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Contemporary Labor Economics

Twelfth Edition



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Twelfth Edition

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CONTEMPORARY LABOR ECONOMICS

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1 2 3 4 5 6 7 8 9 LCR 24 23 22 21 20

ISBN 978-1-260-57062-5

MHID 1-260-57062-2

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Preface

THE TWELFTH EDITION

One benefit of authoring a text that has met the test of the market is the opportunity to revise. Revision provides for improvement—to delete the archaic and install the novel, to rectify errors of omission or commission, to rewrite misleading or obscure statements, to introduce more relevant illustrations, to bring more recent data to bear, to upgrade organizational structure, and to enhance pedagogical aids—in short, to build on an accepted framework of ideas. We feel that those who examine this new twelfth edition of *Contemporary Labor Economics* will agree that we have fully exploited this opportunity.

This new edition incorporates many significant changes, several of which were motivated by the comments of colleagues and students. We are especially grateful to the scholars cited in the acknowledgments who provided reviews of the various editions or commented on drafts of the new edition.

New Topics and Expanded Discussions

New, revised, and expanded discussions permeate the twelfth edition. Some of the more important changes are:

- **Economic Trends** This edition includes a number of discussions related to recent economic trends. For example, this edition includes new World of Work boxes on the decline in labor force participation due to the opioid crisis and video gaming (Chapter 3), the increasing importance of social skills (Chapter 8), and the gender wage gap in the shift to a gig economy (Chapter 14). The text also includes new discussions of past and future changes in labor supply (Chapter 3) and legalization of cannabis (Chapter 5). This edition also has updated data throughout the text.
- **Public policy issues** This edition includes a number of new discussions of public policy issues, including politician pay, the opioid crisis, cannabis, health care reform, undocumented immigration, unions, executive compensation, military spending, climate change, and discrimination.

New World of Work Sections

Sixteen of the World of Work boxes are new to this edition. The new titles to this edition are: Labor Supply of Politicians; The Labor Supply Effects of Winning a Lottery Prize; Video Gaming and the Decline in Labor Supply of Young Men; The Opioid Crisis and the Decline in Labor Force Participation; College as Country Club; Ahead of the Pack: Veterinary Occupations are Growing Fast; [Job] Locked and [Un]Loaded; Rising Importance of Social Skills; Labor Supply of Undocumented Workers; *Janus* Decision and Public Sector Unions; Unions and Executive Compensation; The Impact of Military Cutbacks on Civilians; Climate Change and Occupational Health; Does Ban the Box Cause Discrimination?; Evolution of a Family Friendly Occupation; and The Gender Wage Gap in the Gig Economy.

Learning Objectives

At the beginning of every chapter, a learning objective is provided for each heading within the chapter.

DISTINGUISHING FEATURES

At the hazard of immodesty, we feel that this volume embodies a number of features that distinguish it from other books in the field.

Content

In the area of subject matter, the emphasis in Chapter 6 and elsewhere on allocative efficiency is both unique and desirable. The efficiency emphasis makes students realize that *society* has an interest in how labor markets function. Chapter 7 brings together the literature on the principal-agent problem and the “new economics of personnel” in a single, focused chapter. Chapter 8 on the wage structure has been consistently praised by instructors for providing a thorough, systematic treatment of wage differentials and a simplified presentation of the hedonic wage theory. The comprehensive analyses of the impacts of unions and government on labor markets found in Chapters 10–13 also set this book apart.

Chapter 14 provides extensive analysis of labor market discrimination and antidiscrimination policies. Chapter 15 discusses job search within and outside the firm. Chapter 16 confines its focus almost entirely to the distribution of personal *earnings*, rather than the usual discussion of the distribution of *income* and the poverty problem. We believe this approach is more relevant for a textbook on *labor* economics. The critical topic of labor productivity has been largely ignored or treated in a piecemeal fashion in other books. We have upgraded this topic by according it extensive treatment in Chapter 17. Chapter 18 looks at employment and unemployment through a stock-flow perspective and uses the aggregate demand–aggregate supply model to examine natural versus cyclic unemployment. Finally, the appendix provides a comprehensive discussion of information sources that can be used to widen and deepen the reader’s understanding of the field.

Organization and Presentation

We have put great stress on the logical organization of subject matter, not only chapter by chapter but within each chapter. We have sought to develop the subject matter logically from micro to macro, from simple theory to real-world complications, and from analysis to policy. Similarly, considerable time has been spent in seeking the optimal arrangement of topics within each chapter. Chapter subheadings have been used liberally; our feeling is that the student should always be aware of the organizational structure and directional flow of the subject matter.

Many key topics of labor economics will be intellectually challenging for most students. We have tried not to impair student understanding with clumsy or oblique exposition. Our purpose is to communicate effectively with students. To this end, we have taken great care that our writing be clear, direct, and uncluttered. It is our goal that the material contained herein be highly accessible to the typical college undergraduate who has limited training in economics.

Pedagogical Features

We have included a variety of pedagogical devices that instructors tell us significantly contribute to student understanding. First, the introduction of each chapter states the goals of the chapter and, in many cases,

relates the chapter to prior or future chapters. In addition, the learning objectives for each major head in the chapter are provided. Second, end-of-chapter summaries provide a concise, point-by-point recapitulation of each chapter. Third, key terms and concepts are highlighted at the end of each chapter, and a comprehensive glossary of these and other terms is located at the end of the book. Fourth, ample lists of questions are provided at the end of each chapter. These range from open-ended discussion questions to numerical problems that let students test their understanding of basic analytic concepts. Fifth, each chapter includes one or two Internet exercises and links that help students increase their understanding of the material as well as obtain the most current data available. Sixth, relevant historical statistics that are valuable to both students and instructors are included at the end of the text. Seventh, the within-chapter “Quick Review” summaries and “Your Turn” questions should help students identify key points and study for exams. Furthermore, as indicated previously, the appendix of the book lists and discusses ways the interested reader can update statistical materials found in the book and continue the learning process beyond the course. Finally, we have included 67 short “World of Work” minireadings in this edition.

Supplements

The following ancillaries are available for quick download and convenient access via the Instructor Resource material available through McGraw-Hill Connect[®].

Instructor’s Manual *Contemporary Labor Economics* is accompanied by a comprehensive Instructor’s Manual by author David Macpherson. Among other features, it contains chapter outlines and learning objectives, and answers to end-of-chapter text questions.

PowerPoint Slides An extensive set of PowerPoint slides is available for each chapter. These slides, which highlight the main points of each chapter using animation, are available via the instructor resource material available through McGraw-Hill Connect[®].

Test Bank

Authored by David Macpherson, the *Test Bank* offers multiple-choice and fill-in-the-blank questions categorized by level of difficulty, AACSB learning categories, Bloom’s taxonomy, and topic.

Computerized Test Bank

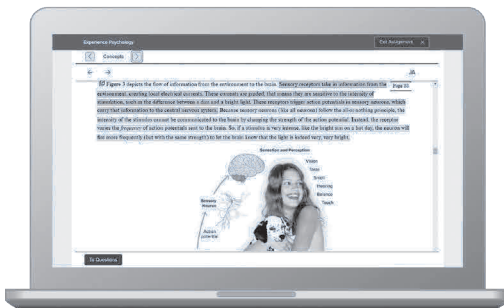
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- Jordan Cunningham,
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Acknowledgments

We would like to express our thanks for the many useful comments and suggestions provided by colleagues who reviewed previous editions of this text during the development stage:

Neil Alper
Northeastern University

John Antel
University of Houston

Martin Asher
Villanova University

Peter S. Barth
University of Connecticut-Storrs

Clare Battista
California Polytechnic State University

Keith A. Bender
University of Wisconsin-Milwaukee

Sherrilyn Billger
Illinois State University

Bruce Brown
University of California-Los Angeles

Don Bruce
University of Tennessee

Clive Bull
New York University

Robert Catlett
Emporia State University

David H. Ciscel
Memphis State University

Vito Colapietro
William Jewell College

John Conant
Indiana State University-Terre Haute

Kelley Cullen
Eastern Washington University

Greg Delemeester
Marietta College

Michael J. Dinoto
University of Idaho

Arthur Dobbelaere
Loyola University

Peter B. Doeringer
Boston University

Paul Engelmann
University of Central Missouri

Abdollah Ferdowski
Ferris State University

William D. Ferguson
Grinnell College

Roger Frantz
San Diego State University

Scott Fuess, Jr.
University of Nebraska-Lincoln

Robert Gitter
Ohio Wesleyan University

Lonnie M. Golden
University of Wisconsin

Daphne Greenwood
University of Colorado at Colorado Springs

Richard Hansen
Southeast Missouri State University

Michael D. Harsh
Randolph-Macon College

Julia Heath
Memphis State University

Jack Hou
California State University-Long Beach

Yu Hsing
Southeastern Louisiana University

David Huffman
Bridgewater College

Sarah Jackson
Indiana University of Pennsylvania-Indiana

Carl P. Kaiser
Washington and Lee University

Melanie Fox Kean
Austin College

Steven J. Kerno, Jr.
Iowa Wesleyan College

Douglas Kruse
Rutgers University

Julia Lane
University of Louisville

Kevin Lang
Boston University

Laura Leete
Case Western Reserve University

Robert I. Lerman
The Urban Institute

Haizheng Li
Georgia Institute of Technology

Eng Seng Loh
Kent State University

John Marcis
Virginia Commonwealth University

Mindy Marks
University of California-Riverside

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St. Olaf College

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Farahmand Rezvani
Montclair State University

Douglas Romrell
Utah State University

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Social Sciences Research Council

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Wade Thomas
Ithaca College

William Torrence
University of Nebraska-Lincoln

Ronald S. Warren, Jr.
University of Georgia

Bill Wilkes
Athens State University

Thomas A. Webb
South-Western College

We are also greatly indebted to the many professionals at McGraw-Hill/Irwin—in particular, Anke Weekes, Kevin White, Marla Sussman, Bobby Pearson, Maria McGreal, David Hash, and Shawntel Schmitt—for their expertise in the production and marketing of this book.

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Contemporary Labor Economics

Chapter 1

Labor Economics: Introduction and Overview

After reading this chapter, you should be able to:

1. Explain why labor economics is justified as a special field of inquiry.
2. Describe how the economic perspective can be applied to analysis of labor markets.
3. Identify those topics in labor economics that are mainly “microeconomic” and those that are primarily “macroeconomic.”
4. Describe several benefits that derive from understanding labor economics.

The core problem of economics permeates all of its specialized branches or subdivisions. This problem is that productive resources are relatively scarce or limited. Society’s material wants—the desires of consumers, businesses, and governmental units for goods and services—exceed our productive capacity. That is, our economic system is incapable of providing all the products and services that individuals and institutions would like to have. Because absolute material abundance is impossible, society must choose what goods and services should be produced, how they should be produced, and who should receive them. Economics is concerned with the discovery of rules or principles that indicate how such choices can be rationally and efficiently rendered. Because resources are scarce and wants are virtually unlimited, society needs to manage its resources as efficiently as possible to achieve the maximum fulfillment of its wants. Labor, of course, is one of society’s scarce productive resources, and this book centers on the problem of its efficient use. Labor economics examines the organization, functioning, and outcomes of labor markets; the decisions of prospective and present labor market participants; and the public policies relating to the employment and payment of labor resources.

LABOR ECONOMICS AS A DISCIPLINE

How can a special field of economics concerned solely with labor be justified? What makes labor economics important as an area of inquiry? There are several answers to these questions.

Socioeconomic Issues

First, evidence of the importance of labor economics is all around us. We need to simply glance at the newspaper headlines: “Senator calls for increase in minimum wage”; “General Motors cuts workforce”; “Labor productivity surges”; “Teamsters gain wage hike”; “Growing wage inequality”; “Sexual harassment accusations”; “Free-trade agreement: Boon or bane for employment?”; “Workplace safety improves”; “Gender discrimination charged”; “More single parents in labor force”; “Illegal immigration continues”; “High executive salaries questioned”; “Jobs shipped out to foreigners.”

Moreover, labor economics helps us understand causes and outcomes of major socioeconomic trends occurring over the past several decades: the rapid rise in employment in the service industries, the surge in the number of female workers, the precipitous drop in union membership as a percentage of the workforce, the recent increase in immigration to the United States, and the expanding globalization of labor markets.

Quantitative Importance

A second justification for labor economics is quantitative. About 65 percent of U.S. income flows to workers as wages and salaries. Ironically, in the capitalist economies of the world, the bulk of income is received not as capitalist income (profit, rent, and interest) but as wages! The primary source of income for the vast majority of households in the United States is from providing labor services. Quantitatively, labor is our most important economic resource.

Unique Characteristics

Finally, the markets in which labor services are “bought” and “sold” embody special characteristics and peculiarities calling for separate study. Labor market transactions are a far cry from product market transactions. As succinctly stated by the famous British economist Alfred Marshall,

It matters nothing to the seller of bricks whether they are to be used in building a palace or a sewer; but it matters a great deal to the seller of labor, who undertakes to perform a task of given difficulty, whether or not the place in which it is to be done is a wholesome and pleasant one, and whether or not his associates will be such as he cares to have.¹

Or as explained by a more recent observer,

The labor market is a rich and complicated place. When a worker takes a job he expects to earn a wage, but will also care about rates of wage growth, fringe benefits, levels of risk, retirement practices, pensions, promotion and layoff rules, seniority rights, and grievance procedures. In return the worker must give up some time, but he is also asked to upgrade his skills, train other workers, provide effort and ideas, and defer to authority in questions of how his time is spent.²

The complexity of labor markets means that the concepts of supply and demand must be substantially revised and reoriented when applied to labor markets. On the supply side, the labor services a worker “rents” to an employer are inseparable from the worker. Because a worker must spend 40 or so hours per week on the job delivering labor services, the nonmonetary facets of a job become extremely significant. Aside from remuneration, the worker is interested in a job’s health and safety features, the arduousness of the work, stability of employment, and opportunities for training and advancement. These nonmonetary characteristics may be as important as the direct pay. Indeed a worker’s social status, self-esteem, and independence may depend on the availability of labor market work. Thus, the supply decisions of workers are more complex than the supply concept that applies to product markets.

¹ Marshall, Alfred. *Principles of Economics*. Cambridge: Ravenio Books, 1936.

² Carmichael, H. Lorne. “Self-Enforcing Contracts, Shirking, and Life Cycle Incentives.” *The Journal of Economic Perspectives* 3, no. 4 (Autumn, 1989): 65–83. <https://doi.org/10.1257/jep.3.4.65>.

Similarly, whereas the demand for a product is based on the satisfaction or utility it yields, labor is demanded because of its contribution—its productivity—in creating goods and services. The demands for particular kinds of labor are derived from the demands for the products they produce. Society has a demand for automobile workers because there is a demand for automobiles. We have a demand for accountants because we value accounting services. The demand for labor is therefore an indirect or “derived” demand.

The point to be underscored is that an understanding of labor markets presumes an appreciation of the special attributes of labor supply and demand. Unique institutional considerations—such as labor unions and collective bargaining, the minimum wage, occupational licensing, and discrimination—all affect the functioning of labor markets and require special attention.

THE “OLD” AND THE “NEW”

The field of labor economics has long been recognized as an important area of study. But the content or subject matter of the field has changed dramatically in the past few decades. If you were to go to the library and examine a labor text published 40 or 45 years ago, you would find its orientation highly descriptive and historical. Its emphasis would be on the history of the labor movement, a recitation of labor law and salient court cases, the institutional structure of labor unions, and the scope and composition of collective bargaining agreements. In short, the “old” study of labor was descriptive, emphasizing historical developments, facts, institutions, and legal considerations. A primary reason for this approach was that the complexities of labor markets seemed to make them more or less immune to economic analysis. To be sure, labor markets and unemployment were accorded some attention, but the analysis was typically minimal and superficial.

This state of affairs has changed significantly in recent decades. Economists have achieved important analytic breakthroughs in studying labor markets and labor problems. As a result, economic analysis has crowded out historical, institutional, legal, and anecdotal material. Labor economics increasingly has become applied micro and macro theory. The present volume focuses on the techniques and understandings associated with the “new” labor economics. This is not to say, however, that all descriptive aspects of the field have been discarded. As noted earlier, the unique institutional features of labor markets are part of the justification for a special field of economics devoted to labor. Yet the focal point of our approach is the application of economic reasoning to labor markets and labor issues.

ECONOMIC PERSPECTIVE

Contemporary labor economics employs theories of *choice* to analyze and predict the behavior of labor market participants and the economic consequences of labor market activity. It attempts to answer such questions as these: Why do some people decide to work while others do not? Why do some prospective labor market participants choose to delay their labor force entry to attend college? Why do some employers employ few workers and much capital while others use many workers and little capital? Why do firms lay off some workers during recessions but retain others? Labor economists also examine the *outcomes* of the choices made in the labor market: Why do some workers earn \$10.00 an hour while others are paid \$25 or \$60 per hour? Why have women entered the labor force in record numbers during the past few decades? What impact, if any, does immigration have on the wages of native workers?

In short, contemporary labor economics focuses on choices—why they are made and how they generate particular outcomes. It therefore is important to be aware of three implicit assumptions underlying this *economic perspective*.

Relative Scarcity

We know that land, labor, capital, and entrepreneurial resources are scarce, or limited, relative to the many individual and collective wants of society. This relative scarcity dictates that society must choose how and for what purpose labor and other resources should be allocated. Similarly, individuals face a relative scarcity of time and spendable income. They must choose, for example, how much time to devote to jobs, to work in the home, and to leisure. They must choose how much present income (goods and services) to forgo for the prospect of obtaining higher future earnings. They must decide which goods and services to buy and, consequently, which to forgo. Relative scarcity—of time, personal income, and societal resources—is a basic element of the economic perspective.

Purposeful Behavior

Because relative scarcity keeps us from having everything we want, we are forced to choose among alternatives. For every choice, say to work longer hours or to institute a national service program, something is gained and something else is sacrificed. This sacrifice—forgone leisure, forgone private sector output—is an *opportunity cost*.

The economic perspective assumes that people compare costs with expected benefits. A worker will compare the extra utility (income) gained from an added hour of work with the value of the lost leisure. A firm will compare the added revenue from hiring a worker with the extra wage cost, and so forth. Thus, contemporary labor economics looks for purpose, or rationality, in labor market behavior and, for that matter, in many labor market institutions. Relative scarcity necessitates that choices be made; the economic perspective assumes that these choices will be made purposefully rather than randomly or in a chaotic way.

To say that labor market participants behave rationally, however, is not to say that they always achieve their intended goals. Information is imperfect or imperfectly processed; unforeseen events occur; choices made by others positively or adversely affect the outcomes of our own choices. But even choices that in retrospect were “poor” ones are assumed to have been made with the *expectation* of net gain.

Adaptability

Because relative scarcity forces people to make choices, and because choices are made purposefully, labor market participants respond to changes in perceived costs and benefits. Some workers will adjust the number of hours they desire to work when the wage rate they receive changes. Fewer people will decide to obtain a specific skill when the training cost rises or when the wage paid to those already possessing the skill falls. Firms will adjust their hiring when the demand for their product changes. Some workers will migrate from lower-paid regions to areas experiencing a significant rise in labor demand and therefore in wage rates. Union officials will lower their wage demands when the economy encounters recession and unemployment among union workers is high. Restated, the economic perspective assumes that workers, employers, and other labor market participants *adapt, adjust, or alter* their behaviors in response to changes in expected costs and expected gains. Contemporary labor economics sorts out these responses, finds predictable patterns, and by so doing, adds to our understanding of the economy.

These three assumptions of the economic perspective—the scarcity of resources relative to wants, purposeful behavior based on comparisons of benefits and costs, and the adaptability of behavior to changing circumstances—underlie all that follows in this text.

1.1 Quick Review

- Labor economics examines the organization, functioning, and outcomes of labor markets; the decisions of prospective and present labor market participants; and the public policies relating to the employment and payment of labor resources.
- The new labor economics employs the economic perspective, which assumes that resources are scarce relative to wants, individuals make choices by comparing costs and benefits, and people respond to incentives and disincentives.

Your Turn

Which of these two statements best reflects the economic perspective? “Most workers in America would retire at age 65 even without pensions because this age has long been the customary retirement age.” “Most workers in America retire at age 65 because at this age they become eligible for private pensions and full Social Security benefits.” (Answer: See page 540.)

WW1.1

1.1 World of Work

Gary Becker: Nobel Laureate

Few economists were surprised when the University of Chicago’s Gary Becker was named the winner of the 1992 Nobel Prize in economics. More than any other recent economist, Becker has extended the boundaries of economic analysis.

Becker’s theories presume that individuals or households make purposeful choices in attempting to maximize their utility and that these choices depend heavily on incentives. His basic contribution has been to apply this perspective to aspects of human behavior that traditionally were believed to be noneconomic.

Becker’s theory of marriage is illustrative. People allegedly seek marriage partners much as they search for jobs or decide which products to buy. Couples stop far short of obtaining complete information about each other before marriage.

At some point the costs of obtaining additional information—the main cost being the benefits of marriage forgone—exceed the extra benefits of more information. After being married for months or years, however, a person learns additional information about his or her spouse’s personality and attributes. This new information in some cases places the spouse in a less favorable light, ending the optimality of the original match and causing divorce.

Becker views the household as a little factory, allocating its time between labor market work, household production, and household consumption in producing utility-providing “commodities” (Chapter 3). Households have fewer children—time-intensive “durable goods”—as the “price” of children rises. A major component of this “price” is the forgone earnings associated with having and caring for children.

Becker’s theory of human capital (Chapter 4) holds that decisions to invest in education and training are analogous to decisions by firms to

purchase physical capital. Applying his approach to crime, Becker concludes that criminals rationally choose between crime and normal labor market work. Also, they respond to changes in costs and benefits, just as noncriminals do. Becker analyzes labor market discrimination (Chapter 14) as a preference or “taste” for which the discriminator is willing to pay.

Because Becker has invaded the traditional territories of sociology, anthropology, demography,

and law, he has been called an “intellectual imperialist” (by both supporters and detractors). But as stated by Summers, there can be no doubt that Becker “has profoundly influenced the future of economics by demonstrating the breadth, range, and power of economic reasoning in a context that seemed unimagined a generation ago.”³

OVERVIEW

Before plunging into the details of specific topics, let’s pause for a brief overview of our field of study. This overview is useful for two closely related reasons. First, it provides a sense of direction. More specifically, it reveals the logic underlying the sequence of topics constituting each chapter. Second, the overview shows how the subject matter of any particular chapter relates to other chapters.⁴

Figure 1.1 is helpful in presenting the overview. Reading from left to right, we note that most aspects of labor economics can be fitted without much arbitrariness under the headings of “microeconomics” or “macroeconomics.” *Microeconomics* is concerned with the decisions of individual economic units and the functioning of specific markets. On the other hand, *macroeconomics* is concerned with the economy as a whole or with basic aggregates that constitute the economy. The determination of the wage rate and the level of employment in a particular market—carpenters in Oshkosh or retail clerks in Okoboji—are clearly microeconomic matters. In contrast, the average level of real wages, the aggregate levels of employment and unemployment, and the overall price level are issues in macroeconomics. Because some topics straddle micro- and macroeconomics, the subject matter of individual chapters will sometimes pertain to both aspects of economics. However, it is fair to say that Chapters 2 to 15 address topics that are “mainly micro.” Similarly, Chapters 16 to 18 are “mainly macro.”

Figure 1.1 reemphasizes that microeconomics stresses the working of individual markets. The goal of Chapters 2 to 6 is to develop and bring together the concepts that underlie labor supply and demand. Specifically, in Chapter 2 we examine the simple theory of labor supply. Here we analyze the basic factors that determine whether a person will participate in the labor force and, if so, the number of hours that the individual would prefer to work. We also consider how various pay schemes and income maintenance programs might affect the person’s decision to supply labor services.

In Chapter 3 we consider the major determinants of the aggregate amount of labor supplied: population, the labor force participation rates of various demographic groups, and hours of work. In particular, we examine labor supply from a household perspective and explore reasons for the rapid increase in the labor force participation of married women.

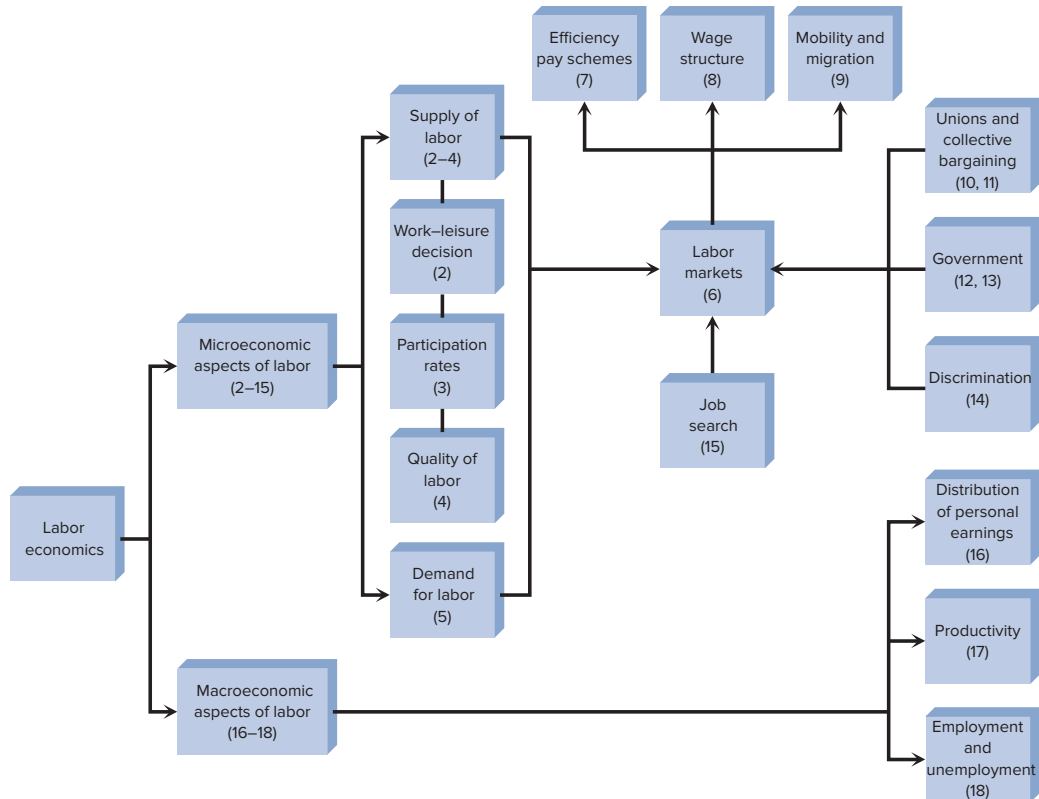
Chapter 4 introduces a qualitative dimension to labor supply. Workers can provide more productive effort if they have training. Thus, in Chapter 4 we examine the decision to invest in human capital—that is, in education and training—and explain why it is rational for different individuals to invest in different quantities of human capital.

³ Summers, Lawrence. “An Economist for the Common Man.” *BusinessWeek*, October 26, 1992.

⁴ This text covers more topics in economics than most instructors will choose to cover in a single course. Also note that chapters and topics can be logically sequenced in numerous ways.

FIGURE 1.1 An Overview of Labor Economics

This diagram shows how the chapters of this volume are divided between microeconomic and macroeconomic topics. Microeconomics focuses on the determinants of labor supply and demand and how supply and demand interact to determine wage rates and employment in various labor markets. In these labor markets, the types and composition of pay are determined, as is the wage structure. Some wage differences persist; others are eroded by mobility and migration. Labor unions, government, and discrimination all affect labor markets through either supply or demand. Macroeconomics stresses the aggregative aspects of labor markets and, in particular, the distribution of earnings, labor productivity, and the overall level of employment.



We turn to the demand side of the labor market in Chapter 5. Here we systematically derive the short-run labor demand curve, explaining how the curve varies between a firm that is selling its product competitively and one that is not. The notion of a long-run demand curve is also explored, as is the concept of wage elasticity of demand. Several short applications of demand and elasticity then follow.

Chapter 6 combines labor supply and labor demand to explain how the equilibrium wage rate and level of employment are determined. An array of market models is presented, ranging from a basic perfectly competitive model to relatively complex bilateral monopoly and “cobweb” models. Because of the importance of using scarce resources prudently, the emphasis in Chapter 6 is on the efficiency with which labor is allocated. Is the socially desirable or “right” amount of labor employed in a particular labor market? If not, what is the efficiency loss to society?

Chapters 7 to 9 are important elaborations and modifications of Chapter 6’s discussion of the working conditions and outcomes of labor markets. In Chapter 6 worker compensation is treated as a standard hourly wage rate, such as \$10 per hour. In Chapter 7 we recognize that worker compensation also involves a whole range of fringe benefits, including health insurance, paid vacations, sick leave, contributions to pensions, and so

forth. We discuss why different compensation packages might appeal to different workers. More important, Chapter 7 explains how pay schemes might be designed to promote worker efficiency and productivity.

In Chapter 8 we confront the complex topic of the wage structure. Why do different workers receive different wages? We find that wage differences are traceable to such factors as the varying working conditions and skill requirements of jobs, differences in the human capital and job preferences of workers, and imperfections in labor mobility and the flow of job information.

Chapter 9 continues our elaboration of the labor market, explaining how the movement of labor—from employer to employer, occupation to occupation, and place to place—can contribute to economic efficiency. This mobility is analyzed as an investment in human capital and has a variety of economic ramifications.

As Figure 1.1 suggests, Chapters 10 to 15 focus on a variety of real-world considerations that have a pervasive and profound impact on how wages are determined and how labor markets operate. Specifically, in these chapters we examine how labor unions, government, and discrimination affect labor markets. Chapters 10 and 11 are concerned with unions and collective bargaining. In Chapter 10 we explore the demographics of trade union membership, discuss the size and institutional structure of the labor movement, and present models of the wage bargaining process and strike activity. Chapter 11 is devoted to the effects of unions and collective bargaining on the operation of labor markets. The discussion focuses on the impact of unions on wage rates, efficiency and productivity, firm profitability, and the distribution of earnings.

The direct and subtle ways in which government influences labor markets are the subject matter of Chapters 12 and 13. Chapter 12 considers government as a direct employer of labor and explores how government's fiscal functions affect labor markets. Specifically, we seek to determine how government expenditures and taxes alter wages and employment. In Chapter 13 our attention shifts to the impact of the legislative and regulatory functions of government on labor markets. What are the implications, for example, of minimum wage legislation and regulations concerning worker health and safety?

In addition to labor unions and government, the “institution” of discrimination greatly affects labor markets. Thus, Chapter 14 presents facts and figures about differences in pay by race and gender, introduces several models of race and gender discrimination, and discusses how many of the observed gender and racial wage differences result from discrimination. This chapter also examines antidiscrimination policies and issues in some detail.

Job search behavior has important implications for issues such as unemployment and economic efficiency. Thus, Chapter 15 is devoted to job search within as well as outside a firm.

The next three chapters deal primarily with macroeconomic aspects and outcomes of labor markets. The personal distribution of earnings is the subject of Chapter 16. Here we discuss alternative ways of portraying the overall earnings distribution and measuring the degree of observed inequality. We then offer explanations for the pattern of earnings and discuss related topics such as the degree of mobility within the earnings distribution and the recent trend toward greater earnings inequality.

In Chapter 17 we consider productivity for the important reason that the average levels of real wages—and thus living levels—are intimately related to it. The factors that contribute to the growth of productivity are examined, as are the systematic changes in productivity that occur during the business cycle. The relationships of changes in productivity to the price level and the level of employment are also explained.

Chapter 18 is devoted to the problem of unemployment. Among other things, distinctions are made between frictional, structural, and cyclic unemployment. The distribution of unemployment by occupations and by demographic groups is considered, as are a variety of public policies designed to alleviate unemployment.

The appendix falls outside Figure 1.1's overview, but it is important for staying aware of future developments in labor economics and continuing the study of the field. It lists and discusses sources of labor-related

statistics; discusses bibliographic, technical, and nontechnical journals in the field; and cites advanced textbooks in labor economics along with books in the closely related fields of labor relations, collective bargaining, and labor law. Students doing term papers or other written assignments in labor economics will want to read this appendix at the outset. Appendix Table 1 lists numerous potential term paper topics that may be of interest.

PAYOFFS

What benefits might you derive from studying labor economics? The payoffs from a basic understanding of the field may be both personal and social. Labor economics yields information and develops analytic tools that may be useful in making personal and managerial decisions relevant to labor markets. Also, a grasp of the field puts you in a better position as a citizen and voter to develop informed positions on labor market issues and policies.

Personal Perspective

At the personal level, the vast majority of readers have already been labor market participants. You have worked summers, in part-time jobs, on your family farm, or perhaps in a school-related internship. Most of you will receive the bulk of your future incomes from the labor market. Thus, many of the topics addressed in this book will have immediate relevance to you. Such topics as job search, unemployment, migration, discrimination, unionism, and labor productivity, to enumerate only a few, will take on new meaning and relevance. For example, if you become a public school-teacher or a state employee, what might you personally expect to gain in terms of salary and fringe benefits by unionization? To what extent does a college education contribute to higher earnings? That is, what rate of return can you expect from investing in higher education? What are the peculiarities of labor markets for college-trained workers? If you are a woman or a member of a minority group, how might discrimination affect your access to specific occupations and your earnings? Similarly, some of you will find yourselves in managerial positions with responsibilities for personnel and labor relations. The background and analytic perspective provided by an understanding of labor economics should be useful in making rational managerial decisions concerning the hiring, firing, promotion, training, and remuneration of workers.

Social Perspective

From a societal viewpoint, a knowledge of labor economics should help make you a more informed citizen and more intelligent voter. The issues here are broad in scope and impact. Should unionization be encouraged or discouraged? Are unions on balance positive or negative forces in our society? Should the government place limits on the salaries of executives, athletes, and entertainers? How might a given change in the tax structure—for example, to a more progressive federal income tax—affect incentives to work? Should the government restrict outsourcing of American jobs to firms or subsidiaries abroad? Should U.S. immigration policies be liberalized or made more restrictive? Should industrially advanced countries use international trade agreements to force developing countries to increase minimum wages, improve working conditions, and meet other labor standards? Should formal education and vocational training be given more or less public support? Is it desirable for employers to pay teenagers wage rates that are lower than the legislated minimum wage? Although detailed and definitive answers to such questions cannot be guaranteed, an understanding of labor economics will provide valuable insights that should help you formulate opinions on these and similar issues.