Principles of Microeconomics

Eugene Silberberg

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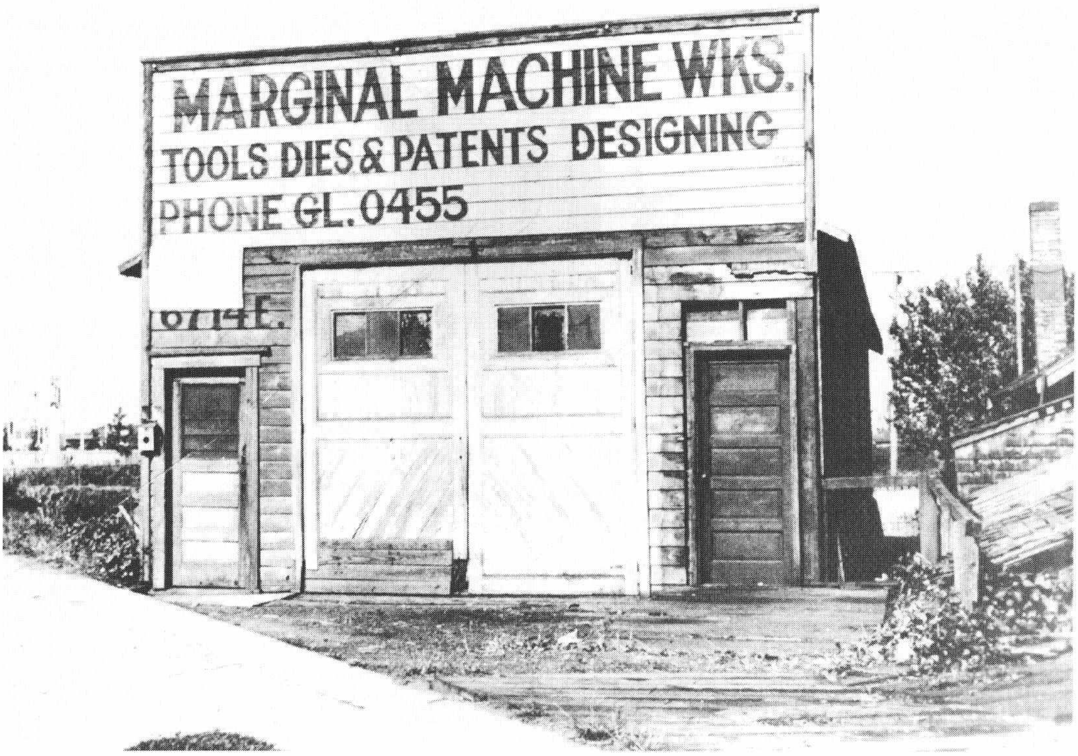
To Thomas Jefferson and his friends
who devised the system of
laws and institutions from which,
hand-in-hand, our freedom
and prosperity derive.

"Good ideals are cheap.
It's easy to have good ideals.
What's difficult are
good ideas."

—Eric Hoffer, Interview with CBS NEWS
correspondent Eric Sevareid, Tuesday,
January 28, 1969.



Marginal Machine Works. Photo by George Stigler, ca. 1935.

Stigler, who passed away in 1992, was a distinguished professor of economics at the University of Chicago and a 1982 winner of the Nobel prize. The firm depicted in the picture was located on East Marginal Way in Seattle, Washington, where Stigler grew up. Noted for his wit, Stigler took this photo to highlight what he found an amusing play on the concept of the marginal firm.

Preface

The late Richard Feynman, Nobel Laureate in Physics, who was known for his ability to get quickly to the heart of the matter, was once evaluating high school physics textbooks for the state of California. He recalled one text that started out with four pictures: a wind-up toy, an automobile, a boy riding a bicycle, and something else. Feynman noted:

> And underneath each picture it said, "What makes it go?" I thought, "I know what it is: They're going to talk about mechanics, how the springs inside work the toy; about chemistry, how the engine of an automobile works; and biology, about how the muscles work." . . . I turned the page. The answer was, for the wind-up toy, "Energy makes it go." And for the boy on the bicycle, "Energy makes it go." For everything, "*Energy* makes it go." Now that doesn't *mean* anything. . . The child doesn't learn anything; it's just a word! What they should have done is to look at the wind-up toy, see that there are springs inside, learn about springs, learn about wheels, and never mind "energy." Later on when the children know something about how the toy actually operates, they can discuss the more general principles of energy.[1]

I have tried to write an economics text that someone like Feynman would have approved. The law of demand, like the law of conservation of energy, is easy enough to state. But it is only by working through example after example that we come to appreciate the significance of such propositions. In Feynman's example, it is by taking apart a bunch of mechanical devices and explaining their individual behavior in terms of a consistent framework that we come to appreciate the general laws of mechanics. In economics, true appreciation of the law of demand comes after we apply it to everyday problems like marriage and divorce, sex and fertility, participation in religion, suicide, smoking, crime and punishment, diamonds and water, and consumption over time, along with the more mundane "meat and potatoes" applications.

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1. Richard Feynman, *Surely You're Joking, Mr. Feynman* (New York: W.W. Norton, 1985), 270–71. Reprinted in softcover by Bantam Books.

Examples, however, must be examined within a consistent, unifying framework. Without theory, examples are nothing but a series of unrelated or special cases. In this text, therefore, I have continuously stressed the unifying propositions underlying the analyses of the examples we discuss. Without theory, we cannot generalize from these examples and explain other events. As we analyze additional problems, we discover subtleties that are often encountered in scientific endeavors, and we improve our skills at applying the theory.

In this text, I have not relegated the illustrations and examples to "boxes" or "sidebars." The examples are precisely the central concern of economics; *they are the whole point of the theory.* They are the only reason for developing a systematic framework. What other purpose is there for developing the laws of demand, or diminishing marginal product, other than to analyze real, observable issues? The "story problems" *are* economics, not "illustrations" of economic theory.

We don't have the luxury in economics of being able to take apart a toy to see how it works; we have to wait for the world to produce conditions that allow empirical testing. However, armed with elementary notions such as the postulates of substitution and diminishing marginal values (rates of substitution) in the theory of the consumer and the law of diminishing marginal product and rising marginal costs in the theory of production, economists are able to explain a wide variety of important issues. The lingering importance of most of our Nobel Laureates' work, for example, is their creative and insightful applications of elementary ideas. It is therefore with real-world applications of a simple, consistent framework that this text is concerned.

Arrangement of the text

I have written this text in a "straight ahead" fashion. I have striven to minimize clutter and other distractions. There are no dazzling special effects or attempts at a multimedia presentation. Up through Chapter 8, the material builds on preceding chapters. Starting with Chapter 9, Transactions Costs and Property Rights, the chapters could be covered in most any order, except that Monopoly, Chapter 11, necessarily comes before Imperfect Competition, Chapter 12. When I teach this material in a ten-week quarter, I cover Chapters 1 through 10, in order, though I leave out some sections. Depending on the class, I usually include some material from Chapter 13, Labor Economics, particularly the discussion of households, and I also make some mention of misallocation due to monopoly. While it comes last in Chapter 7, I dwell heavily on the common property problem. With a simple numerical illustration, students are able to understand why common property causes excess use of resources. Moreover, I find the Knight highway problem in Chapter 9 reinforces students' understanding of the common property problem, and I always leave time for that topic. I usually spend two weeks on Chapter 10, Interest Rates and Capital Values, but that is an emphasis all may not share.

Comparative Advantage, which most texts relegate to a chapter on international trade somewhere in the back of the book, gets front-row treatment in Chapter 6, the first chapter on cost and production. Why is this important topic relevant only for international as opposed to domestic trade? I have always considered it to be a fundamental idea in economics, particularly about opportunity cost and cost minimization. It is the source of rising long-run marginal costs and the appearance of rents. Moreover, it is easy to present, especially when you omit the unnecessary additional step of invoking coefficients of production, and students seem to genuinely understand the idea.

My goal is that by the end of the term, students understand that explanations based on assertions about tastes are not acceptable, that they understand the diamond–water paradox, comparative advantage, the difference between shortages and scarcity, diminishing marginal product and its relation to the problem of common property, and the idea that capital values incorporate all anticipated future incomes. These are easily attainable goals for a reasonably conscientious student. What's more, these tools are the fundamental building blocks of almost all important policy applications of economics.

Acknowledgments

All scholars and textbook writers owe an intellectual debt to those who came before. When I first arrived at the University of Washington, I had some pretty good math skills, but I wasn't so sure why vegetables were cheaper in the summer than in the winter. I learned a great deal of the basic paradigm of economics from some former and current colleagues, some of whom weren't sure why you shouldn't cancel the *d*'s in *dy*/*dx*, but who had a much more profound understanding of economic behavior than I. In particular, I would like to mention, again, Yoram Barzel, Thomas Borcherding, Stephen Cheung, John Floyd, and Allan Hynes. My most valuable teaching experience in elementary economics came from Armen Alchian and William Allen's magnificently irritating text, *Exchange and Production,* which I used for many years. I still marvel at its modern approach to transactions costs and property rights. Readers who are familiar with that text will have no trouble identifying its influence on this one.

I owe a special debt of gratitude to certain individuals who read parts or all of this manuscript carefully and made many valuable suggestions. First and foremost, I want to thank Doug Allan, especially for his detailed help on Chapter 9 (Property Rights and Transactions Costs). I am grateful for Yoram Barzel's constant willingness to entertain my ideas and who provided detailed comments on various sections, but particularly on imperfect competition; to law professor and fellow banjo player Bill Andersen for his comments on the antitrust section; to Shelly Lundberg for her comments on the Labor Economics chapter; to Dick Startz for his comments on the macro chapter; and to Price Fishback, especially for his organizational and expositional suggestions. I am grateful to Professor Steve Stigler for permission to use the Marginal Machine Wks. photo, and to Claire Friedland for locating it. Special thanks to Larina Muecke for her cheery and perspicacious assistance in an assortment of tasks, including the test bank, instructor's manual, end of chapter answers, and general proofreading. I will always have a special warm spot in my heart for J. Stephen Dietrich, who signed me up not only for this text but also for *The Structure of Economics*. Beyond that, his editorial advice has been unerring. Last, but definitely not least, I cannot exaggerate the importance of my wife Jane's love and encouragement and her good humor about letting me make her an occasional classroom and text example.

Eugene Silberberg

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