Financial Ratios: A New Geometric Transformation

ABSTRACT

This paper presents a complementary technique for the empirical analysis of risk and bankruptcy using financial ratios. Within this framework, we propose the use of a new measure of risk, which is Share Risk measure, and provide evidence of the extent to which changes in values of this index are associated with changes in each axis values and how this may alter our economic interpretation of changes in the patterns and direction of risk. Solving some methodological problems concerned using financial ratios such as ratio outliers, non-proportionality, non-asymetricity, non-scalicity and non-normal distribution are illustrated. Then results of Multiple Discriminat Analysis (MDA) and Genetic Programming (GP) are compared for common and modified ratios and higher accuracy achieved