عنوان مقاله:

Index tracking by means of fuzzy clustering using time series features

محل انتشار:

کنفرانس بین المللی پژوهشهای نوین در مدیریت و مهندسی صنایع (سال: 1394)

تعداد صفحات اصل مقاله: 10

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خلاصه مقاله:

Index tracking is an investment strategy aimed to replicate the performance of a particular financial market which is usually shown by a specific index. The strategy become more popular in recent years, as a robust and sustainable one with a lower management and transaction cost in comparison to speculations and active investments. This paper extracted some basic features of the financial time series in order to cluster stocks and make an index fund (tracking portfolio) to track NASDAQ100 index. This is the first time of using fuzzy clustering methods for index tracking, which trigger us to fill this gap of literature.In this paper we proposed a new way of weighting to selected stocks for index fund based on each stock membership degree in each cluster. At last, the new fuzzy model was compared with an integer OR model, our model highly reduced the running time of the model compared to OR model, although its error is more than the OR model. The advantage of reducing time cost shows itself in a larger markets which consists of thousands of stocks

کلمات کلیدی:

index tracking, fuzzy c-means, entropy

لینک ثابت مقاله در پایگاه سیویلیکا: