عنوان مقاله:

Modeling based on metaheuristic algorithms to optimize and reduce risk in the banking sector

محل انتشار:

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خلاصه مقاله:

Meta-heuristic search algorithms have been successfully used to solve a variety of problems in engineering, science, business, and finance. Meta-heuristic algorithms have common features because they are population-based approaches that use a set of tuning parameters to evolve new solutions based on the natural behavior of organisms. In this paper, we present a search optimization algorithm to solve optimization problems. The present study aims to develop an optimization model in the banking industry using meta-heuristic particle swarm algorithm. Since there is no clear picture of the realization of risk, financial markets need risk control and management approaches. The risk criteria used in the models include fuzzy value at risk, fuzzy conditional value at risk, fuzzy average of value at risk, absolute deviation of fuzzy low, semi-fuzzy. MATLAB software was used to conduct the research. The results indicate that the performance of the fuzzy average risk value model is better than other models in the optimal evaluation due to the lower mean squared error.

کلمات کلیدی:

Optimization risk management, MetaHeuristic ,optimization,Controland, fuzzy optimization