State Ownership of Acquirers and results of Mergers and Acquisitions

Evidence from Vietnam

Nga Pham (La Trobe University) KB Oh (La Trobe University)

ABSTRACT

This paper addresses the call for fundamental research that examines the impacts of typical institutional features of emerging markets on corporate development. The corporate structures of an economy partly stem from the structures with which its economy started, among which is the initial structure of state ownership. Rooted from a centrally planned economy, Vietnam is similar to China with regards to the presence of the State in the economy and its impacts on firms' strategic decisions such as mergers and acquisitions (M&A). Our findings suggest that the state owned firms are less efficient compared to non-state owned firms with regards to M&A, in terms of announcement returns and change in post deal growth. We also document the non-linear impact of state ownership on announcement returns. Additionally, M&A performance by firms with state owned firms could be explained by the problem of low efficiency and the fact that M&A activity carried out by state-owned enterprises may be politically or socially motivated, thus, deviating from the principle of shareholders' wealth maximisation.

Key words: Emerging Markets, Mergers and Acquisitions, State-owned Enterprises.

Introduction

This paper addresses the call for fundamental research that examines the impacts of typical institutional features of emerging markets on corporate development. The corporate structures of an economy partly stem from the structures with which its economy started, among which is the initial structure of state ownership. Rooted from a centrally planned economy, Vietnam is similar to China with regards to the presence of the State in the economy. With the ongoing process of privatisation and the development of the financial market, the State retains controlling interest in firms in certain key sectors and relaxes ownership in others. In the market, the State now assumes both roles of a controller and an investor. Therefore, in these emerging markets, the State could influence business decisions and development in many aspects, one of which is mergers and acquisitions.

Mergers and acquisitions (M&A) are strategic corporate restructuring activities. Strong waves of M&A are observed in the 1890s followed by the 1920s, the 1960s, the 1980s, the 1990s and most recently, the 2000s (Gregoriou & Rennenboog, 2007). These waves have been driven by various factors and are witness to tremendous growth in M&A activity in different regions of the world. Each wave has its own historical, legal and economic context. Recent waves have witnessed an increasingly participation of Asian economies in worldwide M&A activity. However, M&A activity in emerging markets of Asia still requires more research to understand the M&A support mechanism, processes and outcomes, and their implications for M&A strategy. This paper addresses the need to add to existing M&A theories those variables that are idiosyncratic to the Asian context in order to observe and appreciate how these variables affect value creation. This paper follows a top-down approach by including key institutional forces that shape the structures and policies of firms in emerging markets as proposed by Fan, Wei, and Xu (2011).

A common feature of emerging markets in Asia is the overwhelming presence of the State in business ownership. After the 1997 Asian financial crisis, State control of business has become more pronounced in a number of South East Asian countries including Malaysia, Singapore, Thailand, Indonesia and even Hong Kong (Carney & Child, 2013). This is evident from studies conducted by Claessens, Djankov, and Lang (2000) and Carney and Child (2013) which compare corporate ownership data in the above mentioned East Asian economies before and after the 1997 financial crisis and find a significant number of struggling family-owned firms from the crisis being taken over by local and foreign governments. Governments found to hold substantial ownership stakes in domestic and foreign firms in the Carney and Child (2008) study include those from Singapore, China and Malaysia. For many emerging economies, state-owned enterprises (SOEs) are among the major contributors to the countries' GDP. Many SOEs are listed in their respective stock markets. In China, for example, approximately 75% of listed firms are SOEs (Bhabra & Huang, 2013). It can be expected that with respect to owning and directing a business, the State may be constrained by social and political objectives. Therefore, under such circumstances the State as a substantial shareholder of partially privatised firms may cause them to behave and perform differently from normal firms. Hence it begs the question that in the market for corporate control would the partially privatised firms create wealth for shareholders in the same way as the non-SOE firms do? The potential impact of state ownership on mergers and acquisitions has received little research attention. This paper hypothesizes that State ownership is one of the variables that influence M&A outcomes. Specifically, this paper addresses the following issues:

(1) Do M&A activity in emerging markets where there is significant state-ownership in the acquirers show the same value creation pattern observed in developed economies?

(2) Does value creation pattern differ between acquiring firms with state ownership and those without state ownership with regard to M&A activity?

Our study investigates 188 mergers and acquisitions conducted by listed firms in the transition economy of Vietnam from 2004 to 2013. We focus our analysis on the impact that the levels of state ownership of the firm may have on the M&A results. We find that Vietnamese acquirers in general do not generate positive abnormal returns. Compared to the non-state owned sectors, the state owned firms obtained significantly higher negative returns around the acquisition announcement date. State ownership level in the acquirer is significant in its negative correlation to the acquirer announcement abnormal return and this relationship holds with various controlling variables. From our findings on state-owned firms and their participation in emerging market M&A activity we add new knowledge by characterising the pattern of value creation from M&A in emerging markets. We also add new evidence to the limited extant literature of M&A conducted by state-owned companies.

The following sections discuss the related literature and propositions, research method, research settings and findings.

Related literature and propositions

Literature on M&A from developed and developing economies

An analysis of extant literature on worldwide M&A activity shows that research emphasis on M&A started in the 1970s. During the last 40 years researchers have found little evidence to prove M&A to significantly increase wealth for merging firms. In fact, despite the popularity of M&A activity and the massive efforts on M&A research from various disciplines such as management, economics and finance in the United States and Europe, there has only been modest improvement in the success rate of M&A over time. Even from research conducted several decades ago, (Kitching, 1974) finds that 46 to 50% of all acquisitions made by U.S. MNCs and European MNCs are considered failures or not worth repeating. Findings from the 1990s including a study by Bleeke, Isono, Ernst, and Weinburg (1993), which finds that 43% of cross-border M&As failed to produce a financial return exceeding the cost of capital of the acquirer. (Rostand, 1994) reveals that 45% of deals failed to meet their initial strategic objectives. Other studies also find that mergers increase the default risk of the acquirer (Furfine & Rosen, 2011; Vallascas & Hagendorff, 2011) and for US acquirers, on average, show no evidence of wealth creation (Andrade, Mitchell, & Stafford, 2001; Fuller, Netter, & Stegemoller, 2002; Jensen & Ruback, 1983). A meta-analytic research of 93 published studies by King et al. (2004) finds robust evidence to support that, on average, M&As either have no significant

effect on or modestly negatively affect the performance of the acquiring firm in the postannouncement period. Similar findings are found for the UK (Sudarsanam & Mahate, 2003). Only occasionally, there are studies that show positive returns to acquirer's shareholders, under certain conditions. For example, Aktas et al. (2011) finds that acquirers are rewarded when making acquisitions that are viewed to be socially responsible investments. However, such studies are too few to generalise about acquirers' returns. So over the many years since the 1960s and the 1970s, the success rate of M&A has not improved (Cartwright & Schoenberg, 2006; Marks & Mirvis, 2011). Therefore given that the state is a major player in many M&A transactions in emerging markets, would the same pattern of wealth creation from M&A activity in the developed world be observed in emerging markets?

In the current M&A literature, there is limited focus on emerging markets, especially those from Asia that have been participating actively in M&As worldwide in recent waves. The fifth M&A wave around the 1990s saw an increased role of non-US and non-UK economies, with Japan as a typical representative of Asia. The U.S. and UK were still the dominant M&A players with their average share of the world's number of reported deals¹ during the 1990s being more than 60% and 20%, respectively. Japan as the only key representative from Asia in the field shared 5.4% of reported deals in 1999. M&A activity was also observed in other parts of Asia during this time with limited statistics available due to the relatively small size of the deals. Towards the end of this decade, Asia became an attractive market for takeovers from the cheaper Asian currencies because of the 1997 Asian economic crisis. In the latest wave of M&As, China and India emerged as important contributors to M&A activity due to privatisation policy and market deregulation in these countries (Gregoriou & Rennenboog, 2007). Interestingly, as the world's economic power starts to shift, Asia, especially Greater China, including Hong Kong, Taiwan and Macau, is now active in both buying and selling sides. Over the five years from 2006 to 2010, the number of overseas acquisitions by Asian bidders almost doubled, from being about 13% of total global cross-border deals in 2005 and 2006 to about 25% in the financial year of 2010 (Mercer & Kroll, 2010). According to the United Nations' World Investment Report 2010, South, East and Southeast Asia now play a leading role in the global economic recovery and M&A, as a channel of FDI inflows and outflows with an increasing trend (UNCTAD, 2010). Given the importance of Asia, it is timely to devote more research efforts to understand M&A activity in this part of the world. Some, among the few studies on M&As in emerging markets of Asia, have found that emerging market acquisitions produce important differences with respect to popularly observed characteristics of M&A from developed markets (Kale, 2004).

¹ Deals value of US\$1million and above, sourced from Thomson Financial.

A study (Ma, Pagan, & Chu, 2009) on a large sample of 1477 M&As from ten Asian emerging markets finds positive abnormal return to shareholders in short event windows. The M&As were conducted from 2000 to 2005 in China, Hong Kong, India, Indonesia, Malaysia, the Philippines, Singapore, South Korea, Taiwan and Thailand. In those deals shareholders of bidding firms, on average, earn an abnormal return of 0.96% in a two day window (0, +1) and 1.7% in a five day window (-2,+2). All earnings are statistically significant. A study of 698 Indian firms' acquisitions during the 1992 – 2002 period by Kale (2004) finds that, acquisitions on average created positive value for both acquirer (abnormal return of 1.71%) and acquired companies (8.79%). The existence of abnormal gain to shareholders in these emerging Asian markets, which is different from findings of most other studies conducted in developed markets, adds weight to the need to re-examine the validity of theories and hypotheses from developed markets in the context of emerging markets. It appears to be erroneous to assume the same pattern of activity and level of value creation observed in the Western literature apply to M&A deals in Asian markets due to the different economic and regulatory context.

Literature on state ownership and M&A

The transition of centrally-planned economies toward more market-oriented economies is well documented in the literature. One thing in common among transitioned economies is the continuing presence of the government in business ownership and management. Both central and local governments can retain ownership and control through partial privatisation or acquire equity for investment purposes like all other investors. There is a continuing debate as to whether state ownership affects the way that the firms are run and their efficiency. There exists evidence that the state owned sector is often thought to be less efficient than the non-state owned sector because of the need by governments to address social and political interests. Take the largest emerging market of China for example, the state sector, including all companies that the government has ultimate control, has slow or negative growth whereas the private sector has maintained strong growth in output and made significant contribution to the country's growth despite the fact that the growth rates of investment in fixed assets of these sectors are comparable (Allen, Qian, & Qian, 2005). The government-related sectors are constrained by various social, political and economic objectives and tend to bear the burden of large labour surplus and heavy corporate debt (Bai, Lu, & Tao, 2006). This inefficiency hypothesis could also be applied to M&A activity by the state-owned sector. In that case, it is plausible that non-state owned firms are better at conducting M&A, hence, creating more value for their shareholders via M&A than state-owned firms do. However the quality of government across the world is not the same (La Porta, Lopez-de-Silanes, & Shleifer, 1999). La Porta et al. (1999) find that the heterogeneity of location, legal system and cultural background explains the difference

in government performance. Additionally, state-owned firms enjoy a number of privileges such as business networking and funding access. Allen et al. (2005) find that in China, most of the bank credit is to serve the state sector and listed sector rather than the private sector. China banks favour industrial state-owned firms (S.-J. Wei & Wang, 1997) and state-owned banks tend to be less strict when they lend to firms with greater state ownership (Firth, Lin, & Wong, 2008). If state-owned firms make good use of such privileges to get a deal approved quicker, find a trusted M&A partner or access funds for the deal, they could implement their M&A activity at relatively lower transaction costs and costs of capital. Therefore, an alternative hypothesis could be that M&A by state-owned firms create more value for shareholders compared to normal firms. The efficiency hypothesis and the privileges hypothesis lead to opposite expected value created from M&A by the state-owned sector. It is necessary to expand the analysis of performance of state owned companies in M&A to other economies to test these hypotheses.

The research context

This research in M&A is positioned in the emerging market of Vietnam for a few reasons. Firstly, Vietnam is becoming an important regional economy in South East Asia. On average, its GDP has been growing at around 5 to 6% per annum for the last ten years (ADB, 2013). The market has grown to a size of 88 million consumers (ADB, 2013), with a young population, abundant resources and good labour supply. In terms of M&A activity, Vietnam has witnessed a tremendous growth in the last decade. According to Stoxplus (2011), the estimated value of M&A in 2011 could be greater than USD3.0 billion, almost doubling the value of the year before. M&A has been viewed by domestic firms as an important channel for restructuring and acquiring new resources. Private equity funds, investment funds and FDI firms have shown strong interest in this 88 million consumer market and as a result cross-border M&A in Vietnam is also used by foreign firms as a mode of entry to the market. According to a 2009 international survey conducted by Grant Thornton Vietnam, 67% of the surveyed businesses consider Vietnam as an attractive destination for investment and 63% of the respondents plan to increase their investment allocation to Vietnam (Thornton, 2009). It is important for international firms to understand how M&A are conducted in Vietnam and how value is created from such activity in order to better design their strategy. Secondly, Vietnam would be an interesting subject to research about corporate restructuring activity through M&A as the presence of the State in the business sector provides the setting for evaluating how local M&A activity may be distorted by factors that have not been explored in the Western literature. The corporate structures of an economy partly stem from the structures with which its economy started. The initial ownership structures are among those important economic structures (Bebchuk & Roe, 2000). Rooted from a centrally planned economy where the state owned and controlled resources and allocated firms' outputs, it is not a surprise to see that after almost three decades since the Reform (DoiMoi) program, the presence of the State is still overwhelming in the economy. According to the Central Institute for Economic Management² (CIEM) of Vietnam, until 2010, there were 1,207 wholly stateowned companies and approximately 1,900 partially privatised companies in which the State remains to hold a controlling interest of at least 50% of equity (CIEM, 2011). According to CIEM (2011), the state-owned sector contributed about 37 to 38 % to the Vietnamese GDP. The stateowned sector accounted for approximately 60 % of banks' credit, 50 % of state investment and 70 % of Vietnamese Official Development Aid (ODA) (CIEM, 2011). The Government still maintains significant ownership in key sectors of the economy, considered as "sensitive sectors" therefore requiring government control. It has been argued that the reason for companies in these sectors to remain fully or at least partly owned by the government is the fear of foreign ownership (IFC, 2012). According to the Prime Minister's Decision No. 929/QD-TTg on restructuring the state-owned sector in the period 2011 – 2015, it postulates that the Government retains 100% ownership in key sectors relating to national security and social welfare, more than 75% in natural resources and telecommunication infrastructure, from 65% to 75% in transportation and distribution sectors and from 50% to 65% of other important SOEs³. To fulfil the commitment with the World Trade Organisation, the Vietnamese Government has been relaxing Government ownership and protection by encouraging firms in other sectors to be privatised and listed in stock market.

Since 2000, a large number of previously wholly state-owned firms have been fully or partly equitized and encouraged to be listed for the purpose of nurturing the national stock market in its infancy (Christiansen, 2013). The two stock exchanges in Vietnam are Ho Chi Minh City stock exchange (HOSE), established in 2000 and Hanoi Stock Exchange (HNX) in 2005. Despite their short history, both stock markets have grown in terms of the number of listed firms. The stock markets have become an important channel for listed firms to access capital. State ownership in listed firms, however, remains significant despite international pressure for the Government to relax business ownership in non–sensitive sectors. As at December 2013 for example, among the top 20 largest firms in terms of market capitalisation on HOSE, the Government still holds significant equity stakes

²²CIEM – Central Institute of Economic Management, Ministry of Planning and Investment of Vietnam.

³ According to the Prime Minister's Decision No. 929/QD-TTg on restructuring the state owned sector in the period 2011 – 2015, the Government retains 100% ownership in key sectors relating to national security and defence, infrastructure, irrigation, large scale electricity production and distribution, airports and sea ports and money printing. Government retains more than 75% in natural resources and telecommunication infrastructure. 65% to 75% state ownership in chemistry, fertiliser, food wholesaling, drug wholesaling, finance, credit, insurance, water supply, rail and air transportation... The Government will decide to retain from 50 percent to 65 percent of other important state owned corporations after equitisation if deemed necessary.

in 11 of them. The value of state ownership in these firms is estimated to be USD14.8 billion, approximately 38 % of the total market capitalisation of HSE (Vietnam Banking Review, 2013⁴).

The two stock markets in Vietnam have also evolved as an increasingly important market for corporate control in the last five years with the number of deals involving listed acquirers increasing from almost none in the early years to 55 cases in 2011. The activity slowed in 2012 with only 40 cases by listed acquirers and 10 cases in the first two quarters of 2013 due to the global crises.



Figure 1: Number of M&A deals conducted by listed acquirers in Vietnam⁵

Research method

This paper follows the standard and widely used event study methodology for studying impacts of specific corporate events or market events on the relevant firms. The method examines the reactions of share prices to merger announcements around the announcement time, i.e., calculating abnormal returns to shareholders. A merger or acquisition decision is among the most important strategic decisions made by the firm. Its announcement often conveys messages about changes in the firm's structure, business scale and scope, which causes the market to form expectations of changes in firm value. Such events, when announced are often accompanied by observable change in stock prices of related firms. The level of wealth created for shareholder is therefore measured by

⁴ Vietnam Banking Review belongs to the State Bank of Vietnam. <u>http://www.thoibaonganhang.vn/tin-tuc/1-giam-bot-so-huu-nha-nuoc-tai-cac-cong-ty-niem-yet-ve-duoi-50-15053.html</u> Accessed on 4th Dec 2013.

⁵ The data only includes deals that are reported in ThomsonONE Investment Banker Database. Prior to 2005, there may be M&A deals by listed acquirers that were not reported by the database.

the abnormal return that the announcement brings to shareholders of related firms. There is a need to neutralise the change in share prices due to factors other than the specific announcement under investigation to avoid cross-sectional dependence. Abnormal return can be measured as the excess return over the expected return anticipated if the merger proposal was not announced. In this paper, the market model is employed for the calculation of expected returns.

The market model introduced by Fama et al. (1969) and improved by Brown and Warner (1980):

In the estimation period:	$R_{it} = \alpha_i + \beta_i R_{Mt} + e_{it}$	(1)
---------------------------	---	-----

In the event time window:
$$\overline{R}_{it} = \alpha_i + \beta_i R_{Mt}$$
 (2)

In the event time window:
$$AR_{it} = R_{it} - \overline{R}_{it}$$
 (3)

In the event time window of (-n; +n) – days/weeks/months:

$$CAR_i = \sum_{t=-n}^{+n} AR_{it}$$
(4)

This model works under the multivariate normal distribution of returns assumption. In the estimation period, actual returns of stock (i) (R_{it}) are regressed on actual market returns (R_{Mt}) (calculated as the rate of return on the market value weighted index) via an OLS regression equation, as in Equation (1). The equation produces estimates of α and β , which reflect the normal covariability between the stock and the market. The estimated α and β are then used to estimate the expected return of the stock (\overline{R}_i) for each day, week or month in the event time window. To eliminate the possible impact of the merger information leakage, the estimation period should end a period of time before the announcement, for example six weeks before announcement (Hawawini & Swary, 1990). The abnormal return, the residuals, would be the difference between the actual return and the estimated expected return using the market model. The cumulative abnormal return (CAR) for (-n,+n) days is the cumulative sum of the daily abnormal returns from the day (-n), i.e., n days before the event is announced to the day (+n), i.e., n days after the event date.

Under the abnormal return approach, a clear time window around the merger announcement should be identified and the abnormal return to shareholders will be calculated cumulatively within that time frame to obtain the cumulative abnormal return (CAR). The event time window could be measured by days (Brown & Warner, 1985), weeks (Hawawini & Swary, 1990), months (Brown & Warner, 1980) or years (Ghost 2001; Gregory, 1997). The event window is, normally but not necessarily, placed symmetrically around the event date. For example, an eleven week event time window includes five weeks prior to, the week of the announcement and 5 weeks after the

announcement (Hawawini & Swary, 1990). Most popular event time windows in M&A studies are CAR(-1,+1), (-2,+2), (-3,+3), (-1,0) and (0,+1) in days.

This paper adopts the measurement windows by Cai and Sevilir (2012). Returns are calculated on a daily basis. Data for estimation of equation (1) is obtained from the 200 trading day estimation window which is 60 days away from the event date, ranging from the -260^{th} to -61^{th} trading day. Event time windows examined are CAR(0, +1), CAR(-1,+1), CAR(-2,+2) and CAR(-30,+30).



Figure 2: Event study methodology measurement windows

Research setting, data and sample description

The study examines all M&A transactions conducted by listed firms in Vietnam since the beginning of the two stock markets. Given the short history of the stock markets in Vietnam, this offers a unique opportunity to explore the development of the M&A activity in parallel with the development of the general stock market.

To be included in the sample, a transaction has to meet the following conditions:

- The transaction specific information could be obtained either via ThomsonONE.com Investment Banker or Bloomberg databases.
- The acquirer owns at least 10% of the target after the transaction.
- The acquirer is not an investment fund or a brokerage firm (firms with SIC code of 62-- are excluded)
- The acquirer is listed on either Hochiminh city stock exchange (HOSE) or Hanoi Stock Exchange (HNX) at the time it announces its M&A.
- The acquirer has been listed for approximately one year before it announces its M&A transaction for estimation purpose.
- The target is located in Vietnam.

The filtering criteria resulted in an original sample size of 193 cases for the period 2004 to 2013. This sample is highly representative of M&A activity of listed markets in Vietnam given the fact that HOSE

started in 2000 and HNX in 2005. After removing the outliers⁶, the sample size is reduced to 188 cases. This study chooses to examine M&A transactions with equity acquisition of 10 % and above because the number of full mergers or acquisitions of listed firms is limited. Repeated deals involving the same acquirer and target are only included once in the sample, when the 10 % threshold was exceeded. Acquisitions of 10% of equity do have economic significance in the context of an emerging market as an acquirer owning 10% of equity could possibly become one of the largest owners and have significant influence on the company's board structure and decisions. Most emerging markets employ a hurdle of 10% equity ownership to differentiate between direct investment for controlling purpose and portfolio investment motivated by returns only (Eiteman, Stonehill, & Moffett, 2010). The sample criteria exclude cases in which the acquirer is a financial brokerage firm or an investment fund to filter out those that are purely financial investments.

The reason for continued state ownership among listed firms could be that they are expected to act differently from the non-state owned ones in like circumstances (IFC, 2012). State influence on listed firms' decisions is asserted via voting power and the degree of influence can be determined by the level of equity ownership. Therefore, by examining the difference among groups of firms with none, minority and majority state ownership may yield interesting insights. The full sample is divided into three subgroups according to the presence of state ownership in the acquiring firm. The first subgroup (0) includes cases in which the acquiring firm is not state-owned. The second subgroup (1) includes cases in which the State holds less than 50 % of the acquiring firm's equity and the last subgroup (2) consists of cases in which the State has a controlling interest of at least 50 % equity in the acquiring firm. The presence of State ownership in the acquiring firm is zero in Group 0, moderate in Group 1 and significant in Group 2. Descriptive statistics for the whole sample as well as the three sub-groups are presented below.

[Insert Table 1 and Table 2 about here]

Over the study time period, M&A activity by the listed firms peaked in 2010 and 2011, during the global financial crisis. The top two sectors for M&A activity of listed firms in Vietnam are from the "Industrials" and "Consumer Staples" sectors. Industrials sector M&A seem to be dominated by SOEs whereas the Consumer Staples sector sees a more equal share of the transactions among the three subgroups. Energy and Power is another sector that is mainly dominated by acquisitions made by SOEs. In 70 out of the total of 188 cases, the target firm is also a listed firm in Vietnam. As

 $^{^{6}}$ An observation is classified as an outlier in this research if its value (for the dependent variable) lies outside the range [Quartile 1 – 2.2(Quartile 3-Quartile 1); Quartile 3 + 2.2(Quartile 3-Quartile 1)] (Hoaglin & Iglewicz, 1987)

information about private targets is not available, our analysis focuses on the acquirers rather than the target firms.

[Insert Table 3 about here]

The preliminary exploratory analysis of the sample reveals the following characteristics, presented in Table 3. The average age of firms at acquisition for the sample is 19 years. The state-owned firms seem to be older but smaller (in terms of market value) than the non state-owned firms at acquisition. There are more diversification than related acquisitions in the sample. It seems that non-SOE acquirers have larger board sizes. The last subgroup (2) has highest operating cash flow (scaled by total assets) but lowest Tobin's Q among the three groups. Leverage ratio (calculated by the total long-term debt divided by total equity, in percentage) is significantly different among the three groups. Despite the difference in EBITDA dollar value, Return on Assets (which is EBITDA divided by total asset) is fairly consistent among the groups.

Findings

State ownership and announcement returns

To measure the effect of an acquisition on the value of the acquiring firm, we use the standard event study method developed by Brown and Warner (1985). We obtain daily abnormal return (AR) which is the difference between actual return and expected return produced by the estimated market model. Parameters of the market models are estimated over the 200 trading days ending two months before the acquisition announcement date (Cai & Sevilir, 2012). The estimation period is separated from the announcement period to eliminate the possibility of information leakage that may distort the market model parameters. The return of the value weighted Viet Nam Index (the major stock market index in Vietnam) is used as the market return in the model. Abnormal returns are calculated on the announcement date (CAR(-1,0)) and then accumulated over short term window (CAR(-1,+1)) as well as longer term window (CAR(-30,+30)) around the announcement date.

[Insert Table 4 about here]

Abnormal return on the announcement date, the mean CAR(-1,0), of the full sample is negative at -0.206% but insignificantly different from 0, suggesting that on average, shareholders of the acquiring firms do not experience significant abnormal returns. Our finding is consistent with Iqbal and Dheeriya (1991) who finds insignificant return of -0.02 % for US M&A with publicly traded targets. The mean announcement abnormal returns for acquirers remain statistically insignificant across all three subgroups of the sample, suggesting that returns are normal around the announcement of the acquisition event. This could mean that there is no strong evidence of value diminution for the acquiring firms as reflected in the instant price reaction upon announcement as normally seen in literature in developed markets (Martynova & Renneboog, 2008). However, one should interpret the returns behaviour in an emerging market context with caution. Insignificant abnormal returns could mean no significant change in the wealth level of the acquirers. But insignificant abnormal returns could also be due to the possibility that the selected time window is not sufficient for changes in the observed share price. This could signal the problem of low market efficiency in emerging economies where information needs more time to be reflected in market prices. Therefore, we also examine cumulative abnormal returns in longer time windows including a three day and a two month windows around the announcement date.

A small negative CAR(-1,+1) of -0.21% is experienced by the full sample. This is similar to the findings of -0.37% (insignificant) abnormal return to the bidders by Mulherin and Boone (2000) for the US market. However, CAR(-1,+1) is statistically negative for Group 2 (-1.21%), suggesting that firms that have the State as the controlling shareholder, experience significant wealth reduction after the acquisition. This is different from what is observed for the listed SOEs in China as this group earned a significantly positive CAR(-1,+1) of 1.42% as recently reported by Bhabra and Huang (2013). The difference is not surprising as Bhabra and Huang (2013) only examined cases of unlisted targets and literature on privately held targets from developed markets does agree on positive wealth generated for the acquirer (Chang, 1998; Iqbal & Dheeriya, 1991; John, Freund, Nguyen, & Vasudevan, 2010).

We also examine return created for acquirer shareholders in the event window of 30 days before and 30 days after the announcement date. It would be beneficial to include a longer event window in the analysis because emerging stock markets are known to be less than efficient in the sense that prices react more slowly to information. One could hypothesize that due to the low level of efficiency in emerging markets, short term event windows, normally examined in developed market literature, may not capture the full price impact of the event. In fact, CAR(-30,+30) in our findings are statistically significant for the full sample as well as for each of the subsamples, which supports our argument of low informational efficiency in emerging markets. On the full sample, acquirers lose 2.69% of their wealth in the period of +/-30 days around announcement of the event. Wealth reduction is smallest for the group with no state ownership (Group 0) (mean abnormal return of 1.96%), and gets more severe at higher level of State ownership in Group 1 (-3.11%) and Group 2 (-4.26%).

It seems that firms with different levels of state ownership experience different abnormal returns patterns with regards to their M&A transactions. It is necessary to examine the possible impact of

State ownership on cumulative abnormal returns to acquirer shareholders in a multivariate setting. The following regression was conducted using CAR(-1, 1) as the dependent variable to be regressed on the main predictor which is *State Ownership*, measured by the, G, percentage of equity of the acquiring firm held by the State at the time of the acquisition as well as by SOE2, a dummy variable receiving a value of one if the state holds a controlling stake in the firm (state ownership is minimum 50%). As State ownership tends to be relatively stable, we use the State ownership percentage information collected from the annual report of the financial year completed before the announcement date.



Figure 3: Mean CAR(-30,+30) by subsamples

The equations are tested and are found to be free from multicollinearity problem. For heteroskedasticity, we employed the Breusch-Pagan test and Koenker test (which is rigorous for small sample size) to check the data. Both tests identified significant existence of heteroskedasticity in our data⁷. Therefore, our regression models are based on heteroskedasticity adjusted standard errors (HCREG).

In various model setting, the dependent variable is M&A performance, measured by either the 3 day cumulative abnormal returns CAR(-1,1) or Δ EPSG, change in EPS growth or Δ ROA, change in ROA. The main independent variable is State ownership, as measured by either a dummy variable SOE2 which takes on the value of one if the State holds a controlling stake in the firm and zero otherwise, or by G, the size of equity held by the State in the firm (as percentage of total equity). We introduce into our regression models a number of variables to control for factors which have been shown to

⁷Koenker test for Heteroscedasticity (CHI-SQUARE df=P): 74.170

Significance level of Chi-square df=P (H0:homoscedasticity):.0000

affect acquirer returns in existing M&A literature. The first control variable is size, both in terms of the acquirer's market value and deal size relative to the size of the acquirer, as it has been shown to impact acquirer returns. S. Moeller, Schlingeman, and Stulz (2004) reported significantly better announcement returns for smaller acquirers. Therefore, the variable Acquirer Size, as measured by natural logarithm of the acquirer's market value two months before the announcement date is included in our model. Though shown to be an important variable in literature, relative deal size information is not available for approximately 30 % of the observations in our sample, and therefore is not included. Other acquirer specific variables in the literature are Leverage Ratio and Tobin's Q (as measured by the ratio of firm's market value to its replacement value) (Lang, Stulz, & Walkling, 1989). Apart from deal size, other deal specific characteristics such as deal premium (Alexandridis, Fuller, Terhaar, & Travlos, 2013), payment method (Travlos, 1987), relatedness versus diversification (Morck, Shleifer, & Vishny, 1990) and deal attitude (Schwert, 2000) have all been examined in literature. Only 10% of the cases in our sample are paid in stock and the majority is in cash. Such limited variability of this sample would not make payment method a useful variable for our model. The attitude of all deals was described as 'friendly' in the deal description from the database. That leaves us with Deal Type as the only deal specific variable to explore in our data set. Deal Type is designed as a dummy variable that receives the value of 1 if the deal is classified as related where the acquirer and the target have the same two-digit SIC code and 0 otherwise. In terms of target specific information, we can only include *Target Listing Status* as a control variable.

Acquirer Operating Cash flow and Acquirer Return on asset (ROA) are used as control variables for the endogeneity of performance. Acquirer Operating Cash Flow is measured by operating cash flow scaled by total asset and Acquirer ROA is the acquirer's EBITDA divided by total assets, which are metrics consistent with Cai and Sevilir (2012).

Comparing the firms with State ownership (G>0) and firms without State ownership (G=0)

[Insert Table 5 about here]

When the firms are separated into two groups with and without State capital, it can be seen clearly that the cumulative returns of the two groups are associated differently with different factors. For the firms without State capital, the cumulative returns are negatively associated with the size of the equity acquired and the operating cash flows and are positively related with the acquirer size, ROA, gender and the level of insider holding of the firm. This is consistent with findings from prior research from firms in developed markets, which are free from State ownership. As acquisitions are seen to be value decreasing (S. B. Moeller, Schlingemann, & Stulz, 2005), the large the size of the equity, the lower the cumulative abnormal return around announcement date. The negative

coefficient of cash flow on CAR(-1,1) suggest that the market is uncertain about the value created from acquisitions made by cash rich firms. This makes sense in light of the free cash flow hypothesis discussed by Jensen (1986) that managers have a tendency to overinvest internally generated funds and therefore, tend to invest in negative NPV projects rather than distributing the free cash flow back to shareholders. In the East Asia context, Wei and Zhang (2008) confirm that too much free cash flow (also measured by operating cash flow scaled by total asset) in the hands of entrenched managers is likely to lead to overinvestment. *Insider Holding* has a positive impact on the M&A returns, suggesting that the market places more confidence in the deals conducted by firms that are heavily owned by insiders, including directors and officers and employees.

It is interesting to note that for the group with State capital, a different set of factors drive M&A returns. The factors are more related to who runs the firm, who owns the firm and what type of firm it acquires rather than financial factors. These firms tend to earn higher returns if the firm is run by a larger board and by a CEO duality structure, which means the chairman of the board is the same as the CEO of the firm. This is not similar to prior literature for non-state owned firms where smaller board size seems to be more efficient (Yermack, 1996). In terms of ownership, both *COE ownership* and *Acquirer Domestic Institutional* ownership have a negative impact on M&A returns, indicating that the market has lower confidence in acquisitions made by SOEs that are heavily owned by the CEO and other domestic firms.

As it can be seen from these preliminary findings, these two groups of firms are fundamentally different, leading us to further analysis zooming in the firms with State capital at minority and majority levels. It also seems that M&A returns of firms with State capital are more driven by CEO and ownership related variables, suggesting us to examine the interaction between state ownership and CEO related variables.

A zoom in the group of firms with State ownership (G>0) – how State ownership level affects M&A performance measured by cumulative announcement returns CAR(-1,1) and by Δ EPSG.

[Insert Table 6 about here]

As different levels of state holding affects the firm differently (Firth et al., 2008), we look at the impact of various state ownership levels on the firm's M&A performance on the subsample of 88 firms with State capital. The main variable of analysis is SOE2 which differentiates firms with majority state ownership and those with minority state ownership.

The univariate analysis in Table 6 shows evidence to support the claim that firms with minority state ownership earn higher M&A announcement returns (at 10% level) and have larger change in EPS

growth (at 5% level) after the deal compared to the counterparts with majority state ownership. However, there is no statistical difference in the change in ROA after the deal between the two groups.

The univariate analysis is further supported by multivariate analysis in Table 7 and Table 8.

[Insert Table 7 about here]

In Table 7, it can be seen that with different set of control variables that reflect deal specific and firm specific characteristics, the coefficient of SOE2 remains strongly negative, indicating that for firms with State capital, the higher the level of State ownership in the firm, the lower returns their shareholders earn from M&A announcement. Table 8 produces the same results, with M&A performance being measured by Δ EPSG. Overall, findings presented in Table 7 and Table 8 suggest that firms with controlling State ownership tend to be less efficient in M&As than firms with minority state capital as their M&As produce less returns to shareholders as well as less growth impact. This evidence is contrary to the findings of Chinese SOEs which tend to outperform non-SOE firms in terms of abnormal return around M&A announcement (Bhabra and Huang (2013). This contradiction could possibly be explained by the inclusion of both domestic and cross-border full mergers and acquisitions of private targets in Bhabra and Huang (2013), whereas our sample includes both full and partial M&A and only domestic deals. Our evidence, however, is consistent with Firth, Malatesta, Xin, and Xu (2012) and Allen et al. (2005) which support the view that governmentowned firms are less efficient than non-government-owned ones. It seems that SOEs, especially listed ones, face some distinct corporate governance challenges because of their public ownership. On the one hand, firms with controlling state ownership are also more likely to suffer the "third agency problem" when the government officials representing state ownership in the firm are not fully motivated to exercise the ownership right and responsibility with the firm (Christiansen, 2013). The result could be a passive board that undermines the robustness and quality of board participation. On the other hand, due to politically motivated ownership interference by the State (OECD, 2005), SOEs are constrained in their M&A decisions by "multiple and contradictory objectives of state ownership" (OECD, 2010) that may not totally be driven by commercial profitability. According to the Ministry of Finance (MOF) of Vietnam⁸, SOEs have the responsibility to support the state cause in maintaining economic sustainability, price stability, employment and social security. For example, state-owned firms are the major force behind infrastructure development for supporting rural and regional development in Vietnam. In some instances, state-owned firms are

⁸ http://www.mof.gov.vn/portal/pls/portal/

expected to undertake projects that benefit society at their own cost. It is also plausible that many M&A deals involving heavily state-owned companies are conducted for the purpose of restructuring or privatising the state-owned sector from political and/or social motivations. Furthermore, some recent M&A announcements are motivated by the need for greater organisational transparency and accountability due to recent corporate crises. SOEs suffer just as much from totally passive or distant ownership as from excessive political dominance on firms' decisions, both of which contribute to the problem of low efficiency of state owned firms. In such cases, acquirer shareholders are less likely to gain.

Evidence of the non-linear impact of State ownership on firms' M&A performance

To further examine the impact of State ownership on M&A performance, we use G, which is the size of equity held by the State as percentage of total equity as an alternative measurement of State ownership. As ownership variables may have non-linear relationship with other variables, we include G squared to capture the non-linearity if any.

[Insert Table 9 about here]

As it can be seen from the regression results reported in Table 9, *G* squared has a negative coefficient on CAR(-1,1) and the impact remains significant after controlling for various factors.

State ownership and CEO related variables

As our preliminary findings suggest that firms with state ownership tend to be more sensitive to CEO related variables, we examine the interaction between State ownership level (SOE2) and CEO related variables in various regression models. Results are reported in Table 10.

[Insert Table 10 about here]

The CEO related variables included in these models are Acquirer Duality (dummy), CEO ownership, CEO vote, and their interaction with the main independent variable, SOE2. It can be seen from Table 10 that SOE2 remains strongly negatively significant through the models, reconfirming the negative impact of having the controlling level of State ownership on the firm's M&A performance. Acquirer Duality has a strong positive impact while CEO ownership has a strong negative impact on M&A performance.

Conclusion

Our findings suggest that the state-owned firms, defined controlled by the State, are not as efficient as the non-state-owned firms with regards to M&A. This could be due to the low efficiency of the government related sector as suggested by Allen et al. (2005). This interpretation is also consistent with what is observed by Porta, Lopez-de-Silanes, Shleifer, and Vishny (1999) that relatively poorer country, close to the equator, use French or socialist laws, of which Vietnam is a case in point, tends to exhibit inferior government performance. The negative value created from M&A by this sector could also be explained by the fact that M&A of state-owned enterprises may be politically or socially motivated, thus, deviating from the principle of shareholders' wealth maximisation. Overall, we conclude that the presence of the State in the ownership structure of the acquirer has a negative impact on the value created from their M&A activity. The paper adds new knowledge about M&A in emerging markets of Asia.

While M&A by state-owned firms may not create "value" in an economic sense, there may be social benefits that fulfil many socio-political objectives of the government in power. Many emerging countries like Vietnam do not yet have the necessary market conditions, infrastructure, sophistication or system to achieve its socio-economic objectives or compete with more developed economies as developing them is a gradual process which requires time and resources. Therefore state-owned enterprises have become a convenient vehicle for Vietnam to implement its market reform agenda through M&A activity for control of sensitive and strategic industries. Whilst this may be the case, Vietnam has also made efforts through merger and acquisition mechanisms such as equitisation, privatisation and strategic alliance in an attempt to improve business efficiency, transparency, disclosure and accountability. Many successful Asian countries have continued to intervene in commercial organisations by taking an equity position in them for advancement of national interests and countries like Singapore's Tamesak and Malaysia's Khazanah are examples of such practice.

REFERENCES

- ADB. (2013). Asian Development Bank and Vietnam: Country Fact Sheet (Vol. April): Asian Development Bank.
- Aktas, Nihat, Bodt, Eric de, & Cousin, Jean-Gabriel. (2011). Do financial markets care about SRI? Evidence from mergers and acquisitions. *Journal of Banking & Finance*, *35*(7), 1753-1761.
- Alexandridis, George, Fuller, Kathleen P., Terhaar, Lars, & Travlos, Nickolaos G. (2013). Deal size, acquisition premia and shareholder gains. *Journal of Corporate Finance, 20*(0), 1-13. doi: <u>http://dx.doi.org/10.1016/j.jcorpfin.2012.10.006</u>
- Allen, Franklin, Qian, Jun, & Qian, Meijun. (2005). Law, finance, and economic growth in China. Journal of Financial Economics, 77(1), 57-116. doi: http://dx.doi.org/10.1016/j.jfineco.2004.06.010
- Andrade, Gregor, Mitchell, Mark, & Stafford, Erik. (2001). New evidence and perspectives on mergers. *The Journal of Economic Perspectives*, 15(2), 103-120.
- Bai, Chong-En, Lu, Jiangyong, & Tao, Zhigang. (2006). The Multitask Theory of State Enterprise Reform: Empirical Evidence from China. *The American Economic Review*, *96*(2), 353-357. doi: <u>http://dx.doi.org/10.1257/000282806777212125</u>
- Bebchuk, L. A., & Roe, M. J. (2000). A Theory of Path Dependence in Corporate Ownership and Governance. *Stanford Law Review*, 52(1), 127.
- Bhabra, Harjeet S., & Huang, Jiayin. (2013). An Empirical Investigation of Mergers and Acquisitions by Chinese listed companies, 1997-2007. *Journal of Multinational Financial Management*(0). doi: http://dx.doi.org/10.1016/j.mulfin.2013.03.002
- Bleeke, J., Isono, J., Ernst, D., & Weinburg, D. . (1993). Succeeding at Cross-border M&A. In J. Bleeke
 & D. Ernst (Eds.), *Collaborating to Compete: Using Strategic Alliances and Acquisitions in the Global Marketplace*. New York: J Wiley & Sons.
- Brown, Stephen J., & Warner, Jerold B. (1980). Measuring security price performance. *Journal of Financial Economics, 8*(3), 205-258. doi: <u>http://dx.doi.org/10.1016/0304-405X(80)90002-1</u>
- Brown, Stephen J., & Warner, Jerold B. (1985). Using daily stock returns: The case of event studies. Journal of Financial Economics, 14(1), 3-31. doi: <u>http://dx.doi.org/10.1016/0304-405X(85)90042-X</u>
- Cai, Ye, & Sevilir, Merih. (2012). Board connections and M&A transactions. *Journal of Financial Economics*, 103(2), 327-349. doi: <u>http://dx.doi.org/10.1016/j.jfineco.2011.05.017</u>
- Carney, Richard W., & Child, Travers Barclay. (2013). Changes to the ownership and control of East Asian corporations between 1996 and 2008: The primacy of politics. *Journal of Financial Economics*, 107(2), 494-513. doi: <u>http://dx.doi.org/10.1016/j.jfineco.2012.08.013</u>
- Cartwright, Susan, & Schoenberg, Richard. (2006). Thirty Years of Mergers and Acquisitions Research: Recent Advances and Future Opportunities. *British Journal of Management*, 17(S1), S1-S5. doi: 10.1111/j.1467-8551.2006.00475.x
- Chang, Saeyoung. (1998). Takeovers of Privately Held Targets, Methods of Payment, and Bidder Returns. *The Journal of Finance*, 53(2), 773-784. doi: 10.2307/117370
- Christiansen, H. (2013). Balancing Commercial and Non-Commercial Priorities of State-Owned Enterprises *OECD*

Corporate Governance Working Papers (Vol. 6): OECD Publishing.

- Claessens, Stijn, Djankov, Simeon, & Lang, Larry H. P. (2000). The separation of ownership and control in East Asian Corporations. *Journal of Financial Economics, 58*(1–2), 81-112. doi: <u>http://dx.doi.org/10.1016/S0304-405X(00)00067-2</u>
- Eiteman, David K., Stonehill, Authur I., & Moffett, Michael H. (2010). *Multinational Business Finance*. Boston, USA.: Pearson.
- Fama, Eugene F., Fisher, Lawrence, Jensen, Michael C., & Roll, Richard. (1969). The Adjustment of Stock Prices to New Information. *International Economic Review*, 10(1), 1-21. doi: 10.2307/2525569

- Fan, J. P. H., Wei, K. C. J., & Xu, X. (2011). Corporate finance and governance in emerging markets: A selective review and an agenda for future research. *Journal of Corporate Finance*, 17(2), 207-214. doi: 10.1016/j.jcorpfin.2010.12.001
- Firth, Michael, Lin, Chen, & Wong, Sonia M. L. (2008). Leverage and investment under a state-owned bank lending environment: Evidence from China. *Journal of Corporate Finance*, 14(5), 642-653. doi: <u>http://dx.doi.org/10.1016/j.jcorpfin.2008.08.002</u>
- Firth, Michael, Malatesta, Paul H., Xin, Qingquan, & Xu, Liping. (2012). Corporate investment, government control, and financing channels: Evidence from China's Listed Companies. *Journal of Corporate Finance, 18*(3), 433-450. doi: http://dx.doi.org/10.1016/j.jcorpfin.2012.01.004
- Fuller, Kathleen, Netter, Jeffry, & Stegemoller, Mike. (2002). What Do Returns to Acquiring Firms Tell Us? Evidence from Firms That Make Many Acquisitions. *The Journal of Finance*, 57(4), 1763-1793. doi: 10.1111/1540-6261.00477
- Furfine, Craig H., & Rosen, Richard J. (2011). Mergers increase default risk. *Journal of Corporate Finance*, *17*(4), 832-849.
- Ghost , A. (2001). Does operating performance really improve following corporate acquisitions? *Journal of Corporate Finance*, 7(2), 151-178.
- Gregoriou, Greg N., & Rennenboog, Luc (Eds.). (2007). *International Mergers and Acquisitions Activity Since 1990: Recent Research and Quantitative Analysis*. Amsterdam, Boston: Elsevier.
- Gregory, Alan. (1997). An examination of the long run performance of UK acquiring firms. *Journal of Business, Finance and Accounting, 24*(971-1002).
- Hawawini, Gabriel, & Swary, Itzhak. (1990). *Mergers and Acquisitions in the U.S. Banking Industry*. The Netherlands: Elsevier Science Publishers.
- Hoaglin, David C., & Iglewicz, Boris. (1987). Fine-Tuning Some Resistant Rules for Outlier Labeling. Journal of the American Statistical Association, 82(400), 1147-1149. doi: 10.2307/2289392
- IFC. (2012). Vietnam Corporate Governance Scorecard. Washington, DC: International Finance Corporation.
- Iqbal, Zahid, & Dheeriya, Prakash L. (1991). A comparison of the market model and random coefficient model using mergers as an event. *Journal of Economics and Business*, 43(1), 87-93. doi: <u>http://dx.doi.org/10.1016/0148-6195(91)90009-L</u>
- Jensen, Michael C. (1986). Agency Costs of Free Cash Flow, Corporate Finance and Takeovers. *The American Economic Review*, *76*(2), 323-329.
- Jensen, Michael C., & Ruback, Richard S. (1983). The Market for Corporate Control: The Scientific Evidence. *Journal of Financial Economics*, 11, 5-50.
- John, Kose, Freund, Steven, Nguyen, Duong, & Vasudevan, Gopala K. (2010). Investor protection and cross-border acquisitions of private and public targets. *Journal of Corporate Finance, 16*(3), 259-275. doi: <u>http://dx.doi.org/10.1016/j.jcorpfin.2010.02.001</u>
- Kale, Prashant. (2004, 2004/08//). ACQUISITION VALUE CREATION IN EMERGING MARKETS: AN EMPIRICAL STUDY OF ACQUISITIONS IN INDIA.
- King, David R., Dalton, Dan R., Daily, Catherine M., & Covin, Jeffrey G. (2004). Meta-Analyses of Post-Acquisition Performance: Indications of Unidentified Moderators. *Strategic Management Journal*, 25(2), 187-200.
- Kitching, John. (1974). Winning and losing with European acquisitions. *Harvard Business Review*, 52(2), 124-136.
- La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (1999). Corporate ownership around the world. *Journal of Finance*, 54(2), 471-517.
- Lang, Larry H. P., Stulz, RenéM, & Walkling, Ralph A. (1989). Managerial performance, Tobin's Q, and the gains from successful tender offers. *Journal of Financial Economics*, 24(1), 137-154. doi: <u>http://dx.doi.org/10.1016/0304-405X(89)90075-5</u>
- Ma, Jianyu, Pagan, Jose A., & Chu, Yun. (2009). Abnormal Returns to Mergers and Acquisitions in Ten Asian Stock Markets. *International Journal of Business*, 14(3), 235-250.

- Marks, Mitchell, & Mirvis, Philip. (2011). Merge Ahead: A Research Agenda to Increase Merger and Acquisition Success. *Journal of Business and Psychology, 26*(2), 161-168. doi: 10.1007/s10869-011-9219-4
- Martynova, Marina, & Renneboog, Luc. (2008). A century of corporate takeovers: What have we learned and where do we stand? *Journal of Banking & Finance, 32*(10), 2148-2177. doi: <u>http://dx.doi.org/10.1016/j.jbankfin.2007.12.038</u>
- Mercer, & Kroll. (2010). Asia on the Buyside: The Key to Success The human capital and hidden risks in cross-border acquisitions: Mercer and Kroll.
- Moeller, S. , Schlingeman, Frederik P., & Stulz, Rene M. (2004). Firm size and the gains from acquisitions. *Journal of Financial Economics*, 73(2), 201-228. doi: 10.1016/j.jfineco.2003.07.002
- Moeller, Sara B., Schlingemann, Frederik P., & Stulz, RenÉ M. (2005). Wealth Destruction on a Massive Scale? A Study of Acquiring-Firm Returns in the Recent Merger Wave. *The Journal of Finance*, *60*(2), 757-782. doi: 10.1111/j.1540-6261.2005.00745.x
- Morck, Randall, Shleifer, Andrei, & Vishny, Robert W. (1990). Do Managerial Objectives Drive Bad Acquisitions? *The Journal of Finance*, 45(1), 31-48.
- Mulherin, J. Harold, & Boone, Audra L. (2000). Comparing acquisitions and divestitures. *Journal of Corporate Finance, 6*(2), 117-139. doi: <u>http://dx.doi.org/10.1016/S0929-1199(00)00010-9</u>
- OECD. (2005). OECD Guidelines on Corporate Governance of State Owned Enterprises: Organisation for Economic Co-operation and Development.
- OECD. (2010). Accountability and Transparency: A Guide for State Ownership: OECD Publishing.
- Porta, R. L, Lopez-de-Silanes, F., Shleifer, A., & Vishny, Robert. (1999). The Quality of Government. *Journal of Law, Economics, and Organization, 15*(1), 222-279.
- Rostand, A. (1994). *Optimizing Managerial Decisions during the Acquisition Integration Process*. Paper presented at the 14th Annual Strategic Management Society International Conference, Paris.
- Schwert, G. William. (2000). Hostility in Takeovers: In the Eyes of the Beholder? *The Journal of Finance*, *55*(6), 2599-2640. doi: 10.1111/0022-1082.00301
- Stoxplus. (2011). Vietnam, 2011 Deal Activity Review (Vol. 1). Hanoi: Stoxplus.
- Sudarsanam, Sudi, & Mahate, Ashraf A. (2003). Glamour Acquirers, Method of Payment and Postacquisition Performance: The UK Evidence. *Journal of Business Finance & Accounting, 30*(1-2), 299-342. doi: 10.1111/1468-5957.00494
- Thornton, Grant. (2009). Private Equity in Vietnam 2009: Investment Sentiment and Outlook. Vietnam: Grant Thornton.
- Travlos, Nickolaos G. (1987). Corporate Takeover Bids, Methods of Payment, and Bidding Firms' Stock Returns. *Journal of Finance*, 42(4), 943-963.
- UNCTAD. (2010). World Investment Report 2010: Investing in a Low-Carbon Economy. New York: United Nations, UNCTAD.
- Vallascas, Francesco, & Hagendorff, Jens. (2011). The impact of European bank mergers on bidder default risk. *Journal of Banking & Finance, 35*, 902-915.
- Wei, K. C. John, & Zhang, Yi. (2008). Ownership structure, cash flow, and capital investment: Evidence from East Asian economies before the financial crisis. *Journal of Corporate Finance*, 14(2), 118-132. doi: <u>http://dx.doi.org/10.1016/j.jcorpfin.2008.02.002</u>
- Wei, Shang-Jin, & Wang, Tao. (1997). The siamese twins: Do state-owned banks favor state-owned enterprises in China? China Economic Review, 8(1), 19-29. doi: <u>http://dx.doi.org/10.1016/S1043-951X(97)90010-9</u>
- Yermack, David. (1996). Higher market valuation of companies with a small board of directors. *Journal of Financial Economics, 40,* 185-211.

Table 1: Sample distribution by announcement year

This table presents the sample distribution of 188 mergers and acquisitions conducted by listed Vietnamese acquirers between 2004 and 2013. Numbers for the full sample are presented first, followed by three subsamples based on the presence and level of state ownership in the acquirer.

	Full Sample		Non ((Non SOE (0)		vnership el 1 1)	State ownership Level 2 (2)	
	Number	%	Number	%	Number	%	Number	%
2004	1	0.5	0	0.0	1	1.8	0	0.0
2005	1	0.5	1	1.0	0	0.0	0	0.0
2006	1	0.5	1	1.0	0	0.0	0	0.0
2007	4	2.1	4	4.0	0	0.0	0	0.0
2008	9	4.8	4	4.0	4	7.0	1	3.2
2009	20	10.6	4	4.0	12	21.1	4	12.9
2010	51	27.1	24	24.0	20	35.1	7	22.6
2011	52	27.7	32	32.0	11	19.3	9	29.0
2012	39	20.7	24	24.0	6	10.5	9	29.0
2013	10	5.3	6	6.0	3	5.3	1	3.2
Total	188	100.0	100	100.0	57	100.0	31	100.0

Table 2: Sample distribution by acquirer industry

Acquirer Macro	Full sample		Non SOE (0)		State ownership Level 1 (1)		State ownership Level 2 (2)	
Industry	Number	%	Number	%	Number	%	Number	%
Consumer Products and Services	4	2.1	4	4.0	0	0.0	0	0.0
Consumer Staples	38	20.2	26	26.0	12	21.1	0	0.0
Energy and Power	27	14.4	7	7.0	7	12.3	13	41.9
Financials	10	5.3	4	4.0	6	10.5	0	0.0
Healthcare	4	2.1	1	1.0	1	1.8	2	6.5
High Technology	2	1.1	1	1.0	1	1.8	0	0.0
Industrials	51	27.1	18	18.0	23	40.4	10	32.3
Materials	19	10.1	13	13.0	0	0.0	6	19.4
Media and Entertainment	6	3.2	4	4.0	2	3.5	0	0.0
Real Estate	25	13.3	20	20.0	5	8.8	0	0.0
Telecommunications	2	1.1	2	2.0	0	0.0	0	0.0
Total	188	100%	100	100%	57	100%	31	100%

Table 3: Summary statistics

This table presents the mean summary statistics of 188 mergers and acquisitions conducted by listed Vietnamese acquirers between 2004 and 2013. ***, ** and * stand for statistical significance at the 1%, 5% and 10%, respectively.

Characteristics of	Full	(0)	(1) Gov.	(2) Gov.	M	lean difference (t statistic)	
the acquiring firm	sample	Non SOE	ownership Level 1	ownership Level 2	(1) - (0)	(2) - (0)	(2) - (1)
Age at acquisition	19.05	15.11	22.98	24.42	7.87***	9.31***	1.44
(years)					(3.85)	(4.01)	(0.51)
%age of target owned after the transaction	51.18	51.17	48.43	56.31	-2.74	5.14	7.88
	0.00	0.40	0.05	o ==	(-0.48)	(0.72)	(1.03)
Deal type (=1 if related)	0.39	0.43	0.25	0.55	-0.18**	0.12	(2.92)
relatedy	C 20	6 57	6.25	F F 2	(-2.42)	(1.15)	(2.82)
Board size (persons)	6.29	0.57	6.25	5.52	-0.32	-1.05***	-0.73***
	1.00	4.04	4.00	1.60	(-1.12)	(-3.87)	(-2.60)
Ln(Board size)	1.80	1.84	1.80	1.69	-0.04	-0.15***	-0.11**
					(-0.88)	(-3.55)	(-2.46)
OCF (scaled by Total	0.05	0.02	0.05	0.13	0.03	0.11***	0.08
assets)					(1.49)	(2.74)	(1.61)
EBITDA (in VND1000s)	574,822	705,168	342,884	580,816	-362284***	-124352	237932
. ,					(-2.64)	(-0.56)	(1.50)
ROA	0.13	0.14	0.12	0.14	-0.015	0.0012	0.016
					(-1.07)	(0.07)	(0.91)
Market value (in	5,685,713	8,336,900	2,704,829	2,614,474	-5632071***	-5722426***	-90355
VNDmillions)					(-3.16)	(-3.30)	(-0.08)
SIZE (=Ln(Market	13.93	14.08	13.80	13.67	-0.2801	-0.42	-0.14
value))					(-0.98)	(-1.01)	(-0.38)
Leverage	90.35	99.05	59.15	119.65	-39.89**	20.60	60.50***
20101080					(-2.39)	(0.89)	(3.15)
Tobin's Q	0.86	0.96	0.91	0.46	-0.0485	-0.51**	-0.46*
					(-0.22)	(-2.02)	(-1.88)
No. of observations	188	100	57	31			

Table 4: Univariate analysis of cumulative abnormal returns

This table presents the mean and median return (CAR) gained by the acquiring firm over a two day, three day and 61 day event window around the acquisition announcement date. CARs are reported for the full sample, and each of the three subsamples. ***, ** and * stand for statistical significance at the 1%, 5% and 10% level, respectively.

Event window	Full sample		(0) Non SOE		(1) State ownership Level 1		(2) State ownership Level 2	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median
CAR(-1,0)	-0.206%	0.005%	-0.37%	0.034%	0.14%	-0.092%	-0.29%	0.057%
	(-0.886)		(-1.498)		(0.149)		(-0.46)	
CAR(-1,+1)	-0.21%	-0.17%	-0.24%	-0.09%	0.16%	0.09%	-1.21%**	-1.12%
	(-1.314)		(-0.92)		(0.17)		(-2.36)	
CAR(-30,+30)	-2.69%***	-3.29%	-1.96%***	-0.96%	-3.11***	-2.78%	-4.26%***	-11.73%
	(-6.7001)		(-5.28)		(-4.72)		(-9.658)	

Table 5 : Important drivers of M&A announcement returns: a comparison between firms with and without State capital

This table presents heteroskedasticity consistent regression results for the sample of 188 mergers and acquisitions between 2004 and 2013 in Vietnam. The dependent variable is CAR(-1,1), the cumulative abnormal returns of the acquirers from 1 day before to 1 day after the deal announcement.

FOR G=0 GROUP						FOR G>0 GROUP						
	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
Acquirer Duality	0.1920	0.1574	0.1643	0.1378	0.3002	0.1926	0.2812	0.3268*	0.5035**	0.2944	0.5853**	0.3676*
	(1.24)	(1.03)	(0.95)	(0.86)	(1.25)	(1.17)	(1.43)	(1.69)	(2.48)	(1.54)	(2.45)	(1.71)
Deal type	0.0386	0.0305	-0.0232	0.0596	0.0072	0.0148	0.0814	0.0706	0.1052	0.0356	0.0592	0.1797
	(0.35)	(0.30)	(-0.18)	(0.61)	(0.07)	(0.14)	(0.58)	(0.51)	(0.76)	(0.24)	(0.41)	(1.22)
Equity acquired	-0.2493*	-0.2462*	-0.2602	-0.3748***	-0.30/1**	-0.2294	-0.1151	-0.1268	-0.1416	-0.0776	-0.1294	-0.1395
Toehold	0.0672	(-1.88)	(-1.58)	(-2.74)	(-2.03)	(-1.40)	-0.1109	(-1.07)	(-1.22)	(-0.00)	(-1.12)	(-0.90)
Tochola	(0.68)						(-0.9624)					
Operating cash flow	-0.2426*	-0.2520*	-0.2216	-0.2440*	-0.2127*	-0.1360	0.0935	0.0959	0.1039	0.1274	0.0823	0.0439
	(-1.86)	(-1.95)	(-1.48)	(-1.95)	(-1.83)	(-1.03)	(0.80)	(0.83)	(0.99)	(1.29)	(0.77)	(0.44)
Acquirer ROA	0.2069	0.1956	0.1213	0.2421*	0.2645*	0.0152	0.0034	0.0170	0.0169	0.0244	-0.0212	0.0521
	(1.46)	(1.46)	(0.67)	(1.91)	(1.97)	(0.09)	(0.03)	(0.15)	(0.17)	(0.21)	(-0.17)	(0.51)
Acquirer size	0.1093	0.1606	0.0738	0.1223	0.3243**	-0.0786	0.0278	0.0107	-0.0279	0.0229	0.0114	0.0492
	(0.63)	(1.31)	(0.28)	(1.10)	(2.52)	(-0.54)	(0.21)	(0.08)	(-0.17)	(0.17)	(0.09)	(0.34)
Acquirer Leverage	0.0653						-0.0907					
Tobin's O	(0.58)	0 1229	0.0466	0 1 8 1 5	0 2177	0 15 22	(-0.7606)	0.0041	0.0201	0.0105	0.0200	0 1741
	(-0.55)	(-0.84)	(0.27)	(-1 13)	(-1 27)	(0.90)	-0.0473 (-0.43)	(-0.043)	(-0.49)	(0.21)	(0.31)	(-1 12)
A. Board size	(0.55)	(0.0 1)	-0.0664	(1.15)	(1.27)	(0.50)	(0.15)	(0.013)	0.2946**	(0.21)	(0.51)	(1.12)
			(-0.37)						(2.54)			
A. Auditor			0.0974						0.0422			
			(0.66)						(0.28)			
Nonexecutive			0.0492						-0.1489			
			(0.42)						(-1.36)			
Target listing status				-0.2258						0.2833**		
Target SOE				(-1.14)						(2.02)		
Talget SOE				-0.0280						-0.2182		
CEO ownership				(0.15)	0.0669					(1.02)	-0.2931***	
					(0.63)						(-2.80)	
CEO age					-0.2509						0.0222	
					(-1.46)						(0.17)	
CEO gender					0.1728*						0.0919	
					(1.71)						(0.77)	
CEO Degree					-0.1893						-0.0187	
A Incider Holding					(-1.63)	0 2625***					(-0.13)	0 1146
A. Insider Holding						(2.91)						-0.1140
A. Domestic Institutional						0.1939						-0.406***
						(1.38)						(-2.71)
A. Foreign institutional						0.1371						-0.1286
<u> </u>						(0.91)						(-0.76)
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ν	100	100	90	100	100	91	88	88	88	87	88	84
adi. R-so	0.058	0.076	0.018	0.097	0.107	0.049	0.045	0.061	0.099	0.086	0.070	0.186

Standardised coefficients are reported. T-statistics are in parentheses. ***, ** and * stand for statistical significance at the 1%, 5% and 10% respectively.

		CAR(-1	.,1)		ΔROA			ΔEPSG		
Group	Obs	Mean	Std. Err.	Obs.	Mean	Std. Err.	Obs.	Mean	Std. Err.	
0	57	0.0016	0.0047	42	-0.0005	0.0127	43	0.7035	0.0127	
1	31	-0.0121	0.0084	20	-0.0259	0.0139	21	-0.0033	0.0139	
Combined	88	-0.0032	0.0043	62	-0.0087	0.0098	64	-0.0087	0.0098	
Mean diff		0.0137	0.0089		0.0254	0.0208		0.0254	0.0208	
diff = mean(0)	- mean(1)									
Hypothesis		t-test statis	tics		t-test statistics			t-test statistics		
Ho: diff = 0		t = 1.5406			t= 1.217	7		t= 1.7811		
Ha: diff < 0		Pr(T < t) = 0	.9365		Pr(T < t) =	0.8860		Pr(T < t) = (0.9601	
Ha: diff != 0	Pr(T > t) = 0.1271				Pr(T > t) = 0.2281			Pr(T > t) = 0.0798		
Ha: diff > 0		Pr(T > t) = 0.0635			Pr(T > t) = 0.1140			Pr(T > t) = 0.0399		

Table 6: Univariate analysis between State majority owned firms and State minority owned firms

Table 7: State ownership and M&A announcement returns

This table reports regression results for the sub-sample of 88 mergers and acquisitions conducted by firms with State capital. The dependent variable is the 3 day cumulative abnormal returns CAR(-1,1) around the announcement date. The main regressor is SOE2, which is a dummy variable taking a value of one for firms in which the State holds a controlling interest (G>=50%) and zero otherwise. Other controlling variables include deal specific and firm specific variables.

Standardised coefficients are reported. T-statistics are in parentheses. ***, ** and * stand for statistical significance at the 1%, 5% and 10% respectively.

· · ·	(1)	(2)	(3)	(4)	(5)
SOE2	-0.3709**	-0.3034**	-0.3691**	-0.2777**	-0.3023**
	(-2.4697)	(-2.1326)	(-2.2138)	(-2.0159)	(-2.0379)
Deal type	0.2937**	0.1645	0.1828	0.1236	0.1655
	(2.2091)	(1.3835)	(1.5577)	(0.9351)	(1.3704)
Equity acquired	-0.2144	-0.1904	-0.2114*	-0.1097	-0.1994
	(-1.4959)	(-1.5933)	(-1.7981)	(-0.8944)	(-1.4666)
Toehold	-0.0545	-0.0633	-0.0278	-0.1120	-0.0604
	(-0.4930)	(-0.6389)	(-0.2752)	(-1.0726)	(-0.5786)
Operating cash flow	0.1384	0.1777	0.2210*	0.1859	0.1790
	(1.2617)	(1.4486)	(1.9587)	(1.5622)	(1.4867)
Acquirer ROA	0.1419	0.0667	0.0508	0.0885	0.0609
	(1.2899)	(0.6075)	(0.4876)	(0.7687)	(0.5389)
Acquirer size	0.1311	0.0503	0.1423	0.0196	0.0608
	(0.8573)	(0.3916)	(0.8683)	(0.1526)	(0.4523)
Tobin's Q	-0.3310**	-0.1248	-0.1677*	-0.0801	-0.1305
	(-2.4981)	(-1.2734)	(-1.9886)	(-0.8685)	(-1.2759)
A.Insider Holding	-0.0654				
	(-0.4996)				
A.Domestic Institutional	-0.4134***				
	(-2.9164)				
A.foreign Institutional	-0.1268				
	(-0.7259)				
Acquirer board size			0.0823		
			(0.8257)		
Acquirer auditor			-0.1311		
			(-0.8855)		
Nonexecutive			-0.1942		
			(-1.4522)		
Target listing status				0.1876	
				(1.4059)	
Target SOE					-0.0287
					(-0.2228)
Industry fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Ν	84	88	88	88	87
adj. R-sq	0.246	0.095	0.117	0.110	0.078

Table 8: State ownership and M&A performance, measured by ΔEPSG

This table reports regression results for the sub-sample of 88 mergers and acquisitions conducted by firms with State capital. The dependent variable is the 3 day cumulative abnormal returns Δ EPSG, which is measured by the difference between two year average EPS growth after and before the deal. All growth values are industry adjusted. The main regressor is SOE2, which is a dummy variable taking a value of one for firms in which the State holds a controlling interest (G>=50%) and zero otherwise. Other controlling variables include deal specific and firm specific variables.

	(1)	(2)	(3)	(4)	(5)	(8)
SOE2	-0.2249**	-0.2470**	-0.2542*	-0.1744	-0.2300*	-0.2145*
	(-2.0239)	(-2.1962)	(-1.8002)	(-1.5235)	(-1.9189)	(-1.8676)
Deal type	0.3273**	0.2965**	0.3919**	0.1940	0.3082**	0.3085**
	(2.4709)	(2.3172)	(2.4807)	(1.5031)	(2.6218)	(2.1634)
Equity acquired	-0.0989	-0.1579	-0.0860	-0.0198	-0.0417	-0.0660
	(-0.7931)	(-1.3232)	(-0.6212)	(-0.1865)	(-0.3356)	(-0.5525)
Toehold	0.2031	0.2189*	0.1489	0.2069*	0.1625	0.2138*
	(1.6538)	(1.7418)	(1.4976)	(1.9156)	(1.2041)	(1.6912)
Operating cash flow	-0.1077	-0.1178	-0.1306	-0.0583	-0.0942	-0.1111
	(-1.3954)	(-1.3696)	(-1.2557)	(-0.6509)	(-1.0505)	(-1.5123)
Acquirer ROA	-0.2446	-0.2359	-0.4766**	-0.2807*	-0.3194*	-0.2350
	(-1.4920)	(-1.5475)	(-2.3184)	(-1.9230)	(-1.9174)	(-1.3352)
Acquirer leverage	0.1846**	0.2782**	0.2085*	0.2722**	0.2046*	0.1984*
	(2.0751)	(2.2423)	(1.9176)	(2.5896)	(1.8251)	(1.8833)
Acquirer size	0.1743	0.0957	0.2326	-0.1141	0.2706*	0.1272
	(1.5191)	(0.7243)	(1.5100)	(-0.7348)	(1.6993)	(0.8018)
Tobin's Q	0.1533*	0.3016**	0.2541	0.1266	0.1732*	0.1857*
	(1.8196)	(2.3349)	(1.1998)	(0.7859)	(1.8709)	(1.8637)
A.Insider Holding		-0.3275				
		(-1.6230)				
A.Domestic Institutional			0.0996			
			(0.8664)			
A.Foreign Institutional				0.5180**		
				(2.6645)		
A.Board size					-0.1408	
					(-0.9143)	
A.Auditor					-0.2195	
					(-1.3490)	
Nonexecutive					0.1016	
					(0.7710)	
Target listing status						-0.0003
						(-0.0020)
Target SOE						0.0562
						(0.3208)
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
N	64	64	61	62	64	63
adj. R-sq	0.422	0.461	0.408	0.540	0.425	0.393

Standardised coefficients are reported. T-statistics are in parentheses. ***, ** and * stand for statistical significance at the 1%, 5% and 10% respectively.

Table 9: Non-linear impact of state ownership on M&A announcement returns

This table reports regression results for the sub-sample of 88 mergers and acquisitions conducted by firms with State capital. The dependent variable is the 3 day cumulative abnormal returns CAR(-1,1) around the announcement date. The main regressor G, which is the size of equity of the firm held by the State. Other controlling variables include deal specific and firm specific variables.

Standardised coefficients are reported. T-statistics are in parentheses. ***, ** and * stand for statistical significance at the 1%, 5% and 10% respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
G	0.9080	0.8939	0.8984	1.0218	0.9215	0.8995
	(1.3334)	(1.5004)	(1.5778)	(1.5985)	(1.4694)	(1.5831)
G squared	-1.0930*	-1.0760*	-1.2063**	-1.1609*	-1.0994*	-1.0921*
	(-1.6759)	(-1.8714)	(-2.0437)	(-1.8532)	(-1.8054)	(-1.9648)
Acquirer Duality	0.3760	0.3697	0.5612**	0.3634	0.3688	0.4217*
	(1.5280)	(1.6053)	(2.4808)	(1.6256)	(1.5780)	(1.9412)
Deal type	0.1185	0.1191	0.1831	0.0777	0.1199	0.2359
	(0.9054)	(0.9753)	(1.5234)	(0.5834)	(0.9719)	(1.6159)
Equity acquired	-0.1819	-0.1795	-0.2161*	-0.1120	-0.1808	-0.1948
	(-1.5040)	(-1.4687)	(-1.8652)	(-0.8343)	(-1.4515)	(-1.1572)
Toehold	-0.1307	-0.1340	-0.0711	-0.1783	-0.1325	-0.1226
	(-1.1998)	(-1.2526)	(-0.6577)	(-1.4439)	(-1.2306)	(-1.0028)
Operating Cash flow	0.2204	0.2187	0.2787**	0.2378*	0.2195	0.1806
Acquirer POA	(1.4576)	(1.5415)	(2.0808)	(1.8139)	(1.5100)	(1.3773)
Acquirer ROA	(0.0041)					
Acquirer Loverage	(0.0307)					
Acquirer Leverage	0.0130					
Acquiror sizo	0.0042	0 0022	0 1027	0.0855	0 0002	0 2207
Acquirer size	0.0942	(0.7305)	(0.6256)	(0.7010)	0.0993	(1 /120)
Tohin's O	-0.0649	-0.0673	-0 1382	-0.0285	-0.0713	-0 2481
	(-0.5473)	(-0.6350)	(-1.5544)	(-0.2799)	(-0.6342)	(-1.4270)
A. Board size	(0.0 0)	(0.0000)	0.2974**	(0.2700)	(0.00)	(1.12/0)
			(2.4550)			
A. Auditor			0.0428			
			(0.2995)			
Nonexecutive			-0.3092**			
			(-2.0749)			
Target Listing status				0.2757		
				(1.5721)		
Target SOE				-0.1521		
				(-0.9744)		
A. Insider Holding					0.0169	
					(0.1292)	
A Domestic Institutional						-0.3246**
						(-2.0763)
A Foreign Institutional						-0.1145
						(-0.5385)
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Ν	82	82	82	81	82	78
adj. R-sq	0.055	0.087	0.177	0.102	0.072	0.204

Table 10: The interaction between State ownership and CEO variables

This table reports regression results for the sub-sample of 88 mergers and acquisitions conducted by firms with State capital. The dependent variable is the 3 day cumulative abnormal returns CAR(-1,1) around the announcement date. The main regressor SOE2, which is a dummy variable taking a value of one for firms in which the State holds a controlling interest (G>=50%) and zero otherwise. Other controlling variables include deal specific and firm specific variables.

Standardised coefficients are reported. T-statistics are in parentheses. ***, ** and * stand for statistical significance at the 1%, 5% and 10% respectively.

	(1)	(2)	(3)	(4)	(5)
SOE2	-0.3095**	-0.3173**	-0.3227**	-0.3553**	-0.2899*
	(-2.1133)	(-2.0872)	(-2.0788)	(-2.1783)	(-1.9745)
Acquirer Duality	0.5561**	0.3553	0.5178*	0.5191**	0.7244*
	(2.5142)	(1.3696)	(1.8443)	(2.3327)	(1.8668)
CEO ownership	-0.2611**		-0.2741**	-2.1791	
	(-2.3466)		(-2.6411)	(-1.6683)	
CEOown*Duality				1.9364	
				(1.4760)	
CEO*SOE				0.0332	
				(0.2288)	
CEO votes		-0.0025	0.0685		0.4503
		(-0.0118)	(0.3580)		(1.5706)
CEOvotes*Duality					-0.6607
					(-1.6175)
Deal type	0.1628	0.1615	0.1628	0.2020	0.1597
	(1.3372)	(1.2947)	(1.3258)	(1.5184)	(1.3026)
Equity acquired	-0.1569	-0.1360	-0.1601	-0.1656	-0.0677
	(-1.4300)	(-1.2316)	(-1.4433)	(-1.4928)	(-0.5901)
Toehold	-0.0163	-0.0569	-0.0083	-0.0330	0.0040
	(-0.1549)	(-0.5872)	(-0.0815)	(-0.3123)	(0.0411)
Operating cash flow	0.1363	0.1457	0.1475	0.1251	0.0960
	(1.2514)	(1.0428)	(1.1274)	(1.0723)	(0.7143)
Acquirer ROA	0.0275	0.0595	0.0276	0.0229	0.0706
	(0.2457)	(0.5278)	(0.2462)	(0.1886)	(0.6356)
Acquirer size	0.0823	0.0877	0.0840	0.0960	0.1180
	(0.6844)	(0.6750)	(0.6924)	(0.7432)	(0.9317)
Tobin's Q	-0.0621	-0.0944	-0.0593	-0.0439	-0.0442
	(-0.6033)	(-0.8244)	(-0.5582)	(-0.3643)	(-0.3802)
Industry fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Ν	88	88	88	88	88
adj. R-sq	0.164	0.115	0.153	0.161	0.147