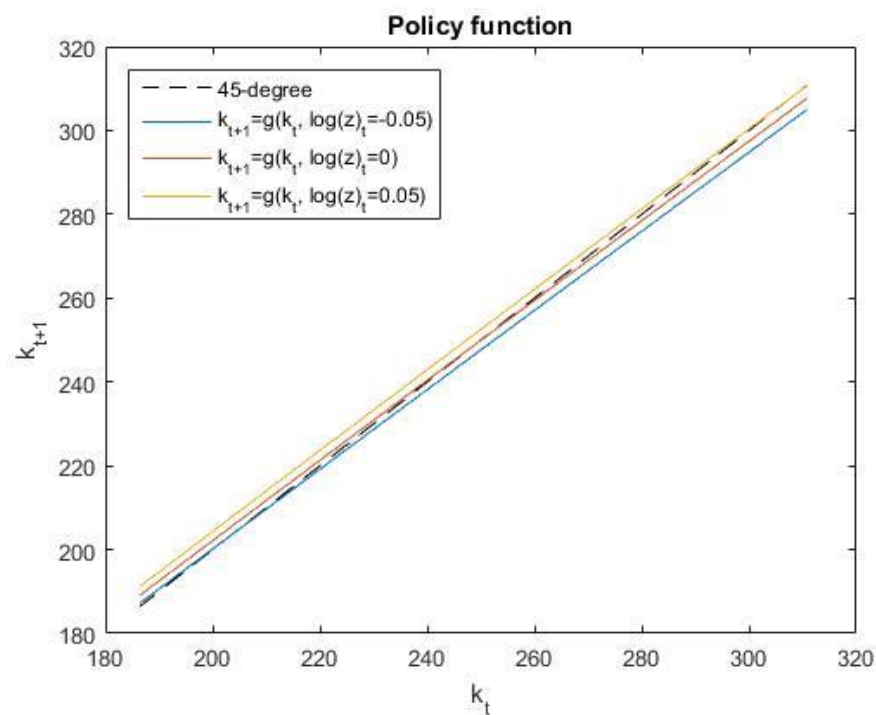
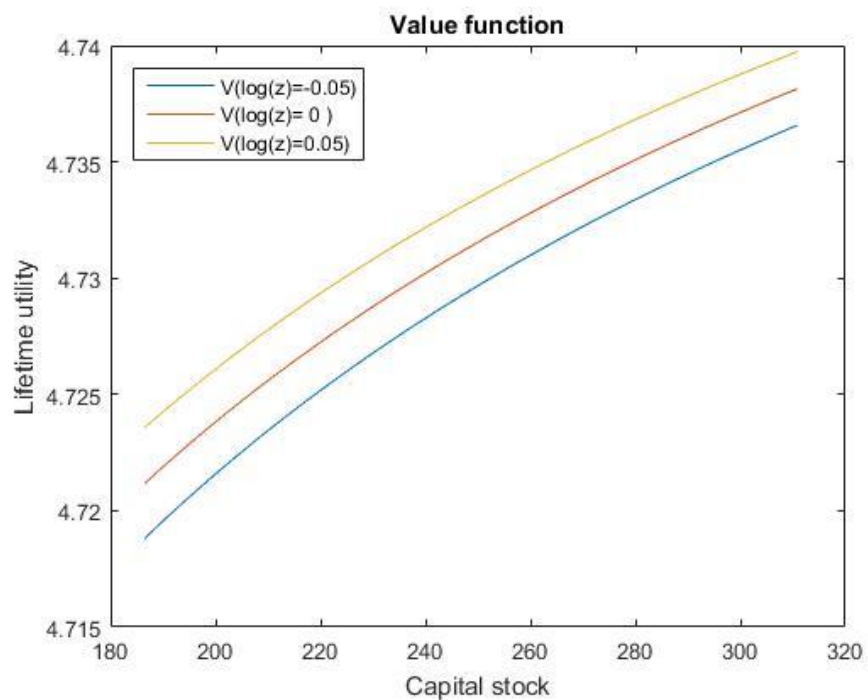


# Value Function Iteration

- GitHub repo:  
<https://github.com/claire4621/EconQuantitativeMethods/tree/master/Project-4>
- Discretize the AR(1) process by Rowenhorst method
- Discretize with 1000 grid points for  $k$  and 3 grid points for  $\log(z)$

# Discrete State Space

- Files: main.m, Rouwenhorst.m
- it takes 50 iterations to reach  $\text{norm}(V(n)-V(n+1)) < 0.001$



# Represent the value function continuously

- Files: main2.m, valfun1.m, valfun2.m, valfun3.m, Rouwenhorst.m
- Use “fminbnd”: Optimization with upper and lower bounds
- It takes 50 iterations to reach  $\text{norm}(V(n)-V(n+1)) < 0.001$

