成長基金的最佳化模型

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摘要

本論文提出數個線性規劃模型建立成長基金的投資組合。目標函數皆以目標規劃方式呈現。第一個模型採用追蹤與成長差距最小的原則。第二個模型改採用大中取小原則。第三個模型則考慮時間因素對於投資組合的影響，修正第一個模型加入時間參數。最後以台灣上市股票市場作為實證分析對象，探討三組模型之表現。

關鍵字： 目標規劃、大中取小原則

Optimization Models for the Growth Portfolio

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ABSTRACT

This thesis presents three linear programming models for selection of the growth portfolio based on historical data. The objective functions of these models are described by goal programming. The first model employs the principle of minimizing the deviation of the value-increasing index. The second model employs the mini-max principle. The third model is derived from the first model and includes the timing effect of historical data during construction of portfolio. The computational results and performance are illustrated by modeling with realistic data from the Taiwan stock market.

Key words: goal program, mini-max principle