# Short Run Stock Overreaction: Evidence from Bursa Malaysia 

NORLI ALI ${ }^{a^{*}}$, ANNUAR MD NASSIR ${ }^{b}$, TAUFIQ HASSAN ${ }^{c}$ AND<br>SAZALI ZAINAL ABIDIN ${ }^{d}$<br>$a^{*}$ Universiti Teknologi MARA<br>b,c,dUniversiti Putra Malaysia


#### Abstract

The objective of this paper is to discuss evidence of short run stock overreaction with respect to the arrival of dramatic events in the Malaysian stock market. The findings reveal that Malaysian stock market overreacts to economic crisis and extraordinary political events. The study shows significant overreaction behaviour existed in this market upon announcement of the removal of the deputy prime minister and announcement of the resignation of the prime minister. In contrast, evidence of underreaction was detected upon announcement of the national election. With regards to dramatic international events, Malaysian stock markets only disclose evidence of stock overreaction behaviour to SARS outbreak.


Keywords: Stock overreaction, EMH, Bursa Malaysia

## INTRODUCTION

Fama (1970) defines stock market as efficient if stock prices fully reflect all available information. This definition implies that the available information cannot be used to forecast stock prices in a fully efficient market. It is due to the reason that the current market price of a stock is the best estimates of its value and therefore should reflect all available relevant information. The price of a stock as well, is expected to change immediately and unbiasedly upon the arrival of new information. However, many published works (De Bondt and Thaler, 1985, 1987; Fung, 1999; Gaunt, 2000; Lai, et al., 2003 and Iihara et al., 2004) found evidence suggesting that over the long run, some predictability may exist in stock returns. These long term and

[^0]short term behaviour in returns is often characterized as evidence of overreaction and under reaction by market participants. Majority of studies in these areas have been performed in the US and UK's market. Until recently, there are a few studies related to these issues are documented for the Malaysian stock market (Lai, et al, 2003; Ahmad and Hussain, 2001 and Hameed and Ting (2000). The objective of this paper is to investigate evidence of stock overreaction upon arrival of extraordinary events in the Malaysian stock market.

This paper is divided into six sections. Section two will briefly discuss the idea of stock overreaction and its implications to EMH while section three talks about stock overreaction behaviour and the arrival of dramatic events. Section four and five elaborate the methodology and findings of this study respectively. Section six summarizes the study.

## STOCK OVERREACTION AND IMPLICATIONS TO EMH

Overreaction is a notion which suggests that, like human behaviour, stock price also has a tendency to overreact to extremely good and bad news. This behaviour is generally resulting from market participants who overreact to the arrival of the new dramatic event but correct their behaviour later. Such market overreaction behaviour proposes that stocks that perform best (worst) over an initial period tend to perform worst (best) in the subsequent period. One strategy that is synonym with stock overreaction is the Contrarian Strategy. The contrarians assume that market overreacts to events in such a way that extremely negative news pulls the stock very much below its true value and extraordinary positive news push the stock's price well above its fair value. This is due to the reason that investors tend to overreact to extreme information that it generate such price movements that go beyond the new justified equilibrium level. Later, as investors realize that they have unduly reacted to the information and take corrective action, price will change to the opposite direction of the initial movements and approached its true equilibrium level. This phenomenon suggests that there is some predictability exists in stock market where loser (winner) firms in one period are likely to win (lose) in the subsequent period. So, strategy that based on Overreaction Hypothesis such as contrarian strategy of buying loser firms and selling winner firms is able to consistently earned potential abnormal returns. Consistent abnormal profits earned by such strategies appear inconsistent with market efficiency, in which, it violates the weak form market efficiency. EMH argues that current prices formed in a competitive and well-regulated market place reflect all known relevant information. According to Ariff, Shamsher and Annuar (1998), it is not possible to make consistent predictions about how future prices will move based on past price patterns. It is because, price changes are not due to stock overreaction and underreaction, but are due to new information, which includes new interpretation of existing information, given more recent developments. Therefore, knowing
historical price data will not enable investors to consistently earned abnormal returns. However, as mentioned above, many studies have documented the existence of stock overreaction behavior in various stock markets.

If stock overreaction exist in Bursa Malaysia, then it would be possible to predict future prices based upon past price information to earn excess profit. This also means that stock prices on Bursa Malaysia will not be in its weak form efficiency if the evidence supports the overreaction or underreaction hypothesis.

## STOCK OVERREACTION AND THE ARRIVAL OF NEW INFORMATION

In an efficient market, stock price is expected to adjust rapidly and accurately to its new equilibrium level upon arrival of new information. Besides financial information, news about political, economic and social events will also be reflected in the stock prices. It is worth to note that the efficiency of the stock market depends on how investors deduce and react towards such events. If investors overreact towards such information, stock price will overshoots its target equilibrium level, and is expected to revert to its true equilibrium level in the subsequent period. There are a number of studies has been conducted such as Zhu (2007), Ising et. al (2006) and Michayluk and Neuhauser (2006) among others to test if stock price has overreacted towards arrival of new information. Most of these studies have focused on stock market returns following extraordinary price movements (either large price increase or large price declines). There is no study thus far that directly focused on stock overreaction behaviour upon arrival of specific events. However, one stream of research related to stock market reaction, although it is not directly related to stock overreaction hypothesis (such as Bilson, Brailsford and Hooper, 2002; Bialkwoski, Gottschalk and Wisniewski, 2008; Maloney and Mulherin, 2003 among others) concentrates on extreme and dramatic events. Such extreme and dramatic events include stock market crashes, political events, and catastrophic events like earthquakes, terrorist attacks, war and many more. Their studies mostly ponder around price discovery, valuation and volatility of stock prices. Findings from their studies show significant impact of extreme events on market reaction. Bursa Malaysia, being an emerging market will be affected by price over and underreaction in response to such events. Such unexpected events can create stress in the stock market and consequently, may cause market participants to lose their ability to rationally assess the valuation implication of the events, which may results in stock overreaction and underreaction behaviour. In Malaysia, Jothee and Annuar (2007) however have performed a study to measure the speed of price adjustment to corporate announcements while Otchere and Chan (2003) look into the stock overreaction behaviour in Hong Kong stock market around the period of 1997 Asian Financial Crisis. Jothee and Annuar (2007) confirm that there is evidence of price overreaction to new information in Bursa Malaysia.

This current study divides extreme events into three categories namely domestic events, international events and economic events. Domestic events will comprise of general elections, resignation of the Malaysian Prime Minister and removal of the deputy prime minister of Malaysia. Gulf Crisis, Invasion of Iraq, Sept $11^{\text {th }}$ terrorist attacks on US, Severe Acute Respiratory Syndrome (SARS) and Asian Tsunami are group into international events while 1987 Financial Market Crisis and Asian Financial Crisis into economic events. The reason why this study uses political events to represent domestic events is because in Malaysia, political involvement is very strong such that business and politics are interrelated. According to Chen (2005), about $20 \%$ of market capitalization in Malaysia comprised of politicallylinked firms. Therefore, surprise in political news may have an impact on investors' overreaction behaviour. Moreover, study by Bilson, Brailsford and Hooper (2002) prove that political risk may be able to explain some of the variation in emerging market returns. If political risk is important in explaining returns variation in emerging market, then it may have influence on investors' overreaction behaviour. In another study, Bialkowski, Gottschalk and Wisniewski (2008) find evidence that investors are surprised by the election outcome, thus suggesting that general election may be able to explain overreaction behaviour of the stock market.

Economic events such as market crash and crisis are also considered as important factor in the study of stock overreaction hypothesis. Previous studies like Michayluk and Neuhauser (2006) and Otchere and Chan (2003) have found that stock market tend to overreact in times of crisis. Besides economic events like market crash and crisis, security prices are also reacting to catastrophic events. Studies on stock price reaction to disaster have been conducted by Maloney and Mulherin (2003), and Shelor, Anderson and Cross (1990) among others. Their findings suggest that security prices has significantly reacts to such events. If catastrophic events have an impact on stock reaction, price discovery and valuation as presented by the above researches, it may have an influence on the behaviour of stock market in the context of stock overreaction hypothesis. For the purpose of this study, dramatic events namely Severe Acute Respiratory Syndrome (SARS), Asian Tsunami, Sept 11 ${ }^{\text {th }}$ terrorist attack, Gulf Crisis, Invasion of Iraq on Kuwait have been chosen to represent international events as these events occurs at the international level. This study investigates investors' overreaction behaviour to catastrophic events namely SARS outbreak and Asian Tsunami because these two devastating events had greatly affected the economy of the affected area and thus might as well affect the behaviour of their respective investors. Meanwhile, invasion of Iraq and the Gulf crisis involves oil producing country and therefore will have an effect on oil prices. It is well known that oil prices play an important role in stock pricing and thus might influence investor's behaviour. Findings from this study will have an important implication for the strategies of institutional and individual investors.

## METHODOLOGY

Table 1 summarizes list of events that occurred over the period of this study over the period between January 1987 and December 2006.

Table 1 List of events between January 1987 and December 2006

| Events | Date |
| :--- | :---: |
| Domestic |  |
| Announcement of the 8th general election | 4 October 1990 |
| Announcement of the 9th general election | 6 April 1995 |
| Announcement of the 10th general election | 10 November 1999 |
| Announcement of the 11th general election | 4 March 2004 |
| Announcement on the removal of the then Deputy Prime Minister | 2 September 1998 |
| Announcement on the resignation of the then Prime Minister | 22 June 2002 |
| International |  |
| The Gulf crisis | 3 August 1990 |
| The September 11th | 11 September 2001 |
| SARS Outbreak | 14 March 2003 |
| Invasion of Iraq | 21 March 2003 |
| 2004 Asian Tsunami | 26 December 2004 |
| Economics |  |
| 1987 Crash | 16 October 1987 |
| Asian Financial Crisis | 4 July 1997 |

Sources: Sazali (2004), Bernama Online and major newspaper.
Daily stock return is calculated as:

$$
R_{i t}=\left(\ln P_{t}-\ln P_{t-1}\right) * 100
$$

Where () is the stock return in day $t$ and is computed as the difference in natural logarithmic between today's and yesterday's closing price $(P)$ obtained from Datastreams. The formation period is defined as the current sub-period itself, whereas the test period is defined as the next sub-period that comes right after the current sub-period. The 20-year period of the study provides twenty seven formation periods and its matching test periods as summarized in Table 2.

Table 2 Formation period and subsequent test period for each sub-period

| Events | Formation period | Test period |
| :---: | :---: | :---: |
| Pre 1987 crash | 2 Jan 1987-15 Oct 1987 | 16 Oct 1987-31 Dec 1987 |
| During 1987 crash | 16 Oct 1987-31 Dec 1987 | 1 Jan 1988-2 Aug 1990 |
| Post 1987 crash | 1 Jan 1988-2 Aug 1990 | 3 Aug 1990-3 Oct 1990 |
| During Gulf Crisis | 3 Aug 1990-3 Oct 1990 | 4 Oct 1990-21 Oct 1990 |
| During $8^{\text {th }}$ general election (GE) | 4 Oct 1990-21 Oct 1990 | 22 Oct 1990-15 Nov 1990 |
| Post $8^{\text {th }}$ GE | 22 Oct 1990-15 Nov 1990 | 16 Nov 1990-5 Apr 1995 |
| Pre $9^{\text {th }}$ GE | 16 Nov 1990-5 April 1995 | 6 Apr 1995-25 Apr 1995 |
| During $9^{\text {th }} \mathrm{GE}$ | 6 Apr 1995-25 Apr 1995 | 26 Apr 1995-23 May 1995 |
| Post $9^{\text {th }}$ GE | 26 Apr 1995-23 May 1995 | 24 May 1995-3 July 1997 |
| Pre Asian Financial Crisis | 24 May 1995-3 July 1997 | 4 July 1997 - 1 Sept 1998 |
| During Asian Financial Crisis | 4 July 1997-1 Sept 1998 | 2 Sept 1998-8 Jan 1999 |
| During Removal of the DPM | 2 Sept 1998-8 Jan 1999 | 9 Jan 1999-9 Nov 1999 |
| Post removal of the DPM | 9 Jan 1999-9 Nov 1999 | 10 Nov 1999-20 Nov 1999 |
| During $10^{\text {th }} \mathrm{GE}$ | 10 Nov 1999-20 Nov 1999 | 21 Nov 1999-30 Dec 1999 |
| Post $10{ }^{\text {th }} \mathrm{GE}$ | 21 Nov 1999-30 Dec 1999 | 31 Dec 1999-10 Sept 2001 |
| Pre September $11^{\text {th }}$ | 31 Dec 1999-10 Sept 2001 | 11 Sept $2001-28$ Dec 2001 |
| During September $11^{\text {th }}$ | 11 Sept $2001-28$ Dec 2001 | 29 Dec 2001-21 June 2002 |
| Post September 11 ${ }^{\text {th }}$ | 29 Dec 2001-21 June 2002 | 22 June 2002-13 March 2003 |
| During Resignation of the PM | 22 June 2002-13 March 2003 | 14 March 2003-20 March 2003 |
| During SARS Outbreak* | 14 March 2003-20 March 2003 | 21 March 2003-15 Apr 2003 |
| During Invasion of Iraq | 21 March 2003-15 Apr 2003 | 16 Apr 2003-3 March 2004 |
| Post Invasion of Iraq | 16 Apr 2003-3 March 2004 | 4 March 2004-21 March 2004 |
| During $11^{\text {th }} \mathrm{GE}$ | 4 March 2004-21 March 2004 | 22 March 2004-14 Apr 2004 |
| Post $11^{\text {th }} \mathrm{GE}$ | 22 March 2004-14 Apr 2004 | 15 Apr 2004-24 Dec 2004 |
| Pre Asian Tsunami | 15 Apr 2004-24 Dec 2004 | 26 Dec 2004-9 Jan 2005 |
| During Asian Tsunami | 26 Dec 2004-9 Jan 2005 | 10 Jan 2005-31 Dec 2005 |
| Post Asian Tsunami | 10 Jan 2005-31 Dec 2005 | 1 Jan 2006-31 Dec 2006 |

For pre-1987 crisis, the study firstly identifies all firms in Bursa Malaysia with a complete set of returns from 2 January 1987 to 15 October 1987. Secondly, on 15 October 1987, the study then computes Cumulative Abnormal Returns (CAR) for each stock over the sub-period as:

$$
C A R_{i}=\sum_{t=1}^{286} A R_{i t}
$$

Where is the Cumulative Abnormal Returns for stock $i$ over 286 days starting on 2 January 1987 and ending on 15 October 1987 (the formation period). is the abnormal return for stock $i$ of day $t$. The study then rank all those stocks from high to low based on their CARs. The top $10 \%$ is placed in the winner portfolio while the bottom $10 \%$ is in the loser portfolio. On 31 Dec 1987, which is the last day of test period for pre-1987 crisis, the study once again calculates CARs for every
stock from the winner and the loser portfolio over the period of 70 days from 16 October 1987 to 31 December 1987.

$$
C A R_{i}=\sum_{t=1}^{70} A R_{i t}
$$

The study then investigates for evidence of overreaction by comparing the performance of the winner and loser portfolios during the test period. To achieve this objective, the study uses parametric t-test for two independent samples. The null and alternative hypotheses are as follows:

$$
\begin{aligned}
& H_{0}: \overline{C A R s_{L}}=\overline{C A R s_{W}} \\
& H_{l}: \overline{C A R s_{L}}>\overline{C A R s_{W}}
\end{aligned}
$$

The mean difference in the CARs of the loser and winner portfolios are estimated and tested using the t - test. Positive and significant t -values imply that loser portfolio has outperformed winner portfolio during the test period. The above procedures are repeated for the rest of the sub-periods.

## FINDINGS

## Economics Events

As presented in Table 3, the findings of the study reveal that investors overreact in times of crisis. For 1987 crash, for both loser and winner that was formed pre, during and post crisis, the results were consistent with stock overreaction behaviour.

Table 3 Differences in CARs in the test period: Economic events

| Events | Mean Loser | Mean Winner | Mean Loser-Winner | t-stat |
| :--- | :---: | :---: | :---: | :---: |
| 1987 Crash |  |  |  |  |
| Pre | 2.7929 | -9.5481 | 13.34098 | $1.886^{*}$ |
| During | 23.1065 | -65.6626 | 88.76908 | $5.126^{* * *}$ |
| Post | 12.5528 | -9.7782 | 22.33099 | $4.775^{* * *}$ |
| Asian Financial Crisis |  |  |  |  |
| Pre | -48.3196 | -88.5798 | 40.2601 | $2.513 * * *$ |
| During | 25.8496 | -37.8612 | 63.71082 | $8.239 * * *$ |

Note: ${ }^{*}, * *$ and $* * *$ indicate significant at $10 \%, 5 \%$ and $1 \%$ respectively.
Loser portfolio has been undervalued pre, during and post 1987 crash and reversed in the subsequent period after investors realized that they have overly undervalued those stocks. In contrast, for winner portfolio, investors have been
overly optimistic about these stocks and push the prices above what they should have been. Prices reverse in the subsequent period once investors realize of the overvaluation. These results are therefore consistent with overreaction hypothesis, which states that extreme movement in stock prices will be followed by subsequent price movement in the opposite direction. The results also show that loser has significantly outperformed winner at $10 \%, 1 \%$ and $1 \%$ for pre-, during and post 1987 crash respectively. These results are consistent with those reported by Michayluk and Neuhauser (2006). In their study, they also found evidence that suggest investors overreact in time of crisis.

Figure 1, Figure 2 and Figure 3 clearly show the reversal behaviour for both loser and winner portfolio pre-, during and post 1987 Crash respectively. The graphs exhibit that the formation period loser portfolio has reversed and becoming winner by earning positive abnormal returns in all sub-periods, namely pre-, during and post 1987 Crash. On the other hand, the winner portfolio has also subsequently reversed in all the sub-periods mentioned above. Furthermore, the graphs also show that loser has outperformed winner as presented by the positive abnormal returns earned by the arbitrage portfolio in all the three sub-periods. Notice that


Figure 1 CARs in the test period of pre-crash 1987


Figure 2 CARs in the test period of during crash 1987
the reversal behaviour took place as early as one day after the formation period for each sub-period of pre-, during and post 1987 Crash, and 10 days after the formation period for during 1987 Crash. These patterns are generally consistent with the overreaction hypothesis. So, this study concludes that Malaysian stock market overreacts to 1987 Financial Market Crash.


Figure 3 CARs in the test period of post crash 1987

As exhibited in Table 3, the study also reveals that portfolios formed during the Asian Crisis have significantly reversed their fortune in the subsequent period with loser outperformed winner at $1 \%$ significant level. However, portfolios formed in pre crisis sub-period present mixed results with only the winner portfolio exhibit the reversal behaviour whereas the loser portfolio indicates continuation behaviour. Notice that the test period for the pre-Asian Financial Crisis falls during the Asian Financial Crisis period and it is generally known that in a crisis period, it is more likely that the market will overreact to bad news (Otchere and Chan, 2003). Therefore loser will likely to continue to become loser in the crisis period (test period for pre-crisis) and as a result, no reversal behaviour is observed for loser portfolio in Pre-1997 Asian Financial Crisis. Nevertheless, loser portfolio has significantly outperformed winner at $1 \%$ significant level and this result is consistent with the overreaction hypothesis. Findings of this study are also consistent with that of Otchere and Chan (2003) for Hong Kong Stock Market. In conclusion, Malaysian stock market overreacts to 1997 Asian Financial Crisis and the overreaction is more pronounced for winner than for loser. Such behaviour is not surprising since overreaction behaviour seems to be asymmetric in nature. Figure 4 and Figure 5 further illustrates the overreaction behaviour in a graphical form. Notice that arbitrage portfolio earned positive abnormal returns for both pre- and during 1997 Asian Financial Crisis, which indicates that loser has outperformed winner as predicted by the overreaction hypothesis. It is worth to note that the overreaction effect is more pronounced in sub-period during the 1997 Asian Financial Crisis than the pre-1997 Asian Financial Crisis sub-period. Figure 5 shows that both loser and winner portfolios formed during the crisis has
reverse even after one day of the test period. Meanwhile, winner portfolio formed prior to the crisis only reversed in about 10 days after the formation period. Loser portfolio on the other hand, shows continuation behaviour in the test period of pre- sub-period. However, arbitrage portfolio of buying loser and selling winner earned positive abnormal returns, thus consistent with the overreaction hypothesis.


Figure 4 CARs of pre-1997 Asian financial crisis


Figure 5 CARs of during 1997 Asian financial crisis
Overall, this study suggests that Malaysian stock market overreacts to economic crisis. The reason for the overreaction could be due to abnormal economic activity that taken place during the crisis period. The stock market may not be fully efficient during the period.

## Domestic Events

The findings of the study as summarised in Table 4 reveals that Bursa Malaysia overreacts to announcement of removal of the Deputy Prime Minister (DPM) and announcement of resignation of the Prime Minister (PM) at $1 \%$ significant level.

Contrarian strategy of selling winner and buying loser formed during removal of the DPM are able to generate abnormal return up to $20 \%$ while those formed during resignation of PM earns potential significant profit of $5 \%$. Evidence of stock overreaction behaviour to removal of the DPM and resignation of the PM is very much anticipated by the study. It is because; both leaders namely Datuk Seri Anwar Ibrahim and Tun Dr. Mahathir Mohamad are known to be very good and knowledgeable economist. Furthermore, both of them hold the position of Finance Minister during their services. Therefore, removal of the former and resignation of the latter will have an impact on the Malaysian stock market which in turn might have an influence on investors' overreaction behaviour in this market.

Table 4 Differences in CARs in the test period: Domestic events

| Events | Mean Loser | Mean Winner | Mean Loser-Winner | t-stat |
| :---: | :---: | :---: | :---: | :---: |
| Removal of the DPM |  |  |  |  |
| During | -7.8542 | -28.7418 | 20.8876 | 2.869*** |
| Post | 0.2538 | 2.5214 | -2.26762 | -1.253 |
| Resignation of the PM |  |  |  |  |
| During | 5.863 | 0.597 | 5.266 | 3.796*** |
| 8th General Election |  |  |  |  |
| During | 0.8391 | 0.1202 | 0.71884 | 0.17 |
| Post | 10.1119 | 23.7397 | -13.6278 | -2.008** |
| 9th General Election |  |  |  |  |
| Pre | -4.2435 | -2.3441 | -1.899 | -1.292 |
| During | -7.2702 | -1.1929 | -6.07724 | -2.008** |
| Post |  |  |  |  |
| 10th General Election |  |  |  |  |
| During | -2.3219 | 7.77814 | -10.10322 | -3.458*** |
| Post | -57.8815 | -27.1788 | -30.70272 | -3.004*** |
| 11th General Election |  |  |  |  |
| During | -5.4742 | -1.8039 | -3.67031 | -1.592 |
| Post | -76.3221 | -35.4326 | -40.88951 | -2.815*** |

Notes: *, ** and ${ }^{* * *}$ denote significant at $10 \%, 5 \%$ and $1 \%$ respectively
The results also presents no evidence of stock overreaction behaviour existed in the Bursa Malaysia in the period when general elections have taken place. Instead, evidence of stock underreaction behaviour is observed in all general elections. The results show that winner has significantly outperformed loser in the subsequent period which is consistent with underreaction behaviour. One possible explanation to the absence of stock overreaction behaviour to announcement of general elections is that the general elections have been well announced and well deliberated in mass media. Therefore, investors have been well informed of the events. As a result, stock market is not expected to show much overreaction
behaviour during the general election. Moreover, results of Malaysian general election are highly predictable. Since independence, the winning party is always the ruling government's party. Therefore, there is no surprise in the outcome of the general election. Unless there is a surprise in the general election outcome, then evidence of overreaction behaviour might be existed in the stock market.

## International Events

Table 5 presents results of stock overreaction behaviour with respect to international events over the period of January 1987 through December 2006. Out of five events, only one event namely SARS outbreak provides significant evidence of stock overreaction behaviour. To our surprise, the study shows that both wars namely the Gulf crisis and war on Iraq do not have any impact on Malaysia stock market. Generally, both wars that occurred in oil producer countries will have an impact on oil prices. Oil prices will increase and that will affect the economy of the world. Therefore, some reactions from the Malaysian stock market are expected to occur. However, surprisingly, this study found no evidence of investor overreaction behaviour towards these two events namely the Gulf Crisis and Invasion of Iraq in Bursa Malaysia.

The study also shows no significant evidence of stock overreaction hypothesis for pre-, during and posts 2004 Asian Tsunami. Although the devastating event had

Table 5 Differences in CARs in the test period: International events

| Events | Mean Loser | Mean Winner | Mean Loser-Winner | t-stat |
| :--- | :---: | :---: | :---: | :---: |
| Gulf Crisis |  |  |  |  |
| $\quad$ During | -3.7485 | -4.9644 | 1.21593 | 0.428 |
| Sept 11 |  |  |  |  |
| Pre | -12.3178 | -3.5777 | -8.74006 | $-2.23^{* *}$ |
| During | -12.4616 | -10.1715 | -2.29006 | -0.345 |
| $\quad$ Post | -28.8652 | -12.6489 | -16.2163 | $-2.408^{* * *}$ |
| SARS outbreak |  |  |  |  |
| $\quad$ During | -0.7259 | -4.0491 | 3.32321 | $2.043^{* *}$ |
| Invasion of Iraq |  |  |  |  |
| $\quad$ During | 9.7738 | 9.1748 | 0.59899 | 0.106 |
| Post | -0.2256 | 0.9964 | -1.22195 | -0.833 |
| 2004 Asian Tsunami |  |  |  |  |
| Pre | 2.4457 | 1.4366 | 1.00916 | 0.848 |
| During | -31.5179 | -38.4611 | 6.94321 | 0.897 |
| Post | 11.1970 | 7.7224 | 3.4742 | 0.421 |

Note: ${ }^{*},{ }^{* *}$ and ${ }^{* * *}$ indicate significant at $10 \%, 5 \%$ and $1 \%$ respectively
greatly affected the economy of the affected area, it has not caused the Malaysian stock market to overreact. One possible explanation is that the economy quickly recovers because Malaysia has strong growth preceding the casualty. Furthermore, it does not greatly affect the economy of Malaysia as it did to Banda Acheh for example. Consequently, this event, although devastating might not resulted in investor overreaction in Bursa Malaysia.

## SUMMARY

This study find that Malaysian stock market has significantly overreacts to economic events. Findings of the study have documented significant evidence of stock overreaction where loser has significantly outperformed winner in both periods. These results suggest that investors overreact to abnormal economic activity. During this period of time, a series of positive news about a stock might have boosted investors' confidence and thus causing them to highly overvalue the securities. Once they realized of the overvaluation, and take corrective action, stock prices reverse in the subsequent period. The opposite is true for a series of negative news.

The study also finds that Bursa Malaysia overreacts to surprises in political news. Unexpected events namely the removal of the DPM and resignation of PM have caused investors to overreact. Well announced events like announcement of general election appear not to significantly caused investors overreaction behaviour in the stock market.

Unlike test for economic and domestic events that support stock overreaction behaviour in Bursa Malaysia, those of international events present mixed results. The study shows that Malaysian stock market has significantly overreact to SARS outbreak, while significantly underreact to September $11^{\text {th }}$ terrorist attacks. Although Gulf Crisis and Invasion of Iraq involve oil producing country, surprisingly, Malaysian stock market does not show any evidence of stock overreaction behaviour towards those events.

Overall, evidences of short term behaviour presented by this study propose that Bursa Malaysia is not consistent with the weak form of EMH in the short run. The results show that investors are able to earn abnormal profit by selling past winners and buying past loser upon surprises in political news and economic crisis for example. In addition to that, arbitrage strategy of buying past winner and selling past loser will give potential abnormal profit to investors upon announcement of general election. Therefore, this study suggest that knowing past performance of stocks enabled investors to beat the market when there is a surprise in information. So, this study concludes that Malaysian stock market is not weakly efficient in the short run.

## REFERENCES

Ahmad, Z. and Hussain, S. (2001) KLSE Long-run Overreaction and the Chinese New Year Effect, Journal of Business, Finance and Accounting, 28(1\&2), 63-112.
Ariff, M. Shamsher, M. and Annuar, M.N. (1998) Stock Pricing in Malaysia. Universiti Putra Press, pp 28-36.
Bialkowski, J., Gottschalk, K. and Wisniewski, T.P. (2008) Stock Market Volatility Around Netional Elections, Journal of Banking and Finance, 32, 1941-1953.
Bilson, C.M., Brailsford, T.J. and Hooper, V.C. (2002) The Explanatory Power of Political Risk in Emerging Market, International Review of Financial Analysis, 11(1), 1-27.
Chen, C.M. (2005) The effect of ownership structure and control on performance of special interest group-linked firms. Unpublished PhD. Thesis, UPM.
De Bondt, W.F.M. and Thaler, R.H. (1985) Does the Stock Market Overreact? Journal of Finance, 793-805.
De Bondt, W.F.M. and Thaler, R.H. (1987) Further Evidence on Investor Overreaction and Stock Market Seasonality, Journal of Finance, 557-581.
Fama, E.F. (1970) Efficient Capital Markets: A Review of Theory and Empirical Work, Journal of Finance, 383-417.
Fung, A.K. (1999) Overreaction in the Hong Kong Stock Market, Global Finance Journal, 223-230.
Gaunt, C. (2000) Overreaction in the Australian Equity Market: 1974-1997, Pacific Basin Finance Journal, 375-398.
Hameed, A. and Ting, S. (2000) Trading Volume and Short Horizon Contrarian Profit: Evidence from the Malaysian Market, Pacific Basin Finance Journal, 8, 67-84.
Iihara, Y., Kato, H.K. and Tokunaga, T. (2004) The Winner-loser Effect in Japanese Stock Returns, Japan and the World Economy, 471-485.
Ising, J., Schiereck, D. Simpson, M.W. and Thomas, W.T. (2006) Stock Returns Following Large 1-month Declines and Jumps: Evidence of Overoptimism in the German Market, The Quarterly Review of Economics and Finance, 1-22.

Jothee, S. and Annuar, M.N. (2007) The Speed of Price Adjustment to Corporate Announcements: A Bursa Malaysia Experience on Final Dividend Announcements, European Journal of Economics, Finance and Administrative Sciences, 7,7-21.
Lai, M.M., Guru, B.K., and Fauzias, M.N. (2003) Do Malaysian investors overreact? Journal of American Academy of Business, 602.
Maloney, M.T. and Mulherin, J.H. (2003) The Complexity of Price Discovery in an Efficient Market: The Stock Market Reaction to the Challenger Crash, Journal of Corporate Finance, 9,453-479.
Michayluk, D. and Neuhauser, K.L. (2006) Investor Overreaction During Market Declines: Evidence from the Asian Financial Crisis, The Journal of Financial Research, xxix(2), 217-234.

Otchere, I. and Chan, J. (2003) Short-term Overreaction in Hong Kong Stock Market: Can a Contrarian Strategy Beat the Market? Journal of Behavioral Finance, 4(3), 157-171.
Shelor, R.M., Anderson, D.W. and Cross, M.L. (1990) The Impact of California Earthquakes on Real Estate Firms' Stock Value, The journal of Real Estate Research, 5(3), 335-340.

Zhu, J. (2007) Do Investors Over- or under-react? Evidence from Hong Kong Stock Market, Journal of American Academy of Business, Cambridge, 11(2), 58-61.


[^0]:    * Corresponding author: Email: norliali71@gmail.com

    Any remaining errors or omissions rest solely with the author(s) of this paper.

