

Documentation

This document provides information about files in the associated folder and also provides some explanation of points that users have found confusing.

1. The associated folder contains the following:

a. A working paper that applies a variety of tests to the model in Epplé and McCallum, “Simultaneous Equation Econometrics: The Missing Example,” *Economic Inquiry*, 44, 2 (April 2006): 374-384. This working Paper, by Brumm, Epplé, and McCallum, is entitled “Simultaneous Equation Econometrics: Some Weak-Instrument and Time-Series Issues.” It also provides Limited Information Maximum Likelihood estimates and robust estimates of confidence intervals for the coefficients of the endogenous variables.

b. Data and Results in Two Formats:

i) Eviews: The file `chicken_1_7_05.wf1` is an Eviews work file. This file contains the data used to estimate the equations in Epplé & McCallum “Simultaneous Equations Econometrics: The Missing Example.” In addition, this file contains all of the equations from our paper. Each equation in the file is named by the corresponding equation number in our paper.

ii) Stata: The files in `Stata_Files.zip` provide the data and commands for estimating the equations in “Simultaneous Equations Econometrics: The Missing Example.” These files also provide the commands required to perform the Limited Information Maximum Likelihood Analysis in “Simultaneous Equation Econometrics: Some Weak-Instrument and Time-Series Issues.”

2. Explanatory Notes

a) Reconciling production and consumption: The USDA measures consumption in “boneless equivalent” chicken meat. Production is reported as pounds of young chicken slaughtered. The ratio of mean production to mean consumption in the sample is $(48.732/30.794)=1.5825$. A part of this difference between production and consumption is due to exports. We take exports to be 10% of US consumption. The remainder of the difference arises because parts of production (bones, feathers, etc.) are not suitable for human consumption. We assume this proportion is constant over time and equal to $(1.5825/1.1)=1.439$. This is then converted to thousands of pounds, yielding a factor of 1439. Hence: $LQ1A = \text{LOG}(\text{PRODUCT}/1439)$

b) Estimating Equation 5: One correspondent reported to us that his software package yielded an estimate for ρ in Equation 5 of 0.7896 instead of the Eviews estimate of 0.997. The value .7896 may be a local, but it is not a global maximum. The global maximum is .997.