Abstract

Markowitz proposed portfolio diversification as being a quadratic programming problem during the 1950s (1952 and 1956), at the same time that standard deviation was introduced as the means of measuring risk. As time has passed, algorithms have been proposed as being more efficient means for resolving such problems, as well as more complex methodologies for measuring portfolio risk. This article describes the active convex method for resolving programming problem, an approach for measuring VaR (value at risk) is reviewed and a Colombian stock market application is presented.

Key words: convex programming, portfolio selection. JEL: C610, C630, G110.