"Good coups, bad coups: evidence from Thailand's financial markets"

AUTHORS	Sutsarun Lumjiak Nguyen Thi Thieu Quang Christopher Gan ⓘ https://orcid.org/0000-0002-5618-1651 Sirimon Treepongkaruna ⓘ https://orcid.org/0000-0002-3096-8499

NUMBER OF REFERENCES **59**	**NUMBER OF FIGURES** **5**	**NUMBER OF TABLES** **6**

BUSINESS PERSPECTIVES

Sutsarun Lumjiak, Ministry of Education, Bangkok, Thailand.

Nguyen Thi Thieu Quang, Ph.D. Candidate, Department of Financial and Business Systems, Faculty of Agribusiness and Commerce, Lincoln University, New Zealand.

Christopher Gan, corresponding author, Professor, Department of Financial and Business Systems, Faculty of Agribusiness and Commerce, Lincoln University, New Zealand.

Sirimon Treepongkaruna, Professor, University of Western Australia, Business School, Australia.

Sutsarun Lumjiak (Thailand), **Nguyen Thi Thieu Quang** (New Zealand), **Christopher Gan** (New Zealand), **Sirimon Treepongkaruna** (Australia)

GOOD COUPS, BAD COUPS: EVIDENCE FROM THAILAND'S FINANCIAL MARKETS

Abstract

This study investigates the short-run and long-run impact of coups on Thailand's financial markets. Using daily data from the stock and foreign exchange markets during the period 2005–2017, the study shows (1) both coups in 2006 and in 2014 exert short-run impact on Thailand's stock and foreign exchange markets; (2) however, the direction and magnitude of impact are different and opposite in the two coups; and (3) in the long run, the coups exhibit minimal impact on the currency market, but induce better market performance (positive return and decrease in the return volatility) despite an increase in liquidity risk of the stock market. Against common beliefs about negative consequences of the coup d'états, this study suggests that the uncertainty surrounding coups can bring good investment opportunities for investors to earn abnormal profits. Moreover, in the long term, the coup can drive the country to better stability and development.

INTRODUCTION

Thailand is known as a country with high political instability in Asia among other countries such as the Philippines, Bangladesh, and North Korea. As of 2015, Thailand was ranked 163rd out of 194 countries in the world in terms of political stability (TheGlobalEconomy.com, 2015). Within eight years since 2006, Thailand has seen two coups and the most recent coup in 2014 is marked as the 12th coup in the country since 1932. The coups and associated political instability were blamed for the country's slow economic development (International Monetary Fund, 2015). However, Thailand's financial market has grown rapidly since the recovery from the 1997 Asian financial crisis. In 2016, Thailand was considered as the second best-performing stock market in Asia with more than 19% year-to-date return of Thai SET50 index (Chandran, 2017). In addition, the Thai Baht appreciated 7.8% against the US dollar to become Asia's best performing currency in 2017 (Reuters, 2017). It is, therefore, interesting to determine if there is any relationship between the coups and financial market quality. In other words, whether the coups affect financial market quality in Thailand.

This study extends the study of Lumiajiak, Treepongkaruna, Wee, and Brooks (2014) by taking into account the effect of the most recent 2014 coup in addition to the 2006 coup. As suggested by Duggan (2004), investors may behave differently to different coups due to their systematic differences. We also investigate the short-run and long-run impact of coups on Thailand's financial markets, specifically the Stock

Exchange of Thailand (SET) and the Foreign Exchange USD/THB market. However, rather than using the realized return, volatility, liquidity and liquidity risk, we use the mean-adjusted model to determine the abnormal value of these measures as suggested for event studies. In addition, this method proved to be as efficient as other complicated methods (Brown & Warner, 1985).

The results of this study contribute to the literature on coup's effects and the role of political risk in a country's financial markets. Specifically, the study results showed (1) both coups in 2006 and 2014 exerted short-run impact on Thailand's stock and foreign exchange markets; (2) however, the direction and magnitude of impact were different and opposite in the two coups; (3) in the long run, the coups had little impact on the currency market, but induced better market performance (positive return, decrease in the return volatility) despite an increase in the liquidity risk of the stock market. The study results provide support for the positive effects of coups in contrast to the traditional negative consequences. The uncertainty surrounding the coups can bring good investment opportunities to investors to earn abnormal profits. Moreover, in the long term, the coup can drive the country to better stability and development.

The next section briefly review related literature about coups and the effect of political risk on the performance of financial markets. Section 2 presents an overview about political environment and coups in Thailand. Section 3 discusses the data and methodology. The summary statistics and empirical results are discussed in section 4, and last section concludes the study.

1. LITERATURE REVIEW

Coup is a political event related to the use of military power and the change of government leaders, and is a source of political risk (Powell & Thyne, 2011). Previous studies have shown that political risk has great influence on stock market development (Perotti & van Oijen, 2001; Yartey, 2008). Particularly, the effect is stronger in emerging than developed markets due to more barriers, such as low transparency, less reliable data, and higher level of information asymmetry (Bilson, Brailsford, & Hooper, 2002; Brooks & Mosley, 2007; Erb, Harvey, & Viskanta, 1996). It has been argued that higher risk associated with political risk can bring abnormal stock returns (Amihud & Wohl, 2004; Beaulieu, Cosset, & Essaddam, 2006; Bilson et al., 2002; Chen, Bin, & Chen, 2005; Fengs, 2001; Kim & Mei, 2001; Ma, Sun, & Tang, 2003; Pantzalis, Stangeland, & Turtle, 2000). The following relationship hypothesis is offered:

H1: *The coup has a positive effect on the abnormal return of Thai stock market.*

However, political risk also affects market volatility. For example, Chan and Wei (1996) showed that political shocks such as the news about Sino-British collaboration on Hong Kong affairs significantly affected the volatility of the stock market due to the impact of both market-wide and substitution effects. Białkowski, Gottschalk, and Wisniewski (2008) when studying the behavior of stock market during national elections in 27 OECD countries also showed that the stock market participants acted more aggressively when there were increasing election shocks caused by narrow margin of victory or changes in the political inclination of the government. We hypothesize the following relationships:

H2: *The coup brings more volatility to Thai stock market.*

H3: *The coup increases the liquidity risk of Thai stock market.*

However, not many studies investigate how political risk affects the stock trading volume, except for a few studies, such as Chan, Chui, and Kwok (2001) and Leblang and Mukherjee (2005). Chan et al.'s (2001) study showed that political news negatively impacted the trading volume on the Hong Kong Stock Exchange due to investors' perceptual biases and the less quality of information from political news. On the other hand, Leblang and Mukherjee (2005) found that the political effect depended on the anticipation of the winning party. We hypothesize the following relationships:

H4a: The coup has a negative effect on the liquidity of Thai stock market.

H4b: The coup has a positive effect on the liquidity of Thai stock market.

The effect of political risk is also prominent in the foreign exchange market. Bachman (1992) argued that political risk played an important role in explaining the significant changes in forward exchange bias. Blomberg and Hess (1997) also criticized the poor performance of standard exchange rate forecasting models and posited that this was due to the omission of political factors. Freeman, Hays, and Stix (2000) added that in democratic-politic countries, the currency traders were forced to continuously revise their expectations about election results and government survival. Therefore, exchange rate would be affected in a way that exhibited different market regimes. In addition, this effect depended on the degree of democracy and the transparency of the policy-making (Hays, Freeman, & Nesseth, 2003). The following hypothesis is offered:

H5: The coup has a positive effect on abnormal return of Thai foreign exchange market.

In terms of market volatility, Lobo and Tufte (1998) found that the exchange rate volatility of the JPY, GBP, DEM and CAD against the USD was affected by political factors, such as electoral cycle and/or the political party. Similar findings were also found for the Greek foreign exchange rate (Siokis & Kapopoulos, 2003). In Latin America, Cermeño, Grier, and Grier (2010) proved that the foreign exchange rate was more volatile in post-election period. Liu and Pauwels (2012) also showed that external political pressures from other countries such as the U.S., the EU and Japan caused the volatility of Renminbi. The following hypothesis is offered:

H6: The coup has a positive effect on return volatility of Thai foreign exchange market.

Given the substantial effort in investigating the effect of political risk on the currency market, studies on liquidity effects have not received adequate attention. Lumiajiak et al.'s (2014) study examined this effect on Thai foreign exchange market. The authors showed that the 2006 coup reduced the bid-ask spread of the USD/THB and increased its volatility. However, this effect was short-run. In the long run, a reverse reaction was found. The following hypotheses are offered:

H7: The coup has a positive effect on the liquidity of Thai foreign exchange market.

H8: The coup has a positive effect on the liquidity risk of Thai foreign exchange market.

1.1. Overview of political environment and coups in Thailand

Since 1932, Thailand has followed the constitutional monarchy with the King as the head of the country and the Prime Minister (PM) leading the government. However, Thailand is not under the full democratic country. Over the past 80 years, the country has seen 12 coups followed by the ruling of the military leaders. The two recent coups took place in 2006 and 2014. Table 1 summarizes key political events in Thailand surrounding the two coups from 2005 to 2017.

Among the causes of coups in Thailand, the preservation of military power has been the most important factor. The history of Thailand politic has not seen any government survived for the full term until 2005 when Thaksin Shinnawatt completed his term in the government and won the election for the second term. With the support from his majority – Thai Rak Thai party, Thaksin gained control over the military. Thaksin was widely supported by the rural and low-income class. His rise to power led to the polarization of the country between one side comprising Thaksin, his Thai Rak Thai party and the police, and the other side including the military, the monarchy and the Democrats.

Thaksin was supported by the rural and low-income class, but he was opposed by the urban and middle class for corruption and untrustworthiness. The opposition accelerated in 2005 with Thaksin election winning for the second term. This led to the conflicts between the Red Shirt – supporters of Thaksin's Thai Rak Thai party – and the Yellow Shirt – opponents of Thai Rak Thai and supported

Table 1. Thailand's key political events (2005 to 2017)

Date	Events	Political regimes
March 2005	Thaksin Shinnawatt became PM for the second term	Shinnawatt led government
January 2006	Negative public opinions about the sale of The Shinawatra family's shares of the country's largest telecommunications company Shin Corp	
March 2006	Mass rallies by People's Alliance for Democracy (PAD) against PM Thaksin	
April-May 2006	Snap election called by PM Thaksin Shinnawatt was boycotted by the opposition parties and annulled	
September 19, 2006	Bloodless coup staged by the military leaders. An interim civilian government was formed	Military led government
October 01, 2006	Retired General Surayud Chulanont was appointed the interim PM	Independently led government
August 20, 2007	Approval and promulgation of the new Constitution	
December 23, 2007	National parliamentary election. The People Power Party (PPP) won the most votes	
January 29, 2008	Samak Sundaravej was elected as the new PM	Shinnawatt led government
September 09, 2008	PM Samak Sundaravej was fired by the Constitutional court and Somchai Wongsawat was appointed as the new PM	
December 02, 2008	The governing PPP was disbanded and PM Somchai Wongsawat was forbidden from politics	Independently led government
December 15, 2008	The leader of the opposite party Abhisit Vejjajiva became the new Prime Minister	Democrat party led government
July 03, 2011	Yingluck Shinawatra – Thaksin's sister – became the next PM	Shinnawatt led government
October 2013	Protest resurfaced following the pronouncement of Yingluck's government about a proposed amnesty bill which allowed Thaksin to re-enter Thailand	
May 20, 2014	The Royal Thai Army imposed martial law across the country	
May 22, 2014	The military formally launched a coup against the temporary government and established a junta named National Peace and Order Maintaining Council (NPOMC) to rule the country	Military led government

Note: Table 1 shows the Shinnawatt led government, Democrat party led government and Military led government that take turns to run the country. These events provide evidences of the highly instable political environment in Thailand. The main cause has been blamed to the military enforcement and the conflicts of interest between political groups (Islam & Chowdhury, 2004). For example, it is argued that there is a close relationship between the military and the monarchy.

by the Democrat party. The Yellow Shirt, formally known as the People's Alliance for Democracy (PAD), accused Thaksin of corruption, nepotism, interference in independent agencies, against the monarchy, vote buying, plans to exasperate the violence, and depressing the military (Malesky & Samphantharak, 2011; The Nation, 2006). They held mass protests calling for Thaksin's resignation and impeachment. The protests escalated during first half of 2006 and reached the peak on September 19, 2006, when the military leaders staged a bloodless coup.

During the post 2006 coup period, the political conflicts continued. Despite being ousted, Thaksin maintained his influence through proxy Prime Ministers. This raised the existing tension between the elected government and the military, the monarchy and the anti-Thaksin group – PAD. The Thai Rak Thai party was dissolved in May 2007, but Thaksin-supporting parties such as The People Power Party (PPP) and Pheu Thai Party (PTP) still held a majority in the parliament. The

social polarization peaked with mass protests by the Red Shirt and the Yellow Shirt during 2006–2011. These two groups put the government under-pressured through mass rallies, control of government buildings and transportation. Within just four years (2007–2011), the country changed leaders five times. Particularly, in 2010, the Red Shirt's protests came into violence with near 100 people dead and more than 2,000 injured (Human Rights Watch, 2011).

Protests resurfaced in October 2013 following the pronouncement of Yingluck's government about a proposed amnesty bill, which allowed Thaksin to re-enter Thailand. Organized by the People's Democratic Reform Committee (PDRC), the protests accused Yingluck's administration as corrupt, illegal, and a representative for Thaksin. The PDRC was considered to be Yellow Shirt supporters, whose followers comprised the middle class living in Bangkok and provinces. In the meantime, the Red Shirt protested the caretaker government and called for

the snap election. The conflicts and protests between groups were associated with recurrent violence and the snap election results was annulled by the Constitutional Court. Three months later, the military stepped in by declaring martial law across the country and then formally launched a coup on May 22, 2014.

The 2006 and 2014 coups are regarded as twin coups due to their relation to Thaksin's political influence and the same origination from the military. However, the 2014 coup is different from other coups in Thailand political history by the tight control of the military, opposition suppression, political debate restriction and operation of a large-scale innovation program (Baker, 2016).

2. DATA AND METHODOLOGY

2.1. Data and key variables of interest

Two instruments are used to measure the overall health of Thai financial markets: the USD/THB and the SET Index. Data used in the study include the tick-by-tick bid-ask quotes for the USD/THB and the SET Index including its trading volume from April 21, 2005 to September 13, 2017. This period covers two recent coup d'états in Thailand, governments, led by Democrat, Thai Rak Thai, Independent parties and Military. Data were extracted from Thomson Reuters Tick History database provided by the Securities Industry Research Centre of Asia-Pacific (SIRCA). Daily trading volume by trader type was sourced from the Stock Exchange of Thailand. We measure market quality at daily interval in four dimensions: return, return volatility, liquidity and liquidity volatility. We define daily return R_{it} as follows:

$$R_{it} = \sum_{d=1}^{D} r_{i,d,t},$$ (1)

where $r_{i,d,t}$ is the d th five-minute return on instrument i during day t and D is the total number of all five-minute return intervals during a trading day. The $r_{i,d,t}$ on the SET Index is calculated from the price level of the SET Index at a five-minute interval. The $r_{i,d,t}$ for the USD/THB is computed from the mid-price of the USD/THB at a five-minute interval.

Each instrument volatility is measured using intra-day data following Andersen et al. (2003). Thus, the daily realized volatility RV_{it} is calculated as follows:

$$RV_{it} = \sum_{d=1}^{D} r_{i,d,t}^2.$$ (2)

For liquidity measure, we use different proxy for the USD/THB and the SET Index, since bid-ask prices are not available for the SET Index. Specifically, we use the daily average of the bid-ask spread to measure the liquidity of USD/THB as follows:

$$LIQ_{it} = \frac{\sum_{d=1}^{D} s_{i,d,t}}{D},$$ (3)

where $s_{d,t}$ is the d th five-minute bid-ask spread in the USD/THB during day t and D is the total number of all five-minute intervals during day t. A high bid-ask spread indicates the less liquidity of the foreign exchange market. Data on the bid-ask spread are not available for the SET Index, thus the natural logarithm of the daily trading volume is employed as our proxy for liquidity of the SET Index (LNV). The liquidity proxy for the SET Index exhibits opposite direction of the USD/THB such that the greater trading volume in the SET Index represents the better liquidity of the Thai stock market.

Finally, to measure variability of liquidity, we use the daily standard deviation of the liquidity. The liquidity volatility of the USD/THB is defined as follows:

$$RVS_{it} = \frac{\sum_{d=1}^{D} s_{i,d,t}^2 - \overline{s_{i,t}}}{D-1}.$$ (4a)

Similarly, the variability of liquidity on the SET Index is defined as follows:

$$LIQV_{it} = \frac{\sum_{d=1}^{D} v_{i,d,t}^2 - \overline{v_{i,t}}}{D-1},$$ (4b)

where $v_{i,d,t}$ is the natural logarithm of the d th five-minute trading volume in day t; $\overline{s_t}$ and $\overline{v_t}$ are the daily average of the five-minute bid-ask

spread in the USD/THB and the daily average of the natural logarithm of the trading volume at five-minute intervals in day t, respectively.

2.2. Method

We conduct both short-run and long-run analysis as follows. First, to measure short-term market reactions to the Military coup d'états, we employ a mean-adjusted event study approach. Our event date (day 0) is the date that the Military coup d'états takes place (September 19, 2006 for first coup and May 22, 2014 for second coup). We define various event windows relative to the military coup d'états event to quantify the effects of coup d'états on four dimensions of market quality separately (i.e., [–60, –1] up to [0, 60]). We choose days –120 to –61 as our estimation window.

For example, to measure market performance via the return, we first calculate the daily abnormal return $\left(AR_{it} \right)$ for instrument i (e.g., USD/THB and SET) in the event window as follows:

$$AR_{it} = R_{it} - \sum_{j=-120}^{-61} \overline{R_{ij}}, \qquad (5)$$

where R_{it} is the daily return for instrument i on day t. To ascertain the magnitude of abnormal returns over the entire event window, we calculate the cumulative abnormal return $\left(CAR_{it} \right)$ as follows:

$$CAR_{it} = \begin{cases} \sum_{i=m}^{-1} AR_{it} & \text{for event windows preceding the event date} \\ \sum_{i=0}^{m} AR_{it} & \text{for event windows following the event date} \end{cases}, \quad (6)$$

where
$m = \left\{ -60, -40, -20, -10, -5, 5, 10, 20, 40, 60 \right\}.$

For the other dimensions of market quality, we measure abnormal return volatility (market risk), abnormal liquidity and abnormal liquidity volatility and their cumulative counterparts in the same manner.

In addition, we evaluate the difference between daily average abnormal return (return volatility, liquidity and liquidity volatility) of the event

date, day 0 (i.e. September 19, 2006 for first coup and May 22, 2014 for second coup) with the daily average abnormal return (return volatility, liquidity and liquidity volatility) 5, 10, 20, 40 and 60 days prior to day 0. Finally, we compare the daily average abnormal return (return volatility, liquidity and liquidity volatility) between 60, 40, 20, 10 and 5 days pre- and post-military coup date.

To formally test both short-run and long-run market reactions to the 2006 and 2014 military coup d'états in Thailand, we estimate a regression of four key variables of interests $\left(y_{it} \right)$, which are return, return volatility, liquidity and liquidity volatility on a set of independent and control variables $\left(x_{it,e} \right)$. Standard errors are corrected using HAC Newey-West method. The regression is as derived as follows:

$$y_{it} = \alpha_{it} + \sum_{e=1}^{n} \beta_e x_{it,e} + u_{it}, \qquad (7)$$

where u_{it} is the normally distributed error term with zero mean and variance of one.

Our key independent variables include SR5_C1, SR10_C1, SR20_C1, SR40_C1 and SR60_C1 which capture the short-term effect of the coup d'états of 2006; SR5_C2, SR10_C2, SR20_C2, SR40_C2 and SR60_C2 to capture the short-term effect of the coup d'états of 2014. These are dummy variables and set to 1 for the windows [0, 5], [6, 10], [11, 20], [21, 40] and [41, 60], respectively, with date 0 being the coup date (i.e. September 19, 2006 for first coup and May 22, 2014 for second coup). We also include the variable "Military_led" to capture the long-term effect of the coup. This is also a dummy variable equal 1 for the period the military takes control, and 0 otherwise. Table 1 shows the Military led period from September 19, 2006 to September 30, 2006 and May 22, 2014 to September 13, 2017. In addition, the financial market is also affected by the trading activities of foreign investors. To capture this effect, we include "FC_Buy" variable, which is the percentage of net purchases in Thai Baht on the Thai stock market by foreign investors. This variable is also interacted with coup-related variables to examine the modera-

tion effect of the foreign investors' net purchase on the relationship between the coup and the financial markets.

The control variables include lags of dependent variables to capture the AR structure in return, return volatility, liquidity and liquidity volatility for both stock and currency markets. The choice of lag lengths to be included closely follows the study of Lumiajiak et al. (2014). Acknowledging that the performance of the financial market of a country can be affected by the financial market in other countries, we include daily return on S&P 500 (S&P) to control for the world stock market cycle. In addition, since the study covers the global financial crisis, a dummy variable "GFC" is included to capture this effect. GFC is set to 1 for the period from July 26, 2007 to July 30, 2010, and 0 otherwise. For the stock market, we also include "Quote" to control for the trading volume and "AvgTBT" to control for the frequency of trading activities. For the currency market, we include "Quoter" to control for the competition in the market.

Definition of the regression variables (equation 7) and their measurements are provided in the Appendix.

3. EMPIRICAL RESULTS

3.1. Summary statistics

Together with changes in the government, the Thai stock market and foreign exchange market exhibit different movement patterns. The foreign exchange market shows the most volatility during the Independent led period, which might be attributed to the high uncertainty of the new election result (see Figure 1). Similar trend is also found for the Thai stock market. However, the market fluctuates greatly during Shin led period, particularly during the protests (see Figure 2). The returns of both the stock and foreign exchange markets are also the highest during these uncertain periods.

The ratio of net stock market purchase by foreign investors (FC_Buy) experiences an increase trend before June 2007 and then decreases sharply during the second half of the Independent led and Shin led periods (Sundaravej as PM). After a relatively stable period during the Democracy and Shin led government (Yingluck as PM), the foreign stock purchase reduces before and after the coup in 2014, but rebounced from the beginning of 2015 (see Figure 3).
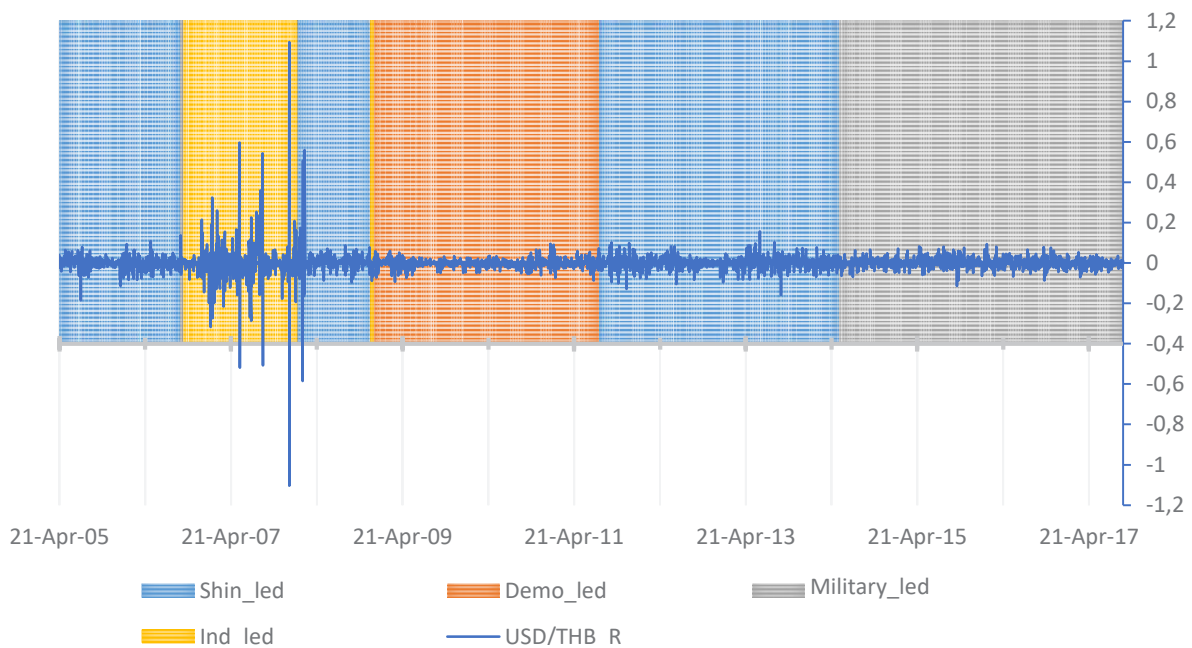
Figure 1. Thai Government and returns of USD/THB (USD/THB_R)
(April 2005 – April 2017)
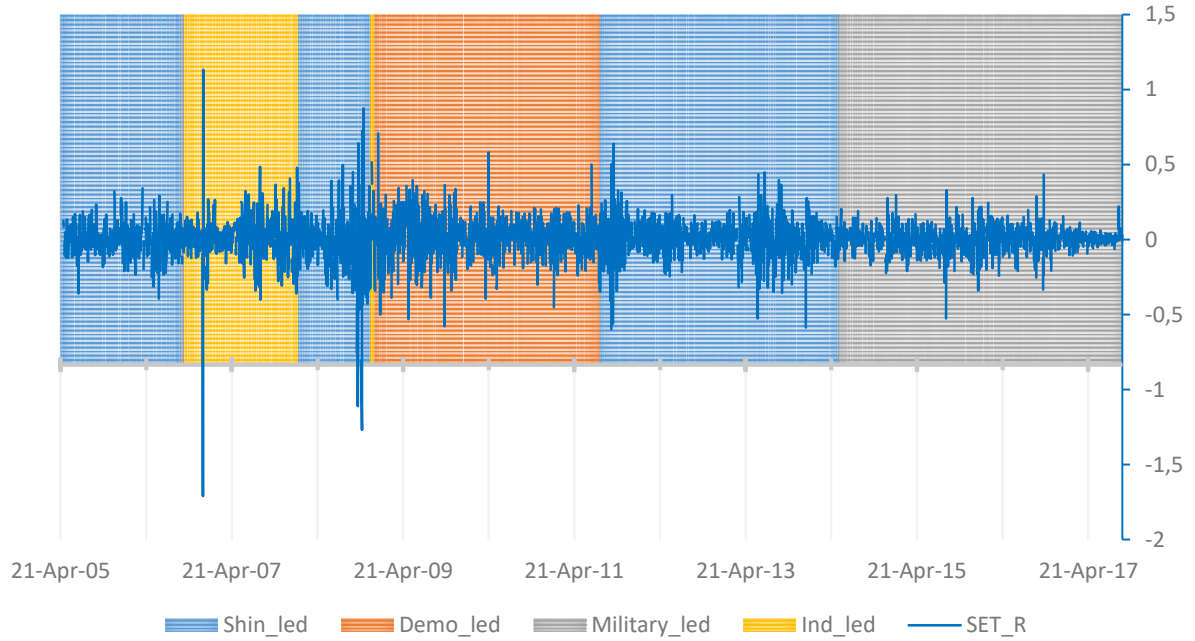
Figure 2. Thai Government and returns of SET index (SET_R, scaled by 10)
(April 2005 – April 2017)

The summary statistics in Table 2 further shows that when the Military led government is in power, the USD/THB return is less volatile, has higher liquidity and lower liquidity risk. However, for the Thai stock market, although the SET return is less volatile, its liquidity risk during this period is higher than that in non-Military led period. In both periods, there was no difference in the return of stock and foreign exchange markets.

Figure 3. Thai Government and net stock purchase by foreign investors (FCBuy)
(April 2005 – April 2017)

Table 2. Summary statistics

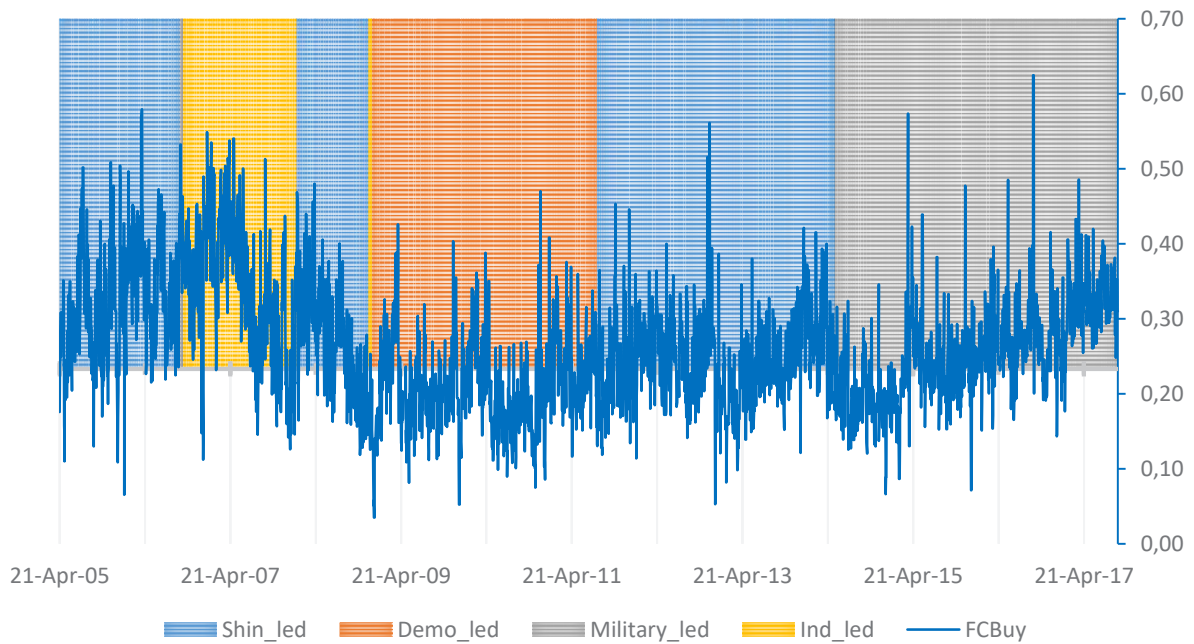|	Military_led					Non-Military_led					Military_led vs. non-Military_led	
	Obs	Mean	Std. Dev.	Min	Max	Obs	Mean	Std. Dev.	Min	Max	Diff.	T-stat
Panel A. USD/THB												
Return	1,030	0.00001	0.00244	−0.01136	0.01372	2,643	−0.0001	0.0057	−0.1103	0.1095	0.00008	−0.5540
RV	1,030	0.00003	0.00002	0.00000	0.00026	2,643	0.0062	0.0230	0.0000	0.2861	−0.00619	13.845
LIQ	1,030	0.02381	0.00705	0.01833	0.08000	2,643	0.0565	0.0456	0.0200	0.5083	−0.03265	35.703
RVS	1,030	0.00827	0.00522	0.00000	0.03671	2,643	0.0309	0.0416	0.0000	0.3199	−0.02258	27.381
S&P	1,030	0.00028	0.00794	−0.03900	0.03900	2,643	0.0003	0.0133	−0.0950	0.1160	−0.00007	0.1904
Quote	1,030	5150.19	3804.23	2.00000	14,736	2,643	403	303	1	2,819	4746.70	−39.995
AvgTBT	1,030	593.33	4928.99	5.80341	91,073	2,643	3,065	10,835	31	180,938	−2471.79	9.4787
Quoter	1,030	13.10	5.49	1.00	33.00	2,643	23	9	1	40	−9.91183	39.620
Panel B. SET Index												
Return	819	0.0001	0.0087	−0.0526	0.0432	2,205	0.0003	0.0155	−0.1709	0.1132	−0.00021	0.4718
RV	819	0.0001	0.0002	0.0000	0.0031	2,205	0.0002	0.0005	0.0000	0.0130	−0.00011	8.6711
LNV	819	0.0003	0.2906	−1.3155	1.6006	2,205	0.0037	0.3429	−1.2342	3.1433	−0.00341	0.2723
LIQV	819	0.4292	0.0687	0.1589	1.1027	2,205	0.4213	0.0935	0.0000	1.8126	0.00787	−2.5257
S&P	819	0.0003	0.0080	−0.0394	0.0390	2,205	0.0004	0.0138	−0.0952	0.1158	−0.00006	0.1383
Quote	819	1149.30	62.36	392	1203	2,205	1405.59	800.25	1	2402	−256.296	14.918
AvgTBT	819	112.67	73.13	72.15	450.78	2,205	299.17	3939.66	35.97	98162	−186.496	2.2218
FC_Buy	819	0.26	0.07	0.07	0.62	2,205	0.26	0.08	0.04	0.58	−0.00735	2.4417

Notes: Table 2 reports the summary statistics of the variables used in the regression analysis for the USD/THB (Panel A) and SET Index (Panel B). Samples are partitioned into two sub-periods based on whether the government is led by military or civilian. T-statistics for mean differences between two sub-samples are displayed in two last columns of the table.

3.1.1. Short-run market reactions

Figure 4 plots the cumulative abnormal measures for the SET Index surrounding the two military coup d'états in Thailand during our sample period. Consistent with Lumjiak et al. (2014), we find both military coup d'états in 2006 and 2014 improve market quality in the Thai stock market in three dimensions. Specifically, the 2006 military coup d'états increases abnormal returns and reduces the volatility in return and liquidity, but results in the reduction in trading volume. In comparison to the 2006 military coup d'états, we detect slightly smaller increase in the abnormal returns, but much higher (lower) volatility in liquidity (return) after the 2014 military coup d'états. Further, the 2014 military coup d'états substantially improve liquidity in the market. Overall, the Thai stock market welcomes the intervention by military coup d'états to bring stability into the overall economy.

Similarly, we plot the cumulative abnormal measures for the USD/THB surrounding the two military coup d'états in Thailand during our sample period in Figure 5. While the 2006 military coup

d'états improves only two dimensions (improved liquidity and lower risk in liquidity) of Thai currency market quality, the 2014 military coup d'états advances all four dimensions in the USD/THB market. It should be noted that the increase in abnormal return in the USD/THB implies the appreciation in the US dollar against the Thai Baht. However, our findings show the Thai Baht strengthen after the 2014 Military coup d'états. Again, the military intervention is welcomed by investors.

The findings are against the common beliefs that the coup d'états associated with political uncertainty and instability would have negative effect on the financial markets (Alesina & Perotti, 1996; Roe & Siegel, 2011). In Thailand context, it was expected that the coup would dampen the investor confidence (McGeown, 2007), signal the weakness in the future government and there would be likely a devaluation of Thai assets (Xie, 2006, cit2 ed in Lumiajiak et al. (2014), as well as an undermining of the investment climate (The Economic Times, 2006). Steve Vickers & Associates even warned that "Previous assumptions that military coup will not affect foreign businesses or interests

operating in Thailand may not apply to this situation" especially for the 2014 coup (Steve Vickers & Associates, 2014).

This "against-expectation-effect" can be justified by the uncertain information hypothesis suggested by Brown, Harlow, and Tinic (1988). Accordingly, investors react to bad news more than to good news. Since the Thai Baht depreciated and the stock index declined during the political turmoil in 2013 (Lee, 2013), there would be upward adjustments after the coup. Therefore, the coup was considered as necessary for the long-term competitiveness and stability of Thai's economy (Schmidt, 2007).

Panels A and B in Table 3 describe the differences in the average daily abnormal return, volatility, liquidity and liquidity risk of the USD/THB between pre and post windows for the 2006 and 2014 military coup d'états, respectively. It appears

that in the 2014 military coup d'états, the market quality is affected similarly but with lesser magnitude to 2006 military coup d'états. Specifically, we find, on the military coup date in 2006, the Thai Baht depreciated against the US dollar compared to 60, 40, 20, 10 and 5 days before the event. The FX market was also more volatile, less liquid with higher liquidity risk. It was documented to be the biggest loss since 2003, in which the Thai Baht fell dramatically 1.3 percent from 37.29 the date before to 37.77 (Bloomberg, 2006). Nevertheless, the effect did not last after the coup. The quick recovery of both the stock and currency markets (despite slower) was due to investors' beliefs that the coup broke the political roadblock from the economy and perceived it as a buying opportunity (Barden & Kuramitsu, 2006). However, we find no such effect in the 2014 military coup d'états, except for the less volatility of abnormal return on the event date in comparison to previous periods. In addition, the market was less liquid only
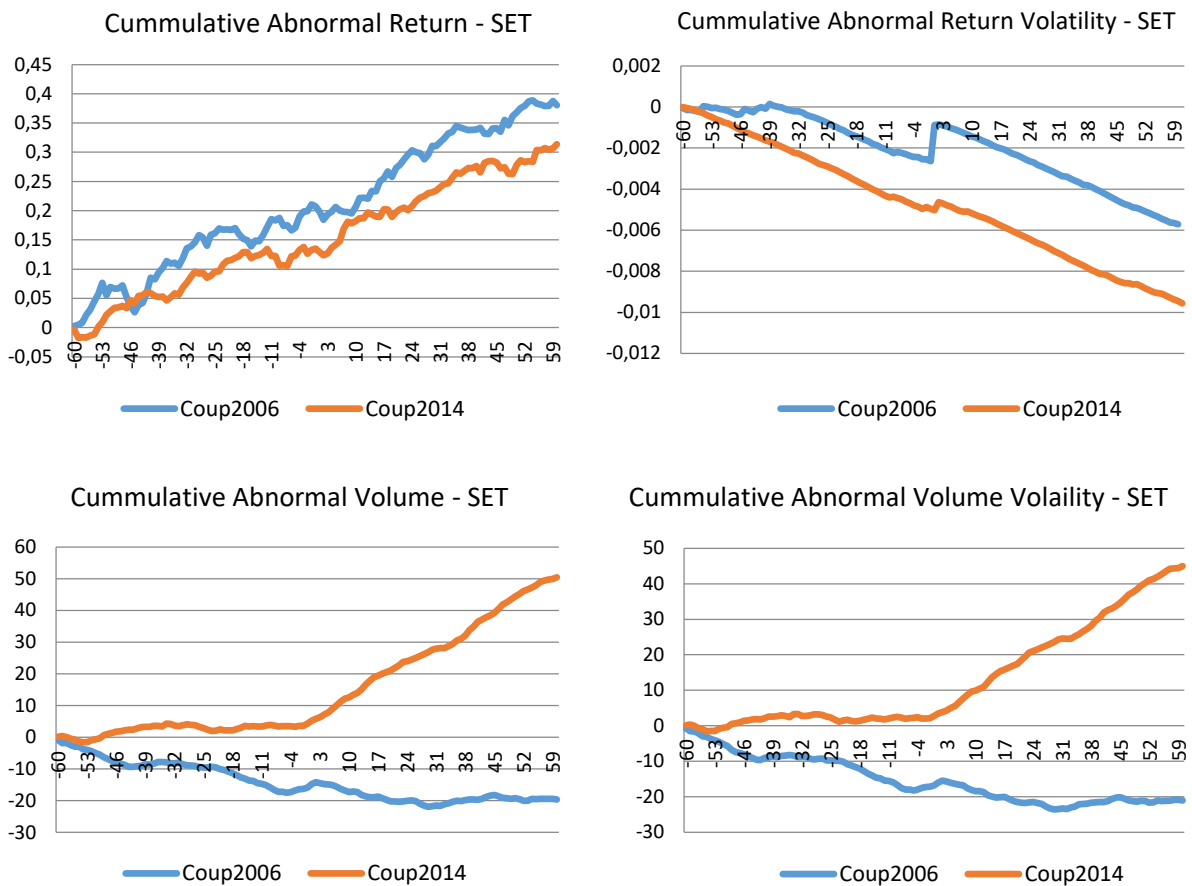

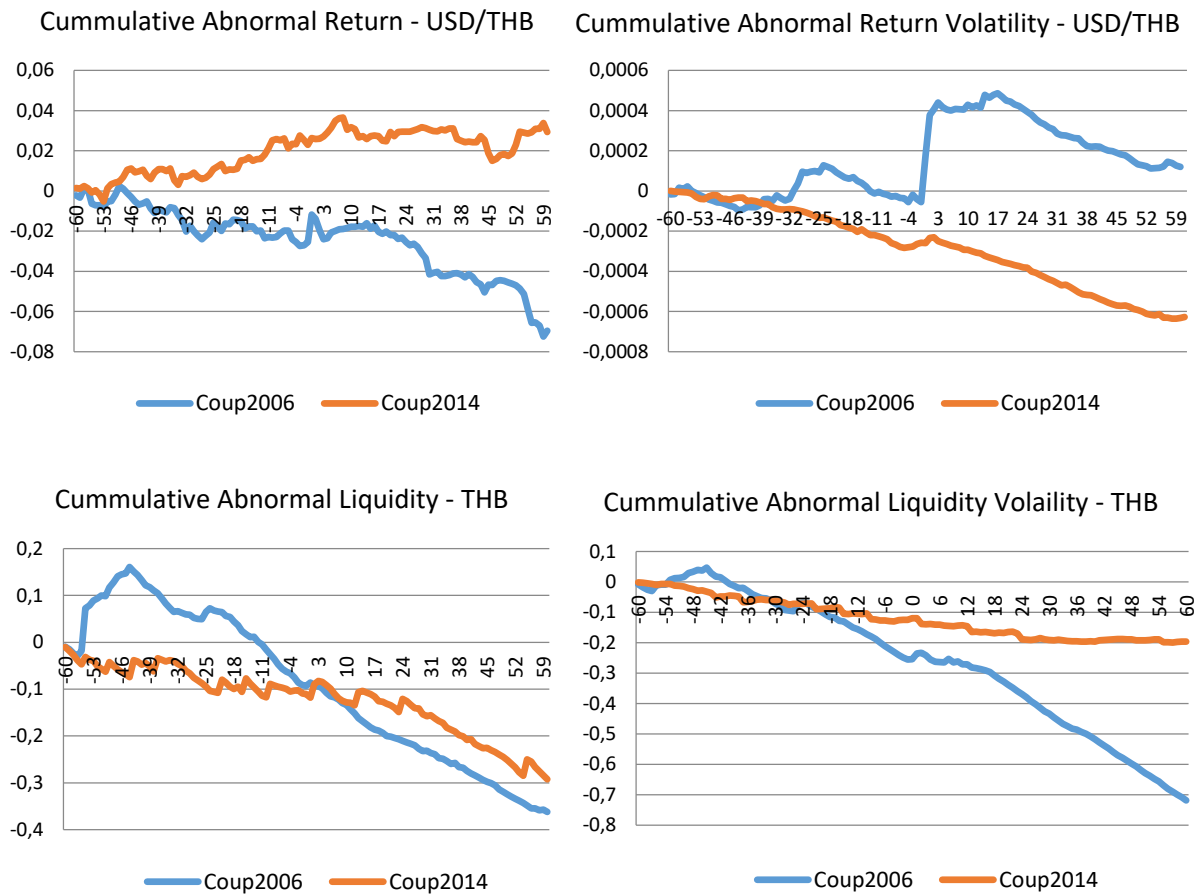**Figure 4.** Cumulative abnormal market quality in the Thai stock market

Figure 5. Cumulative abnormal market quality in the Thai currency market

Table 3. Short-run analysis on the USD/THB

Windows	Return		Volatility		Liquidity		liquidity Risk	
	Diff.	T-stat	Diff.	T-stat	Diff.	T-stat	Diff.	T-stat
Panel A. 2006 coup								
(−60, −1) vs 0	−0.0141	−(5.79)	−0.0002	−(13.35)	0.0000	(0.00)	−0.0049	−(0.60)
(−40, −1) vs 0	−0.0141	−(5.78)	−0.0002	−(13.27)	−0.0040	−(0.72)	−0.0071	−(1.16)
(−20, −1) vs 0	−0.0142	−(5.80)	−0.0002	−(13.72)	−0.0062	−(1.83)	−0.0089	−(3.17)
(−10, −1) vs 0	−0.0140	−(5.72)	−0.0002	−(13.60)	−0.0071	−(2.54)	−0.0099	−(6.03)
(−5, −1) vs 0	−0.0149	−(6.09)	−0.0002	−(13.55)	−0.0053	−(1.79)	−0.0094	−(5.24)
(−60, −1) vs (0, 5)	−0.0012	−(0.38)	−0.0001	−(1.56)	0.0012	(0.41)	−0.0030	−(0.56)
(−60, −1) vs (0, 10)	−0.0011	−(0.50)	< 0.0001	−(1.15)	0.0024	(0.90)	−0.0036	−(0.82)
(−60, −1) vs (0, 20)	−0.0006	−(0.35)	< 0.0001	−(0.82)	0.0037	(1.49)	−0.0008	−(0.21)
(−60, −1) vs (0, 40)	<0.0001	−(0.02)	< 0.0001	−(0.33)	0.0030	(1.25)	0.0021	(0.69)
(−60, −1) vs (0, 60)	0.0003	(0.21)	< 0.0001	−(0.20)	0.0029	(1.29)	0.0034	(1.22)
Panel B. 2014 coup								
(−60, −1) vs 0	−0.0030	−(1.28)	< 0.0001	−(3.66)	−0.0008	−(0.07)	−0.0068	−(1.07)
(−40, −1) vs 0	−0.0030	−(1.26)	< 0.0001	−(3.77)	−0.0005	−(0.05)	−0.0066	−(0.99)
(−20, −1) vs 0	−0.0028	−(1.18)	< 0.0001	−(3.68)	−0.0005	−(0.05)	−0.0064	−(1.03)
(−10, −1) vs 0	−0.0032	−(1.37)	< 0.0001	−(3.46)	0.0015	(0.13)	−0.0066	−(1.08)
(−5, −1) vs 0	−0.0030	−(1.29)	< 0.0001	−(2.53)	−0.0014	−(0.10)	−0.0043	−(0.49)
(−60, −1) vs (0, 5)	−0.0010	−(1.58)	< 0.0001	−(1.82)	−0.0049	−(2.09)	0.0007	(0.57)
(−60, −1) vs (0, 10)	−0.0004	−(0.44)	< 0.0001	−(0.31)	−0.0001	−(0.03)	−0.0003	−(0.10)
(−60, −1) vs (0, 20)	0.0001	(0.11)	< 0.0001	(0.40)	−0.0008	−(0.20)	< 0.0001	(0.00)
(−60, −1) vs (0,40)	0.0003	(0.32)	< 0.0001	(1.07)	0.0006	(0.18)	−0.0003	−(0.18)
(−60, −1) vs (0, 60)	0.0003	(0.26)	< 0.0001	(0.65)	0.0012	(0.29)	−0.0009	−(0.49)

Table 4. Short-run analysis on the SET

Window	Return		Volatility		Liquidity		Liquidity Risk	
	Diff.	T-stat	Diff.	T-stat	Diff.	T-stat	Diff.	T-stat
Panel A. 2006 coup								
(–60, –1) vs 0	0.0068	(0.66)	0.0000	(0.56)	–0.6227	–(1.66)	–0.6666	–(1.78)
(–40, –1) vs 0	0.0065	(0.62)	0.0000	(0.31)	–0.5295	–(1.48)	–0.5834	–(1.66)
(–20, –1) vs 0	0.0055	(0.53)	0.0000	(0.23)	–0.6613	–(1.74)	–0.6971	–(1.85)
(–10, –1) vs 0	0.0058	(0.56)	0.0000	(0.46)	–0.5056	–(1.09)	–0.5399	–(1.19)
(–5, –1) vs 0	0.0122	(1.17)	0.0000	(0.45)	–0.1627	–(0.56)	–0.2178	–(0.80)
(–60, –1) vs (0, 5)	0.0042	(0.93)	–0.0003	–(0.88)	–0.4996	–(1.93)	–0.4239	–(1.86)
(–60, –1) vs (0, 10)	0.0038	(0.99)	–0.0001	–(0.58)	–0.1739	–(0.68)	–0.1690	–(0.77)
(–60, –1) vs (0, 20)	0.0005	(0.13)	–0.0001	–(0.31)	–0.0833	–(0.39)	–0.0772	–(0.41)
(–60,–1) vs (0, 40)	0.0004	(0.10)	0.0000	–(0.06)	–0.1883	–(0.97)	–0.1794	–(1.01)
(–60, –1) vs (0, 60)	0.0007	(0.20)	0.0000	(0.08)	–0.2160	–(1.19)	–0.2227	–(1.32)
Panel B. 2014 coup								
(–60, –1) vs 0	0.0001	(0.02)	0.0000	–(0.32)	–0.6559	–(1.50)	–0.5691	–(1.35)
(–40, –1) vs 0	–0.0003	–(0.04)	0.0000	–(0.34)	–0.6960	–(1.43)	–0.6050	–(1.29)
(–20, –1) vs 0	–0.0012	–(0.17)	0.0000	–(0.28)	–0.6605	–(1.53)	–0.5791	–(1.36)
(–10, –1) vs 0	–0.0011	–(0.15)	0.0000	(0.05)	–0.6933	–(2.80)	–0.5914	–(1.76)
(–5, –1) vs 0	0.0001	(0.01)	0.0000	(0.04)	–0.6884	–(2.65)	–0.6035	–(1.43)
(–60, –1) vs (0, 5)	0.0007	(0.18)	–0.0001	–(8.88)	–0.6464	–(3.23)	–0.5372	–(3.14)
(–60, –1) vs (0, 10)	–0.0023	–(0.66)	–0.0001	–(5.93)	–0.7584	–(4.17)	–0.6693	–(4.22)
(–60, –1) vs (0, 20)	–0.0009	–(0.32)	0.0000	–(2.76)	–0.7727	–(4.44)	–0.6896	–(4.08)
(–60, –1) vs (0, 40)	–0.0013	–(0.41)	0.0000	–(0.39)	–0.7044	–(4.06)	–0.6549	–(4.06)
(–60, –1) vs (0, 60)	–0.0007	–(0.23)	0.0000	–(0.50)	–0.7088	–(4.10)	–0.6662	–(4.10)

in the first 5 days after the coup. The less impact on the currency market during 2014 coup can be explained by its expectation beforehand, when the martial law was declared 2 days before.

Similarly, Panels A and B in Table 4 show the differences in the average daily abnormal return, volatility, liquidity and liquidity risk of the SET Index between pre and post windows for the 2006 and 2014 military coup d'états, respectively. Interestingly, we find no difference on the Thai stock market performance and quality before and after the 2006 coup. The little damage in the stock market in the 2006 coup was partly because the country's stock market was already lagged for several years and the coup took place peacefully without bloodshed (Cheng, 2006).

However, in the 2014 military coup d'états, there is an increase in return volatility for 5 and 10 days post event windows, and an increase in trading volume for all post event windows. This indicates investors actively traded more after the 2014 military coup d'états. The protests that took place on October 2013 increased the uncertainty environment for investment, investors' confidence was

lost and there were doubts about Thailand's future economy. Unsurprisingly, large amount of funds pulled out from the market during this political unstable period. It was estimated that foreign investors pulled 194 billion Thai Baht, equivalent to 6 billion US dollars in 2013. Just one week in May, before the 2014 coup, the withdrawal was 379 million US dollars (Shaffer, 2014). The coup helped to put an end on that political uncertainty which blocked the economic development for a long term. The approvals of many billion-dollar-worth-investment projects right after the coup raised the investors' confidence and encouraged them to trade more. We can conclude that the coup and preceding protests, on the one hand, created a risky investment environment which was highly volatile, but on the other hand, brought investment opportunities for investors to earn higher returns favored by investors.

3.1.2. Short-run and long-run market reactions

Table 5 and 6 report the regression results of the coups and other important factors on the four dimensions (return, return volatility, liquidity and liquidity volatility) of Thai foreign exchange and

stock market quality, respectively. Consistent with Lumjiak et al. (2014), we find investors react differently in the currency and stock markets both in the short run and long run. We find the stock market reacts stronger than the currency market.

Table 5 shows when the net flow of trading by foreigners in the Thai stock market (FC_Buy) increases, the Thai Baht appreciates by 0.003 point against the US dollar, the currency market exhibits more volatility (coefficient of FC_Buy for volatility regression is 0.0112), less liquid (bid-ask spread increases by 0.011) and more liquidity risk (liquidity increases by 0.00974). These findings exhibit foreigners need to convert their currency in-

to the Thai baht before investing in the Thai stock markets. This effect is supported by Gyntelberg, Loretan, Subhanij, and Chan (2009) study, which suggests that foreign investors' net purchases of domestic equities would create an appreciation of its currency. Lumiajiak et al. (2014) also found similar effect when studying the effect of the 2006 coup on the financial markets.

Based on the short-run effect on the currency market (see Table 5), we detect almost opposite market reaction to the two military coup d'états. In the first military coup d'états in 2006 (variables SR5_C1 to SR60_C1), the Thai Baht depreciates up to 40 days after the coup and more volatile in return up

Table 5. Short-run and long-run analysis on the USD/THB

Variables	Return	Volatility	Liquidity	Liquidity Risk
FC_Buy	−0.00310**	0.0112**	0.0110*	0.00974*
Military_led	−3.68e−05	0.00330***	−0.00136	0.00199
Military*FC_Buy	0.00115	−0.00740*	−0.0161**	−0.00903
SR5_C1	0.0143***	0.000165	0.00508	0.0187
SR10_C1	0.00235	0.00197	−0.0349***	0.0463***
SR20_C1	−0.00124	0.00513	−0.0177	0.0287
SR40_C1	0.00595**	0.000353	0.0126**	−0.00635
SR60_C1	−0.000770	0.00401**	0.00307	0.00395
SR5_C1*FC_Buy	−0.0395***	−0.00746**	−0.00269	−0.0610**
SR10_C1*FC_Buy	−0.00390	−0.0120	0.0942***	−0.128***
SR20_C1*FC_Buy	0.00287	−0.0187*	0.0424	−0.0856
SR40_C1*FC_Buy	−0.0201**	−0.00526	−0.0433***	0.0110
SR60_C1*FC_Buy	0.000684	−0.0159***	−0.0153	−0.0188
SR5_C2	−0.00925***	0.000646	0.0475***	0.0436***
SR10_C2	−0.00561***	0.000108	0.0165***	0.00586***
SR20_C2	0.000368	0.000267	0.00233	−0.00958**
SR40_C2	−0.00251	−0.000462	−0.00522	0.00619
SR60_C2	−0.00307	0.000924	−0.00461	0.00654
SR5_C2*FC_Buy	0.0574***	−0.00661	−0.259***	−0.241***
SR10_C2*FC_Buy	0.0198***	−0.00503***	−0.0600***	−0.0241***
SR20_C2*FC_Buy	−0.00666	−0.00555**	−0.000919	0.0520***
SR40_C2*FC_Buy	0.00616	−0.00117	0.0309	−0.0245
SR60_C2*FC_Buy	0.0160	−0.00859	0.0265	−0.0304
S&P	−0.0361***	−0.000723	0.0133	−0.00236
GFC	0.000155	0.000502	0.00114	0.00103
AvgTBT	−2.40e−09	−1.44e−08	2.44e−07***	−1.93e−07***
Quote	−2.66e−08	−1.40e−07***	1.32e−07*	−7.13e−08
Quoter	−2.41e−06	0.000119***	−0.000358***	0.000165***
Ret1	−0.258***	−	−	−
RV1	−	0.424***	−	−
RV2	−	0.253***	−	−
RV3	−	0.110	−	−
RV4	−	0.108	−	−
LIQ1	−	−	0.323***	−
LIQ2	−	−	0.263***	−
LIQ3	−	−	0.199***	−
LIQ4	−	−	0.149***	−
RSV1	−	−	−	0.481***
RSV2	−	−	−	0.425***
Constant	0.000779*	−0.00503***	0.00795***	−0.00309**
Observations	3,673	3,673	3,673	3,673

to 60 days. The liquidity increases in shorter window (10 days) and then drops in longer window (40 days), but the liquidity risk increases only in short window (up to 10 days). On the contrary, opposite findings are detected during the 5-60 days after the 2014 military coup d'états (variables SR5_C2 to SR60_C2).

However, these effects reversed when the foreign money flows in during these short-term windows (interaction variables between SR5_C1 to SR60_C1, and SR5_C2 to SR60_C2 with FC_Buy). These results indicate that the short-term effect of coup d'état on Thai currency market is largely affected by the net stock purchase of foreign investors. During the days following the coups, the higher purchase on the stock market by foreign investors will reduce the volatility of both market return and liquidity. This effect is against the expectation of more market volatility as hypothesized (H6 and H8). In terms of the market return and liquidity, the short-term effect of coups is less clear. The coefficients of interaction terms between short-term windows and net foreign investors' stock purchase are contrary in the two coups.

For the long-run effect of the military intervention (see Table 5), we find minimal impact in the currency market such that the currency market becomes slightly more volatile during the Military-led government (support of H6). The coefficient of "Military_led" government is positive and significant in the regression of volatility. This finding is consistent with the financial behaviour theory that investors tend to overact or underact to the news in the short run, but in the long run, when they realize their errors, a return reversal will be detected (Daniel, Hirshleifer, & Subrahmanyam, 1998). Furthermore, the coefficients on the interaction term between "Military_led" and ratio of foreign buy in the stock market (FC_Buy) indicate that foreign investors place more confidence in the military-led government as the currency market is less volatile during the military-led government. The higher purchase by foreign investors during this time also increases the liquidity of the currency market and thus, supports the positive expectation about the effect of coup on the currency market liquidity (H7). It was reported that after the 2014 coup, the Thailand's Board of Investment was appointed on June 8 and approved investment incentives for 603 projects worth more than 400 billion Thai Baht. Budget spending also increased, together with massive investment plans in infrastructure (Saiyasombut, 2014). Therefore, there is a strong belief that the coup promotes Thailand's stability and economy competency in the future.

Turning to the short-term effect on the Thai stock market (see Table 6), we find investors react differently to the two military coup d'états. The 2006 military coup d'états results in immediate increase in return (the coefficient of SR5_C1 is positive and significant), drop in volatility, but lower liquidity (negative coefficients of SR5_C1 to SR60_C1) and higher liquidity risk (positive coefficients of SR5_C1 to SR60_C1). It also appears that foreign investors do not time market well, as they earn negative return 5 to 10 days after the 2006 military coup d'états. These coefficients are −0.079 and -0.062, respectively. On contrary, market drops slightly 5 and 60 days after the 2014 military coup d'états. Coefficients of SR5_C2 and SR60_C2 in the regression of stock return are −0.0439 and −0.0179, respectively. However, the foreign investors earn positive return during these two short-term windows (positive and significant of variables SR5_C2*FC_Buy and SR6-_C2*FC_Buy).

The results from the short-term effects of the coup provide inconclusive result about its effect on the stock market return given the different market reactions in the two coups. However, there are supportive evidences about the positive effect of coup on liquidity risk (H3) and the negative effect on liquidity of the Thai stock market (H4a). In addition, against the negative expectation about the coup's effect on market volatility, in the short run, it shows that the coup reduces the market risk (rejection of H2). Nevertheless, these effects are lessened by the increase in foreign investors' net stock purchase.

For the long-run effect in the stock market (see Table 6), when the net flow of trading by foreigners in the Thai stock market (FC_Buy) increases, we find higher return and lower risk. The coefficient of FC_Buy in Return regression is 0.0317 and significant at 0.01 level. In the volatility regression, this coefficient is −0.000597 and also significant at 0.01 level. Similarly, higher return and lower risk is detected during the Military-led govern-

Table 6. Short-run and long-run analyses on the SET

Variables	Return	Volatility	Liquidity	Liquidity Risk
FC_Buy	0.0317***	−0.000597***	0.129	0.0343
Military_led	0.00460**	−0.000153**	0.0280	0.0351***
Military*FC_Buy	−0.0156**	0.000410*	−0.109	−0.113**
SR5_C1	0.0275***	−0.00400***	−1.349**	0.324*
SR10_C1	0.0202	−0.000167*	−0.0722	0.383*
SR20_C1	0.0279	−0.000296***	2.376**	0.679*
SR40_C1	−0.0103	−0.000241**	−0.973***	0.182***
SR60_C1	−0.00714	−0.000289***	−0.670	0.305***
SR5_C1*FC_Buy	−0.0790***	0.0106***	3.115**	−0.870**
SR10_C1*FC_Buy	−0.0620**	0.000391	0.0437	−0.777
SR20_C1*FC_Buy	−0.0678	0.000753***	−6.311**	−1.713*
SR40_C1*FC_Buy	0.0311	0.000607*	2.902***	−0.555***
SR60_C1*FC_Buy	0.0137	0.000738***	1.728	−0.775***
SR5_C2	−0.0439***	−0.000488	−0.944*	0.0530
SR10_C2	0.0121	−6.47e−05	−1.020***	0.197***
SR20_C2	−0.0170	−6.83e−05*	0.0750	−0.00553
SR40_C2	0.00164	−5.49e−05	−0.155	−0.0655
SR60_C2	−0.0179***	−8.53e−05**	−0.203	−0.0101
SR5_C2*FC_Buy	0.241***	0.00274	5.103*	−0.805
SR10_C2*FC_Buy	−0.0247	0.000264	4.511***	−1.159***
SR20_C2*FC_Buy	0.0949	0.000194	−0.324	−0.238
SR40_C2*FC_Buy	0.00679	0.000107	0.802	0.197
SR60_C2*FC_Buy	0.113***	0.000340*	1.040	0.104
S&P	0.280***	−0.000225	1.023**	−0.160
GFC	0.000458	6.90e−05***	0.00515	−0.00295
AvgTBT	2.40e−08	−2.92e−09***	−2.82e−07	−4.59e−06***
Quote	2.31e−06***	−5.19e−08**	1.02e−06	−6.93e−06***
Ret1	0.00297	–	–	–
RV1	–	0.308***	–	–
RV2	–	0.149	–	–
RV3	–	−0.0147	–	–
RV4	–	0.0539**	–	–
LIQV1	–	–	–	−0.0243
LIQV2	–	–	–	0.0291
LIQV3	–	–	–	−0.0151
LIQV4	–	–	–	0.0530***
LIQV5	–	–	–	0.0159
LIQV6	–	–	–	0.00381
Constant	−0.0115***	0.000305***	−0.0332	0.398***
Observations	3,024	3,024	3,024	3,022

ment (coefficients of Military_led in Return and Volatility regressions are 0.0046 and −0.000153, respectively) with the exception for an increase in liquidity risk (coefficient = 0.0351).

While the result is inconclusive for short-term effect of the coup on the stock market return, the long results show that the coup has a positive effect on the abnormal return of Thai stock market (support of H1). The results also provide support for the positive effect of the coup on the Thai stock market's liquidity risk (H3). However, similar to short-term results, the hypothesis on the positive relationship between coup and market volatility (H2) is rejected. These effects are also lessened by the increase in foreign investors' net stock purchase. The coefficients on the interaction term between the Military-led and ratio of foreign buy in the stock market (FC_Buy) indicate that foreigners do not time market well during the Military-led government. It appears foreign investors enter the market when liquidity risk is relatively

low (–0.113). Their entrance to the market causes market to be more volatile (+0.00041) but they earn negative return (–0.0156). Poor market performance of foreign investors is attribute to their information disadvantages to the local individual investors (Choe, Kho, & Stulz, 2005; Dvořák, 2005). Similar finding about poor performance of foreign investors in Thailand was also found in the study of Phansatan, Powell, Tanthanongsakkun, and Treepongkaruna (2012).

For the effect of coup on the liquidity of Thai stock market, we do not have enough evidence to support either hypothesis H4a or H4b and conclude that there is no effect of coup on the stock market liquidity in the long run.

CONCLUSION

This study investigates the effects of coups on Thai financial markets. Using daily data from the stock and foreign exchange markets during the period 2005–2017, the study shows the coups exert both short-run and long-run impact on the stock and foreign exchange markets. However, the effect is different between the coups and markets.

In the short run, the 2006 coup induces Thai Bath to depreciate, more volatile, more liquid with higher liquidity risk. However, the 2014 coup strengthens the Thai Bath, reduces its liquidity but increases the liquidity risk. The effect lasts longer for the 2006 coup compared to the 2014 coup. For the stock market, both coups reduce market volatility and liquidity, but increase the liquidity risk. The 2006 coup increases stock returns, while the 2014 coup leads stock returns to decrease. The persistence effects is high for both coups, but more for the 2006 coup.

In the long run, both coups show their positive impact on the stock market by increasing the SET index return and reducing its risk, despite affects the USD/THB negatively by making it more volatile. The study also shows that the effects of the coups on Thai financial markets are largely dependent on the net stock purchase of foreign investors. The moderation effect takes place in the way that it reverses the "pure" effect of the coup (when there is no purchase of foreign investors).

Against common beliefs about negative consequences of the coup d'états, this study suggests that the uncertainty surrounding the coups can bring good investment opportunities for investors to earn abnormal profits. Moreover, in the long term, the coups can drive the country to better stability and development.

REFERENCES

1. Alesina, A., & Perotti, R. (1996). Income distribution, political instability, and investment. *European economic review, 40*(6), 1203-1228.

2. Amihud, Y., & Wohl, A. (2004). Political news and stock prices: The case of Saddam Hussein contracts. *Journal of banking & Finance, 28*(5), 1185-1200.

3. Andersen, T. G., Bollerslev, T., Diebold, F. X., & Labys, P. (2003). Modeling and forecasting realized volatility. *Econometrica, 71*(2), 579-625.

4. Bachman, D. (1992). The effect of political risk on the forward exchange bias: the case of elections. *Journal of International Money and Finance, 11*(2), 208-219.

5. Baker, C. (2016). The 2014 Thai coup and some roots of authoritarianism. *Journal of Contemporary Asia, 46*(3), 388-404.

6. Barden, A. J., & Kuramitsu, Y. (2006). Thailand's Baht Rebounds as Coup May Break Political Deadlock. *Bloomberg.* Retrieved from http://www.bloomberg.com/apps/news-?pid=newsarchive&sid=aUDlJB_AjQW4&refer=asia

7. BBC (2017). Thailand profile – timeline. *BBC.* Retrieved from http://www.bbc.com/news/world-asia-15641745

8. Beaulieu, M. C., Cosset, J. C., & Essaddam, N. (2006). Political uncertainty and stock market returns: evidence from the 1995 Quebec referendum. *Canadian Journal of Economics/Revue canadienne d'économique, 39*(2), 621-642.

9. Białkowski, J., Gottschalk, K., & Wisniewski, T. P. (2008). Stock market volatility around national elections. *Journal of Banking & Finance, 32*(9), 1941-1953. https://doi.org/10.1016/j.jbankfin.2007.12.021

10. Bilson, C. M., Brailsford, T. J., & Hooper, V. C. (2002). The explanatory power of political risk in emerging markets. *International Review of Financial Analysis, 11*(1), 1-27. https://doi.org/10.1016/S1057-5219(01)00067-9

11. Blomberg, S. B., & Hess, G. D. (1997). Politics and exchange rate forecasts. *Journal of International Economics, 43*(1), 189-205. https://doi.org/10.1016/S0022-1996(96)01466-3

12. Bloomberg (2006). Thai Baht Falls, Credit Ratings on Review After Military Coup *Cbonds*. Retrieved from http://cbonds.com/news/item/350141

13. Brooks, S., & Mosley, L. (2007). Risk, uncertainty and autonomy: financial market constraints in developing nations. Symposium conducted at the meeting of the annual meeting of the American Political Science Association, Chicago, IL, August.

14. Brown, K. C., Harlow, W., & Tinic, S. M. (1988). Risk aversion, uncertain information, and market efficiency. *Journal of Financial Economics, 22*(2), 355-385.

15. Brown, S. J., & Warner, J. B. (1985). Using daily stock returns: The case of event studies. *Journal of Financial Economics, 14*(1), 3-31. https://doi.org/10.1016/0304-405X(85)90042-X

16. Cermeño, R., Grier, R., & Grier, K. (2010). Elections, exchange rates and reform in Latin America. *Journal of Development Economics, 92*(2), 166-174.

17. Chan, Y.-c., & Wei, K. J. (1996). Political risk and stock price volatility: the case of Hong Kong. *Pacific-Basin Finance Journal, 4*(2), 259-275.

18. Chan, Y.-c., Chui, A. C. W., & Kwok, C. C. Y. (2001). The impact of salient political and economic news on the trading activity.

Pacific-Basin Finance Journal, 9(3), 195-217. https://doi.org/10.1016/S0927-538X(01)00015-4

19. Chandran, N. (2017, 03/01/2017). India, Indonesia and Thailand to outperform Asia in 2017. *CNBC*. Retrieved from https://www.cnbc.com/2017/01/03/india-indonesia-and-thailand-to-outperform-asia-in-2017.html

20. Chen, D.-H., Bin, F.-S., & Chen, C.-D. (2005). The impacts of political events on foreign institutional investors and stock returns: Emerging market evidence from Taiwan.

21. Cheng, M. C. (2006). *Is Thailand Market Still Attractive After The Recent Coup?* Fundsupermart. Retrieved from https://www.fundsupermart.com/main/research/viewHTMLPrint.tpl?articleNo=2026

22. Choe, H., Kho, B.-C., & Stulz, R. M. (2005). Do domestic investors have an edge? The trading experience of foreign investors in Korea. *The Review of Financial Studies, 18*(3), 795-829.

23. CNN (2011). Thailand timeline 2001–2011. *CNN*. Retrieved from http://edition.cnn.com/2011/WORLD/asiapcf/07/01/thailand.timeline/index.html

24. Daniel, K., Hirshleifer, D., & Subrahmanyam, A. (1998). Investor psychology and security market under-and overreactions. *The Journal of Finance, 53*(6), 1839-1885.

25. Duggan, C. S. (2004). Do different coups have different implications for investment? Some intuitions and a test with a new dataset.

26. Dvořák, T. (2005). Do domestic investors have an information advantage? Evidence from Indonesia. *The Journal of Finance, 60*(2), 817-839.

27. Erb, C. B., Harvey, C. R., & Viskanta, T. E. (1996). Political risk, economic risk, and financial risk. *Financial Analysts Journal, 52*(6), 29-46.

28. Feng, Y. (2001). Political freedom, political instability, and policy uncertainty: A study of political institutions and private investment

in developing countries. *International Studies Quarterly, 45*(2), 271-294.

29. Forsyth, T. (2010). Thailand's Red Shirt Protests: Popular Movement or Dangerous Street Theatre?

30. Freeman, J. R., Hays, J. C., & Stix, H. (2000). Democracy and markets: The case of exchange rates. *American Journal of Political Science,* 449-468.

31. Gyntelberg, J., Loretan, M., Subhanij, T., & Chan, E. H. P. (2009). International portfolio rebalancing and exchange rate fluctuations in Thailand.

32. Hays, J. C., Freeman, J. R., & Nesseth, H. (2003). Exchange rate volatility and democratization in emerging market countries. *International Studies Quarterly, 47*(2), 203-228.

33. Human Rights Watch (2011). Descent into Chaos: Thailand's 2010 Red Shirt Protests and the Government Crackdown. *Human Rights Watch*. Retrieved from https://www.hrw.org/report/2011/05/03/descent-chaos/thailands-2010-red-shirt-protests-and-government-crackdown

34. International Monetary Fund (2015). Thailand: 2015 Article IV Consultation-Staff Report; Press Release; and Statement by the Executive Director for Thailand: International Monetary Fund.

35. Islam, I., & Chowdhury, A. (2000). *The political economy of East Asia: Post-crisis debates*. Oxford University Press, USA.

36. Kim, H. Y., & Mei, J. P. (2001). What makes the stock market jump? An analysis of political risk on Hong Kong stock returns. *Journal of International Money and Finance, 20*(7), 1003-1016.

37. Leblang, D., & Mukherjee, B. (2005). Government Partisanship, Elections, and the Stock Market: Examining American and British Stock Returns, 1930–2000. *American Journal of Political Science, 49*(4), 780-802.

38. Lee, J. (2013). Baht Falls to a Three-Year Low, Stocks Drop on Political Unrest. *Bloomberg*.

Retrieved from https://www.bloomberg.com/news/articles/2013-12-23/thailand-s-baht-declines-to-a-three-year-low-on-political-unrest

39. Liu, L.-G., & Pauwels, L. L. (2012). Do external political pressures affect the Renminbi exchange rate? *Journal of International Money and Finance, 31*(6), 1800-1818.

40. Lobo, B. J., & Tufte, D. (1998). Exchange rate volatility: Does politics matter? *Journal of Macroeconomics, 20*(2), 351-365.

41. Lumiajiak, S., Treepongkaruna, S., Wee, M., & Brooks, R. (2014). Thai financial markets and political change. *Journal of Financial Management, Markets and Institutions, 2*(1), 5-26.

42. Ma, Y., Sun, H.-L., & Tang, A. P. (2003). The stock return effect of political risk event on foreign joint ventures: evidence from the Tiananmen Square Incident. *Global Finance Journal, 14*(1), 49-64.

43. Malesky, E., & Samphantharak, K. (2011). *Understanding Thailand's Ongoing Political Crisis: Wider Implications for Southeast Asia and the West.* Democratic Asia and The West Paper Series. The German Marshall Fund of the United States.

44. McGeown, K. (2007, 15/01/2007). Investors look to overcome Thailand fears. *BBC News*. Retrieved from http://news.bbc.co.uk/2/hi/business/6260357.stm

45. Pantzalis, C., Stangeland, D. A., & Turtle, H. J. (2000). Political elections and the resolution of uncertainty: The international evidence. *Journal of Banking & Finance, 24*(10), 1575-1604. https://doi.org/10.1016/S0378-4266(99)00093-X

46. Perotti, E. C., & van Oijen, P. (2001). Privatization, political risk and stock market development in emerging economies. *Journal of International Money and Finance, 20*(1), 43-69. https://doi.org/10.1016/S0261-5606(00)00032-2

47. Phansatan, S., Powell, J. G., Tanthanongsakkun, S., & Treepongkaruna, S. (2012). Investor type trading behavior and trade performance: Evidence from the Thai stock market. *Pacific-Basin Finance Journal, 20*(1), 1-23. https://doi.org/10.1016/j.pacfin.2011.07.004

48. Powell, J. M., & Thyne, C. L. (2011). Global instances of coups from 1950 to 2010: A new dataset. *Journal of Peace Research, 48*(2), 249-259.

49. Reuters (2017). UPDATE 2-Thai Q2 GDP growth fastest in over 4 yrs, caps strong quarter for Southeast Asia. *Reuters*. Retrieved from https://www.reuters.com/article/thailand-economy-gdp/update-2-thai-q2-gdp-growth-fastest-in-over-4-yrs-caps-strong-quarter-for-southeast-asia-idUSL4N1L42IG

50. Roe, M. J., & Siegel, J. I. (2011). Political instability: Effects on financial development, roots in the severity of economic inequality. *Journal of Comparative Economics, 39*(3), 279-309.

51. Saiyasombut, S. (2014). 28 weeks later: Economic stability comes at a cost under Thailand's military junta. *Asian Correspondent*. Retrieved from https://asian-correspondent.com/2014/11/economic-stability-comes-at-a-cost-under-thailands-military-junta/#GTrkXtAjFjHwWSTX.97

52. Schmidt, J. D. (2007). The Military Coup and its Implications for the Thai Economy Symposium conducted at the meeting of the Seminar on "The September-Coup and Its Political and Economic Implications for the Future of Thailand".

53. Shaffer, L. (2014, 25/05/2014). Coup may bring relief to corporate Thailand. *CNBC*. Retrieved from https://www.cnbc.com/2014/05/23/coup-may-bring-relief-to-corporate-thailand.html?view=story&%24DEVICE%24=native-android-mobile

54. Siokis, F., & Kapopoulos, P. (2003). Electoral management, political risk and exchange rate dynamics: the Greek experience. *Applied Financial Economics, 13*(4), 279-285.

55. Steve Vickers, & Associates. (2014). *Thailand's coup d'etat – Implications for the future and for foreign business*. Retrieved from http://stevevickersassociates.com/content/Thailand%E2%80%99s_coup_d%E2%80%99etat_%E2%80%93_Implications_for_the_Future_and_for_Foreign_Business.pdf

56. The Economic Times (2006). No financial impact yet from Thai coup. *The Economic Times*. Retrieved from http://economictimes.indiatimes.com/news/politics-and-nation/no-financial-impact-yet-from-thai-coup/articleshow/2010665.cms

57. The Nation (2006). We did it for the people: Sonthi. *The Nation*. Retrieved from http://www.pressreader.com/thailand/the-nation/20061125/281565171266527

58. TheGlobalEconomy.com (2015). *Political stability – country rankings*. Retrieved from http://www.theglobaleconomy.com/rankings/wb_political_stability/

59. Yartey, C. A. (2008). The determinants of stock market development in emerging economies: Is South Africa different?

APPENDIX

DEFINITION OF VARIABLES

Variables	Definition
FC_Buy	The percentage of net purchases in Thai baht on Thai stock market by foreign investors relative to all trading activities on day t. It represents the net flow in trading activities of foreign investors on the Thai stock market
Military_led	A dummy variable equals 1 from September 19, 2006 to September 29, 2006 and from May 22, 2014 to September 13, 2017, when government is led by Military, 0 otherwise
Military*FC_Buy	The interaction term between FC_Buy and Military_led
SR5_C1	A dummy variable that measures the short-run impact of the Thai 2006 coup d'etats (Coup1) and equals 1 for the window [0,5]. Day 0 is September 19, 2006
SR10_C1	A dummy variable that measures the short-run impact of the Thai 2006 coup d'etats (Coup1) and equals 1 for the window [0,10]. Day 0 is September 19, 2006
SR20_C1	A dummy variable that measures the short-run impact of the Thai 2006 coup d'etats (Coup1) and equals 1 for the window [0,20]. Day 0 is September 19, 2006
SR40_C1	A dummy variable that measures the short-run impact of the Thai 2006 coup d'etats (Coup1) and equals 1 for the window [0,40]. Day 0 is September 19, 2006
SR60_C1	A dummy variable that measures the short-run impact of the Thai 2006 coup d'etats (Coup1) and equals 1 for the window [0,60]. Day 0 is September 19, 2006
SR5_C1*FC_Buy	The interaction term between SR5_C1 and FC_Buy
SR10_C1*FC_Buy	The interaction term between SR10_C1 and FC_Buy
SR20_C1*FC_Buy	The interaction term between SR20_C1 and FC_Buy
SR40_C1*FC_Buy	The interaction term between SR40_C1 and FC_Buy
SR60_C1*FC_Buy	The interaction term between SR60_C1 and FC_Buy
SR5_C2	A dummy variable that measures the short-run impact of the Thai 2014 coup d'etats (Coup2) and equals 1 for the window [0,5]. Day 0 is May 22, 2014
SR10_C2	A dummy variable that measures the short-run impact of the Thai 2014 coup d'etats (Coup2) and equals 1 for the window [0,10]. Day 0 is May 22, 2014
SR20_C2	A dummy variable that measures the short-run impact of the Thai 2014 coup d'etats (Coup2) and equals 1 for the window [0,20]. Day 0 is May 22, 2014
SR40_C2	A dummy variable that measures the short-run impact of the Thai 2014 coup d'etats (Coup2) and equals 1 for the window [0,40]. Day 0 is May 22, 2014
SR60_C2	A dummy variable that measures the short-run impact of the Thai 2014 coup d'etats (Coup2) and equals 1 for the window [0,60]. Day 0 is May 22, 2014
SR5_C2*FC_Buy	The interaction term between SR5_C2 and FC_Buy
SR10_C2*FC_Buy	The interaction term between SR10_C2 and FC_Buy
SR20_C2*FC_Buy	The interaction term between SR20_C2 and FC_Buy
SR40_C2*FC_Buy	The interaction term between SR40_C2 and FC_Buy
SR60_C2*FC_Buy	The interaction term between SR60_C2 and FC_Buy
S&P	Daily return on S&P500 index to control for world stock market cycle
GFC	A dummy variable to measure the effect of the 2008 global financial crisis. It equals 1 for the period between July 26, 2007 and July 30, 2010, and 0 otherwise
AvgTBT	Daily average of the difference between two consecutive quotes for the USD/THB or two prices for the SET Index
Quote	Total number of quotes per day (as a proxy for trading volume)
Quoter	Total number of quoters per day (as a proxy for competition)
RET1	Daily return lagged by 1. This variable is used to capture for AR structure in the return series
RV1, RV2, RV3, RV4	Daily realised volatility lagged by 1, 2, 3 and 4, respectively. These variables are used to capture for AR structure in the daily realised volatility series
LIQ1, LIQ2, LIQ3, LIQ4	Daily average bid-ask spread on the USD/THB lagged by 1, 2, 3, and 4, respectively. These variables are used to capture for AR structure in the daily spread on the USD/THB series. Proxy for liquidity. The higher the LIQ, the less liquid the market
RVS1, RVS2	Daily variability of liquidity on the USD/THB lagged by 1 and 2, respectively. These variables are used to capture for AR structure in the daily volatility of liquidity series
LNV	Daily natural logarithm of trading volume on the SET Index. Proxy for liquidity. The higher the LNV, the more liquid the market
LIQV1, LIQV2, LIQV3, LIQV4, LIQV5, LIQV6	Daily variability of liquidity on the SET index lagged by 1, 2, 3…and 6, respectively. These variables are used to capture for AR structure in the daily volatility of liquidity series