Contents

Preface vii

CHAPTER 1. ESTIMATION AND INFORMATION 1

1. A Priori Information, 1 2. Alternative Approaches, 3
3. Classical Estimation Theory, 6 4. Some Mathematical Results, 13

CHAPTER 2. EXACT PRIOR INFORMATION 17

1. Introduction, 17 2. Constraint Equations, 18 3. The Asymptotic Bound, 23
7. A Generalization, 38 8. Some Qualifications, 41

CHAPTER 3. INEXACT PRIOR INFORMATION 43

1. Introduction, 43 2. Information from Previous Samples, 43
3. Some Extensions, 47 4. Inequality Constraints, 49 5. The Linear Model with Inequality Restrictions, 53
6. Summary, 58

CHAPTER 4. EFFICIENT ESTIMATION OF SIMULTANEOUS EQUATION SYSTEMS 59

1. Introduction, 59 2. The Model, 60 3. Efficient Estimation: Structural Restrictions Ignored, 63
4. Efficient Estimation: Structural Restrictions Utilized, 65 5. The Derivation of $H_{11}$, 68
6. The Variance Bound, 72 7. Covariance Restrictions, 73
8. $\Sigma$-Restrictions and Identification, 78 9. Efficient Estimators, 79
10. A Generalization, 83 11. Summary, 86
Appendix A, 87 Appendix B, 91

CHAPTER 5. THE VALUE OF RESTRICTIONS 94

4. Example II: A Macroeconomic Model, 103 5. Example II: Numerical Results, 108
6. Summary, 115
Appendix, 116
<table>
<thead>
<tr>
<th>CHAPTER 6. THE BAYESIAN APPROACH TO ECONOMETRICS</th>
<th>132</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>CHAPTER 7. THE VALUE OF BAYESIAN STRUCTURAL INFORMATION</th>
<th>154</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Introduction, 154  2. The General Problem, 154  3. Identification and Precision from the Bayesian Point of View, 156  4. A Bayesian Information Inequality, 159  5. A Limit Result, 162  6. Some Quantitative Results, 164  Appendix, 169</td>
<td></td>
</tr>
</tbody>
</table>

References 173

Index 177