Documentation of Programs for “Ends Against the Middle…”

The program that we used to compute equilibrium is schvou.gss.
This program solves for equilibrium for voucher values ranging from 0
to 5,000. With the setting of elasticities in the program, it will
generate the results shown in boxes in Table 1 of our "Ends Against
the Middle..." paper. To compute other results, change the
elasticities. Comments in the program indicate which values to set to
obtain other elasticies. Note that variable named "vou" is voucher per
half student. Hence, it must be doubled to obtain voucher per student
(and the program prints out the appropriate doubled value). To run
the program, you must change two lines. One line directs the output to
a folder on your computer. You should change the drive and folder name
as appropriate to your computer. The line of code in the program that
you wish to change is: output file=d:\pubprov\schvou.out; The other
line directs the program to the nonlinear search routine. I will send
you the nonlinear search routine in a separate message. You should
save it in a folder and then change the folder name in the attached
program accordingly. The line of code you wish to change is: #include
"d:\gssmastr\nlinsys1.dne";

The program will take a few seconds to run since it will solve for
equilibrium for a range of voucher values. A separate program was used
to calculate votes for Figure 11 of the paper: Vote.gss
Solve for allocation satisfying the necessary condition
for equilibrium using Schvou.gss. Then use VOTE.GSS to calculate the vote for the
conjecture equilibrium against alternatives. To do this, set em at the
conjectured equilibrium and enter the current parameters.
I modified VOTE.GSS to compute the vote favoring the point identified
by the necessary conditions when there are vouchers. The key change is to
have the program recognize that when EA falls below VOU, then everyone
prefers to consume private school. Thus, the value of EA becomes
irrelevant to the solution when EA<VOU.

The nonlinear solver is Nlinsys1.dne
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