

## QUADRATIC PROGRAMMING AS AN OPTIMIZATION TOOL FOR PORTFOLIO MANAGEMENT

ONANAYE, A.S. & AGBOLAMAGBIN, P. O

*Mathematical Sciences Department, Redeemer's University, P.M.B. Ede, Osun State, Nigeria*

### ABSTRACT

*In this paper, an investigation of Nigerian stocks was carried out. The principal task concerns essentially optimizing the portfolio or investors in Nigeria Stocks. Observations revealed that, though it is possible to get profits from investments in some securities but attached to them are some measure of risks. The paper has been able to provide a solution to the problem of balancing the profits and risks attached in the management of portfolios. The optimization tools used in this work includes the mean-variance principle which was used to model the problem and the extended simplex method which was employed in solving the problem.*

**KEYWORDS:** *Quadratic; Programming; Portfolio; Management; Optimization; and Karush-Kuhn-Tucker Conditions*  
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