

## **CHAPTER 5**

### **CONCLUSIONS AND RECOMMENDATIONS**

This chapter concludes the findings of the analysis and provides recommendations based on the findings. Possible explanations of the day of the week anomaly based on previous studies is also discussed in section six of this chapter followed by suggestions for further studies in section seven.

#### **5.1 THE EXISTENCE OF THE DAY OF THE WEEK EFFECT AT THE KLSE FROM 1994 TO 1998**

From the empirical findings, it is concluded that the day of the week effect exist in the Kuala Lumpur Stock Exchange for the overall period from 1994 to 1998 as the mean return vary across days of the week with significantly lowest and negative mean return on Monday and highest and positive return on Friday in consistent with findings documented by Cross (1973). The second lowest and negative return was documented on Thursday and second highest and positive return was documented on Wednesday.

When compared between the days, significant differences in the mean return were found to be between Monday and Wednesday, Monday and Friday, Wednesday and Thursday and Thursday and Friday.

The findings are inconsistent with the efficient market theory and the Capital Asset Pricing Model, as there is a pattern in the distribution of daily mean return at which an investor can gain abnormal return.

## 5.2 THE RELATIONSHIP BETWEEN THE DAY OF THE WEEK EFFECT AND ECONOMIC CONDITIONS

From the empirical findings, it is concluded that the day of the week anomaly is affected by the economic conditions.

During the economic expansions, the day of the week effect was found to exist in Kuala Lumpur Stock Exchange with lowest and negative mean return still documented on Monday and highest and positive return still prevailing on Friday. The second lowest and negative return was also documented on Thursday and second highest and positive mean return was documented on Wednesday.

When compared between days, significance mean return was found between Monday and Tuesday, Monday and Wednesday, Monday and Friday, Wednesday and Thursday and Thursday and Friday.

However, empirical evidences show that during the economic contractions, the day of the week effect **does not** exist in the Kuala Lumpur Stock Exchange. In fact Thursday documented the lowest and negative mean return for the week as opposed to the findings on the overall market which documented lowest and negative return on Monday. The highest and positive return of the week still documented on Friday. However, these differences in the mean return were found not to be significant. Thus, the result concludes non-existence of the day of the week effect in Kuala Lumpur Stock Exchange during contractions.

The above findings are found to be different to the study undertaken by Liano (1989). Despite concluding that the economic business cycle has significant effect on the pattern of daily stock returns, Liano's study

indicates that Monday has stronger negative return during contractions than during expansions and that the returns on Thursday and Friday during contractions were significantly different from those during expansions. In this study however, no day of the week effect was found during contractions and Thursday was found to have lowest mean return during economic contractions as opposed to findings by Liano who documented stronger negative return on Monday during contractions.

### **5.3 THE RELATIONSHIP BETWEEN THE DAY OF THE WEEK EFFECT AND SIZE OF FIRMS**

As opposed to result documented by Ho, P.C. (1996) and Lim, K.C. (1997) who concluded non existence of the day of the week effect for small and large market capitalisation stock respectively, the empirical evidences documented from this study concludes existence of the day of the week effect for both the large and small firms.

The size of the firm was found not to have any effect on the day of the week effect. Irrespective of whether the firms are small or large, the day of the week anomaly is found to exist for both during the period from 1994 to 1998.

However, while the lowest and negative return was found to exist on Monday for the large firms, the small firms documented lowest and negative return on Thursday. The highest and positive return was still documented on Friday for both the small and large firm with smaller firm documenting higher mean return as compared to large firms. The findings slightly differ to result documented by Keim and Stambaugh (1984) who found that Monday mean return to be significantly negative and Friday mean return higher for smaller firms.

The findings of this study is different from the result documented by Ho and Lim as both had used 30 underlying securities to conclude their findings whereas this study had used the EMAS Index and Second Board Index respectively.

#### **5.4 OVERALL COMMENT**

It is interesting to note some consistent pattern throughout the study period whereby irrespective of market condition or the size of firm, the highest and positive return is always documented on Friday, while the Second highest return is always documented on Wednesday.

The lowest and negative Monday return is only documented during expansions period and for large firms only, while during contractions and for small firms, the lowest and negative return is documented on Thursday.

#### **5.5 RECOMMENDATIONS**

From the findings of analysis for the overall period, it is recommended that an investor should buy stocks on Monday and sell on Friday to maximise ones wealth. In view of the second lowest and negative return documented on Thursday and second highest and positive mean return documented on Wednesday, investors can still gain buy buying on Thursday and selling on Wednesday though the investor may not maximise his wealth.

An investor should look at the economic conditions before making an investment to maximize his/her wealth.

During the economic expansions, an investor can maximize his/her wealth by buying on Monday and selling on Friday. He can still gain from buying on Thursday and selling on Wednesday though he may not maximize his wealth.

However, during the economic contractions, an investor will not gain if he invest according to the day of the week strategy to maximize his wealth as there will not be any difference in the mean return gained throughout the days of the week. Since the return pattern between the days are the same, it is not wise for an investor to adopt the day of the week strategy to buy Monday and sell on Friday as he will not gain from the strategy.

On the other hand, when investing in large firms, an investor should buy on Monday and sell on Friday to maximize his wealth. However, when investing in small firms, an investor should buy on Thursday and sell on Friday to maximize his wealth. An investor need not adopt an investment strategy based on the size of the firm as irrespective of the size of the firm, the day of the week still persist.

## **5.6 POSSIBLE EXPLANATIONS OF THE DAY OF THE WEEK EFFECT**

From the empirical findings, the mean returns in Kuala Lumpur Stock Exchange was found to vary across days of the week. For the overall study period, mean return tend to be lower on Mondays and higher on Friday. The anomaly found to persist irrespective to the size of the firm. The day of the week effect was also found to be affected by the economic conditions. Based on the previous studies, there are various possible factors to explain the day of the week effect.

### 5.6.1 Settlement Effect

Day of the week effect could be explained by the settlement effect due to lag in the date of a selling transaction to the date of payment.

Prior to 18.8.97, the settlement period at KLSE was seven days ( $T+7$ ). However, from 18.8.97 onwards, the KLSE had implemented a five days settlement period,  $T+5$ .

Prior to 18.8.97, an investor who sells his stocks on Friday will only get his payment after 11 calendar days while an investor who sells stocks on Monday only need 9 calendar days to be paid. In view of the longer waiting period on Friday as compared to Monday, stocks sold on Friday needs higher return to compensate the longer holding period. This might explain the high and positive return on Friday as compared to Monday.

However, after 18.8.97, with the implementation of the 5 days settlement period, irrespective of whether an investor sells his stock on Monday or Friday, he will only need to wait for 7 calendar days to be paid. Thus, there should not be any variation between the daily return of Monday or Friday as there is no compensation to be made.

As the period of the implementation of the new settlement period coincides with the contractions period of the economy, the non-existence of the day of the week effect during the contractions period could be explained by the new settlement period instead of the economic condition. However, this explanation is not tested for validity.

### **5.6.2 Behavior of Individual Investors**

Monday being the first working day of the week after the weekend holidays and leisure is often started by people with "bad" mood or classified as "Monday blues". Whereas, Friday is usually looked forward with positive attitude for the weekend "break" on Saturday and Sunday. Hence, the different individual moods and perception on Monday and Friday could subject to Monday effect and be a cause of the observed weekend effect in the stock market.

### **5.6.3 Information Effect**

The Government or firms tend to delay the release of any unfavorable news until end of the week after the market is closed to give time for people to digest the information during the weekend and to avoid any "panic selling" of shares which may create a chain effect and trigger the overall market. Although this behavior would not cause systematically negative stock returns in an efficient market, it is possible in a semi-strong form of efficient market and weak form of efficient market such as the Malaysian market. Hence, this tendency might well interact with the Monday pessimism of investors to produce declining prices on Monday, which could explain the day of the week effect.

### **5.6.4 Stockbrokers Influence**

The day of the week effect might also be influenced by the stockbrokers. Usually the stockbroking firms give their buy recommendations during the week instead of at the start of the week after observing the stock movement pattern, leaving the

investors to make their own unsolicited sell decisions during the weekend. The possible pressure by the trading pattern of individual investors at the beginning of the week could cause the share prices to drop and the mean return on Monday to be negative.

#### **5.6.5 Moods Of Fundamental Analysts**

The fundamental analysts who analyses the intrinsic value of stock for a buy or sell recommendations to maximize ones wealth could also contribute to the day of the week effect if there is a swing in his "mood" during the analysis of fundamental factors of a stock. A stock may appear to be good investment during the positive moods on Friday while on a gloomy Monday morning, the same stock may appear to be overvalued. Thus, investors may demand fewer or be willing to sell the stocks on Monday even though the fundamental factors may not have changed. These behavior may result to the day of the week effect.

#### **5.6.6 Trading Patterns Of Individual & Institutional Investors**

Empirical evidences suggest that in New York Stock Exchange (NYSE), trading volume on Monday is lower than on the other days of the week. They have also proved that individuals tend to trade more on Mondays, which implies that low NYSE trading volume on Mondays is a result of less trading by institutions. With the selling pressure on Monday, there is a tendency for individuals to increase the number of sell relative to buy transactions to cause the downward pressure on stock prices on Monday. Assuming that the same trading pattern of NYSE exist in Kuala Lumpur Stock Exchange, it may well explain the low and negative mean return on



Monday found in the Kuala Lumpur Stock Exchange and the day of the week effect anomaly.

## **5.7 SUGGESTIONS FOR FURTHER RESEARCH**

For more insight into this day of the week anomaly, future research can include longer study period and can be also be studied in relation to other market anomalies such as the January effect, holiday or intra-day effect.

To see whether the day of the week effect anomaly is persistent in all the economy sectors, future study can segregate the sectors based on the KLSE Industrial Index, KLSE Consumer Products Index, KLSE Construction Index, KLSE Trading/Services Index, KLSE Finance Index, KLSE Property Index, KLSE Mining Index and KLSE Plantation Index. The findings from this study will give investors a focused perspective into this anomaly and enable investors to invest more wisely.

Also, if the stock market downturn were to persist for few years, the study period can be expanded for a more significance result on the persistency of the day of the week anomaly during the economic crisis. Study can further explore whether the non-existence of the day of the week effect during contractions is influenced by the new settlement period of 5 days from 18.8.97 onwards or due to change in economic conditions. Future studies can also be divided into three category of economy conditions that is, the boom period, recession period and recovery period for better insight on whether the day of the week effect is affected by economic conditions.

For more insight on the Monday effect, future computation of the daily mean return can be based on Monday open to Monday close return or Friday close to Monday open return to distinguish between trading day and non-trading day.

For more significant result, statistical adjustment could be made for auto correlation or other measurement error in future studies. Further exploration could be made whether the day of the week effect resulted from institutional or individual trading.