## Problem set 3

October 23, 2022

Due date: October 30 at 9 am.

## 1 Atkeson, Chari and Kehoe (2007)

Please refer the to the working paper version of the paper which is posted on canvas.

- 1. (30 points) Carefully prove Propositions 2 and 3 in the paper. The proofs in the paper leave out the details but this is exactly what I want you to focus on when writing these proofs.
- 2. (20 points) Consider a slight extension of the environment we saw in class. There, we assumed that the agents did not observe the money growth rate but only observed the inflation rate (which was a noisy signal of the money growth rate). Now suppose that in addition to observing the inflation, agents observe the true money growth rate choice but with a lag. In particular, suppose that  $\mu_{t-1}$  is observable in period t after wages are chosen. Is transparency valuable in this case? More specifically, prove the analog of Proposition 6 in the paper for this environment.