

Melitz in GTAP made easy: the A2M conversion method and result interpretation

This paper is based on Chapter 7 of the Springer book: *Trade theory in computable general equilibrium modes: Armington, Krugman and Melitz*, by Peter Dixon, Michael Jerie and Maureen Rimmer.

However, in preparing the paper we added some improvements.

This supplementary material contains computer files for running simulations. We have provided the files in alternative forms, to be used with either RunDynam or from the command line.

The computer files for the Melitz simulation reported in Tables 2 and 3 of the paper are provided in zip files:

GTAP07-MWAB-R01R-P01P.zip (use with RunDynam, run BASE only)

M_cmdline.zip (use from command line)

The computer files for the Armington simulation reported in Tables 2 and 3 are provided in zip files:

GTAP07-AWAB-R01R-P01P.zip (use with RunDynam, run BASE only)

A_cmdline.zip (use from command line)

These simulations require a GEMPACK licence. The trial version of Executable-image GEMPACK will suffice. It is downloadable from: <http://www.copsmodels.com/gpeidl.htm>.

An installation of RunDynam is required to use the RunDynam zip archives. A trial version is available from: <http://www.copsmodels.com/gprddl.htm>.

Table 2 is based on the BOTE equation (16) of the paper.

In Table 2 we broadly use the decomposition x3_DECOMP that was used in the book, except that:

- (a) We use scale_effect (column 4 in Table 2) instead of “Extra Melitz efficiency” which was used in Tables 7.5 and 7.6 of the book.
- (b) For the terms of trade we used a simple intuitive formula (chkw_tot) which leaves out the prices of international transport. Consequently the terms of trade effects in the paper are slightly different from those implied by adding up the two terms of trade columns in Table 7.5 of the book.

For the convenience of users we have included a coefficient “table2” which includes all columns of Table 2. Users can identify the variables in Table 2 by looking up the coefficient “table2” in the tablo file of the model.

Table3_col5&6.xlsx provides information on how to calculate columns 5 and 6 of Table 3.