

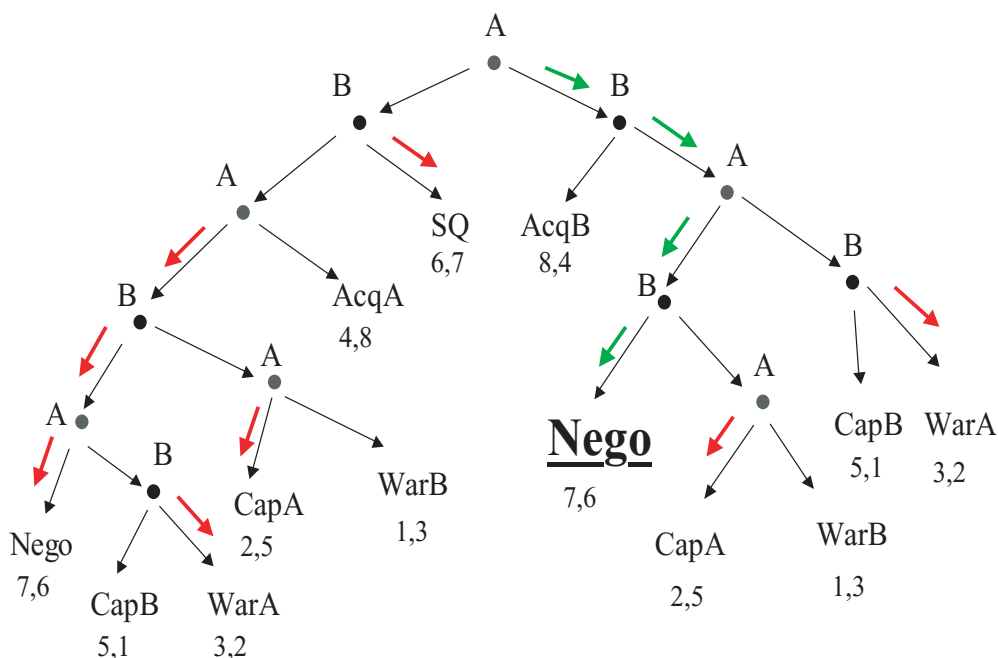
Question A

Refer to the International Interaction Game on p. 30 of BDM & Lalman. Find the unique subgame perfect equilibrium, given each of the following preference orderings. Assume that information is perfect and complete, and that the size of demands is exogenous.

1. For A, $Acq(B) > Nego > SQ > Cap(B) > Acq(A) > War(A) > Cap(A) > War(B)$.
 For B, $Acq(A) > SQ > Nego > Cap(A) > Acq(B) > War(B) > War(A) > Cap(B)$.

⇒ The subgame-perfect equilibrium here is *Negotiate*.¹

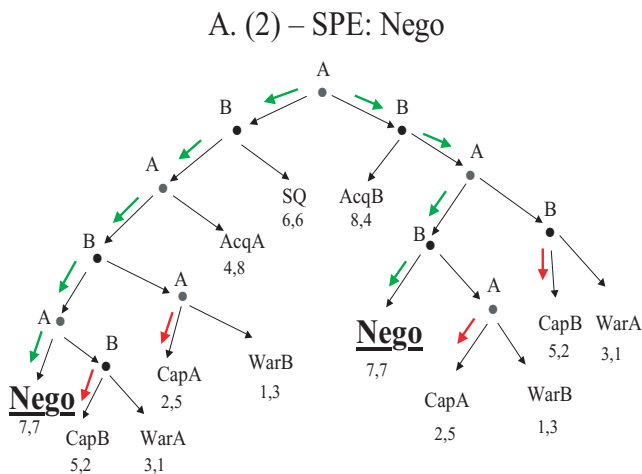
A. (1) – SPE: Nego



¹Follow the green arrows to see why.

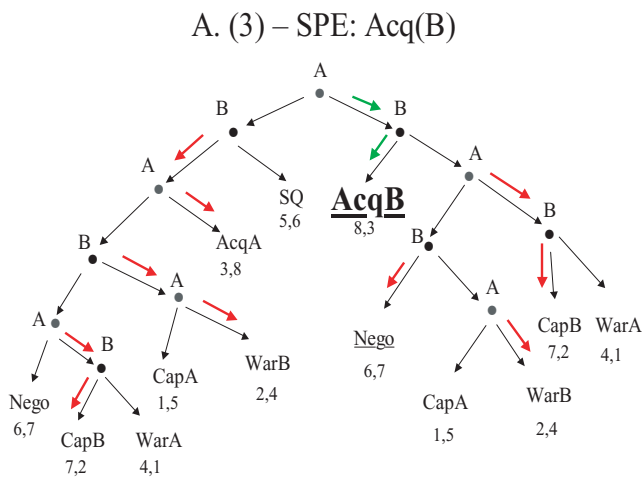
2. For A, $Acq(B) > Nego > SQ > Cap(B) > Acq(A) > War(A) > Cap(A) > War(B)$.
 For B, $Acq(A) > Nego > SQ > Cap(A) > Acq(B) > War(B) > Cap(B) > War(A)$.

\Rightarrow The subgame-perfect equilibrium is *Negotiate*. Note that A is indifferent between moving left or right in the first step; both moves result in negotiations.



3. For A, $Acq(B) > Cap(B) > Nego > SQ > War(A) > Acq(A) > War(B) > Cap(A)$.
 For B, $Acq(A) > Nego > SQ > Cap(A) > War(B) > Acq(B) > Cap(B) > War(A)$.

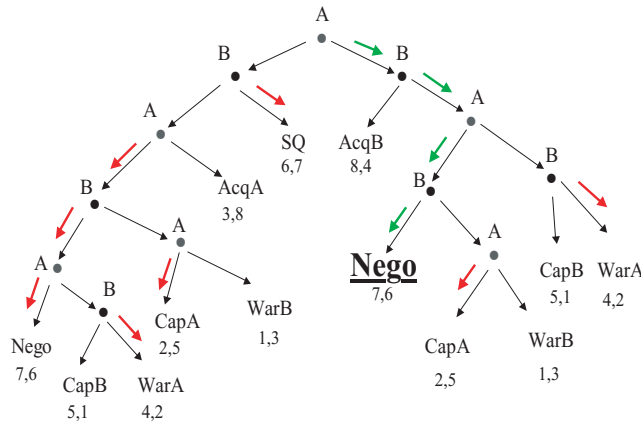
\Rightarrow The subgame-perfect equilibrium is *Acquiesce(B)*.



4. For A, $Acq(B) > Nego > SQ > Cap(B) > War(A) > Acq(A) > Cap(A) > War(B)$.
 For B, $Acq(A) > SQ > Nego > Cap(A) > Acq(B) > War(B) > War(A) > Cap(B)$.

⇒ The subgame-perfect equilibrium is *Negotiate*.

A. (4) – SPE: Nego



5. For A, $Acq(B) > Nego > SQ > Cap(B) > Acq(A) > War(A) > War(B) > Cap(A)$.
 For B, $Acq(A) > SQ > Nego > Cap(A) > Acq(B) > War(B) > War(A) > Cap(B)$.

⇒ The subgame-perfect equilibrium is *Negotiate*.

A. (5) – SPE: Nego

