28.3 Perfect Bayesian Equilibrium - 3

Wednesday, November 18, 2020 1:05 PM

Consider $M^T M^W, R$ $\quad q = p$ $\quad$ PBE IF $p \geq 2/3$

$-2p + 1(1-p) < -1$

$2/3 < p$

What if $p < 2/3$?

F is BR to $M^T M^W$ $\quad$ is M^W BR to F? → NO!

g Prob I^W is mean $= \frac{1}{2}(p/1-p)$
h Prob R fights IF mean
q $P(T|M) = p/p+(1-p)g$

$U_{RA}(F) = U_{RA}(R)$
$-2q + 1(1-q) = -1$
$q = 2/3$

$\rightarrow \quad 2/3 = p/p+(1-p)g$
$1.5p = p + (1-p)g$
$.5p = (1-p)g$
$g = (.5p)/(1-p)$

$U_{IW}(m) = U_{IW}(N)$
$-2h + 1(1-h) = -1$
$h = 2/3$

PBE

$M^T, \sigma_{IW} = 2/3, \sigma_{RA} = 2/3, q = P(T|M) = 2/3$

IF $p \geq 2/3$

M^T, M^W, R