

## Instructions for FRBUS stochastic simulations

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This ZIP file contains the programs to compute the stochastic simulations reported in “Heeding Daedalus: Optimal Inflation and the Zero Lower Bound,” forthcoming in *Brookings Papers on Economic Activity*, 2009. These programs are written in MATLAB. They make use of the AIM code for solving linear rational expectations models available at: <http://www.federalreserve.gov/PUBS/oss/oss4/aimindex.html>

You can download the necessary AIM files from this web site. The web site also provides background information and examples for the AIM algorithm.

The following files need to be modified by the user:

frbus04z.call.m:	set directories for “dirnam” and “solve_path”
frbus04z_par.m:	set parameters of Taylor monetary policy rule (tayp0 and tayx0)
frbus04z_zerosim.m:	choose value of steady-state nominal interest rate (“istar”) and sample for shocks, and set output file

The other files do not need to be modified:

frbus04zfp:	model file
frbus04zfp_aim_data.m:	created by AIM when model is “parsed”
frbus04zfp_aim_matrices.m:	created by AIM when model is “parsed”
frbuseqs1.m:	used in stochastic simulations with ZLB
frbus04_uncond.m	computes unconditional moments under RE w/o ZLB
frbus04_makecov.m	computes covariance matrix of shocks
frbus04_res.dat:	data file of model shocks
runsims.m:	script that runs stochastic simulations by calling other programs

To compute stochastic simulations, at MATLAB prompt run the following program: “runsims.m”

Key simulation results are stored in the output file, per the description in the frbus04z\_zerosim.m file (lines 283-291). All simulation results are stored in memory (see the model file for the order of the model variables).

If you have any questions, please contact John Williams by email at [john.c.williams@sf.frb.org](mailto:john.c.williams@sf.frb.org) or by phone at (415) 974-2240.