Parametric Representation of Preferences[*][†]

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Abstract

A preference is invariant with respect to a transformation τ if its ranking of acts is unaffected by a reshuffling of the states under τ. We show that any invariant preference must be parametric: there is a unique sufficient set of parameters such that the preference ranks acts according to their expected utility given the parameters. This property holds for all non-trivial preferences, provided only that they are reflexive, transitive, monotone, continuous and mixture linear.