CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

Understanding stock market return behaviour is important for all countries. The degree of volatility present in the stock market leads investors to demand a higher risk premium, thereby creating higher capital cost, which impedes investment and slows economic development (Mala and Reddy, 2007).

Forecasting financial market volatility has received extensive attention in the literature by academicians and practitioners and this can easily be explained by the importance of volatility forecasting in investment decision-making, derivatives pricing, risk management and financial market regulation (Meng and Rafikova, 2006).

This project set out to determine the levels of volatility of one of the main Bursa Malaysia indices i.e. FBMKLCI and all its sectorial indices using the GARCH model.

A large number of studies have been done on volatilities in markets around the world. But so far to my knowledge, there have been very few conducted so far on Bursa Malaysia sector indices. This made the comparison of findings of the sectorial indices with previous studies limited.

This study showed the level of volatility (or risk) presence in the Bursa Malaysia stock market. It characterised the risk and return behaviour of the indices. The test for the presence of volatility was carried out for each index. The presence of GARCH terms on each of the indices proved the presence of volatility.

The α coefficient showed the effects of shocks in the earlier periods. Higher values implied that the effects of shocks in earlier periods tend to stay for a longer period than they did on other indices. This also implied less market efficiency than other indices as the time taken to return to normalcy was longer than the others (Thangavelu, 2009). Projecting this fact onto this study, the sequence of indices in descending order is as follows:

1. Mining Sector (the most severe in terms of earlier shocks lingering longer or the most inefficient index)
2. Plantation Sector
3. Property Sector
4. Construction Sector
5. Industrial Production Sector
6. FBMKLCI
7. Technology Sector
8. Consumer Sector

9. Service Sector
10. Finance Sector
11. Industrial Sector (the least severe in terms of earlier shocks lingering longer or the most efficient index)

The β coefficient captured the long term influences on volatility. Higher values mean higher influence of the long term on volatility. Projecting this fact onto this study, the sequence of indices can be listed. In descending order the list is as follows:

1. Industrial Sector (the highest long term influence on volatility)
2. Service Sector
3. Finance Sector
4. Technology Sector
5. FBMKLCI
6. Industrial Production Sector
7. Consumer Sector
8. Construction Sector
9. Property Sector
10. Plantation Sector

11. Mining Sector (the least influence of long term on volatility)

The Lagrange Multiplier Serial Correlation (LMSC) test method could be used to test serial correlation by analyzing how the lagged residual explained the residual of the original equation (Studenmund, 2006). The LM tests were carried out on all the sectors including the Composite Index. The results showed the intensity levels of volatility. The results are presented in table 5.3.2. Below is the list in descending order in terms of level of volatility:

1. Consumer Sector (the most volatile)
2. Industrial Sector
3. Finance Sector
4. Plantation Sector
5. Technology Sector
6. Service Sector
7. Industrial production Sector
8. FBMKLCI
9. Property Sector
10. Construction Sector
11. Mining Sector (the least volatile)

Many literatures suggest that there are many factors influencing stock market returns. Some of the more common ones include the prices of goods, money supply, real activities, exchange rates, political risks, climatic risks, oil prices, trading sector changes/realignment and foreign stock market movements. In the Malaysian context, it could be said that money supply, real activities, oil prices and foreign stock market movements might have significant influence on stock market returns. These factors might have some implications for investors in Bursa Malaysia as volatility in stock returns stems from the fact that stock returns might no longer be seen to carry their true intrinsic value and would lead investors to lose confidence in the stock market.

Finally, the historical data on volatility could be used to predict future volatility but it was hard to conclude about the accuracy of this since the volatility depends on specific assets, data frequency, the time-horizon of the data used and also errors of measurement. This empirical study during this specific period might also differ significantly from the results of other studies. Also the findings from this study and should not be applied directly to other markets.

6.1 Limitations of the study

The main objective of this study was to study the volatility of the Malaysian stock market during a specified period. The scope of this study has been limited by the time given to complete this project. If more time had been available more analysis could have been undertaken.

Using data obtained from the Bloomberg datastream, more analysis could be done, one possible example could be volatility co-movements between sectors and main indices. More detailed analysis could also be carried out to observe the detailed characteristics of the Bursa Malaysia time series.

This study was limited to the analysis of volatility of the Malaysian stock market from 2000 and 2010. Using data from a wider timeframe, more detailed analysis could be carried out to observe the dynamics of the indices during abnormal periods such as economic slowdowns and financial crises. Observations could then be made to see if similar patterns occur between such periods.

If data from other markets could be retrieved, a more comprehensive study on the nature of volatility co-movements with other stock-exchanges could be done to better understand these behaviours and dynamics. Furthermore, the volatility of Bursa Malaysia could be compared with other stock-exchanges, especially those from more developed nations so as to observe and compare the intensity of the volatility.

6.2 Suggested Future Research

This study was limited to the analysis of volatility of the Malaysian stock market within the timeframe of 2000 and 2010. To understand the characteristics of Bursa Malaysia indices more deeply, more tests and analysis must be performed. For example, a more comprehensive study on the nature of volatility

co-movements with other stock-exchanges to better understand the behaviour and dynamics could be undertaken in the future. Furthermore, the volatility of Bursa Malaysia could be compared to other stock-exchanges, especially those from developed nations to observe and compare the intensity of volatilities.

Future research could be conducted by analyzing larger timeframes e.g. fifteen years, by using more data and expanding the research to other countries to analyse commonality between stock-exchanges.

This study focused on data from selected Bursa Malaysia indices. To have a more complete feel of Bursa Malaysia market behaviours, more data and analysis could provide a more detailed knowledge and understanding.