

# Monetary Economics Workshop VI

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Assume that society's, and the policy maker's, loss function is given by

$$L = \frac{1}{2}\pi_t^2 - b(y_t - y^*)$$

and that the Phillips curve is given by

$$y_t = y^* + \alpha(\pi_t - E_{t-1}\pi_t) + e_t$$

where  $e_t$  is an iid process with variance  $\sigma_e^2$ .

1. Briefly explain the meaning of the loss function.
2. Solve under discretion and calculate the resulting loss (use the unconditional expectation to calculate the loss).
3. Assume instead that the policy maker could commit. That is, she sets  $\pi_t = 0$  every period. Find the resulting loss.