HW 13.1

Sunday, November 1, 2020 3:21 PM

Passed Solution review

1. Consider a contractual setting in which the technology of the relationship is given by the following underlying game:

1 \ 2	I	N
I	5, 5	−1, 1
N	7, −1	0, 0

Suppose an external enforcer will compel transfer α from player 2 to player 1 if (N, I) is played, transfer β from player 2 to player 1 if (I, N) is played, and transfer γ from player 2 to player 1 if (N, N) is played. The players wish to support the investment outcome (I, I).

(a) Suppose there is limited verifiability, so that $\alpha = \beta = \gamma$ is required. Assume that this number is set by the players' contract. Write the matrix representing the induced game and determine whether (I, I) can be enforced. Explain your answer.

	I	N
I	5, 5	$-1+\beta$, $1-\beta$
N	$7+\alpha$, $-1-\alpha$	$0+\gamma$, $0-\gamma$

I, I can be enforced if the contract specifies a transfer

$5 > 7+\alpha$ ~~$5 > 1-\beta$~~ $5 > 1-\alpha$

$-2 > \alpha$ ~~$\beta > -4$~~ $\alpha > -4$

$\alpha = \beta$

$-4 < \alpha < -2 \rightarrow \alpha = -3$

(b) Suppose there is full verifiability, but that α, β, and γ represent reliance damages imposed by the court. Write the matrix representing the induced game and determine whether (I, I) can be enforced. Explain your answer.

	I	N
I	5, 5	$-1+1$, $1-1=0$
N	$7-1$, $-1+1$	0, 0

I, I is not NE because N, I dom I, N for Player 1

↙ Just plug in and solve

	I	N
I	5, 5	0, 0
N	6, 0	0, 0

$5 < 6$ so no