

CONTENTS

	Preface	xv
	Introduction	xvii
	Acknowledgments	xxxiii
PART ONE	LABOR SUPPLY AND DEMAND BEHAVIORS	
CHAPTER 1	LABOR SUPPLY	3
	1 Facts About Labor Supply	5
	1.1 Basic Definitions	5
	1.2 The Trend in the Amount of Time Worked	5
	1.3 The Evolution of Participation Rates	7
	1.4 Part-Time Work by Women	10
	1.5 Leisure and Home Production	11
	2 The Neoclassical Theory of Labor Supply	13
	2.1 The Choice Between Consumption and Leisure	13
	2.2 Labor Supply with Household Production and Within the Family	23
	2.3 Life Cycle and Retirement	28
	3 Empirical Aspects of Labor Supply	38
	3.1 Estimation of the Structural Parameters of Labor Supply Models	39
	3.2 Main Results in the Literature	50
	4 Summary and Conclusion	58
	5 Related Topics in the Book	59
	6 Further Readings	59
	7 Appendices	60
	7.1 Properties of Indifference Curves	60
	7.2 The Properties of the Labor Supply Function	60
	7.3 Compensated and Noncompensated Elasticity	61
	7.4 Frischian, Hicksian, and Marshallian Elasticities of Labor Supply	62
	7.5 Sample Selection	68
CHAPTER 2	LABOR DEMAND	77
	1 The Static Theory of Labor Demand	81
	1.1 Labor Demand in the Short Run	81

1.2	The Substitution of Capital for Labor	83
1.3	Scale Effects	90
1.4	Beyond Two Inputs	95
1.5	The Trade-off Between Workers and Hours	101
2	From Theory to Estimate	113
2.1	Specific Functional Forms for Factor Demands	113
2.2	Main Issues and Main Results	116
3	Dynamic Labor Demand	118
3.1	The Costs of Labor Adjustment	119
3.2	The Adjustment of Employment in a Deterministic Environment	122
3.3	The Adjustment of Labor Demand in a Stochastic Environment	128
3.4	Empirical Aspects of Labor Demand in the Presence of Adjustment Costs	135
4	Summary and Conclusion	138
5	Related Topics in the Book	139
6	Further Readings	140
7	Appendices	140
7.1	The Convexity of Isoquants	140
7.2	The Properties of Cost Functions	141
7.3	The Optimal Value of Hours Worked	144

C H A P T E R	3	COMPETITIVE EQUILIBRIUM AND COMPENSATING WAGE DIFFERENTIALS	151
1		The Competitive Equilibrium	153
1.1		Perfect Competition with Identical Workers and Jobs of Equal Difficulty	153
1.2		The Question of Tax Incidence	156
1.3		The Effect of a Shock on Labor Supply	159
1.4		Other Evidence on the Impact of Massive Shocks	169
2		Compensating Wage Differentials and the Hedonic Theory of Wages	169
2.1		A Simple Model of Compensating Wage Differentials	170
2.2		Does the Hedonic Theory of Wages Really Apply?	174
3		Assortative Matching	180
3.1		A Competitive Equilibrium with Assignment	181
3.2		An Illustration: The Upswing in CEO Remuneration	184
4		Summary and Conclusion	187
5		Related Topics in the Book	187
6		Further Readings	188

C H A P T E R 4	EDUCATION AND HUMAN CAPITAL	191
1	Some Facts	192
1.1	Spending on Education	192
1.2	Graduation Rates	194
1.3	Education and Performance on the Labor Market	196
2	The Theory of Human Capital	198
2.1	The Relation Between Earnings and Human Capital	199
2.2	Schooling and Wage Earnings	201
2.3	Education, Training, and Life-Cycle Earnings	204
3	Education as a Signaling Device	208
3.1	A Model with Signaling	209
3.2	Overeducation or Undereducation?	212
4	Identifying the Causal Relation Between Education and Income	214
4.1	The Theory of Human Capital: From the Model to Estimates	215
4.2	The Selection Problem	218
5	The Returns to Education	230
5.1	Private Returns to Education	230
5.2	Private Nonpecuniary Returns to Education	236
5.3	Social Returns to Education	236
5.4	What Is Really Important in Education?	239
6	Summary and Conclusion	245
7	Related Topics in the Book	246
8	Further Readings	246
P A R T T W O	IMPERFECTLY COMPETITIVE LABOR MARKETS	251
C H A P T E R 5	JOB SEARCH	253
1	What Do Job Seekers Do?	255
1.1	How Job Seekers Spend Their Time	256
1.2	How Economic Incentives Affect the Time Dedicated to Job Search	257
1.3	Methods of Job Search: An Internet Revolution?	258
2	Basic Job Search Theory	260
2.1	The Basic Model	260
2.2	Extensions of the Basic Model	269
3	Empirical Aspects of Job Search	280
3.1	The Identification Strategy	281
3.2	Estimation	284
3.3	Main Results on the Determinants of Unemployment Duration	295

4	Search Frictions and Wage Differentials	300
4.1	Empirical Facts About Wage Differentials	300
4.2	The Equilibrium Search Model	303
5	Summary and Conclusion	316
6	Related Topics in the Book	317
7	Further Readings	317
C H A P T E R 6	CONTRACTS, RISK-SHARING, AND INCENTIVE	325
1	The Labor Contract	327
1.1	Explicit and Implicit Clauses	327
1.2	Complete and Incomplete Contracts	328
1.3	The Agency Model	329
2	Risk-Sharing	329
2.1	Symmetric or Verifiable Information	331
2.2	Asymmetric or Unverifiable Information	337
3	Incentive in the Presence of Verifiable Results	342
3.1	The Principal-Agent Model with Hidden Action	343
3.2	Should Remuneration Always Be Individualized?	349
3.3	Some Reasons That Performance Pay May Be Inefficient	351
4	Incentive in the Absence of Verifiable Results	355
4.1	Promotions and Tournaments	355
4.2	Seniority and Incentives	362
4.3	Efficiency Wage and Involuntary Unemployment	371
5	Social Preferences	377
5.1	Gift Exchange, Reciprocity	377
5.2	Intrinsic Motivation and Reputation	383
6	Summary and Conclusion	389
7	Related Topics in the Book	390
8	Further Readings	390
9	Appendix: The Properties of the Net Reputational Payoff Function	391
C H A P T E R 7	COLLECTIVE BARGAINING AND LABOR UNIONS	401
1	Facts About Unions and Collective Bargaining	403
1.1	The Characteristics and Importance of Collective Agreements	403
1.2	The Determinants of Union Density	409
2	Bargaining Theory	413
2.1	The Precursors	413
2.2	The Axiomatic Approach	415
2.3	The Strategic Approach	416
2.4	Labor Conflicts: Strikes and Arbitration	423

3	Models of Collective Bargaining for Wages, Employment, and Investment	426
3.1	The Objective of Labor Unions	426
3.2	Models of Collective Bargaining	431
3.3	Negotiations and Investment	445
4	Empirical Evidence Regarding the Consequences of Collective Bargaining	448
4.1	The Estimation of the Union Wage Gap by Ordinary Least Squares	448
4.2	Regression Discontinuity	452
4.3	Wage Inequalities	456
4.4	Employment	458
4.5	Productivity and Profits	462
4.6	Investment and Capital Structure	464
5	Summary and Conclusion	465
6	Related Topics in the Book	467
7	Further Readings	467
8	Appendices	467
8.1	Unicity of Solution (x^*, y^*)	467
8.2	The Correspondence Between the Nash Axiomatic Solution and the Subgame Perfect Equilibrium of Rubinstein's Model	468
C H A P T E R 8 D I S C R I M I N A T I O N		479
1	Some Facts About Wage and Employment Differences	481
1.1	Women Versus Men	481
1.2	Gaps Between Ethnic Groups	483
2	Theories of Discrimination	488
2.1	Taste Discrimination	488
2.2	Statistical Discrimination	491
3	Measuring Wage Discrimination	495
3.1	Estimations of Wage Equations: The Case of the Black-White Wage Gap	496
3.2	Decomposition Methods: The Case of the Gender Wage Gap	504
3.3	Direct Assessment of Discrimination	514
4	Empirical Results Regarding Discrimination	520
4.1	Race- and Ethnicity-Related Discrimination	520
4.2	Gender Discrimination	524
4.3	Sexual Orientation and Discrimination	528
4.4	The Premium for Beauty	532
5	How to Reduce Inequality Among Demographic Groups	534
5.1	Affirmative Action	535
5.2	The Importance of Premarket Factors	537

	6 Summary and Conclusion	541
	7 Related Topics in the Book	542
	8 Further Readings	543
PART THREE	JOB CREATION, JOB DESTRUCTION, AND UNEMPLOYMENT	551
CHAPTER 9	EQUILIBRIUM UNEMPLOYMENT	553
	1 Facts	555
	1.1 Unemployment, Employment, and Participation	555
	1.2 Jobs Flows	563
	1.3 Worker Flows	567
	2 The Competitive Model with Labor Adjustment Costs	578
	2.1 Job Reallocation and Labor Market Equilibrium	578
	2.2 The Efficiency of the Competitive Equilibrium	581
	2.3 The Limitations of the Competitive Model	582
	3 The Matching Model	583
	3.1 The Matching Function and the Beveridge Curve	583
	3.2 The Behavior of Firms and Workers	589
	3.3 Wage Bargaining	592
	3.4 Labor Market Equilibrium	596
	4 The Efficiency of Market Equilibrium	600
	4.1 Trading Externalities	600
	4.2 The Social Optimum	601
	4.3 Is Labor Market Equilibrium Necessarily Inefficient?	603
	5 Investment and Employment	606
	5.1 The Investment Decision	607
	5.2 Wage Bargaining	609
	5.3 The Adjustment Lag of Capital	610
	6 Unemployment Fluctuations	610
	6.1 The Dynamics of the Vacancies and Unemployment	610
	6.2 The Unemployment Volatility Puzzle	613
	7 Summary and Conclusion	620
	8 Related Topics in the Book	621
	9 Further Readings	621
CHAPTER 10	TECHNOLOGICAL PROGRESS, UNEMPLOYMENT, AND INEQUALITY	627
	1 Technological Progress and Unemployment	628
	1.1 Facts About Technological Progress, Labor Productivity, and Unemployment	629
	1.2 The Capitalization Effect	633
	1.3 Creative Destruction	638

2	Technological Progress and Inequality	646
2.1	Facts on Wages and Occupations	647
2.2	A Model with Skills and Tasks	649
2.3	What Empirical Research Tells Us	657
2.4	The Role of Institutions	666
2.5	Endogenous Technological Progress	668
3	Summary and Conclusion	670
4	Related Topics in the Book	670
5	Further Readings	671
6	Appendices	671
6.1	The Relation Between θ and g	671
6.2	Properties of the Assignment Model	672
C H A P T E R 11 GLOBALIZATION, EMPLOYMENT, AND INEQUALITY		677
1	International Trade and Labor Markets: Facts and Theories	679
1.1	The Rise in the Volume of Trade and Its Consequences	679
1.2	The Stolper and Samuelson Theorem	685
1.3	Firms' Selection and Trade	688
2	International Trade and Labor Markets: Empirical Evidence	697
2.1	Empirical Evidence at the Macro Level	697
2.2	Empirical Evidence at the Micro Level	708
3	Migrations	714
3.1	The Characteristics of Migrations	714
3.2	Theory	722
3.3	Empirical Results	726
4	Summary and Conclusion	733
5	Related Topics in the Book	734
6	Further Readings	734
7	Appendix	734
P A R T F O U R PUBLIC POLICIES		741
C H A P T E R 12 INCOME REDISTRIBUTION		743
1	Taxation and Transfers	745
1.1	The Main Features of Taxes in OECD Countries	745
1.2	The Effect of Taxes on the Labor Market	759
1.3	What Empirical Studies Tell Us	767
2	The Minimum Wage	786
2.1	A Constraint of Varying Strength from Country to Country	787
2.2	Minimum Wage and Employment	793

	2.3 The Employment Impact of the Minimum Wage in Light of Empirical Research	800
	2.4 The Quality of Jobs	808
	2.5 The Minimum Wage and Inequality	809
	2.6 Is the Minimum Wage an Efficient Way to Redistribute Income?	810
	3 Summary and Conclusion	811
	4 Related Topics in the Book	812
	5 Further Readings	813
	6 Appendix: Solution to the Rogerson and Wallenius Model	813
C H A P T E R 13	INSURANCE POLICIES	823
	1 Unemployment Insurance	824
	1.1 An Overview of Unemployment Insurance Systems	825
	1.2 The Basic Analysis of Optimal Unemployment Insurance	836
	1.3 The Optimal Level of Unemployment Benefit in Practice	840
	1.4 Optimal Unemployment Insurance in a Dynamic Environment	848
	2 Employment Protection	856
	2.1 What Is Employment Protection?	857
	2.2 The Effects of Employment Protection	862
	2.3 What Empirical Studies Show	873
	3 The Interplay Between Employment Protection and Unemployment Insurance	881
	3.1 The Protection of Workers from Arbitrary Dismissals	882
	3.2 The Internalization of the Social Costs of Labor Turnover	883
	4 Summary and Conclusion	889
	5 Related Topics in the Book	891
	6 Further Readings	891
	7 Appendix: The Coefficient of Relative Risk Aversion and the Coefficient of Relative Prudence	891
C H A P T E R 14	ACTIVE LABOR MARKET POLICIES	899
	1 Labor Market Policies: An International Perspective	900
	1.1 What Are Active Labor Market Policies?	900
	1.2 Differences Between Countries	904

2	Active Policies: Theoretical Analysis	913
2.1	Manpower Placement Services	913
2.2	Why Promote Training?	918
2.3	Employment Subsidies and the Creation of Public-Sector Jobs	929
2.4	The Equilibrium Effects of Targeted Measures	933
3	Evaluating Labor Market Policies	941
3.1	The Challenges Ahead: Selection Bias and Externalities	941
3.2	Evaluation Based on Controlled Experiments	944
3.3	Evaluation Based on Observational Data	952
4	The Main Empirical Results	964
4.1	An Overview: Results from Meta-analysis	964
4.2	Job Search Assistance and Monitoring	968
4.3	Training Programs	973
4.4	Hiring Subsidies	979
4.5	Temporary Public Jobs	981
4.6	Equilibrium Effects	982
5	Conclusion and Summary	983
6	Related Topics in the Book	985
7	Further Readings	985
	MATHEMATICAL APPENDICES	993
1	Appendix A: Static Optimization	993
1.1	Unconstrained and Constrained Maximum	993
1.2	The Technique of the Lagrangian	994
1.3	The Interpretation of the Lagrange Multipliers	995
1.4	Summary and Practical Guide to Static Optimization	995
1.5	The Envelope Theorem	996
2	Appendix B: Dynamic Optimization	998
2.1	The Optimal Control Problem	998
2.2	The First-Order Conditions	999
2.3	Infinite Horizon	1000
2.4	Calculus of Variations and the Euler Equation	1000
2.5	Summary and Practical Guide to Optimal Control	1001
3	Appendix C: Basic Notions Concerning Random Variables	1002
3.1	Random Variables and Probability Densities	1002
3.2	Independence and Correlation	1003
3.3	Some Common Probability Distributions	1004

4 Appendix D: The Poisson Process and the Value of an Asset	1006
4.1 The Poisson Process	1006
4.2 Evolution of the Value of an Asset	1007
4.3 An Alternative Proof	1008
NAME INDEX	1009
SUBJECT INDEX	1021