

Department of Agricultural & Resource Economics

Testing for Structural Change in Australian Meat Demand

**A dissertation submitted in partial fulfilment of the requirements of
the degree of Master of Economics at the University of New England**

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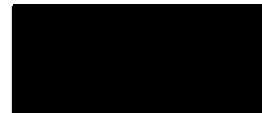
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Declaration

I certify that the substance of this dissertation has not already been submitted for any degree and is not currently being submitted for any other degree.

I certify that, to the best of my knowledge, any help received in preparing this dissertation, and all sources used, have been acknowledged.



Abstract

The Almost Ideal Demand System (AIDS) and Rotterdam models were used to test for the existence of structural change in Australian per capita consumption data on meats (beef, lamb, pigmeat and chicken) for the period 1965:1 to 1992:4. The models were estimated in single equation as well as in nonlinear system of equation versions. Both models showed the presence of structural change with the AIDS model producing more consistent results. The changes occurred in the early 1970s for beef, lamb and pigmeat and in the early 1980s for chicken. However, the effects of the changes were very small with only a 2.44 percent drop in expenditure share of beef, a 2.96 percent drop in lamb, a 0.71 percent increase in pigmeat and a 2.45 percent increase in chicken over the period of time assuming prices and expenditure held constant. These facts support the results of previous studies where the main determinant in quantity of meat demanded are changes in prices and total expenditure. Because of high collinearity of the data, the LA/AIDS model generated similar estimated elasticities to the 'true' AIDS model and due to the similarity of their right hand sides the first-differenced LA/AIDS model estimated similar elasticities to the Rotterdam model. This study also reveals that based on a test developed by Alston and Chalfant (1993) Australian per capita consumption data on meat rejects the Rotterdam model in favour of the AIDS model.

Contents

Declaration	ii
Abstract	iii
List of Tables	vi
List of Figures	viii
Acknowledgments	ix
1. Introduction	1
1.1 Background to the study	1
1.2 Specific objectives of the study	4
1.3 Outline of the dissertation	5
2. Literature Review	6
2.1 Previous studies	6
2.2 Structural change analysis	9
2.2.1 The general approach	9
2.2.2 Some basic assumptions of structural change analysis	10
2.2.3 Parametric analysis	12
2.2.4 Non-parametric analysis	15
2.3 Summary	16
3. The Models	17
3.1 The economic model	17
3.1.1 Neoclassical demand theory	17
3.1.2 Restrictions	17
3.1.3 Weak separability and the aggregation problem	20
3.2 The econometric model	20
3.2.1 General specification and variable choices	20
3.2.2 The Almost Ideal Demand System (AIDS)	22
3.2.3 The Rotterdam model	25
3.3 Summary	27

4. Method of Analysis	28
4.1 Estimation issues	28
4.2 Data sources	30
4.3 Data characteristics	30
5. Results and Discussion	39
5.1 Coefficient and elasticity estimates	39
5.2 Structural change analysis in the linear single equation demand models	51
5.2.1 Chow Test	51
5.2.2 Farley-Hinich (F-H) test	52
5.2.3 Ohtani-Katayama (O-K) test	53
5.3 Structural change analysis in nonlinear demand systems models	56
5.4 Specification tests	60
5.5 Summary	64
6. Conclusion	67
6.1 Summary of findings	67
6.2 Conclusions and implications	68
6.3 Limitations of the study	69
6.4 Areas for further study	70
References	71
Appendix 1: Data Description	78

List of Tables

Table 1:	Summary statistics of the data	34
Table 2:	The correlation matrix	35
Table 3:	Testing for unit roots	38
Table 4:	Notation	44
Table 5:	Coefficients for single equation models with homogeneity restrictions imposed and corrected for autocorrelation	45
Table 6:	Measures of equation goodness-of-fit for restricted single equation models	46
Table 7:	Uncompensated price and expenditure elasticities for single equation models	47
Table 8:	Coefficients for system of equations models with homogeneity, Slutsky symmetry and adding-up restrictions imposed and corrected for autocorrelation	48
Table 9:	Uncompensated price and expenditure elasticities for restricted system of equations models	49
Table 10:	Comparison of estimated elasticities with other studies	50
Table 11:	Pair of subsample observations where the sequential Chow tests are statistically significant in the first differenced LA/AIDS model	54
Table 12:	Pair of subsample observations where the sequential Chow tests are statistically significant in the Rotterdam model	54
Table 13:	F-values of the Farley-Hinich tests in the LA/AIDS and Rotterdam models	55

Table 14: F-values of the Ohtani-Katayama tests in the LA/AIDS and Rotterdam models	55
Table 15: Results of likelihood-ratio tests for structural change	58
Table 16: Exogenous shifts in the LA/AIDS model	58
Table 17: Estimated elasticities before and after the structural change	59
Table 18: Testing the Rotterdam and LA/AIDS specification	65
Table 19: Lamda values for the specification test before and after the structural change	66
Table A1: Meat price and consumption data	80

List of Figures

Figure 1: Australian meat consumption, 1965 to 1992	2
Figure 2: Supply and demand relationships	11
Figure 3: Nominal and real retail prices of meats, 1965 to 1992	32
Figure 4: Real retail price and quantity consumed, 1965 to 1992	33

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