## HW<sub>6</sub>

#### Xinle Pang

January 27, 2019

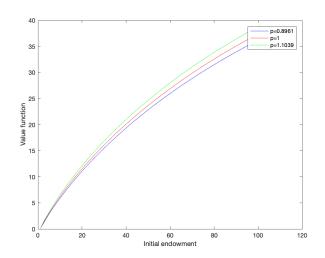
## 1 Question 1

$$V(w,p) = \max_{0 \le w' \le w} p(w-w') - 0.2(w-w')^{1}.5 + \delta[V(w',p')|p],$$

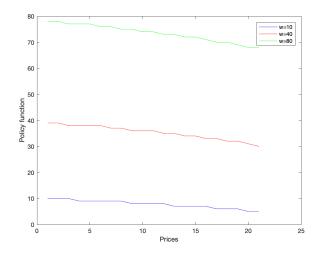
where  $p' = p_0 + \rho p + u'$ ,  $u \sim N(0, 0.1^2)$ .

- State variable: tree stock today w, price today p; choice variable: tree stock tomorrow w'
- State space:  $w \in [0, 100]$

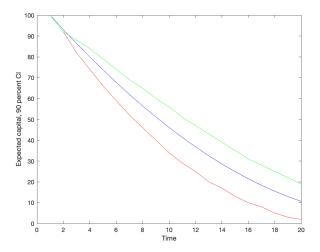
### 2 Question 3



## 3 Question 4



# 4 Question 5



# 5 Question 6

