

Table of Notation for Simultaneous-Move Games

a_i	an action for player i
A_i	the set of actions available to player i
a	an action profile, one for each player: $\langle a_1, \dots, a_n \rangle$
A	the set of all possible action profiles
a_{-i}	a list (vector) of actions for all players other than i : $\langle a_1, \dots, a_{i-1}, a_{i+1}, \dots, a_n \rangle$
A_{-i}	the set of all possible lists (vectors) of actions for all players other than i
(a_i, a_{-i})	an action profile such that player i is assigned the action a_i , and all other players are assigned the actions assigned to them by a_{-i}
α_i	a mixed strategy for player i : a probability distribution over player i 's actions
$\alpha_i(a_i)$	the probability under the mixed strategy α_i of player i playing a_i
α	a profile of mixed strategies, one for each player
α_{-i}	a list (vector) of mixed strategies for all players other than i
μ_i	a belief for player i : a probability distribution over the set A_{-i} of lists (vectors) of all the other players' actions – note that this allows for <i>correlated conjectures</i>
$\mu_i(a_{-i})$	the probability according to player i 's belief μ_i of every player other than i playing according to the list (vector) of actions a_{-i}
$u_i(a)$	player i 's payoff when each player plays according to the action profile a
$U_i(\alpha)$	player i 's expected payoff when each player plays according to the profile of mixed strategies α : $U_i(\alpha) \equiv \mathbb{E}(u_i(\alpha))$
t_i	(in the context of Bayesian games:) a type for player i
T_i	(in the context of Bayesian games:) the set of types for player i
$p_i(t_{-i} t_i)$	(in the context of Bayesian games:) probability that player i 's belief assigns to the vector of every other players' type being given by t_{-i} , in the case where player i is of the type t_i
$\mathbb{E}_{t_i}(\cdot)$	(in the context of Bayesian games:) expected value, from the perspective of player i when she is of the type t_i
s_i	(in the context of Bayesian games:) a Bayesian strategy for player i : a function from T_i to A_i
$s_i(t_i)$	(in the context of Bayesian games:) the action that player i will take if she is type t_i under the Bayesian strategy s_i
ω	a state of nature, or (in the context of correlated equilibria:) an outcome of our signalling device
Ω	the set of all possible states of nature, or (in the context of correlated equilibria:) the (finite) set of all possible outcomes of our signalling device
\mathcal{P}_i	(in the context of correlated equilibria:) player i 's information partition over Ω
π	a prior belief over states of the world (or: signals) held in common by all players
π_i	the prior belief over states of the world (or: signals) held by player i , in contexts where priors are heterogeneous
$\pi(\omega)$	the probability according to the belief π of the state of the world (or: signal) being ω
$\pi(\cdot \mathcal{P}_i)$	player i 's posterior belief over states of the world (or: signals) having received the signal \mathcal{P}_i
$\pi(\omega \mathcal{P}_i)$	the probability according to the belief $\pi(\cdot \mathcal{P}_i)$ of the state of the world (or: signal) being ω
σ_i	(in the context of correlated equilibria:) a “pure strategy for player i in a strategic game <i>with</i> a correlating device”: a function from Ω to A_i , having the property that if $\omega' \in \mathcal{P}_i(\omega)$, then $\sigma_i(\omega) = \sigma_i(\omega')$
$\sigma_i(\omega)$	(in the context of correlated equilibria:) the action that player i will take if the signal is ω , under the “pure strategy for the expanded game” σ_i