CHAPTER 5: SUMMARY AND CONCLUSIONS

5.1 Summary and Conclusion

Using data of the morning open, morning close and afternoon close, this study has investigated the behaviour of trading and non-trading day of six return series for seven KLSE indices throughout the entire sample period from January 3,1994 to November 26,1999. The six return series are the close to open (overnight non-trading), open to close (daily trading), morning, afternoon, close to close and open to open series. The seven KLSE indices are the Composite Index, Emas Index, Industrial Index, Finance Index, Property Index, Plantation Index and Mining Index. This study has further classified the entire sample period into 3 sub-periods in order to detect if there is any difference in the stock return of these sub-periods.

Based on the entire sample period, the average overnight return is positive, suggesting that it has more favourable news during the non-trading period. Most indices also have high positive weekend return from the previous Friday close to Monday open. Nevertheless, the overnight return has the lowest standard deviation or volatility. This shows that the return volatility or standard deviation of non-trading day is lower than trading day.

All indices have average negative open to close (daily trading) return. Except on Friday, all indices have negative return particularly on Monday, Tuesday and Thursday. This implies that the early trading day of

the week is more susceptible to unfavourable news. The magnitude of return volatility during the trading day is three to five times greater than the non-trading day. The return volatility is particularly high on Monday and Tuesday.

The open to close return is decomposed into the morning and afternoon returns. The average morning return for all indices is negative but it turns positive during the afternoon trading except on Monday. It may be due to less favourable information being produced in the morning compared to the afternoon trading. The magnitude of the negative morning return is also greater than the positive afternoon return, causing the average open to close (daily trading) return to be negative. The morning return not only has greater magnitude, it also has higher volatility than the afternoon return.

The day of the week effect can be detected by looking at the daily close to close series. The result is similar to the open to close return. The negative open to close return is mainly attributed to the average negative daily close to close return particularly on Monday, Tuesday and Thursday. The negative Monday closing return accrues mainly from the negative Monday open to close return. The volatility of Monday and Tuesday is higher than other days of the week.

The average open to open return is also negative, similar to the close to close return. However, it behaves differently across the weekdays. It has positive Monday open to open return as opposed to a

negative Monday close to close return. In contrast, the open to open returns on Wednesday and Friday turn negative but they are positive for the close to close returns.

The existence of weekday, overnight, weekend and daily effect is also tested for each index throughout the entire sample period. All indices have significant weekday effect where the negative Monday trading return is significantly different from other days of the week. Overnight effect is significantly seen on Tuesday for property and mining stocks. All indices have significant overnight effect on Wednesday except the Property Index. All indices also show significant overnight effect on Thursday (except Industrial Index) and on Friday (except Mining Index). The weekend effect from the previous Friday close to Monday open is significant for all indices except the Industrial Index. There is a significant day of the week effect for all indices. The Monday closing return is significantly negative and it is different from other days. On the other hand, there is a significant positive Monday and negative Tuesday open to open return. The return volatilities throughout the weekdays are significantly different from each other.

Testing on equality of mean and variance is also performed between overnight and open to close return, between morning and afternoon return as well as between daily close to close and open to open return. The result shows there is significant difference in the mean return between overnight and open to close return particularly on Monday and Thursday. There is also evidence of a significant difference in the mean

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return between the morning and afternoon return for all indices. They are significant on Tuesday, Thursday and Friday (except Industrial Index). There is a significant difference in the mean return on Monday between close to close and open to open series.

The return volatility between overnight and open to close series is significantly different from each other. Similarly, there is a significant difference in the volatility between morning and afternoon series. However, the return volatility is insignificantly different between close to close and open to open series.

When the entire sample period is divided into 3 different sub-periods, the return series of each index and sub-period is examined. For the Composite Index, the average close to open (overnight) return for sub-period 1 is significantly different from zero. Sub-period 1 has significant negative morning return and significant positive afternoon return too. However, the open to close (daily trading), close to close and open to open returns are insignificantly different from zero. During the financial crisis, sub-period 2 has negative overnight return although it is insignificant. Except the afternoon series, all return series are significantly negative in sub-period 2. After the financial crisis, the overnight return becomes significantly positive again in sub-period 3. A significant weekend effect occurs during sub-period 3 and this might have contributed to the weekend effect of the entire period. The afternoon, close to close and open to open series have significant positive returns.

The return series of Emas Index is almost similar to the Composite Index with the exception that it has higher and significant negative open to close return in sub-period 1. For Industrial Index, only the overnight series shows significant positive return in sub-period 1. For the other two sub-periods, it behaves similarly as the Composite Index. The Finance Index has greater non-trading day effect as all the average overnight returns are positive throughout the 3 sub-periods. The Property Index has the highest negative morning return for all 3 sub-periods, resulted in a higher negative daily trading return. All indices have insignificant negative overnight return except the Plantation Index. Only three indices have significant positive afternoon return during the financial crisis (sub-period 2). They are the Property Index, Plantation Index and the Mining Index.

Test of equality of mean and variance is performed between the sub-periods. Most indices have significant difference in the mean return series between sub-period 1 and 2, between sub-period 2 and 3 as well as between sub-period 1 and 3 respectively.

By looking at the volatility, the return volatility is insignificantly different between sub-period 1 and 2. Similarly, there is also an insignificant difference in the volatility between sub-period 2 and 3 as well as between sub-period 1 and 3 respectively.

In conclusion, this study supplements the existing literature by extending the understanding of the trading and non-trading stock return to a smaller yet important Asian Pacific market.

5.2 Recommendations for Future Research

The followings are suggested for future research:-

(a) the intraday market return of individual stocks of different sub-sectors

(b) the comparison of intraday trading volume of different sub-sectors

(c) the analysis of shorter sub intervals stock return such as the minute to minute and hourly interval.

(d) The analysis of longer sub-intervals stock return such as the weekly, monthly or yearly effect.

(e) an examination on the interday stock return such as lunch break interval, morning close to close interval and afternoon open to open interval.