Journal of Mathematical Sciences
Vol.21, No.1 (2010) 37-42

A STUDY OF INTERDEPENDENCY OF SOME STOCK MARKET INDICATORS ON MARKET CAPITALIZATION IN THE NIGERIAN STOCK EXCHANGE

L. A. Nafiu, A. T. Cole, M. D. Shehu, U. Mohammed and D. I. Lanlege

Department of Pure and Applied Mathematics
Federal University of Technology
Minna, Niger State, Nigeria
(e-mail: lanconserv@yahoo.com)

ABSTRACT

Data on growth in new issues and stock index performance were examined to ascertain their contribution to the growth of market capitalization (dependent variable) between 1996 and 2005. The computation was done with the aid of Statistical Package for Social Sciences (SPSS) and the test on the overall regression estimates was significant at 5 % ($\alpha = 0.05$). The multiple regression fitted with sampled data showed that stock index contributed higher value than new issues to the growth of market capitalization. Positive and high partial correlation coefficients were also observed between the variables but low partial correlation was observed in respect of new issues and stock index.

1. Introduction

In today's global business and economic environment, vast amount of statistical information are available. The most successful government, managers and decision makers are the ones who give priority and invest a great deal of their resources towards understanding the behaviors of data, utilizing them effectively for organizational goals. A sensitive and most emerging segment of the financial system; the capital market for instance, is worth examining. Specifically, the swing in stock prices (on secondary market) and the rate of expansion in the new issuance of securities are apparently recurring activities linked to the growth of the total market value (NSE, 2005).

This calls for a substantive statistical investigation to establish the contribution, if it exists; and to what degree the new issues and stock index are related to the market capitalization. (Allen et al, 2000) opined that capital market is the market that facilitates the mobilization and allocation of long-term funds for sustenance and development of industries and government programmes.

Applications of data analysis and statistical methodology are an integral part of organizations. Modern business have more need to predict future operations than did those of past, when business were smaller. Small-business managers can often solve problems simply through personal contact but managers in large corporations, however, have to deal with problems incorporating interactive elements or constraints or variables with distinct attributes (Walpole and Myers, 1993).

Keywords: Regression, Correlation, Material Capitalization, Stock Index, Indicators And New Issues.