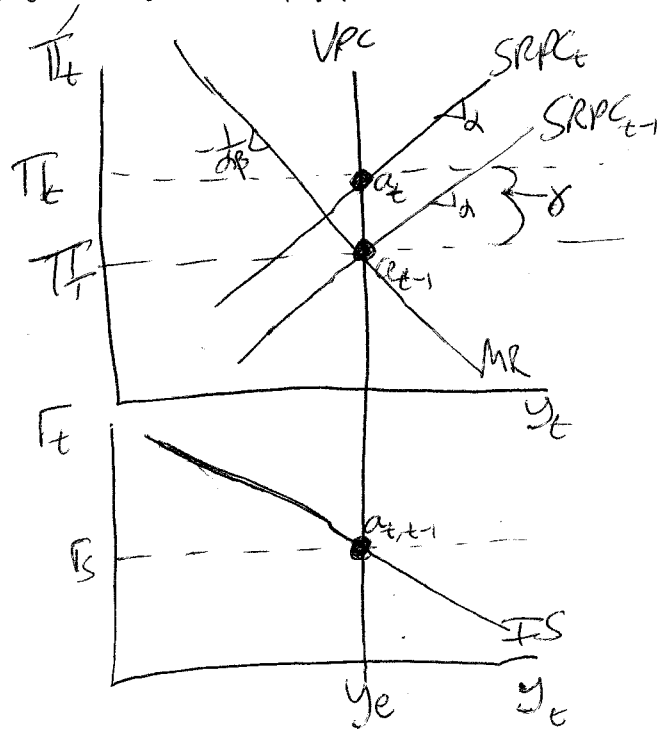
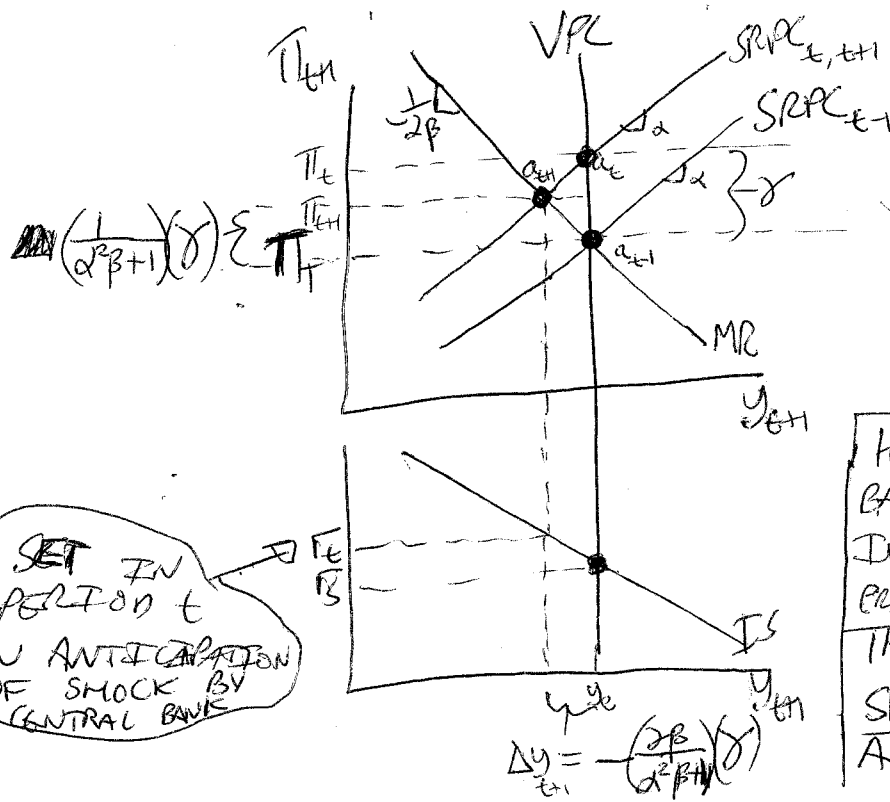


CONSIDER A TWO-PERIOD COST PUSH SHOCK WHERE $u_t = u_{t+1} = \gamma$. IT IS ~~UNANTICIPATED~~ UNANTICIPATED IN PERIOD t BUT ANTICIPATED (BY THE CENTRAL BANK) IN PERIOD $t+1$ DUE TO BEING OBSERVED IN PERIOD t AND KNOWN TO BE PERSISTENT. IN PERIOD t , DUE TO THE INTEREST POLICY LAG WE HAVE: OUTPUT STAYING CONSTANT



$$\text{AND } \Delta\pi = \pi_t - \pi_T = \gamma \\ \Rightarrow \pi_t = \pi_T + \gamma$$

FOR PERIOD $t+1$, LET US FIRST SUPPOSE THAT THE PRIVATE SECTOR DOES NOT KNOW THAT THE SHOCK IS PERSISTENT. IN THAT CASE, WE HAVE:



$$\gamma = (\Delta y_{t+1}) \left(-\frac{1}{\alpha\beta}\right) + (-\Delta y_{t+1}) (\alpha) \\ \gamma = (\alpha + \frac{1}{\alpha\beta}) (-\Delta y_{t+1}) \\ \Delta y_{t+1} = - \left(\frac{\alpha\beta}{\alpha^2\beta + 1} \right) \gamma \\ \pi_{t+1} = \pi_T + \left(\frac{1}{\alpha^2\beta + 1} \right) \gamma$$

SET IN PERIOD t IN ANTICIPATION OF SHOCK BY CENTRAL BANK

$$\Delta y_{t+1} = - \left(\frac{\alpha\beta}{\alpha^2\beta + 1} \right) \gamma$$

HOWEVER, IF THE CENTRAL BANK REVEALS THIS INFORMATION TO THE PRIVATE SECTOR THEN THE SRPC REMAINS AT $SRPC_{t-1}$ IN PERIOD $t+1$ AND THE ECONOMY RETURNS TO a_{t-1} IN PERIOD $t+1$.