## CONTENTS

<table>
<thead>
<tr>
<th>Preface</th>
<th>page xi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figures</td>
<td>xiii</td>
</tr>
</tbody>
</table>

### 1 The Scientific Study of Politics

1.1 Overview 1
1.2 “A Workbook? Why Is There a Workbook?” 1
1.3 Getting Started with Stata
   1.3.1 Launching Stata 2
   1.3.2 Getting Stata to Do Things 3
   1.3.3 Initially Examining Data in Stata 8
1.4 Exercises 8

### 2 The Art of Theory Building

2.1 Overview 10
2.2 Examining Variation Across Time and Across Space
   2.2.1 Producing a Bar Graph for Examining Cross-Section Variation 10
   2.2.2 Producing a Connected Plot for Examining Time-Series Variation 13
2.3 Using Google Scholar to Search the Literature Effectively 14
2.4 Wrapping Up 17
2.5 Exercises 18

### 3 Evaluating Causal Relationships

3.1 Overview 19
3.2 Exercises 19

### 4 Research Design

4.1 Overview 22
4.2 Exercises 22

### 5 Measuring Concepts of Interest

5.1 Overview 24
5.2 Exercises 24
## CONTENTS

### 6 Getting to Know Your Data
6.1 Overview 27  
6.2 Describing Categorical and Ordinal Variables 27  
6.3 Describing Continuous Variables 30  
6.4 Putting Statistical Output into Tables, Documents, and Presentations 33  
6.5 Exercises 34

### 7 Probability and Statistical Inference
7.1 Overview 36  
7.2 Dice Rolling in Stata 36  
7.3 Dice Rolling in Excel 42  
7.4 Exercises 47

### 8 Bivariate Hypothesis Testing
8.1 Overview 49  
8.2 Tabular Analysis 49  
8.2.1 Generating Test Statistics 50  
8.2.2 Putting Tabular Results into Papers 51  
8.3 Difference of Means 52  
8.3.1 Examining Differences Graphically 52  
8.3.2 Generating Test Statistics 53  
8.4 Correlation Coefficients 53  
8.4.1 Producing Scatter Plots 53  
8.4.2 Generating Covariance Tables and Test Statistics 54  
8.5 Exercises 56

### 9 Two-Variable Regression Models
9.1 Overview 58  
9.2 Estimating a Two-Variable Regression 58  
9.3 Graphing a Two-Variable Regression 58  
9.4 Exercises 62

### 10 Multiple Regression: the Basics
10.1 Overview 63  
10.2 Estimating a Multiple Regression 63  
10.3 From Regression Output to Table – Making Only One Type of Comparison 63  
10.3.1 Comparing Models with the Same Sample of Data, but Different Specifications 64  
10.3.2 Comparing Models with the Same Specification, but Different Samples of Data 65  
10.4 Standardized Coefficients 65  
10.5 Exercises 66
CONTENTS

11  Multiple Regression Model Specification 67
   11.1  Overview 67
   11.2  Dummy Variables 67
      11.2.1  Creating a Dummy Variable with the “generate” and “replace” Commands 67
      11.2.2  Estimating a Multiple Regression Model with a Single Dummy Independent Variable 69
      11.2.3  Estimating a Multiple Regression Model with Multiple Dummy Independent Variables 70
   11.3  Dummy Variables in Interactions 70
   11.4  Post-Estimation Diagnostics in Stata for OLS 72
      11.4.1  Identifying Outliers and Influential Cases in OLS 72
   11.5  Exercises 74

12  Limited Dependent Variables and Time-Series Data 76
   12.1  Overview 76
   12.2  Models with Dummy Dependent Variables 76
   12.3  Being Careful with Time-Series Data 80
      12.3.1  Setting Up a Time-Series Data Set in Stata 81
      12.3.2  Lag and Difference Operators in Stata 84
      12.3.3  Performing Time-Series Regression Analyses in Stata 85
   12.4  Exercises 87

Bibliography 89
Index 91