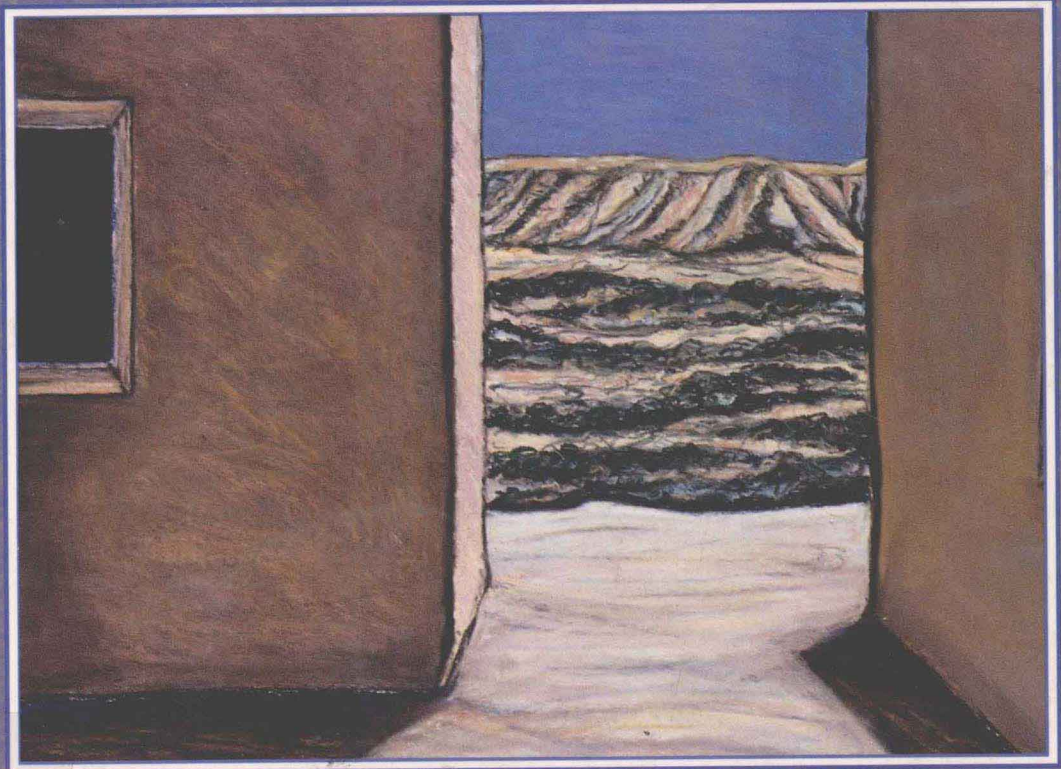


EIGHTH EDITION

THE ECONOMIC WAY OF THINKING



PAUL HEYNE

THE ECONOMIC WAY OF THINKING

PAUL HEYNE

University of Washington



PRENTICE HALL
Upper Saddle River, NJ 07458

Aquisitions editor: Leah Jewell
Editor-in-chief: James Boyd
Marketing manager: Sandra Steiner
Managing editor: Carol Burgett
Production editor: Edie Riker
Manufacturing supervisor: Arnold Vila
Manufacturing buyer: Ken Clinton
Design director: Patricia Wosczyk
Cover and interior designer: Lorraine Castellano
Cover illustration: Juliana Heyne, "Southwest Series: Acoma #6"
1996, 22"x 26" Pastel on Paper
Editorial assistant: Kristin Kaiser

Credits and acknowledgments for materials borrowed from other sources and reproduced, with permission, in this textbook appear on page 566.



Copyright ©1997 by Prentice-Hall, Inc.
A Simon & Schuster Company
Upper Saddle River, New Jersey 07458

Earlier editions copyright ©1994, 1987 by Macmillan Publishing Company. Copyright ©1991, 1983, 1980 by Science Research Associates.

All rights reserved. No part of this book may be reproduced, in any form or by any means, without permission in writing from the publisher.

Library of Congress Cataloging-in-Publication Data

Heyne, Paul T.
The economic way of thinking / Paul Heyne.—8th ed.
p. cm.
Includes index.
ISBN 0-13-572140-7
1. Economics. I. Title
HB171.H59 1997
33—dc20 96-23084

Prentice-Hall International (UK) Limited, London
Prentice-Hall of Australia Pty. Limited, Sydney
Prentice-Hall Canada Inc., Toronto
Prentice-Hall Hispanoamericana, S.A., Mexico
Prentice-Hall of India Private Limited, New Delhi
Prentice-Hall of Japan, Inc., Tokyo
Simon & Schuster Asia Pte. Ltd., Singapore
Editora Prentice-Hall do Brasil, Ltda., Rio de Janeiro

Printed in the United States of America

10 9 8 7 6 5 4 3 2 1

With gratitude to my joint authors,

Wallie and Ruth

Introductory economics has long been an easy subject to teach. It's been a hard subject to *take*, but that's another matter. Moreover, the amount of learning that comes out of principles courses bears no reasonable relationship to the amount of teaching that goes in.

Principles of economics has been an easy course to teach because we have used it largely to regurgitate the bits of technique acquired during our own training in economics. There are so many such bits and pieces, and they are so hard for students to grasp, that principles teachers need never worry about what to do today. They can always introduce a new complication or spend the hour clarifying the complication introduced yesterday. And they don't even have to prepare the complications. A single phrase—elasticity, total-average-marginal revenue, long-run competitive equilibrium, marginal-value product, IS-LM, the multiplier—will serve as an adequate text for an entire class session.

WHAT ARE WE AFTER?

What should be the learning goal in the beginning economics course? It is clear from what has already been said that I have little use for what I take to be the usual learning goal: introducing the student to bits and pieces of technique. Why should we want a beginning student to be familiar with the concepts of average variable, average total, and marginal cost, their downward then upward shapes, the necessary intersection of marginal cost at the low point of average cost, and everything else contributing to the demonstration that in the long run, under perfectly competitive conditions, price will be equal to average total and marginal

cost for all firms after quasi-rents have been capitalized? To ask the question is to answer it. We have no good reason for wanting a beginning student to know all this. Then why have we continued to teach it?

Part of the explanation lies in our commendable concern to teach *theory*. It is economic theory that gives to economics almost all its predictive or clarifying power. Without theory, we must grope our way blindly through economic problems, conflicting opinions, and opposing policy proposals.

But economic theory has proved itself unusually difficult to communicate. So those responsible for teaching undergraduate economics, struck by the apparent failure of theory-oriented principles courses, have sometimes opted instead for a problems and issues course. In such a course, students typically read and discuss statements by labor leaders, industry representatives, agricultural lobbyists, politicians, and a few domestic radicals or foreign socialists. They look at figures on income distribution, gross domestic product, employment, prices, and rates of economic growth. They read and discuss the arguments for guaranteed incomes and against planned obsolescence, for free enterprise and against unregulated competition, for nuclear power and against uncontrolled economic growth. And when it is all over, what have they learned? They have learned that opinions abound, with data to support every one of them, that "it's all relative," that every American is entitled to an opinion, and that economics is not a science and is probably a waste of time.

The insistence on teaching theory is correct insofar as it is a denial of the significance of facts without theories. Theory is essential! But what theory? Economic theory, of course. But that begs the real question. What *kind* of economic theory? And in what *context*? Before we can answer, we must know what we're after.

CONCEPTS AND APPLICATIONS

I want beginning students to master a set of concepts that will help them think more coherently and consistently about the wide range of social problems that economic theory illuminates. The principles of economics make sense out of buzzing confusion. They clarify, systematize, and correct the daily assertions of newspapers, political figures, ax grinders, and barroom pontiffs. And the applicability of the economist's thought tools is practically unlimited. Students should come to appreciate all of this in a beginning course.

But they won't unless we, the teachers and textbook writers, persuade them. And we can persuade them only by showing them. *The principles of economics must therefore be taught as tools of analysis.* The teaching of a concept must take place in the con-

text of application. Better, the potential application should be taught first, then the tool. There is so much evidence from pedagogy to support this approach that it's hard at first to understand how any other approach could ever have conquered the field.

"Here is a problem. You recognize it as a problem. What can we say about it?" That's step one.

"Here is how economists think about the problem. They employ the concept of such and such." Step two entails the exposition of some concept of economic theory.

After the applicability of the concept to the original problem has been demonstrated and some of the implications examined, the concept should be applied to additional problems. That's step three.

It isn't as easy as one-two-three, of course, and I don't mean to imply that it is. The teaching of economic principles requires imagination, insight, a knowledge of current events, and a sense of perspective, as well as familiarity with the formal techniques of economic analysis. Those are all scarce goods. And it presupposes a conviction on the part of the teacher that economic theory really is useful for something more than answering artificial questions and passing equally artificial examinations.

THE VIRTUE OF RESTRAINT

Perhaps no one would disagree in principle with any of the foregoing statements. If so, our practice has been far out of step with our precept. One reason is undoubtedly the obsession with formal technique that characterizes so much teaching of economic theory at all levels. The disciple will very rarely rise above the master. And if the masters in our profession are more concerned with form than content, the effects will be felt at the principles level. We need not debate here the question of how much of the material taught in intermediate and advanced theory texts really belongs there, or what balance should be struck in graduate theory courses between the logic-mathematics and the economics of theory. For the question of what should go into a beginning course can be answered without resolving the other questions. And that answer is: *very little*.

For very little indeed of what might go into a complete and current compendium of economic theory is actually useful in enabling us to make sense of the real world and to evaluate policy proposals. Almost all the genuinely important things that economics has to teach are elementary concepts of relationship that people could almost figure out for themselves if they were willing to think carefully.¹

¹ A compelling statement of this view was provided by Ely Devons in the first two of his *Essays in Economics* (London: George Allen and Unwin, 1961), pp. 13-46.

The challenge is getting people to *appreciate* these few, simple concepts. To do that, we must practice the virtue of restraint. We must attempt less and thereby accomplish more. An introductory course should distinguish itself as much by what it excludes as by what it incorporates. Unless it is our aim to impress students with the esoteric quality of economists' knowledge, we should teach no theory in the introductory course that cannot be put to work immediately. Otherwise, we drown beginning students; they are made to thrash about so desperately that they don't learn to swim a single stroke. Our aim should be to get them swimming and to instill in them the confidence that through practice they can learn to swim better.

Every introductory economics teacher ought to read a short essay by Noel McInnis, entitled "Teaching More with Less." Here are three excerpts:

I dare say that all of us who teach have been guilty of telling our students much more than they cared—or needed—to know. In fact, I would theorize that we have probably been telling them more about our subjects than *we* care to know. That is one reason why we feel compelled to rely on notes to deliver lectures.

Our present methods of communicating often obscure meaning rather than reveal it . . . We often see the tragic results of this in our "best" students, who can repeat what we have told them but cannot apply it in a new context so that it means something. Their learning may have been comprehensive, but it has not been *comprehending*.

Survey courses in almost all disciplines are becoming increasingly impractical because of their compulsive attempt to cover all relevant information. They could be made highly practical once again—or perhaps for the first time—if they were organized to convey the five or six most fundamental organizing and conceptual principles of the discipline, utilizing only the most immediately relevant information to bring the principles to life.²

I agree wholeheartedly with McInnis. My implementation of this vision will undoubtedly be found far from perfect. But the teacher who wonders why this or that topic is not treated in the book, or why there is no complete exposition of some familiar portion of theory, should remember that knowledge is imparted by what is left out as well as by what is included. Judgments on relevance and relative importance will, of course, vary. But the argument of McInnis should be faced every time we're tempted

² *Change: The Magazine of Higher Education* (January–February 1971), pp. 49, 50, 51.

ONE TERM OR TWO?

Every economics teacher, whether of graduates or undergraduates, knows how disconcertingly little most students bring with them from principles courses into subsequent studies. Sometimes they don't seem to remember anything except that they've "heard of it." Is the solution more credit hours of introduction? Should we detain them longer so that we can drill them more thoroughly in the fundamentals of our discipline? In my judgment, the solution lies rather in the direction of fewer hours spent in the introductory course.

What is true and relevant tends to get lost when a beginning course is extended over two quarters or semesters. The student gets many fuzzy ideas of what the subject is *about*, but little grasp of what it *is*.

Moreover, there are too many pedagogical and administrative problems associated with the truncated unity of a two-term single course. Teachers change, textbooks change, micro comes before macro and then macro is put before micro, students drop out after the first term and return two years later for the second term. Why have we nonetheless persisted? It sometimes seems as if we're afraid to teach it all in one term for fear that we'll cut our demand in half. If we can persuade the curriculum makers, especially in the business schools, that two terms is the absolute minimum, we can better maintain the demand for our services.

But a single *worthwhile* term can leave the beginning student eager for more. And economic education doesn't have to end with the introductory course. It won't, at least for many of the students whom we want to continue, if we do a better job of getting them started. The demand for economic principles may even prove to be elastic: if we cut the hourly cost in half, the number of customers may more than double.

Some economists believe that, although a one-term course may be adequate for the general student, two terms are the essential minimum for economics or business majors. But isn't a brief and lively introduction to economics the best start for everyone, for those who plan never to take another course and for those who intend to go on to graduate school in economics? After all, a one-term principles course does not preclude subsequent courses in theory, courses that could be required or strongly recommended for majors. And more students might enroll in the theory courses if the introductory course managed to persuade them that economic theory is a worthwhile and occasionally even an exciting study.

CHANGES IN THE EIGHTH EDITION

I have been teaching economic principles to college students for almost forty years. I continue to enjoy it because I continue to find it challenging. And I find it challenging because I have never gotten it right, as the persistent misunderstandings of my students have repeatedly demonstrated to me. The conviction that I am missing something crucial grew into an obsession over the past few years as a consequence of opportunities given me to teach economics to Russians, Czechs, Slovaks, Hungarians, Bulgarians, Poles, and Romanians. They can't afford to spend time learning an economics that is merely intellectual aerobics; they need to understand how markets work and what institutions are essential if effective cooperation is to occur in a society characterized by an extensive division of labor.

In the course of careful reflection on all this I discovered how much I remained in thrall to the notion that economics is about *economizing*. In reality, economists have almost nothing that is *useful* to say about the economizing process. What we understand and most people do not is the *exchange* process. Scarcity is a fact, but it's not a mystery. The real mystery, to most people, is the fact that society contains millions of people pursuing incommensurable projects that somehow get coordinated. How does this happen? How do markets work? That is the great puzzle that the economic way of thinking begins to resolve. Important changes were made in the seventh edition to focus more sharply on that puzzle and its innumerable solutions. Changes in the eighth edition, especially in the first four chapters, further sharpen that focus.

I have composed responses to all of the end-of-chapter Questions for Discussion. Instructors using the textbook may obtain a copy of these answers, along with permission to photocopy them freely, by contacting the publisher's local representative. The suspicion that students would learn more from reading a lot of questions along with suggested answers than from perspiring over a few questions has been amply confirmed for me by experience.

ACKNOWLEDGMENTS

My debts grow larger every year. Armen A. Alchian and William R. Allen head the list because it was their *University Economics* that first showed me what I ought to be doing in introductory economics courses and because their names both start with A. Continuing in alphabetical order, I want to express publicly my gratitude for the special insights and generous assistance over the years of Terry Anderson, Yoram Barzel, Roger Beck, Robert Bish, Barry Boyer, Ronald Brandolini, Henry Bruton, Judith B. Cox, John B. Egger, Mary Eysenbach, Robert Higgs, P.J. Hill,

Laurie Johnson, Thomas Johnson, Ronald A. Krieger, Charles Lave, Ian Laxer, Frank M. Machovoc, Howard Miller, Charles Nelson, E. C. (Zeke) Pasour, Potluri Rao, Andrew Rutten, Howard Swaine, Peter Toumanoff, Stephen J. Turnovsky, Donald A. Wells, Sidney Wilson, Harvey Zabinsky, and at least half a dozen other economists whose letters have unfortunately disappeared in the clutter of my office. Don't blame any of them for my invincible ignorance; you will never locate the guilty party among so many fine people.

For the forms and colors whose primacy I so quickly forget in the pale and amorphous world of academia, I am especially grateful to my wife, Juliana.

P.H.

The hand-drawn comments, designs, and graphs in the margins, beginning with the cloverleaf intersection on page 2, are intended to underline, explain, or illustrate the accompanying text. Add your own. And if you think one of your "marginal doodles" would be helpful to other readers, send it to the author at the University of Washington, Box 353330, Seattle, Washington 98195. It might appear in the next edition. Be sure to include your name and address.

The Theory of Economics does not furnish a body of settled conclusions immediately applicable to policy. It is a method rather than a doctrine, an apparatus of the mind, a technique of thinking which helps its possessor to draw correct conclusions.

—John Maynard Keynes

PREFACE	xi
1 THE ECONOMIC WAY OF THINKING	1
Questions for Discussion 14	
2 SUBSTITUTES EVERYWHERE: THE CONCEPT OF DEMAND	17
Questions for Discussion 38	
3 OPPORTUNITY COST AND THE SUPPLY OF GOODS	47
Questions for Discussion 63	
4 SUPPLY AND DEMAND: A PROCESS OF COORDINATION	71
Questions for Discussion 95	
5 MARGINAL VALUES AND ECONOMIC DECISIONS	105
Questions for Discussion 121	
6 EFFICIENCY, EXCHANGE, AND COMPARATIVE ADVANTAGE	133
Questions for Discussion 150	

7	INFORMATION, MIDDLEMEN, AND SPECULATORS		159
	Questions for Discussion	177	
8	PRICE SETTING AND THE QUESTION OF MONOPOLY		187
	Questions for Discussion	196	
9	PRICE SEARCHING		203
	Questions for Discussion	218	
10	COMPETITION AND GOVERNMENT POLICY		229
	Questions for Discussion	244	
11	PROFIT		255
	Questions for Discussion	287	
12	THE DISTRIBUTION OF INCOME		299
	Questions for Discussion	318	
13	EXTERNALITIES AND CONFLICTING RIGHTS		331
	Questions for Discussion	347	
14	MARKETS AND GOVERNMENT		359
	Questions for Discussion	380	
15	INFLATION, RECESSION, UNEMPLOYMENT: AN INTRODUCTION		395
	Questions for Discussion	413	
16	PRODUCTION, PRICES, AND AGGREGATE FLUCTUATIONS		419
	Questions for Discussion	428	
17	THE SUPPLY OF MONEY		431
	Questions for Discussion	446	

18	DEMAND-SIDE ECONOMICS	451	contents ix
	Questions for Discussion	468	
19	FISCAL AND MONETARY POLICY	473	
	Questions for Discussion	492	
20	SUPPLY-SIDE PERSPECTIVES	497	
	Questions for Discussion	514	
21	NATIONAL POLICIES AND INTERNATIONAL EXCHANGE	521	
	Questions for Discussion	541	
22	INFLATION, RECESSION, AND POLITICAL ECONOMY	547	
	Questions for Discussion	557	
23	THE LIMITATIONS OF ECONOMICS	561	
	GLOSSARY	565	
	INDEX	567	



THE ECONOMIC WAY OF THINKING

Good mechanics can locate the problem in your car because they know how your car functions when it *isn't having any problems*. A lot of people find economic problems baffling because they do not have a clear notion of how an economic system works when it's working well. They are like mechanics whose training has been limited entirely to the study of malfunctioning engines.

When we have long taken something for granted, it's hard even to see what it is that we've grown accustomed to. That's why we rarely notice the existence of order in society and cannot recognize the mechanisms of social coordination upon which we depend every day. A good way to begin the study of economics,

therefore, might be with astonishment at the feats of social cooperation in which we daily engage. Rush-hour traffic is an excellent example.

RECOGNIZING ORDER

You are supposed to gasp at that suggestion. “Rush-hour traffic as an example of social *cooperation*? Shouldn’t that be used to illustrate the law of the jungle or the *breakdown* of social cooperation?” Not at all. If the association that pops into your mind when someone says “rush-hour traffic” is “traffic jam,” you are neatly supporting the thesis that we notice only failures and take success so much for granted we aren’t even aware of it. The dominant characteristic of rush-hour traffic is not jam but movement, which is why people venture into it day after day and almost always reach their destinations. It doesn’t work perfectly, of course. (Name one thing that does.) But the remarkable fact at which we should learn to marvel is that it works at all.

Thousands of people leave their homes at about eight in the morning, slide into their automobiles, and head for work. They all choose their own routes without any consultation. They have diverse skills, differing attitudes toward risk, and varying degrees of courtesy. As these passenger automobiles in their wide assortment of sizes and shapes enter, move along, and exit from the intersecting corridors that make up the city’s traffic veins and arteries, they are joined by an even more heterogeneous mixture of trucks, buses, motorcycles, and taxicabs. The drivers all pursue their separate objectives, with an almost single-minded devotion to their own interests, not necessarily because they are selfish but simply because none of them knows anything about the objectives of the others. What each one does know about the others is confined to a few observations on the position, direction, and velocity of a changing handful of vehicles in the immediate environment. To this they add the important assumption that other drivers are about as eager to avoid an accident as they themselves are. There are general rules, of course, which everyone is expected to obey, such as stopping for red lights and staying close to the speed limit. That’s about it, however. The entire arrangement as just described could be a prescription for chaos. It ought to end in heaps of mangled steel.

What ensues instead is a smoothly coordinated flow, a flow so smooth, in fact, that an aerial view from a distance can almost be a source of aesthetic pleasure. There they are—all those independently operated vehicles down below, inserting themselves into the momentary spaces between other vehicles, staying so close and yet rarely touching, cutting across one another’s paths with only a second or two separating a safe passage from a jarring collision, accelerating when space opens before them and

