

ECONOMICS OF THE FIRM

THEORY AND PRACTICE

Fifth Edition

TH EDITION

Economics of the Firm: Theory and Practice

Arthur A. Thompson, Jr.

THE UNIVERSITY OF ALABAMA

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Preface to the Fifth Edition

This fifth edition of *Economics of the Firm: Theory and Practice* continues to stress solid coverage of microeconomic theory, complemented with a heavy dose of easy-to-relate-to examples and pragmatic discussions of how a competitive enterprise economy functions. What makes the fifth edition distinctive is the strong attention given to coverage of the competitive process—the drivers of industry structure and market change, the five basic types of competitive forces, generic types of competitive strategies, and the avenues of competitive advantage.

A fuller treatment of rivalry in the marketplace is in step with the realization that competition is alive and well domestically and globally; moreover, fresh techniques for industry and competitive analysis are now a hotspot for pushing beneath the general implications of the traditional market models and digging deeper into the realities of how firms compete. The newly emerging tools of competition analysis are so incisive and so instructive about the hows and whys of rivalrous competition that they need to become standard topics in microeconomics courses.

An exciting companion to this edition is *The COMPETITION Game*—a PC-based microeconomics simulation that faithfully captures the functioning of a competitive market and allows students, organized into teams, to produce and sell a product in head-on worldwide competition with each other. *The COMPETITION Game* represents a pedagogical breakthrough in using the PC to teach students the ins and outs of microeconomic analysis. In playing *The COMPETITION Game*, students see microeconomics concepts come alive; they have to wrestle with price elasticity considerations, economies of scale, substitution of capital for labor, technological change, tariff barriers, marginal and average cost analysis, changing demand-supply conditions, price and nonprice competition, and profit maximization. Without any reservation, I predict that using *The COMPETITION Game* in your course will add markedly to student enthusiasm and to student use of the tools of microeconomic analysis.

HOW THE BOOK APPROACHES MICROECONOMICS

Because of its strong microtheory content, the book is suitable for courses populated with economics majors. Because of its strong focus on the economics of firms, markets, and competitive behavior, the book is especially appropriate for courses

where the audience consists mainly of MBA students and undergraduate business majors. Business school faculty frequently urge that intermediate microeconomics courses give some attention to the economics of business decisions rather than being slanted solely toward economics majors. The reasonableness of such urgings, together with my own belief that economics and business majors both benefit from a strong understanding of competitive market economics, have guided my choices of what to include and what to highlight. I have tried to follow the rules of including concepts and examples especially pertinent to analyzing the behavior of firms and competitive markets and de-emphasizing topics that either have a "purist" flavor or else relate more directly to nonmarket sectors of the economy. Moreover, the primary unit of analysis is the business firm. Readers are exposed again and again to how the conclusions of microeconomic analysis guide firms into one course of action rather than another. The economics of the firm is looked at from the inside as concerns production, cost, profitability, and competitive strategy considerations, and it is examined from the outside as concerns the influences of consumer demand, competition, market structure, and resource supply.

The result is a microtext (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 uses examples and applications to bridge the gap between theory and practice. In the overall scheme of approaches to microeconomics, the aim has been to place the text more or less midway between "pure theory" texts and "managerial economics" texts and, further, to achieve uniquely strong coverage of competitive forces, competitive markets, competitive strategy, and techniques of competition analysis.

TRADITIONAL TOPICS WITH A MENU OF EXTRAS

All major aspects of microeconomic theory are explored. 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 full exposure. But there are differentiating extras that can be covered or not as the instructor sees fit:

- A birdseye look at the methods of economic analysis (including "scientific testing," deductive logic, argument by example, diagrammatic models, and the use of mathematical proofs), what a theory is, the role of assumptions and abstraction, and the relevance of theory to explaining real-world economic phenomena (Chapter 1).
- A refresher chapter on supply, demand, and the functioning of markets (Chapter 2).
- Coverage of the product attribute model of consumer demand (Chapter 4).
- Expanded treatment of learning and experience curve effects in achieving higher levels of efficiency and cost savings (Chapter 6).
- A survey of profit concepts, profit theories, the debate over profit maximization, and nonprofit goals of firms (Chapter 9).
- Full exposure to the many models of oligopolistic competition (Chapter 12).
- A survey of multiple-goal models of business behavior (Chapter 14).
- A new chapter on the five competitive forces, built around Michael Porter's now classic model for diagnosing how competition works in a given industry (Chapter 15).
- A major new chapter on ways to create and defend competitive advantage (Chapter 16).

Sections dealing with a firm's cost competitiveness vis-a-vis rivals, multiproduct pricing, price signaling through the media, the social costs of monopoly power, taxing excess profits, the competitive effects of advertising and product differentiation, firstmover advantages, switching costs, driving forces, the mapping of competitive groups, the wage-employment effects of unions, the impact of minimum wage legislation, and the economics of productivity changes.

The use of boxed off "applications capsules" to highlight actual applications of microtheory was well received in previous editions and has been continued. As before, these aim at keeping the integration of theory and practice always before the student without disjointing the theoretical discussion. In addition to the applications capsules, empirical findings and brief examples are scattered throughout each chapter. The pedagogical thesis is that unless microeconomic analysis is directed at explaining, predicting, and otherwise illuminating the economic behavior of consumers, firms, and markets, its value doesn't go much beyond an exercise in mental gymnastics and intellectual curiosity.

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 that 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 has undergone important rewriting and updating. A special effort has been made to streamline the chapters and to prune less important topics. Color has been used to enhance graphical treatments. The aim has been to give this fifth edition an even better balance 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 to instill students with some technical proficiency and analytical skill. The intended result is (1) a book that suits the "need-to-know" requirements of business school undergraduates, first-year MBA students, and economics majors and (2) a book that 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.

ACKNOWLEDGEMENTS

My intellectual debt to both the classical and contemporary economists whose fertile contributions have been weaved into the presentation will be obvious to any reader familiar with the literature of microeconomics; I have been particularly influenced by the recent works of F.M. Sherer and Michael E. Porter. All the scholarly sources and materials I have drawn upon are cited in the footnotes and bibliographical references. I genuinely hope that no violence has been done to anyone's ideas in my effort to synthesize them into the body of microeconomic analysis.

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Both this edition and previous editions have benefited greatly from the comments of students, reviewers, and adopters. Special thanks are due to the reviewers of all five editions: Keith Lumsden, Robert Clower, Howard Dye, Lloyd Valentine, Richard Hoffman, Frank Falero, Dwight Anderson, Ralph Gray, Thomas C. Anderson, Jay G. Chambers, Larry G. Beall, Melvin C. Fredlund, Wesley Magat, Donald J. Roberts, Ernest Koenigsberg, Stephen L. Shapiro, Stephen Buckles, John Stevens, William A. Hayes, Sharon G. Levin, and Walter Ricke.

Naturally, however, I alone am responsible for whatever blunders or inadequacies you find. I will be grateful if you will call them to my attention at P.O. Box 870223, Tuscaloosa, Alabama, 35487.

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, the road ahead is well 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 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 from previous courses or who feel poorly prepared in economics will find yourselves at no serious disadvantage.

Assuming no prior knowledge and providing complete explanations has made some chapters a bit long. But longer may still be quicker and easier. The intended effect is a more comprehensible presentation that will help you to grasp the more difficult material in less time and convince you of the value and power of economic 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 book performs its job of helping you understand the subject matter. I will be pleased to receive your praises and/or criticisms at P.O. Box 870223, Tuscaloosa, Alabama, 35487.

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