottom of pyramid, 109

## C

*care*, 102, 162  
cases, 24, 25, 26, 30, 31, 32, 33,  
50, 122, 124, 132, 148, 153,  
156, 157, 179, 181, 197, 202  
Cement Manufacturing  
Association, 48

*ceteris paribus*, 193, 202  
civil, 123, 138, 139, 175, 196  
collateral, 26, 27  
commercial bank, 105, 110, 111,  
116  
companies, 15, 17, 31, 48, 127,  
145, 147, 150, 151, 157, 160,  
161, 163, 164, 167, 168, 170,  
174, 175, 176, 177, 178, 180,  
181  
competition, 17, 35, 37, 38, 39,  
41, 45, 47, 48, 49, 52, 60, 65,  
127  
Competition Commission of  
India, 37, 43, 48, 63, 65  
Constitution, 121, 156, 157, 189,  
190, 192, 196, 198, 203, 208,  
210  
consumer, 20, 38, 40, 50, 60, 102,  
162, 170, 180  
contingent, 131  
contracts, 29, 128, 129, 132, 138  
corruption, 122, 189, 190, 191,  
192, 193, 194, 195, 196, 197,  
198, 199  
costs, 23, 25, 26, 27, 30, 31, 38,  
45, 47, 51, 119, 122, 123, 125,  
150, 157, 179, 180, 181  
courts, 24, 26, 27, 28, 30, 31, 32,  
33, 122, 123, 124, 127, 138,  
148, 158, 207  
credibility, 20, 128  
credit transactions, 23  
crime, 202  
criminal, 24  
*customer*, 16, 21, 89, 178

## D

defaulters, 27

delays, 23, 24, 25, 26, 27, 28, 29,  
30, 31, 32, 120, 122, 123, 126,  
134  
demand and supply, 40, 87, 107  
development, 58, 63, 85, 86, 100,  
101, 102, 103, 106, 132, 144,  
145, 146, 147, 149, 155, 162,  
163, 164, 175, 190, 198, 201,  
203, 204, 206, 208, 213  
dilemma, 189, 197, 198  
discovery, 153, 156  
discrimination, 68, 69, 70, 71, 72,  
73, 83, 84  
disputes, 23, 26, 31, 119, 120,  
122, 124, 126, 127, 134, 135,  
137, 138, 139  
docket, 23, 25, 26  
Doha Declaration, 154, 155  
drugs, 143, 144, 146, 149, 151,  
162, 163, 164

## E

economic growth, 23, 47, 86,  
100, 101, 103, 108, 109, 117,  
147, 160, 163, 168  
efficiency, 29, 32, 38, 41, 43, 44,  
45, 51, 52, 53, 54, 58, 60, 123,  
131, 132, 149, 170, 196, 205,  
206  
enforcement, 25, 29, 63, 148,  
149, 155, 179, 182  
engineers, 19, 120, 134  
enterprises, 49, 146, 178  
*environmental*, 17, 170, 173, 179,  
208  
equilibrium, 191  
equity, 161  
ethical, 206, 207, 209, 212  
European Commission, 169, 170,  
171, 172, 176, 178, 184  
European Economic Area, 171  
European legislation, 169

## F

Financial Inclusion, 85, 86, 87,  
100, 101, 102, 105, 106, 110,  
117, 118

financial literacy, 90, 99, 102,  
105, 106, 108

## G

gender., 73

## H

harassment, 69, 202  
health., 83, 144, 155, 164  
homo oeconomicus, 167, 176,  
182  
households, 90, 107, 114  
Human Development Index, 88  
hypothesis, 54, 55, 111, 112

## I

*Imatinib mesylate*, 156  
incumbent, 53  
indicators, 87, 88, 105, 108, 160  
industrialization, 145  
information, 31, 48, 63, 87, 91,  
108, 171, 173, 174, 176, 184,  
197  
infrastructure, 16, 31, 32, 33, 34,  
36, 42, 87, 105, 108, 109, 111,  
116, 117, 127, 128, 131, 162,  
208  
innovation, 20, 37, 47, 49, 58,  
109, 147, 163, 168, 172, 202  
innovative, 15, 17, 21, 37, 38, 41,  
52, 58  
intellectual property protection,  
144  
inter alia, 121, 174, 178, 180  
International Monetary Fund,  
107, 110  
intervention, 39, 119, 181, 189,  
194  
invention, 20, 146, 147, 148, 150,  
153, 154, 157  
inventor, 147  
investment, 18, 19, 21, 25, 32, 33,  
40, 50, 106, 123, 128, 133, 149,  
150, 160, 194

**J**

judges, 30, 31, 32

**K**

knowledge, 19, 86, 91, 127, 148,  
149, 154, 170, 172, 175, 179

**L**

Labelling, 171  
labour, 69  
Land Acquisition, 130  
lawhood, 202  
leadership, 15, 16, 17, 21, 203  
legislations, 193, 196, 202  
licences, 153, 155  
liquidity, 109, 118

**M**

*Magna Carta*, 192, 199  
malpractices, 30  
market concentration, 35, 37, 38,  
39, 42, 43, 44, 52, 53, 57, 60  
market share, 36, 37, 39, 41, 42,  
43, 49, 51, 52, 53, 57, 58, 59,  
60, 61  
market structure, 35, 36, 41, 44,  
47, 48, 51, 52, 53, 54, 63  
medical, 164, 168, 170  
mergers and acquisitions, 35, 36,  
37, 51  
methods, 24, 31, 87, 91, 93, 126,  
134, 172, 179, 180, 182  
Microfinance, 86, 87, 102  
monetary policy, 106  
money-laundering, 99  
monopoly, 38, 50, 51, 148, 151,  
156  
morality, 191, 206, 207  
multinational corporations, 145

**N**

nanomaterials, 167, 168, 169,  
170, 171, 175, 176, 177, 178,  
179, 180, 181, 182, 183

*Natco Pharma Limited v. Bayer  
Corporation*, 157  
non-performing assets, 27, 28  
nudge, 209, 210, 211, 212

**O**

oligopolistic, 35, 36, 38, 44, 45,  
48, 52  
organisations, 89, 175, 177

**P**

Parliament, 42, 119, 123, 145  
patent, 143, 144, 145, 146, 147,  
148, 150, 151, 152, 153, 154,  
155, 156, 157, 158, 160, 162,  
163, 164, 165  
paternalism, 203, 211  
*per capita*, 105, 108, 113, 114,  
116, 197  
*per capita* income, 105, 113, 114  
Policy-makers, 85  
precautionary, 172, 180, 184  
preferences, 93, 178, 179, 180,  
206  
proceedings, 25, 125, 127  
producer, 36  
product, 18, 20, 39, 44, 45, 47, 48,  
58, 88, 143, 144, 145, 146, 147,  
151, 152, 155, 156, 162, 163,  
164, 170, 179, 180  
productivity, 16, 32, 47, 70, 87,  
107, 163  
professionals, 71, 73, 75, 119,  
121, 126, 127, 134  
Profitability, 46, 52, 61  
property, 27, 29, 93, 127, 143,  
144, 147, 149, 150, 155, 156,  
158, 160, 162, 163  
protection, 50, 118, 121, 144,  
146, 149, 150, 151, 152, 155,  
162, 163, 164, 165, 168, 172,  
175, 181, 192, 208  
psychological, 69, 70, 84, 132  
public goods, 191, 193, 194, 211  
punishment, 202

**R**

raw materials, 42, 44  
 reciprocal, 94  
 regression, 54, 55, 57, 73, 108,  
 111, 113, 114  
*regulation*, 17, 39, 41, 49, 50, 51,  
 59, 87, 169, 171, 172, 175, 186,  
 207  
 Research & Development, 60  
 Reserve Bank of India, 88, 102,  
 107, 118  
 resources, 21, 31, 45, 48, 53, 131,  
 147, 160, 178, 181, 182, 189,  
 193, 196, 208, 209  
*revenue*, 26, 31, 32, 193  
 rights, 25, 26, 29, 130, 147, 148,  
 149, 150, 151, 155, 157, 160,  
 164, 189, 192, 204, 206, 208,  
 213  
*risks*, 15, 21, 58, 127, 130, 132,  
 138, 167, 169, 170, 172, 173,  
 174, 175, 176, 177, 180, 181,  
 182  
 rule of law, 29, 33, 160, 196

**S**

safety, 150, 164, 167, 172, 173,  
 179, 180, 181, 183  
 sanctions, 180, 181, 210, 211  
 scandalisation, 180  
 scarcity, 26  
 self-esteem, 68, 72, 83  
 services, 58, 85, 86, 87, 88, 89, 90,  
 91, 99, 101, 106, 107, 109, 114,  
 117, 118, 130, 137, 147, 194,  
 195, 198  
 shareholders, 16, 21  
 social media, 72, 199  
 socio-economic benefits, 174  
 spillovers, 38  
*stakeholders.*, 15, 21, 181  
 standards, 17, 86, 126, 181  
 statutory, 69, 146, 193  
 stocks, 57

strategy, 15, 19, 30, 35, 36, 37, 40,  
 43, 44, 45, 49, 50, 52, 53, 54,  
 58, 59, 60, 61, 64, 70, 164, 175,  
 180  
 stress, 68, 70, 71, 72, 73, 83, 208  
 structure-conduct-performance,  
 51  
 substances, 168, 171, 172, 173,  
 174, 175, 176, 178, 180, 181  
 survey, 88, 107, 108, 118, 120,  
 127, 133, 134, 135, 176  
 sustainable, 16, 17, 106, 167, 183,  
 208

**T**

technologies, 17, 31, 156, 167,  
 168, 182, 183  
 territory, 15, 18, 121, 146, 152,  
 153, 158  
 trade secrets, 147  
 transaction costs, vii, 23, 29, 206  
 transactions, 23, 26, 27, 89, 90,  
 106  
 Transparency, 174, 175, 199  
 trial, 24, 25, 29

**U**

*ultra vires*, 192, 193, 195  
 uncertainties, 15, 21, 170, 179,  
 181

**V**

verdicts, 119

**W**

wellbeing, 105, 110  
 willingness, 177, 178, 180, 181  
 World Bank, 88, 101, 102, 105,  
 107, 110, 111, 117, 118, 132,  
 149, 165  
 WTO, 144, 151, 152, 154, 155,  
 163, 186