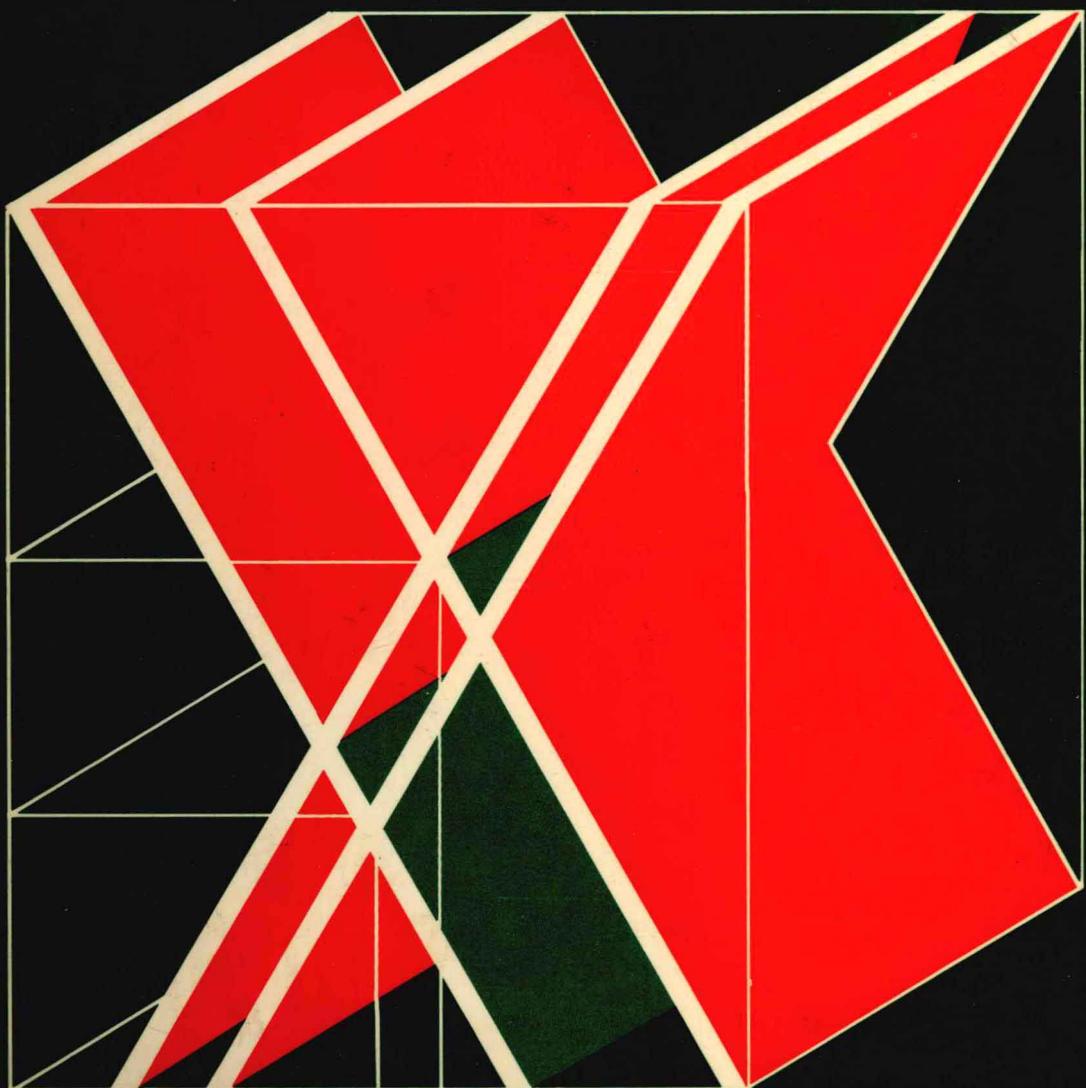


C O N T E M P O R A R Y  
L A B O R  
E C O N O M I C S

CAMPBELL R. McCONNELL • STANLEY L. BRUE



---

C O N T E M P O R A R Y  
L A B O R  
E C O N O M I C S

---

**CAMPBELL R. McCONNELL**

Professor of Economics  
University of Nebraska, Lincoln

**STANLEY L. BRUE**

Professor of Economics  
Pacific Lutheran University

**McGraw-Hill Book Company**

---

New York St. Louis San Francisco Auckland Bogotá Hamburg Johannesburg London Madrid  
Mexico Montreal New Delhi Panama Paris São Paulo Singapore Sydney Tokyo Toronto

## **CONTEMPORARY LABOR ECONOMICS**

Copyright © 1986 by McGraw-Hill, Inc. All rights reserved.  
Printed in the United States of America. Except as permitted under the  
United States Copyright Act of 1976, no part of this publication may be  
reproduced or distributed in any form or by any means, or stored in a data  
base or retrieval system, without the prior written permission of the  
publisher.

2 3 4 5 6 7 8 9 0 D O C D O C 8 9 8 7 6

**ISBN 0-07-044911-2**

This book was set in Meridien by Bi-Comp, Incorporated.  
The editors were Patricia A. Mitchell, Paul V. Short, and Edwin Hanson;  
the designer was Anne Canevari Green;  
the production supervisor was Diane Renda.  
The drawings were done by Fine Line Illustrations, Inc.  
R. R. Donnelley & Sons Company was printer and binder.

### **Library of Congress Cataloging-in-Publication Data**

McConnell, Campbell R.

Contemporary labor economics.

Includes indexes.

1. Labor economics. I. Brue, Stanley L.,  
date . II. Title.

HD4901.M15 1986 331 85-16662

ISBN 0-07-044911-2

**CONTEMPORARY LABOR ECONOMICS**

---

## ABOUT THE AUTHORS

**C**ampbell R. McConnell earned his Ph.D. from the University of Iowa after receiving degrees from Cornell College and the University of Illinois. He is currently Carl Adolph Happold Professor of Economics at the University of Nebraska–Lincoln, where he has taught since 1953. He is also the author of *Economics*, currently in its ninth edition and the leading introductory economics textbook. His primary areas of interest are economic education and labor economics. He has an impressive collection of jazz recordings and enjoys reading jazz history.

**S**tanley L. Brue did his undergraduate work at Augustana College (SD) and received his Ph.D. from the University of Nebraska–Lincoln, where he was a student of Professor McConnell's. He has taught at Pacific Lutheran University since 1971. He is coauthor (with D. R. Wentworth) of *Economic Scenes: Theory in Today's World* and his main areas of specialization are labor economics and the history of economic thought. For relaxation he enjoys salmon fishing and skiing trips with his family.

*To Mem  
and  
Terri and Craig*

# PREFACE

## BACKGROUND AND PURPOSE

There can be no doubt that the winds of change have permeated the field of labor economics. Labor economics has increasingly become an area for the application of micro and macro theory. To make room for such analytical applications, economists are making less and less use of the extensive historical, legal, and institutional materials which dominated the field two or three decades ago. Labor economics has become less and less an area tangential to the core of analytical economics and increasingly a major component of that core.

It is the fundamental purpose of the present volume to capture the content and the attendant excitement of these changes. To put it bluntly, we strive for a logically organized and clearly presented statement of the “new” labor economics. This is not to say that such topics as labor law and the structure of unions and collective bargaining have been entirely crowded out. These subjects remain, but only in a context which explains their impact upon the functioning of labor markets.

The level of analysis is tailored for the undergraduate student who has completed a reasonably rigorous sequence on macro and micro principles. The book is designed for a one-semester or one-quarter course, although appropriate supplementation can make it usable as the focal point of a two-semester course.

## ORGANIZATION AND CONTENT

The subject matter generally proceeds from micro to macro topics. Figure 1-1 and the Overview section of Chapter 1 outline the organizational framework in some detail. Hence, our synopsis at this point will be brief.

Chapters 2 to 6 are designed to provide students with a no-nonsense, bare-bones understanding of how orthodox or neoclassical economists conceive of labor markets. Specifically, Chapters 2 to 4 explore the supply side and Chapter 5 the demand side of labor markets. Chapter 6 combines supply and demand to delineate a variety of labor market models, emphasizing the efficiency aspects of each.

Chapters 7 to 11 introduce institutions which influence the functioning of individual labor markets. Hence, Chapters 7 and 8 add unions and collective bargaining to the discussion and stress the effects of unions upon wages, efficiency, and the distribution of earnings. Chapters 9 and 10 embody a systematic and comprehensive analysis of the direct and indirect impacts of government upon labor markets. Chapter 11 is devoted to the institution of discrimination and the many ways it affects the functioning of labor markets.

In Chapters 12 to 14 we concentrate primarily upon labor market outcomes. Chapter 12 explores the general character of the wage structure which labor markets yield. Similarly, the personal distribution of earnings is examined in Chapter 13. In Chapter 14 we examine the geographic movement of labor resulting from the system of incentives inherent in labor markets and assess how that movement relates to efficiency over time.

While it is accurate to say that our approach is "orthodox," "neoclassical," or "mainstream," we feel that it is important for students to be aware of alternative conceptions of labor markets. Hence, in Chapter 15 we summarize the "old" institutionalism of the immediate post-World War II period, outline the "new" institutionalism of internal labor market theory, and explore the theory of dual or segmented labor markets.

Chapters 16 to 19 are mainly, but not exclusively, macro. The issue of labor productivity is accorded extensive treatment in Chapter 16. Chapter 17 embodies a rigorous discussion of several theories of labor's share of the national income. The next two chapters are devoted to the core macro topics of unemployment and inflation. Chapter 18 features a simplified job search model. In Chapter 19 we have resisted a generalized discussion of inflation in order to concentrate upon the relationship between wage determination and the price level.

Chapter 20 might be regarded as optional, although we feel an overview of the labor sector in the Soviet Union enhances a student's appreciation of labor markets and labor issues in the United States.

Finally, Chapter 21 serves as a springboard for students desiring to supplement their newly acquired knowledge of labor economics. The chapter should also prove useful to students doing term papers or projects in this or related courses. By delineating sources of labor-related data, listing and discussing the major journals and nontechnical publications in the field, and citing closely related books, it should help the interested student to avoid obsolescence of his or her human capital investment in labor economics!

## **DISTINGUISHING FEATURES**

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

**Content.** In the area of subject matter the emphasis in Chapter 6 upon allocative efficiency is both unique and desirable. The efficiency emphasis makes students realize that *society* has an interest in how labor markets function. The systematic and comprehensive analysis of government's impact upon labor markets found in Chapters 9 and 10 also set this book apart. Chapter 13 confines its focus almost entirely to the personal distribution of *earnings*, as compared to the usual discussion of the distribution of *income* and the poverty problem. While we recognize that the preferences of instructors vary on this matter, we believe our approach to be more relevant for a textbook on *labor* economics. In our treatment of the critiques of orthodoxy in Chapter 15 we have taken care to treat the

“old” institutionalism, internal labor market theory, and labor market segmentation as logical outgrowths of one another, rather than as disparate topics. Indeed, we observe that many competing books give these topics only fleeting mention. 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 16. Chapters 18 and 19 on unemployment and wages and inflation embody the modern aggregate supply and demand model now common in principles texts to discuss the contending views of economists concerning search versus cyclical unemployment and wage-push versus demand-pull inflation. And, to our knowledge no other labor text embodies a separate analytically oriented chapter on the labor sector of the U.S.S.R. Finally, Chapter 21 provides a comprehensive discussion of information sources which can be used as a springboard to widen and deepen the reader’s understanding of the field.

**Organization and Presentation.** We are aware that this book will face intense competition from similar texts authored by distinguished labor economists. Our basic strategy for meeting this competition has been to put great stress upon the logical organization of subject matter, not only chapter by chapter but within each chapter. It is our hope that our earlier discussion of Organization and Content and a reading of the Overview section of Chapter 1 will convince most instructors that we have given a great deal of thought to the sequence of chapters. What the world does *not* need is a new labor text comprised of twenty or so disparate and unrelated chapters. Hence, 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 directional flow of the subject matter.

Many of the 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.

**Pedagogical Features.** We have included a variety of pedagogical devices which we feel will make significant contributions to student understanding. First, the introduction of each chapter contains a paragraph or so stating the goals of the chapter and, in many cases, relating it to prior or future chapters. Second, end-of-chapter summaries provide a concise, pointed recapitulation of each chapter. Third, ample lists of questions are provided at the end of each chapter. These range from questions on basic terminology and “open-ended” discussion questions to numerical problems which permit students to test their understanding of basic analytical concepts. Fourth, a list of basic references is provided at the end of each chapter for those ambitious students who seek greater breadth and depth of understanding. Fifth, we have utilized the inside covers of the book to present

relevant historical statistics which we hope will be valuable to both students and instructors. Furthermore, as indicated previously, the final chapter of the book lists and discusses various avenues by which the interested reader can update statistical materials found in the book and continue the learning process beyond the course. Finally, we have included short minireadings under the heading "Time and One-Half" at the close of each chapter. Some are special applications or cases pertinent to the chapter's subject matter. Others are present views which contrast with or dissent from positions presented in a chapter. Others are simply in-depth extensions of subject matter. The Time and One-Half minireadings are purposely located at the end of each chapter so as not to interrupt the continuity of the text material.

To our knowledge *Contemporary Labor Economics* is the only text in the field which is accompanied by a comprehensive *Student Workbook*, which has been prepared by Professor Norris Peterson of Pacific Lutheran University. The *Workbook* contains behavioral objectives and a chapter-by-chapter glossary in addition to problems, exercises, and multiple-choice questions. The philosophy of the workbook is captured by the Chinese proverb inside its cover: "I hear and I forget, I see and I remember, I *do* and I understand." It is our belief that the *Student Workbook* will prove to be a valuable aid both to the instructor and to students. Professor Peterson's considerable expertise is also reflected in the *Instructor's Manual* which he has authored. Among other features, it contains chapter outlines and learning objectives, answers to selected end-of-chapter text questions, answers to the problems and multiple-choice questions in the *Workbook* (answers to odd-numbered questions also are contained in the *Workbook* itself), and several sample examinations comprised of essay and multiple-choice questions.

## ACKNOWLEDGMENTS

We would like to express our thanks for the many useful comments and suggestions provided by colleagues who reviewed all or portions of this text during the course of its development, especially to Clive Bull, New York University; Robert Catlett, Emporia State University; David H. Ciscel, Memphis State University; Michael D. Harsh, Randolph-Macon College; Carl P. Kaiser, Washington and Lee University; John Marcis, Virginia Commonwealth University; J. Peter Mattila, Iowa State University; Norris Peterson, Pacific Lutheran University; Jerry Petr, University of Nebraska–Lincoln; Blair Ruble, Social Science Research Council; Robert Simonson, Mankato State University; Wade Thomas, Ithaca College; William Torrence, University of Nebraska–Lincoln; and Ronald S. Warren, Jr., University of Georgia.

This has truly been a joint endeavor. Hence, we see no gracious means by which either author can avoid the traditional responsibility for errors of commission or omission.

**Campbell R. McConnell**  
**Stanley L. Brue**

# CONTENTS

Preface	xxiii
<b>1 LABOR ECONOMICS: INTRODUCTION AND OVERVIEW . . . . .</b>	<b>1</b>
Importance of Labor Economics	1
The “Old” and the “New”	2
Overview	3
Payoffs	7
TIME AND ONE-HALF: The Choice/Theoretic Assumptions	10
<b>2 THE THEORY OF INDIVIDUAL LABOR SUPPLY . . .</b>	<b>13</b>
The Work-Leisure Decision: Basic Model	14
<i>Indifference Curves</i>	14
<i>Budget Constraint</i>	17
<i>Utility Maximization</i>	18
<i>Wage Rate Changes: Income and Substitution Effects</i>	19
<i>Isolating Income and Substitution Effects</i>	22
<i>Rationale for Backward-Bending Supply Curve</i>	24
<i>Empirical Evidence</i>	24
<i>Elasticity versus Changes in Labor Supply</i>	25
Applying and Extending the Model	26
<i>Nonparticipants</i>	27
<i>Standard Workday: Overemployment and Under-         employment</i>	29
<i>Premium Pay versus Straight Time</i>	31
<i>Income Maintenance Programs</i>	33
TIME AND ONE-HALF: The SIME/DIME Experiments	40

<b>3</b>	<b>LABOR FORCE PARTICIPATION RATES AND HOURS OF WORK. . . . .</b>	<b>43</b>
	Becker's Model: The Allocation of Time	44
	<i>Two Fundamental Changes</i>	44
	<i>Income and Substitution Effects Revisited</i>	47
	Participation Rates: Defined and Measured	48
	Secular Trend of Participation Rates	49
	<i>Rising Female Participation Rates</i>	50
	<i>Declining Male Participation Rates</i>	54
	<i>Causal or Spurious?</i>	58
	Cyclical Changes in Participation Rates	59
	<i>Added-Worker Effect</i>	59
	<i>Discouraged-Worker Effect</i>	59
	<i>Procyclical Labor Force Changes</i>	59
	Hours of Work: Two Trends	61
	<i>Workweek Decline, 1900–1940</i>	62
	<i>Post-World War II: Workweek Stability</i>	62
	TIME AND ONE-HALF: Economics and Fertility	67
<b>4</b>	<b>LABOR QUALITY: INVESTING IN HUMAN CAPITAL . . . . .</b>	<b>69</b>
	Investment in Human Capital: Concept and Data	70
	The Human Capital Model	71
	<i>Discounting and Net Present Value</i>	72
	<i>Internal Rate of Return</i>	75
	<i>Generalizations and Implications</i>	76
	<i>Rate-of-Return Studies</i>	78
	<i>Private versus Social Perspective</i>	80
	Markets for the College-Trained Work Force	81

Human Capital Investment and the Distribution of Earnings	82
<i>Diminishing Rates of Return</i>	83
<i>Demand, Supply, and Equilibrium</i>	84
<i>Differences in Human Capital Investment</i>	85
<i>Capital Market Imperfections</i>	88
On-the-Job Training	89
<i>General and Specific Training</i>	89
<i>Distributing Training Costs</i>	90
<i>Worker Retention</i>	92
Criticisms of Human Capital Theory	92
<i>Investment or Consumption?</i>	93
<i>Nonwage Benefits</i>	93
<i>The Ability Problem</i>	93
<i>The Screening Hypothesis</i>	94
TIME AND ONE-HALF: The Marxian Critique of Human Capital Theory	100

## **5 THE DEMAND FOR LABOR. . . . . 103**

A Firm's Short-Run Production Function	104
Short-Run Demand for Labor: The Perfectly Competitive Seller	108
Short-Run Demand for Labor: The Imperfectly Competitive Seller	110
The Long-Run Demand for Labor	113
The Market Demand for Labor	115
Elasticity of Labor Demand	117
<i>The Elasticity Coefficient</i>	117
<i>The Total Wage Bill Rules</i>	118
<i>Determinants</i>	119
Changes in Demand for Labor	122
TIME AND ONE-HALF: Estimates of the Elasticity of Labor Demand	126

	Appendix to Chapter 5: Isoquant–Isocost Analysis of the Long-Run Demand for Labor	127
	<i>Isoquant Curves</i>	127
	<i>Isocost Curves</i>	129
	<i>The Cost-Minimizing Combination of Capital and Labor</i>	130
	<i>Deriving the Long-Run Labor Demand Curve</i>	131
<b>6</b>	<b>WAGE DETERMINATION AND RESOURCE ALLOCATION . . . . .</b>	<b>135</b>
	The Theory of a Perfectly Competitive Labor Market	135
	<i>The Labor Market</i>	136
	<i>The Hiring Decision by an Individual Firm</i>	140
	<i>Allocative Efficiency</i>	141
	Wage and Employment Determination: Monopoly in the Product Market	145
	Monopsony	147
	Union Techniques to Raise Wages	150
	<i>Increasing the Demand for Labor</i>	150
	<i>Restricting the Supply of Labor</i>	154
	<i>“Monopolizing” Labor Supply</i>	157
	Bilateral Monopoly	160
	Extending the Analysis	162
	TIME AND ONE-HALF: Pay and Performance in Professional Baseball	166
<b>7</b>	<b>LABOR UNIONS AND COLLECTIVE BARGAINING . . . . .</b>	<b>169</b>
	Labor Unionism: Facts and Figures	169
	<i>Who Belongs to Unions?</i>	169
	<i>Structure of Organized Labor</i>	172
	<i>Unionism’s Relative Decline</i>	176

Are Unions Maximizers?	179
Collective Bargaining: A Special Transaction	182
A Model of the Bargaining Process	184
<i>The Model</i>	184
<i>Implications</i>	186
TIME AND ONE-HALF: The Airline Unions: Diminished Bargaining Power?	194
<b>8 THE ECONOMIC IMPACT OF UNIONS . . . . .</b>	<b>197</b>
The Union Wage Advantage	197
<i>Preliminary Complications</i>	198
<i>Measuring the Wage Advantage</i>	199
<i>Empirical Evidence</i>	202
<i>Total Compensation: Wages plus Fringe Benefits</i>	207
Efficiency and Productivity	209
<i>Negative View</i>	210
<i>Positive View</i>	215
<i>Mixed Empirical Evidence</i>	217
Distribution of Earnings	218
<i>Increasing Inequality</i>	218
<i>Promoting Equality</i>	220
Other Issues: Inflation and Income Shares	222
TIME AND ONE-HALF: Freezes and "Givebacks": Wage Bargaining in the 1980s	225
<b>9 GOVERNMENT AND THE LABOR MARKET: EMPLOYMENT, EXPENDITURES, AND TAXATION . . . . .</b>	<b>229</b>
Public-Sector Employment and Wages	229
<i>Government Employment: Extent and Growth</i>	230
<i>Public- versus Private-Sector Pay</i>	232

The Military Sector: The Draft versus the Voluntary Army	233
<i>The Labor Economics of Military Conscription</i>	234
<i>The Voluntary, Market-Based Approach</i>	235
Nonpayroll Spending by Government: Impact on Labor	236
<i>Government Purchases of Private-Sector Output</i>	236
<i>Transfer Payments and Subsidies</i>	237
Labor Market Effects of Publicly Provided Goods and Services	238
<i>Impacts on Demand</i>	239
<i>Impacts on Supply</i>	240
Income Taxation and the Labor Market	241
<i>The Income Tax: Impact on Wages and Employment</i>	241
<i>The Income Tax and Individual Labor Supply</i>	243
The Incidence of the Payroll Tax	246
Excise Taxation and Labor Markets	248
<i>Direct Impact</i>	249
<i>Secondary Effects</i>	250
TIME AND ONE-HALF: Interest Arbitration in the Public Sector	254

## **10 GOVERNMENT AND THE LABOR MARKET: LEGISLATION AND REGULATION . . . . . 257**

Labor Law	257
<i>Labor Law and Union Membership</i>	258
<i>Labor Law and Bargaining Power</i>	261
The Minimum-Wage Law	263
<i>The Basic Model: Complete Coverage</i>	264

	<i>The Shock Effect</i>	265
	<i>Monopsony</i>	266
	<i>Two-Sector Model: Incomplete Coverage</i>	268
	<i>An Assessment of the Empirical Evidence</i>	270
	Occupational Health and Safety Regulation	272
	<i>Profit-Maximizing Level of Job Safety</i>	273
	<i>Society's Optimum Level of Job Safety</i>	275
	<i>The Occupational Safety and Health Act of 1970</i>	276
	Government as a Rent-Provider	278
	<i>Occupational Licensure</i>	280
	<i>Tariffs, Quotas, and "Domestic Content" Rules</i>	282
	TIME AND ONE-HALF: State Right-to-Work Laws	285
<b>11</b>	<b>LABOR MARKET DISCRIMINATION BASED ON RACE AND SEX . . . . .</b>	<b>289</b>
	Discrimination and Its Dimensions	289
	<i>Types of Discrimination</i>	290
	<i>Indicators of Discrimination: Casual Evidence</i>	291
	Theories of Labor Market Discrimination	295
	<i>Taste-for-Discrimination Model</i>	295
	<i>Market Power or Monopsony Model</i>	299
	<i>Theory of Statistical Discrimination</i>	302
	<i>The Crowding Model: Occupational Segregation</i>	304
	Unions and Discrimination	308
	Cause and Effect: Nondiscriminatory Factors	310
	<i>Rational Choice</i>	310
	<i>Discrimination as a Cause</i>	312
	<i>Evidence</i>	313
	Antidiscrimination Policies	314