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# Preface

The pedestrian and economical title “Market Failure and Government Failure” is rather a contrast to the dramatic subtitle “Using Force for the Public Good,” but all four ideas are essential elements of the economics of regulation. Regulation is about compelling people to do things. Governments use force to compel their citizens to follow the regulations, and the laws generally.<sup>1</sup> The use of force is to provide a threat so that people will obey. In America, it is how the government gets people to obey laws and regulations. Professor Carter of Yale Law School says, “On the opening day of law school, I always counsel my first-year students never to support a law they are not willing to kill to enforce. Usually they greet this advice with something between skepticism and puzzlement, until I remind them that the police go armed to enforce the will of the state, and if you resist, they might kill you.”<sup>2</sup> His point is good. In the end, all law is based on the death penalty. It is only because modern government are so powerful that we so seldom see the death penalty formally imposed.<sup>3</sup> In Hinduism’s trinity of Creator, Preserver, and Destroyer, the Destroyer is necessary to the work of the other two. Shiva must act to provide room for Brahma’s creation and stop those who would block Vishnu’s preservation. This book is mainly Vishnu, with a little Brahma thrown in, but Shiva is standing there behind him, with his wife to back him up if necessary.<sup>4</sup>

I wrote this book because I have long taught the economics of regulation, and I couldn’t find a text that suited me. I wanted my course to teach the ideas economic theory gives us to help us think about government regulation, more than what the current regulations are, or, worse, the story of what the regulations were twenty or more years ago. I didn’t want to put more into the book than could be taught in a semester, and that meant some areas of regulation had to be excluded. On the other hand, traditionally regulation has been part of the field of industrial organization in economics, which covers antitrust policy, regulated industries, and “social regulation”—consumer protection and pollution. Labor regulation, health, education, banking, and morals regulation—which is the most pervasive regulation—is ignored. Antitrust, in particular, gets much more attention than its importance in the economy warrants. The

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<sup>1</sup>Though see my “Law, Coercion, and Expression: A Review Essay on Frederick Schauer’s *The Force of Law* and Richard McAdams’s *The Expressive Powers of Law*,” *Journal of Economic Literature* (forthcoming). Regulation does have some aspects of pure provision of information and coordination, though even that is financed by coercive taxation.

<sup>2</sup>“Stephen L. Carter, *Law Puts Us All in Same Danger as Eric Garner*” *BloombergView* (December 4, 2014).

<sup>3</sup>The police do kill hundreds of people each year in America, however. (461 in 2013; “Police killings highest in two decades,” *USA Today* Nov. 11, 2014.) [Cite Macaulay on the Highlands].

<sup>4</sup>Kali, whose devotees are the origin of the word “thug”. See Wikipedia.

excluded topics were relegated to courses in public finance, or topical courses like labor economics or money and banking. I think they belong in a regulation course. In a course on regulation, we should cover the sources of market failure and the restrictions governments put on our behavior to remedy them. Public finance is best allocated the task of how to raise and spend government revenue, with some overlap on the issues of taxation for incentivization instead of revenue and which goods should be public and which private.

I have found in my teaching that students need review on the basics of supply and demand. That's a useful starting point for the question of why government regulated is needed at all, so this book starts with chapters on perfect competition, market failure, and government failure before getting into particular areas of regulation. Government failure is a big part of the story. Reasons why markets fail can be found everywhere, so a big part of the reasoning in deciding whether regulation is optimal is thinking not about the theoretical optimum, but about what policy will be chosen given the incentives of the government officials. The theory of regulation is as much about government design as about market design. Part of this is administrative law—the law of how regulations are created and implemented—and so I have included that also. I've also tried especially, though not as successfully as I'd like, to call attention to everyday economic fallacies, e.g. that reducing unemployment is always good (which ignores the quality of the job taken), that the government needs to reduce use of nonrenewable resources (false unless there is a market failure), monopoly is always bad (untrue when the monopoly is because the good is innovative).

At the start of every chapter I have put a quotation and a picture. My aim is to teach something as well as provide visual relief from the pages of normal text. Do not think that I agree with all the quotations! In many undergraduate courses, instructors have given up trying to make students think, and just present facts to memorize and step-by-step ways to solve problems. I used to look down on that style of teaching. Now, I realize that it is probably the best way to teach most undergraduates, because trying to make you think often just leaves you confused and upset without knowing anything more than when you started. After some time, I realized that many of you, when you say, "I am trying to think of the answer" mean "I am trying to remember the answer," not "I am trying to figure out the answer using the power of human reason." My current view is that a combination of approaches is best. Teach some materials by rote, so every student can get something out of the class if he is diligent. Teach some materials indirectly, so the student who is accustomed to multi-step analytic reasoning or less systematic synthetic intuition can puzzle out the subtle ideas. Thus a picture is us for monopoly is a mail truck. Think about why that picture is there and you will be better able to answer test questions on public utilities, even though the utilities chapter never mentions the post office.

With economic theory, you need to understand what you're doing, not just memorize

formulas or diagrams. The experiment of Neilson, Price & Shor (2012) is relevant to how we teach economics.<sup>5</sup> Here is how they describe it. I haven't included their Tables, 2,4, or 5, but you will get the drift of what is going on.

"The game starts with 21 stones. The subject and a computer opponent alternate by removing between 1 and  $a$  stones per turn. The subject wins a monetary prize if he, and not the computer, removes the last stone. The game has a unique optimal strategy. We examine the effect of teasers on a subject's ability to learn this optimal path. Accordingly, we reward subjects not only for taking the final stone, but also include a smaller 'teaser' interim payment that subjects can earn. Our teasers take two forms, with the interim payment either on or off the optimal path. When the teaser is on the optimal path, a subject who removes the last stone will also necessarily capture the teaser. Here, like paying people to go to the gym, teasers can help guide people to the optimal goal. When the teaser is off the optimal path, capturing the teaser stone and the last stone are mutually exclusive. A subject trying to learn the optimal path may be misguided to capture the teaser instead. Notably, given that the teaser stone pays less than the last stone, the presence of teasers does not alter the optimal path. Following 30 iterations of this game, subjects play a different race game where the only change is the action space, from between one and three stones per turn to between one and four stones per turn, or vice versa. This subtle change alters both the optimal path and whether a teaser is on or off this path. A subject who learned only a pattern of play (e.g., take stone 1, then stone 5, etc) or a general principle about teasers (take the teaser or don't) will not succeed upon a change in the action space. However, subjects who learned the concept underlying the game should be able to apply this principle to the new action space.

What they found was that putting the teasers on the optimal path helped the subjects to win, but that came at a price. Making the first game easier this way hurt the subjects' ability to adapt to a changing game. It seems that the subjects learned to follow the optimal strategy by going after the teaser, but having the teaser there prevented them from thinking hard enough to understand why that strategy was optimal. As a result, when the game changed slightly, they kept following the same old strategy. Subjects who spent the first 30 periods puzzling out what to do without the teaser as a hint did better when the rules changed so that up to four stones instead of three could be removed. The application in economics is that students who learn how to solve a narrowly framed problem—how to find the equilibrium price and quantity, say—may be quite unable to solve the same problem with a twist— a sales tax— or in a word problem.

This book deliberately makes heavy use of basic price theory and extends it to ideas that while fundamental are often not dealt with even in intermediate economics books. These ideas include marginal benefit curves being different from demand curves, true cost curves being different from supply curves, rationing being either efficient or inefficient, externalities sometimes being pecuniary instead of real. As is typical in eco-

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<sup>5</sup>Neilson, William, Michael Price & Mikhael Shor (2012) "A Nudge or a Crutch? Interim Payments and Learning in Sequential Decision Tasks," U. of Tennessee Economics working paper, <http://www.mikeshor.com/research/nudge/nudge.pdf> (January 2013).

nomics, learning general ideas like these is more important than the particular applications. Even if you have no interest in electricity pricing by public utility companies, the ideas in the chapter on that industry will be useful to you. Thus, if a particular topic doesn't seem relevant, don't fret—the ideas there will come back somewhere else to help you.

I thank Stephanie Dohman, Melissa Frye, Cory Gathmann, Nicholas Georgakopoulos, Jo Kim, Anthony Liu, Blair Mancini, and Mary McConnell for helpful comments.

### **How I Teach Using This Book**

I teach a course of about 30 seniors (and a few juniors) who are majors in Business Economics and Public Policy in a business school. They have had basic micro in the economics department and intermediate micro in my department. We finish all 12 chapters in a semester of 28 sessions but are hard-pressed to do so. I have one entire-session midterm and three half-session quizzes beside the two-hour final. My Powerpoint slides and MS-Word tests are up on the web via <http://www.rasmusen.org/g406/0.g406.htm>.

Interaction between professor and students is important. I have dipped my foot into true Socratic Method, which is to cold-call a student with a question, encourage him to think out loud so the whole class can hear, and slowly move him to figure out the right answer. This does not have to be terrifying for the student. It helps to ask lots of people lots of questions, and to kindly emphasize how wrong the answers are of some of the brighter and bolder students while ever more kindly noting the partial truth of the wrong answers of some dimmer and more timid students so that everyone sees how little harm comes from giving a wrong answer.

### **A Note on References**

Readers should have access to the sources of statistics, tables, and diagrams. On the other hand, they add a lot of clutter to a book. To provide information without reading clutter, I've put many of my sources here instead of in the chapter where they are used.

I have taken some ideas, facts, and references without citation (except to the original source) from the *Marginal Revolution* blog at <http://www.marginalrevolution.com> and *Wikipedia*. Sometimes I do not look up the original source at all, and I rely on *Wikipedia*. I really do think *Wikipedia* is the first place to look for facts. This can be dangerous, of course, so I have used my judgement in deciding which facts to find there. I have not even looked at what *Wikipedia* has to say about global warming, for example, because virtually all of the numbers relevant to global warming are subject to heated controversy. Information about things such as the governance structure of the FTC is more reliable, on the other hand, and *Wikipedia* is more up-to-date, and perhaps even more accurate, than any book and most other sources.



Please let me know, reader, if you find mistakes. I am sure there are a lot of them, because I have tried to provide institutional detail and real-life stories. The safe and easy thing to do in an economics text is to avoid mentioning any real-world facts at all. One is apt to make mistakes, enter controversy, and quickly become out-of-date.

Wikipedia entries can be found by googling. The electronic version of the book will have links to some webpage references. I have not put webpage references where I thought they would not be useful. I have usually omitted footnotes from quotations. I have also changed punctuation freely, so that the sentence

(1) “Nevertheless, the trade war ended, and life continued.”

would be quoted as

(2) “The **trade war** *ended*.” (boldface and italics added)

rather than

(3) “. . . [T]he **trade war** *ended*[. . .]” (boldface and italics added)

One need only to compare (2) and (3) to see why the conventional style is bad writing. It uses intrusive punctuation that distracts the reader while adding nothing except the useless information that the original phrase was embedded in a larger sentence. You must trust me as an author not to quote phrases out of context. Providing pedantic styling is useless anyway since if I am so unscholarly as to quote out a phrase out of context, I can still deceive you by quoting entire sentences out of context or, better yet, simply forging my quotations outright. On the other hand, I will note added or omitted boldfacing and italics since those do change the meaning somewhat.

### *Some books I recommend*

These are nontechnical books on regulation that I have found worth reading— and even entertaining.

*The Economist’s View of the World* by Steven E. Rhoads. (1985).

*Reforming Regulation* by Lawrence J. White. (1981).

*Giant Killers* by Michael Pertschuk. W. (1987)

*Yes, Minister* by Jonathan Lynn & Antony Jay. BBC Books (1989). The TV show is good, but the book is even better.

Milton Friedman, *Capitalism and Freedom* (1962).