CONTENTS

Preface 13

Chapter 1	An Overview of Regression Analysis 19
1.1	What Is Econometrics? 19
1.2	What Is Regression Analysis? 23
1.3	The Estimated Regression Equation 32
1.4	A Simple Example of Regression Analysis 35
1.5	Using Regression Analysis to Explain Housing Prices 38
1.6	Summary and Exercises 41
1.7	Appendix: Using Stata 48
Chapter 2	Ordinary Least Squares 53
2.1	Estimating Single-Independent-Variable
	Models with OLS 53
2.2	Estimating Multivariate Regression Models with OLS 58
2.3	Evaluating the Quality of a Regression Equation 67
2.4	Describing the Overall Fit of the Estimated Model 68
2.5	An Example of the Misuse of \overline{R}^2 73
2.6	Summary and Exercises 75
2.7	Appendix: Econometric Lab #1 81
Chapter 3	Learning to Use Regression Analysis 83
3.1	Steps in Applied Regression Analysis 84
3.2	Using Regression Analysis to Pick Restaurant Locations 91
3.3	Dummy Variables 97
3.4	Summary and Exercises 101
3.5	Appendix: Econometric Lab #2 107
Chapter 4	The Classical Model 110
4.1	The Classical Assumptions 110
4.2	The Sampling Distribution of $\hat{\beta}$ 118
4.3	The Gauss–Markov Theorem and the Properties
	of OLS Estimators 124
4.4	Standard Econometric Notation 125

4.5 Summary and Exercises

Chapter 5	Hypothesis Testing and Statistical Inference 133
5.1	What Is Hypothesis Testing? 134
5.2	The <i>t</i> -Test 139
5.3	Examples of <i>t</i> -Tests 147
5.4	Limitations of the <i>t</i> -Test 155
5.5	Confidence Intervals 157
5.6	The F-Test 160
5.7	Summary and Exercises 165
5.8	Appendix: Econometric Lab #3 173
Chapter 6	Specification: Choosing the Independent Variables 175
6.1	Omitted Variables 176
6.2	Irrelevant Variables 183
6.3	An Illustration of the Misuse of Specification Criteria 185
6.4	Specification Searches 187
6.5	An Example of Choosing Independent Variables 192
6.6	Summary and Exercises 195
6.7	Appendix: Additional Specification Criteria 202
Chapter 7	Specification: Choosing a Functional Form 207
7.1	The Use and Interpretation of the Constant Term 208
7.2	Alternative Functional Forms 210
7.3	Lagged Independent Variables 220
7.4	Slope Dummy Variables 221
7.5	Problems with Incorrect Functional Forms 224
7.6	Summary and Exercises 227
7.7	Appendix: Econometric Lab #4 235
Chapter 8	Multicollinearity 239
8.1	Perfect versus Imperfect Multicollinearity 240
8.2	The Consequences of Multicollinearity 244
8.3	The Detection of Multicollinearity 250
8.4	Remedies for Multicollinearity 253
8.5	An Example of Why Multicollinearity Often Is Best Left
	Unadjusted 256
8.6	Summary and Exercises 258
8.7	Appendix: The SAT Interactive Regression
	Learning Exercise 263

Chapter 9	Serial Correlation 291
9.1	Time Series 292
9.2	Pure versus Impure Serial Correlation 293
9.3	The Consequences of Serial Correlation 299
9.4	The Detection of Serial Correlation 302
9.5	Remedies for Serial Correlation 309
9.6	Summary and Exercises 314
9.7	Appendix: Econometric Lab #5 321
Chapter 10	Heteroskedasticity 324
10.1	Pure versus Impure Heteroskedasticity 325
10.2	The Consequences of Heteroskedasticity 330
10.3	Testing for Heteroskedasticity 332
10.4	Remedies for Heteroskedasticity 338
10.5	A More Complete Example 342
10.6	Summary and Exercises 348
10.7	Appendix: Econometric Lab #6 356
Chapter 11	Running Your Own Regression Project 358
11.1	Choosing Your Topic 359
11.2	Collecting Your Data 360
11.3	Advanced Data Sources 364
11.4	Practical Advice for Your Project 366
11.5	Writing Your Research Report 370
11.6	A Regression User's Checklist and Guide 371
11.7	Summary 375
11.8	Appendix: The Housing Price Interactive Exercise 376
Chapter 12	Time-Series Models 382
12.1	Distributed Lag Models 383
12.2	Dynamic Models 385
12.3	Serial Correlation and Dynamic Models 389
12.4	Granger Causality 392 pinion/ Stata 1
12.5	Spurious Correlation and Nonstationarity 394
12.6	Summary and Exercises 403
Chapter 13	Dummy Dependent Variable Techniques 408
13.1	The Linear Probability Model 408
13.2	The Binomial Logit Model 415
13.3	Other Dummy Dependent Variable Techniques 422
13.4	Summary and Exercises 424

14.1	Structural and Reduced-Form Equations 430
14.2	The Bias of Ordinary Least Squares 436
14.3	Two-Stage Least Squares (2SLS) 439
14.4	The Identification Problem 448 9190 9d
14.5	Summary and Exercises 453
14.6	Appendix: Errors in the Variables 458 mg
Chapter 15	Forecasting 461
15.1	What Is Forecasting? 462
15.2	More Complex Forecasting Problems 467
15.3	ARIMA Models 474
15.4	Summary and Exercises 477
Chapter 16	Experimental and Panel Data 483
16.1	Experimental Methods in Economics 484
16.2	Panel Data 491
16.3	Fixed versus Random Effects 501
16.4	Summary and Exercises 502
Appendix A	Answers 509
пропал	7.11011010
Appendix B	Statistical Tables 535

Chapter 14 Simultaneous Equations 429