**Problem Set #1**

**Professor Eisfeldt**

**MGT 239C PhD Topics**

Replicate the findings from Eisfeldt (2007) for the case in which there are only one period bonds. This corresponds closely to the problem outlined in Ljungqvist and Sargent Chapter 4 which we discussed in class. Below, I’ve included the parameters from the program I used. Please use Matlab and hand in your program as well as the requested output.

Show that your output matches the average bond holdings from the one period bond model in the paper, the mean and variance of consumption, and the persistence of savings. Report mean bond holdings in each of the 3 income states.

Then, perform comparative statics with respect to the risk aversion parameter sigma. Compute the same statistics for sigma =1.5 and sigma=5.

Extra credit. Use Epstein Zin Weil preferences to de-link risk aversion and the elasticity of intertemporal substitution and perform comparative statics over each separately.

%set parameter values

beta=.96^(.25);

sigma=2

rb=0;

tau=.01;

%markov process for income (from AG 1991)

y=[.31;.7524;1.3470]; %average income=1

piy=[.34 .33 .33;.035 .4825 .4825;.035 .4825 .4825];

%finite dimensional state space

step=.1;

bmax=5.1;

b=[0:step:bmax]'; %grid steps for bonds are .1\*avg. income