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Title: “AJAE appendix for ‘The Use of Conditional Cost Functions to Generate Estimable Mixed Demand Systems’”.

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Appendix: Estimates for QAIDS, QIAIDS & QAIMDS

Economists are interested in comparison of ordinary, inverse, and mixed demand systems before conducting policy analysis. They may wish to know which system (the ordinary, inverse or mixed demand system) is appropriate for representing consumer preferences. To briefly investigate this issue, we specify and estimate Michelini's (1999) Quadratic Almost Ideal Demand System (QAIDS, ordinary system), Quadratic Inverse Almost Ideal Demand System (QIAIDS, inverse system),^a and QAIMDS (mixed system).^b Model performance of the three specifications is presented in table A1. System measures of fit reported in the table include the system log-likelihood values (L), SC, AIC, and HQC. As shown in the table, all the specifications fit the data reasonably well: the share equation R^2 values range from 38.5% for Fillet (implied by the QAIMDS) to 97.8% for Shellfish (implied by the QAIMDS). Although the QAIDS, QIAIDS and QAIMDS are not nested, we can compare them informally on the basis of their log-likelihood values since they contain the same number of parameters.^c Using this criterion, we find that the QAIMDS dominates the other two systems, with the QAIDS displaying the weakness performance. Possibly, this indicates that the exogenous treatment of processed fish and meat prices,

^a The QIAIDS specification is based on the modification of Eales and Unnevehr's (1994) Inverse Almost Ideal Demand System.

^b The comparison of the functional forms of QAIDS, QIAIDS and QAIMDS is available online as Readers' Appendix B at <http://au.geocities.com/garywong21/function.pdf>.

^c Since the number of parameters is the same in these models, a comparison of log-likelihood values yields the same model selection results as would be obtained using Pollak and Wales' (1991) LDC.

and quantities of fresh fish and meat is appropriate for the purpose of econometric estimation.

Table A1: Single Equation and System Measures of Fit for QAIDS, QIAIDS and QAIMDS

	QAIDS	QIAIDS	QAIMDS
Conditioning Variables	($\mathbf{p}_A, \mathbf{p}_B, c$)	($\mathbf{x}_A, \mathbf{x}_B$)	($\mathbf{p}_A, \mathbf{x}_B, u$)
R²			
Salted Fish	0.949	0.935	0.954
Processed Meat	0.951	0.934	0.947
Fillet	0.393	0.688	0.385
Fresh Meat	0.650	0.555	0.741
Fresh Fish	0.886	0.765	0.896
Shellfish	0.964	0.950	0.978
L	1562.298	1574.963	1641.731
SC	-40.317	-39.998	-40.795
AIC	-40.855	-40.535	-41.332
HQC	-40.984	-40.665	-41.461