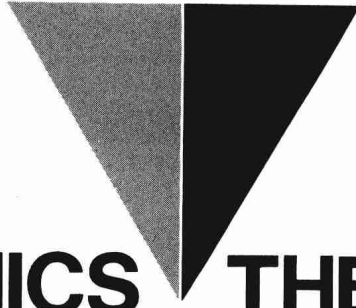


THIRD EDITION

**ECONOMICS
OF THE FIRM**

**THEORY
AND PRACTICE**

Arthur A. Thompson, Jr.



ECONOMICS OF THE FIRM THEORY AND PRACTICE

THIRD EDITION

ARTHUR A. THOMPSON, JR.

The University of Alabama

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PREFACE

As with its predecessors, this edition has two noteworthy pedagogical features. First and foremost, the text offers a solid treatment of microeconomic theory in which the topical emphasis is on the economics of the firm and how markets function. Second, special pains have been taken to demonstrate the practical value of theoretical analysis and its power to explain real-world microeconomics.

The hoped-for outcome is a text which not only zeros in on the needs of economics majors but which is also broadly suitable for the increasing numbers of MBA and undergraduate business majors being required to take a microtheory course. Non-economics faculty have long been heard to urge that the content of intermediate microeconomics courses should stress what business majors need to know about microtheory rather than being slanted solely toward economics majors. Their point is well taken. Consequently, in agonizing over what to include and what to emphasize, I have tried to follow the rule of including concepts especially pertinent to analyzing the behavior of firms and markets and de-emphasizing topics which either have a “purist” flavor or else relate more directly to nonmarket sectors of the economy. The sought-after compromise is a micro-text (1) that is strong on theory and analysis, (2) that takes as its focal point the economics of the firm in a competitive market environment, and (3) that is in close touch with the reality of

applications. In the overall scheme of approaches to microeconomics, the aim has been to place the text more or less mid-way between “pure theory” texts and “managerial economics” texts.

All major aspects of microeconomic theory are covered. The standard models of utility theory, indifference analysis, basic supply and demand, elasticity, production and cost functions, monopoly and perfect competition, resource pricing, and general equilibrium are given thorough exposure. But you will quickly note the inclusion of a number of textual treatments that are intended as improvements in coverage:

****An introductory chapter on the methodology of economic analysis and the relevance of theory to explaining real-world economic phenomena.**

****A birdseye description of what a market is and how the sizes of firms and their respective corporate strategies relate to actual behavior in the marketplace (Chapter 2).**

****A survey of the economic aspects of technology and the impetus for R&D and innovation (Chapter 6).**

****An in-depth look at profit concepts, profit theories, the debate over profit maximization, and non-profit goals of the firm (Chapter 9).**

****An extensive treatment of oligopoly theory which focuses on competitive rivalry among large corporations (Chapter 12).**

****A major new chapter on the strategic aspects of competition and on how economic forces combine to shape the nature and strength of competition (Chapter 14).**

****A survey of multiple-goal models of the firm (Chapter 15).**

****An assessment of overall market performance and the social benefits of competition under conditions of market capitalism and corporate capitalism, using the tools of welfare economics and industrial organization (Chapter 16).**

****Sections dealing with multiproduct pricing, price signaling through the public media, the use and abuse of corporate power, taxing excess profits, the competitive roles of advertising and product differentiation, the relevance of corporate strategy to competition analysis, the wage-employment effects of unions and minimum wage legislation, and the economics of productivity changes.**

The use of in-depth “applications capsules” to highlight actual applications of microtheory was well-received in the previous edition and has been expanded. The number of capsules has been increased from 24 to 32 and 18 are brand new. As before, these aim at keeping the integration of theory and practice always before the student without disjointing the theoretical discussion. The applications capsules have been “boxed off” from the text narrative to permit meaningful and detailed discussion, rather than trying to make do with simple examples which can be cited in a passing sentence, footnote, or brief paragraph. Once again, the selection of the capsule topics aims at the mainstream of how a competitive enterprise economy works in actual practice; their pragmatic nature can be easily seen by glancing through the *Table*

of Contents. Many of the applications capsules are quite suitable for use as short cases for class discussion. In addition to the applications capsules, summaries of empirical findings and dozens of brief examples are scattered throughout each chapter.

The attention paid to application and examples has several justifications. Students are more likely to buckle down and master theoretical material when they are convinced it has a payoff and is not just something that must be tolerated to get a degree. More fundamentally, though, the worth of microeconomic theory is best proven by its power of application. Indeed, unless theory truly explains, predicts, and otherwise illuminates the economic behavior of consumers, firms, and markets, it is of little use and interest.

As has now become customary and proper, the theoretical concepts are presented in a modestly mathematical vein in belief that most students, given that they are required to take introductory calculus, are well-equipped to handle nothing more mathematically complex than first derivatives. All mathematical concepts requiring more than basic algebra are explained fully and in terms which can be grasped by the mathematically unsophisticated. The more advanced mathematical treatments of microeconomics have been placed in self-contained “capsules” at appropriate places in the book and can be omitted without a loss of continuity.

Like any new edition, this one too has undergone important revision and updating. Chapters 1 and 2 reflect a streamlined treatment of what formerly was organized into three chapters. More attention has been given to measuring price elasticity and to assessing the conditions which cause buyers and sellers to be price sensitive. Coverage of the market models of perfect competition, monopolistic competition, oligopoly, and monopoly is now divided into four separate chapters, and the discussion of monopoly has been accorded considerably more emphasis. A brand new chapter on assessing the nature and strength of competitive market forces has been added to give more attention to the non-structural aspects of the market interplay among rival firms; this chapter focuses on competition as a strategic process and the extent to which competition is influenced by potential entrants, the presence of substitutes, and the market influences of both suppliers and buyers. The usual efforts have been made to improve further the clarity of the exposition; the coverage of some ideas and concepts has been condensed to make room for the added topics and applications capsules.

All in all, the third edition strives for effective and comfortable balances between “bare bones” coverage versus in-depth analysis, theory versus application, classical versus contemporary models, mathematical versus verbal/graphical exposition, and conceptual simplicity versus the need of the student to acquire *some* technical proficiency and analytical skill.

The result, I trust, is (1) a book which is as well-suited for intermediate microtheory courses required of business school undergraduates and first-year MBA students as for economics majors and (2) a book which is a coherent and teachable synthesis of the best of all that is old and new in

microeconomics. Whether I have succeeded is, quite fittingly, for “the market” to decide. Your comments regarding coverage and emphasis will be most welcome, as will your calling my attention to specific errors.

ACKNOWLEDGMENTS

My intellectual debt to both the classical and contemporary economists whose fertile concepts and ideas appear herein will be obvious to any reader familiar with the literature of microeconomics. I have endeavored to acknowledge the scholarly materials and sources relied upon in the many footnotes and bibliographical references. I trust that no violence has been done to their ideas in my attempts to synthesize them into the body of microeconomic analysis.

Both this edition and previous editions have benefited greatly from the comments of students, reviewers, and adopters. Special thanks are due to David Hildebrand and Alice Erdman at Prentice-Hall and to Professor Keith Lumsden (Stanford), Robert Clower (UCLA), Howard Dye (University of South Florida), Lloyd Valentine (University of Cincinnati), Richard Hoffman (formerly of University of Buffalo), Frank Falero (California State at Bakersfield), Dwight Anderson (Arizona State University), Ralph Gray (DePauw University), Thomas C. Anderson (Eastern Michigan University), Jay G. Chambers (University of Rochester), Larry G. Beall (Virginia Commonwealth University), Melvin C. Fredlund (California State at Hayward), Wesley Magat (Duke University), Donald J. Roberts (Northwestern University), Ernest Koenigsberg (University of California), Stephen L. Shapiro (University of North Florida), Stephen Buckles (University of Missouri), John Stevens (Babson College), William A. Hayes (DePaul University), Sharon G. Levin (University of Missouri, St. Louis), and Walter Rice (California Polytechnic State University)—all of whom reviewed portions of this text at various stages. Naturally, however, none of them is responsible for any of the blunders or inadequacies which remain; for those I bow to tradition and accept full responsibility.

Arthur A. Thompson, Jr.
Tuscaloosa, Alabama

NOTE TO THE STUDENT

Courses in intermediate microeconomics typically have the reputation of being among the most challenging in any college curriculum. The reputation is well deserved—this might as well be admitted at the outset. But despite the analytical rigor which characterizes the course, the road ahead is worth exploring, and I have tried to clear the way of unnecessary obstacles. Pains have been taken to make the text readable and interesting, to provide step-by-step explanations of each concept, to keep the graphs uncluttered and the mathematics simplified. Examples and applications of the theory are consistently indicated in enough detail to make them meaningful. Chapter-end problems and questions have been included as a self-test of your command of the material and to increase your mechanical proficiency with important concepts.

Because students begin the course with widely-varying backgrounds and degrees of preparation, the treatment of each new topic is begun at the lowest level of analysis. No prior knowledge of economics is assumed. Thus, while this course is probably not your first exposure to economics, those of you who remember little about previous courses or who feel poorly prepared in economics will find yourselves at no serious disadvantage.

All of this has resulted in a book with more pages to cover. But longer may still be quicker and easier. The intended effect is a more comprehensible

xx presentation that will not only help you to hurdle the more difficult theory
Note to the in less time but that will also convince you of the value and power of eco-
Student nomic analysis.

A textbook is, after all, primarily for the student, not the professor and, in the final analysis, you the student are an excellent judge of how well the teaching/learning objectives of this book are being met. I will be pleased to receive your comments at P. O. Box J, University, AL 35486.

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ONE INTRODUCTION TO MICROECONOMICS: SCOPE AND METHODS OF ANALYSIS

George Bernard Shaw is credited with the observation that any reasonably intelligent parrot, provided that he was not tongue-tied, could be instructed in economics; he need only be taught to say “demand” and “supply.” This simplification strikes at a central truth in economics: The aggregate of society’s material wants far exceeds the available economic resources needed to satisfy them. Indeed, the fundamental economic issue around which economic analysis revolves is how best to employ scarce economic resources (land, labor, capital goods, managerial talents) in supplying goods and services, so as to achieve the greatest fulfillment of society’s unlimited wants.

But in exploring the economic ins and outs of how society can do its economic best with what it has to work with, the picture becomes quite muddled and complex. For example, there are millions of individuals and households deciding how to budget a limited income for food, apparel, housing, medical care, transportation, and other goods and services. There are also millions of business firms making decisions about how much time, money, and human effort to devote to manufacturing operations, new product research and development, investment in cleaner and cheaper production technologies, sales promotion, a search for new market opportunities, improving their market standing, and so on. There are hundreds of thousands of government agencies and not-for-profit organizations involved in fur-