

A fuzzy numbers regression for inducing OECD better life to WCY

competitiveness 2012

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## Abstract

The better life could be the basics of the national competitiveness. In order to verify this assumption, an induction of crossing systems is proposed to illustrate the conditional dependence of better life on competitiveness. The technique of crossing systems is built on fuzzy numbers that associate criteria values to decision objects. Based on a homogeneous-scaling of the fuzzy numbers, a classification regression can make inductions of crossing systems available. For an illustration instance, Organization for Economic Co-operation and Development (OECD) better life and World Competitiveness Yearbook (WCY) competitiveness in 2012 are used as dataset, dominance-based rough set approach (DRSA) is designed to give the fuzzy numbers. The result reveals that the better life does not have significant evidences to support national competitiveness; contrarily, the national competitiveness has the regression evidence on the better life effectively. The weights of the regression further help users to realize the priorities of the aggregated competitiveness

Keyword : better life, competitiveness, fuzzy numbers, Organization for Economic Co-operation and Development (OECD), World Competitiveness Yearbook (WCY)