

## Contents

I. The Simultaneous Equation Model.	1
I.1 The statistical model ; Notations	1
I.2 The identification problem	3
I.3 Some previous contributions	8
I.4 Review of the contents	11
I.5 Technical abstract	13
II. Full Information Analysis of the Two-equation Model.	20
II.1 Notations	20
II.2 The Drèze and Morales' approach.	23
II.3 An alternative approach : structural analysis	29
II.4 Reduced form analysis and prediction.	40
II.5 Some additional remarks	44
III. Limited Information Analysis of the Simultaneous Equation Model	49
III.1 Some posterior joint conditional densities on $\Pi$ : non-informative prior density	49
III.2 Posterior moments of the reduced form parameters : limited information prior density	59
III.2.1 Natural conjugate prior density ( $m_1=1$ )	60
III.2.2 Exact prior restrictions ( $m_1=1$ ).	68
III.2.3 Some extensions for $m_1 > 1$	76
III.3 A "limited information" prediction	81

Appendix I : The matrix-t density	85
Appendix II : The row-diagonal conditional matrix-variate-t density	89
Appendix III : The technicalities of Chapter II	93
Appendix IV : Hypergeometric series ; Their computations	118
Appendix V : The programs of Chapter II	141
Appendix VI : An integral identity (Dickey)	147
IV. Empirical Illustration : The Belgian Beef Market	152
IV.1 Morales' model.	152
IV.2 The information content of the identifying restrictions	154
IV.3 Informative approach : full information analysis	166
IV.4 Informative approach : limited information analysis	187
V. Conclusions	196
Appendix VII : The data	201
Appendix VIII : The results	203
References	223