

University of Nottingham

**An analysis of the impact of political news on Thai stock
market**

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MA Risk Management

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by

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ABSTRACT

Political risk is one of the crucial factors influencing the operation of a country's financial market as widely claimed by numerous studies. Many examples of the events which are considered as a political risk are the switch in regimen, a revolution, a coup incident, or a civil war. In Thailand, one of the most recent incidents contribute to the instability of the country's political situation which received much of public attention worldwide is the 2006-military coup. Not only the coup itself, the demonstrations by all groups of people both for and against the government also play an important role in causing political risk in the country and affect investors' decision to invest in Thai stock market. The most common way I think for this risk to transmit its effect on the country's stock market is through the announcement of political news. That is, investors reevaluate their investment plans after the recognition of political situation in the country from those news.

Regarding to this assumption, it is thus interesting to investigate the impact of political news on Thai stock market. Though there are abundant of existing academic literatures in this area, Thailand provides a unique research context due to the complication in its political system and its position as a developing country. The main model I used here for the analysis is the Generalized Autoregressive Conditional Heteroscedasticity in mean or GARCH-in-mean model. The distinctiveness of this model is that it takes account of risk as measured by the time-varying variance (or volatility term) in the estimation of stock returns. In particular, this implies the relationship between risk and return of the assets. Based on the concept of the GARCH-M model, three model specifications were identified in order to examine the impact of favorable and unfavorable political news on stock returns and volatility which are GARCH (1,1)-M, EGARCH, and APARCH model where the APARCH is the most general form of the other two. Note that the EGARCH and APARCH model specifications are selected to be used because their ability in capturing the asymmetric effect of the impact between favorable and unfavorable news on stock return. For the stock data, I employed a historical daily data of the SET index returns. This is a composite index which composes the price of all common stock traded in

Thai stock market. The study period of this dissertation starts from January 1, 2004 to October 1, 2008. Moreover, this is separated into two sub-periods which pre- and post-coup period.

Mainly, there are four hypotheses to be tested in this study including 1) there is a difference in stock market volatility between the event day and non-event day 2) the difference in stock market volatility between the event and non-event day is higher after the coup 3) major political news has a significant impact on both stock market returns and volatility and 4) the impact of major political news on stock market returns and volatility was amplified after the coup incident. For the first two hypotheses, the results from a nonparametric Mann-Whitney test show that stock volatilities in the event day are significantly difference from those in the non-event days in both pre- and post-coup period. Besides, it is apparently proved that SET index returns appear to be negative on the day in which unfavorable news was released and the opposite occur on the day in which favorable news was released.

For the third and fourth hypotheses, the results from estimating the GARCH (1,1)-in-mean, the EGARCH, and the APRACH model specifications indicate a significant impact of favorable(unfavorable) news on the increase(decrease) in SET index returns. Similarly, both types of news also have a significant effect on SET index volatility in a way that it increases the volatility of the stock market. An incredibly surprising finding is that the effect of positive and negative political news on stock returns is symmetric which is rare in the real world. However, we failed to find an evidence of the latest coup on stock return and its amplification effect as well as the risk premium, though a significant impact of coup on stock volatility is evidenced. Lastly, the leverage effect of political news on stock market has been found also the persistence of shocks from the news on stock volatility. In conclusion, these results imply the importance of political instability on the health of Thai stock market.

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Chapter I – Introduction

It is no doubt that political risks is regarded as one of the most vital risks to every countries because the damage created by this risk can costs a significant amount of money and the risk itself affects both the country's macro- and micro-level economic system. Basically, political risks can come in many forms such as a new piece of legislation, coup, an election, or a change in the country's regimen where many examples in the past can be used to demonstrate the adverse impact of political risks on the country's economy. For instance, Fiji, which once used a coup as a weapon to overthrow the democratic government, was hurt on its economy due to this political risk especially in the post-1987 period as reported that the May 2000 coup has caused an economic depression, a slump in tourism industry, and threatened the collapse of the sugar and garment industries (O'Brien, 2006). Besides, it was evidenced that Fiji's gross domestic product fell 7.7 percent after this coup and, in the long-run, real national welfare and real consumption is expected to fall by around 7 and 2 per cent, respectively (Narayan and Prasad, 2007).

Another apparent empirical case of the impact of political event on the whole economy is the sudden and devastating tragedy of September 11th, 2001 in the US. Definitely, it cannot be rejected that the most harmful part of all terrorism is the destruction of lives but the impact on economic system is another issue that should also be concerned. Though it was said that the effect of the 9/11 terrorism was only a short-term moderate effect because of the action of the Federal Reserve to facilitate the credit available to the consumer by cutting the interest rate and add more liquidity to banks in the face of crises by lessening the borrowing requirement for the banks, the long-term effects of the attack has continued for

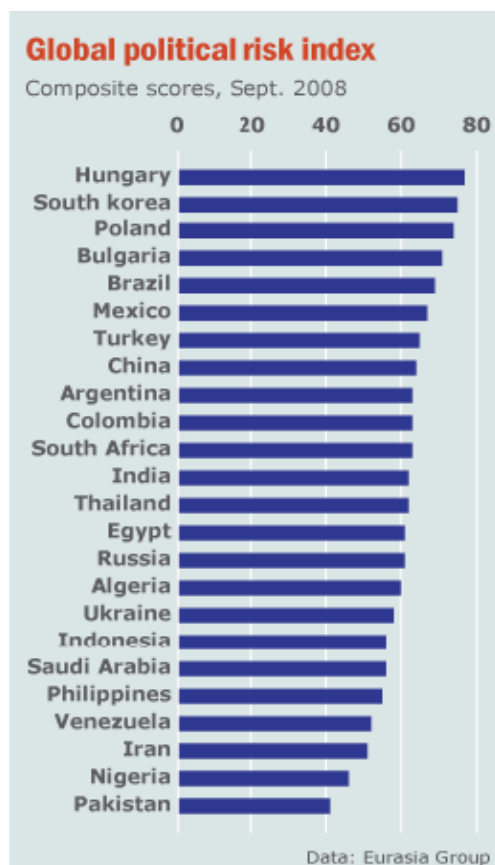
some period of time. That is, there was a decrease in the country's capital stock and the consumers and investors lost their confidences due to this political uncertainty as revealed by the poll from CNN that 40 percent of the respondents planned to cut back their spending and 42 percent want to reduce their travel expenditure (Kheifetz, 2005).

According to the Report for Congress by Makinen (2002), it is estimated that about 130 thousand people lost their job owing to this attack. Moreover, certain industries was also seriously affected by the 9/11 incident especially the airline, hotel, and insurance industries. The airline industry faced a heavy loss from the lack of consumer confidence and the insurance companies was put in trouble because of a huge amount of insurance claim caused by this kind of terrorism which has never been occurred before in the American history. On top of that, the biggest long-term effect seems to be the security cost which will be charged more to the consumer in many industries such as transportation, power stations, and especially the airline industry.

Political risks not only cause an unpleasant impact on the macro-level economy, but extreme political events also affect the economy on a micro-level as well. Many empirical works have examined the effect of political risks either on certain industries or the country's stock market however much of those works focused on the political issues in developed countries and less works are carried out in the context of emerging or developing countries even though the political environment in these countries is less stable which make them a motivating topic for the research purpose. One developing country where political situation was now being in public attention is Thailand. In particular, it is now being deemed as one of the highest political risks when compared with its regional peers. According to the risk indicator measured by the risk analysis firm, IHS Global Insight, Thailand is the country with

highest perceived risk that the company should be aware when operating the business in the country. Currently, its risk rating is equal to 3.25 while Malaysia, Indonesia, and

Figure 1 Global political risk index



Philippine's rating is 2.75, 2.50, and 2.75, respectively. Likewise, the WGI project conducted by the World Bank which revealed that Thailand's relative world ranking on the degree of political instability was higher year by year from 31.7 in 2004 to 12.9 in 2008 (Chalmers, 2009). Also, the Global Political Risk Index produced by the Eurasia's group, the world's leading political risk research and consulting firm, shows that Thailand is another country, apart from Russia and Pakistan, in which political risks is on the rise. The risk composite scores which is calculated from 20 indicators in four equally weighted categories including government, society, security, and

economy is exhibited in figure 1. This score ranges from 0 to 100. The higher the score, the more stable the country where Thailand's composite score is 62 (Lesova, 2008). All of these indexes and ratings emphasize the image of political risky country of Thailand in the view of both domestics and foreign investors.

Talking about political situation in Thailand, basically political distress in this country began to be more aggressive during the last 5 years. Different viewpoints about political issues in

Thailand has caused a disharmony among Thai people and resulted in two main separate political groups: pro-government and anti-government, so-called red-shirt (PPP) and yellow-shirt (PAD). The demonstrations of these two groups both against and for the former Prime Minister, Thaksin Shinawatra, became more severe as day goes by particularly when the excuse of the yellow-shirt people was related to the stability of the Royal Family. The situation is even more violent after the 2006-coup and when Abhisit Vejjajiva was nominated as a new Prime Minister by the congress while the red-shirt felt that PM Abhisit does not acquire his position rightfully and transparently and called for a new democratic election by holding a big rally in the center area of Bangkok. The harshest political incident in the last decade of Thai history happened on the 10th of April 2010 when PM Abhisit released an order for the army to terminate the red-shirt rally, which killed at least 25 people, followed by the Emergency Decree announcement.

Apparently, it was widely known that those political events adversely affect the confidence of both domestic and foreign investors as the volatility of stock market is increased which lead to the uncertainty of the investment expected cash flows. This fact is quite practical not only in emerging or developing countries but also in the European countries which have a more developed political system as recently reviewed by Apps (2010), Reuters' reporter, that *"[f]rom southern Europe's debt crisis to U.S. banking reform, politics has emerged as a driver of volatility in Western markets this year in a way normally more associated with emerging economies"*. For this reason, it can thus be anticipated that the impact of these risks on the country's stock market should be significant and it is interesting, for both academic and business administrative aspects, to explore how political risks contribute to the movement in stock market. This fact leads to the theme of this dissertation that is to

investigate the impact of political risks on the volatility and change of Thailand's stock market. More specifically, the effect of the release of political news regarding major political events in the country on stock returns and volatility will be inspected by employing a well-known nonlinear GARCH model. This model was used extensively in many previous academic works concerning the influence of news upon security prices. The outline of this dissertation is as followings: next chapter reviews existing academic literatures associated with the impact of a specific tremendous event both political and economic on stock returns and volatility in different countries. The third chapter is a brief summary about Thailand political background and major political events which are expected to have an important effect on the country's stock market. The fourth chapter involves a description of the stock data, a framework and statistical models which will be utilized for the investigation of the impact of political news on stock returns and volatility also includes the preliminary data analysis. The fifth chapter exhibits the empirical results found from the estimation and the test of models' robustness and reliability. Finally, last chapter is a concluding remark discussing about all crucial implications derived from this study as well as some limitations and a suggestive direction for future researches.

Chapter II - Literature Reviews

The behavior and fluctuation of security prices during the period of dramatic events have undergone an extensive empirical investigation by the researchers for a long time. Unexpected events can produce so much stress and uncertainty that market participants are unable to accurately and rationally assess the value of a security which in turn, causes volatility in the market. In this direction, a large number of papers have examined the behavior of security price when there is an uncertainty in financial markets after the turbulent phenomena and a review of some of those papers is presented below.

2.1) The Relationship between Political Risk and Security Prices

The relationship between political risk and stock market which is the main focus of this dissertation is one of the interesting issues that has been explored by a numerous academic literatures both in the developed and emerging countries especially in this modern era where there is a rapid development in a communication system which enables an individual to access all political information and quickly response to that news. One of the recent researches in this area is introduced by Chuang and Wang (2009). Basically, they aimed to examine the effects of political change (which is defined in the paper as the transition of ruling party in president and prime ministers) in developed stock markets by adopting a panel data analysis as a methodology since it is assumed that the country-specific effect exists. The data utilized in this paper for the analysis is the daily stock return data for individual country indices including Nikkei 225, SBF-250, FTSE 30, and Dow Jones 30.

Generally, there are two techniques of the panel data analysis. Each of which has different assumptions and fits the data with different characteristics, that is, the fixed effect model takes a country-specific as a constant term in the regression therefore the term 'fixed' indicates that the country-specific term does not vary over time while, in the random-effect model, country-specific effects are treated as stochastic thus it changes over time. Here, the paper performed a Hausman test to determine the preferred model and the result showed that the fixed-effect model is a preferable one. By using this model, stock returns of each country in each time period are regressed on a set of dummy variable reflecting political change impact, a one-period lagged stock returns, a constant term represents individual specific variable, and a residual.

The empirical results from the fixed-effect model indicated that a political change dummy coefficient is significantly negative at 5% significant level on all stock markets which is an indicative of negative relationship between the American, Japanese, British, and French stock returns and political changes. The 1987 crash dummy shows that DJIA, Nikkei 25, SBF-250, and FTSE 30 are significantly negative at the 5% level. Moreover, analytical findings suggested that political change effect on stock returns after the 1987 crash significantly exceeded those prior to the crash. Prior to the 1987 crash, the confusion in economic and finance policies, the clash and conflict of Congress or Parliament policies, and slow policy performance cause an uncertainty to the market thus these factors negatively influence and create uncertainties in the national economy. However, after the 1987 crash, there are an increasing numbers of specialists and economists involved in government policy planning; consequently, political change in this period has positively affected individual country's economic performance.

With a resemble objective, Goonatilake and Herath (2007) conducted a research to examine the relation between stock market fluctuation and the release of political news in three stock markets including DJIA, NASDAQ, and S&P 500 for a consecutive period of ten weeks beginning July 3, 2006 and ending on September 10, 2006. Their primary approach to analyze the effects of political news on stock volatility is to categorize political news into three types: good news, bad news, and neutral news and used the chi-square independent test to investigate the relationship between number of news and the movement of stock returns (decrease, increase, or unchanged). The result produced by a chi-square test demonstrated that there is sufficient evidence of the association between the nature of the number of news items and the market fluctuations in all sample stock markets. For the news analysis, they also used an ANOVA single factor analysis in order to test the difference in the mean of the number of sample news in each category over the period of ten weeks. The result indicated that the population means of three news items categories are not all the same. This result is confirmed by the multiple comparison test of the number of news population means as the good news items vs. bad news items and bad news items vs. neutral news items are statistically significant. Finally, the relation between sample stock markets fluctuation and the movement of crude oil prices is examined. According to the test statistics from a chi-square test, it was evidenced that there is an association between stock markets fluctuation and the crude oil price in the way that the oil prices increase/decrease in the same direction with the stock markets.

The work by Chan and Wei (1996) provided a more focused research on political risk and stock price volatility by comparing and contrasting the effect of political news release about the Sino-British confrontation between the blue-chip and red-chip stocks in Hong Kong. In

the paper, the blue-chip shares are represented by the well-known index called the Hang-Seng index and the red-chip shares are the stocks controlled by the People's Republic of China (PRC) state-owned enterprises. The study period begins on January 1, 1990 to July 8, 1992 and it was divided into two sub-periods: before and after the government Patten. In order to analyze the effect of confrontation news on stock price volatility, the selected methodology is to use a modified GARCH-M model by adding several dummy variable including a news dummy (indicates good news or bad news), the Patten administration dummy, and the events day dummy into the model.

The hypotheses of this paper are a) whether the political news affect Hong Kong's stock market volatility or not b) whether the effect get higher after Patten took office or not and c) is there any difference between the impact of political news on red-chip and blue-chip shares. For the first hypothesis, the empirical results from a nonparametric Wilcoxon test for the equality of stock market volatilities indicated that stock volatilities of Hang-Seng index and red-chip shares are statistically significant between the event and the non-event days both before and after Patten arrived. When examining the other two hypotheses by using the GARCH-M model, the results from testing a variance equation showed that political news has increased blue-chip volatility especially during the Patten period. Moreover, the evidence suggested that favorable political news caused blue-chip shares a higher positive return than red-ship shares and vice versa for unfavorable news. However, when considering the result from testing stock mean returns, it was found that investors' reaction to political news was not amplified for blue-chip shares after Patten arrived. For the red-chip index, it was found that political news increased volatility more than the blue-chip shares. Whereas, in contrast to the blue-chip shares, favorable (unfavorable) political news

did not increase (decrease) the expected returns of the Red-chip index. Consequently, it was concluded that red-chip stocks are considered a safe haven from political shocks for investors on the Hong Kong economy.

The relation between political risk and security prices is examined by many scholars not only in the context of developed countries but also emerging countries. For example, Wang and Lin (2009) investigated the response of stock market to political uncertainty during congressional sessions in Taiwan. By using daily data on the Taiwan Stock Exchange Value Weighted Index (TAIEX) movements from February 24, 1984 to January 31, 2004, the EGARCH model is selected as a preferred model when compared with the GJR GARCH model according to the result from the Likelihood Ratio Test. In particular, the objective of the paper is to find the answers for three questions including whether or not congressional sessions exert an influence on stock returns and volatility, whether or not democratization (as reflected by the democratically presidential election in Taiwan) influence stock returns and volatility, and whether or not the interaction effect between congressional and democratization influence stock returns and volatility. Here, these effects are captured by adding congressional sessions and democratization dummy variables into the model.

The results suggested that congressional sessions cause a significant negative effect on stock returns. In contrast, this uncertainty is not a crucial variable to the stock market volatility. When consider the coefficient of democratization dummy variable, it was found that the effect of democratization on stock returns is similar to that of the congressional sessions. That is, the democratic election resulted in a significantly negative stock return. Likewise, the stock market volatility was increased following democratization in Taiwan to significantly exceed volatility previous to such changes. Finally, the findings from the paper

demonstrated an interesting results that during the congressional sessions, Taiwan's stock returns after democratization significantly exceed those prior to democratization, but stock volatility do not display significant. This result is not consistent with the expectation that the uncertainty generated from congressional effects will cause a negative shock on financial markets.

Ismail and Suhardjo (2001) presented an interesting study about the impact of domestic political events on Indonesian stock market which examines the validity of the efficient market hypothesis (EMH) and the effect of political events on both the overall economy and a specific industry. The scope of this paper is concentrated on all industry sectors in Jakarta Stock Exchange (JSX) and the data are obtained from daily closing price of market indices comprises of composite index and the indices in each sector. 11 domestic political events from November 1999 to February 2001 are selected according to the event identification criteria of the paper and the stock returns before and during each event will be determined in order to test the hypotheses. The paper utilized an event study as a methodology to test the level of market efficiency and the reaction of stock market to domestic political events. Mainly, two hypotheses have been set; a) domestic political events produces zero abnormal returns and b) average abnormal returns of post-event are not different significantly from those of pre-event. Like other literatures, the mean-adjusted returns model was employed to estimate the expected returns which will be used to calculate the abnormal returns afterwards.

In order to test the hypotheses, the t-statistics test will be performed to determine the difference in the cross-industry and the overall industries abnormal returns before and after the event day. The results from the test are mixed; out of 11 cases, there are only two cases

in which the industries as a whole and the composite index responded to the political events on the day of the event while there are three cases where the industries as a whole and the composite index reacted differently. That is, considerable abnormal return was found in the event period for the industries as a whole while the composite index experienced significant abnormal returns before the events occurred. For other political events, the whole industries and the composite index did not respond at all. These mixed responses lead to a conclusion that no conclusive statement can be made regarding the semi-strong form market efficiency of the JSX. Moreover, the change in the abnormal returns signs (positive/negative) suggested that the political environment in Indonesia was still unstable.

Lastly, Aktas and Oncu (2006) presented an empirical finding of the stock market reaction to the rejection of bill authorizing the deployment of U.S. Troops in Turkey on March 3, 2003 which is viewed as a political extreme event of the country. Turkey is an interesting country for the research purpose since it stands in a position between a developed and developing country. On the one hand, the political situation in this country is now similar to other developing countries such as Thailand, Vietnam, or Indonesia as the true democracy is now being established in the country (Nuraddin, 2008). On the others, some parts of the country such as the western area are considerably more developed than the other areas. Therefore, Turkey as a whole is a unique context which will provide an interesting result and implication. Broadly, their paper tried to examine whether market participants incorporate new information into the estimation of stock value or investment decision or not. In other words, it tried to test the validity of the Efficient Market Hypothesis (EMH) which is similar to the work of Ismail and Suhardjo. However, this work focused on the stock market

reaction to only one extreme event so when compared with another literature it provides a more focused vision to the readers.

In order to test the hypothesis that the drop in individual stock prices should be related to systematic risk of each stock (which is defined here as a rejection of bill), this systematic risk (or the betas of each stock) is estimated in this paper by using the well-known market model. Based on 60, 120, and 240 daily prices for 48 selected stocks listed in the Istanbul Stock Exchange (ISE) from February 20, 2002 to March 7, 2003, the market model is used in the form of ordinary least square regression where daily stock returns over a specific period are regressed on daily returns to the market index over that period and the systematic risk of that stock (beta). The results from all three regression indicated that systematic risks of stocks have statistically significant explanatory power for the percentage decline of stock prices regardless of time periods over which the betas are estimated. Moreover, negative slope coefficients implied that stocks with higher betas decreased more than those with lower betas. Thus, this finding verifies that investors are able to rationally reflect different systematic risk characteristics of stocks on the event day.

Though it was found that market participants are rational in reflecting the new information in the value of securities, the overreact or underreact of stock prices to new coming information might be the case. Hence, in order to examine whether expected changes in value of stocks are less or more than true economic value, the paper calculated abnormal returns for each stock on the first day of event and on four subsequent days of week over which market direction was up. The result suggested that overall there is no strong sign for underreaction or overreaction of investors that violates the Efficient Market Hypothesis after the rejection of government's motion.

2.2) Response of Security Prices to Disasters

In addition to the reaction of security prices to political risks, another remarkable issue which sparks an exploration by many scholars is the reaction of security prices to disasters (both man-made and natural). One of the latest and comprehensive works in this field was presented by Gunther and Laguna (2010) which examined the stock market reaction to industrial disasters using a sample of 64 explosions in 38 chemical plants and refineries worldwide over the period 1990-2005. Primarily, this paper investigated the equity returns losses following chemical disasters by means of a daily event study which measures the financial effects of a disastrous event at time t through the company's abnormal stocks returns (AR_t) variable while the average loss incurred by shareholders is captured by the cumulative average abnormal returns ($CAAR_t$) up to a specific day after the accident. An expectation is that stock market value should decrease after an occurrence of the accident because of an uninsurable cost and a change in the belief of stakeholders and the investors about the firm's safety standard. The results from short-term evidence suggested that, on average, shareholders suffer a significant loss of 0.76% on the day of accident and 1.26% on the following day. Moreover, it was also found that the investor's reactions to the accidents tend to persist for a longer period as the cumulative returns after 20 days of the accident occurred are statistically significant at -5.26%. For the effect of disasters on the firm's market value, the result indicated that over two days the average decline in market value is equal to \$306 million.

In addition to the short-term evidence, cross-sectional and long-term evidence was also examine by investigating the relation of magnitude of losses and the seriousness of the accidents which, in the paper, are measured by the number of casualties and the occurrence

of toxic release. The results from this investigation are very interesting as it was found that the most serious incidents are associated with abnormal return losses of higher magnitude. Particularly, the $CAAR_t$ within six months of events with fatalities and injuries are about 3% higher than the ones that did not cause human harm. Also, the $CAAR_t$ of polluting incidents are about 7% higher than that of non-polluting incidents. Furthermore, the results also suggested that the response of investors to a serious accident is not complete in the short-term and there is a possibility that the reaction will be more intensive in the long-term.

Based on the fact that there might be additional factors which could be simultaneously affect investor's response to accidents, in order to investigate the stock market response more deeply, the paper also tried to specify other determinants of the response by performing multivariate regressions where the numerous explanatory variables are included such as the total number of fatalities and serious injuries, a dummy set variable which equal to 1 if there is a toxic chemicals release, the number of previous chemical disasters experienced by the firm since 1980, the log of market value on the day before an accident, the abnormal media coverage received by each firm shortly before an accident, or the country dummy variables for accidents that happened in the UK, the continental Europe, Japan, and emerging countries.

Short-term evidence from the regressions demonstrated that first, the human cost of an accident increases equity value losses, that is, one more fatality or serious injury leads to an additional market value loss of \$164 million over three days after the accident date. Second, toxic chemical leakages do incur losses of greater magnitude where the difference in shareholders losses between toxic and non-toxic release case is \$1 billion. Third, it was found that the higher number of previous accidents faced by the firms, the higher the

magnitude of loss in equity returns. Fourth, the results indicated that stock market losses are stronger in Japan and continental Europe compared to the US. Fifth, when compared to smaller firms, the data shown that bigger firms are less likely to be affected by accidents. Sixth, it appears that abnormal losses are lower for firms which are in journalists' major concern in the period before disasters. For the long-term effect of disasters on the firm's value, it was found that the additional shareholders loss after six months associated with pollution occurrence is 12% and number of injuries and fatalities has no long-term effect on losses. Moreover, firms with bad environmental records lose their values more strongly than the firms with a good record and lastly, as observed in the short-term evidence, US firms incur lower losses than the firms in other countries.

Javid (2007) examined the effect of the earthquake of October 8, 2005 which was viewed as one of the most severe geographical disaster in the region on the price behavior and activities of Karachi Stock Exchange (KSE), Pakistan. In particular, the objective of this study is to analyze the effects of this earthquake on stock market average return, volatility, and volume of the listed firms in KSE around the event date. The data used in the analysis contain three indicators including average return, volume, and volatility from 60 firms listed on KSE and the study is based on daily observations ranging from January 2005 to December 2006. The methodology adopted for in this paper is the GARCH model however the model has been slightly modified by adding an impulse event dummy variable into the average stock returns and time-varying variance equation in order to separately capture the effects of the March-2005 market crash on stock market before the earthquake, the northern areas quake, and the post quake. Therefore, this dummy variable will take value zero before the earthquake, one from October 10, 2005 to October 30, 2005, and zero again afterward.

Interestingly, the results revealed that earthquake has both positive and negative information content for KSE stocks. The returns of banking and financial sectors experienced negative effect on average return but positive effect on the volume. The immediate positive reaction of investors appears in the cement, food, and chemical and pharmaceutical as there is a positive effect on the average returns and volume in these sectors while, in the textile sector, the situation is the same as a banking and financial sector. Therefore, these effects offset each other and the overall market did not show any dominated effect of this event. For the volatility, there is an increase in volatility but the results are not statistically significant in the case of most firms. One explanation given in the paper is that after the crash of March 2005, investors took a safe position so the earthquake did not affect the volatility much. Finally, the evidence suggested that the Pakistani stock market is reactive to unanticipated shocks and it takes no time to impact the market activities. Also, the stock market is resilient and it is capable of recovering soon after the disastrous event.

Hill and Schneeweis (1983) conducted another research in a similar area with the above literatures however this work aimed to analyze the effect of disaster on a narrower scale, that is, it explored the impact of Three Mile Island (TMI) nuclear accident only on the stock prices of electric utility sector. The data used in this paper is derived from a sample of 30 non-nuclear and 34 nuclear utilities listed on New York Stock Exchange. The analysis of the reaction of utilities stock returns to the accident was conducted at three levels. First, the paper measured the risk-adjusted returns for the utility experiencing the nuclear accident, or General Public Utilities (GPU) which is a parent company of TMI, over monthly time periods surrounding TMI. Second, it performed the same analysis on an aggregate sample of electric utility firms to estimate the direction and magnitude of TMI's impact on other firms

in the industry. Lastly, it divided the sample into nuclear generating capacity utilities and non-nuclear generating capacity utilities in order to differentiate the impact of the nuclear accident between these utilities.

Here, the risk-adjusted returns were calculated by using the single index market model where the returns will be estimated over the 36-month period February 1975 – February 1978. Then, the monthly parameter will be used to calculate the abnormal returns (AR_t) and the cumulative abnormal returns (CAR_t) of the three sub-samples: all utilities, nuclear utilities, and non-nuclear utilities. In addition to a single index market model, a two index model, in which the second index was defined as the monthly return on the S&P AAA long term industrial bond index, was also employed in order to eliminate the common influence of interest rate change from the abnormal returns. The results from the estimation indicated that on the month of an accident, the abnormal returns of GPU were negative and the returns decreased even more in the following month. This evidenced that the TMI has an adverse effect on GPU returns.

For the effect of TMI on other utilities' returns, though the TMI showed a clear effect on GPU returns, the impact is not statistically significant on the utilities as a whole. When consider the sample in two sub-samples, it was found that abnormal returns of these two sub-samples are similar previous to TMI. However, on the month of the TMI and the following months, nuclear utilities have significantly negative abnormal returns while the abnormal returns in the non-nuclear utilities did not appear to be significantly negative. This result is confirmed even after removing interest rate effect as it was revealed from the two index market model estimation that the impact of accident on non-nuclear firms was less than that on nuclear based utilities.

Chance and Ferris (1987) also did a similar work in which the objective is to explore the reaction of the stock prices of the aircraft manufacture companies and the carriers to the aviation disasters. A very similar methodology with Hill and Schneeweis was used in their research to examine the impact of air crashes on air transport industry over the period 1962 through 1985. Broadly, the paper measured the impact by investigating the average unexpected returns of the carriers and the aircraft manufacturers twenty days before and after the crashes occurred while the cumulative average expected returns are used to indicate the pattern in which a stock reacted to an event.

The results from the air carrier tests suggested that there is a statistically significant negative return of the airline carriers which involved in the accidents on the event day. The 1.2 percent of the average unexpected return implied that shareholders of the airlines involved in the accident incurred about 1.2 percent losses of wealth. Whereas, in the days after the event the t-statistics indicated that the market reaction to the crashes is immediate and not prolonged. When consider the movement of cumulative average expected returns, it was found that even though the market does not continue to react to the accident in the subsequent period, the cumulative average expected returns still not return to zero; therefore, the stock market reaction is quite substantial. However, when examining the results of crash on the average expected returns of the air carrier industry as a whole, the paper cannot find any evidence to support the assumption that investors viewed the air crashes as an industry-wide problem.

For the investigation of the effect of air crashes on the stock returns of aircraft manufacturers, though the expectation is that there should be a negative reaction in the stocks of those companies due to potential liability, increased insurance rates, and more

costly safety standard incurred after the crashes, the empirical findings revealed that there is no significant impact on this sector at all. Therefore, it can be concluded that the stocks of the aircraft manufacturers exhibited no reaction to the crashes.

2.3) Behavior of Securities Prices in the time of Market Crash

Finally, a more specific topic which has been extensively explored by researchers in many areas is the behavior of security prices in responsive of a market crash. Schwert (1990) thoroughly examined the behavior of stock return and volatility around the 1987 market crash by using a sample of US stock return data from 1885 to 1988. Initially, he investigated the daily and monthly percentage change in stock return during the sample period and remarked that October 19, 1987, is the largest one-day percentage change in stock prices (-20.4 percent). Also, he found several patterns of stock market behavior. First, the reversals emerged in many sub-periods; large drops in stock prices are frequently followed by large increases. For example, after the next two largest drops in stock prices on October 28 and 29, the market rebounded on October 30 to 12.5 percent one-day gain which is the second largest gain in the sample. He noted that this is the characteristics of an increase in stock market volatility during and after the crash. The same conclusion was also drawn when using the monthly stock return data.

Moreover, he also conducted a more structured analysis of the time-series properties of stock market volatility by employing an autoregressive and seasonal model to predict stock volatility. The model estimated short-term movements in conditional expected returns by regressed stock returns on 22 lagged returns and day-of-the-week dummy variable which captures differences in mean return in each-trading day. The similar model was also used to estimate the conditional standard deviation of returns. The results of the test from a stock

return model suggested that there is a weak tendency for movements in aggregate stock returns to persist and most of the movements in daily stock returns cannot be explained by the model's independent variables. For the estimation of stock market volatility, the results showed that volatility is expected to be lower than average on Saturday since trading lasted only half day. Moreover, there is a strong tendency that the aggregate stock volatility will persist and movements in daily stock volatility are much more predictable than those in stock returns.

A leverage effect in return-volatility relation was also examined in the paper by including lagged values of the volatility measure in the stock return estimation model. The model revealed that there is weak evidence that an increase in volatility increases the expected future return to stocks; rather, stock volatility is negatively related to stock return. More specifically, he found an asymmetric effect of a negative and positive return shock on stock volatility. That is, a negative shock has about 2.5 times as large an effect on volatility as a positive return shock. Finally, the paper compared and contrasted the behavior of stock volatility between the October 1987 crash and other market crashes by adding two sub-period dummy variables including October and November 1987 and pointed out that there is an unusualness of the 1987 crash and its aftermath. First, it was found that during the October 1987 the stock returns are higher than predicted while they are lower than predicted in November 1987. Second, when comparing to the historical average, the stock market returned to relatively normal levels of volatility more quickly at the 1987 crash than previous crashes. These conclusions were confirmed even though the sample data are drawn from the options and futures markets.

With a similar fashion, Choudhry (1996) studied the stock market volatility, risk premia, and the persistence of volatility before and after the 1987 crash by using monthly stock indices from six emerging markets including Argentina, Greece, India, Mexico, Thailand and Zimbabwe. This research is conducted by means of the General Autoregressive Conditional Heteroscedasticity in the mean model (GARCH-M) which is capable of capturing the three striking features observed in stock return data: leptokurtosis, skewness, and volatility clustering. The whole period of this research starts from January 1976 to August 1994 however the test divided this period into two sub-periods: pre- and post-1987 crash in order to examine the volatility, risk premia, and persistence of shocks to volatility in these sub-periods.

Using the GARCH (1,1)-M test, the results from the whole period (January 1976 – August 1994) indicated that the ARCH effect is present in all six countries. In other words, there is an evidence of volatility clustering in the stock returns in all markets during this period although the shocks are not explosive. However, the test failed to find an evidence of a significant time-varying risk premium. Moreover, the residual kurtosis indicates that in all cases the residuals have thicker tails than a normal distribution and the largest kurtosis is found in the residuals from Mexico.

When comparing the results from pre-crash and post-crash period, volatility clustering is presented in both periods only in the cases of Argentina, Greece, and India nevertheless it does not exist for Mexico and Thailand during the post-crash period (1987-94). The opposite is true for the case of Zimbabwe: no ARCH effect is found during the pre-crash period. For the effect of volatility on returns, there is no significant effect in any of the six cases during the pre-crash period however there is a significant effect during the post-crash period in the

cases of Argentina and India. When examining all six risk premium coefficients, the test failed to find any evidence about the trade-off between risk and the expected return in any country.

Finally, the persistent measure or the sum of the coefficients ($\alpha+\beta$) of GARCH conditional variance equation (h_t) for the whole period is insignificantly different from unity in the cases of Greece, India, Mexico, and Zimbabwe which indicates that shocks to volatility were permanent in these countries. Hence, stock prices of those four countries are affected by the volatility movement. Yet, Argentina's and Thailand's stock market, the volatility has an insignificant impact on stock prices. Comparing the persistence measure between two sub-periods, the persistence of shocks to volatility in Argentina and Zimbabwe seems to be permanent in both periods while the shocks are transitory in pre-crash period and permanent in post-crash period in Greece and India and the opposite is true in Mexico and Thailand. Overall, this paper found an evidence of changes in ARCH parameters, the risk premium, and volatility persistence before and after the 1987 crash in the stated markets, but the results are mixed and vary between the individual markets.

Based on the fact that investors are currently facing integrated financial markets in which domestic and foreign securities are close substitute, Fang (2002) claimed that, according to the portfolio balance model (Branson and Henderson, 1985), currency depreciation should have negative effects on stock prices and stock returns. He then used a daily stock data from Thailand and the four other Asian Tigers; Hong Kong, Singapore, South Korea, and Taiwan to investigate this hypothesis over the period of Asian crisis 1997-1999 which caused a depreciation in many countries' currency. The model used in his paper is the generalized autoregressive conditional heteroscedasticity or GARCH (1,1) model in which the mean of

stock returns depend on its time-varying variance and the other causes for the mean or the changing variance. However, he modified the specification of the stock return process by including the depreciation rate as an additional regressor. Two hypotheses are set in this paper including; a) currency depreciation and its expectation will reduce the holdings of domestic stocks, switching to securities denominated in foreign currencies. Therefore, there will be decreases in demand and increases in the supply of domestic stock market, resulting in a fall in stock prices and returns and b) since, in the Asian crisis, it is unavoidable for the risk-averse investors to encountered unstable financial markets, they preferred to hold a stronger currency such as dollar to lower risk. The switch between assets of stocks and the dollar amplified fluctuations of the stock market. In other words, domestic currency depreciation due to the financial crisis could be a cause of stock market volatility.

The results showed that there is high volatility persistence in all markets where South Korea presented the highest persistence followed by Hong Kong, Singapore, Taiwan, and Thailand. Moreover, two important conclusions from the research are drawn. First, a significant negative relation between the stock return and the depreciation rate existed in the stock market of Singapore, South Korea, Taiwan, and Thailand. For Hong Kong, though the stock market did not exhibit this relation due to no change in an exchange rate, the concern about the depreciation hit the stock market harshly. The same situation occurred as well in Singapore, Taiwan, and Thailand which suggested that currency depreciation rooted from the Asian crisis is a source of market volatility. However, the depreciation has an adverse effect on South Korea's stock returns but not on market volatility. Second, he found an evidence that currency depreciation which caused by the crisis is a determinant of stock market volatility. As the end of his paper, he provided the implication from the research that

domestic investors or international fund managers who intend to invest in East Asian newly emerging stock markets may need to carefully evaluate the stability of the foreign exchange markets to avoid biased judgment.

A more detailed work which contemplated on the behavior of a specific stock in the turbulent period was conducted by Glascock et al. (2004). This work was inspired by the general belief that, the Real Estate Investment Trusts (REITs) shares provide an opportunity to invest in diversified portfolios of real estate properties in a similar degree of liquidity with other publicly traded shares or a much greater liquidity comparing to a direct ownership of real property. In addition, REITs shares also possess a defensive characteristic as they provide inflation hedging benefits to the investors. The implication of these characteristics is that REITs stocks should behave differently than the overall stock market during periods of high market volatility. Hence, the paper aimed to examine the returns of REIT and non-REIT common stocks around the October 1997 market decline based on the assumption that REIT stocks should experience a lesser price decrease than the overall market.

Using the stock data from the New York Stock Exchange (NYSE) Trades and Quotes (TAQ) database and the 1997 REIT Handbook from October 24 to October 28, 1997, the hypothesis was tested by observing the width of the bid-ask price spread of the REITs stocks compared to other stocks before, during, and after the market decline. The October 27 close-to-close returns data indicated that REITs decreased by approximately half the magnitude of non-REIT stocks. However, the fall in returns in REITs is as pervasive as the non-REIT stocks as the percentage of the stocks that showed a decline in REITs and non-REIT stocks is quite similar (94.5 and 93.5 percent, respectively). On October 28, the close-to-close returns differ

between REITs and non-REIT stock. The returns on that day are approximately five times larger for the non-REITs than the REITs and the percentage of stocks with positive returns is also larger. Overall, the results indicated that REITs seem to behave differently than common stocks in terms of the magnitude of the returns and the reversals. That is, REITs have smaller returns on the day of the market decline and less of a reversal on the day following the decline. Therefore, it was concluded in this paper that REIT stocks act as a defensive stock because they exhibit less variation in returns and bid-ask spread behavior.

Additionally, the paper also investigated whether or not the riskiness of REITs (as measured by the standard deviation) can be a proper explanation for the difference in returns of the REITs and non-REITs. The behavior of the risk measure is examined by calculating the standard deviation during the period before the market decline (1-22 October, 1997) and then testing its significance in explaining the cross-section of returns on and after the market decline. The result revealed that the standard deviation is not a good risk measure for the REITs. This result is also confirmed by the regressions of an REIT/non-REIT indicator variable, the standard deviation risk measure, a utility indicator variable, and the dividend yield as all coefficients are statistically significant indicating that there is a difference in REIT returns that cannot be fully explained only by differences in standard deviation.

Chapter III - Summary of major political events in Thailand

Before going through to the remaining parts of this dissertation, it is useful to provide some backgrounds of Thai politics especially during the study period in order to provide the readers some ideas about the key events which are likely to impact investors' confidence. Literally, Thailand is now being governed by a democratic government however it is widely known that, in practice, the country is conducted under the system namely 'constitutional monarchy'. This system consists of a government established in accordance with the constitution while acknowledges a hereditary or elected monarch as head of the state. In fact, as Kobkua (2003) claimed, a form of constitutional monarchy in Thailand is a traditional version which 'emphasizes the extra-constitutional and traditional powers of the throne'. At some degree, the constitution was regarded as a pre-emptive measure to protect the monarchy (McCargo, 2005). When incorporated with the influence of politicians, bureaucracy, noble men, academicians, or tycoons, Thai politics is thus propelled by these groups of people which share mutual benefits. So it is not surprising that the country's political situation is extremely complicated and frequently exhibits conflicts within and between the groups of people.

3.1) Thaksin's first entry as a Prime Minister

First of all, I would like to begin this section with a brief presentation of important political events in Thailand over the 21st century as exhibited in the timeline below (figure 2). Beginning on January 2000 where tycoon Thaksin Shinawatra, the leader of '*Thais love*

Thais' (TRT) party, was nominated for the first time as the 23rd Prime Minister. He has gained a lot of nation-wide popularity over his session, this is said to be because of his distinguishing policies such as low-interest agricultural loan, village-managed microcredit development funds, '30 baht cure all disease' project, one district-one

Figure 2 Timeline of key political events in Thailand

Sep-11									
May-11									
Jan-11									
Sep-10									'10
May-10									
Jan-10									
Sep-09									'09
May-09									
Jan-09									
Sep-08									'08
May-08									
Jan-08									
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Sep-03									'03
May-03									
Jan-03									
Sep-02									'02
May-02									
Jan-02									
Sep-01									'01
May-01									
Jan-01									
Sep-00									

Sources: Timelines SDB (2010), Horrocks (2010), Poyzner (2010)

product, or the declaration of drug and AIDS war. All of which appeals the majority of people in the rural area and therefore these policies are also known as 'populism' policies that were subsequently criticized by technocrats about its long-term effects on the country people. Despite of his popularity, during the period being a PM, his government was accused of a policy corruption but the case was acquitted by the court soon after. Moreover, he was also verbally attacked by the opponents in supporting or providing a benefit to his relatives or intimates, such as encouraging the designation Police General 'Chaisit Shinawatra' to be Commander-in-Chief or reducing concessions tax to AIS corporation which is owned by the brother of his wife, *Khunying Pojaman Shinawatra*, by using his political power.

3.2) Separatism in the Southern part of the country

One of the extremely crucial political events during PM Thaksin's period which tends to affect the stability of the country in view of investors is the discomposure around the Southern area of the country in Narathiwat, Pattani, Yala, and 4 main districts in Songkhla province which leads to many aggressive actions such as the ambush, arson, terrorism, and riot by some groups of Muslim people so-called separatists. This problem stems from the believe of some Muslims that the government's plan to reform the education system of the whole country is aimed to integrate all Malaysian Muslim with a power hub in Bangkok which is regarded as a challenge to traditional Muslim believe and identity. Consequently, they raised the issues about the difference in nationality and religion and the political unfairness as an excuse to separate themselves from the mainland (Dorairajoo, 2006). During that time, the majority of Thai people and the government did not agree with this excuse and tried to negotiate with the separatists in order to maintain the unity of the

whole country. Unfortunately, those Muslim people asserted the request for their freedom and employed a more violent means to force the government in providing them independence. Until now, their actions resulted in many deaths and injuries of teachers, children, monks, army, and even another group of Muslims who disagree with the isolation. Though the government has attempted to employ various strategies to put an end to the violence such as declaring the state of emergency, setting up a 24/7 surveillance by the army in all dangerous area or even declaring to use a more firm and aggressive means to stop all separatists, the violence still proceeds up till now without any sign of a termination.

3.3) Declaration of Thaksin's second victory and the PAD

After 4 years as a Prime Minister, Thaksin was second elected on April 3rd, 2006 with a recorded-breaking 19 million votes – overwhelmingly won the ‘*Democrat Party*’ currently lead by ‘*Abhisit Vejjajiva*’ - in spite of the criticism by the antagonists about his ‘Thaksinomics’ system (which focused on government spending and supporting the livelihood of the people in a lower and intermediate social classes which also known as ‘*Grassroots*’ citizen), corruption, and vote-buying issues at that time. The result of this reelection was considered as a starting point of the series of a conflict between the anti- and pro-government people which persists until now (Pornwalai, 2004). When talking about the fight among these two groups, the name ‘*Sondhi Limthongkul*’ should not be missed in this topic. Sondhi has ever supporting Thaksin during the first session as a PM however he later changed to the opposite position due to some business conflicts which resulted in the cancellation of his weekly TV show broadcasted on government-run TV channel. Due to the discontent, he then set up weekly rallies and established a group named ‘*People's Alliance*

for Democracy' (PAD) or the 'yellow-shirt' to uncover the fresh allegations of official corruption and misconduct.

Another point which sparked the dissatisfaction of the PAD group is the selling of all stocks of Shin Corporation Plc, which owned by the Shinawatra and Damapong family, to Temasek Holdings. This case was in public's attention due to the overlapping interests and the evasion of a relevant tax incurred from this transaction. When combining these two main causes together, the result is the frequent rallies by the PAD in order to pressure and call for the resignation of Thaksin's government. Until February 4, 2006, Prime Minister Thaksin decided to dissolve the parliament and called for a snap election on April 2, 2006. During that time, the demonstration became more serious as it spread into Bangkok and the main shopping area which disrupted business and traffic in the heart of the capital. On April 3, 2006, the result of a general election which followed weeks of anti-government protests revealed that Thais love Thais party again won more than half of the vote thus Prime Minister Thaksin has rights to stay in his position. Then again, the PAD did not satisfy with this poll and kept on with the protests purposed to oust Thaksin from his position.

3.4) 2006 Coup d'etat and the UDD

The situation getting worse till September 19, 2006, one of the most important day in Thailand's political history where the army commander, General '*Sonthi Boonyaratkalin*', in the name of Council for National Security (CNS), launched a bloodless coup against Prime Minister Thaksin Shinawatra by seizing control of TV stations and declaring a provisional authority pledging loyalty to the king. It was the 18th coup in Thailand since 1932 and General '*Prem Tinsulanonda*', one of the most influential persons in Thai politics, was suspected to be the mastermind of the coup. At that time, Gen. Sonthi claimed that this

coup was aimed to bring peace back to the country and he promised to give democracy back to all Thais as soon as possible also he planned to hold an election by October 2007. As a result of this coup, Prime Minister Thaksin Shinawatra was thus automatically dismissed from his position and General '*Surayud Chulanont*' was appointed as an interim Prime Minister by the CNS. This undemocratic action invoked a lot of criticisms and provoked another group of people in the country who later called themselves as '*United front for Democracy against Dictatorship*' (UDD) or the '*red-shirt*'. Generally, the objectives of the UDD are to request for a democratic government and an amnesty for the previous Prime Minister so that he has rights to come back to the country again.

During the period following the coup, one topic which was informally commented in the country is the attempt of the government to intervene both local and national media. It was said that a large number of regional and nation-wide radio and TV stations were closed due to their opinions which casts doubt on the government's actions. Moreover, many websites which seems to disagree with the government were also cancelled without any set limit. This interference on the media has even cause more dissatisfactory among the red-shirt protesters as the action was considered as the intention to distort the truth and made the information unavailable. However, as pledged by Gen. Sonthi, Gen. Surayud later resigned from being an interim Prime Minister and the parliamentary election has been conducted on January 29, 2008. The voting result appeared that '*Samak Sundaravej*', representing the ex-PM Thaksin Shinawatra interests, was chosen by the parliament as a new Prime Minister. However, his office as a Prime Minister continued just over a short period as he was forced to resign after the court ruled that he violated the law by hosting a cooking TV program. The

ruling party then nominated ‘*Somchai Wongsawat*’, brother-in-law of the ousted PM Thaksin, to be a new Prime Minister on September 17, 2008.

3.5) The situation getting more serious

Again, the anti-government protesters (*PAD*) displeased with the nomination of PM Somchai and almost thousand of the members gathered for their big rally in front of the parliament and closed the capital’s main airport, ‘*Suvarnabhumi*’, in order to put more pressure on PM Somchai to resign from his position. After weeks of protests, PM Somchai then ruled by the court to resign while parliament will have to choose a new Prime Minister within 30 days. Finally, on December 15, 2008, in a parliamentary vote, Abhisit Vejjajiva was elected to be a Prime Minister amidst the hope that he will bring tranquility to the country again.

Unfortunately, the situation is contrast to what expected. The red-shirt protesters resumed their demonstrations with the reason that PM Abhisit did not acquired his position by a transparent means but this time they declared to fight for democracy till the end of their life. Almost a million of people thus seized the area in ‘*Sanam Luang*’, capital’s biggest square, as their commanding centre to call for PM Abhisit’s resignation. The starting point of the most violent political event in the history occurred when the UDD protestors declare to use a shrapnel strategy by dispersing the rally into all important places in Bangkok. As a solution, the government then commanded the army and police to dissolve the demonstration which led to an extremely harsh battle between the army and the protestors as presented by worldwide press agencies. The direct costs of this action are almost hundred deaths and innumerable injuries. However, the indirect cost of this battle is the damage to the constructions in many areas, the loss from an inability to do some business

transactions during the turmoil, and the loss in investors' confidence as Thailand is viewed as a highly unstable country for the investment.

Chapter IV - Data & Methodology

4.1) Stocks and news data

In order to explore the reaction of stock market movement on political risks, I will use the SET index as a representative of the overall stock prices trading on the Stock Exchange of Thailand. Here, the historical daily data of the SET index are obtained from Siam Commercial Bank's (SCB) website. The SET index is a composite index representing the price movement of all common stocks trading on the main board where the stock closing prices are used to calculate the index. It is a market capitalization-weighted price index and the calculation of the index is adjusted in line with modifications in the value of stocks resulting from changes in the number of stocks owing to various events such as conversions of preferred to common shares or exercised warrants. Therefore, all effects other than price movements were eliminated from the index. This will help increase the accuracy of the results implication as the irrelevant external factors are excluded from the data.

For the news data, the daily political news is obtained from the website of Bangkok Post, one of the most famous Thai bi-language newspapers which is known by both domestic and international investors. Only the headline news are selected for the analysis where the key words used in searching the news online are 'politics', 'Thaksin', 'Abhisit', 'Coups', 'UDD', 'PAD', 'rally', 'protest', 'southern' and 'election'. In fact, the selection of the keywords and news to be included in the data set is quite subjective. For the key words, I try to choose the set of words that can cover all important political events in Thailand as reviewed in last section as much as possible. The search results provide approximately 5,000 news which I believe that almost all of the required major political news have been included in the results

though some key words might not be entered in the searching procedure. Another problem I encountered in the news data collection process is the occasional difficulty in deciding whether to take some news into the data set or not. For example, the headline *“PAD to close five airports in PM protest”* (September 29, 2008) might clearly indicate the political instability in the country however the headline *“Thaksin’s lawsuit rejected”* (September 27, 2008) is not. To solve the problem, one criterion I used is that the news to be selected will be the one that indicates a political instability of the country and affects investment decision. Political news which is not obviously shown the instability and not related to investor’s decision making will not be considered in the analysis in order to minimize any ambiguity that might occur in the analysis. Therefore, in the above case the latter headline will not be included in the data set.

The study period for this research starts from January 1, 2004 to October 1, 2008. This period is divided into two sub-periods which are 1) January 1, 2004 to September 19, 2006 and 2) September 20, 2006 to October 1, 2008. Since one of the objectives of the research is to explore the difference of political news impact on stock market before and after the coup, the cut-off date is the day in which the coup took place.

4.2) Hypotheses and methodology

As mentioned in the introductory chapter, the main objective of this dissertation is to study whether or not stock market volatility in Thailand is changed by the release of political news regarding the important political events. Additionally, this study also aims to investigate the amplification effect of the latest coup on the impact of political news on stock market movement. Generally, coup is regarded as one of the signals of political risks or instability in the country as stated in many academic literatures especially in the international business

area, for example, *“political risks arise from the actions of national government which interfere with or prevent business transactions, or change the terms of agreements, or cause the confiscation of wholly or partially foreign owned business property”* (Weston and Sorge 1972, p.60). Therefore, it is believed that, to some extent, this military action may reduce investors’ confidence to invest in the country and intensify the effect of political risks on stock market volatility. The evidence which apparently demonstrate the influence of coup on the attitude of investors about country’s political risk is given by McGeown (2007), in his article discussed about the outcome of Thailand’s 2006 coup on investors’ viewpoint published in BBC news, he stated that *“[t]he first incidence to hit investor confidence was the coup itself”*. These assumptions leads to four interesting hypotheses to be tested which are:

H₁: There is a difference in stock market volatility between the day at which political news (event day) was released and the day at which there is no major political news (non-event day).

H₂: The difference in stock market volatility between the event and non-event day is higher after the coup.

H₃: Major political news has a significant impact on both stock market returns and volatility.

H₄: The impact of major political news on stock market returns and volatility was amplified after the coup incident.

In order to test the first two hypotheses of the equality of stock market volatilities between event and non-event day, I choose to apply the Mann-Whitney test which is a nonparametric test instead of a parametric test such as the *t*-test or the variance-ratio test

which has an underlying assumption about the normality of the population distribution. Before testing the hypotheses, the first step is to calculate stock returns and volatility across two trading days. For the stock returns, I employed a traditional calculation of a natural logarithmic return, that is, stock returns in period t (R_t) is equal to $\ln(P_t/P_{t-1})$ where P_t is a stock price in period t . For the stock volatility, we will use a stock volatility data estimated by a statistical package in which this estimation will be based on the concept of a GARCH model. This method will provide a more reliable volatility data than calculating volatility by traditional means of squaring the stock returns.

Next, to investigate the effect of political news in Thailand on stock returns and volatilities, I use the Generalized Autoregressive Conditional Heteroscedasticity in Mean (GARCH-M) of Engle, Lilien and Roberts (1987) as a main model to estimate stock mean returns and volatility. The GARCH model is used in this case since, according to Choudhry (1996), it is capable of capturing the three most empirical features observed in our stock return data which are leptokurtosis, skewness, and volatility clustering as will be shown later in the preliminary analysis section. Before going through to the specification of the GARCH-M model, it is useful to discuss about where this model comes from. The root of the GARCH-M model is the autoregressive conditional heteroscedasticity (ARCH) model proposed in the seminal paper by Engle (1982). The concept of the ARCH model is that the variance of the error term at time t can be explained by the squared error terms from previous periods. The simplest specification of this model is

$$\sigma_t^2 \equiv E\{e_t^2 | \phi_{t-1}\} = \omega + \alpha e_{t-1}^2$$

Where ϕ_{t-1} represents the information set in previous period, normally including ε_{t-1} and its entire history (Verbeek, 2004). This is an ARCH(1) process with an implication that when a big shock happens in period $t-1$, it is more likely that the variance of ε_t is also large.

ARCH models have been generalized in many different ways and the most well-known one is introduced by Bollerslev (1986) namely the generalized ARCH or GARCH model. The advantage of the GARCH model is that it incorporates heteroscedasticity into the estimation procedure. The GARCH (p,q) model can be thought as a reduced form of a more complicated dynamic structure for the time varying conditional second order moments, according to Bollerslev et al. (1992). The general form of the GARCH (1,1) model can be written as

$$\sigma_t^2 = \omega + \alpha e_{t-1}^2 + \beta \sigma_{t-1}^2$$

which has only three unknown parameters. This model estimates the variance of return on day t as a weighted average of a constant, the forecast of previous day, and the previous day's squared error.

The standard GARCH model is widely known as a convenient way for forecasting volatility, nonetheless, one important restriction of this model is the symmetry, that is, it assumes that a big negative shock will exert an equivalent impact on volatility to a big positive shock. Unfortunately, in practice, the impact is asymmetric: an unanticipated bad news usually leads to a larger impact on future volatility than an unexpected good news. To capture this asymmetry, Nelson's (1990) adjusted a general GARCH model into a new approach known as an exponential GARCH or EGARCH model which can be specified by

$$\log \sigma_t^2 = \omega + \beta \log \sigma_{t-1}^2 + \gamma \frac{e_{t-1}}{\sigma_{t-1}} + \alpha \frac{|e_{t-1}|}{\sigma_{t-1}}$$

The term $\varepsilon_{t-1} / \sigma_{t-1}$ is included here in order to capture the asymmetric effect. When $\gamma < 0$, it means that volatility responds to positive shocks less than negative shocks while $\gamma > 0$ implies that positive shocks generate more volatility than negative shocks.

An alternative way to capture the asymmetric effect is proposed by Ding, Granger, and Engle (1993) namely asymmetric power arch (APARCH) model. The specification of the conditional variance of this model is:

$$\sigma_t^\delta = \omega + \sum_{i=1}^q \alpha_i (|e_{t-i}| - \gamma e_{t-i})^\delta + \sum_{i=1}^q \beta_i \sigma_{t-i}^\delta$$

This model parameterizes the conditional standard deviation raised to the power of δ as a function of the lagged conditional standard deviation and the difference between absolute and the value of lagged innovations raised to the same power (Bollerslev, 2008). In this model, the coefficient γ captures a ‘leverage effect of the news’. Typically, γ is found to be positive so that the volatilities increase more following negative than positive news. Whereas, δ represents the ‘Taylor Effect’ (Stastny, 2006) where the sample autocorrelations of absolute returns are usually larger than those of squared returns. This effect was observed by Taylor (1986) and Ding et al. (1993) and so-called the ‘long memory effect’. Broadly speaking, the parameter δ tells us the long memory of stock market volatility (MBS, 2004).

Finally, we will go into more details about the GARCH-M model which is a main model of this study, this model comes from the financial idea which says that certain sources of risk are priced by the market. In other words, assets with more risks may provide higher average returns to compensate for that risk. The model extends the conventional GARCH model by

allowing the conditional mean to depend directly on the conditional variance (Bollerslev, 2008). Typically, a traditional GARCH-M model can be specified as

$$R_t = \alpha_0 + \alpha_1 \sigma_t^2 + e_t$$

where $\sigma_t^2 | \phi_{t-1} \sim N(o, \sigma_t^2)$ and

$$\sigma_t^2 = b_0 + b_1 e_{t-1} + b_2 \sigma_{t-1}^2$$

where R_t is the return of the stock market index in period t and again ϕ_{t-1} is the set of all information available in previous period while e_t is the error term which is distributed as conditionally normal with time-varying variance σ_t^2 . The non-negativity property of σ_t^2 implies that $b_0 > 0$, $b_1, b_2 > 0$, and $b_1 + b_2 < 1$. The GARCH-M model provides a more flexible approach to capture various dynamic structures of conditional variance and it allows simultaneous estimation of parameters of interest and hypotheses (Chou, 1988). In the above equation, the presence of conditional variance (σ_t^2) in the mean returns equation gives a way to directly investigate the tradeoff between risk and return. The coefficient of this parameter (α_1) captures the significant influence of volatility on stock returns. A positively significant coefficient α_1 implies that stock investors were compensated with higher returns for bearing higher levels of risk. On the other hands, a negatively significant α_1 indicates that investors were penalized for bearing risk.

For the lagged error term (e_{t-1}) in the conditional variance equation, the size and significance of the coefficient b_1 indicates the magnitude of the effect imposed by e_{t-1} on conditional variance (σ_t). In particular, it implies the existence of the ARCH process in the error term or volatility clustering. Note that volatility clustering in stock returns means that small (large) changes in price will follow a small (large) price changes of either signs. As

stated by Bollerslev et al. (1992, p.32) and other empirical works, the ARCH effect might be owing to nominal interest rates, clustering of trade volumes, dividend yields, oil price index, etc.

The concept of this model fits well with the research context of this dissertation as we want to explore the impact of political risk on stock prices. The utilization of GARCH (p,q)-M model in examining stock volatility is also advocated by Engle (1990). However, I would like to apply some modification to the model in order to capture the effect of political risks more extensively. Here, the assumptions behind this modified model are 1) favorable political news will cause a positive impact to stock returns and volatility whereas unfavorable political news will cause a negative impact 2) the two different types of news would induce different amount of additional volatility to the stocks. In other words, the effect of political risks on stock returns and volatility is asymmetric and 3) the happening of 2006-coup has affected both the mean return and volatility of the stock market. Regarding to these assumptions, we can derive the modified GARCH (1,1)-M model as follow

$$R_t = a_0 + a_1 h_t + a_2 R_{t-1} + \alpha_3 DC + \alpha_4 DG + \alpha_5 DG \times DC + b_1 DB + b_2 DB \times DC + e_t \quad (1)$$

$$h_t = c_0 + c_1 e_{t-1} + c_2 h_{t-1} + c_3 DC + c_4 DG + c_5 DG \times DC + d_1 DB + d_2 DB \times DC \quad (2)$$

The above equations indicate that this is a GARCH (1,1)-in-mean model since we have included a one-period lagged error and variance terms into the current conditional time-varying variance equation. From equation (1) and (2), five dummy variables were added to the model. First is a favorable news dummy (DG) which will equal to 1 if there is a good political news and zero otherwise. Second is an unfavorable news dummy (DB) which will equal to 1 if there is a bad political news and zero otherwise. Third is a coup dummy (DC) which will equal to zero on the pre-coup period (January 1, 2004 to September 19, 2006)

and one on the post-coup period (September 20, 2006 to October 1, 2008). Fourth and fifth are the interacted dummy variables ($DG \times DC$ and $DB \times DC$) between good/bad news and coup. These two variables will be used to investigate whether coup has amplified the effect of news on stock returns and volatility or not. The rationale of this model is to distinguish the impact of different types of news on returns while capturing the effects on volatility at the same time. The sign and amount of the coefficients a_4 and b_1 of the DG and DB dummy variables in equation (1) tell the direction and magnitude of the impact of favorable and unfavorable news on stock returns, respectively. Likewise, the coefficients c_3 and d_1 in equation (2) indicate the direction and magnitude of the release of political news on stock volatility. Whereas, the coefficients of the interacted dummy variables in both equation (i.e., a_5 , b_2 , c_4 , and d_2) explain whether or not the coup has amplified impact of political news on stock returns and volatility.

Other than focusing on the effect of political news on SET index returns and volatility, this dissertation also aims to examine the persistence of this effect as well. According to Engle and Bollerslev (1986), if the sum of the coefficients of the lagged variance and lagged error term ($c_1 + c_2$ for our model) in a GARCH (1,1)-M model equals to one, it means a) persistence of a forecast of the conditional variance over all finite horizons b) an infinite variance for the unconditional distribution of e_t . That is, when $c_1 + c_2 = 1$ a current shock persists indefinitely in conditioning the future variance and the more the sum of c_1 and c_2 approaches unity, the greater the persistence of shocks to volatility. A value higher than unity indicates that the response of volatility to shock increases with time and a value lower than unity implies that shocks decay with time. The closer to unity, the slower the decay

rate (Chou, 1988). Therefore, the value of $c_1 + c_2$ will be used as a measure to investigate the persistence of political news on stock market volatility.

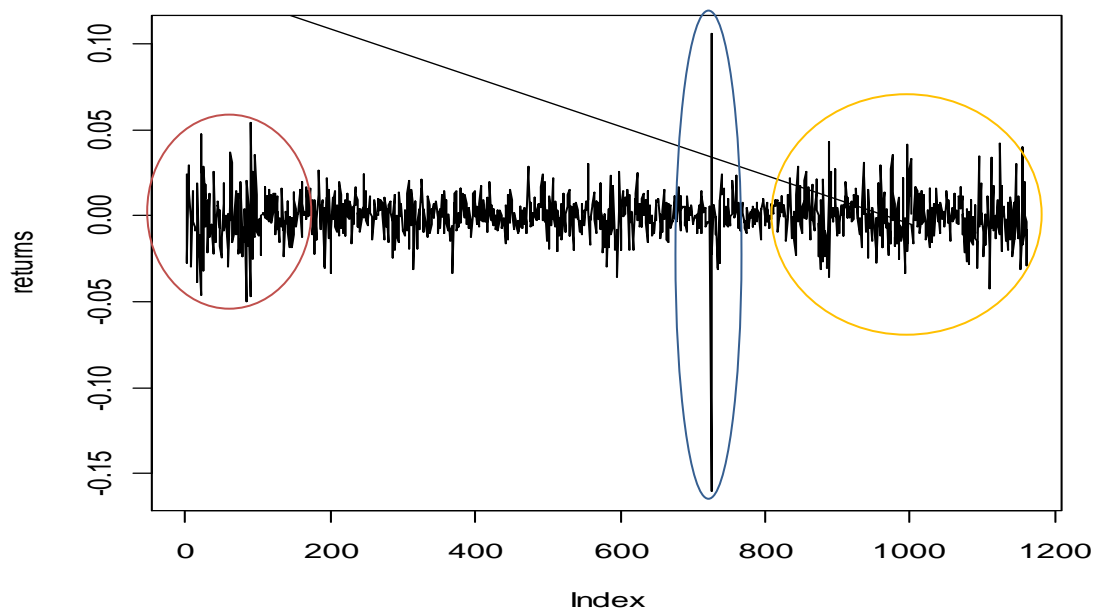
4.3) Preliminary data analysis

This section provides a preliminary analysis of the stock index data over the study period. This initial analysis will be a primary step that helps confirm the appropriateness of the model used to explore the relationship between stock market volatility and political risks. Therefore, it is regarded as a useful step of the research.

4.3.1) SET index returns and volatility

First, we will take a brief look at the stock index return during the period January 2004 to October 2008. The series of SET index return is exhibited in figure 3 below.

Figure 3 SET index returns from January 2004 to October 2008

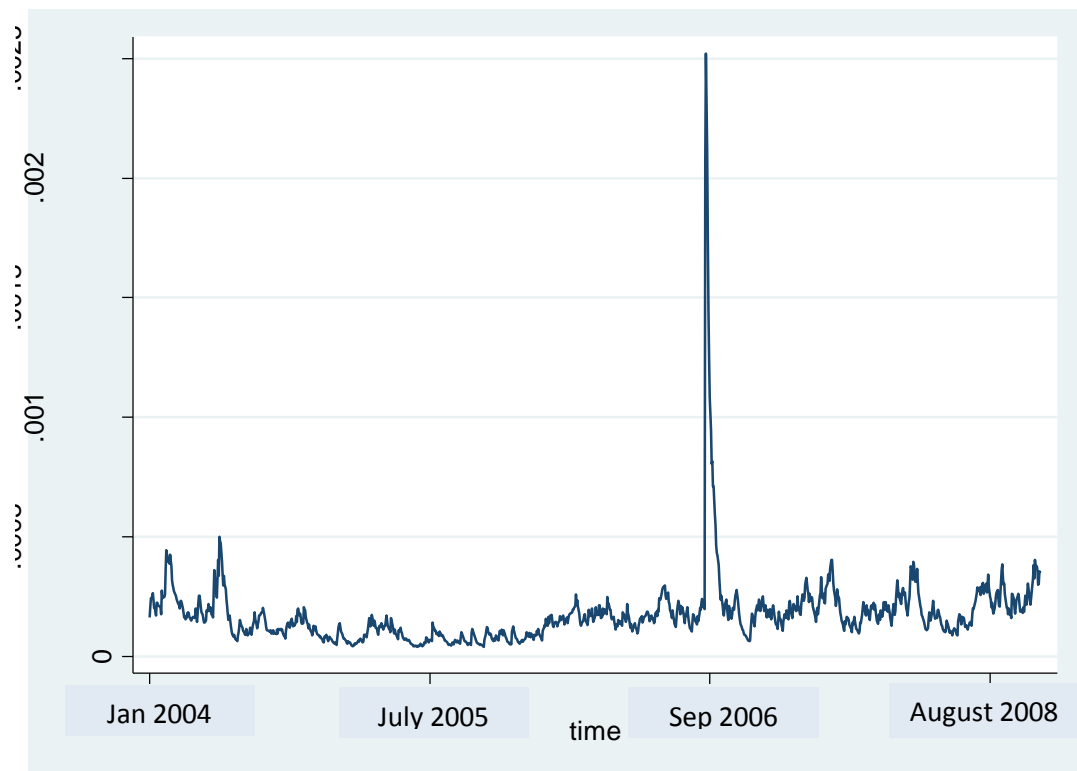


Here, it can be seen that on the very beginning of the study period (in a purple circle), the index returns are moderately fluctuate. I conjecture that, the political factors which caused this fluctuation might be the violence in the Southern area of the country which, as stated by the government at that time, reached the critical stage and it seems that the government encountered a difficulty in bringing rest back to the area. However, this fluctuation gradually faded as time goes by and the stock market was back to a consistency stage during the middle of the study period.

Stock returns exhibited an extremely big plunge and jump again after the middle of the period as shown in a blue oval. This corresponds to the September 19, 2006 coup incident and the frequent demonstrations by the PAD. Therefore, it can be roughly said that coup had a considerable effect on the overall stock market. Finally, after the coup, the stock market turned to its normal situation for a short period of time and then exhibited a slight fluctuation during the end of the study period as shown in a yellow circle. This might be again caused by the repeated protests by either red or yellow shirts which indicated a vital instability of the political situation in the country.

In the same way with the stock index returns, stock market volatility also exhibited a similar movement as well. As shown in figure 4 below, a moderate fluctuation was found at the beginning of the study period followed by a quite stable volatility. During September 2006, volatility is at its peak and get back to a fair variability again around the period after September 2006 to the end of the study period. Overall, the stock index returns and volatility graphs both imply that, more or less, political risks have some influences on these indices especially on the period in which coup took place.

Figure 4 Stock index volatility

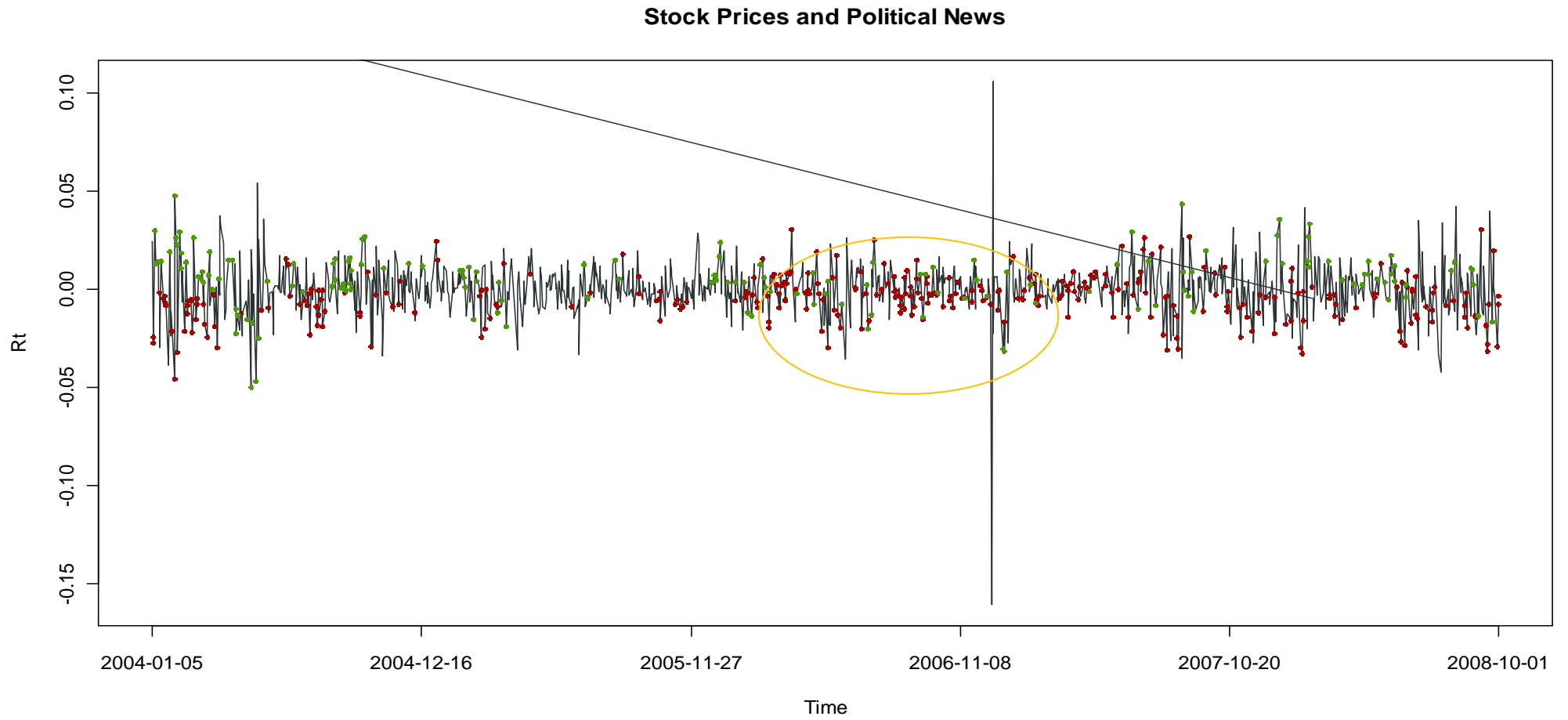


4.3.2) Relationship between stock prices and political news

Another issue worthwhile for an inspection is how stock prices respond to the release of major political news. Our expectation is that stock price should be decreased on the day in which bad news has been announced and vice versa for the day in which good news has been announced. The next graph plots daily stock price with the red and blue dots representing negative and positive political news in each day, respectively. One interesting remark observed from the graph is that, in most of the days, the rise(fall) in the stock prices is associated with the release of favorable(unfavorable) news. Furthermore, it can be noticed that during the period in which stock prices fairly fluctuate (the circle area), we observe a large number of bad political news in almost every day. However, there are also some days where stock prices increase even though there is an announcement of

unfavorable news, for example, at the end of the study period. In conclusion, I think that this graph provides some hints about the relationship between political news and stock prices though not so obviously.

Figure 5 Stock prices and political news

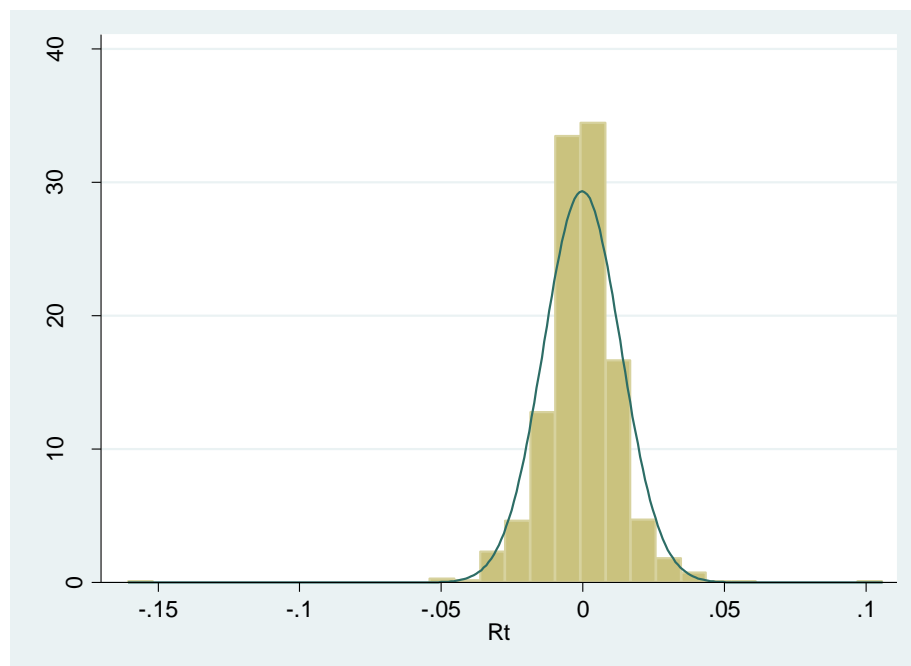


4.3.3) Non-normality

Next, I will focus on the investigation of the distribution of the stock index data. More specifically, I would like to test whether the data are non-normally distributed or not as the underlying assumption of the methodology used in this study (GARCH model) is the non-normality property of the stock index. Normally, the simplest way to investigate data distribution is to take a look at its histogram. Figure 6 draws a histogram of the SET index returns from January 2004 to October 2008. As can be seen, stock returns are non-normally distributed with a high peak, slight negative skewness and a fat tail where most observations concentrated around the average and a relatively large number of observations that are far from average. The skewness and fat-tailed of the stock returns distribution can be verified through a normal qq line which plots the quartile of the sample of our data against the normal theoretical quantile. The qq plot presented below in figure 7 exhibits a split at both ends of the sample line from a theoretical line which is an obvious evidence of a heavy tail.

In order to further validate the non-normality feature of the stock returns distribution, the statistics values shown below in table 1 provide many evidences supporting the assumption of non-normality. The easiest way to investigate the non-normality feature of the stock returns is to examine the value of mean and median. Generally, if the data are normally distributed, the mean and median should be the same value. However, according to table 1, the mean and median of our returns data are somewhat different. Also, standard deviation can be used as one of the criteria of non-normality property. Here, the standard deviation value is approximately equal to 0.014 which is less than 1 or

Figure 6 Histogram of SET index returns



the standard deviation of a normal distribution. Finally, the evidence of negative skewness and heavy tail can be seen through the skewness and kurtosis statistics which here equal to -1.014 and 19.97, respectively. Since the skewness is less than zero, this is an indicative of a left skewed distribution. For the kurtosis, this value is an extremely large value (normally, it should equal to three) so it can be concluded that our data set have a leptokurtic distribution. In other words, there is a high probability for the extreme values in the data set.

Figure 7 Q-Q plot of the stock returns data

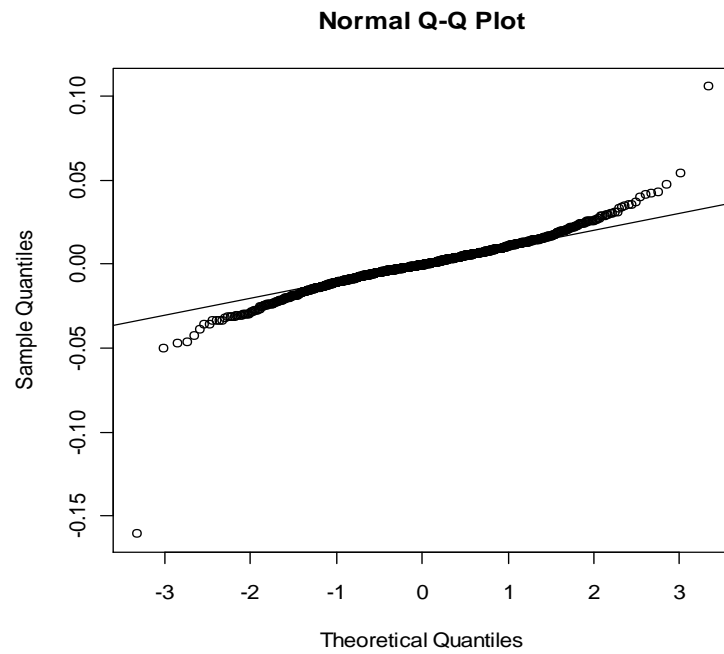


Table 1 Basic statistics of the stock index data

Statistics	Value
Minimum	-0.160630
Maximum	0.105770
Mean	-0.000225
Median	-0.000380
Standard deviation	0.013593
Skewness	-1.013560
Kurtosis	19.966602

Chapter V - Empirical Results

5.1) Summary statistics of SET index returns and non-parametric test for the equality of stock volatilities between event and non-event days

This section presents the results from a Mann-Whitney test to examine the hypotheses of the equality of stock volatility as stated in the methodology chapter. To reiterate, those hypotheses are:

H₁: The stock market volatilities between the day at which political news (event day) was released and the day at which there is no major political news (non-event day) are not equal.

H₂: The difference in stock market volatilities between the event and non-event days is higher after the coup incident occurred.

Table 2 Summary statistics of returns for the SET index and results from Mann-Whitney test during the period January 1, 2004 to September 19, 2006.

Panel A: Pre-coup period (01/01/2004 - 09/19/2006)

a) Summary statistics of returns for the SET index

	Number of observations	Returns	
		Mean	Standard deviation
Favorable news event days	99	0.00451	0.01203
Unfavorable news event days	159	-0.00484	0.01210
All event days	258	-0.00125	0.01210
Non-event days	405	0.00057	0.01214

b) Non-parametric Mann-Whitney test for equality of volatilities

	No. of observations (event days)	No. of observations (non-event days)	z-statistics	p-value (1-tailed)
SET index volatilities	258	405	-10.243	.000

Panel B: Post-coup period (09/20/2006 - 10/01/2008)

a) Summary statistics of returns for the SET index

	Number of observations	Returns	
		Mean	Standard deviation
Favorable news event days	56	0.00546	0.01537
Unfavorable news event days	159	-0.00431	0.01534
All event days	215	-0.00177	0.01534
Non-event days	285	0.00073	0.01544

b) Non-parametric Mann-Whitney test for equality of volatilities

	No. of observations (event days)	No. of observations (non-event days)	z-statistics	p-value (1-tailed)
SET index volatilities	215	285	-5.489	.000

Note: The volatility used in the non-parametric tests is defined as the square of returns. σ_E^2 represents the volatility on event days while σ_N^2 denotes the volatility on non-event days.

Panel A and B of table 2 report summary statistics of the returns of SET index before and after the 2006-coup, respectively. Basically, the results indicate a positive returns on non-event days and negative returns on event days on both pre- and post-coup period. Moreover, it was shown that on the event days in both phases, returns are positive on the days with favorable news and negative on the days with unfavorable news. With a further investigation, it was found that the mean returns for the event days in a post-coup period is less than that in a pre-coup period (-0.00177 and -0.00125, respectively) and vice versa for the non-event days. Also, there is an increase in the standard deviation in all cases in the

post-coup period. All of these results imply that the release of political news does have some effects on the stock market returns and there is a sign that the coup has strengthened the effect of political news on stock market returns and volatilities.

Table 2 presents the results from a Mann-Whitney test for the equality of SET index volatilities. This test is based on the null hypothesis that the stock index volatilities are equal for the event and non-event days ($H_0: \sigma_N^2 = \sigma_E^2$) while the null hypothesis is that the stock volatility is higher for the event days ($H_1: \sigma_N^2 < \sigma_E^2$). The result from Mann-Whitney test presented in the above table indicates a p-value of 0.000 which means that, at a 95% confident level, we can reject the null hypothesis and claim that stock market volatilities are significantly different between the event and non-event days for both pre- and post-coup period. In particular, the result suggests that stock market volatilities are higher in the event days. This evidences the impact of political news on SET index volatilities.

5.2) Results from GARCH model

In this section, the other two hypotheses will be tested which are:

H₃: Major political news has a significant impact on both stock market returns and volatility.

H₄: The impact of major political news on stock market returns and volatility was amplified after the coup incident.

By using a GARCH model, the relationship between the release of political news and the stock returns and volatility will be investigated as well as the direction and magnitude of this relationship. The dummy variables have been added into the model in order to explore how favorable and unfavorable political news affects stock returns and volatility and, in what way, this effect changes after the coup has been executed. Note that, when estimating the

model, since the SET index is calculated based on the stock ‘closing’ prices, instead of matching political news on previous day with today’s price as directly suggested by the model, I will use the news on current period to investigate the effect of news release on current stock returns. This is based on the assumption that investors will respond immediately after the news was issued in the morning and the reaction will be noticeable in the evening on the same day before the closing time of stock market.

Table 3 Results from GARCH model

	Specification 1	Specification 2	Specification 3	Specification 4
Mean returns (R_t)				
α_0	0.00074 (0.232)	0.00078 (0.282)	0.00066 (0.299)	0.00024 (0.520)
α_1	-0.59204 (0.916)	-0.89588 (0.867)	-4.36389 (0.357)	-0.42371 (0.729)
α_2	0.03959 (0.234)	0.03369 (0.297)	0.03379 (0.278)	0.22923 (0.268)
α_3	0.00031 (0.764)	0.00015 (0.870)	0.00011 (0.911)	0.001 (0.116)
α_4	0.00472*** (0.000)	0.00420*** (0.01)	0.00483*** (0.000)	0.00554*** (0.000)
α_5	-	0.00141 (0.589)	0.00083 (0.746)	-0.00084 (0.593)
b_1	-0.00401*** (0.000)	-0.00431*** (0.000)	-0.00472*** (0.000)	-0.00429*** (0.000)
b_2	-	-0.00053 (0.799)	-0.00296 (0.623)	-0.0003 (0.732)
Variance (h_t)				
c_0	-12.2533*** (0.000)	-11.75665*** (0.000)	-0.80775*** (0.000)	0 (0.454)
c_1	0.07255*** (0.000)	0.05947*** (0.000)	-	-
c_2	0.82137*** (0.000)	0.82654*** (0.000)	0.91718*** (0.000)	-
c_3	0.52710*** (0.000)	-25.29373*** (0.000)	0.03111** (0.031)	0 (1)
c_4	1.24940*** (0.000)	1.43736*** (0.000)	0.15045*** (0.000)	0 (0.254)
c_5	-	24.19287*** (0.000)	-	-

d_1	1.94493*** (0.000)	0.71559** (0.01)	0.15211*** (0.000)	0 (0.798)
d_2	-	26.88231*** (0.000)	-	-
γ	-	-	-0.16847*** (0.000)	0.32689*** (0.001)
τ	-	-	0.03066* (0.078)	-
δ			-	2.92365*** (0.000)
β_1			-	0.09143*** (0.000)
β_2			-	0.74694*** (0.000)
<i>Log Likelihood</i>	3472.49	3496.42	3508.782	3583.38

Notes: 1.The number in the bracket below each coefficient is a p-value of that coefficient

2.The results are estimated based on the following GARCH-M model:

$$R_t = a_0 + a_1\sigma_t^2 + a_2R_{t-1} + \alpha_3DC + \alpha_4DG + \alpha_5DG \times DC + b_1DB + b_2DB \times DC + e_t$$

$$\sigma_t^2 = c_0 + c_1e_{t-1} + c_2\sigma_{t-1}^2 + c_3DC + c_4DG + c_5DG \times DC + d_1DB + d_2DB \times DC$$

Where R_t is the SET index return in period t , e_{t-1} is the error term, h_t is the time-varying conditional variance, DC equals 1 on a post-coup period and 0 on a pre-coup period, DG equal 1 when there is a favorable news and 0 when there is no favorable news, DB equals 1 when there is an unfavorable news and 0 when there is no unfavorable news.

***, **, * denotes significance at 0.01, 0.05, and 0.10 level, respectively.

Table 3 reports the results from estimating a GARCH(1,1)-M model (model specification 1 and 2) as proposed in the data and methodology chapter. Also, another two model specifications have been performed in order to examine the robustness and stability of the proposed models in explaining how political news exerts an impact on Thai stock market. In the table, each specification contains different types and number of parameters. The first specification comprises three dummy variables in the mean returns (equation 1) and variance equation (equation 2) which are coup dummy, unfavorable news dummy, and favorable news dummy. This specification will capture the effect of each type of news as well as the coup prosecution on stock returns and volatilities. Specification two adds the interacted dummies between news and coup which are $DB \times DC$ and $DG \times DC$ into both the stock mean returns and variance equation. In particular, the difference between the

second and the first specification is that this specification also tries to distinguish the pre- and post-coup effect on both stock returns and volatilities. In fact, it is the full-version of a modified GARCH (1,1)-M model which I have proposed in last chapter. Specification three presents a result from estimating an EGARCH model which is an alternative model capable of capturing a leverage effect of the news. When included relevant dummy variables into the original form of the EGARCH model, the specification form of the time-varying variance equation will be:

$$\log(\sigma_t^2) = c_0 + c_2 \log \sigma_{t-1}^2 + \gamma \frac{e_{t-1}}{\sigma_{t-1}} + \tau \frac{|e_{t-1}|}{\sigma_{t-1}} + c_3 DC + c_4 DG + d_1 DB$$

As mentioned in the data and methodology chapter, the coefficient γ in this model is used to determine a leverage effect of the news on stock volatility. That is, when γ shows a significantly negative value, volatility increases relatively higher after the release of bad news than good news and vice versa when γ is significantly positive. Whereas, the coefficient τ indicates the magnitude of the effect that political news induce on stock volatilities.

Finally, the fourth specification is estimated by generalizing the initial model based on the concept of an asymmetric power ARCH model. After a modification, the specification form of the conditional variance equation will be:

$$\sigma_t^\delta = c_0 + \beta_1(|e_{t-1}| - \gamma e_{t-1})^\delta + \beta_2 \sigma_{t-1}^\delta + c_3 DC + c_4 DG + d_1 DB$$

Similar to the EGARCH model, the coefficient γ in this model serves as a measure of the asymmetry effect of news on volatility (also known as a ‘leverage effect’). If γ is significantly positive, negative news will induce higher volatility than positive news and the opposite case will be true if γ is significantly less than zero. For δ , this parameter determines the

shape of the transformation (or the news impact curve which will be shown later) (Hentschel, 1995). If $\delta > 1$, the transformation of σ_t is convex, while if $\delta < 1$, it is concave. The implication of this parameter is a long memory of the stock volatility known as a ‘Taylor Effect’. According to Hurvich et al. (2005), long memory of volatility occurs when the effects of volatility shock decays slowly which can be detected by the autocorrelation of volatility measures such as absolute returns or squared returns. This effect is empirically observed in many literatures (for example, Brunetti, 1999; Yoon, 2010; Dalla, 2009, Mora-Galán et al., 2004). Note that from the variance equation of both EGARCH and APARCH model, it can be observed that the interacted dummy variables are needed to be excluded from the variance equation. This is because the statistical package fails to converge the results when those dummies are included.

One thing I would like to inform is that the specification of the time-varying variance of the APARCH model is considered to be a general form of the other two models (Bollerslev, 2008). That is, the volatility of a GARCH (1,1) model (specification 3) is the case where $\delta = 2$ and $\gamma = 0$ while the EGARCH model can be obtained when $\delta = 0$ (Hentschel, 1995). However, those four model specifications are all regarded as a GARCH-in-mean model since all of them include the variance term within the mean returns equation but we will treat each of them as a separate specification.

5.2.1) An Investigation on the results from GARCH-M model

Coefficient values of each parameter in the model are presented in the table with a p-value of each coefficient in a bracket below. We will first consider the coefficients estimated from the model specification 2 which is the full-version of a GARCH (1,1)-in-mean presented in the data and methodology chapter.

a) Results from mean returns equation

Beginning with the mean returns equation, according to the results, we can obtain a mean return equation as follow:

$$R_t = 0.00078 - 0.89588\sigma_t^2 + 0.03369R_{t-1} + 0.00015DC + 0.0042DG + 0.00141DG \times DC \\ - 0.00341DB - 0.00053DB \times DC + e_t$$

It was found that the coefficients of both favorable and unfavorable news dummy variables (a_4 and b_1) are strongly significant at a 95% confidence level. This implies that political news (both positive and negative) do have a significant effect on SET index returns. The negative coefficient for unfavorable news dummy and positive coefficient for favorable news dummy are sensible and consistent with our expectation that bad news would cause a decrease in stock returns and vice versa for good news. Surprisingly, the magnitude of these effects seems to be similar as the absolute value of good and bad news coefficients is not so different (0.0042 for positive news and 0.00431 for negative news). Therefore, favorable news increase stock returns by a similar amount with the decrease in stock returns due to a release of unfavorable news (approximately 4%). This result implies the symmetric effect of political news on stock returns.

For the coup dummy, the coefficient a_3 is not significant and so does the coefficient of the interacted dummy variables (a_5 and b_2). This suggests that the September 19, 2006 coup does not have any significant effect on stock returns at all. A possible explanation for this insignificant result might be that most firms may expect this undemocratic action to occur and have prepared some policies or strategies to prevent a fall in a company's stock price beforehand. Consequently, the adverse effects of coup on stock returns were alleviated though coup prone to badly affects investors' confidence and investment decision. Finally,

the influence of volatility on SET index returns measured by the coefficient (a_1) displays a negative but insignificant value. Hence, we fail to find an evidence of a significant risk premium required by investors. In other words, the result does not support the presence of a tradeoff between risks and returns.

b) Results from variance equation

The results from the model estimation suggest a variance equation as follow:

$$\sigma_t^2 = -11.75665 + 0.05947e_{t-1} + 0.82654\sigma_{t-1}^2 - 25.2937DC + 1.437DG + 24.1929DG \times DC \\ + 0.71559DB + 26.8823DB \times DC$$

A similar pattern was also found in the variance equation. The coefficients of both good and bad news dummy variables (c_4 and d_1) are strongly significant at a 95% confident level which is an indicative of a significant impact of political news on SET index volatility. For the direction of the effect, since both c_4 and d_1 are positive, it can be concluded that good and bad political news all cause a rise in stock volatility but with higher magnitude for favorable news (c_4 is higher than d_1) which is opposite to what I have expected. Regarding to the results, positive political news increase volatility by 1.44 unit whereas negative news increase volatility by 0.72. Contrary to the results from mean returns equation, the coefficient of coup dummy variable (c_3) is significantly negative with an interestingly low value. This provides an unbelievable implication that coup has a significant effect on SET index volatility in a way that it extremely reduced market volatility. On the period after coup, the interacted dummy variables' coefficients (c_5 and d_2) are both significantly positive but the coefficient of bad news interacted dummy is a little higher. This provides a conclusion that this military coup contributed a very important implication to stock volatility and it has amplified the effect of political news on stock market volatility and negative news

cause more fluctuation in the stock market than positive news. However, the magnitude of the both coefficients is so high (24.12 and 26.88) that I think it is implausible for coup to exert this much severe effect on stock volatility. To examine the volatility clustering or the ARCH effect, the coefficient of a lagged error term (c_1) was considered and it was found that this coefficient presents a positively significant value which is an obvious evidence of volatility of the stock market.

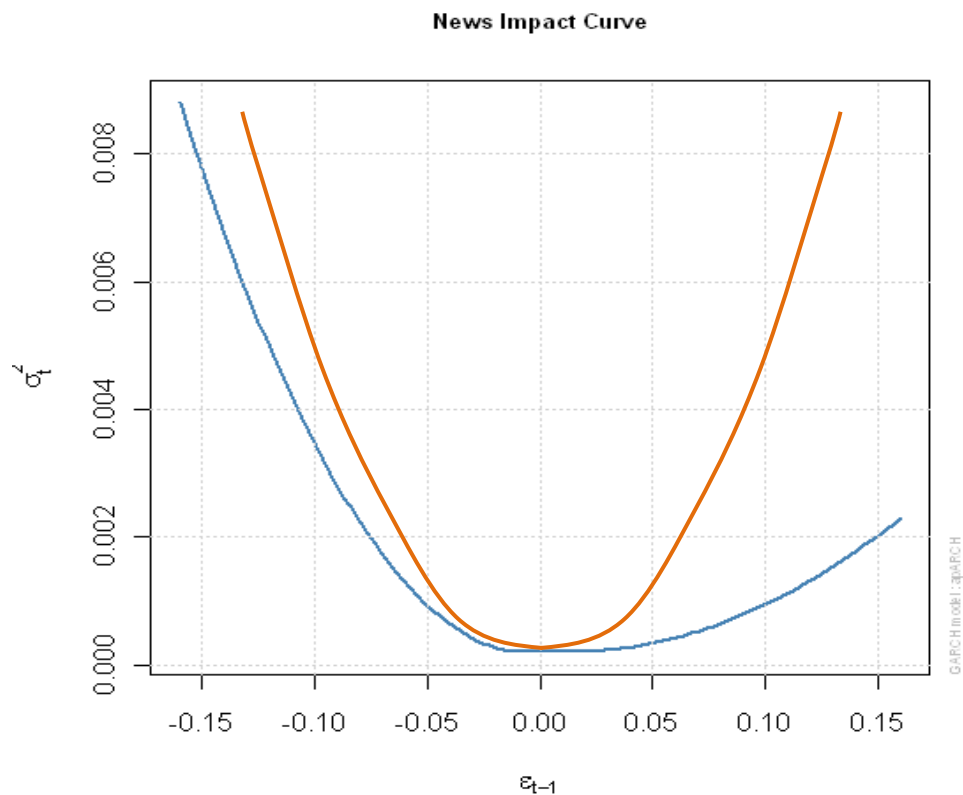
5.2.2) Leverage effects

In this section, a leverage effect of the news on stock market volatilities will be examined through coefficients γ from both EGARCH and APARCH (specification 3 and 4) model. The result from estimating an EGARCH model produced a significantly negative value of γ at a 95% confident level which means that SET index volatility was increased higher following positive news than negative news. Likewise, the coefficient τ is positive and fairly significant. This supports the indication of asymmetric effect between positive and negative news on stock volatility. A similar result was obtained from the APARCH model as the parameter γ estimated from this model exhibits a significantly positive value which also implies that negative news exerts larger impact on stock volatility than positive news. These results are consistent with what I have expected.

The leverage effect of political news on stock volatility can be illustrated through the news impact curve as shown below in figure 8. The news impact curve (NIC) is first introduced by Engle and Ng (1993). The underlying concept behind the NIC is that positive news and negative news affect stock market differently. In addition, even the positive (negative) news itself does not cause the same magnitude of impact on stock market between the period of bull and bear market. According to Parker (2006), the news impact curve demonstrates the

relationship between the news and future volatility. On the horizontal axis is the range of bad and good news and this is plotted against the resulting volatility from those news.

Figure 8 News impact curve



The blue line in the above figure is the news impact curve estimated from an APARCH model. What can be obviously seen, when comparing with the red line which is estimated from the standard GARCH model, is the asymmetric feature of the curve. That is, the same magnitude of positive and negative news induces a different amount of stock volatility. For instance, at ε_{t-1} equals to 0.10 (positive news) and -0.10 (negative news), positive news increases volatility to about 0.001 unit while negative news increases volatility to almost 0.004 unit. Also, another remarkable point is that the marginal increase in volatility from a negative shock is higher than those from a positive shock of the same magnitude as can be

seen that when ε_{t-1} changes to 0.15 and -0.15, volatility in the case of good news goes up to 0.002 unit while in the case of bad news it rises substantially to 0.008 unit.

5.2.3) Persistence of shocks on volatility

In this section, we will investigate the persistence of shocks on volatility, according to the results from GARCH (1,1)-in-mean model, the persistence measure ($c_1 + c_2$) is equal to 0.886 and is significantly different from unity at a 95% confident level (by means of the t-test). This implies that the shock from political news was permanent or the conditional variance was non-stationary. Therefore, this suggests that the SET index stock prices are affected by the movement in volatility. Moreover, this sum value is considered to be nearly close to unity which indicates that shocks from the release of political news slowly decayed from the stock market. In other words, there is a presence of volatility persistence in Thai stock market.

Long memory of volatility was also observed through parameter δ derived from estimating an APARCH model. This parameter is equal to 2.92 and strongly significant at 95% confident level therefore it is another indicative of the persistence in volatility. However, this result is contradict to what we found above in the mean returns equation that no evidence is found about investors' demand for a risk premium as compensation for bearing higher risk. This is because, normally, if shock to volatility seems to persist for a long time, an adjustment from the market to the discount rate should take place and this, in turn, will cause some movements in stock prices and returns as well. In other words, if volatility tends to be permanent, there should be a significant impact on stock prices and returns.

5.3) Robustness and reliability of the model

In order to initially examine the robustness and stability of our models, the results from all four specifications will be considered together. Let us first investigate the coefficients from the mean returns equation, coefficient of a favorable news dummy variable (a_4) ranges from 0.0042 to 0.00554 and are strongly significant across all specifications. The same case is also found in the unfavorable news dummy's coefficient (b_1) as the result presents a very narrow range from -0.00472 to -0.00401 in which all of them are strongly significant as well. This confirms the results which indicate that positive and negative political news affect stock returns in the same direction by approximately the same amount. Nevertheless, the ARCH-in-mean term's coefficient (a_1) moves in a wide range from -4.36 to -0.51 but they are all insignificant. For the interacted dummy variables, both coefficients a_5 and b_2 from all specifications seem quite stable with a similar insignificant p-value which suggests that after the coup, negative news did not have any significant effect on SET index returns. Finally, the coefficient of a lagged return (a_1) in all specifications are negative but quite fluctuates. However, none of these coefficients is significant so I think this can be neglected since it does not provide any important implication.

For the variance equation, note again that the interacted dummy variables cannot be contained in the APARCH and EGARCH model since the statistical package was failed to converge the results when those variables are included. The range of favorable news dummy variable's coefficient (c_4) is fairly wide (from 0 to 1.44), all are positive and strongly significant except the one estimated by an APARCH model. Therefore, the implication from these coefficients is identical, that is, positive news plays a significant role in the increase of volatility. The ARCH effect or coefficient c_1 in the first two specifications shows a very

similar value and are strongly significant which evident the presence of volatility clustering. For the coup dummy variable, the coefficients (c_3) is extremely inconsistent with a very wide range from -25 in the GARCH (1,1)-M to 0.03 in the EGARCH model where all are significant at 95% confidence level. Though the stock volatility estimated by EGARCH model is based on the log scale, this is still considered to be a very fluctuate set of coefficients. Likewise, the unfavorable news dummy's coefficient (d_1) is pretty fluctuates across all four specifications and decrease to zero in the APARCH model but with an insignificant value.

Now, we will go on to consider the leverage effect of political news on stock volatility captured by each model. In the GARCH (1,1)-M model, this asymmetric effect is captured by adding the favorable and unfavorable news dummy variables into the conditional variance equation. The coefficients of these dummy variables are c_4 and d_1 which are all positive and strongly significant but with different magnitude. This provides a robust evident that positive and negative news have different effect on stock volatility. In particular, the coefficient of bad news interacted dummy is higher than a good news interacted dummy which implies that bad news cause larger volatility than good news in Thailand's stock market. The results from the EGARCH and APARCH model also support the asymmetric effect of the news. A significantly negative value of γ in EGARCH model and a positive value in APARCH model show that leverage effect do exist in stock volatility.

Apart from the investigation through the stability of the coefficients, we will also consider the suitability of each model specification in explaining the effect of political news on Thai stock market. Here, the log likelihood value provided in the last row of table 3 will be used to determine the performance of each model specification. Roughly speaking, this value implies the appropriateness of the model fitted; the higher the log likelihood, the better the

fitness of the specification. According to the results, it was found that the APARCH model presents the highest log likelihood followed by the EGARCH and GARCH (1,1)-in-mean model. Hence, it is suggested by these values that the APARCH model is the most suitable model for our data. The reliability of the each model specification can be examined through other indexed as well. Table 4 below displays the results from testing the stability of the GARCH-M, EGARCH, and APARCH models, respectively. Consider the results from the serial correlation test on both standardized residuals and the squared standardized residuals, the results from testing all model specifications at 10, 15, and 20 lagged residuals accept the null hypothesis of no serial correlation as all p-values exceed the significance level of 0.05. For the ARCH LM test, a null hypothesis of this test is that there is no ARCH error in the conditional variance while an alternative hypothesis is that the conditional variance is given by an ARCH(q) process. The results indicate that the LM test for ARCH(2), ARCH(5), and ARCH(10) all reject the presence of ARCH errors in the data. Overall, I think that the robustness and stability of the model is in a satisfactory level. Though the alternative model (APARCH) presents a slightly model fit, the proposed GARCH(1,1)-in-mean model produces fairly robust results as well.

Table 4 Results from testing stability and reliability of the model

	GARCH(1,1)-M	EGARCH	APARCH
Statistics on standardized residuals			
Lag 10	0.9852	1	0.9657
Lag 15	0.7004	1	0.8341
Lag 20	0.6704	1	0.7400
Statistics on standardized squared residuals			
Lag 10	1	1	1
Lag 15	1	1	1

Lag 20	1	1	1
ARCH LM Test			
ARCH Lag (2)	0.9556	0.9991	0.9774
ARCH Lag (5)	0.9991	1	0.9991
ARCH Lag (10)	1	1	1

Chapter VI – Concluding Remarks

Abundant of literatures has concentrated on the role of political risk in stock markets both in the developed and emerging countries. Many cases were examined by academicians and practitioners where most of them focused on the impact of the release of political news on stock returns and volatility. However, not so many studies as I known until now were focused on the influence of the extreme political events such as coup, revolution, or civic war which is likely to cause additional effect on the stock market. The reason might be that those extreme events are rare especially in the modern and globalized era. But, surprisingly, a recent military coup d'état has been executed in Thailand on September, 2006 and the incident was in world-wide public attention. Since this kind of event occasionally takes place and Thailand is viewed as a country which receives little attention but is important in the international framework, I think this is an interesting opportunity to study about how this rigorous event affects the country's stock market. The aim of this paper is thus to explore the impact of political risks on Thailand stock market during the coup period. More specifically, it sheds light on how the latest coup influences the way negative and positive political news exert an impact on the SET index returns and volatility.

One of the recent existing literature which points out the importance of extreme political event in manipulating the behavior of stock market is produced by Bautista (2003). Broadly, the results from his study indicate the sensitivity of Philippine stock market to a dramatic change in the political and economic environment. It was found that large fluctuations in a stock price index (or stock volatility) were observed four times during the period February 1987 to October 2000. Among these four times, the first and the second swing were caused

by a series of military coup in the late 1980s where as the third and the fourth occurred due to the lifting of the remaining foreign exchange and capital account restrictions in 1993 and the 1997 Asian financial crisis which caused a stampede all over the world. The study by Bluhm and Yu (2001) also indicates the influential consequence of coup on stock market. Basically, by observing the daily returns from the DAX index from January 1, 1988 to June 30, 1999, it was found that there are mainly three outstanding periods which exhibit high volatility: 1) the 13.7% fall in the index returns on October 16, 1989 in the wake of the burst merger bubble in the United States 2) the fall of 8.4% on October 28, 1997 due to the Asian financial crisis and 3) the 9.9% decrease on August 19, 1991 which is the day of the coup against Gorbachev in the Soviet Union, a political event that severely affected the German stock market. It can be seen that a change in political atmosphere such as a military coup plays an important role as one of the influential factors that determine the direction of the country's stock market and therefore it is very interesting to investigate the impact of this political action on stock exchange.

The purpose of this dissertation is to explore the impact of political news on stock returns and volatility in Thailand. Also, it examined whether or not the September 19, 2006 military coup has amplified the effect of political news on stock market. In particular, four main hypotheses to be tested are: 1) there is a difference in stock market volatility between the event day and non-event day 2) the difference in stock market volatility between the event and non-event day is higher after the coup 3) major political news has a significant impact on both stock market returns and volatility and 4) the impact of major political news on stock market returns and volatility was amplified after the coup incident. In order to test the first two hypotheses, a non-parametric Mann-Whitney test has been used to examine the

equality of stock volatilities between the event and non-event day. For the last two hypotheses, due to its advantage to capture the relationship between risk and returns of the security, the generalized autoregressive conditional heteroscedasticity in mean (GARCH-M) model was utilized here in order to determine the way a release of political news affect stock returns and volatility. A series of SET index which is calculated from the price of all common stocks traded on a main board was employed in the model estimation process as a representative of the overall stock prices in Thailand. In order to capture the effect of news on stock market, a couple of dummy variables: favorable news and unfavorable news dummies were included into the model. For the amplification effect of the coup, I added other two interacted dummy variables into the model: a favorable news and coup interacted dummy and an unfavorable and coup interacted dummy. This modified model is based on the assumption that bad news would exert a negative effect on stock returns and volatility while good news would induce an opposite effect. Also, note that we assume that the asymmetric effect exists, that is, positive and negative news will cause an unequal impact on stock market. In other words, we acknowledge a leverage effect of the news.

In addition to the GARCH (1,1)-in-mean model, in order to better capture the asymmetric effect of political news on stock volatility, other two model specifications in which one of them is considered to be a more general form of the GARCH-M known as 'EGARCH' and 'APRACH' model was also employed in this study. The results from testing all hypotheses are as follows. First, a non-parametric Mann-Whitney test indicates that stock volatilities on event day are significantly different from those of non-event day. In particular, the test does not reject an alternative hypothesis that volatilities on event day are larger. Second, the results from GARCH (1,1)-in-mean model estimation indicate that favorable and unfavorable

political news do have a significant impact on stock returns in a way that favorable news increase stock returns by about 4% and vice versa for unfavorable news. Similar to stock returns, the result also suggests that favorable and unfavorable news causes a significant effect on stock volatility by increasing volatility on the day in which both types of news was released. For the effect of coup, it was found that coup has not imposed any significant effect on stock returns also it did not significantly amplify the impact of political news on stock returns. However, the estimation from the GARCH (1,1)-in-mean model indicates an unbelievable result that there is an extremely large effect of military coup on stock volatility in both pre- and post-coup period. Finally, we found an evidence of volatility clustering in Thailand's stock market. That is, large fluctuation in stock movement was often followed by large fluctuation and the same occurs with small fluctuation.

An asymmetric feature of the impact of political news on stock market volatility has been investigated in this study as well. Summarily, an obvious evidence of the asymmetric effect of political news on stock volatility is found in the analysis. All of the results from estimating GARCH (1,1)-in-mean, EGARCH, and APARCH model specification indicates a stylized fact that unfavorable political news exert a larger increase in stock volatility than favorable political news of the same amount. This has been illustrated by means of a news impact curve presented in the last chapter. Furthermore, the exploration of the persistence of shocks from the release of political news on volatility is also presented in this study. The results from both GARCH-in-mean and APARCH model estimation indicate a presence of long memory of stock volatility during the study period. That is, it was found that the impact of political news on stock volatility was decayed slowly from Thailand's stock market. Finally, the robustness and reliability of all three models used in this study was examined. The log

likelihood value suggests that the APARCH is the most appropriate model, followed by the EGARCH and the GARCH (1,1)-in-mean model. For the ARCH LM test, the hypothesis of the presence of ARCH errors in the data was rejected for all three models and so does the presence of serial correlation in the squared residuals.

In many existing literature, similar findings were also discovered. For instance, the work by Beaulieu et al. (2002) studying the impact of political risk on stock return and volatility of Quebec-based firms suggested that political risk (as measured by political news) related to a possible independence of Quebec plays an important role in the stock returns conditional volatility but not in the risk premiums. Moreover, they also found that stock return volatility differs with the degree of a firm's exposure to political risk. In other words, they concluded that the effect of political risk on stock volatility is firm-specific. Besides, a plentiful of academic literatures also shed light on the asymmetric response of stock market to positive and negative news. A useful example would be a paper by Laakkonen and Lanne (2008) which denotes the asymmetric effect of both types of news in US and European countries on volatility in good versus bad times. Apparently, the results show that unfavorable news causes a rise in volatility more than favorable news. Moreover, the asymmetric effect also depends on the state of economy. That is, volatility is increased more by negative news in good times than bad times while no difference presents between the impact of good news on volatility in good and bad times. These extensive findings of political news on stock returns and volatility highlight the universality of the stylized fact about the importance of political risk on stock markets.

Several important and interesting implications were obtained from this study. First, the evidence of a significant impact of political risk news on stock market volatility suggests that

political risk news should be one of the factors to be considered when modeling stock market volatility. This is quite important because the events which cause some changes in political situation are a worldwide phenomenon which affects most national stock markets (Jorion and Goetzmann, 1999). Second, the results which indicate a significant impact of military coup on stock volatility verify that political instability is an influential factor capable of convincing the direction of stock market. Though it may sometimes unavoidable for this political event to occur, it is crucial for the country to minimize this instability in order to maintain investors' confidence and the steadiness of country's financial market. It should be noted that the 2006-military coup is the third time coup has been executed in Thailand: the first two coups happened in October 1977 and February 1991. At the time these first two coups were carried out, there is an obvious evidence that coup resulted in a considerable loss in the performance of Thai stock market (Kasikorn Research Centre, 2006; Thaipost, 2009; Sharma and Wongbangpo, 2002). Consequently, it is no doubt that the latest coup would also cause stagnancy on the stock exchange operations in a similar way. A final implication sheds light on the absence of risk premium required by investors in Thai stock market as we failed to find an evidence of the tradeoff between risk and returns. This result is inconsistent with the cognitive assumption behind the modern portfolio theory (MPT) or more specifically a Capital Asset Pricing Model (CAPM) (Black et al., 1972) which underpins the relationship between the asset's non-diversifiable risk and the price of that asset measured by beta (β). If the concept of CAPM holds, high risk needs to be compensated by high returns. Moreover, the invisibility of the tradeoff between risk and return also presents a violation on the Efficient Market Hypothesis (EMH) which states that the fluctuation resulted from any shock should be temporary if market is efficient. This inefficiency was also

supported by our findings which indicate the persistence in stock volatility and volatility clustering during the study period.

As much similar with other academic literatures, some limitations do exist in this study as well. A first limitation associated with a subjective judgment in the political news collection process. Clearly, in the same way as the quality of food depends on the quality of ingredients, the quality of the results depends on the quality of input data too. The selection of political news, to some extent, has some influence on the accuracy and the bias of the results. One point needed to be aware is that the author's judgment on the importance of the news is sometimes likely to be different with investors' viewpoint. As a result, some news might be included in the data set though it is considered to be negligible by investors. Nonetheless, as stated in the earlier chapter, I have tried to minimize this problem as much as possible by excluding the news with ambiguous headlines from the data set. A second limitation relates to the availability of the data. According to our findings, there are some points which are not in line with our expectation, for example, an absence of the tradeoff between risk and stock returns, or the insignificant impact of military coup on stock returns though the effect on stock volatility is presented. One of the reasons for this unanticipated results might be that the effect of coup on the returns of stocks in different sectors was offset each other. That is, this political coup may induce an impact merely on some sectors such as financial, services, or property and construction industries but not the others. As noted by a director of the Bank of Thailand (BoT), though the economy as a whole has not been affected by the latest coup, the financial and credit also property and construction industries in the southern part of Thailand is showing a slow down (Thaisouth Team, 2006). Likewise, Thakoon Boonparn (2010), an editor of an independence press website named

'VoiceTV', commented that the tourism industry is the most affected business sector from this coup incident. However, due to the availability of the data, the historical SET index data categorized by each industry in Thailand are not usually published, the impact of coup on a specific sectors is thus cannot be investigated.

A third limitation is that though it was shown that political risk exerts a significant impact on the overall stock volatility, this result cannot be completely relied on. This is because the movement in SET index historical data during the study period does not resulted from only the political incidents but it also takes account of other important events in the country around that time. For instance, one event which is most likely to influence the performance of Thai stock market is the recrudescence of 'bird flu' in Thailand at the end of the year 2006. As noted by Suphawut Saicheua (2003) in Bangkok Post News, at the beginning of the year 2008, it was expected by the public that Thai stock market would soar to its peak however the arrival of bird flu and the unrest in the southern part of the country has eventually decelerated stock market performance. Last limitation involves the quality and reliability of the news data. In some aspects, it has to be admitted that almost all of the news extensively published in Thailand are often manipulated by the government and related parties. As a result, it is not surprising that those news would be somewhat biased and this has an important effect on our results. Unfortunately, this limitation is extremely hard to solve and more time is needed for a liberty of media to prevail more vastly in the country. As a conclusion, a final point that should be noted here is the area of plausible future research on this topic. In support of a result which has an implication on the country's policy consideration, a more profound and intensive analysis by which the real cause that retard a stock market performance is identified as well as the impact of political

risk on option and future markets should be conducted. I believe that this will lead to a greater contribution and implication on the development of the country's financial market and a strategy to strengthen the political stability in Thailand.

Appendix: Headlines in the Bangkok Post newspaper which appeared on each event day

Date	Headline	Good News (+)/ Bad News (-)
06/01/04	Army writes its own news	-
07/01/04	PM lambastes army, Wan Nor	-
08/01/04	Army team to probe murder	+
09/01/04	Thaksin tells non-security govt officials to button lips	+
12/01/04	Army to train troops to become reporters	+
14/01/04	Army informant's throat slit	-
16/01/04	Thaksin, Abdullah agree on development of border area	+
19/01/04	Thaksin says martial law necessary	-
20/01/04	Muslim clerics warn Thaksin to take care investigating schools	-
21/01/04	Army warns ponoh fugitives	-
22/01/04	Draftees gathered outside army camp on night of raid	-
23/01/04	Key separatists met in Malaysia before attack on army camp	-
27/01/04	Army sets 8-month target to quell unrest	+
30/01/04	Senators urge debate on govt record	-
02/02/04	Army chief defends military operations	-
03/02/04	Poor must be given chance, says Thaksin	+
04/02/04	Thaksin seeks ideas from local leaders	+
05/02/04	Thaksin insists bid to scrap local elections is democratic	+
06/02/04	Suspect in raid on army camp linked to JI	-
09/02/04	TRT offers to supply funds for by-election	+
10/02/04	Thaksin 'doing all he can' to win back foreign confidence	+
11/02/04	Muslims living in fear can ask for protection from the army	+
16/02/04	Army praises district office for imposing 10pm curfew on teens	-
17/02/04	Army to build road and fence to seal border with Malaysia	+
18/02/04	Army chief firm on keeping martial law	-
19/02/04	Defining times for PM Thaksin	-
20/02/04	Thaksin challenges Songkhla voters	-
23/02/04	Election staff scared, volunteers scarce	-
24/02/04	Staff threaten mass protest to stop Egat stock exchange float	-
25/02/04	Quick lifting of red zones causes alarm	-
27/02/04	Army to build road and fence to seal border with Malaysia	+
01/03/04	Abhisit slams 'ineffective' rejig	-
02/03/04	Unions plan huge Govt House protest	-
03/03/04	Protest leaflets greet cabinet	-
04/03/04	Chaisit says army insiders not involved in Jan 4 weapons raid	+
08/03/04	Army hotline for public complaints	+
09/03/04	Army communities nationwide eligible for B1m village fund	+
10/03/04	Thaksin regime 'undemocratic'	-
11/03/04	Forgive and forget, says Thaksin	+
12/03/04	Banyat sees Songkhla by-election shattering TRT dream	-
15/03/04	Egat workers take protest to provinces	-

17/03/04	Prommin: It's summer, protest must end	+
18/03/04	Pisarn made new chief of Fourth Army	+
22/03/04	A civilised protest	+
23/03/04	Egat union insists protest legal, despite Labour Ministry warning	-
24/03/04	Mass rally to be held	-
25/03/04	Union says protest will last till May	-
29/03/04	Sanam Luang rally draws nearly 10,000	-
30/03/04	Army informants in parley with key separatist leaders	+
12/04/04	Thaksin to visit trouble spots	+
16/04/04	Thaksin goes on PR offensive	+
21/04/04	PM dismisses possibility of early election	+
22/04/04	Grenades greet visit by Thaksin	+
23/04/04	Banyat unconvinced election call imminent	+
28/04/04	Violence at Krue Se mosque	-
06/05/04	Thaksin to create 100,000 jobs	+
10/05/04	Banyat unconvinced election call imminent	+
13/05/04	Muslims, Democrats, army support inquiry	+
17/05/04	New peace plan sought by Thaksin	+
20/05/04	Sanoh tells unions he will talk with Thaksin on their behalf	+
24/05/04	Arguing takes up eight hours of debate	-
01/06/04	Thaksin certain of ministers' survival	+
02/06/04	Govt says debate 'ineffective'	-
24/06/04	Army post attacked, ranger killed, two others injured	-
28/06/04	Army provides guns, ammo to scared Buddhist villagers	-
29/06/04	Army bracing for another rebel strike	-
02/07/04	Thaksin is still most popular in Bangkok	+
05/07/04	Thaksin vows to remain at helm 'in absence of worthy successor'	+
12/07/04	Students held over 'plan to harm Thaksin'	-
16/07/04	Thaksin cool to metropolis idea	+
19/07/04	Army stations cut Apirak's radio pitch	-
22/07/04	Stay clear of politics or leave the temple, PM tells monks	-
23/07/04	Army wants ponoh school help frozen	-
26/07/04	Thaksin team chooses wrong exports for global marketplace	-
27/07/04	Chaisit expected to remain army chief	-
03/08/04	Vendors in protest over rent increase	-
04/08/04	Rent rally gets results for vendors	-
05/08/04	Academics find fault with Thaksin	-
06/08/04	Critic lashes out at money politics, graft	-
09/08/04	Prawase urges Thaksin to resign chairmanship, citing interference	-
10/08/04	Thaksin in vocal spat with critic	-
11/08/04	Winning over separatists not an easy job, says army	-
13/08/04	'Enemies' of Thaksin vow to oust him	-
23/08/04	Thaksin refuses to accept challenge	+
24/08/04	Army asks clerics to lift rebels' oath	+
25/08/04	Pulo, GMIP seek to join talks with army	+
26/08/04	Army hopes to quell violence by reorganising ponoh schools	+

27/08/04	Thaksin orders overhaul of laws	+
03/09/04	Apirak meets Thaksin for talks on shape of city	+
06/09/04	Cut in bureaucratic red tape planned	+
07/09/04	Army plans welcome home party for troops	+
08/09/04	Democrats launch major rally	-
10/09/04	Push for election law changes to curb EC powers	+
13/09/04	Banharn certain PM will not call early election	+
14/09/04	Thaksin, Apirak need each other	+
15/09/04	Thaksin declares new drugs war	+
16/09/04	Army, police chiefs call for unity to end unrest	+
17/09/04	Thaksin to visit Italy, Sweden this month	+
27/09/04	Ekkayuth: I want to bring down Thaksin	-
28/09/04	Ekkayuth joins anti-TRT rally at Sanam Luang	-
30/09/04	Thaksin gives critics soapbox to stand on	+
01/10/04	Democrats launch election campaign	+
04/10/04	Army goes on offensive from Oct 1	+
08/10/04	Abhisit accuses govt of 'integrated cronyism'	-
12/10/04	Bangkok sends Thaksin a message	-
18/10/04	Promises galore at TRT rally	-
29/10/04	Thaksin: I'm not quitting; no snap poll	+
01/11/04	Government faces candle-light protest	-
08/11/04	Political 'dictatorship' slammed by Abhisit	-
16/11/04	Anti-Thaksin resentment 'growing'	-
18/11/04	Ammar challenges Thaksin's ability to run the country	-
29/11/04	Thaksin denies cash for votes	+
07/12/04	Protest demands senators' ouster	-
17/12/04	Poll names Thaksin as Man of Year	+
04/01/05	Call to delay general election	-
06/01/05	RIVALS BATTLE TO END THAKSIN ERA	-
03/02/05	Army hopes unrest will ease after Aceh tragedy	+
07/02/05	Thaksin orders security forces to cooperate	+
09/02/05	Thaksin optimistic situation in deep South will soon improve	+
10/02/05	Crackdown on Tak Bai protest dims chances of TRT hopefuls	+
15/02/05	Abhisit takes Democrat helm	+
21/02/05	Egat union says election no mandate for privatisation	+
24/02/05	Thaksin optimistic situation in deep South will soon improve	+
25/02/05	Thaksin denies split in TRT	+
01/03/05	Thousands rally in Yala to slam unrest	-
02/03/05	Egat union says election no mandate for privatisation	-
03/03/05	Farmers rally to stop Newin getting job	-
08/03/05	Policeman slain, army patrol unit ambushed	-
09/03/05	Civic groups plan campaign rally to keep govt in check	-
14/03/05	Election body throws out fraud proof	-
22/03/05	Army to deploy more troops in restive South	-
23/03/05	Army on alert for Krue Se anniversary	-
24/03/05	Suranand: Thaksin not a dictator	+

25/03/05	Straight down to work for Thaksin	+
28/03/05	Thaksin says he'll make up with Sanoh	+
31/03/05	Factional anger boils as Thaksin refuses to go to Sanoh's birthday bash	-
04/04/05	Sanoh calls truce in war of nerves with Thaksin	+
04/05/05	Journalists accuse Thaksin govt of interfering in news reporting	-
27/06/05	Abhisit: Policy at fault, not officials	-
12/07/05	Thaksin: 30-baht scheme not broke	+
18/07/05	Thaksin assures govt not broke	+
21/07/05	Thaksin is leading us to disaster	-
22/08/05	Muslim backed as army chief	+
26/08/05	Thaksin urges Southerners not to be afraid	+
01/09/05	Press freedom 'waned under Thaksin govt'	-
21/09/05	Thaksin toys with media, reporters not impressed	-
22/09/05	Army to take 'more serious approach' to unrest	-
14/10/05	Investors to learn more about protest	-
17/10/05	TRT decides not to contest Satun by-election	-
18/10/05	Thaksin: We will retaliate	-
07/11/05	Die-hard protesters continue their rally	-
11/11/05	Thousands to gather for anti-Egat listing protest	-
14/11/05	Thaksin files sixth lawsuit against hosts of talk show	-
16/11/05	Major rally still planned at Sanam Luang	-
21/11/05	Thaksin to take Sondhi to court again	-
23/12/05	Not 'rock bottom yet' for Thaksin	+
26/12/05	Fourth Army gets new chief	+
27/12/05	Court allows Sondhi some space to criticise Thaksin	+
29/12/05	Thaksin a good sport, decides to keep day job	+
30/12/05	Sonhi: Army won't interfere	+
03/01/06	Thaksin brushes off criticism	+
04/01/06	Peeraphan named adviser to Thaksin	+
13/01/06	Thaksin's political survival at stake	+
23/01/06	Army may step in if police fail to control rally	+
24/01/06	Chidchai: Troops won't be needed to keep peace at rally	-
03/02/06	Huge police force to keep eye on rally	+
06/02/06	Cabinet shock as PM's critics rally	-
07/02/06	More academics protest	-
08/02/06	Govt warns Sondhi not to rally at Royal Plaza	+
09/02/06	Thammasat students step up campaign for Thaksin to quit	-
14/02/06	Rally to oust Thaksin of 'no concern' to govt	+
15/02/06	Sanam Luang 'booked' on rally day	-
17/02/06	Alliance vows to protest at Sanam Luang	-
20/02/06	Chamlong 'has right to join rally'	-
21/02/06	Too little, too late, Thaksin's foes say	-
24/02/06	Army will leave it to police	+
27/02/06	Lively protest draws 100,000	-
01/03/06	Business welcomes snap election	+
02/03/06	Pornchai refutes rumours of coup	+

03/03/06	Thammarak warns top brass against coup bid	+
06/03/06	Lively protest draws 100,000	-
07/03/06	Panlop: Military coup possible	-
08/03/06	PM fights back with Friday rally	-
10/03/06	Mobile phone companies say protest having no impact	+
13/03/06	Unions urge workers to join anti-PM rally	-
14/03/06	State workers 'entitled' to take leave for rally	-
17/03/06	Anti-Thaksin group rallies support in Silom	-
20/03/06	PAD ponders city request to move protest	-
21/03/06	PAD urges people to join its big rally on Saturday	-
23/03/06	PAD set to turn up political heat on Thaksin	-
24/03/06	Election may fail to produce a parliament	-
27/03/06	Abhisit: PM should see King, quit	-
28/03/06	Rally renews call for King to step in	-
29/03/06	Actors premiere on stage at protest rally	-
30/03/06	Rally move to Paragon worries police, sellers	-
31/03/06	Fears mount of protest showdown upcountry	-
03/04/06	Huge protest packs Siam Square	-
04/04/06	Poll: 70% in Bangkok query election winners' legitimacy	-
05/04/06	Thaksin, Plodprasop file lese majeste suits against Sondhi	-
11/04/06	Election questions unanswered	-
12/04/06	Thaksin: I took my break reluctantly	+
24/04/06	Govt warns against ballot protest	-
25/04/06	By-election called off after staff protest	-
26/04/06	Protest paralyses Thon Buri traffic	-
27/04/06	Politics, oil prices causing stress	-
28/04/06	PAD goes ahead with rally plan	-
03/05/06	PAD rally turnout sparse as court verdicts awaited	+
04/05/06	Police set to finalise protest cases soon	+
08/05/06	Anti-Thaksin rallies must end now	-
09/05/06	Uncertainties to undermine stability Stock investors cheer election nullification	-
11/05/06	Thaksin confirms he will lead TRT to contest next election	-
15/05/06	Election panel has no credibility left	-
16/05/06	Thaksin accused of shirking duties	-
19/05/06	Supreme Court: PAD support rally not wanted	+
22/05/06	Students plan protest against EC	-
23/05/06	Southern turmoil and Thaksin's 'pledge' to end it	+
29/05/06	Academics say Thaksin not needed	-
30/05/06	MP murder probe focuses on politics	-
02/06/06	Confidence in politics falls	-
05/06/06	Senator mocks Thaksin by taking leave	-
07/06/06	Yellow shirt fever across the nation	-
09/06/06	Army chief backs NRC's plans	+
26/06/06	Bomb-politics link downplayed by PM	-
27/06/06	Thaksin's foundation continues to crumble	-

03/07/06	Commission is ready to reschedule election date	-
05/07/06	Meechai forewarns Thaksin	-
10/07/06	PAD: Others may rally outside TRT	-
12/07/06	PAD rally may be postponed	+
13/07/06	PAD calls off planned anti-Thaksin protest	+
14/07/06	Thaksin says another plot hatched to take his life	-
17/07/06	Thaksin to resubmit poll decree to King	+
20/07/06	Rally put off until King recovers	+
21/07/06	Two top army brass launch war of words	-
24/07/06	Decree does not legitimise Thaksin	-
31/07/06	PAD plans more rallies if Thaksin won't quit	-
03/08/06	HM's advice changed face of Thai politics	-
07/08/06	Prem leads army top brass in show of unity	-
15/08/06	Call to postpone Oct 15 election	-
16/08/06	PM gets no protest respite, even in Chiang Mai	-
17/08/06	Thaksin's supporters, opponents clash briefly in Tak, Phitsanulok	-
18/08/06	THAI staff again protest early move	-
21/08/06	PAD calls for reform within 18 months of next election	-
23/08/06	Non-violent protest goal not achieved	-
24/08/06	Bomb Found Close to Thaksin's House	-
25/08/06	Election date likely to be extended	-
28/08/06	PAD protests action against Thaksin foes	-
29/08/06	Prem supporters rally outside his residence	-
30/08/06	Thaksin: Polls likely to be delayed	-
31/08/06	Thaksin set to postpone polling date	-
05/09/06	PAD to hold more rallies against Thaksin	-
06/09/06	Prem won't meet anti-Thaksin group leaders	-
07/09/06	Thaksin to file criminal lawsuit against Sondhi	-
11/09/06	CSD probes alleged coup	-
13/09/06	The politics of Suvarnabhumi Airport	-
14/09/06	Sonthi dismisses coup talk as rumours spread	-
15/09/06	Panlop warns of coup by 'Thaksin's officers'	-
19/09/06	Thaksin hints he may take break from politics	+
20/09/06	COUP D'ETAT IN THAILAND	-
21/09/06	Most peaceful military coup in Thai history	+
22/09/06	Anti-coup rally planned for today	-
25/09/06	Coup should restore unity to country	+
26/09/06	Uphill struggle ahead for coup council	-
27/09/06	Mcot board resigns 'for Thaksin broadcast'	-
28/09/06	Fake bomb found outside shop with letter attacking Thaksin	-
29/09/06	Thaksin not doing the right thing	-
02/10/06	Anti-coup driver rams taxi into army tank	-
03/10/06	Anti-coup activists stage rally	-
05/10/06	Prem hints Thaksin like Adolf Hitler	+
06/10/06	Academics rally to Prem	-
09/10/06	Gen Sonthi promotes 75 army officers for taking part in coup	-

11/10/06	Book to explain why coup was 'necessary'	+
17/10/06	Sondhi: Thaksin traded Thai territory for deals	-
25/10/06	Third Army moves troops to capital	-
26/10/06	Midnight uni website closed after protest	-
27/10/06	Uphill struggle ahead for coup council	-
30/10/06	Mcot board resigns 'for Thaksin broadcast'	-
02/11/06	Anti-coup protesters test waters of dissent	-
06/11/06	Investigator seeks evidence of corruption by Thaksin govt	-
10/11/06	Military losing post-coup momentum	-
13/11/06	Thaksin urged to wait a year before returning	+
14/11/06	Three anti-coup groups hold city protests	-
23/11/06	Anti-coup group snubs CNS talk offer	-
24/11/06	Something is odd about the coup	-
27/11/06	Thaksin to steer clear of politics	+
30/11/06	Thaksin to be witness in trial of TRT for electoral fraud	+
04/12/06	TRT allegedly bankrolling rally	-
12/12/06	Democracy protest passes peacefully	+
18/12/06	Thaksin's fate to be decided today	-
27/12/06	Bank plays down Thaksin reports	-
28/12/06	Up to 1,000 expected at anti-coup rally	-
29/12/06	NSC retains 2 coup-makers' orders	-
03/01/07	POLITICS 'TO CHANGE FOR BETTER'	+
04/01/07	BoT arm seeks damages from Thaksin and wife	-
05/01/07	Sonhi goes on TV to deny coup	+
08/01/07	Abhisit: Nation can't afford another coup	+
15/01/07	Militants target army camp	-
22/01/07	Protest demands army quit politics	-
26/01/07	Parties excluded from by-election	-
29/01/07	FM confirms Thaksin met US lobbyist	-
30/01/07	ICT looking at pro-Thaksin website's legality	-
05/02/07	Foreign press seems to love Thaksin	-
07/02/07	Govt, CNS decide to let Thaksin sound off	+
12/02/07	Thaksin still sowing seeds of division	-
13/02/07	A chance to explain Thailand's post-coup situation to EU	+
14/02/07	ICT blocks pro-Thaksin website	-
15/02/07	There are problems a coup cannot solve	-
16/02/07	'Black book' lists Thaksin-era graft	-
19/02/07	Thaksin's motives a tangled web	-
16/03/07	FM defends coup before EU ministers	-
19/03/07	CNS and govt 'have yet to justify coup'	-
20/03/07	Clean politics can curb corruption	-
26/03/07	PTV rally draws thousands of Thaksin backers	-
27/03/07	Anti-government protest at Sanam Luang draws 1,000	-
28/03/07	Another pro-Thaksin website under scrutiny	-
30/03/07	4,000 join pro-Thaksin protest	-
02/04/07	Anti-coup rallies upset Prem backers	-

05/04/07	2,000 to rally in support of Gen Prem	-
09/04/07	CNS' anti-Thaksin campaign	-
10/04/07	A long road to general election day	-
17/04/07	Yala rally calls for action on security	-
20/04/07	Thaksin supporters targeting CNS again	-
24/04/07	PTV can't use Sanam Luang for Friday rally	+
25/04/07	City approves PTV rally	-
30/04/07	Govt urged to put public station on air before election	-
02/05/07	PR campaign 'to counter Thaksin'	-
14/05/07	2,000 residents to stage rally at airport today	-
15/05/07	CNS to hit back at pro-Thaksin website	-
24/05/07	Govt hopes EU will soften stance on coup	-
29/05/07	A proposal guaranteed to stir protest	+
30/05/07	banned 111 executives from politics	-
04/06/07	300 gather for counter-rally	-
11/06/07	Rude shock for Kraisaak at PTV rally	-
12/06/07	Anti-coup protesters march on army HQ	-
18/06/07	Anti-coup protests lose steam	+
19/06/07	Thaksin, Potjaman charged	-
25/06/07	Anti-coup protest fizzles out	+
26/06/07	Thammarak, Pongsak face charges over election fraud	-
27/06/07	Thailand's upcoming election won't reduce risk for investors	-
28/06/07	Government blocks 2 pro-Thaksin websites	-
02/07/07	Election could be delayed until 2008	-
03/07/07	Sonthi: Many people upset with DAAD want to rally	-
05/07/07	Army uneasy as protest spreads in the North	-
09/07/07	Thaksin free to launch his website	+
11/07/07	Army warns of fresh bombings in Bangkok	-
13/07/07	Fake officers offer cash to attend rally	-
18/07/07	Paiboon backs talking peace with Thaksin	+
24/07/07	Anti-coup chiefs issue challenge	-
27/07/07	Thaksin and wife formally indicted	-
31/07/07	Thaksin vows to fight on	-
01/08/07	Military once again dominate politics	-
02/08/07	Government blocks 2 pro-Thaksin websites	-
10/08/07	Anti-coup protest thwarted by riot cops	-
14/08/07	Thaksin, stay away _ poll	-
15/08/07	ASC freezes Thaksin's assets	-
16/08/07	Soldiers threaten charter critics, rally told	-
20/08/07	Abhisit urges end to conflict	+
23/08/07	A POLITE AND STYLISH PROTEST	+
24/08/07	PM, poll agency to fix election date next week	+
28/08/07	Election to be held on Dec 23	+
31/08/07	Thaksin, wife and son may be charged with money laundering	-
03/09/07	Sonthi denies plans to stay on as army chief	+
04/09/07	Saprang rejects possibility of coup	+

17/09/07	Charter gives power to army, bureaucracy	-
19/09/07	Public opinion divided over coup results	-
21/09/07	Keeping army out of politics	+
01/10/07	Stability still distant hope at election, says scholar	-
03/10/07	Politics behind Army HQ blast	-
15/10/07	PPP salutes Thaksin legacy	-
17/10/07	PPP rally draws huge crowd in Chiang Rai	-
18/10/07	Thaksin wants ASC's Sak to be charged	-
19/10/07	Prosecution of key Thaksin backers sought	-
02/11/07	Politics-weary public shows little interest in election	-
05/11/07	PAD leaders to run in election	-
12/11/07	Fiery protest at monument, charges laid against 3 men	-
19/11/07	PPP tells rally they'll bring back Thaksin	-
27/11/07	City Hall will allow banned TRT execs to address rally	-
28/11/07	Thaksin's suit against ASC rejected	-
06/12/07	'No coup' claim by army chief clears the air	+
07/12/07	EC wants ban on Thaksin internet site	-
17/12/07	Democrats file complaint over Thaksin VCDs	-
18/12/07	ARMY CHIEF SPEAKS OUT	-
21/12/07	No red cards to be issued before the poll	+
25/12/07	Anti-Thaksin groups split over result	-
27/12/07	Election Commission ready for Senate poll on March 2	+
02/01/08	More than 300 people rally in Buri Ram in support of EC	-
07/01/08	PPP red cards spark big protest	-
08/01/08	EC concerned about PPP rally	-
09/01/08	Crime on the rise as politics grabs the attention	-
18/01/08	Many disappointed with election result	-
21/01/08	Abhisit denies trying to subvert PPP attempts to form a govt	-
22/01/08	Poll panel issues three more yellow cards	-
23/01/08	Major blow to army in South	-
24/01/08	Sonthi issues veiled warning to Thaksin	-
29/01/08	Results show politics still very polarised	+
30/01/08	Election Commission ready for Senate poll on March 2	+
31/01/08	Sonthi phones Thaksin for reconciliation	+
01/02/08	DSI chief won't counter sue Thaksin, Potjaman	+
04/02/08	Thailand's imperfect election	-
25/02/08	Thousands welcome Thaksin back home	+
26/02/08	No need for protest yet	-
27/02/08	PAD leaders regroup to fight Thaksin	-
03/03/08	Many unaware of Senate election	-
04/03/08	A hazard of politics	-
05/03/08	Source: Samak meets secretly with army boss over reshuffle	-
13/03/08	PAD to revive anti-Thaksin push with March 28 forum	-
14/03/08	PPP govt picks up where Thaksin left off	+
28/03/08	No counter rally to PAD forum	+
31/03/08	Samak tells of new coup plot	-

08/04/08	Seer denies having predicted a coup	+
11/04/08	Thaksin says he's forgiven everyone	+
16/04/08	New attempt to dilute Sonthi's influence in the army	+
17/04/08	Samak confirms early election	+
24/04/08	Samak claims PAD paving way for coup	-
25/04/08	Democrats grill govt about Duang's return to the army	-
28/04/08	PAD drops charter rally plan	+
02/05/08	Thirayuth warns of coup peril	-
07/05/08	Army to quell unrest 'next year'	+
12/05/08	Jakrapob to ban PRD staff talking of coup	+
15/05/08	Abhisit opts for article change	+
16/05/08	Red Beret unit to be withdrawn from South	+
20/05/08	Police to protect rally goers	+
21/05/08	To avoid another coup	+
23/05/08	PAD set to stage mass protest on Sunday	-
26/05/08	PAD rally demands PM quits	-
28/05/08	PAD confident, says protest will continue	-
30/05/08	PAD to expand rally, rejects call to ease off	-
02/06/08	Samak 'must quit to end rally'	-
03/06/08	Army, police don't want crackdown on PAD rally	+
04/06/08	Govt hatches plan to end rally	+
05/06/08	Your demands were met, time to end the protest	-
06/06/08	PAD kicks off its mini-protest strategy	-
10/06/08	Protest leader says his life threatened	-
11/06/08	Army set to deploy its new APCs	-
12/06/08	Abhisit urges PM to call general debate	-
16/06/08	Thaksin faces criminal rap	-
17/06/08	PAD stages protest at EC office	-
18/06/08	PAD targets major rally on Friday to oust the govt	-
30/06/08	Abhisit: Samak unfit to lead the country	-
07/07/08	Farm, slum groups plan rally	-
08/07/08	PAD rally returns to bridge	-
09/07/08	Army leader criticises the PAD, vows to stay neutral	-
10/07/08	Protest planned for Noppadon's arrival	-
25/07/08	PAD guard killed as 700 opponents storm rally	-
31/07/08	Army, air force offer to help police protect protesters	+
04/08/08	PAD threatens mass anti-government rally	-
06/08/08	PAD denies encouraging military coup	+
18/08/08	PAD to rally outside British embassy	-
19/08/08	Protest shuts Hat Yai road	-
20/08/08	Panlop warns he'll make PAD protest more hostile	-
21/08/08	Police unit trapped inside the protest	-
27/08/08	Snap election the best way out of a dilemma	+
28/08/08	Police to protect rally goers	+
29/08/08	PM, army chief scotch rumours of a rift	+
01/09/08	Government supports rally against PAD	-

03/09/08	Samak will delay city election	-
05/09/08	UDD decides to shut down its rally sites	+
08/09/08	Another coup is possible, says close aide to the CNS	-
15/09/08	Rural people suffering financially from protest	-
16/09/08	Thousands of students plan to join rally	-
17/09/08	Prosecutors set to target Thaksin, wife	-
18/09/08	PAD unveils its doctrine of demonstration	-
22/09/08	Hopes for protest breakthrough	+
24/09/08	ICG: Instability may bring coup	-
29/09/08	PAD to close five airports in PM protest	-
30/09/08	Court issues 4th warrant for Thaksin	-
01/10/08	Security chief says politics a hindrance	-

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