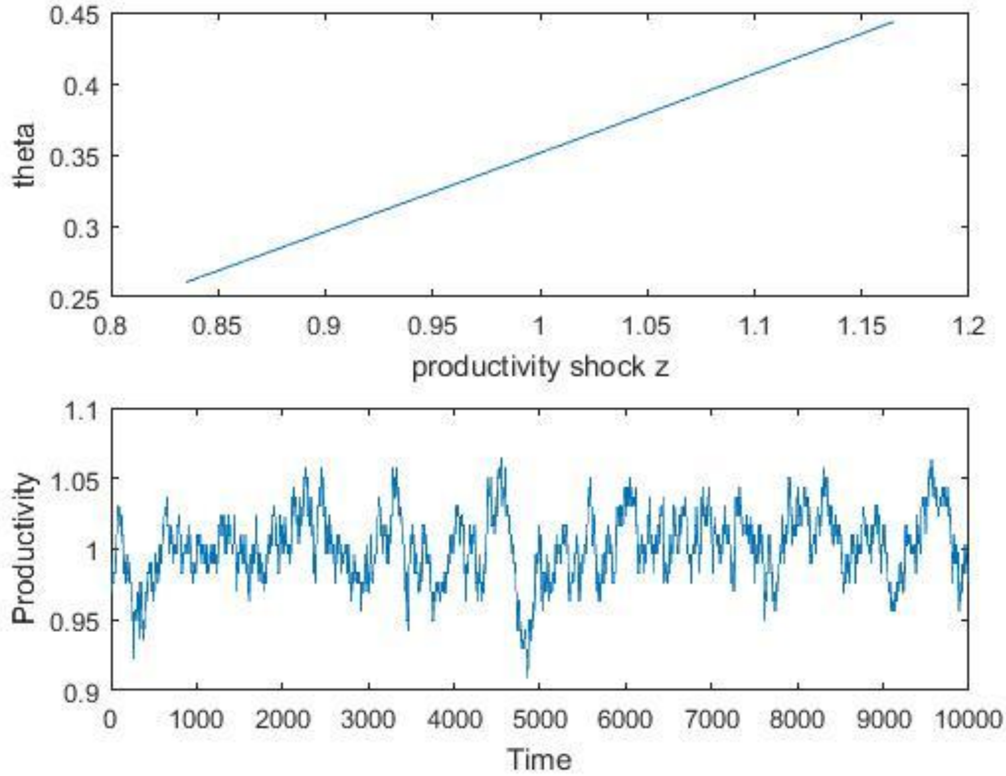
Question 1

The result is as follows:



We can see that:

(1) The slope is relatively flat in the first diagram.

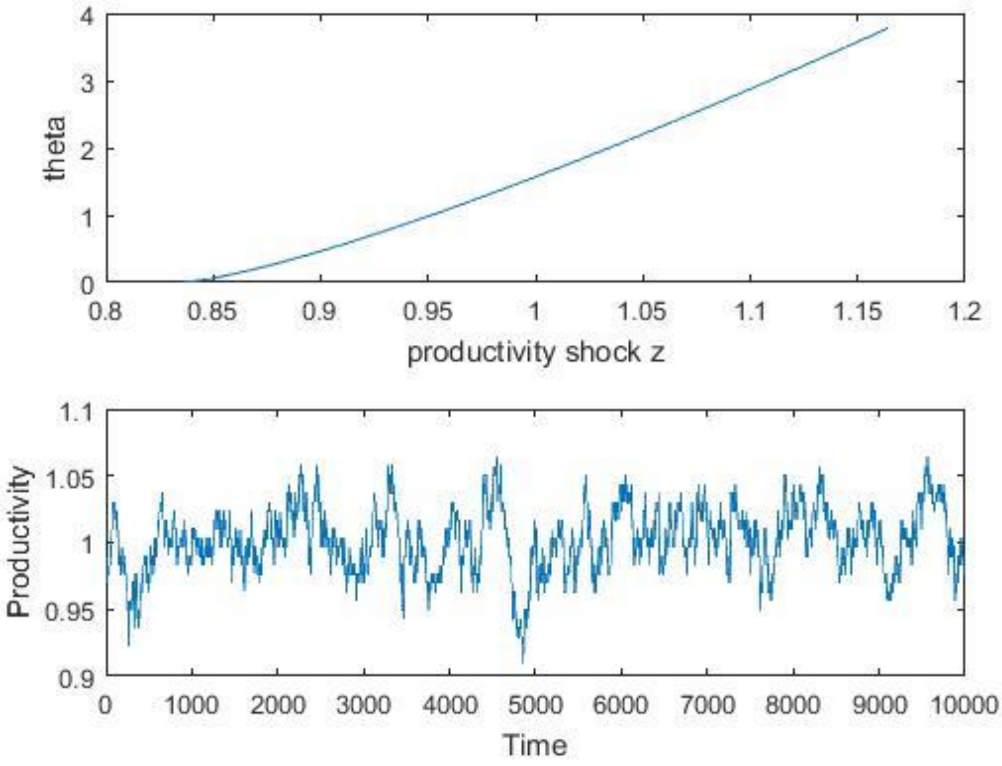
(2) The productivity in the simulated economy is quite persistent because the process is AR(1) process.

(3) Market tightness is a function of the productivity.

(4) The simulated productivity has standard deviation of 0.0237.

Question 3

The alternative calibration result is as follows:



We can see that:

(1) The slope is much steeper than the Question 1.

(2) Since the worker's bargaining weight is lower and the unemployment benefit is higher, the labor decision responses more to the change in productivity.

(3) Because we set the seed to be 19920124, the simulation result is the same.