

Suppose g is a gamble (= uncertain alternative) of order n in which two consequences are identical and g' is the gamble of order $n-1$ obtained from g by taking the union of the two events having the common consequence. Then coalescing holds for a decision maker if g' is indifferent to g . It is noted that rank-and sign-dependent utility (RSDU) (and the special cases of subjective expected utility, SEU, and expected utility, EU), Chew's weighted utility, and the quadratic utility theory of Chew, Epstein, and Segal all satisfy coalescing, but Edwards' linear weighted utility, Viscusi's prospective reference theory, and the configural weight theory of Birnbaum, Coffey, Mellers, and Weiss do not except in special cases where they become RDU or one of its special cases (SEU, EU, or EV). Status-quo event commutativity holds if in a compound binary gamble with the second alternative the status quo, the order in which the events occur is immaterial. Rank-dependent utility (and so SEU and EU) satisfy this property, but none of others do except in special cases that reduce to RDU or one of its special cases. The major result of the paper concerns which properties together with coalescing and status-quo event commutativity imply the general RDU representation. The answer is a few relatively non-controversial conditions plus the necessary condition that the preference order over the consequences with the events held fixed satisfies Wakker's axioms of additive conjoint measurement where the consequences are enumerated from best to worst.