

### Problem on interest-rate rule

Take the model presented in the class notes on "persistent disturbances and interest-rate rule," with the shocks  $u^{IS}, u^{AS}$  - forget about  $u^{mp}$  .

But instead of an interest-rate rule  $r_t = \phi\pi_t$  , use an interest-rate rule like this:

$$r_t = \phi_\pi \pi_t + \phi_y y_t$$

1) Suppose the only shock is  $u^{IS}$  . Solve for  $y_t, \pi_t$  as functions of  $u^{IS}$  . (Don't bother solving for  $r_t$  .)

1) Suppose the only shock is  $u^{AS}$  . Solve for  $y_t, \pi_t$  as functions of  $u^{AS}$  . (Don't bother solving for  $r_t$  .)