Guide to the matlab files for the Alvarez-Lippi paper "Price setting with menu cost for multi-product firms", ECONOMETRICA 2013. Although almost all the results in the paper are analytical these files are useful to produce figures and illustrate the workings of the model. These files are provided as is.

The files in the main folder are the ones used in the main body of the paper concerning the size-distribution of price changes, the hazard rates, as well as the impulse responses for the aggregate price level and the cumulative output effect of a monetary shock. One subdirectory provide the files for the extension to a model with drift , correlated shocks and cross-products discussed in Section 7 (see the Online appendix for the analytics). Another subdirectory provides the files used to assess the accuracy of our analytical approximate impulse response by comparing them with a full GE model for the cases of n=1 and n=infty.

All files whose name begins with fct or fun are subroutines of main files and are typically not executable files. The name of the key executable files begins with " solve_..." and indicates the task accomplished (e.g. solve_impact_response_delta.m). Some of the files (particularly those involving on the impulse responses) involve simulating a cross section of firms which, depending on parameters, may take some time for the computation (3 or 4 hours on our laptop computers).

Here is a brief description of the main executable files and of what they do:

solve_hazard_multi.m   computes the hazard rate functions of Figure 1.

solve_price_dist_multi.m   computes the size distribution of price changes of Figure 2.

solve_impact_response_delta.m   computes the impact effect of the monetary shock on the aggregate price level of Figure 3.

solve_IRF.m   computes the impulse response function and saves the output (example output `'output_n10.mat'` is the output of an economy with n=10); this can be used for drawing figures etc etc.

solve_figures_IRF.m   loads the output of the solve_IRF.m routine to produce impulse response figures of Figure 4

solve_CumY_IRF.m   computes the cumulated effect of a monetary shock on output and saves the output (example `'out_n10_MULTI_d.mat'`) for an economy with n=10.

solve_cum_IRF_Y_1_infty.m   computes the cumulated effect of a monetary shock on output for the boundary cases of n=1 and n=\infty. Load the data for other values of n generated by the code solve_CumY_IRF.m and produces Figure 6