MBS 98-27

A Simple Axiomatization of Binary Rank-Dependent Expected Utility of Gains (Losses)

A.A.J. Marley, Duncan Luce

For binary gambles composed only of gains (losses) relative to a status quo, the rank- dependent expected-utility model with a representation that is dense in intervals is shown to be equivalent to ten elementary properties plus event commutativity and a gamble partition assumption. The proof reduces to a (difficult) functional equation that has been solved by Aczél, Maksa, and Páles (submitted).

Key words: Rank-dependent expected-utility, event commutativity, gains partition.