Hypersensitivity Selten [1] then defines the property 'hypersensitivity'; using the notation above. If $r, p \in \Delta_n$ are two distributions with $r_j > 0$ and $p_j = 0$ for at least one j then the score is hypersensitive if both the following hold: (a) $V(p|r) = -\infty$ and (b) for every $\epsilon > 0$ and M > 0 it is possible to find $r, p \in \Delta_n$ with $r_i > 0$ and $p_i > 0$ such that $|r - p| < \epsilon$ and L(p|r) > M.

A score is hypersensitive if forecasts can be 'close' (defined by the Euclidean distance between them as n-vectors), yet their scores arbitrarily far away.

Bibliography

[1] R. Selten. Axiomatic characterization of the quadratic scoring rule. Experimental Economics, 1:43–62, 1998.