

## CHAPTER 5

### Conclusion and Implications

#### 5.1 Conclusions

The objective of this research is to investigate the day of the week effect on stock volatility in the information and communication technology sectors in ASEAN. The data employed closing daily series of ICT stock price indices data over the period from April 4<sup>th</sup> 2011 to March 25<sup>th</sup> 2016: a total of 5 years. The standard ordinary least square (OLS) estimation and generalized autoregressive conditional heteroscedasticity (GARCH) model with dummy variable models were employed to identify the day of the week effect which presented in both returns and volatility. We found statistically significant evidence to show that there is the day of the week effect.

We employed three different types of models for the return and volatility.

##### 1. Thailand

The first one is OLS which indicates the consistency of the error term's variance. This model is used for finding the return equation. The outcome based on this model showed that the highest return of Thailand is on Mondays. The lowest return of Thailand is on Tuesdays.

The second model studied the day of the week effect for only the return equation by using GARCH model. In this GARCH model, the volatility can change over time. The results of returns were similar to the OLS estimation which the highest return of Thailand is on Mondays. The lowest return of Thailand is on Tuesdays.

Last, the third model examined the day of the week effect for both return and volatility equation by using Modified GARCH which the results of the return equation are the same as OLS estimation and GARCH model. The findings indicate that the highest

volatility occurs on Tuesdays for Thailand. The lowest volatility occurs on Thursdays for Thailand.

## 2. Malaysia

The first one is OLS which indicates the consistency of the error term's variance. This model is used for finding the return equation. The outcome based on this model show that the highest return of Malaysia is on Fridays. The lowest return of Malaysia is on Thursdays.

The second model studies the day of the week effect for only the return equation by using GARCH model. In this GARCH model, the volatility can change over time. The results of returns are similar to OLS estimation which the highest return of Malaysia is on Fridays. The lowest return of Malaysia is on Thursdays.

Last, the third model examines the day of the week effect for both return and volatility equation by using Modified GARCH which the results of the return equation are the same as OLS estimation and GARCH model. The findings indicate that the highest volatility occurs on Tuesdays for Malaysia. The lowest volatility occurs on Mondays for Malaysia.

## 3. Indonesia

The first one is OLS which indicates the consistency of the error term's variance. This model is used for finding the return equation. The outcome based on this model show that the highest return of Indonesia is on Thursdays. The lowest return of Indonesia is on Fridays.

The second model studies the day of the week effect for only the return equation by using GARCH model. In this GARCH model, the volatility can change over time. The results of returns are similar to OLS estimation which the highest return of Indonesia is on Thursdays. The lowest return of Indonesia is on Fridays.

Last, the third model examines the day of the week effect for both return and volatility equation by using Modified GARCH which the results of the return equation are the same as OLS estimation and GARCH model. The findings indicate that the highest

volatility occurs on Mondays for Indonesia. The lowest volatility occurs on Fridays for Indonesia.

#### 4. The Philippines

The chi-squared probability of ICT the Philippines' stock market returns is 0.1176, so the null hypothesis is accepted which means the data has no relation with time varying volatility. The outcome based on this model show that the highest return of the Philippines is on Tuesdays. The lowest return of the Philippines is on Thursdays.

Although the data is significant, the day of the week effect was not capable of explaining the presence of day of the week effects that were the daily returns on stock price indices of the Philippines to exist. In addition, the support is weak and the data are inconclusive.

This investigation examined the day of the week effect for both return and volatility equation by using Modified GARCH which the results of the return equation are the same as OLS estimation and GARCH model. The findings indicate that the highest volatility occurs on Tuesdays for the Philippines. The lowest volatility occurs on Thursdays for the Philippines.

#### 5. Singapore

The chi-squared probability of ICT Singapore's stock market returns is 0.3512, so the null hypothesis is accepted which means the data has no relation with time varying volatility. The outcome based on this model show that the highest return of Singapore is on Thursdays. The lowest return of Singapore is on Tuesdays.

Although the data are significant, the day of the week effect was not capable of explaining the presences of a day of the week effects that were the daily returns on stock price indices of the Singapore exist. In addition, the support is weak and the data are inconclusive.

This investigation examines the day of the week effect for both return and volatility equation by using Modified GARCH which the results of the return equation are the same as OLS estimation and GARCH model. The findings indicate that the highest

volatility occurs on Tuesdays for Singapore. The lowest volatility occurs on Mondays for Singapore.

If the investors have limit budget, they should invest depend on return.

For example

1. Thailand

The investors should invest on Monday which is the best choice for them to prevent capital loss.

2. Malaysia

The investors should invest on Friday which is the best choice for them to prevent capital loss.

3. Indonesia

The investors should invest on Thursday which is the best choice for them to prevent capital loss.

If the investors concern about volatility, they should invest on the day which has the lowest volatility.

For instance,

1. Thailand

The investors who is risk averse should invest on Thursday which is the lowest volatility. Moreover, The investors who is risk lover should invest on Tuesday which is the highest volatility.

2. Malaysia

The investors who is risk averse should invest on Monday which is the lowest volatility. Moreover, The investors who is risk lover should invest on Tuesday which is the highest volatility.

### 3. Indonesia

The investors who is risk averse should invest on Friday which is the lowest volatility. Moreover, The investors who is risk lover should invest on Monday which is the highest volatility.

These findings will guide the investors to change their patterns and protect them from the higher volatility of ICT stock in each country in ASEAN market. However, these results indicate the need for more research in different sector, countries and time period.

### 5.2 Reccomendation

The data employed ICT stock price indices data over the period from April 4, 2011 to March 25, 2016: a total of 5 years. We just focused on ICT sector so in the next research we should investigate in different time periods or focus on varying sectors such as RESOURC, INDUS, SERVICE, ARGO, CONSUMP, and PROPCON. Furthermore, we can select another country for study that makes different results in order to be a new choice for interested investors. Finally, researchers have to be careful that the result were not capable of explaining the presences of a day of a week effects. The support is weak and the data are inconclusive.