

Contents

A. Whodunit?	1
B. Unemployment — Facts and Theories	5
I. Aggregate Labor Market Trends	6
II. A Selective Survey of Unemployment Theories	21
1. The Natural Rate Hypothesis	22
2. Unions and Wage Bargaining	25
3. The Insider-Outsider Theory	27
4. Efficiency Wage Theories	28
5. Other Unemployment Theories.....	30
6. Theories Face Facts	31
III. Skill-Biased Technical Change versus Structural Change	32
1. Skill-Biased Technical Change.....	33
2. Structural Change	42
3. Structural Change of the Production Process.....	57
4. A Shift-Share Analysis	59
IV. Whodunit?	62
Appendix to Chapter B.....	64
1. Data from the German Socio-Economic Panel	64
2. Additional Empirical Figures and Tables	69
3. Diagrams.....	71
4. Derivation of the Shift-Share Equation.....	72
C. The Impact of Structural Change and Technical Change on the Labor Market	74
I. Demand Bias and Specific Technical Change.....	75
1. A Survey of Existing Models.....	75
2. A Demand Bias towards Skill-Intensive Goods	76

II. A Closed Economy with Perfect Labor Mobility	77
1. The Basic Model	77
2. Excursion: Numerical Methods in Economics.....	87
3. Parametrization	93
4. The Impact of Technical Change in the Flexible Labor Market Case	93
5. The Impact of Technical Change in the Rigid Labor Market Case.....	96
III. Interfirm Mobility.....	98
1. Introducing Interfirm Mobility Costs into the Basic Model ...	98
2. Labor Market Adjustment at Different Levels of Mobility Costs	100
3. Subsidizing Interfirm Mobility	104
IV. Upskilling	105
1. Upskilling of Labor Market Entrants	105
2. Upskilling of Mid-Career Workers.....	107
3. Subsidizing the Upskilling of Unskilled Mid-Career Workers	111
V. A Case for Intraindustry Trade.....	111
1. Extension of the Basic Model	112
2. Simulation Results	114
VI. Whodunit?	116
Appendix to Chapter C.....	118
1. Derivations.....	118
2. Tables.....	130
D. Structural Change and Unemployment Duration in Germany	145
I. Unemployment Duration as an Issue.....	146
II. A Survey of the Literature on Unemployment Duration	147
1. Studies with a Focus on Unemployment Benefits	148
2. Studies with a Focus on Training	152
3. Studies with a Focus on Individual Characteristics	153
4. Empirical Regularities and Open Questions	156

III. The Econometrics of Hazard Rate Analysis.....	157
1. Different Statistical Concepts to Describe a Spell Length.....	157
2. Spell Data and Censoring	158
3. Estimation by Maximum Likelihood	160
4. Parametric Distributions for the Duration.....	161
5. The Cox Proportional Hazard Model.....	163
IV. The Data	174
1. Unemployment Spells.....	174
2. Covariates	178
V. Regression Results	181
VI. Whodunit?	192
Appendix to Chapter D	193
1. Derivations.....	193
2. Descriptive Statistics for the Covariates	194
3. Estimation of the Expected Wage Loss	196
E. Summary and Implications for Economic Policy	199
I. Summary of Main Arguments.....	199
II. What to Do about It.....	202
1. Fallacies	202
2. Some Thoughts on Overcoming Unemployment in Germany	203
References	210
Index	229

List of Figures

Figure 1	— Labor Force, Employment, and Unemployment in West Germany	7
Figure 2	— Labor Force, Employment, and Unemployment in Germany	7
Figure 3	— Labor Force, Employment, and Unemployment in the United States.....	8
Figure 4	— Ratio of Compensation per Employee in Services to Compensation per Employee in Manufacturing.....	11
Figure 5	— Skill Composition of the Employed in West Germany	12
Figure 6	— Skill-Specific Unemployment Rates in West Germany.....	16
Figure 7	— The Skill Composition of the Unemployed	17
Figure 8	— Ratio of Skill-Specific Unemployment Rates to Skill-Specific Employment Rates in West Germany.....	18
Figure 9	— Wage Differentials by Skill.....	20
Figure 10	— Actors and Institutions in the Labor Market.....	21
Figure 11	— Engel Curves for Different Income Elasticities.....	44
Figure 12	— Labor Productivity Growth in Selected OECD Countries...	53
Figure 13	— Sectoral GDP Deflators in Selected OECD Countries	54
Figure 14	— The Occupational Decomposition of the Economy	60
Figure 15	— Individual Preferences	78
Figure 16	— The Production Tree.....	79
Figure 17	— Wages before and after Unskilled-Specific Technical Change in a Flexible Labor Market.....	94
Figure 18	— Wages before and after Skilled-Specific Technical Change in a Flexible Labor Market.....	95

Figure 19 — Wages before and after Neutral Technical Change in a Flexible Labor Market.....	95
Figure 20 — Unskilled-Specific Technical Change in a Rigid Labor Market	96
Figure 21 — Neutral Technical Change in a Rigid Labor Market	97
Figure 22 — Imperfect Interfirm Mobility	99
Figure 23 — Unskilled-Specific Technical Change and Interfirm Mobility Costs	102
Figure 24 — Neutral Technical Change and Interfirm Mobility Costs	103
Figure 25 — Upskilling of Previously Unskilled Workers after a Technology Shock	106
Figure 26 — Upskilling of Laid-off Unskilled Workers	108
Figure 27 — Upskilling in the Case of Unskilled-Specific Technical Change in a Rigid Labor Market	109
Figure 28 — Upskilling in the Case of Neutral Technical Change in a Rigid Labor Market	110
Figure 29 — Wages and Transport Costs (Identical Countries with Flexible Labor Markets).....	115
Figure 30 — Censoring.....	159
Figure 31 — Estimated Baseline Hazard from Mixing Two Constant Hazards.....	170
Figure 32 — The Distribution of Unemployment Spells in the Sample ...	177
Figure 33 — Number of Spells Beginning per Year in the Sample, 1985–1996.....	178
Figure A1 — Aggregate Unemployment Rate from the GSOEP and the OECD.....	66
Figure A2 — Changes in the Skill Composition of the Labor Force	69
Figure A3 — Skill-Specific Unemployment Rates for West Germany (Mikrozensus).....	70

XII *List of Figures*

Figure A4 — Indifference Curve of a Stone–Geary (SG) and a Cobb–Douglas (CD) Preference Function	71
Figure A5 — Disposable Income and Expenditure Shares for SG-Preferences	72

List of Tables

Table 1	— Sectoral Employment Growth in West Germany and the United States, 1960–1994	10
Table 2	— Changes in the Skill Composition by Sector, 1984–1997..	14
Table 3	— Changes in the Skill Composition by Occupation, 1984–1997.....	15
Table 4	— Literature Survey of the Skill Composition Debate	37
Table 5	— Employment Shares in Selected OECD Countries.....	50
Table 6	— Nominal GDP Shares in Selected OECD Countries	51
Table 7	— Real GDP Shares in Selected OECD Countries	52
Table 8	— Shift-Share Analysis: Change in the Skilled Share 1984/86 – 1995/97.....	61
Table 9	— The Impact of Interfirm Mobility Costs	100
Table 10	— Empirical Studies with a Focus on Unemployment Benefits.....	149
Table 11	— Empirical Studies with a Focus on Training and Skill Level.....	153
Table 12	— Empirical Studies with a Focus on Skill Level, Age, and Other Factors	154
Table 13	— Different Parametric Distributions for the Spell Length	162
Table 14	— Descriptive Statistics for Unemployment Duration.....	175
Table 15	— Description of the Data	179
Table 16	— Regression Results — Goodness-of-Fit: Transition into Employment, Both Genders	183
Table 17	— Regression Results — Coefficients: Transition into Employment, Both Genders	184

XIV *List of Tables*

Table 18	— Regression Results — Goodness-of-Fit: Transition into Employment, Males Only.....	188
Table 19	— Regression Results — Coefficients: Transition into Employment, Males Only.....	189
Table 20	— Regression Results — Goodness-of-Fit: Transition into Employment, Females Only.....	190
Table 21	— Regression Results — Coefficients: Transition into Employment, Females Only.....	191
Table A1	— Definition of the Skill Variable with Three Categories.....	65
Table A2	— Definition of the Skill Variable with Two Categories.....	65
Table A3	— Defining the Sectoral Structure of an Economy from the GSOEP.....	67
Table A4	— Aggregating Occupations from the GSOEP.....	67
Table A5	— Employment Changes by Skill and Sector, 1976–1989.....	71
Table A6	— Individual Preference Parameters and Population.....	130
Table A7	— Parameters of the Cost Functions.....	130
Table A8	— Flexible Labor Market, Individuals with SG-Preferences..	131
Table A9	— Flexible Labor Market, Individuals with CD-Preferences..	132
Table A10	— Identical Wage Growth.....	133
Table A11	— Interfirm Mobility Costs and Unskilled-Specific Technical Change.....	134
Table A12	— Interfirm Mobility Costs and Neutral Technical Change ...	135
Table A13	— Labor Supply Adjustment Through Upskilling (Constant Relative Wage).....	136
Table A14	— Upskilling in the Case of Unskilled-Specific Technical Change in a Flexible Labor Market.....	137
Table A15	— Upskilling in the Case of Neutral Technical Change in a Flexible Labor Market.....	138

Table A16 — Upskilling in the Case of Unskilled-Specific Technical Change in a Rigid Labor Market.....	139
Table A17 — Upskilling in the Case of Neutral Technical Change in a Rigid Labor Market.....	140
Table A18 — Intraindustry Trade, Identical Countries with Flexible Labor Markets	141
Table A19 — Intraindustry Trade, Identical Countries with Flexible Labor Markets and Neutral Technical Change.....	142
Table A20 — Intraindustry Trade, Countries of Different Size with Flexible Labor Markets	143
Table A21 — Intraindustry Trade, Countries of Identical Size with Rigid Labor Markets	144
Table A22 — Descriptive Statistics for the Covariates Capturing Structural Change.....	194
Table A23 — Descriptive Statistics for the Covariates Capturing Labor Market Institutions	195
Table A24 — Descriptive Statistics for the Covariates Capturing Individual Heterogeneity.....	196
Table A25 — Estimation Results for the Wage Loss Equation	198