

# Network Simulation

Econ Research Project

Shiyu Ma

# Parameter Setting

- $x=2, y = (x-c)/r=1, c=1, r=1, p_0=0.45$
- $c/x$  (myopic)  $= 1/2$
- $c/(x+y)$  (single-agent)  $= 1/3$

# Cutoff Time with Different K

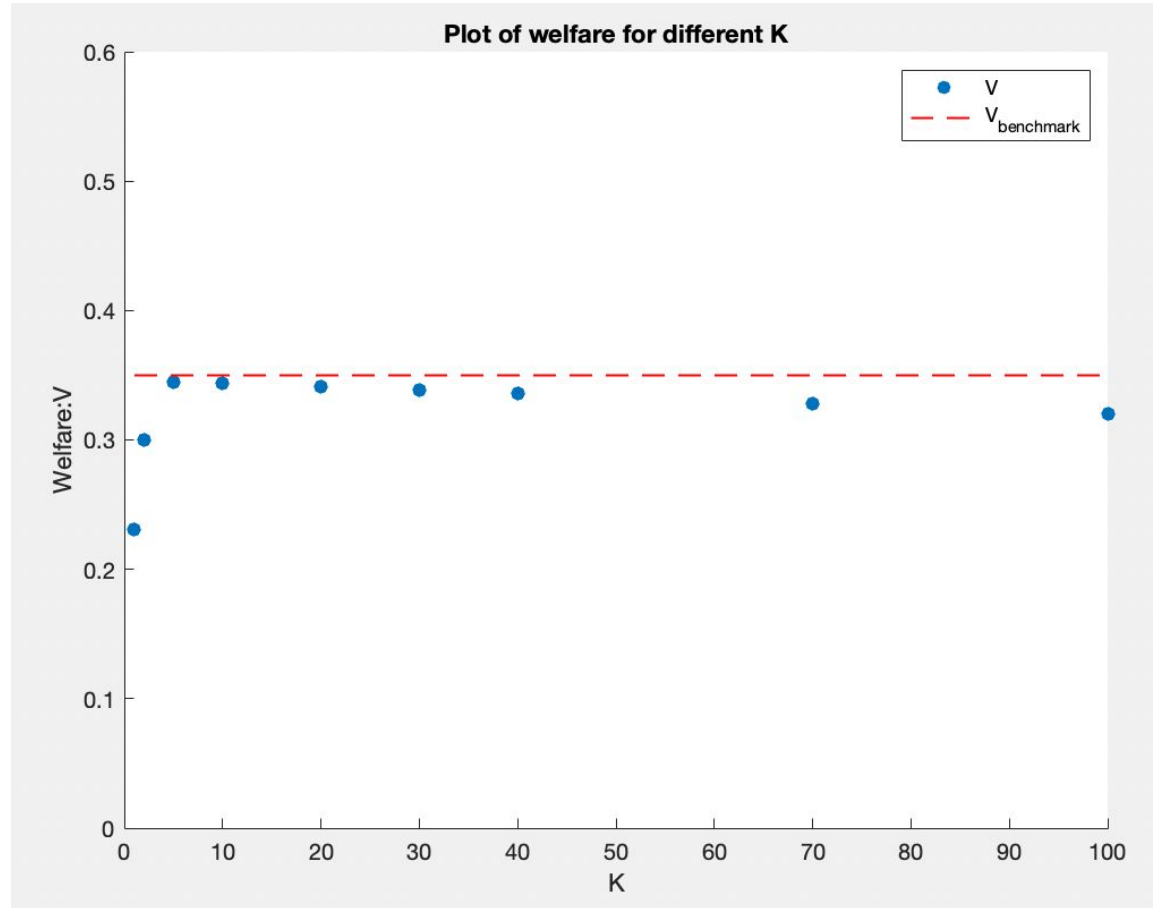
T =

9×5 [table](#)

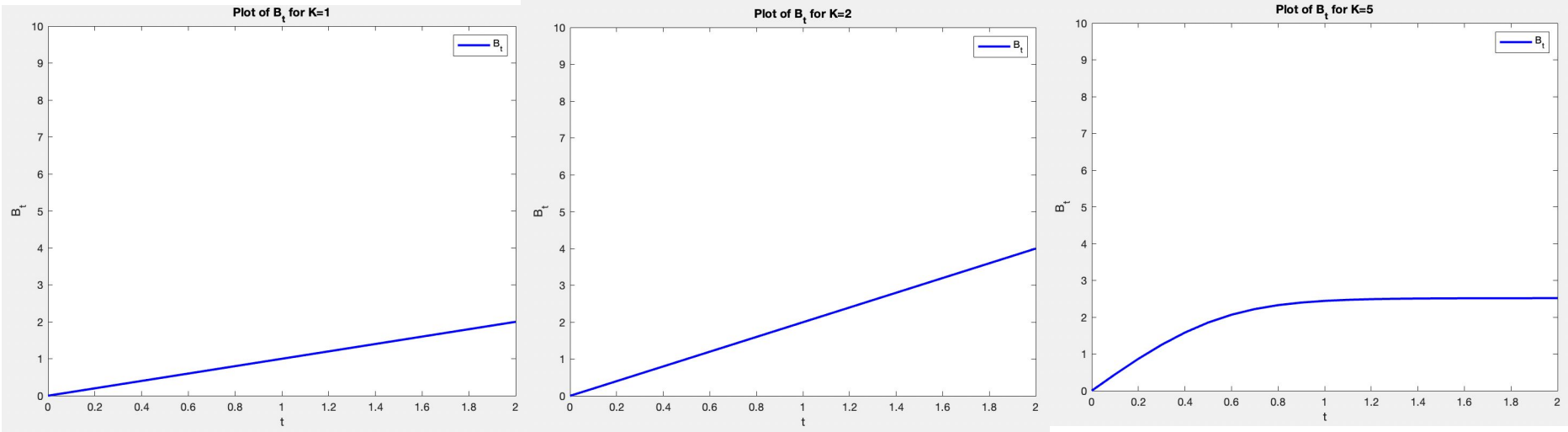
K	tau_k	tau_l	V	B_inf
1	0	0.102998294415717	0.230714414164341	102.895296121301
2	0	0.0298062500123144	0.300226491462932	29.7466375122898
5	0	0.00253320307414615	0.344143295352785	2.52053705877542
10	0	0.00186442366074734	0.34381428249838	1.84577942413987
20	0	0.00163040871206136	0.341303291852449	1.59780053782014
30	0	0.00155384458969121	0.338671538136579	1.50722925200047
40	1.24280855842588e-05	0.0015118125092409	0.335899659116992	1.45183713229464
70	3.91639865714025e-05	0.00144452237686602	0.327887149814537	1.34614728954539
100	6.0291138253337e-05	0.00140622111404483	0.320321611997687	1.27162811646568

# Graph Welfare

- $K=1, 2, 5, 10, 20, 30, 40, 70, 100$
- Welfare Benchmark=  
 $p_o(x+y)-c=0.35$
- $k^*=3.5$



# Graph of $B_t$ : $K=1,2,5$



# Graph of $B_t$ : $K=10,20,30,40,70,100$

