

Possibilistic Aggregations in the Investment Decision Making

Authors : I. Khutsishvili, G. Sirbiladze, B. Ghvaberidze

Abstract : This work proposes a fuzzy methodology to support the investment decisions. While choosing among competitive investment projects, the methodology makes ranking of projects using the new aggregation OWA operator - AsPOWA, presented in the environment of possibility uncertainty. For numerical evaluation of the weighting vector associated with the AsPOWA operator the mathematical programming problem is constructed. On the basis of the AsPOWA operator the projects' group ranking maximum criteria is constructed. The methodology also allows making the most profitable investments into several of the project using the method developed by the authors for discrete possibilistic bicriteria problems. The article provides an example of the investment decision-making that explains the work of the proposed methodology.

Keywords : expert evaluations, investment decision making, OWA operator, possibility uncertainty

Conference Title : ICFSNC 2014 : International Conference on Fuzzy Systems and Neural Computing

Conference Location : Barcelona, Spain

Conference Dates : October 27-28, 2014