

Branch Independence is a weaker form of Savage's independence axiom; if two gambles have a common outcome for a given probability event, the value of that common outcome should have no effect on the preference order induced by other probability-outcome branches. Configural weight theory and rank-dependent utility theories allow violations. Systematic violations of branch independence were obtained in two experiments with choices between three-outcome gambles, contradicting the idea that people cancel common outcomes in direct choices. The pattern of violations is opposite that predicted by cumulative prospect theory. Results are consistent with rank dependent, configural weight utility theory, with lower outcomes having higher weights. The ratio of weight of the medium outcome to the highest exceeds the ratio of weight of the lowest to the medium outcome.