## CHAPTER 5

## **CONCLUSION**

The primary objective of this study is to investigate the presence of seasonal variation in stock volatility across the days of the week in the Malaysian stock market for the period 3 July 1995 to 30 June 2000. The daily volatility of stocks is estimated using the Parkinson's extreme value method i.e. using the daily high and low prices of the stocks. The study also takes the opportunity to look into the day-of-the-week effect of daily stock trading returns; analyse the seasonal variation of volatility across the days of the week using Levene test; as well as the causal relationship between daily stock volatility, trading returns and trading volume.

The study revealed that there is no strong evidence to indicate the persistent presence of seasonal variation in stock volatility across the days of the week in the Malaysian stock market from 3 July 1995 to 30 June 2000. This finding is consistent with the results of similar analysis for the three sub-periods, which correspond with a stable, declining and rising stock market. Thus, the finding from this study does not concur with the previous findings on the existence of seasonal variation in volatility of Malaysian stock market.

The finding from this study reflected a moderate presence of the day-of-theweek effect of the daily stock trading returns in the stock market of Malaysia for the sample period under study. Nevertheless, the study shows significant

109

positive Friday trading returns and negative Monday trading returns. This finding is reasonably consistent with the earlier finding of previous studies which show the persistent presence of the day-of-the-week effect of stock returns for the stock market in Malaysia. The sub-period analyses provide further information on the presence of the day-of-the-week effect under different market environments. Results of the first sub-period, a stable market, indicates a moderate presence of the day-of-the-week effect of stock trading returns. Nevertheless, the second and third sub-periods, which correspond with a sharp declining and rising markets respectively, did not provide sufficient evidence on the persistent presence of the day-of-the-week effect of stock trading returns.

In this study, the stock volatility is estimated using the Parkinson's extreme value method. The estimated volatility for each stock is tested for equal mean across the days of the week to determine the presence of seasonal variation in stock volatility. From the study, it appears that the Parkinson's method of testing for unequal mean volatility using the one-way ANOVA or Kruskal-Wallis tests is less sensitive since the rejections of null hypothesis using this methodology are consistently less than that of the Levene test on the daily trading returns for the whole period and sub-periods.

As the stock volatility is a measure of the risk in investing in a stock, the riskreturn relationship of stocks is also examined in this study to determine if there is direct or inverse relationship between the risks and returns in the Malaysian stock market. From the study, we conclude that Friday, with lowest

110

volatility or risk for most of the stocks is consistently rewarded with higher mean trading returns. On the other hand, Monday, which consistently exhibits higher daily volatility or risks, is accompanied by a lower daily trading returns.

The study further examines the causal relationship between daily volatility, trading returns and trading volume for the stock market in Malaysia for the period July 1995 to June 2000. The findings revealed that most of the stocks' daily volatility, trading returns and trading volume can be explained by their own lag variables. In addition, there is strong evidence to indicate that the daily volatility of stocks in Malaysia can be explained by the lag variables of trading returns and trading volume. There is also evidence to conclude the presence of feedback relationship between the daily volatility and trading returns as well as the daily volatility and daily trading volume.

In conclusion, this study did not find strong evidence to indicate the persistent presence of the seasonal variation of stock volatility in the Malaysian stock market during the period July 1995 to June 2000. The study also revealed a weakening of the day-of-the-week effect for stock returns in the stock market during this period. These results do not concur with the previous studies which documented a strong presence of seasonal variation in stock volatility and stock returns in the Malaysian stock market. Nevertheless, the finding of this study which shows the inverse relationship between stock volatility or risk and returns is consistent with the earlier findings in other markets. The study also concluded the strong presence of the causal relationship between the daily volatility, trading returns and trading volume.

111

30 E

Although investors can derive abnormal profits from some of the stock market anomalies as identified above, it is significant to note that the presence of the stock market anomalies may not be persistent or consistent over time. In addition, it is important to note that the sample period under study is a unique period as the economy and the stock market experienced a significant downturn and sharp correction as a result of financial crisis. It must also be noted that this is also the period in which the selective capital controls were introduced to contend with the financial crisis. To further verify or evaluate the findings of this study, it is recommended that more studies using other statistical methodologies or tests and with a longer sample period be conducted so that a firmer conclusion could be achieved.