THE DIVIDEND AND EARNINGS ANNOUNCEMENT EFFECTS: THE CASE OF MALAYSIA AND SINGAPORE

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APRIL 2011

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A research project submitted in partial fulfillment of the
requirement for the degree of

BACHELOR OF FINANCE (HONS)

UNIVERSITI TUNKU ABDUL RAHMAN

FACULTY OF ACCOUNTANCY AND MANAGEMENT

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APRIL 2011

DECLARATION

We hereby declare that:

(1) This UBFZ3026 Research Project is the end result of our own work and that due acknowledgement has been given in the references to ALL sources of information be they printed, electronic, or personal.

(2) No portion of this research project has been submitted in support of any application for any other degree or qualification of this or any other university, or other institutes of learning.

(3) Equal contribution has been made by each group member in completing the research project.

(4) The word count of this research report is <u>11,993</u>

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Date: <u>20 APRIL 2011</u>

ACKNOWLEDGEMENTS

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ABSTRACT

This study examines the market efficiency for both the Malaysian and Singaporean Stock Exchange by conducting a research on dividend and earnings announcement effect. A sample of 149 listed companies in Malaysia and 96 in Singapore were collected from the period of 2004 to 2009. This research adopted CAPM to estimate the AR and CAAR for the event period of 21 days. The study begins with a general analysis and then further categorized into yearly, dividend changes and earnings changes analysis. The results strongly support the signaling effect of both dividend and earnings announcement on companies future prospects. However, the findings show no sign of semi-strong form efficiency in both the stock markets. Further, the result has shown dividend and earnings announcements are positively related to stock prices. Besides, the study found some trend recurring at the past for four to five years which will be useful in assisting the investors in making investment decision. In addition, yearly analysis has indicated that the Malaysia economy is more resilient despite of economic downturn than Singapore. The results have shown dividend increase carry greater effect in Malaysia while we observed dividend unchanged bring stronger effect in Singapore. The Malaysia market has stronger preference towards earnings increase than earnings decrease. In contrast, unusual results found in the Singapore market where earnings decrease carry stronger impact on the market. Overall, our findings show that the Malaysian and Singaporean markets lean more towards inefficient market scenario.

CHAPTER 1:

INTRODUCTION

1.1 Introduction

Why do companies pay dividends? Is there, or should there be, a company "dividend policy"? These questions have been at the center of inquiry of financial analysts and economists since many years ago. Dividend policy is still an ongoing debate issue to this day. Thus, dividend policy remains an unsolved with "puzzle". The harder we look at the dividend picture, the more it seems like a puzzle, with pieces that just do not fit together (Black, F., 1976).

Dividend is a taxable payment declared by a company and it is given to shareholder out of the company's current or retained earnings. Dividend policy refers to the percentage of earnings paid to the shareholder in forms of dividend. The dividend decision of a company involves retaining a proportion of net earnings for investment needs in the future while distributing the rest as dividend to shareholders.

By and large, there are three types of financial decisions that the boards of directors need to make and they are investment decisions, financial decisions and dividend decisions. The investments made by a company determine the future earnings and future potential dividends; and dividend policy influences the amount of equity capital in a company's capital structure and further influences the cost of capital (Foong, Zakaria and Tan, 2007). Thus, we can see the relationship between dividend payout ratio, financial decision and company investments. Consequently, investors may use dividend payout ratio as a reflection on the company's future prospects. Therefore, managers must not only consider the question of how much of the company's earnings are needed for investment, but also take into consideration the possible effect of the amount of dividend payout on share prices.

Lintner's (1956) famous investigation of dividend policy stresses that companies only increase dividends when management believes that earnings

have increased and such increase can be sustained, meaning that a dividend increase implies a rightward shift in distribution of earnings. Brav, Graham, Harvey, Michaely (2005) supported Lintner findings and found that managers are reluctant to make changes that may have to be reversed. This is because the managers are afraid that a decrease in dividend may bring negative signal to the market.

On the other hand, Miller and Modigliani, (MM), (1961) argued that dividend policy is irrelevant to company's value under the assumptions that the market is efficient, no transaction costs and no taxes are charged. If dividend policy is unable to affect company's value, company's investment decision plays an important role to improve shareholders wealth. If MM theory holds, managers are free to determine any dividend policy without worries. Therefore, an unsolved issue concerning dividend policy occurred that is whether the dividend policy affects the company's value. If it does, how strong shall the effect will be?

We have seen many past studies on dividend as a signaling tool. The dividend signaling theories suggests that dividend announcement convey information on the company's future prospects (Bhattacharya, 1979 and Miller and Rock, 1985). However, many empirical studies failed to support this idea. Studies by Watts (1973), Benartzi, Michaely and Thaler (1997) and Grullon, Michely, Benartzi, and Thaler (2005) found no evidence that dividend changes contained information on future earnings. Thus, another dividend enigma remained unsolved.

Earnings, sometimes called the "bottom line" or "net income", are the single most important item in financial statements. They indicate the extent to which a company has engaged in value-added activities. They are a signal that helps direct resource allocation in capital markets. In fact, the theoretical value of a company's stock is the present value of its future earnings.

According to Lev (1989), increased earnings represented an increase in company value, while decreased earnings signal a decrease in value.

Earnings announcements are the most common but significant corporate event worldwide; the information content of which largely determines the stock price formation process and thereby the level of market efficiency in an economy. Earnings announcements involve a release of information in which the timing is publicly known. Even though "pre" earnings announcements have become increasingly popular, the actual earnings announcement still resolves much uncertainty related to stock pricing.

Officially, earnings per share do provide information on the net profitability of a company, and reveal the portion of a company's profit that is allocated to each share of the company. If you own 100 shares, the EPS number can tell you what your share of the profit from the company is.

Many investors use earnings announcement information to adjust their expectations about a company's performance and to decide whether to invest in the company's stock. The reaction to an earnings announcement can be evaluated by comparing the level of the actual earnings to the value previously expected by market participants. If the difference is positive, than the stock will have positive returns after the announcement, and vice-versa. Therefore, what really matters is not the absolute value of the earnings but rather the difference between actual earnings and expected earnings. Although many studies like that of Jegadeesh and Titman(1993) studied on how stock prices react after the event, a great deal of information on how prices move prior to the earnings announcement is still not available. Investors are sometimes irrational in the way they make decisions which might lead to inefficiencies in the market. Theoretical work by Kim and Verrecchia (1991) posited that market reaction to a company's public announcement, particularly earnings announcement, is an outcome of

market's perception of disclosed information quality and of private information trading prior to the news.

Most of the dividends and earnings related studies were conducted in developed countries. We had not seen much of dividend announcement and earnings announcement-related studies in the Malaysia market. Furthermore, we would like to compare the results in the Malaysian market against the Singaporean market in terms of market efficiency and dividend signaling effect. Results gained will improve our understanding of the weaknesses and strengths of Malaysia and Singapore stock market.

1.2 Why Select Malaysia and Singapore?

A stock market is considered to be efficient if it accurately reflects all the relevant information in determining security prices. In international stock markets, if the assets with identical risks offer similar level of expected returns, then markets are said to be integrated. Empirical testing of EMH has been conducted overwhelmingly in a variety of ways, utilizing data from different countries, across different time periods and using different event studies.

According to Los (1998), Singapore appears to be the most efficient of the chosen six Asian stock markets, then followed by Thailand, Indonesia, Malaysia, Hong Kong, and Taiwan, respectively. Singapore stock market pricing is closest to speculative market behavior which can support stock options. Although price innovations in Malaysia, are least stationary at the weekly level, it exhibits regular higher-order transitions and the large sustained movements in both bull and bear markets, which are characteristic for illiquid emerging market.

Dimuthu Samaratunga, (2009) concluded that there is no evidence against the efficiency of Japan's stock market while markets of Sri Lanka, Pakistan and Australia are proved to be inefficient. For China, Malaysia, Hong Kong and Singapore, the tests gave inconclusive results with regard to market efficiency.

Research done by Baharuddin, Abdullahi and Teoh (2010), concluded that both dividends and earnings play a significant role as signaling effects of the future prospects of company. Dividends effect is proven to be significantly stronger than the earnings effect. Their results provide some evidence of semi-strong form efficiency in the Malaysian stock market, where stock prices adjust in an efficient manner to dividend and earnings announcements.

Dividend and earnings announcements are among the two most important signaling devices used by managers to transmit information about firms' future prospects to the public (Lonie et al, 1996). If dividend and earnings news does convey useful information in an efficient capital market, then it is assumed that such news will be reflected in the stock price as soon as they are publicly released in the market.

Besides, Malaysia is known as the hub for Islamic financial centre, and also the leading innovative country in Islamic banking industry. Singapore is recognized as international financial centre, serving not only its domestic economy, but also the wider Asia Pacific region and in some instances, the world. A key aspect of Singapore's financial centre is its deep and liquid capital markets. With one of the more well-established capital markets in Asia-Pacific, the Singapore Exchange (SGX) is the preferred listing location of close to 800 global companies. Thus, for this reason, we would like to see the comparison of efficiency between Malaysia and Singapore, as one is Islamic financial centre, while the other is conventional financial centre.

Thus in this study, we choose Malaysia and Singapore stock markets to study the dividend and earnings announcement effects, in order to examine their markets efficiency. With Malaysia known as a developing country while Singapore a developed country (Dimuthu Samaratunga, 2009), we would like to compare the efficiency of the Malaysian market against the Singaporean market. Singapore is set as a benchmark against Malaysia as in they are well known as an efficient market while this is not the case for Malaysia.

1.3 Research Problems

For many years, financial analyst and economists have argued on the dividend puzzle. No one can clearly specify the best dividend policy. MM concluded that company value cannot be increased by changing the amount or the form of dividend distribution. Lintner (1956) showed that investors tend to prefer high dividend policy because holding a dividend in hand is less risky than having uncertain capital gain in the future. Conversely, the leftist believed that whenever dividends are taxed more heavily than capital gains, companies should pay the lowest cash dividend and available cash should be retained or used to repurchase shares (Myers, Brealey and Allen, 2008). Which dividend theory should managers follow? Thus, managers are uncertain on the most suitable dividend policy to adopt that could maximize shareholders wealth and benefit the company.

Besides, some past studies has proven and also disproved that dividend did signal company's future prospects. Watts (1973) found that current and past dividends appeared to have little predictive power over and above current and past earnings. However, researchers (Nissim and Ziv, 2001) found that dividend changes are positively correlated with future earnings changes. Thus, investors began to hesitate to whether they should react to the changes in dividend payout ratio.

Given that earnings represent an important source of information, the upshot from this line of inquiry is that prevailing investor uncertainty will influence the earnings-return relation. In particular, theory anticipates investor uncertainty will negatively influence the weights placed on the earnings components. The earnings-return relation had received considerable academic attention based on Kothari (2001). The basis for the earnings-return relation is that accounting earnings are posited to reflect value relevant information. In particular, current stock returns are viewed to incorporate unexpected current earnings, as well as the changes in expectations about future earnings in regards to Collins et al. (1994); Lundholm and Myers(2002).

An asymmetry in the returns to value and glamour stocks following a news shock. Following a string of positive shocks observed in, say, glamour stocks, the investor in this model expect another positive shock, that is, he expects the earnings to trend. If good news is announced, the market response is relatively small since the positive shock was anticipated. A negative shock, on the other hand, generates a large negative return, since it is more of a surprise.

Since the 1997 financial crisis, the Malaysian government has introduced many new policies and regulations to boost the confidence of market participants. Therefore, we would like to know whether Malaysia stock market has become more transparent and efficient nowadays. For comparative purposes, the companies in Singapore Stock Exchange will also be analyzed.

1.4 Research Questions

The research questions are as follow:

1) What do Efficient Market Hypothesis indicates?
2) What is the relationship between dividend and stock price?
3) What is the relationship between earnings and stock price?
4) What are the theories related to dividend policies?
5) How efficient is Malaysia and Singapore stock market?
6) Is there a difference in the effect of dividends on company share price in Malaysia and Singapore?
7) Is there a difference in the effect of earnings on company share price in Malaysia and Singapore?
8) What should be the most suitable advice given to the company managers on dividend policy?
9) How should we advise the investor who are seeking to invest in Malaysia and Singapore?

1.5 Main Objective

The main objective of this study is to determine whether the stock market is efficient for Malaysia and Singapore.

The sub-objectives of this study are as follow:

1) Understand the concept of Efficient Market Hypothesis.
2) Determine the relationship between dividends and earnings on stock prices of Malaysia and Singapore listed company.
3) Understand the various theories surrounding earnings and dividend policies of the company.
4) Examine the efficiency of the stock market of Malaysia and Singapore.
5) Investigate whether there is a difference in the effect of dividends and earnings on company share price in Malaysia and Singapore.
6) Provide managers with advice on the most suitable dividend policy to be implemented.
7) Provide sound investment advice for investors who seek to invest in Malaysia and Singapore.

1.6 Contribution of Research

Throughout the research, we seek to discover the effect of dividend and earnings announcement on company's stock price and consequently, managers will have a better understanding on the best dividend approach they could adopt. While for investors, they will have clearer understanding on how to react to consequence of dividends and earnings. Further, we could also have better understanding on the efficiency of both the Malaysia and Singapore stock market.

CHAPTER 2:

LITERATURE REVIEW

2.1 Efficient Market Hypothesis (EMH)

Efficient Market Hypothesis (EMH) was developed by Professor Eugene Fama from the University of Chicago Booth, School Of Business (Fama, 1969). EMH is an important point of reference in the financial market theory. Fama cites, among other things, his earlier study of serial correlations in daily price changes of 30 stocks that comprise the Dow Jones Industrial Average index ("The Behavior of Stock Market Prices"). He concluded that daily changes had a very small positive correlation, approaching zero for practical purposes. The stock market seemed to work in a way that allowed all information reflected in past prices to be incorporated into the current price. In other words, the market efficiently processed the information contained in past prices. So as to define EMH as the information was widely available to the participants and the ascertainable information concerned was reflected to the prices, such market would be considered as efficient. Given market efficiency, across assets and over time, the average excess or predicted return will randomly fluctuates around zero. If an information is to have value it must accurately tell market participants something they do not already know. If the information processing market is inefficient, it does not mean that market is inefficient (Verrechia, 1979). Generally speaking, studies on market efficiency had examined financial securities or commodity market.

The most crucial implication of the EMH is to trust market prices. At any point in time, prices of securities in efficient markets reflect all known information available to investors. There is no room for fooling investors, and as a result, all investments in efficient markets are fairly priced, for instance, on average investors get exactly what they pay for. Fair pricing of all securities does not mean that they will all perform similarly, or that even the likelihood of rising or falling in price is the same for all securities. According to capital markets theory, the expected return from a security is primarily a function of its risk. The price of the security reflects the present value of its expected future cash

flows, which incorporates many factors such as volatility, liquidity,and risk of bankruptcy. However, while prices are rationally based, changes in prices are expected to be randomand unpredictable, because new information, by its very nature, is unpredictable. Therefore stock prices are said to follow a random walk. EMH comes in three general forms:

(a) <u>Strong form efficiency</u>

Under this form of efficiency, there would not be excessive return in the long run. Following the normal distribution of return, the stock value at any given time should reflect the true position namely all necessary information required to determine the value of the stock, which would generate nil excessive gain for investors, provided that the flow, disclosure and assessment of information are not legally prohibited.

(b) <u>Semi-strong form efficiency</u>

In between, this form of efficiency will adjust the uncertain information by way of rationalization and consistency on real time basis, which reflects as the name suggests there has been somehow different interpretation on the information, in other words share values may therefore be slightly adjusted by investors' bias within a small range and in random manners. It follows that there will also not be excessive gain so generated as may be found under the fundamental analysis.

(c) <u>Weak form efficiency</u>

Finally, this form of efficiency is founded on the basis through the use of fundamental analysis, stock values that may either be undervalued or overvalued could be sorted out and thus it allows and agrees that there could be excessive return generated from this fundamental analytical exercise, which is objective, as opposed to use of historical share values, financial ratios or statistical trends under the so called traditional investment strategies.

EMH emphasize that overall speaking, the outcome of the stock market results is always accurate in the context of normal distribution pattern, as some investors might over-react while some might not at any particular time frame or with respect to the same piece of information, which follows that it is not supposed to have generated abnormal gain or loss.

2.2 Dividend Policy

Dividend can be defined as distribution or payment in either cash or shares to the shareholders of the company out of the companies' earnings (Rose, Westerfield and Jordon, 2006). Dividend policy important in the sense that what happens to the value of the firm as dividend is increased, holding everything else constant. Thus, it is a trade-off between retained earnings on one hand, and distributing cash on the other. A company's dividend is set by board of directors due to the complexities involved in the decision.

Companies need to decide on their dividend policies because payout ratios are tied to long-run targets. Besides, firm's value is sensitive to changes in dividends, not dividends' absolute value; therefore, Changes in dividends are tied to long-run earnings. Careful determination in dividend policy is to avoid irreversible dividend policies. Dividend policy of a company could be measured using 2 methods: (1) dividend yield and dividend payout ratio (Damodaran, 2001). Previous research showed that shares with high dividend yields would result in excess returns, after adjusting for the market performance and risk (Damodaran, 2001). The reason behind was that, when dividend payout ratio increases, the amount of free cash flow decreases led to fewer investments could be made from the available cash flow, as a result the company was expected to have lower growth in earnings. This also implied that the higher of retention ratio, the higher of growth in earnings.

Few, Lukman, Aidil and Othman (2007) concluded there were different characteristics between dividend-payer and non-payer for Malaysian public listed companies. Dividend-payers were companies that have relative lower growth opportunities, lower company risk and lower company leverage as compared to non dividend-paying companies. They tended to achieve higher profitability and were bigger (in term of revenue), as compared to non dividend-paying companies. Profitability showed stronger positive linear relationship with dividend yield and dividend payout ratio as compared to growth opportunities factor and company size. On the contrary, company leverage and company risk showed negative relationship with both dividend yield and dividend payout ratio. They found that dividend payment had a positive correlation with the past earnings, little or no correlation with current earning, and is negatively correlated with future earnings.

2.2.1 Dividend Signaling Hypothesis

Miller and Modigliani (1961) proved that dividend policy is irrelevant to share value in perfect and efficient capital markets. In that setup, no rational investor had a preference between dividends and capital gains. Arbitrage ensured that dividend policy was irrelevant. They explicitly suggested that dividends could convey information about future cash flows when markets were incomplete. According to Miller and Modigliani, a company's value was determined by its expected future earnings and not on current earnings. If dividends were dependent on the permanent component of the earnings, dividends would serve as a surrogate for expected future earnings. Meanwhile, the other theories also gave support to it, which are Bhattacharya (1979), John and Williams (1985) and Miller and Rock (1985) also referred as "cash flow signaling theory". Regarding their suggestion, the changes in dividend policy would convey the information about the company future cash flow. As the dividend increased (decreased) would signal future cash flow

increased (decreased), so increased (decreased) future cash flow would bring an upward trend of its stock price, thus it gave positive relationship to dividend and stock price.

An early study by Lintner (1956) investigation of dividend policy stressed that companies only increase dividends when management believed that earnings had permanently increased. His famous investigation of dividend policy stressed that companies only increase dividends when management believes that earnings had permanently increased, meaning that a dividend increase implied a rightward shift in (management's perceived) distribution of earnings. He showed that changes in earnings would affect dividend payout and managers rarely change their dividend payout in order to achieve the target payout ratio. There were three features on how company determined the payout policy (Myers, Brealey and Allen, 2008). First, managers were reluctant to make dividend changes that might have to be reversed. They were particularly worried about having to rescind a dividend increased and, if necessary, would choose to raise new fund to maintain the payout. Second, to avoid the risk of a reduction of payout, managers "smooth" the dividend. Consequently, dividend changes follow shift in the long run sustainable earning. Transitory earning changes were unlikely to affect dividend payout. Third, managers focus on dividend changes than on absolute level. Subsequent study by Fama and Babiak (1968) also confirmed the findings by Lintner (1956) in which changes in dividend lagged changes in earnings.

While early scholars suggested that companies used changes in dividends to convey information on the companies' financial prospects to the investors, some argued that companies rarely change their dividends regardless of the earnings of the company. Damodaran (2001) explained that sticky dividend was due to the concern of companies in maintaining higher dividends in the future and negative views on dividend decrease which associated with a drop in share price. Based on the assertion of companies' reluctant to change

dividends, an increase in dividend signals a favorable expectation on the company's future prospects and vice versa.

There were two important hypotheses related to the dividend signaling theory, namely the free cash flow hypothesis and the maturity hypothesis. The free cash flow hypothesis advanced by Jensen (1986) stated that managers endowed with free cash flow would invest it in negative net present value (NPV) projects rather than paid it out to shareholders. Jensen defined free cash flow as cash flow left after the company had invested in all available positive NPV projects. The maturity hypothesis suggested that an increase in dividend conveys information on decreased investment opportunities, decreased return on assets and future earnings growth rate as well as decrease in systematic risks (Grullon, Michaely, Roni and Swaminathan, 2002). When taking the fee cash flow, we also needed to include the agency cost theory conduct by Easterbrook (1984). According to him, the separation of ownership from control would encourage managers to misuse the company's resources for their personal gain (Hiau, Rashid,and Ibrahim, 2002). Therefore, if the manager reduced the dividend payout use to invest in unprofitable business, the stock price of the company would react negatively.

2.2.2 Dividend Irrelevance Theory -Miller and Modigliani (M&M)

From the past we had seen various theories explained the relationship between dividend announcement and shares price. In 1961, Miller and Modigliani (M&M) advanced the Dividend Irrelevance Theory is the most famous topic in the dividend area, which said that in the perfect world, there had no corporate and personal taxes, no transaction and flotation costs, no single individual who could affect a security's price through his/her trade. Thus, there were neither investors nor dividend can affect the share price.

Furthermore, this dividend irrelevant theory is supported by Black and Scholes (1974). This party raised the following question:

"If companies could increase their share price by distributing more or less cash dividend, why have they not already done so?" (Myers, Brealey and Allen, 2008).

Besides, M&M (1961) showed that the dividend policy in the perfect and complete capital market does not affect its value and they also measure the irrelevant theory is in combination with the unfavorable taxation of dividend, therefore makes dividend puzzle.

However, in a world in which dividends were taxed more heavily than capital gains, investors might demand higher before-tax returns to hold securities with high dividend yield. But in the theoretical way, shareholders could be reward by the cash dividend which was something already in the company. Thus, this would be offset by the decreased in the share price (Porterfield, 1959 and 1965).

If, it was in the ideal world, M&M argued that there were not have tax and any transaction coast occurs, therefore dividend payment should not have any impact on the shareholders value. Unfortunately, in the real world whatever changes in the dividend policy would often follow by changes in share price.

2.2.3 Clientele Effect

Brigham & Houston (2007) defined clientele as different group of shareholders who prefered different dividend payout policies. They stated that investors who like current investment income would invest in high dividend payout company, while investors who did not need current investment income

would prefer to hold low dividend payout shares. They found that companies had many different clienteles, each have different preferences, and hence dividend policy changes might upset the dominant clientele and therefore brought negative effect on stock prices. Hence, they suggested that companies should follow their own dividend policy to avoid disrupting their clienteles.

According to Allen, Bernardo and Welch (2000), their studies found two clienteles which are "untaxed institutional" and "taxed individual". Untaxed institutional were frequently tax exempted and they were public and corporate pension funds, colleges and universities. Shleifer and Vishny (1986) studies showed that the small investors are likely to prefer capital gain, whereas large shareholders prefer to have favor dividend. They also recognize that dividend could be a mechanism to compensate institutional investors. These institutional had abilities to vote therefore they are powerful to influence the company's decision. They also assumed that if the company wanted to attract the institutional investors, they need to pay dividend and perform better than other non-paying company. Furthermore, they also stated that taxable dividend was a signal that company management is good. Bad performance company did not have this ability to pay such dividend to its investors. Base on the theory of Bhattacharya (1979) and Miller & Rock (1985), they showed that institutional investors had a better information gathering ability or asymmetric information.

Moreover, Black and Scholes (1974) argued that with tax, there had a differentiated dividend yield and yet still no observable relationship between these yield and risk-adjusted return. The argument relied on clientele effect, which paying no tax (tax) investors would prefer (low) high-yielding stock. They also stated that different dividend paying stock equal to demand by different clienteles. Therefore, relationship between the risk-adjusted return and dividend yield were unobservable. If there were not equal to demand,

thus companies have the incentives to alter their dividend policy, until the different dividend paying stock was in line with that which was demanded.

2.2.4 The Bird-in-Hand Fallacy

Investors prefer dividend compare to capital gain is because capital gain is received only when they sell out the share. Grahman and Dodd (1951) argued that the sole purpose for the existences of the corporation wais to pay dividend. If there were two companies, the company that pay higher dividend would have higher share value (Frankfurter, Kosedag, Schmidt and Topalov, 2002). Nevertheless, MM argued that dividend is irrelevant, share prices would not changes regardless of the dividend policy.

Gordon (1963) and Lintner (1956) showed that investors prefer to have high dividend policy was because having a dividend on hand was more safety than having uncertainty capital gain in the future. Therefore, stock prices would be maximized by maximizing the dividend payout rate.

According to the studies of Baker, Powell and Theodore (2002), dividend payout was a sure thing relative to share price. This is due to dividend were less risky than the capital gain. Therefore, company should set a high dividend payout to maximize the share price. However, MM (1961) theory did not agree that high dividend payout abled to maximize shares price or company value. Moreover, Bhattacharya (1979) also disagreed with the bird in hand theory, he viewed this theory as fallacious. Company value should be indicated by the riskiness of cash flow.

2.3 Earning Study

Earnings announcements level the playing field and provided information that helped investors assess the change in the stock value of firms. Information asymmetry might still increase after earnings announcements due to the differential ability of investors to interpret the public announcement. After earnings announcements, higher-than-usual bid-ask spreads that might suggest an increase information asymmetry were documented by Lee, Mucklow, and Ready (1993) and Krinsky and Lee (1996).

According to the Seetharaman and John (2011) they defined EPS as an investment tools used to evaluate the performance of company either in long run or short run. Moreover, EPS also used to measure the financial health and prospect of the company. Therefore, most of the investors, researchers, manager, and other are interested in EPS because, they believe EPS will had impact on the stock prices. Regarding the Seetharaman (1995) EPS not only reflect the company situation in the stock price and stock market , but it is also reveal in the P/E ration, dividend cover, dividend yield, and earning yield. The International Accounting Standards Board (IASB) in its International Financial Reporting Standard (IFRS) 14 defined EPS is reflected the company net after tax earnings that belong to equity shareholders divided by the number of outstanding shares.

In the Beaver, Lambert and Morse (1980) stated there was a theoretical link between earning and share price and could be established under rather strong condition of complete and perfect capital market assumption. Although the market was more liquid and could have information more easily, but it did not mean all the investors would capture the right information nor can analysis the information. Furthermore, Beaver (1989, 1990) recommended the relationship of earning and share price could be developed in three critical links:

1.   A link between share price and future dividends

2.   A link between future dividends and future earnings

3.   A link between future earnings and current earnings

2.4 Review of the Past Journals

2.4.1 Previous Literatures that Show Significant Abnormal Return Arising from Dividend Announcement

There was several of empirical studies carried out the movement of stock price was react due to change in dividend (Aharony and Swary, 1980; Asquith and Mullins, 1983; Impson, 1997; Impson and Karafiath, 1992; Jin, 2000; Michaely et al. 1995; Yoon and Starks, 1995) the result of these empirical also agreed to the dividend signaling theory.

Asquith and Mullins (1983) conducted the test by using 168 companies as a sample to test during 1963 to 1980. In their result, they found a significant positive excess return following dividend initiation announcement. Thus, they concluded a dividend initiator would convey useful information. Besides that, Mitra and Owers (1995) was studies the information content of dividend hypothesis. In their test, they used company-specific characteristics as the proxy variable, such as size, number of institutions holding the company equity, percentage of institution equity holdings and number of analysts of following the company. The sample was 80 dividend initiations announced by companies between January 1976 and December 1987. In the result, they concluded the dividend initiation announcement was given a highly significant positive.

In the Baharuddin, Abdullahi, and Teoh (2010) they focused on how the announcement effect of both dividend and corporate earnings on stock price to examine evidence of semi-strong form efficiency in Malaysia Stock

Exchange. There were 120 sample companies which were listed on the main board of Bursa Malaysia that announced the final dividends in their fourth financial quarter was selected covering a period from January 1, 2006 to November 30, 2006. From their result, they agreed with the dividend signaling theory, increasing dividend announcements, on an average, earned positive abnormal return, while decreasing dividend announcements were associated with negative abnormal return.

Further dividend test was observed in the study of Pettit (1972). They concluded change on the dividend may convey substantial information, thus it made influences on the future earning prospect of the company. In the Hiau, Rashid and Ibrahim, (2002), they focused on the dividend announcement. They used three groups, which were dividend increases, decreases, and no changes for their test. They conducted a test by using 120 listed companies from the Kuala Lumpur Stock Exchange and used sixty said as theirs event day. From the previous theory suggestion, dividend decreases would associate negative abnormal return; unfortunately their dividend decreases did not reaction according to theory. But, in the evidence suggested dividend increases were associated with positive abnormal return and unchanged dividend was provided no clear pattern of cumulative average abnormal return could be observed.

The evidence research studies by Jais, Karim, and Funaoka (2009), they research was examined the effect of dividend announcement on stock market reaction in Kuala Lumpur Stock Exchange. The evidence showed that dividend increase announcements were greeted positively by investors, while there were some evidence suggesting investors reacted negatively prior to dividend decrease announcements. They result also measured investors was treated dividend increase announcement as good news and positively reacted to the announcement. Moreover, some evidence indicated investors were

reacting negatively prior to the announcement, thus share price was negatively prior to the announcement.

Regarding the researcher in Japan Fukuda (2000), found that stock market was react positively when dividend increases and dividend initiation announcement. But, the magnitude of the reaction was smaller than the studies of the developed market and the post operating performance of the firms contradicts the predictions of the theory.

From the study of Dar, Hsiang, and Cheng (2009), they investigated whether dividend signaling theory would hold in China stock market by using the period during 2000 to 2004 to conduct their study. From the results given, indicated dividend change did give a positive influences on share prices. Unfortunately, there was only partly support the dividend signaling theory, which is dividend increases hold the theory whereas dividend decrease give a positive announcement effect. Mansor and Subramaniam (1992) studied the Malaysia market to announcement changes in dividend and earnings. Their study indicated opposite with efficient market, their result still had an abnormal return although it was after announcement week.

2.4.2 Previous Literatures that Show No Significant Abnormal Return Arising from Dividend Announcement

There were many researcher found out most of the companies stock price was affected by the dividend annoucement. However it is always true? There were still many arguments saying that dividend actually did not affect stock price, the company paid dividend just because to satisfied the investors.

In the several of empirical study, most of them also supported to the dividend irrelevant theory. They were Miller and Scholes (1978, 1982), Hess (1981)

Miller (1986), and Bernstein (1996) provided evidence in support of the dividend irrelevance hypothesis.

In the case of Uddin (2003), they used 137 sample of dividend paying companies listed on Dhaka Stock Exchange; result showed the investors did not gain abnormal return from the dividend announcement. Unfortunately, the result showed investors lost about 20 percent of value over of 30 days prior to the dividend announcement through to 30 days after the announcement. This might due to when company paid cash dividend, investors required to pay taxes on their dividend income. Thus, they evidence tended to support the dividend irrelevancy hypothesis.

Based on the Brennan (1970), Litzenberger and Ramaswamy (1979), they showed received dividend was not an optimal for investors because dividend received was needed to pay tax. For the investors who subjected to their personal tax rates would prefer less cash dividend if it was taxable. So, stock prices tended to decline after announcement of dividend increase.

Regarding the empirical result in Vasuthep Bhanavavatana (2007), had ran a test by using the sample provide by Stock Exchange of Thailand (SET) and selected 156 listed companies financial information for the years 2000 to 2003. Their hypothesis claimed that dividend yields did not show significant relationship to raise rates of return on common stock in the Stock Exchange of Thailand during the period of experiment. Hence, there was no evidence to show increasing of dividend would reduce realized rate of return and raise the price of a company's shares, so they concluded dividend policy was irrelevant. Furthermore, it also stated that a firm cannot manipulate stock price by using the dividend policy.

In the studies by Kah and Zhao (2008), they examined how the information asymmetries affected firm dividend policy. They found that the companies

who were subjects to the problem of information asymmetries would be less likely to make dividend payments, to initiate dividends, and to increase dividend. They concluded their result did not support the dividend signaling theory.

Furthermore, we also find that Black and Scholes (1974) do not support to the dividend signaling theory. According their suggestion, they said: "If a corporation could increase its share price by increasing (or decreasing) its payout ratio, then many corporations would do so, which would saturate the demand for higher (or lower) dividend yields, and would bring about an equilibrium in which marginal changes in a corporation's dividend policy would have no effect on the price of its stock" (p. 2). Moreover in the M&M dividend irrelevance theory, they also gave the same conclusion about the dividend and stock price.

On the other hand, some of the researchers (Conroy, Eades, and Harris, 2000) found that dividend announcement had no material impact on the stock price. Those researchers had taken the advantage of the unique setting in Japan where current year's dividend and earnings announcement were made simultaneously. Their result showed that earnings variables dominated dividends in their ability to explain share price movements. Pricing effects were largely due to earnings information. They found that there was no evidence of either an informational or real cash flow effect of current dividends. Their findings were consistent with Modigliani and Miller's dividend irrelevance proposition.

Regarding to Yip (2009), the study was conducted to examine the stock price reaction to dividend announcement from January 2004 to December 2008 in Kuala Lumpur Stock Exchange (KLSE) Main Board. The dividend is categories in three types, which were dividend increases, dividend decreases, and dividend unchanged. The finding showed the market did not react when

dividend announcement, therefore no significant abnormal return during dividend announcement day. However, there were significant on post-announcement day, the study concludes the market was inefficient due to information was delayed.

2.4.3 Previous Literatures that Show Significant Abnormal Return Arising from Earnings Announcement

The relationship between the effects of earnings announcements and share price were positively correlated. Information on the company's financial statement would reflects on the company's share price where investors wwould response towards the good or bad position the company in the market (Hribar, 2006). However, the fundamental factor for the effect of earnings announcements and share price could be managers in the companies. It was arguable that managers in the companies could control and manipulate the account book and reported figures. Armstrong (1983) stated that managers decided whether the earnings reported are good or bad that would be announce to the public. The author provided four possible explanations for the superiority of management forecast where managers sometimes had insider information, managers exert controlled over performance, and managers could influence the reported earnings and managers had recent information.

Kross, (1981), Givoly and Palmon, (1982), Chambers and Penman (1984), Kross and Schroeder (1984), Begley and Fischer (1989) explained that the timing of earnings announcement could affect the relationship between earning announcement and share price. Therefore, companies strategically time their earnings news announcements to optimize the post-announcement stock price. Consequently, market participants reacted less favorably to delayed announcements. Given the fact that positive earnings surprises

concentrate at the beginning of earnings season and early announcements tended to be advanced from their typical announcement dates, the timing effect could be driven by the penalty on delayed bad news announcements.

Brown and Kenelly (1972) explained the earnings information that reported in financial statement will be reflected in stock price prior to the release of the actual annual earnings figure. Therefore, speculation might arise when the companies were doing well before the earnings announcements were made public. Jones and Latane (1982) stated that stock price will began to response 20-day before actual earnings announcement made. Further support by Ariff and Johnson (1990) stated that the price adjustment will happen even before the actual announcement date. They also explained that the prices were more sensitive to change in good news information than bad news information. It believed the market behavior would anticipate the changes in the information content and behave accordingly. Joy, Litzenberger and McEnally (1977) stated that information published in earnings reports was not immediately absorbed by the market and the price will continue to adjust for a period of time. A further examination by Mansor and Subramaniam(1992) on Malaysia stock market (BURSA), for the relationship between earnings announcement and share price resulted that contrary to an efficient market situation, significant abnormal returns were still realized even after the announcement week. The stock price would continue to adjust after the announcement and the reaction was upward irrespective of the kind of information conveyed to the market.

According to the Mansor, Rubi Ahmad and Chan (1996), they used 59 IPOs listed on the KLSE during the period 1986-1992 of the actual earning and forecasted earning. Their purpose was to examine the information effects of the earning announcements on the share price. Their result showed positive CAAR when earnings increase, vice versa. On the other hand, Erwin van der Vlist (2009) found that the Europe market was strongly significant evidence

that the market respond in the good news earnings announcement was slowly, while for the bad news of earnings announcements the market was respond quickly.

2.4.4 Previous Literatures that Show No Significant Abnormal Return Arising from Earnings Announcement

Suijs (2002) argued that earnings announcement did not carry any information or pattern towards the companies' future cash flow and share price. Therefore, share price should not be affected by the earnings announcements. The author stated that post earnings announcement drift might arise in a capital market with rational investors of the firm's earnings in consecutive periods were positively correlated and there was a fixed supply of the firm's shares. Brown, (1987),Givoly and Lakonishok,(1984) examined that Value Line's earnings projections in deciding on actual EPS exceed, equal or fall short of expectations of the investors in market. Stock prices were expected to rise in response to announced increases in either unexpected earnings or dividend and fall in response to announce decrease in either unexpected earnings. Finally, no significant change in stock price was expected regardless announcements of either no change in earnings when the absolute difference between actual EPS and expected EPS is less than 10%.

Foster (1981,) Han and wild (1990) stated that earnings information transfers within the same industry did affect the stock price not the random earnings announcements. The price co-movement arose because firm in the same industry had similar cash flow information and also information about common elements that affected profitability of all firms in the same industry. Soffer and Lys (1999) argued that the market did not initially fully incorporate the implications that earning announcement would affect share price. Earnings

announcement did not carry any information on the company's future direction and other information uncertainty relating to the company could lead to the share prices changes.

2.5 Conceptual Framework

Figure 2.1: Conceptual Model of the Effects of Dividend and Earnings on Stock Price.

Independent variable   Dependent variable

Dividend Announcement
Earnings Announcement

→ Stock price
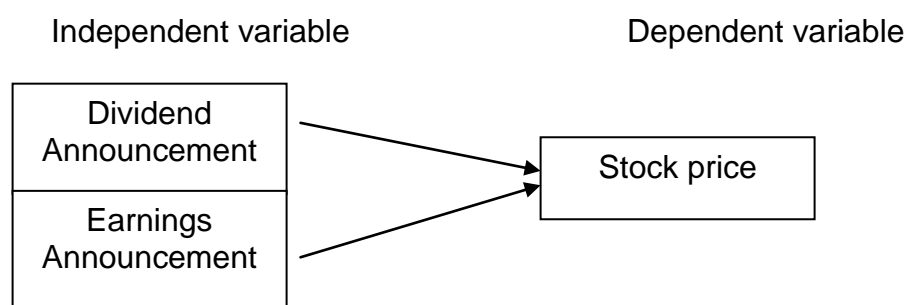
2.6 Summary

Based on our review of past literature, most of the studies showed that dividend and earnings did affect share price in a positive direction and there was a significant abnormal stock returns associated with announcements of dividend and earnings changes. Thus, the results had violated Efficient Market Hypothesis because no one should have experienced abnormal return in an efficient market. However, there were also some researchers who found no material impact of dividend on share price. Besides, we also found that there are different views on dividend as signal on the future prospects of the company. The reasons on the differences in findings were partly due to geographical differences (different stock exchanges with different market characteristics/ sophistication/market liquidity), differences in companies' characteristics (different corporate culture or dividend policies) and industry effect. The next chapter covered the methods employed for our research.

CHAPTER 3:

RESEARCH METHOD

3.1 Hypotheses of the Study

Hypothesis 1

$H1_0$: There is no significant abnormal return arising from dividend announcement

Hypothesis 2

$H2_0$: There is no significant abnormal return arising from earnings announcement

3.2 Sampling Design

At the beginning of data there are a total of 859 listed companies in Malaysia and 678 listed companies in Singapore. In our data collection, we have gone through and study every listed company in Bursa Malaysia and Singapore Stock Exchange Thus; our samples were obtained based on the following selection criteria:

(i) Companies in the Finance, REITS and Closed-End Funds sectors have very high leverage with different rules for income measurement, thus they were excluded from the study to improved homogeneity of the sample as these companies. Such selection criterion follows the selection method adopted by Pandey (2001), Grullon et al. (2005) and Short, Zhang and Keasey (2002).

Table 3.1: Total Number of Companies Excluded Based on Criteria (i)

	Finance	Reits	Close-Fund
Malaysia	41	14	1
Singapore	118	20	-

(ii) Companies that are categorized under PN17 were excluded from the study because those companies are financially distressed companies in which the possibility of division omission is very high. (Total number of PN17 companies excluded is 34)

(iii) The selected company must paid 6 consecutive years of dividends and have announced the company's EPS in the event period. Dividend initiations and dividend omissions are excluded from the study. The selected dividend payment is on cash basis.

(iv) In order to ensure that the announcements are not contaminated by other company's information, distribution events such as stock splits or stock dividends declared around the announcement of the dividend and earnings will be excluded from the study (Grullon et al, 2005; Aharony and Dotan, 1994; Jais et al, 2009).

Table 3.2: Total Number of Companies Excluded Based on Criteria (iv)

	Stock Splits	Stock dividends
Malaysia	133	363
Singapore	106	228

Therefore, we have compiled samples which consist of 149 listed Malaysia companies and 96 listed Singapore companies that declared dividend payment and have announced their earnings between the years of 2004 to 2009 based on the selection criteria.

3.3 Sources of Data

Our data were obtained from different resources. We collected dividend per share (DPS) and earnings per share (EPS) from the Osiris database and companies' annual reports.

The Malaysian data such as final dividend announcement dates were collected from The Star website at http://biz.thestar.com.my while the earnings announcement dates were gathered from the Bursa Malaysia website at http://www.klse.com.my.

Both dividend and earnings announcement dates for Singapore were collected from the Singapore Exchange website, http://www.sgx.com.

The yearly risk free rate of Malaysia was obtained from the Bank Negara Malaysia (BNM) website; http://www.bnm.gov.my while for Singapore it was collected form Monetary Authority of Singapore (MAS) official website; http://www.mas.gov.sg.

Besides, we gathered the companies' historical closing daily stock prices, FTSE Bursa Malaysia composite indexes and Straits Times indexes from the Yahoo website, http://finance.yahoo.com.

3.4 Dividend Expectation Model

In order to examine empirically the adjustment of common stock prices to annual dividend and earnings announcement, we employed the dividend and earnings expectation model used by Aharony and Swary (1980), Mansor and Subramaniam (1992) and Baharuddin, Abdullahi and Teoh (2010). We adopted the naïve model as our expectation model in this research. Firstly, we assumed that the dividend on security *i* was:

$$E(D_{it}) = D_{i,t-1}$$

$E(D_{it})$ = Expected annual dividends of company *i* in financial year of t

$D_{i,t-1}$ = Annual dividend paid in year t-1.

The model showed that the expected dividend for year t will be the same with the dividend paid in year t-1. If $D_{i,t} > D_{i,t-1}$, it shows that there was a dividend increase while $D_{i,t} < D_{i,t-1}$ indicates dividend decrease and $D_{i,t} = D_{i,t-1}$ signify that the dividend was unchanged. We obtained our earnings expectation using the same manner which represent $EPS_{i,t} > EPS_{i,t-1}$ for earnings increase, $EPS_{i,t} < EPS_{i,t-1}$ shows earnings decrease and $EPS_{i,t} = EPS_{i,t-1}$ indicates earnings unchanged.

3.5 Research Flow of Study

3.5.1 Identification of the Event and Estimation Window.

Firstly, the event window was identified. The event window for this study was 10 days preceding the announcement date and 10 days after the announcement date. Thus, there were 21 days for the event window. This event window was important in observing any effects before or after the announcement day and in determining whether the market reacts efficiently to the announcement. There were several researchers in Malaysia who have used the same event window duration on their dividend and earnings announcement effect study such as Baharuddin, Abdullahi and Teoh (2010), Mohamad et al, (2005) and How,Teo and Izan, (1992).

Then, the estimation window was identified. This is the period used in estimating the Beta parameters. The estimation window duration was usually longer than the event window period. The estimation window used in this study was 130 days before the announcement date excluding the 10 days prior to the announcement date. Referring to Campbell, Lo and Mackinlay (1997), the estimation windows are often between 120 days to 250 trading. Jais et al, (2009) did calculate their parameters using the same length of period as our study.

Figure 3.1 Estimation period and event window.
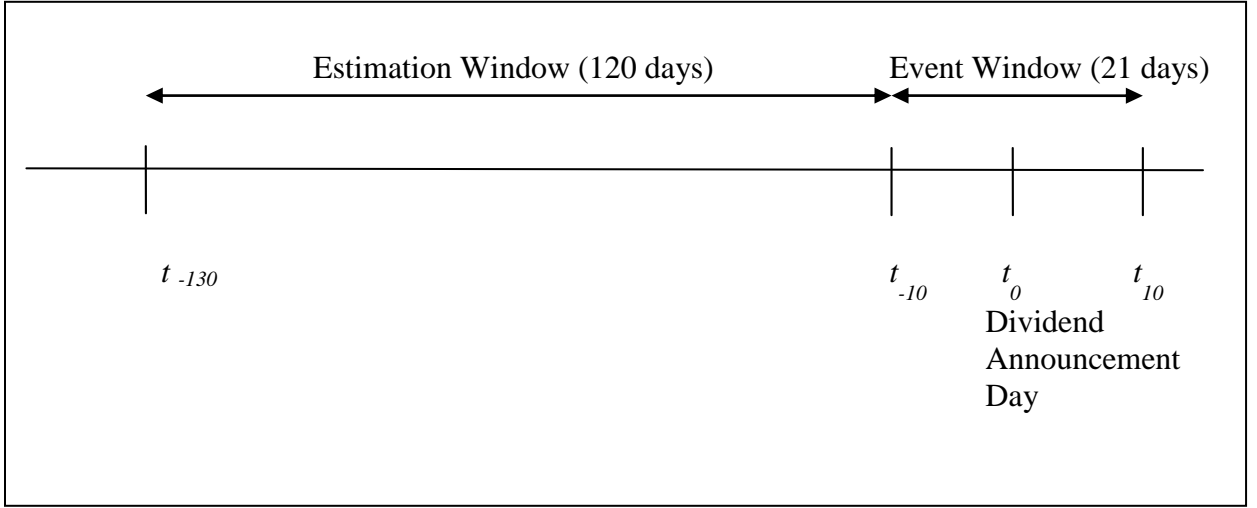
The daily return for each stock $R_{i,t}$ was calculated using the following formula:

$$R_{i,t} = \frac{(P_{i,t} - P_{i,t-1})}{P_{i,t-1}}$$

$P_{i,t}$ = Closing price for stock *i* at day *t*

$P_{i,t-1}$ = Closing price for stock *i* at dat *t-1*.

The daily market return $R_{m,t}$, was computed using the formula as follow:

$$R_{m,t} = \frac{(I_{i,t} - I_{i,t-1})}{I_{i,t-1}}$$

$I_{i,t}$ = Closing price for stock *i* at day *t*

$I_{i,t-1}$ = Closing price for stock *i* at dat *t-1*.

(Brown and Warner, 1980)

3.5.3 Calculation of Average Abnormal Return (AAR) and Cumulative Abnormal Return (CAAR).

Stock prices and market index were collected during the estimation window, it were used to compute the Beta, β. Then, we measured the market reaction to dividend change announcements considering the abnormal returns calculated through the CAPM (Vieira and Raposo, 2007) using the following formula:

$$AR_{i,t} = R_{i,t} - [R_{f,t} + \beta_i(R_{m,t} - R_{f,t})]$$

where:

$AR_{i,t}$ = abnormal return for share *i* in day *t*;

$R_{i,t}$ = return for share *i* in day *t*;

$R_{f,t}$ = 3 month treasury bill risk-free rate. (Chris and Sharpe, 2007)

$R_{m,t}$ = market return for day *t*;

β_i = systematic risk of share *i*.

Abnormal return (AR_{it}) is the difference between the actual return, R_{it}, and the expected return $R_{f,t} + \beta_i(R_{m,t} - R_{f,t})$.

Subsequently, we calculated the average abnormal return for the event window used by Baharuddin, Abdullahi, and Teoh (2010) as follow:

$$AAR_t = \frac{1}{N}\sum_{t=1}^{N} AR_{it}$$

Where:

AAR_t = Average abnormal return for day t

N = Number of securities in the sample

Outliers in the samples were excluded from the significance test. AR which was less than 30% and more than 30% were exempted from the analysis.

The cumulative abnormal return (CAR) was used to measure the market reaction to the dividend announcements and was calculated surrounding the announcement date. Aharony and Swary (1980) pointed out that cumulative effects of the abnormal returns (CAR) behavior in the days surrounding the dividend and earnings announcement dates (event time zero) were obtained by summing AR_{it} over event window:

$$CAAR_T = \sum_{t=1}^{T} AAR_t$$

3.5.4 AAR and CAAR t-test

AAR and CAAR were tested on their statistical significance using t-test. The following formula was used to assess the statistical significance of AAR used by Tee (2000).

$$t_{AAR} = \frac{AAR\sqrt{N}}{\sigma}$$

Where:

σ = standard deviation of AR

N= Number of security

The t-statistic for CAAR was computed using the formula adopted by Wong (2002) as follow:

$$t_{CAAR} = \frac{CAAR_t}{Var(CAAR_T)^{1/2}}$$

T= event window

3.5.5 Decision Rules (Level of Significance)

The decision to reject or accept the null hypotheses were based on the probability, as it was observed at the significant level. According to McCloskey and Ziliak (1996), it was normal that almost any parameter can be found to be significantly different from zero if the sample size is sufficiently large. This study had used the 1%, 5% and 10% level of significance to determine whether to reject or to accept the null hypothesis.

3.6 Summary

The Capital Asset Pricing Model was employed to calculate the expected return in this study. The difference between stock actual return and the expected return would determine whether stockholders realized abnormal returns in the days adjoining to dividend and earnings announcements.

Event window and estimation window would be 21 days and 120 days respectively. The estimation of parameters i.e. $R_{f,t}$ and $\beta_i(R_{m,t} - R_{f,t})$ would be using 120 days daily closing data. Basically, historical daily closing prices would be collected from The Star websites, and Yahoo Finance websites.

After data collection, abnormal returns were computed for further analysis. Lastly, the 1%, 5% and 10% of significant level was used to determine whether to reject or accept the null hypothesis.

CHAPTER 4:

ANALYSIS AND

RESULTS

4.1 Review of Results Based on Dividends Announcement

4.1.1 General-Malaysia Scenario

General assessment on all Malaysian companies' dividends announcement gave significant result of positive AAR on t=-3, 0, 2, 3, 5, 6, and 8 at 5% significance level. Negative AAR were significant on t=-4 to -10, -1, 4, 7 and 10 at least 5% significance level.

From the result shown in table 4.1.1, t=-4 to -10 the announcement of dividend made, the AAR were all negative in value. Thus, the stock prices tended to perform poorly 4 to 10 days before the announcement of dividend changes. On t=-3, 0, 2, 3, 5, 6 and 8, AAR were in positive figures. This was probably due to the fact that the information of dividend payment often leaked out to the market a few days before the announcement made by the company. Hence, the announcement of dividend normally carried no surprise to the market. This is inconsistent with Yip (2009) findings.

During the post announcement periods, all AAR were significant except those on day 9. Most of them were positive in values. Thus, the stock prices tended to perform well after the announcement of dividend changes. However, in between the days, t=1, 4, 7, 10, generated significant negative AAR. Overall, AAR results suggested that the effect of dividend announcement was strong in Malaysian shares. t=-8 gave the greatest negative AAR, t=6 provided greatest positive AAR.

General assessment on all Malaysian companies' dividends announcements CAAR all generated significant negative returns, except on t=-10, 6, 8, 9. This showed that investors did not gain value from dividend announcement (Uddin, 2003). Findings also showed that investors lost more value in the pre-dividend period.

Table 4.1.1: General Malaysia Stock Market Reaction to Dividend Announcement

Days	AAR	AAR t-value		CAAR	CAAR t-value	
-10	-1.4365	-12.3866	***	-1.4365	-1.4142	
-9	-2.1329	-26.6306	***	-3.5694	-2.3667	**
-8	-2.1502	-24.2671	***	-7.5157	-2.4367	**
-7	-1.7962	-22.9603	***	-7.5157	-2.4868	**
-6	-0.9437	-11.0147	***	-8.4595	-2.7843	***
-5	-1.5922	-18.0433	***	-10.0517	-3.0958	***
-4	-0.4371	-4.7356	***	-10.4887	-3.1419	***
-3	0.7268	6.4510	***	-9.7620	-3.0123	***
-2	-0.0391	-0.3263		-9.8011	-3.1218	***
-1	-0.2396	-2.3696	**	-10.0407	-3.2842	***
0	0.2157	2.1295	**	-9.8250	-3.3192	***
1	-0.4131	-4.0042	***	-10.2381	-3.5395	***
2	1.4051	15.2859	***	-8.8330	-3.1836	***
3	0.4493	4.8284	***	-8.3837	-3.1448	***
4	-0.2177	-2.1173	**	-8.6015	-3.3466	***
5	0.7699	9.1176	***	-7.8315	-3.1504	***
6	4.9803	32.2380	***	-2.8512	-1.0396	
7	-2.7269	-18.3411	***	-5.5781	-2.0515	**
8	4.1365	33.0825	***	-1.4416	-0.4772	
9	0.0673	0.8270		-1.3742	-0.4239	
10	-4.5464	-20.9935	***	-5.9207	-1.8666	*

Note: AAR = Average Abnormal Returns (%).
CAAR = Cumulative Average Abnormal Returns (%).   N=745
*Significant at α = 0.10 ; **significant at α = 0.05, and ***significant at α = 0.01

Figure 4.1.1.1: General Malaysia Stock Market Reaction to Dividend Announcement
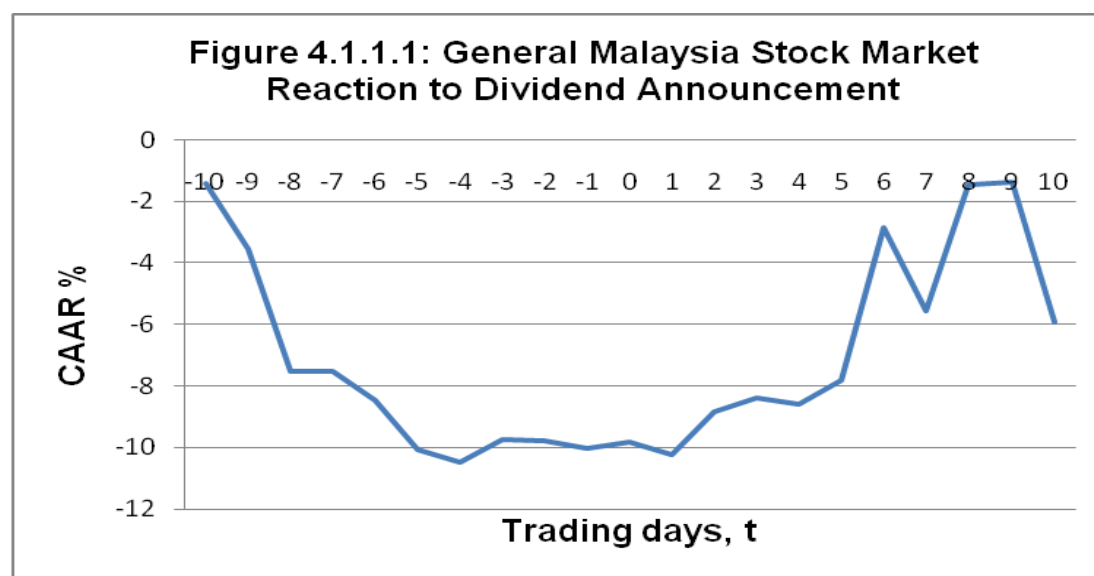
4.1.2 General-Singapore Scenario

Based on table 4.1.2, the general assessment on all Singaporean companies' dividends announcements gave the significant result of positive AAR on t=4 at 5% significance level. Other AAR were all insignificant. This appeared to be a delayed reaction towards dividend announcement (Uddin, 2003). From the result shown, t=-8 to -10, -5, -3, 1, 6, the AAR were negative in values. Thus, stock prices tended to perform poorly in these days. During the post announcement period, all AAR were positive in value except t=1 and 6. Besides, there were more positive AAR than negative AAR during post-dividend announcement. Overall, AAR result suggested that the stock prices tended to perform better after the announcement of dividend.

General assessment on all Singaporean companies' dividends announcement provided significant CAAR result on t=-8, -2 to 0, and 2 to 10, at least 10% significance level. t=-10 to -8 showed negative CAAR while others showed positive CAAR. There appeared to be information leaked out before dividend announcement. The behavior of significant ex-announcement excess return indicated the early reaction of the market towards the earnings announcement.

Based on figure 4.1.2, the trend for Singapore dividend CAAR for the event window had a very clear direction and it was an upward trend. CAAR started to climb since t=-8. CAAR were observed positive before the announcement of dividends, since Singaporean shares shown better AAR performance. This complement the AAR result that Singapore shares generally gave positive returns during post-dividend period.

Table 4.1.2: General Singapore Stock Market Reaction to Dividend Announcement

Days	AAR	AAR t-value		CAAR	CAAR t-value	
-10	-0.0287	-0.1744		-0.0287	-1.4142	
-9	-1.1566	-1.1257		-1.1853	-1.4493	
-8	-0.0075	-0.0401		-1.1928	-1.7804	*
-7	2.0858	1.0459		0.8930	0.8852	
-6	0.0543	0.2595		0.9473	0.8972	
-5	-0.8039	-0.8001		0.1434	0.1509	
-4	1.0855	1.0592		1.2289	1.2329	
-3	-1.0466	-1.0321		0.1823	0.1975	
-2	2.4072	1.1727		2.5895	2.1721	**
-1	1.5660	1.4843		4.1555	2.5404	**
0	0.6136	0.5800		4.7691	2.4275	**
1	-1.7550	-0.8782		3.0141	1.5457	
2	2.2775	1.1043		5.2916	2.4368	**
3	1.0424	1.0048		6.3340	2.5960	***
4	0.6613	2.5099	**	6.9954	2.6011	***
5	0.3933	1.3003		7.3887	2.5517	**
6	-1.1755	-1.1118		6.2132	2.1150	**
7	0.2172	1.1599		6.4304	2.1614	**
8	0.6939	1.3706		7.1243	2.3423	**
9	0.8672	0.7281		7.9915	2.5399	**
10	3.6703	1.4215		11.6618	3.2848	***

Note: AAR = Average Abnormal Returns (%).

CAAR = Cumulative Average Abnormal Returns (%).   N=480

*Significant at α = 0.10 ; **significant at α = 0.05, and ***significant at α = 0.01

Figure 4.1.2.1: General Singapore Stock Market Reaction to Dividend Announcement
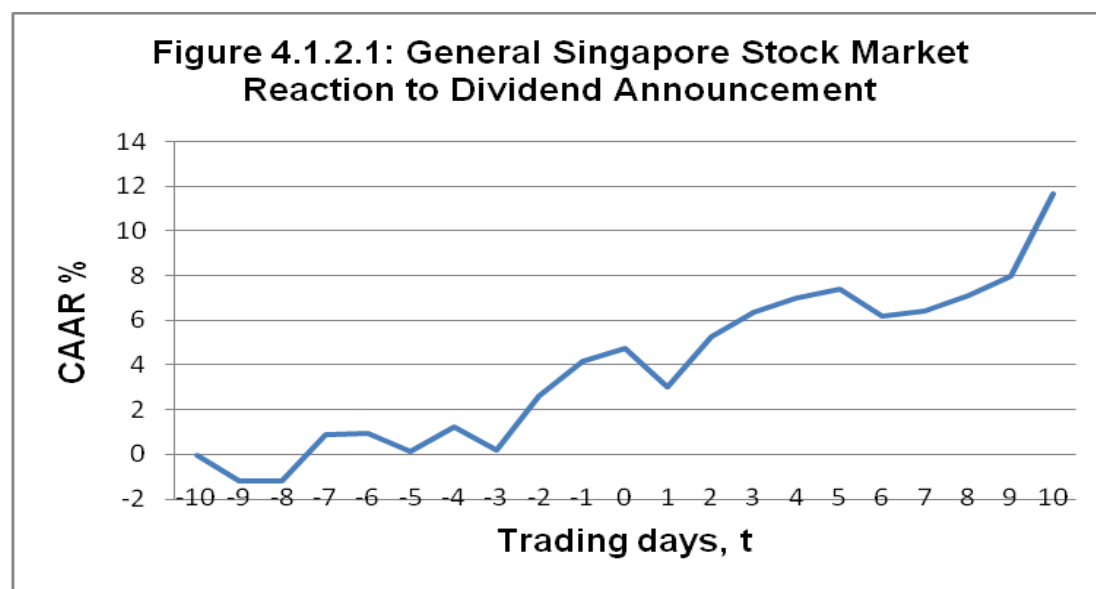
4.1.3 Year by Year Analysis-Malaysia Scenario

Repeating the analysis performed earlier, but in the following cases, on a year to year basis, the results are as follows:

4.1.3.1 Year 2005

According to table 4.1.3.1, the AAR was significant on t=-6 at 5% level of significance with negative value that was -0.4436%. This indicated that the market had predicted the information on dividend even before the actual announcement date. AAR was significant on t=1 at 1% level of significance with the highest return that was 0.7748%. However, the magnitude of the share price reaction was small, limiting its economic significance, and the result was similar to DeAngelo and DeAngelo, (1996) who state "...these studies typically find an average share price increase of the order of 1 % or less."

The CAAR were negative from t=-10 and turned positive beginning t=2. The CAAR was significant on t=+10 with the highest CAAR that was 1.0123% at 10% level of significance. The result was contradicted with Yip (2009) where he found most of the CAAR before the announcement date were significant. Besides, our results showed a clear upward trend after t=+1. The results implied that the investors could earn abnormal return if they purchased the stocks before t=+1 and sold it off at the last day of event window.

Table 4.1.3.1: Stock Market Reaction to 2005 Malaysia Dividend Announcement

Day	AAR%	AAR t-value		CAAR%	CAAR t-value	
-10	-0.2034	-1.0770		-0.2034	-0.3706	
-9	0.1094	0.5796		-0.0940	-0.1713	
-8	-0.2593	-1.3566		-0.3533	-0.6436	
-7	0.2006	1.0615		-0.1527	-0.2781	
-6	-0.4436	-2.0851	**	-0.5962	-1.0863	
-5	0.1498	0.5883		-0.4464	-0.8133	
-4	-0.1863	-0.7665		-0.6327	-1.1528	
-3	0.1633	0.7087		-0.4694	-0.8553	
-2	-0.3006	-1.4849		-0.7700	-1.4030	
-1	0.0310	0.1336		-0.7391	-1.3465	
0	-0.1252	-0.5659		-0.8642	-1.5746	
1	0.7748	2.9642	***	-0.0894	-0.1629	
2	0.1310	0.5542		0.0416	0.0757	
3	0.0620	0.2142		0.1036	0.1888	
4	-0.0673	-0.2334		0.0363	0.0661	
5	0.3696	1.2784		0.4058	0.7394	
6	0.1189	0.4612		0.5247	0.9560	
7	-0.0750	-0.3453		0.4497	0.8193	
8	0.3473	0.7691		0.7970	1.4521	
9	-0.0733	-0.2399		0.7237	1.3186	
10	0.2886	0.8683		1.0123	1.8443	*

Note: AAR = Average Abnormal Returns (%).
CAAR = Cumulative Average Abnormal Returns (%).   N=149
*Significant at α = 0.10 ; **significant at α = 0.05, and ***significant at α = 0.01

Figure 4.1.3.1:CAAR for 2005 Malaysia Dividend Announcement
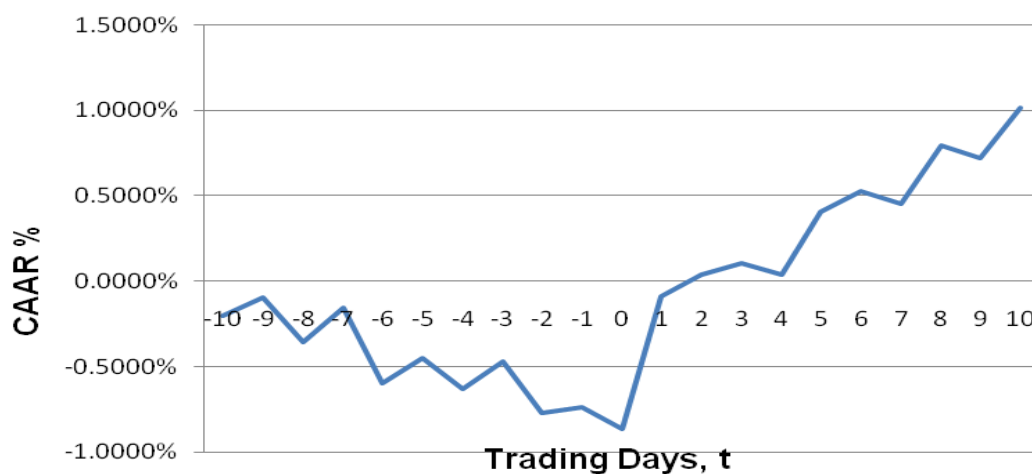
4.1.3.2 Year 2006

The AAR were significant on t=0 at 5% level of significance and on t=1 at 1% level of significance. Parts of the investors reacted immediately once the company announced their dividend while the remaining reacted only after the announcement date. This indicated that the Malaysia stock market was inefficient where some of the investors received the information only after the announcement date.

According to figure 4.1.3.2, there was a clear upward trend for CAAR in year 2006. All the CAAR were positive beginning the first day of event window. The CAAR was the highest on t=+8 with return of 2.3622%. The CAAR were significant on t=1 and t=3 to 10. The results showed that the investors could earned the highest positive abnormal return by buying the stock on day t=-10 and sell it on t=8.

Table 4.1.3.2: Stock Market Reaction to 2006 Malaysia Dividend Announcement

Day	AAR%	AAR t-value		CAAR%	CAAR t-value	
-10	0.1374	0.7250		0.1374	0.1497	
-9	0.2114	0.9186		0.3487	0.3801	
-8	-0.1018	-0.5350		0.2469	0.2691	
-7	-0.0068	-0.0369		0.2402	0.2618	
-6	-0.0859	-0.3650		0.1543	0.1682	
-5	-0.0124	-0.0783		0.1419	0.1546	
-4	-0.1342	-0.6358		0.0077	0.0084	
-3	0.1318	0.3625		0.1394	0.1520	
-2	0.3510	1.2882		0.4905	0.5346	
-1	-0.0435	-0.1787		0.4470	0.4872	
0	0.4876	2.0332	**	0.9345	1.0186	
1	0.7145	3.1830	***	1.6491	1.7973	*
2	-0.1542	-0.6186		1.4948	1.6292	
3	0.2951	1.5952		1.7899	1.9508	*
4	0.3338	1.3833		2.1237	2.3147	**
5	-0.1933	-0.9050		1.9305	2.1040	**
6	0.2874	1.1523		2.2179	2.4173	**
7	-0.0011	-0.0044		2.2168	2.4161	**
8	0.1454	0.7570		2.3622	2.5746	**
9	-0.1610	-0.8942		2.2012	2.3991	**
10	-0.0256	-0.1315		2.1756	2.3712	**

Note: AAR = Average Abnormal Returns (%).

CAAR = Cumulative Average Abnormal Returns (%).　　　　　N=149

*Significant at α = 0.10 ; **significant at α = 0.05, and ***significant at α = 0.01

Figure 4.1.3.2 :CAAR for 2006 Malaysia Dividend Announcement

4.1.3.3 Year 2007

The results in table 4.1.3.3 showed the AAR were significant only after the announcement date at different level of significance that were 1%, 5% and 10 % on t=1, 3 and 9 respectively. The delayed response by the market again indicated that the Malaysia stock market was inefficient. Similarly to the two previous year results, t=1 has the highest AAR in the event window. The results are consistent with Urooj and Zafar (2008) where they found that the stock prices were not affected significantly prior the dividend announcement day.

The CAAR for the whole event window were positive. This might show that the investors were confident with the performance of the companies during the year of high economic growth. The CAAR were significant beginning t=1 to 10. The CAAR was the highest on t=8 that is 4.5223%. Thus, the results indicated that the investors could benefit by purchasing the stock on t=-10 and hold it until t=8.

Table 4.1.3.3: Stock Market Reaction to 2007 Malaysia Dividend Announcement

| Day	AAR%	AAR t-value		CAAR%	CAAR t-value	
-10	0.1199	0.5725		0.1199	0.0752	
-9	-0.0430	-0.1771		0.0769	0.0483	
-8	0.4127	1.5562		0.4896	0.3073	
-7	0.1491	0.7432		0.6387	0.4008	
-6	0.1600	0.6282		0.7987	0.5012	
-5	0.0908	0.4599		0.8895	0.5582	
-4	0.0896	0.3739		0.9791	0.6144	
-3	0.1958	0.7967		1.1749	0.7373	
-2	0.3327	1.4972		1.5075	0.9461	
-1	0.0115	0.0556		1.5190	0.9533	
0	0.2614	0.9666		1.7804	1.1173	
1	1.0070	3.4502	***	2.7874	1.7492	*
2	0.2868	1.5594		3.0742	1.9292	*
3	0.3473	1.6245		3.4215	2.1472	**
4	0.6757	2.4921	**	4.0972	2.5712	**
5	-0.2775	-1.2345		3.8197	2.3970	**
6	0.2895	1.5490		4.1091	2.5787	**
7	0.2809	1.6111		4.3901	2.7550	***
8	0.1322	0.6921		4.5223	2.8380	***
9	-0.4465	-1.6982	*	4.0758	2.5578	**
10	-0.0660	-0.2859		4.0098	2.5164	**

Note: AAR = Average Abnormal Returns (%).
CAAR = Cumulative Average Abnormal Returns (%).   N=149
*Significant at α = 0.10 ; **significant at α = 0.05, and ***significant at α = 0.01

Figure 4.1.3.3:CAAR for 2007 Malaysia Dividend Announcement
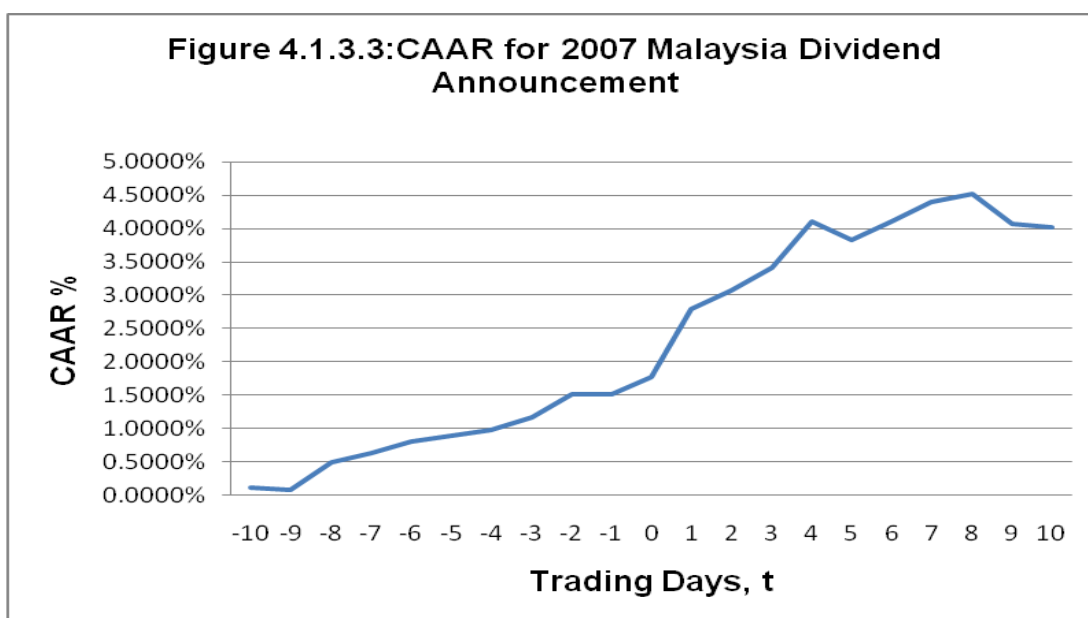
4.1.3.4 Year 2008

The AAR was significant on t=-4 and 1 at 10% level of significance. The AAR was the highest on t=4 that is 0.8395% and the results showed that there was a sign of information leakage in the Malaysia stock market. The AAR was significant on t=1 as well and this showed that there was a delayed response in the market regarding the dividend announced.

Based on figure 4.1.3.4, the CAAR were negative from t=-9 to t=-5 and turned positive from t=-4 to the last day of event window. The results showed an upward trend and the CAAR were significant from t=-3 to 10. However, the CAAR began to fall after t=7. Despite of the global financial crisis and the 12th general election crisis, the stocks prices were able to perform as well as those in the previous years.

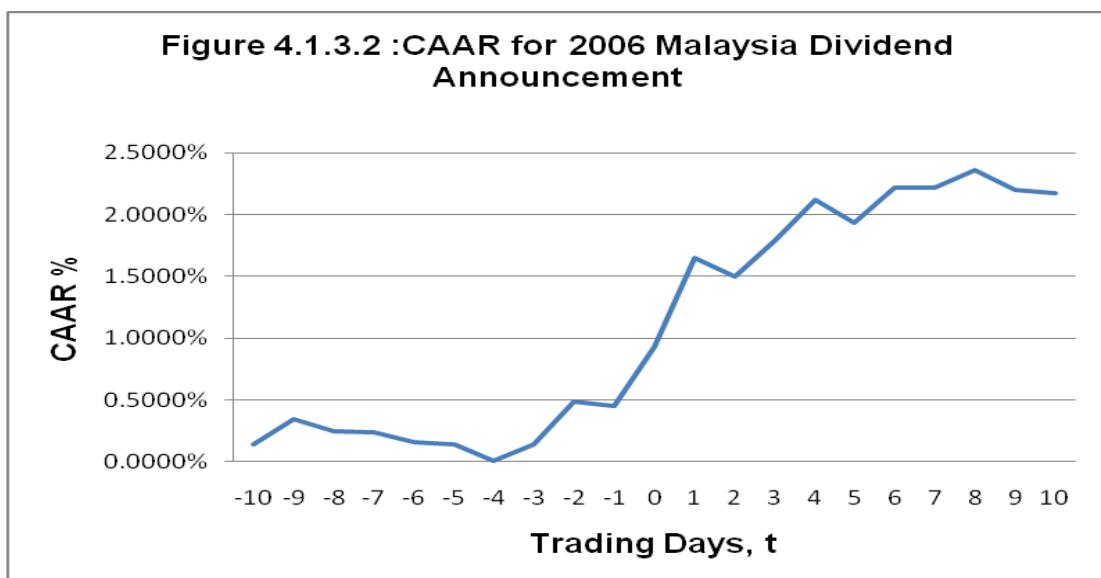**Table 4.1.3.4: Stock Market Reaction to 2008 Malaysia Dividend Announcement**

Day	AAR%	AAR t-value		CAAR%	CAAR t-value	
-10	0.1549	0.2992		0.1549	0.1210	
-9	-0.2112	-0.9000		-0.0563	-0.0440	
-8	-0.0954	-0.4049		-0.1516	-0.1185	
-7	-0.1838	-0.5649		-0.3354	-0.2621	
-6	-0.1147	-0.4187		-0.4501	-0.3516	
-5	0.2117	0.6595		-0.2384	-0.1863	
-4	0.8395	1.7520	*	0.6010	0.4696	
-3	-0.3175	-0.7630		0.2835	0.2215	
-2	0.7526	1.4316		1.0362	0.8095	
-1	-0.4199	-0.9781		0.6163	0.4815	
0	0.3561	1.2203		0.9724	0.7597	
1	0.6099	1.6645	*	1.5823	1.2361	
2	0.3001	0.8858		1.8824	1.4706	
3	0.2628	0.7725		2.1452	1.6759	*
4	0.3738	1.0411		2.5190	1.9679	*
5	0.2821	0.7996		2.8010	2.1883	**
6	0.2064	0.7200		3.0074	2.3496	**
7	0.0673	0.2645		3.0747	2.4021	**
8	-0.0387	-0.1290		3.0360	2.3719	**
9	-0.2317	-0.7312		2.8044	2.1909	**
10	-0.4896	-1.2817		2.3147	1.8084	*

Note: AAR = Average Abnormal Returns (%).
CAAR = Cumulative Average Abnormal Returns (%).   N=149
*Significant at α = 0.10 ; **significant at α = 0.05, and ***significant at α = 0.01

Figure 4.1.3.4:CAAR for 2008 Malaysia Dividend Announcement

4.1.3.5 Year 2009

According to table 4.1.3.5, the AAR was significant on t=-3 at 5% level of significance and this indicated that the market had predicted the dividend even before the announcement date. The AAR was also significant on t=0 to 2, 4 and 6. This showed that there was continuous reaction even after the announcement date. Similarly to the results in the past four years, t=1 was significant.

The CAAR were significant from t=3 to t=10. Almost all the CAAR were positive except for t=-8. The CAAR peaked at t=+9 with the return of 7.8856%. Just like the results in the past four years, the CAAR were significant only after the dividend announcement date. Year 2009 had the highest CAAR among all the studied years and this showed that the market was optimistic towards the performance of the companies even during the year of recessions.

Table 4.1.3.5 : Stock Market Reaction to 2009 Malaysia Dividend Announcement

Day	AAR%	AAR t-value		CAAR%	CAAR t-value	
-10	0.1133	0.2146		0.1133	0.0380	
-9	-0.0007	-0.0025		0.1125	0.0378	
-8	-0.2569	-0.8413		-0.1444	-0.0485	
-7	0.4786	1.3670		0.3342	0.1121	
-6	0.2862	0.8506		0.6204	0.2082	
-5	0.3335	1.0796		0.9539	0.3201	
-4	-0.1685	-0.5829		0.7854	0.2635	
-3	0.5920	2.2107	**	1.3775	0.4622	
-2	0.3912	1.1050		1.7687	0.5934	
-1	0.0338	0.0989		1.8024	0.6048	
0	0.6710	1.6647	*	2.4735	0.8299	
1	1.2408	3.1390	***	3.7143	1.2462	
2	1.1899	2.5594	**	4.9042	1.6455	
3	0.2362	0.6648		5.1404	1.7247	*
4	0.5959	1.9447	*	5.7363	1.9246	*
5	0.4574	1.3728		6.1937	2.0781	**
6	0.7575	1.8861	*	6.9512	2.3323	**
7	0.4924	1.1417		7.4435	2.4975	**
8	0.4370	1.6211		7.8806	2.6441	***
9	0.0051	0.0176		7.8856	2.6458	***
10	-0.5155	-1.0764		7.3702	2.4729	**

Note: AAR = Average Abnormal Returns (%).

CAAR = Cumulative Average Abnormal Returns (%).   N=149

*Significant at α = 0.10 ; **significant at α = 0.05, and ***significant at α = 0.01

Figure 4.1.3.5 :CAAR for 2009 Malaysia Dividend Announcement

Figure 4.1.3.6: CAAR of Malaysia Yearly Analysis of Dividend Announcement
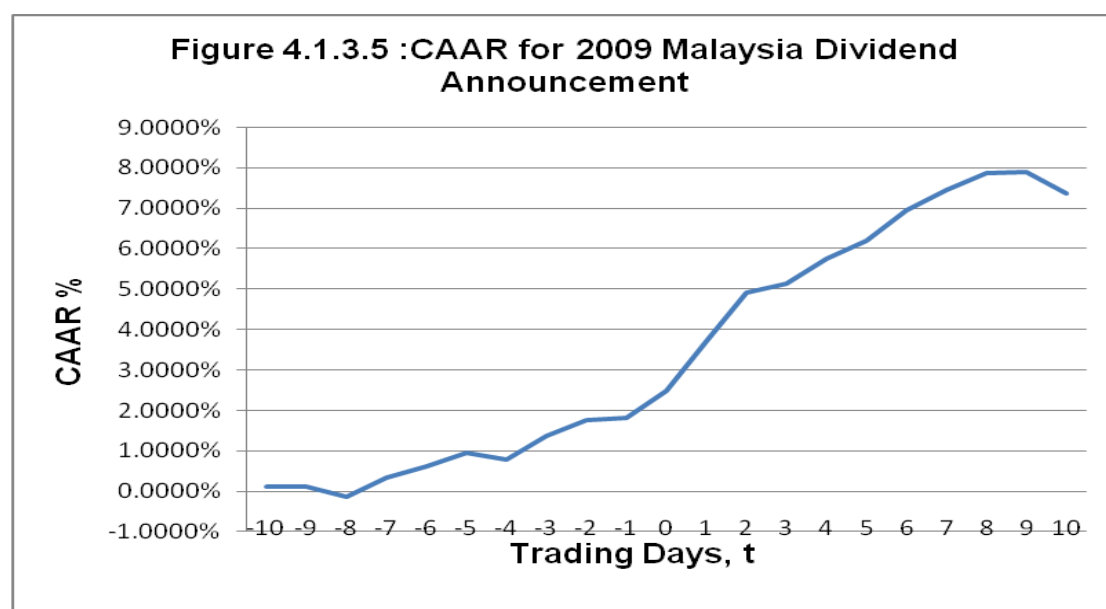
4.1.4 Year by Year Analysis-Singapore Scenario

4.1.4.1 Year 2005

Based on the result in table 4.1.4.1, from Singapore's companies in the year of 2005, AAR which recorded the highest figure was t=8 at 0.7379% and the lowest was t=-6 at -0.4496%. However, level significance of 5% was shown three results with significant which were t=-10, 2 and 8. As for confidence level of 10%, t=-4 was recorded as significant. Therefore, it was suggested that investors were reacting strongly to the information after announcement (Albert and Bruce, 1992). t=-10 and t=-4 shown significant maybe there was insider information and led to investor to speculate before the announcement date.

Figure 4.1.4.1 showed most of the CAAR had generated positive return. Level significance of 1% showed that t=8, 9 and 10 were significant. Confidence level of 5% show t=7 to 4 were significant. This meant the market could be in inefficient form where the longer investors held the better the return. These showed that year 2005 dividend announcement did carry information about future cash flow of the companies.

Table 4.1.4.1: Stock Market Reaction to 2005 Singapore Dividend Announcement
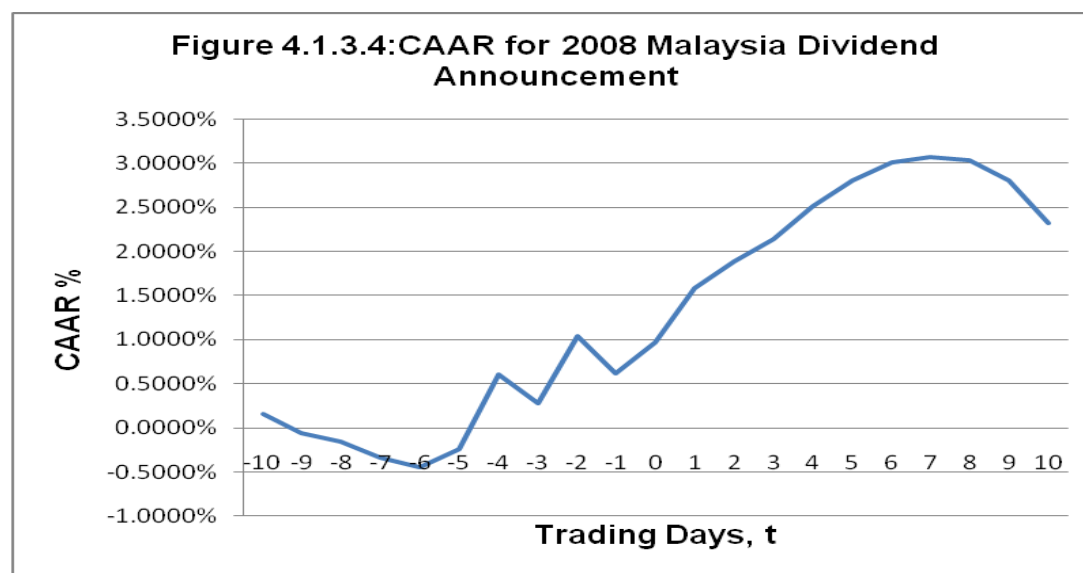
Day	AAR %	AAR t-value		CAAR %	CAAR t-value	
-10	0.5969	2.0878	**	0.5969	0.3254	
-9	-0.1694	-0.4357		0.4275	0.2331	
-8	-0.0962	-0.2526		0.3314	0.1807	
-7	0.0164	0.0509		0.3477	0.1896	
-6	-0.4996	-0.7992		-0.1518	-0.0828	
-5	1.1253	1.1765		0.9734	0.5307	
-4	0.5936	1.7371	*	1.5671	0.8543	
-3	-0.2076	-0.4070		1.3594	0.7411	
-2	0.5911	1.3243		1.9505	1.0634	
-1	0.0364	0.0816		1.9869	1.0832	
0	1.0417	1.4286		3.0286	1.6511	
1	0.7024	1.3128		3.7310	2.0341	**
2	0.5086	2.1401	**	4.2396	2.3114	**
3	-0.0332	-0.1281		4.2064	2.2933	**
4	-0.3546	-1.0261		3.8518	2.0999	**
5	0.2186	0.6782		4.0704	2.2191	**
6	0.2658	0.8637		4.3362	2.3640	**
7	0.0756	0.2256		4.4118	2.4052	**
8	0.7379	2.0363	**	5.1497	2.8075	***
9	-0.1028	-0.3898		5.0470	2.7515	***
10	-0.0742	-0.2560		4.9728	2.7111	***

Note: AAR = Average Abnormal Returns (%).
CAAR = Cumulative Average Abnormal Returns (%).   N=96
*Significant at α = 0.10 ; **significant at α = 0.05, and ***significant at α = 0.01

Figure 4.1.4.1: CAAR for 2005 Singapore Dividend Announcement

4.1.4.2 Year 2006

The AAR which recorded the highest figure was on the announcement day at 1.0539%. Level significance of 5% show t=-5, t=0 were significant. This could be investor were starting to speculate due to information leakage from the company. Significance on the announcement day could be the investors reacted to the news immediately as suggested by Gordon, 1959. Level significance of 10% show t=1 and t=2 are significant.

CAAR showed that level significance of 1% on t=1 to 7 and 10 were significant. Level significance of 5% show t=0, 8 and 9 significant. Level confidence of 10% show t=-1 significant. This showed that year 2006 dividend announcement did carry information about earning of the companies. The evidence was contrary with the dividend irrelevance hypothesis of Miller and Modigliani (1961). The CAAR accumulated high to 4.9625 % despite the year of election. This showed that the investors remained optimistic towards the company's future.

Table 4.1.4.2: Stock Market Reaction to 2006 Singapore Dividend Announcement

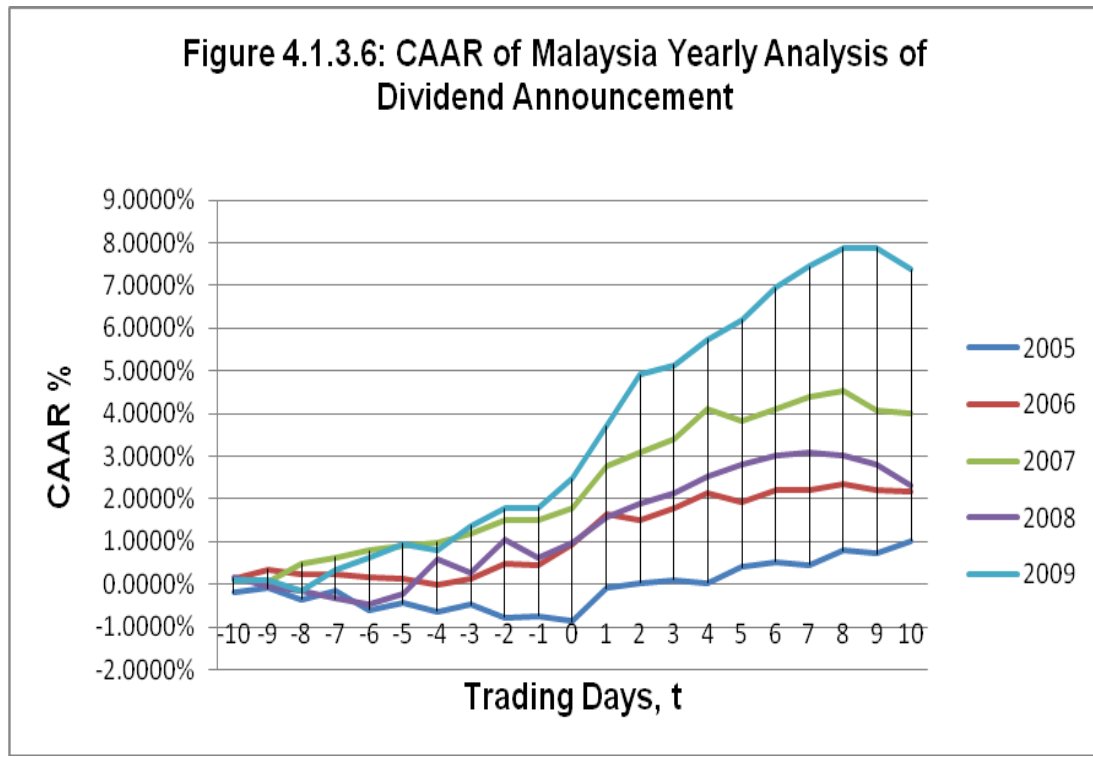| Day	AAR %	AAR t-value		CAAR %	CAAR t-value	
-10	0.6367	1.1308		0.6367	0.3836	
-9	0.0524	0.1773		0.6891	0.4152	
-8	-0.0529	-0.1632		0.6362	0.3833	
-7	0.4497	1.4460		1.0859	0.6543	
-6	0.0896	0.2497		1.1754	0.7082	
-5	0.6119	2.4467	**	1.7873	1.0769	
-4	0.5597	1.2501		2.3470	1.4141	
-3	-0.1672	-0.4202		2.1798	1.3133	
-2	0.5376	1.8035	*	2.7173	1.6372	
-1	0.3709	0.8368		3.0883	1.8607	*
0	1.0539	2.0123	**	4.1422	2.4957	**
1	0.8216	1.8160	*	4.9639	2.9907	***
2	-0.1863	-0.7177		4.7776	2.8785	***
3	-0.1580	-0.4850		4.6196	2.7833	***
4	0.1400	0.5399		4.7595	2.8676	***
5	0.2030	0.7998		4.9625	2.9899	***
6	-0.1625	-0.3042		4.8001	2.8921	***
7	-0.0259	-0.0782		4.7742	2.8764	***
8	-0.6461	-1.2860		4.1281	2.4872	**
9	0.1300	0.4540		4.2581	2.5655	**
10	0.3590	1.0767		4.6170	2.7818	***

Note: AAR = Average Abnormal Returns (%).

CAAR = Cumulative Average Abnormal Returns (%).   N=96

*Significant at α = 0.10 ; **significant at α = 0.05, and ***significant at α = 0.01

Figure 4.1.4.2:CAAR for 2006 Singapore Dividend Announcement
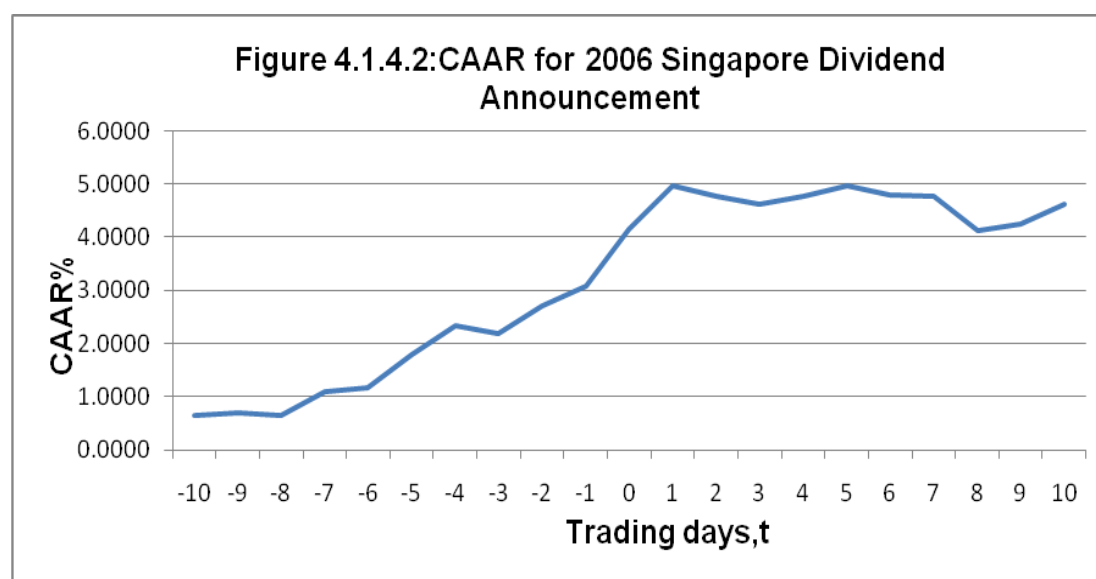
4.1.4.3 Year 2007

Based on the result in table 4.1.4.3, AAR which recorded the highest figure was t=0 at 1.5765%. The level significance of 1% recorded only t=-4, 0 and 5 were significant. Meanwhile, level significance of 5% test only recorded t=5, was significant. 10% significance test recorded t=-7 were significant. This proven that the market was in inefficient form. Therefore, it was suggested that purchase on t=-10 before the announcement day and sold after t=5 would be a good option.

The CAAR showed that level of 1% significance test was significant only on t=8. Level significance of 5% showed that t=4,5,6,7,9,10 were significant while 10% show only t=1 to 3 significant. This indicated market in semi-strong form and the CAAR kept increasing suggesting a favor buy for investors. This was contrasts with the traditional finding (Arnott and Asness, 2003) where investor could not make continuous profit in the market.

Table 4.1.4.3: Stock Market Reaction to 2007 Singapore Dividend Announcement
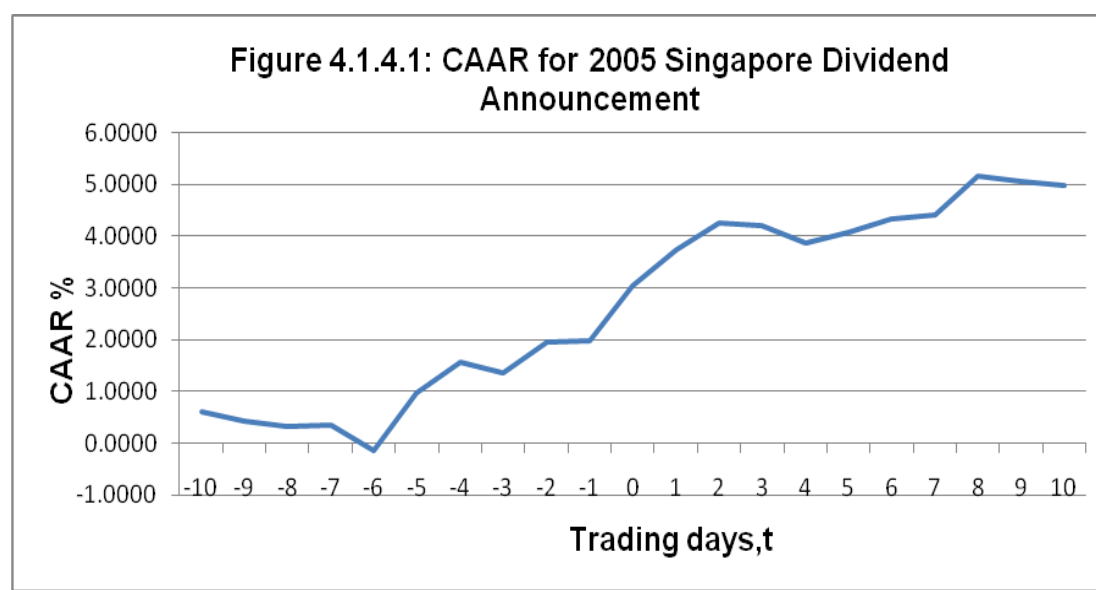
Day	AAR %	AAR t-value		CAAR %	CAAR t-value	
-10	-0.1388	-0.5839		-0.1388	-0.0622	
-9	-0.0575	-0.2327		-0.1963	-0.0880	
-8	-0.0191	-0.0807		-0.2154	-0.0965	
-7	0.4994	1.8866	*	0.2840	0.1273	
-6	-0.1992	-0.7287		0.0849	0.0380	
-5	0.3457	1.2609		0.4306	0.1930	
-4	1.0414	3.6914	***	1.4721	0.6597	
-3	-0.1378	-0.7759		1.3343	0.5980	
-2	-0.0045	-0.0161		1.3298	0.5960	
-1	0.6331	2.0053	**	1.9629	0.8797	
0	1.5765	4.5743	***	3.5393	1.5862	
1	0.3170	0.8783		3.8563	1.7283	*
2	0.3664	1.2085		4.2227	1.8925	*
3	0.0832	0.2563		4.3059	1.9298	*
4	0.1239	0.3793		4.4298	1.9853	**
5	0.6335	2.6392	***	5.0633	2.2692	**
6	0.1100	0.3722		5.1733	2.3185	**
7	0.4459	1.2674		5.6192	2.5184	**
8	0.3963	1.3885		6.0155	2.6960	***
9	-1.0563	-1.4867		4.9592	2.2226	**
10	-0.0455	-0.1604		4.9138	2.2022	**

Note: AAR = Average Abnormal Returns (%).
CAAR = Cumulative Average Abnormal Returns (%).   N=96
*Significant at α = 0.10 ; **significant at α = 0.05, and ***significant at α = 0.01

Figure 4.1.4.3:CAAR for 2007 Singapore Dividend Announcement date
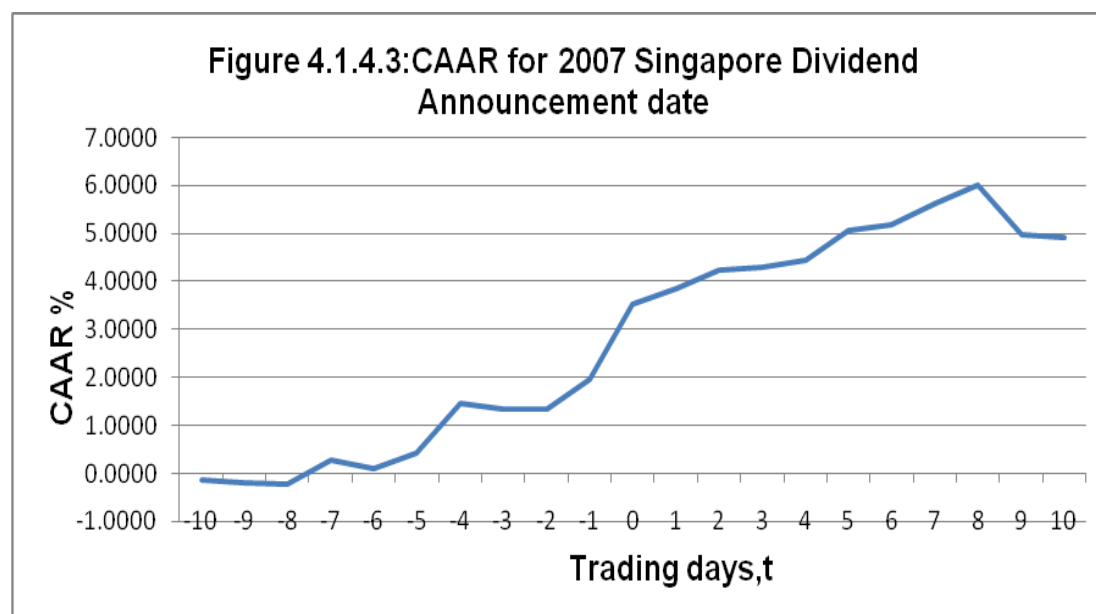
4.1.4.4 Year 2008

Based on the result in table 4.1.4.4, AAR which recorded the highest figure were on announcement date at 1.5599%. Level significance of 1%, 5% and 10% had shown only the announcement day itself is significant. These proved that companies and investors only responded to the market on the announcement date itself. Therefore, it was suggested there was less opportunity to make abnormal return in this year. This was further supported by the fact that this year the financial crisis from U.S. had affected the economy of whole world causing the economy heading into slump. Therefore, investors were extremely cautious in the market and only react to the market on the announcement day itself. Therefore, year 2008 was not suitable for buying and held for a long period.

The figure 4.1.1.4 showed that the highest CAAR on t=1 at 1.7688%. Level of significance test 1% showed that t=0,1,2 were significant. Meanwhile level of significance 5% recorded t=5 and t=3 were significant. As for 10% significance test, result showed t=6 was significant. Since CAAR only showed higher figure from t=1 to t=7, it was suggested that after t=7 should be sold.

Table 4.1.4.4 : Stock Market Reaction to 2008 Singapore Dividend Announcement

Day	AAR %	AAR t-value		CAAR %	CAAR t-value	
-10	0.5378	0.6985		0.5378	0.9004	
-9	-0.4407	-1.1619		0.0971	0.1626	
-8	0.4908	0.8308		0.5879	0.9843	
-7	-0.1406	-0.2859		0.4473	0.7490	
-6	0.0390	0.0934		0.4863	0.8143	
-5	-0.6328	-0.8813		-0.1465	-0.2453	
-4	0.7059	0.8057		0.5594	0.9367	
-3	-0.4029	-1.0613		0.1566	0.2621	
-2	-0.3398	-1.0145		-0.1833	-0.3069	
-1	0.1988	0.5136		0.0155	0.0260	
0	1.5599	3.2965	***	1.5754	2.6378	***
1	0.1934	0.3381		1.7688	2.9615	***
2	-0.0249	-0.0721		1.7439	2.9199	***
3	-0.3634	-1.2763		1.3806	2.3115	**
4	-0.3168	-0.6227		1.0638	1.7811	
5	0.2391	0.5792		1.3029	2.1814	**
6	-0.2942	-0.4410		1.0087	1.6889	*
7	-0.1795	-0.4214		0.8292	1.3883	
8	-0.3335	-0.7313		0.4957	0.8300	
9	0.1205	0.3089		0.6162	1.0317	
10	-0.3903	-1.0696		0.2259	0.3782	

Note: AAR = Average Abnormal Returns (%).
CAAR = Cumulative Average Abnormal Returns (%).   N=96
*Significant at α = 0.10 ; **significant at α = 0.05, and ***significant at α = 0.01

Figure 4.1.4.4:CAAR for 2008 Singapore Dividend Announcement
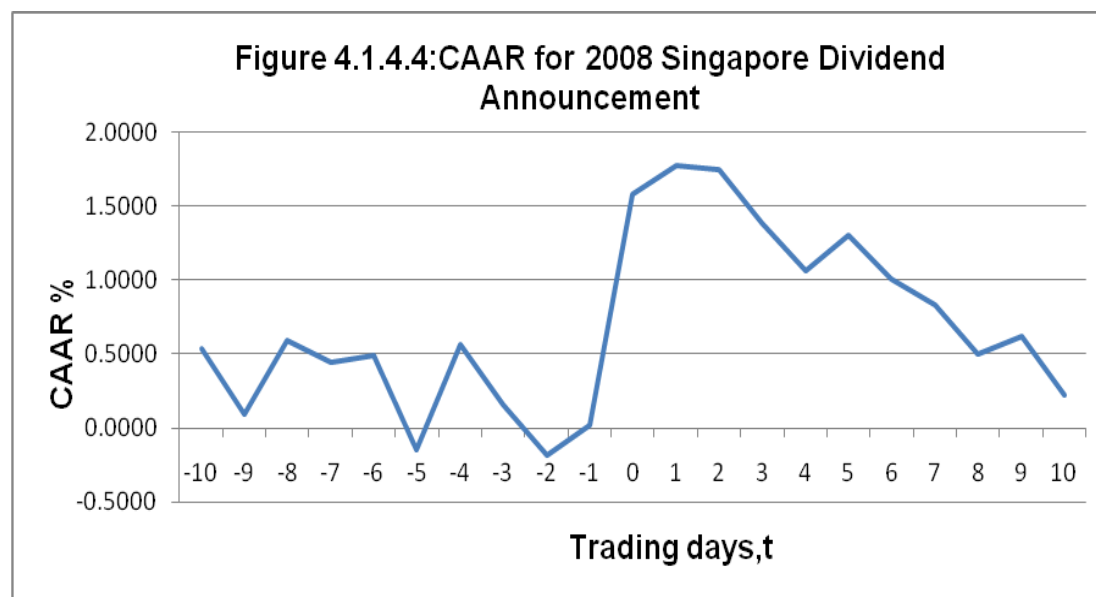
4.1.4.5 Year 2009

Based on the result in table 4.1.4.5, the highest AAR was on the announcement day at 3.2067% Level significance of 1%, 5% and 10% had shown only the announcement day itself is significant meaning other day were insignificant. This suggested that there was less opportunity to make abnormal return. This showed that Singapore still affected by the aftermath of U.S. financial crisis from previous year.

CAAR showed the highest on t=10 at 11.4493%. Test significance of 5% showed t=1 to t=10 were significant. Level significance of 5% shows only the announcement date is significant. There were less upward changes on share price prior to the announcement date. The increased of CAAR only happen after announcement date. This was consistent with studies by (Mansor and Subramanian, 1992; Nasir and Mohamad 1993) that investors would only respond to good news positively and bad news badly.

Table 4.1.4.5: Stock Market Reaction to 2009 Singapore Dividend Announcement

Day	AAR %	AAR t-value		CAR %	CAAR t-value	
-10	-0.3683	-0.3368		-0.3683	-0.0844	
-9	-0.7591	-1.0135		-1.1274	-0.2584	
-8	3.2235	1.3565		2.0961	0.4804	
-7	0.4191	0.7093		2.5152	0.5765	
-6	-0.1504	-0.2717		2.3648	0.5420	
-5	0.5760	0.6910		2.9408	0.6740	
-4	0.5792	0.7794		3.5200	0.8068	
-3	1.1416	1.3989		4.6616	1.0684	
-2	0.4847	0.9847		5.1463	1.1795	
-1	-0.1094	-0.2087		5.0369	1.1544	
0	3.2067	5.2325	***	8.2435	1.8894	*
1	0.8904	0.9447		9.1339	2.0934	**
2	1.0538	1.1706		10.1878	2.3350	**
3	0.1745	0.3247		10.3623	2.3750	**
4	0.8272	1.2776		11.1895	2.5645	**
5	-0.3938	-0.5694		10.7957	2.4743	**
6	0.3561	0.8542		11.1517	2.5559	**
7	0.2569	0.5665		11.4086	2.6148	**
8	-0.1048	-0.2541		11.3038	2.5907	**
9	0.1113	0.2440		11.4150	2.6162	**
10	0.0342	0.0671		11.4493	2.6241	**

Note: AAR = Average Abnormal Returns (%).
CAAR = Cumulative Average Abnormal Returns (%).   N=96
*Significant at α = 0.10 ; **significant at α = 0.05, and ***significant at α = 0.01

Figure 4.1.4.5:CAAR for 2009 Singapore Dividnend Announcement

Figure 4.1.4.6: CAAR Singapore Yearly Dividend Announcement
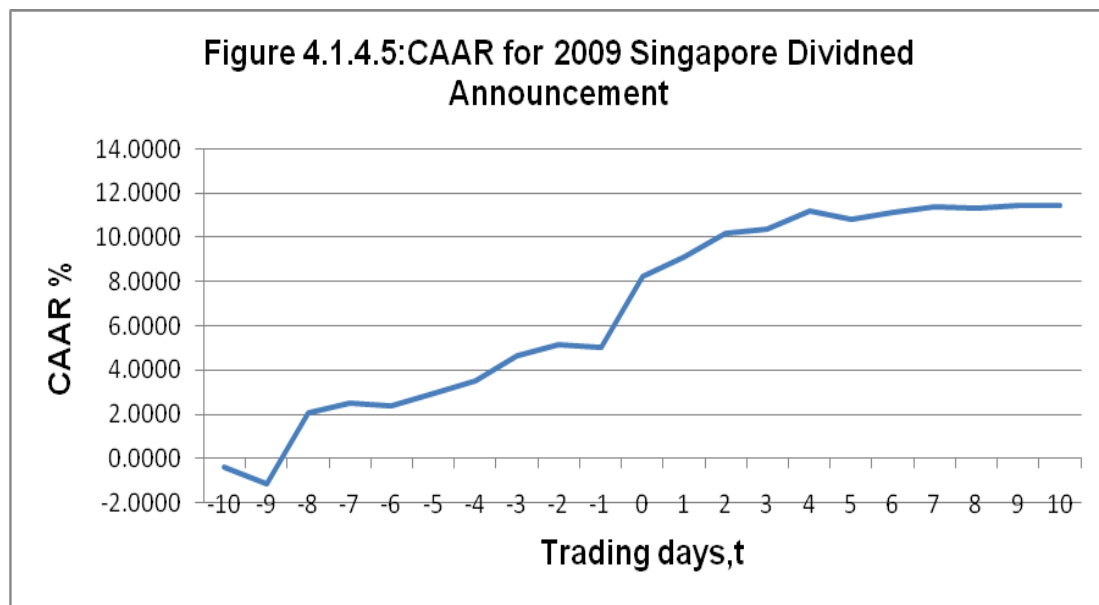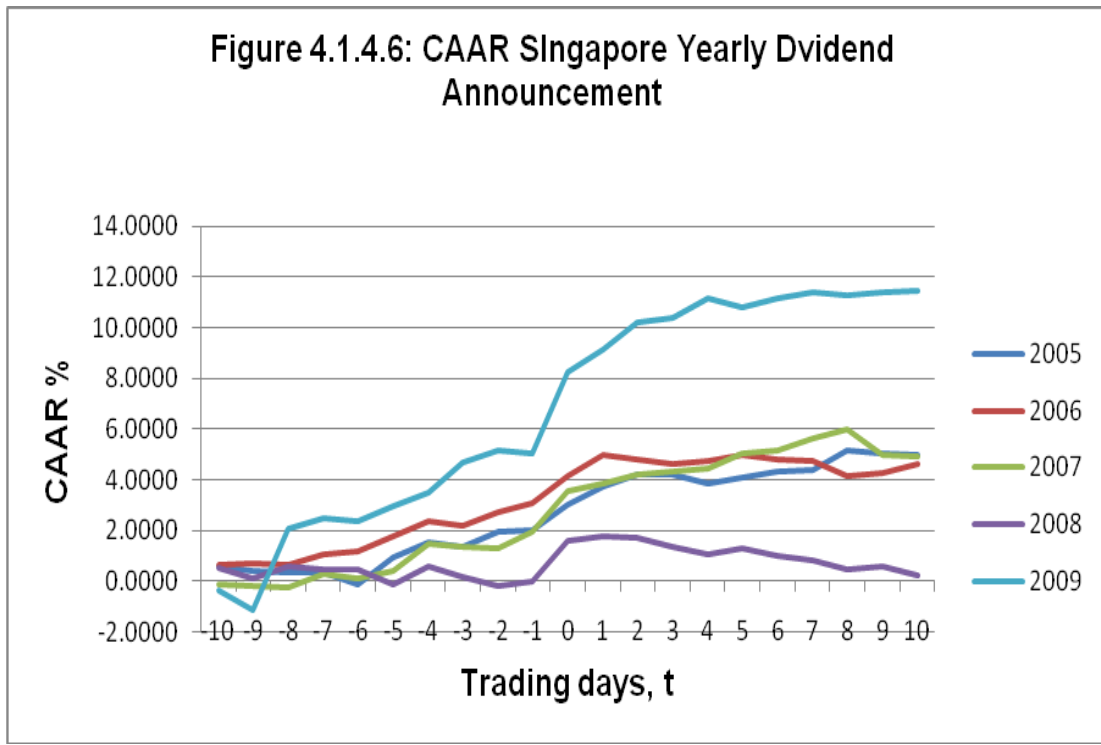
4.1.5 Changes in Dividends-Malaysia Scenario

4.1.5.1 Dividends Increased

According to our result in table 4.1.5.1, before the announcement of dividend increase on t=-1, the AAR was negative in value of -0.0809%. However, after the announcement on t=+1, the AAR showed high positive value of 1.1709%. While the days significant at 1% are t=-2, 0, 3, 9, and 10, some significant at 5% on t=4 and 6 and 10% on t=+1.

Based on table 4.1.5.2, the CAAR showed upward trend when increase in dividend was announced. The CAAR were positive in value after t=-8. For days significant at 1% level of confidence is t= +3, while at 5% were t= 4 to 10. The risen in CAAR indicated that investors were happy with the increase in dividend news and therefore tended to hold the stock for longer period.

Our result for dividend decrease was consistent with cash flow signaling effect. The theory suggested that changes in dividend policy would convey information about the company future cash flow. When increased in dividend was announced, it was also a sign of increase in company future cash flow. This was because investors thought that the managers would increase the dividend payment only if they were confident about their future cash flow as mentioned by Lintner (1956).

4.1.5.2 Dividends Decreased

According to table 4.1.5.1, the AAR were negative in value on t=-9 to -6, 3, and 10. Through the 21 event days, the days significant at 1% level of confidence were on t=-10, -6, 2 whereas at 5% on t=7.

The CAAR pattern of the decreasing dividend announcement was downward trend from t=-10 to -6, but after that it started to show upward trend. There was only one negative CAAR that was -0.2122% which appeared on t=-6. The days significant at 1% level of confidence is t=+2, and +3 whereas at 5% is t= 4 to 6, and 10, while for 10% is t=7 to 9.

Referring to table 4.1.5.2, the results showed CAAR was upward sloping when there was an announcement of dividend decreased. It represented dividend decreased was a good news for investors. However, our results were not consistent with the cash flows signaling theory. The theory suggested that as dividend decreased it would convey bad information about the current and future cash flow of the companies. Similarly in the imperfection of capital market indicated that when dividend decrease would bring an unfavorable news to investors (Azzopardi, 2004). This was due to the asymmetry of information, thus if managers reduced the dividend it would read by the investors as unfavorable information.

4.1.5.3 Dividends Unchanged

According to table 4.1.5.1, there were mixtures of positive and negative AAR. The t=1 had the highest positive value compare to other days which is 1.0495%. AAR were significant at 1%, 5%, and 10% on days t= 1, 4, and 2 respectively.

The CAAR graph of dividend unchanged was almost flat from t=-10 to -1 and turned to an upward trend on the days after. The CAAR showed positive value after and before announcement made except on t=-8 where the CAAR was -0.0758%. The day significant at 1% level of significance was t=3, at 5% were t= 4, to 9 and at 10% is t=10.

Our result was inconsistent with the local market result (Mansor and Subramaniam, 1992; Nasir and Mohamad, 1993; and Hiau *et al.*, 2002) which the researchers found that the market perceived no information when dividend were unchanged or there was no clear pattern could be observed.

Table 4.1.5.1: Dividend Changes Announcement Effect Malaysia-AAR

Trading Day, t	Decreased		Increased		Unchanged	
	AAR	AAR t-value	AAR	AAR t-value	AAR	AAR t-value
-10	0.5708	1.6729 *	-0.4556	-1.5940	0.2312	1.2030
-9	-0.2124	-1.2324	0.1822	1.0386	-0.0253	-0.1193
-8	-0.0363	-0.1747	0.1043	0.5831	-0.2817	-1.5988
-7	-0.1978	-0.8407	0.2993	1.5287	0.2482	1.4407
-6	-0.3365	-1.7319 *	0.0185	0.0937	0.1232	0.5555
-5	0.3222	1.4737	0.1899	1.1907	-0.0354	-0.1559
-4	0.2515	0.9836	0.0000	-0.0001	0.0096	0.0424
-3	0.2847	0.8975	0.0192	0.0962	0.2181	0.9630
-2	0.1558	0.5759	0.4964	1.8737 *	0.2147	0.9073
-1	0.1223	0.4740	-0.0809	-0.3737	-0.2192	-0.9176
0	0.2647	1.2209	0.3363	1.9269 *	0.3900	1.3245
1	0.2940	1.1238	1.1709	4.8171 ***	1.0495	4.8149 ***
2	0.5689	1.8384 *	0.1075	0.4970	0.4092	1.9534 *
3	-0.0233	-0.0993	0.3621	1.7851 *	0.3235	1.4125
4	0.2324	0.8417	0.4810	2.3384 **	0.4559	2.1428 **
5	0.0611	0.2073	0.0755	0.4298	0.1984	0.9268
6	0.1367	0.7329	0.4700	2.3676 **	0.2991	1.1098
7	0.4816	2.0005 **	0.0865	0.4635	-0.1432	-0.6001
8	0.1042	0.5506	0.0567	0.3995	0.4491	1.3093
9	0.1098	0.5266	-0.2908	-1.6462 *	-0.2811	-1.0884
10	-0.3411	-1.3627	-0.4863	-1.8669 *	0.3694	1.3818

Note: AAR = Average Abnormal Returns (%).
*Significant at α = 0.10 ; **significant at α = 0.05, and ***significant at α = 0.01
Increase, N=296
Decrease, N=214
Unchanged, N=235

Table 4.1.5.2: Dividend Changes Announcement Effect Malaysia-CAAR

Trading Day, t	Decreased		Increased		Unchanged	
	CAAR	CAAR t-value	CAAR	CAAR t-value	CAAR	CAAR t-value
-10	0.5708	0.5127	-0.4556	-0.2856	0.2312	0.1504
-9	0.3584	0.3219	-0.2734	-0.1714	0.2059	0.1340
-8	0.3221	0.2893	-0.1691	-0.1060	-0.0758	-0.0493
-7	0.1243	0.1116	0.1301	0.0816	0.1725	0.1122
-6	-0.2122	-0.1906	0.1487	0.0932	0.2956	0.1923
-5	0.1100	0.0988	0.3386	0.2123	0.2603	0.1693
-4	0.3615	0.3247	0.3386	0.2122	0.2699	0.1756
-3	0.6462	0.5805	0.3577	0.2243	0.4879	0.3174
-2	0.8021	0.7205	0.8542	0.5355	0.7027	0.4571
-1	0.9244	0.8303	0.7733	0.4848	0.4834	0.3145
0	1.1891	1.0681	1.1095	0.6956	0.8735	0.5683
1	1.4831	1.3323	2.2805	1.4296	1.9230	1.2511
2	2.0520	1.8433 *	2.3879	1.4970	2.3322	1.5173
3	2.0287	1.8223 *	2.7500	1.7240 *	2.6557	1.7278 *
4	2.2611	2.0310 **	3.2310	2.0255 **	3.1116	2.0243 **
5	2.3221	2.0859 **	3.3065	2.0729 **	3.3099	2.1534 **
6	2.4588	2.2087 **	3.7765	2.3675 **	3.6090	2.3480 **
7	2.9404	2.6413 ***	3.8629	2.4217 **	3.4658	2.2548 **
8	3.0446	2.7348 ***	3.9196	2.4572 **	3.9149	2.5470 **
9	3.1544	2.8335 ***	3.6288	2.2749 **	3.6338	2.3641 **
10	2.8132	2.5270 **	3.1425	1.9701 **	4.0032	2.6045 ***

Note: CAAR = Cumulative Average Abnormal Returns (%).
*Significant at α = 0.10 ; **significant at α = 0.05, and ***significant at α = 0.01
Increase, N=296
Decrease, N=214
Unchanged, N=235

Figure 4.1.5.1 CAAR for Dividend Changes Announcement Malaysia

4.1.6 Changes in Dividends-Singapore Scenario

4.1.6.1 Dividends Increased

According to table 4.1.6.1, there were mixtures of AAR with positive and negative value during the event period. On t=0 the AAR was the highest throughout the event period which was 1.4661%. There were only 3 days that showed significant AAR at 10% and 1% level of significance on t= -4, -1, and 0 respectively.

The CAAR graph in Figure 4.1.6.1 showed an upward trend when dividend increased was announced. The CAAR increase gradually from the first day of event window and achieved cumulative return of 4.7666% at the end of event period. For days significant at 1 % was t= 0, while at 5% were on t=1 to 9. Our results on CAAR strongly supported the Bird-in-Hand fallacy where investors felt dividend in hand was more certain than the future capital gain.

4.1.6.2 Dividends Decreased

Referring to table 4.1.6.1, we observed there was a mixture of positive and negative figure of AAR. The t=0 had the highest AAR of 1.8753% significant at 1% level of significance. There were 1% significant on t=-9 and 8. The days significant at 5% is t= -4, and 10 and at 10% is t=0.

The pattern of the CAAR shown in Figure 4.1.6.1 was downward trend from t=-10 to -6 and began to show upward trend on the subsequent days. For the case of dividends decrease, there were mixtures of positive and negative value of CAAR. The CAAR increased substantially on t=0 to 2.7356% from 0.8603% on t=-1, however, the result was insignificant. The CAAR are significant from t=1 to t=10. Our CAAR result was inconsistent with the

findings of Bhattacharya (1979) and Miller and Rock (1985) which they suggested that a decrease in dividend would signal bad news on the companies' future cash flow.

4.1.6.3 Dividends Unchanged

For the result of AAR in table 4.1.6.1, most of them were in positive value except t=-9, 5, 9, and 10. Besides, AAR on t=0 was significant at 10% level of significance with the highest positive value which was 1.5828% and significant at 5% level of confidence on t=8. This indicated that there was a delayed response in the market where AAR were significant only after the announcement date.

For unchanged dividend announcement, it was also an upward trend pattern for CAAR. Compared to the other two dividend changes announcement, we observed that dividend unchanged announcement had the greatest impact with the highest CAAR value. The CAAR showed positive figure excepted t=-9 where the CAAR is -0.3253%. The CAAR were significant at 5% level of significance on t=0 and 1 and at 10% on t=2 to 10.

Table 4.1.6.1: Dividend Changes Announcement Effect Singapore-AAR

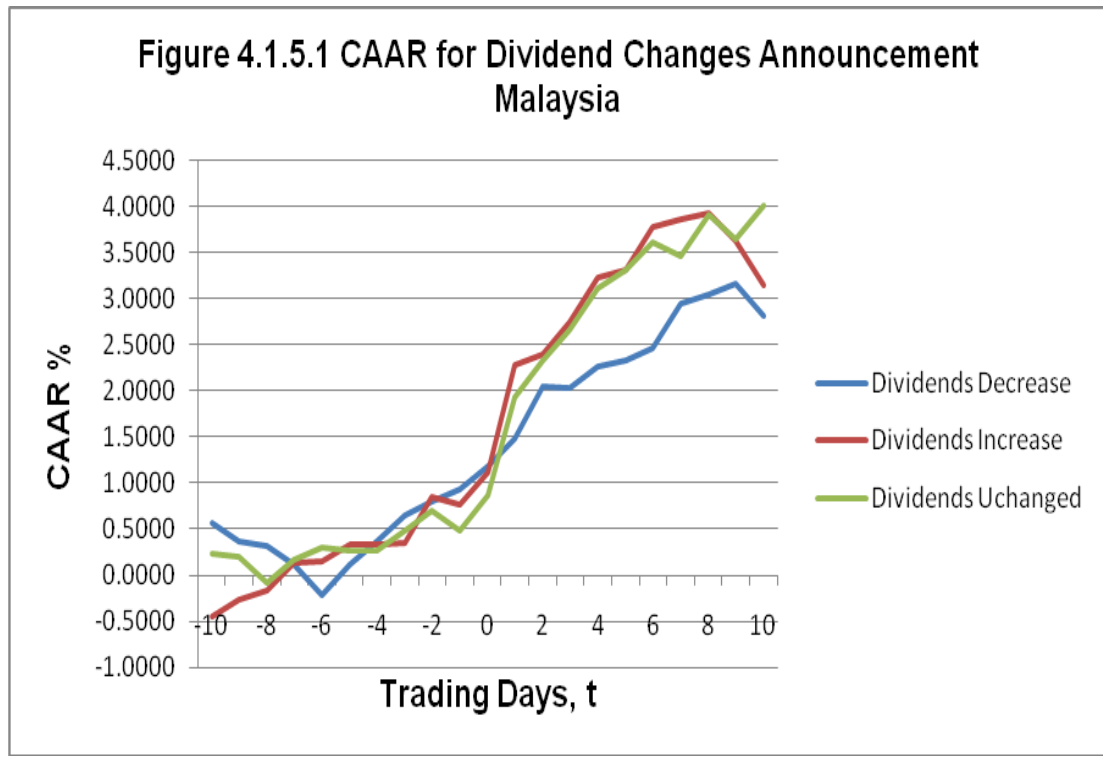| Trading Day, t	Decreased		Increased		Unchanged	
	AAR	**AAR t-value**	**AAR**	**AAR t-value**	**AAR**	**AAR t-value**
-10	0.3941	1.1968	0.1585	0.6446	0.2354	0.3201
-9	-0.4500	-1.7351 *	0.0982	0.4593	-0.5607	-1.2203
-8	-0.2570	-0.8581	0.0757	0.3006	1.9971	1.5268
-7	0.2515	0.8474	0.3523	1.4993	0.1137	0.2906
-6	-0.6032	-1.3132	-0.1383	-0.4569	0.1648	0.4763
-5	0.6363	0.8418	0.2101	0.7707	0.4301	0.7682
-4	0.8726	2.0704 **	0.3804	1.6657 *	0.8483	1.4191
-3	-0.2665	-0.7191	0.1545	0.7640	0.0887	0.1727
-2	0.2018	0.7444	0.2662	1.0167	0.2366	0.7186
-1	0.0807	0.2705	0.5638	1.7023 *	0.0197	0.0577
0	1.8753	3.5533 ***	1.4661	4.2123 ***	1.5828	3.4613 ***
1	0.6188	1.4869	0.3906	1.5525	0.7278	1.1729
2	0.1043	0.3405	0.2345	1.0572	0.6557	1.3370
3	-0.1096	-0.2986	-0.1002	-0.4828	0.0699	0.2438
4	-0.1226	-0.3977	0.1848	0.5953	0.1073	0.2838
5	0.4617	1.5182	0.2605	1.0593	-0.0771	-0.1992
6	0.2644	0.6229	-0.2456	-0.7499	0.1918	0.5460
7	-0.0282	-0.1149	0.2942	1.1327	0.0009	0.0026
8	-0.8115	-1.8363 *	-0.0431	-0.1916	0.6653	2.0751 **
9	0.1692	0.6134	-0.1352	-0.4136	-0.3958	-1.0055
10	-0.4912	-2.4658 **	0.3385	1.3060	-0.0552	-0.1680

Note: AAR = Average Abnormal Returns (%).
*Significant at α = 0.10 ; **significant at α = 0.05, and ***significant at α = 0.01
Increase, N= 178
Decrease, N=124
Unchanged, N=181

Table 4.1.6.2: Dividend Changes Announcement Effect Singapore-CAAR

Trading Day, t	Decreased			Increased			Unchanged		
	CAAR	CAAR t-value		CAAR	CAAR t-value		CAAR	CAAR t-value	
-10	0.3941	0.2374		0.1585	0.0871		0.2354	0.0937	
-9	-0.0559	-0.0337		0.2567	0.1411		-0.3253	-0.1295	
-8	-0.3129	-0.1885		0.3324	0.1826		1.6718	0.6656	
-7	-0.0614	-0.0370		0.6847	0.3762		1.7855	0.7109	
-6	-0.6646	-0.4004		0.5464	0.3002		1.9503	0.7765	
-5	-0.0283	-0.0170		0.7565	0.4157		2.3803	0.9477	
-4	0.8443	0.5087		1.1369	0.6247		3.2286	1.2854	
-3	0.5778	0.3481		1.2914	0.7096		3.3173	1.3207	
-2	0.7796	0.4697		1.5577	0.8559		3.5539	1.4149	
-1	0.8603	0.5183		2.1215	1.1657		3.5736	1.4228	
0	2.7356	1.6482		3.5876	1.9713	*	5.1564	2.0529	**
1	3.3543	2.0210	**	3.9782	2.1860	**	5.8842	2.3427	**
2	3.4587	2.0839	**	4.2127	2.3148	**	6.5398	2.6038	***
3	3.3490	2.0178	**	4.1125	2.2597	**	6.6097	2.6316	***
4	3.2265	1.9440	*	4.2972	2.3613	**	6.7170	2.6743	***
5	3.6881	2.2221	**	4.5578	2.5044	**	6.6399	2.6436	***
6	3.9526	2.3814	**	4.3122	2.3695	**	6.8317	2.7200	***
7	3.9244	2.3645	**	4.6064	2.5312	**	6.8326	2.7203	***
8	3.1129	1.8755	*	4.5633	2.5075	**	7.4979	2.9852	***
9	3.2820	1.9775	*	4.4281	2.4332	**	7.1021	2.8276	***
10	2.7909	1.6815	*	4.7666	2.6192	***	7.0469	2.8056	***

Note: CAAR = Cumulative Average Abnormal Returns (%).
*Significant at α = 0.10 ; **significant at α = 0.05, and ***significant at α = 0.01
Increase, N=178
Decrease, N=124
Unchanged, N=181

Figure 4.1.6.1 CAAR for Dividend Changes Announcement Singapore

4.2 Review of Results Based on Earnings Announcement.

4.2.1 General-Malaysia Scenario

General assessment on all Malaysian companies' earnings announcements gave the significant result of positive AAR on t=+1 only, at 5% significance level. From the result shown, day -9, -7, -6 and -1, AAR were negative in value. Thus, stock prices tended to perform poorly on those days. Other days had shown positive AAR. Among these days, however, only t=1 was negatively significant. The price adjustment was thus demonstrated to be taken place after the announcement. It showed the inability of the market to react fully to new information. There appeared to be a delayed reaction of one day. Overall, AAR results suggested that the effect of earnings announcement was not strong in Malaysian share market.

General assessment on all Malaysian companies' earnings announcements provided CAAR were significant on t=6, 7, 9 10. t=-8 to 2 shown negative CAAR, other days showed positive CAAR. This indicated the Malaysian shares performed well during earnings post announcement. The trend for Malaysian earnings CAARs for the event window had a very clear direction and it was first goes down and later showed an upward trend. CAAR started to climb since t=-3. Although the upward trend started prior to announcement trend, which might indicate that the market participants be able to anticipate the event before actual announcement date, the trend was not significant. The results were shown in Table 4.2.1.

Table 4.2.1: General Malaysia Stock Market Reaction to Earnings Announcement

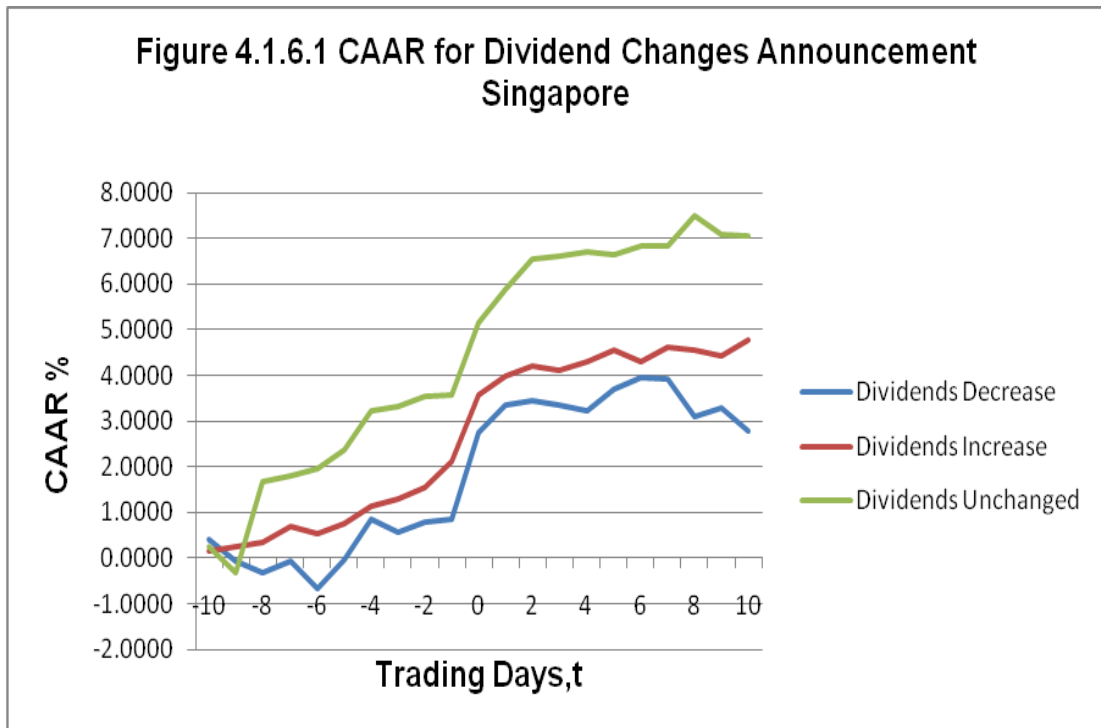| Days	AAR	AAR t-value		CAAR	CAAR t-value	
-10	5.8417	1.1303		5.8417	1.4142	
-9	-3.3807	-0.9973		2.4610	1.0295	
-8	-1.6460	-0.7670		-1.0031	-0.2931	
-7	-1.8181	-1.0311		-1.0031	-0.3058	
-6	-1.1334	-1.0428		-2.1365	-0.6494	
-5	-0.9076	-0.5063		-3.0442	-0.9111	
-4	-1.2016	-1.2706		-4.2457	-1.2201	
-3	-1.8657	-1.5563		-6.1114	-1.6111	
-2	2.5741	1.2635		-3.5373	-0.9728	
-1	2.8952	1.1147		-0.6421	-0.1868	
0	-1.5386	-1.1058		-2.1807	-0.6668	
1	-0.2112	-0.1339	**	-2.3919	-0.7640	
2	1.0698	0.9183		-1.3220	-0.4410	
3	1.9420	0.6622		0.6200	0.2112	
4	0.1157	0.0974		0.7357	0.2556	
5	4.2440	1.4632		4.9797	1.5657	
6	1.0786	0.3425		6.0583	1.7302	*
7	0.5247	0.3164		6.5830	1.7437	*
8	-0.1209	-0.0574		6.4621	1.6323	
9	3.4754	0.8253		9.9375	2.2521	**
10	2.6204	1.4811		12.5579	2.5078	**

Note: AAR = Average Abnormal Returns (%).
CAAR = Cumulative Average Abnormal Returns (%).　　　　　　N=745
*Significant at α = 0.10 ; **significant at α = 0.05, and ***significant at α = 0.01

Figure 4.2.1.1: General Malaysia Stock Market Reaction to Earnings Announcement
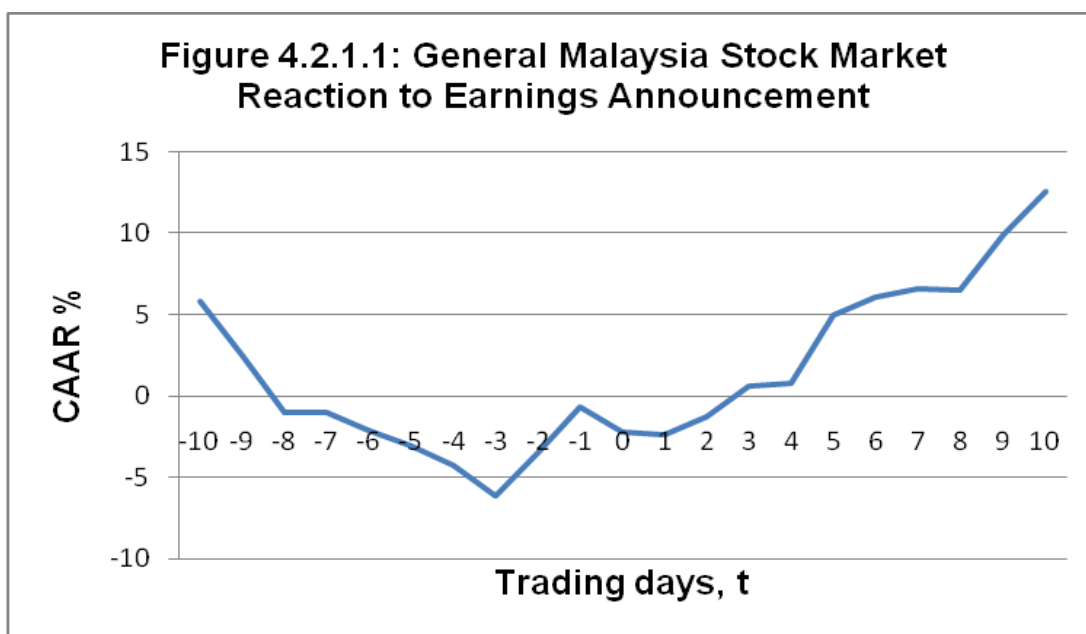
4.2.2 General-Singapore Scenario

General assessment on all Singaporean companies' earnings announcements gave the significant result of positive AAR on t=-7 and -1 at least 5% significance level. From the result shown, t=-9, -8, -5 and 5, AAR were negative in value. Thus, stock prices tended to perform poorly on those days. With t=-7 providing significant return, this suggested that there was probability of leakage of earnings information or insider trading prior earnings announcement. Starting from t=-4 to 4, AAR were all in positive figures (Mansor, Rubi Ahmad and Chan, 1996).

During the post earnings announcement periods, almost all showed positive AAR. Overall, AAR results suggested that the effect of earnings announcement was not strong in Singaporean share market. t=-1 gave the greatest positive AAR; this suggested that investors sold Singaporean shares on that day for the greatest positive return. t=4 to 10, at least 10% significance level. Only t=-9 and -8 showed negative AAR. Days after that, AAR showed positive figures and started to be significant from t=4. That indicated the shares starting to do well.

General assessment on all Singaporean companies' earnings announcements provided significant positive CAAR results on t=-6, and-4 to -10, at least 10% significance level. Starting t=-6, CAAR showed positive values. The price adjustment was thus proven to be taken place before the announcement. It showed the ability of the market to react before new information. The behavior of significant ex-announcement excess return indicates the information leakage.

The trend for Singapore earnings CAAR for the event window had a very clear direction and it was an upward trend. CAAR started to climb since t=-8. Although the upward trend started prior to announcement trend, which might

indicate that the market participants be able to anticipate the event before actual announcement date, the trend was not significant until later days (post-earnings announcement). The results were shown in table 4.2.2.

Table 4.2.2: General Singapore Stock Market Reaction to Earnings Announcement

Days	AAR	AAR t-value		CAAR	CAAR t-value	
-10	0.2645	0.7714		0.2645	1.4142	
-9	-0.3793	-1.2790		-0.1148	-0.4281	
-8	-0.0535	-0.1464		-0.1683	-0.7134	
-7	0.7074	2.0001	**	0.5391	1.6147	
-6	0.2622	1.2296		0.8013	1.9226	*
-5	-0.2368	-1.1914		0.5645	1.4385	
-4	0.1172	0.4305		0.6817	1.7745	*
-3	0.0473	0.1860		0.7290	1.9286	*
-2	0.1383	0.5382		0.8673	2.2541	**
-1	0.8371	2.9008	***	1.7045	3.1882	***
0	0.1044	0.3408		1.8089	2.8855	***
1	0.2738	0.5314		2.0827	2.8964	***
2	0.8971	1.5765		2.9798	3.2610	***
3	0.3959	1.0971		3.3757	3.1067	***
4	0.1799	0.8795		3.5556	2.9209	***
5	-0.0143	-0.0563		3.5413	2.7210	***
6	1.9182	1.0664		5.4595	3.4302	***
7	0.0452	0.1492		5.5047	3.0801	***
8	0.4778	1.5266		5.9826	3.0316	***
9	-0.1055	-0.3350		5.8771	2.8025	***
10	0.1648	0.7305		6.0419	2.7452	***

Note: AAR = Average Abnormal Returns (%).
CAAR = Cumulative Average Abnormal Returns (%).   N=480
*Significant at α = 0.10 ; **significant at α = 0.05, and ***significant at α = 0.01

Figure 4.2.2.1: General Singapore Stock Market Reaction to Earnings Announcement
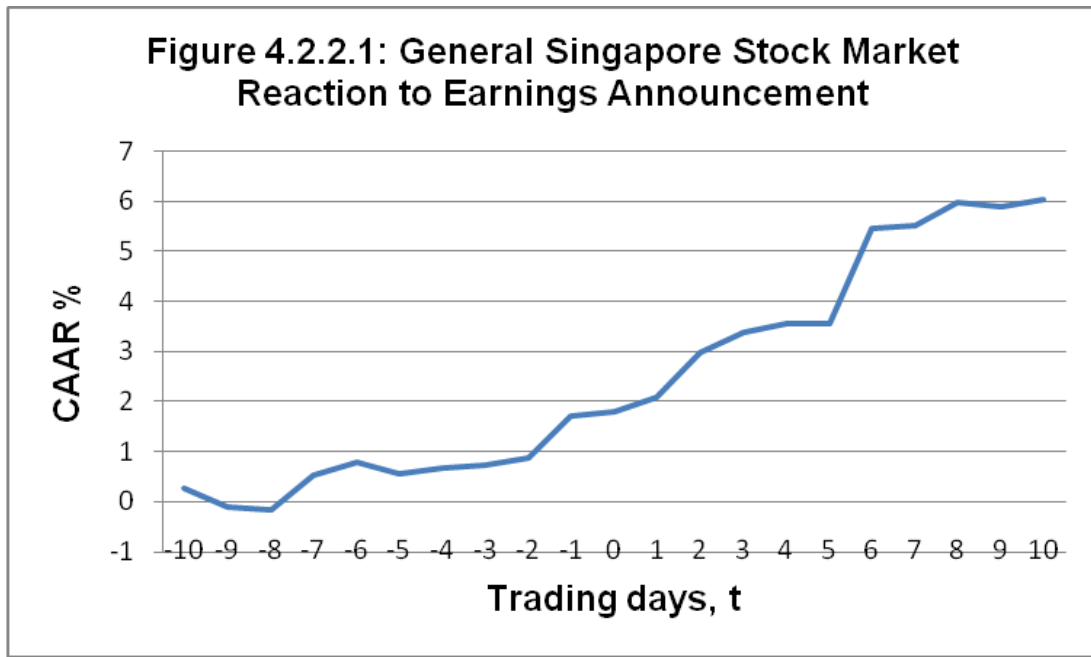
4.2.3 Year by Year Analysis-Malaysia Scenario

4.2.3.1 Year 2005

The AAR in table 4.2.3.1 was significant on t=-9 at 10% level of significance. This implied that the market was inefficient where there was a sign of information leakage before the actual announcement date. The result was found similar with Ariff and Johnson (1990) which they discovered price adjustment had taken place before the actual earnings announcement. Besides, t=2 was significant at 5% level of confidence with negative AAR and this indicated that the earnings announcement was unfavorable to most of the investors.

Most of the CAAR in the event window were negative except for t=-8 to -5. The CAAR were significant form t=3 to 10. The highest CAAR was on t=-8 that was 0.2876% but the return was too small and insufficient to cover the transaction costs. The results indicated that the market was pessimistic towards the dividend payment of the companies during the year of 2005.

Table 4.2.3.1 : Stock Market Reaction to 2005 Malaysia Earnings Announcement

Day	AAR%	AAR t-value		CAAR%	CAAR t-value	
-10	-0.0602	-0.1280		-0.0602	-0.0916	
-9	-0.3365	-1.8155	*	-0.3967	-0.6034	
-8	0.6844	0.9956		0.2876	0.4374	
-7	-0.1132	-0.5706		0.1744	0.2652	
-6	-0.0721	-0.5051		0.1023	0.1556	
-5	-0.0584	-0.3167		0.0439	0.0668	
-4	-0.2678	-1.3046		-0.2239	-0.3405	
-3	-0.2677	-0.8926		-0.4916	-0.7476	
-2	-0.2846	-0.9867		-0.7762	-1.1804	
-1	-0.1019	-0.6608		-0.8781	-1.3354	
0	-0.0718	-0.4409		-0.9499	-1.4446	
1	0.3174	1.3678		-0.6325	-0.9619	
2	-0.3299	-2.0157	**	-0.9624	-1.4636	
3	-0.1400	-0.5949		-1.1024	-1.6765	*
4	-0.7990	-1.5710		-1.9014	-2.8916	***
5	0.2639	1.0423		-1.6375	-2.4903	**
6	0.0773	0.2906		-1.5601	-2.3727	**
7	0.0455	0.1870		-1.5147	-2.3036	**
8	0.1722	0.7500		-1.3425	-2.0417	**
9	0.0265	0.1280		-1.3160	-2.0015	**
10	0.1619	0.8897		-1.1541	-1.7552	*

Note: AAR = Average Abnormal Returns (%).
CAAR = Cumulative Average Abnormal Returns (%).   N=149
*Significant at α = 0.10 ; **significant at α = 0.05, and ***significant at α = 0.01

Figure 4.2.3.1 : CAAR for 2005 Malaysia Earnings Announcement
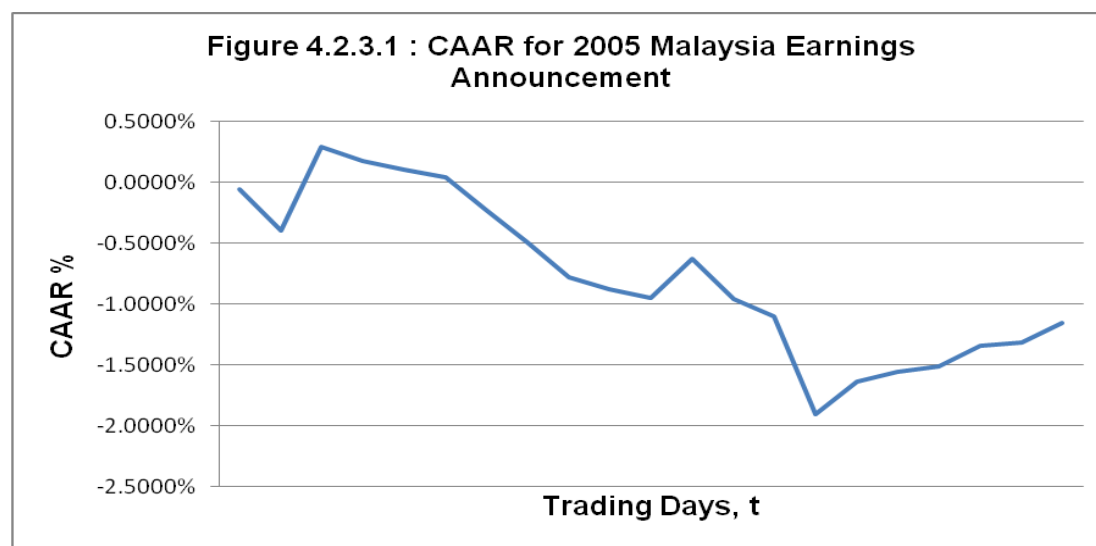
4.2.3.2 Year 2006

The AAR was significant on t=-10 at 5% level of significance and on t=-2 at 10% level of significance. The result had indicated that there was information leakage and insider trading before the actual announcement date and the result was consistent with the findings of Nasir and Mohammad (1993). Besides, t=2 was found significant at 5% level of significance. The result indicated incomplete reaction of the market towards the earnings announcement. The continued price adjustment after t=0 showed the released of earnings information was not instantaneously and fully reflected in the stock price.

Year 2006 result shown in table 4.2.3.2 has the most number of days which are significant. The CAAR on t=-9, -8, -5 to 4 and 7 to 10 were significant. All the CAAR were in positive value and the CAAR rose gradually from the first day of event window and peaked at t=1 with excess return of 1.9894%. However, on the day after, the CAAR began to fall but bounced back on t=6. The result implied that investor could benefit if they purchased the stock on t=-10 and sold them on t=1.

Table 4.2.3.2: Stock Market Reaction to 2006 Malaysia Earnings Announcement

Day	AAR%	AAR t-value		CAAR%	CAAR t-value	
-10	0.5410	2.2530	**	0.5410	1.2148	
-9	0.2387	0.7444		0.7797	1.7507	*
-8	0.0422	0.1370		0.8219	1.8455	*
-7	-0.1928	-0.8281		0.6291	1.4126	
-6	0.0598	0.2513		0.6888	1.5468	
-5	0.2126	0.7045		0.9015	2.0242	**
-4	0.1907	0.7373		1.0921	2.4524	**
-3	0.0896	0.4216		1.1817	2.6535	***
-2	0.3403	1.6932	*	1.5220	3.4175	***
-1	0.3233	1.4961		1.8453	4.1436	***
0	0.0983	0.2862		1.9436	4.3643	***
1	0.0458	0.1491		1.9894	4.4671	***
2	-0.5288	-2.4758	**	1.4606	3.2797	***
3	-0.3263	-1.4042		1.1343	2.5469	**
4	-0.0525	-0.1628		1.0818	2.4291	**
5	-0.5789	-1.6230		0.5029	1.1291	
6	0.1855	0.7784		0.6884	1.5457	
7	0.2917	1.2252		0.9801	2.2007	**
8	0.3336	1.3336		1.3136	2.9497	***
9	-0.0680	-0.3750		1.2456	2.7970	***
10	0.1388	0.6634		1.3844	3.1087	***

Note: AAR = Average Abnormal Returns (%).
CAAR = Cumulative Average Abnormal Returns (%).   N=149
*Significant at α = 0.10 ; **significant at α = 0.05, and ***significant at α = 0.01

Figure 4.2.3.2: CAAR for 2006 Malaysia Earnings Announcement
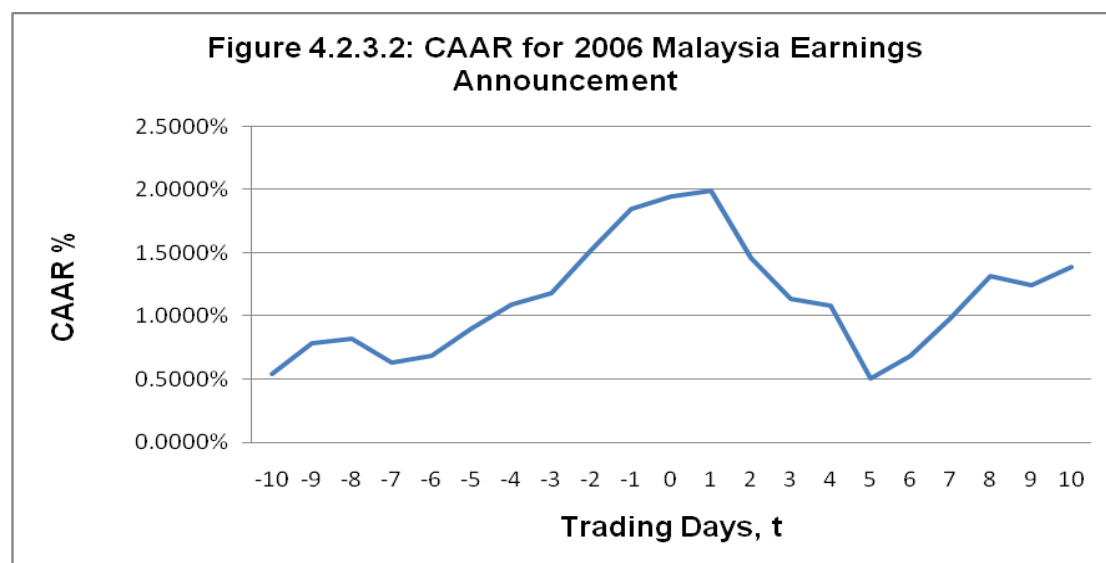
4.2.3.3 Year 2007

The result from table 4.2.3.3 showed the AAR was significant prior the announcement date on t=-7 at 10% level of significance. Thus, the result once again had implied the sign of information leakage in Malaysia and the market was proven inefficient. The AAR were also significant during and after the announcement date on t=0, 2 to 4 and 7. The market continued to react to the announcement even after the declaration day.

The CAAR were significant at 10% level of confidence on t=-2 and 4. The CAAR increased gradually at the beginning of the event window and started to fall on t=-2. However, the CAAR rebounded at t=8.

Table 4.2.3.3: Stock Market Reaction to 2006 Malaysia Earnings Announcement

Day	AAR%	AAR t-value		CAAR%	CAAR t-value	
-10	-0.0330	-0.1382		-0.0330	-0.0323	
-9	0.1399	0.6339		0.1069	0.1044	
-8	0.1219	0.4771		0.2288	0.2235	
-7	0.4043	1.7078	*	0.6331	0.6184	
-6	-0.0979	-0.5534		0.5352	0.5228	
-5	0.5352	1.4078		1.0705	1.0455	
-4	0.3666	0.9924		1.4370	1.4036	
-3	0.0951	0.3729		1.5321	1.4965	
-2	0.2419	0.8716		1.7741	1.7328	*
-1	-0.0866	-0.2507		1.6874	1.6482	
0	-0.7012	-2.1122	**	0.9863	0.9633	
1	-0.4700	-1.2708		0.5163	0.5043	
2	-0.4323	-1.8580	*	0.0840	0.0821	
3	-0.9587	-2.5129	**	-0.8747	-0.8543	
4	-1.0655	-3.1441	***	-1.9402	-1.8950	*
5	0.6644	1.5386		-1.2758	-1.2461	
6	-0.0706	-0.1657		-1.3464	-1.3151	
7	0.7551	2.2903	**	-0.5913	-0.5775	
8	0.6895	1.3427		0.0982	0.0959	
9	-0.0730	-0.2567		0.0252	0.0246	
10	-0.2101	-0.7054		-0.1849	-0.1806	

Note: AAR = Average Abnormal Returns (%).
CAAR = Cumulative Average Abnormal Returns (%).   N=149
*Significant at α = 0.10 ; **significant at α = 0.05, and ***significant at α = 0.01

Figure 4.2.3.3: CAAR for 2007 Malaysia Earnings Announcement
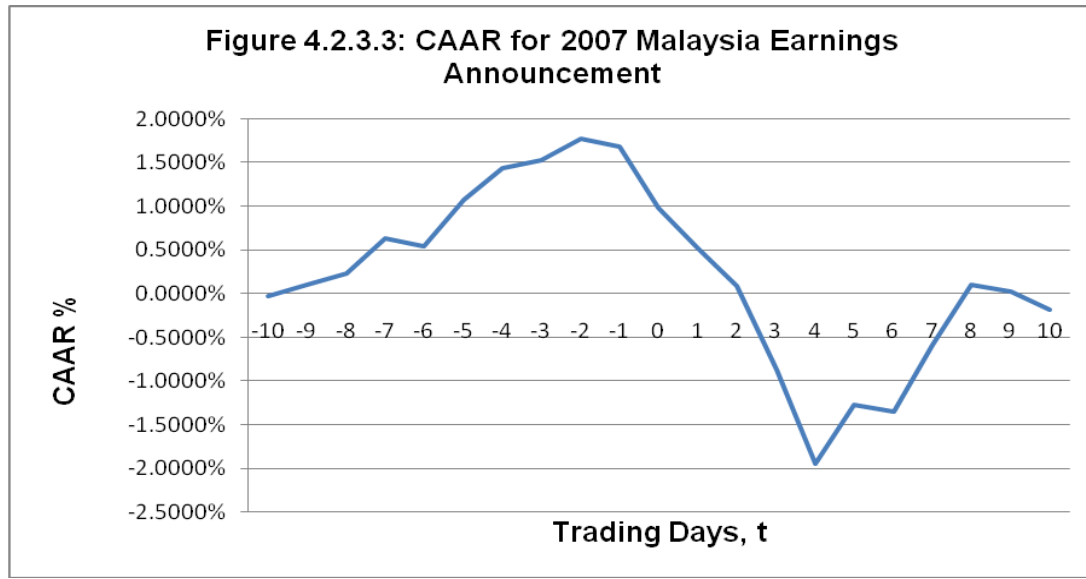
4.2.3.4 Year 2008

The AAR were significant on t=-7,-4, 1, 2 and 6 all at 10% level of significance. The result showed high fluctuation in stock price surrounding the day of earnings announcement. We discovered there were 11 days with negative AAR and 10 days with positive AAR. This was mainly due to the global financial crisis and general election crisis in 2008. The investors were trying to determine the influence of earnings announcement effect but at the same time susceptible to the influence of different condition both of economic and political events. Therefore, the results indicated that investing during the year of financial crisiswa risky and the return was uncertain.

Similarly to the results in the past three year, the t=2 was significant with negative return that was -0.7298%.

The CAAR were also highly fluctuates during the year of 2008. The CAAR were significant on t=-4 at 10% level of significance and t=1 at 5% level of confidence. The highest CAAR was on t=1 with the return of 1.2348%.

Table 4.2.3.4: Stock Market Reaction to 2008 Malaysia Earnings Announcement

Day	AAR%	AAR t-value		CAAR%	CAAR t-value	
-10	0.5616	1.3142		0.5616	1.0836	
-9	-0.4852	-1.0872		0.0764	0.1475	
-8	0.5137	0.8098		0.5901	1.1385	
-7	-0.6093	-1.8817	*	-0.0192	-0.0371	
-6	0.1365	0.4003		0.1173	0.2263	
-5	-0.3588	-1.1057		-0.2415	-0.4660	
-4	-0.6357	-1.7519	*	-0.8772	-1.6925	*
-3	0.3819	0.9810		-0.4953	-0.9556	
-2	0.3950	1.2420		-0.1003	-0.1935	
-1	-0.2067	-0.7440		-0.3070	-0.5922	
0	0.8280	1.3717		0.5210	1.0053	
1	0.7137	1.6609	*	1.2348	2.3824	**
2	-0.7298	-1.6841	*	0.5050	0.9743	
3	-0.2422	-0.7767		0.2628	0.5070	
4	0.3540	0.5982		0.6168	1.1900	
5	-0.2103	-0.6522		0.4065	0.7842	
6	-0.8369	-1.9598	*	-0.4304	-0.8305	
7	0.1015	0.1809		-0.3289	-0.6346	
8	-0.0138	-0.0330		-0.3428	-0.6613	
9	-0.1068	-0.1765		-0.4496	-0.8674	
10	-0.0625	-0.1274		-0.5120	-0.9879	

Note: AAR = Average Abnormal Returns (%).
CAAR = Cumulative Average Abnormal Returns (%).   N=149
*Significant at α = 0.10 ; **significant at α = 0.05, and ***significant at α = 0.01

Figure 4.2.3.4: CAAR for 2008 Malaysia Earnings Announcement
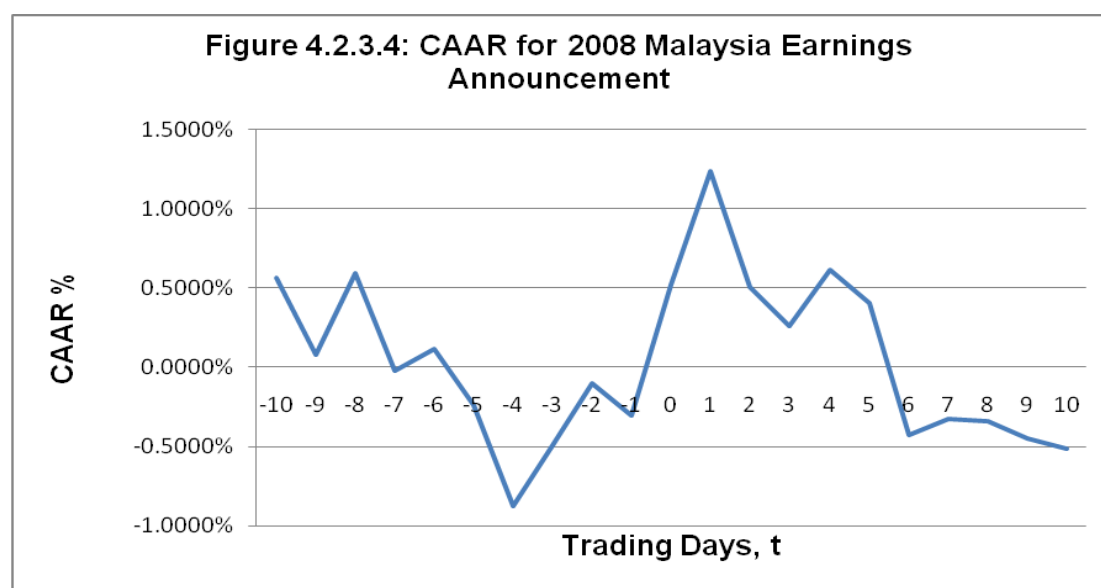
4.2.3.5 Year 2009

Table 4.2.3.5 showed only t=1 is significant at 1% level of confidence with the highest return that was 1.6944%. All the AAR before the earnings announcement date were insignificant and this indicated no sign of information leakage during the year. However, our results were found contradict with the results of Ball and Brown (1968) which they discovered about 85% of the information content of the annual earnings announcement were shown in stock prices prior to the announcement if the actual earnings results.

In contrast with the results from 2005 to 2008, the AAR on t=2 was not significant. The trend was found disappeared in year 2009 and this showed that the investors had finally identified the trend and had reacted accordingly.

The CAAR before the earnings announcement date were all negative in value but increased significantly on the subsequent days. The result indicated that the investors might predict bad earnings during the year of recession and therefore react pessimistically before the announcement date. However, the actual earnings announced might turn out to be better than many have expected and therefore the CAAR increased substantially after the announcement date. The year 2009 earnings announcement carried a greatest effect on CAAR which it generated the highest CAAR compared to the past four years.

Table 4.2.3.5: Stock Market Reaction to 2009 Malaysia Earnings Announcement

Day	AAR%	AAR t-value		CAAR%	CAAR t-value	
-10	-0.5975	-0.8718		-0.5975	-0.5109	
-9	-0.2331	-0.6734		-0.8306	-0.7102	
-8	0.1476	0.3587		-0.6831	-0.5841	
-7	0.0646	0.1854		-0.6185	-0.5288	
-6	0.2032	0.6439		-0.4153	-0.3551	
-5	0.2001	0.5497		-0.2152	-0.1840	
-4	0.0287	0.0666		-0.1865	-0.1595	
-3	-0.5563	-1.4243		-0.7428	-0.6351	
-2	0.4224	1.1969		-0.3204	-0.2739	
-1	0.0241	0.0546		-0.2962	-0.2533	
0	-0.3476	-1.0550		-0.6438	-0.5505	
1	1.6944	3.7527	***	1.0506	0.8983	
2	-0.3982	-0.9432		0.6524	0.5578	
3	0.5297	1.4937		1.1821	1.0107	
4	-0.2225	-0.6036		0.9596	0.8204	
5	0.4258	1.4158		1.3853	1.1845	
6	0.2978	1.0235		1.6831	1.4391	
7	-0.3785	-0.8098		1.3046	1.1155	
8	1.2002	1.6154		2.5048	2.1417	**
9	0.0197	0.0327		2.5245	2.1585	**
10	-0.0737	-0.2352		2.4508	2.0955	**

Note: AAR = Average Abnormal Returns (%).

CAAR = Cumulative Average Abnormal Returns (%). N=149

*Significant at α = 0.10 ; **significant at α = 0.05, and ***significant at α = 0.01

Figure 4.2.3.5: CAAR for 2009 Malaysia Earnings Announcement

Figure 4.2.3.6: CAAR of Malaysia Yearly Analysis of Earnings Announcement
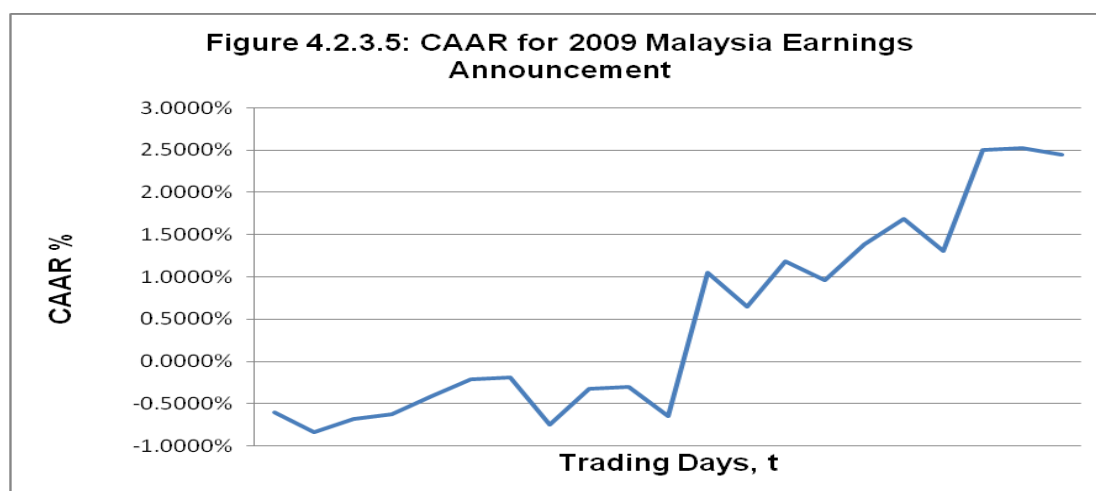
4.2.4 Year by Year Analysis-Singapore Scenario

4.2.4.1 Year 2005

From table 4.2.4.1, the highest recorded was on t=-6 at 8.6364% and lowest on t=-9 at -1.0659%. Level significance of 5% show t=1 significant. Level of significance 10% showed that only t=7 were significant these showed there was less chance to make abnormal return although market was inefficient.

For the case of CAAR, level significance of 1% showed that t=1 to t=10 were significant while level significance of 5% showed t=-6 to t=0 were significant. This could be a signal that the longer the investors held the better the return.

Table 4.2.4.1: Stock Market Reaction to 2005 Singapore Earnings Announcement

Day	AAR %	AAR t-value		CAAR %	CAAR t-value	
-10	0.6806	1.0357		0.6806	0.1595	
-9	-0.4318	-1.0659		0.2488	0.0583	
-8	0.5627	0.7527		0.8114	0.1902	
-7	-0.6442	-0.6117		0.1672	0.0392	
-6	8.6364	0.9888		8.8036	2.0633	**
-5	0.4091	1.6301		9.2127	2.1592	**
-4	0.1496	0.3543		9.3623	2.1942	**
-3	0.1469	0.4941		9.5091	2.2287	**
-2	0.1314	0.3347		9.6405	2.2594	**
-1	-0.0122	-0.0368		9.6282	2.2566	**
0	0.2963	0.6362		9.9245	2.3260	**
1	1.4029	1.9967	**	11.3274	2.6548	***
2	0.0747	0.1344		11.4021	2.6723	***
3	0.2293	0.8698		11.6315	2.7261	***
4	0.0430	0.1745		11.6744	2.7361	***
5	0.1064	0.2881		11.7808	2.7611	***
6	-0.2142	-0.6612		11.5666	2.7109	***
7	0.6615	1.6986	*	12.2282	2.8659	***
8	-0.7549	-0.6229		11.4733	2.6890	***
9	0.2917	0.6195		11.7650	2.7574	***
10	0.1001	0.3338		11.8651	2.7808	***

Note: AAR = Average Abnormal Returns (%).
CAAR = Cumulative Average Abnormal Returns (%).   N=96
*Significant at α = 0.10 ; **significant at α = 0.05, and ***significant at α = 0.01

Figure 4.2.4.1 : CAAR for 2005 Singapore Earnings Announcement
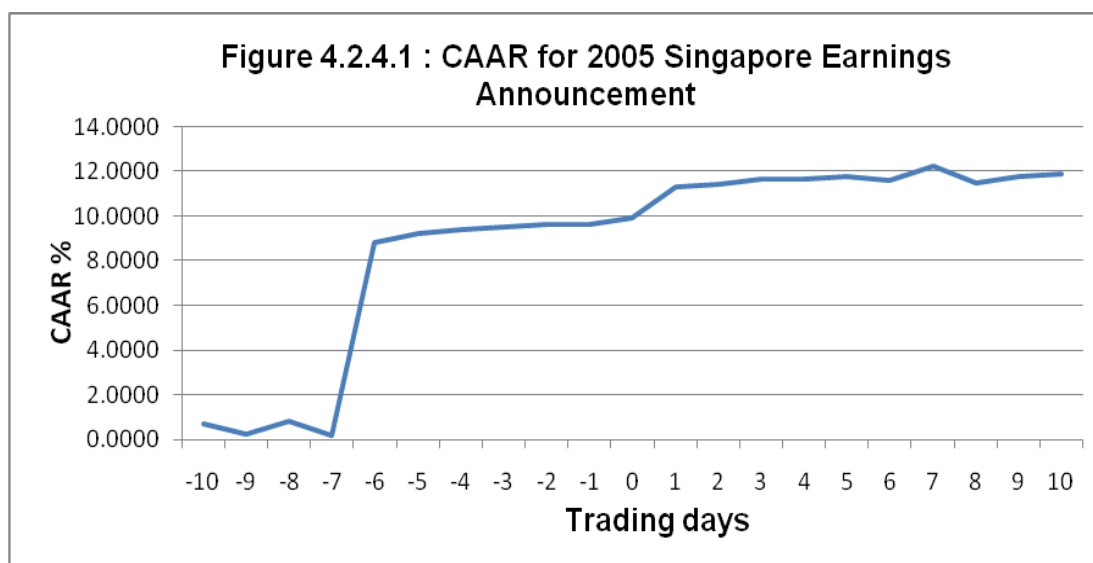
4.2.4.2 Year 2006

Based on the result in Table 4.2.4.2, the highest AAR value on t=10 at 1.5822% with lowest on t=-1 at -5.2911%. Level of significance 1% showed only t=1 significant. Meanwhile, level significance of 5%recorded t=-3,-2,8 were significant. Level significance of 10% showed t=6 and t=10 were significant. This was consistent with the finding of Eilifsen (1999) where there would be changes in share price volatility near the announcement period relative to the post-announcement period. It suggested that purchased on t=-1 and sold after t=10 could earn and profit.

CAAR year 2006 showed the highest value on t=-2 at 2.1436% with lowest on t=-1 at -3.1474%. Level significance of 5% show t=-1 and t=0 are significant. Most of the CAAR figures were negative after announcement dates suggested that investor should not hold long. This could be the impact of general election in Singapore.

Table 4.2.4.2: Stock Market Reaction to 2006 Singapore Earnings Announcement

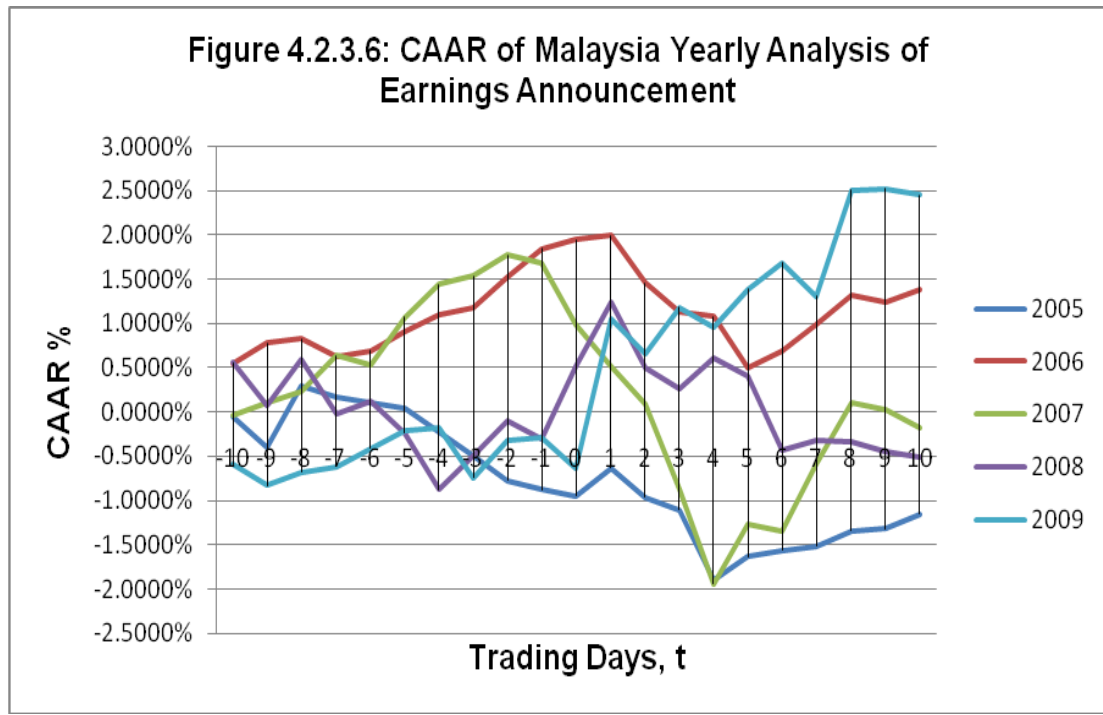| Day	AAR %	AAR t-value		CAAR %	CAAR t-value	
-10	0.3822	1.3495		0.3822	0.2535	
-9	0.1885	0.3546		0.5708	0.3786	
-8	0.0462	0.1465		0.6170	0.4092	
-7	0.2073	0.5053		0.8243	0.5467	
-6	0.2653	0.7014		1.0897	0.7227	
-5	-0.0304	-0.0629		1.0592	0.7025	
-4	-0.1817	-0.6521		0.8775	0.5820	
-3	0.7132	2.1241	**	1.5907	1.0550	
-2	0.5529	2.1994	**	2.1436	1.4218	
-1	-5.2911	-1.0220		-3.1474	-2.0875	**
0	0.1371	0.3360		-3.0103	-1.9966	**
1	1.4600	3.0895	***	-1.5503	-1.0282	
2	0.4462	0.7122		-1.1040	-0.7323	
3	-0.6104	-1.4443		-1.7144	-1.1371	
4	0.0482	0.1449		-1.6663	-1.1052	
5	-0.0206	-0.0647		-1.6869	-1.1188	
6	0.4635	1.7879	*	-1.2234	-0.8114	
7	0.5911	0.7778		-0.6323	-0.4194	
8	-0.4758	-2.1114	**	-1.1080	-0.7349	
9	-0.9390	-1.3223		-2.0471	-1.3577	
10	1.5822	1.8529	*	-0.4649	-0.3083	

Note: AAR = Average Abnormal Returns (%).
CAAR = Cumulative Average Abnormal Returns (%).   N=96
*Significant at α = 0.10 ; **significant at α = 0.05, and ***significant at α = 0.01

Figure 4.2.4.2: CAAR for 2006 Singapore Earnings Announcement
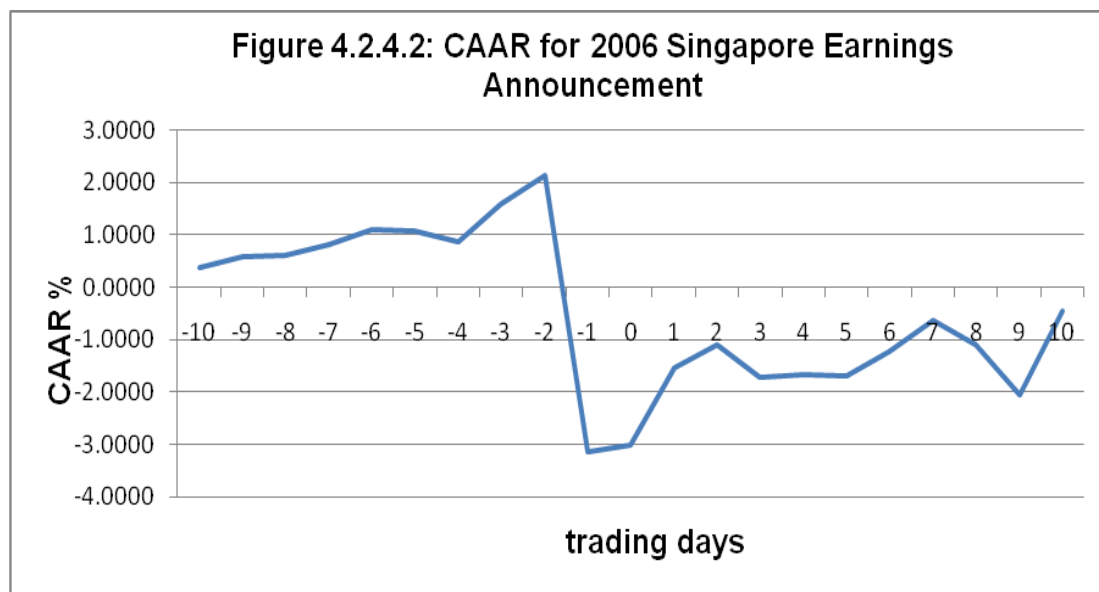
4.2.4.3 Year 2007

Based on the result in table 4.2.4.3, the AAR showed the highest value on t=7 at 0.7229% with the lowest on t=-10 at -0.9068%. Level of significance 10% showed only t=-4 and t=7 were significant. This indicated that investor had less chance to make continuous daily abnormal return although market was in inefficient form.

CAAR year 2007 showed the highest figure on t=9 at 1.8391% with the lowest on t=-0.1597%. The CAAR for year 2007 was lower than the past two years results. Significance test of 1% showed t=8 and t=9 are significant while level significance of 5% show t=-3,-2,-1,0,1,7 were significant.

Table 4.2.4.3: Stock Market Reaction to 2007 Singapore Earnings Announcement

Day	AAR %	AAR t-value		CAAR %	CAAR t-value	
-10	0.1120	0.4179		0.1120	0.2143	
-9	-0.2717	-1.0267		-0.1597	-0.3056	
-8	0.6275	1.4315		0.4677	0.8949	
-7	-0.3805	-1.2979		0.0873	0.1669	
-6	0.2644	0.7456		0.3517	0.6729	
-5	-0.0545	-0.1507		0.2972	0.5686	
-4	0.5993	1.7212	*	0.8965	1.7152	
-3	0.2612	0.5276		1.1577	2.2149	**
-2	-0.0084	-0.0257		1.1493	2.1989	**
-1	0.1446	0.3830		1.2938	2.4755	**
0	0.0277	0.0778		1.3215	2.5285	**
1	-0.2675	-0.7136		1.0541	2.0167	**
2	-0.2225	-0.6649		0.8316	1.5911	
3	-0.4199	-1.1783		0.4117	0.7877	
4	-0.1694	-0.4845		0.2423	0.4636	
5	0.3431	0.8168		0.5854	1.1200	
6	-0.0981	-0.3157		0.4872	0.9322	
7	0.7229	1.8119	*	1.2101	2.3153	**
8	0.1737	0.5248		1.3839	2.6477	***
9	0.4552	1.3730		1.8391	3.5187	***
10	-0.9869	-0.9068		0.8521	1.6304	

Note: AAR = Average Abnormal Returns (%).
CAAR = Cumulative Average Abnormal Returns (%).   N=96
*Significant at α = 0.10 ; **significant at α = 0.05, and ***significant at α = 0.01

Figure 4.2.4.3:CAAR for 2007 Singapore Earnings Announcement
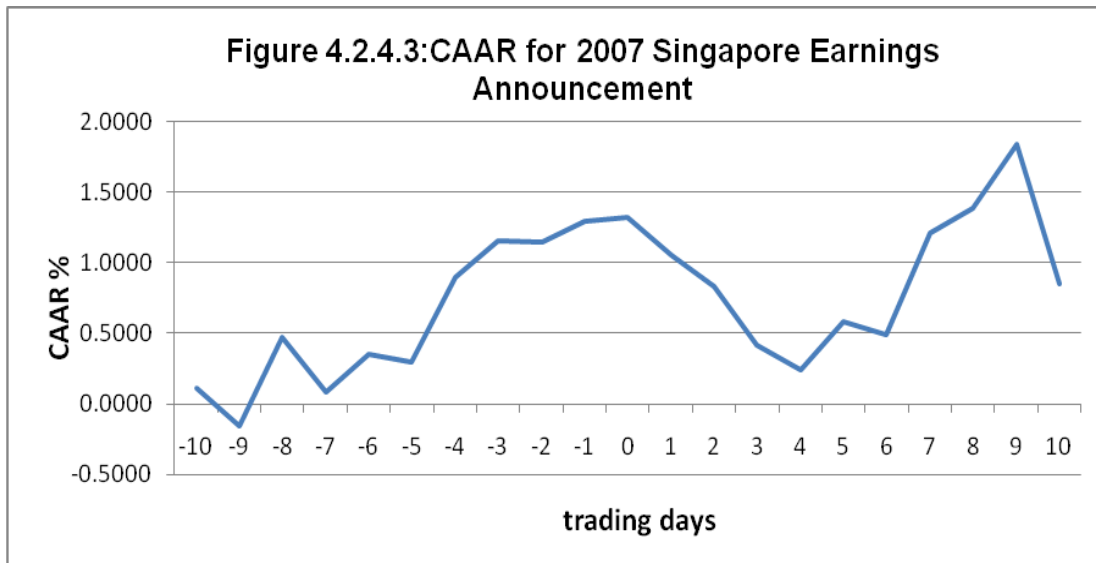
4.2.4.4 Year 2008

Based on the result in table 4.2.4.4, The AAR value showed the highest on t=-3 at 1.9023% with lowest on -1.1509%. Level of significance 10% significance showed only t=-6 and t=-4 are significant. This might due to the financial crisis in U.S. which affected the economy of the whole region.

CAAR year 2008 showed the highest figure on t=4 at 4.0192% with lowest on t=-10 at -0.3499%. Level significance of 1% showed only t=4 was significant. Level significance of 5% showed t=0,1,2,3,5,6,7,8 were significant. Continuous higher CAAR values after announcement date suggested that investor could hold long to make profit.

Table 4.2.4.4: Stock Market Reaction to 2008 Singapore Earnings Announcement

Day	AAR %	AAR t-value		CAAR %	CAAR t-value	
-10	-0.3499	-0.6090		-0.3499	-0.2545	
-9	0.5356	0.8904		0.1857	0.1351	
-8	0.6801	0.7537		0.8658	0.6299	
-7	0.4095	0.6776		1.2754	0.9278	
-6	-0.9029	-1.6651	*	0.3724	0.2709	
-5	0.2191	0.3265		0.5915	0.4304	
-4	-0.9057	-1.7170	*	-0.3142	-0.2286	
-3	1.9023	1.6043		1.5881	1.1553	
-2	0.6526	0.4525		2.2406	1.6301	
-1	0.3139	0.5370		2.5545	1.8584	*
0	0.5474	0.6817		3.1019	2.2567	**
1	0.0044	0.0050		3.1063	2.2599	**
2	0.2336	0.3411		3.3399	2.4298	**
3	-0.1559	-0.2860		3.1839	2.3163	**
4	0.8353	0.8456		4.0192	2.9240	***
5	-0.6837	-1.2457		3.3356	2.4266	**
6	0.0964	0.1655		3.4320	2.4968	**
7	-0.0910	-0.1734		3.3410	2.4306	**
8	-0.2007	-0.4824		3.1402	2.2846	**
9	-1.1509	-1.2491		1.9893	1.4472	
10	0.2765	0.3131		2.2658	1.6484	

Note: AAR = Average Abnormal Returns (%).
CAAR = Cumulative Average Abnormal Returns (%).   N=96
*Significant at α = 0.10 ; **significant at α = 0.05, and ***significant at α = 0.01

Figure 4.2.4.4: CAAR forn 2008 Singapore Earnings Announcement
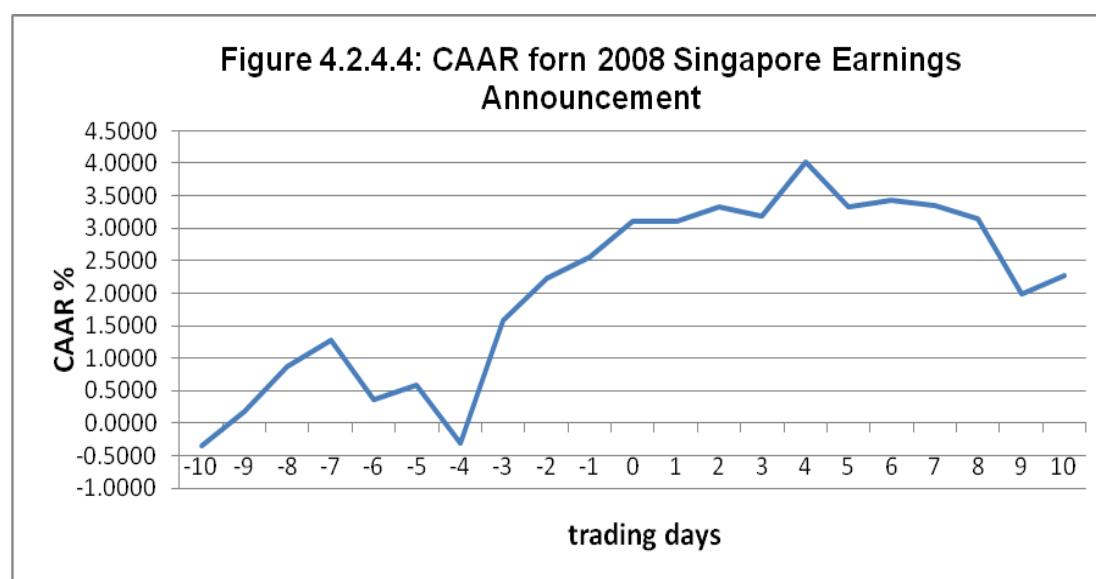
4.2.4.5 Year 2009

Based on the table 4.2.4.5, the highest AAR were recorded on t=-2 at 3.1745% with the lowest on t=-9 at -1.4406%. Level significance of 1% showed only t=1 was significant. Level significance of 10% showed only t=5 was significance. It suggested there was low opportunity to make continuous daily return because market was in recovery from the financial crisis.

CAAR year 2009 showed the highest value on t=8 at 12.5799% while the lowest on t=-9 at -1.0788%. Level significance of 1% showed t=8 to10 were significant. Level of significance 5% showed t=3,4,6,7 were significant. Level of significance 10% showed t=1 and t=2 were significant. Continuous increase in CAAR suggested that investor could earn good return for holding in longer term.

Table 4.2.4.5: Stock Market Reaction to 2009 Singapore Earnings Announcement

Day	AAR %	AAR t-value		CAAR %	CAAR t-value	
-10	0.3618	0.6999		0.3618	0.0831	
-9	-1.4406	-1.4357		-1.0788	-0.2479	
-8	1.5585	1.3658		0.4797	0.1102	
-7	0.8924	1.1672		1.3722	0.3153	
-6	0.8467	0.4700		2.2189	0.5099	
-5	0.3886	0.4586		2.6074	0.5992	
-4	0.5040	0.7096		3.1115	0.7150	
-3	-0.9533	-0.8340		2.1582	0.4959	
-2	3.1745	1.3322		5.3327	1.2254	
-1	1.6927	0.6956		7.0254	1.6144	
0	-0.8985	-0.8071		6.1269	1.4079	
1	1.7578	2.6808	***	7.8847	1.8119	*
2	0.2304	0.3883		8.1151	1.8648	*
3	1.2247	1.2841		9.3399	2.1463	**
4	0.0003	0.0004		9.3402	2.1464	**
5	-0.8751	-1.7574	*	8.4651	1.9453	
6	1.0691	1.5060		9.5342	2.1909	**
7	1.7069	1.2296		11.2411	2.5832	**
8	1.3388	1.1547		12.5799	2.8908	***
9	-0.3870	-0.5715		12.1929	2.8019	***
10	-0.0703	-0.1298		12.1226	2.7857	***

Note: AAR = Average Abnormal Returns (%).
CAAR = Cumulative Average Abnormal Returns (%).   N=96
*Significant at α = 0.10 ; **significant at α = 0.05, and ***significant at α = 0.01

Figure4.2.4.5:CAAR for 2009 Singapore Earnings Announcement

Figure 4.2.4.6: CAAR Singapore Yearly Earnings Announcement
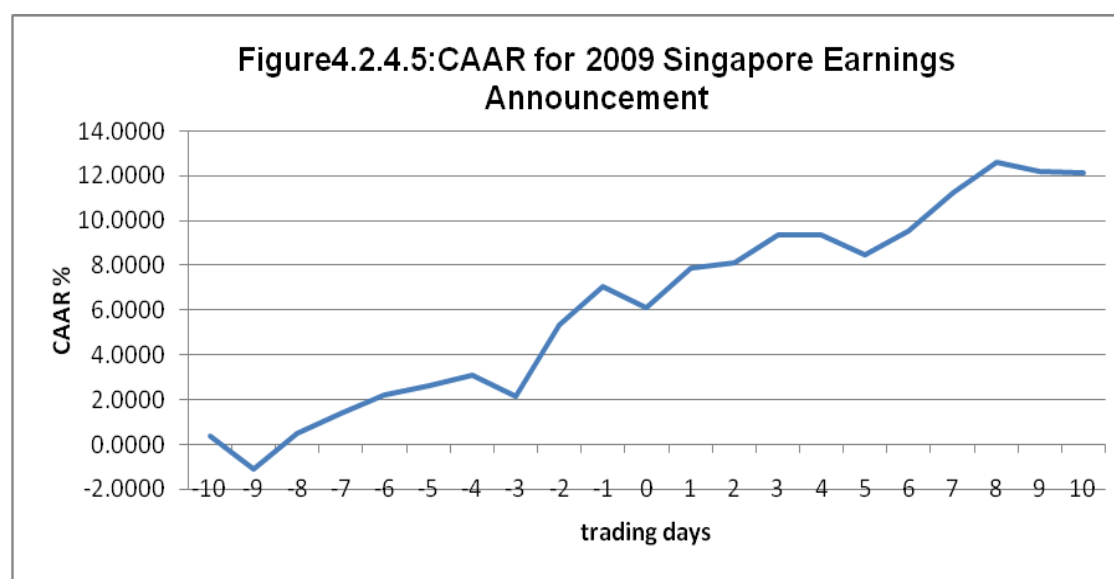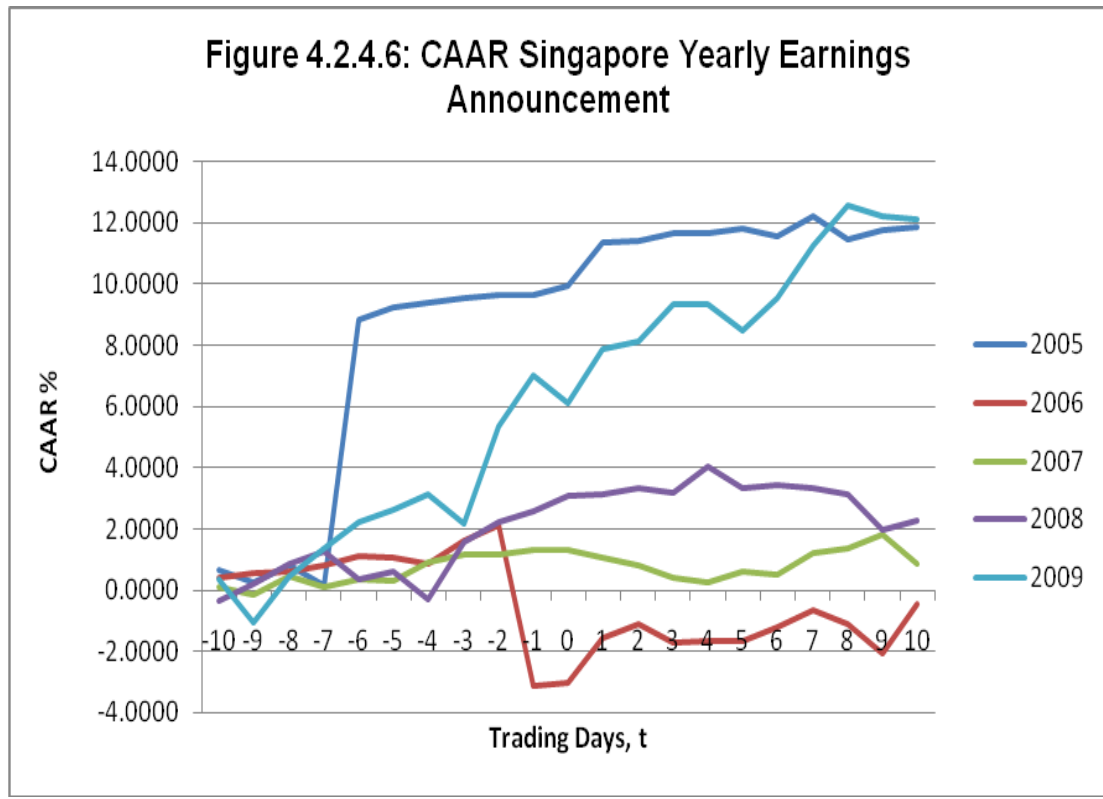
4.2.5 Changes in Earnings-Malaysia Scenario

4.2.5.1 Earnings Increased

In increased earnings announcement, the AAR on t=0 was -0.2671% and it showed an insignificant result at any level of tests. This denoted that the market did not react on the increased earnings announcement instantaneously. However, AAR was significant on t=+1 at 5% level. This indicated that the investors would only react after the earnings announcements. The highest AAR in on t=+8 with 0.7398%. This was consistent with the finding of Joy, Litzenberger and McEnally (1977). Besides, t=+8 was significant at 5% level.

Table 4.2.5.1 showed the CAAR for earnings increased showed a positive trend. It could be judged by Isa, Ahmad, & Chan (1992), where increased in earnings show a positive CAAR. The highest return could be made from t=+4 to t=+8, meanings in earnings increased announcement huge return could be earned in short term. This was due to insignificant result on CAAR.

4.2.5.2 Earnings Decreased

For the decreased in earnings announcement, the AAR on t=0 was 0.1797%, none of significant results shown on this day. This meant that investors were unfavorable towards the bad announcement being made. Hence, they did not respond on the earnings announcement day. However, on t=+2, the results are significant at all tests level. The investors did not have immediate response towards the earnings announcement. The highest AAR was on t=-8, that was 0.7011% nevertheless it was not significant at any test levels.

Table 4.2.5.2 showed earnings decreased announcement in Malaysian market. It was a volatile market where investors might buy on t=-9 and sell it off at t=+1. The CAAR was significant on t=+1 and t=6 at 5% significant tests.

The CAAR values swayed to be negative after the announcement day. Again, this finding was consistent with Isa, Ahmad, & Chan (1992) finding.

4.2.5.3 Earnings Unchanged

Unchanged earnings announcement in Malaysia market had AAR of 0.3312% on t=0. It just like the earnings increased and decreased announcement, it was not significant on the announcement day itself. The AAR had significant value on t=+2 at 1% level.

Table 4.2.5.2 showed a negative trend of CAAR. At 1% level, t=+4,t=+5 and t=+10 showed a significant results. While t=-2, t=-1, t=+2, t=+6, t=+8 and t=+9 were significant at 5% level. On the other hand, t=-5, t=-3, t=0, and t=+3 were significant were at 10% level.

Table 4.2.5.1: Earnings Changes Announcement Effect Malaysia-AAR

Trading Day, t	Increased		Decreased		Unchanged	
	AAR	AAR t-value	AAR	AAR t-value	AAR	AAR t-value
-10	0.3650	1.6656 *	-0.1845	-0.5020	-0.2856	-0.3401
-9	-0.1435	-0.7035	-0.1797	-0.8172	0.1891	0.4236
-8	0.1733	0.66483	0.7011	1.5681	-0.4525	-1.1047
-7	-0.0607	-0.4101	-0.2562	-1.1143	0.2739	0.6759
-6	0.1212	0.78221	-0.0314	-0.1559	0.0267	0.0966
-5	-0.0003	-0.0015	0.4085	1.4887	-0.4577	-1.1337
-4	-0.0804	-0.4533	-0.2069	-0.6981	0.5296	1.3035
-3	0.1440	0.91252	-0.1957	-0.7350	-0.4793	-0.8392
-2	0.2967	1.82686 *	0.2771	1.2217	-0.3000	-0.6061
-1	0.1197	0.59989	-0.2042	-0.9142	-0.0225	-0.0866
0	-0.2671	-1.1001	0.1797	0.6334	0.3312	0.7682
1	0.5241	2.34662 **	0.3326	1.1778	0.6241	1.2182
2	-0.3427	-1.5655	-0.5600	-2.8515 ***	-0.9375	-2.8261 ***
3	-0.4055	-1.9211 *	-0.0882	-0.4558	0.1806	0.4311
4	-0.2825	-1.0095	-0.4407	-1.3152	-0.4485	-1.0930
5	0.1412	0.68759	0.1676	0.6370	-0.2501	-0.5871
6	0.0623	0.27606	-0.4243	-1.7245 *	0.5670	2.0881 *
7	0.0094	0.04672	0.3605	1.0111	0.2962	0.7232
8	0.7398	2.10009 **	0.3230	1.3032	-0.3279	-0.8221
9	-0.0615	-0.1874	-0.0305	-0.1593	-0.0119	-0.0471
10	0.0281	0.13014	-0.0380	-0.1772	-0.1077	-0.3573

Note: AAR = Average Abnormal Returns (%).
*Significant at $\alpha = 0.10$; **significant at $\alpha = 0.05$, and ***significant at $\alpha = 0.01$
Increase, N=390
Decrease, N=276
Unchanged, N=79

Table 4.2.5.2 Earnings Changes Announcement Effect Malaysia-CAAR

Trading Day, t	Increased			Decreased			Unchanged		
	CAAR	CAAR t-value		CAAR	CAAR t-value		CAAR	CAAR t-value	
-10	0.3650	1.12708		-0.1845	-0.5683		-0.2856	-0.7268	
-9	0.2215	0.68389		-0.3642	-1.1217		-0.0966	-0.2457	
-8	0.3948	1.21902		0.3369	1.0378		-0.5491	-1.3972	
-7	0.3341	1.0316		0.0807	0.2486		-0.2752	-0.7003	
-6	0.4552	1.40577		0.0493	0.1519		-0.2486	-0.6325	
-5	0.4550	1.40497		0.4578	1.4102		-0.7063	-1.7972	*
-4	0.3746	1.15674		0.2509	0.7729		-0.1766	-0.4495	
-3	0.5186	1.60135		0.0552	0.1701		-0.6559	-1.6691	*
-2	0.8153	2.51765	**	0.3324	1.0238		-0.9559	-2.4324	**
-1	0.9350	2.88717	***	0.1281	0.3947		-0.9784	-2.4897	**
0	0.6678	2.06231	**	0.3079	0.9483		-0.6472	-1.6469	*
1	1.1920	3.68087	***	0.6404	1.9728	**	-0.0231	-0.0587	
2	0.8493	2.62256	***	0.0805	0.2478		-0.9606	-2.4443	**
3	0.4437	1.37023		-0.0077	-0.0238		-0.7800	-1.9847	*
4	0.1612	0.49788		-0.4484	-1.3812		-1.2284	-3.1259	***
5	0.3025	0.93404		-0.2808	-0.8650		-1.4785	-3.7622	***
6	0.3648	1.12638		-0.7051	-2.1720	**	-0.9115	-2.3194	**
7	0.3741	1.15534		-0.3445	-1.0613		-0.6153	-1.5657	
8	1.1140	3.43991	***	-0.0216	-0.0664		-0.9431	-2.4000	**
9	1.0524	3.24997	***	-0.0520	-0.1602		-0.9551	-2.4304	**
10	1.0806	3.33679	***	-0.0900	-0.2773		-1.0627	-2.7043	***

Note: CAAR = Cumulative Average Abnormal Returns (%).
*Significant at $\alpha = 0.10$; **significant at $\alpha = 0.05$, and ***significant at $\alpha = 0.01$
Increase, N=390
Decrease, N=276
Unchanged, N=79

Figure 4.2.5.1 CAAR for Earnings Changes Announcement Malaysia
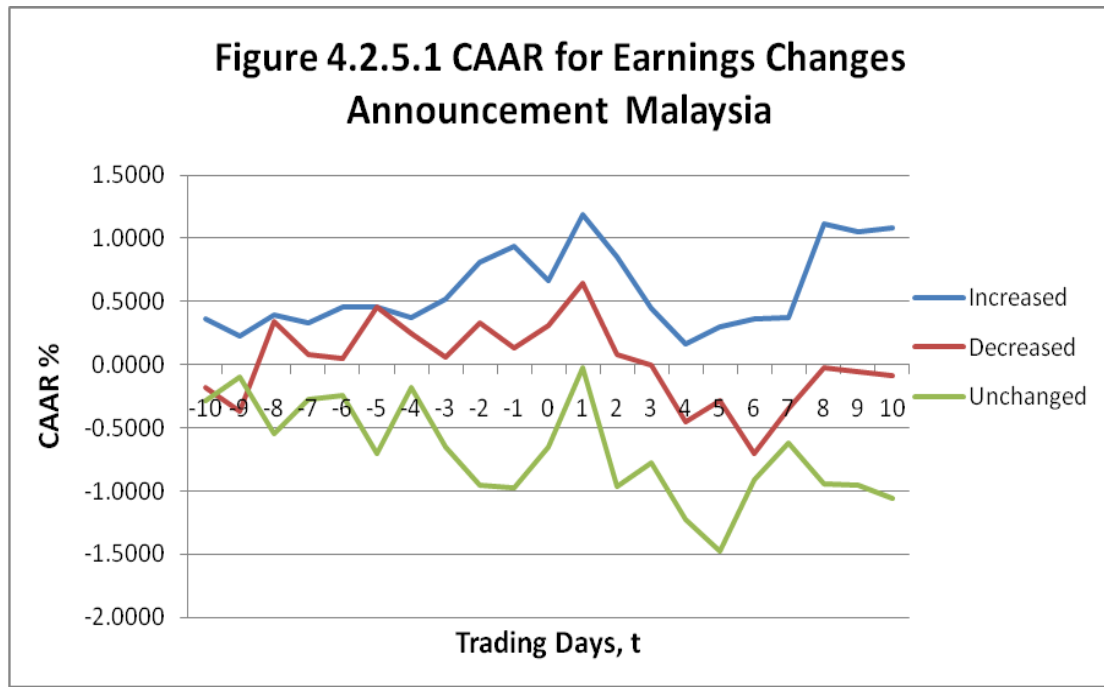
4.2.6 Changes in Earnings-Singapore Scenario

4.2.6.1 Earnings Increased

In increased earnings announcement, the AAR on t=0 was 0.3402%. The value was insignificant at any test levels. On t=+1, the AAR was 0.8344% and it appeared to be the highest AAR in the event windows. Besides, it was also significant at 5% level. This indicated that the investors reacted slowly towards the announcement being made. On t=-3, the AAR value was 0.3957% and it was significant at 10%, this implied that the market had predicted unfavorable earnings announcement from the Singapore companies before the actual announcement date. Furthermore, there was a significant result shown on t=+6, it showed that investors still reacted towards the announcement made after announcement day.

The CAAR in Figure 4.2.6 showed an upward trend for earnings increased announcement. This finding was consistent with Isa, Ahmad, & Chan (1992) study. On t=+1 onwards, the CAAR values responded onto the test level. In Singapore market, when there was an increased announcement made onto earnings, they should have to buy at t=+1 and hold it up to t=+10.

4.2.6.2 Earnings Decreased

According to table 4.2.6.1, AAR for decreased earnings announcement had the highest value of 1.1532% which was fall on t=+1. The value was significant at 5% level. The result implied that the flow of information in Singapore stock market was slightly slow which the market reacted only after the announcement of earnings. The AAR on the announcement day was insignificant and this had indicated that the market was inefficient and thus the market did not show immediate reaction.

From Figure 4.2.6, obviously, value of decreased earnings announcement had the highest value of CAAR. It was a positive trend and starting from t=-4 onwards, the values were significant towards the test levels. The trend increased gradually until t=+10. However, this result was contradicted with Isa, Ahmad, & Chan (1992) finding which pointing decreased in earnings show a negative CAAR.

4.2.6.3 Earnings Unchanged

Table 4.2.6.1 showed the value of AAR was significant before the earnings announcement day. That was on t=-7, -4, -2. t=-4 and t=-2 significant at 5% level had values of -1.5498% and 5.1498% . Meanwhile, t=-7 had an AAR of 1.3766%. This indicated that market was able to predict the information content and behave accordingly. Reason for significant AAR before announcement date is there was information leakage in the market. This finding was consistent with Ariff and Johnson(1990). However, AAR on t=-2 appeared to be the highest positive value in the event windows.

Same as the case in increased and decreased earnings announcement, unchanged earnings announcement had a positive trend as well. It was significant on t=-2 until t=-1 and it was insignificant on t=0 and t=+1. It started to be significant on t=+2 until end of the event windows. In order to earn huge profit, investors were advised to buy the shares at t=-2 and sell it up to t=10.

Table 4.2.6.1 Earnings Changes Announcement Effect Singapore-AAR

Trading Day, t	Increased		Decreased		Unchanged	
	AAR	AAR t-value	AAR	AAR t-value	AAR	AAR t-value
-10	0.2827	0.9623	0.2838	0.6842	0.0419	0.0828
-9	-0.0673	-0.3265	-0.2529	-0.4876	-0.8966	-0.8667
-8	0.4807	1.5739	0.9121	1.1916	0.8633	0.8739
-7	-0.2934	-0.9483	-0.0592	-0.0896	1.3766	1.6965 *
-6	-0.0466	-0.1909	5.0429	0.9468	0.9481	0.5020
-5	-0.2935	-1.3146	0.3187	0.7521	1.1878	1.2324
-4	0.3610	1.5432	0.4522	1.1429	-1.5498	-2.2725 **
-3	0.3957	1.8448 *	1.1661	1.6143	-0.8653	-0.6592
-2	-0.0522	-0.2566	-0.1437	-0.1638	5.1942	2.0445 **
-1	-0.1977	-0.8279	1.2611	0.9182	0.4492	0.3980
0	0.3402	1.2339	0.4353	1.0031	-1.5257	-1.1898
1	0.8344	2.4776 **	1.1532	2.4798 **	0.4701	0.4745
2	-0.1016	-0.3195	0.0950	0.3016	0.9077	0.9600
3	0.0661	0.1555	-0.2748	-0.7810	0.6004	1.2024
4	-0.3501	-1.4410	0.3024	0.8136	1.1760	1.0364
5	0.0173	0.0734	-0.2358	-0.7160	-0.8347	-1.3055
6	-0.0223	-0.0825 *	0.3378	0.9175	0.8669	1.4102
7	0.4233	1.7063	0.6957	1.0976	1.5170	1.0992
8	0.0629	0.2055	0.4729	0.6564	-0.9094	-0.7697
9	-0.1297	-0.3429	-1.1023	-1.8215 *	0.4317	0.7047
10	0.4429	0.6110	0.8498	1.4109	-0.4648	-0.7238

Note: AAR = Average Abnormal Returns (%).

*Significant at $\alpha = 0.10$; **significant at $\alpha = 0.05$, and ***significant at $\alpha = 0.01$

Increase, N=231

Decrease, N=159

Unchanged, N=90

Table 4.2.6.2 Earnings Changes Announcement Effect Singapore-CAAR

Trading Day, t	Increased			Decreased			Unchanged		
	CAAR	CAAR t-value		CAAR	CAAR t-value		CAAR	CAAR t-value	
-10	0.2827	0.4357		0.2838	0.0704		0.0419	0.0119	
-9	0.2155	0.3320		0.0309	0.0077		-0.8547	-0.2427	
-8	0.6962	1.0727		0.9430	0.2338		0.0086	0.0024	
-7	0.4028	0.6206		0.8838	0.2191		1.3853	0.3934	
-6	0.3562	0.5488		5.9267	1.4693		2.3333	0.6626	
-5	0.0627	0.0966		6.2454	1.5483		3.5211	0.9999	
-4	0.4236	0.6527		6.6975	1.6604	*	1.9713	0.5598	
-3	0.8193	1.2624		7.8636	1.9495	*	1.1061	0.3141	
-2	0.7671	1.1820		7.7199	1.9139	*	6.3003	1.7891	*
-1	0.5695	0.8774		8.9810	2.2265	**	6.7496	1.9167	*
0	0.9096	1.4015		9.4163	2.3345	**	5.2239	1.4834	
1	1.7440	2.6872	***	10.5695	2.6204	***	5.6939	1.6169	
2	1.6425	2.5307	**	10.6645	2.6439	***	6.6016	1.8747	*
3	1.7086	2.6326	***	10.3897	2.5758	**	7.2020	2.0452	**
4	1.3585	2.0931	**	10.6921	2.6508	***	8.3780	2.3791	**
5	1.3758	2.1197	**	10.4563	2.5923	**	7.5433	2.1421	**
6	1.3535	2.0854	**	10.7941	2.6760	***	8.4102	2.3883	**
7	1.7768	2.7377	***	11.4898	2.8485	***	9.9273	2.8190	***
8	1.8397	2.8346	***	11.9627	2.9658	***	9.0179	2.5608	**
9	1.7100	2.6347	***	10.8603	2.6925	***	9.4496	2.6834	***
10	2.1529	3.3171	***	11.7101	2.9031	***	8.9848	2.5514	**

Note: CAAR = Cumulative Average Abnormal Returns (%).
*Significant at $\alpha = 0.10$; **significant at $\alpha = 0.05$, and ***significant at $\alpha = 0.01$
Increase, N=231
Decrease, N=159
Unchanged, N=90

Figure 4.2.6.1 CAAR for Earnings Changes Announcement Singapore
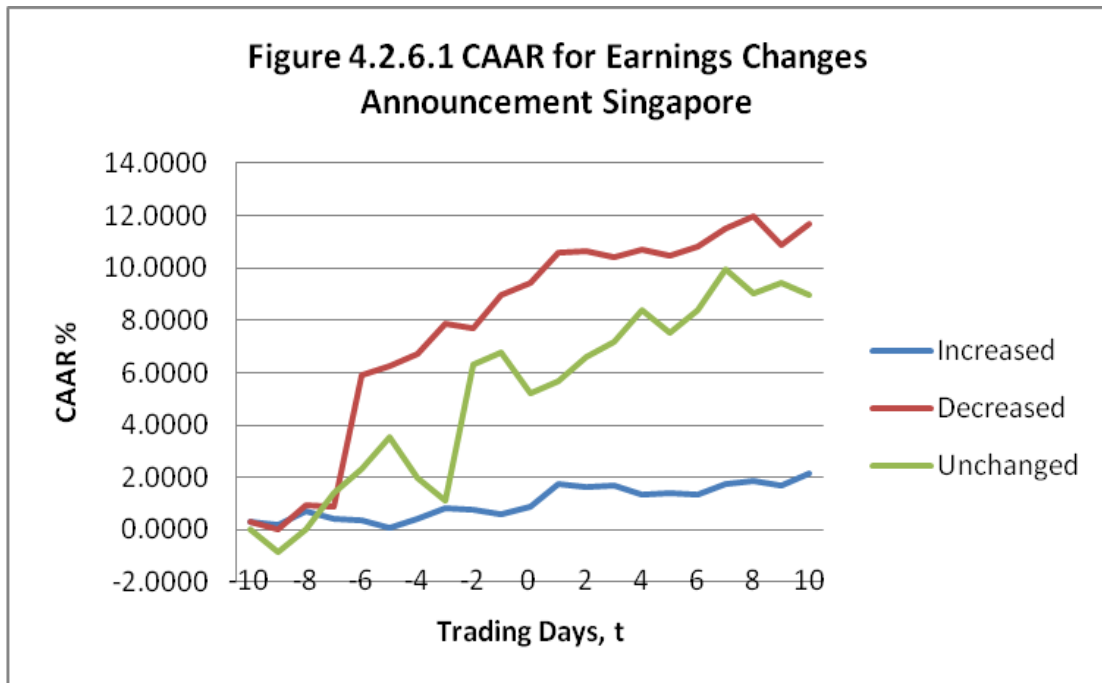
CHAPTER 5:

CONCLUSION AND

RECOMMENDATIONS

5.1 Recap of Objectives

The main objective of this study is to determine whether the stock market is efficient for Malaysia and Singapore. (Discussed in 5.2 Conclusion)

The sub-objectives of this study are as follow:

1) Understand the concept of Efficient Market Hypothesis.(Achieved in 2.1 EMH)

2) Determine the relationship between dividends and earnings on stock prices of Malaysia and Singapore listed company. (Discussed in Chapter 4)

3) Understand the various theories surrounding earnings and dividend policies of the company. (Achieved in Chapter 4)

4) Examine the efficiency of the stock market of Malaysia and Singapore. (Achieved in Chapter 4)

5) Investigate whether there is a difference in the effect of dividends and earnings on company share price in Malaysia and Singapore. (Achieved in Chapter 4)

6) Provide managers with advice on the most suitable dividend policy to be implemented. (Achieved in 5.3 Implications to Investors)

7) Provide sound investment advice for investors who seek to invest in Malaysia and Singapore. (Achieved in 5.4 Implications to Managers)

5.2 Conclusion

Table 5.1: Summary on Malaysia and Singapore Market Efficiency.

	Dividend		Earnings	
	Malaysia	Singapore	Malaysia	Singapore
General	IE	E	E	IE
Yearly:				
2005	IE	IE	IE	IE
2006	IE	IE	IE	IE
2007	IE	IE	IE	IE
2008	IE	E	IE	IE
2009	IE	E	E	IE
Changes:				
Increase	IE	IE	IE	IE
Decrease	IE	IE	IE	IE
Unchanged	IE	IE	IE	IE

*E represents efficient market.

**IE represents inefficient market.

Based on our results, we had derived several conclusions. Firstly, our findings strongly supported the information content hypothesis where significant abnormal returns were found surrounding the announcement date of dividend and earnings (Mansor and Subramaniam, 1992; Pettit, 1972; Aharony and Swary, 1980).

Besides, we did not observe any sign of semi-strong form efficiency in both the Malaysia and Singapore market. The semi-strong efficiency asserts that stock price fully reflect all relevant information that investors can obtain from public sources. As soon as the announcement is made to public, the market has already incorporated into the price any favorable information associated with the announcement. However, we observed significant AAR and CAAR after the announcement date of dividend and earnings (Uddin, 2003). The delayed response implied that the market required longer time to absorb the information conveyed in the announcements. However, our results were inconsistent with the findings of Baharudin, Abdullahi and Teoh (2010) where

they strongly support the semi-strong form efficiency in Malaysia. We suspected the main reason that caused the difference in findings is that they used Market Adjusted Abnormal Return Model to calculate their AR.

Next, EMH argued that even if stock price did exhibit recurring pattern, those patterns could not last for long. However, based on the yearly analysis of Malaysia dividend announcement effect, we could clearly identify a trend which all the AAR on t=1 for all the five years were significant with positive return ranging from 0.6710% to 1.2408%. On top of that, based on the yearly analysis on dividend for the case of Singapore, we observed another trend where AAR on t=0 from 2006 to 2009 were significant with high positive return ranging from 1.5039% to 3.2067%. Therefore, we did provide another empirical evidence to prove that Malaysia and Singapore stock market was inefficient (Mansor and Subramaniam, 1992 and Yip, 2009).

Both the market inefficiency was also supported by some evidence of information leakage in the Malaysia and Singapore stock market. Most of our results indicated that there was a significant AAR before both the dividend and earnings announcement date. The significant reactions implied that market had anticipated the information before the actual release of dividend and earnings figure (Ariff and Johnson, 1990; Nasir and Mohammad, 1993; Ball and Brown 1968).

According to the general assessment on Malaysia, market reacts negatively towards dividend announcement but positively towards earnings announcement. While for the case in Singapore, market reacts positively toward both the announcements.

Next, based on the yearly analysis of Malaysia dividend announcement effect the 2009 CAAR was the highest followed by 2007, 2008, 2006 and 2005. The results had indicated that the dividend announcement carried greater effect

on abnormal return year by year in Malaysia. The CAAR for all the five years were upward sloping in Malaysia and the CAAR were significant only after the announcement date. Likewise, the CAAR in Singapore were significant on post dividend announcement days. Despite of the recession in year 2009, the investors in Malaysia reacted optimistically toward the dividend announcement. In contrast, for the case of Singapore, 2008 that was the year of recession had the lowest CAAR among all the years.

During the year of global financial crisis, Malaysia market had outperformed the Singapore market which it indicated that Malaysia market had a resilient economy to overcome the crisis. In 2008, the highest CAAR for Malaysia market was approximately 3% while for Singapore was lower than 2%. The stock market performance in Singapore surrounding the dividend announcement from year 2006 to 2007 looked quite similar. This implied that dividend announcement in Singapore did not carry much effect on stock price.

According to the yearly analysis of Malaysia earnings announcement, all the AAR on t=2 from year 2005 to 2008 were significant with negative in value ranging from -0.3299% to -0.7767%. However, the trend had disappeared in 2009 and this indicated that the market had finally identified the trend and reacted accordingly. Similarly with the yearly analysis on Malaysia dividend effect, the year of recession, 2009 had the highest CAAR compared to the other four years. The stock prices surrounding the earnings announcement in Malaysia were more volatile than the Singapore stock market where we could observe CAAR moved upward and downward repeatedly during the event period. The result also had proven that the effect of general election on both the countries was different. Despite of the election crisis in Malaysia, the stock market reacted optimistically and CAAR for the whole event period were positive and upward sloping. While for Singapore, the CAAR remained negative beginning t=-1 to 10 in 2006.

In addition, the Malaysia investors reaction on both dividends unchanged and increase announcement were quite similar. We could observe that both graphs were close to each other and their return on stock market looked alike. The results were inconsistent with Isa and Subramaniam, 1992; Nasir and Mohamad, 1993; and Hiau *et al.*, 2002 where they observed no significant trend for dividend unchanged. However, the increased dividend announcement performed slightly better than dividend unchanged announcement. Both the CAAR were upward sloping. Likewise, the CAAR for dividend decrease was also upward sloping but the effect is not as strong as the other two. In short, regardless of the types of dividend changes announcement, the CAAR would go upward. While for the case of Singapore, dividend unchanged announcement effect had clearly exceeded the impact of dividend increase and decrease. Just like the results from Malaysia, all the CAAR were upward sloping and dividend decrease announcement had the lowest effect.

The results for earnings changes announcement effect in Malaysia showed that the market was very volatile surrounding the announcement date. The announcement of earning increase was highly welcomed by the investors compared to earnings decrease (Ariff and Johnson, 1990).The CAAR for earnings increase were positive for the whole event period (Isa, Ahmad and Chan, 1992). We observed a trend from this results where all the CAAR would peak at t=1.

While for the case of Singapore, we observed an unusual result in earnings changes announcement. The findings showed risen in CAAR for both the increase and decrease in earnings announcement. In fact, the CAAR for decrease in earnings was higher than increase announcement. One of the possible explanations was the actual decrease in earnings was lesser than what most of the analyst and market participants had expected or in short, it is called as positive earnings surprises. Investors were increasingly confident

with the management of the company since it had outperformed the their expectation. This situation would occur especially during the time of bad economy and recession where the company that outperformed the average industry index would be highly preferred by investors.

In summary, Malaysia and Singapore stock market are inefficient. Based on our results, dividend and earnings announcement are positively related to stock price. The dividend announcement is found carry a stronger effect than the earnings announcement. Both the dividend and earnings announcement bring greater impact on Malaysia market rather than Singapore. The CAAR for Malaysia had increasingly higher year by year. Besides, Malaysia stock market was highly volatile especially surrounding the earnings announcement while Singapore stock market remained upward sloping regardless of types of earnings changes announcement. In addition, comparing the results during the year of global financial crisis, recession and general election, Malaysia is proven to have a more resilient economy than Singapore. Furthermore, Malaysia investors would have stronger preference on increase in dividend while Singapore investors would prefer a stable income. Increase earnings announcement carried greater impact on Malaysia market while for Singapore was earnings decrease announcement.

5.3 Implications to Investors

Since our results has proven that both the Malaysia and Singapore market are in inefficient form, it indicates to the investors that they will have the opportunity to earn abnormal return in the stock market.

Based on the trend that we found in the yearly analysis, we suggest that Malaysian investors should purchase the stocks on the dividend announcement date, $t=0$ and selling them on $t=1$ to earn abnormal return. While for the case of Singapore, the investors should purchase the stock a day earlier before the dividend announcement date and sold them off on $t=0$.

Besides, regardless whether it was the case of dividend or earnings announcement in Malaysia, year 2009 had the greatest impact on CAAR. This has implied to the investors that buy and hold strategy is best practice during the year of recessions in Malaysia.

In view of the fact that CAAR were upward sloping regardless of types of dividend announcement for both the Malaysia and Singapore stock market, the investors should practice buy and hold strategy surrounding the days of dividend announcement. However, if the investors would like to earn the optimal return, they should invest when they anticipated dividend increase in Malaysia companies and dividend unchanged in Singapore companies.

Since the stock price was highly volatile for earnings changes announcement in Malaysia, this indicates that the investment risk is high surrounding the earnings announcement; however, it is also an indication of opportunity for high return. If investors would like to benefit from the earnings announcement, based on the trend found in our results, it is suggested that they purchase the stock on $t=-10$ and sell it off on $t=1$ since all the CAAR peaked on that particular day. While for the investor in Singapore, they could earn positive

return in spite of the types of earnings changes. However, earnings decrease announcement will carry a greater impact on CAAR.

Finally, the research has found that Malaysia has a more resilient economy than Singapore market. Thus, Malaysia is the better place for business during economic downturn. Malaysia market will provide greater investment security and stronger economy during the recession.

5.4 Implications to Managers

The yearly analysis conducted on Malaysia implies to the managers that dividend announcement carry greater effect on abnormal return year by year. In addition, the stock prices surrounding the earnings announcement were highly volatile. This has indicated that the investors are increasingly relying on the dividend and earnings information to make decision. Hence, it is important for the manager to clearly identify the investors' preference on dividend before making any announcement.

The result has shown that both dividend increase and unchanged announcement effect are almost similar in the Malaysia market. Dividend increase effect is just slightly exceeding the impact of dividend unchanged. Thus, it leads to the question whether managers should increase their dividend or allowed it to be remained. If solely looking at the short term effect, dividend increase will bring the greatest effect on shareholder wealth. However, if we refer to the earnings announcement results as well, earnings increase announcement in Malaysia had the strongest effect on stock price. Thus, based on the two results, we will advise the managers in Malaysia to remain their dividend unchanged and keep the additional cash flow for investment. This, in return will increase the shareholder earnings per share and also maximize their wealth in the long run.

On the other hand, for the case of Singapore, investors had strong preference towards dividend unchanged and this implies to the managers that investors in Singapore will favor stable income rather than any changes in dividend.

Generally, bad earnings are considered as a signal for bad future cash flow and bad future prospect for the company. Decrease in earnings is frequently perceived as bad earnings. However, referring to the results of earnings changes announcement, earnings decrease has the greatest impact on the abnormal return. This unusual finding is the results of positive earnings surprises which actual decrease in earnings is lower than the expected decrease in earnings by investors. Thus, the finding has lead to the question on what bad earnings really are? In what level of earnings is consider as bad earnings? Is decrease in earnings will definitely decrease the share price? The results found has imply to the managers that as long as the earnings announced has exceeded the expected performance of the market , it will be consider as good earnings regardless whether it is decreasing or increasing.

5.5 Limitations

Several problems and limitations were encountered during the completion of this study that may affect the accuracy of the findings. In term of data volatilities, there were excessive volatilities in the SGX and Bursa Malaysia during August 2007 to December 2008. The US subprime crisis had an impact on the Malaysian and Singaporean stock market and caused a major sell-off during that period. The market was also influenced by the political instability that occurred during the same period. The FTSE Bursa Malaysia index fell almost 130 points in 10th March 2008 after the 12th National General Election. Besides, year 2006 was the year of general election for Singapore. Therefore, it was believed that the volatilities of the stock market

will affect the estimation of Abnormal Return due to the increase of variances in security prices.

Besides, the market model is subject to the estimation problem if the security is infrequently traded (thin trading) or not traded at all during estimation period (Leemakdej, 1998) and this study had paid less attention on this area. Leemakdej defined thin trading of a particular stock of which average non-trading day to total was lower than 10%. For instance, the model is subject to biased risk measurement in which the systematic risk measurement of the infrequently traded security is underestimated. Given that the systematic risk is projected from the covariance of the security return and the market returns, the return of infrequently traded security, whose price is unchanged, will not move along with the market returns. Consequently, the covariance between the returns will be underestimated and so will be the systematic risk estimation. This also implied that the systematic risk estimation of frequently traded security would suffer from overestimation as the market index includes both frequently and infrequently traded securities and its systematic risk. In short, the biased beta would affect the calculation of abnormal returns.

Managers tend to respond to changes in their company's stock prices. Signals can reinforce behavior and encourage its repetition in the future. Our study used 21 days event window, as supported by journals stated in previous chapters, to provide collective opinions regarding these implications. Besides, study conducted was based on segregated dividend and earnings announcements into general, year-by-year, increase, unchanged, and decreased. The implications provided are limited to these categories.

However, longer-term market reaction to events may be more accurate indicator of the longer-term performance implications (Oler, Harrison and Allen, 2007).

Nevertheless, it is hoped that the empirical evidence observed in this study is generally representative and can provide some useful insights into the dividends and earnings announcement effect in Malaysia and Singapore shares market.

5.6 Suggestions

The focus of this study is to look at the information being signaled from dividend and earnings announcements. Future studies are suggested to pay more attention to the thin trading securities. The exclusions of thin trading securities tend to avoid biasness of beta and better reflect the performance of the effects of such announcements. Otherwise, the future researchers need to select some techniques as mentioned by Leemakdej (1998) to eliminate this biasness.

Furthermore, the event windows could be amended via using a longer window than the common 21-day one (i.e. -10, +30 or - 30, +30) (Oler, Harrison and Allen, 2007). Bernard & Thomas (1989) concluded that after examining 84,792 earnings announcements from 1974 to 1986 in the US, that on average, companies that announced the greatest earnings surprise tended to outperform the general market by 2% in the following 60 days. On the flip side, companies with the largest negative earnings surprises tended to underperform the market by 2% in the following 60 days. This result is consistent with the Singapore's result (with the studied post-dividend of +10days). However, it is suggested to increase the sample size and lengthen the observation days to further examine the depth of post earnings announcement effect for both Malaysian and Singaporean effect.

Also, we would suggest further research to draw on the simultaneous announcement of current dividends, current earnings and management

forecasts of next year's earnings to provide further analysis of the informational and real effect of dividend announcements (Sponholtz, 2005). These analyses would deepen understanding of the market reaction to the simultaneous announcements and facilitate a complete disentanglement of the informational and real effects of dividends.

In this study, from the Year-by-Year Analysis of Dividend Announcements in both Malaysian and Singaporean stock market, there were trends where CAARs are increasing on yearly basis. This could imply that dividend announcements are gaining more importance in the recent years. Therefore, future researches are suggested to extend the study period to the year of 2010, in order to see whether the trend continue to grow.

Besides, study conducted was based on segregated dividend and earnings announcements into general, year-by-year, increase, unchanged, and decreased. Our study had implications for practitioners and investors as they try to anticipate stock prices regarding to the categorized of announcements. For further analysis, it is suggested to analyze dividend and earnings announcements by industries.

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7. Appendices

Appendix 1: List of Sample from Malaysia

COMPANIES	CODE
ACOUSTECH BERHAD	7120
ADVANCED PACKAGING TECHNOLOGY (M) BERHAD	9148
ADVENTA BERHAD	7191
AEON CO. (M) BERHAD	6599
AJINOMOTO MALAYSIA BHD	2658
AJIYA BERHAD	7609
AMWAY (MALAYSIA) HOLDINGS BERHAD	6351
ANN JOO RESOURCES BERHAD	6556
APB RESOURCES BERHAD	5568
APM AUTOMOTIVE HOLDINGS BERHAD	5015
APOLLO FOOD HOLDINGS BERHAD	6432
ASTINO BERHAD	7162
ATLAN HOLDINGS BHD	7048
BERJAYA LAND BHD	4219
BERJAYA SPORTS TOTO BERHAD	1562
BLD PLANTATIONS BERHAD	5069
BONIA CORPORATION BHD	9288
CARLSBERG BREWERY MALAYSIA BERHAD	2836
CCK CONSOLIDATED HOLDINGS BERHAD	7035
CHEETAH HOLDINGS BERHAD	7209
CHIN TECK PLANTATIONS BHD	1929
CHOO BEE METAL INDUSTRIES BERHAD	5797
CHUAN HUAT RESOURCES BERHAD	7016
COASTAL CONTRACTS BERHAD	5071
COCOALAND HOLDINGS BERHAD	7205
CYL CORPORATION BHD	7157
DAIBOCHI PLASTIC & PACKAGING INDUSTRY BHD	8125
DEGEM BERHAD	7119
DELLOYD VENTURES BERHAD	6505
DIALOG GROUP BERHAD	7277
DOMINANT ENTERPRISE BERHAD	7169
DRB-HICOM BERHAD	1619
DUTCH LADY MILK INDUSTRIES (M) BHD	3026
EMIVEST BERHAD	7125
ENG TECKNOLOGI HOLDING SDN.BHD	8826
ENGTEX GROUP BERHAD	5056
ESSO MALAYSIA BHD	3042
EUROSPAN HOLDINGS BERHAD	7094
FAR EAST HOLDINGS BHD	5029
FIAMMA HOLDINGS BHD	6939
FIMA CORPORATION BERHAD	3107
FREIGHT MANAGEMENT HOLDINGS BERHAD	7210
FURNIWEB INDUSTRIAL PRODUCTS BERHAD	7168
GENTING MALAYSIA BERHAD	3182
GUINNESS ANCHOR BHD	3255
HAI-O ENTERPRISE BERHAD	7668
HAP SENG CONSOLIDATED BHD	3034
HARRISONS HOLDINGS (MALAYSIA) BERHAD	5008

HEXZA CORPORATION BHD	3298
HIAP TECK VENTURE BERHAD	5072
HING YIAP GROUP BERHAD	7722
HIROTAKO HOLDINGS BERHAD	9644
HUP SENG INDUSTRIES BERHAD	5024
KFC HOLDINGS (MALAYSIA) BHD	3492
KIAN JOO CAN FACTORY BERHAD	3522
KIM LOONG RESOURCES BERHAD	5027
KINSTEEL BERHAD	5060
KLCC PROPERTY HOLDINGS BERHAD	5089
KONSORTIUM LOGISTIK BERHAD	6157
KUALA LUMPUR KEPONG BHD	2445
KUMPULAN FIMA BERHAD	6491
KUMPULAN PERANGSANG SELANGOR BERHAD	5843
LTKM BERHAD	7085
MAMEE-DOUBLE DECKER (M) BERHAD	5282
MUDAJAYA GROUP BERHAD	5085
NCB HOLDINGS BERHAD	5509
NESTLE (MALAYSIA) BERHAD	4707
NEW HOONG FATT HOLDINGS BERHAD	7060
NPC RESOURCES BERHAD	5047
ORIENTAL HOLDINGS BERHAD	4006
OSK PROPERTY HOLDINGS BERHAD	6661
PARAMOUNT CORPORATION BHD	1724
PERUSAHAAN SADUR TIMAH MALAYSIA (PERSTIMA) BERHAD	5436
PETRONAS DAGANGAN BERHAD	5681
PHARMANIAGA BERHAD	7081
PLUS EXPRESSWAYS BERHAD	5052
PMB TECHNOLOGY BERHAD	7172
PPB GROUP BERHAD	4065
PRESTAR RESOURCES BHD	9873
PROTASCO BERHAD	5070
QL RESOURCES BERHAD	7084
RANHILL BERHAD	5030
RUBBEREX CORPORATION (M) BERHAD	7803
RIVERVIEW RUBBER ESTATES BHD	2542
ROCK CHEMICAL INDUSTRIES (MALAYSIA) BERHAD	8087
SAPURACREST PETROLEUM BERHAD	8575
SBC CORPORATION BERHAD	5207
SCIENTEX BERHAD	4731
SCOMI GROUP BERHAD	7158
SELANGOR DREDGING BERHAD	2224
SEE HUP CONSOLIDATED BHD	7053
SEG INTERNATIONAL BERHAD	9792
SHANGRI-LA HOTELS (MALAYSIA) BHD	5517
SHELL REFINING CO (FOM) BHD	4324
SHL CONSOLIDATED BERHAD	6017
SIME DARBY BERHAD	4197
SINDORA BERHAD	6106

SENI JAYA CORPORATION BHD	9431
SARAWAK OIL PALMS BERHAD	5126
SELANGOR PROPERTIES BERHAD	1783
SPRITZER BERHAD	7103
SP SETIA BHD	8664
STAR PUBLICATIONS (MALAYSIA) BHD	6084
SUIWAH CORPORATION BHD	9865
SUNCHIRIN INDUSTRIES (MALAYSIA) BERHAD	7358
SUPERMAX CORPORATION BERHAD	7106
SYMPHONY HOUSE BERHAD	16
TA ANN HOLDINGS BERHAD	5012
TALIWORKS CORPORATION BERHAD	8524
TAN CHONG MOTOR HOLDINGS BERHAD	4405
TEKALA CORPORATION BERHAD	6378
TENAGA NASIONAL BERHAD	5347
TEXCHEM RESOURCES BHD	8702
THONG GUAN INDUSTRIES BERHAD	7034
TIEN WAH PRESS HOLDINGS BERHAD	7374
TELEKOM MALAYSIA BERHAD	7863
TONG HERR RESOURCES BERHAD	5010
TOP GLOVE CORPORATION BERHAD	7113
TRIUMPHAL ASSOCIATES BHD	9911
TSH RESOURCES BERHAD	9059
TSR CAPITAL BERHAD	5042
TRADEWINDS (M) BHD	4421
UAC BERHAD	4537
UCHI TECHNOLOGIES BERHAD	7100
UNITED KOTAK BERHAD	7127
UNITED MALACCA BERHAD	2593
UNITED MALAYAN LAND BHD	4561
UMS HOLDINGS BHD	7137
UMW HOLDINGS BERHAD	4588
UNICO-DESA PLANTATIONS BERHAD	5019
UNIMECH GROUP BERHAD	7091
UNISEM (M) BERHAD	5005
UPA CORPORATION BERHAD	7757
UNITED PLANTATIONS BERHAD	2089
UTUSAN MELAYU (MALAYSIA) BERHAD	5754
V.S. INDUSTRY BERHAD	6963
WARISAN TC HOLDINGS BERHAD	5016
WAH SEONG CORPORATION BERHAD	5142
WEIDA (M) BERHAD	7111
WONG ENGINEERING CORPORATION BERHAD	7050
WHITE HORSE BERHAD	5009
YEE LEE CORPORATION BHD	5584
YEO HIAP SENG (MALAYSIA) BERHAD	4642
YI-LAI BERHAD	5048
YINSON HOLDINGS BHD	7923
YLI HOLDINGS BERHAD	7014
YTL CORPORATION BERHAD	4677

YTL CEMENT BERHAD	8737
YTL POWER INTERNATIONAL BERHAD	6742

Appendix 2: List of Sample from Singapore

COMPANIES	CODE
BONVESTS HOLDINGS LTD	B28
BOUSTEAD SINGAPORE LIMITED	F9D
BUKIT SEMBAWANG ESTATES	B61
CAPITALAND LIMITED	C31
CEI CONTRACT MANUFACTURING LTD	C11
CEREBOS PACIFIC LTD	C20
CH OFFSHORE LTD	C13
CHALLENGER TECHNOLOGIES LIMITED	573
CHIP ENG SENG CORPORATION LTD	C29
CHOSEN HOLDINGS LIMITED	C10
CITY DEVELOPMENTS LTD	C09
COLEX HOLDINGS LIMITED	567
COMFORTDELGRO CORPORATION LTD	C52
CORTINA HOLDINGS LTD	C41
CREATIVE TECHNOLOGY LTD	C76
CWT LIMITED	C14
DATAPULSE TECHNOLOGY LTD	D04
ELEC & ELTEK INTERNATIONAL CO LTD	E16
ENGRO CORPORATION LIMITED	S44
F J BENJAMIN HOLDINGS LTD	F10
FOOD JUNCTION HOLDINGS LIMITED	529
GP BATTERIES INTERNATIONAL LTD	G08
GP INDUSTRIES LIMITED	G20
GUOCOLAND LIMITED	F17
GUTHRIE GTS LTD	G33
HAW PAR CORPORATION LIMITED	H02
HI-P INTERNATIONAL LTD	H17
HO BEE INVESTMENT LTD	H13.SI
HONG LEONG ASIA LIMITED	H22.SI
HOTEL GRAND CENTRAL LTD	H18.SI
HOTEL PROPERTIES LTD	H15.SI
HOTEL ROYAL LTD	H12.SI
HUPSTEEL LIMITED	H73.SI
HYFLUX LTD	600.SI
IDT HOLDINGS (SINGAPORE) LTD	I05.SI
INNOTEK LIMITED	M14.SI
ISETAN (SINGAPORE) LTD	I15.SI
MCL LAND LIMITED	M25.SI
M1 LIMITED	B2F.SI
LEE KIM TAH HOLDINGS LTD	L25.SI
KHONG GUAN FLOUR MILLING LTD	K03.SI
KEPPEL TELECOMMUNICATIONS & TRANSPORTATION LTD.	K11.SI
JARDINE CYCLE & CARRIAGE LIMITED	C07.SI
ARMSTRONG INDUSTRIAL CORPORATION LTD	A14

ASIA PACIFIC BREWERIES LTD	A46
ASIA POWER CORPORATION LIMITED	A03
AURIC PACIFIC GROUP LTD	A23
AMARA HOLDINGS LTD	A34
ASL MARINE HOLDINGS LTD	A04
AVAPLAS LTD	598
ZAGRO ASIA LTD	Z01.SI
YHI INTERNATIONAL LIMITED	Y08.SI
WHEELOCK PROPERTIES (SINGAPORE) LIMITED	M35.SI
VICOM LIMITED	V01.SI
VENTURE CORPORATION LIMITED	V03.SI
UNITED INDUSTRIAL CORPORATION LTD	U06.SI
UNITED ENGINEERS LTD	U04.SI
TREK 2000 INTERNATIONAL LIMITED	5AB.SI
THOMSON MEDICAL CENTRE LIMITED	5FV.SI
TELECHOICE INTERNATIONAL LTD	T41.SI
TECKWAH INDUSTRIAL CORPORATION LTD	561.SI
TAI SIN ELECTRIC LIMITED	500.SI
SUPER GROUP LTD.	S10.SI
STARHUB LIMITED	CC3.SI
SPINDEX INDUSTRIES LIMITED	564.SI
SMRT CORPORATION LTD	S53.SI
SINGAPORE SHIPPING CORPORATION LIMITED	S19.SI
SINGAPORE PRESS HOLDINGS LTD	T39.SI
SINGAPORE POST LTD	S08.SI
SINGAPORE AIRLINES LTD	C6U.SI
SIM SIANG CHOON LIMITED	594.SI
SIM LIAN GROUP LIMITED	S05.SI
SIA ENGINEERING COMPANY LTD	S59.SI
SHANGHAI ASIA HOLDINGS LTD.	T57.SI
SEMBCORP INDUSTRIES LIMITED	U96.SI
SECOND CHANCE PROPERTIES LIMITED	528.SI
SBS TRANSIT LTD	S61.SI
SATS LTD.	S58.SI
SANTAK HOLDINGS LIMITED	580.SI
ROTARY ENGINEERING LTD	R07.SI
RAFFLES MEDICAL GROUP LIMITED	R01.SI
POH TIONG CHOON LOGISTICS LIMITED	P01.SI
PCI LTD	P19.SI
PAN UNITED CORPORATION LIMITED	P52.SI
PAN PACIFIC HOTELS GROUP LIMITED	H49.SI
NSL LTD.	N02.SI
NOEL GIFTS INTERNATIONAL LTD	543.SI
NEW TOYO INTERNATIONAL HOLDINGS LTD	N08.SI
NERA TELECOMMUNICATIONS LTD	N01.SI
NAM LEE PRESS METAL INDUSTRIES LIMITED	G0I.SI
MTQ CORPORATION LIMITED	M05.SI
METRO HOLDINGS LTD	M01.SI
MEIBAN GROUP LTD	M24.SI
MEGACHEM LIMITED	5DS.SI

Appendix 3: Calculation of Expected Return and AR
Dividend Announcement:
ACOUSTECH BERHAD

Days	Stock Price	Stock Return	Market Index	Market Return	Beta	Daily Risk Free Rate	Expected Return	Abnormal Return
-10	0.8	0.000000	937.04	0.001058	0.00098	0.000135	0.000136	-0.000136
-9	0.8	0.000000	927.92	-0.009733	0.00098	0.000135	0.000125	-0.000125
-8	0.8	0.000000	926.49	-0.001541	0.00098	0.000135	0.000133	-0.000133
-7	0.8	0.000000	926.38	-0.000119	0.00098	0.000135	0.000134	-0.000134
-6	0.79	-0.012500	923.64	-0.002958	0.00098	0.000135	0.000132	-0.012632
-5	0.79	0.000000	925.54	0.002057	0.00098	0.000135	0.000137	-0.000137
-4	0.79	0.000000	923.97	-0.001696	0.00098	0.000135	0.000133	-0.000133
-3	0.79	0.000000	923.79	-0.000195	0.00098	0.000135	0.000134	-0.000134
-2	0.79	0.000000	926.08	0.002479	0.00098	0.000135	0.000137	-0.000137
-1	0.8	0.012658	919.85	-0.006727	0.00098	0.000135	0.000128	0.012530
0	0.81	0.012500	918.38	-0.001598	0.00098	0.000135	0.000133	0.012367
1	0.8	-0.012346	911.85	-0.007110	0.00098	0.000135	0.000128	-0.012473
2	0.79	-0.012500	913.56	0.001875	0.00098	0.000135	0.000136	-0.012636
3	0.79	0.000000	909.67	-0.004258	0.00098	0.000135	0.000130	-0.000130
4	0.8	0.012658	909.18	-0.000539	0.00098	0.000135	0.000134	0.012524
5	0.8	0.000000	909.74	0.000616	0.00098	0.000135	0.000135	-0.000135
6	0.77	-0.037500	911.64	0.002089	0.00098	0.000135	0.000137	-0.037637
7	0.79	0.025974	919.07	0.008150	0.00098	0.000135	0.000143	0.025832
8	0.79	0.000000	916.8	-0.002470	0.00098	0.000135	0.000132	-0.000132
9	0.79	0.000000	917.92	0.001222	0.00098	0.000135	0.000136	-0.000136
10	0.79	0.000000	919.07	0.001253	0.00098	0.000135	0.000136	-0.000136

*For detailed results, please refer to the attach CD.

Earnings Announcement:
ACOUSTECH BERHAD

Days	Stock Price	Stock Return	Market Index	Market Return	Beta	Daily Risk Free Rate	Expected Return	Abnormal Return
-10	0.73	0.013889	902.84	0.001720	0.004454	0.000135	0.000142	0.013747
-9	0.72	-0.013699	898.7	-0.004586	0.004454	0.000135	0.000114	-0.013812
-8	0.73	0.013889	893.4	-0.005897	0.004454	0.000135	0.000108	0.013781
-7	0.73	0.000000	891.36	-0.002283	0.004454	0.000135	0.000124	-0.000124
-6	0.71	-0.027397	889.27	-0.002345	0.004454	0.000135	0.000124	-0.027521
-5	0.72	0.014085	891.39	0.002384	0.004454	0.000135	0.000145	0.013940
-4	0.72	0.000000	886.37	-0.005632	0.004454	0.000135	0.000109	-0.000109
-3	0.72	0.000000	887.47	0.001241	0.004454	0.000135	0.000140	-0.000140
-2	0.72	0.000000	883.17	-0.004845	0.004454	0.000135	0.000113	-0.000113
-1	0.71	-0.013889	884.34	0.001325	0.004454	0.000135	0.000140	-0.014029
0	0.71	0.000000	870.1	-0.016102	0.004454	0.000135	0.000062	-0.000062
1	0.72	0.014085	867.1	-0.003448	0.004454	0.000135	0.000119	0.013966
2	0.74	0.027778	869.11	0.002318	0.004454	0.000135	0.000144	0.027633
3	0.74	0.000000	869.96	0.000978	0.004454	0.000135	0.000138	-0.000138
4	0.74	0.000000	860.73	-0.010610	0.004454	0.000135	0.000087	-0.000087
5	0.72	-0.027027	861.96	0.001429	0.004454	0.000135	0.000140	-0.027167
6	0.73	0.013889	862.4	0.000510	0.004454	0.000135	0.000136	0.013753
7	0.74	0.013699	865.88	0.004035	0.004454	0.000135	0.000152	0.013547
8	0.74	0.000000	871.97	0.007033	0.004454	0.000135	0.000165	-0.000165
9	0.75	0.013514	876.92	0.005677	0.004454	0.000135	0.000159	0.013354
10	0.76	0.013333	879.44	0.002874	0.004454	0.000135	0.000147	0.013186

*For more details, please refer to the attach CD.

Appendix 4: Calculation of t-test for AAR and CAAR
2009 Malaysia Dividend Announcement

AAR	Stdev	AAR t		0.99		0.95		0.9
0.001133	0.064429	0.214563		0		0		0
-7.2E-06	0.0359	-0.00246		0		0		0
-0.00257	0.037281	-0.8413		0		0		0
0.004786	0.042734	1.367024		0		0		0
0.002862	0.041078	0.850584		0		0		0
0.003335	0.03771	1.079604		0		0		0
-0.00168	0.035282	-0.58288		0		0		0
0.00592	0.03269	2.210653		0	**		*	
0.003912	0.043212	1.104994		0		0		0
0.000338	0.041716	0.098882		0		0		0
0.00671	0.049206	1.664685		0		0	*	
0.012408	0.04825	3.138958	***		**		*	
0.011899	0.056751	2.559411		0	**		*	
0.002362	0.043365	0.664757		0		0		0
0.005959	0.037404	1.94474		0		0	*	
0.004574	0.040669	1.372811		0		0		0
0.007575	0.049024	1.886149		0		0	*	
0.004924	0.052642	1.141669		0		0		0
0.00437	0.032908	1.621078		0		0		0
5.08E-05	0.035121	0.017646		0		0		0
-0.00515	0.058459	-1.07637		0		0		0

*For more details, please refer to the attach CD.

CAAR	Stdev	CAAR t	0.99	0.95	0.9
0.001133	0.029804	0.037998	0	0	0
0.001125	0.029804	0.037755	0	0	0
-0.00144	0.029804	-0.04846	0	0	0
0.003342	0.029804	0.112119	0	0	0
0.006204	0.029804	0.208159	0	0	0
0.009539	0.029804	0.320063	0	0	0
0.007854	0.029804	0.263535	0	0	0
0.013775	0.029804	0.462176	0	0	0
0.017687	0.029804	0.593423	0	0	0
0.018024	0.029804	0.604762	0	0	0
0.024735	0.029804	0.829913	0	0	0
0.037143	0.029804	1.246218	0	0	0
0.049042	0.029804	1.645465	0	0	0
0.051404	0.029804	1.724703	0	0	*
0.057363	0.029804	1.924649	0	0	*
0.061937	0.029804	2.078111	0	**	*
0.069512	0.029804	2.332274	0	**	*
0.074435	0.029804	2.497472	0	**	*
0.078806	0.029804	2.644105	***	**	*
0.078856	0.029804	2.645809	***	**	*
0.073702	0.029804	2.472851	0	**	*

*For more details, please refer to the attach CD.

2009 Malaysia Earnings Annoucement

AAR	Stdev	AAR t	0.99	0.95	0.9
-0.00598	0.083668	-0.87176	0	0	0
-0.00233	0.042253	-0.67342	0	0	0
0.001476	0.050219	0.358664	0	0	0
0.000646	0.042514	0.185416	0	0	0
0.002032	0.038531	0.643886	0	0	0
0.002001	0.044433	0.549737	0	0	0
0.000287	0.052496	0.066634	0	0	0
-0.00556	0.047674	-1.42426	0	0	0
0.004224	0.043079	1.196866	0	0	0
0.000241	0.053987	0.054552	0	0	0
-0.00348	0.040216	-1.05499	0	0	0
0.016944	0.055114	3.752702	***	**	*
-0.00398	0.051533	-0.94322	0	0	0
0.005297	0.043291	1.493676	0	0	0
-0.00223	0.045003	-0.60362	0	0	0
0.004258	0.03671	1.415778	0	0	0
0.002978	0.035519	1.023457	0	0	0
-0.00379	0.057056	-0.80983	0	0	0
0.012002	0.090691	1.615439	0	0	0
0.000197	0.073459	0.032693	0	0	0
-0.00074	0.038269	-0.23517	0	0	0

*For more details, please refer to the attach CD.

CAAR	Stdev	CAAR t	0.99	0.95	0.9
-0.00598	0.011696	-0.51091	0	0	0
-0.00831	0.011696	-0.71022	0	0	0
-0.00683	0.011696	-0.58405	0	0	0
-0.00619	0.011696	-0.52884	0	0	0
-0.00415	0.011696	-0.35506	0	0	0
-0.00215	0.011696	-0.18396	0	0	0
-0.00186	0.011696	-0.15946	0	0	0
-0.00743	0.011696	-0.63508	0	0	0
-0.0032	0.011696	-0.27392	0	0	0
-0.00296	0.011696	-0.25329	0	0	0
-0.00644	0.011696	-0.55048	0	0	0
0.010506	0.011696	0.898252	0	0	0
0.006524	0.011696	0.557779	0	0	0
0.011821	0.011696	1.010718	0	0	0
0.009596	0.011696	0.820439	0	0	0
0.013853	0.011696	1.184487	0	0	0
0.016831	0.011696	1.439119	0	0	0
0.013046	0.011696	1.11547	0	0	0
0.025048	0.011696	2.14168	0	**	*
0.025245	0.011696	2.158502	0	**	*
0.024508	0.011696	2.095464	0	**	*

*For more details, please refer to the attach CD.