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(iii) Name of corresponding author – Suman Seth

(iv) Email address and affiliation of the corresponding author – suman.seth@vanderbilt.edu and Vanderbilt University/OPHI

(v) Names of any co-authors – James E Foster and Mark McGillivray

(vi) Text of the abstract - Many common multidimensional indices take the form of a “composite indicator” which aggregates linearly across dimensions using a vector of weights. Judgments rendered by a composite indicator are contingent on the initial vector of weights and could well be reversed at some other plausible vector. Certain other comparisons, however, are preserved even when weights are varied. This paper defines and characterizes a general robustness criterion that discerns between these two situations for a set of multiple “allowable” weighting vectors. We focus on a particular form for this set that arises naturally from an epsilon contamination model of ambiguity whose parameter relates to the degree of confidence in the initial weighting vector, as in Ellsberg (1961). We provide the necessary and sufficient conditions for a comparison to exhibit this form of robustness and propose a measure by which the robustness level of a comparison can be gauged.