

Michel Regenwetter

University of Illinois at Urbana-Champaign, USA

Random utility without regularity

Classical random utility models imply a consistency property called regularity. Decision makers who satisfy regularity are more likely to choose an option x from a set X of available options than from any larger set Y that contains X . In light of ample empirical evidence for context-dependent choice that violates regularity, some researchers have questioned the descriptive validity of all random utility models. I show that not all random utility models imply regularity. I propose a general framework for random utility models that accommodate context dependence and may violate regularity. Mathematically, like the classical models, context-dependent random utility models form convex polytopes. They can be leveraged to make parsimonious behavioral predictions, and are empirically testable using contemporary methods of order-constrained inference.