

## عنوان مقاله:

Investigating the Effects of New Indicators of Liquidity and Operational Performance of the Market on the Markowitz (Model Portfolio Returns Using Genetic Algorithm (Case Study: Refining and Petrochemical TSE -Listed Companies

## محل انتشار:

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## نویسندگان:

Mohammad Tavakkoli Mohammadi - Assistant Professor, Accounting and Finance Department, Petroleum Faculty of Tehran, Petroleum University of Technology, Tehran, Iran

Abbas Alimoradi - Assistant Professor, Accounting and Finance Department, Petroleum Faculty of Tehran, Petroleum University of Technology, Tehran, Iran

Mohsen Sarvi - M.A. Student in Finance, Petroleum Faculty of Tehran, Petroleum University of Technology, Tehran, Iran

## خلاصه مقاله:

The research on the Markowitz model and optimization of its portfolio using a variety of evaluation indicators and meta-beta-algorithms has always been the focus of attention of accounting and finance researchers. The results of studies carried out by various types of optimization methods are different in the Markowitz modified models. The purpose of this study is to measure the optimal portfolio and its corresponding return, with respect to the portfolio in the traditional Markowitz model, as well as to compare the position of the refining and petrochemical companies versus stock market outperformers, through integrating the operational criteria and the new indicators of liquidity using the genetic algorithm in the Markowitz model. Therefore, financial data related to the research variables for 35 cases of TSE-listed refinery and petrochemical companies from 2012 to 2016 fiscal years were extracted from Rahavard Novin database software and simulated by the genetic algorithm. The results show that returns on the stock portfolio optimized using the genetic algorithm and without considering the liquidity limitations and filters have a significant and positive difference with the return on the stock portfolios optimized with regard to the liquidity limitations and filters. Furthermore, the application of liquidity limitations and filters in the formation of optimal stock portfolios leads to a conservative increase in the choice of stocks (portfolio formation), which leads to a reduction in the risk and return of investment in such portfolios.

## کلمات کلیدی:

Liquidity Indicators, Operational efficiency, Genetic Algorithm, Markowitz Model, Optimum Portfolio

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