

Let G be a game defined by an extended utility function g_p of player p ; a function $\text{seq}(i)$, which returns the sequence leading to the information set i ; a function $A(i)$, which returns the actions available at infoset I ; and finally, I_p , and S_p , which are sets of infosets, and sequences of player p respectively. For clarity, we subscript the functions with the player they belong to.

The optimal value of the following sequence-form linear program is equal the utility of the first player.

$$\begin{aligned}
& \max_{v, r} \left(\sum_{s_0 \in S_0} g_0(s_0, \langle \rangle) \cdot r_{s_0} \right) + \sum_{\substack{j \in I_1 \\ \text{seq}_1(j) = \langle \rangle}} v_j \\
& \text{s.t.} \quad \left(\sum_{s_0 \in S_0} g_0(s_0, \sigma_1 a) \cdot r_{s_0} \right) + \sum_{\substack{j \in I_1 \\ \text{seq}_1(j) = \sigma_1 a}} v_j \geq v_i \quad \forall i \in I_1, \forall a \in A_1(i), \sigma_1 := \text{seq}_1(i), \\
& \quad \sum_{a \in A_0(i)} r_{\sigma_0 a} = r_{\sigma_0} \quad \forall i \in I_0, \sigma_0 := \text{seq}_0(i), \\
& \quad r_{\langle \rangle} = 1
\end{aligned}$$

where the variables v can achieve any real value $\forall i \in I_1, v_i \in \mathbb{R}$; the r variables are probabilistic $\forall s \in S_0, r_s \in [0, 1]$; the symbol $\langle \rangle$ denotes the sequence of no actions; and the juxtaposition σx of a sequence σ followed by an action x appends the action to the sequence.