Computational Problem Set 4

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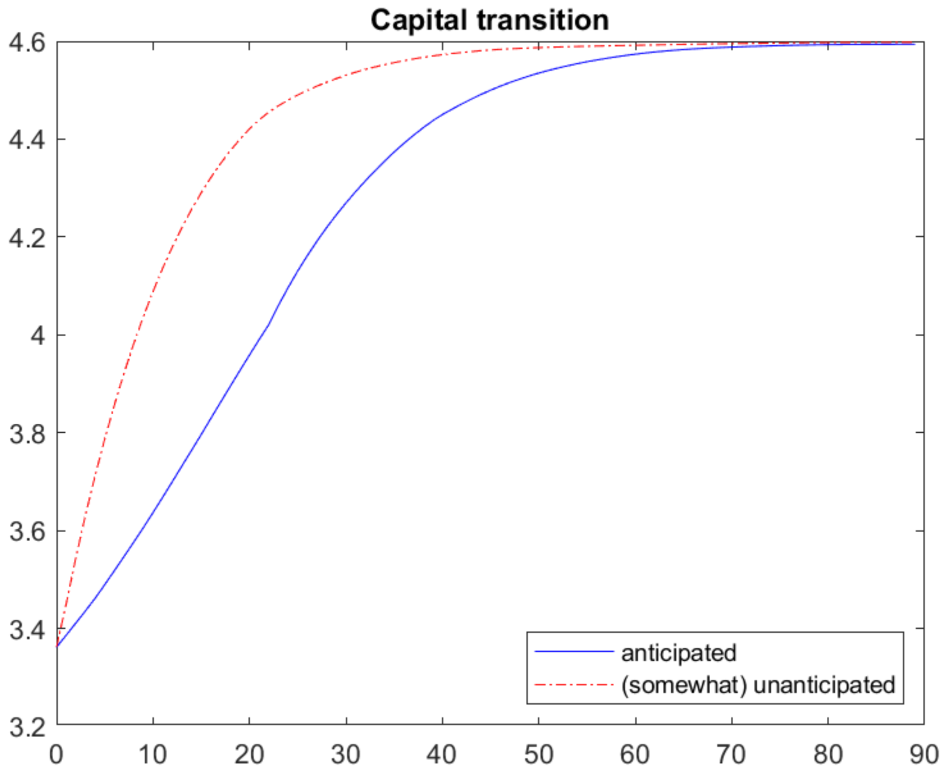
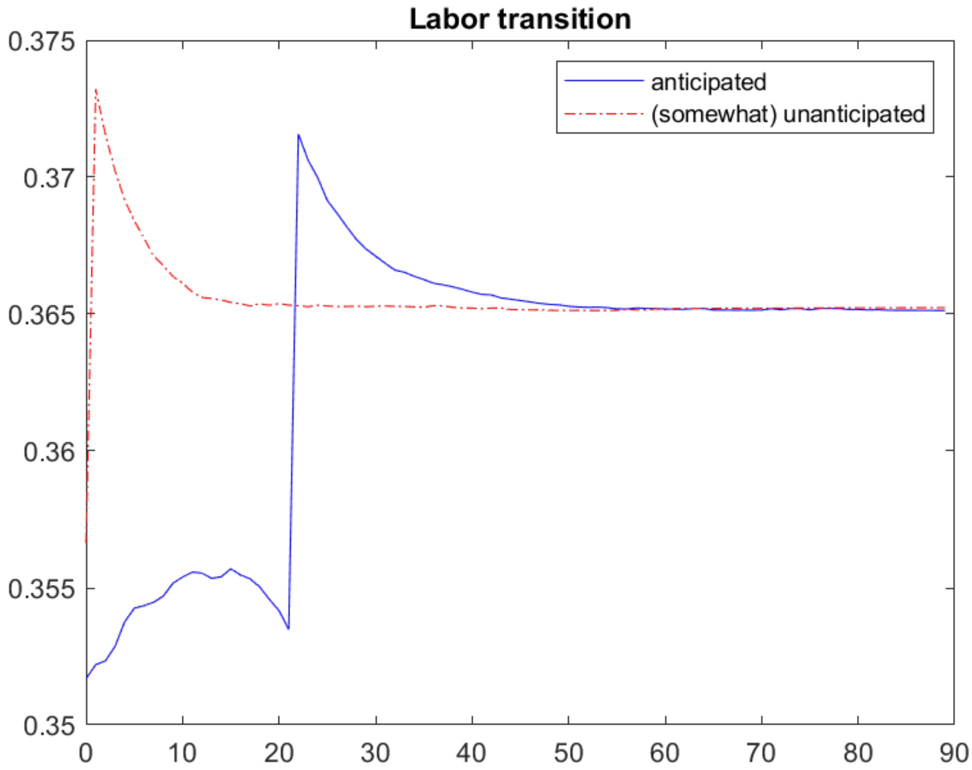
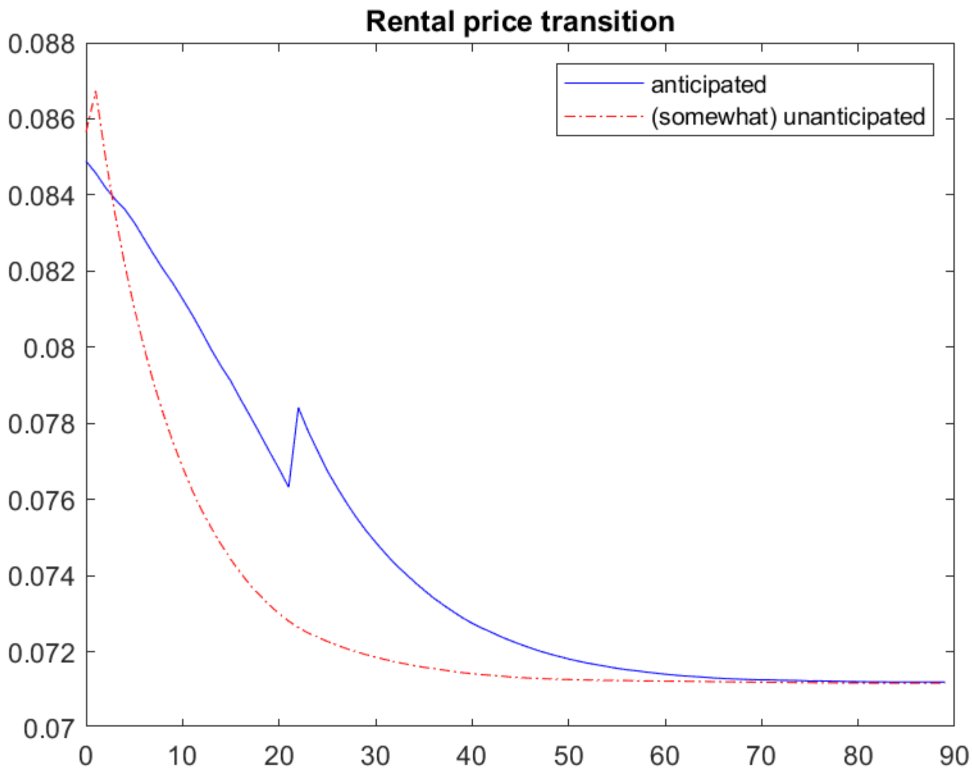
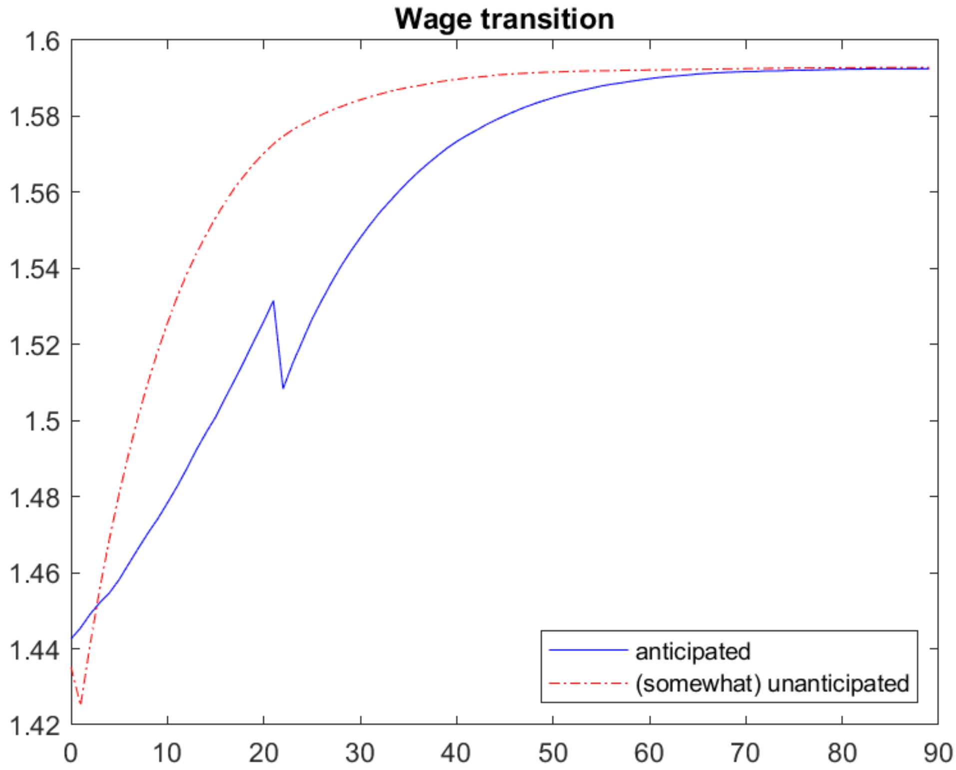
1 Results

First we present the transition path of the economy, then we present the EV-related measures.




Labor transition
0.375
0.37
0.365
0.36
0.355
0.35
0
10
20
30
40
50
60
70
80
90
anticipated
(somewhat) unanticipated


Rental price transition
0.088
0.086
0.084
0.082
0.08
0.078
0.076
0.074
0.072
0.07
0
10
20
30
40
50
60
70
80
90
anticipated
(somewhat) unanticipated



Our results show that capital adjusts gradually to the change, rising as households save precautionarily. Labor adjusts immediately in response to the news, as households work more to fund their increased capital investment. There is also a second spike at $t = 1$ as the labor wedge is removed when the taxes change. The rental price increases immediately on impact due to the labor spike, and similarly wage falls on impact. Both variables experience a second spike from the removal of the labor wedge. As the capital levels rise gradually, the rental price falls and the wage rises.

In the experiment where the switch occurs in a later period, we see that the short- and long-run effects are consistent qualitatively. The most significant difference is the transition point where the tax change occurs. This spike was occuring in period $t = 1$ and now it is occuring later, at time $t = 21$. In the capital transition, there is now a small kink in the capital transition.

	Experiment 1	Experiment 2
EV	0.741	0.907
Vote	0.106	0.261

Our EV measure shows that the agents are substantially worse off, on average, due to the tax change. The agents are less worse off when the shock is anticipated. Voting numbers are consistent with this finding - most of the household mass is worse off in both cases, but fewer are worse off in the second experiment when the change is anticipated.