

## **CHAPTER 5**

### **SUMMARY AND CONCLUSION**

Monthly data of 150 stocks covering the period from January 1987 to December 2001 have been used to study the month-of-the-year effect and the firm size effect. This chapter summarizes the important results, concludes the study, and describes its implications and limitations of the study.

#### **5.1 RESTATEMENT OF STUDY OBJECTIVE**

The emphasis of this study is to determine empirically the existence of the month-of-the-year return seasonality and the firm size effect in the KLSE Main Board. Previous studies have documented the existence of return seasonality in the KLSE indices particularly the benchmark KLCI. The most prominent seasonality is the January effect and the CNY effect. However, the results could not be used to test for the small firm size effect, for which the January effect is largely associated, since market indices used as proxies are represented by large-capitalised stocks.

To improve the analysis, this study re-examines the issue using different methodology and utilising more recent data. This includes investigation of the pattern of seasonality to determine whether seasonality exists in the Main Board. This was

carried out by using statistical tests such as one-sample t-test, one-way ANOVA test, Tukey test and Kruskal-Wallis test. The study was conducted on 150 Main Board stocks as well as the KLSE Composite Index. Five sizes of portfolios were created based on the market value, thus, allowing for direct examination of the return patterns of the smallest to the largest stocks.

The time period was further divided into two sub-periods to enable a closer examination of the return patterns during the sub-periods. The segmentation is necessary since the full period covers a long period of time and may not be able to give accurate picture of the return patterns due to numerous changes in the Malaysian stock market throughout the period. For comparison purposes, this study also analyses the KLCI return patterns throughout the 1987 to 2001 period.

## **5.2 CONCLUSION ON THE MAIN FINDINGS**

Consistent with the earlier findings, there is a pronounced January effect in the Malaysian equity market particularly during the 1987 to 1993 sub-period. The anomaly is stronger in smaller companies possibly due to the asymmetric information that makes smaller firms more visible to investors. However, the tax-loss selling hypothesis could not explain the existence of the January effect for the Malaysian case since there is no capital gain tax imposed in Malaysia. Instead, the anomaly may be best explained by the market integration hypothesis due to the evidence that the

January effect is a worldwide phenomenon and the correlation between the Malaysian market and the international markets. In addition, the anomaly may also be explained by the portfolio rebalancing, window dressing and parking-the-proceed hypotheses based on the large presence and active involvements of institutional investors in the Malaysian market.

Besides the January effect, the superior return recorded in the month of February indicates the existence of the CNY effect. February emerged as the best performing month in the 1987-2001 full period, 1987-1993 sub-period and during the 1995-2001 sub-period although it is not significant in sub-period 2. The CNY effect is particularly pronounced in smaller companies. The phenomenon is attributed to the dominant role of the ethnic Chinese investors in the Malaysian stock market.

This study also reveals the presence of the reverse August effect as reflected by the negative return in the month of August. August is found to be the worst performing month throughout the 1987-2001 period but the negative return is not statistically significant. The negative return is more pronounced in sub-period 1 and sub-period 2 across all portfolios. Similar to the January effect, the reverse August effect may be explained by the market integration hypothesis since several other major world markets including Australia, Singapore, and the United Kingdom are found to have negative August return. The poor August performance may be due to investors becoming less active during the month as manifested by the relatively low share turnover that coincides with the long summer holiday in the western countries.

To conclude, this study has found strong evidence of the existence of the January effect and the CNY effect in the Malaysian stock market. The effects are more robust in smaller stocks as compared to larger stocks. However, there is inherent risk involved if individual investors attempt to exploit the January and February seasonal to earn abnormal profits since both effects appear to be less persistent.

### **5.3 IMPLICATIONS OF THE STUDY FINDINGS**

The findings of this study on the KLSE Main Board concur with the findings by Nassir and Mohamad (1987), Wong (1988) and Tay (1991). The January effect was observed, and the month-of-the-year effect as well as the seasonality effect were found to be significant and their existence can be generally concluded.

The findings of this study has important implications to investment management. An investor should adjust the timing of his investments to take advantage of the established pattern of seasonality in the KLSE. Moreover, the inter-relationship between size effect and month-to-month seasonality of stock returns provides guidelines as to which firm-size stocks to invest and when to buy or sell them.

In January and February, investors should sell stocks regardless of firm-size because the share prices of all stocks are highest in both January and February than in any other months of the year. Investors will profit much more if they sell small firm-size stocks because the turn-of-the-year effect is stronger on small firm-size stocks than on large firm-size stocks. Investors who want to buy stocks during the first half of the year should do so in March because the market reaches a minor trough in that month. They should choose small firm-size stocks because the size effect is pronounced in that month.

In the months of August and October, investors should buy stocks regardless of firm-size because the market is generally bearish in both months. With regard to the pronounced size effect, *ceteris paribus*, investors should favour small firm-size stocks over large firm-size stocks when constructing optimal portfolios for long term investment.

#### **5.4 LIMITATIONS OF THE STUDY**

Time and resource constraint had contributed to the following limitations. First, the study covers only 150 stocks. It would be more representative if the number of stocks studied is increased. Second, the study covers only the monthly returns for 15 years, that is, from January 1987 to December 2001. It would be more representative if the period of study is extended to at least 20 years.

## **5.5 RECOMMENDATIONS FOR FUTURE RESEARCH**

This study provides the groundwork for further research on size effect and seasonality in the KLSE. In particular, the study may be extended to cover more stocks from the Main Board and a longer period of study (say 20 years).

As for future studies, it is suggested that the scope of the analysis is broadened to include the examinations on the role of the risk-return relationship and the microstructure in the monthly return variations, or testing the validity of other explanations such as the portfolio rebalancing, the window dressing and the parking the proceed hypotheses to account for the January effect in the Malaysian stock market.

Future studies on the KLSE could also focus on the relationship between firm-size, bid-ask spreads, trading volume and transaction costs to determine the extent investors can profit from firm size effect and seasonality in KLSE.