SECTORAL INTERDEPENDENCE IN THE KUALA LUMPUR STOCK EXCHANGE

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ABSTRACT

The relationship among the five sectoral indices namely, the Finance, Industrial, Plantation, Mining and Property Index of the Main Board of the Kuala Lumpur Stock Exchange, is examined in this study. The entire sample period covers 29 March 1993 to 30 June 1999, and daily indices were used.

The analysis is divided into two major parts. First part of the analysis is based on the entire sample period. We refer to this as the long-term analysis. Time-series and econometric techniques were employed. These include unit root and cointegration tests, vector error correction (VEC) modeling, Granger causality test and forecasting. Second part of the analysis focuses on four sub-periods, which were identified from the entire sample period. Each sub-period reflects a different market condition. The four sub-periods show a growing market, booming market, period of economic turmoil and the recovery stage, respectively. This is referred to as the short-term analysis. Among the techniques employed are the vector autoregression (VAR) modeling, variance decomposition, Granger causality test and forecasting.

This paper presents evidence that a single cointegrating vector underlies the long-run comovement of the five sectoral indices. This indicates that there is a long-run equilibrium relationship among the five sectors.

The results show the dominance of the finance sector over the entire sample period. In the short run, there is no clear dominance of any particular sector. Depending on the market condition, the leading sector is different for each sub-period. The first sub-period (29 March 1993 to 5 January 1994) sees no clear dominance of any sector. The plantation sector is dominant in the second sub-period (6 January 1994 to 28 February 1997). The finance sector is the leading sector in the third sub-period (3 March 1997 to 1 September 1998). For the fourth sub-period (2 September 1998 to 30 June 1999), the industrial sector leads the other sectors. We also found from the results of variance decomposition that the finance sector seems to be the most exogenous as it explains most of the shocks in the other sectors.

The VEC and VAR models were used to forecast (one day ahead) the daily sectoral indices for July 1999. The results are satisfactory as the forecasts track the actual indices quite closely for both the models. However, it was found that forecasting using the VEC model have smaller percentage of errors compared to that of the VAR model. This shows the importance of the long-run relationship included in the VEC model for forecasting purposes.

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