

Using DRSA and Fuzzy Measure to Enlighten Policy Making for Enhancing
National Competitiveness by WCY 2011
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Abstract

The fuzzy measure of competitiveness criteria can be used to enlighten policy making for enhancing national competitiveness. However, fuzzy densities and interactions among criteria are usually unknown or uncertain for implications thus making analysis complicated and hard. This research proposes an extended fuzzy measure to non-additively (or called super-additively) aggregate preferences and implication possibilities into utilities or values, and then implies competitiveness features, patterns, and trends based on the utilities or values. Technically, the dominance-based rough set approach (DRSA) is used to transform ‘if...then...’ implications into fuzzy densities. For illustration, the extended fuzzy measure is applied on World Competitiveness Yearbook 2011 for analyzing Greece, Italy, Portugal, and Spain, then how making policy for avoiding debt crisis and enhancing national competitiveness.

Keyword : fuzzy measure, national competitiveness, dominance-based rough set approach (DRSA), World Competitiveness Yearbook (WCY)