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The Effects of Political Connections on Firms' Abnormal Returns in Thailand

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Abstract: Developing economies experience significant political instability. Thailand, which has experienced 21 coup d'états since 1932, exemplifies this turbulence, particularly with the 2006 and 2014 coup d'états against the siblings Thaksin and Yingluck Shinawatra under the pretext of alleged nepotism. We exploit this unique historic incidence of two coups against prime ministers of the same family to investigate to what extent politically connected firms experienced abnormal high/low returns in periods ex ante and ex post the coups. We therefore combined the financial data, including firm characteristics and daily stock returns of approximately 450 Thai firms for each coup, and categorized them based on political connections, identified through an extensive manual-compiled dataset of politicians and their families. We find that in the majority of periods surrounding the events of 2006 and 2014, the effect of political connection remains insignificant. However, we suggest that political connections might exhibit periodic effects, particularly in times of drastic political instability, since politically connected firms experienced solely significantly higher negative abnormal returns than unconnected firms in the direct aftermath of these events. Therefore, our research contributes to understanding the dynamics of political connections in developing economies and the firm-level impacts of drastic political events.

Keywords: Political Connections; Abnormal Returns; Coup d'états; Thailand; Political Instability; Shinawatra

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1 Introduction

Since 1950 there have been 446 coup d'état attempts [1] in developing economies, where half of the coup d'états were successful and therefore constitute a sudden change of government (Powell and Thyne, 2011). However, regardless of whether a coup can be considered successful or not, coup d'états create significant political instability with severe consequences for the political landscape and companies as a whole. Putsches reduce economic growth (Alesina et al., 1996) with substantial negative effects on other growth-related objectives, like investments, education, or health (Meyersson, 2016), raise the cost of capital (Balima, 2020), lead to drastic stock price volatilities (Ahmed, 2017) and a reduction in foreign aid (Masaki, 2016).

With 21 coup d'états since 1932, Thailand has been especially impacted by political turmoil and military governments. In particular, the 2006 and 2014 coup d'états are a unique occurrence in Thailand's modern political landscape after the 1997 constitution attempted to strengthen Thai democracy and institutions: Under the pretext of protecting Thailand from nepotism, both coups were staged against prime ministers belonging to the same family, siblings Thaksin and Yingluck Shinawatra. The Shinawatras have been an influential Thai business family that achieved their wealth by conducting business within the telecommunication sector during the mid-1990s and early 2000s. Although historians have evaluated various causes that led to each coup, a commonly shared criticism of each Shinawatra government has been their alleged proximity to businesses through shareholdership and board of director positions, thus creating a conflict of interest through potential personal gains. Therefore, this paper investigates to what extent politically connected firms experienced particularly high or low abnormal stock returns [2] in periods prior to and after the 2006 and 2014 coup d'états, as well as the removal of Yingluck Shinawatra from office.[3]

To shed light on this issue, we combined the financial data of approximately 450 Thai firms, including metrics such as profitability, size, and leverage, among others, with their respective daily stock returns, while the daily stock returns served as the basis for calculating their abnormal stock returns.[4] However, more importantly, to isolate the effect of political connections on abnormal returns, we determined whether each firm in our data set is politically connected or not. We conduct this classification on the basis of shareholder and board composition data purchased from the Thai stock exchange, which we combined with our extensive manually compiled data set of approximately forty government members and their approximately 370 respective family members for each year. We thereby leverage the uniqueness of family names in Thailand required by law and define a political connection if certain thresholds (see 5.2.2 and 6.3) of shareholdership and board composition are met. These data sets subsequently provide the foundation to test in two ways whether politically connected

[1] Considering Europe as well, the total number is 457 coup d'états since 1950.
[2] Abnormal returns may be perceived as consequence of such proximity, thus serving as a proxy for political favors etc., see in more detail in section 4.
[3] Yingluck Shinawatra was removed fifteen days prior to the 2014 coup d'état on May 7th, 2014.
[4] Note that the true Thai market portfolio has more companies, see section 5.3.

firms experienced in periods around the 2006 and 2014 coup d'état abnormal high returns: First, we conduct univariate tests between both groups of firms during these periods to identify whether they differ significantly. Second, we run a set of regressions for these time periods in which we control for the aforementioned firm characteristics, industry membership, and political connection.[5]

In contrast to the majority of political connection literature, we find that, to a large extent, political connections have no significant impact on the abnormal returns of Thai firms in the periods under scrutiny around the coup d'état in 2006 and 2014 for both the univariate tests and our regressions. The initial univariate tests for 2006 (Table 8) show only significant differences between politically connected and unconnected firms in two of the six periods, namely in the immediate four-day and two-week aftermath of the coup d'état. In these periods, politically connected firms experienced significantly higher negative abnormal returns than their counterparts (approximately 2 to 4 percentage points).[6] The univariate tests for 2014 (Table 11) yield similar results: Only after Yingluck Shinawatra's removal did politically connected firms experience significantly higher negative abnormal returns of approximately 1 percentage point more than unconnected firms. The set of regressions for 2006 and 2014 highlight the tarnished effect of political connections even further. In particular, for 2014 (Table 13), in periods under scrutiny, we find that political connection cannot significantly explain any variation in abnormal returns. Meanwhile, for 2006 (Table 9), we find similar significant abnormal returns for political connections in the same periods as in the 2006 univariate tests (the two periods after the coup d'état), but with lower significance levels.

Second, defining political definitions more conservatively to test the robustness of our results, we find that the results of the robust univariate tests for 2006 (Table 7) are consistent with the same periods in the initial results, yet at a lower significance level. Meanwhile, in the 2006 robust regression (Table 10) only political connection in the four-day period after the coup d'état remains significant. However, for the robust 2014 univariate tests (Table 12), we identified stronger significant results in three time periods where it should be noted that politically connected companies experienced higher positive abnormal returns in the period prior to the removal of Yingluck Shinawatra in 2014 of approximately 11 percentage points. In contrast to the initial regressions, the robust regressions for 2014 (Table 14) show a significant high positive abnormal return for the political connections estimator during the period prior to the removal of Yingluck Shinawatra.

Therefore, we can draw two conclusions. First, we assert that political connections have a negligible impact on a firm's abnormal returns. This is surprising given the extensive political connections exhibited by firms in Thailand, which we were able to attribute through our extensive background research on politicians and their families. However, secondly, given our results, particularly the univariate tests, it appears

[5] To address the issue of endogeneity of these coup d'états that would bias our estimates, we conduct a detailed historical assessment of the causes for each coup d'état as well as Yingluck Shinawatra's removal, see sections 11.1.2 and 11.1.3.

[6] Significant at the 1% and 5% level respectively.

that the coup d'état in 2006 and the removal of Yingluck Shinawatra in 2014, have had a greater negative impact on the abnormal returns of politically connected firms compared to unconnected firms. Political connections thus might exhibit periodic specific effects on abnormal returns, especially in times when the political landscape is drastically shaken, such as when it is the removal of the prime minister or a coup d'état.

Our findings contribute to two strands of existing economic literature. First, our research on Thailand sheds light on the effects of political connections in the context of developing countries, particularly in South East Asia. Second, we provide further insights into the effects of drastic political events on a firm-level. Bunkanwanicha and Wiwattanakantang (2009) also examine the effects of political connections in Thailand on abnormal returns in light of the election of Thaksin Shinawatra in 2001, and find, contrary to our research, that politically connected firms experienced particularly in a two and three year period after Shinawatra's election strong significant abnormal returns. For Indonesia, Fisman (2001) shows that the stock returns of companies that had a stronger political affiliation to the former President Suharto experienced lower stock returns if the President was allegedly sick. Meanwhile, Ahmed (2017) examines the effects of three political events on stock volatilities in light of Egypt's presidential elections in 2012 and 2014 as well as the coup d'état in 2013, finding that these events cause significant volatilities in stock prices.

However, the existing literature has so far neglected the political events in Thailand, namely the coup d'états as well as Yingluck Shinawatra's removal. These events provide, given that the governments were led by brother and sister respectively, the unique opportunity to study twice an almost similar set of companies that can be regarded as politically connected: In fact, we find that our sample of politically connected firms has a 45% overlap for the initial definition and a 50% overlap for the robust definition between 2006 and 2014. Moreover, while our approach of determining political connections through family names is not novel, our extensive compiled data on politicians and their family members in these respective periods is unique concerning research in Thailand and enables us to confidently attribute political connection, exceeding both quantitatively and qualitatively previous papers from a data point of view. Lastly, our findings are relevant not only from an economic point of view but also from a historical point of view: The common perception is that the coups against the Shinawatra governments were staged due to their allegedly nepotistic nature and close ties to businesses. However, this appears to be just a pretext for the coups if unusually high returns are considered a proxy for personal gains. Instead, our findings align with historical arguments that the actual causes were more political and ideological, rooted in an ongoing intra-elite struggle between Shinawatra supporters and conservative elites (Hewison, 2008; McCargo, 2015, among others).[7]

[7] A thorough explanation of these historical arguments is provided in the appendix, see sections 11.1.2 and 11.1.3.

2 Historical Perspectives on Politics in Thailand

2.1 From the Siamese revolution of 1932 to the Millenium

The Siamese revolution of 1932 ended Thailand's century-long absolute monarchy and resulted in the establishment of the constitutional monarchy that still exists today (de Lapomarede, 1934). However, Thailand's political landscape during the twentieth century was particularly characterized by great instability. In the subsequent sixty years, nineteen unconstitutional attempts occurred to topple the government of which thirteen were successful, parallel to twenty prime ministers that headed 48 governments. Most governments were led by the military or military surrogates, whereas only sixteen governments were civilian; during that time also fifteen constitutions were promulgated (Neher, 1992). Plagued from over 60 years of corruption, political inefficiency, and military rule, as well as the bloody suppression of protests in May 1992, the new government under the Democratic Party paved the way for the "Committee for Democratic Development" in 1994 which aimed to create a new democratic constitution (Klein, 1998b).

Therefore, in 1997 a new democratic constitution was enacted, which included as major reform a party-list system for the House of Representatives: 400 MPs were elected in their respective constituencies, while the remaining 100 MPs were selected through party lists. With this system, these MPs would serve a four-year term, while the prime minister was obliged to be an MP (Uwanno and Burns, 1998). The first constitutional election was held on January 6th, 2001 (Bunkanwanicha and Wiwattanakantang, 2009).

2.2 Premierships of Thaksin Shinawatra (2001-2006)

Founded in 1998 by business tycoons, the Thai Rak Thai Party (TRT) won 248 of 500 seats in the 2001 election, significantly supported by rural voters from northern provinces (Phatharathananunth, 2008; Hewison, 2008). With the absorbance of a few smaller parties, the TRT achieved the absolute majority (Jotikut, 2016). As a result, Thaksin Shinawatra, the leader of the TRT, assumed the role of Prime Minister of Thailand on February 9th, 2001, with a cabinet composed largely of prominent business figures and individuals connected to the broader business community's familial networks (Bunkanwanicha and Wiwattanakantang, 2009). However, Shinawatra's first six months in office were tarnished due to a conviction of deliberately concealing assets as a MP. Although he successfully appealed and won the subsequent court ruling closely with an 8-7 majority in August 2001 (Connors, 2008), his initial conviction set the tone for later allegations of corruption.

Once in office, Pye and Schaffar (2008) argue that Shinawatra implemented populist policies, catering to the masses, while simultaneously pushing forward his neoliberal agenda that aimed to restructure the Thai economy to the benefit of large corporations and Thailand's competitiveness globally. For instance, Thaksin Shinawatra implemented a public health care scheme, particularly for the rural population, while also promoting the "medical hub project", which attracted foreign patients but inadvertently caused a brain drain from public hospitals to better paying private hospitals (Pachanee and Wibulpolprasert, 2006). Second, Thaksin's rural development initiatives, including debt restructuring and credit programs, spurred a shift toward more capital-intensive agriculture. However, this shift predominantly benefited large corporations and their monoculture-focused contract farmers, often leaving smaller farmers unable to compete effectively. (Connors, 2008). Third, Shinawatra aggressively pursued free trade agreements (FTA) with countries such as Australia and China in 2003 to boost agricultural exports (Pye and Schaffar, 2008). However, small-farmer protests claimed that these FTAs were detrimental, alleging that they were primarily aimed at liberalizing the telecommunications sector, benefiting Shinawatra's own Shin Corporation (Moxham, 2004). Alongside these policies, allegedly suppressed the media through the acquisition of iTV, and pursued in the separatist southern provinces, culturally closer to Malaysia, a "war on drugs" through draconian military operations (Connors, 2008).

Shinawatra's effective management of the aftermath of the December 2004 tsunami contributed to his landslide victory in the 2005 election (Jotikut, 2016). Historically, this victory was not unique in its magnitude, as the TRT won 375 of 500 seats in the House of Representatives, but also because Shinawatra led thus the first government to complete a whole legislative term since the Siamese revolution in 1932 (Bunkanwanicha and Wiwattanakantang, 2009).

However, the anti-Thaksin movement arose during 2005. The movement arguably began when the Shinawatra-critical broadcast show "Thailand Weekly" by Sondhi Limthongkul, a former Shinawatra ally and media mogul, was cut off and moved to Lumpini Park where his speeches attracted over 30,000 spectators (Pye and Schaffar, 2008). Allegedly, Limthongkul and Shinawatra diverged over not providing preferential business opportunities for Limthongkul's businesses (Tejapira, 2006). However, arguably the tipping point for the anti-Thaksin demonstration was the announcement of the tax-free sale of his Shin Corporation to a Singaporean investment company. The sale was carried out quickly after the new Thai telecommunication act became effective on January 23rd, 2006, which raised the maximum of foreign holdings in the sector to 49% - the exact shareholdership of Shinawatra. In response, Limthongkul accused Shinawatra of corruption and not respecting the King (Hewison, 2008). On February 4th, Limthongkul formed with broad public support the People's Alliance for Democracy (PAD). The PAD consisted of more than 40 civil organizations and organized mass

demonstrations throughout February and March with between 50,000 and 300,000 protesters (Connors, 2008), wherein the protests attracted particularly the urban middle class (Jotikut, 2016). The main objective of the PAD was Shinawatra's resignation, while Limthongkul also called for a royal intervention (Pye and Schaffar, 2008).

Amid significant political unrest and protests, Shinawatra called for reelections in April 2006, which were boycotted by the opposition and thus later annulled by the constitutional court (Connors, 2008). During the summer, Limthongkul's ally, former prime minister and monarchist General Prem Tinsulanonda, toured Thailand's military academies, advocating military loyalty to the King, while his affiliate General Sonthi Boonyaratglin, later head of the 2006 coup d'état, became the new commander in chief. The coup d'état was staged on September 19th, 2006, when Shinawatra was in New York (Ockey, 2007).

2.3 Inter-Shinawatra period (2006-2011)

The period after the coup d'état in 2006 was marked by further political instability through protests, as the interim government under Surayud Chulanont, which was closely aligned with the military, revoked the majority of policies implemented under Shinawatra, such as his health scheme. Subsequently, during the 2008 political crisis, Thailand had three short premierships, namely under Samak Sundaravej and Somchai Wongsawat (Liu, 2014). The political crisis of 2008, resulted in a new premiership by the opposition leader Abhisit Vejjajiva. He targeted the ongoing economic struggle for the last two years with two stimulus packages, addressing primarily the poorer households and large infrastructure projects to obtain popular support, particularly from regions in the North. However, the harsh measures during the antigovernment protests in 2010 that favored Shinawatra, as well as the lack of popular vote, resulted in defeat against Yingluck Shinawatra during the election in July 2011 (Jotikut, 2016).

2.4 Premiership of Yingluck Shinawatra (2011-2014)

Following the elections on July 3rd, 2011, Yingluck Shinawatra assumed her premiership on August 5th, 2011, with the Pheu Thai Party, arguably the successor of and proxy for Thaksin Shinawatra's TRT and formed a coalition with a few smaller parties (Jotikut, 2016). Following the poor management of the 2011 flood and other instances of internal friction, Shinawatra reshuffled her cabinet four times to strengthen internal support. Similarly to her brother, she pursued economic policies that emphasized economic growth, particularly for the development of poorer and rural constituencies in the Northern provinces that were her main electorate. She introduced a subsidy program for approximately seventeen million rice farmers, increased the minimum wage to 10 USD per day, and established a 64 USD billion infrastructure scheme

(Liu, 2014). Moreover, she also advocated for an equivalent of the EU common market with other ASEAN countries through reduced border controls (Mellor and Suwannakij, 2013). Through these targeted policies on the rural population, her policies were perceived to be highly populistic and addressed through public protests.

However, the tipping point in protests arose when Shinawatra introduced during the 2013 summer an amnesty bill that would have pardoned all protestors, protest leaders, army leaders as well as former TRT politicians, including her brother Thaksin Shinawatra, going back until 2004, starting the 2013/14 political crisis. In particular, opposition leader Suthep Thaugsuban of the Democratic Party organized these rallies and claimed that the bill was meant to allow Thaksin Shinawatra to return to Thailand. (Baker, 2016). Although the bill was passed on November 1st, 2013, and the senate subsequently annulled it on November 11th, the protests intensified due to a proposed constitutional amendment that initiated making the senate a fully elected chamber, quickly rejected by the constitutional court on November 20th (Kongkirati, 2016). Due to the protests and the impediments, Shinawatra dissolved the House of Representatives on December 9th, 2013, and scheduled new elections for February 2nd, 2014.

Although another victory for Shinawatra's ruling Pheu Thai Party was predicted, due to protest disruption, the election was annulled on March 21st by the constitutional court (Liu, 2014). However, Shinawatra also faced an alleged constitutional misconduct as she transferred, after assuming her premiership in 2011, a senior official to the prime minister's office. Thus, on May 7th the constitutional court removed Yingluck Shinawatra from office with nine other cabinet members, as this transfer involved a conflict of interest (Jotikut, 2016). Subsequently, amid further political instability due to extensive protests, the army declared martial law on May 20th, and the army leader, General Prayut Chan-o-cha, who previously publicly stated to remain neutral, declared the coup d'état on May 22nd after the protest leaders and the government could not reach an agreement (McCargo, 2015).

3 Literature Review

3.1 Political Connections and their Effects on Firms

Various papers examined the influence of political connections. Arguably, the political scientist Roberts (1990) pioneered in this field when he utilized the sudden death of Senator Henry Jackson in 1983 to investigate its effect on stock prices of companies that were affiliated with Jackson. The event study found that the stock prices of the affiliated companies dropped, while the stock prices of the firms related to his successor increased significantly.

In subsequent research, empirical evidence has been found that political connections of firms are associated with lower stock price crash risk in Indonesia (Harymawan et al., 2019), lower equity cost (Boubakri et al., 2012), greater access to bank loans (Infante and Piazza, 2014; Faccio, 2010) or a better chance of obtaining government concessions, in the form of subsidies (Zhang et al., 2014), or government contracts (Tahoun, 2014). Among others, Lehne et al. (2018) also showcased that political connections affect the probability of road constructions in India, while Ahmad et al. (2022) highlighted the nuanced distinction between the different types of political connections necessary. They show that firms in Pakistan that are connected to civil servants, including the government, pay significantly higher audit fees than unconnected companies because they find evidence of higher associated business and audit risk. However, companies connected to the military pay significantly lower audit fees than unconnected companies, as the military provides a "stable political platform".

Arguably, there are multiple facets to why politically connected firms exhibit superior firm performance than politically unconnected firms (Saeed et al., 2019), reasoned, for example, by the derived competitive advantage firms have through access to more government resources affecting ultimately their profitability (Chang and Wong, 2004; Faccio, 2010). Therefore, the most dominant issue under scrutiny concerns the effects of political connections on either firm performance or stock price returns, as seen in a comprehensive overview compiled by Wong and Hooy (2018). They identify that the majority of research is case study based on countries and focuses on one specific type of political connections, wherein the specific types are categorized as follows:

1. Political connection is given as the firm is a state enterprise, thus government-linked.
2. Political connection is given through former or current government members on a firm's board.
3. Political connection is given through the proximity of business owners to politicians in government.
4. Political connections are given through government official's family members who are either shareholders or on the firm's board.

Using this approach to investigate political connections on firm performance in Malaysia over multiple years, Wong and Hooy (2018) find that state enterprises and firms that are politically connected through politicians on their board exhibit a better firm performance. Meanwhile, they cannot assert a better firm performance if a firm is politically connected through family members or the proximity of business owners to government members.

However, we want to highlight two papers, notably the paper published by Fisman

(2001) as well as Bunkanwanicha and Wiwattanakantang (2009) because their geographical focus, methodology, and insights provide the basis for our research. Fisman (2001) focuses on the macro perspective with his case study on firms that were politically connected to President Suharto in Indonesia. By establishing a political connection as a continuous variable, he could discern the extent of political exposure and differentiate between the gravity of rumors surrounding President Suharto's health issues. He showed that as the severity of rumors concerning President Suharto's health increased, more politically connected firms exhibited significantly lower stock returns compared to companies that were not politically related to President Suharto's regime.

Meanwhile, the research by Bunkanwanicha and Wiwattanakantang (2009) is unique because it not only examines in depth the reasons for Thaksin Shinawatra and fellow business owners with their Thai Rak Thai (TRT) to run for office in the 2001 general election, but also shows the effect of political power on market evaluation: They find that the dependency of businesses on concessionary income through government contracts is a significant factor in deciding to run for political office, while businesses connected to politicians in Thaksin Shinawatra's government achieved significant abnormally high returns after 36 months in office. In addition, they also investigated the mechanisms used to channel political favors, documenting that politically connected businesses do not benefit positively from preferential access to debt financing. However, they detect that the implementation of beneficiary public policies led to "astonishingly" high abnormal returns for politically connected firms. Lastly, these firms also displaced unconnected competitors, ultimately achieving higher market shares during Thaksin Shinawatra's premiership.

3.2 Political Events and its Effects on Economies and Markets

Alesina et al. (1996) explored the relationship between political instability and economic growth across 113 countries from 1950 to 1982, defining political instability as the likelihood of government collapse. Their findings not only suggest that political instability reduces economic growth but also distinguish between the types of change that lead to instability: In particular, unconstitutional executive changes, like coup d'états, as well as significant changes in ideologies through government transitions contribute to lower economic growth, whereas the political instability caused by regular government turnovers in industrial democracies exhibits weak effects on growth. It is important to highlight that Alesina et al. (1996) also find that a low economic growth rate increases the probability of government turnovers, like coup d'états, while they also show that the occurrence of government changes increases the likelihood of subsequent changes, manifesting political instability.

Meanwhile, the question of whether political risk impacts stock returns has, for example, been studied by Diamonte et al. (1996) wherein political risk is attributed to sev-

eral factors, including political leadership, corruption in the government, or military in politics, among others. They find statistically significant evidence that increases in political risk have larger effects on returns in emerging markets than in developed countries, underlining that emerging markets exhibit more volatility.

The research of Alesina et al. (1996) and Diamonte et al. (1996) serves as a basis for further investigating the practical effects of political instability, especially embodied by coup d'etats. Using a panel data set covering 134 countries, Balima (2020) finds that putsches significantly increase the cost of debt, while they also increase the likelihood of experiencing sovereign default, where more pronounced effects in autocratic countries are observable. Meanwhile, Meyersson (2016) documents substantial negative effects on multiple growth-related objectives, such as investment, education, and health as a consequence of coup d'etats, while new leaders fail to advance economic reforms and end political instability. He also highlights that coup d'états are especially detrimental to a country's economy when its government was democratically elected before the coup. Lastly, Masaki (2016) finds evidence that in response to the coup d'états, foreign aid was significantly reduced when evaluating a panel data set from 1960 to 2012.

While these previous studies highlight the effects of coup d'états in various countries from a cross-country macro-perspective over time, other studies investigate the effects of specific political events on financial markets, such as presidential elections. For example, Ahmed (2017) examined the effects of three political events on market prices and stock volatilities, using Egypt as a case study considering the presidential election in 2012, the military-led coup d'état in 2013 and the presidential election in 2014. He shows that political uncertainty has a significant impact on prices and thus volatilities, wherein the basic consumer goods industry is less affected than the financial industry. Moreover, of all three events, the military coup had the most severe consequences on the market due to its high political uncertainty. Other examples include the research by Rigobon and Sack (2005) that assessed the impact of the US invasion in Iraq on the US financial market, finding that war-related news prompted high declines in equity prices and Treasury yields, or the paper by Nikkinen and Vähämaa (2010) showing a substantial negative stock market sentiment following the terrorist attacks in New York (2001), Madrid (2004), and London (2005).

4 Motivation

From the coup d'états to the removal of Yingluck Shinawatra, most previous economic research has largely overlooked the political events in Modern Thailand. Through our analysis, we have discovered a 45% and 50% overlap between the politically connected firms in 2006 to the ones in 2014 respectively. Given that the governments were led

by brother and sister, respectively, this gives the unique opportunity to study a similar group of connected firms across two different time periods.

Furthermore, Fisman (2001) noted in his case study in Indonesia that the impact of political connections on stock returns would ideally not have been studied based on the rumors surrounding President Suharto's health, but through an abrupt change in government structures. The unique prevalence of the two coup d'états in 2006 and 2014 as well as the centralized political system of Thailand, whose importance was stressed by Fisman (2001), means that the political landscape of Thailand provides the "ideal scenario". Meanwhile, Bunkanwanicha and Wiwattanakantang (2009) focused exclusively on the impact of political connections on stock returns at the onset of Shinawatra's premiership in 2001, leaving a significant research gap.

Consequently, motivated by the diverse literature that highlights the effects of political connections in various aspects, the distinctive circumstances of coups in Thailand, and Bunkanwanicha and Wiwattanakantang (2009) sole focus on the onset of Shinawatra's first premiership, we define the following research questions:

1. To what extent do the stock returns of politically connected companies outperform non-politically connected companies when the government is still in office?
2. To what extent does a sudden change of government, seen in the 2006 and 2014 coup d'état as well as the removal of Yingluck Shinawatra, impact the returns of politically connected companies compared to non-politically connected companies?

We will address these research questions through the following hypotheses:

- H1: Politically connected firms have abnormally high returns in the years prior to the coup d'état 2006 as investors assume such companies can leverage their political connections.
- H2: Politically connected firms have abnormally low returns after the coup d'état 2006 within the three time periods assessed due a loss of investor confidence.
- H3: Politically connected firms have abnormally high returns prior to the coup d'état 2014 as investors assume such companies can leverage their political connections.
- H4: Politically connected firms have abnormal low returns after to removal of Yingluck Shinawatra and/or the coup d'état 2014 due a loss of investor confidence.

It is crucial to note that although abnormal returns may not directly indicate political favors, conflicts of interest, or nepotism, there is still the potential for the public,

including investors, to interpret them as such, even if these factors were not actually involved. This perception is thus the basis for our hypotheses.

5 Data

5.1 Procurement

5.1.1 Financials and Stock Returns

Stock prices and annual fundamentals for listed companies are collected from the Wharton Research Data Service (WRDS). For the 2006 coup, daily stock prices were used to calculate abnormal returns. We followed two methods, using Buy-and-Hold Abnormal Returns (BHAR) and Cumulative Abnormal Returns (CAR) to calculate both long- and short-term abnormal returns between the periods of February 2005 and March 2007. A more in-depth explanation of both methods will be found later, in section 5.2.1. To reduce bias and ensure precision, we used company fundamental data from the closing balance of 2005 (opening balance of 2006) to calculate control variables, such as profitability and leverage ratios. For events in 2014, we implemented the same methods with stock data 2013-2014 and annual fundamentals from the closing balance of 2013 (opening balance of 2014).

5.1.2 Shareholder and Board of Directors

We purchased an extract of the SETSMART dataset on major shareholders and board of directors of Thai firms from the Stock Exchange Thailand (SET) information obtained from annual reports (Thai form: FM 56-1) and mandatory to disclose to SET: For each company, the largest ten shareholders, any shareholder with at least 0.5%, as well as members of the board, must be reported and, if changes occur, immediately updated (Thai law). Therefore, since the data could be purchased on a customized annual basis, we requested the data for a one-year time frame that cumulated, respectively, in the coup d'états, capturing the major shareholder and board names relevant for our investigation: For the 2006 coup d'état, the data ranges from September 20th, 2005, to September 19th, 2006, while for the 2014 coup d'état, the data ranges from May 23rd, 2013, to May 22nd, 2014. The data of the major shareholders was in Thai, while the board data was in English, thus romanized.

5.1.3 Politicians and their Families

As the premise of our research is the distinguishing factor between politically connected and unconnected Thai firms, we manually compiled our own data set containing all relevant politicians and their extended family members. A politician was relevant when they held a cabinet position within the Thaksin Shinawatra II government (Cabinet 55) or in the Yingluck Shinawatra government (Cabinet 60), by being the prime minister, deputy prime minister, minister of a certain ressort, or deputy minister of a certain ressort.[8] However, due to the scope of our research and because Yingluck Shinawatra reshuffled her cabinet four times, we only consider relevant politicians from the 60th cabinet, if they held their position until the coup d'état on May 22nd, 2014, or lost their position in the last reshuffle taking place on June 30th, 2013. To obtain all relevant cabinet members, we relied on official government websites that were only accessible by using *Way Back Machine*, an archiving website that allows access to websites that have already been deleted.

Meanwhile, we augmented the cabinet members' data set by reconstructing their extended family through manually researching their publicly known relatives. Fundamentally, we took the Thai, the English and the German versions of a relevant politician's Wikipedia page and collected family member names that were, respectively, mentioned. If a family member had their own Wikipedia page, this page was used again to collect further names of relatives. This procedure was iterated until the information on names was exhausted, and a name reached a dead-end by having no Wikipedia page on their own. We gather both the Romanised and the Thai versions of each person's full name and cross-checked all individual Thai names by searching them online in various Thai newspapers; the correct spelling was detrimental to the matching of the SETSMART data during the determination of political connections. Therefore, our complete data set contains a detailed list of all relevant politicians and their extended family members[9], wherein we assign to each family member also their respective distance (grade of kinship) to the relevant politician. Our extensive methodological approach and rules for incorporating and defining a grade of a person are visible, respectively, in Table 22 to Table 34 in the appendix. It is important to note that we do not claim a family tree to be exhaustive due to the fact that not all family members are publicly disclosed but argue that the data set provides a comprehensive overview on politicians and their relatives that is sufficient for the scope of our research, see the description of data structure in the following section.

[8] From a hierarchical point of view the deputy prime ministers and the ministers of different ressorts are the same level. Therefore, within our data set we assign to all affected politicians the same level (M), while the Prime Minister holds level PM and deputy ministers hold level DM.

[9] The manual research of relatives led in two instances to direct members of the Thai Royal Family. Due to the strict rules outlined in Section 112 of the Thai Criminal Code surrounding lèse-majesté, we discontinued our research in these two instances when it was certain that the subsequent person belonged to the Royal Family. However, certain names, such as Kitiyakara that belong to the Thai aristocracy and thus the extended Royal Family, were included.

5.1.4 Wealthy Families

Acemoglu et al. (2005) state that wealth can serve as a motivation for obtaining de jure political power to gain economic benefits. While Bunkanwanicha and Wiwattanakantang (2009) find specific evidence that this is accurate for Thailand, they argue more nuanced that wealth can also be seen as a proxy for high social status and having access to networks, including politicians. Therefore, we also incorporate the latest Forbes Magazine annual ranking of the wealthiest Thai families and persons before each coup d'état occurred. These rankings were published in June 2006 and 2013, respectively, whereas the 2006 edition featured forty and the 2013 edition fifty families or persons.

While the theoretical argument of their relevance is established above, we will elaborate further in subsection 5.2.2 on how the relation between wealth and politician families is established in our research.

5.2 Construction

5.2.1 Calculating Abnormal Returns

Following the approach by Bunkanwanicha and Wiwattanakantang (2009), we take as the main measurement of outperformance in stock returns the Buy-and-hold abnormal returns (BHAR) which was first introduced by Barber and Lyon (1997). First, BHAR permits us to encapsulate the accumulation of market value during the Shinawatra premierships. Second, the BHAR can approximate the value of the political power Shinawatra obtained during his premierships conditional on all information that is slowly revealed over time. Although the BHAR methodology may also divulge information beyond the value of political connections, thus affecting the outlook of firms, we argue that the aforementioned benefits outweigh this shortcoming. To calculate the BHAR, we therefore rely on the following formula as specified by Bunkanwanicha and Wiwattanakantang (2009):

$$BHAR_{iT} = \left[\prod_{t=1}^{T}(1 + R_{it})\right] - \left[\prod_{t=1}^{T}(1 + R_{mt})\right] \tag{1}$$

BHAR is calculated for firm *i* over the total number of periods *T* (total number of months), whereas *t* represents the specific time period (month) under scrutiny. Meanwhile, R_{mt} constitutes the return of the value-weighted index of the market, defined by the daily stock price data of all Thai firms from Compustat.

However, since BHAR is used primarily to understand abnormal returns over a pro-

longed period, we employ the CAR as a way to assess the immediate market response to the coups (including Yingluck's removal), following the approach of Larcker et al. (1980). The investigation into the event windows spans four days (-1, +2 days). We have chosen this time window to account for any changes in stock returns on the day of the coup. In some time periods, such as 2006, where the event occurred in the late evening and the stock exchange was closed, most investors would not have been able to react directly. However, with such drastic political shifts, we wanted to account for potential information leakages that could have affected investors decisions. To accomplish this, the CARs are calculated using the following formula:

$$CAR(T_1, T_n) = \sum_{t=T_1}^{T_n} AR_t \tag{2}$$

Wherein T_1 and T_n represent the start and end points of each time window.

5.2.2 Determining Political Connections

One key aspect of distinguishing the effect of political connection on abnormal returns is to determine which Thai firms are politically connected and which are not. Following the approach of Bunkanwanicha and Wiwattanakantang (2009), we can leverage the uniqueness of family names that is required by law in Thailand. For example, any person with the surname "Shinawatra" within the data set of the major shareholders and board members provided by SET will thus belong to the "Shinawatra family umbrella", regardless of whether an individual's first name is listed in our handpicked family tree data set. Furthermore, in a successive paper, Bunkanwanicha et al. (2013) find evidence in Thailand that network marriages can be a potential source of value gains for families and their businesses, solidifying our claim that associated new family names acquired through our manual research of family trees can be considered to "belong" to the same relevant family name of politicians. In the case of "Shinawatra", this means that "Na Pompet", the maiden name of Thaksin Shinawatra's ex-wife, is added to the "Shinawatra family umbrella", consisting of the associated surnames due to their interconnection.

To establish political connections subsequently, the comprehensive list provided by Wong and Hooy (2018) and our literature review show that the majority of research defines political connections simply by considering whether any politician or any of their family members possesses any shareholdership or is represented on the board of directors. This definition emanates from the assumption that major shareholders receive significant benefits from better firm performance even if they do not have controlling rights (Lazonick and O'sullivan, 2000). Meanwhile, the board's primary obligation is to protect the interests of shareholders (Davies, 2000), and other stud-

ies also find evidence to influence firms' performance, see Klein (1998a), Vafeas and Theodorou (1998), among others.

Therefore, although the Thai Stock Exchange demands the public disclosure of at least 0.5% shareholdership to transparently highlight major shareholders, we increase the threshold of political connection to a minimum of 1% shareholdership to more confidently attribute a political connection. However, Bunkanwanicha and Wiwattanakantang (2009) as well as Acemoglu et al. (2005) also emphasize that wealth might be a proxy for social status, and thus access to political networks and connections. To incorporate this notion, we allow a wealthy family and a politician's family umbrella to cumulatively achieve the 1% threshold. Second, for the board of directors, we adopt the standard approach in the literature on political connections and also argue that a political connection is given if a firm has at least one board of directors member that belongs to the family umbrella of any politician.

Furthermore, it is important to note that when matching the SET and WRDS data, we do not classify the parent or subsidiaries of a politically connected company as also politically connected.

5.3 Description

5.3.1 Financial Data

Between 2005 and 2007, WRDS contained daily stock data on 531 unique companies while the annual fundamental data had 502 unique companies. Quarterly fundamentals and monthly stock data contained fewer overall companies and were not implemented. In total, excluding any occurrences of missing values, we identified 478 total matching companies across the two data sets. Given the large amount of observations, and to avoid any bias related to imputation or prediction, all NA values from the annual fundamental data were removed. This resulted in us having 430/531 maximum companies in our sample. The remaining 101 companies were used as part of a benchmark portfolio by which to calculate abnormal returns. The same method was applied for 2014, but the data sets contained more missing values. Of the 576 potential companies, only 464 companies remained after cleaning the data.

However, not all lost observations within the regression are attributable to the removal of NA values in the initial matching process. When calculating stock returns, we compare the price of the stock at the current time period with the price at the previous time period. If the daily stock data is missing enough values within a time period, then we cannot generate a return. This is not an issue over the long term, but when calculating short term abnormal returns insufficient data from WRDS results in fewer companies. This difference is represented in the regression tables, where the number

of observations varies slightly between time periods.

5.3.2 Initial Politicians Families

In this subsection, we want to highlight the main characteristics of our self-collected data on the families of relevant politicians and why we argue that the scope is sufficient for our research.

Table 1: Summary Statistics Family Trees

	2006	**2014**
Raw Data		
Number of Relevant Politicians	42	47
Number of Politicians Relatives	367	386
Total Number of People	409	433
Average of Relatives per Politician	8.7	8.2
Median of Relatives per Politician	4	4
Average Kinship Degrees Relatives*	2.5	2.7
Median Kinship Degrees Relatives*	2	2
Max Kinship Degrees Relatives	7	9
Cleaned Data		
Number of Associated Surnames	145	151
Total Amount of Family Surnames	187	198
Amount of Family Umbrellas	39	42
Average of Associated Surnames per Politician	3.5	3.2
Median of Associated Surnames per Politician	1	1
Average Kinship Degrees Umbrellas*	4.7	3.6
Median Kinship Degrees Umbrellas*	3	3
Max of Kinship Degrees Umbrellas	7	9

Source: Garvey and Seifert, 2024

As evident in Table 1,[10] we were able to retrieve a notable amount of family names and thus family umbrellas from our collected data sample by investigating the relatives of all relevant politicians. In both years, we were able to trace more than 400 relatives, reaching a maximum at the 7th degree of kinship in 2006, and at the 9th degree in 2014, while we found on average 8.7 relatives in 2006 and 8.2 relatives per relevant politician in 2014. In both years, the median number of relatives per politician was lower (four relatives), which is explicable through the fact that the majority of politicians had a more dim online presence than others, for example, the Shinawatras. However, the cleaned family data highlights that extensive research was crucial as in both years at the maximum degree of kinship, an additional relevant surname was found; key to developing the family umbrellas for the politicians, which are based on a total of 182 in 2006 and 198 associated surnames in 2014. Similarly to the average

[10] In Table 1, certain statistics are marked with (*). Note that the average and median of the kinship degree statistics are skewed upward because these calculations exclude degree 0, omitting all politicians without associated relatives or surnames, thereby introducing a bias that inflates the measures.

and median of the relatives, the median with one associated surname per politician is lower than the averages, respectively, due to the same reasoning: In 2006, for example, the Shinawatra family had 21 associated family names, whereas we did not find any associated surnames for 18 politicians. Ultimately, we were able to determine 39 family umbrellas for 2006 and 42 family umbrellas for 2014. The lower number of family umbrellas is attributable to the fact that our research of relatives highlighted the interconnectedness between families of relevant politicians, especially as we conducted the research across two cabinets. By far the largest unified family umbrella is the family of the 2006 politicians Sathirathai, Maleenont, Vejjajiva, and Isarangkun Na Ayutthaya, which belong essentially to the same family, proven through our family tree data. In addition, Yingluck Shinawatra's cabinet included Vejjajiva a second time, as well as two other politicians, namely Sasiprapha and Hongsakul, who were proven to belong to this extensive family of politicians, too. Spanning thus over two cabinets, this extraordinary family umbrella of fundamentally seven politicians gathers in total 49 associated surnames, seen, respectively, for each year in Table 26 and Table 33 in the appendix. All other family umbrellas are displayed as well in the appendix, ranging from Table 22 to Table 34. Table 2 is an exemplified extract.

Table 2: Family Umbrellas Example

Family Umbrella	**Associated Surnames**
Liptapanlop (ลิปตพัลลภ), M	Phitthanukorn (พหิทธานุกร), MF1
Klinprathum (กลิ่นประทุม), M	Anderson (แอนเดอร์สัน), MF2
	Chotichaicharin (โชติชัยชรินทร์), MF3
Thienthong (เทียนทอง), M	Tosaksit (โตศักดิ์สิทธิ์), MF2
	Yutthaworn (ยุวถาวร), MF3
	Thongpanich (ธงพานิช), MF1
	Chokdamrongsuk (โชคดำรงสุข), MF4

Source: Garvey and Seifert, 2024

On the left side, the relevant politicians' names are displayed as well as their respective level; in this extract, all three politicians exhibit associated surnames. For example, we were able to attribute to the politician Thienthong the surname Tosakit in the second degree.

5.3.3 Politically Connected Companies (*POLCON*)

Table 3: Robust Industry Distribution Sample Firms 2006

Industry	NON POLCON	%	POLCON	%	Total
Communication Serv.	24	5.62	6	11.76	30
Consumer Discret.	70	16.39	5	9.80	75
Consumer Staples	47	11.01	4	7.84	51
Financials	48	11.24	7	13.73	55
Health Care	16	3.75	1	1.96	17
Industrials	69	16.16	6	11.76	75
Information Tech.	28	6.56	3	5.88	31
Materials	63	14.75	7	13.73	70
Real Estate	34	7.96	9	17.65	43
Utilities	13	3.04	2	3.92	15
Other	15	3.51	1	1.96	16
Total	427	100.00	51	100.00	478

Source: Garvey and Seifert, 2024

Table 4: Industry Distribution Sample Firms 2014

Industry	NON POLCON	%	POLCON	%	Total
Communication Serv.	29	5.66	6	9.38	35
Consumer Discret.	69	13.48	10	15.62	79
Consumer Staples	48	9.38	4	6.25	52
Financials	58	11.33	6	9.38	64
Health Care	18	3.52	3	4.69	21
Industrials	99	19.34	7	10.94	106
Information Tech.	30	5.86	3	4.69	33
Materials	63	12.30	8	12.50	71
Real Estate	67	13.09	12	18.75	79
Utilities	15	2.93	3	4.69	18
Other	16	3.12	2	3.12	18
Total	512	100.00	64	100.00	576

Source: Garvey and Seifert, 2024

Tables 3 and 4 show the distribution of political and unconnected firms.[11] In 2006, there were 51/478 companies with political connections, compared to 64/576 in 2014. The more robust categorizations for political connectdetermine in appendix 11.2), categorize fewer firms, resulting in 24/478 in 2006 and 26/576 in 2014 respectively. However, even despite these stricter criteria, our paper still obtains a higher number of political observations than Bunkanwanicha and Wiwattanakantang (2009). Furthermore, there is a 45% overlap between the initial sample of politically connected firms in 2006 and the most recent sample in 2014. This share increases to 50% when we look at the robust categorization of ptherefore render thisirms.

Industries are defined using the GICS classification system, divided into 10 categories

[11] The names of all *POLCON* firms can be found under appendix 11.4.

with one ”other” variable created for missing values. The division of firms based on industry not only controls for unobserved heterogeneity, but also provides valuable information for the differences between the two groups. In particular, in 2006, we see that a strong majority of politically connected companies 9/51 (17.65%) are within the real estate industry, compared to only 2/51 (3. 92%) within utilities. Based on the percentages within Table 3 in both years, we can see that the two groups have a similar division between industries, except the real estate industry, which has a slightly higher distribution of *POLCON* firms compared to unconnected firms. While the relationship between industries, political connection and abnormal returns will be expanded on later (see discussion section 8.1), it is relevant to explore how firm characteristics differ between politically connected groups.

Table 5: Firm Characteristics 2006

	POLIC		NON-POLIC		Difference	
	Mean (1)	Median (1)	Mean (0)	Median (0)	(t-test)	(z-test)
Market-to-book ratio (MB)	3.455	1.874	3.345	1.466	-0.132	-0.687
Industry-adj MB	0.156	-0.930	-0.019	-1.101	-0.209	-1.463
Profit Margin (PM)	0.052	0.080	-0.012	0.085	-0.632	-1.995
Industry-adj PM	0.060	-0.004	-0.007	0.041	-0.66	-2.718
Return on assets (ROA)	0.054	0.060	0.071	0.077	1.155	-2.616
Industry-adj ROA	-0.012	-0.008	0.001	0.004	0.87	-2.358
Leverage	0.158	0.127	0.129	0.051	-1.142	-0.235*
Industry-adj leverage	0.014	-0.032	-0.002	-0.057	-0.638	-0.934
Total assets (log)	8.017	7.790	8.017	7.690	0.004	-0.73
Fixed assets/total assets	0.317	0.276	0.352	0.331	0.98	-2.871
Growth on assets	12.512	9.872	16.488	8.186	0.871	-2.501
Net sales (M USD)	4644.257	1635.192	11132.941	1881.831	2.359**	-1.21

This table reports the summary statistics of the sample firms in 2014. ’*’, ’**’ and ’***’ denote statistical significance at the 10%, 5% and 1% levels, respectively. Profit Margin is the ratio of EBIT to total sales, Return on assets is the ratio of EBIT to total assets and Leverage is the ratio of total debt to total assets. The statistical significance in Net Sales is not sufficient to indicate there are fundamental differences between the two groups.

Source: Garvey and Seifert, 2024

Therefore, similarly to Bunkanwanicha and Wiwattanakantang (2009), we carry out a test on the firm characteristics between the group of politically connected firms and the group of unconnected firms seen in Table 5. For the analysis, both a t-test and a two-sided U Mann test are used to compare the differences between each group. From the results of this test we do not find enough statistical significance in the difference between the characteristics. Therefore, we can determine that the main factor of differentiation between the two groups is their degree of political connection. Furthermore, while Table 5 displays only the overview for 2006, we also did not find quantitatively relevant statistical significant differences for 2014 or in the robustness tables (see Tables 15, 16 and 17).[12]

In addition, it should be reiterated that there exist variations in the available daily

[12] In Table 5 only one significant difference is found for ”Net Sales” which is not incorporated as control in the OLS regressions. We therefore render this irrelevant, similarly to the other results seen in Tables 15, 16 and 17.

stock data for all companies. This is more consequential in shorter time periods, meaning some politically connected as well as non-politically connected companies will not appear in exactly the same number across the entire year. For example, in 2006 while we have 51/51 politically connected firms for three out of the six regression time periods, the average number of political companies in each regression is 49/51. A similar thing occurs in 2014 with an average of 53/56 in all regressions.

6 Empirical Strategy

6.1 Univariate Tests

Similarly to Bunkanwanicha and Wiwattanakantang (2009), the first empirical strategy employed is to investigate whether the abnormal returns of politically connected firms differ significantly from the abnormal returns of politically unconnected companies, using univariate tests through the U Mann test, throughout the following time intervals, as seen in Table 6:

Table 6: Event Segmentation Intervals

2006 Time Intervals	**2014 Time Intervals**
Ex ante Coup	**Ex ante Removal**
February 2005 to August 2005 (BHAR)	January 2013 to June 2013 (BHAR)
August 2005 to February 2006 (BHAR)	June 2013 to December 2013 (BHAR)
February 2006 to September 18th, 2006 (BHAR)	January 2014 - 6th May, 2014 (BHAR)
Ex post Coup	**Ex post Removal**
18th to 21st September 2006 (CAR)	6th to 9th May (CAR)
19th September to 3rd October 2006 (BHAR)	7th to 19th May (BHAR)
19th September, 2006 to March 2007 (BHAR)	
	Ex post Coup
	22nd to 25th May 2014 (CAR)
	22nd May to 5th June 2014 (BHAR)
	22nd May to 22nd November 2014 (BHAR)

We rely on the closing stock price and hence it is crucial to determine these periods precisely to capture the effects on the markets accordingly. The final interval before the coup 2006 ends on September 18th to mitigate any potential events that hinted at the coup on September 19th. Meanwhile, for the periods after the coup d'état in 2006, we chose September 19th as the starting point to calculate BHAR. For 2014, we chose to incorporate May 7th as the constitutional court announced their decision before the stock exchange closed, while the ex post removal BHAR calculations range until May 19th as the military imposed on May 20th nationwide martial law from 3:00 am onward. Although the imposition of martial law and subsequent negotiations did not exhibit the coup d'état, we argue that the imposition of martial law could already have

hinted at a further military intervention. Therefore, we exclude May 20th until May 22nd and treat it as if it was the coup d'état itself. Since the coup d'état 2014 was proclaimed after the stock exchange closed on May 22nd, we chose it as our starting point to calculate the ex post coup BHAR. Although this event-based segmentation allows us to understand the market responses to each event distinctly, we also acknowledge the complex interaction between impeachment and coup d'état and therefore address this complexity when discussing our results in 8.1.

6.2 OLS Regressions

Our second empirical strategy constitutes several Ordinary Least Squares (OLS) regressions that we run for specific periods that have also been segmented according to the periods we already used for the univariate tests for 2006 and 2014 respectively.

$$Y_{it} = \beta_1 POLCON_{it} + \beta_2 X_{it} + \delta_k + \varepsilon_{it} \tag{3}$$

wherein

- Y_{it} denotes the abnormal returns for firm i in period t wherein t refers to the specified periods prior and after each coup
- $POLCON_{it}$ is a dummy variable, taking value of 1 for politically connected firms given our conditions and 0 otherwise
- X_{it} represents a vector of firm characteristic control variables
- δ_k denotes the industry fixed effect for Industry$_k$, wherein Industry$_{it_k}$ is a dummy variable, taking a value of 1 if the observation corresponds to Industry$_k$ and 0 otherwise
- ε_{it} is a random, idiosyncratic error term

One threat to obtaining unbiased estimators and being able to interpret their effect accurately is that each coup d'etat is in itself endogenous (Meyersson, 2016), correlated with specific returns and therefore ultimately abnormal returns of specific firms. For example, this could be true if the causes of each coup were of economic nature: Alesina et al. (1996) indicate that a significant factor behind coups is often linked to periods of low economic growth. If the coups in 2006 and 2014 were motivated by economic conditions, and we examine the abnormal stock returns of individual firms in the Thai economy, it is conceivable that the coups themselves were triggered by the underperformance of companies' stock returns. However, more importantly, endogeneity could especially be given if each coup d'état was anticipated, and thus the

abnormal returns of the politically connected firm reflected such anticipation prior to each coup or political connection was the determining factor for each coup. The coup exogeneity is thus crucial to attribute the variation in stock returns of politically connected versus unconnected firms to the coups themselves.

We address the threat of coup exogeneity with various measures in our empirical model. First, based on our detailed historical analysis of Thailand's political landscape leading up to the 2006 and 2014 coup d'états (see 11.1.2 and **??**), we argue that the coups were not driven by economic factors, including the performance or returns of politically connected companies, nor was each coup anticipated despite previous political instability. For 2006, we suggest that the main factor leading up to the coup was an intra-elite conflict between the Shinawatra government and the monarchy over ideological and political discrepancies (Hewison, 2008) as well as an intra-military power struggle (Ockey, 2007). Despite the previous political instability, marked by widespread mass protests, we contend that the annual military reshuffle proposed by Shinawatra ten days prior to the coup - which would have replaced the eventual coup leader - renders the 2006 coup d'état unanticipated, as the documents were undisclosed to the public. For 2014, we argue that the underlying causes for the coup d'état were a continuation of the ideological and political struggle between the Shinawatra's and the established elites, including the monarchy, while the coup d'état was not anticipatable until the army imposed martial law on May 20th, 2014 (McCargo, 2015). However, the removal of Yingluck Shinawatra by the constitutional court on May 7th, 2014, might have been anticipated. To what extent this affected our results, will be examined in the discussion of our results in section 8.1.

Second, to ensure that the results are not driven by industry-specific membership, we incorporated ten industry dummy variables as industry fixed effects δ_k through Least Squares Dummy Variables (LSDV) based on the GICS standard. These industry fixed effects account for specific shocks that might have affected specific industries, such as industry-specific policy changes or other macroeconomic shocks that might have occurred in either period, yet affected certain industries distinctly. The industry-fixed effects also control for overperformance in a particular industry: For example, during the early 2000s, firms in the telecommunications sector might have experienced exorbitant high stock returns due to the rampant technological development, thus being the decisive factor for abnormal returns.

Third, based on the paper by Bunkanwanicha and Wiwattanakantang (2009) and Wong and Hooy (2018), among others, we introduced a set of other characteristic control variables of the firm, embodied by the vector X_{it} that reflect firm performance, and thus also stock returns. The size of the firm is measured as the logarithm of the total assets. Leverage is constituted by the ratio of total debt to total assets. The asset tangibility effect is represented by the ratio of fixed assets to total assets. As a profitability metric, we incorporate return on assets (ROA). Asset growth captures the annual

growth rate of the total assets. By controlling for these abnormal returns, we can differentiate whether the abnormal returns are the result of firm-specific attributes or their political connection.

Fourth, a firm's political connection is controlled with a binary dummy variable that allows us to encapsulate the effect of political connections on abnormal returns ($POL-CON_{it}$). Therefore, the accuracy of the political connections estimator will be improved, as the controls allow us to understand the variation in the abnormal returns that cannot be attributed to a firm's political connection. As indicated in section 5.3.3, the preliminary test that was conducted to see whether the controlled firm characteristics differ systematically between politically connected and unconnected firms showed no significant difference between these firm characteristics. Therefore, we can ascertain that the firms studied should in fact only differ in their political connection, respectively.

Lastly, all standard errors are clustered at the firm level to estimate all models. Therefore, the clustered error term's t-statistics is adjusted for heteroskedasticity and robust to inherent correlations in the abnormal returns within a cluster.

6.3 Robustness

To test the robustness of our results, we refined the variable of political connection with a more stringent and conservative definition. While we focused initially purely on obtaining benefits from a shareholder perspective and contemplated the board of director's role to protect such interest, our robust definition of political connection stems from exercising active control over a firm through shareholderships or board of directors, possessing the ability to influence decisions, and hence also performance significantly.

La Porta et al. (1999) describe exercising significant control over a firm when a shareholder has at least 10% of voting rights. Therefore, in consideration of the threshold by La Porta et al. (1999) and recognizing the impact and duty of the board members, we have devised three stricter criteria that assert substantial shareholder and board influence within a company. If this influence is held by politicians and their extended family, a company is ergo considered to be politically connected if it meets one of the following criteria:

1. A cumulative ownership of at least 10% of voting rights by family umbrellas and wealthy families, with the absence or presence of any board member bearing a name from a family umbrella or wealthy family.
2. A cumulative ownership of at least 5% of voting rights by family umbrella and wealthy families, with the presence of at least one board member bearing a name

from family umbrellas.

3. A cumulative ownership of at least 1% of voting rights by family umbrellas and wealthy families, along with a board composition in which at least 50% of its members bear names from family umbrellas and wealthy families.

Note that we again increased the threshold for voting rights from 0. 5% to 1% in the final criterion to exceed the minimum requirement set by the SET and adjusted the demand for the number of board members present, respectively. This adjustment not only corresponds to the stricter criteria specified by La Porta et al. (1999) with respect to voting rights. But it also resonates with the approach of Bunkanwanicha and Wiwattanakantang (2009), which focuses solely on the cash flow rights of at least 10%, which are typically lower for large shareholders (Wang et al., 2010), enabling us to confidently assert a political connection. We also adapted the criteria with wealthy families to account for their social status as explained earlier.

7 Results

7.1 2006

7.1.1 Univariate Tests Results

Across both initial and robust univariate tests, we cannot observe any significant differences in the abnormal returns between the portfolios of politically connected and unconnected firms prior to the 2006 coup. However, we observed significant differences in the aftermath of the 2006 coup d'état. Specifically, in our initial univariate tests, the portfolio of politically connected companies showed significantly higher negative abnormal returns of about 2.4 percentage points at the 1% significance level. The robust univariate tests similarly indicated significant higher negative abnormal returns of about 2.7 percentage points for politically connected firms at the 5% significance level.

In contrast, in both sets of univariate tests, in the two-week BHAR after the coup d'état 2006, the portfolio of politically connected firms consistently showed significantly higher negative mean abnormal returns of approximately 4 percentage points at the 5% significance level compared to the portfolio of unconnected firms. However, the six-month post-coup interval did not yield significant results in either the initial or robust univariate tests.

Table 7: Robust Univariate Abnormal Returns 2006

Time Periods	POLCON	NON-POLCON	Difference (U-Mann Test)
Ex ante Coup			
Feb 2005 to Aug 2005 (BHAR)	-0.15972	-0.10187	-0.05785
Aug 2005 to Feb 2006 (BHAR)	0.00907	-0.00418	0.01389
Feb 2006 to Sep 2006 (BHAR)	0.16929	0.10388	0.06535
Ex post Coup			
18th-21st Sept 2006 (CAR)	-0.03969	-0.01218	-0.02778**
19th-3rd Oct 2006 (BHAR)	-0.03530	0.00388	-0.03918**
Sep 2006 to Mar 2007 (BHAR)	0.16929	0.10388	0.06535

This table reports the mean buy-and-hold abnormal returns (BHARs) and cumulative abnormal returns between politically and non-politically connected firms. POLCON is a dummy variable that takes on a value of 1 if the firm is politically connected. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively. Statistical significance is derived from the U-Mann Test between each groups abnormal returns.

Source: Garvey and Seifert, 2024

Table 8: Univariate Abnormal Returns 2006

Time Periods	POLCON	NON-POLCON	Difference (U-Mann Test)
Ex ante Coup			
Feb 2005 to Aug 2005 (BHAR)	-0.15555	-0.09842	-0.05713
Aug 2005 to Feb 2006 (BHAR)	0.11941	-0.01958	0.13899
Feb 2006 to Sep 2006 (BHAR)	0.11239	0.10670	0.00569
Ex post Coup			
18th-21st Sept 2006 (CAR)	-0.03518	-0.01069	-0.02417***
19th-3rd Oct 2006 (BHAR)	-0.03297	0.00617	-0.03914**
Sep 2006 to Mar 2007 (BHAR)	0.11239	0.10670	0.00569

This table reports the mean buy-and-hold abnormal returns (BHARs) and cumulative abnormal returns between politically and non-politically connected firms. POLCON is a dummy variable that takes on a value of 1 if the firm is politically connected. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively. Statistical significance is derived from the U-Mann Test between each groups abnormal returns.

Source: Garvey and Seifert, 2024

7.1.2 OLS Regression Results

Tables 9 and Table 10 present the results of our initial and robust regression for 2006. We find that the estimated coefficient on our political connection dummy variable (*POLCON*) is in both cases strongly significant at the 5% level for the four-day CAR window representing the immediate aftermath of the coup d'état in 2006: The portfolio of politically connected firms experienced on average higher negative abnormal returns of 1.9 percentage points in the initial and of 2.6 percentage points in the robust regressions than its counterparts, holding all other variables constant. Furthermore, in the initial regressions, we find that the coefficient estimator of political connection is significant at the 10% level for the two-week period after the coup d'état occurred where firms with political connections experienced on average higher negative abnormal returns of about 2.6 percentage points compared to politically unconnected parts. Lastly, we observe that the magnitude for the firm-level clustered standard errors for the significant political connections coefficients is very low, suggesting a high precision of the coefficients.

However, both the initial and robust regressions also highlight that in all other periods, the variation of abnormal returns cannot be explained by political connections because it lacks significance. Meanwhile, we also find that in the majority of periods, firm characteristics cannot explain significant variations in abnormal stock returns, with a few exceptions. However, in a few instances, we observe that certain firm characteristics, such as profitability (ROA) or firm size (embodied by the logarithm of total assets) are signficant at 1% level.

Moreover, particularly in the period from August 2005 to February 2006, the industry dummies in the initial, as well as robust regression, can significantly explain the variation in the BHAR, highlighting that industry membership is a decisive factor in explaining the abnormal returns. For example, significantly at the 1% level, firms within communication services and utilities achieved higher positive abnormal returns, respectively, of approximately 28 and 25 percentage points, respectively. Membership in these industries also explains the higher positive abnormal returns for affiliated firms, in two further periods, at the 5% significance level. In the period from February 2006 until the coup d'état, industry membership can also significantly explain abnormal returns of firms. However, we cannot find any statistical significance for industry membership in the immediate periods after the coup d'état occurred, but to a large extent in the six-month BHAR regressions after the coup d'état occurred.

It should also be noted that the constant in the first two time periods (February to August 2005; August 2005 to February 2006) in the initial and robust regressions is significant at the 1% level, where these coefficients predict, if all other estimators are neglected, that firms experienced significant high negative abnormal returns of approximately 45 and 37 percentage points, respectively.

Lastly, we find that the adjusted R^2 for all periods in the initial and robust regressions is rather low, which suggests that our model does not quite predict the proportion of variation in abnormal returns as the dependent variable.

Table 9: Initial Regression Results 2006

Variable	Ex ante coup (2005-2006)			Ex post coup (2006-2007)		
	Feb-Aug BHAR	Sep-Feb BHAR	Mar-Sep BHAR	18-21st Sep CAR	19-3rd Oct BHAR	Sep-Mar BHAR
Intercept	-0.454***	-0.381***	-0.087	-0.038*	0.001	-0.087
	(0.123)	(0.113)	(0.121)	(0.02)	(0.03)	(0.121)
POLCON	0.008	0.111	0.043	-0.019**	-0.026*	0.043
	(0.04)	(0.103)	(0.094)	(0.008)	(0.014)	(0.094)
Asset growth	0.001*	0	0	0	0	0
	(0)	(0)	(0.001)	(0)	(0)	(0.001)
Fixed assets/total assets	0.021	-0.103	-1.08	0.01	0.013	-0.108
	(0.062)	(0.088)	(0.103)	(0.015)	(0.021)	(0.103)
Leverage	-0.168*	-0.017	-0.03	-0.004	0.013	-0.03
	(0.094)	(0.162)	(0.124)	(0.017)	(0.03)	(0.124)
Total assets (log)	0.025***	0.018*	0.005	0.001	-0.003	0.005
	(0.008)	(0.01)	(0.009)	(0.002)	(0.002)	(0.009)
Return on assets (ROA)	0.906***	0.384**	0.121	0.107***	0.165**	0.121
	(0.127)	(0.17)	(0.168)	(0.029)	(0.077)	(0.168)
Materials	0	0.139**	0.262**	-0.002	-0.004	0.262**
	(0.092)	(0.067)	(0.108)	(0.012)	(0.018)	(0.112)
Industrials	0.041	0.153**	0.205**	-0.012	-0.018	0.205**
	(0.093)	(0.069)	(0.084)	(0.012)	(0.018)	(0.084)
Consumer Discretionary	0.143	0.247***	0.151*	0.008	0.019	0.151*
	(0.092)	(0.068)	(0.082)	(0.011)	(0.018)	(0.082)
Consumer Staples	0.194**	0.228***	0.209**	0.013	0.028	0.209**
	(0.097)	(0.086)	(0.088)	(0.012)	(0.019)	(0.088)
Health Care	0.264***	0.421***	0.531***	0.014	0.045	0.531***
	(0.099)	(0.094)	(0.146)	(0.017)	(0.035)	(0.146)
Financials	0.022	0.133	0.044	0.019	-0.004	0.044
	(0.096)	(0.083)	(0.087)	(0.012)	(0.021)	(0.087)
Information Technology	0.046	0.278***	0.224**	-0.002	0.005	0.224**
	(0.104)	(0.076)	(0.101)	(0.013)	(0.02)	(0.101)
Communication Services	0.049	0.247***	0.199**	0.013	-0.019	0.199**
	(0.1)	(0.084)	(0.095)	(0.015)	(0.032)	(0.095)
Utilities	0.039	0.502*	0.104	0.003	-0.009	0.104
	(0.117)	(0.276)	(0.097)	(0.016)	(0.032)	(0.097)
Real Estate	0.028	0.402***	0.055	-0.006	-0.009	0.055
	(0.095)	(0.085)	(0.091)	(0.014)	(0.025)	(0.091)
Adjusted R2	0.194	0.080	0.022	0.076	0.073	0.022
N Obs (POLCON = 1)	49	51	51	46	47	51
N Observations	386	410	419	381	395	419

This table reports the coefficient estimates of OLS regression models. For each regression, the dependent variables are either buy-and-hold abnormal returns (BHARs) or cumulative abnormal returns (CARS). The numbers in parentheses constitute t-statistics, from heteroskedasticity-robust standard errors with clustering at the firm level. POLCON is a dummy variable that takes on a value of 1 if the firm is politically connected. '*', '**' and '***' denote statistical significance at the 10%, 5% and 1% levels, respectively.

Source: Garvey and Seifert, 2024

Table 10: Robust Regression Results 2006

Variable	Ex ante coup (2005-2006)			Ex post coup (2006-2007)		
	Feb-Aug BHAR	Sep-Feb BHAR	Mar-Sep BHAR	18-21st Sep CAR	19-3rd Oct BHAR	Sep-Mar BHAR
Intercept	-0.45***	-0.362***	-0.09	-0.039*	-0.001	-0.09
	(0.123)	(0.115)	(0.122)	(0.02)	(0.031)	(0.122)
POLCON	-0.016	0.014	0.103	-0.026**	-0.028	0.103
	(0.049)	(0.054)	(0.177)	(0.012)	(0.02)	(0.177)
Asset growth	0.001*	0	0	0	0	0
	(0)	(0)	(0.001)	(0)	(0)	(0.001)
Fixed assets/total assets	0.022	-0.104	-0.115	0.011	0.015	-0.115
	(0.062)	(0.089)	(0.105)	(0.015)	(0.021)	(0.105)
Leverage	-0.167*	-0.004	-0.028	-0.005	0.01	-0.028
	(0.094)	(0.156)	(0.127)	(0.017)	(0.03)	(0.127)
Total assets (log)	0.025***	0.017*	0.005	0.002	-0.002	0.005
	(0.008)	(0.01)	(0.009)	(0.002)	(0.002)	(0.009)
Return on assets (ROA)	0.901***	0.35**	0.126	0.107***	0.168**	0.126
	(0.126)	(0.176)	(0.166)	(0.031)	(0.079)	(0.166)
Materials	0	0.139**	0.266**	-0.003	-0.005	0.266**
	(0.092)	(0.061)	(0.112)	(0.012)	(0.018)	(0.112)
Industrials	0.04	0.153**	0.213**	-0.013	-0.019	0.213**
	(0.092)	(0.063)	(0.087)	(0.012)	(0.019)	(0.087)
Consumer Discretionary	0.142	0.244***	0.155*	0.008	0.018	0.155*
	(0.092)	(0.063)	(0.085)	(0.012)	(0.018)	(0.085)
Consumer Staples	0.192**	0.227***	0.217**	0.011	0.027	0.217**
	(0.097)	(0.082)	(0.09)	(0.012)	(0.02)	(0.09)
Health Care	0.263***	0.416***	0.534***	0.014	0.045	0.534***
	(0.098)	(0.091)	(0.148)	(0.017)	(0.035)	(0.148)
Financials	0.022	0.135*	0.045	0.018	-0.005	0.045
	(0.096)	(0.078)	(0.088)	(0.012)	(0.021)	(0.088)
Information Technology	0.045	0.281***	0.229**	-0.004	0.003	0.229**
	(0.104)	(0.07)	(0.103)	(0.013)	(0.02)	(0.103)
Communication Services	0.05	0.257***	0.198**	0.012	-0.021	0.198**
	(0.099)	(0.076)	(0.096)	(0.015)	(0.032)	(0.096)
Utilities	0.039	0.504*	0.108	0.002	-0.01	0.108
	(0.116)	(0.281)	(0.097)	(0.017)	(0.033)	(0.097)
Real Estate	0.03	0.428***	0.061	-0.01	-0.015	0.061
	(0.094)	(0.071)	(0.09)	(0.014)	(0.025)	(0.09)
Adjusted R2	0.194	0.069	0.025	0.075	0.069	0.025
N Obs (POLCON = 1)	24	24	24	22	22	24
N Observations	386	410	419	381	395	419

This table reports the coefficient estimates of OLS regression models. For each regression, the dependent variables are either buy-and-hold abnormal returns (BHARs) or cumulative abnormal returns (CARS). The numbers in parentheses constitute t-statistics, from heteroskedasticity-robust standard errors with clustering at the firm level. POLCON is a dummy variable that takes on a value of 1 if the firm is politically connected. '*', '**' and '***' denote statistical significance at the 10%, 5% and 1% levels, respectively.

Source: Garvey and Seifert, 2024

7.2 2014

7.2.1 Univariate Tests Results

Table 11: Univariate Abnormal Returns 2014

Time Periods	POLCON	NON-POLCON	Difference (U-Mann Test)
Ex ante removal			
Jan to June 2013 (BHAR)	0.01185	0.00833	0.00352
July to Dec 2013 (BHAR)	0.06285	0.07360	-0.01075
Jan to May 2014 (BHAR)	0.04870	0.00734	0.04136
Ex post removal			
6th-9th May 2014 (CAR)	-0.00919	0.00188	-0.01107***
7th-19th May 2014 (BHAR)	-0.01210	-0.01190	-0.00020
Ex post coup			
22nd-25th May 2014 (CAR)	-0.00007	0.00237	-0.00244*
22nd-5th June 2014 (BHAR)	0.01543	0.01011	0.00533
May to Nov 2014 (BHAR)	0.21563	0.10667	0.10897

This table reports the mean buy-and-hold abnormal returns (BHARs) and cumulative abnormal returns between politically and non-politically connected firms. POLCON is a dummy variable that takes on a value of 1 if the firm is politically connected. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively. Statistical significance is derived from the U-Mann Test between each groups abnormal returns.

Source: Garvey and Seifert, 2024

Table 12: Robust Univariate Abnormal Returns 2014

Time Periods	POLCON	NON-POLCON	Difference (U-Mann Test)
Ex ante removal			
Jan to June 2013 (BHAR)	0.031	0.0707	0.02339
July to Dec 2013 (BHAR)	0.0775	0.0707	0.00542
Jan to May 2014 (BHAR)	0.1228	0.0065	0.1163**
Ex post removal			
6th-9th May 2014 (CAR)	-0.0145	0.0019	-0.0164***
7th-19th May 2014 (BHAR)	-0.0349	-0.0108	-0.02416
Ex post coup			
22nd-25th May 2014 CAR)	0.0058	0.0019	0.00390
22nd-5th June 2014 (BHAR)	0.0311	0.0097	0.02146**
May to Nov 2014 (BHAR)	-0.0137	0.1255	-0.13926

This table reports the mean buy-and-hold abnormal returns (BHARs) and cumulative abnormal returns between politically and non-politically connected firms. POLCON is a dummy variable that takes on a value of 1 if the firm is politically connected. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively. Statistical significance is derived from the U-Mann Test between each groups abnormal returns.

Source: Garvey and Seifert, 2024

Within the first three time intervals analyzed, only the robust univariate tests from January coefficients:he removal of Yingluck Shinawatra indicate statistical significance at the 5% level, with politically connected firms outperforming their unconnected counterparts by approximately 12 percentage points. Furthermore, these companies exhibited significantly higher negative abnormal returns at the 1% levapproximately both initial and robust univariate tests during the immediate aftermath of the re-

moval of Yingluck Shinawatra, where politically connected companies experienced on average higher negative abnormal returns of approximately 1.4 percentage points compared to unconnected firms.[13] Unexpectedly, no significant differences were observed in mean abnormal returns immediately following the 2014 coup d'état, except for higher negative abnormal returns of about 0.002 percentage points, which is rather marginal. Contrary to our initial assumptions, the subsequent two weeks saw abnormal returns that were significantly different at 5% level. During this period, politically connected firms actually outperformed their counterparts by approximately 2.1 percentage points in robust univariate tests.

7.2.2 OLS Regression Results

Tables 13 and 14 present the results of our initial and robust regressions for 2014. We do not find significance in abnormal returns that can be attributed to political connections in the set of the initial regressions, whereas in the robust regressions we observe only in one period, January 2014 until the removal of Yingluck Shinawatra, a significant coefficient for political connection at the 10% level: Politically connected firms experienced higher positive abnormal returns of approximately 12.5 percentage points than unconnected firms. In all other periods across the robust results, no significantly lower or higher abnormal returns are observable. However, we also observe that the standard error for this coefficient is rather high (almost half of the coefficient), casting doubt on the precision of the coefficient.

Considering the firm characteristics in both sets of regressions, we observe that the majority also does not exhibit significant effects on abnormal returns, except in a few instances. Particularly in the six-month BHAR model after the coup d'etat 2014, we see strong significant results at the 1% level for example in profitability (ROA), firm size (logarithm of total asset) and asset tangibility (ratio of fixed assets over total assets).

Similarly to 2006, in two periods (January to Shinawatra's removal 2014; two-week BHAR 2014 after the coup d'état 2014), we find that half of industry dummies show statistical significance, while in the two-week BHAR period after the coup d'état, three coefficients are significant. In the remainder of periods, we observe only in two periods a single significant coefficient: In the two-week BHAR regression after Shinawatra's removal, the negative abnormal returns of the healthcare sector were significantly higher by approximately 6.1 percentage points, while in the CAR regressions after the coup d'état, the real estate sector experienced significantly higher negative abnormal returns of about 2.4 percentage points, both statistically significant at the 5% level.

Similarly to the 2006 regressions, we also identify that in one instance the constant was highly significant at the 1% level. Therefore, if all other estimators are neglected,

[13] Initial and robust results averaged.

Table 13: Initial Regression Results 2014

	Ex ante removal (2013-2014)			Ex post removal (2014)		Ex post coup (2014)		
Variable	Jan-June BHAR	July-Dec BHAR	Jan-May BHAR	6-9 May CAR	7-19 May BHAR	22-25 May CAR	22-05 June BHAR	May-Nov BHAR
Intercept	-0.076	0.258	-0.041	0.002	-0.02	0.012	-0.032	0.753***
	(0.184)	(0.183)	(0.074)	(0.018)	(0.032)	(0.011)	(0.023)	(0.206)
POLCON	0.025	-0.013	0.057	-0.01	0.006	0	0.006	-0.05
	(0.059)	(0.049)	(0.038)	(0.007)	(0.024)	(0.004)	(0.011)	(0.112)
Asset growth	0**	0	0	0	0***	0	0***	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0.001)
Fixed / total assets	-0.067	-0.036	-0.054	0.004	-0.001	0.001	0	-0.374***
	(0.013)	(0.075)	(0.056)	(0.016)	(0.023)	(0.07)	(0.02)	(0.137)
Leverage	-0.008	-0.183*	0.059	-0.035	-0.046	0.012	0.071*	0.069
	(0.086)	(0.11)	(0.136)	(0.023)	(0.046)	(0.014)	(0.037)	(0.281)
Total assets (log)	0.006	0	0.001	0.001	0.001	0.001	-0.001	-0.069***
	(0.086)	(0.1)	(0.07)	(0.003)	(0.003)	(0.001)	(0.002)	(0.016)
ROA	0.206	0.038	0.07	-0.089**	-0.017	0.003	-0.063	-1.012***
	(0.212)	(0.242)	(0.09)	(0.04)	(0.053)	(0.006)	(0.046)	(0.339)
Materials	-0.003	-0.11	0.102**	0	-0.002	0.001	0.067***	0.148
	(0.132)	(0.116)	(0.049)	(0.01)	(0.025)	(0.008)	(0.015)	(0.1)
Industrials	0.005	-0.147	0.053*	0	-0.006	-0.007	0.058***	0.201*
	(0.132)	(0.116)	(0.029)	(0.008)	(0.015)	(0.006)	(0.014)	(0.104)
Consumer Discret	-0.002	-0.118	0.067**	0.01	-0.003	0.003	0.022*	0.019
	(0.132)	(0.114)	(0.03)	(0.009)	(0.006)	(0.006)	(0.013)	(0.087)
Consumer Staples	-0.079	-0.1	0.087***	0.004	0.021	0.003	0.03**	0.017
	(0.137)	(0.115)	(0.031)	(0.008)	(0.017)	(0.006)	(0.013)	(0.08)
Health Care	0.125	-0.055	0.085	0.009	0.062**	0.01	0.034	0.152
	(0.142)	(0.113)	(0.08)	(0.011)	(0.029)	(0.008)	(0.026)	(0.104)
Financials	0.038	-0.148	0.024	-0.004	0.01	-0.003	0.058***	0.192*
	(0.15)	(0.114)	(0.058)	(0.01)	(0.024)	(0.007)	(0.018)	(0.111)
Information Tech	0.169	-0.085	0.066	-0.023	-0.036	-0.01	0.017	-0.086
	(0.144)	(0.129)	(0.041)	(0.019)	(0.023)	(0.006)	(0.013)	(0.101)
Communication Serv	0.018	-0.155	0.107**	-0.003	-0.012	-0.011	0.019	-0.15
	(0.141)	(0.118)	(0.047)	(0.008)	(0.017)	(0.007)	(0.014)	(0.112)
Utilities	0.093	0.02	0.099	0.025	0.054	0.002	0.061**	0.667***
	(0.172)	(0.157)	(0.071)	(0.018)	(0.037)	(0.011)	(0.029)	(0.21)
Real Estate	-0.051	0.268	-0.031	0.035*	0.079	-0.024**	0.016	3.052
	(0.266)	(0.253)	(0.048)	(0.019)	(0.058)	(0.009)	(0.025)	(1.914)
Adjusted R2	0.003	0.010	-0.013	0.026	0.003	0.008	0.089	0.217
N Obs (POLCON = 1)	61	62	63	60	60	61	61	63
N Observations	420	430	437	429	430	424	426	448

This table reports the coefficient estimates of OLS regression models. For each regression, the dependent variables are either buy-and-hold abnormal returns (BHARs) or cumulative abnormal returns (CARS). The numbers in parentheses constitute t-statistics, from heteroskedasticity-robust standard errors with clustering at the firm level. POLCON is a dummy variable that takes on a value of 1 if the firm is politically connected. '*', '**' and '***' denote statistical significance at the 10%, 5% and 1% levels, respectively. Fixed / total assets = Fixed assets/total assets, Consumer Discret = Consumer Discretionary, Information Tech = Information Technology, and Communication Serv = Communication Services.

Source: Garvey and Seifert, 2024

the firms achieved positive abnormal returns of about 75 percentage points.

Lastly, similar to 2006, we find that the adjusted R^2 across all periods in the initial and robust regressions is rather low, and thus suggests that the proportion of variation in the abnormal returns as the dependent variable is not quite predictable by our model.

Table 14: Robust Regression Results 2014

	Ex ante removal (2013-2014)			Ex post removal (2014)		Ex post coup (2014)		
Variable	Jan-June BHAR	July-Dec BHAR	Jan-May BHAR	6-9 May CAR	7-19 May BHAR	22-25 May CAR	22-05 June BHAR	May-Nov BHAR
Intercept	-0.072	0.256	-0.037	0.001	-0.019	0.012	-0.031	0.749***
	(0.183)	(0.184)	(0.074)	(0.018)	(0.032)	(0.011)	(0.023)	(0.205)
POLCON	0.111	0.041	0.125*	-0.013	-0.024	0.006	0.015	-0.093
	(0.109)	(0.088)	(0.064)	(0.012)	(0.055)	(0.008)	(0.015)	(0.068)
Asset growth	**0	0	0	0	0***	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)	(0.002)	(0.001)
Fixed / total assets	-0.071	-0.037	-0.057	0.004	0	0.001	0	-0.371***
	(0.13)	(0.075)	(0.056)	(0.016)	(0.024)	(0.007)	(0.002)	(0.136)
Leverage	-0.011	-0.188*	0.057	-0.035	-0.043	0.012	0.071*	0.069
	(0.086)	(0.11)	(0.135)	(0.023)	(0.046)	(0.014)	(0.037)	(0.276)
Total assets (log)	0.007	-0.006	-0.001	0	0.001	-0.001	0	-0.069***
	(0.013)	(0.01)	(0.007)	(0.001)	(0.003)	(0.001)	(0.002)	(0.016)
ROA	0.199	0.039	0.059	-0.087**	-0.018	0.003	-0.065	-1.002***
	(0.211)	(0.242)	(0.091)	(0.04)	(0.054)	(0.015)	(0.046)	(0.342)
Materials	-0.011	-0.113	0.093*	0.001	0	0.001	0.066***	0.155
	(0.132)	(0.115)	(0.05)	(0.01)	(0.023)	(0.008)	(0.015)	(0.101)
Industrials	0.001	-0.147	0.047*	0.001	-0.006	-0.007	0.057***	0.205**
	(0.131)	(0.117)	(0.029)	(0.007)	(0.015)	(0.006)	(0.014)	(0.104)
Consumer Discret	-0.008	-0.121	0.061**	0.011	0.003	-0.004	0.021*	0.023
	(0.132)	(0.114)	(0.03)	(0.009)	(0.02)	(0.006)	(0.013)	(0.087)
Consumer Staples	-0.082	-0.101	0.082***	0.005	0.022	-0.003	0.03**	0.021
	(0.136)	(0.116)	(0.03)	(0.007)	(0.017)	(0.006)	(0.013)	(0.08)
Health Care	0.124	-0.054	0.084	0.01	0.061**	0.01	0.034	0.153
	(0.141)	(0.114)	(0.079)	(0.01)	(0.029)	(0.008)	(0.026)	(0.104)
Financials	0.024	-0.152	0.01	-0.002	0.012	-0.003	0.056***	0.201*
	(0.149)	(0.115)	(0.059)	(0.01)	(0.025)	(0.007)	(0.018)	(0.112)
Information Tech	0.166	-0.084	0.062	-0.022	-0.036	-0.01	0.016	-0.083
	(0.144)	(0.13)	(0.041)	(0.019)	(0.023)	(0.006)	(0.013)	(0.101)
Communication Serv	0.005	-0.161	0.094**	-0.002	-0.009	-0.011	0.017	-0.141
	(0.14)	(0.12)	(0.047)	(0.008)	(0.018)	(0.008)	(0.014)	(0.113)
Utilities	0.086	0.019	0.091	0.026	0.055	0.002	0.06**	0.673***
	(0.173)	(0.152)	(0.064)	(0.018)	(0.038)	(0.011)	(0.029)	(0.207)
Real Estate	-0.051	0.265	-0.024	0.034*	0.08	-0.024**	0.017	3.045
	(0.27)	(0.254)	(0.049)	(0.02)	(0.057)	(0.009)	(0.024)	(1.912)
Adjusted R2	0.006	0.011	-0.005	0.026	0.005	0.010	0.090	0.218
N Obs (POLCON = 1)	25	26	26	24	24	24	25	26
N Observations	420	430	437	429	430	424	426	448

This table reports the coefficient estimates of OLS regression models. For each regression, the dependent variables are either buy-and-hold abnormal returns (BHARs) or cumulative abnormal returns (CARS). The numbers in parentheses constitute t-statistics, from heteroskedasticity-robust standard errors with clustering at the firm level. POLCON is a dummy variable that takes on a value of 1 if the firm is politically connected. '*', '**' and '***' denote statistical significance at the 10%, 5% and 1% levels, respectively. Fixed / total assets = Fixed assets/total assets, Consumer Discret = Consumer Discretionary, Information Tech = Information Technology, and Communication Serv = Communication Services.

Source: Garvey and Seifert, 2024

8 Discussion

8.1 Results

8.1.1 Political Connections

The question we attempt to answer with our research is two-fold. First, we investigate whether political connection has a significant effect on abnormal returns. Second, we consider abnormal returns in light of the sudden change of government, seen in the coup d'états as well as the removal of Yingluck Shinawatra.

For the time periods in 2006, only considering the difference in abnormal returns be-

tween politically connected and unconnected firms, we find that politically connected firms experienced in the immediate aftermath of the coup d'état 2006 significantly lower abnormal returns in the initial and robust univariate tests. However, this finding is tarnished if we compare these results to the set of regressions in which we could only identify that the political connection explained significant negative abnormal returns in the four-day CAR regressions that followed the coup d'état in 2006 but not in the subsequent two weeks. Although we argued that the coup d'état was not anticipated by the public, and therefore these results hint at the conclusion that politically connected firms were affected in particular by the coup d'état, drawing a solid causal inference would be inadequate since our study does not incorporate a counterfactual of how the abnormal returns of politically connected firms would have developed if the coup d'état of 2006 had not happened. In this context, we emphasize that the majority of the univariate tests (four out of six) and regressions (five out of six)[14] show no significance in both the difference between politically connected firms as well as in the political connection dummy variable, suggesting that an existing political connection has no notable effect on abnormal returns.

As mentioned above, the results of the political events in 2014 are similar to the results in 2006, yet suggest that the actual coup d'état in 2014 ("the more detrimental political event") might have been the removal of Yingluck Shinawatra: After removal, the results of the univariate tests are strongly significant at the 1% level for politically connected firms, while the absence of significant differences between politically connected and unconnected firms after the coup d'état 2014 is observable. However, in light of the set of regressions, the effect of political connections on abnormal returns becomes questionable: Although the initial regressions show only insignificant results for political connections, we find only one significant result in the robust regressions. In one period (January 2014 until the removal of Yingluck Shinawatra), political connections explained positive abnormal returns of approximately 12.5 percentage points. However, the large extent of insignificant findings thus underscore that political connections have a low explanatory value for a firm's abnormal returns.

Although we identify in the robust univariate test for the period prior to Shinawatra's removal as well as in the one period in the initial regressions significant positive abnormal returns for politically connected firms, the remaining significant results, both in the univariate tests as well as the two-week period after the coup d'état 2014 in the initial regression, cast doubt to what extent the events were perceived as detrimental news for politically connected firms: Particularly, after the coup we found a significant difference of higher positive abnormal returns for politically connected firms which misaligns with our initial expectation that politically connected firms would suffocate as consequence for the sudden change of government. Given also that the majority of univariate tests and the coefficients for political connections are insignif-

[14] This is the case in for the robust, but not for the initial OLS regressions: In the initial OLS regressions we observed in four out of six periods insignificant results.

icant, we suggest furthermore that political connections as we defined them in our research cannot explain eventual abnormal returns for Thai companies.

Moreover, we want to highlight that the robust definition of political connection appears to alter both the consistency in significance and the magnitude of the observed impact of political connections on abnormal returns. In detail, the robust univariate tests for 2014 exhibit more significant results than the initial ones, whereas for 2006 the opposite occurs. Meanwhile, in regressions of 2006, we observe that in the two-week BHAR regressions the coefficient becomes insignificant in the robust model, while significance remains consistent in the four-day CAR regression with a more pronounced effect on abnormal returns. In the 2014 regressions across the periods, the significance of the coefficient of the political connection dummy variable is inconsistent as well. However, note that in the majority of periods, in the univariate tests as well as in the regressions, political connections remain insignificant regarding their effect on abnormal returns, underscoring that potentially other factors might explain the variation in abnormal returns more appropriately.

Furthermore, the distribution of significant results in all time periods casts doubt on to what extent any political events, such as the mass protests before each coup d'état, affected politically connected firms more pronounced than unconnected firms. However, the results of the 2006 univariate tests, the 2006 regressions, and the 2014 univariate tests show significantly higher negative abnormal returns for politically connected firms. This not only confirms our initial expectation, but also suggests that political connections might exhibit period-specific effects. These effects seem particularly pronounced in response to drastic political shifts, such as coups or the removal of the prime minister.

Considering our findings, we can reject our hypotheses to a large extent that political connections can significantly explain abnormally high or abnormally low returns of firms in Thailand within these respective periods, as the public might have assumed. These findings stand in contrast to the implications of the evidence provided by Bunkanwanicha and Wiwattanakantang (2009). However, assuming that our definition accurately captures political connections, our findings agree with historical assessments of the causes for the coup d'états, particularly Hewison (2008),Connors (2008), Ockey (2007), and McCargo (2015) among others. Although we cannot completely exclude whether in particular instances nepotism, conflict of interests, or personal gains from the Shinawatras or their government members occurred, our findings underscore that the impact of political connections on abnormal returns is negligible. Instead, the coup d'états as well as the removal of Yingluck Shinawatra appeared to be a consequence of the ongoing political power struggle between these governments and the conservative established elites affiliated with the monarchy.

8.1.2 Industries

Bunkanwanicha and Wiwattanakantang (2009) highlighted that possibly membership in a particular industry might explain abnormal returns of companies as certain industries could have experienced beneficial policies, certain macroeconomic shocks or were in a particular period "vogue", such as the rise of telecommunications in the early 2000s. While we find in the majority of periods that either none or the majority industry dummies are significant, we thus focus on the instances when only one or two industries yield significant coefficients, implying that the abnormal returns of firms within a particular industry were discretely affected compared to others. This is the case for the health care sector in the two-week BHAR regression after Shinawatra's removal, and for the real estate sector in the CAR regressions after the coup d'état 2014. However, based on the historical assessment, we are unable to assert these particular results to any specific policies or events in the broad political landscape that might have had a pronounced impact on these industries.

8.1.3 Constants

In both the 2006 and 2014 regressions, we observed in multiple periods that the coefficient of the constant was significant at the 1% level, causing significant abnormal high/low returns if all other estimators were removed from the model. These results suggest that our benchmark portfolio that was derived from the returns of firms in our sample does not adequately reflect the actual Thai market in these particular periods, which might be reasoned with the construction of our data: A prerequisite for to be in our sample was to have financial data accessible, which is often true for particular big corporations, thus potentially excluding smaller, yet listed firms. Therefore, these per se abnormal returns for firms in our sample might be explainable with research that shows that the returns between smaller and bigger firms differ (Chan et al., 1991).

8.1.4 Firm Characteristics and Model Fit

Moreover, considering the firm characteristics, we find inconsistent significant results when comparing 2006 and 2014. For example, ROA in 2006 shows across four periods significant results, affecting abnormal returns positively, and thus suggesting that profitability might be a decisive factor for achieving abnormal stock returns. However, ROA is insignificant for all periods. Meanwhile, we identified leverage to explain positive abnormal returns significantly in two periods prior to Shinawatras removal in 2014; yet, in 2006, leverage has exhibited negative effects on abnormal returns in one period, while remaining insignificant in the other periods. Given these inconsistencies as well as the fact that the majority of firm characteristics remain insignificant

across the periods of 2006 and 2014, which is also true for the industry controls, we must assert that our model can only explain to a limited extent the variation in abnormal returns at a firm level, evident from the low adjusted R^2 values. Therefore, abnormal returns of firms must be attributed to unobserved predictors that we did not incorporate into our model.

8.1.5 External Validity

Our results stand in contrast to the extensive literature that can assert significant effects of political connections on various variables, in particular abnormal returns (Bunkanwanicha and Wiwattanakantang, 2009), and therefore question the importance of the effect of political connections for firms. Despite this surprising result, we argue that these findings from the Thai perspective provide the basis for further research in other South East Asian countries, as these have similar societal structures and share many other macroeconomic characteristics.

8.2 Limitations

Although we still find our results insightful for understanding the effects of political connections, we have identified several limitations to our investigation, both from a data point of view and in our empirical strategy.

First, we segment the data into the aforementioned time periods to understand whether politically connected firms exhibited higher or lower abnormal returns within these intervals. However, while our classification allows us to differentiate between the effect of political connection, we are unable to confidently draw a causal inference between the events, namely the coup d'états as well as the removal of Yingluck Shinawatra, and their effects on abnormal returns of firms in general. This issue could have been addressed by introducing counterfactual abnormal returns to each event, for each group of firms; To confidently attribute any effect of each event period, on abnormal returns, a synthetic control (Abadie et al., 2010) could have been established that allows us to trace how abnormal returns would have developed in a hypothetical scenario in which each event did not occur.

Second, with our historical assessments, we provide a detailed argument on why each coup d'état as well as the removal of Yingluck Shinawatra, are exogenous. However, this assumption of exogeneity is in particular vulnerable from an anticipation point of view, due to the political instability Thailand experienced during the respective 2005/06 and 2013/14 political crises. Potentially, the abnormal returns of the firms were affected differently depending on their political connection, thus adulterating our findings. Using an adjusted empirical model with the introduction of an instru-

mental variable that correlates with the endogenous explanatory variable, such as the coup d'état, but not with the error term, could have mitigated these exogeneity issues more effectively.

Third, despite using CAR to observe the immediate response of abnormal returns after each event, we employed BHARs as key measurements of abnormal returns over the long term. However, it is crucial to mention that the BHAR can suffer from potential skewness biases if conducted over too long periods. This potential distortion could have been caused by the asymmetry in the distribution of stock returns, since the BHAR assumes a symmetric distribution and thus leads to biased estimates barber1997detecting (barber1997detecting).For example, this skewness bias could have been addressed through block-bootstrapped skewness-adjusted t-statistics as it was conducted by Bunkanwanicha and Wiwattanakantang (2009) and introduced by Barber and Lyon (1997). However, we attempt to mitigate such skewness bias by introducing the six-month time intervals ex ante and ex post to each coup d'état

Fourth, while our key variable of interest, political connection, captures the effect of political connections on abnormal returns of a company, it does not necessarily indicate the political dependency of a firm, and vice versa. A company might deliberately establish political connections through their board of directors, or with offerings of shareholdership to politicians in order to mitigate their dependence on institutions, seen in revenue from government contracts, etc., while firms can also be politically connected but not dependent on current governments. Therefore, while in the first scenario the political connection could have been an adequate proxy for political dependency, the sole political dependency of firms without any political connections might have a differential effect on abnormal returns, as such companies might be more sensitive to the political landscape; Once identified by the market, investors might perceive politically dependent but unconnected firms as more volatile, and thus this perception of this sensitivity would be, in anticipation of higher volatility, reflected in a firm's stock price. While Bunkanwanicha and Wiwattanakantang (2009) controlled for political dependency through the ratio of concessional income to revenue, a similar approach was beyond the feasibility of our investigation as no central data on concessional income was available for Thai firms.

Fifth, while we can profoundly attribute political connections to firms through our detailed research on politicians and their families, it should also be noted that the resulting relationships between institutions and firms are complex and dynamic in their nature (Tian et al., 2019) and not as steady as we defined them in our research. They may be subject to change over time even if institutions remain arguably stable, while they may also differ in their strength, introducing further variation and thus affecting abnormal returns distinctly. Meanwhile, Wong and Hooy (2018) also show that the type of connections, seen in the difference between politicians and their families, might have different effects on the outcome variables. Therefore, a more differentiat-

ing approach to defining political connections might be appropriate. For instance, it might be important to not only trace government members for determining political connections, but also incorporate other public officials, like military leaders, MPs, senate members or party affiliates, and to distinguish between proximity between firms and institutions. Therefore, a refined and in-depth classification could potentially create a continuous political connection variable that captures more nuances of political connections, similar to Fisman (2001).

Lastly, we attempt to attribute in our regressions the effect of political connection on abnormal returns, and thus also conducted preliminary tests, seen in Tables 5, 15, 16 17, in which we find that by a large extent firm characteristics are not significantly different between politically connected and unconnected firms. Although our findings are also supported by Bunkanwanicha and Wiwattanakantang (2009), other research points out that politically connected firms might benefit from lower equity cost (Boubakri et al., 2012) and greater accessibility to bank loans (Infante and Piazza, 2014), suggesting that firm characteristic can indeed differ between these groups. Therefore, for example, if political connection influences firm behavior, seen in the extent of taking loans, the mediation of leverage of political connections might have an amplifying or attenuating effect on abnormal returns. Moreover, even if we do not find significant differences in firm characteristics in the preliminary tests, the effect of political connections on abnormal returns might be more pronounced in larger firms or with higher leverage due to a potential interaction between these variables.

9 Conclusion

Our investigation aimed to understand to what extent political connections of Thai firms can explain low or high abnormal returns in periods before and after coup d'états of 2006 and 2014, as well as Yingluck Shinawatra's removal as prime minister.

Contrary to the majority of existing literature, see Bunkanwanicha and Wiwattanakantang (2009), Fisman (2001), among others, we find that to a large extent political connections have no significant impact on the abnormal returns of Thai companies in the periods under scrutiny around the coup d'état in 2006 and 2014 for both univariate tests and our regressions. In detail, for the univariate tests, we find that particularly in the periods after the coup d'etat 2006 and the period after Yingluck Shinawatra experienced significantly higher negative abnormal returns than politically unconnected firms. However, the majority of the remaining periods exhibit no significant differences in abnormal returns in both years, both for the robust and initial univariate

tests.[15]

The results of the regressions underscore that politically connected firms did not experience significant abnormal returns. In 2006 (Table 9 and Table 10), across the initial and robust regressions, only in the four day period after the coup d'etat, politically connected firms experienced higher negative abnormal returns.[16]

Meanwhile, in the initial 2014 regression (Table 13) we do not observe any significance for political connection. For 2014, within the robust regression set, we only find in the period prior to Yingluck Shinawatra's removal that politically connected companies exhibit significant positive abnormal returns (Table 14).

Based on these results, we come to the following two conclusions. First, the results cast doubt that political connections in the larger context have significant effects on abnormal returns. Instead, given that in particular political connections exhibit significant effects in the immediate aftermath of the coup d'état 2006 and the removal of Yingluck Shinawatra, political connections appear to have period-specific effects on firms' abnormal returns, particularly in times when drastic political instability becomes apparent.

However, we also identified several limitations to our research. First, the segmentation of the data builds the foundation for understanding in which periods politically connected firms exhibited significant abnormal returns. However, since we do not establish a counterfactual of how abnormal returns would have developed if the events had not happened, a solid causal inference between the effects of the events on abnormal returns cannot be drawn. Second, while we provide a profound historical analysis to argue for the exogeneity of the events, a potential anticipation of these might have biased our results. Third, political connection does not per se imply political dependency, and thus abnormal returns might be more pronounced for politically dependent firms, as they presumably are more sensitive in the political environment. Fourth, while we can confidently attribute political connections based on our extensive research on politicians and their family members, political connections are complex and dynamic in their nature. They might vary in strength and even within short time periods, thus biasing our results. Fifth, running BHAR over longer periods of time might bias abnormal returns as BHAR can suffer from potential skewness biases, caused by the asymmetry in the distribution of stock returns. Lastly, while we did not observe significant differences in firm characteristics between politically connected and unconnected firms, one limitation might be that the true effect of political connections on abnormal returns might derive from an interaction between political connec-

[15] Note, however, within the robust univariate tests for 2014 (Table 12) in the period prior to the removal of Yingluck Shinawatra, that politically connected firms experienced significantly higher positive returns of approximately 11%.

[16] Note, however, that in the initial 2006 regressions (see Table 9), the two-week period after the coup d'état showed that politically connected firms exhibit higher negative abnormal returns, which renders to be insignificant in the robust regression.

tion and any firm characteristic, while political connection might also influence firm behavior.

Future research may build on our findings and address the limitations mentioned above to strengthen particularly internal validity. In detail, implementing counterfactuals for abnormal returns that capture hypothetical abnormal returns of politically connected and unconnected firms if the events had not happened would allow for the asserting of a more solid causal inference between the events and the abnormal returns of firms. This causal inference could also be solidified through an empirical model that incorporates an instrumental variable that correlates with the endogenous explanatory variable, such as the coup d'état, to address the potential problem of exogeneity that can arise particularly due to the complex political situation in developing countries, and in our case Thailand.

Moreover, to improve the variable of political connections and capture their complex nature, future research may introduce a continuous variable, similar to Fisman (2001), which reflects political connections more nuanced than our binary classification. For example, this could be achieved through the incorporation of members of parliament and party officials that account for the various strengths political connections may exhibit.

Lastly, future research may not solely focus on specific countries, but potentially on regions that share characteristics of institutions and other cultural features, seen, for example, in the larger South East Asian sphere. Such cross-country examinations would provide deeper insight into to what extent political connections affect certain firm characteristics, like abnormal returns or firm performance, and thus allow, as a consequence, the broader comparison of business environments.

Ultimately, the implications of our findings showcase that such particular economic research extends across other scholarly disciplines. In our case, we arguably supported the historical argument that the causes for the coup d'etats were rather of political and ideological, thus underscoring that the alleged nepotism through the Shinawatra governments might have been rather pretextual. Therefore, it is worthwhile to conduct further research in the area of political connections and the impacts of political events generally to explore other potential ramifications.

10 Bibliography

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11 Appendix

11.1 Coup d'états and Historic Exogeneity Assessments

11.1.1 Literature Review: Causes of Coup d'états and their Mitigation

An aspect of our research is the argument for the exogeneity of the 2006, and 2014 coup d'état (including the removal of Yingluck Shinawatra from office). Although the main purpose of our investigation is to understand the effect of political connections in light of sudden changes in governments on abnormal returns, and our focus lies solely on Thailand, this review of the literature allows us to understand the causes of coup d'ètats, the motives of the military, and how leaders try to avoid them empirically. Therefore, this review of the literature served as the basis for the historical evaluation of the causes that led to each coup d'état in Thailand, and hence our argument of exogeneity.

The majority of scholars apply a rational framework to the decision of whether the military will overthrow the government; see Lichbach (1995) or Thyne (2010). Although militaries might overthrow the government due to misalignment with their interests Thompson, 1973, conspirators also carefully examine the chances of their maneuver: They will ultimately only proceed if the expected payoffs of a potential victory offset the risky consequences of a potential failure. This is especially highlighted by Finer (1988) who emphasizes the importance of opportunity: While elites may have the disposition to displace the government, they do not necessarily do so.

In reality, when it comes to determining the factors of coup d'états, Powell (2012) finds this window of opportunity and thus resulting in coup activity in higher political instability, seen in national crises, demonstrations, etc. Meanwhile, Londregan and Poole (1990) find an inverse relationship between coup d'états and income, arguing that coups are 21 times more likely to occur in poorer countries when evaluating data from 1950 to 1982. Moreover, in agreement with research by Alesina et al. (1996), Finer (1988), Johnson et al. (Johnson et al., 1983), among others, they show that "once the ice is broken" with a successful coup d'état, the propensity to experience another coup increases drastically over the next six years.

Similarly, Collier and Hoeffler (2005) emphasize that economic weakness, seen in low income and a lack of growth, increases the likelihood of coup d'états. However, they also subsequently assess the connection between coup risk and military spending Collier and Hoeffler (2007a). By focusing specifically on African countries, they find evidence that African governments that consider the coup risk to be high increase their military spending, and vice versa, while similar behaviors are not visible in other re-

gions. Moreover, analyzing developing aid and coup risk, they found that foreign aid leads to an increase in coup risk as the increase in military spending consequently empowers the military: In a previous paper Collier and Hoeffler (2007b) already showed that about 40% of the military spending in Africa is derived from foreign aid.

Jenkins and Kposowa (1992) offer another explanation for coup activity wherein they found intra-military conflict, rooted in the cohort rivalry in military schools, to be a decisive factor for coup activity.

Meanwhile, the relationship between military spending and coup risk serves as a hint to the extensive literature on mitigating coup risk from a government perspective because, as Feaver (1999) emphasizes, military can become [the institution's] greatest threat. Leon (2014) supports this argument empirically, showing that coup d'états are generally more likely when military spending as part of GDP is relatively low. Therefore, aligned with Collier and Hoeffler (2007a), Huntington (1991) suggests that governments should appease the military through "toys", such as increased salaries and benefits. Powell (2012) supports their findings, as he also shows empirically that greater military funds undermine its capacity and willingness to undertake a coup. Moreover, Powell (2012) documents further factors deteriorating coup attempts as well as their success: Synchronous paramilitary activity and their strength, and military size. An increase in military size leads to shrinking cohesion and coordination challenges, enabling effective mitigation of coup risk.

Additionally, Belkin and Schofer (2005) employed two empirical tests to document that the threat of military coups leads leaders to counterbalance their militaries through division of military branches, while also finding support that leaders engage in international conflict to warrant internal conflict within the military, thus encouraging internal distrust to prevent a unified military. This involvement in international conflict to mitigate coup risk is shown by Biddle and Zirkle (1996), Pilster and Böhmelt (2011), among others.

11.1.2 Detailed Historic Assessment of the 2006 Coup d'état Causes

The Journal on Contemporary Asia dedicated in 2008 a whole edition on Thailand and the surrounding events of the 2006 coup d'état, which serves with its various historic articles as the basis for the assessment and argumentation of exogeneity (Connors and Hewison, 2008). In addition to augmenting their historical account with the paper of Ockey (2007), we argue that the main drivers of the coup d'état were two reasons: First, Thailand's intra-elite conflict, which is mainly eminent from opposing ideological and political views between Shinawatra and the Palace, as well as royalists, embodied by General Prem Tinsulanonda and media tycoon Sondhi Limthongkul (Pathmanand, 2008; Connors, 2008; Hewison, 2008). Second, Ockey (2007) suggests that

factionalism within the military played a major role wherein Shinawatra undermined the "professionalism" of Thailand's military, which had been particularly emphasized by the ideas of General Tinsulanonda. Although both arguments underscore the discrepancies between Shinawatra and General Tinsulanonda, they diverge on the nature of their conflict. However, their common thread, as emphasized in the argument of Finer (1988) about seizing opportunities, is ultimately the military's exploitation of the 2005-2006 political crisis with the aim of solving the conflict through the military coup.

Hewison's argument of the the Intra-Elite Conflict

In his historic account, Hewison (2008) underscores the importance of the intra-elite conflict as a pivotal cause that led to the coup d'état of 2006. Although the struggle was based on a complex interplay of economic, ideological, and political discrepancies between the Palace and Shinawatra, Hewison (2008) points out that the underlying issues were rather political and ideological in their nature and thus outweigh the economic factors, discussed by Pathmanand (2008) and Ouyyanont (2008).

In fact, one of the arguments is that the economic power Shinawatra obtained through political favoritism in the form of his post-neoliberal policies (Bunkanwanicha and Wiwattanakantang, 2009); Pye and Schaffar, 2008) led to his discrepancy with the monarchy and the associated capitalist of the monarchy: As Hewison (2008) argued, "[he] neglected the general interests of the domestic capitalist class in favor of his own wealth ", evident especially through the sale of Shinawatra's Shin Corporation in 2006 (Pathmanand, 2008). Meanwhile, Shinawatra used his governmental power against companies that had close ties to the monarchy and the royalist General Prem Tinsulanonda. For example, he blocked the stock listing of Charoen Sirivadhanabhakd's beverage firm in 2005, while he aggressively restructured the debt-plagued TPI Group, Thailand's largest petroleum and chemicals conglomerate. Connors (2008) suggests that these examples are factors in the establishment of loose capitalist groups that wanted Shinawatra out of office. However, more importantly, the economic friction between Shinawatra and the monarch arguably stemmed from his economic influence posed to the interests of the Crown Property Bureau (CPB), the investment arm of the Palace (Pathmanand, 2008; Ouyyanont, 2008), as the Shin Corporation and the CPD were in fact closely intertwined. Ouyyanont (2008) emphasized that the CBP preferred to maintain the integrity and honor of the crown in their business activities, while Shinawatra prioritized quick profits and challenged the special status of the CPB (Hewison, 2008). If this economic argument were indeed significant, the coup would arguably be endogenous.

However, the argument falls short for a variety of reasons. First, albeit the friction may be true regarding the narrative of discrepancy in management approaches, from a factual point of view, Ouyyanont (2008) clearly underlines that the CPB's income, thus

the Palace's economic power, was not threatened by Shinawatra's economic policies: Plagued from an under diversification and the 1997 financial crisis, the CPB achieved through internal restructuring and leverage rom, almost three times the income in the mid-2000s than pre-1997. Second, Hewison (2008) suggests the friction between the Palace and Shinawatra was derived mainly from political and ideological competition, which undermined the authority of the monarchy.

In his description, McCargo (2005) described the Palace's institutionalism as "network monarchy" which Tejapira (2006) confirms as more than 6000 individuals within government structures and police as well as civilians since the mid-1970s, particularly embodied by General Tinsulanonda and the "Privy Council". Hewison (2008) argues that this close alignment between the military and the King arguably derived from the King's fear of communism and anti-royal sentiment during the 20th century. Moreover, he underpins that exactly this "network monarchy" posed a threat to Shinawatra's power, which he systematically attempted to replace with supporters of the TRT. Not only did the King express his personal dislike for Shinawatra, but he also saw this reorganization within the bureaucracy as challenging the monarchy's authority. However, more importantly, Hewison (2008) highlights that friction arose with the "battle for the masses", seen especially in the extensive support for Thaksin from the rural population for his policies in spite of the anti-Thaksin protests: Pye and Schaffar (2008) described the large protests in favor of Shinawatra in 2006 as a "Caravan of the Poor". This rural support was based on Shinawatra's policies, such as health reforms and development projects, which shifted popularity toward Shinawatra (Hewison, 2008). Meanwhile, they also stood in direct contrast to the King's public image as "savior of the poor" through his arguably unsuccessful development projects after 1997 as well as his different concept of welfare. This friction between the Palace and Shinawatra came to light and was vocalized by Anti-Thaksin protest leader Sondhi Limthongkul, who declared to protect the monarchy. Faced with the imminent likelihood that Shinawatra would further consolidate his public support by winning the scheduled October 2006 election - following the annulment of the April elections - the royalist elite (to which the military leaders belonged as well) arguably orchestrated the coup d'état on September 19th, 2006, when Shinawatra was at the United Nations in New York. This decisive action was taken not only to counter Shinawatra's tactics of vote-buying, but to prevent a significant shift in power that threatened their authority (Walker, 2008). Before the coup, Hewison (2008) suggests that the speeches by General Tinsulanonda criticizing Shinawatra heavily underlined the Palace's interest in removing Thaskin, while publicly the King remained neutral with his refusal to install a new prime minister in April 2006. However, in the aftermath of the coup, the King even blessed the coup (CNN, 2006).

Therefore, we can argue that the coup d'état can be considered exogenous because political and ideological factors were the rather decisive factor in committing the coup,

while claims of economic friction can be neglected.

Ockey's argument of the Professional Soldiers

The second argument brought forward by Ockey (2007) concerns the intra-military power struggle derived from the concept of military professionalism. Throughout the Cold War, the class sizes of the Royal Thai Army Academy (today Chulachomklao Royal Military Academy) increased drastically, seen especially in the exorbitant jump from about 59 officers in 1952 to 148 officers in 1953 (Class 5), thereafter continuously growing. This rapid increase not only meant escalated competition among officers for high-ranking positions but also culminated in increased factionism based on political ideologies: "Class 5", the "Young Turks" (mainly from Class 7), as well as the "Democratic Soldiers" wherein especially a fourth group, the informally organized "Professional Soldiers" faction emerged of which General Prem Tinsulanonda was the focal point once he became also Prime Minister in 1980, lasting until 1988, with close ties to the monarchy. According to Huntington (1991), military professionalism emanates from three pillars: expertise, responsibility to a client (the institutions), and corporateness, whereas Ockey (2007) highlights that the faction of the "Professional Soldiers" shared the ambition of democratization, protecting the monarchy, as well as political stability. Their ambitions were particularly manifested in the Prime Ministerial Order 66/2523 through the notion of domestic counterinsurgency that intended to end Thailand's extensive history of political turmoil, especially in the 1970s, as this Prime Ministerial Order incorporated democratic values into military operations, thus serving Huntington's "client", Thailand. The dominance of the "Professional Soldiers" was especially evident in thwarting the attempted coup in 1981 by the "Young Turks" as well as in removing "Class 5" through mass protests after they committed a coup in 1991.

However, as Ockey (2007) argues, this dominance was challenged once Shinawatra, a Class 21 member, assumed his premiership in 2001 through a shift towards harsher military means, evident particularly in his approach to the conflict-ridden southern provinces. The "Professional Soldiers" claimed that their methods exacerbated the insurgency rather than containing it, suggesting that, for example, community engagement would be more suitable to address the complex dynamics in the South. Moreover, the division became more evident as well in the rapid promotion of fellow officers from Class 21 who were affiliated with Shinawatra, despite a lack of qualification, to gain further support within the military. In particular, Shinawatra's brothers Chaisit and Uthai were promoted to general and undersecretary of defense, despite having any experience commanding field troops. Consequently, the military faced discrepancy derived from the pillars of military professionalism in which Class 21 not only lacked expertise but defined its client orientation towards Shinawatra and his policies, not the institution that was embodied by the monarchy. General Tinsulanonda even underscored loyalty to the crown in July 2006 when he delivered a

speech at the military academy, describing the soldiers as “horses” and the government as “jockeys”. While the “jockeys” can change, the “horses” shall be reminded that they always belong to the King (Pathmanand, 2008).

Ultimately, the cumbersome appointment of General Sonthi Boonyaratglin, the later coup leader, as new commander-in-chief and somewhat ally of General Tinsulanonda’s aides laid arguably the foundation for the 2006 coup d’état. Although Shinawatra preferred another candidate (General Rattanavanich) who had similarly no combat experience, multiple generals within the Thai military leadership organ (the “Privy Council”), including General Tinsulanonda, withheld the annual promotion list until Shinawatra approved Boonyaratglin as the new commander-in-chief following the October 2005 reshuffle. In July 2006, General Boonyaratglin already transferred key members of Class 21 to rural, insignificant posts, alluding to an internal division and arguably preparing the coup. However, Pathmanand (2008pathmanand2008different) highlights a fundamental lack of foresight and planning by the military, evident from no clear policies to protect the monarchy post-coup, which points to an immediate decision to commit the coup. In fact, this aligns with the argument of Ockey (2007) that the decisive factor for the coup was rather that General Boonyaratglin feared rumors amidst the protests that Shinawatra would attempt to replace him during the October 2006 reshuffle to reestablish his own allies in command: Just ten days before the coup, Shinawatra submitted the draft of proposed promotions ten days before the King. Quickly after general Boonyaratglin committed the coup d’état on September 19th, 2006. During the direct aftermath, the junta increased constitutionally drastic military spending (according to the literature of Collier and Hoeffler (2007a), Huntington (1991), among others) as the “Professional Soldiers” lamented the decrease in military spending under Shinawatra and enforced stricter rules around lèse majesté to protect the reputation of the monarchy, thus laying the foundation for military professionalism again.

Therefore, based on the argument of Ockey (2007), the coup qualifies as exogenous, as it was arguably driven by the intra-military struggle between Shinawatra supporters, embodied in Class 21, and the faction of “Professional Soldiers” to which General Boonyaratglin was affiliated, which arguably urged a potential loss of power.

11.1.3 Detailed Historic Assessment of the 2014 Coup d’état Causes

The assessment of the causes of the 2014 coup d’état is more difficult than the 2006 coup d’état due to two factors. First, there is only a handful of literature that examines the events, and second, the political crisis in 2013/14 certainly exceeded the magnitude of the 2005/06 political crisis, seen in the extensive seizure of government buildings and violent protests that resulted in the deaths of dozens of protestors (Baker, 2016; McCargo, 2015; Kongkirati, 2016, among others), making its assessment more com-

plex. We argue that the underlying causes for the coup d'état were a continuation of the ideological and political struggle between the Shinawatras and established elites, including the monarchy, while the coup d'état was not anticipated until May 20th, 2014.

Regarding the anticipation of the coup d'état McCargo (2015) provides clarity into the events between May 20th, and proclamation of the coup on May 22nd. He argues that the decision to seize power must have occurred at a very late stage. After the imposition of martial law on May 20th, General Prayut Chan-o-cha's installation of the Peace and Order Maintaining Command (POMC), the POMC ordered government politicians and protest leaders to find a resolution. General Chan-o-cha also publicly emphasized that the military had no intention of seizing power but to find an agreement between the parties to end the political crisis. However, on May 22nd, due to failed negotiations, General Chan-o-cha proclaimed a coup d'état and detained all negotiators. Allegedly, participants from both sides thought that he was joking. Therefore, we argue that both the reactions of the participants as well as the set-up of the POMC to find a resolution show that the coup d'état occurred to be rather spontaneous, where the markets could have anticipated an eventual coup starting from May 20th despite the previous assurances from General Chan-o-cha to not stage a coup d'état.

However, it is also crucial to assess the anti-Shinawatra movement in more detail, as it highlights that the protest, and thus arguably the coup itself, was rather a continuation between ideological and political struggle between the Shinawatras and established conservative elites, including the Thai monarchy (Kongkirati, 2016; Baker, 2016). Similarly to Hewison (2008), Liu (2014) points out that Thai society is split between two elite factions: The loyal monarchy faction consists of conservative and traditional elites, namely wealthy business owners from the South, the judiciary, and the army, while the second group is the reformist group of business owners from northern Thailand around Shinawatra, described as "New Money" that attempted to change Thailand's political system. Liu (2014) highlights that the former had a particular affiliation to the Democratic Party whose leader, Suthep Thaugsuban, was the leading figure of the organized mass protests, namely the People's Democratic Reform Committee (PDRC). The continuous objective of the protests was to remove Yingluck Shinawatra from her office (Peck and Wedel, 2014) took various forms, reaching their peak amid the snap election in February 2014: Through violent protests that prevented the registration of voters, voting and vote counting (Kongkirati, 2016), Thaugsuban was able to sabotage the predicted victory of Shinawatra (Liu, 2014) as due to the thus misconducted elections, the constitutional court annulled the elections on March 21st, 2014. Parallel to the April 2006 election, we argue that the obstruction of the elections represented the ideological and political conflict of these two groups over the popular vote. Although not as successful as Thaksin Shinawatra, the policies of Yingluck Shinawatra were widely popular among the rural and poor population (Baker, 2016). However,

what differentiated the 2014 protest movement from 2006 was the enormous violence that occurred, intensifying the divisions between the factions, leading to the military intervention on May 20th. Therefore, we argue that conflict over ideological and political factors was the decisive factor for the military's intervention to establish law and order again.

Nevertheless, the removal of Yingluck Shinawatra on May 7th must also be examined closely, and we argue that the removal was political in its nature due to two reasons, whereas the removal itself is ambiguous regarding its potential anticipation. First, Shinawatra's action to install Thaksin Shinawatra's former brother-in-law in a high-ranking police position is politically motivated in itself. Second, the senator who brought the complaint in March 2014 to the constitutional court was Paiboon Nititawan, a politician from the oppositional People's Reform Party who was closely aligned with the monarchy and the military (Jotikut, 2016) This affiliation is the basis for arguing that the complaint itself was political in nature. However, whether the removal could have been anticipated is double-edged: On the one hand, Liu (2014) highlights the bias of the judiciary, which was to a large extent staffed with supporters of traditionalists. The New York Times (Fuller, 2014) and the Wall Street Journal (Hookway and Chomchuen, 2014) underscore that the court's decision was of political nature due to an extraordinary quick decision that occurred just a day after Shinawatra submitted her defense. Therefore, due to this political affiliation, the removal could have been anticipated. However, the removal might not have been anticipated for two reasons: First, in a similar concern, yet in hindsight, the former prime minister Abhisit Vejjajiva was acquitted of any malpractice from the constitutional court. Second, in the first jurisdictional instance with the administration court, Shinawatra's action was declared to be legal. Therefore, the contrary decision by the constitutional court, compared to Vejjajiva's case, as well as the previous decision of the administration court, allows arguing that the decision was not anticipated.

Based on these aforementioned arguments, we assert that the coup d'état is exogenous for two reasons. First, the clear ideological and political frictions highlight that the coup was not driven by worsening economic factors or market expectations that could have affected the stock returns of firms, particularly politically connected firms. Second, despite the heavy protest, the coup was not anticipated at least until May 20th, 2014, which was shortly before the coup d´état. Moreover, the actions of Yingluck Shinawatra, as well as the complaint against her, can be regarded as inherently political without any ties to economic factors that could have affected the stock returns of companies. However, we identify a two-sided argumentation regarding the anticipation of the removal and thus incorporate this into the discussion of our results.

11.2 Remainder Firm Characteristics Overview

Table 15: Robust Firm Characteristics 2006

	POLIC		NON-POLIC		Difference	
	Mean (1)	Median (1)	Mean (0)	Median (0)	(t-test)	(z-test)
Market-to-book ratio (MB)	4.223	2.087	3.315	1.497	-0.719	0.418
Industry-adj MB	0.824	-0.091	-0.040	-1.102	-0.695	0.381
Profit Margin (PM)	0.120	0.073	-0.011	0.085	-1.48	-0.486
Industry-adj PM	0.076	-0.009	-0.004	0.041	-0.773	-1.946
Return on assets (ROA)	0.063	0.057	0.070	0.076	0.4	-1.377
Industry-adj ROA	-0.001	-0.009	0.000	0.004	0.066	-1.125
Leverage	0.143	0.132	0.132	0.056	-0.349	-0.641
Industry-adj leverage	0.003	-0.032	0.000	-0.053	-0.123	-0.481
Total assets (log)	8.075	8.100	8.015	7.691	-0.219	0.277
Fixed assets/total assets	0.336	0.360	0.349	0.322	0.238	-0.863
Growth on assets	14.124	5.932	16.132	8.598	0.251	-1.435
Net sales (M USD)	3979.486	2613.332	10745.590	1812.068	2.602**	0.047

This table reports the summary statistics of the sample firms in 2014. '*', '**' and '***' denote statistical significance at the 10%, 5% and 1% levels, respectively. Profit Margin is the ratio of EBIT to total sales, Return on assets is the ratio of EBIT to total assets and Leverage is the ratio of total debt to total assets.

Source: Garvey and Seifert, 2024

Table 16: Firm Characteristics 2014

	POLIC		NON-POLIC		Difference	
	Mean (1)	Median (1)	Mean (0)	Median (0)	(t-test)	(z-test)
Market-to-book ratio (MB)	2.645	1.320	1.408	0.982	-1.197	-1.197***
Industry-adj MB	1.010	-0.097	-0.143	-0.373	-1.585	-1.257***
Profit Margin (PM)	-0.294	0.075	0.110	0.086	1.148	-3.104
Industry-adj PM	-0.348	0.014	0.045	0.020	1.167	-3.387
Return on assets (ROA)	0.045	0.051	0.059	0.061	0.821	-2.451
Industry-adj ROA	-0.013	-0.004	0.002	0.002	0.865	-2.509
Leverage	0.130	0.071	0.096	0.029	-1.679*	-1.799*
Industry-adj leverage	0.021	-0.020	-0.003	-0.050	-1.225	-1.772*
Total assets (log)	8.491	8.367	8.342	8.045	-0.783	-0.448
Fixed assets/total assets	0.324	0.345	0.315	0.280	-0.260	-5.729
Growth on assets	39.802	9.817	18.432	6.687	-1.730*	0.075**
Net sales (M USD)	8895.142	2568.191	19991.927	2188.333	1.776*	-1.240

This table reports the summary statistics of the sample firms in 2014. '*', '**' and '***' denote statistical significance at the 10%, 5% and 1% levels, respectively. Profit Margin is the ratio of EBIT to total sales, Return on assets is the ratio of EBIT to total assets and Leverage is the ratio of total debt to total assets.

Source: Garvey and Seifert, 2024

Table 17: Robust Firm Characteristics 2014

	POLIC		NON-POLIC		Difference	
	Mean (1)	Median (1)	Mean (0)	Median (0)	t-(t-test)	(z-test)
Market-to-book (MB)	2.074	1.199	1.535	1.004	-1.038	-0.154
Industry-adj MB	0.516	-0.247	-0.026	-0.353	-1.087	-0.423
Profit Margin (PM)	0.087	0.063	0.063	0.086	-0.411	-1.398
Industry-adjusted PM	0.016	-0.023	-0.001	0.020	-0.239	-1.876
Return on assets	0.058	0.041	0.057	0.058	-0.008	-1.825
Industry-adj ROA	-0.002	-0.015	0.000	0.002	0.075	-1.903
Leverage	0.127	0.061	0.099	0.030	-0.906	-0.423
Industry-adj leverage	0.019	-0.029	-0.001	-0.050	-0.664	-0.306
Total assets (log)	8.661	8.367	8.346	8.064	-0.997	0.756
Fixed assets/total assets	0.351	0.374	0.314	0.281	-0.546	-3.054
Growth on assets	21.464	6.100	20.886	7.455	-0.035	-1.101
Net sales (M USD)	6849.102	4017.648	19236.187	2189.704	2.216**	0.338

This table reports the summary statistics of the sample firms in 2014. '*', '**' and '***' denote statistical significance at the 10%, 5% and 1% levels, respectively. Profit Margin is the ratio of EBIT to total sales, Return on assets is the ratio of EBIT to total assets and Leverage is the ratio of total debt to total assets.

Source: Garvey and Seifert, 2024

11.3 Robust Industry Distribution Overview

Table 18: Robust Industry Distribution Sample Firms 2006

Industry	NON POLCON	%	POLCON	%	Total
Communication Serv.	26	5.73	4	16.67	30
Consumer Discret.	72	15.86	3	12.50	75
Consumer Staples	50	11.01	1	4.17	51
Financials	51	11.23	4	16.67	55
Health Care	16	3.52	1	4.17	17
Industrials	74	16.30	1	4.17	75
Information Tech.	30	6.61	1	4.17	31
Materials	66	14.54	4	16.67	70
Real Estate	40	8.81	3	12.50	43
Utilities	14	3.08	1	4.17	15
Other	15	3.30	1	4.17	16
Total	454	100.00	24	100.00	478

Source: Garvey and Seifert, 2024

Table 19: Robust Industry Distribution Sample Firms 2014

Industry	NON POLCON	%	POLCON	%	Total
Communication Serv.	31	5.64	4	15.38	35
Consumer Discret.	75	13.64	4	15.38	79
Consumer Staples	51	9.27	1	3.85	52
Financials	61	11.09	3	11.54	64
Health Care	20	3.64	1	3.85	21
Industrials	104	18.91	2	7.69	106
Information Tech.	33	6.00	0	0.00	33
Materials	66	12.00	5	19.23	71
Real Estate	74	13.45	5	19.23	79
Utilities	17	3.09	1	3.85	18
Other	18	3.27	0	0.00	18
Total	550	100.00	26	100.00	576

Source: Garvey and Seifert, 2024

11.4 Overview *POLCON* Firms

11.4.1 *POLCON* Firms in 2006

Table 20: *POLCON* Firms in 2006

No.	2006	Robust 2006
1	AEON THANA SINSAP PCL (THAILAND)	AIRA FACTORING PCL
2	AGRIPURE HOLDINGS PCL	AMATA CORP PCL
3	AIRA FACTORING PCL	BANGKOK DUSIT MEDICAL SVCS
4	AKS CORPORATION PCL	BANGKOK POST PCL
5	AMATA CORP PCL	BEC WORLD PCL
6	AP (THAILAND) PCL	BIG CAMERA CORPORATION PCL
7	BANGKOK DUSIT MEDICAL SVCS	CAPITAL ENGINEERING NETWORK PCL
8	BANGKOK POST PCL	CENTRAL PATTANA PCL
9	BEC WORLD PCL	CENTRAL PLAZA HOTEL PCL
10	BIG CAMERA CORPORATION PCL	FINANSIA SYRUS SECS PCL
11	CAPITAL ENGINEERING NETWORK PCL	INDARA INS PUBLIC
12	CENTRAL PATTANA PCL	INTL RESEARCH CORP
13	CENTRAL PLAZA HOTEL PCL	MALEE GROUP PCL
14	CHARN ISSARA DEVELOPMENT PCL	NATION GROUP (THAILAND)
15	DCON PRODUCTS PCL	PICNIC CORP PCL
16	FINANSIA SYRUS SECS PCL	POSCO THAINOX PCL
17	FNS HOLDINGS PCL	SAFARI WORLD PCL
18	G STEEL PCL	SAMAGGI INSURANCE PCL
19	INDARA INS PCL	SC ASSET CORP PCL
20	INTERNATIONAL ENGINEERING PCL	SEVEN UTILITIES AND POWER PCL
21	INTL RESEARCH CORP	THAI FUTURE INCORPORATION PCL
22	KWI PCL	THAI O P P PCL
23	MALEE GROUP PCL	UNION MOSAIC INDUSTRY PCL
24	NATION GROUP PCL (THAILAND)	WAVE EXPONENTIAL PCL
25	NAVA NAKORN PCL	
26	PICNIC CORP PCL	
27	POSCO THAINOX PCL	
28	PP PRIME PCL	
29	PROFESSIONAL WASTE TECH PCL	
30	QUALITY HOUSES PCL	
31	ROBINSON PCL	
32	ROCKWORTH PCL	
33	SAFARI WORLD PCL	
34	SAHAMIT MACHINERY PCL	
35	SAMAGGI INSURANCE PCL	
36	SAMART CORP PCL	
37	SAMART DIGITAL PCL	
38	SAMMAKORN PCL	
39	SC ASSET CORP PCL	
40	SEVEN UTILITIES AND POWER PCL	
41	SIAM FOOD PRODUCTS PCL	
42	SIAM SPORT SYNDICATE PCL	
43	SINO-THAI ENGR AND CONSTR PCL	
44	THAI FUTURE INCORPORATION PCL	
45	THAI O P P PCL	
46	THAI PLASTIC AND CHEMICAL PCL	
47	THREE SIXTY FIVE PCL	
48	TRITON HOLDING PCL	
49	TTL INDUSTRIES PCL	
50	UNION MOSAIC INDUSTRY PCL	
51	WAVE EXPONENTIAL PCL	

Source: Garvey and Seifert, 2024

11.4.2 *POLCON* Firms in 2014

Table 21: *POLCON* Firms in 2014

No.	2014	Robust 2014
1	AMATA CORP PCL	AP PCL (THAILAND)
2	AP PCL (THAILAND)	BANGKOK DEC-CON PCL
3	ASIA SERMKIJ LEASING PCL	BANGKOK INSURANCE PCL
4	BANGKOK DEC-CON PCL	BANGKOK POST PCL
5	BANGKOK INSURANCE PCL	BEC WORLD PCL
6	BANGKOK POST PCL	BIO GREEN ENERGY TECH PCL
7	BANPU PCL	CENTRAL PATTANA PCL
8	BEC WORLD PCL	CENTRAL PLAZA HOTEL PCL
9	BIG C SUPERCENTER PCL	COL PCL
10	BIO GREEN ENERGY TECH PCL	ERAWAN GROUP PCL (THAILAND)
11	BLISS INTELLIGENCE PCL	EVERLAND PCL
12	BOUND AND BEYOND PCL	FINANSIA SYRUS SECS PCL
13	BUMRUNGRAD HOSPITAL PCL	KIATNAKIN PHATRA BANK PCL
14	CAPITAL ENGINEERING NETWORK PCL	MALEE GROUP PCL
15	CENTRAL PATTANA PCL	MATICHON PCL
16	CENTRAL PLAZA HOTEL PCL	NAVA NAKORN PUBLIC PCL
17	CHOW STEEL INDUSTRIES PCL	NEP REALTY AND INDUSTRY PCL
18	COL PUBLIC PCL	POSCO THAINOX PCL
19	COUNTRY GROUP DEV PCL	PRINCIPAL CAPITAL PCL
20	DCON PRODUCTS PCL	SC ASSET CORP
21	DEMCO PUBLIC PCL	SRITHAI SUPERWARE PCL
22	ERAWAN GROUP PCL (THAILAND)	SUPER ENERGY CORPORATION PCL
23	EVERLAND PCL	THAI FUTURE INCORPORATION PCL
24	FINANSIA SYRUS SECS PCL	THAI O P P PCL
25	GREEN TECH VENTURES PCL	UNION MOSAIC INDUSTRY PCL
26	INDARA INS PCL	WAVE EXPONENTIAL PCL
27	INTER FAR EAST ENERGY CORP	XSPRING CAPITAL PCL
28	KCE ELECTRONICS PCL	
29	KIATNAKIN PHATRA BANK PCL	
30	MALEE GROUP PCL	
31	MATICHON PCL	
32	MC GROUP PUBLIC PCL	
33	MINOR INTERNATIONAL PCL	
34	NAVA NAKORN PCL	
35	NEP REALTY AND INDUSTRY PCL	
36	NEWS NETWORK CORP PCL	
37	NOBLE DEVELOPMENT PCL	
38	NOK AIRLINES PCL	
39	NUSASIRI PCL	
40	OISHI GROUP PUBLIC PCL	
41	PACE DEVELOPMENT CORP PCL	
42	PAE THAILAND PCL	
43	POSCO THAINOX PCL	
44	PRINCIPAL CAPITAL PCL	
45	PTG ENERGY PUBLIC PCL	
46	RABBIT HOLDINGS PCL	
47	ROBINSON PCL	
48	S.KHONKAEN FOODS PCL	
49	SAHAMIT MACHINERY PCL	
50	SAMAGGI INSURANCE PCL	
51	SAMART CORP PCL	
52	SAMART DIGITAL PCL	
53	SAMMAKORN PCL	
54	SC ASSET CORP PCL	
55	SEVEN UTILITIES AND POWER PCL	
56	SIAM FOOD PRODUCTS PCL	
57	SIAM SPORT SYNDICATE PCL	
58	SIAMGAS AND PETROCHEM PCL	
59	SIKARIN PCL	
60	SRITHAI SUPERWARE PCL	
61	SUPER ENERGY CORPORATION PCL	
62	THAI FUTURE INCORPORATION PCL	
63	THAI O P P PCL	
64	THREE SIXTY FIVE PCL	

Source: Garvey and Seifert, 2024

11.5 Rules for Determining Kinship

General

1. The prime minister receives level PM, and their family members receive PMFX, wherein X stands for a relative respective degree to the politician.
2. Deputy prime ministers receive level M, and their family members receive MFX, wherein X stands for a relative respective degree to the politician.
3. Ministers receive level M, and their family members receive MFX, wherein X stands for a relative respective degree to the politician.
4. Deputy Minister receives level DM, and their family members receive DMFX, wherein X stands for a relative respective degree to the politician.
5. If a politician holds various levels at the same time, then the higher level will be attributed.

Households

1. Each relative who can potentially establish their own household receives another grade, while spouses are assumed to be in the same household.
2. Children thus will receive an additional family degree.

Marriages

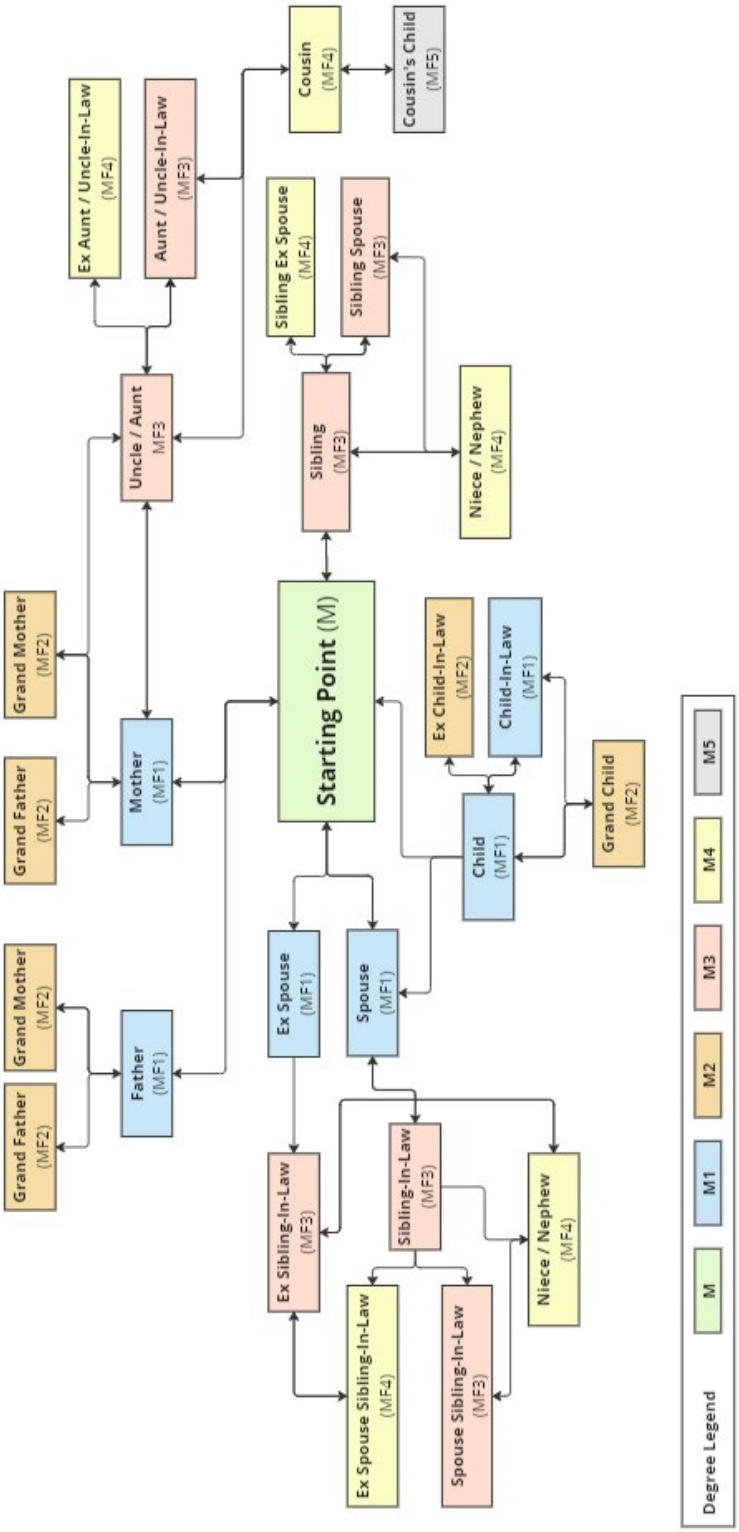
1. Birth names are assumed current unless stated otherwise (e.g., through marriage).
2. If a wife shares her husband's family name, her maiden name is assumed missing and labeled as n/a.
3. Marriages must precede each coup to be considered relevant; otherwise, they are excluded.
4. Spouses are labeled as F1, adjusting the family degree of in-law relatives by one to accommodate "another family."

Divorces

1. Persons who got divorced from the initial family are disregarded, if no children exist and divorce was before the coup.

2. In case of divorce with children, ex-spouses married into the family receive FX+1, reflecting changes in household composition.
3. This rule doesn't apply to politicians' spouses, as they're already classified as F1; divorce does not affect their degree.

Figure 1: Determining Kinship



Source: Garvey and Seifert, 2024

11.6 Family Umbrellas 2006

Table 22: Politicians without Associated Surnames 2006

M-Level Politicians	DM-Level Politicians
Bodharamik, M (โพธารามิก)	Charoensiri, DM (เจริญศิริ)
Charoenrattanakul, M (เจริญรัตนกุล)	Kaewdaeng, DM (แก้วแดง)
Chuphiban, M (จูภิบาล)	Laohapongchana, DM (เลาหพงศ์ชนะ)
Jarusombat, M (จารุสมบัติ)	Lapvisutthisin, DM (ลาภวิสุทธิสิน)
Khunkitti, M (คุณกิตติ)	Lertsuriyadet, DM (เลิศสุริย์เดช)
Pittaya, M (พิทยะ)	Phiengket, DM (เพียรเกตุ)
Rattanapian, M (รัตนเพียร)	Rattanakorn, DM (รัตนากร)
Rattanapongpaisarn, M (รักตพงศ์ไพศาล)	Wechayachai, DM (เวชยชัย)
Vatana, M (วันทนา)	
Wannasathit, M (วรรณสถิตย์)	

Source: Garvey and Seifert, 2024

Table 23: Family Umbrellas Single Associated Name 2006

Family Umbrella	Associated Families
Chidchob, M (ชิดชอบ)	Supha, MF1 (ชิดชอบ)
Keyuraphan, M (เกยุราพันธุ์)	Leelapanyalert, MF1 (ลีลาปัญญาเลิศ)
Liptapanlop, M (ลิปตพัลลภ)	Phitthanukorn, MF1 (พหิทธานุกร)
Suphamongkol, M (ศุภมงคล)	Atthakrawee Sunthon, MF1 (อรรถกระวีสุนทร)
Thepsuthin, M (เทพสุทิน)	Phukprasert, MF1 (พุกประเสริฐ)
Tiyaphairat, M (ติยะไพรัช)	Worrapattananan, MF2 (วรพัฒนานันน์)
Charnvirakul, DM (ชาญวีรกูล)	Wattanawarangkun, DMF1 (วัฒนวรางกูร)
Piangkaset, DM (เพียงเกษ)	Pinsamrid, DMF1 (พินสำริด)
Sunthornwat, DM (สุนทรวัฒน์)	Thammarat, DMF3 (ธรรมรัตน์)

Source: Garvey and Seifert, 2024

Table 24: Family Umbrellas 2, 3 or 4 Associated Surnames 2006

Family Umbrella	First Degree	Second Degree	Third Degree	Fourth Degree
Chaisaeng, M (ฉายแสง)	Piamkamon, MF1 (เปี่ยมกมล)	Bunyakida, MF2 (บุณยกิดา)		
Jatusripitak, M (จาตุศรีพิทักษ์)	Boonyaleepan, MF1 (บุญยะลีพรรณ)			
	Phingkarawat, MF1 (ภิงคารวัฒน์)			
	Praneeprachon, MF1 (ปราณีประชาชน)			
Juangroongruangkit, M (จึงรุ่งเรืองกิจ)		Rungruangkit, MF2 (รุ่งเรืองกิจ)	Boonrat, MF3 (บุญรัตน์)	
			Opilan, MF3 (โอปิลันธน์)	
			Wongngamnit, MF3 (วงศ์งามนิจ)	
Klinprathum, M (กลิ่นประทุม)		Anderson, MF2 (แอนเดอร์สัน)	Chotichaicharin, MF3 (โชติชัยชรินทร์)	
Krea-ngam, M (เครืองาม)	Siratharanon, MF1 (ศิรธรานนท์)	Nilrat, MF2 (นิลรัตน์)		
	Warapa, MF1 (เครืองาม)			
Thienthong, M (เทียนทอง)	Thongpanich, MF1 (ธงพานิช)	Tosaksit, MF2 (โตศักดิ์สิทธิ์)	Yutthaworn, MF3 (ยุวถาวร)	Chokdamrongsuk, MF4 (โชคดำรงสุข)
	Phingkarawat, MF1 (ภิงคารวัฒน์)			
	Praneeprachon, MF1 (ปราณีประชาชน)			
Pongpanich, DM (พงษ์พานิช)	Amatawong, DMF1 (อมตวงศ์)	Hongthong, DMF2 (หงษ์ทอง)		

Source: Garvey and Seifert, 2024

Table 25: Family Umbrellas 5+ Associated Surnames 2006

Family Umbrella	First Degree	Second Degree	Third Degree	Other Degrees
Dabbaransi, M (ทัพพะรังสี)	Thaworntarn, MF1 (ถาวรธาร)	Choonhavan, MF2 (ชุณหะวัณ)	Chiewsakul, MF3 (เชี่ยวสกุล)	Adireksarn, MF4 (อดิเรกสาร)
		Chumpairoj, MF2 (ชุ่มไพโรจน์)	Saliratwiphak, MF3 (สาลีรัฐวิภาค)	Chitrawat, MF4 (จิตราวัฒน์)
		Mahagitsiri, MF2 (มหากิจศิริ)	Sophot, MF3 (โสพจน์)	Winitchai, MF4 (วินิจฉัย)
		Rathornhiranrat, MF2 (ราธรหิรัญรัฐ)	Sriyanont, MF3 (ศรียานนท์)	Hongsaprapas, MF5 (หงสประภาส)
			Wattanalikhit, MF3 (วัฒนลิขิต)	Pahitthanukorn, MF5 (พหิทธานุกร)
Muangsook, M (เมืองสุข)	Chearavanont, MF1 (เจียรวนนท์)			Ariyavararom, MF5 (อริยวรารมย์)
				Chearavanont Ross, MF5 (เจียรวนนท์ รอสส์)
				Mahaphant, MF5 (มหพันธ์)
				Ross, MF5 (รอสส์)
Sasomsap, DM (สะสมทรัพย์)	Techapaiboon, DMF1 (เตชะไพบูลย์)		Chutanupong, DMF3 (ชุตานุพงษ์)	Promphan, DMF4 (พร้อมพันธุ์)
			Thuanlin, DMF3 (ธุวนลิน)	Niyomtham, DMF5 (นิยมธรรม)
				Thaugsuban, DMF5 (เทือกสุบรรณ)
				Chaiyakul, DMF6 (ไชยกูล)
				Phakamon, DMF7 (ภากมล)

Source: Garvey and Seifert, 2024

Table 26: Largest Family Umbrella 2006

Family Umbrella	First Degree	Second Degree	Third Degree	Fourth Degree
Sathirathai, M (เสถียรไทย)	Na Ayutthaya, MF1 (ณ อยุธยา)	Forester, MF2 (ฟอเรสเตอร์)	Jarusathien, MF3 (จารุเสถียร)	Sakuntaphai, MF4 (ศกุนตาภัย)
Vejjajiva, M (เวชชาชีวะ)	Kichothan, MF1 (กิจโอธาน)	Kitiyakara, MF2 (กิติยากร)	Laohapongchana, MF3 (เลาหะพงศ์ชนะ)	Watcharasindhu, MF4 (วัชรสินธุ)
Isarangkun Na Ayutthaya, M (อิศรางกูร ณ อยุธยา)	Sawat-Chuto, MF1 (สวัสดิ์-ชูโต)	Ladawan, MF2 (ลดาวัลย์)	Phumphichai, MF3 (ภูมิพิชัย)	
Maleenont, M (มาลีนนท์)		Nipatakusol, MF2 (นิพัทธกุศล)		
		Sathanapong, MF2 (สธนพงศ์)		
		Sukhonthayak, MF2 (สุคนธวยัคฆ์)		
Amatyakul, MFX (อมาตยกุล)	Chotikasathien, MFX (โชติกเสถียร)	Isarangkun, MFX (อิศรางกูร)	Na Songkhla, MFX (ณ สงขลา)	Sasiprapha, MFX (ศศิประภา)
Attanan, MFX (อัตตะนันทน์)	Chupinij, MFX (ชูพินิจ)	Jirapong, MFX (จิรพงศ์)	Norrapanlop, MFX (นรพัลลภ)	Sawatdiwat, MFX (สวัสดิวัตน์)
Boonyapana, MFX (บุญยะปาณะ)	Danphattharakun, MFX (ด่านภัทรกุล)	Kittikachorn, MFX (กิตติขจร)	Pamornmontri, MFX (ภมรมนตรี)	Sukanthawanich, MFX (สุคันธวณิช)
Boonyarat, MFX (บุญรัตน์)	Diskul, MFX (ดิศกุล)	Kotchaseni, MFX (คชเสนี)	Panprasit, MFX (ปานประสิทธิ์)	Wannapruek, MFX (วรรณพฤกษ์)
Chayangkun, MFX (ชยางกูร)	Diskul Na Ayutthaya, MFX (ดิศกุล ณ อยุธยา)	Limotibun, MFX (ลิ่มอติบูลย์)	Penchat, MFX (เพ็ญชาติ)	Wittayawethin, MFX (วิทยะเวทิน)
Chirathivat, MFX (จิราธิวัฒน์)	Euawattanasakul, MFX (เอื้อวัฒนะสกุล)	Mongkolkitti, MFX (มงคลกิตติ)	Phanthumsen, MFX (พันธุมเสน)	Yodmanee, MFX (ยอดมณี)
Chitnatham, MFX (จิตณาธรรม)	Hongsakul, MFX (หงสกุล)	Na Lampang, MFX (ณ ลำปาง)	Sarasin, MFX (สารสิน)	Yut, MFX (ยุทธ)

Source: Garvey and Seifert, 2024

Table 27: Family Umbrella Shinawatra 2006

Family Umbrella	First Degree	Second Degree	Third Degree	Other Degrees
Shinawatra, PM (ชินวัตร)	Na Pombejra, PMF1 (ณ ป้อมเพชร)	Limphattanachat, PMF2 (ลิ้มพัฒนาชาติ)	Maneenet, PMF3 (มณีเนตร)	Suksapha, PMF4 (สุขสภา)
	Damapong, PMF1 (ดามาพงศ์)	Kovitcharoenkul, PMF2 (โกวิทเจริญกุล)	Promchana, PMF3 (พรหมชนะ)	Rattanasuwanchat, PMF4 (รัตนสุวรรณชาติ)
	Ramingwong, PMF1 (ระมิงวงศ์)	Klongkhanakarn, PMF2 (คล่องคำนวณการ)	Hiranpruk, PMF3 (หิรัญพฤกษ์)	Towijakchaikul, PMFX (โตวิจักษณ์ชัยกุล)
	Wongsawat, PMF2 (วงศ์สวัสดิ์)	Nakwichit, PMF2 (นักวิช)	Osathaphan, PMF3 (โอสถาพันธุ์)	
		Amornchat, PMF2 (อมรฉัตร)	Tantives, PMF3 (ตันติเวสส)	
			Kongprayoon, PMF3 (คงประยูร)	
			Meephanich, PMF3 (มีพานิช)	
			Charoensawat, PMF3 (เจริญสวัสดิ์)	
			Wongnapachant, PMF3 (วงศ์นภาจันทร์)	

Source: Garvey and Seifert, 2024

11.7 Family Umbrellas 2014

Table 28: Politicians without Associated Surnames 2014

M Level Politicians	DM Level Politicians
Boonchaisuk, M (บุญชัยสุข)	Chantararuangthong, DM (จันทรรวงทอง)
Kasemthongsri, M (เกษมทองศรี)	Kuldilok, DM (กุลดิลก)
Nakpong, M (นาคพงศ์)	Lek-uthai, DM (เล็กอุทัย)
Nitisiri, M (นิติสิริ)	Louicharoen, DM (หลุยเจริญ)
Palusuk, M (พาลุสุข)	Phuangrach, DM (พวงราช)
Phurisisak, M (ภูรีศรีศักดิ์)	
Raktaphongpaisarn, M (รักตพงศ์ไพศาล)	
Rattanakorn, M (รัตนากร)	
Rengsomboonsuk, M (เร่งสมบูรณ์สุข)	
Sinthwanarong, M (สินธวณรงค์)	

Source: Garvey and Seifert, 2024

Table 29: Family Umbrellas Single Associated Surname 2014

Family Umbrella	Associated Families
Boonsongpaisan, M (บุญทรงไพศาล)	Sukumarn, MF1 (สุขุมาลย์)
Nakornthap, M (นาครทรรพ)	Nana, MF1 (นานา)
Na-Ranong, M (ณ ระนอง)	Thanaphum, MF1 (ธนะภูมิ)
Promphat, M (พร้อมพัฒน์)	Thongthaem, MF1 (ทองแถม)
Teriyapirom, M (เตริยาภิรมย์)	Santiphanarak, MF1 (สันติพนารักษ์)
Prasobdee, DM (ประสพดี)	Thandamrong, DMF2 (ธารดำรงค์)
Srikaew, DM (ศรีแก้ว)	Bamrungphong, DMF1 (บำรุงพงษ์)
Techatheerawat, DM (เตชะธีราวัฒน์)	Amornwiwat, DMF1 (อมรวิวัฒน์)

Source: Garvey and Seifert, 2024

Table 30: Family Umbrellas 2 Associated Surnames 2014

Family Umbrella	Associated Families
Auapinyakul (เอื้ออภิญกุล), M	Kanthatham (กันทาธรรม), MF1
	Serirak (เสรีรักษ์), MF2
Chaisaeng (ฉายแสง), M	Piamkamon (เปี่ยมกมล), MF1
	Bunyakida (บุณยกิดา), MF2
Ruangsuwan (เรืองสุวรรณ), M	Neil (นีล), MF1
	Pathomthanaphong (ปฐมธนพงศ์), MF1
Suwannathat (สุวรรณทัต), M / DM	Plikanont (พลิกานนท์), MF1
	Lertwisetpanya (เลิศวิเศษปัญญา), DMF1
Yubamrung (อยู่บำรุง), M	Phakranikorn (ภักรนิกร), MF2
	Ungsrisawat (อึงศรีสวัสดิ์), MF2
Kachornprasart (ขจรประศาสน์), DM	Anchananan (อัญชนานันท์), DMF1
	Wongyai (วงศ์ใหญ่), DMF1
Pongpanich (พงษ์พานิช), DM	Amatawong (อมตวงศ์), DMF1
	Hongthong (หงษ์ทอง), DMF2
Saikua (ใสยเกื้อ), DM	Saisa-at (ใสสะอาด), DMF1
	Nakkaew (นาคแก้ว), DMF2

Source: Garvey and Seifert, 2024

Table 31: Family Umbrellas 3 and 4 Associated Surnames 2014

Family Umbrella	Associated Families
Thienthong (เทียนทอง), DM	Thongpanich (ธงพานิช), DMF1
	Yutthaworn (ยุวถาวร), DMF1
	Chokdamrongsuk (โชคดำรงสุข), DMF2
	Tosaksit (โตศักดิ์สิทธิ์), DMF2
Khunpluem (คุณปลื้ม), M	Khonjam (โขนแจ่ม), MF1
	Saencharoen (แสนเจริญ), MF1
	Chatikawanich (จาติกวณิช), MF2
Limlaemthong (ลิ้มแหลมทอง), M	Lim (หลิน), MF1
	Norodom (นโรดม), MF1
	Sittisuk (สิทธิสุข), MF1
Promnok (พรหมนอก), M	Bamrungsawat (บำรุงสวัสดิ์), MF1
	Phetphanomporn (เพชรพนมพร), MF1
	Sriworakhan (ศรีวรขาน), MF1
Sittipunt (สิทธิพันธุ์), M	Asavarittipoom (อัศวฤทธิภูมิ), MF1
	Kullawanit (กุลละวณิชย์), MF1
	Sitthiphan Ferry (สิทธิพันธุ์), MF2
Thepkanjana (เทพกาญจนา), M	Wattanavekin (วัธนเวคิน), MF1
	Angubolkul (อังอุบลกุล), MF3
	Wannamethee (วรรณเมธี), MF3

Source: Garvey and Seifert, 2024

Table 32: Family Umbrellas 5+ Associated Surnames 2014

Family Umbrella	First Degree	Second Degree	Third Degree	Other Degrees
Sasomsap, M (สะสมทรัพย์)		Techapaiboon, MF2 (เตชะไพบูลย์)		Chutanupong, MF4 (ชุตานุพงษ์)
		Thuanlin, MF2 (ธุวนลิน)		Promphan, MF5 (พร้อมพันธุ์)
				Thaugsuban, MF5 (เทือกสุบรรณ)
				Chaiyakul, MF6 (ไชยกูล)
				Niyomtham, MF7 (นิยมธรรม)
				Phakamon, MF7 (ภากมล)
Silpa-archa, M (ศิลปอาชา)	Chiarasawatwattana, MF1 (เจียรสวัสดิ์วัฒนา)	Lekwat, MF2 (เลขวัต)	Raiwin, MF3 (ไรวินท์)	Chusanwet, MF5 (ชุษณเวทย์)
	Sae Bae, MF1 (แซ่เบ๊)			Wongwanich, MF5 (วงศ์วานิช)
Suraswadi, M (สุรัสวดี)	Anukarnopakit, MF1 (งอนุการนพกิจ)	Thipwichai, MF2 (ทิพย์วิชัย)	Chinapodok, MF3 (ชินะโปดก)	
	Prachasaraisoradet, MF1 (ประชาศรัยสรเดช)		Laksanasai, MF3 (ลักษณาศัย)	
	Vanikanan, MF1 (วณิกนันทน์)		Srisomwong, MF3 (ศรีสมวงศ์)	

Source: Garvey and Seifert, 2024

Table 33: Largest Family Umbrella 2014

Family Umbrella	First to Third Degrees	Fourth/Fifth Degrees	Sixth Degree	Other Degrees
Hongsakul, M (หงสกุล)	Chirathivat, MF3 (จิราธิวัฒน์)	Amatyakul, MF4 (อมาตยกุล)	Boonyarat, MF6 (บุญรัตน์)	Boonyapana, MF7 (บุญยะปาณะ)
Sasiprapha, DM (ศศิประภา)	Kitiyakara, MF3 (กิติยากร)	Chayangkun, MF4 (ชยางกูร)	Chotikasathien, MF6 (โชติกเสถียร)	Na Songkhla, MF7 (ณ สงขลา)
Vejjajiva, DM / MF4 (เวชชาชีวะ)	Jarusathien, DMF1 (จารุเสถียร)	Chitnatham, MF4 (จิตณาธรรม)	Wittayawethin, MF6 (วิทยะเวทิน)	Wannapruek, MF7 (วรรณพฤกษ์)
	Na Ayutthaya, DMF1 (ณ อยุธยา)	Diskul Na Ayutthaya, DMF4 (ดิศกุล ณ อยุธยา)	Jirapong, DMF6 (จิรพงศ์)	Limotibun, MF8 (ลิ่มอติบูลย์)
	Panprasit, DMF2 (ปานประสิทธิ์)	Sakuntaphai, DMF4 (ศกุนตาภัย)	Kotchaseni, DMF6 (คชเสนี)	Diskul, MF9 / DMF4 (ดิศกุล)
	Attanan, DMF3 (อัตตะนันทน์)	Watcharasindhu, DMF4 (วัชรสินธุ)	Pamornmontri, DMF6 (ภมรมนตรี)	Chupinij, DMF7 (ชูพินิจ)
	Kittikachorn, DMF3 (กิตติขจร)	Euawattanasakul, MF5 (เอื้อวัฒนะสกุล)	Penchat, DMF6 (เพ็ญชาติ)	Phanthumsen, DMF7 (พันธุมเสน)
	Na Lampang, DMF3 (ณ ลำปาง)	Danphattharakun, MF5 (ด่านภัทรกุล)	Yodmanee, DMF6 (ยอดมณี)	Sukanthawanich, DMF7 (สุคันธวณิช)
		Mongkolkitti, MF5 (มงคลกิตติ)		
		Norrapanlop, MF5 (นรพัลลภ)		
		Sarasin, MF5 (สารสิน)		
		Sawatdiwat, MF5 (สวัสดิวัตน์)		
		Yut, DMF5 (ยุทธ)		
	Kichothan, MFX (กิจโอธาน)	Nipatakusol, MFX (นิพัทธกุศล)	Sathirathai, MFX (เสถียรไทย)	Isarangkun Na Ayutthaya, DMFX (อิศรางกูร ณ อยุธยา)
	Ladawan, MFX (ลดาวัลย์)	Phumphichai, MFX (ภูมิพิชัย)	Sawat-Chuto, MFX (สวัสดิ์-ชูโต)	Isarangkun, DMFX (อิศรางกูร)
	Maleenont, MFX (มาลีนนท์)	Sathanapong, MFX (สธนพงศ์)	Forester, DMFX (ฟอเรสเตอร์)	Sukhonthayak, DMFX (สุคนธวยัคฆ์)

Source: Garvey and Seifert, 2024

Table 34: Family Umbrella Shinawatra 2014

Family Umbrella	First Degree	Second Degree	Third Degree Column	Fourth Degree
Shinawatra, PM (ชินวัตร)	Amornchat, PMF1 (อมรฉัตร)	Klongkhanakarn, PMF2 (คล่องคำนวณการ)	Charoensawat, PMF3 (เจริญสวัสดิ์)	Suksapha, PMF4 (สุขสภา)
Towijakchaikul, M (โตวิจักษณ์ชัยกุล)	Ramingwong, PMF1 (ระมิงวงศ์)	Kovitcharoenkul, PMF2 (โกวิทเจริญกุล)	Damapong, PMF3 (ดามาพงศ์)	Rattanasuwanchat, PMF4 (รัตนสุวรรณชาติ)
		Limphattanachat, PMF2 (ลิ้มพัฒนาชาติ)	Hiranpruk, PMF3 (หิรัญพฤกษ์)	
		Nakwichit, PMF2 (นักวิช)	Kongprayoon, PMF3 (คงประยูร)	
		Wongsawat, PMF2 (วงศ์สวัสดิ์)	Kunakornwong, PMF3 (คุณากรวงศ์)	
			Linal, PMF3 (ลีนาล)	
			Maneenet, PMF3 (มณีเนตร)	
			Meephanich, PMF3 (มีพานิช)	
			Na Pombejra, PMF3 (ณ ป้อมเพชร)	
			Osathaphan, PMF3 (โอสถาพันธุ์)	
			Preechom, PMF3 (ปรีชม)	
			Promchana, PMF3 (พรหมชนะ)	
			Tantives, PMF3 (ตันติเวสส)	
			Wongnapachant, PMF3 (วงศ์นภาจันทร์)	

Source: Garvey and Seifert, 2024

11.8 Use of Artificial Intelligence (AI) in our Research

What AI tools have been used and how?

We used Chat GPT-4 in our research for coding in Latex as well as for our empirical models in R. Moreover, we consulted ChatGPT-4 additionally to receive recommendations regarding the clarity of certain parts of our texts and how ideas might be more effectively conveyed. We also used DeepL Write to identify opportunities to improve the wording.

In what ways have these tools contributed to increasing the quality of the thesis?

In particular, Chat GPT-4 increased the quality of our work, as it provided significant insights into what commands need to be formulated within Latex or R to achieve the desired outcome, like tables. The tool drastically increased the production of qualitative and aesthetically pleasing tables.

What potential risks were found using AI and what measures were taken to reduce these risks?

Chat GPT-4 is known to hallucinate in its answers as it uses simple vectors to identify the next most probable word in its responses. Therefore, we did not use Chat GPT-4 to generate any texts or summarize any scientific articles, as such answers are not only generic but might be untrue.

What are the insights gained from using AI tools in the thesis writing process?

AI can significantly contribute to the decrease in repetitive tasks and can quickly provide solutions to incorrectly specified strands of code. That said, it is crucial to write detailed prompts as otherwise Chat GPT-4 will deliver answers that do not solve eventual coding problems but eventually prolong the actual process of finding an adequate solution to coding issues.