

ABSTRACT

This research aims to discover the relationship in terms of correlation and causality between the movement of Dow Jones Industrial Average (DJIA) index and that of stock indexes in advanced Europe area as well as in emerging Asia. The variables in this research are the stock indexes movement of Dow Jones, FTSE 100, CAC 40, DAX, SSMI, SSE, BSE Sensex, and IHSG, using period of time from August 2009 - July 2010 with total amount of sample of 209 sample.

The method of analysis for correlation is bivariate correlation analysis while granger causality is used to test the causality between variables. The steps to do to precede granger causality test consist of unit root tests and lag optimum test. The unit root tests to find out whether the data is already stationer, use Augmented Dickey Fuller (ADF) test. The next step is to determine the optimum lag of variables based on some criteria such as Akaike information criterion (AIC), Schwarz information criterion (SC), and Likelihood Ratio (LR).

Bivariate correlation analysis states that the Dow Jones index movement is strongly and significantly correlated to all the stock indexes movement of advanced Europe and weakly correlated to those of emerging Asia area. Mean while, according to the unit root tests all data is already stationer at level, and lag 1 is selected by three criteria (LR, FPE, AIC) as the optimum lag for causality test. The granger causality test to describe the pattern of relationship between variables states that there are one way relationship (uni directional causality) between Dow Jones index movement with all the stock indexes movement except for SSE Composite index of China. The Dow Jones is the exogenous variable that significantly influences all those variables in advanced Europe and emerging Asia area, while each of those variables doesn't significantly influence the Dow Jones index movement during the period of time of this research.

Keywords : Dow Jones index, FTSE 100, CAC 40, DAX, SSMI, SSE, BSE Sensex, IHSG.